

NCDware

ICA Client

Installation and User's Guide



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Introduction

The purpose of this guide is to provide instructions for installing and using the NCDware ICA Client. For complete information on NCDware, see the NCDware *User's Guide* and *System Administrator's Guide*.

Important Information for This Release

- **DPS (Display PostScript):** This release of the ICA Client does not support PostScript display.
- **Shadowing:** If you wish to *shadow* an ICA client session, the window size and color depth in both ICA sessions must be the same. For more information about shadowing, see the Citrix Online ICA documentation or the *WinStation Administration* online help.
- **Interactive Window Managers:** If you are using a window manager with interactive window placement enabled, we recommend you disable it. Using interactive window placement with the ICA Client user interface can cause unpredictable results when navigating in an ICA session.

What is the ICA Client?

The NCDware ICA Client is a client program that uses the ICA protocol to distribute Windows application user interfaces to the desktop while the application executes on the WinFrame server.

ICA Client Features

NCDware ICA Client has the following features:

- Support of multiple, simultaneous ICA sessions, limited only by the installed RAM on your terminal.
- User-specified ICA session window size.
- Support of simultaneous UNIX (Legacy/X) window and ICA sessions.

Supported Platforms

The NCDware ICA Client supports the following NCD thin client devices:

- Explora
- ExploraPro
- Explora 400, 450
- HMX, HMXpro, or HMXpro24

System Requirements

To install and use the NCDware ICA Client, the following requirements must be met:

System Requirements

- **RAM:** Each terminal must have a minimum of 8 MB of RAM.
- **WinStations:** Your WinFrame server must have ICA WinStations installed. For more information, see the *WinStation Administration Utility* in the Administrative Tools program group on your WinFrame server.

NCDware Requirements

- You must have NCDware 5.0.129 or later installed on your boot host. To see the version number of your current NCDware installation, press the Setup key, and select **Statistics → Show Version**.

What You'll Need for Installation

- The NCDware ICA Client CD.
- Access to the boot host.
- The machine name of the terminal's boot host. This is the machine where NCDware is installed.
- The directory path to NCDware on the boot host.

Installing the NCDware ICA Client

To install the NCDware ICA Client:

1. Insert the ICA Client CD in your boot host's CD drive.
2. Do one of the following:
 - **For Unix:** In the unix subdirectory of the installation CD, run the script install.sh.
 - **For Windows NT:** In the winnt directory on the installation CD, run the file SETUP.EXE.
3. After installation is complete, reboot the NCD terminals that will use the ICA Client.
4. To verify the ICA Client was installed, select **Utilities → Windows Access** from the NCDware Console. The **Windows Connections** dialog box should display.

Adding and Removing ICA Connections

You must define at least one connection before you can connect to a WinFrame server or set ICA connection properties.

Using a Remote Configuration File to Add a Connection

To add a connection using a remote configuration file:

1. Open the following file in your favorite text editor:

```
/boot_dir/usr/lib/X11/ncd/configs/ncd_std.stp
```

Note This is the default configuration file. Your configuration file name may be different. If this file does not exist, create it using your text editor.

2. Below the section `ica-chooser-entries = {`, enter connection information in the following format:

```
{ " -label description -h host_name -co 256 -t tcp -g 800x600 -c 0" }
```

For example:

```
ica-chooser-entries = {  
{ " -label description -h host_name -co 256 -t tcp -g 800x600 -c 0" }  
}
```

Be sure to put the information between the left and right curly braces of the section.

The variables may be entered in any order. The values given above are only examples. The variables are defined as follows:

- **-label:** Connection description.
- **-[h]ost:** WinFrame server name or IP address.
- **-[co]lor:** Number of display colors.
- **-[t]ype:** Protocol used to connect to the WinFrame server. For this release, only “-t tcp” is allowed.
- **-[g]eometry:** Screen size, in width x height format.

- -[c]ache: Largest cache size, in KB.
3. When you are finished creating entries, save the file and reboot your NCD terminal and select **Utilities → Windows Access** from the NCDware Console to verify the connections were created.

Manually Adding a Connection

To manually add a connection:

1. At the NCD terminal, press the Setup key.
2. Select **Utilities → Windows Access**.
3. In the **Connections** dialog box, click *New*.
4. In the **Connection Properties** dialog box, enter the following information:
 - **Description:** Enter a description for this connection.
 - **Server:** Enter a server name or IP address; for example, *My_Server*, or *192.86.56.20*.
 - **Window Size:** Select a window size from the drop-down list.

Note If you are using a window manager, and want to run a Full Screen session, select Custom Size and enter a value from the list below, or define a custom size that allows for window borders.

Window manager	Full Screen Size (for 1024x768 resolution)
fwm	1016x738
fwm95-2	1015x710
mwm	1015x735
twm	1024x745

- **Custom Size:** Select Custom Size from the Window Size drop-down list above, then enter a custom window size using the format 000x000; for example, 810x750. Do not use spaces.

