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# Exceed TurboX

Dashboard and Client User Guide

V12.5.4

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# 1. Dashboard and Client User Guide

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Rocket® Exceed TurboX (ETX) is a web-based platform that enables users to launch UNIX, Linux, and Windows desktops and applications over the internet. Exceed TurboX provides IT with a central platform to monitor and manage user access to systems. It provides users with a seamless experience, where desktops and applications running on remote hosts look and feel like they are running locally.

This document provides conceptual and task-oriented information about how to use Exceed TurboX Dashboard and the Exceed TurboX Client menu. This document is intended for Exceed TurboX users.

## 2. Using Exceed TurboX Dashboard

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### Using Exceed TurboX Dashboard

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This section introduces Exceed TurboX Dashboard and describes the ways you can create, manage, and use sessions and profiles in this web interface.

Exceed TurboX lets you use your local computer to access and work with applications located on an X Window (UNIX or Linux) or Microsoft® Windows® remote desktop or application host. In other words, you can use your local computer to view, control, and/or manipulate applications running on a computer in a different location (for example, in a different office).

Exceed TurboX Dashboard allows you to:

- Start and work within sessions to access these remote applications.
- View, configure, and manage sessions you have started or suspended, or that have been shared with you.
- Create and manage profiles.
- View messages sent by administrators.
- Configure your Exceed TurboX user settings.

You can access the Dashboard from any computer that has a supported web browser installed; for information about how to access and sign in to Exceed TurboX Dashboard, see [Signing in to Exceed TurboX Dashboard](#).

#### **Note**

System administration of Exceed TurboX is performed in Exceed TurboX Server Manager. For more information, see the *Exceed TurboX Server Manager Help*.

# Signing in to Exceed TurboX Dashboard

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## Signing in to Exceed TurboX Dashboard

This section describes how to sign in to Exceed TurboX Dashboard. Before you can sign in, you may need to obtain a user account and password from your administrator. Follow the steps specific to your sign-in workflow, depending on the user authentication method configured for your site:

1. Kerberos single sign in: If your system administrator has configured your system to use single sign-on based on Kerberos, you are authenticated using your Microsoft Active Directory credentials. In this case, you do not need to sign in manually. However, you may need to configure your web browser before you are authenticated. To do so, follow the steps in [Configuring your web browser for Kerberos](#).

You can bypass the Kerberos sign-in by adding `kerberos=0` to the Exceed TurboX Dashboard URL.

Example: `http://etxserver/etx/?kerberos=0`

2. Native, PAM, or LDAP authentication: If your system administrator has configured your system for Native, PAM, or LDAP authentication, perform the steps provided in [To sign in to Exceed TurboX Dashboard with Native, PAM or LDAP authentication](#).
3. OTDS authentication: If your system administrator has configured your system for OTDS authentication, perform the steps provided in [To sign in to Exceed TurboX Dashboard with OTDS authentication](#).

### To sign in to Exceed TurboX Dashboard with Native, PAM or LDAP authentication:

1. In a web browser, open the Exceed TurboX Dashboard URL provided by your system administrator. The Exceed TurboX Dashboard sign-in page appears.

#### Note

If the Exceed TurboX Server is in maintenance mode, a server status message displays instead of the sign-in page. Wait until this Server is switched back to live mode or use a different Server.

For a list of supported browsers, see the *Exceed TurboX Release Notes*.

2. *Optional:* To display the Exceed TurboX Dashboard content in a different language, select an option from the language drop-down list in the top-right corner of the page.

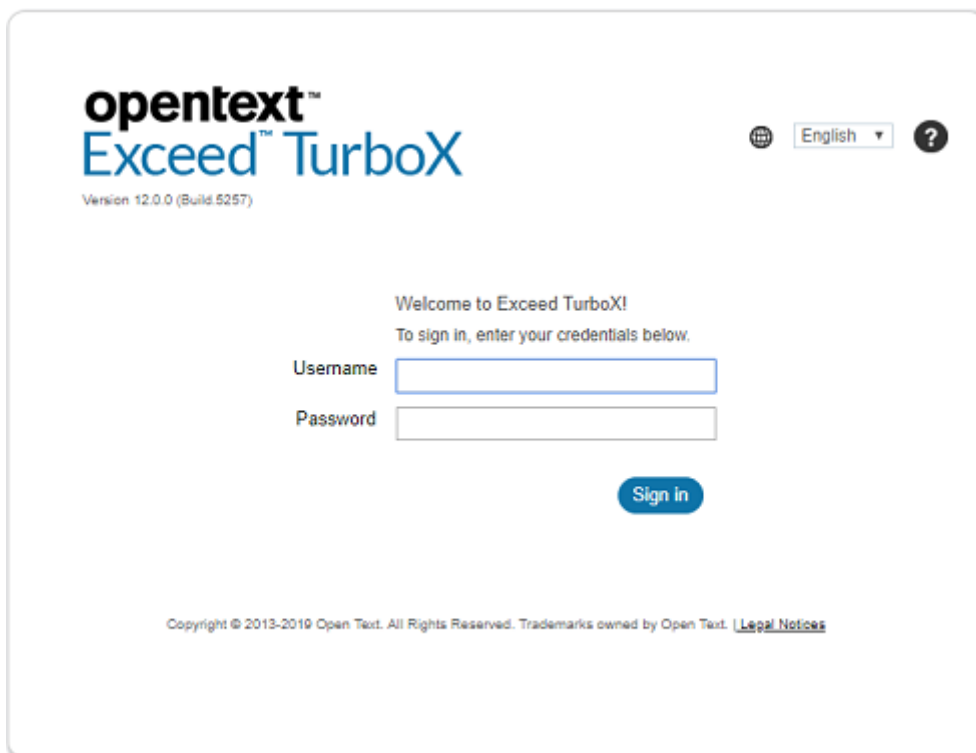
**Tip**

You can update your language preferences in your user settings after you sign in. See [Configuring your user settings](#) for more information.

3. On the sign-in page, enter your **Username** and **Password**.

**Note**

The sign-in page content may vary, depending on your authentication method. The following example shows the sign-in page for Native authentication.



The screenshot shows the sign-in page for OpenText Exceed TurboX. At the top left is the logo "opentext™ Exceed™ TurboX" with "Version 12.0.0 (Build.5257)" below it. At the top right, there is a language dropdown menu set to "English" and a help icon. The main content area features a welcome message: "Welcome to Exceed TurboX! To sign in, enter your credentials below." Below this are two input fields: "Username" and "Password". A blue "Sign in" button is positioned below the password field. At the bottom of the page, there is a copyright notice: "Copyright © 2013-2019 Open Text. All Rights Reserved. Trademarks owned by Open Text. | [Legal Notices](#)".

For PAM authentication, if the prompt returned by the PAM server is very long, only the first few lines of text are shown. The remainder of the prompt is displayed in a tooltip.

4. A **Keep me signed in** check box may be available on the sign-in page, based on an option set by your site administrator. Select this check box to sign in automatically the next time you open the Exceed TurboX Dashboard URL.

**Note**

When you sign in with **Keep me signed in**, your user name and password are cached on Exceed TurboX Server and used to authenticate you on application servers for Exceed TurboX profiles that use the **Use session credentials** authentication method. If your user credentials change after the cache is created, the saved credentials no longer work. To resolve this issue, sign out of Exceed TurboX and sign back in with the new credentials. This option can only be enabled when Exceed TurboX Server is configured for LDAP or Native authentication (without Kerberos single sign-on enabled). It is not recommended if you are using a shared or public computer.

**5. Click Sign in.**

If you are signing in for the first time, you may be prompted to configure your user settings (Full name and Email address), and then install the Client Launcher. For instructions, see [Signing in to Exceed TurboX Dashboard for the first time](#).

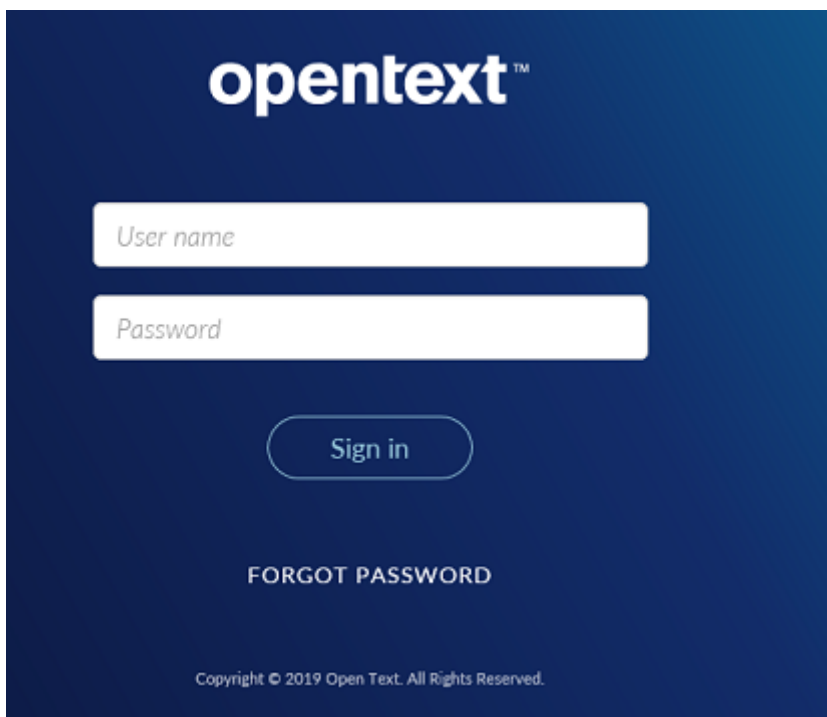
If this is not your first time signing in, the Exceed TurboX Dashboard displays. See [Getting started with Exceed TurboX Dashboard](#) for an overview of the interface.

**To sign in to Exceed TurboX Dashboard with OTDS authentication**

1. In a web browser, navigate to the Exceed TurboX Dashboard URL provided by your system administrator. For a list of supported browsers, see the *Exceed TurboX Release Notes*.

The Exceed TurboX Dashboard sign-in page appears.

2. On the sign-in page, type your **User name** and **Password**.



### 3. Click **Sign in**.

If you are signing in for the first time, you may be prompted to configure your user settings (Full name and Email address), and then install the Client Launcher. For instructions, see [Signing in to Exceed TurboX Dashboard for the first time](#).

If this is not your first time signing in, Exceed TurboX Dashboard appears. For an overview of the interface, see [Getting started with Exceed TurboX Dashboard](#).

#### **Tip**

You can update your language preferences in your user settings after you sign in. See [Configuring your user settings](#) for more information.

## Signing in to Exceed TurboX Dashboard for the first time

This section describes the steps you may need to take when you sign in to Exceed TurboX for the first time. You may be asked to confirm or enter your email address and full name. You may also be prompted to verify that the Exceed TurboX Client Launcher is installed. Or, your administrator may have automated one or both of these steps.

#### **Note**

For information about signing in to Exceed TurboX Dashboard after the first time, see [Signing in to Exceed TurboX Dashboard](#).

### To sign in for the first time:

1. In a web browser, enter the Exceed TurboX Dashboard URL provided by your system administrator.
2. On the Exceed TurboX Dashboard sign-in page, enter your **Username** and **Password**, and click **Sign in**.
3. Depending on how your administrator has configured the first-time sign-in process, the **Welcome to Exceed TurboX!** dialog box may open. Click **Next**.
4. Depending on how your administrator has configured the process, one of the following occurs:
  - If the **User settings** dialog box opens, proceed to step 5.
  - If the **Client Compatibility Wizard** opens, proceed to step 7.
  - If a registration message appears, click **OK**. Registration is complete. Confirming your user settings and Client Launcher testing is not required. You may begin working with Exceed TurboX Dashboard.

5. In the **User settings** dialog box **General** tab, confirm that your **Username** , **Full name**, **Email address** , and **Language** are correct. Make changes if required.

See "Configuring your user settings" in *Exceed TurboX Dashboard and Client Help* for more information.

See [Configuring your user settings](#) for more information.

6. Click one of the following:

- **Next.** This button is displayed if your administrator has enabled Client Launcher verification during registration.

The **Client Compatibility Wizard** opens. Proceed to step 7.

#### Note

The **Next** button is unavailable if any mandatory fields are empty.

- **Save:** This button is displayed if your administrator has disabled Client Launcher verification during registration.

Registration is complete. Client Launcher testing is not required. You may begin working with Exceed TurboX Dashboard.

7. Follow the instructions in the **Client Compatibility Wizard**. When compatibility testing is complete, click **Finish**.

For detailed instructions, see "To verify the Client Launcher compatibility" steps under "Downloading and installing the Client Launcher" in *Exceed TurboX Dashboard and Client Help*.

For detailed instructions, see [To verify the Client Launcher Compatibility](#).

8. One of the following occurs:

- A registration message appears. Click **OK**.
- The **Sign-in** dialog box appears. Enter your **Username** and **Password**, and click **Sign in**.

Registration is complete. You may begin working with Exceed TurboX Dashboard.

## Configuring your web browser for Kerberos

This section describes how to configure your web browser for Kerberos. If your system administrator has configured your system to use single sign-on based on Kerberos, you are authenticated using your Microsoft Active Directory credential and do not need to sign in; however, you may need to configure your web browser before you are authenticated. Each client web browser must be configured to allow Exceed TurboX Dashboard to authenticate against the domain in which the Exceed TurboX Connection Node is located.

### Note

The steps may vary depending on your web browser version. For more information, consult the documentation for your web browser.

Once you have configured your browser appropriately, you can start using Exceed TurboX Dashboard. For information on the tasks you can perform, see [Getting started with Exceed TurboX Dashboard](#).

# Configuring FireFox, Internet Explorer, and Chrome Browsers for Kerberos

## To configure Mozilla Firefox for Kerberos (Windows, Linux, Mac):

1. In the address bar of Firefox, type `about:config` to list the current configuration options.
2. In the **Search** box, type `negotiate` to show only options containing that word.
3. Double-click the `network.negotiate-auth.trusted-uris` entry.
4. In the **Enter string value** dialog box, enter the name of the domain to authenticate against (for example, `.example.com`).
5. Double-click the `network.negotiate-auth.delegation-uris` entry and specify the same domain that you entered in step 4.

## To configure Internet Explorer for Kerberos (Windows only):

1. In Internet Explorer, select **Tools**, then **Internet Options**.
2. On the **Security** tab, select **Local intranet** and click **Sites**.
3. Make sure that the **Include all sites that bypass the proxy server** and **Include all local (intranet) sites not listed in other zones** check boxes are selected.
4. Click **Advanced**.
5. In the **Websites** list, add the name of the domain to authenticate against (for example, `example.com`), then click **Close**.

### **Note**

If you are using the fully qualified domain name as the Exceed TurboX URL, you must complete this step. You must also complete this step in Internet Explorer if you are using Microsoft Edge as the browser.

6. Click **OK** in the **Local intranet site** dialog box.
7. On the **Security** tab, select **Local intranet** and click **Custom Level**.
8. In the **Security Settings** dialog box, scroll to the **User Authentication** area.
9. Select **Automatic logon only in Intranet zone**, then click **OK**.
10. Select the **Advanced** tab.
11. Scroll to the **Security** area and select **Enable Integrated Windows Authentication**.

!!! note If you receive the following message when launching Internet Explorer: "Your browser is not supported by Exceed TurboX Dashboard", navigate to **Tools > Compatibility View Settings**, and clear the option for **Display intranet sites in Compatibility View**.

12. Use the command line to run the following command:

```
chrome.exe --auth-server-whitelist="*.domain.com" --auth-negotiate-delegate-whitelist="*.domain.com"
```

where `domain` is the name of the domain to authenticate against.

## To configure Google Chrome for Kerberos (Linux only):

1. Follow the steps in the **Set Up Policies** section of the following Linux Quick Start article:

<http://dev.chromium.org/administrators/linux-quick-start>

2. For the step in the article that prompts you to insert content into the file you created, insert the following content:

```
{
  "AuthServerWhitelist": "/*.domain.com",
  "AuthNegotiateDelegateWhitelist": "/*.domain.com",
}
```

where `domain` is the name of the domain to authenticate against.

3. At a command prompt, run the following commands:

- `defaults write com.google.Chrome AuthServerWhitelist"/*.domain.com"`
- `defaults write com.google.Chrome AuthNegotiateDelegateWhitelist "/*.domain.com"`

where `domain` is the name of the domain to authenticate against.

4. Currently, configuration is not required to use Kerberos on Safari.

## Displaying Exceed TurboX in another language

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You can configure the Exceed TurboX interface to display in various languages. This section describes how to change the language of the interface before and after signing in to Exceed TurboX.

### Note

Your language selection is reflected in the Exceed TurboX interface only. Operating system dialog boxes, such as **Open** and **Save As**, retain your system's language setting.

You can change the language of the Exceed TurboX interface using the following methods:

#### Sign-in page

Before you click **Sign in**, select an available option from the language drop-down list at the top-right corner of the page. See [Signing in to Exceed TurboX Dashboard](#) for more information.

#### Prompt upon first sign in

The first time you sign in to Exceed TurboX Dashboard, the **User settings** dialog box opens. Select an available option from the **Language** drop-down list.

#### User settings dialog box

You can change the language at any time by using the **User settings** dialog box. For more information, see [Configuring your user settings](#).

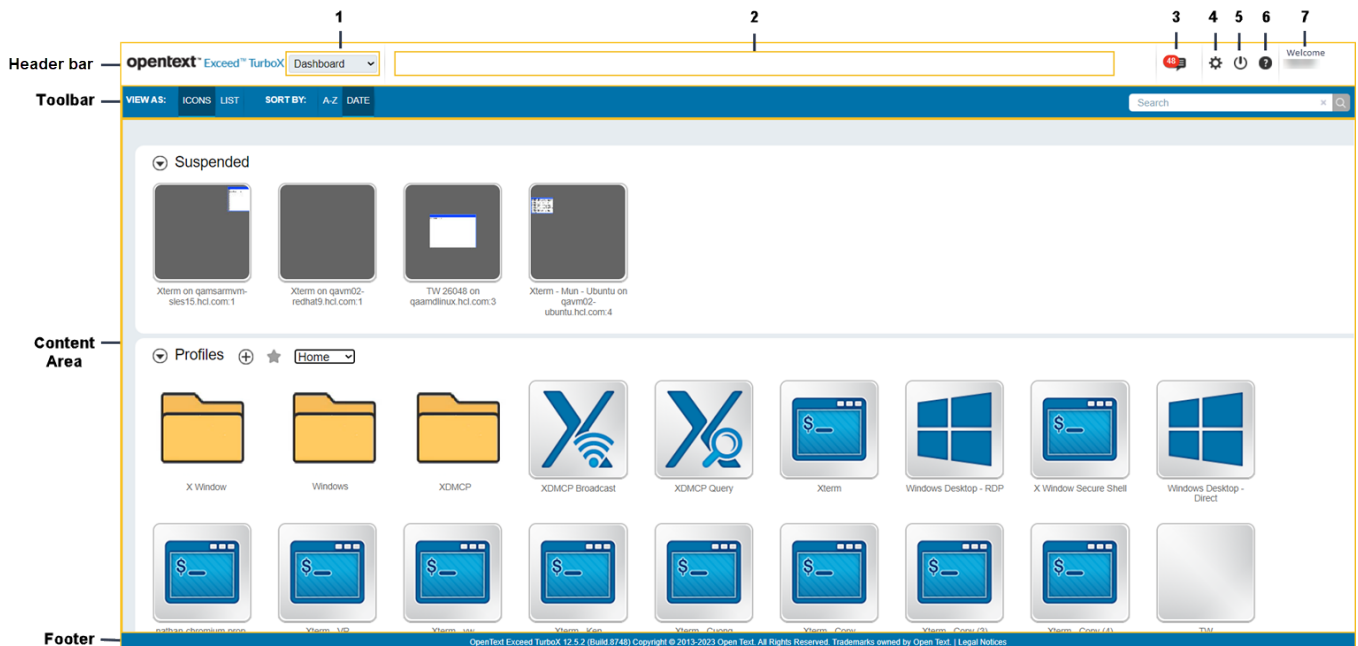
## Getting started with Exceed TurboX Dashboard

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### Getting started with Exceed TurboX Dashboard

This section provides an overview of Exceed TurboX Dashboard.

The following illustration shows the Dashboard in **Icons** view.



The Dashboard interface contains the following elements:

### Header bar


- (1) Web application selector: Allows you to switch between the following Exceed TurboX Server web applications: **Dashboard**, **Server Manager**, and **REST APIs**.

#### Note

Some of these options may not be available, depending on your user role and permissions.

For information about using **Server Manager**, see the *Exceed TurboX Server Manager Help*.

For information about using **REST APIs**, see [Getting started with Exceed TurboX REST APIs](#).


- (2) Site banner area: Information about the Exceed TurboX Server status.
- (3) **Read messages** : Click to open the **Messages** dialog box and review messages sent by the Exceed TurboX Server.

For more information, see [Viewing messages](#).

The section about viewing message can be made 'shared content' between UG and AG in a future release.


- (4) **User settings** : Click to configure your Exceed TurboX user settings.

For more information, see [Configuring your user settings](#).

- (5) **Sign out** : Click to sign out of Exceed TurboX Dashboard.

For more information, see [Signing out of Exceed TurboX Dashboard](#).

The section about signing out can be made "shared content" between UG and AG?


- (6) **Help** : Click to access the *Exceed TurboX Dashboard Help*.

#### **Note**

The **Help** icon is visible only if your Exceed TurboX administrator has not disabled it.

- (7) **User name** area: Displays the user name that you are logged in as.

## Toolbar

- **ICONS**: Click to display the **Icons** view. Sessions and profiles are displayed as thumbnail images. See [Using the Icons view](#) for more information.
- **LIST**: Click to display the **List** view. Sessions and profiles are displayed as lists. See [Using List view](#) for more information.
- **A-Z**: Click to sort the sessions and profiles by name. Sorting is available in Icons view only. See [Sorting sessions and profiles in Icons view](#) for more information.
- **DATE**: Click to sort the sessions and profiles by date. Sorting is available in Icons view only. See [Sorting sessions and profiles in Icons view](#) for more information.
- **Search** : Allows you to search for sessions and profiles by name. For more information, see [Searching for a session or profile](#).

**Content area**: Displays sessions and profiles information in the following panes:

- For **Icons** view: **Profiles, Active, Suspended, and Shared**.
- For **List** view: **Profiles and Sessions**.


For more information, see [Expanding and collapsing panes in Icons view](#) and [Creating profiles](#).

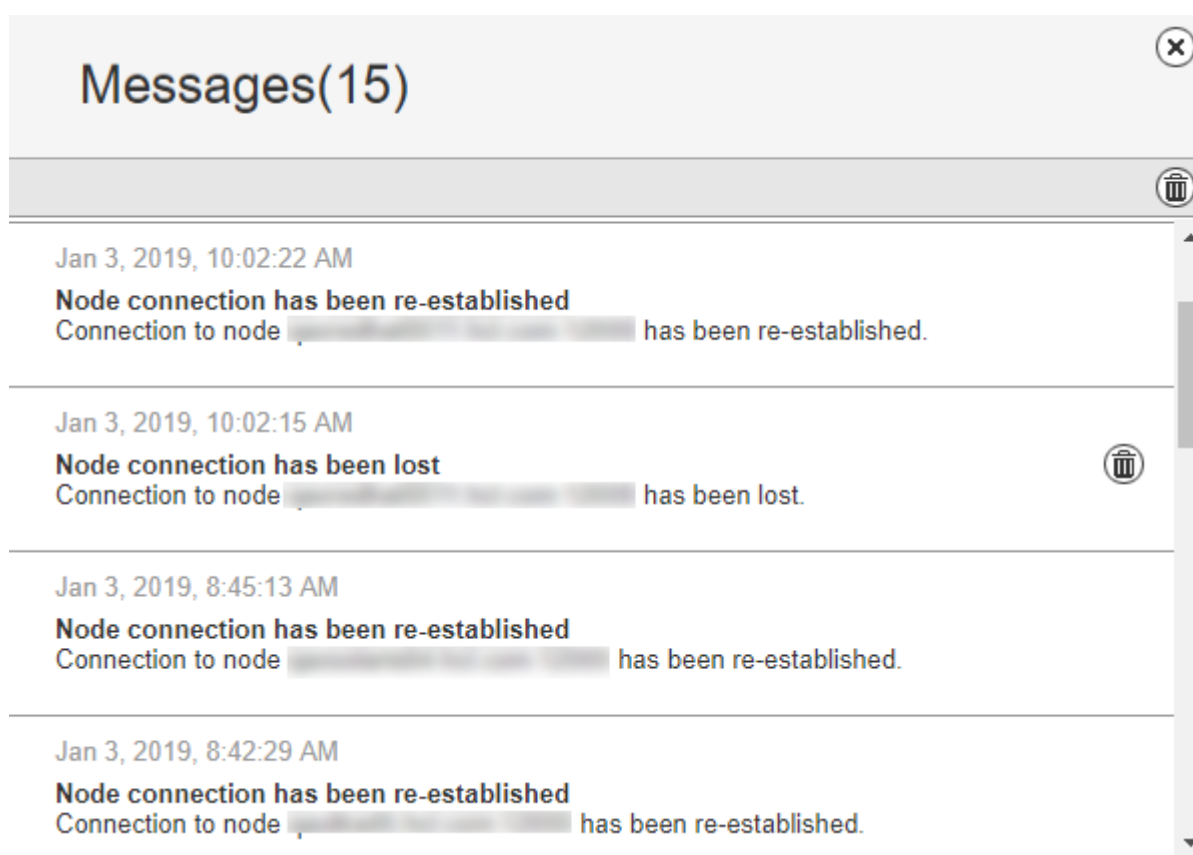
**Footer**: Displays the Exceed TurboX version and build number, update version (if applicable), product copyright and trademark information, and a link to additional legal information.

## Viewing messages


This section describes how to view messages sent to you by your Exceed TurboX administrator and by other users.

You receive a message whenever another user invites you to share a session. You also receive a message when an Exceed TurboX administrator sends a message to you, a user group you belong to, or to a node or node group on which you have an active session.

When you receive a message, a red icon appears over the **Read messages** icon  in your Exceed TurboX Dashboard. The red icon displays the number of unread messages you have. To view your messages, click the icon. Your messages are displayed in the Messages dialog box, with the newest messages on top.



The screenshot shows a dialog box titled "Messages(15)" with a close button (X) in the top right corner. Below the title bar is a trash icon. The messages are listed as follows:


- Jan 3, 2019, 10:02:22 AM  
**Node connection has been re-established**  
Connection to node [redacted] has been re-established.
- Jan 3, 2019, 10:02:15 AM  
**Node connection has been lost**  
Connection to node [redacted] has been lost. 
- Jan 3, 2019, 8:45:13 AM  
**Node connection has been re-established**  
Connection to node [redacted] has been re-established.
- Jan 3, 2019, 8:42:29 AM  
**Node connection has been re-established**  
Connection to node [redacted] has been re-established.

### Note


If you have an active session when a message is sent, the message also appears in a dialog box in the session. If a message is sent to a node or to a node group on which you have a suspended session, you will see the message dialog box when you resume the session. Other messages are not displayed in a dialog box when you resume a suspended session.

You can configure Exceed TurboX to sent you an email copy each time you receive a message. See [Configuring your user settings](#) for more information.

### To delete a message

1. Open the **Messages** dialog box on your Exceed TurboX Dashboard.
2. Position the pointer over the message that you want to delete.
3. Click the **Delete this message** button .

### To delete all read messages

1. Open the **Messages** dialog box on your Exceed TurboX Dashboard.
2. Click the **Delete all read messages** button  at the top right of the **Messages** dialog box.

## Configuring your user settings

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This section describes how to configure your Exceed TurboX user settings, which contain your user information, preferences for automated messages, and your client settings.

Your user settings also display additional, read-only information. This information may list the groups to which you belong and user roles assigned to you by your system administrator. You can also view the date and time when your user account last signed in to the Exceed TurboX Dashboard, and the IP address from which the sign-in was performed.

If the Exceed TurboX administrator has not yet configured your user settings, you may be required to specify the following information:

- Your full name and email address.
- The types of messages you want to receive when specific events occur in Exceed TurboX.
- The session startup method you want to use when running applications.

### To configure your user settings:

1. In the Exceed TurboX Server Manager, click the **User settings**  icon on the header bar.

## User settings ✕

General
Messages
Client settings
API keys
?

**User information**

Username

Full name

Email address

Role Admin (Full Access)

User groups All users

Most recent sign-in: 2023-07-10 11:52:19 from

Previous sign-in: 2023-07-07 23:19:44 from

**Preferences**

Language English ▼

Always allow browser shortcuts to resume suspended sessions

Save

### Note

If you are signing in for the first time, the **Client settings** and **API keys** tabs (not shown in the figure above) are not available.

2. In the **User settings** dialog box, on the **General** tab, confirm or enter the following information:

In the **User information** area, the following fields are required:

Username	The username assigned by your system administrator.
Full name	The name associated with your Exceed TurboX user account.

Email address	The email address associated with your user account. All Exceed TurboX messages (for example, event messages and invitations to join shared sessions) will be sent to this email address.
---------------	---

**Note**

If your administrator configured an LDAP server in your environment, the name and email address displayed in your user settings are retrieved from the LDAP server. In this case, these values are read-only.

When using OTDS authentication, your full name and email address are retrieved from the OTDS server and displayed in your user settings.

In addition to this information, user can also view **Role**, **User groups**, **Most recent sign-in**, and **Previous sign-in** details.

In the **Preferences** area:

- Select the **Language** for the Exceed TurboX interface.
- Select the **Always allow browser shortcuts to resume suspended sessions** to resume suspended sessions using a browser shortcut.

For more information, see *Working with shortcuts* in *Exceed TurboX Dashboard and Client Help*.

3. On the **Messages** tab, configure the types of message that you want to receive when specific events occur in Exceed TurboX. These messages are sent to your Exceed TurboX Dashboard.

## User settings

✕

General Messages Client settings API keys
?

- Session is terminated by an administrator
- Session is suspended by an administrator
- Session is terminated due to idle timeout
- Session is suspended due to idle timeout
- Session is suspended for more than  hour(s)
  - Send a reminder message every  Hour(s) ▼ after initial warning
- Suspended session is terminated due to timeout
  - Send a warning message  Hour(s) ▼ before timeout
  - Send a reminder message every  Hour(s) ▼ after initial warning
- ETX Proxy has crashed
- Session is reassigned
- Account is locked because of too many failed sign-in attempts
- Profile is edited by an administrator
- API key is created
- Receive a copy of all user messages via email

Save

You can configure the followings settings in the **Messages** tab:

Session is terminated by an administrator	Send a message when an administrator terminates one or more sessions that the user owns.
Session is suspended by an administrator	Send a message when an administrator suspends one or more sessions that the user owns.
Session is terminated due to idle timeout	Send a message when one or more sessions that the user owns have been terminated by Exceed TurboX after they have been suspended for a defined period of time.
	This function is controlled by the <b>Terminate suspended sessions after [n] [units]</b> option in the site settings.
	The message contains the session ID(s) of the automatically suspended session(s).

Session is suspended due to idle timeout	Send a message when one or more sessions that the user owns have been suspended by Exceed TurboX because there has been no session activity for a defined period of time.
	This function is controlled by the <b>Suspend idle sessions after [n] minute(s)</b> option in the site settings.
Session is suspended for more than [n] hour(s)	Send a message when one or more sessions that the user owns have been suspended for longer than the specified time period.
	If you select this option, you must enter the time period in hours.
Send a reminder message every [n] [units] after initial warning	Send reminder messages if one or more sessions that a user owns has been suspended longer than the time period defined in <b>Session is suspended for more than [n] hour(s)</b> .
	If you enable this option, you must enter the frequency of the reminder messages in minutes, hours, or days.
Suspended session is terminated due to timeout	Send a message when one or more sessions that the user owns have been terminated due to timeout.
Send a warning message [n] [units] before timeout	Send a message when one or more suspended sessions that the user owns are about to be terminated.
	The message indicates when the suspended session will terminate.
	If you select this option, you must enter the time period in minutes, hours, or days.
Send a reminder message every [n] [units] after initial warning	Send reminder messages if a suspended session that the user owns is terminated due to timeout.
	This option is available if <b>Suspended session is terminated due to timeout</b> is selected.
	If you enable this option, you must enter the frequency of the reminder messages in minutes, hours, or days.

ETX Proxy has crashed	Send a message when the Exceed TurboX session proxy process terminates abnormally, causing a session that the user owns to terminate.
	The message includes a URL linking to more information about the crash.
Session is reassigned	Send a message when a session that the user owns is reassigned by an administrator.
	The message includes the session title and node on which it was started.
	The message to the user that started the session includes the username of the new session owner.
	The message to the session owner includes the name of the previous session owner.
Account is locked because of too many failed sign-in attempts	Send a message when the user's account is locked after too many consecutive failed sign-in attempts.
	This function is controlled by the <b>Lock users out of ETX Server after [n] consecutive failed sign-in attempts</b> option in the site settings.
Profile is edited by an administrator	Send a message when an administrator modifies one or more profiles that the user owns.
	The message contains the names of the modified profiles.
API key is created	Send a message when the user creates an API key.
	<b>Note:</b> Users who do not have permissions to create API keys (see <a href="#">Working with API keys</a> ) receive a message when an Exceed TurboX administrator creates an API key on their behalf.
Receive a copy of all user messages via email	Send a copy of all user messages on the email ID from which user has registered.

If this option is not selected, messages are delivered only to the user's Exceed TurboX Dashboard.

#### 4. On the **Client settings** tab:

a. In the **Client Preference** area, select the Exceed TurboX client that you prefer to use to launch a session:

- **Native Client only:** Always use the Native Client. If you are on a device which does not support the Native Client, the session will not start.
- **Native if supported, Web otherwise:** Use the Native Client on any device which supports it (generally, any Windows, Linux, or Mac PC) and the Web Client on any other device such as a tablet.
- **Web Client only:** Always use the Web Client.
- **Prompt:** Have Exceed TurboX prompt you for the client to use.

#### **Note**

This setting is used only if the Profile you are using to launch the session allows the user to select the client type. A client type setting in a Profile overrides the user's client preference.

The Native Client includes more features than the Web Client, and in many configurations also offers better performance. In most cases, we recommend you use the Native Client, if possible. However, it does require you to install the Client Launcher on your local system. If you do not want to install any software locally, for devices where the Native Client is not supported, or if for any other reason you do not want to use the Native Client, use the Web Client.

b. In the **Client Launcher** area, ensure that Exceed TurboX Client Launcher is installed on your system and is able to launch sessions:

- If you do not have a Client Launcher installed on your computer, select one of the Launcher packages available for your platform and click **Download launcher**. The selected installation package is downloaded and saved on your system; you must install the package before you can launch Exceed TurboX sessions in the Native Client. For more information, see [Downloading and installing the Client Launcher](#).

The **Download launcher** button is only available if the ability to download the Client Launcher is enabled in the **Security** settings.

See the *Exceed TurboX Server Manager Administration Help* for more information.

- If you have a Client Launcher installed on your computer, click **Test launcher**. This launches the **Client Compatibility Wizard**, which checks the compatibility of the launcher with your system

and determines whether you need to perform any launcher downloads or upgrades. For more information, see [Downloading and installing the Client Launcher](#).

- c. If required, click **Clear Native Client cache** to clear the data cached by Exceed TurboX Native Client. Occasionally, you may need to clear the cached data to reduce disk usage of old client runtimes or to delete client-side cached settings.
5. Depending on the way your system is configured, you may see the **API keys** tab. To work with API keys, click the **API keys** tab. For more information, see [Working with API keys](#).
6. Click **Save** to save your user settings.

## Downloading and installing the Client Launcher

Exceed TurboX uses an executable program called the Client Launcher to launch Native Client sessions. The Client Launcher must be installed on the user's computer. It is responsible for:

- Downloading and extracting the Native Client runtime from Exceed TurboX Server when a session is started.
- Validating the integrity of the downloaded Native Client runtime.
- Invoking the Native Client runtime ( `etxc` ) with the necessary connection information to start the session.
- Updating itself when a new Client Launcher is available.
- Launching or resuming sessions using a Windows shell command or shortcut.

Launching or resuming sessions using a Windows shell command or shortcut.

For more information, see [About the Client Launcher](#).

This section describes how to download and install the Client Launcher on your computer. It also describes how to use the **Client Compatibility Wizard** to check the compatibility of the launcher with your system and determine whether you need to perform any launcher downloads or upgrades.


### Notes:

- The Client Launcher is not required to launch session through the Web Client. If you will use only the Web Client, not the Native Client, you do not need to install the Client Launcher.
- When using the Client Launcher over HTTPS with a fully-verified certificate chain, you may see a mixed content warning issued by the browser. This is because some browsers inform the user when information is leaving the browser (in this case, to launch a remote session). For example, in Chrome, the HTTPS lock symbol to the left of the address bar changes from green to orange after launching a session. This is an expected behavior.

- The Client Launcher supports client-side HTTP(S) proxy configuration when connecting to Exceed TurboX Server to download launcher and client runtime updates.

The Client Launcher is supported on Windows, Linux, and Mac. For details about supported operating systems, see the *Exceed TurboX Release Notes*.

**To download and install the Client Launcher on Windows:**


1. On the Exceed TurboX header bar, click **User settings** .
2. In the **User settings** dialog box, click the **Client settings** tab.
3. In the **Client Launcher** area, select one of the launcher packages from the list based on the system CPU you have:

Packages for `Windows Intel` or `Windows AMD` based CPUs:

- **ETXLauncher-`version`.msi**: This package is available to all users.
- **ETXLauncher-`version`\_AllUsers.msi**: This package is available only for users who have the **Download Windows MSI (AllUsers) Client Launcher** permission in user settings. By default, this package is available for users with the Admin role. The package requires Administrative rights on the Windows machine itself.

Packages for `Windows/arm64` based CPUs:

- **ETXLauncher-`version`-arm64.msi**: This package is available to all users.
- **ETXLauncher-`version`-arm64\_AllUsers.msi**: This package is available only for users who have the **Download Windows MSI (AllUsers) Client Launcher** permission in user settings. By default, this package is available for users with the Admin role. This package requires Administrative rights on the Windows machine.

 **Note**

You can install `Intel`, `AMD`, or `ARM64` packages on the Windows `ARM64` platform. The installed CPU type determines the platform used for the Exceed TurboX Client Launcher and Exceed TurboX client. To switch the CPU type used for your Exceed TurboX Client Launcher or Exceed TurboX client, you can uninstall the current launcher package and install the other ETX launcher package. For example, uninstall **ETXLauncher-`version`.msi** to install **ETXLauncher-`version`-arm64.msi** to use `ARM64` binaries.

4. Click **Download launcher**.

Depending on the file you downloaded, the installation file is saved on your system.

5. Run the installer package from the download location.

- If prompted with a Security Warning, click **Run**.
6. On the **Welcome** page of the **Setup Wizard**, click **Next**.
  7. Read the Exceed TurboX End User License Agreement. Click **I accept the terms in the License Agreement**, then click **Next**.
  8. To install the Client Launcher, click **Install**.


#### **Note**

**Allow third party libraries to be loaded in ETX Client Launcher** should be selected under special circumstances only. For example, if a previous installation failed with a security warning. If you select this option, a less secure version of the Client Launcher, either the `ETXLauncher1-version.msi` or `ETXLauncher1-version-arm64.msi` is installed. This version allows non-system DLLs to be used. If you install this version of the Client Launcher, future service pack updates will be applied to this version and will not update your installation to the more secure version.

9. When the installation process is complete, click **Finish**.

The Client Launcher is now installed on your system. You can now test the compatibility of this launcher. See [To verify the Client Launcher Compatibility](#) for more information.

#### **To download and install the Client Launcher on Linux:**

1. On the Exceed TurboX header bar, click **User settings** .
2. In the **User settings** dialog box, click the **Client settings** tab.
3. In the **Client launcher** area, select the **Linux (.TAR)** launcher package and click **Download**.
4. When the download is complete, unpackage the .tar file to your local drive:

```
sudo tar -xvzf ETXLauncher-ETX Version.Build Number-SP Number-Platform-CPU.tar.gz
```

For example:

```
sudo tar -xvzf ETXLauncher-12.0.1.5790-SP1-linux-x64.tar.gz
```


5. Run the installation script:

```
./etxlauncher_version/bin/install
```

6. Follow the script prompts to complete the installation.

When the installation is complete, you can test the compatibility of this launcher. See [To verify the Client Launcher Compatibility](#) for more information.

**To download and install the Client Launcher on Mac:**

1. On the Exceed TurboX header bar, click **User settings** .
2. In the **User settings** dialog box, click the **Client settings** tab.
3. In the **Client launcher** area, select the **Mac OS X (.DMG)** launcher package and click **Download**.

A new page appears, allowing you to either open the file or save it.

4. Click **Open**.

The `ETXLauncher-ETX Version.Build Number-SP Number-Platform-CPU.dmg` file is downloaded to the `Download` folder on your local machine.

For example, the Mac Client Launcher package name for version 12.0.1 (build 5790) is:

`ETXLauncher-12.0.1.5790-SP1-macosx-x86_64.dmg`.

5. Double-click the `.dmg` file name.

The **Exceed TurboX Client Launcher 12** dialog box opens.


6. Drag the **Exceed TurboX Client Launcher.app** icon and drop it over the **Applications** folder icon. This ensures that Exceed TurboX Client Launcher.app is registered.

**Note**

You can also register the `ETXLauncher.app` by opening the `Download` folder and right-clicking the file.

When the installation is complete, you can test the compatibility of this launcher. See [To verify the Client Launcher compatibility](#) for more information.

**To verify the Client Launcher compatibility:**

1. On the Exceed TurboX header bar, click **User settings** .
2. In the **User settings** dialog box, click the **Client settings** tab.
3. Click **Test launcher**.

The **Client Compatibility Wizard** opens.

**Note**

To ensure optimal performance, run the **Client Compatibility Wizard** the first time Exceed TurboX is accessed from a computer.

If you are signing in to Exceed TurboX Dashboard for the first time, the **Client settings** tab is not available. Instead, if your administrator has enabled Client Launcher verification during registration,

the **Client Compatibility Wizard** opens automatically. If your administrator has not enabled Client Launcher verification, clicking **Save** creates the user and causes the **User settings** dialog box to close.

4. On the **Welcome** page, review the information and click **Next**.

The wizard tries to start the Client Launcher and test whether it is compatible with your system.

5. On the **Attempting to start Exceed TurboX Client Launcher** page, read and accept any dialogs that appear.

If you are using Google Chrome and you receive an External Protocol Request for ETX Client Launcher prompt, click **Open ETX Client Launcher**.

If the test fails, the **Exceed TurboX Client Launcher was not detected** page displays. Continue to the next step.

If the test is successful, the **Exceed TurboX Client Launcher started successfully** page displays. Continue with Step 8.

6. On the **Exceed TurboX Client Launcher was not detected** page, select a package from the list and click **Download launcher** to download and install the Launcher package. For installation instructions, see:

- [To download and install the Client Launcher on Windows](#)
- [To download and install the Client Launcher on Linux](#)
- [To download and install the Client Launcher on mac](#)

7. When the Launcher package installation is complete, return to the **Client Compatibility Wizard** and click **Next**. Continue with Step 5.

8. Click **Finish** to close the **Client Compatibility Wizard**.

9. Click **Save** to save any changes made to the client settings.


## Deleting data cached by Exceed TurboX

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This section describes how to remove cached Exceed TurboX data from your local computer.

The client-side cache includes both the Exceed TurboX client runtimes that have been downloaded to the user's computer and cached settings, such as window positions for suspended sessions. Clearing the cache removes any client-cached settings and deletes all runtimes except those used by active sessions. This can be done to free up disk space or to force a corrupt client runtime to be re-downloaded from Exceed TurboX Server.

## To clear cached Exceed TurboX data from your computer

1. Click the **User settings**  icon on the header bar.
2. In the **User settings** dialog box, click the **Client settings** tab.
3. Click **Clear cache**.

For information on how to configure caching settings in a profile, see [Configuring Performance settings in Advanced mode](#).

## Working with API keys

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### Working with API keys

This section provides an overview of API keys and describes how to manage the API keys associated with your Exceed TurboX user name.

API keys provide secure authentication for REST API calls to Exceed TurboX Server by not requiring user credentials to be saved to a script file in plain text. API keys are useful in several cases. For example:

- When writing scripts and saving credentials to a file.
- When accessing Exceed TurboX Server through HTTP instead of HTTPS. In this case, credentials are sent over the wire in plain text and can be stolen.
- When API calls, including typed credentials, can be seen by other users. For example, when accessing APIs during a webinar.

Active API keys must be stored in a safe location. Anyone with access to the API keys can perform actions in Exceed TurboX on the user's behalf.

You can manage the API keys on the **API keys** tab of the **User settings** dialog box. You can create, view, and delete API keys associated with your Exceed TurboX user name. For more information, see:

- [Creating API keys](#)
- [Viewing API keys](#)
- [Viewing detailed API key information](#)
- [Deleting API keys](#)

### Note

Depending on your user permissions and site settings, you may not see the **API keys** tab. Users with the *User* role are permitted to create API keys only when the **Access REST APIs** and **Allow users to create API keys** settings are both enabled.


See *Configuring user permissions* and *Configuring general site settings* in the *Exceed TurboX Server Manager Help* for more information.

Users can also manage API keys by calling Exceed TurboX REST APIs to create or delete API keys. Use the Exceed TurboX **REST APIs** web interface to browse the list of REST APIs provided with the server. See [Getting started with Exceed TurboX REST APIs](#) for more information.

## Creating API keys

This section describes how to create API keys using the **User settings** dialog box. You can generate API keys that can be used to authenticate REST API calls.

To create an API key:

1. In the **User settings** dialog box, click the **API keys** tab.
2. Click the **Create API key**  icon.
3. In the **Create API key** dialog box, specify the following fields:

### Usage limit

Select how many times the API key can be used:

- **Single use:** The API key can be used only once.
- **Multiple use:** The API key can be used an unlimited number of times.

### Expiration

Select the length of time after which the API key expires:

- **Never:** The API key never expires.
- **1 hour:** The API key expires after 1 hour.
- **24 hours:** The API key expires after 24 hours.

### Note

The **Never** option is available only if the **Users can create never-expiring API keys** setting is enabled in the **Site Settings > General >** page. See *Configuring general site settings* in the *Exceed TurboX Server Manager Help* for more information.

#### 4. Click **Create**.

The **Information** area displays the **API key**, **Usage limit**, and **Expires** information.

If your system has reached the maximum number of allowed API keys, you may receive a message indicating you need to delete keys before you can create new ones. See [Deleting API keys](#) for more information.

#### 5. Copy the API key code to your clipboard.

##### **Note**

If you close the **Create API key** dialog box before copying the API key, you cannot view this key again.

#### 6. Save the API key code to a location that only you, or the intended users of the key, can access.

#### 7. Click **Close**.

## Viewing API keys

This section describes how to view information about the active and expired API keys that are associated with your Exceed TurboX user name, using the **User settings** dialog box **API keys** tab.

Depending on the selection of the **Hide used and expired API keys** check box, you may or may not see used and expired API keys in the list.


##### **Note**

For security reasons, API keys are hashed before being stored. Exceed TurboX cannot show the actual API key after its creation. API keys should be copied to a safe location when they are created.

To view API keys:

1. In the **User settings** dialog box, click the **API keys** tab.
2. Review the information about the existing API keys.
3. To hide used and expired API keys, select the **Hide used and expired API keys** option. To display used and expired API keys, de-select the **Hide used and expired API keys** option.

##### **Note**

The information in the tab is updated only if you reload the current page or click the **Refresh**  icon in the top-right corner.

The following information is available in the **API keys** tab of the **User settings** dialog box:

Item	Description
Created	When the API key was created.
Status	The current status of the API key. ( <b>Active</b> , <b>Used</b> , or <b>Expired</b> .)
Usage	The availability of the API key for usage. ( <b>Single</b> or <b>Multiple</b> .)
Expires	When the API key expires, or <b>Never</b> if the key does not expire.
Last used	When the API key was last used.
Actions	The actions you can perform on an API key. To view the available actions, position the pointer over the <b>Actions</b> column.

## Viewing detailed API key information

This section describes how to view detailed information for an API key.

To view API key information:

1. In the **User settings** dialog box **API keys** tab, position the pointer over the **Actions** column of the API key whose information you want to view.
2. Click **Details** ⓘ.
3. Review the information for the selected API key.
4. When you are finished, click **OK**.

You can view the following information on the **API key** dialog box:

ID	The ID number of the API key is displayed at the top of the dialog box.  This is a 36-character string that includes a timestamp and unique ID.
API key	The API key code is visible only when the key is created.  This field displays ( <b>Only visible when created</b> ) to indicate the unavailability of the API key code.
Created	When the API key was created.
Created from	The IP address where the API key was created.
Usage limit	How many times the API key can be used. ( <b>Single</b> or <b>Multiple</b> .)

Expires	When the API key expires, or <b>Never</b> if the key does not expire.
Last used	When the API key was last used.
Last used from	The IP address from which the API was last used.


## Deleting API keys

This section describes how to delete API keys using the **User settings** dialog box. You can delete a single API key or all API keys.


### Note

Ensure you do not need the API keys you are about to delete. You cannot retrieve deleted API keys; you can only recreate them.

To delete a single API key:

1. In the **User settings** dialog box, click the **API keys** tab.
2. Position the pointer over the **Actions** column of the API key that you want to delete.
3. Click **Delete API key** .
4. When prompted, confirm that you want to delete the API key.

To delete all API keys:


1. In the **User settings** dialog box, click the **API keys** tab.
2. Click the **Delete API keys**  icon.
3. *Optional:* To delete used and expired API keys only, select the **Delete used and expired API keys only** check box, and then click **Yes**.
4. When prompted, confirm that you want to delete the API keys.

## Signing out of Exceed TurboX Dashboard

This section describes how to sign out of Exceed TurboX Dashboard.

Signing out of Exceed TurboX Dashboard does not affect any session that is running or suspended. If you are working in a session and sign out of Exceed TurboX Dashboard, or close your web browser, you can continue working in the session at a later time. You must sign in to Exceed TurboX Dashboard again only if you need to launch other sessions or manage your profiles. If you close Exceed TurboX Dashboard while you are working in a session, you can start the Dashboard again from the Exceed TurboX menu in the session. For information, see [Accessing the Exceed TurboX Client menu](#).

### To sign out:

Click the **Sign out**  icon on the header bar. The sign-in page appears.

## Understanding the Exceed TurboX workflow

This section describes the Exceed TurboX Dashboard workflow and its high-level tasks.

### 1. Sign in to Exceed TurboX Dashboard.

You need a user account and password to sign in to Exceed TurboX Dashboard. For more information, see [Signing in to Exceed TurboX Dashboard](#).

### 2. Set up your user settings.

If you are signing in for the first time, you must set up your user settings before you can work with Exceed TurboX. User settings contain user information and email message preferences. For more information, see [Configuring your user settings](#).

### 3. Create or confirm the availability of profiles.

You must use a profile to start a session. You may need to use a profile provided by your administrator or your administrator may also allow you to create profiles of your own. For more information, see [About sessions](#).

### 4. Use Exceed TurboX Dashboard to start a new session.

Start a session on your local computer. For more information, see [Launching a new session from the Profiles pane](#).

Native Client sessions do not run in the web browser. They run on your local computer in separate windows. Web Client sessions run in a new tab in your browser.

### 5. Work in a session, after it has been launched, typically to access an application and perform tasks with it.

When a session is running, you can view, manipulate, and/or work with applications located on a remote computer.

You can also perform tasks in your session before you launch an application, such as sharing it.

To work within a session, you can use the Exceed TurboX Client menu or the tools available in Exceed TurboX Dashboard.

For more information, see [Working with Sessions in the Native Client](#) and [Working with Sessions in the Native Client](#).

#### 6. Terminate or suspend your session.

When you are finished working with a session, you can terminate it if you do not plan to use it in the future. If you do plan to use a session again, you can suspend it instead of terminating it. When a session is suspended, all session settings and opened applications are preserved.

For more information, see [Suspending and resuming sessions](#) and [Suspending and resuming sessions](#).

#### 7. Use Exceed TurboX Dashboard to view and manage your sessions and profiles.

If multiple sessions and profiles are available to you, you can use various tools in Exceed TurboX Dashboard to view, organize, and locate sessions and profiles. You can also manage your existing sessions and profiles.

For more information, see [Viewing, sorting, and searching for sessions and profiles](#) and [Viewing, sorting, and searching for sessions and profiles](#).

#### 8. Sign out.

If Exceed TurboX Dashboard is open in your web browser, sign out.

For more information, see [Signing out of Exceed TurboX Dashboard](#).

## Viewing, sorting, and searching for sessions and profiles

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### Viewing, sorting, and searching for sessions and profiles

---

This section describes how to view and organize sessions and profiles in Exceed TurboX Dashboard, in either **Icons** or **List** view.

It also describes how to search for sessions and profiles in Exceed TurboX Dashboard.

## Using the Icons view

### Using the Icons view

To display the **Icons** view, click **ICONS** on the Dashboard toolbar. This view is selected by default.

This view displays sessions and profiles, as thumbnail images, in the following panes:

#### Shared sessions

This pane is available only when one or more sessions have been shared with you by other Exceed TurboX users.

#### Suspended sessions

This pane is available only when you have one or more suspended sessions. This includes suspended sessions started using your Exceed TurboX user account on other computers.

#### Active sessions

This pane is available when at least one session you started is running. This includes active sessions started using your Exceed TurboX user account on other computers. It also includes sessions that you started and are sharing with other users.

#### Profiles



This pane is always visible. It displays folders if available and profiles that you can use to start a session.






Each thumbnail image represents a session, a profile, or a folder available in your environment. You can expand or collapse any pane (for information, see [Expanding and collapsing panes in Icons view](#)), sort the sessions and profiles in each pane (for information, see [Sorting sessions and profiles in Icons view](#)), and use the action icons displayed over the thumbnail images to perform various tasks (for more information, see [Using session and application action icons](#)).

### Expanding and collapsing panes in Icons view

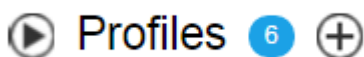
This section describes how to expand and collapse the session and profile panes to change the information displayed in Exceed TurboX Dashboard. For more information about panes, see [Using the Icons view](#).

To expand or collapse a pane, use the following action icons at the top of the pane.

Icon	Description	Available in the following panes
	Shows the contents of a collapsed pane.	All
	Hides the contents of an expanded pane.	All

Icon	Description	Available in the following panes
	Indicates the number of items in a collapsed pane. Click this icon to show the contents of the pane.	All
	Indicates the number of favorite profiles in the collapsed <b>Profiles</b> pane. Click this icon to show the favorite profiles.	Profiles
	* Shows only favorite profiles.	Profiles
	* Shows all profiles.	Profiles
	* Lists <b>Home</b> and <i>Profile folder names</i> . The list box is displayed only when there is a folder available for the user. Selecting a folder displays all the user profiles or group profiles stored in the folder. By default, <b>Home</b> is selected that contains folders and profiles.	Profiles
	* <b>Note:</b> Available only when the <b>Profiles</b> pane is expanded.	

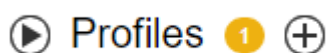
Example 1: This example shows a collapsed **Profiles** pane.



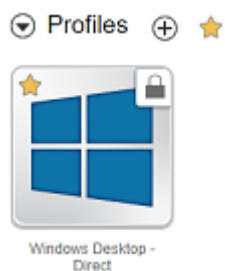
This pane contains six profiles, as indicated by the blue circle. Click the arrow or the blue circle to expand the pane and show the profiles.



Example 2: This example shows a collapsed **>Profiles** pane which is filtered to show only favorite profiles.



This pane contains one favorite profile, as indicated by the yellow circle. Click the arrow or the yellow circle to expand the pane and view the profile.



The yellow icon is displayed only when the profiles are filtered to show only favorite profiles. Otherwise, the blue icon shows the total number of profiles in the pane. When the pane is expanded, click the gray star or yellow star to switch between all profiles and favorites only.

## Sorting sessions and profiles in Icons view

This section describes how to sort the session and profile thumbnail images displayed in **Icons** view.

You can sort the images in ascending or descending order, according to dates or names. The sorting buttons (**A-Z** and **DATE**) are located on the Dashboard toolbar.

You can use these buttons to sort the thumbnail images in all of the displayed panes according to the criterion you select. You can reverse the sort order by clicking the same button again. By default, session and profile thumbnail images are sorted by date, in ascending order.

## Using session and application action icons

### Using session and application action icons

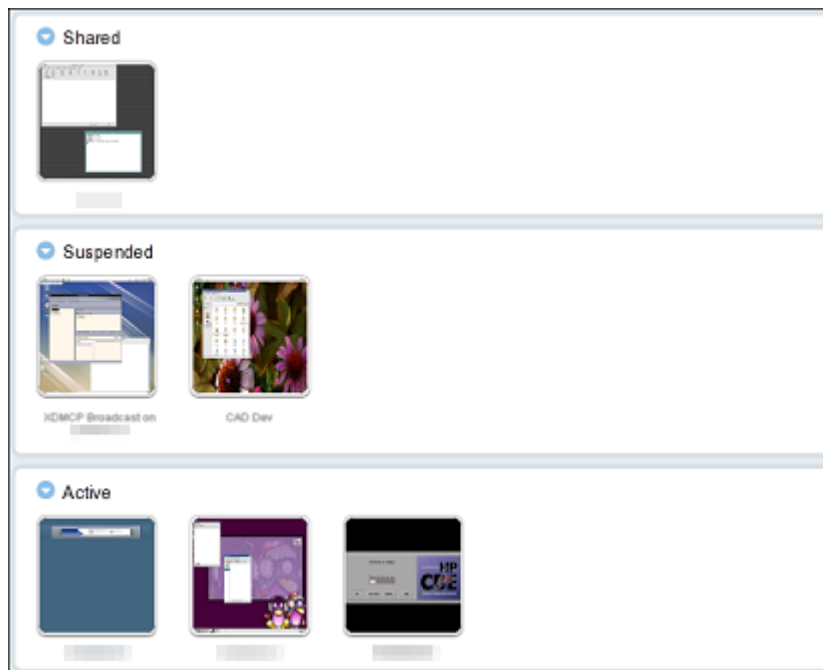
This section describes the icons that are displayed when you place the pointer over a session thumbnail image or profile image in **Icons** view, and the tasks that you can perform using these icons.

