



Sun™ Desktop Access Client 1.0 User Guide

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This document describes how to configure and use the Sun™ Desktop Access Client.

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About the Sun Desktop Access Client

The Sun Desktop Access Client (Desktop Access Client) is an application that installs on common client operating systems. You use the Desktop Access Client to log in to a Sun Ray™ server and start or reconnect to a Sun Ray desktop session.

Because you can install and run the Desktop Access Client on your computer, it provides an alternative to using a Sun Ray Desktop Unit (DTU). For example, you can install the Desktop Access Client on your computer at home and use it to log in to a Sun Ray server at your office. You can then access your programs and files as if you were working from your Sun Ray DTU at the office.

The computer that you use to run the Desktop Access Client and connect to the Sun Ray server is called the *client computer*.

The Sun Ray session is shown on the client computer using one of the following display modes:

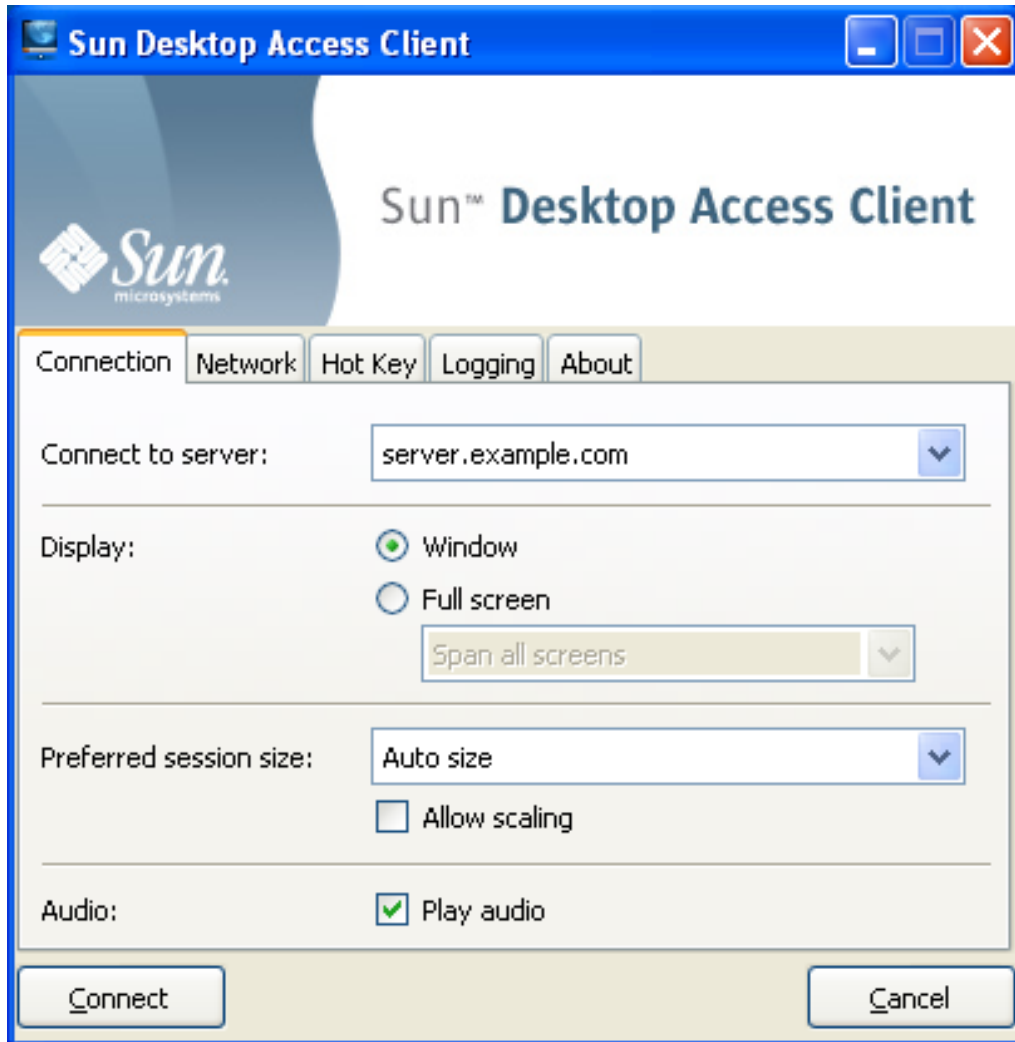
- **Windowed mode** – The session is displayed in a window on screen, called the *client window*
- **Full screen mode** – The session fills the whole screen area