Note The maximum window size allowed by the ICA protocol is 1280x1024.

- **Protocol:** Select a protocol from the drop-down list. For this release, only TCP/IP is supported.
 - **Number of Colors:** Select the number of colors from the drop-down list. The default is 256.
 - **Cache Size:** Select a cache size from the drop-down list. The default is 2048K; depending on your number of ICA sessions and amount of free memory, you may want to choose a different value.
5. If you want to create additional connections, click *Apply*. If you are finished creating connections, click *OK*. The connection is added to the list of connections in both cases.

Removing a Connection

To remove a connection:

1. Select **Utilities** → **Windows Access**.
2. Select the connection name in the Connections list, and click *Delete*. The connection is removed from the connection list.

Copying a Connection

To copy a connection:

1. Select **Utilities** → **Windows Access**.
2. Select the connection name in the Connections list, and click *Copy*. The **Connection Properties** dialog box appears with the properties of the selected connection already filled in.
3. Edit the connections properties as desired. If you want to create additional connections, click *Apply*. When you are finished creating connections, click *OK*.

Starting and Ending an ICA Session

Note You must add at least one connection to the connection list before you can start an ICA session.

To start an ICA session:

1. Select **Utilities** → **Windows Access**.
2. Select a connection from the connection list, and click *Connect*.

To start an additional session, iconify the current session and repeat step 2 above. Repeat to start as many sessions as desired.

To end an ICA session:

1. In the Program Manager, select **File** → **Logoff**.
2. Click *OK* to end your ICA session.

Note If you use the WinFrame Disconnect/Reconnect feature, you cannot reconnect at a different resolution; doing so can cause unpredictable results when navigating in an ICA session. To use a different resolution for your ICA Client session, select **File** → **Logoff** and start another session at the desired resolution.

Viewing and Editing ICA Connection Properties

To modify ICA connection properties, you must first add at least one connection using the instructions in *Adding and Removing ICA Connections* on page 8.

Note If edit privileges are restricted, the *OK* and *Apply* buttons are grayed out and you cannot make connection changes. To restrict editing privileges, see the section below titled *Restricting Editing and Creation of Connections*.

To view and edit ICA connection properties:

1. Select **Utilities** → **Windows Access**.
2. Select a connection in the connections list, then click *Properties*.
3. View or edit the connection properties as desired.

Note Changing the Description creates a new connection. If you want to change the connection Description, see the instructions under **Copying a Connection** on page 10.

4. Click *OK*.

Restricting Editing and Creation of Connections

If you don't want users to modify existing connection properties, or create new connections, you can restrict these privileges using the Setup menu, or using remote configuration files to set the restriction on the NCDware X server.

Using Remote Configuration Files to Restrict Privileges

Note Manual restriction of editing privileges must be done on the boot host.

To use a remote configuration file to restrict editing and creation privileges:

1. Open the following file in your favorite text editor:

```
/install_dir/usr/lib/X11/ncd/configs/ncd_std.stp
```

This is the default shared configuration file. Your configuration file name may be different.

2. Add or edit the following line:

```
ica-enable-chooser-editing = false
```

Be sure to use spaces on either side of the equals sign.

Using TELNET Interactive Configuration to Restrict Privileges

To restrict editing and creation privileges using TELNET interactive configuration:

1. In the NCDware Console, select **Setup → Change Setup Parameters**.
2. Click *Access Control*.
3. In the Config Daemon section, enter passwords in the **Config Read-Only Password** and **Config Read-Write Password** entry fields.
4. Click *Apply*, then *Cancel*.
5. In the NCDware Console, select **Terminals → New Terminal**.

6. In the Default Hosts list, select Config, and click *OK*.
7. Enter the password you entered in step 3 and press Enter.
8. Type **get ica** and press Enter. The ica portion of the configuration file displays.
9. Enter the following command:

```
set ica-enable-chooser-editing = false
```

Be sure to use spaces on either side of the equals sign.
10. Type **apply**, then type **quit**.
11. Click *OK*, then select **File** → **Exit**.
12. In the Login Console, select **Login** → **Logout**.

When you select **Utilities** → **Windows Access**, the *New*, *Copy*, and *Delete* buttons in the **Connections** dialog box should be grayed out.

Automating ICA Session Startup

To automate ICA session startup when you boot the NCD terminal:

1. From the NCDware Console, select **Setup** → **Change Setup Parameters** → **Commands and Startup**.
2. Do either of the following:
 - **To automatically start the Windows Access chooser**, click *New* or a client name in the list, and enter `icaui` in the Command entry field.
 - **To automatically start an ICA session**, click *New* and enter `icaclnt [options]` in the Command entry field, where [options] are the options described in *Using a Remote Configuration File to Add a Connection* on page 8.
3. Click *Apply*, then *Restart*. Your changes will take effect after you restart the NCD terminal.

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