Exceed TurboX uses a unique name and image to represent each session and profile in Exceed TurboX Dashboard.

In the **Profiles** pane, the profiles are represented as default images. If you have permission to create or edit profiles, you can change the default image displayed for a profile or specify a new name for a profile.

In the **Active**, **Suspended**, and **Shared** panes, sessions are represented as thumbnail images. Each thumbnail image is a screenshot of the session window that is generated and refreshed automatically by Exceed TurboX. These thumbnail images allow you to see what is occurring in the session before resuming, transferring, or joining the session.

Additionally, the session status information displayed below the thumbnail images in the **Active** pane contains details pertinent to the session launch progress. For example, the status **Downloading Client...** indicates that the client runtime is being downloaded. These status descriptions are shown when launching, resuming or joining a shared session and can help troubleshoot session launch issues.



You can position the pointer over an image to access options for its corresponding session or profile. Use the action icons to perform tasks that relate specifically to the type of session (active, suspended, shared), or profile you want to work with or launch.

### Action icons for active sessions

This section describes the tasks you can perform using the action icons available for a session in the **Active** pane.

#### Note

An active session is one that is running and not suspended. This includes sessions that are running on your local computer and sessions that were started on other devices or computers using the same Exceed TurboX user account.

Position the pointer over the thumbnail image of a session in the **Active** pane to access the following action icons:

#### **Transfer**

Transfer the active session to your local computer. For more information, see [Transferring an active session launched on another computer](#).

**Details** ⓘ

View information about the session, including when you started the session and when the thumbnail screenshot was last refreshed. For more information, see [Viewing a larger version of a session image](#) and [Using the session details dialog box to manage sessions](#).

**Share** 👤

Share the session with one or more users.

After you share a session, the **Share** 👤 icon appears on the thumbnail.

For more information, see [Sharing sessions](#).

**Suspend** ⏸ Suspend the session. For more information, see [Suspending and resuming sessions](#).

**Terminate** ⏹

Terminate the session. For more information, see [Ending sessions](#).

The following session state indicators for an active session are displayed in the top-right corner of its session thumbnail.

**Session State Indicator Description**

Depending on how your environment is set up and the permissions granted to you, you may need to use a read-only session. A lock icon indicates that you can use or duplicate the session, but cannot edit or delete it.



The exclamation mark icon indicates that a session is unavailable. For example, connection to the proxy manager that is responsible for this session is broken, the proxy manager was interrupted by a network failure, the proxy manager is in a frozen state, or the proxy manager is restarting or has crashed.

When in this state, all action icons are unavailable.



The delete icon appears while the session deletion is in progress if you click **Delete**.

When in this state, the deletion overlay is half-transparent and all action icons are unavailable.



The sharing icon appears if you own a session and are sharing it with other Exceed TurboX users.


### Action icons for suspended sessions

This section describes the tasks you can perform using the action icons available sessions in the **Suspended** pane.

Position the pointer over the thumbnail image of a session in the **Suspended** pane to access the following action icons:



**Resume** Resume the session. For more information, see [Suspending and resuming sessions](#).

**Details**  View information about the suspended session, including when the session was suspended and when the thumbnail screenshot was last refreshed. For more information, see [Viewing a larger version of a session image](#) and [Using the session details dialog box to manage sessions](#).

**Terminate**  Terminate the suspended session. For more information, see [Ending sessions](#).


### Action icons for shared sessions

This section describes the tasks you can perform using the action icons available for sessions in the **Shared** pane. A shared session is one that an Exceed TurboX user has launched and shared with you. Each shared session is identified by its own thumbnail image in Exceed TurboX Dashboard.

Position the pointer over the thumbnail image of a session in the **Shared** pane to access the following action icons:



**Join** shared session upon invitation](../user/sharing/joining-a-shared-session-upon-invitation.md).

**Details**  See the participants in the shared session and their current status (Owner, Invited, or Joined). For more information, see [About sharing and shadowing X sessions](#).

### Action icons for profiles


This section describes the tasks you can perform using the action icons available for profiles.



Depending on how your environment is set up and the permissions granted to you, you may need to use a global profile that your administrator has provided. Alternatively, your administrator may allow you to create custom profiles for your environment. See [About profiles](#) for more information.

Position the pointer over an image in the **Profiles** pane to access the following action icons:

**Locked** 

If your user permissions do not allow you to edit, delete, or customize group profiles, group profiles are indicated by a lock icon . If your user permissions allow you to edit, delete, or customize group profiles, the lock icon is not displayed.

The lock icon is not displayed on a profile image if you defined the profile or if you have permission to edit that profile.

**Favorite** ; **Favorite** 

Toggle between marking the profile as a favorite and unmarking it as a favorite. For more information, see [Managing favorites](#).

#### **Note**

A yellow star indicates a favorite profile.

**Launch** 


Launch a session using this profile. For more information, see [Launching a new session from the Profiles pane](#).


**Details** 


View the details of the profile. For more information, see [Creating profiles](#).

**Edit** 

Edit the profile's settings. For more information, see [Creating profiles](#).

**Copy**  Duplicate the profile. Use this option to create a new profile, either from a profile you have already created or from a global profile. For more information, see [Creating profiles](#).

**Shortcut**  Create a shortcut to the profile from any location on your computer (for example, your desktop). Use this option to access sessions more easily. For more information, see [Working with shortcuts](#).

**Delete**  Delete the profile. You can only delete profiles that you created. For more information, see [Creating profiles](#).

## Using List view

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### Using List view

To display **List** view, click **LIST** on the Dashboard toolbar.

This view displays sessions and profiles as lists, in the following panes:

#### Sessions

Lists active and suspended sessions that you started, as well as sessions shared with you by other users. It provides action icons that allow you to interact with these sessions.

For more information, see [Viewing session information in the Sessions pane](#).

#### Profiles


Lists the profiles that you can use to start a session and provides action icons that allow you to interact with these profiles. For more information, see [Viewing profile information in the Profiles pane](#).


### Showing and hiding columns in Exceed TurboX Dashboard grids

For most types of objects, Exceed TurboX can display more information than can easily be shown in a list, especially when the pane containing the information is minimized. For this reason, by default, the lists do not display all of the available columns. You can use the **Change view** dialog box to show/hide columns, and to arrange the order in which columns are displayed.

Your column display preferences are preserved after you sign off, even if you sign on again using a different browser.

#### To show and hide columns in Exceed TurboX grids:

1. In Exceed TurboX, go to the pane you want to view.
2. Click the **Change view** button  at the top-right corner of the pane.

3. In the **Change view** dialog box, for each column, select whether you want that column to **Hide** or **Show** in the pane.
4. To change the order of the columns, click and hold each column's **Reorder** button . Drag and drop each column, as needed, to get the order you want.
5. Click **Save**.

** Tip**

To return the columns to their default settings, in the **Change view** dialog box, click **Reset**. Then click **Save**.

## Viewing session information in the Sessions pane

The **Sessions** pane in the **List** view displays the following information about each of your sessions:

### Started on

The date and time when the session was started. For shared sessions, this is the time the session was shared with you.

### Profile name

The profile used to launch the session.

### Description

The session description, which may be set in the profile and when a user suspends a session.

### Node address

The host name or IP address of the node on which the session is running.

### Status

The session status **Active**, **Suspended**, **Shared by me**, or **Shared with me**.

### Suspended for

The length of time the session has been suspended, if applicable.

### Actions

The actions you can perform to manage a session. To view the action icons, position the pointer over the **Actions** column. See [Working with session action icons](#) for more information.

The following action icons are available on the top-right corner of the **Sessions** pane:

### Refresh view of sessions

Click this button to update the content of the pane.

**Change view** 

Use the **Change view** dialog box to customize the columns that are displayed in the pane. See [Showing and hiding columns in Exceed TurboX Dashboard grids](#) for more information.

**Maximize view** 

Maximize the pane so it occupies the entire page. This reduces scrolling when monitoring or managing long lists. This icon is displayed when the pane is minimized.

**Minimize view** 

Minimize the pane so it occupies only part of the page. This icon is displayed when the pane is maximized.

You can sort the entries in ascending or descending order, according to specific columns. See [Sorting entries on lists](#) for more information.

Use the navigation buttons in the lower-right corner of the pane to browse the list entries. See [Browsing Exceed TurboX Dashboard lists](#) for more information.

To locate one or more specific entries in this pane, perform a search. See [Searching for a session or profile](#) for more information.

**Working with session action icons**

This section describes the tasks that you can perform using the icons in the **Actions** column of the **Sessions** pane in **List** view. To display these icons, place the pointer in the **Actions** column.

The following action icons are displayed for sessions with the status **Active** or **Shared by me** :

**Transfer** 

Transfer the session to your local computer. For more information, see [Transferring an active session launched on another computer](#).

**Details** 

View information about the session, including when you started it and when the thumbnail screenshot was last refreshed. For more information, see [Viewing a larger version of a session image](#) and [Using the session details dialog box to manage sessions](#).

**Share** 

Share the session with one or more users. For more information, see [Sharing sessions](#).

**Suspend**  Suspend the session. For more information, see [Suspending and resuming sessions](#).

**Terminate** 

Terminate the session. For more information, see [Ending sessions](#).

The following action icons are displayed for a session with the status **Suspended**:

**Resume** 

Resume the suspended session. For more information, see [Suspending and resuming sessions](#).


**Details** 

View information about the suspended session, including when the session was suspended and when the thumbnail screenshot was last refreshed. For more information, see [Viewing a larger version of a session image](#) and [Using the session details dialog box to manage sessions](#).

**Terminate**  Terminate the suspended session. For more information, see [Ending sessions](#).

The following action icons are displayed for a session with the status **Shared with me**:

**Join**  Join the shared session. See [Joining a shared session upon invitation](#) for more information.



**Share**  Opens the **Share** dialog box. The **Share** dialog box shows participants in the shared session, their current status (Owner, Invited, or Joined), and their permission. See [About sharing and shadowing X sessions](#) for more information.

## Viewing profile information in the Profiles pane

The **Profiles** pane on the **List** view displays the following information about profiles:

### Folder

The folder name in which a profile is stored.

**Favorite icon** ; . A yellow star indicates a favorite profile. You can click the icon to switch the profile between favorite status and not. For more information, see [Managing favorites](#).

### Created on

When the profile was created.

### Name

The name of the profile.

### Type

The profile's type, which can be either:

**Group profile:** The profile has been distributed by an Exceed TurboX administrator to a user group which includes you.

**User profile:** You created the profile or it was distributed to you by an Exceed TurboX administrator.

### Startup mode

The startup mode defined in the profile: **Custom startup** , **Published application**, **Windows application** , **Windows desktop - Direct**, **Windows desktop - RDP**, **XDMCP Broadcast**, or **XDMCP Query**.

### Window mode

The window mode defined in the profile: **Single** or **Multiple**.

### Screen size

If the Window mode is set to **Single**, the window size that is defined in the profile.

### Actions

The actions you can perform to manage profiles. To view the action icons, position the pointer over the **Actions** column. See [Working with profiles action icons](#) for more information.

The following action icons are available at the top-right corner of the **Profiles** pane:

#### New


Create a new profile. See [Creating new profiles from profile templates](#) for more information.


#### Refresh view of profiles

Click this button to update the content of the pane.

#### Change view

Use the **Change view** dialog box to customize the columns that are displayed in the pane. See [Showing and hiding columns in Exceed TurboX Dashboard grids](#) for more information.

**Maximize view**  Maximize the pane so it occupies the entire page. This reduces scrolling when monitoring or managing long lists. This icon is displayed when the pane is minimized.

**Minimize view**  Minimize the pane so it occupies only part of the page. This icon is displayed when a pane is maximized.

You can sort the entries in ascending or descending order according to specific columns. See [Sorting entries on lists](#) for more information.

To browse the entries of your list, use the navigation buttons in the lower-right corner of the pane. See [Browsing Exceed TurboX Dashboard lists](#) for more information.

To locate one or more specific entries, perform a search. See [Searching for a session or profile](#) for more information.

## Working with profiles action icons

This section describes the tasks that you can perform using the action icons for a profile. The action icons are available in the **Profiles** pane in **List** view. To display the action icons, place the pointer in the **Actions** column.

The following action icons may be displayed for a profile, depending on your user permissions:

### Launch

Launch a session using this profile. For more information, see [Launching a new session from the Profiles pane](#).

### Details ; Edit

View the details of the profile. If you created the profile, you can edit the settings. For more information, see [Creating profiles](#).

Users with permission to do so can use the **Edit** icon to customize the settings in a group profile. Customizing a group profile changes it only for you, not for other users. For more information, see [Customizing a group profile](#)

### Copy

Duplicate the profile. Use this option to create new profiles from profiles you have already created or from global profiles. For more information, see [Creating profiles](#).

### Shortcut

Create a shortcut to the profile from any location on your computer (for example, your desktop). Use this option to access sessions more easily. For more information, see [Working with shortcuts](#).

### Delete

Delete the profile. You can only delete profiles that you created. For more information, see [Creating profiles](#).



## Sorting entries on lists

When first displayed, each list is sorted by a default column. You can change the column that the list is sorted by, and whether it is sorted in ascending or descending order.

### To change how a list is sorted:

1. In the Exceed TurboX web interface, go to the list you want to sort.
2. Click the name of the column you want to use to sort the list entries.

One of the following icons appears beside the name of the column:

-  The list is sorted in ascending order, according to the values in the column.
-  The list is sorted in descending order, according to the values in the column.

3. To reverse the sort order, click the column name again.

#### **Note**





Not all columns are sortable.

Your column display preferences are preserved after you sign off, even if you sign on again using a different browser.

You can customize which columns appear, and the order in which the columns appear.

## Browsing Exceed TurboX Dashboard lists

To browse the entries of a list, use the navigation icons in the lower-right corner of the pane:

Click this icon	To do this ...
	Display the beginning of the list.
	Display the previous set of entries in the list.
	Display the next set of entries in the list.
	Display the end of the list.

At the bottom of each pane, you can view the range of entries currently displayed in the list, as well as the total number of entries available in the list.

For example, if **1-6 of 12** is displayed at the bottom of the pane, entries 1 through 6 are currently displayed, and 12 entries in total are available on multiple pages.

## Searching for a session or profile

This section describes how to search for a session or a profile in Exceed TurboX Dashboard.

The **Search** text box is located at the top-right corner of the Dashboard toolbar. It allows you to search for active, suspended, and shared sessions and profiles by name.


Searching for sessions and profiles by full or partial ETXID will be implemented post rev 12 release.

### To perform a search:

1. In the **Search** box, enter the complete or partial name of the session or profile you want to locate.

2. Click the **Search for sessions and profiles** button .

The search results are displayed in the **Sessions** and **Profiles** panes. After entering a search query, you can do the following:

- Clear your query from the **Search** text box. To do so, use the Delete or Backspace keys on your keyboard. This does not cause the search results to disappear.
- Clear the search results from the **Sessions** and **Profiles** panes. To do so, click the **Clear** button  in the **Search** box.

## Viewing a larger version of a session image

This section describes how to view larger versions of session images, to identify active, suspended, or shared sessions in Exceed TurboX Dashboard without having to resume, transfer, or join the session.

If you cannot identify a session by its name, description, or its thumbnail image in **Icons** view, you can display a larger version of the image (snapshot), as follows:

- A medium-sized version of the image in the session details dialog box.
- A full-sized version of the image in a separate web browser window.

### To view a larger version of a session image (a snapshot):

1. Click the **Details** icon  for the session.

The **Snapshot** tab of the session details dialog box opens. A medium-sized version of the session image is displayed, along with other information about the session.

#### **Note**

The **Details** icon is not available for sessions that have been shared with you by another user.

2. If needed, click the **Refresh** button to display the most current state of the session.
3. To grant administrators the ability to view snapshots of your session screen, select the **Allow administrators to view session snapshot** check box.
4. To display a full-sized version of the image in a separate web browser, click **View full resolution image**.

For information on other tasks you can perform using the action icons available on the session dialog box, see [Using the session details dialog box to manage sessions.


# Using the session details dialog box to manage sessions

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## Using the session details dialog box to manage sessions

The session details dialog box displays information that can help you identify a session (for example, when a session was started). It also provides action icons for performing session management tasks, such as suspending and resuming a session, so that you can perform these tasks without having to return to the main Exceed TurboX Dashboard page.

### To access the session details dialog box:

1. Click the **Details** icon  for your session. The icon is located on the session thumbnail image in **Icons** view, or in the **Actions** column for the session in **List** view.

The session details dialog box opens. The information displayed in the dialog box depends on the session status (active or suspended). For more information, see the following sections:

- [Active session details dialog box](#)
- [Suspended session details dialog box](#)
- [Applying quick settings to active sessions](#)

## Active session details dialog box

This section describes the information and icons you can view and access on the session details dialog box **Snapshot** tab for active sessions.

New Profile (3) on XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

ID: 1ed70350-96cc-6ac1-8054-063ae4c404c2

✎

✕

---

[Snapshot](#) [Quick settings](#)

▶ ↶ ⏸ ⏻ ?

---

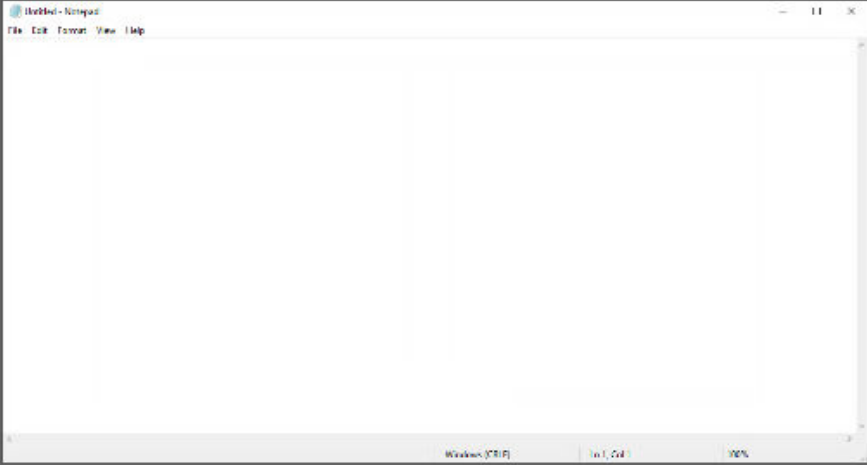
Profile name: New Profile (3)

Display ID: XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Started on: Nov 29, 2022, 5:27:41 PM

---

EN



Runtime version 12.5.1.8328

Image refreshed on Nov 29, 2022, 10:32:47 PM

Refresh

---

Allow administrators to view session snapshot

View full resolution image

### Title bar

The name of the session, the name of the host on which the session is running, the Display ID, and the session ID. The session ID is a 36-character string in the form xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx.

To edit the name of the session, click the Edit icon ✎.

### Transfer ▶

Click to transfer the session.

**Share** 

Click to close the session details dialog box and open the **Share** dialog box so you can share your session with another user.

**Suspend** 

Click to suspend the session.

**Terminate** 

Click to terminate the session.

**Profile name**

The name of the profile used to launch the session.

**Display ID**

The X Window display ID, which includes the host name or IP address and display number for the session.

**Started on**

The date and time the session was launched.

**Snapshot**

A medium-sized version of the session image.

**Runtime version**

The session runtime version.

**Image refreshed on**

The date and time the thumbnail image was last refreshed.

**Refresh**

Click to refresh the session image with an updated screenshot.

**Allow administrators to view session snapshot**

Select this check box to allow Exceed TurboX administrators to view the session snapshot.

**View full resolution image**

Click to open a new window that displays a full-sized, high-resolution screenshot of the session. See also [Viewing a larger version of a session image](#).

For information about the **Quick settings** tab, see [Applying quick settings to active sessions](#).

**Suspended session details dialog box**

This section describes the information and icons you can view and access from the session details dialog box for suspended sessions.

New Profile (3) on XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

ID: 1ed70350-96cc-6ac1-8054-063ae4c404c2

✕

Snapshot

▶ ⏻ ?

Profile name: New Profile (3)

Display ID: XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Suspended reason: by user

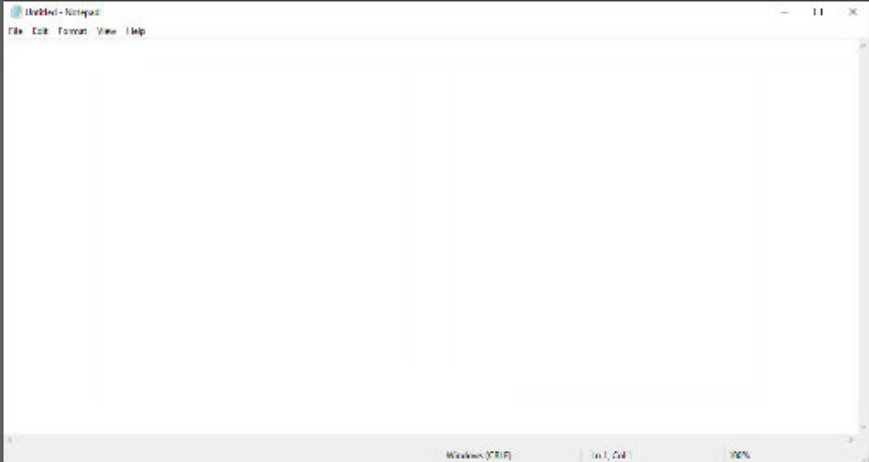
Suspended on: Nov 29, 2022, 10:39:17 PM

Suspended from: XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Suspended by: XXXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

11

EN



Runtime version 12.5.1.8328

Image refreshed on Nov 29, 2022, 10:39:26 PM

Refresh

Allow administrators to view session snapshot

View full resolution image


### Title bar

The name of the session, the name of the host on which the session is suspended, the Display ID, and the session ID. The session ID is a 36-character string in the form xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx.

To edit the name of the session, click the Edit icon .

### Resume

Click to resume the suspended session.

**Terminate**  Click to terminate the session.

**Profile name**

The name of the profile used to launch the session.

**Display ID**

The X Window display, which includes the host name or IP address and display number for the session.

**Suspended reason**

How the session was suspended (for example, by the user or by the administrator).

**Suspended on**

The date and time the session was suspended.

**Suspended from**

The IP address of the computer on which the session was suspended.

**Suspended by**

The name of the user who suspended the session.

**Snapshot**

A medium-sized version of the session image.

**Runtime version**

The session runtime version.

**Image refreshed on**

The date and time the session image was last refreshed.

**Refresh**

Click to refresh the session image with an updated screenshot.

**Allow administrators to view session snapshot**

Select this check box to allow Exceed TurboX administrators to view the session snapshot.

**View full resolution image**


Click to open a new window that displays a full-sized, high-resolution screenshot of the session. See also [Viewing a larger version of a session image](#).

## Applying quick settings to active sessions

This section describes how to make changes to active sessions, without having to re-establish a new session or connection. You cannot apply quick settings to suspended sessions. The settings you can change depend on the Window mode of the profile.

Quick settings are fully supported for clients on Windows platforms, and are partially supported for Web Clients, as well as clients on Linux and Mac platforms.

### To apply settings:

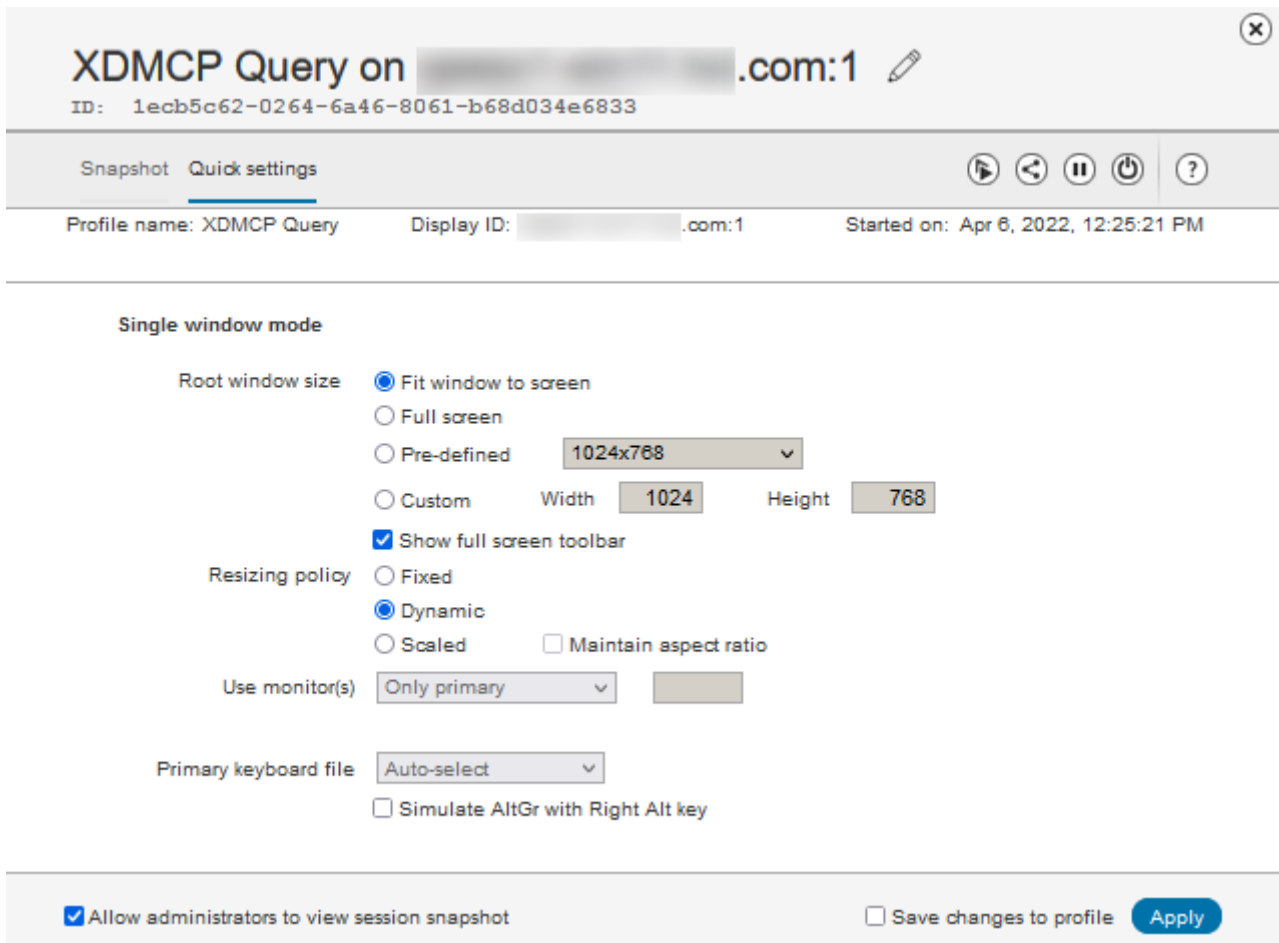
1. Click the **Details**  button for your session.


The button is located on the session thumbnail in **Icons** view, or in the **Actions** column for the session in **List** view.

2. In the session details dialog box, click the **Quick settings** tab.






The **Quick settings** page allows you to select and apply quick settings to the session. The settings you can change depend on the Window mode of the profile:

#### • Single window mode



**XDMCP Query on [redacted].com:1** 


ID: 1ecb5c62-0264-6a46-8061-b68d034e6833

Snapshot Quick settings     



Profile name: XDMCP Query Display ID: [redacted].com:1 Started on: Apr 6, 2022, 12:25:21 PM


---

**Single window mode**

Root window size  Fit window to screen  
 Full screen  
 Pre-defined 1024x768   
 Custom Width 1024 Height 768  
 Show full screen toolbar

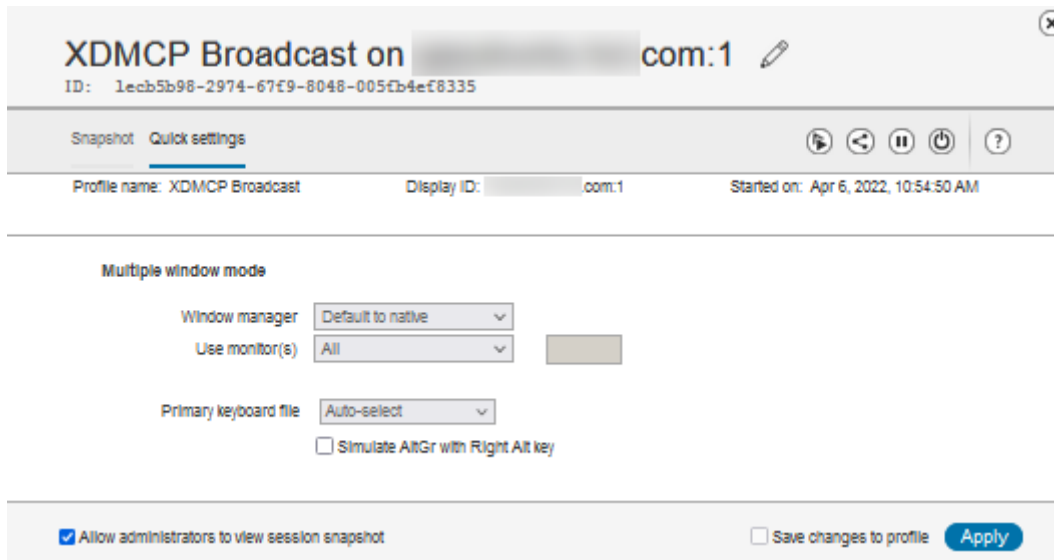
Resizing policy  Fixed  
 Dynamic  
 Scaled  Maintain aspect ratio

Use monitor(s) Only primary  

Primary keyboard file Auto-select   
 Simulate AltGr with Right Alt key

Allow administrators to view session snapshot  Save changes to profile **Apply**

#### • Multiple window mode



3. Modify the available settings, as needed.

### Root window size

Define the resolution of the window where the launched session is displayed. This function is available in single window mode only.

### Display settings; Resizing policy

Define the display settings and resizing policy. This function is available in single window mode only. For more information, see [Configuring Window mode settings in Advanced mode](#).

### Windows manager

In multiple window mode, you can adjust the Window manager setting. For more information, see [Configuring Window mode settings in Advanced mode](#).

### Use monitor(s)

If you have more than one monitor attached to your machine, you can use all the monitors to display a session, or specify the monitor(s) to use. For more information, see [Configuring Window mode settings in Advanced mode](#).

### Primary keyboard file

Select the type of keyboard mapping on the client machine.

#### Note

Select **Simulate AltGr with Right Alt key** to enable Exceed TurboX emulate the behavior of the AltGR key. This is useful with European keyboards.

For more information, see [Configuring Input settings in Advanced mode](#) or [Configuring Other settings in Basic mode](#).

4. To enable administrators to see snapshot changes that you make to an active session, select **Allow administrators to view session snapshot**.

By default, administrators cannot view such changes, because this setting is not tied to profile settings.

5. To save the changes to the profile for next time, select **Save changes to profile**.
6. Click **Apply**.
7. Click **Yes** to confirm the changes.

Any modified settings are applied to the running session, and take effect immediately.

# 3. Launching and Accessing Sessions

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## Launching and Accessing Sessions

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This section describes how to launch a new session or access an existing one (suspended, active, or shared) using Exceed TurboX Dashboard.

### Note

After a session is launched, you may work within the session to access remote applications and perform other required tasks, such as copying and pasting of content between different applications, or printing from such applications. For information about working in a session after it has been launched see [Working with sessions in the Web client](#) and [Working with sessions in the Web client](#).

## About sessions

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You can use Exceed TurboX to connect to a remote computer. This connection is called a session. A session may run a particular application on the remote computer, or show the entire desktop. If it shows the desktop, you can then run one or more applications on the remote computer from the desktop.

Whether you are running a single application or the remote desktop, the session appears as if it is a local application on your computer, though it is actually running remotely.

The remote computer you connect to may be running any supported operating system — Windows, Linux, or UNIX — no matter what supported operating system you are running locally. For example, if you launch a Linux profile from a Windows workstation, Exceed TurboX runs an application on the Linux host and sends the graphical display to your workstation. The application appears as a local Windows application even though it is running on a remote Linux host.

Depending on how your Exceed TurboX administrator has configured your settings, you may be able to have multiple sessions running concurrently. This includes shared sessions that you have joined, and may include Suspended and Active sessions, or Active sessions only.

You can use Exceed TurboX to:

- Launch a new session in various Exceed TurboX modes.

- Access an existing suspended or active session.
- Suspend and resume a session.
- Share a session with other users.
- Join a session that has been shared with you by another user.
- Transfer a session from a remote computer to your local computer.
- Terminate a session.
- View, sort, and search for sessions in Exceed TurboX Dashboard. See [Using session and application action icons](#) for more information.

#### **Note**

To start a session, you must have access to at least one profile. Profiles specify how a session is started, displayed, and run. Profiles can be published to you by an Exceed TurboX administrator. If you have the appropriate permissions, you can customize these profiles or create your own. See [About profiles](#) for more information.

## Verifying the availability of profiles

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Before you can launch a session, you must verify that you have access to at least one profile that is configured to meet your needs. The profiles that are available for you to use are displayed in the **Profiles** pane in Exceed TurboX Dashboard.

If you have a profile configured for the session you want to run, you are ready to launch a session. See [Launching a new session from the Profiles pane](#).

If you do not have a profile configured to launch the type of session you require, before you can launch a session, you must create a profile or request the appropriate profile from your administrator. See [Creating profiles](#) for more information about creating profiles.

# Launching a new session from the Profiles pane

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## Launching a new session from the Profiles pane

This section describes how to launch a new session using a profile displayed in the **Profiles** pane of the Dashboard.

Before launching a session, you must verify that you have access to a profile that is configured to meet your needs. See [Verifying the availability of profiles](#) for more information.

To work with a session that is already running (for example, a session that is suspended or a session that another user has shared with you), see [Accessing existing sessions: suspended, shared, or active](#).

### To launch a new session from the Profiles pane

1. In the **Profiles** pane, locate the profile you want to use to launch the session.

See [Viewing, sorting, and searching for sessions and profiles](#) for more information.

2. Click the **Launch** icon .

The icon is located on the profile thumbnail image in **Icons** view, or in the **Actions** column for the selected profile in **List** view.

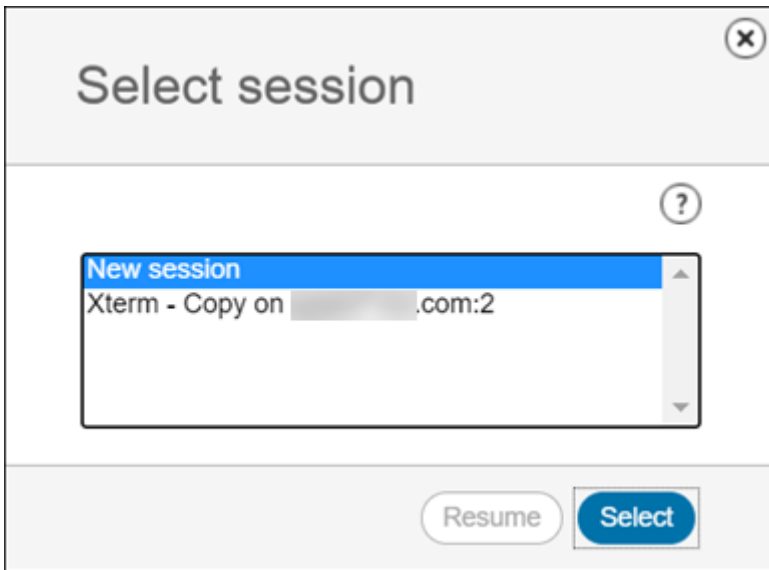
3. If you have installed the Client Launcher and this is the first time you are using it, select **ETX Client Launcher** from the list of applications to use to open Exceed TurboX links.

4. Select **Remember my choice for etx12 links** (if available), then click **OK**.

See [Downloading and installing the Client Launcher](#) for more information.

Depending on the configuration of your profile, you may be prompted to select a session. For session reuse, the **Select session** dialog box opens, listing the available sessions. Do one of the following:

- Select the session you want to reuse, and click **Resume**.
- Select **New session**, and click **Select**.



5. If you are launching a new session, and if the **Ask user to select node** setting is enabled in the profile, the **Select a node for the session** dialog box opens.

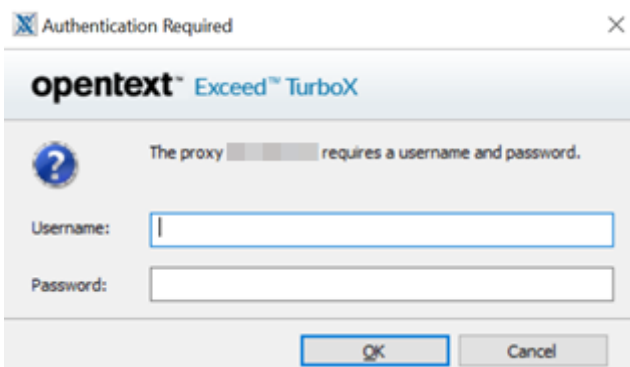
Select the connection node on which you want to launch the session, and click **OK**.

**Tip**

To terminate the launcher process, click **Exit**. See [Selecting the session node](#) for detailed information about the **Select a node for the session** dialog box.

6. If you are using an HTTP(S) proxy for launching the session and the proxy requires authentication, Exceed TurboX Client will try to read the proxy settings from the client system or from the Exceed TurboX server proxy settings, as configured by the administrator. If the proxy username and password are not specified, the **Authentication Required** dialog box opens.

Enter the proxy **Username** and **Password**, then click **OK**.



Once the session is launched, the session thumbnail is displayed on the **Dashboard**. The session is displayed in the **Active** pane in **Icons** view, or in the **Sessions** pane in **List** view.

You may need to perform additional steps, depending on the startup mode specified in the profile used to launch the session:

- [Launching sessions in Windows application startup mode](#)
- [Launching sessions in Windows Desktop - RDP startup mode](#)
- [Launching sessions in Windows desktop - Direct startup mode](#)
- [Launching sessions in XDMCP Broadcast startup mode](#)
- [Launching sessions in XDMCP Query startup mode](#)
- [Launching sessions in Custom startup mode](#)

Need to add here sections for Launching sessions in Published application.

## Selecting the session node

---

The **Select a node for the session** dialog box lists the compatible connection nodes on which you can run your session. Select the node to use for your session.

The dialog box shows the following information for each node:

### **Node address**

The IP address of the computer where the connection node software is installed.

### **Port**

The port on which the node accepts client connections.

### **Operating system**

The operating system running on the computer that hosts the node.

### **Sessions**

The total number of Exceed TurboX sessions (includes active and suspended sessions) running on the node.

### **CPU (%)**

The percentage of processor resources (CPU) being used by the connection node. This is the total CPU used by all processes running on that system, up to a total of 100%.

### **Memory (%)**

The percentage of memory (RAM) being used by the connection node. This is the total memory used by all processes running on that system, up to a total of 100%.

## Selecting a node group for the session

The **Select a node group for the session** dialog box lists the node groups on which you can run your session. Select the node group to use for your session. The dialog box shows the following information for each node group:

### Group name

The name of the node group.

### Total members

The number of connection nodes in the node group.

## Launching sessions in Windows application startup mode

This section describes how to launch a session using the Windows application startup mode. The Windows application startup mode runs Windows applications in Direct mode.

To launch a session in this mode, you must have access to a profile that contains the appropriate Windows application startup mode settings. See [Verifying the availability of profiles](#) for more information.

### To launch a session in Windows application startup mode

1. Launch a session using a profile that uses the Windows application startup mode. See [Launching a new session from the Profiles pane](#) for more information.

If the **Client type** field is set to **User preference**, you will be prompted to select the client type.

2. Select one of the following client types:

- **Native Client:** Select this option to start the session in a separate window on your computer. If you are on a device that does not support the Native Client, the session will not start.
- **Web Client:** Select this option to start the session in a new tab in your web browser.

Once the session is launched, the session thumbnail is shown on the Exceed TurboX Dashboard. The thumbnail appears in the **Active** pane in **Icons** view, or in the **Sessions** pane in **List** view.

To successfully launch a Windows application, the target host must meet the following criteria:

- It must be a supported Windows Server Operating System.
- The Exceed TurboX Connection Node software must be installed.
- The Remote Desktop Services role must be enabled.
- Group policy on the host must allow running unlisted applications.

- Group policy on the host must allow running multiple applications per user.
- RDS connections must be allowed.

**Note**

The Connection Node installer for Windows operating systems checks whether these conditions have been met. If they have not been met, you are prompted to change these settings.

## Launching sessions in Windows Desktop - RDP startup mode

This section describes how to launch a session using the Windows Desktop - RDP startup mode.

To launch a session in this mode, you must have access to a profile that contains the appropriate Windows Desktop - RDP startup mode settings. See [Configuring the Windows Desktop - RDP startup mode](#) for more information.

**To launch a session in Windows Desktop - RDP startup mode:**

1. Launch a session using a profile that uses the Windows Desktop - RDP startup mode. See [Launching a new session from the Profiles pane](#) for more information.

If the profile does not set the host name, the **ETX Connection Parameters** dialog box prompts you to provide the connection information for the remote host.

2. In the **Host** box, do one of the following:

- Type the name or address of the RDP server to connect to.

You can specify any RDP-enabled host for RDP connections. The node for the session can be any Windows or Linux node registered with Exceed TurboX Server. RDP profiles can also target localhost if the node is a Windows host with RDP services enabled.

- Select a host from the list.

#### **Note**

The list of hosts is configured in the profile's **Prompts** tab. See [Configuring startup settings on the Prompts tab](#) for more information.

3. Click **OK**.

The session is launched.


When a session is running, you can use the Exceed TurboX menu to perform additional tasks. See [Working with Sessions in the Native Client](#) for more information.

## Launching sessions in Windows desktop - Direct startup mode

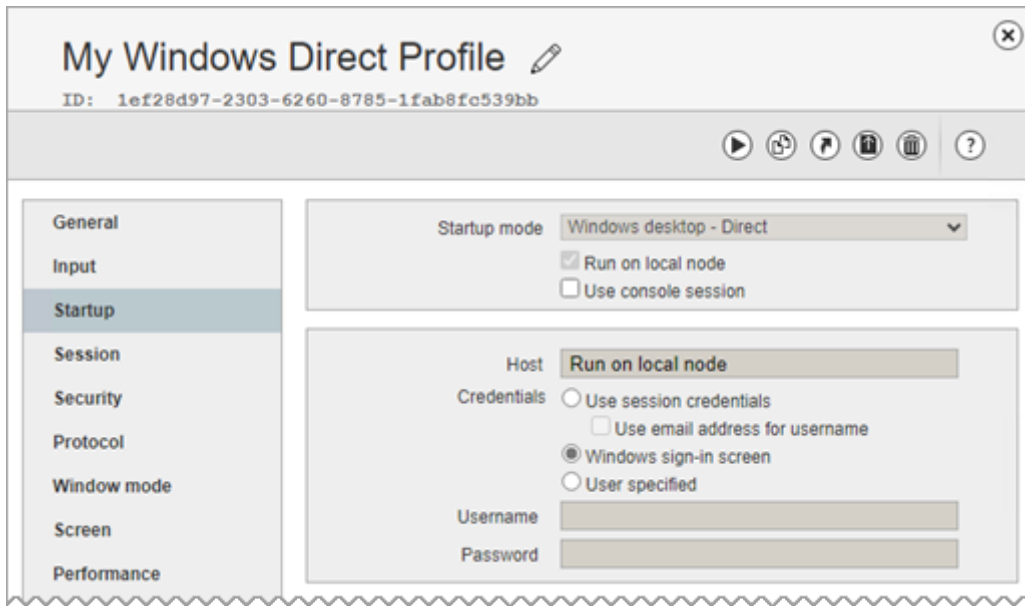
This section describes how to launch a session using the Windows Desktop - Direct startup mode.

To launch a session in this mode, you must have access to a profile that contains the appropriate Windows Desktop - Direct startup mode settings. For more information, see [Configuring the Windows Desktop - Direct startup mode](#).

### To launch a session in Windows Desktop - Direct startup mode:

1. Launch a session using a profile that uses the Windows Desktop - Direct startup mode. For more information, see [Launching a new session from the Profiles pane](#).
2. If a message indicating `You must use a smart card to sign in` is displayed, configure your session profile as follows:
  - a. In the TurboX Dashboard **Profiles** pane, click the **Edit** button  on the session profile.
  - b. On the profiles dialog box **Startup** tab, click **Advanced mode**.

c. On the left navigation pane, click the **Startup** tab and then select **Windows sign-in screen**.



d. Save the profile.

e. Restart the session and choose **Smart Card login** on the sign-in screen to log in.

You can now work in the session. When a session is running, you can use the Exceed TurboX menu to perform additional tasks. For more information, see [Working with Sessions in the Native Client](#).

**Note**

Windows Desktop - Direct startup mode always connects to the Exceed TurboX Connection Node; you cannot select a different host to connect to. Any Windows machine that you want to connect to using this method must have the Connection Node software installed and be registered as a node with the Exceed TurboX Server.

## Launching sessions in XDMCP Broadcast startup mode

This section describes how to launch a session using the XDMCP Broadcast startup mode.

When you launch a session in XDMCP Broadcast mode, Exceed TurboX broadcasts to application host on the network to determine which hosts are available to manage your X display. You can then select the host you want to use.

To launch a session in this mode, you must have access to a profile that contains the appropriate XDMCP Broadcast settings. For more information, see [Configuring XDMCP Broadcast startup mode](#).

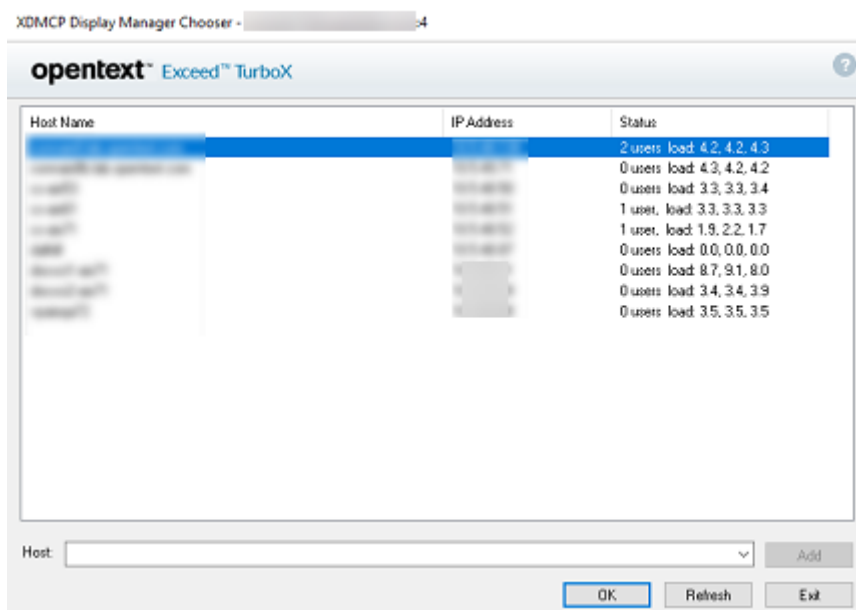
**Note**

Before starting a session in an XDMCP mode, ensure that the host is running an X Display Manager (XDM) and verify the name or network node specification for the remote host specified in the **Host** box in the **XDMCP Startup Modes** dialog box.

**To launch a session in XDMCP Broadcast mode:**

1. Launch a session using a profile that uses the XDMCP Broadcast startup mode. For more information, see [Launching a new session from the Profiles pane](#).

The **XDMCP Display Manager Chooser** dialog box lists the available hosts.



2. To add a new host to the list, type the fully qualified host name in the `<Host>` box and click **Add**.

**Note**

Adding a host is unavailable if **Use custom host list** is locked in the XDMCP Broadcast template.

3. To refresh the list with the most up-to-date entries, click **Refresh**.
4. Select a host from the list and click **OK**.

**Note**

To close the **XDMCP Display Manager Chooser** dialog box without selecting a host, click **Exit**.

You can now work in the session. When a session is running, you can use the Exceed TurboX menu to perform additional tasks. For more information, see [Working with Sessions in the Native Client](#).

## Launching sessions in XDMCP Query startup mode

This section describes how to start sessions using the XDMCP Query startup mode.

Exceed TurboX automatically connects to the application host specified in the profile, if there is one. After you sign in, the host starts the application specified in the host's XDM session (script) file.

To launch a session in this mode, you must have access to a profile that contains the appropriate XDMCP Query settings. For more information, see [Configuring XDMCP Query startup mode](#).

### Note

Before launching a session in an XDMCP mode, ensure that the host is running an X Display Manager (XDM) and verify the name or network node specification for the remote host specified in the **Host** box in the **XDMCP Startup Modes** dialog box.

### \*To launch a session in XDMCP Query startup mode:

1. Launch a session using a profile that uses the XDMCP Query startup mode. For more information, see [Launching a new session from the Profiles pane](#).
2. If there is no application host specified in the profile, the **XDMCP Query** dialog box opens. Type the hostname or IP address of the host to connect to, or select the host if it is listed. Click **OK**.

### Note

If the application host to connect to is specified in the XDMCP Query profile, you are automatically connected to this host and the **XDMCP Query** dialog box does not open. If the `@u` macro is included in the **XDMCP Query host** setting, the `@u` macro is substituted with your user credentials.

3. If necessary, sign in to the host.

The host starts the applications specified in its XDM session file. Typically, this is the desktop.

You can now work in the session. When a session is running, you can use the Exceed TurboX menu to manage and perform certain tasks within the session. For more information, see [Working with Sessions in the Native Client](#).

## Launching sessions in Custom startup mode

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This section describes how to start a session using the Custom startup mode.

In this mode, Exceed TurboX starts a session with the remote host, and runs any additional scripts or applications (Xstarts) that are defined in the profile. If no applications are defined, you can use an external mechanism to start applications.

Many options are available when working in Custom startup mode.

For information on other Custom startup scenarios, see [Configuring Custom startup mode](#).

### To launch a session in Custom startup mode

1. Launch a session using a profile that uses the Custom startup mode. See [Launching a new session from the Profiles pane](#) for more information.

One of the following occurs, depending on how the profile is configured:

- If no Xstarts are defined in the profile, the X server is started on an Exceed TurboX Connection Server node, ready for you to use.
  - If the profile includes an Xstart (a defined startup configuration that specifies a host to connect to and the commands to start one or more applications), the applications specified in the Xstart are started.
2. Depending on how prompt-related settings are configured in the startup configuration, the **ETX Connection parameters** dialog box may open, displaying and/or prompting you for connection parameters. See [Specifying connection parameters for Custom startup mode](#) for more information about this step.
  3. Depending on the scenario, do one of the following:
    - Use a connection method (such as REXEC) to connect to the application host you need to work with.
    - If the startup configuration started one or more applications, you can begin working with these applications.

When a session is running, you can use the Exceed TurboX menu to perform additional tasks. See [Working with Sessions in the Native Client](#) for more information.

# Specifying connection parameters for Custom startup mode

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This section describes how to specify connection parameters if prompted by the remote host in Custom startup mode.

If you are using a profile that starts one or more applications automatically, and the Xstart is set up to ask for startup information, you may be prompted to provide connection parameters in the **ETX Connection Parameters** dialog box.

Depending on startup configuration, the **ETX Connection Parameters** dialog box allows you to enter the following connection information:

## Host

The name or IP address of the host to connect to. Do one of the following:

1. Type the name or IP address of the host to connect to.

If the remote command service is not on a default port on the host, use the following syntax:

```
<host_name>:<_port_number>
```

2. Select a host from the list.

The host list is configured in the profile's **Prompts** tab. See [Configuring startup settings on the Prompts tab](#) for more information.

## Username

The user ID to use to sign in to the host.

## Password

The password for the user name you specify.

## Command

The command(s) to run upon signing in. See [Command syntax for starting applications](#) for more information.

If the remote host requires additional information after you enter the connection parameters, the **Enter Reply For Prompt** dialog box opens. This dialog box shows host and sign-in information, and the reason for the sign-in problem. You can send a reply, or send revised sign-in information or commands.

The **Enter Reply For Prompt** dialog box allows you to perform the following tasks:

## Retry

Exceed TurboX waits for another response from the host. For example, a host might send a complex greeting message or Exceed TurboX might expect a sign-in prompt and instead receives a prompt for a command. If you click **Retry**, Exceed TurboX continues to parse the incoming host response.

**Cancel**

Cancel the attempt to start the application.

**Reply**

Type the required information (for example, sign-in information or commands).

**Send Reply**

Send the information from the **Reply** field to the host.

**Send Command**

If there are no further prompts for login information, click this button to send the command, if one is included in the profile. For more information, see [Configuring Custom startup mode](#).

## **Accessing existing sessions: suspended, shared, or active**

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This section describes how to access a suspended session or a session shared with you by another user. It also describes how to access a session launched on a different computer by transferring it to your current computer. To complete these tasks, use the action icon on the Exceed TurboX Dashboard.

**To access a suspended session:**

1. In Exceed TurboX Dashboard, locate the suspended session that you want to resume.
2. Click the **Resume** icon. The icon is located on the session thumbnail image in **Icons** view or in the **Actions** column for the session in **List** view.

The session is resumed. For more information or alternative methods, see [Suspending and resuming sessions](#).

**To access a shared session:**

1. In Exceed TurboX Dashboard, locate the shared session that you want to join.
2. Click the **Join** icon. The icon is located on the session thumbnail image in **Icons** view or in the **Actions** column for the session in **List** view.

You have now joined the session that was shared with you. For more information or alternative methods, see [Joining a shared session upon invitation](#).

**To access an active session running on a remote computer:**

1. In Exceed TurboX Dashboard, locate the active session that you want to access on remote computer.
2. Click the **Transfer** icon. The icon is located on the session thumbnail image in **Icons** view or in the **Actions** column for the session in **List** view.

The session is transferred to your local computer. For more information or alternative methods, see [Transferring an active session launched on another computer](#).

## Working with shortcuts

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### Working with shortcuts

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This section describes how to work with shortcuts.

Shortcuts let you access frequently-used sessions more easily. When you double-click a shortcut, Exceed TurboX Dashboard opens and your session launches.


### Creating shortcuts

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This section describes how to create shortcuts to launch a profile. Exceed TurboX lets you create the following two types of shortcuts:

1. Browser shortcuts: Launch the Exceed TurboX Dashboard and prompt you to launch a session.
2. Client Launcher shortcuts: Launch the profile without opening Exceed TurboX Dashboard. When you use a Client Launcher shortcut, you may or may not be prompted to authenticate before the profile is launched, depending on how the profile and the shortcut are configured.

**To create a *browser* shortcut to your session:**

1. In Exceed TurboX Dashboard, locate the profile to create a shortcut for.
2. Click the **Shortcut** icon .

The icon is located on the profile thumbnail image in **Icons** view, or in the **Actions** column for the profile in **List** view.


3. In the **Create a shortcut** dialog box, drag and drop the profile icon's link to your desktop or other desired location.

When you use this shortcut, you are prompted to sign on to Exceed TurboX Dashboard and launch a session.

#### **Note**

If you cannot drag the shortcut to your local computer, see [Browser security settings and how they affect browser shortcuts](#).

#### **To create a *Client Launcher* shortcut to your session:**

1. In Exceed TurboX Dashboard, locate the profile to create a shortcut for.
2. Click the **Shortcut** icon .
3. In the **Create a shortcut** dialog box, click **Create Client Launcher shortcut**.
4. When prompted to confirm allowing the site to open the link with the Client Launcher, select the link and click **Open Link**.
5. In the **Create Client Launcher shortcut** dialog box, enter the **Shortcut location**, select the authentication method, and enter any **Additional parameters** (optional).
6. Click **Create**.

The shortcut is saved in the location you entered. When you use this shortcut, the session is launched without opening Exceed TurboX Dashboard. Depending on how the profile is configured and how you configured the shortcut, you may or may not be prompted for authentication before the session is launched.

See [Using shortcuts to launch sessions](#) for information on how to use a shortcut to launch a profile.

## Browser security settings and how they affect browser shortcuts

Due to built-in security features of your browser, you may not be able to create a browser shortcut for a profile. When you drag the shortcut to the browser, the icon may indicate that the profile cannot be copied.

To enable creation of shortcuts, configure your browser to recognize Exceed TurboX as a trusted and secure site.

This section provides instructions on how to add Exceed TurboX as a trusted site. For the most up-to-date instructions, refer to the official documentation for the listed browsers.

### To add a trusted site to a Google Chrome or Microsoft Edge browser:

1. Click the icon on the far right of the **Address** bar (contains three dots).
2. From the menu that is displayed, select **Settings**.
3. Scroll to the bottom of the page and click the **Advanced** link.
4. Under **System**, click **Open proxy settings**.  
The **Internet Properties** dialog box opens.
5. Click the **Security** tab.
6. Under **Select a zone to view or change security settings**, select **Trusted sites**, and then click **Sites**.  
The **Trusted sites** dialog box opens.
7. Type the address (URL) of Exceed TurboX Dashboard and click **Add**.
8. Click **Close**, then **OK**.
9. Restart your browser.

### To add a trusted site to a Mozilla Firefox browser:

1. From the menu bar, select **Options**.
2. Select **Privacy & Security** and scroll down to **Permissions**.
3. Next to **Warn you when ...**, click **Exceptions**.
4. Type the address (URL) of Exceed TurboX Dashboard in the text box and click **Allow**.
5. Click **Save Changes**.
6. Restart your browser.

## Using shortcuts to launch sessions

This section describes how to launch a session using a profile shortcut. For information on creating shortcuts, see [Creating shortcuts](#).