Connecting to a Sun Ray Server

1. Start the Desktop Access Client.

In the Windows Start Menu, choose the All Programs → Sun Desktop Access Client → Sun Desktop Access Client option.

The Sun Desktop Access Client configuration dialog is shown.



Configuration Dialog, Showing the Connection Tab

2. Specify a Sun Ray server to connect to.

For the Connect to Server setting, do one of the following:

- **Choose the Find Automatically option** – Choose this option if you want the Desktop Access Client to find a Sun Ray server on your network automatically.
- **Type the name of a Sun Ray server** – If you know the name of the Sun Ray server, type this in the text field.

Use the default values for the other settings on the Connection tab.

3. Connect to the Sun Ray server.

Click the Connect button.

The Desktop Access Client connects to the Sun Ray server and displays the Sun Ray login screen.

4. Log in to the Sun Ray server.

Type the user name and password for your Sun Ray user account.

The Sun Ray session is displayed in windowed mode on your computer.

Note: You can only use the Desktop Access Client to access non-smart card mobile (NSCM) sessions. This release of the Desktop Access Client cannot be used with a smart card.

Logging Out From a Sun Ray Session

1. **Click Log Out in the Sun Ray Launch menu.**

You are logged out from the Sun Ray session. The Sun Ray login screen is displayed.

2. **Close down the Desktop Access Client.**

Type Left Shift-Left Ctrl-Alt, to display the Disconnect dialog.



Disconnect Dialog

Click the Confirm button on the Disconnect dialog to disconnect from the Sun Ray session and close down the Desktop Access Client.

Note: In Windowed mode, you can click the window close icon to display the Disconnect dialog.

Frequently Asked Questions

This section answers some frequently asked questions about the Desktop Access Client. The following topics are included:

- Do I Need to Know the Name of My Sun Ray Server?
- Can I Connect Over a Virtual Private Network?
- What If I Am Unable to Connect to the Sun Ray Server?
- Can I Use Multiple Monitors?
- How Do I Play Audio on the Client Computer?
- How Can I Improve the Graphics Quality?
- How Can I Set The Display Size of My Sun Ray Session?
- How Do I Exit From a Full-Screen Session?
- Can I Use Multiple Profiles?

Do I Need to Know the Name of My Sun Ray Server?

If you use the Find Automatically option on the Connection tab to find a Sun Ray server on your network automatically, you do not need to know the name of your Sun Ray server. However, to connect to a *specific* Sun Ray server, you need to type the name of the Sun Ray server in the Connect to Server field. Depending on how your network is configured, you can use one or more of the following names:

- The full name of the server on the network, also called the Domain Name System (DNS) name. For example, `sr-1.example.com`.
- The host name of the server. For example, `sr-1`.
- The Internet Protocol (IP) address of the server. For example, `123.456.789.12`.

Contact your administrator if you need to know the name of your Sun Ray server.

Can I Connect Over a Virtual Private Network?

You can use the Desktop Access Client to connect to your Sun Ray server over a Virtual Private Network (VPN). A VPN is typically used to provide secure access to a company network to people from outside the network, such as employees working from home. See your administrator if you need help to configure your computer for connecting over a VPN.

To use the Desktop Access Client over a VPN, you might need to decrease the Maximum Transmission Unit (MTU) setting on the Network tab from the default setting of 1500 bytes. Contact your administrator for advice on the required setting for your company's VPN.

