This Quick Reference Card describes how to use the Citrix ICA UNIX Client to connect to a Citrix server and run remote applications. Topics covered include:

- Introduction to the ICA UNIX Client
- Starting the ICA UNIX Client
- Connecting to a Citrix server
- Using ICA UNIX Client features
  - ICA UNIX Client hotkeys
  - Transparent clipboard access
  - Accessing local directories
  - Accessing local printers
  - Audio mapping
  - COM port mapping
- Terminating the ICA session

This card assumes the ICA UNIX Client has already been installed on the client and entries have been configured. For more information, including installation and additional configuration and troubleshooting instructions, see the Citrix ICA Client Administrator’s Guide for the ICA UNIX client, or the Citrix ICA Client for UNIX online help. To access help, use a Web browser to load the file contents.htm located in the help subdirectory of your installation directory.

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Starting the ICA UNIX Client

The ICA UNIX Client main window lets you create and edit connection entries. Connection entries contain configuration options that define the attributes of the ICA sessions you run on Citrix servers.

To start the ICA UNIX Client

• At the UNIX prompt, type /usr/lib/ICAClient/wfcmgr and press RETURN, where /usr/lib/ICAClient is the directory in which you installed the ICA Client.

Note If the ICA UNIX Client is not installed in the default installation directory, ensure that the environment variable ICAROOT is set to point to the actual installation directory.

Toolbar Buttons

The ICA UNIX Client toolbar contains the following buttons:

<table>
<thead>
<tr>
<th>Use this</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>![File icon]</td>
<td>Add a new remote application entry.</td>
</tr>
<tr>
<td>![Copy icon]</td>
<td>Copy the selected remote application entry.</td>
</tr>
<tr>
<td>![Delete icon]</td>
<td>Delete the selected remote application entry.</td>
</tr>
<tr>
<td>![Edit icon]</td>
<td>Edit or view the selected remote application.</td>
</tr>
<tr>
<td>![Connect icon]</td>
<td>Connect to the selected remote application.</td>
</tr>
</tbody>
</table>

Connecting to a Citrix Server

To connect to a Citrix server or published application

• Double-click the desired entry in the entry list, or place the cursor bar on the desired entry and click the Connect button on the toolbar, or from the Entry menu, click Connect. If the entry contains a valid user name and password, the ICA Client logs on as that user name. If no user name and password are present in the entry, the server logon screen appears. Enter a valid user name and password for the Citrix server and click OK to begin the session.

Using ICA UNIX Client Features

After you connect to a Citrix server or published application, the ICA UNIX Client provides additional features that make remote control computing just like using a desktop computer. The ICA UNIX Client provides you with hotkeys, clipboard support, and access to local storage devices and printers.

ICA UNIX Client Hotkeys

The Citrix UNIX Client provides hotkeys that can be used to control various functions while in an ICA session. ICA Client hotkeys let you define alternative key combinations for the hotkeys Alt+F1 to Alt+F12, because these are reserved for use by X Windows. By default, UNIX hotkeys Alt+F1 to Alt+F12 are mapped to Alt+Ctrl+F1 to Alt+Ctrl+F12 in your ICA sessions.

To change the default values, click Options, Settings in the ICA UNIX Client main window. In the Settings dialog box, select Hotkeys from the pull-down menu.

Any Alt key combinations not used by your X Window manager can be used as usual within your Citrix session. In addition, the key combination Ctrl+Alt+Enter can be used to produce the PC key combination Ctrl+Alt+Delete.

Transparent Clipboard Access

You can use the client workstation’s clipboard to cut and paste objects between applications running locally on the client computer and applications running remotely in an ICA session. Access to the local clipboard requires no special procedures; using the familiar cut, copy, and paste commands, you can transfer text, pictures, files, and other objects back and forth between local and remote applications.

You can use the xcapture program to assist the exchange of graphical data between the Citrix server clipboard and non-ICCM-compliant X-window applications on the X-desktop. See the Citrix ICA Unix Client Administrator’s Guide for instructions on how to use xcapture.
Accessing Local Directories

Client drive mapping makes any directory mounted on your UNIX computer, including CD-ROMs, available to you during ICA sessions on Citrix servers. When a Citrix server is configured to allow client drive mapping, you can access your locally stored files, work with them during your ICA sessions, and then save them either on a mounted directory or on a drive on the Citrix server.

To map a directory on the UNIX workstation to your ICA session

1. In the ICA Client main window, click Options and then click Settings. In the Settings dialog box, select Drive Mapping from the pull-down menu:

   ![Drive Mapping List](image)

   For each Citrix server drive letter, the Drive Mapping list shows the disk or pathname of the UNIX directory mapped to the drive. In the Enable/Read/Write column, icons display whether each mapped directory is enabled for use and what type of access you have to the drive.

2. Click the check box in the Enable column next to an available drive letter and then click in the corresponding field. For example, in the dialog box shown above, you can select F:

3. Click Modify. Select the UNIX directory you want to map and click OK.

4. The mapped directory appears in the Drive Mapping list. If the drive letter you selected is not available on the Citrix Server, the specified directory is mapped to another free drive letter at logon.

5. Make sure Enable Drive Mapping is checked. Click OK. Log off any connections already established and reconnect. The same drive mapping and access settings apply to all connection entries.