### To launch a session from a shortcut:

1. Go to the location where you saved the shortcut.
2. Double-click the shortcut.
3. If prompted, enter your credentials.

Depending on the configuration of your user settings and session settings, one of the following occurs:

- A new session launches and you can begin working. This occurs when there are no suspended sessions and when **Reuse session** in the profile is set to **Auto-select** or **Never**.
- The existing session resumes and you can begin working. This occurs when you are limited to working with one session at a time.
- The **Select session** dialog box opens. This occurs if there are suspended sessions and **Always allow browser shortcuts to resume suspended sessions** is selected in your user settings or, if there are suspended sessions and **Reuse session** in the profile is set to **Ask user**.

For information about **Always allow browser shortcuts to resume suspended sessions**, see [Configuring your user settings](#). For information about **Reuse session**, see [Configuring Session settings in Advanced mode](#).

4. If the **Select session** dialog box opens, depending on the options that are displayed, do one of the following:

- To launch a new session, highlight **New session** and click **Select**.
- To resume a suspended session or launch the command in that session, highlight a Suspended session. Click **Resume** to resume the session without launching the command, or click **Select** to launch the command without resuming the session.
- To start the profile command within an Active session, highlight the Active session and click **Select**.

The profile application launches within the selected session. If that session is running on a different client machine, the session will not be transferred to the local client machine.

- To have Exceed TurboX automatically select a compatible active session, highlight **Auto-select session** and click **Select**. If a compatible active session exists, Exceed TurboX launches it. If no such session exists, Exceed TurboX launches a new session.

 **Note**

The **Select session** dialog box displays Active and Suspended sessions that are owned by the signed-in user and compatible with the profile being launched by the shortcut. The options displayed depend on how **Reuse session** is configured in the profile, and whether **Always allow browser shortcuts to resume suspended sessions** is selected in the user settings.

For information about **Reuse session**, see [Configuring Session settings in Advanced mode](#). For information about **Always allow browser shortcuts to resume suspended sessions**, see [Configuring your user settings](#).

# 4. Working with Sessions in the Native Client

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## Working with Sessions in the Native Client

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This section describes how to perform tasks after you launch a session using the Native Client. Most tasks can be completed in more than one way. You can:

1. Use the commands from the Client menu after a session is launched. This menu allows you to perform frequent tasks more easily. You can launch the Client menu in multiple ways. For details, see [Using the Exceed TurboX Client menu](#).
2. Configure a profile to reduce a number of required steps for some tasks (for example, automate application startup, or reduce the number of steps needed to copy and paste content).
3. Use commands and options available in your applications, accessed through the session.

This section describes options and features available in the Native Client. For information on working with sessions using the Web Client, please see [Working with sessions in the Web client](#).

### Tip

If your administrator has limited you to using a specific client, you may not be sure if you are using the Native Client or the Web Client. When you launch a session with the Native Client, it opens in a new window, separate from the browser window. When you launch a Web Client session, it opens in a new tab in your browser.

## Using the Exceed TurboX Client menu

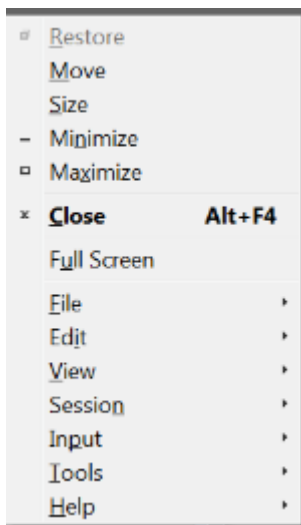
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## Using the Exceed TurboX Client menu

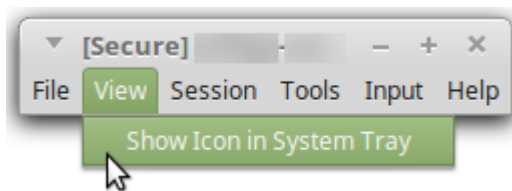
This section describes the Exceed TurboX Client menu. The menu is available after you launch a session from your web browser. It allows you to perform certain tasks from within this session (suspend, share, view log, trace, and so on). Depending on whether you use Windows, Linux, or Mac, the menu options may differ. On Windows systems, the menu is accessible on the taskbar of your local computer.

Alternatively, if the session is displayed in Full Screen mode, you can perform most of these tasks using the Full Screen toolbar on Windows and Linux platforms.

The following image shows the Exceed TurboX menu from a session running in Single Window mode on Windows. Option availability differs depending on system and user account configuration.



The following image shows the Exceed TurboX floating menu from a session running on Linux.




## Accessing the Exceed TurboX Client menu

This section describes how to access the Client menu using a Windows, Linux, or Mac client. The Client menu provides an alternate way to complete most tasks in remote sessions.

You can access the menu in several ways, depending on the client platform and on the Window Mode selected for the running session.

If you are using the Full Screen Single Window mode, the Client menu is available as a Full Screen toolbar on Windows and Linux platforms. This toolbar can be moved around, as well as pinned and displayed in a specific position on the screen. The toolbar contains frequently used options that enable you to work with the session, such as **Launch Dashboard**, **Suspend Session**, **Share Session**, **View Log**, and **View Help**.

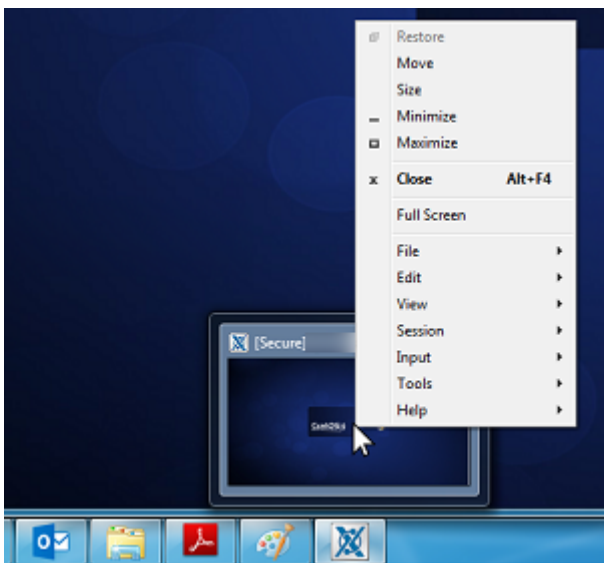
**To access the Exceed TurboX Client menu options:\*\***


1. Sign in to Exceed TurboX and start a session. See [Signing in to Exceed TurboX Dashboard](#) and [Signing in to Exceed TurboX Dashboard](#).
2. If you are using the Windows or Linux client (Full Screen Single Window mode):
  - a. Display the Full Screen toolbar by positioning the pointer over the top center of the screen.
  - b. Click the **Menu**  icon on the Full Screen toolbar.

The menu is displayed. See also [Launching the Exceed TurboX menu from the Full Screen toolbar](#).


3. If you are using the Windows client (Single Window mode, not Full Screen):

Option 1: Click the Exceed TurboX icon in the application window title bar.

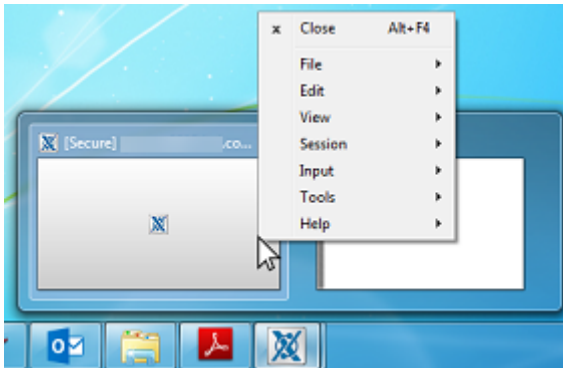


Option 2: Position the pointer over the Exceed TurboX icon  to show the Exceed TurboX window and then right-click the window that appears above the icon.

The menu is displayed. For more information about Single Window mode, see [Configuring Window mode settings in Advanced mode](#).

4. If you are using the Windows client (Multiple Window mode):
  - a. Position the pointer over the Exceed TurboX icon  to show the Exceed TurboX windows.

- b. Right-click the root window that appears above the icon (gray background with the Exceed TurboX icon).



!!! note If you access the Client menu on an application window, you only see the **Edit** Client menu option. Access this menu to perform edit actions specific to this window, such as copying or pasting content to or from the application window.

For more information about Multiple Window mode, see [Configuring Window mode settings in Advanced mode](#).

5. If you are using the Linux client (not Full Screen):

Use the floating menu bar or right-click the Exceed TurboX icon in the System Tray.

6. Use the application menu bar available for the session.

## Menu options for Windows, Linux, and Mac clients

This section lists the Client menu options available within a session on a supported Windows, Linux, or Mac platform. For information on supported client platforms, see the *Exceed TurboX Release Notes*.

You can access the Client menu in several ways. For more information, see [Accessing the Exceed TurboX Client menu](#).

The Client menu allows you to perform certain actions on a running Exceed TurboX session. Option availability differs depending on system and user account configuration.

### Menu Commands

**File > Exit** or **Close** (Windows) When you close a session, the applications or desktops may be suspended or terminated, depending on the User closes session settings defined for your profile.

When you terminate a session, the application or desktop session is disconnected on both the server and client side.

**File > Exit** or **Exit** (Linux) When you suspend a session, the application window closes on the client, but the session continues to run and may be resumed later with no loss of data.

For more information, see [Configuring Session settings in Advanced mode](#) and [Ending sessions](#).

**Exceed TurboX Client > Quit Exceed TurboX Client** (Mac) When you suspend a session, the application window closes on the client, but the session continues to run and may be resumed later with no loss of data.

**File > Launch Dashboard** (Windows, Mac, Linux) or **Launch Dashboard** (Linux) Launches Exceed TurboX Dashboard in your default web browser.

If you did not previously enable the Keep me signed in option on the sign-in page, you must enter your credentials.

For more information, see [Relaunching Exceed TurboX Dashboard from a session](#).

**File > File and Print Manager** (Windows, Mac, Linux) Opens the **File and Print Manager**, which allows you to transfer files between your local client and the remote host and print local and remote files.

For more information, see [Transferring and printing files and folders using the File and Print Manager](#).

**Edit > Copy Rectangle** (Windows) Turns the mouse cursor into a crosshair pointer, which you can click and drag to outline the region of the active window to copy. The content of the selected region is copied:

**To Clipboard:** Copies the region into the operating system clipboard. You can paste regions from the clipboard into native applications that support pasting graphics.

For more information, see [Copying session screenshots to the clipboard](#).

- **To Printer:** Copies the region to a printer. You specify the printer in the Copy to Printer dialog box. For more information, see [Copying session screenshots to the printer](#).
- **To File:** Copies the region to an image file (.bmp) on your local computer.

For more information, see [Copying session screenshots to a file](#).

**Edit > Copy All** (Windows)

Copies all visible areas of the active window:

**To Clipboard:** Copies the screenshot to the operating system clipboard. You can paste screenshots from the clipboard into native applications that support pasting graphics.

For more information, see [Copying session screenshots to the clipboard](#).

**To Printer:** Copies the screenshot to a printer. You specify the printer in the Copy to Printer dialog box.

For more information, see [Copying session screenshots to the printer](#).

To File: Copies the screenshot to an image file (.bmp) on your local computer.

For more information, see [Copying session screenshots to a file](#).

### **Edit > Copy X Selection** (Windows, Mac)

For Windows:

Copies text or image from the currently configured X selection:

- To Clipboard: Copies the text or image from the currently configured X selection into the operating system clipboard. You can paste text or images from the clipboard can be pasted into native applications that support this operation.
- To Printer: Copies text from the currently configured X selection to the default printer.
- To File: Opens the Copy X Selection to File dialog box, which allows you to copy text from the currently configured X selection into a text file (.txt) on your local computer.

#### **Note**

These options are not available for sessions launched using a Windows Desktop - Direct or Windows Desktop - RDP profile.

For Mac:

Copies text or image from the currently configured X selection:

To Clipboard: Copies the text or image from the currently configured X selection into the operating system clipboard. Text or image copied into the operating system clipboard can be pasted into operating system native applications that support this operation.

#### **Note**

This option is not available for sessions launched using a Windows Desktop - Direct or Windows Desktop - RDP profile.

### **Edit > Paste to X Selection** (Windows, Mac)

For Windows:

Pastes text or image into the currently configured X selection:

- **From Clipboard:** Pastes text from the operating system clipboard into the currently configured X selection. You can paste text from the X selection into any application window that supports pasting text for the currently configured X selection.
- **From File:** Opens the Paste File to X Selection dialog box, which allows you to paste text from a selected text file (.txt) into the currently configured X selection.

**Note**

These options are not available for sessions launched using a Windows Desktop - Direct or Windows Desktop - RDP profile.

For Mac:

Pastes text or image into the currently configured X selection:

**From Clipboard:** Pastes text from the operating system clipboard into the currently configured X selection. You can paste text from the X selection into any application window that supports pasting text for the currently configured X selection.

**Note**

This option is not available for sessions launched using a Windows Desktop - Direct or Windows Desktop - RDP profile.

**Edit > Clear X Selection** (Windows, Mac)

Clears the current X selection temporary buffer on the remote host.

**Note**

This option is not available for sessions launched using a Windows Desktop - Direct or Windows Desktop - RDP profile.

**View > Full Screen** or **Full Screen** (Windows client Single Window mode only)

Toggles the session between full screen mode and window mode.

For more information, see [Configuring a profile to use Full Screen](#).

**View > Enter Full Screen** and **View > Exit Full Screen** (Mac)

Toggles the session between full screen mode and window mode.

For more information, see [Configuring a profile to use Full Screen](#).

**View > Always on Top** (Windows) Keeps the session window in the foreground of your screen. This option is disabled in Multiple Window mode.

For more information, see [Setting the display preferences for your workspace](#).

**View > Show Icon in Notification Area** (Windows) Shows the Exceed TurboX icon in the Windows notification area (system tray) instead of the Windows taskbar. This option is disabled in Single Window mode.


For more information, see [Setting the display preferences for your workspace](#).

**View > Show Icon in System Tray** or **Show Icon in System Tray** (Linux) Moves the Exceed TurboX icon to the system tray. Clear this option to display the floating menu bar.

**View > Performance Panel** (Windows, Mac) Provides real-time measurement of session performance, including bandwidth usage, network latency, frame rate, and CPU (Central Processing Unit)/GPU (Graphics Processing Unit) utilization. For more information, see [Viewing usage statistics from the Client menu](#).

**View > Show Desktop Backdrop** (Windows, Mac) Hides or shows the X Window desktop background in Multiple Window mode.


When selected, the remote desktop backdrop covers the local desktop background. If this option is cleared, you can see the local desktop.

 **Note**

This option is available only for XDMCP profiles in Multiple Window mode.

For more information, see [Setting the display preferences for your workspace](#).

**View > Send Desktop Mouse Actions to X** (Windows, Mac) Specifies whether mouse actions on the native desktop are processed by the local desktop operating system or the remote desktop operating system.

 **Note**

This option is available only for XDMCP profiles in Multiple Window mode.

For more information, see [Setting the display preferences for your workspace](#).

**Session > Suspend** (Windows, Mac) Suspends the session. You are prompted to enter a name for the suspended session to identify it in Exceed TurboX Dashboard.

**Session > Suspend** or **Suspend Session** (Linux) When you suspend a session, the application window closes on the client, but the session continues to run and may be resumed later with no loss of data.

For more information, see [Suspending and resuming sessions](#).

**Session > Share** (Windows Mac, Linux) or **Share Session** (Linux)) Opens the session sharing dialog box so you can grant other users access to view or participate in your session.

For more information, see [Sharing sessions](#).

**Input > Switch to Alternate Keyboard** (Windows) Switches to the alternate keyboard set defined in the Input settings.

For more information, see [Configuring Other settings in Basic mode](#).

**Input > Synchronize keyboard with Windows IME** (Windows) Synchronizes the primary Exceed TurboX keyboard with the selected Windows keyboard.

This option overrides the setting in the session profile while the session is open on the user's machine.

If this option is enabled, **Switch to Alternate Keyboard** is not available in the Client menu. If **Switch to Alternate Keyboard** is enabled, **Synchronize keyboard with Windows IME** is not available in the Client menu.

#### **Note**

This option is available if Primary keyboard file is set to Auto-select in the session's profile. See [Configuring Input settings in Advanced mode](#) for more information.

**Input > Send Touch Events to X** (Windows) Specifies whether touch-screen actions are sent to the remote host or handled on your local system.

**Input > Send Ctrl +Alt+Delete to Host** (Windows Single Window mode only and Mac) Sends CTRL-ALT-DELETE keyboard input to the host machine.

This option is available only for sessions launched using Windows desktop - RDP startup

**Input > Send Ctrl +Alt+Delete to Host** or **Send Ctrl+Alt +Delete to Host** (Linux)

Sends CTRL-ALT-DELETE keyboard input to the host machine.

This option is available only for sessions launched using Windows desktop - RDP startup

**Tools > View Log** (Windows, Mac and Linux) or **View Log** (inux)

Opens `etxlog.txt` for viewing in a text editor.

For more information, see [Accessing Logs or Traces](#).

**Tools > View Node Certificate** (Windows, Mac Linux) or **View Node Certificate** (Linux)

Displays the server certificate from a connection node in the **Certificate Viewer** dialog box.

**Tools > Start Trace** (Windows, Mac Linux) or **Start Trace** (Linux)

Starts generating a trace file for troubleshooting purposes. When you stop the tracing process, you are prompted to download the trace file to your local computer.

For more information, see [Generating and downloading a trace package](#).

**Help > View Help** (Windows, Mac, Linux) or **View Help** (Linux)

Opens the Exceed TurboX *Dashboard and Client Help* in your default web browser.

**Help > About Exceed TurboX Client** (Windows, Linux) or **About** (Linux) or **\*\*Exceed** locations on the Mac session.

The Client menu **Edit** options are available to participants of shared sessions, as follows:

- If the **Menu is visible to controller of shared sessions** check box is disabled in your profile, the **Edit** menu is available only to the owner of a shared session.
- If the **Menu is visible to controller of shared sessions** check box is enabled in your profile, and the session is shared in collaborative mode, the **Edit** menu is available to any user who has control of the shared session at a given time.
- If the **Menu is visible to controller of shared sessions** check box is enabled in your profile, and the session is shared in non-collaborative mode, the **Edit** menu is available to the user in control of the session, and is visible but unavailable for the view-only participants.

## Launching the Exceed TurboX menu from the Full Screen toolbar

This topic describes how to launch the Client menu if the session profile is configured for Full Screen viewing mode and **Show full screen toolbar** is selected for the session. In addition, the topic describes the Full Screen toolbar.

**\*\*To launch the Client menu when Full Screen is displayed**

1. Position the pointer over the top center of the screen to display the Full Screen toolbar.



2. Click the menu icon on the Full Screen toolbar.



The menu is displayed. See [Menu options for Windows, Linux, and Mac clients](#). Exceed TurboX does not provide a Full Screen toolbar for Mac.

## Configuring a profile to use Full Screen

This topic describes how to configure an X profile to provide Full Screen view and the **Full Screen** toolbar on Windows and Linux platforms.

### Note

Configuring Full Screen view in a profile sets the initial state of the session only.

### To configure the Full Screen view:



1. In the **Profiles** pane of the Dashboard, click the **Edit** button of the profile you want to configure for Full Screen display.
2. To configure Full screen display in Basic mode:  
In the profile's dialog box, click the **Display** tab.  
Ensure that **Single window mode** is selected.  
In the **Root window size** area, select **Full screen**.  
To make the Full Screen toolbar available when you position the pointer over the trigger area, select **Show full screen toolbar**.  
Click **Save**.
3. To configure Full Screen display in Advanced mode:  
In the profile's dialog box, click **Advanced mode**.  
In the left-hand column, click **Window mode**. The Window mode content displays.  
In the Window mode area, ensure that **Single** is selected.  
In the **Root window size** area, select **Full screen**.  
To make the Full Screen toolbar available when you position the pointer over the trigger area, select **Show full screen toolbar**.  
Click **Save**.  
See [Configuring Window mode settings in Advanced mode](#) for more information.


### To work with the Full Screen toolbar:

## 1. Perform the relevant action:


- To display and move the toolbar, move the mouse cursor to the top center of the screen. This is the trigger area for the full screen toolbar.

By default, the menu bar is shown when the cursor is over the trigger area, and auto-hides when the cursor moves away from the trigger area.

- To resize the toolbar, place the mouse cursor on the left or right edge of the toolbar. Click and hold. Drag the cursor to resize the toolbar.
- To pin the menu bar to the screen, or unpin it, click the **Pin**  icon. To unpin the toolbar, click the icon again.
- To send the Ctrl-ALT-Delete keyboard input to the host machine, click the **CTL ALT DEL**  icon.

 **Note**

This option is only available for sessions launched using Windows desktop - RDP startup mode or Windows desktop - Direct startup mode.

- To display the Client menu, click the **Menu** >  icon.  
See [Menu options for Windows, Linux, and Mac clients](#) for more information.
- To reposition the Full Screen toolbar, Click the menu toolbar and drag it to a new location.
- To switch out of Full Screen mode on Windows, double-click the toolbar.
- To return to Full Screen mode on Windows, drag a floating window to the top of the screen, and release the window.
- To move the Full Screen to a different monitor on Windows, using a single action:

2. Drag the toolbar towards the bottom of the screen.

3. Drag the toolbar to the monitor on which you want to use full screen mode.

4. Drag the toolbar to the top of the target screen, and release it.

To minimize, restore, or close the session screen, click the relevant  icon.

## Setting the display preferences for your workspace

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This topic describes how to configure how your workspace is displayed.

### To configure display settings for your workspace:

1. Start a session by launching a profile. For information, see [Launching and Accessing Sessions](#).
2. Open the Client menu. For more information, see [Accessing the Exceed TurboX Client menu](#).
3. Select **View**. In the submenu, select each option you want to configure. If an option is enabled, a check mark is displayed beside the option name. For more information about the available options, see [Menu options for Windows, Linux, and Mac clients](#).

## Viewing your connection status from the system tray

---

(*Windows only*) This topic describes how to enable the display of an icon in the system tray. The icon reflects the status of your connection to the Exceed TurboX Connection Node. For example:

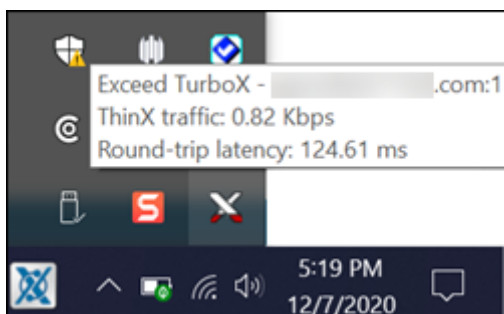


### To display the connection status icon on a Windows platform:

1. Start a session. For information, see [Launching and Accessing Sessions](#).

The connection status icon appears in the system tray located in the bottom-right corner of the Windows desktop.

2. Position the pointer over the connection status icon to display the connection information. A tooltip appears with the following connection information.



- Exceed TurboX Connection Node—The host name and display ID ( `Name:DisplayID` ).
- ThinX traffic—The total network bits sent or received between the Client and Proxy. This does not include TLS or TCP/IP overhead.

- Round-trip latency—Indicates the amount of time it takes for a message to go from the Client to the Proxy and back. This time may be longer than the ICMP round-trip time if there is heavy drawing or if the network is constrained.

#### Note

The icon color and connection information are updated automatically every five seconds based on the network traffic, However, connection information displayed in the tooltip is not updated automatically. You must reopen the tooltip to view the updated connection information.

## Viewing usage statistics from the Client menu

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This section describes how to use the **Performance panel** to view real-time measurement of session performance, including bandwidth usage, network latency, frame rate, and CPU/GPU utilization.

*-To view session bandwidth usage statistics:\**

1. Start a session by launching a profile. See [Launching and Accessing Sessions](#) for more information.
2. Open the Client menu. See [Accessing the Exceed TurboX Client menu](#) for more information.
3. In the Client menu, select **View Performance Panel**.
4. In the **Performance panel**, you can modify the following controls:
  - **Show data for:** Select the time period to view session statistics for.
  - **Optimize for:** Move the slider to optimize more for **Quality** (image quality) or **FPS** (frame rate).

#### **Note**

The exact effects of this setting depend on network or other conditions, and may change between runtime releases. Quality will not increase if the network conditions already allow very high quality. Moreover, FPS will not increase beyond the application drawing rate.

- **Target bandwidth:** Select the check box and define the number of Mbps that the session bandwidth will be restricted to.

#### **Note**

Actual session bandwidth usage may exceed the target bandwidth limit if required to display the current application drawing.

#### **Note**

The **Target bandwidth** and **Optimize for** values that initially appear in the **Performance Panel** are defined in the profile settings. For more information, see [Configuring Performance settings in Advanced mode](#).

You can view the following information on the **Performance Panel**:

**ThinX traffic (bits per second)** Total network bits sent or received between the Client and Proxy. This does not include TLS or TCP/IP overhead.

**Round-trip latency (ms)** The amount of time it takes for a message to go from the Client to the Proxy, and back. This may be longer than the ICMP (ping) round-trip time if there is heavy drawing or if the network is constrained.

**Codec usage (%)** The percentage of total pixels compressed with individual codecs.

**Node memory (%)** Select one of the following memory usage options to view from the drop-down list:

- Proxy process: Memory usage of the etxproxy process.
- User processes: Total memory usage on the Node for all processes running under the same user account as etxproxy (that is, the session owner).

There is no special handling for fallback accounts.

#### Note

Node memory usage data is not available on AIX or Windows Nodes.

All processes: Total memory usage of all processes on the Node.

#### Note

The information displayed in the tooltip when you hover over this graph is controlled by the **Use cgroups limits for node CPU/memory** option in the profile.

**Node CPU (%)** Select one of the CPU usage options to view from the drop-down list:

- Proxy process: CPU usage by the etxproxy process. 200% indicates two cores are fully used.
- User processes: CPU usage by all processes running under the same user account as etxproxy (that is, the session owner). 200% indicates two cores are fully used.

There is no special handling for fallback accounts.

#### Note

Node CPU usage data is not available on AIX or Windows Nodes.

- All processes: CPU usage by all processes on the Node system. 200% indicates two cores are fully used. (This data is not available on Solaris Nodes.)
- Per core: Usage of each CPU core on the Node system. 100% indicates a core is fully used.

#### Note

The information displayed in the tooltip when you hover over this graph is controlled by the **Use cgroups limits for node CPU/memory** option in the profile.

**Node GPU (%)** GPU usage for memory, rendering and video encoding tasks. The Node GPU drop-down list displays the GPU number and name. From the drop-down list, select any GPU in the system to view its usage. The default GPU is **0**.

Currently, the GPU graph displays GPU usage for the following GPUs/platforms only:

- Windows Server 2019 or later: Any GPU
- Windows 10 or later: Any GPU
- Linux: NVIDIA Quadro or GeForce with sufficient NVML support

**Client rendering (draws per second)** The number of times per second the Client draws to the screen. This includes small vector updates. An idle application gives a value at or near zero.


**Client CPU (%)** Select one of the usage options to view from the drop-down list:

- Client process: CPU usage by the etxc process. 200% indicates two cores are fully used.
- All processes: CPU usage by all processes on the Client system. 200% indicates two cores are fully used.
- Per core: Usage of each CPU core on the Client system. 100% indicates a core is fully used.

## Relaunching Exceed TurboX Dashboard from a session

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To restart Exceed TurboX Dashboard from a session window, do one of the following:

1. From the **Client** menu in the system tray, select **Launch Dashboard**.
2. From the Full Screen toolbar, click the **Menu**  icon and then click **Launch Dashboard**.

## Copying and pasting data between applications

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This section describes how to copy and paste text or images between applications. You can copy and paste content:

1. From a local application to a remote application.
2. From a remote application to a local application.
3. From a remote application to a remote application.
4. Between applications running in different sessions.

Copying and pasting depends on your operating system, native copy/paste options in the applications you are using, and your profile settings. Copying data from a source application always transfers the clipboard to the Exceed TurboX session proxy. Whether you can then paste the information to a local application or to an application running in a different session is controlled by the **Automatically synchronize local to remote** and **Automatically synchronize remote to local** profile settings (**Advanced mode Copy and paste** tab **Clipboard synchronization**). By default, both of these settings are enabled, so you can copy and paste data from any local or remote application to any other local or remote application. For more information, please see [Configuring Copy and paste settings in Advanced mode](#).

See [Configuring Input settings in Advanced mode](#) for information about other profile settings that can affect copying and pasting.

*\*To copy and paste data between applications:*

1. In the source application, select the data (text or image) you want to copy, by doing one of the following:
  - Dragging to select the text or image content.
  - Use keyboard shortcuts specific to the source application, to select the text or image content (for example, Shift + arrow to select text in a text editor).
2. Copy the selected text or image to the clipboard or X selection on the source system, using the correct method for the source system and application. For example, in Notepad on Windows, you could press CTRL+C.
3. Place the cursor where you want to paste the content, then paste it using the correct method for the operating system and application. For example, for MacOS, you could press COMMAND+V.

#### Tip

You can also drag and drop text between X Window applications that support it, including between a remote session and a local application. When you do this, the text is copied to the destination location; the original text remains where it was. Dragging and dropping works only with text, not with images or other files. Dragging and dropping is not supported in Windows remote sessions.

If the paste operation fails, it could be for one of these reasons:

- When copying large amounts of data, it may take time for the data to transfer from the source system to the proxy, and from the proxy to the target system. You may need to wait several seconds between making a selection in the source application and pasting the data into the target application.

- Windows applications understand only some image formats. Windows requires that clipboard data be stored in BMP or PNG formats, whereas X applications support additional formats such as JPEG and TIFF. If the X application cannot save data to the clipboard in BMP or PNG formats, image clipboard data will not be synchronized to Windows.

## Taking session screenshots

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### Taking session screenshots

Exceed TurboX Client allows you to take screenshots of the entire session window or a select region of your session window. A screenshot contains a still capture of your session at a particular point in time. You can paste a session image to your workstation clipboard, save it to a file, or transfer it to the default printer.

To copy and paste a session screenshot, you can use the typical copy/paste methods specific to your operating system native applications, if they support copying and pasting of graphics.

Alternatively, use the **Copy All** and **Copy Rectangle** options in the Client menu (see [Menu options for Windows, Linux, and Mac clients](#)).

### Copying session screenshots to the clipboard

This section describes how to copy session screenshots to your local clipboard. The following procedure applies if you are using Exceed TurboX on a Windows workstation and you are running Exceed TurboX Client on a Windows computer.

#### To copy a session screenshot to the clipboard:

1. In your active session, open the **Client** menu.
2. Do one of the following:
  - To select a region of the session window, click **Edit Copy Rectangle To Clipboard**.

The mouse cursor changes to a crosshair. Drag the center of the crosshair to select the desired region of the window.

#### **Note**

The values displayed on the top-left corner of the rectangle (X, Y, W x H) indicate the position and size of the selected region.

When you release the mouse button, the outlined area of the window is transferred to the operating system clipboard.

- To copy all visible parts of the session window, click **Edit Copy All To Clipboard** on the desktop menu.

The entire window is copied and transferred to the operating system clipboard.

#### **Note**

If you are using the Native Window Manager in Multiple Window mode, you can also right-click the title bar of the application window to open a menu that includes these features. You can paste the graphic stored in the clipboard into any operating system native application that supports pasting graphics.

## Copying session screenshots to the printer

This section describes how to copy session screenshots to the printer. The following procedure applies if you are using Exceed TurboX on a Windows workstation and you are running Exceed TurboX Client on a Windows computer.

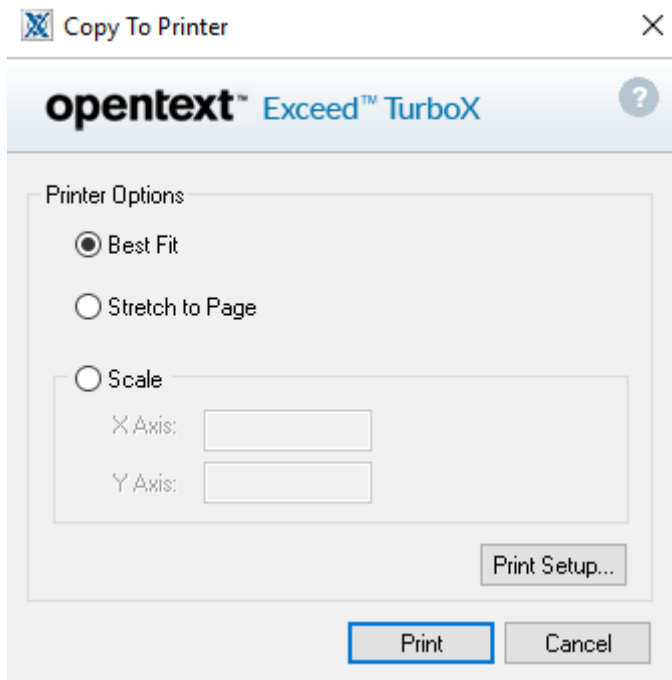
### To copy a session screenshot to the printer:

1. In your active session, open the **Client** menu.
2. Do one of the following:

- To select a region of the session window, click **Edit > Copy Rectangle > To Printer**.

The mouse cursor changes to a crosshair cursor. Drag the center of the crosshair to select the desired region of the window.

When you release the mouse button, the **Copy to Printer** dialog box opens.



- To print all visible parts of the session window, click **Edit Copy All To Printer** on the desktop menu. The **Copy to Printer** dialog box opens.

#### **Note**

If you are using the Native Window Manager in Multiple Window mode, you can also right-click the title bar of the application window to open a menu that includes these features.

In the **Copy to Printer** dialog box, select the appropriate scaling options and click **Print**.

The selected region is transferred to the default printer.

To abort the operation at any time, click **Cancel** or press **Escape** on your keyboard.

## Copying session screenshots to a file

This section describes how to copy session screenshots to a `.bmp` file. The following procedure applies if you are using Exceed TurboX on a Windows workstation and you are running Exceed TurboX Client on a Windows computer.

### To copy a session screenshot to a file:

1. In your active session, open the **Client** menu.
2. Do one of the following:

- To select a region of the session window, click **Edit Copy Rectangle ToFile**.

The mouse cursor changes to a crosshair. Drag the center of the crosshair to select the desired region of the window. Release the mouse button to copy the selected region.

- To copy all visible parts of the session window, click **Edit Copy All To File**.

#### **Note**

If you are using the Native Window Manager in Multiple Window mode, you can also right-click the title bar of the application window to open a menu that includes these features.

3. In the **Save Bitmap As** dialog box that opens, browse to the local directory where you want to place the file, and click **Save**.

The selected region or window is copied to the `.bmp` file.

# Sharing sessions

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## Sharing sessions

This section describes how to share your session with others and how to join a session shared to you. This section also describes shared session lists, collaborative sharing, and responding to administrator requests to shadow your X sessions.

## About sharing and shadowing X sessions

This section describes concepts related to session sharing and shadowing.

The Share feature lets you, the session owner, share your session with one or more users, so that they can view your session and participate in it from their computers. This feature is useful if you are providing a demonstration, working remotely, or getting technical support.

### Note

Session sharing is not available if the Exceed TurboX administrator has disabled this functionality.

Shadowing allows administrators to participate in your session without being explicitly invited by you. Administrators can send requests to you, the session owner, if they want to shadow your session. As the session owner, you can either accept or decline this request. If you accept, the administrator can participate in the session like any other invited user. See [Responding to shadow requests from administrators](#).

The following types of users are involved in session sharing:

- The session owner is the user who launches the session and invites other users to join.
- Participants are invited users who choose to join the session. A participant can also be an administrator whose shadow request you have accepted. Participants may be given control of the input or, if collaborative sharing is enabled, grab the input when the soft cursor becomes available, without being given explicit control by the session owner.

## Considerations before you share a session

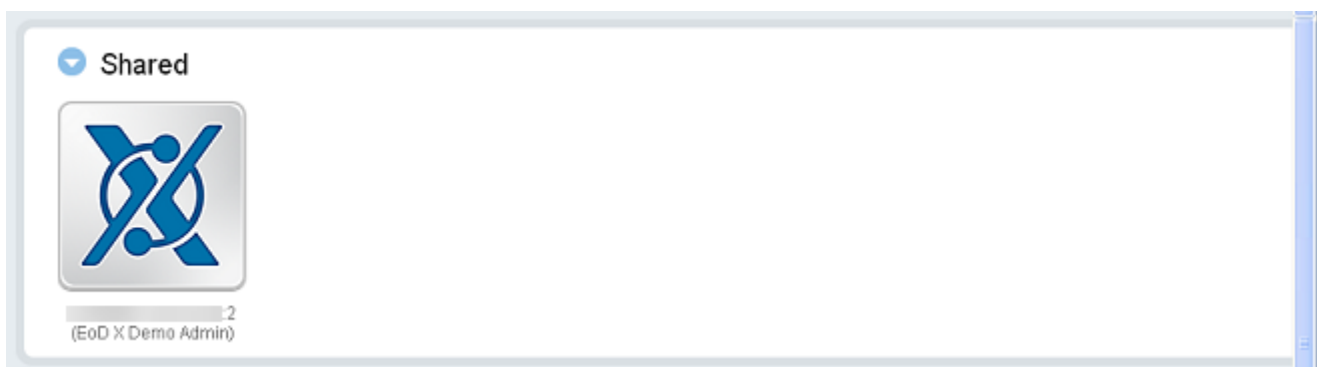
The following considerations can affect sharing:

- Participants' systems must have a supported browser and the Client Launcher installed (for more information, see [Downloading and installing the Client Launcher](#)).
- Users you want to invite must be registered Exceed TurboX users, or users who have accounts in a user directory that Exceed TurboX is configured to use for authentication.
- If Multiple Window mode is enabled in the profile you use for the session, sharing the session will cause the session to appear in Single Window mode. In this case, the session owner needs to start a window manager.
- A shared session may not use Dynamic resizing. If a session that uses Dynamic resizing is shared, it switches to using Fixed resizing. Once the sharing is stopped, the session reverts to the Dynamic resizing policy.

## How will I know that I have been invited to share a session?

Registered Exceed TurboX user invitees receive a message in their Exceed TurboX message box (accessible from the Dashboard), and an email if that message option is enabled in their user accounts.

If you are using **Icons** view in the Dashboard, the **Shared** pane appears automatically and displays the shared session thumbnail. Place the pointer over the shared session thumbnail to access the action icons.



If you are using **List** view in the Dashboard, the shared session appears in the **Sessions** pane. Shared sessions have the status **Shared with me**.

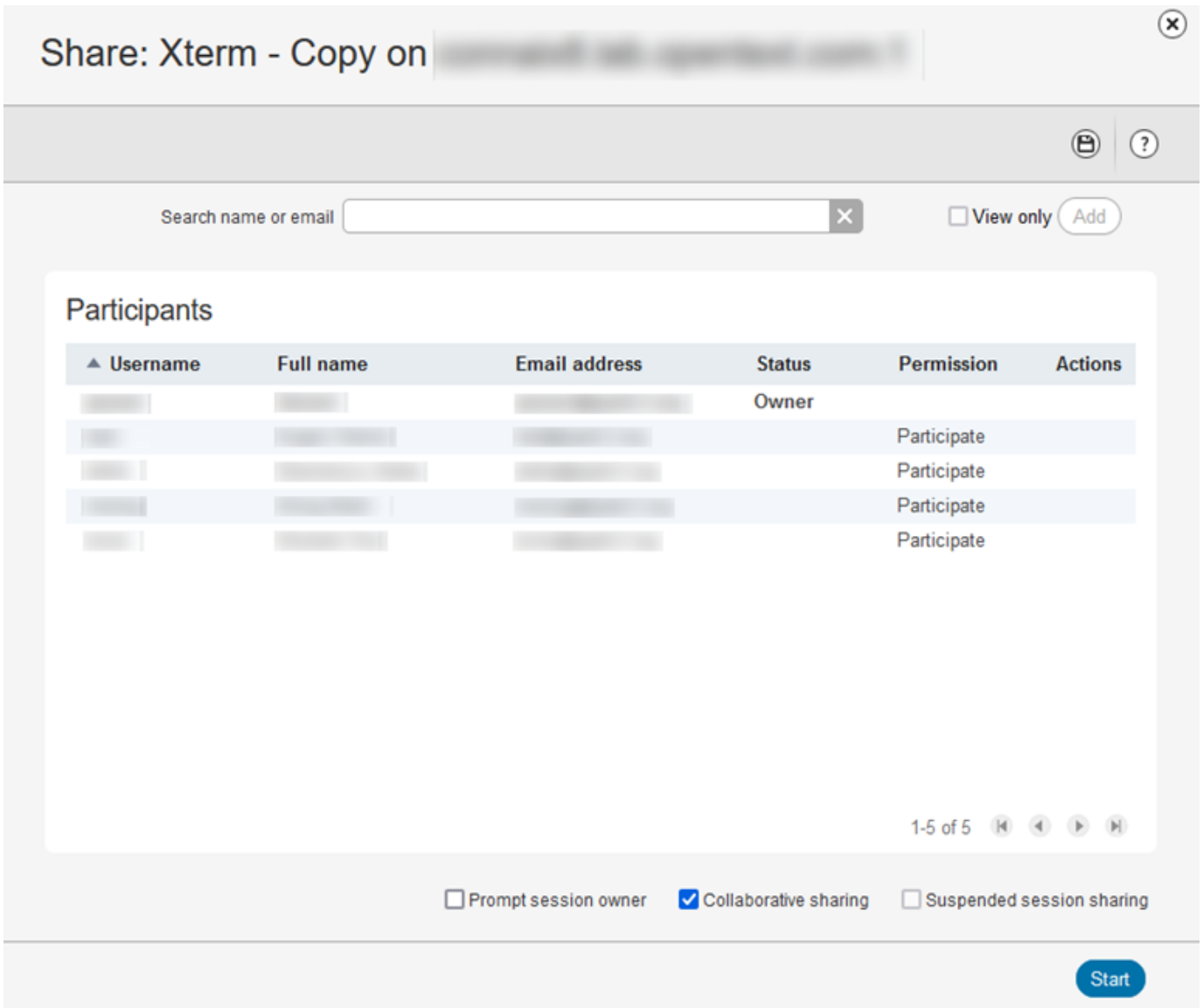
**Note**

In collaborative sharing mode, mouse and keyboard control is automatically and temporarily assigned to the participant interacting with the session. Other participants will not be able to take control of mouse and keyboard input. A corresponding soft cursor of the session owner is displayed to the participant who has been given control.

If collaborative mode is enabled, any participant can grab the input if the cursor becomes available. For more information, see [Participating in a shared session](#).

## What is Exceed TurboX Share Manager?

Exceed TurboX Share Manager is a dialog box that allows session owners to manage and monitor sessions. Users can use the Share Manager to join and leave sessions, monitor sessions, and perform certain tasks, depending on the permissions granted to them by the session owner. You can access Share Manager from Exceed TurboX Dashboard.



Some Share Manager functionality is available only to the session owner. The following table describes tasks that owners and participants can perform in Share Manager:

Owner's Share Manager	Participants' Share Manager
Specify users or groups to share the session with. These can be registered Exceed TurboX users, email addresses, or Exceed TurboX user groups. If you share a session with an email address that is not associated with a registered user, that user will have to sign in and create an Exceed TurboX account before they can join the session.	Join and leave the shared session or the suspended shared session.


Owner's Share Manager	Participants' Share Manager
Save the share list and load it for future sessions. You can save and load multiple lists to share to the combined list of users.	View the name of the machine that is hosting the session, the session's display number, and the name of the session owner.
View which users have joined or left the session.	View which users have joined or left the session.
Disconnect a user without closing the session.	Participants who have permission to participate (not <b>View only</b> ) can remove users from the session if <b>Allow participants to invite/remove users</b> is enabled in the profile's <b>Security</b> settings. Participants are not able to remove themselves or the session owner from the session. Participants are not able to modify share lists. See <a href="#">Configuring Security settings in Advanced mode</a> for more information.
Pause sharing temporarily.	N/A
End sharing.	N/A
Enable and disable collaborative sharing.	N/A
Enable and disable suspended session sharing.	N/A
Enable and disable session join prompting.	N/A

For more information about using Share Manager, see [Managing a shared session as the session owner](#).

## Understanding the sharing workflow

This section provides an overview of the sharing process, with links to more detailed information and procedures.

### The sharing workflow is as follows:

1. Launch a session in Exceed TurboX Dashboard.
2. On the session that you want to share, click the **Share** button . Or, on Linux or Windows systems, click **Sessions Share** in the Client menu. See [Accessing the Exceed TurboX Client menu](#) for more information.

The Share Manager opens with an empty share list.

3. Do one or more of the following to invite other users to join the session:

- Invite individual users to join your session. See [Sharing your session with other users](#) for more information.
- Create a share list with specific users.
- Load one or more existing share lists.
- Edit one or more existing share lists.

See [Working with shared session lists](#) for information about share lists.

4. Click **Start** to send the invitations.

The Share Manager updates the **Status** column in the **Participants** list to indicate which users were invited. The icons in the **Action** column change to allow you to re-invite or remove a user.

Registered Exceed TurboX user invitees receive a message in their Exceed TurboX message box, and an email, if that message option is enabled in their user accounts. Registered and non-registered invites receive different URLs in their email.

The shared session appears on the invitee's Dashboard, allowing them to join the session.

### Note

The **Start** button becomes available when you add at least one user to the **Participants** list. See [Sharing your session with other users](#) for more information.

Invitees can join the session and access a read-only version of the Share Manager. See [Joining a shared session upon invitation](#) for more information.

The session owner's Share Manager is updated to reflect changes in participation. The thumbnail for the session displays the sharing icon in the top-right corner.



- Participants can view or take control of the shared session. See [Participating in a shared session](#) for more information.
- Participants can invite and remove users. See [Inviting and removing users](#) for more information.
- The session owner can enable prompting to join the session, pause sharing, enable suspended session sharing, stop the session, add and remove participants, load additional shared session lists, and save changes to the share list. See [Managing a shared session as the session owner](#) for more information.
- Participants can exit the session. See [Leaving a session you joined](#) for more information.


## Sharing your session with other users

This section describes how to share your session with other users using the Exceed TurboX Dashboard or the sessions's Client menu.

### To share your session:

1. In Exceed TurboX Dashboard, launch the session you want to share.

If the session launches successfully, it appears as an active session on your Dashboard.

2. On the active session you want to share, click the **Share** button . Or, on Linux or Windows systems, on the Client menu, click **Session > Share**. See [Accessing the Exceed TurboX Client menu](#) for more information.

The Share Manager opens.

3. In the Share Manager, do one of the following:
  - a. Click the **Search name or email** box. A list of users and user groups appears (up to 100 entries). Select the user or user group you want to share the session with.
  - b. In the **Search name or email** box, start typing the name or email address of the user you want to invite to the session. A list of up to 100 matching entries is displayed. If the user appears in the list, select their name. If the user does not appear, finish typing their name or email address.
  - c. In the **Search name or email** box, enter multiple email addresses separated by a comma. Do not include spaces.

**Note**




The **Add** button is disabled as you type subsequent email addresses. It is enabled again when you finish entering each email address. If you include spaces or other invalid characters, the **Add** button is disabled.

4. Click **Add**.

If you selected a user, the user is added to the **Participants** list. If you selected a user group, users belonging to the group are added to the **Participants** list. If you entered multiple email addresses, the users are added to the **Participants** list.

**Note**

If restricted sharing is enabled, the **Add** button becomes available only if the user you selected is included in a restricted sharing list. See [Configuring Security settings in Advanced mode](#) for more information about restricted sharing.

5. To sort the users listed in the **Participants** list, click the **Username**, **Full name**, or **Email address** column headings. The list is sorted in ascending alphabetical order. To sort the list in descending alphabetical order, click the heading again.
6. To remove a user from the **Participants** list, in the **Actions** column for that user, click the **Remove participant** button .
7. To save the list of participants as a new share list that you can load in the future, click the **Save** button .
8. To add a previously saved share list to the session, click the **Load share list** button . Select a share list from the **Saved share lists** box, and then click **Load**.

The users contained in the saved share list appear in the **Participants** list.

**Note**

See [Working with shared session lists](#) for more information about creating, editing, and deleting share lists.

9. To start sharing the session with the participants, click **Start**. See [Managing a shared session as the session owner](#) for information on how to proceed.


## Working with shared session lists

Shared session lists allow session owners to easily share a session with multiple users. This section describes how to use the Exceed TurboX Dashboard to create, save, edit, and delete shared session lists.

### Note


Only the session owner can create, save, edit and delete shared session lists.

#### To create and save a share list:

1. In the **Search name or email** box of the Share Manager, enter the name or email address of the first user you want to add to the share list.
  - If the user is a registered Exceed TurboX user, their name is displayed. Select the name and click **Add**.
  - If the user is not registered, type their email address. Exceed TurboX attempts to authenticate them against your organization's user directory. Authenticated users receive emails with a link to the Exceed TurboX Dashboard sign-in page.
2. Repeat as required to add more users.
3. To save the share list so you can use it in the future:
  - a. Click the **Save share list** button .
  - b. In the **Save share list** dialog box, in the **List name** field, enter a name for the share list, or select a previously saved list to overwrite it.
  - c. Click **Save**.

The saved share list can be loaded and reused in future sessions.

#### To edit or delete a share list:

1. In the Share Manager, click the **Load share list** button .
- The **Load share list** dialog box opens, listing the previously saved share lists.

### Note

This icon is available only after you save at least one share list.


2. In the **Saved share lists** dialog box, click the name of the share list you want to edit or delete.


3. Do one of the following:

- To delete the list, click **Delete**.
- To edit the list, click **Load**.

The list of saved participants is displayed under **Participants** in the Share Manager.

4. In the Share Manager, edit the list as follows:

- To add users, in the **Search for name or email** box, enter the name or email address of the user you want to add. Select the name from the list and click **Add**.
- To remove users, in the **Actions** column of the user you want to remove, click the **Remove participant** button .

5. To save your changes, click the **Save share list** button .

If you do not save your changes, you can use the share list to start the shared session, but the list reverts to the previously saved participants when you end session sharing.

## Enabling collaborative sharing and suspended session sharing

This section describes how to use the Exceed TurboX Dashboard to enable collaborative sharing and suspended session sharing for all session participants.

Enabling collaborative sharing gives all session participants the ability to take control of the mouse and keyboard input when the person that is currently in control does not send any input into the session for two seconds. See [Participating in a shared session](#) for more information.


Suspended session sharing allows session participants to remain in the session, even if the session owner suspends the session.

### Note

Only the session owner can enable collaborative sharing and suspended session sharing. **Collaborative sharing** and **Suspended session sharing** are only available if **Allow collaborative sharing** is enabled in the profile's security settings. See [Configuring Security settings in Advanced mode](#) for more information.

### To enable collaborative sharing and suspended session sharing:

1. In Exceed TurboX Dashboard, launch a session.

2. On the active session that you want to share, click the **Share** button . Or, on the Client menu (Windows and Linux systems), click **Session Share**. See [Accessing the Exceed TurboX Client menu](#) for more information.

The Share Manager is displayed.

3. Select the **Collaborative sharing** check box.
4. Select the **Suspended session sharing** check box.

The session becomes **Active** when the first user joins the session. The session becomes **suspended** when the last user leaves the session or when the session owner suspends the session. Multiple users can join suspended shared sessions.

## Responding to shadow requests from administrators

This section describes a type of sharing called shadowing, which is initiated by a request from your Exceed TurboX administrator. After you grant permission to an administrator, shadowing and sharing function in the same way.

*The shadowing request workflow includes the following steps:\**

1. The administrator requests permission to shadow your session.  
A dialog box appears in your session that identifies the administrator who made the request.
2. You grant permission to shadow.
  - If you are already sharing the session with other users, the administrator is added to the existing share list.
  - If you are not already sharing the session with other users. Exceed TurboX adds the administrator to the share list, and invites the administrator to join. The administrator accepts the invitation.
3. Once the administrator joins the session, you can control the shared session just as you would if you had initiated sharing. For example, you can give the administrator control, remove the administrator from the share list, and pause or stop the share. See [Managing a shared session as the session owner](#) for more information.

### **Note**

If you permit an administrator to shadow your session, saving the share list will add the administrator to the list. See [Working with shared session lists](#) for more information about changing a share list.

## Knowing that a session has been shared with you

This section describes how Exceed TurboX informs you if another user shares a session with you.

Exceed TurboX provides the following types of notifications when a user shares a session with you:

- When you sign in to the Exceed TurboX Dashboard, you receive an invitation in your Exceed TurboX message box.
- If you are working in **Icons** view in the Dashboard, the **Shared** pane displays a thumbnail of the sessions you can join.
- If you are working in **List** view in the Dashboard, the shared session appears in the **Sessions** pane with the status **Shared with me**.
- If you are working in a session, a dialog box appears in the session window.
- If email messaging is enabled in your user settings, you receive an invitation at the email address specified in your user settings.

For instructions on how to join a shared session, see [Joining a shared session upon invitation](#).

## Joining a shared session upon invitation

Once a session owner has shared a session with you, you will receive a message in your Exceed TurboX Dashboard. If you have never used Exceed TurboX before, you will receive an email message instead. In this case, you are required to register your Exceed TurboX user account before you join the session.

### To join a shared session if you have never used Exceed TurboX before:


1. Click the link in the share email to access the Exceed TurboX sign-in page.
2. Enter the user name and password you use within your organization.

If you are authenticated, Exceed TurboX Dashboard opens in your browser.

3. Fill out the **User settings** dialog box with your user information, and save to register as an Exceed TurboX user.
4. Continue with the following procedure.

### To join a shared session if you have an Exceed TurboX user account:

1. In the Exceed TurboX Dashboard, identify the session you want to join. The session appears in the **Shared** pane in **Icons** view, or in the **Sessions** pane in **List** view.
2. Do one of the following:

- Click the **Join** button . This allows you to join the session without using the **Share** dialog box.

- Click the **Share** button . The **Share** dialog box is displayed.

In the **Share** dialog box, click **Join**.

#### **Note**

If you have multiple Exceed TurboX user accounts, use the user account mentioned in the message you received to join the session.

3. (Optional) Depending on how session sharing is configured, a dialog box may inform you that the session owner needs to approve your request to join the shared session. Do one of the following:
  - If the session owner approves the request, the connection to the shared session is established. Proceed to step 4.
  - If the session owner does not approve the request, a dialog box informs you that your request was denied. Click **Close** to close the dialog box.
  - If the shared session you requested to join is suspended, a dialog box informs you that the session is suspended and cannot be joined. Click **Close** to close the dialog box.
  - To cancel your request to join the shared session, click **Close** in the dialog box.
4. On the **Launch session** dialog box, select **Native Client** or **Web Client**.
5. When prompted to confirm the launch, click **Open**.

The session opens in a new window on your desktop and your status changes to **Joined**. Both you and the session owner can verify your status in Share Manager. You may now participate in the session. See [Participating in a shared session](#) for more information.

#### **Note**

If you are using a MAC, the window mimics the screen mode of the session owner. If the session owner launched the session using full-screen mode, you may or may not see scroll bars, depending on the size of your monitor. If the session owner is not in full-screen mode and if your monitor is large enough, the window automatically adjusts to be the same size as the session owner's window.

## Managing a shared session as the session owner


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A session owner can manage a shared session using the Share Manager. This section describes the tasks you can perform in the Share Manager as the owner of a shared session.

Typically, Exceed TurboX Dashboard and the Share Manager are still open after you launch and share a session.

### To manage and monitor your shared session using the Share Manager:

1. If the Share Manager is not open, in the active session that you have shared, do one of the following:

- Click the **Share** button .
- On a Linux or Windows system, on the **Client** menu, click **Session > Share**. See [Accessing the Exceed TurboX Client menu](#) for more information.

The Share Manager is displayed.

The session owner and invited users are listed in the **Participants** pane.

The screenshot shows a window titled "Share: Xterm - Copy on" with a search bar for "Search name or email" and a "View only" checkbox. Below is a "Participants" table with columns for Username, Full name, Email address, Status, Permission, and Actions. The table lists one "Owner" and four "Participate" users. At the bottom, there are checkboxes for "Prompt session owner", "Collaborative sharing" (checked), and "Suspended session sharing", along with a "Start" button.

Username	Full name	Email address	Status	Permission	Actions
			Owner		
				Participate	
				Participate	
				Participate	
				Participate	

1-5 of 5

Prompt session owner  Collaborative sharing  Suspended session sharing

Start

### Note

The availability of some icons changes depending on your actions.

2. Manage the sharing permissions and tasks using the following options:

#### **View users in the Participants pane**

Use the navigation icons at the bottom-right corner of the **Participants** pane to view all invitees and participants. See [Browsing Exceed TurboX Dashboard lists](#) for more information.

#### **Prompt session owner**

If this option is enabled, the session owner is prompted to approve or reject user attempts to join a shared session. If the session owner approves the request, the user joins the session as a participant. If the session owner denies the request, the user receives a message informing them that their request has been denied. If a user attempts to join a suspended session, the user receives a message informing them that the session cannot be joined.

This option is disabled by default.

### Collaborative sharing

Select this option to enable collaborative sharing mode. This allows all participants to be able to grab mouse and keyboard input (take control of the session) when the soft cursor becomes available.

The title of the session window indicates whether the session is in collaborative sharing mode, or whether a specific user is in control of the session.

#### Note

This option is available if **Allow collaborative sharing** is selected in the profile's security settings. See [Configuring Security settings in Advanced mode](#) for more information.

### Suspended session sharing

Select this option to enable suspended session sharing.

Suspended session sharing allows invited users to join the session, and participants to continue working in the session, even if the session is suspended.

A suspended shared sessions appears as **Shared** on the Dashboard of invitees and participants, and as **Suspended** on the session owner's Dashboard, regardless of invitees joining or leaving the session. The session appears as **Suspended** on the Dashboard of invitees when the last user leaves the session.