What If I Am Unable to Connect to the Sun Ray Server?

Sun Ray Server Software (SRSS) uses on-screen displays (OSD) to show the status of a connection. The OSD can be used to diagnose problems with a connection.

For example, the following OSD icon indicates that the SRSS has not been enabled for access using the Desktop Access Client.



Access Disabled Icon

If you are unable to connect to the Sun Ray server and this icon is displayed, contact your administrator.

Your firewall configuration might prevent you from connecting to the Sun Ray server. Check that the firewall settings on your computer allow you to use the Sun Desktop Access Client program to access the Internet.

Can I Use Multiple Monitors?

You can use the Desktop Access Client with multiple monitors in the following ways:

- **Span the display across all monitors** – The displays of all the monitors are combined to form a single large “virtual display”. The Sun Ray session is then shown using the whole of the virtual display. To enable this mode, select the Span All Screens option for the Full Screen setting on the Connection tab.
Note: To use display spanning mode, the monitors must be set to the same display resolution.
- **Display the Sun Ray session on a single monitor** – You use one of your monitors to display the Sun Ray session, leaving the remaining monitors free to run other applications. To enable this mode, select the screen you want to use for the Sun Ray session from the Full Screen list on the Connection tab.

How Do I Play Audio on the Client Computer?

To play audio from a Sun Ray session on your computer, select the Play Audio check box on the Connection tab. Then when you play a podcast, for example, the sound is output through the speakers on your computer.

Note: Your administrator might need to enable this feature for Sun Ray sessions.

How Can I Improve the Graphics Quality?

By default, the Sun Ray server automatically compensates for changes in network conditions by compressing image data when necessary. This can sometimes lead to a loss of graphics quality.

If you want the best possible graphics display quality, regardless of network conditions, select the Lossless Compression setting on the Network tab.

How Can I Set The Display Size of My Sun Ray Session?

You set the display size of the Sun Ray session using the settings on the Connection tab.

The Auto Size option automatically adjusts the size of the Sun Ray session display to fit the client computer. If Full Screen is selected, the display takes up the whole of the screen. If Window is selected, the Sun Ray session is shown in a client window, which you can resize.

Alternatively, you can define the size of the Sun Ray session display by choosing one of the predefined display sizes, or by typing the required display size.

The changes made only apply for new Sun Ray sessions.

Note: Policies on the Sun Ray server might result in the actual display size of your session being different to the display size you requested.

How Do I Exit From a Full-Screen Session?

Full-screen sessions do not include icons for minimizing and closing the client window.

To exit from a full-screen session, you use the Left Shift-Left Ctrl-Alt keyboard shortcut. This displays the Disconnect dialog, enabling you to disconnect from the Sun Ray session and close down the Desktop Access Client.

Note: You can change this keyboard shortcut, using the settings on the Hot Key tab.

Can I Use Multiple Profiles?

Yes. For example, you might want to use different settings depending on which Sun Ray server you connect to.

Save the required settings for each Sun Ray session in a profile, as described in Creating a New Profile on page 16. You can then specify the required profile when you start the Desktop Access Client from the command line, for example:

```
sdac --profile srl-profile
```

Note: You can use multiple profiles at the same time.

See Using Profiles on page 16 for more information about creating and using profiles with the Desktop Access Client.

Desktop Access Client Configuration Settings

You configure the Desktop Access Client using the tabs in the configuration dialog. The following tabs are available:

- Connection
- Network
- Hot Key
- Logging
- About

Connection Tab

You use the Connection tab to specify a Sun Ray server to connect to, and to configure display window settings and audio services for the connection.

The following table shows the available settings for this tab.