To view mapped client directories when connected to a MetaFrame server

- From within the ICA Client session, double-click My Computer on the remote desktop. The My Computer screen appears:

   ![My Computer Window](image)

   In this example, drives A, C, D, and E are storage devices on the MetaFrame server. Drives G and H are directories on the UNIX workstation mapped to this ICA session. You can access these directories by specifying drive G or H for any operation.

   Depending on the configuration of the Citrix server, your mapped directories may or may not be immediately available when you log on. If the drive letters you specify in the Drive Mapping screen are already in use by the Citrix server, your UNIX directories are mapped to other available drive letters.

   Published applications and ICA server connections that run a specified initial program offer you the same access to your local directories. When connected to published applications, you can access local directories in the same way you would when using locally run applications.

To manually map a client directory on a Citrix server

Mapped directories that do not appear after logon can be manually mapped from within an ICA session. Use the following procedure to manually map a client directory.

1. Log on to the Citrix server.

2. On a WinFrame server, Start File Manager. In the Disk menu, click Connect Network Drive. The Connect Network Drive dialog box appears.
On a MetaFrame server, start Windows NT Explorer. In the Tools menu, click Map Network Drive. The Map Network Drive dialog box appears.

3. In the Drive field, select a server drive letter. This drive letter represents the mapped client drive.

4. In the Shared Directories list, double-click Client Network, Client, and then select the appropriate icon for your UNIX directory from the list of available client drives.

5. If you want to have this drive available to you each time you log on to this server, check Reconnect at Logon. Click OK.

### Accessing Local Printers

Client printer mapping lets you access printers attached to your client computer during ICA sessions. When a Citrix server is configured to allow client printer mapping, applications running remotely on the Citrix server can print to local printers. With the ICA UNIX Client, you can print to any spooled printer available from the UNIX workstation.

#### To map a local printer on a WINFRAME server

1. Log on to the WINFRAME server.
2. In the Main program group, double-click Print Manager. In the Printer Manager window you should see an icon or open dialog box for a network printer with a name similar to workstation#printer, where workstation is the UNIX workstation name and printer is the UNIX name for the printer.
3. If no client printer is available, select Connect to Printer from the Printer menu.
4. In the Shared Printer list, double-click Client Network and then double-click Client.
5. Select the client printer icon, which will have a name similar to workstation#printer, and click OK.
6. If you want this printer to be your default printer, select it in the Default menu at the top of the Printers window.

#### To map a local printer on a MetaFrame server

1. Log on to the MetaFrame server.
2. Click Start on the taskbar, point to Settings, then click Printers.
3. In the Printers window you should see an icon for a network printer with a name similar to workstation#printer, where workstation is the UNIX workstation name and printer is the UNIX name for the printer.
4. If no client printer is available, double-click Add Printer. The Add Printer wizard appears.
5. Click Network printer server and then click Next.
6. Double-click Client Network and then double-click Client.
7. Select the printer from the list displayed. Spooled printers available on the UNIX workstation have a name similar to workstation@printer. Click OK.
8. If you want this printer to be your default printer, click Yes and then click Next.
9. Click Finish.

### Audio Mapping

Audio mapping allows your client computer to play sounds generated by applications running on the Citrix server.

#### To configure Audio mapping for a Connection Entry

1. In the ICA Client main window, select the name of the connection you want.
2. Click Properties from the Entry menu, or click the Properties button. The Properties dialog box shows the current properties of the selected connection.
3. In the Properties dialog box, select Connection from the pull-down menu.
4. Select Enable Sound to enable sound support. Select High, Medium, or Low quality depending on the available bandwidth.

Client Audio mapping can cause excessive load on the Citrix servers and the network. To avoid network congestion, your system administrator may disable audio mapping or limit the audio quality from the server.

### Mapping COM ports

If you are running the ICA Client on Linux, you can perform bi-directional mapping of Linux serial devices, e.g. `/dev/ttyS0`, to Citrix Server COM ports. This allows a user at the client workstation to use local devices like modems, serial printers, and barcode scanners seamlessly from the applications running on the Citrix server.
To configure COM port mapping
1. In the ICA Client main window, click Options and then click Settings.
2. In the Settings dialog box, select Preferences from the pull-down menu.
3. Click Add to map a COM port.

Ending a Citrix Server Connection
Citrix servers support two types of connection termination. You can log off or disconnect. Logging off ends your session. Disconnecting leaves your session executing on the server. You can reconnect to a disconnected session and resume any tasks left executing on the server. For example, you can connect to a Citrix server and execute an application that requires an extended period of time to complete a task. After starting the task, you can disconnect the session. You can reconnect to the session at a later time to retrieve the results of the operation.

To log off from a Citrix server connection during an active session
• To log off from a WINFRAME server, click File in Program Manager in your active session and then click Logoff. Click OK to the confirmation message.
• To log off from a MetaFrame server, click Start in your active session and then click Logoff. Click OK to the confirmation message.

To disconnect from a Citrix server connection during an active session
• To disconnect from a WINFRAME server, click File in Program Manager in your active session and then click Disconnect. Click OK to the confirmation message.
• To disconnect from a MetaFrame server, click Start in your active session and then click Disconnect. Click OK to the confirmation message.

To exit the ICA UNIX Client
• In the ICA Client main window, click the Entry menu and then click Exit or press ALT+F4.