This option is available if **Allow collaborative sharing** is enabled in the profile's security settings. If **Allow collaborative sharing** is not enabled in the profile, **Suspended session sharing** is not available in the Share Manager.

#### Note


If **Enable suspended session sharing by default** is enabled in the profile's security settings, **Suspended session sharing** is selected in the Share Manager by default. See [Configuring Security settings in Advanced mode](#) for more information.

### Sort participants alphabetically

Sort entries in the **Participants** list in ascending or descending alphabetical order by clicking the **Username**, **Full name**, or **Email address** column headings.


### Invite users to join the session

Use the **Search name or email** box to find and select users or user groups to invite to join the session. See [Sharing your session with other users](#) for more information.

**Save share list**  The **Save share list** dialog box lets you name new share lists, save changes to the currently loaded list, or specify a list that you want to overwrite. See [Working with shared session lists](#) for more information.

**Load share list** 

The **Load share list** dialog box allows you to view, delete, and load the share lists you have saved. This option is available after you create and save a your first share list.

**Invite participant**  To reveal this icon, place your pointer in the **Actions** column of a user who has left the session or who has not yet joined the session.


Participants who have left the session or who have not yet joined the session are listed as **Invited** in the **Status** column.


The invitee receives a share message inviting them to join the session.

**Remove a participant** 

To reveal the **Remove participant** icon, place your pointer in the **Actions** column of the user you want to remove.

The participant receives a message informing them that sharing has been stopped.


 **Note**

If you save the list by clicking the **Save share list** button , the participant is removed from the share list.

**Pass control to a participant** 

To reveal this icon, place your pointer in the **Actions** column of the user you want to pass control of the session to.

Participants with control of the session can type or use the mouse in the session. Other participants are in View Only mode. See [Participating in a shared session](#) for more information.

 **Note**


This option is available if Collaborative mode is not enabled.

**Pause sharing** 

Participant screens are frozen until you resume sharing.

**Resume sharing** 

Participant screens are refreshed to the current state of the session window, and sharing resumes.

**End sharing**  After you confirm, participants receive a message indicating that sharing has been stopped. The session you started remains available in the Dashboard.

### Note

If you share a session with a user whose access has been disabled, they appear in the list in an italic strikethrough font. The only option in the **Actions** column is **Remove participant**.

## Participating in a shared session

### Participating in a shared session

This section describes the tasks you can perform when you join a session.

#### Taking control of the session:

- If the session is in **Collaborative sharing** mode, the title of the session window begins with the label **[Collaborative - `username`]** for all participants.

Participants whose status is **Joined** can take control of the mouse and keyboard input when the person who is currently in control does not send any input into the session for two seconds. When no users are sending inputs into the session, the window title only displays **[Collaborative]**, without `username`. When a user takes control of the session, the window title displays the user name of that user.

The soft cursor (indicated by a small, white square) shows the position of the current controller's mouse to all users who are viewing the session.

### Note

You can adjust the release wait time, which is the length of time that the current controller must be idle before another user can take control of the session. To change the release wait time, open the profile in **Advanced mode**. In the **General** tab **Optional settings** box, enter `proxy.AutoInputGrabTimeout=n`. For example, to adjust the release wait time to five seconds, type: `proxy.AutoInputGrabTimeout=5`. See [Configuring General settings in Advanced mode](#) for more information.

### Tip

If the session owner enabled suspended session sharing, you can join the session or continue working in it, even if it is suspended. The session remains **Shared** on each participant's/invitee's Dashboard. Multiple users can join suspended shared sessions.

- If the session is not in **Collaborative sharing** mode, the owner of the session can select a participant to take over mouse and keyboard input.

The title of the session window begins with the label **[In Control - username]** to indicate the user who controls the session. All other participants are in **View only** mode by default. The title of the session window displays the label **[View Only - username]** for those users.

### Adding and removing users:

If **Allow participants to invite/remove users** is enabled in the profile's security settings, you will be able to invite users to join the session, and remove participants from the session. You will not be able to remove yourself or the session owner from the session. See [Inviting and removing users](#) for more information.

### Leaving the session:

To end your participation in the session, see [Leaving a session you joined](#).

#### Note

For more information about session sharing, see [About sharing and shadowing X sessions](#), and [Managing a shared session as the session owner](#).


## Inviting and removing users

This section describes how to invite users to join a shared session, and remove users from a shared session that you are participating in.

#### Note

**Allow participants to invite/remove users** must be enabled in the profile's security settings. See [Inviting and removing users](#) for more information.

### To invite users to join a shared session:

1. On the session thumbnail, click the **Share** button . Or, on Linux or Windows systems, on the **Client** menu, click **Session Share**. See [Accessing the Exceed TurboX Client menu](#) for more information.
2. In the share manager, do one of the following:
  - Click the **Search name or email** box. A list of users and users groups appears (up to 100 entries). Select the user or user group you want to share the session with.

- In the **Search name or email** box, start typing the name or email address of the user you want to invite to the session. A list of up to 100 matching entries is displayed. If the user appears in the list, select their name. If the user does not appear in the list, finish typing their name or email address.

### 3. Click **Add**.



If you selected a user, that user is added to the **Participants** list. If you selected a user group, users belonging to the group are added to the **Participants** list.

#### **Note**

If **Restricted sharing** is enabled in the profile's security settings, the **Add** button is available only if the user you select is included in a restricted sharing list. See [Configuring Security settings in Advanced mode](#) for more information about restricted sharing.

### 4. To start sharing the session with the users, click **Invite**.

#### **To remove users from a shared session:**

1. On the session thumbnail, click the **Share** button .
2. In the share manager, place your cursor in the **Actions** column of the user you want to remove.
3. Click the **Remove participant** button .

The participant receives a message informing them that sharing has been stopped.

## **Leaving a session you joined**

This section describes how to leave a session you have joined. After you leave, the session thumbnail remains in the **Shared** pane of the Dashboard, so you can re-join. The session owner may reissue an invitation for the session you left. In this case, you will receive a message.

When you leave a session, your status changes to **Invited** in the Share Manager.

#### **To leave a session:**

1. Do one of the following:
  - Close the session window. If you are prompted to confirm leaving the session, click **OK**.
  - On your Exceed TurboX Dashboard, open the Share Manager for the session you want to leave. Click **Leave** in the bottom-right corner.

# Suspending and resuming sessions

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## Suspending and resuming sessions

This section describes how to suspend a session and resume it at a later time. This feature is useful if you want a session to remain active and available when you close Exceed TurboX.

The Suspend/Resume feature lets you close Exceed TurboX without terminating your session or the application you are running in the session.

## About suspending and resuming sessions

This section describes concepts related to suspending and resuming sessions.

When you suspend a session, Exceed TurboX maintains the session. When you sign back in to the server, you have the option to resume the session and continue your work. If you do not want to resume a session, you can terminate the session and start a new one.

Additional Suspend/Resume settings, located in the associated profile, let you:

- Prevent unwanted disconnections
- Suspend sessions without terminating the applications you were running
- Attempt to reconnect when a lost server connection is restored

For more information about these settings, see [Defining automatic suspend settings](#).

### Note

Administrators can set a timeout value for suspended sessions. Sessions that are suspended for longer than the defined time are terminated automatically.

Administrators can suspend and terminate user sessions, if necessary.

Your Exceed TurboX administrator grants Suspend/Resume permissions. Depending on the permissions granted to you, you may be able to resume a session on a computer other than the one on which you suspended it.

## Suspending an active session

This section describes how to suspend an active session.

You can suspend your session at any time, provided that your administrator has enabled the feature for you. Suspending sessions is useful if you want to stop working in a session but do not want the session, or any processes and applications using it, to be terminated. Instead, the session remains in a suspended state, so you can resume your work at a later time.

If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues to run in collaborative sharing mode for those participants. If suspended session sharing is not enabled, suspending the session ends the session for all participants. For information about configuring suspended session sharing, see [Configuring Security settings in Advanced mode](#).

### Note


Server configuration may include a timeout for suspended sessions. Sessions suspended for more than the allotted time are terminated.

To suspend OpenGL applications, use a Direct Server Side Rendering to run those applications. Otherwise, any running OpenGL applications that use client-side rendering are terminated when the session is suspended.

You can suspend active sessions from Exceed TurboX Dashboard, or by using the Client menu while you are working in the session.

A suspended session must be named. In **Icons** view, the suspended session's name and thumbnail image appear in the **Suspended** pane on the Dashboard. In **List** view, the session name and description are available in the **Sessions** pane.

### To suspend an active session from Exceed TurboX Dashboard:

1. In Exceed TurboX Dashboard, locate the session that you want to suspend.
2. Click the **Suspend** button  on the session's thumbnail.
3. In the **Suspend a session** dialog box, type a description that will help you identify the suspended session. This description will replace the session name that is displayed under the thumbnail.
4. Click **Suspend**.

The session is now suspended. It is displayed in the **Suspended** pane in **Icons** view, or in the **Sessions** pane in **List** view.

 **Tip**

Alternatively, in **Icons** view, hold down the Shift key and click the **Suspend** icon. This bypasses the **Suspend a session** dialog box.

**To suspend a session using the Exceed TurboX Client menu:**

1. In your session, open the Exceed TurboX Client menu. For more information, see [Accessing the Exceed TurboX Client menu](#).
2. Locate and click the option to suspend the session. This menu differs depending on your workstation's operating system. For more information, see [Menu options for Windows, Linux, and Mac clients](#).
3. In the confirmation dialog box, specify a new description that will help you to identify the session when it is suspended.
4. Click **Suspend**.

The session is now suspended. It is displayed in the **Suspended** pane in **Icons** view, or in the **Sessions** pane in **List** view.

## Resuming suspended sessions

This section describes how to resume work in a session that has been suspended by you, an administrator, or by Exceed TurboX.



Suspended sessions are displayed in the **Suspended** pane in **Icons** view or in the **Sessions** pane in **List** view.

Using the action icons in this pane, you can resume sessions that:

- You suspended on the same computer.
- You suspended with Exceed TurboX on a different computer or device.
- Exceed TurboX suspended automatically (if the auto-suspend feature is enabled in your profile).
- The Exceed TurboX administrator suspended.

**To resume a session from Exceed TurboX Dashboard:**

1. In Exceed TurboX Dashboard, locate the suspended session that you want resume.
2. Do one of the following:

- Click the **Resume**  icon to resume the session immediately
  - Click the **Details**  icon to open the session details dialog box. This allows you to view the session details before resuming the session.
  - To resume the session from the session details dialog box, click the **Resume** icon at the top of the dialog box.
3. If you are prompted to permit Exceed TurboX to run, click **Yes**.
- The session is now resumed. It is displayed in the **Active** pane in **Icons** view, or in the **Sessions** pane in **List** view.


## Defining automatic suspend settings

This section describes how you can configure Exceed TurboX to suspend X sessions automatically using various triggers.

In some situations, you might want Exceed TurboX to automatically suspend your active X sessions. For example, if there is a network failure, you can lose work in progress. To avoid this, you can configure Exceed TurboX to automatically suspend X sessions upon connection loss. If a network failure occurs, your session is safely suspended on the server, so that your work is preserved and you can resume this session at a later time.

You can configure auto-suspend options in the profile you use to launch a session. These settings let you define which events should automatically suspend a session.

### To configure automatic suspend settings:

1. In the **Profiles** pane, locate the profile in which you want to configure the automatic suspending settings. For more information, see [Viewing, sorting, and searching for sessions and profiles](#).
2. Click the **Details**  icon. The icon is located on the profile thumbnail image in the **Profiles** pane in **Icons** view or in the **Actions** column for the selected profile in **List** view.

If you have access to Basic mode, the profile dialog box opens on the **Startup** tab. Otherwise, proceed to Step 6.

3. Click the **Other** tab.

## New Profile

✕

Startup Display Other Summary

---

**Input**

Primary keyboard file Auto-select

Alternate keyboard file us.kbf

Simulate AltGr with Right Alt key

---

**Session**

User closes session Prompt

Last window closed Terminate session

Local system logout Suspend session

User is idle Keep session running

After 30 minute(s)

---

**General**

Runtime version Default (12.5.1.8350)

Client type User preference

Allow administrators to view session snapshot

Select template
Advanced mode
Save

4. Configure the options in the **Session** area.
5. If you have the required permissions, you can access additional auto-suspend settings by clicking **Advanced mode** and opening the **Session** tab.
6. Configure the options in the **Session management** area. For more detailed information about the options, see [Configuring Session settings in Advanced mode](#).


## Transferring an active session launched on another computer

---

This section describes how to transfer a session from the remote computer on which it is currently running to your local computer.

If a session is active, you can transfer it to any computer, as long as you sign in to Exceed TurboX using the same account. For example, you can start a session on your computer at work and leave it running (not suspended). You can then use your computer at home to sign in to Exceed TurboX, transfer the session, and continue working.

**To transfer an active session from another device or computer:**

1. In Exceed TurboX Dashboard, locate the session that you want to transfer.
2. Click the **Transfer**  icon. The icon is located on the session thumbnail image in the **Active** pane in **Icons** view or in the **Actions** column for the selected profile in **List** view.

The remote session opens and you can continue working in it.

## Transferring and printing files with Exceed TurboX

---

### Transferring and printing files with Exceed TurboX

This section describes different ways to transfer files and print from sessions:

- [Transferring and printing files and folders using the File and Print Manager](#)
- [Printing from the command line](#)
- [Printing from applications](#)
- [Printing from applications using CUPS](#)

#### **Note**

File transfer and remote printing options are configured in the profile **File and print** tab. For more information, see [Configuring File and print settings in Advanced mode](#).

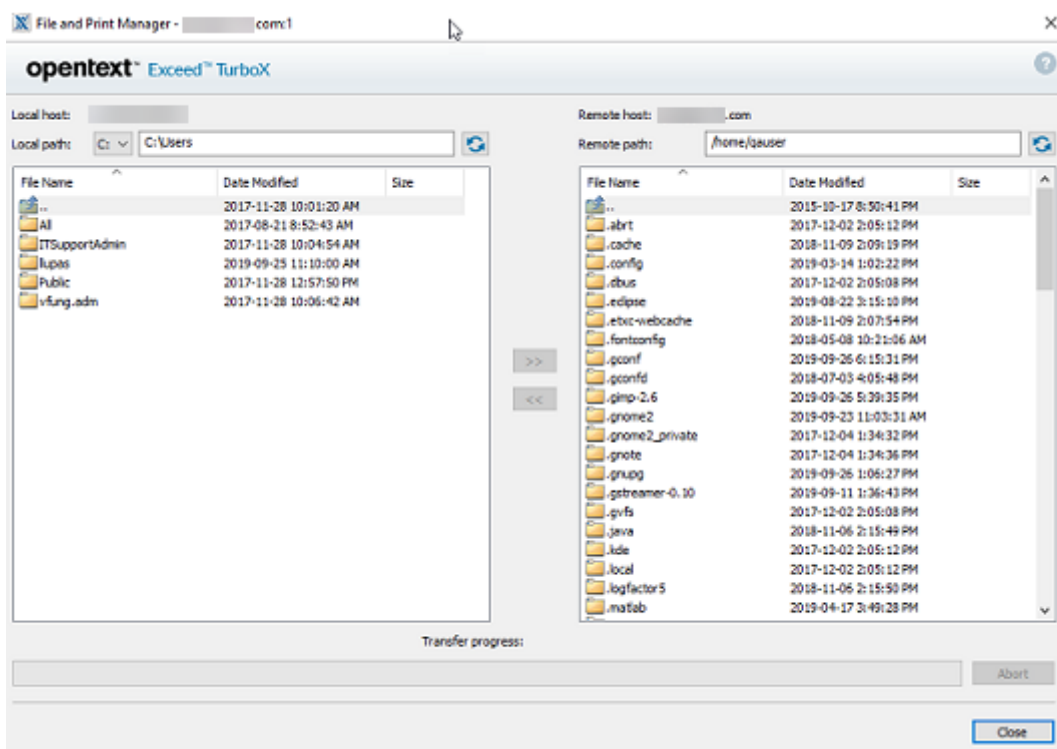
# Transferring and printing files and folders using the File and Print Manager

This section describes how to use the **File and Print Manager** to transfer files and folders between local and remote sessions, and how to open, delete, and print files from the local or remote session. Using the **File and Print Manager**, you can transfer files between the client and application/desktop host, upload files to a remote host, or download files from a remote host. This feature is available for Windows, Linux, and Mac clients, and for Linux, Solaris, and Windows hosts.

To enable the **File and Print Manager** functionality in a profile, select the **Enable File and Print Manager** setting in the **File and print** tab. An Exceed TurboX administrator can disable this functionality server-wide. In this case, all file and folder transfer and print settings in the profile are ignored. See [Configuring File and print settings in Advanced mode](#) for more information.

**To transfer a file or a folder using File and Print Manager:**

1. On the Client menu, click **File and Print Manager**.





In the **File and Print Manager** dialog box, the **Local host** and **Remote host** fields contain the hostnames of the local and remote machines.

The **Local path** and **Remote path** panes list up to 10,000 files and folders. If more files or folders exist, only the first 10,000 are listed.



**Tip**

The remote file system shown in the **File and Print Manager** is the Exceed TurboX node. To show files from a different host, copy `etxft` to that host, and invoke the `etxft -display display` command. This shows the file system on the host where `etxft` was installed. The `etxft` utility is supported on AIX, Linux, Solaris, and Windows platforms. It is not supported for Windows RDP hosts. In this case, use RDP drive mapping.

2. (*Windows client only*) Select a drive from the **Local path** drive selector.
3. In the **Local path** box, type the path to the local files or folders, or browse in the folder hierarchy.
4. Click the **Refresh** button  to refresh the list of local files and folders.
5. (*Windows host only*) Select a drive from the **Remote path** drive selector.
6. In the **Remote path** box, type the path to the remote files or folders, or browse in the folder hierarchy.
7. Click the **Refresh** button  to refresh the list of remote files and folders.
8. Select the files or folders you want to transfer.

**Tip**

You can use your SHIFT and CTRL keys to select multiple files and folders.

9. Do one of the following:
  - To transfer the files or folders from the local to the remote location, click the **Upload** button .
  - To transfer the files or folders from the remote location to the local, click the **Download** button .

The **Transfer progress** bar shows the progress of each file or folder. One file or folder is transferred at a time, even if you selected multiple files or folders.

If a file or folder with the same name already exists at the target location, you are prompted to confirm overwriting the file or folder.

If the session is interrupted, terminated, or suspended, the transfer is canceled. If a folder containing multiple files or folders is partially transferred, the files and folders that have been transferred remain on the target location.

Symbolic links (including JUNCTION and SYMLINKD folders in Windows) are not transferred.

10. To cancel the transfer, click **Abort**.

If a folder containing multiple files or folders is partially transferred, the files and folders that have been transferred remain in the target location.

### To print a file using File and Print Manager:

1. In the **File and Print Manager** dialog box, navigate to and select the file to print.

Exceed TurboX supports printing of plain text ( `.txt` ) files and, depending on the printer, PostScript ( `.ps` ) files. All other file formats are considered non-printable files.

#### **Tip**

To print file formats other than `.txt` or `.ps`, first save the file by clicking the **Download** button. Then open the file using an application that supports that file type, and print it from that application.

2. Right-click the file and click **Print**.

Depending on the remote printing settings configured in your profile, the file is automatically printed to the default printer or the system **Print** dialog box opens. If the system **Print** dialog box opens, select a printer from the available options.

Files must be transferred to the client for client-side printing. The progress of the transfer is indicated in the **Transfer progress** bar.

#### **Note**

When you send a print job, Exceed TurboX queries the printer for confirmation of PostScript support. If the printer does not support PostScript files, or if the printer does not respond to the confirmation query, a warning message is displayed. Most UNIX applications can produce PostScript-formatted output, but many printers do not support this file type. In such cases, you can use third-party applications to convert the PostScript to a supported format.

### To open a file or folder using File and Print Manager:

1. In the **File and Print Manager** dialog box, navigate to and select the local file or folder to open.
2. Right-click the file or folder and click **Open**.

#### **Tip**

Alternatively, open the item by double-clicking it or by selecting it and pressing Enter.

The file or folder opens in the appropriate software application, if available.

### To rename a file or folder using File and Print Manager:

1. In the **File and Print Manager** dialog box, navigate to and select the file or folder to rename.
2. Right-click the file or folder and click **Rename**.
3. Enter the new name.

#### Tip

Alternatively, rename the file or folder by selecting it and clicking f2. You will be prompted to rename the file or folder.

### To delete a file or folder using File and Print Manager:

1. In the **File and Print Manager** dialog box, navigate to and select the file or folder to delete.
2. Right-click the file or folder and click **Delete**.

## Printing from the command line

This section describes how to print files from the command line, from your session, using the Exceed TurboX File Transfer and Remote Print Utility (`etxft`).

If the file to print is saved on your machine, you can use the `etxft -print` command to send the file from your session to the Exceed TurboX Connection Node, and then print it as you would a local file. This utility is available on the product installation package, in the `Utilities/etxft` directory. The `etxft` utility is supported on AIX, Linux, Solaris, and Windows.

### To print from the command line:

1. Enable printing and specify the appropriate printing behavior for your session. For more information, see [Configuring File and print settings in Advanced mode](#).
2. Transfer the files that you want to print from your session to the Exceed TurboX Connection Node using the following command:

```
> etxft -print -display display Filename1 Filename2 FilenameN
```

where:

- `display` is the X display to connect to.
- `Filename1 Filename2 FilenameN` are the files that you want to print.

Depending on the remote printing settings configured in the profile, the files are automatically sent to the default printer or the system **Print** dialog box opens:

- If **Print to default printer** is enabled in the profile, the printable files are sent to the default printer. If no default printer is specified, you are prompted to select one.
- If **Show system print dialog** is enabled in the profile, the system print dialog box opens. Select the printer you want to use.

3. Print the files by doing one of the following the following:

- To print a printable file ( `.txt` or `.ps` ), click **Print**.  
Alternatively, click the **Download** button to preview, or **Save** to save the files to your local machine before printing.
- To print a non-printable file, click the **Download** button to save the file to your local machine. Open the file using an application that supports this type of file, and print it from the application.

## Printing from applications

This section describes how to send files from a session to the Exceed TurboX Connection Node so you can print them.

If you are running an application such as a browser, you can use the application print function to send a file to the Exceed TurboX Connection Node and then print it as you would a local file.

### Note

The following procedure is generic. The printing functionality in the application from which you want to print may operate differently.

### To print from an application:

1. Enable printing and specify the appropriate printing behavior for your session.
2. Find the location of `etxft` on your UNIX machine by asking your system administrator, or by using the `which` command:  

```
> which etxft
```
3. Open the file you want to print in an application associated with its file type, and then click **Print**.
4. In the print dialog box that opens, edit the print command by specifying the location of the `etxft` . For example:

```
/user/local/bin/etxft -print
```

To give the file a `.ps` extension, edit the command as follows:

```
/user/local/bin/etxft -print -ext.ps
```

To disable any information messages, edit the command as follows:

```
/user/local/bin/etxft -print -ext.ps -q
```

5. Click **Print**. The file is sent to Exceed TurboX Connection Node.

If **Print to default printer** is enabled in the profile, the printable files are sent to the default printer. If no default printer is specified, you are prompted to select one.

If **Show system print dialog** is enabled in the profile, the system **Print** dialog opens. Select the desired printer.

## Printing from applications using CUPS

*(UNIX/Linux only)* This section describes how to print from applications using CUPS.

If you launched a session on a UNIX/Linux host, you can use a Common UNIX Printing System (CUPS) server to print files. Files that are sent to a CUPS print server are automatically transferred to the Exceed TurboX Connection Node, using the Exceed TurboX File Transfer and Remote Print Utility (`etxft`), for printing.

To use this feature, CUPS must be installed and running on your UNIX/Linux application host. For more information, see <http://www.cups.org>.

You must also install the Exceed TurboX CUPS printing files and add a CUPS printer on the application host.

### To install the Exceed TurboX CUPS printing files:

1. On the UNIX/Linux application host, start a terminal session.
2. At a command prompt, sign in to the root account.
3. Create a subdirectory in a directory that is owned by the root user.
4. Copy the installation file (`ETXCUPS-12.0.1.5790-SP1-linux-x64.tar.gz`) from the `Utilities/etxft/linux-x64` directory on the product package to the sub-directory you created.

#### Note

The file and directory used in this procedure are examples. Select the file that matches your system and version.

5. Run the following command to untar the file:

```
tar xvzf ETXCUPS-12.0.1.5790-SP1-linux-x64.tar.gz
```

The files are extracted into a directory called `Exceed_TurboX_Printing`.

- Go to the `Exceed_TurboX_Printing` directory and run the following command to install the Exceed TurboX CUPS printing files:

```
./installetxCUPS -i
```

#### Note

To uninstall the Exceed TurboX CUPS printing files, run the following command: `./installetxCUPS -u`

### To add an elpr CUPS printer:

- On the UNIX/Linux application host, sign in to the root account.
- In a web browser, go to the following page: `http://localhost:631/admin`
- In the **Printers** area, click **Add Printer**.
- On the **Add Printer/Local Printers** page, select **elpr** as the local printer and click **Continue**.
- On the **Add Printer/Connection** page, specify `etxps://etxps` in the **Connection** field. Click **Continue**.

#### Note

`etxps` is the name of the Exceed TurboX CUPS script file that was extracted in the previous task and installed in the CUPS `backend` directory.

- On the **Add Printer/Name** page, enter a name for the printer in the **Name** field (for example, `ETX_Printer`).
- Specify a description and location for the printer as needed. These values are optional. Click **Continue**.
- On the following pages, select the make and model of the printer.

#### Note

If needed, click the **Browse** button to locate and select the PostScript Printer Definition (PPD) file that corresponds to your Exceed TurboX Client printer. The PPD file must be installed on the application host.

- Click **Add Printer**.
- If needed, click the **Set Default Options** button and specify default options for the printer.

**Note**

At least one printer must be marked as the Default printer on the client side for Linux Client (Local printer). Otherwise an error message is displayed, indicating that no default destination is available.

The printer will be activated automatically when users sign in to an Exceed TurboX session. Users can select the printer in applications from which they want to print files.

## Generating and downloading a trace package

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### Generating and downloading a trace package

This topic describes how to generate a trace file to use for troubleshooting. Typically, this file is requested by the Rocket Software Customer Support or your administrator.

When you start a trace, Exceed TurboX creates a binary file ( `.TRX` ) and records all X-related network traffic to it. When you turn tracing off, you can generate a compressed trace package ( `.ZIP` ) that contains the trace file ( `.TRX` ), a log file ( `.LOG` ), and a configuration file ( `.JCFG` ). Creating the trace package makes it easier to share this troubleshooting information.

#### To generate a trace package:

1. In your session, open the Exceed TurboX menu. For more information, see [Accessing the Exceed TurboX Client menu](#).
2. Click **Tools Start Trace**.

**Note**

The desktop menu may differ depending on the operating system of your workstation. For more detailed information, see [Menu options for Windows, Linux, and Mac clients](#) and [Accessing the Exceed TurboX Client menu](#).

The **Trace Manager** dialog box opens.

3. In your session, perform any actions you want to capture in the trace file.
4. If you want to add comments to the trace file:

Depending on your operating system, you may open the comment dialog box which has lost focus. For example, in some versions of Windows, you can click the **Trace Manager (Insert Trace Comment)** icon in the taskbar.

Type your comment in the text box and click **Insert**. The comment is listed in the comments box and will appear in the `.TRX` file after the last logged action.

Click the session's icon in the taskbar to continue the trace.

Repeat this process to add additional comments when necessary.

5. To end the trace, click **Stop Trace** in the **Trace Manager** dialog box. You are prompted to download the trace package to your workstation.

#### **Note**

If you do not want to create a trace package and download it, you can retrieve it from the server later. For more information, see [Accessing Logs or Traces](#).

6. Click **Yes**.

The **Save as** dialog box opens. By default, the trace package is saved as

`EoD_trace_YYYY_MM_DD_Hour_Min_Sec.zip` in the following location:

- On Windows workstations: `C:\Documents and Settings\username\My Documents`
- On Linux workstations: `/home/username/Documents`

7. If desired, modify the file name and location. Click **Save**.

## Accessing Logs or Traces

This topic describes how to view or download log and trace files after they have been generated.

If, after performing a trace, you do not download the generated Trace Package, you can retrieve the files from the server at any time as described below.

The Proxy Files screen displays the name, creation date, and size of all logs and traces on the Exceed TurboX Connection Server. Exceed TurboX lets you directly view a proxy log. However, you must save all other logs and/or traces to your computer before you can view them. These files are useful when troubleshooting a problem.

### To view a proxy log:\*

On the Exceed TurboX **Client** menu, click **Tools View Log**.

The proxy log opens in a text editor.

#### To save a log or trace:

1. In your session, open the Exceed TurboX menu. For more information, see [Accessing the Exceed TurboX Client menu](#).
2. On the Exceed TurboX **Client** menu, click **Tools View Log**.  
The proxy log opens in a text editor.
3. Use the text editor's **Save** or **Save As** feature to save the file to your workstation.

## Ending sessions

---

### Ending sessions

This section describes ways to terminate different types of sessions.

You can end active sessions from either the Dashboard or from the session.

#### Note

If you want a session to remain active and available when you close Exceed TurboX, suspend the session instead of terminating it. For more information, see [Suspending an active session](#).

Administrators can set a timeout value for suspended sessions. Sessions that are suspended for longer than the defined time are terminated automatically.

Administrators can terminate user sessions.

## Terminating the session in which you are working

This section describes how to end sessions that are running on your local computer.


To close all applications and exit the session in which you are working, use the **Exit** option on the Client menu or, if in Full Screen mode, from the available Full Screen toolbar.

If you are sharing the session with other users, terminating the session ends the session for all participants.

### Note

If you do not want applications or other processes to be terminated with your session, or if you want to prevent participants from being kicked out, suspend the session instead of terminating it. See [Suspending an active session](#).

## To end the session in which you are currently working

1. Save any work in your session and applications.
2. Click **Exit** on the Exceed TurboX menu or click the **Menu**  icon on the full screen toolbar.
3. Click **Terminate**.

## Terminating active or suspended sessions from the Dashboard

This section describes how to end an active or suspended session from Exceed TurboX Dashboard.


If you are terminating a suspended session, you do not have to resume that session in order to terminate it. If the session is shared with other users, terminating the session ends the session for all participants.

You can use the sessions details dialog box to view information about a session before you terminate it. See [Using the session details dialog box to manage sessions](#) for more information.


### Caution

Terminating a session from the Dashboard does not save any work you completed while working in the session. Terminate the session only if you know your work has been saved.

## To terminate an active or a suspended session

1. In Exceed TurboX Dashboard, locate the active or suspended session that you want to terminate.
2. Click the **Terminate** button . This button is located on the session's thumbnail image in the **Active** or **Suspended** pane in **Icons** view, or in the **Actions** column for the selected session in **List** view.
3. If prompted to terminate the session, click **Terminate**.

### **Tip**

In **Icons** view, you can also terminate the session by holding down the Shift key and clicking the **Terminate** button . This ends the session immediately, without prompting for confirmation.

# 5. Working with sessions in the Web client

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## Working with sessions in the Web client

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This section describes how to launch and work with sessions using the Web Client. In addition to the Windows, Linux, and UNIX systems where the Native Client is supported, the Web Client also works on mobile devices, such as tablets and smart phones. See the *Exceed TurboX Release Notes* for a list of supported devices.

When using a session in the Web Client, you can:

- Use commands and options available in your applications, accessed through the session.
- Use the features of the Web Client toolbar. This toolbar allows you to perform tasks from a touchscreen device as if it were a workstation, gives you access to the Web Client menu, and lets you close or suspend your session. For details, see [Using the Web Client Toolbar](#).

This section describes only options and functions available in the Web Client. For information on working with sessions using the Native Client, please see [Working with Sessions in the Native Client](#).

### Tip

If your administrator has limited you to using a specific client, you may not be sure if you are using the Native Client or the Web Client. When you launch a session with the Web Client, it opens in a new tab in your browser. When you launch a Native Client session, it opens in a new window, separate from the browser window. If you want to change the client you are using, contact your administrator to see if it is possible.

## Using the Web Client Toolbar

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The Exceed TurboX Web Client window includes a toolbar. Most of the toolbar features allow you to simulate workstation actions when working on a touchscreen device such as a tablet or smart phone.


When you first open a Web Client session, the toolbar is minimized to a single icon at the top left of the browser window.



To show the entire toolbar, click the icon.

You can move the icon to anywhere in the browser window by dragging it. However, when you click or tap it to display the toolbar, the toolbar always displays at the top of the window.

### Tip








When you first display the toolbar, the icons that apply only to touchscreen devices appear only if you are on a touchscreen device. To display or remove these touchscreen icons, click the **Menu** icon  and click **Show touch controls**.




### Note

The toolbar may hide information that is at the very top of the window. To see information that is behind the toolbar, minimize the toolbar.

## Toolbar icons

The Web Client toolbar contains the following icons:

Icon	Name	Description
	Minimize	Returns the toolbar to its minimized icon.
	Menu	Displays the Web Client menu.
	Left mouse button	These touchscreen controls let you choose the action mode for the session when you are on a touchscreen device. You can select only one mode at a time. For more information, see <a href="#">Using the touchscreen controls</a> .
	Center mouse button	
	Right mouse button	
	Cursor mode	
	Pan/zoom mode	

Icon	Name	Description
	Displays mobile keyboard	<i>(Touchscreen device only)</i> Display the device's on-screen keyboard so you can enter characters in the remote session. Use this option to display the device's keyboard without displaying the Web Client keyboard.
	End session	Displays a menu where you can suspend, terminate, or, if you are in a shared session, leave the session. For more information, please see <a href="#">Ending the session</a> .
	Help	Displays the <i>Exceed TurboX Dashboard and Client Help</i> in a new browser tab.

### Tip


Be sure that the keyboard defined for the profile you are using matches the on-screen keyboard. For more information, see [Changing your keyboard](#).

To remove the keyboard, click the **Display keyboard**  icon again.

## Using the touchscreen controls

One of the main uses of the Web Client is for opening sessions on a touchscreen device such as a tablet or smartphone. The Web Client toolbar lets you choose from six modes; each mode determines how touchscreen actions such as taps or slides are interpreted on the host computer for the session.

### Tip

By default, the touchscreen controls are shown when you first display the toolbar on a touchscreen device. If they are not shown, to display them click the **Menu icon** , then click **Show touch controls**.

Each touch control selects one of the six available modes. Only one mode can be active at any time, but you can switch between modes whenever you want. The six available modes are:



— Left mouse button

A tap equals a left-button mouse click.



— Center mouse button

A tap equals a center-button mouse click.



— Right mouse button

A tap equals a right-button mouse click.



— Cursor mode

A tap or finger swipe moves the cursor to that location.



— Pan/zoom mode

Pinching zooms the display and dragging moves it. In this mode, you cannot send a tap or mouse-click to the application.



— Send remote touch events

Removed for 12.0.4 because it doesn't work. Will be added back in a future release.

Sends all touch events (taps, pinching, dragging, and so on) to the remote host. Exceed TurboX does not do any handling of the events.

## Copying and pasting data

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This section describes how to copy and paste text or image data between applications. You can copy and paste content:

- From a local application to a remote application.
- From a remote application to a local application.
- From a remote application to a remote application.
- Between applications running in different sessions.

Copying and pasting depends on your operating system, the copy/paste options in the applications you access, and your profile settings. Copying data from a source application always transfers the clipboard to the Exceed TurboX session proxy. Whether you can then paste the information to a local application or to an application running in a different session is controlled by the **Automatically synchronize local to remote** and **Automatically synchronize remote to local** profile settings. By default, both of these settings are enabled, so you can copy and paste data from any local or remote application to any other local or remote application. For more information, please see [Configuring Copy and paste settings in Advanced mode](#).

See [Configuring Input settings in Advanced mode](#) for information about other profile settings that can affect copying and pasting.

### To copy and paste data between applications:

1. In the source application, select the data (text or image) to copy by doing one of the following:
  - Drag to select the text or image content.
  - Use keyboard shortcuts specific to the source application to select the text or image content (for example, Shift+arrow to select text in a text editor).
2. Copy the selected text or image to the clipboard or X selection on the source system, using the correct method for the source system and application. For example, in Notepad on Windows, you could press CTRL+C.
3. If you are copying from an X application, copy the data from the X selection to the clipboard:  
Click the **Menu** icon   
Click **Copy X selection**.  
This makes the data available to your local applications or remote Windows applications.
4. If you are copying from Windows and want to paste the data into an X application, copy it into the X selection:  
Click the **Menu** icon   
Click **Paste X selection**.  
This makes the data available to X applications in a remote session.
5. In the local or remote application where you want to paste the content, place the cursor in the desired location.
6. Paste the data from the clipboard or X selection using the correct method for the operating system and application. For example, for MacOS, you could press `COMMAND+V`.

#### **Note**

If the paste operation fails, it could be for one of these reasons:

When copying large amounts of data, it may take time for the data to transfer from the source system to the proxy, and from the proxy to the target system. You may need to wait several seconds between making a selection in the source application and pasting the data into the target application.

Windows applications understand only some image formats. Windows requires that clipboard data be stored in Bitmap or PNG formats, whereas X applications support additional formats such as JPEG and TIFF. If the X application cannot save data to the clipboard in BMP or PNG format, image clipboard data will not be copied to Windows.

## Using the Web Client keyboard

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The on-screen keyboard available on most touchscreen devices does not include all of the same keys as a standard PC or other workstation keyboard. The Web Client includes a supplementary on-screen keyboard to give you access to these keys. You can display this keyboard when you want to use it, then hide it again to maximize the available screen space in your browser window. The keyboard includes the CTRL, ALT, ESC, and INS (insert) keys, function keys, arrow keys, and more.

When you display the Web Client keyboard, it also displays the keyboard for your touchscreen device.


### Tip

You may need to use the Web Client keyboard at times even on a system that has a full keyboard. The Web browser may intercept certain keystrokes or key combinations and use them to execute browser functions instead of functions within the session in the browser window. If this happens, you can use the Web Client keyboard to enter those keystrokes and they will be entered in the session.

### To use the Web Client keyboard

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Tap the **Keyboard** icon .

The Web Client keyboard and the keyboard for your touchscreen device are displayed.


3. If you want to display the F1 — F12 function keys, tap Fn.
4. When you are done using the keyboard, tap the **Keyboard** icon  again to remove it.

## Relaunching the Exceed TurboX Dashboard

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When you start a Web Client session, it opens a new browser tab. The Exceed TurboX Dashboard stays open in its original tab. If you close the dashboard tab while you have an open Web Client session, you can open a new Dashboard tab from the session.

### To launch the Dashboard from a Web Client session

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Click the **Menu** icon .
3. Click **Launch Dashboard**.

## Changing your keyboard

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When you start a session in the Web Client, it sets your keyboard to use the primary keyboard definition file set in the profile for the session. This is usually set to auto-select, so Exceed TurboX detects the type of keyboard you are using and sets the definition file to match. However, it does not have to be. For example, the profile could be set to use a German, Korean, or any other type of keyboard that Exceed TurboX has a definition file for.


Each profile also has an alternate keyboard file defined. For example, for a profile expected to be used from Canada, the primary keyboard could be an English keyboard and the alternate could be French, or vice-versa.

For information about setting the primary and alternate keyboards for a profile, please see [Configuring Other settings in Basic mode](#)

### **Note**

When using a touchscreen device, the keyboard for your profile should match the device's on-screen keyboard. If it does not, the on-screen keyboard may contain unsupported keys. Pressing an unsupported key will not send any character or action to the remote session.

### To switch the keyboard definition you are using:

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Click the **Menu** icon .
3. Click **Switch to alternate keyboard** or, if you are using the alternate keyboard and want to switch back, click **Switch to primary keyboard**.


## Generating a trace package


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A trace file captures the network activity during your Exceed TurboX session. It can be used to help troubleshoot an issue with Exceed TurboX. You will generally only want to generate a trace file if you are asked to by your administrator or customer support.

When you start a trace, Exceed TurboX creates a binary file ( `.trx` ) to which all X-related network traffic is recorded. When you turn tracing off, Exceed TurboX creates a compressed trace package ( `.zip` ) that contains the trace file ( `.trx` ), a log file ( `.log` ), and a configuration file ( `.jcfg` ). You can either save this file to your system or copy a URL for it to your clipboard.

### To generate a trace:

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Click the **Menu** icon .
3. Click **Start trace**.
4. Perform the actions you want to capture a trace for.
5. If you want to add a comment to the trace — for example, if the issue you are concerned with occurs:
  - a. Click **Insert comment**.
  - b. On the **Insert trace comment** dialog box, type your comment and click **Insert**.
6. To stop the trace:

In the Web Client toolbar, click the **Menu** icon .

Click **Stop trace**.
7. Either:
  - Click **Download trace package** to download the zipped trace package file to your system. The file name is `ETX_trace_yyyy_mm_dd_hh_mm_ss.zip`. It is downloaded using the browser's download feature.
  - Click **Copy URL** to save the URL for the trace package file to the clipboard.

## Viewing the log file


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If your user permissions allow it, you can view the Exceed TurboX log file ( `etxproxy.log` ) for your session from the Web Client menu. The log file contains technical information about the activity that took place during the session.

### Note

An Exceed TurboX administrator can configure what level of information is stored in the log file.

### To view the log file

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Click the **Menu** icon .
3. Click **View log**.

The log file is displayed in a new browser tab.

4. You can save or print the log file using your browser's features.

## Ending the session

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When you have completed your work and want to leave the session, you can terminate the session, suspend it, or, if it is a shared session, leave it:

- Terminating the session ends all applications and closes the tab containing the session. You cannot return to the session later. If it is a shared session, the session is closed for all participants.


### Note

Be sure to save your work before terminating a session.

- Suspending the session also closes the tab containing the session. However, it does not end any applications that are running in the session. You can resume the suspended session from the Exceed TurboX Dashboard at a later time.
- Leaving a shared session just removes you from the session. It does not affect the session for any other participants.

Follow the procedure below to suspend or terminate a session.

**To leave a Web Client session:**

1. If it is not already showing, display the Web Client toolbar. See [Using the Web Client Toolbar](#).
2. Click **End session** .
3. Click **Suspend session**, **Terminate session**, or **Leave session**.
4. Confirm your action.

# 6. Working with Profiles

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## Working with Profiles

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This section includes an overview of Exceed TurboX profiles and templates, and provides detailed information about how to create and customize profiles using the Exceed TurboX web interface.

## About profiles

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This section provides an overview of Exceed TurboX profiles.

Profiles define what happens when a user launches a remote session. They can be defined by both administrators and users, if the users have the needed permissions. Profiles may include:

- Which application or desktop to launch in a remote session
- How to authenticate the session for single sign-on
- The Exceed TurboX runtime version to use
- Window and monitor settings
- Keyboard and locale
- Copy and paste options
- File transfer settings
- Security settings
- Logging settings

To launch a session, Exceed TurboX users must have access to at least one profile.

An Exceed TurboX administrator may distribute pre-configured profiles to users, or distribute profile templates to allow users to create profiles of their own. Any number of profiles can be created to accommodate different session and application requirements.

The settings available for users to configure may vary, depending on which properties are locked in the underlying template.

For detailed information about profile settings, see [Customizing profiles in Advanced mode](#).

For detailed information about profile settings, see [Customizing profiles in Advanced mode](#).

The following types of profiles are available:

## Group Profiles

Group profiles are profiles that have been distributed to more than one user or user group. Group profiles cannot be edited by users, as changes to group profiles would affect other users of the profile. Group profiles can only be modified by Exceed TurboX administrators. However, users with the proper permissions can copy a group profile to create a new user profile, or customize a group profile's settings for their own use.

Users with the **Copy group profiles** permission may copy a group profile and modify the copy to suit their needs. Properties that are locked in the underlying template appear as read-only and cannot be modified. Copied profiles are only visible to the user who created the copy. Changes made to a copied profile do not affect other users.

Users with the **Customize group profiles** permission may change settings in a group profile. Properties that are locked in the underlying template appear as read-only and cannot be modified. The settings are modified for the user only. The group profile maintains its original settings for other users. Users and administrators with **Customize group profiles** enabled are also able to customize existing Xstarts.

The difference between copying and customizing a group profile is that copying the profile creates a new profile for the user's use while leaving the original group profile in place. The user can launch a session using either the original group profile or the copy with their modified settings. Customizing a profile does not create a new profile. Instead, it modifies the group profile settings for the user who performs the customization. When the user launches a session using the group profile, the profile uses their customized settings instead of the original group settings.

In the **Profiles** pane in **Icons** view, group profiles are identified by the lock icon displayed in the top-right corner of their images. For users and administrators who have **Customize group profiles** enabled, the lock icon is not displayed.



New installations include default templates and group profiles for each startup mode. These default profiles and templates contain optimal settings and provide a good starting point for creating and distributing new profiles.

## User Profiles

A user profile is a profile created in one of the following ways:

- By a user with the **Copy group profiles** or **Copy personal profiles** permission, who duplicated a group profile or a user profile.
- By a user with the **Create profiles** permission, who created a new profile based on an existing template.
- By a user or administrator who imported profiles from an export file. All imported profiles are initially distributed to the user who imported them.
- By an administrator who distributed a profile to a single user.

In Exceed TurboX Dashboard, users can access profiles in the **Profiles** pane. This pane contains group profiles that have been distributed to all users, profiles that have been distributed only to the user who is currently signed in to Exceed TurboX Dashboard, and profiles that the user has created or copied.

## About profile templates

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This section provides an overview of profile templates.

Exceed TurboX administrators can create and configure profile templates. Templates can be used by administrators and users as a starting point for creating new profiles. These templates contain administrator-specified profile settings. An administrator may lock individual properties, property groups, and/or tab pages in a template to ensure that profiles based on the template cannot change those values. Locked properties appear as read-only in Exceed TurboX Dashboard.

When creating a new profile or template, users and administrators must base it on an existing template. Templates created in this way are a copy of the existing template, including locks and property settings. Profiles created from a template are permanently linked to that template and respect all locks and default template settings.

A new template must be published before any profiles based on the template can be distributed to users. Unlike profiles, templates can only be published to the **All Users** group. This makes the template appear in the list of available templates whenever a user or administrator creates a new profile or template.

When an administrator updates a profile template in Exceed TurboX Server Manager, the change is reflected in all profiles that are based on that template.

# Creating profiles

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## Creating profiles

This section describes how to create and edit a profile in Exceed TurboX Dashboard. Users can create a profile from a profile template or from an existing profile. Users cannot create templates. Templates can be created or deleted only by administrators using Exceed TurboX Server Manager.

To configure ETX for the best performance, see "Best Practices for Optimizing Performance" in the Exceed TurboX Installation Guide.

## About Basic and Advanced modes in Exceed TurboX Dashboard

This section describes the two modes available to users for editing profiles in Exceed TurboX Dashboard:



1. **Basic mode:** You can view and/or configure the most commonly used profile settings, which are sufficient for starting most sessions. In this mode, the settings are grouped on separate tabs: **Startup, Display, Other, and Summary.**
2. **Advanced mode:** You can view and/or configure all profile settings, including those available in Basic mode. Exceed TurboX administrators can disable Advanced mode and make only Basic mode available to users. In most cases, the administrator customizes these settings when creating a group profile and profile template. For more information about templates, see [About profile templates](#).

You can switch between Basic and Advanced mode when configuring a profile.


Exceed TurboX administrators can lock individual properties or property groups in the underlying template.

## Launching and managing profiles from the profile controls

This section describes launching and managing profiles from the profile controls. Use the following action icons to manage the existing profile(s).

**Favorite;** ;  Toggle between marking the profile as a favorite and unmarking it as a favorite. For more information, see [Managing favorites](#).


A yellow star indicates a favorite profile.


**Launch**  Launch a session based on the profile.

For more information, see [Launching and Accessing Sessions](#).


**Edit**  Edit the profile.

For more information, see [Editing a profile](#).

**Copy**  Copy the profile. For more information, see [Creating a new profile by copying an existing profile](#).

**Shortcut**  Create a shortcut that launches a session using the selected profile (Windows only).


For more information, see [Working with shortcuts](#).

**Delete**  This icon is available only for user profiles. Only administrators can delete a read-only or group profile. Administrators may also delete a template if it is not used by any profile.

## Managing favorites

This section describes how to manage favorite profiles in Exceed TurboX Dashboard. By default, no profiles are marked as favorites.


### To mark a profile as favorite in Icons view

1. In the **Profiles** pane, position the pointer over the desired profile.
2. Click the **Favorite**  icon in the upper left corner of its thumbnail.


The **Favorite** icon changes to yellow, indicating that the profile is now a favorite.



#### Tip

Click the yellow **Favorite** icon  to remove the favorite status from the profile.

## To mark a profile as favorite in List view

1. In **Profiles** pane, position the pointer in the **Favorite** column of the desired profile.
2. Click the **Favorite**  icon that appears.

The **Favorite** icon changes to yellow, indicating that the profile is now marked as favorite.

### **Tip**

Click the yellow **Favorite** icon  to remove the favorite status from the profile

You can have the **Profiles** pane display all of your available profiles or only your favorite profiles by clicking the star icon at the top of the pane.

For details, see [Expanding and collapsing panes in Icons view](#).


## Creating new profiles from profile templates

This section describes how to use profile templates to create new profiles, and how to create a new profile by importing an existing profile in Exceed TurboX Dashboard.

Administrators create profile templates to provide users with preconfigured session settings. You can use any template as a basis for a new profile. Depending on the permissions set by your administrator, you may have access to settings in both Basic and Advanced configuration modes. This section provides information about both modes.

You must have **Create profiles** permission in order to create and save a new profile.

### To create a new profile from a template

1. In the **Profiles** pane, click the **New**  button.
2. To create a new profile from one of the listed templates.
  - a. In the **Select template for the profile** dialog box, select the appropriate template for your profile. The selected template's settings are shown in the **Details** pane.
  - b. Click **Create profile**.

The **New Profile** dialog box opens in Basic mode.
3. To create a new profile by importing an existing profile.
  - a. In the **Select template for the profile** dialog box, click **Import profile**.

b. Choose the XML file to import and click **Open**.

The **Imported profile** dialog box opens in Basic mode.

You can only import one profile at a time. If you try to import an export file created from an unsupported Exceed TurboX version, an error message is displayed.

4. In the profile name field at the top of the new profile's dialog box, type a name for the new profile and press enter.

5. Specify the basic and/or advanced settings for the profile, as needed.

- In Basic mode, click each tab at the top of the dialog box to display different groups of settings. For details, see [Modifying profiles in Basic mode](#).
- To switch to Advanced mode, click **Advanced mode**. In this mode, click each tab in the left navigation pane to display different groups of settings. For details, see [Customizing profiles in Advanced mode](#).

The **Advanced mode** button is enabled only if your administrator has given you **Access advanced mode** permission.

6. When you are finished making your changes, click **Save**. You can now use the profile.

To return to the Dashboard without saving your changes, click the **Close** button in the top-right corner of the dialog box. When prompted to save your changes, click **No**.

If you import a profile or create a profile from a template while in favorite view (that is, only profiles marked as favorite are shown in the **Profiles pane**), the new profile will be marked as a favorite.

For more information, see [Expanding and collapsing panes in Icons view](#).

You can remove the profile's favorite status, if needed. See [Managing favorites](#).

You cannot import or create a template using this procedure. A template can be used only for exporting and importing on the same server.


## Creating a new profile by copying an existing profile

This section describes how to create a profile by copying an existing one.

You can create a copy of any profile you have access to, including a group profile. After creating a copy, you can rename it and modify it as desired. If you copy a profile that has been marked as a favorite, the new profile will also be a favorite.

You can copy profiles only if your administrator has granted you the appropriate permissions to do so. Otherwise, the **Copy** icon is unavailable.

### To create a new profile from an existing one

1. In the **Profiles** pane, identify the profile you want to use as the basis for your new profile.
2. Click the **Copy**  icon. This icon is located on the profile thumbnail image in **Icons** view, or in the **Actions** column in **List** view.

The **Copy a profile** dialog box opens.

3. In the **Profile name** field, replace the default name with the name of the new profile.
4. Click **Save**.

Alternatively, in **Icons** view, hold down the shift key and click the **Copy** icon. The profile is copied. The name for the new profile is the name of the profile you are copying with — **Copy** appended to it.

You can now edit the profile to suit your needs. For more information, see [Editing a profile](#).

## Creating Profiles for Linux and Unix Applications

Applications can be run directly so they appear on the user's native OS taskbar, called **multiple window mode**. Alternatively, applications can be run inside a single window that contains an entire remote desktop environment, called **single window mode**. Running applications directly in **multiple window mode** gives the best performance because it avoids overhead from compositing or backgrounds, and can be more efficient with window operations.

### Creating a Profile to Launch Applications in Multiple Window Mode

1. From the Dashboard, create a new profile from the **Default Custom Startup** template, then edit its settings under **Advanced mode**.
2. On the **Startup** tab, add a new Xstart for every desired application.
3. For best performance, make sure each Xstart's **Startup method** is set to **X Window Host Application**.

### Creating a profile to launch a desktop environment in Single Window Mode

If a desktop environment is required, choosing one that supports disabling compositing will give significantly better performance.

KDE and Xfce are good choices. Because GNOME does not support a non-compositing mode, it uses far more CPU resources and additional bandwidth compared to alternatives. GNOME is the only desktop environment included by default and supported by the OS vendor on RHEL 8 and RHEL 9. However, KDE and Xfce can be installed from the EPEL repository.

## To create a profile that launches a desktop environment

1. From the Dashboard, create a new profile from the **Default Custom Startup** template.
2. On the New Profile **Startup** tab, add a new Xstart.
  - a. Set **Startup method** to **X Window Host Application**.
  - b. In the **Command** box, enter the command for the desired desktop environment. For example:
    - **Xfce:** `@r/rundesktop xfce`
    - **GNOME:** `@r/rundesktop gnome`

**Note:** See `/usr/share/xsessions/` on the target node for a list of installed desktop environments.
  - c. Click **Advanced settings**.
  - d. On the **General** tab, in the **Run command using** list, select `su`.
3. On the **Session** tab:
  - a. Under **General**, in the **Node targeting** list, choose a target node with the chosen desktop environment installed.
  - b. Under **Session management**, in the **Last window closed** list, select **Terminate session**.
4. On the **Protocol** tab:
  - a. Select **MIT-SHM**.
  - b. Under **GLX**, select **Render on Node** to enable it.
  - c. Under **Render on Node**, leave **Hardware acceleration** unselected (disabled).
5. On the **Window mode** tab, select **Single**.

## Editing a profile

This section describes how to edit an existing profile.


You can edit a profile at any time. Any active sessions that were launched using the profile are not affected by changes made to the profile after they were launched. When you edit a profile, you cannot change settings that are locked in the template that the profile is based on.

Users can edit user profiles only. Administrators can modify group profiles and templates. However, if you have the necessary permissions, in addition to editing existing user profiles, you can:

1. Create a copy of a group profile and edit the copy. See [Creating a new profile by copying an existing profile](#).

2. Customize a group profile: Change the settings in the profile as desired and save the changes for your personal use. See [Customizing a group profile](#).

### To edit a profile:

1. In the **Profiles** pane, identify the profile you want to edit.
2. Click the **Edit** button . The icon is located on the profile thumbnail image in **Icons** view, or in the **Actions** column in **List** view.

If you do not have the **View details of group profiles** permission, this icon is unavailable for group profiles.

The profiles dialog box opens in Basic mode.


3. To select a different template for the profile, click **Select template**. See [Selecting a different template for a profile](#) for more information.
4. Change the basic and/or advanced settings for the profile, as needed.
  - In Basic mode, click each tab at the top of the dialog box to display its settings. Make the desired changes for each tab. See [Modifying profiles in Basic mode](#) for more information.
  - To switch to Advanced mode, click **Advanced mode**. Click each tab in the left navigation pane to display its settings. Make the desired changes for each tab. See [Customizing profiles in Advanced mode](#) for more information.
5. When you are finished modifying the profile settings, click **Save**. You can now use the profile to launch a session.

After editing a profile, you can use the icons on the top-right corner of the dialog box to launch a session using that profile, or to manage the profile. See [Launching and managing profiles from the profile controls](#) for more information about these icons.



## Customizing a group profile

Customizing a group profile is almost the same as editing a profile. The difference is that any changes you make affect only your usage of the group profile. The original group profile remains unchanged. When you launch a session using the customized profile, it will use the customized settings that you entered. If another user uses the group profile to start a session, it will use the settings stored in the original profile and ignore your customized settings.

Any user with the proper permission can customize a group profile. Different users may customize the same group profile in different ways, so that the same profile may launch sessions differently for each person who uses it.

You can customize a group profile only if an administrator has given you permission to do so. If you do not have the necessary permissions, the **Edit** icon  does not appear for the profile.

### To customize a group profile

1. In the **Profiles** pane, identify the group profile that you want to customize.
2. Click the **Edit** icon . The icon is located on the profile thumbnail image in **Icons** view, or in the **Actions** column in **List** view.  
The profiles dialog box opens in Basic mode.  
If you want to undo any customizations that you have previously saved for this profile, click the **Reset to default** icon .
3. To select a different application template for the profile, click **Select template**. For more information, see [Selecting a different template for a profile](#).
4. Change the basic and/or advanced settings for the profile, as needed.
  - In Basic mode, click each tab at the top of the dialog box to display its settings. Make the desired changes for each tab. For details, see [Modifying profiles in Basic mode](#).
  - To switch to Advanced mode, click **Advanced mode**. Click each tab in the left pane to display its settings. Make the desired changes for each tab. For details, see [Customizing profiles in Advanced mode](#).
5. When you are finished modifying the profile settings, click **Save**. This saves your changes to your customized copy of the profile. The actual group profile is not changed. You can now use the profile to launch a session.

To return to the Dashboard without saving your changes, close the dialog box.

## Exporting a profile

This section describes how to export a profile and its associated template in XML format.

Exporting a profile allows you to share it with another user or provide information to Rocket Software Technical Support. An exported profile can only be imported to the same Rocket Software Server, because it requires the same underlying template.