Setting	Description
Connect to Server	The Sun Ray server to connect to. The following options are available: <ul style="list-style-type: none">• Find Automatically. Uses a discovery mechanism, such as Dynamic Host Configuration protocol (DHCP), to select a Sun Ray server on your network automatically.• User Specified Server Name. Type the DNS name or IP address for the Sun Ray server you want to connect to. Alternatively, select from the list of Sun Ray servers that you have connected to previously.
Display	The display mode for the Sun Ray session. The following options are available: <ul style="list-style-type: none">• Window. The Sun Ray session is displayed in windowed mode.• Full Screen. The Sun Ray session is displayed in full screen mode. To exit from full screen mode, type Left Shift-Left Ctrl-Alt. If Full Screen is selected, the following options are available when using multiple monitors: <ul style="list-style-type: none">• Span All Screens. The display is shown across multiple screens.• Display On Screen. Select the screen you want to use to display the Sun Ray session. The number of options shown depends on the number of monitors used.

Preferred Session Size	<p>The preferred display size for the Sun Ray session.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> • Auto Size. The Sun Ray session is displayed at the optimal size for the client computer. If Full Screen is selected, the Sun Ray session is sized to fit the whole screen. • User Specified Display Size. Either select from the predefined list of display sizes, or type the width and height of the Sun Ray session, in pixels. For example, 640 x 480. <p>If Full Screen is selected and the session dimensions are greater than the dimensions of the client screen, the display moves when your mouse pointer is near the edge of the screen. This is called <i>panning</i>. If the session dimensions are less than the width of the client screen, black bands are shown around the visible screen area.</p> <p>For multiple monitors, if you specify a session width or session height greater than the width or height of the primary display, the display is panned.</p> <p>Note: Policies on the Sun Ray server might result in the actual display size of your session being different to the display size you request.</p>
Allow Scaling	<p>The display is scaled to fit the client window. If you resize the client window, the display is rescaled automatically.</p> <p>Deselect the check box to disable scaling of the display. The display size is then fixed and the client window includes scroll bars.</p> <p>In windowed mode, the aspect ratio of the display is retained when the client window is resized. In full screen mode, the aspect ratio is not retained during resizing.</p>
Play Audio	Enables you to play audio from the Sun Ray session on the client computer.

Network Tab

You use the Network tab to configure network connection and data compression settings.

The following table shows the available settings for this tab.

Setting	Description
Bandwidth Limit	<p>Maximum bandwidth for the connection, in megabits per second.</p> <p>The default setting is 75 megabits per second, which is the maximum value. Decrease this setting if you are using a low bandwidth connection, or if you want to restrict the amount of server bandwidth used by the Desktop Access Client.</p>
Maximum Transmission Unit (MTU)	<p>This is the maximum packet size for connections, in bytes.</p> <p>The default setting is 1500 bytes, which is the maximum value.</p> <p>If you are experiencing problems when using a Virtual Private Network (VPN), you might want to decrease this value to allow space for Internet Protocol Security (IPSec) headers. Contact your administrator for advice on the correct setting for your network.</p>
Force Compression	Compresses all packets before transmission, regardless of the available bandwidth.
Lossless Compression	Disables the use of lossy compression for image data. Choose this setting if you want high-quality graphics.

Hot Key Tab

You use the Hot Key tab to configure the keyboard shortcut used to exit from the Desktop Access Client. This is called the *exit key combination*.

The following table shows the available settings for this tab.

Setting	Description
Exit Key Combination	Defines the keyboard shortcut used to exit from the Desktop Access Client. The default setting is Left Ctrl-Left Shift-Alt.

Note: Some of the available exit key combinations might not work on your client computer. If the configured exit key combination does not work, use an alternative key combination.

Logging Tab

You use the Logging tab to configure the logging level and the types of log messages you want to record.

The following table shows the available settings for this tab.

Setting	Description
Level	Logging level. You can record informational, warning, and critical messages.
Categories	Select the categories of log message you want to record.

Log messages are written to a `.log` text file on the client computer. The `.log` file is named after the profile used. For example, the log file for the `default` profile is called `default.log`. The location of the log file depends on the installation platform, as follows:

- **Microsoft Windows XP platforms** – `C:\Documents and Settings\username\Application Data\Sun\SDAC\profilename.log`
- **Microsoft Windows Vista and Microsoft Windows 7 platforms** – `C:\Users\username\AppData\Roaming\Sun\SDAC\profilename.log`

About Tab

The About tab shows version information for the Desktop Access Client and system resources for the client computer.