You can only export one profile at a time.

## To export a profile

1. On the Dashboard **Profiles** pane, locate the profile you want to export.
2. Click the **Edit** icon. The icon is located on the profile thumbnail image in **Icons** view or in the **Actions** column in **List** view.

This icon is unavailable for all group profiles unless you have the **View details of group profiles** permission.

The profiles dialog box opens in Basic mode.


3. Click the **Export**  icon at the top-right corner of the dialog box.
4. When prompted, save this profile as XML file.


## Using the profile toolbar in Exceed TurboX Dashboard

This section describes the action icons included on the toolbar when editing a profile. Some of these icons are also available when creating a new profile, as indicated.

### Launch

Launch a session using this profile. For more information, see [Launching and Accessing Sessions](#).

**Reset to default**  Remove any saved group profile customizations. Appears only if you have previously saved customizations for this group profile. For more information, see [Customizing a group profile](#).

**Edit**  Edit this profile. Appears only if you have permission to change the profile.

If you edit a group profile, you are changing the settings only for yourself, not for other members of the group. This is called *customizing* the profile.

### Copy

Create a copy of the profile. For more information, see [Creating a new profile by copying an existing profile](#).

### Shortcut

Create a shortcut that launches a session using the selected profile (Windows only).


For more information, see [Working with shortcuts](#).

**Export**  Export the profile and its associated template in XML format. This icon is available on the toolbar when editing or creating a profile.

For more information, see [Exporting a profile](#).

#### Delete

Delete the profile.

**Help**  Open the Exceed TurboX Help. This icon is available on the toolbar when editing or creating a profile.

## Creating and managing profiles and templates

This section describes how to create, edit, delete, import/export, distribute, and manage profiles and templates in Exceed TurboX Server Manager. Templates can be created or deleted in Exceed TurboX Server Manager by administrators only.

### Viewing profile and template information

On the Server Manager **Users and Profiles** page, the **Profiles and Templates** pane by default displays the following information about profiles and templates available on your Exceed TurboX site:

#### Created on

The date and time when the profile was created.

#### Folder

The folder name in which the profile is stored.

#### Name

The name of the profile or template.

#### Type

The type of item, which can be one of the following:

- **Group profile:** A profile that has been distributed to a user group by an administrator. The name of the group to which the profile was distributed is displayed in the **Access** column.
- **User profile:** This can be one of the following types of user profiles:
  - A profile that was created by an individual user in Exceed TurboX Dashboard. The name of the user who created the profile is displayed in the **Access** column.
  - An administrator-defined profile that has been distributed to an individual user, but not to any groups. The name of the user to which the profile was distributed is displayed in the **Access** column.
  - An administrator-defined profile that has not yet been distributed to any users or groups. The name of the administrator who created the profile is displayed in the **Access** column.
- **Template:** A profile template that was created by an administrator.

**Access**

The name of the user or group that has access to the profile or template.

**Startup mode**

The startup mode defined in the profile or template: Custom startup, Published Application, Windows Application, Windows Desktop - Direct, Windows Desktop - RDP, XDMCP Broadcast, XDMCP Query.

**Window mode**

The window mode defined in the profile or template: Single or Multiple.

**Screen size**

If Single Window is set as the default window mode, the window size value that is defined in the profile or template.

**Runtime version**

The Exceed TurboX runtime version to be used when the profile launches a remote session.

**Actions**

The actions you can perform on this profile or template. To view the available actions, position the pointer in the column.

The following additional information is displayed when you select the **Show** option in the **Change view for Profiles and Templates** dialog box. See [Showing and hiding columns in Exceed TurboX Dashboard grids](#) for information.

**Profile/Template ID**

The identifier of the profile or template.

**Node targeting**

The targeted node or node group.

**Linked template ID**

The identified of the linked template to a profile.


**Linked template name**

The name of the linked template to a profile.

The following action icons are available at the top right corner of the **Profiles and Templates** pane:

**Export profiles and templates list**  Save a copy of the current view of the pane.

**Import profile / template**  Import a profile or template.

**New profile / template**  Create a new profile or template.

**Refresh view of profiles / templates**  Click this button to update the contents of the pane.

**Search for profiles / templates** 

Perform a search to locate one or more specific entries.

**Change view** 

Customize which columns appear, and the order in which the columns appear. See [Showing and hiding columns in Exceed TurboX Dashboard grids](#) for more information.

**Maximize view** 

Click this button to see an expanded view of the pane.

**Using Action icons to manage profiles and templates**


This section describes the action icons you can use to manage profiles and templates. You can view, edit, copy, import/export, distribute, or delete profiles and templates. To do so, use the following icons in the **Actions** column for the profile or template:

**Properties** 


Opens the profile details dialog box, where you can view and edit the profile or template parameters. See [Customizing profiles in Advanced mode](#) and *Viewing linked profiles* in the *Server Manager Administration Guide* for more information.


**Copy** 

Creates a copy of the profile or template. You can use this to create a new profile or template based on an existing one.

**Distribute**  Distributes a profile to specific users or user groups.

**Publish**  Publishes a template to all users.

**Export**  Exports the profile or template.

**Delete**  Deletes the profile or template. You can delete a template only if it is not associated with a profile that is in use.

**Creating and editing profiles and templates**

This section describes how to create new profiles and templates, and edit existing profiles or templates.

**To create a profile or template**

1. In the **Profiles and Templates** pane, click the **New profile/template** button  in the top-right corner of the pane.

The **Select template** dialog box opens.

2. In the left pane, select the name of the template you want to base the new profile or template on.

3. Click **Create template** or **Create profile**.

4. In the text box at the top of the new template/profile properties dialog box, type a name for the new profile or template and press **Enter**.
5. Select **Show REST API tooltips** to display tooltips when hovering over each profile option.
6. Configure the profile or template, as needed. Click each tab in the left pane to display different groups of settings. See [Customizing profiles in Advanced mode](#) for more information.


If you are creating a template, you can lock some of its options. To do so, click the lock icon beside an option or option group. This will ensure that they are set as read-only and cannot be modified by users.

Locking a property in a template forces any linked profile(s) to use this value. It also prevents the value from being changed inside any profiles that are linked to this template.

7. When you are finished, click **Save**.

If you have the appropriate permissions, you can now distribute the profile or template to Exceed TurboX users and user groups.

### To edit a profile or template

1. In the **Profiles and Templates** pane, move the pointer to the **Actions** column for the template or profile you want to edit.
2. Click the **Properties** button .
3. Make the required and permissible changes in relevant categories, and click **Save**. See [Customizing profiles in Advanced mode](#) for information about each tab and field.


Some options in default templates are locked and cannot be modified.

### Exporting and importing a profile or template


This section describes how to export and import a profile and its associated template in XML format. Exporting a profile allows you to import the profile into another Exceed TurboX instance or to provide the information to Rocket Software Technical Support.

You can export or import only one profile or template at a time.

### To export a profile or template

1. In the **Profiles and Templates** pane, move the pointer to the **Actions** column for the template or profile to export.
2. Click the **Export**  icon.
3. When prompted, confirm whether you want to open or save this template or profile.

## To import a profile or template

1. In the **Profiles and Templates** pane, click the **Import**  icon in the top-right corner.
2. When prompted, choose the XML file to import, then click **Open** to import the file into Exceed TurboX.

An error message is displayed if you try to import an export file created from an unsupported Exceed TurboX version.

3. Click **Close**.

The XML file is uploaded to Exceed TurboX and the new profile or template appears in the **Profiles and Templates** pane. The access rights to the XML file are assigned to you, as the person who imported the file.

You can now distribute the profile or template to Exceed TurboX users.

## Distributing profiles to users or user groups

This section describes how to distribute profiles to users or user groups.

Exceed TurboX administrators can create profiles and make them available (distribute them) to specific users or user groups in Exceed TurboX Dashboard. Distributed profiles are visible only to the users or user groups to which they have been distributed.


New installations of Exceed TurboX contain Group Profiles, which are distributed to all users. You may delete these profiles or distribute them to different user groups.

If you plan to distribute a profile to an Exceed TurboX user group, you must first create the user group in Exceed TurboX Server Manager.

For more information about creating, naming, and deleting users and user groups, see *Managing users* and *Managing user groups* in the *Server Manager Administration Guide*.

The **All Users** group is a special group that includes all Exceed TurboX users. Profiles distributed to the **All Users** group are available to all Exceed TurboX users, including user accounts created after the profile is distributed.

## To distribute a profile

1. In the **Profiles and Templates** pane, position the pointer in the **Actions** column of the profile you want to distribute.
2. Click the **Distribute** button .

The **Distributing profile** dialog box opens.

3. To search for a user or user group:

Select one of the following options below the **Candidates** box to define the scope of your search:


- **All:** Include users who have set up their Exceed TurboX user settings and, if applicable, groups defined on an LDAP or OTDS server. This option is selected by default.
- **Users:** Include only users who have set up their Exceed TurboX user settings.
- **User Groups:** Include only user groups.

In the **Candidates** box, type the full or partial name of the user or user group you want to locate.

Click the **Search** button  beside the **Candidates** box.

The search results are displayed in the left pane.

You can sort the results according to the **Username/Group** or **Full name** column.

To clear the search results from the pane and perform another search, click the **Clear** button  beside the **Candidates** box.

4. In the left pane, select the names of the users or groups to distribute the profile to. You can select multiple entries by left-clicking them.

5. Click the **Add user to group** button .

6. To delete the original profile after it has been distributed, clear the **Keep original profile** check box.

If this option is enabled, a copy of the profile that does not preserve custom user settings is created.

If this option is not enabled, and if **Customize group profiles** is selected in the user permissions, custom user settings will be preserved. See *Configuring user permissions* in the *Server Manager Administration Guide* for more information.

7. To reuse the original profile template, select the **Re-use existing template** check box.

A single instance of a template is created when a profile is imported from an older version of Exceed TurboX. This template is re-used when profiles based on this template are distributed. If the **Re-use existing template** check box is selected when a profile is distributed, and before the template is cloned, the system will compare the profile's template against all existing templates (in order) until a matching template is found. All settings, including the template name, must be identical for it to be considered a match. If a match is found, the profile will reference the existing template. If no match is found, or if the matching template is a private template, a new template will be created and the new profile will reference the new template.

8. Click **OK**.

If a profile has been distributed to a group of users, it is listed as a **Group Profile** in the **Profiles and Templates** pane. For more information, see *Viewing profile and template information* in the *Server Manager Administration Guide*.

## Publishing templates to all users

This section describes how to publish templates to all users.

Administrators can create templates and make them visible and available to all users of Exceed TurboX Dashboard.

### To publish a template

1. In the **Profiles and Templates** pane, position the pointer in the **Actions** column of the template to publish.

2. Click the **Publish**  icon.

The **Publishing a template** dialog box opens.

3. To confirm publishing the template to **All users**, click **Yes**.

## Copying or deleting a profile or template

This section describes copying or deleting a profile or template. You can create a copy of a profile or template if, for example, you want to use it as the basis to create another. You can also delete profiles or templates.

To delete a template, you must first ensure that it is not linked with a profile that is currently in use. A template cannot be deleted if it is linked with a profile. If a template is linked, you can use the message feature to ask users to delete any profile that links to the template you want to delete. They can create a copy of the profile first. But the copy will still be linked to the template, right?

### To copy a profile or template

1. In the **Profiles and Templates** pane, position the pointer in the **Actions** column of the profile or template to copy.

2. Click the **Copy**  icon.

When you copy a profile, the **Copy a profile** dialog box opens.

When you copy a template, the **Duplicating a template** > dialog box opens.


3. In the dialog box, type a unique name for the new profile or template.

4. Click **Save**.

A new entry appears in the **Profiles and Templates** > pane.

You can now configure the parameters and/or permissions of the profile or template you duplicated. For more information, see [Customizing profiles in Advanced mode](#).


## To delete a profile or template

1. In the **Profiles and Templates** pane, position the pointer in the **Actions** column of the profile or template entry to delete.
2. Click the **Delete**  icon.
3. When prompted, click **Yes** to confirm that you want to delete this template or profile. A template may not be deleted if it is linked to an existing profile.

## Viewing linked profiles

This section describes how to view the list of profiles linked to a template.

### To view the list of linked profiles:

1. In the **Profiles and Templates** pane, position the pointer in the **Actions** column of the template you want to view.
2. Click the **Properties**  icon.
3. In the template dialog box, click the **Linked profiles** tab.

The following information is displayed on the **Linked profiles** page:

#### Name

The name of the linked profile.

#### Type

The item's type, either **Group profile** or **User profile**:

A **Group profile** has been distributed to a user group by an administrator. The name of the group to which the profile was distributed is displayed in the **Access** column.

A **User profile** is one of the following types:

- A profile that was created by a user in Exceed TurboX Dashboard. The name of the user who created the profile is displayed in the **Access** column.
- An administrator-defined profile that has been distributed to an individual user, but not to any groups. The name of the user to which the profile was distributed is displayed in the **Access** column.
- An administrator-defined profile that has not yet been distributed to any users or groups. The name of the administrator who created the profile is displayed in the **Access** column.


#### Access


The name of the user or group who has access to the profile or template.


4. To update the contents of the pane, click the **Refresh**  button in the top-right corner of the pane.

## Using the profile toolbar in Exceed TurboX Server Manager

This section describes the action icons included on the toolbar when editing a profile or template in Exceed TurboX Server Manager.

**Open as user**  Allows an administrator to view and edit customized group profiles on behalf of the user who customized it. Administrators cannot create customizations; they can only edit or delete existing customizations. Clicking the icon opens up a **Open as user** dialog box where the administrator can select a user from the list of users with customized group profiles. Selecting a user displays the profile as the user would see it with the **Viewing as** `username` text. The default value is **All users (Profile defaults)**.

**Copy**  Create a copy of the profile.

**Export**  Export the profile and its associated template in XML format.

**Delete**  Delete the profile.

**Help** 

Access the Exceed TurboX Help. This icon is also available when creating a profile.

## Modifying profiles in Basic mode

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### Modifying profiles in Basic mode

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This section describes the profile settings available in Basic mode and how to modify an existing profile. The available settings are the same whether you are editing a user profile or customizing a group profile for your own use.

After editing the profile in Basic mode, you can continue editing the profile in Advanced mode, if necessary. For more information, see [Customizing profiles in Advanced mode](#).

## Selecting a different template for a profile

This section describes how to import the settings from a different profile template than the one currently selected in a profile.

Administrators can provide multiple profile templates to meet the requirements of different users. When you are creating a new profile or editing an existing one, you can change the template selected for it.

Changing the template overwrites any profile settings you may have modified. You cannot retrieve the edited profile settings after you change the template. If a profile has been edited, consider creating a copy before you proceed.

See [Action icons for active sessions](#).

### To select a different template for a profile:

1. In the **Profiles** pane, identify the profile you want to modify.
2. Click the **Edit** icon. The icon is located on the profile thumbnail image in **Icons** view or in the **Actions** column in **List** view.

The profile settings dialog box opens.

3. Click **Select template**.

The **Select template for the profile** dialog box opens, displaying a list of available templates.

Templates	Details
Default Custom Startup	Template: Default Custom Startup
Default Published Application	Startup mode: Custom startup
Default Windows Application	Host: Not applicable
Default Windows Desktop - Direct	Window mode: Not applicable
Default Windows Desktop - RDP	Window size: Not applicable
Default XDMCP Broadcast	Resizing policy: Dynamic
	Keyboard: Auto-select
	Monitors: All
	When idle: Keep session running
	Runtime version: Default

Load template

scalefit="1"/>

4. Select a template from the **Templates** list.

The settings of the selected template are displayed in the **Details** table.

5. Click **Load template**.

The **Select template for the profile** dialog box closes.

6. In the profile settings dialog box, click **Save**.

If the template being loaded is a 100% match for the existing template and has the same name, then the template is not loaded and the existing template is used instead.

## Configuring Startup settings in Basic mode

This section describes the settings available on the Profile dialog box > **Startup** tab in Basic mode.

On the **Startup** tab, select the startup mode for the profile, and set values for that mode. The available modes are:

### Published application

Runs an application that has been shared with you by an Exceed TurboX administrator.

In Basic mode, you must configure the following settings for this startup mode: **Application** and **Host**. Select the appropriate option from each drop-down list.

For a Windows published application, you can also choose to make the connection using direct mode instead of RDP. To do so, select **Run application in direct mode**.

See [Configuring Published application startup mode](#) for more information about configuring this startup mode.

### XDMCP Query

Launches a session in XDMCP Query mode.

The **Host** field may be set to the address of a specific XDMCP server to connect to. If **Host** is empty and the **Host** prompt is enabled, the user will be asked to type the hostname when the session is launched. Selecting **Run on node** disables the **Host** field and launches the XDMCP session on the Exceed TurboX session node, as opposed to starting a remote session from the session node to a different XDMCP host.

See [Configuring XDMCP Query startup mode](#) for more information about configuring this startup mode.

### XDMCP Broadcast

Launches a session in XDMCP Broadcast mode.

In Basic mode, no additional configuration is required for this startup mode. If XDMCP broadcasting is enabled on your hosts, this startup mode lists all XDMCP hosts on the network.

See [Configuring XDMCP Broadcast startup mode](#) for more information about configuring this startup mode.

### Windows desktop - RDP

Launches a remote Windows desktop session.

You can set the **Host** field to the address of a specific RDP server to connect to. If **Host** is empty and the **Host** prompt is enabled, the user will be asked to type the hostname when the session is launched. Selecting **Run on node** disables the **Host** field and launches the RDP session on the Exceed TurboX session node, as opposed to starting the RDP session from the session node to a different RDP host.

See [Configuring the Windows Desktop - RDP startup mode](#) for more information about configuring this startup mode.

### Windows desktop - Direct

Launches a remote Windows desktop session, using a proprietary protocol developed by Rocket Software.

In Basic mode, you must select a Windows connection node from the **Node** list, or keep the default of **Any node**. This starts a remote Windows desktop session on the Windows connection node.

See [Configuring the Windows Desktop - Direct startup mode](#) for more information about configuring this startup mode.

### Windows application

Runs Windows applications in Direct mode.

You must specify the path to the executable and the command parameters.

See [Configuring Windows application startup mode](#) for more information about configuring this startup mode.

### Custom startup

Launches a session and executes any Xstarts (applications or commands) that you define. This mode can launch either X Window or Windows applications or commands.

Unlike XDMCP modes, the **Custom startup** mode does not connect you to an application host by default. Without additional configurations, **Custom startup** mode only starts the proxy on the Connection Node. To start applications on remote application hosts, you can either add one or more Xstarts to automatically run applications, or you can launch without defining any Xstarts, connecting instead to the host using remote communication protocols, such as Secure Shell, and run commands manually.

See [Configuring Custom startup mode](#) for more information about configuring this startup mode.

For information about the action icons available on the profile toolbar, see [Using the profile toolbar in Exceed TurboX Dashboard](#).

## Configuring Display settings in Basic mode

### Configuring Display settings in Basic mode

This section describes the settings available on the **Display** tab when you configure profiles in Basic mode.

In Basic mode, the **Display** tab lets you configure window and monitor settings. Exceed TurboX offers two ways to view and work with an application: Single window mode (which offers the Full Screen viewing option) and Multiple window mode. For more information about these modes, see [Selecting the window mode for working with applications \(Basic mode\)](#).

New Profile
✕

Startup Display Other Summary

**Window mode**

Multiple window mode

Window manager Native

Use monitor(s) All

Single window mode

Root window size

Fit window to screen  
 Full screen  
 Pre-defined 1024x768  
 Custom    Width 1024    Height 768

Show full screen toolbar

Use monitor(s) Only primary

Resizing policy Dynamic

Select template
Advanced mode
Save

## Notes

- If you share a session that is configured to use Multiple window mode, the session switches to Single window mode for the duration of the share.  
For more information, see [Sharing sessions](#).
- A shared session cannot use Dynamic resizing. If a session using Dynamic resizing is shared, it switches to Fixed resizing. Once the sharing is stopped, the session reverts to Dynamic resizing.
- On a supported Microsoft Windows platform, you can set additional viewing options from within your running session.

See [Setting the display preferences for your workspace](#).

For information about the action icons available on the profile toolbar, see [Using the profile toolbar in Exceed TurboX Dashboard](#).

## Selecting the window mode for working with applications (Basic mode)

You can view and work with an application in the following window modes:

### Multiple window mode

Each application you start runs inside its own application window, as if the application was running natively on your machine. The menus and information provided by Exceed TurboX are available in the Client menu.

### Single window mode

Every application you start appears in a single root window on your desktop. The window serves as the primary work space where you start and display applications during a session. By default, Single window mode uses a single (primary) monitor and Fixed resizing.

A local or a remote X Window Manager controls all window functions. You can also specify the root window size. You may need to make it larger than your screen for certain applications to run. In this case, you can enable scroll bars to more easily view the entire window.

## Configuring Monitor settings for Multiple or Single window mode (Basic mode)

The **Use monitor(s)** settings apply to both Multiple and Single window modes.

If you have more than one monitor attached to your machine, you can use all monitors to display a session, or specify the monitors to use. In the **Display** tab, select the preferred option from the **Use monitor(s)** list:

**All**

Use all available monitors.

**Only primary**

Use only your primary monitor.

**All non-primary**

Use all non-primary monitors.

**Specified**

Specify which adjacent monitors to use. Type the monitor number in the field next to the **Use monitor(s)** list. Up to 32 adjacent monitors are supported.

To use multiple monitors, you must install multiple video cards or a video card that supports multiple monitors on your computer.

To find out your monitor properties, refer to the documentation provided by the manufacturer of the platform you are using. For example, on some versions of Windows, you can right-click your Windows desktop and select **Display settings**

**Configuring Multiple window mode (Basic mode)**

The following settings are available in **Multiple window mode** (Basic mode):

**Window manager**

A window manager is a special application you can use to move, size, and arrange application windows. Window managers also frequently provide menus with commands you can use to start other applications. These menu commands are preconfigured with the command lines required to start their respective X applications. You can run one window manager at a time in your Exceed TurboX session.

You can start a window manager the same way you start any application. If you use XDMCP, you can specify a window manager in the XDM session file on the host. You can also start a window manager from any command prompt on your host.

The following are typical window manager startup commands:

- DEC (UNIX): `[path/]dxwmAMPERSAND`
- Motif (UNIX):- `[path/]mwmAMPERSAND`
- OpenLook: `[path/]olwmAMPERSAND`
- AIX: `[path/]aixwmAMPERSAND`
- DEC (VMS): `spawn/nowait run sys$system:decw$winmgr`
- Motif (VMS): `spawn/nowait run sys$system:decw$mwm`

- KDE (Linux): `[path/]startkdeAMPERSAND`
- Gnome (Linux): `[path/]gnome-sessionAMPERSAND`
- CDE: `[path/]dtwmAMPERSAND`

#### Note

You must specify the display specification so the window manager knows which X display server to use. GNOME/KDE starts the default window manager, if one is not specified. The settings for the window manager are configurable within `GNOME`.

The following options are available for selection:

Option	Description
Native	<p>Uses the window manager on the operating system where Exceed TurboX Client is running. You can reduce network traffic by using the native window manager.</p> <p><b>Note:</b> Do not select the Native option if you are using desktop environments, such as the Common Desktop Environment (CDE), from UNIX hosts. These environments do not support the native window manager.</p>
X	Uses any local or remote X window manager. You must start the window manager. It does not start by default.

#### Use monitor(s)

For information, see [Configuring Monitor settings for Multiple or Single window mode \(Basic mode\)](#).

## Configuring Single window mode (Basic mode)

#### Settings Available in Basic and Advanced Single Window Mode

The following settings are available in **Single window mode** (Basic mode):

##### Root window size:

The width and height of the root window.

#### Note

You can modify this option in the **Quick Settings** for an active session.

Select one of the following sizing methods:

#### Fit window to screen

Calculate the root window size based on the selected monitor(s). The root window area is the combination of the working areas of the selected monitors, excluding the window taskbars.

When using **Fit window to screen** with Windows Desktop - Direct console mode, if the remote display driver does not support the specified resolution, the window is resized down to the next largest supported resolution.

#### Full screen

Select this option to enable the window to occupy the primary monitor fully, including the Windows taskbar. You can add monitors or use all monitors. Full screen mode can occupy more than one monitor, but the default is to occupy the primary monitor only. The root window size adjusts to the primary monitor's resolution.

You can set Full screen mode on monitors that use different resolutions (different sizes). In this case, Exceed TurboX uses the largest rectangle found on any of the selected monitors. If the largest rectangle spans two or more monitors, that rectangle is used in its entirety. To achieve optimum results with multiple monitor configuration, set all monitors to the same resolution. For example, if one monitor is set to 1920 x 1080 pixels, all other monitors should be configured the same way.

In Windows Desktop - Direct mode, with **Use console on Windows Server** enabled, using **Full screen** may show black around the edges if the remote display does not support the resolution on the client-side monitor.

If the **Auto-hide** option in the **Scrolling** area is enabled (Advanced mode), the Exceed TurboX menu bar is displayed in its default position, or the last used position, for a moment before it auto-hides.

#### Pre-defined

Use a pre-defined root window size. Choose a resolution from the available options.

#### Note

When using **Pre-defined** with Windows Desktop - Direct console mode, if the remote display driver does not support the specified resolution, the window is resized down to the next largest supported resolution.

#### Custom

Use a custom root window size. Enter the **Width** and **Height** in pixels. The maximum size is 8192 x 8192. A width or height of zero makes the root window size equal to the size of your screen.

If you have two monitors next to one another, each with a resolution of 1280 x 1024 pixels for a combined resolution of 2560 x 1024, setting the width to 2560 and the height to 1024 sets the root window to display across both monitors as if they were one.

#### Resizing policy

The resizing policy for the root window and its contents.

#### **Note**

You can modify this option in the **Quick Settings** for an active session.

The following policies are available:

#### **Fixed**

A user (or the system) defines the size of the root window. Once a session has started, the root window size will not change. If you click the **Maximize** button in the bar, the main window is restored to its original position and size. The number and size of all monitors is also fixed. Scroll bars appear when the root window size is larger than session window size.

This is the default resizing policy for Single window mode.

#### **Note**

If **Fixed** resizing is selected, you can change the root window size of an active session in **Quick settings**. Full screen viewing is available when the root window size matches the size of the monitor where the session is running.

#### **Dynamic**

Allows you to resize the Exceed TurboX root window dynamically. The application (such as the KDE environment) will reflect this and fit in the new window. For example, you may switch from Single to Multiple monitor mode, or vice-versa. The applications will renegotiate the new root window size and be redrawn appropriately based on the new information. They will not be distorted, as may occur in **Scaled** mode.

The minimum size of the window is 800x600. You cannot resize the window to be smaller. When the window is maximized, the window and root window will cover the work area.

#### **Notes:**

A shared session may not use Dynamic resizing. If a session using Dynamic resizing is shared, it switches to Fixed resizing. Once the sharing is stopped, the session reverts to Dynamic resizing.

Windows Desktop - RDP and Windows Desktop - Direct profiles do not support Dynamic resizing . This option is visible in the interface, but is unavailable in the quick settings. You can change the resizing policy to either **Scaled** or **Fixed** in the quick settings for an active session. Once the session is terminated, the profile setting reverts to Dynamic resizing.

### Scaled

When the window is resized, the size of the root window does not change, but the contents of the session scale up or down accordingly. For example, if multiple sessions are running, the user may view them as thumbnails. Scaling does not affect the behavior of UNIX applications, because the root window size remains the same.

#### Note

For Linux clients, Scaled resizing requires that the host Xserver supports Composite extension version 1.4 and up and RENDER extension. Scaled resizing is not supported on RedHat 5.10 or 6.0-6.3.

## Configuring Other settings in Basic mode

This section describes the settings available on the **Other** tab when you configure a profile in Basic mode.

## New Profile

✕

Startup
Display
Other
Summary

---

### Input

Primary keyboard file

Auto-select

Alternate keyboard file

us.kbf

Simulate AltGr with Right Alt key

---

### Session

User closes session

Prompt

Last window closed

Terminate session

Local system logout

Suspend session

User is idle

Keep session running

After  minute(s)

---

### General

Runtime version

Default (12.5.1.8350)

Client type

User preference

Allow administrators to view session snapshot

Select template

Advanced mode

Save

This tab allows you to configure keyboard input, session management, snapshot privacy, and runtime version. The following settings are available:

## Input settings

### Primary keyboard file

Select **Auto-select** to let Exceed TurboX attempt to detect the type of keyboard used on the client machine and select the corresponding Keyboard Definition File if it exists on the server. Alternatively, select a keyboard definition file from the drop-down list.

You can modify this option in the **Quick Settings** for an active session.

See [Applying quick settings to active sessions](#) for more information.

See the *Dashboard and Client User Guide* for more information.

### Alternate keyboard file

This setting allows you to switch easily between active keyboards inside a remote session. To make a different keyboard language available, select the language from the drop-down list. Use the **Input Switch to Alternate Keyboard** command (in the Windows Client menu) to change languages.

For more information, see [Using the Exceed TurboX Client menu](#).

### Simulate AltGr with Right Alt key

Select this option to let Exceed TurboX emulate the behavior of the AltGR key. This is useful when using European keyboards.

## Session settings

User closes session

Select an option to control what happens when the session owner closes the session:

- **Prompt:** Exceed TurboX prompts the session owner on whether to suspend or terminate the session. The session owner can add a description before suspending/terminating the session. The confirmation dialog box displays the number of participants in the session, if applicable. If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues to run in collaborative sharing mode for those participants. If suspended session sharing is not enabled, suspending the session ends the session for all participants. Suspended sessions appear as **Suspended** on the session owner's Exceed TurboX Dashboard. Terminating the session ends the session for all participants. For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).
- **Suspend:** Exceed TurboX suspends the session without displaying a message. If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues to run in collaborative sharing mode for those participants. If suspended session sharing is not enabled, suspending the session ends the session for all participants. For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).
- **Suspend with confirmation:** Exceed TurboX displays a confirmation dialog box before suspending the session. The session owner can add a description before suspending the session. The dialog box displays the number of participants in the session, if applicable. If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues to run in

collaborative sharing mode for those participants. If suspended session sharing is not enabled, suspending the session ends the session for all participants.

For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).

- **Terminate:** Exceed TurboX terminates the session without displaying a warning message.
- **Terminate with confirmation:** Exceed TurboX displays a confirmation dialog box before terminating the session.

The dialog box displays the number of participants in the session, if applicable. Terminating the session ends the session for all participants.

### Last window closed

Select an option to control what happens to the session when the last (or only) remote session window is closed:

**Keep session running:** The session continues to run, waiting to accept new X client connections.

- **Terminate session:** The session terminates without a warning message.
- **Terminate with confirmation:** Exceed TurboX displays a confirmation prompt before terminating the session.
- The **Terminate with confirmation** setting applies to Custom, Published application, Windows application, XDMCP Broadcast, and XDMCP Query startup modes only.
- Signing out, disconnecting, or shutting down a remote Windows desktop from the Windows Start menu (Windows Desktop - RDP or Windows Desktop - Direct sessions) will terminate the session without prompts, regardless of profile settings.
- Logging out or shutting down a remote Linux desktop (XDMCP Broadcast and XDMCP Query sessions) terminates the session without prompts for both **Terminate session** and **Terminate with confirmation** options, and keeps the session running when **Keep session running** option is selected.

### Local system logout

Select an option to control what happens on the user's local system when the session closes in response to a system shutdown or restart or on a client sign-out:

- **Suspend session:** The session is suspended without a warning message.
- **Terminate session:** The session is terminated without a warning message.

### User is idle

Select an option to control what happens with the session when the user is idle:

- **Keep session running:** The session continues to run.
- **Suspend session:** The session is suspended without a warning message.
- **Terminate session:** The session is terminated without a warning message.

#### After [n] minute(s)

This option is available only when **User is idle** is set to **Suspend session** or **Terminate session**. Default value is 30 minutes.

- When **User is idle** is set to **Suspend session**: How long Exceed TurboX should wait in the absence of user input (mouse or keyboard) before it suspends the session. For example, during processes such as data compiling or video file playback, there is no user input, which could trigger a suspension.
- When **User is idle** is set to **Terminate session**: How long Exceed TurboX waits before terminating Exceed TurboX sessions if there is no activity between the proxy and Exceed TurboX Client.

## General settings

### Runtime version

If multiple versions of Exceed TurboX runtime are available, they are listed in this drop-down list. Select the one that you want this profile to use when it is launched. If you select **Default**, the runtime version designated by the administrator as the default will be used for your session.

### Client type

Select the client to use when opening a session with this profile:

- **User preference:** Use the preference in the user's Client settings to select the client. See [Configuring your user settings](#) for more information.
- **Native client:** Use the Exceed TurboX Native Client.
- **Web client:** Use the Exceed TurboX Web Client.

### Allow administrators to view session snapshot

Select this option to allow administrators to view snapshots of your session.

For information about the action icons available on the profile toolbar, see [Using the profile toolbar in Exceed TurboX Dashboard](#).

## Using the Summary tab in Basic mode

This section describes the tasks you can perform on the **Summary** tab when you configure profiles in Basic mode.

The **Summary** tab provides an overview of key settings in the profile and lets you assign a thumbnail image to help identify the profile.

Xterm - Copy (4)
✕

ID: 1ee42b7c-0243-639e-b06b-bb0633d8cc84


Startup
Display
Other
Summary

▶
📄
↶
🗑️
?

### Details

Created on	2023-08-25 01:22:26
Template	Default Custom Startup
Startup mode	Custom startup
Host	Not applicable
Window mode	Single
Window size	Current window size
Resizing policy	Dynamic
Keyboard	Auto-select
Monitors	Primary
When idle	Keep session running
Runtime version	Default (12.5.2.8747)

### Profile icon



Profile folder

Select template

Advanced mode

Save

You can use the **Summary** tab to perform the following tasks:

- Review the current configurations for the selected profile.

The **Details** table displays the name of the profile template used to create the profile and a summary of the current configuration. Clicking a row displays the page where the setting is located, if the setting is available in Basic mode.

**Details**

Created on	2018-10-30 16:30
Template	Default Custom Startup
Startup mode	Custom startup
Host	Not applicable
Window mode	Not applicable
Window size	Not applicable
Resizing policy	Dynamic
Keyboard	Auto-select
Monitors	All
When idle	Keep session running
Runtime version	Default (12.0.1.5829)

- Select an image.

The **Profile** icon list lets you select an image to be used as the profile icon in Exceed TurboX Dashboard. You can also select an icon in Advanced mode, on the **General** page.

**Profile icon**

- Add profile to a folder

Enter a folder name to create a new folder or select a folder from the list of existing folders in which the profile is stored. By default, this option is blank.

You can also specify the folder for the profile on the **General** tab in Advanced mode. For more information, see [Configuring General settings in Advanced mode](#).

For information about the action icons available on the profile toolbar, see [Using the profile toolbar in Exceed TurboX Dashboard](#).

## Customizing profiles in Advanced mode

---

### Customizing profiles in Advanced mode

This section describes the profile settings for Advanced mode. Some settings are available in both Basic mode and Advanced mode. You can edit these common settings in either mode.

This section describes the profile settings.

Profile settings enable you to fine-tune Exceed TurboX performance and behavior to suit specific network, security, application, and application host operating system requirements.

To access these settings, edit or create a profile in Dashboard, and click **Advanced mode** in the profile dialog box.

To access these settings, edit or create a profile in the Server Manager **Profiles and Templates** pane.

Any updates made to the profile in the **Advanced mode** do not apply to active sessions.

## Configuring General settings in Advanced mode

---

### Configuring General settings in Advanced mode

This section describes the settings available on the **General** tab when you configure profiles in Advanced mode.

The profile **General** tab lets you set the runtime version, profile folder, icon, and privacy options for the profile.

Select **Show REST API tooltips** to enable tooltips when you hover over options displayed in this tab. REST API tooltips show the attribute name and a list of valid and current values for the option. For some fields, the tooltip also includes the attribute description. You can copy and paste the content of the tooltips.

The **Show REST API tooltips** option is available if your administrator enabled **Show REST API tooltips** in your user settings. For more information, see *Exceed TurboX Server Manager Administration Guide*.

The screenshot shows the configuration interface for a profile in Advanced mode. At the top, there is a header bar with a close button (X) and a pencil icon for editing. Below the header, the profile ID is displayed as `1ee429e5-7d52-6550-abbf-67c643afb85f`. A checkbox for "Show REST API tooltips" is present, along with icons for help, refresh, and delete.

The main content area is divided into a left sidebar and a main panel. The sidebar lists various configuration categories: General (selected), Input, Startup, Session, Security, Protocol, Window mode, Screen, Performance, Fonts, Troubleshooting, File and print, Devices, and Copy and paste.

The main panel is titled "General" and contains the following settings:

- Created on:** [Redacted]
- Template:** Default Windows Desktop - RDP
- Runtime version:** 12.5.1.8437 (dropdown menu)
- Client type:** User preference (dropdown menu)
- Profile folder:** [Empty text input field]

Below these settings is a "Profile icon" section with a horizontal scrollable list of icons representing different system components: a network/Wi-Fi icon, a server rack icon, a graph icon, a monitor icon, a globe icon, a CPU icon, and a neural network icon.

The "Privacy" section contains two checked checkboxes:

- Allow administrators to view session snapshot
- Allow administrators to reassign session to a different user

The "Optional settings" section is currently empty.

At the bottom of the interface, there are two buttons: "Select template" and "Save".

You can configure the following settings on the **General** tab:

#### Runtime version

If multiple versions of Exceed TurboX runtime are available, they are shown in this drop-down list. Select the one for sessions launched from this profile to use. Selecting **Default** uses the runtime version designated by the administrator as the default.

To designate the default runtime version, see "Managing runtimes" in the *Exceed TurboX Server Manager Help*.

#### Client type

Select one of the following options to determine which Exceed TurboX client sessions started with this profile will use:

- **User preference:** Use the client preference in the user's settings to select the client. See [Configuring your user settings](#) for more information.
- **Native client:** Use the Native Client.
- **Web client:** Use the Web Client.

The Native Client includes more features than the Web Client, and in many configurations also offers better performance. In most cases, we recommend you use the Native Client, if possible. However, it does require you to install the Client Launcher on your local system. If you do not want to install any software locally, for devices where the Native Client is not supported, or if for any other reason you do not want to use the Native Client, use the Web Client.

#### Profile folder

Enter a folder name to create a new folder or choose a folder from the list of existing folders in which a profile or template is stored. By default, this option is blank. Users with **ManageXappsFolder** permission can modify this setting.

If a template is stored in a folder, then all the profiles utilizing that template are also stored in the same folder. You can delete the folder name from the **Profile folder** list to remove the folder attribute from the profiles.

For more information about the user permissions, see "Role Permissions" in the *Exceed TurboX Server Manager Administration Help*.

You can also specify the folder for the profile on the **Summary** page in Basic mode.

#### Profile icon

The image you select will be used as the profile icon in the Dashboard. The icon helps users easily identify a profile.

You can also specify the icon for the profile on the **Summary** page in Basic mode.

#### Allow administrators to view session snapshot

Select this option to permit administrators to view snapshots of your session.

If desired, you can lock this feature in the profile template so that it cannot be modified by users.

Allow administrators to reassign session to a different user

Select this option to allow administrators to reassign a session started with this profile to another user while the session is active or suspended.

Optional settings

Enter string/value pairs for supported, but undocumented, flags. To specify multiple flags, enter them on separate lines.

You can enter up to 4000 KB of text. All of the flags you enter are listed in the proxy log if one is generated for troubleshooting purposes.

## Configuring Input settings in Advanced mode

This section describes the settings available on the **Input** tab when you configure profiles in Advanced mode.

The **Input** tab lets you configure keyboard input, mouse input, and touchscreen settings. You can specify keyboard mapping files and configure the behavior of modifier keyboard keys, such as Alt and Ctrl.

## New Profile

✕

Show REST API tooltips

- General
- Input
- Startup
- Session
- Security
- Protocol
- Window mode
- Screen
- Performance
- Fonts
- Troubleshooting
- File and print
- Devices
- Copy and paste

### Keyboard

Primary keyboard file Auto-select ▼

Synchronize with Windows IME

Alternate keyboard file us.kbf ▼

Allow X clients to modify keyboard mapping

#### Modifier keys

Alt key Right local, left remote ▼

Windows / Cmd key Right local, left remote ▼

Shift key Map both left and right ▼

Ctrl key Right local, left remote ▼

Send Windows keyboard shortcuts to remote host

Simulate AltGr with Right Alt key

Suppress NumLock when XKEYBOARD extension enabled

### Mouse and touch

Middle button emulation

Click interval 100 milliseconds

Wheel movement sends button 4/5 event

Send touch events to remote host

Select template

Save

### Note

Exceed TurboX provides a Keyboard Utility which allows administrators to modify keyboard files provided with the product. This utility is available in the *Utilities\Keyboards\Xkeys* folder on the installation DVD. For detailed information about editing a keyboard file (.kbf), see the *readme.txt* file included in the *Utilities\Keyboards* folder.

You can configure the following settings on the **Input** tab:

## Keyboard

### Primary keyboard file

Select **Auto-select** to let Exceed TurboX attempt to detect the type of keyboard used on the client machine and use the corresponding Keyboard Definition File, if it exists on the server. Alternatively, select a keyboard definition file.

You can modify this option in the **Quick Settings** for an active session.

See *Dashboard and Client User Guide* for more information.

### Synchronize with Windows IME

Synchronizes the primary Exceed TurboX keyboard with the selected Windows keyboard. This option also enables users to switch the keyboard input language through keyboard shortcuts, without accessing the Exceed TurboX Client menu.

If this option is enabled, when a session is started, resumed, or joined, Exceed TurboX automatically selects the active Windows keyboard. If Exceed TurboX does not have a keyboard that matches the new locale, the keyboard switch is ignored. If the session is started or resumed with an unknown keyboard, Exceed TurboX sets the English US keyboard by default.

This option is available if **Primary keyboard file** is set to **Auto-select**.

If **Synchronize keyboard with Windows IME** is enabled in the Client menu, the Exceed TurboX keyboard input is updated to match any changes to the Windows IME.

### Alternate keyboard file

Switches easily between active keyboards inside a remote session. To make a different keyboard language or layout available, select the language or layout. Use the **Input > Switch to Alternate Keyboard** command in the Windows Client menu to change languages.

### Allow X clients to modify keyboard mapping

Lets an X Window application modify the keyboard mapping.

### Modifier keys

#### **Alt Key, Windows/Cmd Key, Shift Key, Ctrl Key**

For keyboards that contain two of a specific modifier key (such as Alt, Ctrl, and Shift), you can use the options to map the keys on the left- and right-hand side of the keyboard separately. You can, for example, map one modifier key to be processed by your local Windows computer and the other modifier key to be processed by your session (remote).

For **Alt Key**, **Windows/Cmd Key**, and **Ctrl Key**, you can select from the following options:

- **Left local, right remote**—The left modifier key communicates with your local computer and the right modifier key communicates with your session.
- **Right local, left remote**—The right modifier key communicates with your local computer and the left modifier key communicates with your session.
- **Both local**—Both modifier keys communicate with your local computer.
- **Both remote**—Both modifier keys communicate with the session.

For **Shift Key**, you can select from the following options:

- **Map both left and right**—The left and right Shift keys are treated and interpreted separately.
- **Map left as right**—When you press either the left or right Shift key, it is treated as a right shift.
- **Map right as left**—When you press either the left or right Shift key, it is treated as a left shift.

Send Windows keyboard shortcuts to remote host

Enables Exceed TurboX to send key sequences such as Alt-Tab to the remote host.

Simulate AltGr with Right Alt key

Lets Exceed TurboX emulate the behavior of the AltGR key. This is useful when using European keyboards.

Suppress NumLock when XKEYBOARD extension enabled

Suppresses the NumLock state when the XKEYBOARD extension is enabled. This option is useful for some X applications that may not accept keyboard and mouse events carrying NumLock states correctly when NumLock is turned on.

## Mouse and touch

Middle button emulation

Lets a two-button mouse emulate a three-button mouse in an application window. When this option is enabled, simultaneously clicking the left and right mouse buttons emulates a middle button.

Click interval [n] milliseconds

The maximum amount of time (in milliseconds) allowed between the clicking of the left and right mouse buttons for the middle-button emulation to occur. If you do not click the two buttons within this time interval, the clicks are treated as two separate events.

Wheel movement sends button 4/5 event

Sends `ButtonPress` and `ButtonRelease` events to applications when the mouse wheel is used to scroll up or down. If this option is enabled, scrolling up sends `Button4Press` and `Button4Release` events. Scrolling down sends `Button5Press` and `Button5Release` events.

Send touch events to remote host

Sends touch-screen events on the user's device to the remote X host. If this option is not enabled, touch-screen events are interpreted by the local device.

## Configuring Startup settings in Advanced mode

This section describes the settings available on the **Startup** tab, when you configure profiles in Advanced mode.

The **Startup** tab allows you to select the startup mechanism for sessions. There are several types of startup modes:

Custom startup

Launches a session and executes any Xstarts (applications or commands) that you define. This mode can launch either X Window or Windows applications or commands.

Unlike XDMCP modes, the **Custom startup** mode does not connect you to an application host by default. Without additional configurations, **Custom startup** mode only starts the proxy on the Connection Node. To start applications on remote application hosts, you can either add one or more Xstarts to automatically run applications, or you can launch without defining any Xstarts, connecting instead to the host using remote communication protocols, such as Secure Shell, and run commands manually.

See [Configuring Custom startup mode](#) for more information about configuring this startup mode.

Published application

Runs an application that has been shared by an Exceed TurboX administrator.

See [Configuring Published application startup mode](#) for more information about configuring this startup mode,.

### Windows desktop - Direct

Launches a remote Windows desktop session using a proprietary protocol developed by {{ no such element: dict object['COMPANYNAME'] }}.

See [Configuring the Windows Desktop - Direct startup mode](#) for more information about configuring this startup mode.

## Windows desktop - RDP

Launches a remote Windows desktop session.

See [Configuring the Windows Desktop - RDP startup mode](#) for more information about configuring this startup mode.

## XDMCP Broadcast

Launches a session in XDMCP Broadcast mode.

See [Configuring XDMCP Broadcast startup mode](#) For more information about configuring this startup mode.

## XDMCP Query

Launches a session in XDMCP Query mode.

See [Configuring XDMCP Query startup mode](#) for more information about configuring this startup mode.

## Windows application

Runs Windows applications in Direct mode.

See [Configuring Windows application startup mode](#) for more information about configuring this startup mode.

The **Startup** page in a profile template also includes the **Configure modes** button, which allows you to configure the startup modes available in the **Startup mode** drop-down list.

The **Startup mode** drop-down list displays only the startup modes enabled in the template on which this profile is based.

## Restricting available startup modes

Exceed TurboX administrators can restrict the list of startup modes available in a profile by modifying the base template. For example, administrators may want to disable XDMCP Broadcast or Windows Desktop - RDP protocols across the application by disabling these items in all templates.

This section describes how to configure which startup modes are available in a template and in any profiles linked to this template. This functionality is available when you create or edit a profile template on the Server Manager **Users and Profiles** page.

To restrict the available startup modes:

1. On the **Startup** page of a profile template, click **Configure modes**.

The **Available startup modes** dialog box opens.

2. Select the check boxes for the startup modes that should be available in this template and in any profiles linked to this template.
3. Click **OK**.

The **Startup mode** drop-down list on the **Startup** page on the template and on any linked profiles is updated to display only the selected startup modes.

## Configuring Session settings in Advanced mode

This section describes the settings available on the **Session** tab when you configure profiles in Advanced mode.

The **Session** tab allows you to configure settings related to reusing, closing, and suspending sessions.

## New Profile (4)

✕

Show REST API tooltips

- General
- Input
- Startup
- Session
- Security
- Protocol
- Window mode
- Screen
- Performance
- Fonts
- Troubleshooting
- File and print
- Devices
- Copy and paste

### General

Node targeting ▼

Node/Group name

Ask user to select node (node group)

Reuse session ▼

Session title

Group session windows in taskbar

### Session management

User closes session ▼

Last window closed ▼

Local system logout ▼

User is idle ▼

After  minute(s)

Only if contents unchanged

Give a  second warning

During collaborative sharing

Terminate suspended sessions after  ▼

Reconnect automatically when connection is broken

Sign out of Windows hosts when session terminates

Lock screen for suspended Windows console session

Select template
Basic mode
Save

You can configure the following settings on the **Session** tab:

### General

#### Node targeting

When you launch a session, the Connection Node provides the connection between your workstation and applications that you run in the session. Select one of the following options to specify the Connection Node to use for sessions based on this profile:

- **Any node:** Use any available node. If this option is selected, you can select **Ask user to select node (node group)** to prompt the user to select the node to use for each session.
- **Any node group:** Use any available node group. If this option is selected, you can select **Ask user to select node (node group)** to prompt the user to select the node group to use for each session.
- **Specific node:** Use a specific connection node. When you select this option, the **Node/Group name** box is enabled. Click the **Node/Group name** box and select the node to use.

Administrators can use this option to define custom load balancing.

#### Note

If you are configuring a Published Application profile and have specified an application startup host, that setting overrides the **Node targeting** setting defined here. See [Configuring Published application startup mode](#) for more information.

- **Specific node group:** Use a node belonging to a specific Node Group. When you select this option, the **Node/Group name** text box is enabled. Click the **Node/Group name** box and select the Node Group to use. Exceed TurboX uses load balancing to select a node from the Node Group for each session.

#### Notes:

- If a selected node is disconnected or deleted, the hostname appears in italics, in a strikethrough font. If all of the nodes in a specified Node Group are disconnected or deleted, the Node Group name appears in italics in a strikethrough font.
- When **Node targeting** is set to **Any node** or **Any node group**, if the load balancer selects a node and the session fails to start, the load balancer will select a different node for the next launch, to improve the likelihood that a working node will be selected.

#### Ask user to select node (node group)

If this option is enabled, the user is prompted to select the node or node group to use for each session. The **Select session node** or the **Select session node group** dialog box is displayed when the user launches a session, showing the list of compatible nodes or node groups for the session.

- If **Ask user to select node (node group)** is enabled and **Node targeting** is set to **Any node**, the **Select session node** dialog box displays all compatible nodes.

To restrict the list of nodes displayed in the dialog box, set **Node targeting** to **Node group**, and set **Node/Group name** to the desired node group. Only compatible nodes in the defined group will be displayed.

- If **Ask user to select node (node group)** is enabled and **Node targeting** is set to **Any node group**, the **Select session node group** dialog box displays a list of node groups containing compatible nodes.

For more information, see "Selecting the session node" in the *Exceed TurboX Dashboard and Client Help*.

#### **Note**

**Ask user to select node (node group)** is not available when **Node targeting** is set to **Specific node**.

#### Reuse session

Determines how and when sessions are reused, and which options are displayed in the **Select session** dialog box when a user launches a session from the Dashboard or a shortcut. Reusing a session means that applications started by an Exceed TurboX profile will open within an existing active or suspended session instead of starting a new session.

Select one of the following options to specify whether you want the profile to launch a new session or reuse an existing session:

#### **Auto-select**

If the user has an active session that is compatible with the profile being launched, the profile launches within that active session. If the user has no compatible active sessions, the profile launches in a new session.

Session compatibility is determined as follows:

- XDMCP Broadcast, XDMCP Query, Windows Desktop — RDP, and Windows Desktop — Direct profiles are not compatible with other sessions.
- Published application profiles are compatible with sessions running on nodes that support the published application.
- Custom startup profiles are compatible with sessions running on hosts that support the startup methods contained in the profile. REXEC, RSH, and RLOGIN commands are not supported on Windows nodes. Windows applications are only supported on Windows nodes. Secure Shell commands are supported on all nodes.
- Custom startup profiles that contain different startup methods may auto-reuse a session running on a node that is not compatible with some of the startup methods. In this case, any incompatible commands will not be executed.

#### **Ask User**

If the user has an active or suspended session that is compatible with the profile being launched, the **Select session** dialog box asks the user whether they want to launch the profile in a new session, or select a compatible existing session.

See the **Auto-select** option for a description of the compatibility rules.

### Never

The profile always launches within a new session.

Users who have **Always allow browser shortcuts to resume suspended sessions** enabled in their user settings, and who launch the profile from a browser shortcut, are asked whether to resume a suspended session instead of launching the profile in a new session.

For more information about the **Always allow browser shortcuts to resume suspended sessions** option, see [Configuring your user settings](#).

### Session title

In Single Window mode, the text entered here appears in the Exceed TurboX Client title bar and in the taskbar. In Multiple Window mode, the title is displayed only in the taskbar. You can use the following macros to insert values in the title:

- @a : The IP address of the Connection Node.
- @c : The IP address of the Client machine as reported by the Client.
- @d : the display specification of the session in the format `hostname:display#`.
- @h : The application server hostname.
- @i : The application server IP address.
- @n : The hostname of the Connection Node.
- @s : The words `[Not Secure]` if the administrator has disabled TLS for data passed between the desktop and proxy.
- @u : The user ID.
- @x : The name of the Exceed TurboX profile used to run the session.
- @# : The display number of the session.

For example, if `123.45.67.88:9` is your display specification, then `9` is the display number.

- @@ : The @ character.

If you leave **Session title** empty, Exceed TurboX uses the following default title: `@s @d - @x - @u`  
(`hostname:display# - profile name - userid`).

### Group session windows in taskbar

If this option is enabled, all Exceed TurboX sessions will be grouped under one taskbar icon.

If this option is disabled, each Exceed TurboX session will display its own icon in your taskbar.

#### **Note**

This option is only available for Exceed TurboX Clients running on Windows.

## Session management

The options in the **Session management** area allow you to configure Exceed TurboX to suspend sessions automatically based on specified triggers. You can also suspend sessions manually using the **Suspend** option in the Client menu for the session.

### User closes session

Controls what happens when the session owner closes the session. Select one of the following options:

- **Prompt:** Exceed TurboX prompts the session owner whether to suspend or terminate the session. The session owner can add a description before suspending or terminating the session.

The confirmation dialog box displays the number of participants in the session, if applicable.

If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues in collaborative sharing mode for those participants. If suspended session sharing is not enabled, suspending the session ends the session for all participants.

Suspended sessions appear as **Suspended** on the session owner's Exceed TurboX Dashboard.

Terminating the session ends the session for all participants.

For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).

- **Suspend**

Exceed TurboX suspends the session without displaying a warning message.

If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues in collaborative sharing mode for those participants. If suspended session sharing is unavailable, suspending the session ends the session for all participants.

For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).

- **Suspend with confirmation:** Exceed TurboX displays a confirmation dialog box before suspending the session. Users can add a description before suspending the session.

The dialog box displays the number of participants in the session, if applicable.

If there are other participants in the session and suspended session sharing is enabled, suspending the session does not kick the other users out. The session continues in collaborative sharing mode for those participants. If suspended session sharing is unavailable, suspending the session ends the session for all participants.

For more information about suspended session sharing, see [Configuring Security settings in Advanced mode](#).

- **Terminate:** Exceed TurboX terminates the session without displaying a warning message.
- **Terminate with confirmation:** Exceed TurboX displays a confirmation dialog box. The dialog box displays the number of participants in the session, if applicable. Terminating the session ends the session for all participants.

#### Last window closed

Controls what happens with the session when the last (or only) remote session window is closed. Select one of the following options:

- **Keep session running:** The session keeps running, waiting to accept new X client connections.
- **Terminate session:** The session terminates without displaying a warning message.
- **Terminate with confirmation:** A confirmation prompt is displayed.

#### Note

The **Terminate with confirmation** setting applies to Custom, Published application, Windows application, XDMCP Broadcast, and XDMCP Query startup modes only.

Signing out, disconnecting, or shutting down a Windows Desktop - RDP or Windows Desktop - Direct session from the Windows Start menu terminates the session without prompts, regardless of profile settings.

Signing out of or shutting down an XDMCP Broadcast or XDMCP Query session terminates the session, without prompts, for the **Terminate session** and **Terminate with confirmation** options, and keeps the session running when **Keep session running** is selected.

#### Local system logout

Select one of the following options to control what happens on the user's local system when the session closes in response to a system shutdown or restart on a client sign-out:

- **Suspend session:** The session is suspended without a warning message.
- **Terminate session:** The session terminates without a warning message.

#### User is idle

Select one of the following options to control what happens with the session when the user is idle:

- **Keep session running:** The session continues to run.
- **Suspend session:** The session is suspended without a warning message.
- **Terminate session:** The session terminates without a warning message.

#### After [n] minute(s)

This field is available when **User is idle** is set to **Suspend session** or **Terminate session**. The default value is 30 minutes.

The behavior of this value depends on the **User is idle** setting:

- When **User is idle** is set to **Suspend session**: Specifies how long Exceed TurboX should wait in the absence of user input (mouse or keyboard) before it suspends a session. For example, during processes where there is no user input (such as data compiling or video file playback), the lack of input could trigger a suspension.
- When **User is idle** is set to **Terminate session**: Specifies the time Exceed TurboX waits before terminating a session if there is no activity between the proxy and Exceed TurboX Client.

#### Only if contents unchanged

This option is available when **User is idle** is set to **Suspend session** or **Terminate session**.

If this option is enabled, Exceed TurboX suspends a session only when the application is not generating output. This can be used to prevent auto-suspend when running a simulation or other application that is updating the screen.

#### Give a [n] second warning

This field is available when **User is idle** is set to **Suspend session** or **Terminate session**.

If this option is enabled, Exceed TurboX displays a dialog *n* seconds before the session suspends or terminates due to timeout. The default is 30 seconds.

#### During collaborative sharing

This option is available when **User is idle** is set to **Suspend session** or **Terminate session**.

This option controls whether the idle timeout is active during collaborative sharing. By default, this functionality is disabled. When enabled, the idle time is only counted for the session owner, not for the user(s) who take control of the session.

#### Terminate suspended session after [n] [units]

A suspended session will be terminated automatically after the defined time period. The session owner will receive a message indicating that the session has been terminated due to timeout.

If you define a timeout value here, and if your administrator has defined a timeout value in your user settings, the higher of the two values is used by default.

#### Reconnect automatically when connection is broken

Defines whether Exceed TurboX Client will attempt to reconnect when a lost server connection is restored.

#### Sign out of Windows hosts when session terminates

Determines what happens to the remote Windows desktop when the user closes the session window or terminates the session.

If this setting is enabled, the user is signed out of the remote Windows desktop. Future connections to the same desktop will start from a fresh sign-in session.

If this setting is disabled, terminating a Windows RDP or Windows Direct session disconnects the user from the remote Windows host, but leaves the Windows session running. If you later launch a new Windows Direct session on the same host and using the same user, Exceed TurboX reconnects you to the original session, with its programs still running. Exceed TurboX also reconnects you to Windows sessions that were closed by selecting **Disconnect** from the Windows Start menu, if you launch a new session on the same host and using the same user.

This option is enabled by default.

#### Lock screen for suspended Windows console session

If this option is enabled, the session is locked once it is suspended. Users with physical access to the remote host (such as the monitor, mouse, or keyboard) will not be able to view or control the session without authentication. This option is enabled by default. If the remote host is physically secure, you may deselect this option to prevent suspended sessions from automatically locking. This allows for live thumbnail updates of applications running on the suspended session.

## Configuring Security settings in Advanced mode

### Configuring Security settings in Advanced mode

This section describes the settings available on the **Security** tab when you configure profiles in Advanced mode.

The screenshot shows the 'New Profile' configuration window with the 'Security' tab selected. The window has a title bar with 'New Profile' and a close button. Below the title bar is a toolbar with a checkbox for 'Show REST API tooltips', a share icon, a trash icon, and a help icon. A left sidebar contains a list of configuration categories: General, Input, Startup, Session, Security (selected), Protocol, Window mode, Screen, Performance, Fonts, Troubleshooting, File and print, Devices, and Copy and paste. The main content area is divided into three sections:
 

- General:** Contains a checkbox for 'Show session watermark' and a 'Configure' button.
- Access control:** Contains three radio button options: 'Use dynamic Xauthority', 'Allow any host' (selected), and 'Use custom host ACL'. Below these is a large grey text area and a checkbox for 'Allow X applications to modify host ACL'.
- Session sharing:** Contains several checked checkboxes: 'Allow sharing', 'Allow collaborative sharing', and 'Allow suspended session sharing'. It also has unchecked checkboxes for 'Enable suspended session sharing by default', 'Allow participants to invite / remove users', 'Restrict sharing to user groups', and 'Prompt session owner to join session'. Below these is another large grey text area with an 'Edit' button.

 At the bottom of the window, there is a 'Select template' button on the left and a 'Save' button on the right.

You can configure the following settings on the **Security** tab:

## General

General security settings for the profile.

### Show session watermark

Displays a watermark in the session. Click **Configure** to configure the watermark. The watermark is tiled, and displays at a 45-degree angle, ascending to the top-right corner of the screen.

See [Configuring the session watermark](#) for more information.

### Notes:

- This feature is available for Mac and Windows platforms only. It works only in the Native Client, not the Web Client.
- Resizing a window containing a watermark does not change the size of the watermark.
- In Single Window mode, the watermark is drawn on the root window, and draws on top of all Client windows. The scaling mode does not affect the watermark. The size of the watermark is fixed. In Multiple Window mode, the watermark is drawn over the desktop background, separately inside each window, for both Native and X Window modes.

See [Configuring Window mode settings in Advanced mode](#) for more information.

### Access control

Controls the access to sessions using this profile.

### Use dynamic Xauthority

Use user-level security. While in this security method, Exceed TurboX generates a cookie (MIT-MAGIC-COOKIE) and passes this cookie to X applications. Only those X applications that have the cookie generated by Exceed TurboX are allowed to make connections to Exceed TurboX.

#### **Note**

Any custom host Access Control List (ACL) is ignored and treated as an empty list.

This setting is always enabled for Windows Desktop – Direct sessions, whether this option is selected in the profile or not. A message is printed in the Proxy log, indicating this profile change.

### Allow any host

Terminates the use of the host Access Control List (ACL) and grants unrestricted access to all hosts on the network.

#### Use custom host ACL - deprecated

Limits access to the session to hosts in the custom host ACL. Enter the name or IP address of each host you want to have access rights.

To specify multiple hosts, enter one name or IP address per line with no separator punctuation. Lines beginning with # are ignored.

#### Allow X applications to modify host ACL

Select to allow X applications to add or remove hostnames from the ACL.

#### Session sharing

Allows you to control session sharing.

#### Allow sharing

This option controls whether a session may be shared with others.

#### Allow collaborative sharing

Collaborative sharing mode allows session participants to take control of the mouse and keyboard input when the soft cursor of the session is not moving.

This option is enabled by default. Clear this check box to disable collaborative sharing mode.

If this option is disabled, the **Collaborative sharing** check box in the Share Manager is cleared and unavailable, so the session owner cannot enable collaborative sharing. The session owner can still explicitly give control of a session to a participant.

For more information about Share Manager, see *Exceed TurboX Dashboard and Client Help*.

#### Allow suspended session sharing

This option is available when **Allow collaborative sharing** is enabled.

When **Allow suspended session sharing** is enabled, Share Manager displays an option for owners to share the session with users even after the session has been suspended. For example, a session owner may want to pass control of their session to another user or user group in a different time zone, so they can continue working with applications in that session.

See *Exceed TurboX Dashboard and Client Help* for more information about Share Manager.

#### Enable suspended session sharing by default

If this option is selected, **Suspended session sharing** is automatically selected in the Share Manager, and suspended session sharing is automatically enabled in the shared session.

This option is available when **Allow suspended session sharing** is enabled.

See *Exceed TurboX Dashboard and Client Help* for more information about Share Manager.

#### Allow participants to invite / remove users

If this option is enabled, session participants with permission to participate (not **View only**) in the session are able to invite users to join the session, and remove existing users from the session. Participants are able to remove all users except the session owner and themselves.

This setting is unavailable by default. If this setting is enabled, it cannot be disabled while the session is active.

This option is available when **Allow collaborative sharing** is enabled.

#### Restrict sharing to user groups

If this option is disabled (default), the session can be shared with all users.

If this option is enabled, session sharing is restricted to users who are members of groups listed in the **Restrict sharing to user groups** field.

After selecting this option, follow the instructions in [Sharing user groups](#) to add, edit and delete user groups in the **Restrict sharing to user groups** field.

#### Note

If this option is selected but the **Restrict sharing to user groups** field is empty, a warning is displayed when you try to save the profile settings. Select at least one user group or remove the sharing restriction before saving the profile settings.

#### Prompt session owner to join session

If this option is selected, the session owner is prompted to approve or reject user attempts to join a shared session. If the session owner approves the request, the user joins the session as a participant. If the session owner denies the request, the user receives a message informing them that their request has been denied. If a user attempts to join a suspended session, the user receives a message informing them that the session cannot be joined.

This option is disabled by default.

### Configuring the session watermark

To configure the session watermark:

1. Open the profile's **Security** tab (Advanced mode).
2. Enable **Show session watermark**.
3. Click **Configure**.

4. On the **Session watermark** dialog box, configure the settings as required.

5. Click **OK**.

The watermark is tiled, and displays at a 45 degree angle, ascending to the top-right corner of the screen.

You can configure the following watermark settings in the **Session watermark** dialog box:

**Watermark text:** The text to display as the watermark. The following macros are supported:

- @a : Node IP address.
- @n : Node host name.
- @c : Client IP address, as seen by the Client.
- @s : Client IP address as seen by the Node.
- @h : Host name. If there are multiple hosts, the watermark expands to include them.
- @I : Host IP address. If there are multiple hosts, the watermark expands to include them.
- @d : Current Server date, in text format. For example, November 15, 2020. This value is sent by the proxy.
- @D : Current Server date, in *YYYY-MM-DD* format. For example, 2020-11-15. This value is sent by the proxy.
- @t : Server time, in 12-hour format. For example, 4:36 PM. This value is sent by the proxy.
- @T : Server time, in 24-hour format. For example, 16:36. This value is sent by the proxy.
- @u : User ID.
- @m : Email address.
- @x : Profile name.
- @@ : @ character.

**Tile size:** Together with your monitor's DPI, this defines the width and height of the watermark tiles. Select one of the following options:

- **Small:** Displays eight tiles, horizontally.
- **Medium:** Displays six tiles, horizontally.
- **Large:** Displays four tiles, horizontally.
- **Extra Large:** Displays two tiles, horizontally.

If you have multiple monitors, adjust the tile size as follows:

- If the session window is floating, adjust the tile size based on the monitor that contains the majority of the window.
- If the session window or desktop background is in full-screen mode on one screen, use the DPI for that screen.
- If the session window or desktop background is spread across multiple monitors, adjust the tile size based on the monitor with the highest DPI.

**Text color:** Select a color for the watermark text.

**Opacity:** The percent opacity of the watermark text. The value must be between zero and 100. If you enter an invalid value or no value and try to close the **Session watermark** dialog box, an error message is displayed.

Resizing a window containing a watermark does not change the size of the watermark.

In Single Window mode, the watermark is drawn on the root window, and draws on top of all Client windows. The scaling mode does not affect the watermark. The size of the watermark is fixed.

In Multiple Window mode, the watermark is drawn over the desktop background, separately inside each window, for both Native and X Window modes.

See [Configuring Window mode settings in Advanced mode](#) for more information.

## Sharing user groups


To select the groups for session sharing:

1. In the **Session sharing** pane, select **Restrict sharing to user groups**.
2. Click **Edit**.


The **Sharing user groups** dialog box opens.

3. To search for a user group, do the following:

In the **Candidates** box, type all or part of the name of the user group you want to find.

Click the **Search**  icon beside the **Candidates** box.


The search results are displayed in the left pane.

To clear the search results from the pane and perform another search, click the **Clear**  icon beside the **Candidates** box.

4. In the left pane, select the name(s) of the user group(s) that you want to restrict session sharing to. You can select multiple entries by clicking them.

5. Click the **Add user groups**  icon.

The selected user group names are moved to the right pane.

6. In the right pane, select the name(s) of any user group(s) that should be removed from the sharing.  
You can select multiple entries by clicking them.
7. Click the **Remove user groups**  icon.  
The selected user group names are moved to the left pane.
8. To clear all groups from the right pane, click **Clear**.
9. Click **OK**.  
The text box at the bottom of the **Session sharing** pane displays the list of user groups that session sharing is restricted to.

## Configuring Protocol settings in Advanced mode

### Configuring Protocol settings in Advanced mode

This section describes the settings available on the **Protocol** tab when you configure profiles in Advanced mode.

The **Protocol** tab lets you configure settings that affect the use of the X protocol. You can enable X server protocol options and specific extensions.

## New Profile (4)

✕

Show REST API tooltips

- General
- Input
- Startup
- Session
- Security
- Protocol
- Window mode
- Screen
- Performance
- Fonts
- Troubleshooting
- File and print
- Devices
- Copy and paste

**X server protocol**
 Custom vendor string

**Extensions**

<input checked="" type="checkbox"/> BIG-REQUESTS	<input checked="" type="checkbox"/> GLX
<input checked="" type="checkbox"/> Composite	<input checked="" type="checkbox"/> Render on Node
<input checked="" type="checkbox"/> Disable with Multiple WM	<input type="checkbox"/> Hardware acceleration
<input checked="" type="checkbox"/> DAMAGE	<input type="checkbox"/> Desktop overlay support
<input checked="" type="checkbox"/> DOUBLE-BUFFER	<input checked="" type="checkbox"/> XFree86-VidModeExtension
<input type="checkbox"/> MIT-SHM	<input type="checkbox"/> XFree86-Misc
<input checked="" type="checkbox"/> RANDR	<input checked="" type="checkbox"/> XFree86-Bigfont
<input checked="" type="checkbox"/> RECORD	<input checked="" type="checkbox"/> X-Resource
<input checked="" type="checkbox"/> RENDER	<input checked="" type="checkbox"/> XTEST
<input checked="" type="checkbox"/> Disable with PseudoColor	<input checked="" type="checkbox"/> XKEYBOARD
<input checked="" type="checkbox"/> SHAPE	<input checked="" type="checkbox"/> XInputExtension
<input checked="" type="checkbox"/> SYNC	<input type="checkbox"/> XVideo
<input checked="" type="checkbox"/> XFIXES	<input checked="" type="checkbox"/> MIT-SCREEN-SAVER
<input checked="" type="checkbox"/> XINERAMA	<input checked="" type="checkbox"/> DPMS

Select template
Save

You can configure the following settings on the **Protocol** tab:

X server protocol Custom vendor string

If an application requires a specific vendor string, select this option and specify the string.

Extensions BIG-REQUESTS

Permits large X protocol requests. The core X protocol restricts the maximum length of a protocol request to 262,140 bytes. This can be a problem when joining large numbers of lines or arcs, because these requests cannot be divided into smaller requests without disturbing the rendering of join points.

## Composite

Lets clients request that all drawing to window is redirected to an off-screen buffer. Through the **DAMAGE** extension, the client (called a "compositing manager") can know which areas of a window are modified and render the windows on screen. By using the drawing requests from both the core protocol and the **RENDER** extension, the compositing manager can create special effects, such as translucent windows.

**Disable with Multiple Window mode:** Select this option to disable compositing when Exceed TurboX runs in Multiple Window mode.

## DAMAGE

Notifies clients whenever something is drawn to a window. This feature is useful for virtual network computing (VNC) servers, for screen magnifiers, and for clients using the **Composite** extension to update the screen.

## DOUBLE-BUFFER

Lets applications draw images to a back buffer. When the image is completely rendered there, it can be swapped into the role of the front buffer, which makes the image. Thus, only completely rendered images are shown and remain visible during the entire time it takes to render a new frame. The result is flicker-free animation.

## MIT-SHM

Lets local applications store ximage data in a memory segment that is shared with the proxy. This precludes having to send the ximage over the Xlib interprocess communication channel. This extension provides minimal performance gain in client/server environments such as Exceed TurboX. By default, this option is not selected.

Regardless of how you configure this setting in a Windows Desktop – Direct profile, this extension is automatically enabled when you launch the profile. A message is printed in the Proxy log, indicating this profile change.

## RANDR

Lets clients modify the size, accelerated visuals, and rotation of an X screen. It also informs clients when screens were resized or rotated, and it lets them discover which visuals have hardware acceleration available.

## RECORD

Enables support for the recording of core X protocol and arbitrary extension protocol within the X Server. When the extension is requested to intercept a specific protocol by one or more applications, the protocol data is formatted and returned to the recording application. The extension provides a mechanism for capturing all events, including input device events that do not go to applications.

## RENDER

Enables anti-aliased text and alpha-blending on the Exceed TurboX server. Newer desktop environments (such as the latest versions of KDE, GNOME and Open Office) use this extension for anti-aliased text.

**Disable with PseudoColor** —Disables the use of the **RENDER** extension when the root visual is PseudoColor. Because the extension allocates colors on the root colormap, disabling PseudoColor support means more color cells are available for applications.

## SHAPE

Permits arbitrary window and border shapes. This extension reports the SHAPE extension when queried by a client for the list of supported extensions.

Drawing operations on non-rectangular windows are slower than on rectangular windows. Certain applications will use non-rectangular windows instead of rectangular windows if the SHAPE extension is present. You can improve the performance of these applications by disabling the SHAPE extension before starting the client.

## SYNC

Enables the synchronization extension. This extension provides primitives that let synchronization between applications take place entirely within the X server. It removes any error introduced by the network and makes it possible to synchronize applications on different hosts running different operating systems.

The synchronization extension is important for multimedia applications where audio, video, and graphics data streams are synchronized. This extension also provides internal timers within the X server for synchronizing client requests. This implements simple animation applications without any round-trip requests and makes the best use of buffering within the application, network, and X server.

## XFIXES

A collection of improvements for deficiencies in the core protocol, including:

- Save Set processing changes
- notification when a selection changes
- server-side region objects
- cursor tracking
- cursor names (labels)

## XINERAMA

Allows applications and window managers to use two or more physical displays as one display. The display behavior may differ depending on the window manager used. If you enable this extension, ensure that the **Use monitors** setting in the profile **Window mode** tab for screen 0 is set to **All**.

## GLX (OpenGL)

Enables OpenGL rendering support. Rendering can be Direct, done in the application process space, or Indirect, with instructions sent across local or network sockets using the X protocol, so that rendering can occur on the Connection Node or client desktop.

*Direct* OpenGL rendering is controlled in the application environment using `ssrun`.

*Indirect* OpenGL rendering is controlled by the **Render on Node** and **Hardware acceleration** options.

See [Configuring OpenGL rendering modes](#) for information on the configuration of OpenGL rendering.

See the *Exceed TurboX Server Manager Administration Guide* for more information about each rendering mode.

The **Desktop overlay support** option advertises hardware overlay plane support. This applies when **Render on Node** is cleared.

Some applications use hardware overlay planes to draw parts of the UI.

This option is disabled by default because most applications do not require overlay support, and because disabling this option prevents careless applications from accidentally selecting an overlay visual. To function, this option requires hardware support in the GPU and overlay support enabled in the video driver. Typically only workstation-class GPUs support hardware overlays.

{{ no such element: dict object['COMPANYNAME'] }} recommends leaving **Desktop overlay support** disabled.

## XFree86-VidModeExtension

Allows an application to query various video mode settings, such as the refresh rate of the monitor.

## XFree86-Misc

Allows an application to query various keyboard and mouse settings, such as the keyboard repeat rate or the middle-button mouse emulation setting.

## XFree86-Bigfont

Improves performance when working with big fonts such as CJK or Unicode by using shared memory.

This extension does not apply to Windows nodes.

#### X-Resource

Lets clients query the X server about its usage of various resources. This tool assists developers with making server resource usage more efficient and in debugging server-side resource "leakage".

#### XTEST

Lets applications generate user input actions in the X server without requiring the presence of a user. It also lets an application control the handling of user input actions by the server.

#### XKEYBOARD

Extends keyboard-control capabilities for modifiers, key groups, sounds, indicators (LEDs), parameters, and quick keys.

#### XInputExtension

Accommodates new types of input devices. Keyboard and mouse input extensions are currently supported. You must select this extension to use a SpaceBall 3D mouse. This extension applies to Exceed TurboX Client for Windows only.

#### XVideo

Uses hardware capacities to speed up video playback and reduce total CPU time on both systems running Exceed TurboX and the X client. It also provides server-side video adjustment for brightness, contrast, and hue if the hardware supports it.

The XVideo extension supports image playback—depending on the capacities of the system video card, Exceed TurboX can use the color space conversion or hardware scaling provided by the video card to play back video frames of certain formats and to rescale video frames to the desired size.

To successfully use XVideo functionality, ensure that the following is true:

- Your hardware provides the required capacities.
- XVideo support is available and enabled in the video playback software (the X client).
- As X applications typically run on a remote host, XVideo shared memory should not be used. Refer to the X application's documentation for more information.

#### MIT-SCREEN-SAVER

Allows X applications to coordinate with Exceed TurboX and each other to detect idle states and enable the screen saver within the Exceed TurboX session. This extension applies to the screen saver that runs inside the Exceed TurboX session. It does not affect the screen saver of any machine that the Exceed TurboX Client may be running on.

This extension does not modify the MIT-SCREEN-SAVER settings of the Operating System that Exceed TurboX is running on. It only affects applications running inside the Exceed TurboX session.

## DPMS

Silences X Client warnings that the DPMS extension is not present.

This extension does not modify the DPMS settings of the Operating System that Exceed TurboX is running on. It only affects applications running inside the Exceed TurboX session.

## Configuring OpenGL rendering modes

You can configure Exceed TurboX to use Direct Server-Side Rendering (DSSR), Hardware-based Indirect Server-Side Rendering (HISSR), Software-based Indirect Server-Side Rendering (SISSR) and Desktop-Side Rendering (DSR) for 3D rendering.

For information about each rendering mode, see [Configuring Protocol settings in Advanced mode](#).

To configure Exceed TurboX to use HISSR:

1. Open the profile's **Protocol** tab (Advanced mode).
2. Enable **Render on node** and **Hardware acceleration**.
3. Click **Save**.

To configure Exceed TurboX to use SISSR:

1. Open the profile's **Protocol** tab (Advanced mode).
2. Enable **Render on node**.
3. Ensure **Hardware acceleration** is unavailable.
4. Click **Save**.

To configure Exceed TurboX to use DSR:

1. Open the profile's **Protocol** tab (Advanced mode).
2. To enable DSR, do any one of the following:
  - With GPU (Graphics Processing Unit) rendering, select **Hardware Acceleration**. Ensure that **Render on Node** is unavailable.
  - With CPU (Central Processing Unit) rendering, **Render on Node** and **Hardware Acceleration** should be unavailable.
3. Click **Save**.

DSSR is configured in the **General** tab of the Xstart dialog box. See [Configuring startup settings on the General tab](#) for more information.

## Configuring Window mode settings in Advanced mode

### Configuring Window mode settings in Advanced mode

This section describes the settings available on the **Window mode** tab when you configure profiles in Advanced mode.

The profile **Window mode** tab lets you configure monitor and window settings.

Some basic settings are also available on the **Display** tab in Basic mode.

The screenshot shows the 'New Profile' dialog box with the 'Window mode' tab selected. The dialog has a title bar with 'New Profile' and a close button. Below the title bar is a toolbar with a checked checkbox for 'Show REST API tooltips' and icons for help, delete, and refresh. The main content area is divided into a left sidebar and a main panel. The sidebar lists various settings categories: General, Input, Startup, Session, Security, Protocol, **Window mode** (selected), Screen, Performance, Fonts, Troubleshooting, File and print, Devices, and Copy and paste. The main panel is titled 'Window mode' and contains several sections:
 

- Window mode:** Radio buttons for 'Multiple' and 'Single' (selected).
- Root window size:** Radio buttons for 'Fit window to screen', 'Full screen' (selected), 'Pre-defined' (with a dropdown menu showing '1024x768'), and 'Custom' (with 'Width' set to '1024' and 'Height' set to '768'). There are also checkboxes for 'Show full screen toolbar' (checked) and 'Pin toolbar by default' (checked), and a text field for 'Full screen toolbar title'.
- Resizing:** A dropdown menu for 'Resizing policy' set to 'Fixed'. There are checkboxes for 'Maintain aspect ratio' and 'Save geometry on exit', both of which are unchecked.
- Scrolling:** A checked checkbox for 'Automatically scroll near window edges', an unchecked checkbox for 'Middle mouse button scrolling', and a dropdown menu for 'Show scrollbars' set to 'Always'.
- Monitors:** A dropdown menu for 'Use monitor(s)' set to 'Only primary' and a small rectangular preview area.

 At the bottom of the dialog, there is a 'Select template' button on the left and a 'Save' button on the right.

The **Window mode** tab allows you perform the following tasks:

- [Selecting the window mode for working with applications \(Advanced mode\)](#)
- [Configuring Monitor settings for Multiple or Single Window mode \(Advanced mode\)](#)
- [Configuring Multiple window mode \(Advanced mode\)](#)
- [Configuring Single window mode \(Basic mode\)](#)
- [Configuring Single window mode \(Advanced mode\)](#)

### Selecting the window mode for working with applications (Advanced mode)

You can view and work with an application in the following window modes:

#### Multiple Window mode

In this mode, the Exceed TurboX root window is not displayed when you start applications. Instead, each application runs inside its own application window, as if the application was running natively on your machine. The menus and information provided by Exceed TurboX are available in the Client menu.

If a user shares a session that uses Multiple Window mode, the session switches to Single Window mode for as long as it is shared.

If you are working on a supported Microsoft Windows platform, you can set additional viewing options from within the running session.

#### Single Window mode

In this mode, every application appears in a single root window on the desktop. The window serves as the primary work space where you start and display applications during a session. By default, Single Window mode uses a single (primary) monitor, and Fixed resizing.

A local or a remote X Window Manager controls all window functions. You can also specify the root window size. You may need to make it larger than the screen for certain applications to run. In this case, you can enable scroll bars to view the entire window more easily.

You can enable the auto-scrolling functionality by:

- Selecting the **Scrolling : Automatically scroll near window edges** option in the profile (for details, see [Configuring Single window mode \(Advanced mode\)](#)).
- Clicking the **Auto-scroll** icon in the lower right corner of the Single Window mode session. This toggles the auto-scroll functionality on and off.

When auto-scroll is on, moving the mouse near the edge of the main window (when the root size is bigger than the main window), automatically scrolls the window to reveal the hidden area.

### Configuring Monitor settings for Multiple or Single Window mode (Advanced mode)

The **Use monitor(s)** settings apply to both Multiple and Single window modes.

If you have more than one monitor attached to your machine, you can use all the monitors to display a session, or specify the monitor(s) to use. In the **Window mode** tab, select the preferred option from the **Use monitor(s)** list:

<b>All</b>	Use all available monitors.
<b>Only primary</b>	Use only your primary monitor.
<b>All non-primary</b>	Use all non-primary monitors.
<b>Specified</b>	Use one or more specific monitors. Type the monitor number(s) in the text box beside the <b>Use monitor(s)</b> list.
	Up to 32 adjacent monitors are supported. To specify multiple monitors, separate the monitor numbers with commas.
	To use multiple monitors, you must install multiple video cards or a video card that supports multiple monitors, on your computer.

#### Notes:

- To find out your monitor properties, refer to the documentation provided by the manufacturer of the platform you are using. For example, if you are using Windows 10, right-click your Windows desktop and select **Display settings**.
- You can modify this option in the **Quick Settings** for an active session.  
See *Dashboard and Client User Guide* for more information.

### Configuring Multiple window mode (Advanced mode)

#### Configuring Multiple window mode (Advanced mode)

The following settings are available in **Multiple window mode**, in the **Window options** area:

## Window manager

A window manager is a special application which you can use to move, size, and arrange application windows. Window managers also frequently provide menus with commands you can use to start other applications. These menu commands are preconfigured with the command lines required to start up their respective X applications. You can run one window manager at a time in your Exceed TurboX session. For information about starting a window manager, see [Starting a window manager](#).

Select one of:

- **Native:** Use the window manager on the operating system on which Exceed TurboX Client is running. You can reduce network traffic by using the native window manager.

Do not select the **Native** option if you are using desktop environments, such as the Common Desktop Environment (CDE), from UNIX hosts. These environments do not support the native window manager.

- **X:** Use any local or remote X window manager. You must start the window manager. It does not start by default.

You can modify this option in the **Quick Settings** for an active session.

See *Dashboard and Client User Guide* for more information.

## Focus policy

Selects the focus policy for your application window.

This option is available only when running a native Window manager.

Select one of:

- **Click:** A window is given focus when you click in the window.
- **Pointer:** A window is given focus when you point at the window.
- **System default:** A window is given focus according to the settings in the operating system you are using. By default, this option is used if you do not specify a native window manager focus policy.

This option is available only for Exceed TurboX Clients running on Windows or Mac platforms. This functionality is supported on Linux platforms, but is controlled through a Linux-specific focus policy.

## Window title

The text entered in this field appears in the Exceed TurboX Client taskbar. It can be used to differentiate between Exceed TurboX window icons based on the Exceed TurboX server connection.

By default, **Window title** is empty. In this case, Exceed TurboX displays the X window title. You can include the X window title in the window title by using the `@w` macro. For a list of additional macros you can use in the window title, see [List of Window title macros](#).

This option is available only when running a native Window manager.

Show confirmation on window close

Displays a warning message when you try to close an X application window. The message allows you to confirm or cancel closing the window.

This option is available only when running a native Window manager.

Shrink window to fit display

Sends a request to any X client that creates a window larger than the size of your screen, making the window the size of your screen.

Cascade windows

Tells the proxy to cascade all top-level client windows when the X client does not specify a hint position. This option is enabled by default.

Pan near screen edges

Pans X application windows that extend beyond the edge(s) of the screen onto the screen when the user moves the mouse pointer inside the window near the screen edge. The X application window must have focus to trigger this behavior, and you must be using a native window manager. This feature may be useful when working with X applications that are taller or wider than the user's screen.

Show desktop backdrop

Hides or shows the X Window desktop background in Multiple Window mode.

If this option is selected, the remote desktop backdrop covers the local desktop background. If this option is cleared, you can see the local desktop.

This option is available only for XDMCP profiles in Multiple Window mode.

During a session, you can use the **Show Desktop Backdrop** > command in the Client menu to toggle between displaying or hiding the X window desktop background in Multiple Window mode.

Send desktop mouse actions to X

Specifies whether mouse actions on the user's desktop are processed by the local operating system or the remote X Window Manager.

This option requires the following session configuration:

- Window mode must be set to Multiple.

- **Window mode Use monitor(s)** must include the monitor from where you want to send mouse actions.
- There must be an X Window Manager running (this can be accomplished by launching an XDMCP profile, or by launching an X window manager in a Published Application or Custom Startup profile).
- The remote desktop backdrop should be disabled, since mouse actions on the remote host's X desktop backdrop are always sent to the remote host.

You can switch between local and remote desktop mouse actions in a running session by toggling the **Send Desktop Mouse Actions to X** option in the Client menu.

The following setting is available in **Multiple window mode** (Advanced mode), in the **Monitors** area:

**Use monitor(s):** For information, see [Selecting the window mode for working with applications \(Advanced mode\)](#).

### Starting a window manager

You can start a window manager the same way you start any application. If you use XDMCP, you can specify a window manager in the XDM session file on the host. You can also start a window manager from any command prompt on your host.

The following are typical window manager startup commands:

- DEC (UNIX): `[path/]dxwmAMPERSAND`
- Motif (UNIX):- `[path/]mwmAMPERSAND`
- OpenLook: `[path/]olwmAMPERSAND`
- AIX: `[path/]aixwmAMPERSAND`
- DEC (VMS): `spawn/nowait run sys$system:decw$winmgr`
- Motif (VMS): `spawn/nowait run sys$system:decw$mwm`
- KDE (Linux): `[path/]startkdeAMPERSAND`
- Gnome (Linux): `[path/]gnome-sessionAMPERSAND`
- CDE: `[path/]dtwmAMPERSAND`

#### Note

You must specify the display specification so the window manager knows which X display server to use. GNOME/KDE starts the default window manager, if one is not specified. The settings for the window manager are configurable within GNOME.

## List of Window title macros

You can use the following macros in the window title:

- @a —IP address of the Connection Node.
- @c —IP address of the Client machine as reported by the Client.
- @d —Display specification of the session in the format: `hostname:display#`.
- @h —Application server hostname.
- @i —Application server IP address.
- @m — User email address.
- @n —Hostname of the Connection Node.
- @s —IP address of the Client machine as reported by the Connection Node.
- @u —User ID.
- @w —Name of the X window title (X client/application).
- @x —Name of the profile used to run the session.
- @# —Display number of the session.
- @@ —@ character.

## Configuring Single window mode

### Settings Available in Basic and Advanced Single Window Mode

The following settings are available in **Single window mode** (Advanced mode):

Root window size:

The width and height of the root window.

#### **Note**

You can modify this option in the **Quick Settings** for an active session.

Select one of the following sizing methods:

### Fit window to screen

Calculate the root window size based on the selected monitor(s). The root window area is the combination of the working areas of the selected monitors, excluding the window taskbars.

#### Note

When using **Fit window to screen** with Windows Desktop - Direct console mode, if the remote display driver does not support the specified resolution, the window is resized down to the next largest supported resolution.

### Full screen

Select this option to enable the window to occupy the primary monitor fully, including the Windows taskbar. You can add monitors or use all monitors. Full screen mode can occupy more than one monitor, but the default is to occupy the primary monitor only. The root window size adjusts to the primary monitor's resolution.

#### Notes:

- You can set Full screen mode on monitors that use different resolutions (different sizes). In this case, Exceed TurboX uses the largest rectangle found on any of the selected monitors. If the largest rectangle spans two or more monitors, that rectangle is used in its entirety. To achieve optimum results with multiple monitor configuration, set all monitors to the same resolution. For example, if one monitor is set to 1920 x 1080 pixels, all other monitors should be configured the same way.
- In Windows Desktop - Direct mode, with **Use console on Windows Server** enabled, using **Full screen** may show black around the edges if the remote display does not support the resolution on the client-side monitor.
- If the **Auto-hide** option in the **Scrolling** area is enabled (Advanced mode), the Exceed TurboX menu bar is displayed in its default position, or the last used position, for a moment before it auto-hides.

### Pre-defined

Use a pre-defined root window size. Choose a resolution from the available options.

#### Note

When using **Pre-defined** with Windows Desktop - Direct console mode, if the remote display driver does not support the specified resolution, the window is resized down to the next largest supported resolution.

## Custom

Use a custom root window size. Enter the **Width** and **Height** in pixels. The maximum size is 8192 x 8192. A width or height of zero makes the root window size equal to the size of your screen.

If you have two monitors next to one another, each with a resolution of 1280 x 1024 pixels for a combined resolution of 2560 x 1024, setting the width to 2560 and the height to 1024 sets the root window to display across both monitors as if they were one.

## Show full screen toolbar

Show the full screen bar.

when the user positions the pointer over the trigger area at the top of the screen. Enter the text for the toolbar title in **Full screen toolbar title**.

## Resizing: Resizing policy

The resizing policy for the root window and its contents.

### **Note**

You can modify this option in the **Quick Settings** for an active session.

The following policies are available.

### **Fixed**

A user (or the system) defines the size of the root window. Once a session has started, the root window size will not change. If you click the **Maximize** button in the bar, the main window is restored to its original position and size. The number and size of all monitors is also fixed. Scroll bars appear when the root window size is larger than session window size.

This is the default resizing policy for Single window mode.

### **Note**

If **Fixed** resizing is selected, you can change the root window size of an active session in **Quick settings**. Full screen viewing is available when the root window size matches the size of the monitor where the session is running.

**Dynamic** Allows you to resize the Exceed TurboX root window dynamically. The application (such as the KDE environment) will reflect this and fit in the new window. For example, you may switch from Single to Multiple monitor mode, or vice-versa. The applications will renegotiate the new root window size and be redrawn appropriately based on the new information. They will not be distorted, as may occur in **Scaled** mode.

The minimum size of the window is 800x600. You cannot resize the window to be smaller. When the window is maximized, the window and root window will cover the work area.

#### Notes:

- A shared session may not use Dynamic resizing. If a session using Dynamic resizing is shared, it switches to Fixed resizing. Once the sharing is stopped, the session reverts to Dynamic resizing.
- Windows Desktop - RDP and Windows Desktop - Direct profiles do not support Dynamic resizing . This option is visible in the interface, but is unavailable in the quick settings. You can change the resizing policy to either **Scaled** or **Fixed** in the quick settings for an active session. Once the session is terminated, the profile setting reverts to Dynamic resizing.

**Scaled** When the window is resized, the size of the root window does not change, but the contents of the session scale up or down accordingly. For example, if multiple sessions are running, the user may view them as thumbnails. Scaling does not affect the behavior of UNIX applications, because the root window size remains the same.

#### Note

For Linux clients, Scaled resizing requires that the host Xserver supports Composite extension version 1.4 and up and RENDER extension. Scaled resizing is not supported on RedHat 5.10 or 6.0-6.3.

#### Maintain aspect ratio

Available only with Scaled resizing. Enable this option to avoid distortion while scaling by maintaining the width-to-height ratio of the window's contents.

#### Save geometry on exit

Exceed TurboX saves the Client window position, size, and state when you exit the session and restores it when you start the session and enter Single Window mode.

#### Scrolling: Automatically scroll near window edges

*(Fixed resizing only)* Activates auto-scrolling when the mouse cursor is near the edge of the window. This sets the default toggle state. See the description of **Single Window mode Auto-scrolling** in [Selecting the window mode for working with applications \(Advanced mode\)](#).

### Middle mouse button scrolling

(*Fixed resizing only*) enables setting an anchor point for scrolling with the middle mouse button.

### Show scrollbars

Select one of the following values to specify when you want to display scroll bars in a Single Window mode session.

#### **Note**

This feature is supported on Windows only.

- **Always:** Always displays scroll bars. This is the default.
- **Auto-hide:** Show scroll bars only when pointer is near the edge of the window. Hide scroll bars at all other times.
- **Never:** Never display scroll bars.

### Monitors:

These settings are the same for Multiple and Single Window mode. For more information, see [Selecting the window mode for working with applications \(Advanced mode\)](#).

## Configuring Screen settings in Advanced mode

This section describes the settings available on the **Screen** tab when you configure profiles in Advanced mode.

The profile **Screen** tab lets you define the color, screen size, and resolution settings in your profile.

## New Profile

✕

Show REST API tooltips

- General
- Input
- Startup
- Session
- Security
- Protocol
- Window mode
- Screen
- Performance
- Fonts
- Troubleshooting
- File and print
- Devices
- Copy and paste

### Color

Server visual Auto-select ▼

Sun Microsystems compatible colormap

Multiple color depths support

### Screen size

Use local system settings

Specify in mm

Width 0 mm

Height 0 mm

Compute based on monitor DPI

DPI 100

High DPI resolution on Windows

High DPI resolution on macOS

Select template
Save

## Color

### Server visual

Defines the color characteristics for the specified screen of your X display. Use this setting to specify the default server visual:

- **Auto-select**—Exceed TurboX automatically selects the Server Visual setting. If the video driver setting is High Color or TrueColor, Exceed TurboX selects the TrueColor setting. If the video driver settings is 256 color, Exceed TurboX selects PseudoColor.
- **PseudoColor**—Supports dynamic colormaps of 256 colors. Under normal circumstances, the PseudoColor setting is appropriate. By default, the Xserver allocates the color black to cell zero, and white to cell one when PseudoColor is enabled. However, you can reverse this allocation by

enabling **Sun Microsystems Compatible Colormap**. PseudoColor mode is supported with a high color or true color video driver.

- **TrueColor**—Use with display drivers that support 256,768 or more simultaneous colors on your video adapter.

#### Note

An application can still create windows of TrueColor, PseudoColor, or of both types unless the **Multiple color depths support** setting (described in this table) is disabled.

#### Sun Microsystems compatible colormap

Enables Sun Microsystems-compatible colors and affects the default settings of the PseudoColor server visual. Selecting this option reverses the default allocation: it allocates black to cell one and white to cell zero.

#### Multiple color depths support

Enables advertisement of all supported visuals. This lets certain Xapplications display correctly (for example, if 8-bit PseudoColor or 24-bit TrueColor is the default visual on a high-color video device).

If you clear this option, Exceed TurboX advertises only the default visual.

This option is disabled by default.

### Screen size

#### Use local system settings

Instructs Exceed TurboX to calculate the screen size based on the system settings.

#### Specify in mm

Specify the screen **Width** and **Height** in millimeters.

#### Compute based on monitor DPI

Instructs Exceed TurboX to calculate the screen size based on the monitor's DPI. Enter the monitor DPI as a value between **1** and **2000**.

#### High DPI resolution on Windows

Enables the DPI awareness for the Exceed TurboX client running on Windows platforms. Support for other platforms will be added in a future release.

Disable this option when you are working with X applications that are not DPI-aware, to allow the display to be scaled up.

## High DPI resolution on MacOS

Enables the DPI awareness for the Exceed TurboX client running on Mac OS platforms. Support for other platforms will be added in a future release.

Disable this option when you are working with X applications that are not DPI-aware, to allow the display to be scaled up.

## Configuring Performance settings in Advanced mode

This section describes the settings available on the **Performance** tab when you configure profiles in Advanced mode.

The **Performance** tab allows you to optimize Exceed TurboX for use in your environment and applications. In some cases, adjustments are necessary for troubleshooting purposes.

The screenshot shows the 'New Profile' configuration window with the 'Performance' tab selected. The window has a title bar with 'New Profile' and a close button. Below the title bar is a toolbar with a checked checkbox for 'Show REST API tooltips' and three icons: a share icon, a trash icon, and a help icon. The main content area is divided into a left sidebar and a right main panel. The sidebar lists various configuration categories: General, Input, Startup, Session, Security, Protocol, Window mode, Screen, Performance (highlighted), Fonts, Troubleshooting, File and print, Devices, and Copy and paste. The main panel displays settings for the Performance tab, organized into sections: General, Performance panel, Tuning, and Drawing. The General section has a checked checkbox for 'Show performance icon'. The Performance panel section has checked checkboxes for 'Open from performance icon' and 'Open from client menu', and an unchecked checkbox for 'Use cgroups limits for node CPU / memory'. The Tuning section has a dropdown menu for 'Quality vs. FPS' set to 'Balanced', an unchecked checkbox for 'Target bandwidth' with a value of '20' and 'Mbps' next to it, and a checked checkbox for 'Allow GPU-accelerated video decoding'. The Drawing section has a checked checkbox for 'Draft mode' and a dropdown menu for 'Backing store' set to 'None'. At the bottom of the window, there is a 'Select template' button and a 'Save' button.

You can configure the following settings on the **Performance** tab:

## General

Show performance icon

Shows the **Performance** icon in the system tray for the session owner.

## Performance panel

Open from performance icon

Gives the session owner the ability to open the **Performance panel** for a session by clicking the **Performance** icon in the system tray.

Open from client menu

Gives the session owner the ability to open the **Performance panel** from the **View** section of the Client menu for a session.

Use cgroups limits for node CPU/memory

Controls how the Node CPU and memory limits are displayed in the **Performance Panel**.

If this option is enabled and `etxproxy` is running in a session slice, the tooltips for the **Node CPU usage (%)** and the **Node memory usage** graphs in the **Performance Panel** display the memory and CPU limit for the `etxproxy` slice.

If this option is unavailable, the tooltips display the system hardware total memory and CPU limit.

This option is enabled by default.

## Tuning

Quality vs. FPS

Select a value to set the balance between the image quality and the frame rate at which Exceed TurboX draws the session. You can modify this value in the **Optimize for** setting in the **Performance Panel**.

Target bandwidth

If desired, select the check box and define the target bandwidth in megabits per second (Mbps). For example, to limit the session to half a megabit per second, enter `0.5`, or to set the limit to 10 Mbps, enter `10`.

You can modify this value in the **Target bandwidth >** setting in the **Performance Panel**.

The target bandwidth you set is only a soft limit; it may be exceeded if required by the session proxy.

Exceed TurboX automatically and dynamically scales its bandwidth use to current conditions. To control the total bandwidth used, you should use Quality of Service in your router.

For details, see [Configuring Exceed TurboX Server settings](#).

#### Image cache memory

Image cache memory specifies the amount of memory used by the ETX Client to cache images. Workloads with repetitive images benefit from this cache. Increasing the cache size may increase performance by allowing ETX to find a matching image further back in history.

This setting only affects memory use on end user hosts running the ETX Client. It does not meaningfully affect ETX Node memory use.

#### Allow GPU-accelerated video decoding

Enables or disables hardware video decoding. This option is enabled by default.

Disabling this option may be useful for troubleshooting purposes. For example,

Exceed TurboX Client uses hardware video decoding by default. Disabling this option may be useful when troubleshooting sessions suspended by faulty video drivers.

## Drawing

Configure these settings to reduce network traffic and improve window refresh speed (at the expense of window drawing speed and memory).

#### Draft mode

Improves performance with a slight and generally unnoticeable reduction in drawing accuracy.

#### Backing store

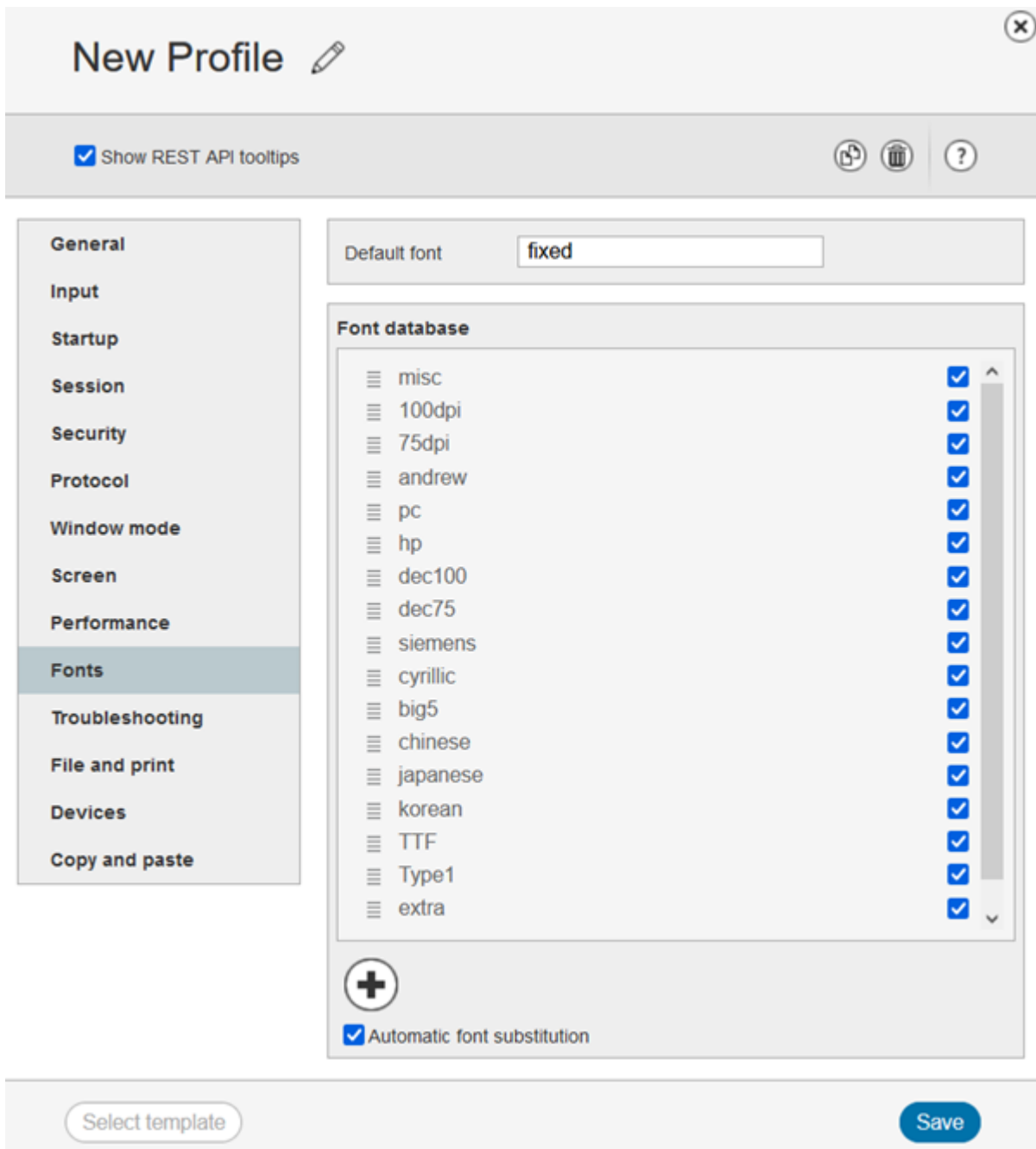
Determines the conditions under which the backing store is used:

- **None:** Never saves the contents of the application window. This is the default.
- **When mapped:** Backing store is provided to all mapped windows if the application requests it. Window content is saved only when the application is drawing to the window when it is mapped.
- **Always:** Always attempts to preserve the contents of any window, whether or not it is mapped, if the application requests it.

## Configuring Fonts settings in Advanced mode

This section describes the settings available on the **Fonts** tab when you configure profiles in Advanced mode.

The profile **Fonts** tab lets you specify the default text font for a session. You can also enable or disable local fonts for a session and add an Xfont server.



To specify the default text font for sessions:

1. In the **Default font** box, type the name of the font to use for text. The font must reside in one of the servers/directories in the **Font database** list.
2. Click **Save**.



To specify the font server/directory search order and substitution options:

1. Change the search order by dragging a database entry using the **Reorder** icon ≡ beside it.
2. If you do not want to automatically substitute missing fonts, clear the **Automatic font substitution** check box.

### 3. Click **Save**.



To add, edit, or delete a custom font server:

#### 1. Do one of the following:

- To add a custom font server, click the **Add (+)** icon.
- To edit a custom font server, locate the entry in the **Font Database** list and click its **Edit**  icon.
- To delete a custom font server, locate the entry in the **Font Database** list and click its **Delete**  icon. No further steps are required.

2. In the **Font server host** box, type the hostname or IP address of the machine running the X font server(s).

3. In the **Port** box, type the font server port.

4. Click the **Apply**  icon or click the **Cancel**  icon.

5. Click **Save**.

Font directories and servers are added dynamically and do not require a server reset.

## Configuring Troubleshooting settings in Advanced mode

This section describes the settings available on the **Troubleshooting** tab when you configure profiles in Advanced mode.

The profile **Troubleshooting** tab lets you provide several methods for troubleshooting session issues.

You can configure the following settings on the **Troubleshooting** tab:

### Log

Configures the type of information that the Exceed TurboX Proxy logs for your session. The specified information is recorded in a proxy log file (`etxproxy.log`) on the Exceed TurboX Connection Node. You can access the proxy log file using the desktop menu.

#### Proxy information

Enables the option to create log files and lets you specify the following types of information to be logged:

- **Font opens:** All font requests. This setting is applied dynamically and does not require a server reset.

- **Window and command names:** The initial setting of the WM\_COMMAND and WM\_NAME properties on the InputOutput root level window. This is useful when you are trying to determine which client is associated with a particular network socket. This setting is applied dynamically and does not require a server reset.
- **GLX Information:** All OpenGL-related information. This setting is applied dynamically and does not require a server reset.
- **Connection Information:** All security-related information. Does this require a server reset? All the other options specifically say that they don't. Also, that isn't much of a description.

## Traces

Configures the trace settings for your session. You can trace the events, requests, and dialogs that occur between the Xserver and the application.

### Allow trace

Permits users to perform traces.

- **Trace initially on:** Traces dialog between the Xserver and the first application. When you select this option, the trace starts along with the Xserver. All dialog between the Xserver and the first application, including XDM, is traced. You must restart the Exceed TurboX Connection Server for this setting to take effect. The trace file is saved on the server in the corresponding session directory with a `.trx` extension.
- **Slow trace:** Traces all events and requests between the Xserver and the application. You can use this functionality for troubleshooting purposes should the Xserver hang.

### Dashboard

There are now separate topics for using tracing for the Native Client and the Web Client

See "Deleting data cached by Exceed TurboX" in the *Exceed TurboX Dashboard and Client Help*

### Profiles

- [Configuring Performance settings in Advanced mode](#)
- [Configuring startup settings on the General tab](#)

### Sessions

See "Generating and downloading a trace package" in the *Exceed TurboX Dashboard and Client Help*

## Configuring File and print settings in Advanced mode

This section describes the settings available on the **File and print** tab when you configure profiles in Advanced mode.

The **File and print** tab allows you to enable file transfer and remote printing and configure the settings for printing from an application running in your session.

The screenshot shows the 'New Profile' configuration window with the 'File and print' tab selected. The window has a title bar with 'New Profile' and a close button. Below the title bar is a toolbar with 'Show REST API tooltips' (unchecked), a share icon, a trash icon, and a help icon. A sidebar on the left lists various configuration categories, with 'File and print' highlighted. The main content area contains the following settings:

- Enable File and Print Manager
  - Enable file download
  - Enable file upload
    - Initial remote path:
    - Initial local path:
- Enable remote printing
  - Warn apparent non-PostScript printer
  - When print job available:  (dropdown)
  - Maximum print job size:  KB

At the bottom of the window, there is a 'Select template' button and a 'Save' button.

You can configure the following settings on the **File and print** tab:

### Enable File and Print Manager

Enables the **File and Print Manager** command in the Exceed TurboX Client menu and the file transfer settings on that page.

The **File and Print Manager** is available for Windows Desktop - RDP and Windows Published Application profiles only if the Exceed TurboX Connection Node is installed on the RDP host. If the node and RDP hosts are different systems, the **File and Print Manager** option is unavailable. However, you can enable file transfer and printing by configuring RDP printer and drive redirection for Windows clients (see [Configuring startup settings on the ETX RDP tab](#)).

### Enable file download

Enables the **Download** button in the Exceed TurboX Client **File and Print Manager** dialog box, as well as the **Print** command for remote files.

### Enable file upload

Enables the **Upload** button in the Exceed TurboX Client menu > **File and Print Manager** dialog box.

### Initial remote path

The default remote path for file transfers. This field accepts multiple paths, separated by commas. Paths are checked in order. The first path that exists on the remote system will be used to set the initial path in the **File and Print Manager** remote file browser. The following macros are supported:

`@u` = Exceed TurboX Dashboard signed-in user name

`@s` = The proxy process owner when `etxft` is launched by the proxy, or the user who launched `etxft` when `etxft` is launched by the user

`@c` = The cached remote path. When the user closes the **File and Print Manager**, the current remote path is saved to a cache file on the user's system. The next time the **File and Print Manager** is opened on that system, the `@c` macro expands to the cached path. The cached path is unique to each remote host, so that the **File and Print Manager** remembers the most recently accessed path on multiple remote hosts.

`@w [path]` = Resolves the path on Windows host only

`@x [path]` = Resolves the path on X host only

For example, if you configure the path as follows:

```
@c,@x ~,@x $HOME,@x /usr/@u,@w %HOMEPATH%,@w c:\users\@u
```

the **File and Print Manager** will try to set the initial remote path in the following order:

1. `@c` = last cached path for the host
2. `@x ~` = `cd ~` on X hosts only
3. `@x $HOME` = `cd $HOME` on X hosts only

4. `@x /usr/@u = cd /usr/username` on X hosts only
5. `@w %HOMEPATH% = cd %HOMEPATH%` on Windows hosts only
6. `@w c:\users\@u = cd c:\users\username` on Windows hosts only

### Initial local path

The initial path in the local file browser when the **File and Print Manager** opens. This field accepts multiple paths, separated by commas. Paths are checked in order. The first path that exists on the user's system will be used. The following macros are supported:

`@u` = Exceed TurboX Dashboard signed-in user name

`@s` = The signed-in user on the Client system

`@w [path]` = Resolves the path on Windows host only

`@x [path]` = Resolves the path on X host only

For sample paths, see the description of **Initial remote path**.

### Enable remote printing

Enables printing support in the remote session. You can print inside an Exceed TurboX session using one of these methods:

- Invoking the `etxft -print` command on a remote X host.
- Printing to the Exceed TurboX CUPS printer driver on a remote X host.
- Right-clicking a printable file format in the remote or local areas of the **File and Print Manager** and selecting **Print**.

If a printable file is printed using one of these methods, Exceed TurboX forwards the print job to your client device. The **When print job available** option defines the behavior of the Exceed TurboX Client when the print job arrives at the client device.

### When print job available

What happens when a print job arrives at the user's device. The print job may arrive using command line (`etxft -print`) or may be launched from the **File and Print Manager** using the **Print** menu option.

**Print to default printer:** Print automatically to the default printer, as defined by the local operating system.

**Show system print dialog:** Display the system print dialog so the user can select the destination.

This setting is applied dynamically and does not require a Server reset.

### Maximum print job size

The maximum allowable job size in kilobytes (KB). Enter 0 to indicate that there is no job size limit.

## Configuring Devices settings in Advanced mode

### Configuring Devices settings in Advanced mode

This section describes the settings available on the **Devices** tab when you configure profiles in advanced mode.

The profile **Devices** tab allows you to:

- Enable or disable audio rendering.
- Enable or disable redirection for audio and other devices.

You can configure the following settings on the **Devices** tab:

A lot of these options recur in ETXRDTP tab. If updating here, check to see if updates need to be made there as well.

### Audio redirection

#### Play

Redirect audio from the remote host to speakers or headphones connected to the user's local computer. This option is enabled by default. See "Redirected device support" In the ETX Server Manager Administration Guide for details on which local and remote platforms are supported.

#### Record

Redirect recorded audio (e.g. microphone) from the user's local computer to the remote host. This option is disabled by default. See "Redirected device support" In the ETX Server Manager Administration Guide for details on which local and remote platforms are supported. Remote Windows sessions require enabling microphone privacy settings before applications can use the microphone.

### Drives redirection

#### Drives

- To share all available drives with the remote computer, select **Drives** and leave the text box empty.
- To share one drive only, select **Drives** and type the drive into the text box. For example, to share drive C, type

- To share multiple drives, select **Drives** and type the drive into the text box, separated by commas. For example, to share drives c and D, type `c,d`

Before launching the session, make sure that the specified drives are available in your system.

#### Removable drives

Allows users to access removable drives such as USB sticks on the remote computer. All removable drives that are plugged in when the session starts are shared to the remote computer. While the session is running, any drives that are added or removed are reflected on the remote computer.

#### Home directory

Shares the Windows home directory (the entire user directory under the user account. For example, `C:/Users/user1`) to the remote session.

### Other redirection

#### WebAuthn (FIDO2)

Allows remote computer to access FIDO2 compatible devices in WebAuthn interrogation. Typically this means your remote browser when querying for WebAuthn FIDO2 compatible device will allow the operation to take place using your local device such as security token.

#### Smart cards

Allows users to access local smart card devices from the remote host. Users can sign in to a remote session using only a PIN, or use the smart card device with other applications inside the session.

#### Printers

Shares local printers with a remote Windows session. The printers appear in the remote session as redirected printers. When this option is enabled, *all local printers* are redirected to the remote Windows session.

To redirect a *specific local printer only*, clear the **Printers** check box and specify the printer in the **Options** text box. For more information, see [Configuring redirection for a specific printer](#).

#### USB devices

Allows users to share supported local USB devices with a remote session. Most devices that use Human Interface Device (HID) or WinUSB driver stacks are supported without any driver installation on the ETX Client host.

Some devices require installing the {{ no such element: dict object['COMPANYNAME'] }} Exceed TurboX USB Client Drivers package on Windows. You must have Administrative rights to install the package on the Windows machine. The packages are available in the `Utilities\EtxUsbDrivers\windows\` folder on the installation DVD.

**Allow selecting devices in client** Allows users to select devices for redirection while the session is running by enabling the **Device Redirection** menu in the ETX Client. The ETX Client remembers the selected devices across sessions.

**Redirect these devices** Allows users to specify particular devices for redirection. Users can specify the devices by their `VID:PID` (for example, 046D:C626) that can be discovered using the Client redirection menu, or by a string that matches part of the device name. Ensure each entry is separated by a comma.

**Notes:**

For best results, this feature requires a network connection with 20ms latency or less between the ETX Client and Node.

The following devices are not supported:

- some device classes, such as internal bus devices
- devices that require high bandwidth, such as cameras

**Redirected device support**

Using a redirected device requires support from the Client OS, where the user runs the Exceed TurboX Client, and the Node OS, where the remote session is running using the Exceed TurboX node. The following table shows current device support:

Client OS	Printer	Drive	USB	Audio Play	Audio Record	Sn...
Windows	✓	✓	✓	✓	✓	C
Linux x64				✓		
Linux ARM64				✓		
Mac				✓		
Web				✓		

Node OS	Printer	Drive	USB	Audio Play	Audio Record	Sn...
Windows (Console)						C
Windows (RDS)	✓	✓	✓	✓	✓	

Node OS	Printer	Drive	USB	Audio Play	Audio Record	Sn C
Linux x64				✓		
Linux ARM64				✓		
Solaris x64				✓		
Solaris SPARC						
AIX						

## Configuring Copy and paste settings in Advanced mode

This section describes the settings available on the **Copy and paste** tab when you configure profiles in Advanced mode.

These settings apply only if you are accessing an X Window host using a Windows or a Mac client. A Linux client can use only automatic copy and paste operations. Other host/client combinations either do not require or do not offer such configuration options.

The profile **Copy and paste** tab allows you to:

- Hide or show the Exceed TurboX Client menu **Edit** options.
- Automate copy/paste functions between Windows and Xapplications.
- Specify the Xselection used for copy and paste operations.

**New Profile** ✎

Show REST API tooltips

**General**

Hide window contents in screenshots

**Edit menu items**

Copy X selection

Paste to X selection

Clear X selection

Copy rectangle / Copy all

Menu is visible to controller of shared sessions

**Clipboard synchronization**

Automatically synchronize local to remote

Remote X selection to overwrite

Automatically synchronize remote to local

Remote X selection to read from

Select template Save

You can configure the following settings on the **Copy and paste** tab:

### General

Hide window contents in screenshots

For Windows clients, blacks out the Exceed TurboX window content when Windows print screen key combinations are used.

For Mac clients, causes the Exceed TurboX window content to appear as transparent when Mac print screen key combinations are used.

Session snapshots including the full screen view and thumbnail appear as black for sessions where this check box is enabled.

If you select this option, the **Copy All** and **Copy Rectangle** commands are unavailable on the Exceed TurboX Client menu even if the menu is enabled in the profile.

## Edit menu items

### Copy X selection

Displays the **Copy X Selection** option on the Exceed TurboX Client **Edit** menu. Users can use this option to copy text or images to their local clipboard, save the X selection to a file, or print it on their local printer.

This option is available only if you are accessing an X Window host using a Windows client.

This option has no effect when connecting to Windows hosts.

### Paste to X selection

Displays the **Paste to X Selection** option on the Exceed TurboX Client **Edit** menu. Users can use this option to paste text or images from the local operating system clipboard or a file on their computer to an X selection.

This option is available only if you are accessing an X Window host using a Windows client.

This option has no effect when connecting to Windows hosts.

### Clear X selection

Displays the **Clear X Selection** option on the Exceed TurboX Client **Edit** menu. Users can use this option to clear the X selection on the remote host.

This option is available only if you are accessing an X Window host using a Windows client.

This option has no effect when connecting to Windows hosts.

### Copy rectangle / Copy all

Displays the **Copy Rectangle** and **Copy All** options on the Exceed TurboX Client **Edit** menu. Users can use these option to capture images during local sessions.

This option is available only if you are accessing an X Window host using a Windows client.

Menu is visible to controller of shared sessions

Makes the **Edit** menu visible to the user in control of a shared session. This includes users who have the presenter role and users who take focus in a collaborative session. The session owner can always see the **Edit** menu, whether or not they are the current presenter.

If all the check boxes in the **Edit menu items** pane are cleared, the Exceed TurboX Client **Edit** menu is hidden.

## Clipboard synchronization

### Automatically synchronize local to remote

Automatically copies the content of the local Clipboard to the remote Clipboard when the local Clipboard changes. This enables effortless pasting of content to remote X applications.

This setting is enabled by default. If you change this setting, it is applied dynamically and does not require an X server reset.

### Remote X selection to overwrite

This option is available when **Automatically synchronize local to remote** is enabled. It selects which X selection is overwritten when data is transferred from the user's local clipboard to the remote host:

- **All:** Overwrite all X selections (PRIMARY, SECONDARY, and CLIPBOARD) on the remote host.
- **PRIMARY:** Overwrite the PRIMARY X selection on the remote host.
- **SECONDARY:** Overwrite the SECONDARY X selection on the remote host.
- **CLIPBOARD:** Overwrite the CLIPBOARD X selection on the remote host.

### Automatically synchronize remote to local

Copies the remote selection to the local Clipboard automatically when the remote host window loses focus (for example, when the focus changes to a local system window where the clipboard data may be pasted).

This setting is enabled by default. If you change this setting, it is applied dynamically and does not require an X server reset.

### Remote X selection to read from

This option is available when **Automatically synchronize remote to local** is enabled. It specifies which remote X selection is copied to the user's local clipboard:

- **Last updated:** Copies the most recently updated X selection (PRIMARY, SECONDARY, or CLIPBOARD) to the user's local clipboard. This is the default setting, which works with all X applications, no matter which X selection the application writes to.
- **PRIMARY:** Transfers only the PRIMARY X selection to the local clipboard.
- **SECONDARY:** Transfers only the SECONDARY X selection to the local clipboard.
- **CLIPBOARD:** Transfers only the CLIPBOARD X selection to the local clipboard.

# Configuring Custom startup mode

## Configuring Custom startup mode

This section describes how to configure session startup in a profile using **Custom startup** mode.

This information applies to both Basic and Advanced configuration.

### Basic mode

New Profile
✕

Startup
Display
Other
Summary

🔍
👤
🗑️
?

Published application      Application Not selected      Host

---

XDMCP Query      Host        Run on local node

---

XDMCP Broadcast

---

Windows desktop - RDP      Host        Run on local node

---

Windows desktop - Direct      Node Any node

---

Windows application      Application

Parameters

---

Custom startup

---

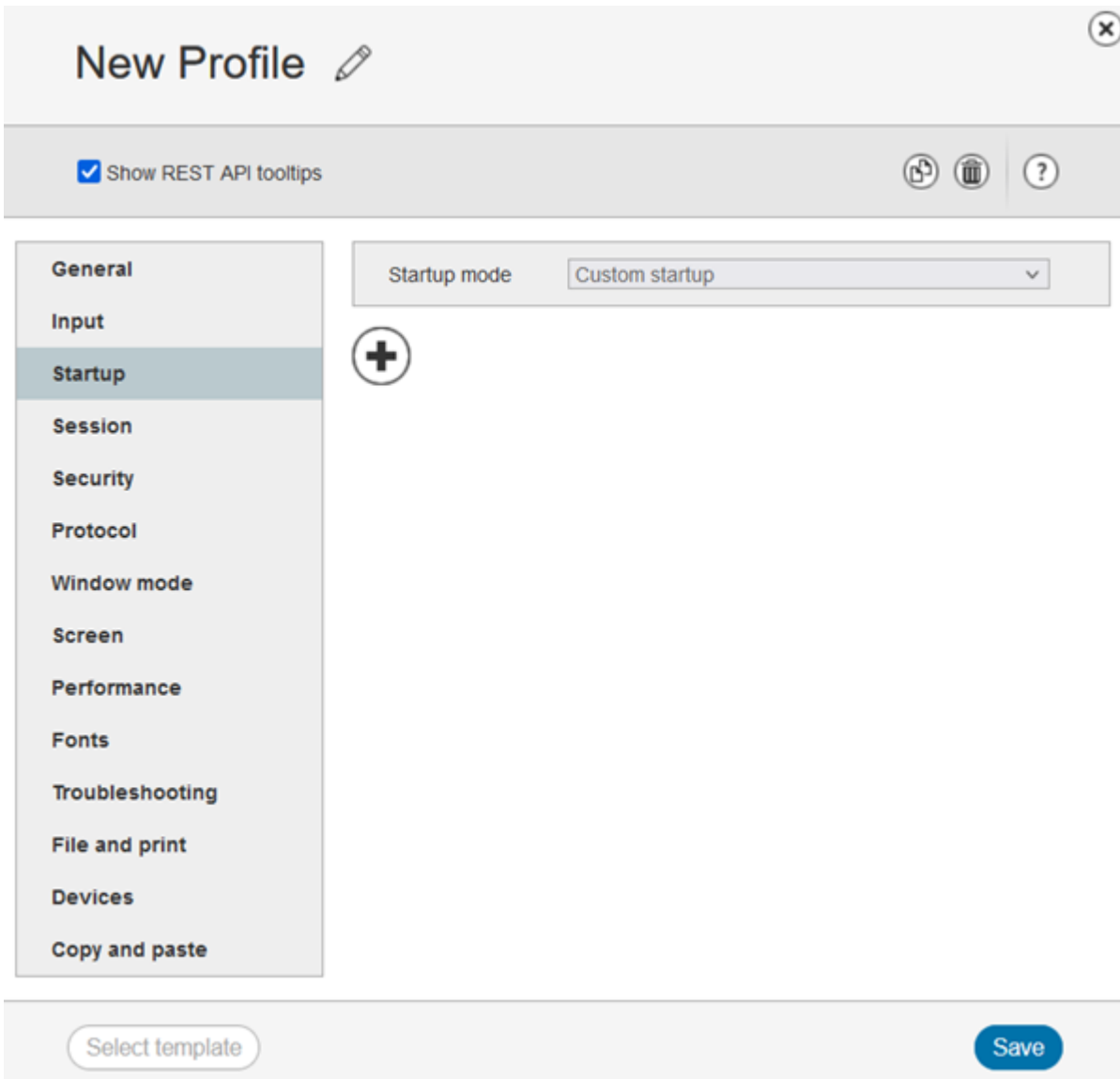
+

Select template

Advanced mode

Save

### Advanced mode



You can configure custom startup mode in two ways:

1. **Without a startup configuration (Xstart):** In this case, a session proxy will be started on the Exceed TurboX Connection Node, but no applications will be launched. You can display graphical applications in the session in two ways:
  - Connecting to an X Window host (for example, using SSH), exporting the DISPLAY on that host to point to the running session display, then launching a graphical X Window application.
  - Launching an Exceed TurboX profile that has **Reuse session** enabled. If the profile is compatible with the running session, the profile will launch any graphical windows using the already running session.
2. **With one or more startup configurations (Xstarts) defined:** In this case, a session proxy will be started on the Exceed TurboX Connection Node, and the command defined in the Xstart will be executed on the specified host. If the command launches a graphical application, the application will

display its windows inside the session. Additional commands (and associated graphical applications) can be displayed in this session using either of the two ways listed in the previous bullet.

For information on starting a session in this mode, see "Launching sessions in Custom startup mode" in the *Exceed TurboX Dashboard and Client Help*.

## What is a startup configuration (Xstart)?

A startup configuration (Xstart) automates the process of connecting to a host and starting applications that reside on it. You can configure, name, and save one or more Xstarts within a profile. You also specify a startup method. For a list of supported startup methods, see [Supported Custom startup methods](#).

You can create multiple Xstarts in a single profile. When you launch a session with the profile, the Xstarts are executed in the order in which they appear in the profile. Profiles and templates created by the administrator can also include preconfigured Xstarts.

For example, when a session is started, an Xstart can run one or more applications on the host automatically, saving you the time of manually starting the applications for the session.

If you choose Windows application startup method and select **Run on local node**, the Xstart will only be able to run on a Windows node. Similarly, when you select X Window Host Application, the Xstart will only be able to run on an X Window node. This means that if your profile contains both Local Windows and Local X Window Xstarts, some of them will fail to run because the selected node will be incompatible.

## Adding Xstarts to a Custom startup profile




**To add Xstarts to a Custom startup profile:**

1. Create a new profile or edit an existing profile.
2. In the profile **Startup** tab, change the startup mode to **Custom startup**.

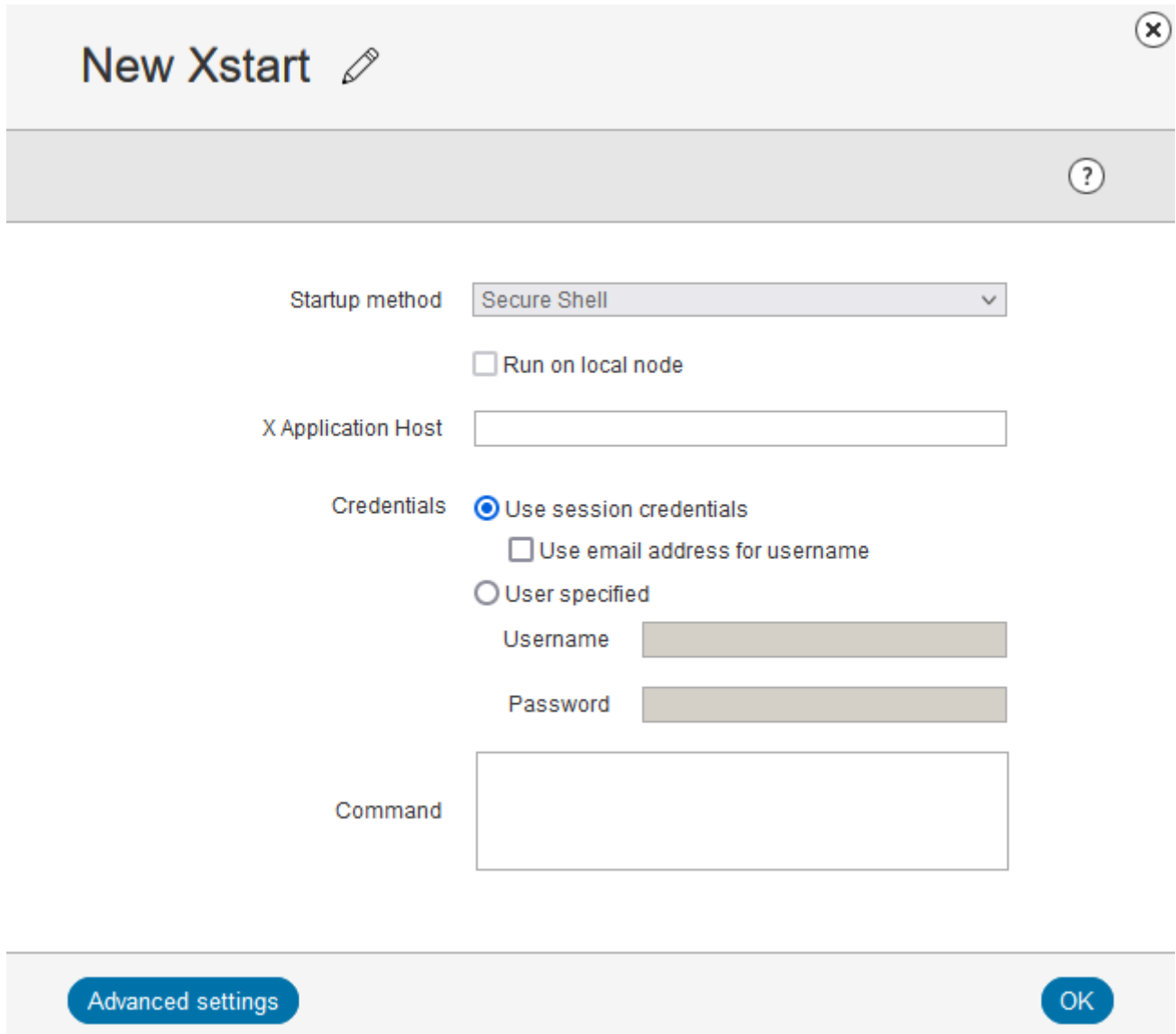
If you are editing a profile, the ability to change the startup mode may be locked in the underlying template. Instead of unlocking the Startup mode in the template, create or edit a profile based on the **Default Custom Startup** template, or a copy of that template. This ensures that the profile uses settings optimized for launching Xstarts.


3. Do one of the following:

- To create a new Xstart, click **Add Xstart** .

- To use an existing Xstart as the basis for a new one, click the **Copy** button  of the desired Xstart. Then, click the **Edit** button  of the copy to configure the copy.
- To modify an existing Xstart, click the **Edit** button  of the Xstart that you want to edit.

An Xstart dialog box opens. For example, if you clicked **Add Xstart**, the **New Xstart** dialog box opens.



**New Xstart** 

Startup method

Run on local node

X Application Host

Credentials  Use session credentials  
 Use email address for username  
 User specified

Username

Password

Command

**Advanced settings** **OK**

4. In the Xstart dialog box, modify the Xstart settings, as needed. For a list of settings you can customize, see [Configuring Xstart settings](#).

5. To configure additional options, in the Xstart dialog box, click **Advanced Settings**.

The **Advanced settings** dialog box opens, showing the **General**, **Prompts**, and **ETX RDP** tabs.

The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. See the *Exceed TurboX Server Manager Help* for more information.

6. Configure the settings in each tab, as needed:


- [Configuring startup settings on the General tab](#)
- [Configuring startup settings on the Prompts tab](#)
- [Configuring startup settings on the ETX RDP tab](#)


The tabs available and the settings you can customize depend on the startup method.

7. After configuring the settings in each tab, click **OK** to return to the Xstart dialog box.
8. Click **OK** to return to the profile dialog box.
9. Click **Save** to save the Xstart you just created or edited.

The newly created Xstart is listed in the **Startup** tab of the profile.

10. If there are multiple Xstarts associated with the profile, Exceed TurboX executes them all at launch time, in the order in which they appear in the **Startup** tab.

To change the order in which the Xstarts run, use the **Reorder** button  to drag and drop each Xstart to its new position.

11. To delete an Xstart, click its **Delete** button .
12. To create more Xstarts that perform other tasks (such as launching other applications), repeat the process.
13. In the profile dialog box, click **Save**.

The profile is ready to launch a session in Custom mode.


If you are not using a local window manager (HWM, MWM, or native window manager), you must start a remote X window manager. Even if you're connecting to a Windows box?

## Configuring Xstart settings

The Xstart dialog box allows you to specify the startup method, the host that you want to connect to, and the sign-in credentials to use. If necessary, you can also access the Xstart **Advanced settings** dialog box, which lets you configure more advanced options. See [About Advanced settings for select startup modes](#) for more information.

You can configure the following settings in the Xstart dialog box:

### Xstart name (title bar)

Click the **Edit** button  in the title bar and enter a name for the Xstart. Typically, this name refers to the host and/or application that the Xstart will connect to.

### Startup method

Specify the startup method to use to establish communication with the application host.

Xstart supports the following startup methods:

- Secure startup methods: **Secure Shell**, **X Window Host Application**, and **Windows application**.

#### **Important**

To get the best performance with X applications, set up your ETX installation so that the ETX node is on the same host as your application and then **Select X Window Host Application**. X Windows applications run much faster with this configuration. (See "Best Practices for Optimizing Performance" in the ETX Installation Guide.)

- Insecure startup methods: **REXEC**, **RSH**, **RLOGIN**, and **TELNET**.

#### **Note**

These startup methods send information over the network in plain text. For security reasons, these startup methods are not shown by default. To show insecure startup methods in the **Startup method** list, you must clear the **Hide insecure startup methods in Xstart** setting on the Server Manager Site Settings **Security** tab. See "Configuring security settings" in the *Exceed TurboX Server Manager Help* for more information.

See [Supported Custom startup methods](#) for more information about each startup method.

### **Run on local node**

This option is available for the **Windows application** and **X Window Host Application** startup methods.

If you choose the **Windows application** startup method and select **Run on local node**, the Xstart will only be able to run on a Windows node. It will not be able to run on a remote node. Similarly, when you select **X Window Host Application**, the Xstart will only run on an X Window node. This means that if your profile contains both Local Windows and Local X Window Xstarts, some of them will fail to run due to the selected node being incompatible.

### **Application Host / X Application Host**

Type the name or IP address of the host to connect to.

This field is not available if you are using the **X Window Host Application** startup method, as this method runs on the local host only. The same is true when you use the **Windows application** startup method with **Run on local node** selected.

## Credentials

Select one of the following options to specify the credentials to use:

**Use session credentials:** Use the currently logged in Exceed TurboX credentials to authenticate against the remote host.

If the server administrator has specified a **Default domain** in the general site settings, the domain may be added automatically to your user name. See **Add domain to username** in [Configuring startup settings on the General tab](#) for more information.

Select **Use email address for username** if the username used to sign on to the Exceed TurboX server is different from the username used to sign on to the remote server, but the password is the same.

**User specified:** Exceed TurboX authenticates on the remote host using the entered **Username** and **Password**.

Unlike the **Use session credentials** setting, the domain is never added to the user name in this mode. If your environment requires you to specify a domain as part of your user name, you must include the domain in the **Username** field.

## Command

Type the command line to start the application you want. The type of command depends on the host system and configuration.

For example, some typical window manager startup commands include:

- Motif (UNIX): `[path/]mwmAMPERSAND`
- OpenLook: `[path/]olwmAMPERSAND`
- AIX: `[path/]aixwmAMPERSAND`
- KDE (Linux): `[path/]startkdeAMPERSAND`
- Gnome (Linux): `[path/]gnome-sessionAMPERSAND`
- CDE: `[path/]dtwmAMPERSAND`

See [Command syntax for starting applications](#) for more information about commands you can use.

The **Command** box may also include macros, which can customize the startup command based on criteria such as current user, display number, hostname, or parameters passed using URL. See [Using Xstart Macros](#) for information about macros.

The **Command** box is not available for the **Windows application** startup method.

## Application

Use this field to specify the path to the executable. For example:

```
C:\Windows\notepad.exe
```

This field may also include macros, which can set the application path based on information only available at runtime. (Such as the current username, or launch parameters passed using URL.) See [Using Xstart Macros](#). for information about macros.

This field is only available for the **Windows application** startup method.

See [Launching Windows applications](#) for more information about supported methods for launching Windows applications.

## Parameters

Use this field to specify the command parameters. For example:

```
-f filename.txt
```

This field may also include macros, which can pass dynamic startup parameters to an application, such as the current user, display number, hostname, or parameters passed using URL. See [Using Xstart Macros](#) for more information about macros.

This field is only available for the **Windows application** startup method.

## Supported Custom startup methods

---

Xstart supports the following secure startup methods:

### Secure Shell

Uses the Secure Shell protocol (SSH) to establish the connection with the specified host. This method offers added security by encrypting user credentials and X11 traffic (if enabled). The remote system must be running an SSH server which listens for SSH commands (for example, `sshd` on UNIX systems). The Secure Shell protocol operates on the default TCP port 22. You can change the port number by including the `-p <port>` option in the secure shell parameters.

### X Window Host Application

Starts an X application on behalf of an authorized user. Requires a user ID and password. Additional authentication options are available in the **Advanced settings** dialog box (for details, see [About Advanced settings for select startup modes](#)). When sign-in information is validated, the command specified in the **Command** box is executed directly on the Connection Node. Requires the Exceed TurboX Connection Node software to be installed on the application host.

## Windows application

Starts a Windows application within your Exceed TurboX session. Requires a user ID and password. When sign-in information is validated, the application specified in the **Application** box is launched, using the parameters defined in the **Parameters** box.

The **Windows application** startup method uses the RDP protocol, which operates on TCP port 3389 and UDP port 3389.

To successfully launch a Windows application, the target host must meet the following criteria:

- It must be a supported Windows Server Operating System.
- The Exceed TurboX Connection Node software must be installed.
- The Remote Desktop Services role must be enabled.
- Group policy on the host must allow running unlisted applications.
- Group policy on the host must allow running multiple applications per user.
- RDS connections must be allowed.

### Note

The Connection Node installer for Windows operating systems checks if these conditions have been met. If they are not met, you are prompted to change these settings.

## Other supported startup methods

Xstart supports the following insecure startup methods:

### Note

These startup methods send information over the network in plain text. For security reasons, these startup methods are not shown by default. To show insecure startup methods in the **Startup method** list, you must clear the **Hide insecure startup methods in Xstart** setting on the Server Manager Site Settings Security tab. See "Configuring security settings" in the *Exceed TurboX Server Manager Help* for more information.

## REXEC

REXEC uses the *REXEC protocol* to run non-interactive programs on a remote system. The remote system must be running an REXEC server, which listens for REXEC commands (for example, `rexecd` on UNIX systems). The REXEC protocol operates on the default TCP port 512.

## RSH

RSH uses the *RSH protocol* to establish the connection with the specified host. This startup mode does not require a password. However, the Exceed TurboX Connection Node must be authorized for RSH access on the host to which you connect. Exceed TurboX sends the specified sign-in name to the RSH daemon on the host. If you are using an `.rhosts` file to allow access to your host, use the exact spelling and letter case of your sign-in name as specified in the file, because RSH is case sensitive.

The RSH protocol operates on the default TCP port 514.

### Notes:

- When running in RSH startup mode, Exceed TurboX sends the sign-in name you used on the Exceed TurboX Server sign-in page to the host's RSH daemon. If you use an `.rhosts` file to allow access to your host, you must use the name of the Exceed TurboX node as the remote host name, and your Exceed TurboX sign-in name as the remote user name.
- The host RSH daemon will not accept user names longer than 14 characters. To avoid error, Exceed TurboX passes only the first 14 characters of a user name. If a user name is longer than 14 characters, truncate it when including it in the `.rhosts` file.

## RLOGIN

RLOGIN Uses the RLOGIN protocol to establish a remote connection to run X applications. It allows an authorized user to sign in to hosts on a network and to interact as if the user were physically at the host computer. Requires a user ID and password. The remote system must be running an RLOGIN server (for example, `rlogind` on UNIX systems). The RLOGIN protocol operates on the default TCP port 513.

## TELNET

TELNET Uses the TELNET protocol to connect a PC to a host on the network. An authorized user can enter commands through TELNET and they will be executed as if the user were entering them directly on the server console. A user ID and password are required. The remote system must be running a TELNET server (for example, `telnetd` on UNIX systems). The TELNET protocol operates on the default TCP port 23.

For detailed information about commands and macros you can use for sign-in and application startup, see [Command syntax for starting applications](#). For advanced settings available for select Custom startup methods, see [About Advanced settings for select startup modes](#).






## Managing startup configurations (Xstarts) in Custom profiles

This section describes the tasks you can perform when managing startup configurations (Xstarts) within a profile.

If you edit or create a profile to use Custom startup mode, and you have created Xstarts within it, they are displayed as a list.

If you are creating a new profile from scratch, no Xstarts are included by default.

When creating and working with Xstarts, the following actions are available on the **Startup** tab for the profile:

	Add Xstart	Lets you create and configure an Xstart.
		If an X profile contains multiple Xstarts, when you launch a session Exceed TurboX runs them in the order in which they appear in the list. Drag this icon to move an Xstart in the list.
	Copy	Copies the Xstart. You can use the copy as the basis for a new Xstart.
	Edit	Edits the Xstart.
	Delete	Deletes the Xstart.

## Command syntax for starting applications

### Command syntax for starting applications

This section describes the commands and macros you can use for sign-in and application startup.

The command line syntax you use to start an application depends on:

- The application host operating system (typically, UNIX/Linux or VMS).
- Whether you have defined certain environment variables on your application host.

### Command Line Syntax for UNIX and Linux Hosts

This section describes the syntax of the Xstart > **Command** field for the following X Window startup modes:

- Secure Shell

- Plain text shell (REXEC, RSH, RLOGIN)
- X Window Host Application

The Windows application startup mode uses a different syntax. See [Launching Windows applications](#) for more information.

Use the following command line syntax to start an application:

```
[install_path/]application [parameters] [-display displayspec] [AMPERSAND]
```

where:

`install_path`

The directory where the application is located.

If you have pre-configured the PATH environment variable on your host, you may not need to enter the path on the command line. For more information, see [Setting environment variables on UNIX/Linux Hosts](#).

`application`

The executable name of the application to run.

`parameters`

Any command line parameters for the application.

`displayspec`

The display specification of your Client Desktop, in one of these formats:

```
hostname:display# OR ipaddress:display#
```

For example, `ewebhost:2` or `123.45.67.89:1`. You can determine the hostname, display number, and IP address to use by using information displayed in the Desktop title bar.

In most cases, you can use `@d` to specify your `displayspec`.

`AMPERSAND`

Run the application in the background.

When starting applications, you should start them in background mode.

For example, you can type the following to start the `xterm` application:

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey -display  
etxhost:2 AMPERSAND
```

With any startup method, you can specify the following command to start `xterm` and display the user ID and hostname in the title bar of the application in the form `userID@hostname` :

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey -display
@d -name "@u@@@h"AMPERSAND
```

For more information on using macros, such as `@d` and `@u`, see [Using Xstart Macros](#).

If you have pre-configured the DISPLAY environment variable for the host, you can omit the `-display displayspec` parameter when starting an application from that shell and just use the following command line syntax:

```
[install path/]application [parameters] AMPERSAND
```

For example:

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey AMPERSAND
```

## Command Line Syntax for UNIX and Linux Hosts

This section describes the syntax of the Xstart **Command** field for the following X Window startup modes:

- Secure Shell
- Plain text shell (REXEC, RSH, RLOGIN)
- X Window Host Application

The Windows application startup mode uses a different syntax. See [Launching Windows applications](#) for more information.

Use the following command line syntax to start an application:

```
[install_path/]application [parameters] [-display displayspec] [AMPERSAND]
```

where:

```
install_path
```

The directory where the application is located.

If you have pre-configured the PATH environment variable on your host, you may not need to enter the path on the command line. For more information, see [Setting environment variables on UNIX/Linux Hosts](#).

application

The executable name of the application to run.

parameters

Any command line parameters for the application.

displayspec

The display specification of your Client Desktop, in one of these formats:

```
hostname:display# OR ipaddress:display#
```

For example, `ewebhost:2` or `123.45.67.89:1`. You can determine the hostname, display number, and IP address to use by using information displayed in the Desktop title bar.

In most cases, you can use `@d` to specify your `displayspec`.

AMPERSAND

Run the application in the background.

When starting applications, you should start them in background mode.

For example, you can type the following to start the `xterm` application:

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey -display  
etxhost:2 AMPERSAND
```

With any startup method, you can specify the following command to start `xterm` and display the user ID and hostname in the title bar of the application in the form `userID@hostname`:

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey -display  
@d -name "@u@@@h"AMPERSAND
```

For more information on using macros, such as `@d` and `@u`, see [Using Xstart Macros](#).

If you have pre-configured the `DISPLAY` environment variable for the host, you can omit the `-display displayspec` parameter when starting an application from that shell and just use the following command line syntax:

```
[install path/]application [parameters] AMPERSAND
```

For example:

```
/usr/bin/X11/xterm -sb -ls -fg blue -bg lightgrey AMPERSAND
```

## Command Line Syntax for VMS Hosts

This section describes the command line syntax you use to start X applications on VMS hosts.

If your VMS system supports REXEC, RSH, or Secure Shell, and is running version 5.0 or higher of the PCX\$SERVER command processor, you can specify a command with the following syntax to start an application using the REXEC, RSH, or Secure Shell startup methods:

```
@sys$system:pcx$server 4,@#,0,tcpip,@a application
```

where `application` is the command line executable required to run the application.

For example, to start the `xterm` application:

```
@sys$system:pcx$server 4,@#,0,tcpip,@a DECW$TERMINAL
```

You must use the `@#` and `@a` macros because the display number and IP address are not necessarily the same for each session.

If you selected the Custom startup mode in the profile, and you want to specify the X display server to which the application should connect, you must define the DISPLAY environment variable before starting applications.

You do not need to define the DISPLAY environment variable when using the REXEC, RSH, or Secure Shell startup method, because PCX\$SERVER sets the DISPLAY variable.

Do not specify the DISPLAY environment variable in your host sign-in file because the IP address and display number are not necessarily the same in each session.

Use the following syntax example to set the DISPLAY environment variable:

```
set display/create/node=123.183.33.17/transport=tcpip/server=2
```

When setting the DISPLAY environment variable, keep the following in mind:

- You can determine the IP address and display number from the information displayed on the Client title bar.
- Do not put spaces before or after the equal (=) sign.

Once the DISPLAY environment variable is set correctly for a sign-in session, you can start an application from that session using the following command line syntax:

```
run sys$system:decw$application
```

For example:

```
run sys$system:decw$clock
```

## Using Xstart Macros

Xstart macros are reserved symbols that are replaced at runtime with specific values, such as the user name or display number. For a list of supported Xstart macros, see [List of Xstart Macros](#).

You can use macros and commands in the following locations:

- The **Username** and **Password** fields when configuring an Xstart.
- The **Command** field available when you configure Custom startup mode in a profile for any startup method other than **Windows application**.
- The **Application** and **Parameters** fields available when you configure Custom startup mode in a profile for the **Windows application** startup method.
- The **Reply** field on the **Prompts** tab of the Xstart Advanced settings dialog box.
- The **Connection Parameters** and **Enter Reply for Prompt** dialog boxes that can be opened when starting in Custom mode.

## List of Xstart Macros

### List of Xstart Macros

This section describes the available Xstart macros. Letters in macros can be upper or lower case.

`@a`

The IP address or hostname of the Connection Node.

When running applications directly on a node, `@a` inserts the node hostname. For remotely running applications, such as SSH, `@a` inserts the IP address of the Connection Node, as seen by the remote application host. This is done to support nodes that have multiple IPs.

For example, if `123.45.67.89:5` is the display specification, then `123.45.67.89` is the IP address of the Connection Node.

`@b`

The user ID of the user who runs the Xstart child process on the target node.

`@%C%`

The IP address of the Client machine as reported by the Client.

`@d`

The display specification of the session in the format: `address:display#`.

For example, `123.45.67.89:1`.

For applications running remotely (for example, SSH), the address portion of the display is the IP of the Connection Node.

For applications running directly on a node, the address portion of the display specification is blank. For example, `:1`.

@h

The host value, as required by the selected startup method, specified in the **Host** box of the Xstart dialog box.

@i

The host-specified IP address in the profile.

@k

Kerberos credential file.

@m

The default domain name.

@n

@s or the looked-up host name of @s, depending on the configuration.

@p

The user's remote command password.

@r

The Exceed TurboX runtime directory.

@s

The IP address of the user workstation as reported by the Connection Node.

@t

The Exceed TurboX profile name.

@u

The user name specified on the **Startup** page when you configure a profile.

@w

The user's Exceed TurboX sign-in information.

@x

The dynamic Xauth cookie string.

@y

The Xauth file location. This location depends on the `xstart.XauthFile` setting in the Exceed TurboX profile.

`@~`

The user's home directory.

`@@`

The @ character.

`@#`

The display number of the session.

For example, if `123.45.67.89:1` is your display specification, then `1` is the display number.

`;%ENVVAR%`

The value of the corresponding environment variable on the client machine, if that variable is defined. If the value of the client machine environment variable is undefined, `;%ENVVAR%` is not substituted and the startup profile may fail.

`@{ }`

Parameter values from a URL. For more information, see [Passing URL parameters using Xstart macros](#).

### Passing URL parameters using Xstart macros

This section provides information about how you can pass URL parameters using an Xstart macro.

Exceed TurboX enables users to launch profiles by accessing a URL that includes the ID of the profile to launch. For example:

```
https://myserver.example.com/etx/#profile=1e8dc82a-596f-623c-8bc5-500000000130
```

This launches profile `1e8dc82a-596f-623c-8bc5-500000000130` on behalf of the user.

Users need to sign in to Exceed TurboX if they do not already have an active session.

In addition, profiles that use the Custom startup mode with one or more Xstarts defined may also accept parameters from the URL using a special query string. This uses the following format:

```
https://myserver.example.com/etx/
```

```
#profile=1e8dc82a-596f-623c-8bc5-500000000130&commandmacro=param1=value1,param2=value2,...,paramN=valueN
```

The `commandmacro` flag is a reserved keyword, which indicates that the URL contains parameter name and value pairs. These values can then be referenced inside an Xstart **Command** box using the `@{ }` macro.

For example:

```
xterm -title=@{param1} -geometry=@{param2} -fn @{paramN}
```

When the profile is launched by a user, `@{param1}` in the shell command will be replaced by `value1` from the URL, `@{param2}` will be replaced by `value2` from the URL, and so on.

Parameter names must contain alphanumeric characters only. Parameter values may contain alphanumeric characters and/or percent-encoded symbols.

If your values contain special characters—such as comma ( , ), the equal sign ( = ), or backslash ( \ )—that are reserved for the URL query string, then they must be escaped with a backslash. For example, if a value string is:

```
report=Jan,Feb\expired
```

then it must be encoded as:

```
report\=Jan\,Feb\\expired
```

If your values are URLs and the URL will be used as a URL, use an online URL encoder (such as <https://www.urlencoder.org/>) to encode them into URL-safe parameters.

#### Setting environment variables on UNIX and Linux Hosts

This section describes how you can simplify the startup of an application by setting environment variables. To simplify the startup of applications on UNIX/Linux hosts, define the following environment variables on your host:

- DISPLAY
- PATH

If you would like to start X applications on a Sun host running OpenWindows, you may also need to specify the following environment variables on your host:

- OPENWINHOME
- LD\_LIBRARY\_PATH

## Setting environment variables on UNIX/Linux Hosts

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- DISPLAY
- PATH

If you would like to start X applications on a Sun host running OpenWindows, you may also need to specify the following environment variables on your host:

- `OPENWINHOME`
- `LD_LIBRARY_PATH`

### **DISPLAY environment variable**

You can define the `DISPLAY` environment variable for your current sign-in session on a UNIX/Linux host. Many applications use this variable to determine the X display that they should use.

The syntax you use to specify the `DISPLAY` environment variable depends on whether you are using the C shell (displays a percentage "%" prompt by default) or the Bourne or Korn shell (displays a dollar sign "\$" prompt by default).

To set the `DISPLAY` environment variable, you need to type the following command at the command prompt for each shell:

- For a C shell (%):

```
setenv DISPLAY displayspec
```

Example: `setenv DISPLAY etxhost:2`

- For a Bourne/Korn shell (\$):

```
DISPLAY=displayspec
```

```
export DISPLAY
```

Example:

```
DISPLAY=etxhost:2
```

```
export DISPLAY
```

Do not specify the `DISPLAY` environment variable in your `hostlogin` file because your `displayspec` is not necessarily the same in each session.

### **PATH, OPENWINHOME, and LD\_LIBRARY\_PATH environment variables**

You may specify the `PATH`, `OPENWINHOME`, and `LD_LIBRARY_PATH` environment variables on UNIX/Linux hosts.

The `OPENWINHOME` and `LD_LIBRARY_PATH` environment variables are needed only for Sun OpenWindows hosts.

Using these environment variables, you can add directories to your path specification. If you enter a command without specifying its full path, the shell searches each directory listed in the `PATH`, `OPENWINHOME`, and `LD_LIBRARY_PATH` environment variables for the application executable and executes the first one it finds. Consider specifying these environment variables in your host login file (described in the procedure in this section) so they are set each time you log on to the host.

The following list provides the commands required by each shell to set the `PATH` environment variable, where `path` is a directory that you want to include on your host path. Separate multiple paths with colons (:).

- For a C shell (%):

```
setenv PATH
path:path:path
```

Example:

```
setenv PATH
/usr/bin/X11:/usr/bin/jsmith
```

- For a Bourne/Korn shell (\$):

```
PATH=path:path:path
export PATH
```

Example:

```
PATH=/usr/bin/X11:/usr/bin/jsmith
export PATH
```

The following list provides the commands required by each shell to set the `OPENWINHOME` and `LD_LIBRARY_PATH` environment variable, where `usr` is the directory on the host where the X Window system files reside.

- For a C shell (%):

```
setenv OPENWINHOME /usr/openwin
setenv LD_LIBRARY_PATH /usr/openwin/lib
```

- For a Bourne/Korn shell (\$):

```
OPENWINHOME=/usr/openwin
LD_LIBRARY_PATH=/usr/openwin/lib
export OPENWINHOME LD_LIBRARY_PATH
```

To determine which environment variables are defined and their values, type the following commands at the shell prompt:

- For a C shell (%):

```
setenv
```

```
printenv
```

- For a Bourne/Korn shell (\$):

```
env
```

```
export
```

```
printenv
```

To determine if a specific environment variable is defined and to determine its value, type the following command at the shell prompt:

```
echo $variablename
```

where `variablename` is the name of the environment variable.

If the environment variable is not defined, or is incorrectly defined, define it properly in your startup configuration.

To define the environment variable in your host startup login file:

1. Open your host startup login file in a text editor. If you are using the C shell, the `.cshrc` file in your home directory is the login file. If you are using the Bourne or Korn shell, the `.profile` file in your home directory is the host login file.
2. Find the environment variable in the file and enter the correct command as specified in this section. If the environment variable is not defined, specify the environment variable by typing the command at the end of the file.
3. Save the file and exit the text editor.

The next time you start a shell session, your environment variable will be set according to your host startup login file. To verify this, start a new login/shell session and use the commands described above to determine the current value of these environment variables.

## Environment Variables to Enhance Applications

Java applications may use low quality font rendering if the `DISPLAY` variable is specified with a hostname or if `MIT-SHM` is off or not usable (e.g., the application is run via SSH). Force higher quality text by setting the following environment variable before launching your Java application.

```
_JAVA_OPTIONS='-Dawt.useSystemAAFontSettings=on -Dswing.aatext=true'
```

## Launching Windows applications

There are two ways to launch Windows applications:

- RemoteApp
- Specifying the path to the executable. For example:

```
C:\Program Files\MyApplication\app.exe
```

Under Windows RDP 2008, the Windows `PATH` environment variable is respected. You can enter an application filename without its full path, as long as that directory is defined in the variable.

Windows 2012 does not support `PATH`. This requires you to enter the full path of a command. To work around this restriction, you can configure a system environment variable to point to the appropriate directory. For example, configuring `windir` as the environment variable pointing to the applicable directory allows you to enter `%windir% \system32\mspaint.exe` as a valid command. This method ensures that such commands will work on any Windows RDP host, even if the Windows operating system is not installed on a C: drive. Windows system environment variables can be used for Application, Parameters, and Working Directory settings.

### To launch a RemoteApp application from an Exceed TurboX profile:

1. Create a profile using the Default Custom Startup template.
2. On the **Startup** tab click **Add Xstart**.
3. Select the Windows application startup method.
4. In the **Parameters** box, type a double pipe ( `||` ) followed by the alias of the published application name. For example, if the name of the RemoteApp is `MSWord`, enter:

```
|| MSWord
```

5. Click **OK**, then click **Save**.

When you launch the profile, it will start the RemoteApp.

### To launch an application using the path to the executable:

1. Create a profile using the Default Custom Startup template.
2. On the **Startup** tab, click **Add Xstart**.
3. Select the **Windows Application** startup method.
4. In the **Application** box, enter the path to the application. For example:

C:\Windows\winword.exe

5. Click **OK**, and then click **Save**.

When you launch the profile, it will start the application.

## Configuring Published application startup mode

---

Published application mode allows you to launch an application that was published by an Exceed TurboX administrator. This section describes how to configure session startup using **Published application** mode.

The **Advanced settings** dialog box allows you to configure advanced settings such as session use, security, how startup should handle connection and sign-in prompts, and remote desktop session settings.

In Basic mode, you can configure the **Application** and **Host**, and whether to use Windows Direct mode for the connection.

You can configure the following **Published application** settings on the **Startup** tab in Advanced mode:

### Application

---

From the list of available applications, select the application to launch when a session starts. If the list is dimmed, then there are no published applications available on this server.

This settings is available in both Basic and Advanced configuration modes.

### Host

---

Select **Auto-select** to allow Exceed TurboX to choose an available host, or select one from the list.

This settings is available in both Basic and Advanced configuration modes.

Host selection is subject to session reuse and load balancing.

## Run Windows application in Direct mode

---

This option is available only for Windows-based published applications. Select this option to have Exceed TurboX connect to the remote Windows host using direct mode instead of RDP mode.

Choosing direct mode disables the **Advanced settings** button, as the advanced settings apply to RDP connections only.

## Credentials

---

Select the credentials to use to connect to the remote host:

### Use session credentials:

Use the credentials that you used to sign in to Exceed TurboX.

If the server administrator has specified a **Default domain** in the **General** site settings, the domain may be automatically added to your user name.

See **Add domain to username** in [Configuring startup settings on the General tab](#) for more information.

Select **Use email address for username** if the username used to sign on to the Exceed TurboX server is different from the username used to sign on to the remote server, but the password is the same.

### User specified

Use the **Username** and **Password** that you enter on this tab.

Unlike the **Use session credentials** setting, the domain will never be prepended to the user name in this mode. If your environment requires you to specify a domain as part of your user name, you must include the domain here.

### To configure the Advanced settings:

1. On the profile **Startup** tab (Advanced mode), click **Advanced settings**.

The **Advanced settings** dialog box opens, showing the **General**, **Prompts**, and **ETX RDP** tabs.

The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. See the *Exceed TurboX Server Manager Help* for more information.

2. Configure the settings in each tab, as needed:

- [Configuring startup settings on the General tab](#)
- [Configuring startup settings on the Prompts tab](#)

- [Configuring startup settings on the ETX RDP tab](#)

3. After configuring the settings in each tab, click **OK** to return to the **Startup** tab.
4. Click **Save** to save the profile.

## Configuring Windows application startup mode

---

This section describes how to configure the Windows application startup mode in a profile.

### To configure the Windows application startup mode

1. Open the profile you want to configure.
2. In the profile dialog box, on the **Startup** tab, enter the following information:

- In the **Application** box, specify the path to the executable. For example:

```
C:\Windows\notepad.exe
```

- In the **Parameters** box, enter the command parameters. For example:

```
-f filename.txt
```

3. To configure additional Startup settings, click **Advanced mode**.
4. Click the **Startup** tab.

The **Application** and **Parameters** fields are populated with the information you entered in Basic mode.

5. Under **Credentials**, select one of the following options to specify the credentials to use:
  - **Use session credentials:** Use the Exceed TurboX credentials of the user who is currently signed in to authenticate against the remote host.  
Select **Use email address for username** if the ID used to sign on to the Exceed TurboX server is different from the ID used to sign on to the remote server, but the password is the same.
  - **User specified:** Exceed TurboX authenticates on the remote host using the **Username** and **Password** you enter.

6. Click **Save** to save your settings.

## Configuring the Windows Desktop - Direct startup mode

This section describes how to configure a profile to launch a direct Windows desktop session.

Windows Desktop - Direct mode (referred to here as "Direct" mode) uses a proprietary protocol to connect to and display remote Windows desktops. This means that each Windows host you are connecting to must have the Exceed TurboX Connection Node software installed. Direct mode provides better performance than Windows Desktop - RDP mode by eliminating extra protocol layers and by supporting additional hardware capabilities, such as direct frame buffer capture.

Direct mode can operate in two different ways (*console mode* and *multi-user mode*), depending on the Windows host and profile settings you are using:

- **Console mode:** This mode is supported on Windows Desktop operating systems (Windows 7, 8, and 10) and Windows Server operating systems (Windows 2008 R2 and later). In console mode, the Windows "physical" console session is captured and sent to the remote user. The Windows console session is the same desktop session which is shown on the physical monitor that is connected to the host. For this reason, console mode is only recommended for virtual machines or "headless" (no monitor connected) physical machines deployed in secure server rooms. Using console mode to connect to a physical machine in a publicly accessible location is not recommended, because anyone with physical access could attach a display to the machine and observe the user's remote session.
- **Multi-user mode:** This mode is supported only on Windows Server operating systems (Windows 2012 R2 and later). In *multi-user mode*, multiple users can connect to a shared Windows Server host and create their own private desktop sessions. This mode supports greater scalability by enabling a single host to serve many users. Multi-user Direct desktop mode provides the same optimizations as console mode, and is safe to use with physical machines that have connected displays. The Windows Server hosts may be either physical or virtual.

Refer to the following table for a quick reference to functionality available in Windows Desktop - Direct console mode and multi-user mode.

Console mode	Multi-user mode
Supports only a single user session.	Supports multiple user sessions.
Supported on any Windows version supported with Exceed TurboX.	Requires Windows Server 2012 R2 and later versions.
Supports multiple monitors.	Supports multiple monitors.

Console mode	Multi-user mode
<p><b>Note:</b> If using an NVAPI-capable GPU (GRID or mid-range NVIDIA Quadro, K2000+), it connects virtual monitors and can run headless. Otherwise, it requires multiple physically-connected monitors. The maximum number of supported monitors is limited by the GRID profile type for GRID VMs (typically 1-4), or the number of outputs on the GPU for physical machines (typically 3-4).</p>	
<p>Supports standard resolutions up to UHD on NVAPI-capable GPUs. For other GPUs, the resolution is restricted to the output resolutions supported by the GPUs and/or monitors physically connected to the remote host.</p>	<p>Supports any resolution.</p>
<p>Provides access to the same desktop session that is seen when physically accessing a machine.</p>	<p>Creates a virtual session.</p>
<p>Provides full 3D support with any GPU vendor.</p>	<p>Requires NVIDIA hardware (Tesla, GRID, Quadro K2000, or higher GPU) to support 3D accelerated sessions. For information about tested GPUs, contact customer support.</p>

#### Note

If NVIDIA hardware is not available on the Windows Server host and you require 3D acceleration, you must force the session to start in console mode by selecting the **Use console on Windows Server** check box in the profile **Startup** tab.

To make sure that the profile is configured properly for Windows Desktop - Direct mode, ensure that a Windows Connection Node or Node Group is selected in the **Node targeting** box on the **Session** tab. For more information about the **Node targeting** options, see [Configuring Session settings in Advanced mode](#).

The "Node" setting in the **Basic mode > Startup** tab corresponds to "Node targeting" in the **Advanced mode > Session** tab.

You can configure the following **Windows desktop - Direct** settings on the **Startup** tab in Advanced mode:

### Run on node

This option is read-only and pre-selected, to remind users that this startup mode launches a desktop locally on the Windows node.

### Use console on Windows Server

Forces the session to start in console mode on Windows Server. If a session is already running on the selected host, the session will automatically start in multi-user mode.

If this check box is cleared, the session starts in multi-user mode. If multi-user mode is unavailable on the selected host, an error message is displayed.

#### Note

This check box has no effect when connecting to a Windows desktop edition host (Windows 7, 8.1, or 10), as these hosts support only console sessions.

### Host

This option is read-only and is set to **Run on node**, to remind users that this startup mode runs on the Windows Connection Node or Node Group.

#### Note

This setting is not available when creating or editing Windows Desktop – Direct templates.

### Credentials

Select the credentials to use to connect to the remote host:

- **Use session credentials:** Uses the credentials that you used to sign in Exceed TurboX.  
If the server administrator has specified a **Default domain** in the **General** site settings, the domain may be automatically added to your user name. For more information, see **Add domain to username** in [Configuring startup settings on the General tab](#).  
Select **Use email address for username** if the username used to sign on to the Exceed TurboX server is different from the username used to sign on to the remote server, but the password is the same.
- **Windows sign-in screen:** Supported only in multi-user mode, on Windows Server 2012 R2 and later. Prompts you to enter your credentials at the Windows sign-in prompt.
- **User specified:** Uses the **Username** and **Password** that you enter on this tab.

**Note**

Unlike the **Use session credentials** setting, the domain will never be prepended to the user name in this mode. If your environment requires you to specify a domain as part of your user name, you must include the domain in the **Username**.

## Configuring the Windows Desktop - RDP startup mode

---

This section describes how to configure a profile to launch a Windows Desktop - RDP session. The Windows Desktop - RDP startup mode launches a remote Windows Desktop session.

You can configure the following **Windows desktop - RDP** settings on the **Startup** tab in Advanced mode:

In Basic mode, you can only configure the **Host** and **Run on node** settings.

### Run on local node

Launches an RDP desktop session directly on the Connection Node, as opposed to starting an RDP session between the node and a remote Windows RDP host.

### Host

Enter the hostname or IP address of the RDP server to connect to, or leave blank to have the user enter or select the server name or address when they start a session. By default, the user is prompted for the server information only if you leave this field blank. You can change this behavior by changing the **Host** prompt setting on the **Prompts** tab of the **Advanced Settings** page. See [Configuring startup settings on the Prompts tab](#) for more information.

If **Run on node** is selected, the **Host** field is not available.

This setting is available in both Basic and Advanced configuration modes.

### Credentials


Select the credentials to use to connect to the remote host:

**Use session credentials** Use the credentials that you used to sign in to Exceed TurboX.

If the server administrator has specified a **Default domain** in the **General** site settings, the domain may be automatically added to your user name. For more information, see [Add domain to username in Configuring startup settings on the General tab](#).


Select **Use email address for username** if the username used to sign on to the Exceed TurboX server is different from the username used to sign on to the remote server, but the password is the same.

**Windows sign-in screen (no NLA support)** Prompt for Windows credentials when the connection is established.

 **Note**

Because Network Level Authentication (NLA) does not allow you to sign in from the Windows sign in screen, this authentication mode will fail in environments where NLA is enabled.

**User specified** Use the **Username** and **Password** that you enter in this tab.

 **Note**

Unlike the **Use session credentials** setting, the domain will never be prepended to the user name in this mode. If your environment requires you to specify a domain as part of your user name, enter the domain manually here.

The **Advanced settings** dialog box allows you to configure advanced settings, such as session use, security, how startup should handle connection and sign-in prompts, and remote desktop session settings.

**To configure the Advanced settings:**

1. On the profile **Startup** tab (Advanced mode), click **Advanced settings**.

The **Advanced settings** dialog box opens, showing the **General**, **Prompts**, and **ETX RDP** tabs.

The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. The **Advanced settings** option is available if **Access Xstart advanced settings** is enabled in your user permissions. See the *Exceed TurboX Server Manager Help* for more information.

2. Configure the settings in each tab, as needed:

- [Configuring startup settings on the General tab](#)
- [Configuring startup settings on the Prompts tab](#)
- [Configuring startup settings on the ETX RDP tab](#)

3. After configuring the settings, click **OK** in each tab to return to the **Startup** tab.

4. Click **Save** to save the profile.

# Configuring XDMCP Broadcast startup mode

---

This section describes how to configure a session startup using X Display Manager Control Protocol (XDMCP) Broadcast mode.

When you launch a session in XDMCP Broadcast mode, Exceed TurboX broadcasts to each available application host on the network to determine which are available to manage your X display.

You can broadcast/multicast requests to the hosts you list in the custom host list and/or those referenced by the Broadcast/Multicast Address. You specify the IP address to send broadcast/multicast packets to. By default, the Broadcast/Multicast Address is `255.255.255.255`. This address represents a broadcast to the entire network. Most TCP/IP transport implementations support this address.

To broadcast on your local network, the Broadcast/Multicast Address must consist of the network portion of your IP address with a host portion set to all 1s (in binary). For example, if your IP address is `192.9.200.6` (a Class C address), the network portion of the address is `192.9.200`. To use this as the local network broadcast address, type `192.9.200.255` or `255.255.255.255`. Multicast addressing limits the sending of packets to a specific group of application hosts. This avoids a broadcast to every host on the network. For example, IPv4 addresses between `224.0.0.0` and `239.255.255.255` are reserved for Class D addresses.

For more information about Broadcast/Multicast Address specifications, consult your TCP/IP network software documentation.

You can configure the following **XDMCP Broadcast** settings on the **Startup** tab in Advanced mode:

You cannot configure any **XDMCP Broadcast** settings in Basic mode.

## Select first display manager

Connect to the first display manager that responds to the broadcast. The sign-in information page prompts you to sign in to the host.

If you disable this setting, the **XDMCP Display Manager Chooser** window prompts you to select an available host to manage the display. After you make a selection, the sign-in information page prompts you to sign in. Once you sign in to the host, it starts the X applications specified in the XDM session file (script).

## Enable broadcast / multicast

Use the Broadcast/Multicast Address to determine the hosts to send packets to.

## Address

The Broadcast/Multicast Address: the IP address to send the broadcast packets to. By default, the broadcast address is `255.255.255.255`. This represents a broadcast to the entire network. Most TCP/IP transport implementations support this broadcast address. For more information, see the note at the beginning of this section.

## Keep alive

Enable this option only if your host supports TCP/IP keep-alive.

## Use custom host list

Broadcast requests only to the hosts you enter. Enter the name or IP address of each host that you want to send the broadcast to.

### Note

To specify multiple hosts, enter one hostname or IP per line with no separator punctuation, such as commas or semicolons. Lines beginning with `#` are ignored.

## Display class

Display groups or classes of XDM nodes. The **Display class** field is applicable only when XDM-AUTHENTICATION-1 or XDM-AUTHORIZATION-1 is enabled on the XDM host.

### Note

Do not modify this value unless requested by your system administrator.

## Use XDM authentication

Use XDM Authentication. Enter the display key for the authentication in **XDM Authentication key**,

## XDM authentication key

The display key to use in XDM authentication. The authentication key is applicable only when AUTHENTICATION-1/AUTHORIZATION-1 is enabled on the XDM host. If it is enabled, your system administrator requires your Display Class and XDM Authentication Key.

### Note

Do not modify this value unless requested by your system administrator.

For information on starting a session in this mode, see "Launching sessions in XDMCP Broadcast startup mode" in the *Exceed TurboX Dashboard and Client Help*.

# Configuring XDMCP Query startup mode

---

This section describes how to configure a session startup using X Display Manager Control Protocol (XDMCP) Query mode.

You can configure the following **XDMCP Query** settings on the **Startup** tab in Advanced mode:

In Basic mode, you can configure only the **Host** and **Run on node** values.

## Run on node

Launches an XDMCP session directly on the node, as opposed to starting an XDMCP session from the node to a remote X desktop host.

## XDMCP Query host

The name or IP address of the host to connect to.

This setting is also available in Basic mode (as **Host**).

If this box is blank, the user will be prompted to specify the host when launching the session.

When **Run on node** is selected, this field is unavailable and set to **Run on node**.

This box may include macros, which can provide startup customizations (for example, based on the current user).

For information on macros, see [List of XDMCP Query macros](#).

## Display class

Display groups or classes of XDM nodes. The **Display Class** box is applicable only when XDMAUTHENTICATION-1 or XDMAUTHORIZATION-1 is enabled on the XDM host. Do not modify this value unless requested by your system administrator.

## Use XDM authentication

Enables XDM authentication. Enter the display key for the authentication in **XDM Authentication key**,

## XDM authentication key

The display key used in XDM authentication. The authentication key is applicable only when AUTHENTICATION1/AUTHORIZATION-1 is enabled on the XDM host. If it is enabled, your system administrator requires your Display Class and XDM Authentication Key. Do not modify this value unless requested by your system administrator.

## List of XDMCP Query macros

---

The following is a list of macros you can use when configuring XDMCP Query startup mode, in the **XDMCP Query host** (in Advanced mode) or **Host** (in Basic mode) field. Using a macro dynamically selects the host based on the value of the macro when the session is launched. Letters in macros can be upper or lower case.

@u

User name.

Example: When you enter the following value in the **XDMCP Query host** box:

```
ws-@u.example.com
```

the @u macro is replaced with the Exceed TurboX login user name, resulting in the host string:

```
ws-username.example.com
```

If the user `esmith` launches this profile, an XDMCP query session will be launched on the host:

```
ws-esmith.example.com
```

For information on launching a session in this mode, see "Launching sessions in XDMCP Query startup mode" in the *Exceed TurboX Dashboard and Client Help*.

## About Advanced settings for select startup modes

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### About Advanced settings for select startup modes

---

This section describes the advanced settings you can configure in Custom startup for the startup modes Published Application, Windows Desktop - RDP, and Xstart applications.

**To access the advanced settings for Published Application and Windows desktop - RDP profiles:**

1. On the profile **Startup** tab (Advanced mode), click **Advanced settings**.

The **Advanced settings** dialog box opens, showing the **General**, **Prompts**, and **ETX RDP** tabs.

2. Configure the settings in each tab, as needed:

- [Configuring startup settings on the General tab](#)
- [Configuring startup settings on the Prompts tab](#)
- [Configuring startup settings on the ETX RDP tab](#)

### To access the advanced settings for Custom startup profiles:

1. On the profile **Startup** tab (Advanced mode), add or edit an Xstart application.  
The **New Xstart** or **Xstart** dialog box opens.
2. Click **Advanced settings**.  
The dialog box is updated to display the **General**, **Prompts**, and **ETX RDP** tabs.
3. Configure the settings in each tab, as needed:
  - [Configuring startup settings on the General tab](#)
  - [Configuring startup settings on the Prompts tab](#)
  - [Configuring startup settings on the ETX RDP tab](#)

## Configuring startup settings on the General tab

This section describes the startup settings available on the **General** tab of the **Advanced settings** and **Xstart** dialog boxes.

The **General** tab allows you to configure settings for session use, network timeouts, troubleshooting, Secure Shell security, and server-side rendering.

**New Xstart**

General Prompts ETX RDP

**X Window Host Application**

- Run command in shell
- Use login shell
- Run in user's shell
- Run command in background
- Run command using
- DISPLAY uses local socket

**Add domain to username**

- For Windows applications
- For X Window applications

**Server side rendering**

- Use direct server side rendering
- Options

**Secure Shell**

Options

- Use interactive shell

**Network timeouts**

Connect  second(s)

Close  second(s)

Response  second(s)

Prompt  second(s)

**Troubleshooting**

- Enable log
- Show host reply
- Log extended information

OK

### To access the General tab:

1. For **Published application** and **Windows Desktop - RDP** startup modes:
  - a. On the **Startup** tab of the profile or template, click **Advanced mode**.
  - b. On the Advanced mode **Startup** page, click **Advanced settings**.
  - c. In the **Advanced settings** dialog box, click the **General** tab.
2. For **Custom startup** modes:
  - a. On the **Startup** tab of the profile or template, select whether to add or edit an Xstart.
  - b. In the dialog box for the Xstart, click **Advanced settings**.
  - c. Click the **General** tab.

You can configure the following settings on the **General** tab:

If a described setting is unavailable or not present in the interface, then the setting does not apply to the startup mode and startup method you selected.

## X Window Host Application

These settings are enabled only with the **X Window Host Application** startup method.

### Run command in shell

Runs a specified command. To specify how to run a command, select one of the following options:

- **Use login shell**

Start the Xstart commands in a login shell.

- **Run in user's shell**

Use the shell defined in the user account.

- **Run command in background**

Append an ampersand (AMPERSAND) to the command. This causes the command to run as a background command from the XStart shell. If more than one XStart command is specified, XStart appends an ampersand to the last command only.

Running commands in the background can prevent applications from terminating when the XStart shell closes after the **Close** timeout is reached.

Some applications, such as `gnome-terminal` and `gnome-session`, will terminate if they are run in the foreground (that is, without an ampersand) and the parent process (`etxstart`) is closed. In cases such as these, adding an ampersand helps prevent `gnome-terminal` from exiting after the parent process closes.

**Note**

You set the **Close** timeout in the **Network timeouts** section of the **New Xstart Advanced settings** dialog box, **General** tab, as described later in this section.

Disable this option only if you selected **X Window Host Application** as the startup method on the profile **Startup** page. When this option is disabled, the specified command is not run in a shell. As a result, many shell variables are not available, the path is the default path, and you cannot run shell scripts. If you disable the option, you can still run the shell by specifying it as part of the command.

**Run command using**

Determines how the Xstart commands will start.

- **execve**: Start Xstart commands without loading the user's environment.
- **su**: Start Xstart commands in a login shell with all the environment variables.

**Note**

If **Use login shell** is selected under **Run command in shell**, the **su** option starts Xstart commands in a login shell. However, if **Use login shell** is not selected, the **su** option does not start Xstart commands in a login shell.

**DISPLAY uses local socket**

For the **X Window host application** startup method, determines whether the X application uses a local UNIX socket or a TCP connection to connect to the remote host. It does this by setting the value of the **DISPLAY** variable for the local host application:

- Select the check box to set the **DISPLAY** environment variable to just the display number. This causes the X application to use a local UNIX socket. Local sockets provide better performance for local applications and desktops that send a lot of X11 commands.
- Clear the check box to set the **DISPLAY** environment variable to the Connection Node hostname or IP address followed by the display number (`node_address:n`). This causes the X application to use TCP.

This option is enabled by default.

## Add domain to username

### For Windows applications

Adds the default domain, as defined in the general site settings, to the user name for Windows applications. For example, user name `JSMITH` would render as `MYDOMAIN\JSMITH`. See the description of **Use session credentials** in [Configuring Xstart settings](#)

### For X Window applications

Adds the default domain, as defined in the general site settings, to the user name for X Window applications. For example, user name `JSMITH` would render as `MYDOMAIN\JSMITH`.

### Server side rendering

Specifies startup configuration settings related to OpenGL applications. If Exceed TurboX Connection Server is installed on a UNIX machine, you can use server-side rendering features to support suspend/resume of OpenGL applications, and to improve performance of render-heavy OpenGL applications.

Because graphics are rendered on the proxy, the proxy machine must have an adequate 3D graphics card. However, because no rendering occurs on the client side, a 3D graphics card is not required on the client machine. If the 3D application uses overlays, the Client machine may require a 3D graphics card that supports this feature.

### Use direct server side rendering

All OpenGL rendering occurs on the Proxy host, which then sends a compressed image of each frame to Exceed TurboX Client. You must enable this option to support suspend/resume of OpenGL applications.

#### Note

To get the best performance with Direct Server Side Rendering, enable the MIT-SHM extension on the **Protocol** tab in Advanced mode. See [Configuring Protocol settings in Advanced mode](#).

### Options

Specify additional command line parameters required by third-party 3D rendering applications. Options in this box are automatically appended to the command sent to the host. For more information on commands that may apply to this feature, see the *User's Guide for VirtualGL 2.6.5* or later. If the Administrator selects GLP mode, you must use the `-d glp` option.

### Note

To use server side rendering features, the Administrator must configure graphics device permissions by running the following script:

```
ECS_INSTALL_DIR/bin/ssrconfig
```

See also [Command syntax for starting applications](#).

## Secure Shell

Specifies when session information is secured.

### Options

Additional command line parameters required by third-party Secure Shell clients. For example, if you want to use a specific cipher, you can type `-c ciphername`. Options in this box are automatically appended to the command sent to the host.

If a session profile is configured to use the Secure Shell startup method and the **Use for Authentication Only** option is disabled (the default), you must ensure that the command does not contain any display information.

### Use interactive shell

Runs the Secure Shell profile in interactive mode. By default, this setting is disabled, and the Secure Shell profile runs in SSH execution mode.

If the **Network timeouts > Close** setting is greater than 10, the **Use interactive shell** setting is automatically enabled.

## Network timeouts

Sets the timeouts for various processes that Exceed TurboX will run on your network.

### Connect

The number of seconds a connection process waits before timing out, from 30 to 600. The default setting of 60 is normally adequate; however, if network traffic is extremely high or if you have trouble making a connection, increase this number.

### Close

The number of seconds (from 0 to 999) the remote command socket remains open after the host has acknowledged receipt of the command. The default is 10 seconds. If the connection is established before the client has started, set this interval to a higher value.

If you want the socket to stay open indefinitely (for example, if you have enabled **Show Host Reply** and you want to track host messages during the session), set this value to `-1`. This indicates that the socket should remain open until the client is closed.

#### **Note**

If this setting is greater than 10, the **Use interactive shell** setting is automatically enabled.

### **Response**

The number of seconds (from 0 to 99) to wait for a password prompt before assuming that one is not required for this account and the sign-in has been successful. The default is 4 seconds. This timeout applies only to Secure Shell, RLOGIN, and Windows application startup methods.

### **Prompt**

The number of seconds (from 0 to 99) to wait after logging onto the application host before sending the command (gives the shell time to start up). The default is 2 seconds. This timeout applies only to Secure Shell, RLOGIN, and Windows application startup methods.

### **Troubleshooting**

If you experience difficulty starting an application with a session profile, you can enable and configure a remote command log to help you with troubleshooting the problem. Customer Support may also request a log if you require assistance.

#### **Enable log**

Exceed TurboX generates a log that records all remote command settings. All logging information is recorded in the `etxlog.txt` file for that session. Users can view this information by clicking **View Log** on the Exceed TurboX Client menu.

#### **Show host reply**

Lets you view host replies for remote commands. Host replies are displayed in a separate dialog box.

#### **Log extended information**

Select if you want the remote command log to contain more detailed trace information in addition to the remote command settings.

Logging extended information can pose a security risk as sign-in credentials are recorded in plain text. Enable this option only for troubleshooting purposes.

If you have enabled X11 tunneling for Secure Shell, ensure that the remote command you specify does not end with an ampersand (AMPERSAND).

For information on other troubleshooting-related tasks, see:

### Dashboard

For more information, see "Deleting data cached by Exceed TurboX" in the *Exceed TurboX Dashboard and Client Help*.

### Profiles

- [Configuring Troubleshooting settings in Advanced mode](#)
- [Configuring Performance settings in Advanced mode](#)

### Sessions

See "Generating and downloading a trace package" in the *Exceed TurboX Dashboard and Client Help*

## Configuring startup settings on the Prompts tab

---

This section describes the startup settings available on the **Prompts** tab of the **Advanced settings** and **Xstart** dialog boxes.

The **Prompts** tab allows you to configure settings for handling connection and sign-in prompts.

**xterm**

General **Prompts** ETX RDP

**Connection prompts**

Host

Username

Password

Command

**Custom host list**

**Login prompts**

Username   
 Password   
 Shell

Send command if shell prompt not detected

Optional	Prompt	Reply

OK


**To access the Prompts tab for Published application and Windows Desktop - RDP startup modes:**

1. On the **Startup** tab of the profile or template (Advanced mode), click **Advanced settings**.
2. Click the **Prompts** tab.

**To access the Prompts tab for Custom startup modes:**

1. On the **Startup** tab of the profile or template, add or edit an Xstart application.
2. In the dialog box for the Xstart, click **Advanced settings**.
3. Click the **Prompts** tab.

You can configure the following settings on the **Prompts** tab:

 **Note**

If a described setting is unavailable or not present, then the setting does not apply to the startup mode and startup method you selected.

## Connection prompts

Define what Exceed TurboX will do upon receiving a prompt, and how to provide your connection information and credentials to the application host, when required.

You can configure the following settings:

### Host

The name or IP address of the host to connect to. If the remote command service is not on a default port on the host, use the following syntax:

```
host:port
```

### Username

The user name used to log on to the host.

### assword

The password used to log on to the host.

### Command

The command to execute upon logging onto the specified host.

### Custom host list

(Optional) Define a list of host names that will be added to the host history list and included in the **Host** list in the **ETX Connection Parameters** dialog box during session launch. Enter each host name on a separate line.

The **Custom host list** box is enabled if **Host** is set to **Ask user** or **Ask user if not set**. If no host names are defined, the user is prompted to enter a host name.

You can select one of the following options in the **Host**, **Username**, **Password**, and **Command** fields:

**Hide:** Does not display or prompt for this information. Instead, it uses the information specified in the startup configuration.

**Show only:** Displays the information specified in the startup configuration, but does not let the user modify it.

**Ask user:** Displays the information specified in the startup configuration. The user may modify this information before connecting.

**Ask user if not set:** Prompts for the information only if it has not been previously specified. If all values have been specified, the **Information** dialog will not appear at all. For example, if you select **Ask user** for all prompts (**Host**, **Username**, **Password**, and **Command**), you will be prompted to supply the required information when you launch the session.

### Login prompts

These options inform Exceed TurboX of the prompts it can expect from the remote host when it attempts to connect. These options are available for RLOGIN, SecureShell, and X Window Host Application startup methods.

You can configure the following settings:

#### Username

User ID prompt.

#### Password

Password prompt.

#### Shell

The host shell prompt character(s). This lets Exceed TurboX know when the shell is ready for a command. To enter more than one shell prompt, use the **Optional** box.

If you cannot specify a matching rule for the remote Shell prompt (for example, if you are not sure which remote shell will be used, or if users customize their shell prompts), enable the **Send command if shell prompt not detected** option. This will cause Xstart to send the command to the remote shell after the **Prompt** timeout is reached, even if the shell prompt is not detected based on the specified matching rules.

The **Prompt** timeout is configured in the **Network timeouts** section of the **Xstart Advanced settings** dialog box **General** tab. See [Configuring startup settings on the General tab](#) for more information.

#### Optional

Other prompt information, if this option is available for the method you selected. Some hosts prompt for additional information, such as the terminal you are using. You can specify the expected prompt (for example, `TERM`) and the intended reply (for example, `(hp)`). You can use display and sign-in macros in the reply.

To add an optional prompt, click the **Add login prompt** button , enter the **Prompt** and **Reply**, then click the **Apply** button . You can add multiple optional prompts.

For example, Exceed TurboX receives the prompt and replies, waits for the shell prompt, then sends the command you specified in the **Command** box.

See [Using Xstart Macros](#) for more information.

## Configuring startup settings on the ETX RDP tab

This section describes the startup settings available on the **ETX RDP** tab of the **Advanced settings** and **Xstart** dialog boxes.

The **ETX RDP** tab allows you to configure remote desktop session settings for Published Applications (with Windows application), Windows Desktop - RDP, and Custom Startup (with Xstart using Windows application startup method) startup methods.

### Note

RDP redirection features are supported only when connecting from a Windows client and are not supported on Mac, Linux, or iPad.

**To access the ETX RDP tab for Published application (with a Windows application) and Windows Desktop - RDP startup modes:**

1. On the **Startup** tab of the profile or template (Advanced mode), click **Advanced settings**.
2. In the **Advanced settings** dialog box, click the **ETX RDP** tab.

**To access the ETX RDP tab for Custom startup mode:**

1. On the **Startup** tab of the profile or template, add or edit an Xstart application.
2. Select **Windows Application** as the startup method.
3. In the dialog box for the Xstart, click **Advanced settings**.
4. Click the **ETX RDP** tab.

You can configure the following settings on the **ETX RDP** tab:

#### Audio redirection

A lot of these options recur in the **Profile > Advanced > Devices** tab. If updating here, check to see if updates need to be made there as well.

#### Play

Redirect audio from the remote Windows host to speakers or headphones connected to the user's local computer. This option is enabled by default. See "Redirected device support" in the ETX Server Manager Administration Guide for details on which local and remote platforms are supported.

## Record

Redirect recorded audio (e.g. microphone) from the user's local computer to the remote host. This option is disabled by default. See "Redirected device support" In the ETX Server Manager Administration Guide for details on which local and remote platforms are supported.

## Do not play

Do not redirect audio from the remote session.

## Microphone redirection

### Record from this computer

Allows users to use the microphone connected to the user's local computer inside a remote Windows session.

### Do not record

Disables the use of a local microphone inside a remote Windows session. This is the default.

## Other redirection

### Drives

To share all available drives with the remote computer, select **Drives** and leave the text box blank.

To share one drive only, select **Drives** and type the drive in the text box. For example, to share drive c, type `c`.

To share multiple drives, select **Drives** and type the drive in the text box, separated by commas. For example, to share drives c and d, type `c, d`.

Before launching the session, make sure that the specified drives are available in your system.

### USB drives that are plugged in later

Allows users to access removable drives such as USB sticks on the remote computer. All USB drives that are plugged in after the Exceed TurboX session starts are shared to the remote computer. While the session is running, any drive that is added or removed is reflected on the remote computer.

### Home directory

Shares the Windows home directory (the entire user directory under the user account. For example, `C:\Users\user1`) to the remote session.

### Printers

Shares local printers with a remote Windows session. The printers appear in the remote session as redirected printers. When this option is enabled, *all local printers* are redirected to the remote Windows session.

To redirect a *specific local printer*, clear the **Printers** check box and specify the printer in the **Options** text box. For more information, see [Configuring redirection for a specific printer](#).

## User experience settings

### Font smoothing

Enables True Type fonts. This ensures optimized display of text in a remote session. By default, this option is selected.

### Desktop background

Specifies whether the desktop wallpaper is shown when running a remote session. By default, the option is disabled to ensure best performance and the background is black.

### Enhanced visual experience

Enables True Color support and tear-free screen updates. By default, this option is selected.

## Other settings

### Working directory

The working directory for Windows applications.

### Options

Additional RDP command parameters for configuring your profile.

*Use case 1:* Use the `/w` and `/h` parameters to customize the desktop width and height.

For example, `/w:1200 /h:900`.

*Use case 2* Use the `/multimon` parameter to configure how to treat multiple monitors in single window mode for RDP connections. By default, Exceed TurboX supports the XINERAMA extension for RDP connections, for Windows Desktop - RDP and Published application (with a Windows application) startup modes.

For example, to configure your profile to treat multiple monitors as a single one, use `/multimon:0`. The information is passed to the RDP server, and individual monitors are treated as one window.

You can also use this field to redirect a single printer. See [Configuring redirection for a specific printer](#) for more information.

## Configuring redirection for a specific printer

To configure a profile where only one local printer is redirected, clear the **Printers** check box in the **ETX RDP** tab and add the following parameter in the **Options** text box:

```
/printer:printername,(drivername)
```

where `printername` and `drivername` are the name of the local printer and driver to use.

### To locate your local printer:

1. Open the **Devices and Printers** configuration on your local machine's Control Panel.
2. Right-click the printer you want to redirect to the remote session and select **Printer Properties**.
3. Locate the printer name on the **General** tab and the driver name on the **Advanced** tab.

Exceed TurboX currently supports only printer drivers that use the Windows native `winprint` print processors. If you try to use a printer driver other than the supported one, the printer's redirection will fail.

In most cases, you can switch to other Windows-provided printer drivers, which are usually available for this specific printer.

## About the Client Launcher

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### About the Client Launcher

The Native Client Launcher can be used to launch or resume Exceed TurboX sessions, and to create shortcuts that can be used to start sessions directly from the desktop.

#### Native Client Launcher for Windows

On Windows, the default installation paths for the launcher are as follows:

- Per-User Installation: `%appdata%\OpenText\`
- Per-Machine Installation: `%programfiles(x86)%\OpenText\`

Scripts and shortcuts on Windows platforms should only reference executables in the above locations. Updated launcher executables in the `%homepath%\etxc-webcache\` folder are cached files that are automatically downloaded and invoked by the launcher as part of its self-update mechanism.

The Native Client Launcher for Windows includes the following binary files:

#### `etxlauncher.exe`

The executable launcher.

Invoke the executable using Windows shortcuts. If invoked with missing parameters, the executable launcher displays usage instructions in a GUI window, and can also prompt the user to enter a username and password.

### `etxlauncher.com`

The command line launcher.

Invoke the command line launcher using Windows scripts ( `.bat`, `.com`, or `.ps1` ). The `.com` version provides usage instructions on the command line.

### `etxlauncher64.exe`

The 64-bit version of the Windows executable launcher. Only installed on 64-bit Windows platforms.

### `etxlauncher64.com`

The 64-bit version of the Windows command line launcher. Only installed on 64-bit Windows platforms.

If you selected **Allow third party libraries to be loaded in ETX Client Launcher** during installation, alternate versions of the binary files ( `etxlauncher1.exe`, `etxlauncher1.com`, `etxlauncher164.exe`, and `etxlauncher164.com` ) are used instead. See [Downloading and installing the Client Launcher](#) for more information.

See [Client Launcher command parameters](#) for information about the parameters that can be used with the Client Launcher commands.

## Native Client Launcher for Mac

The Exceed TurboX Client Launcher for Mac contains an embedded console version that provides all functionality of Linux and Windows console applications.

### To locate the `etxlauncher` for Mac:

1. In **Finder**, right-click to locate `Exceed TurboX Client Launcher 12.app`.
2. Select **Show Contents Inside the Contents**.
3. Locate the **Applications** folder, which contains the `etxlauncher` executable.

You can launch this executable from **Terminal**, using the same arguments as the Windows and Linux `etxlauncher`.

See [Client Launcher command parameters](#) for information about the parameters that can be used with the Client Launcher commands.

## Native Client Launcher for Linux

On Linux platforms, the launcher is provided as a `.tar.gz` package and contains a single 64-bit binary, `etxlauncher`. You can display usage instructions for `etxlauncher` on the command line, and it includes an interactive shell prompt when invoked with missing parameters.

See [Client Launcher command parameters](#) for information about the parameters that can be used with the Client Launcher commands.

## Using the Client Launcher to launch profiles and resume sessions

This section describes how to launch or resume Exceed TurboX sessions using the Native Client Launcher, as well as how to create a shortcut for the Launcher. This is an alternative way to launch sessions using script files or shortcuts without accessing the Dashboard. To use this feature, the Native Client Launcher must be installed on the client system.

See [Client Launcher command parameters](#) for information about the parameters that can be used with the Client Launcher commands.

### Using `etxlauncher`

#### To view usage instructions:

- Invoke `etxlauncher` without parameters.

When you use `etxlauncher` with any `-action` parameter, including using it to launch a session, the user account that provides the credentials for the action must have the REST API enabled. If it does not, the action will fail.

#### To launch a session:

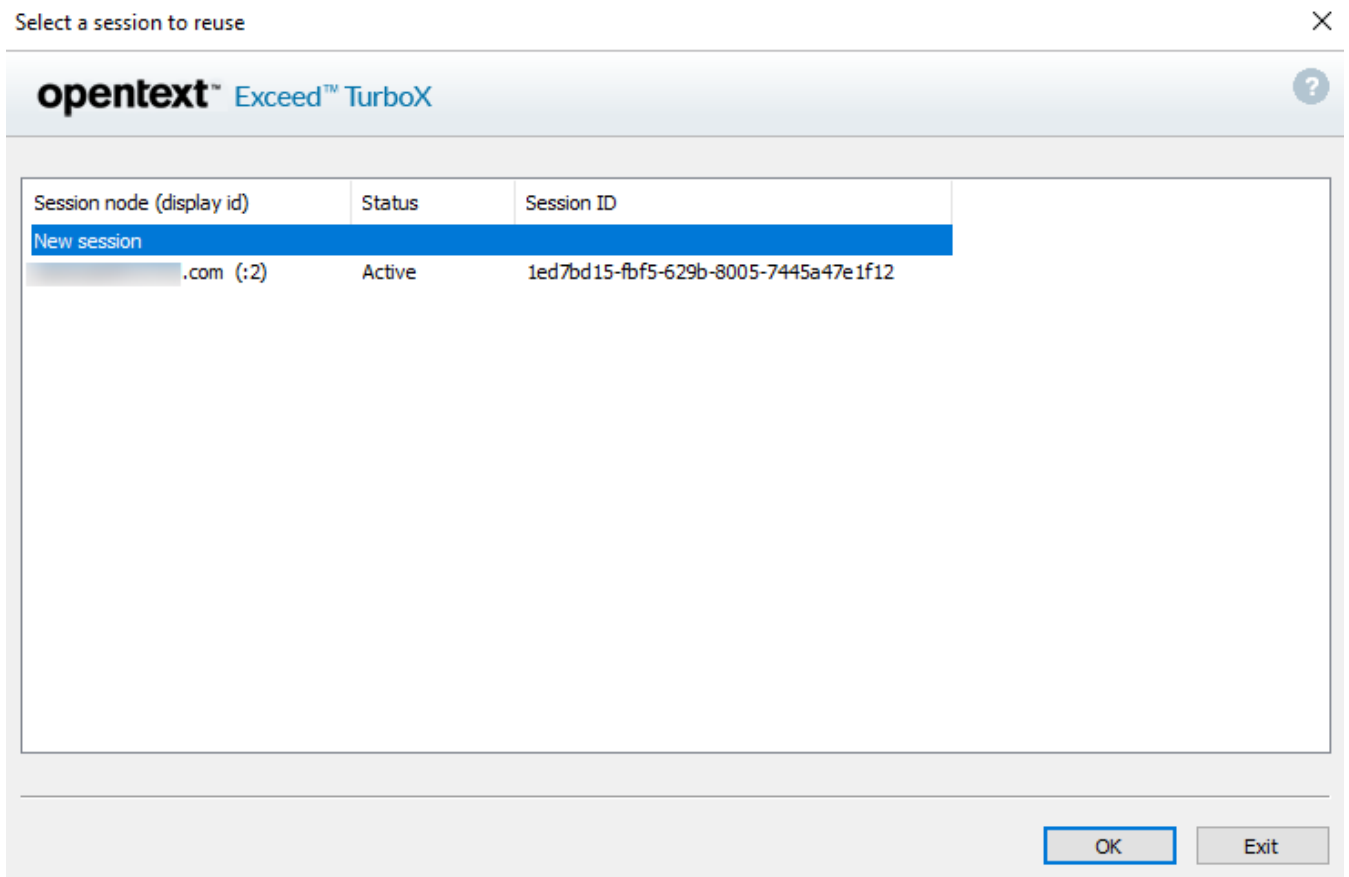
1. To launch the profile on a specific server, enter the following command in the `etxlauncher` command window:

```
etxlauncher -action launch AUTH URLPROFILEID [COMMANDMACRO] [LID]
```

If an `LID` is not provided, `etxlauncher` displays a list of nodes or sessions.

Parameters in square brackets are optional.

2. If the profile you use has an active or suspended session, and if **Reuse session** is set to **Ask user**, the **Select a session to reuse** dialog box opens. Click the session you want to use, then click **OK**.



See [Configuring Session settings in Advanced mode](#) for more information about configuring session reuse settings.

#### To join a session:

- To join a session that has been shared with you on a specific server, enter the following command in the `etxlauncher` command window:

```
etxlauncher -action join AUTH URL[SESSIONID]
```

If a `sessionID` is not provided, `etxlauncher` displays a list of shared sessions.

Parameters in square brackets are optional.

#### To resume a session:

- Enter the following command in the `etxlauncher` command window:

```
etxlauncher -action resume AUTH URL[SESSIONID]
```

If a `sessionID` is not provided, `etxlauncher` displays a list of suspended sessions.

Parameters in square brackets are optional.

**To check the installed launcher version:**

- Enter the following command in the `etxlauncher` command window:

```
etxlauncher -version
```

**To check the cached launcher version:**

- Enter the following command in the `etxlauncher` command window:

```
etxlauncher -action cachedversion [URL]
```

Parameters in square brackets are optional.

**To create a Client Launcher desktop shortcut (Windows and Linux platforms only):**

- Enter the following command in the `etxlauncher` command window:

```
etxlauncher -action createshortcut [<AUTH>][<URL>][<PROFILEID>][<DEST>][<SARGS>]
```

Parameters in square brackets are optional.

## Client Launcher command parameters

---

This section describes the parameters that you can use with the Client Launcher commands.

**parameter; q**

The following **AUTH** parameters are available in the launcher commands:

**-k**

Authenticate by passing the Kerberos ticket which was issued to the user by the operating system. This parameter is supported on Windows and Linux.

Launcher versions prior to 12.0.1 do not support the `-k` parameter. Scripts that use the `-k` parameter with the old Launcher will not work with old versions of the Launcher.

**-keyauth key**

Authenticate with an API key. You can list multiple keys separated by a comma.

If **Ask user to select node (node group)** is enabled in the profile, one multiple-use token is required, or three single-use tokens are required to launch the session. If using three single-use tokens, the first token is used to perform the initial request, the second token is used to generate the list of available nodes, and the third token is used to launch the session using the selected node.

See [Working with API keys](#) for information about creating API keys.

See [Working with API keys](#) for information about creating API keys.

**-username <username> ; -password <password>**

Authenticate with a username and password.

If authentication parameters ( `-keyauth -k` or `-username` and `-password` ) are NOT specified:

- `etxlauncher` on Linux will prompt for a username and password using interactive shell.
- `etxlauncher.exe` on Windows will prompt for a username and password using GUI window.
- `etxlauncher.com` on Windows will prompt for a username and password using interactive shell.

### URL parameter

The following URL parameters are available in the launcher commands:

**-url <serverurl> [-launcherproxyurl launcherproxyurl] [-proxyurl proxyurl]**

The Exceed TurboX Server to use for the connection or details about the HTTPS proxy Server connection, the HTTP(S) proxy for the launcher to use to download launcher updates and Client runtimes, and the HTTP(S) proxy to be used between the client and the Connection Node for remote session traffic.

`serverurl`

- Exceed TurboX Server URL, including http(s) schema, hostname, and port.

Example: `https://my.etx.server:8443`

`launcherproxyurl`

- HTTP(S) proxy Server URL for communication between the Client Launcher and the Exceed TurboX Server. When a session is launched, the Launcher communicates with the Server to download Client Launcher updates and the Client Runtime, and may also pass settings to the Server. These connections are established during the session launch, before the session connection to the connection node.

This parameter includes the proxy schema and proxy authentication, in the following format:

`[schema://][proxy_username:proxy_password@]proxyhost:proxyport`

Example: `https://proxyuser:password123@124.124.124.124:443`

- Alternatively, to force the use of system proxy settings and ignore the launcher HTTP(S) proxy configuration sent by Exceed TurboX Server, specify `system://`, as follows:

```
-launcherproxyurl system://
```

- Use the `etxlauncher_proxy` environment variable to override server proxy settings and/or to store proxy credentials in a separate environment variable.

```
{proxyurl}
```

- Required for the `-action launch` and `-action resume` commands.

Optional for the `-action cachedversion` command. If not specified, the launcher version on the user's machine is displayed. If specified, the launcher version on the specified server is displayed. If the user has a lower version launcher on their machine and they launch a session on the specified server, the launcher will automatically update itself to the server version.

- Uses an HTTP or HTTPS proxy server for session traffic between the end-user machine and the Connection Node. This parameter includes the proxy schema and proxy authentication, in the following format:

```
[schema://][proxy_username:proxy_password@]proxyhost:proxyport
```

Example: `https://proxyuser:password123@124.124.124.124:443`

- Alternatively, to force the use of system proxy settings and ignore the launcher HTTP(S) proxy configuration sent by Exceed TurboX Server, specify `system://`, as follows:

```
-proxyurl system://
```

- Use the `etxlauncher_proxy` environment variable to override server proxy settings and/or to store proxy credentials in a separate environment variable.

#### Note

When configuring your Proxy Auto-Config (PAC), include proxy entries for your Connection Nodes if they are deployed behind a proxy. When a session is established, the Client system needs to return the correct proxy information for the session node it is connecting to.

#### Tip

Parameters indicated in square brackets are optional.

The proxy address can be any client-resolvable IP address or hostname.

If the proxy does not require authentication, omit `[proxy_username:proxy_password@]`

## PROFILEID parameter

The following `PROFILEID` parameter is available in the launcher commands:

```
-profileid profile_id
```

The ID of the profile to launch.

### SESSIONID parameter

The following `SESSIONID` parameter is available in the launcher commands:

```
-sessionid session_id
```

The ID of the session to join or resume.

If you use `-action join` without a `sessionid`, the Launcher either dumps the list of sessions that have been shared with the user to the shell, in the format `{id, userId, profileId, display, node,...}` (command line app), or displays a dialog box listing the sessions that the user can join (web UI).

If the `-action resume` command is used and a `sessionid` is not provided, the Launcher either dumps the list of sessions that have been suspended by the user to the shell, in the format `{id, userId, profileId, display, node,...}` (command line app), or displays a dialog box listing the sessions that the user can resume (web UI).

#### Note

For the command line app, you must use the `id` value as the `-sessionid` argument.

### COMMANDMACRO parameter

The following `COMMANDMACRO` parameter is available in the launcher commands:

```
-commandmacro macro
```

An optional parameter for the `-action launch` command, to pass parameters using Xstart macros. For more information, see [Passing URL parameters using Xstart macros](#).

`macro` can include any letters, numerals, or special characters except for the `[space]` character. If you want to include the `[space]` character, you must surround the macro with double quotes ("`macro`").

Examples:

```
-commandmacro key1=value1,key2=value2
-commandmacro key1=abcd-!@#$$%,key2=efgh) (*#
-commandmacro "key1=a b c d"
```

The `LID` parameter you use depends on the profile being launched:

- **ID** : Required when **Ask user to select node** is enabled in the profile.
- **NODEGROUPID** : Required when **Ask user to select node group** is enabled in the profile.
- **REUSEID** : Required when the session reuse properties require the user to specify the session to reuse.

See [Configuring Session settings in Advanced mode](#) for information about configuring session settings.

### LID parameter

The following parameters are available in the launcher commands:

#### **NODEID -selectednodeid <ETX\_id>**

**ETX\_id**: The ID of the node to launch a new session. This can be used with any profile to specify the target node.

The node ID is only used when **Ask user to select node (node group)** is selected in the launching profile. If this option is unavailable, the session ignores the `selectednodeid` setting. Instead, the session chooses a session node based on the **Node targeting** and **Reuse session** settings in the **Session** tab and the server load balancing rules. For more information about the **Session** tab, see [Configuring Session settings in Advanced mode](#).

#### **NODEGROUPID -selectednodegroupid ETX\_id**

**ETX\_id**: The ID of the node group to launch a new session. This can be used with any profile to specify the target node group.

The node group ID is only used when **Ask user to select node (node group)** selected in the launching profile. If this option is unavailable, the session ignores the `selectednodegroupid` setting. Instead, the session chooses a node group based on the **Node targeting** and **Reuse session** settings, and the server load balancing rules. See [Configuring Session settings in Advanced mode](#) for more information.

#### **REUSEID -resueid ETX\_id**

**ETX\_id**: The ID of the session to reuse. to force a new session, use `new` as the `ETX_id`.

### parameter

The following parameters are available in the launcher commands:

#### **SARGS -createshortcut SARGS**

**SARGS** :

## Limitations of `.desktop` files on Linux platforms

When you use a file manager to navigate to the location of the `.desktop` file and double-click, it opens the associated viewer application. However, in some GNOME platforms the desktop icons functionality has been removed. This is a GNOME limitation on some Linux platforms.

You can still use the `.desktop` files on some distributions. The version level may affect the tool used in a specific step even if you are in the same distribution. Therefore, consider the following suggestions when using the `.desktop` files:

You must create the `ETX.desktop` file using the Exceed TurboX Client Launcher before running the command.

1. Open terminal and run the following `gio launch` command if `gio` version supports the `launch` command:

```
$ gio launch ~/Desktop/etx.desktop
```

2. Open terminal and run the following `gtk-launch` command after copying to permitted location:

```
$ cp ~/Desktop/etx.desktop ~/.local/share/applications/
$ gtk-launch etx.desktop
```

3. Open terminal and run the following `gio` or `gtk` command:

- Using `gio`:

```
$ gio set etx.desktop metadata::trusted VALUE
```

where `VALUE` is either `true` or `yes` based on the version of `gio` installed.

- Using `gvfs-set-attribute`:

```
$ gvfs-set-attribute -t string etx.desktop metadata::trusted VALUE
```

where `VALUE` is either `true` or `yes` based on the version of `gvfs-set-attribute` installed.

- Run the following commands to modify permissions:

```
$ chmod +x etx.desktop
$ touch etx.desktop
```

## Limitations of .desktop files on Linux platforms

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```
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$ cp ~/Desktop/etx.desktop ~/.local/share/applications/
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- Run the following commands to modify permissions:

```
$ chmod +x etx.desktop
```

```
$ touch etx.desktop
```

## Global Options for Native Client Launcher

This section describes global options for the Native Exceed TurboX Client Launcher. By adding values to a global options file or registry key, the Launcher behavior can be changed for all users of a machine.

On the Windows, the launcher behavior is managed by the register entry.

### To make an entry in the registry:

1. Launch Registry Editor on your system.
2. Go to `HKEY_LOCAL_MACHINE\Software\WOW6432Node`.
3. Right-click the `WOW6432Node` folder, point to **New**, and then click **Key** to create the `OpenText` subkey if it does not already exist.
4. Right-click the `OpenText` folder, point to **New**, and then click **Key** to create the `ETX Launcher` subkey.
5. Right-click anywhere in the editor, point to **New**, and then click **DWORD (32-bit) Value** to create **REG\_DWORD** key.
6. Set the **REG\_DWORD** key as **LauncherShowUsage** with the following values:

Key	Value	Description
ETXLauncherShowUsage	1	Indicates that the Exceed TurboX Client Launcher usage are displayed to the user. By default, this option is set to 1.
ETXLauncherShowUsage	0	Indicates that the Exceed TurboX Client Launcher usage are not displayed to the user.

On the Mac OS, the launcher behavior is managed by the `global.options` file. To run the file, do the following:

### To run the `global.options` file:

1. Open Terminal and run the following command in the `etxlauncher` command window to ensure the global options path exists:

```
sudo mkdir -p /private/etc/opt/opentext/etxlauncher
```

2. Run the following command to make edits in the `global.options` file:

```
sudo vi /etc/opt/opentext/etxlauncher/global.options
```

3. Set the **ETXLauncherShowUsage** launcher policy as **0** or **1** where:

- **1**: Indicates that the Exceed TurboX Client Launcher usage are displayed to the user. By default, this option is set to 1.
- **0**: Indicates that the Exceed TurboX Client Launcher usage are not displayed to the user.

On the Linux, the launcher behavior is managed by the `global.options` file.

**To run the `global.options` file:**

1. Open Terminal and run the following command in the `etxlauncher` command window to ensure the global options path exists:

```
sudo mkdir -p /etc/opt/opentext/etxlauncher
```

2. Run the following command to make edits in the `global.options` file:

```
sudo vi /etc/opt/opentext/etxlauncher/global.options
```

3. Set the **ETXLauncherShowUsage** launcher policy as **0** or **1** where:

- **1**: Indicates that the Exceed TurboX Client Launcher usage are displayed to the user. By default, this option is set to 1.
- **0**: Indicates that the Exceed TurboX Client Launcher usage are not displayed to the user.

# 7. Getting started with Exceed TurboX REST APIs

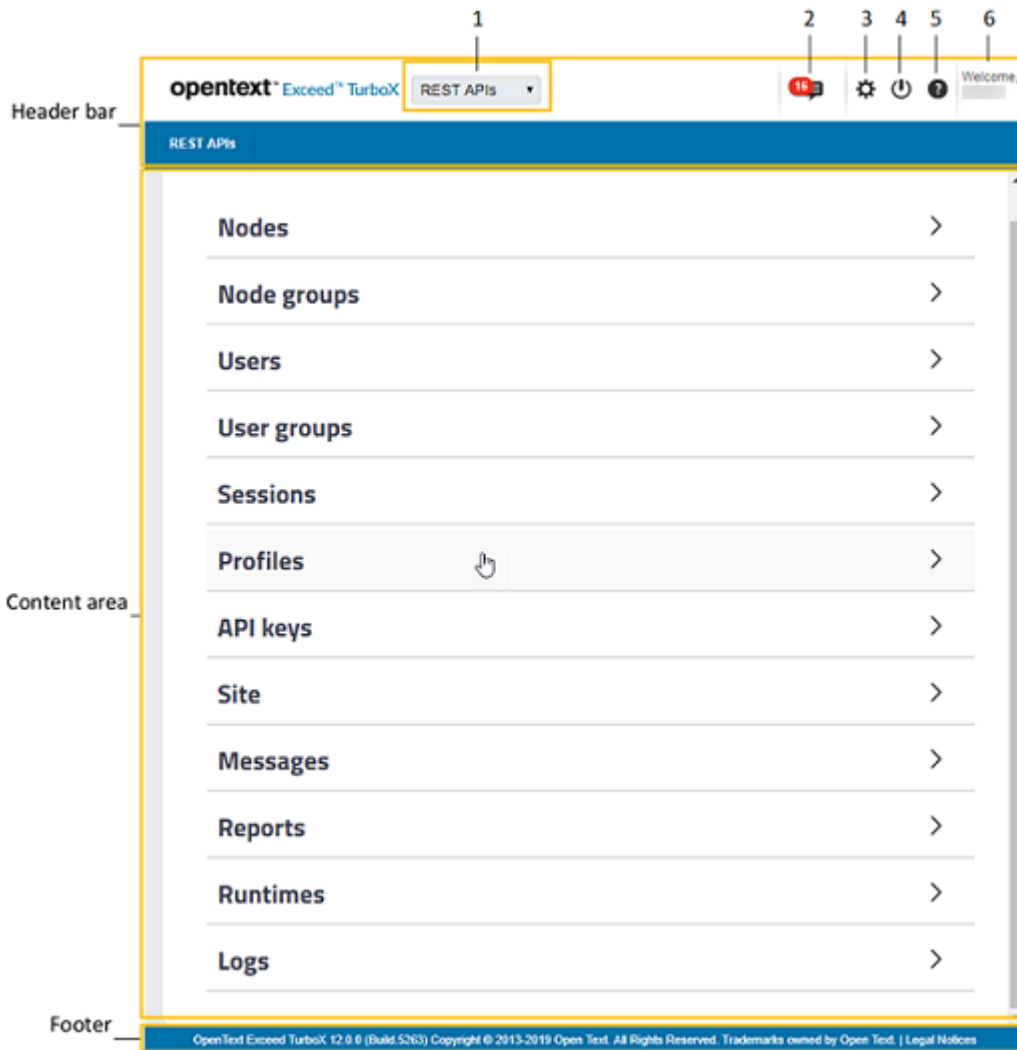
---

This section provides an overview of the Exceed TurboX **REST APIs** web interface and the Server REST APIs available to users. For detailed information about how to use these REST APIs, see the *Exceed TurboX REST API User Guide*.

Exceed TurboX REST APIs provide many benefits to users and server administrators, including:

- Performing server actions from a shell script or a custom application without needing to sign in to the Exceed TurboX user interface.
- Developing front-end applications that rely on Exceed TurboX functionality.
- Automating repetitive administrative tasks.

The Exceed TurboX **REST APIs** interface allows users to navigate through and interact with the Server REST APIs in the web browser, to better understand how the APIs work. This interface is available to all Administrators, Session Managers, and Tech Support users. It is available to users with the *User* role only if the **Access REST APIs** setting is enabled.





The REST APIs interface contains the following elements:

## Header bar


(1) Web application selector: Allows you to switch between the **Dashboard**, **Server Manager**, and **REST APIs**.

Some of these options may not be available on the drop-down menu, depending on your user role and permissions.

(2) **Read messages** : Opens the **Messages** dialog box and review messages sent by the Exceed TurboX Server.

(3) **User settings** : Opens the **User settings** dialog box and configure your Exceed TurboX user settings.

(4) **Sign out** : Signs out of the Exceed TurboX web interface.

(5) **Help** : Opens the *Exceed TurboX Dashboard Help*.

(6) **User name** area: Displays the name of the user logged in to the system.

## Content area

Lists the **REST API** functions available to the signed-in user.

Depending on your user role, you may not see all REST APIs. For a complete list of REST API permissions by user role, see *Appendix B: REST API Permissions* in the *Exceed TurboX REST API User Guide*.

## Footer

Displays the Exceed TurboX version and build number, update version (if applicable), product copyright and trademark information, and a link to additional legal information.

# To access the Exceed TurboX REST APIs interface:

---

1. Sign in to Exceed TurboX Dashboard or Server Manager.
2. On the header bar, select **REST APIs** from the web application selector.

The **REST APIs** interface is displayed.

The **REST APIs** interface lists the REST API functions available to you.

REST APIs are grouped into sections based on the object that the API accesses. To list the operations for a section, click the section name. Click the section name of an expanded section to collapse it.

Each section includes the following standard REST operations:

### GET

View one or more objects.

### POST

Create an object or perform an action.

### PUT

Modify an object.

### DELETE

Delete an object.

Each API includes built-in REST API documentation and the following UI elements:

- REST API name and description.

- **Parameters:** Input parameters, used for passing information to the REST API.
- **Responses:** Information about the object structure and example values to be passed to the REST API.
- **Try it out**, **Execute**, and **Cancel** buttons to interact with the API from the web browser and test it prior to writing a script:

1. Click **Try it out**.

2. Enter the input parameters, as required. Mandatory parameters are marked with a red asterisk.

3. Click **Execute**.

The following information is displayed in the **Responses** area:

- The **Curl** command that you can execute from command line to call this REST API.
  - The **Request URL** syntax of the REST API call.
  - The **Response body**, which includes information about the result of the REST API call. You can use the **Download** button to download the **Response body** in JSON format.
4. To test the API with a different set of parameters, click **Clear** and return to step 2.
  5. When you are done testing the API, click **Cancel**.

Exceed TurboX REST APIs can be included in scripts that you can run from a command shell, custom applications, or other websites. For detailed information and usage examples, see the *Exceed TurboX REST API User Guide*.

When calling REST APIs using a script, you must provide your user credentials to the Exceed TurboX Server in one of the following ways:

- By storing credentials directly in the script file. This method is not recommended if the script file is stored in a public location.
- By storing an API key in the script file. Note that other users can still steal API keys to perform actions on behalf of the user who generated the key, but this risk can be mitigated further by setting a key expiry or usage limit.

You can create API keys on the **API keys** tab of the **User settings** dialog box. For details, see [Working with API keys](#).

You can also create an API key by calling the `/apikey/` APIs with your plain text credentials. The call will generate an API key, which can be used with subsequent calls to the API.

Users with the *User* role can create API keys only when both the **Allow users to create API keys** and the **Access REST APIs** settings are enabled.

## 8. Glossary

---

### application host

---

The remote computer that hosts the applications with which you want to work. An application host can be any supported platform type, such as Windows or Linux.

### application

---

The core purpose of Exceed TurboX is to allow users to launch applications and desktops on a remote computer. When you launch a profile from Exceed TurboX Dashboard, a session starts up. Depending on the profile configuration, one or more applications or desktop sessions may launch. These applications are running on a remote host but are designed to appear as if they are running on the local client machine. X Window applications can also be referred to as X clients.

### Client Menu

---

The Client Menu is available after you use Exceed TurboX Dashboard to launch a session. The Client Menu allows you to perform tasks within the sessions you start. The commands offered on the menu differ depending on the operating system of the client workstation. In most cases, you can use the menu to perform such tasks as:

- sharing and suspending the session
- terminating the session
- generating a trace

## Connection Node

---

The processing hub of Exceed TurboX. The connection node acts as an intermediary between the client and the remote host and is responsible for managing the session, compressing the remote display, and handling input and other requests from the Exceed TurboX Client once a session has been established. Also called a proxy host.

## Dashboard

---

This web-based interface is your access point to Exceed TurboX and your gateway to the remote applications you need to work with. You can use it to configure, launch, and manage sessions.

## ETX RDP protocol

---

The protocol or language used to transfer information between the proxy and the Windows application or desktop host to which you connect. Windows applications communicate with the proxy using the ETX RDP protocol. In turn, the proxy communicates with your workstation using the Thin X Protocol (TXP).

## etxlog.txt

---

Log file generated by Exceed TurboX for each session, which records detailed information about the session for troubleshooting purposes.

## etxscan utility

---

The Exceed TurboX application scanner (etxscan) scans the connection node and returns a list of installed applications to Exceed TurboX Server. These applications can, in turn, be published. The etxscan utility provides information about installed applications from the XDG standard menu system and Windows Start menu, including the application path, parameters, and working directory. This allows Exceed TurboX Server to launch those applications remotely. On Windows, etxscan also supports a --syscheck argument to print GPU hardware support.

## Exceed TurboX Client

---

The Exceed TurboX Client consists of two parts: the Client Launcher and the Client Runtime. The launcher downloads and executes the correct client runtime. The runtime provides all client-side functionality, such as launching and managing sessions, displaying the client-side menus, transferring files, and communicating with the remote host.

## Multiple Window mode

---

Application and desktop profiles can be configured to run in either Multiple Window mode or Single Window mode. In Multiple Window mode, each application runs inside its own application window, as if the application was running natively on the user's machine.

## profile

---

Exceed TurboX profiles contain settings that define the look and behavior of Exceed TurboX sessions. You launch sessions from profiles listed on Exceed TurboX Dashboard. Administrators can create Group profiles to accommodate different session requirements. Users cannot edit Group profiles, but they can customize or copy and edit them for their own use. proxy host See Connection Node.

## proxy

---

Each time a connection node receives a request to start a session, it starts a new proxy with a unique display ID. The proxy is responsible for communicating between your workstation and the remote application or desktop host. When you terminate your session, the server closes the associated proxy.

## published application

---

Applications installed on a Windows or X Window host can be published in Exceed TurboX by means of an application scanner ( etxscan) that is installed on the Exceed TurboX Connection Node. Exceed TurboX administrators can publish scanned applications to make them available to users.

## resizing policy

---

Defines how the root window is resized.

*Fixed*A user or the system defines the size of the root window. If you click the Maximize button in the bar, the main window is restored to its original position and size. By default, the session uses Fixed resizing policy and is displayed on a primary monitor.

*Scaled*When you resize the window, the size of the root window does not change, but the contents of the session scale up/down accordingly. For example, if multiple sessions are running, you may view them as thumbnails. Scaling does not affect the behavior of UNIX applications, because the root window size remains the same.

*Dynamic*Allows you to resize the Exceed TurboX window dynamically. The application (such as the KDE environment) will reflect this and fit in the new window. For example, you may switch from Single to Multiple Window Mode or vice versa. The applications will renegotiate the new root window size and be redrawn appropriately.

## REST

---

Representational State Transfer (REST) is a software architectural style that defines a set of constraints to use to create web services. Web services that conform to the REST architectural style are called RESTful web services; they provide interoperability between computer systems on the Internet. RESTful web services allow the requesting systems to access and manipulate textual representations of web resources by using a uniform and predefined set of stateless operations. In a RESTful web service, the requests made to a resources URI generate a response with a payload formatted in HTML, XML, JSON, or some other format. The response can confirm that some change has been made to the stored resource, and can provide hypertext links to other related resources or collections of resources. When HTTP is used, the following operations are available: GET, POST, PUT, DELETE, and other predefined CRUD HTTP methods.

## REXEC protocol

---

The REXEC (Remote EXECute) protocol launches applications on a remote host. It requires a user ID, password, host address, and command to execute on the remote host. You can select this startup method in Xstart.

## RLOGIN protocol

---

The RLOGIN protocol establishes a remote connection to run X applications. It allows an authorized user to sign in to hosts on a network and interact as if the user were physically at the host computer. You can select this startup method in Xstart.

## root window

---

The parent (container) window which opens when launching a Single Window Mode profile. This root window contains either a remote desktop or multiple

remote application windows. It keeps all session windows in a single container, so that users can manage all windows as a single group and manage multiple sessions more easily. By contrast, In Multiple Window mode, application windows are opened directly on the users desktop as native windows, not within a root window.

## RSH protocol

---

RSH is a protocol for executing commands on a remote host, passing it input and receiving its output. RSH communicates with a daemon on the remote host. A benefit of RSH is its ability to reference a file called `.rhosts`, which resides on the host and maintains a list of terminals allowed to sign-in without a password. You can select this startup method in Xstart.

## Secure Shell protocol

---

Secure Shell (SSH) is a TCP-based protocol that provides authentication, encryption, and data integrity security features. In Exceed TurboX, SSH provides a secure channel between the connection node and application host, for sending and receiving user inputs and display protocol. You can select this startup method in Xstart.

## Server Manager

---

This is the web-based administration interface for Exceed TurboX. session A connection to another computer, established by Exceed TurboX, that moves information (including keyboard input and screens, for example) between them. You configure and launch these connections with Exceed TurboX to work with one or more applications installed on the computer that you connect to. You can use Exceed TurboX Dashboard to start, manage, and end sessions.

## Single Window mode

---

Application and desktop profiles can be configured to run in either Multiple Window mode or Single Window mode. In Single Window mode, each application runs inside the root window, which is a single window that contains all of the remote applications. Applications running inside the root window may overlap each other and cannot be moved outside of the root window.

## taskbar icon

---

This icon appears on your desktop taskbar when you start or join a session. You may have multiple icons in the taskbar, each representing a session that you have started. Joined sessions are always displayed in Single Window mode and represented by one icon only. Right-click the sessions taskbar icon to access the Client Menu.

## template

---

Administrators create and configure templates for users who need to create profiles of their own. Users create profiles by copying existing templates. The administrator-specified settings in the template are copied to the profile; individual settings in the template can be marked as read-only so that they cannot be changed by users. This provides the administrator with complete control over which settings users can modify.

When an administrator modifies a template, the change is reflected in all profiles that are based on that template.

## Windows

---

The Microsoft Windows operating system should not be confused with the X Window System. Exceed TurboX includes the capability to run remote sessions by connecting to either an X Window (UNIX or Linux) or Microsoft Windows remote desktop or application host.

## X application

---

Any application that uses the X Window System to draw its graphical user interface. Although X applications are written primarily on the UNIX and Linux operating systems, it is possible to create X applications that run on other platforms, such as Microsoft Windows.

## X display

---

Each time you start an X Window session, an X server is started on the host to which you connect. The X display identifies this specific X server which will be used to manage your session (for example, by transferring input from your mouse and keyboard to the application). The applications you work with are aware of which X display you are using. An X display is referenced using the following notation:

`<HostIP>:<Display#>`, where `<Display#>` is incremented for each new session started on that host.

## X protocol

---

One of the protocols used to transfer information between your computer and the X Window application host that you connect to. In Exceed TurboX, applications communicate with the proxy using the X protocol. In turn, the proxy communicates with your workstation using the Thin X Protocol (TXP).

## X selection

---

The text or other data, such as an outlined region of the screen, that you have selected for copying and pasting to another open window in either the same session, another session, or on your workstation.

## X server

---

An intermediary component that Exceed TurboX launches to handle communication such as key and data transfer (visual screens and windowing) between your workstation and the application host. The X server is composed of both the software launched to handle your session and the hardware (mouse, keyboard, monitors) used to communicate and display screens. The X server also handles font rendering and resource management.

## X Window Manager

---

An X Window Manager is a program that provides basic management commands for application windows, including opening, closing, moving, and resizing windows. Most window managers are installed with the operating system. The X Window Manager handles all window functions and often provides a menu from which you can select commands to start other applications. The window manager you use can be installed on your workstation or on a remote machine. You must start the window manager. It does not start by default. You can set window manager options on the Display tab (Basic mode) and Window mode tab (Advanced mode) when you create or edit profiles.

## X Window

---

When running applications on a UNIX or Linux host, application windows are rendered using X drawing primitives such as lines and rectangles. These application windows are referred to as X Windows. Depending on the operating system, a different X Window Manager may be used, which affects the appearance and functionality of your application windows. An X Window can be rendered on the host or on the client desktop.

## Xstart

---

Custom startup profiles typically contain one or more applications or commands. These applications or commands are called Xstarts. Xstarts allow you to specify:

- the application host to connect to
- your sign-in credentials for that host
- command line parameters for the application
- additional options such as user prompts and advanced flags

You can configure multiple Xstarts within a profile.

# 9. Notices

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## Contacting Technical Support

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The Rocket Community is the primary method of obtaining support. If you have current support and maintenance agreements with Rocket Software, you can access the Rocket Community and report a problem, download an update, or read answers to FAQs. To log in to the Rocket Community or to request a Rocket Community account, go to [www.rocketsoftware.com/support](http://www.rocketsoftware.com/support). In addition to using the Rocket Community to obtain support, you can use one of the telephone numbers that are listed above or send an email to [support@rocketsoftware.com](mailto:support@rocketsoftware.com).

Rocket Global Headquarters  
77 4th Avenue, Suite 100  
Waltham, MA 02451-1468  
USA

## Country and Toll-free telephone number

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To contact Rocket Software by telephone for any reason, including obtaining pre-sales information and technical support, use one of the following telephone numbers.

- United States: 1-855-577-4323
- Australia: 1-800-823-405
- Belgium: 0800-266-65
- Canada: 1-855-577-4323
- China: 400-120-9242
- France: 08-05-08-05-62
- Germany: 0800-180-0882
- Italy: 800-878-295
- Japan: 0800-170-5464
- Netherlands: 0-800-022-2961
- New Zealand: 0800-003210
- South Africa: 0-800-980-818
- United Kingdom: 0800-520-0439