Sun Keyboard Shortcuts

The following table shows the keyboard shortcuts that have been implemented to provide compatibility with Sun keyboards. The audio options are only available when using full screen mode.

Keyboard Shortcut	Sun Keyboard Equivalent	Description
Ctrl-Down Arrow-Pause	Mute	Mutes audio output
Ctrl-Right Arrow-Pause	Louder	Increases audio volume
Ctrl-Left Arrow-Pause	Softer	Decreases audio volume
Ctrl-N-Pause	Mute-Louder-Softer	Displays network connection details

Note: The keyboard shortcuts in this table use the Ctrl-Pause keystroke combination to implement the Break key. On your computer keyboard, the required keystrokes to implement the Break key might be different. See your computer documentation for more details.

Running the Desktop Access Client From the Command-Line

To configure and run the Desktop Access Client from the command-line, you use the `sdac` command in either of the following ways:

```
sdac
```

```
sdac [ options... ] servername | --autoconnect
```

where *servername* is the name of the Sun Ray server you want to connect to. The `--autoconnect` option finds a Sun Ray server on your network automatically.

If the `sdac` command is used with no command-line arguments, the Sun Desktop Access Client configuration dialog is shown.

The Sun Desktop Access Client configuration dialog is not shown if a *servername* is specified, or when the `--autoconnect` option is used.

The available options for the `sdac` command are shown in the following table.

Command Option	Description
-? --help	Display help for the command.
-v --version	Display version information.
-f --fullscreen	Display the Sun Ray session in full screen mode.
--windowed	Display the Sun Ray session in windowed mode.
--size <i>widthxheight</i>	Dimensions of the Sun Ray session, in pixels. <i>width</i> is the width of the Sun Ray session, between 64 and 5120 pixels. <i>height</i> is the height of the Sun Ray session, between 64 and 5120 pixels.
-s --scaling	Rescale the display automatically when the client window is resized.
--noscaling	Do not rescale the display automatically when the client window is resized.
--audio	Enable audio output on the client computer.
-n --noaudio	Disable audio output on the client computer.
--autoconnect	Uses a discovery mechanism, such as DHCP, to select a Sun Ray server on your network automatically. The Sun Desktop Access Client configuration dialog is not displayed.

-b <i>megabits</i> --bandwidth <i>megabits</i>	Maximum bandwidth for the connection, in megabits per second.
-p --span	Multiple monitors only. Span the display across all screens.
--nospan	Multiple monitors only. Show the display on a single monitor.
-r <i>num</i> --onscreen <i>num</i>	Multiple monitors only. Use the specified screen to display the session.
-a --autosize	Automatically size the Sun Ray session for the client computer.
--noautosize	Do not automatically size the Sun Ray session for the client computer.
-m <i>bytes</i> --mtu <i>bytes</i>	Maximum Transmission Unit. The maximum packet size for connections.
-o --force-compression	Automatically compress all packets before transmission.
--noforce-compression	Do not automatically compress all packets before transmission.
-e --lossless-compression	Use only lossless compression for image data. Disable lossy compression.
--nolossless-compression	Use lossy <i>or</i> lossless compression for image data.
-l <i>num</i> --logginglevel <i>num</i>	Level of log messages to record. 0 = No logging 1 = Critical messages 2 = Warnings 3 = Informational messages Logging level is cumulative. For example, selecting log level 3 includes all warnings and critical messages.
-d <i>num</i> --logging-domain <i>num</i>	Categories of log messages to record. 1 = Session 2 = Network 4 = Input 8 = Appliance Link Protocol (ALP) commands 16 = Multimedia 32 = Audio 64 = Display For multiple categories, add the values. For example, 33 = Audio + Session, 127 = All categories.

<p><code>-x num</code></p> <p><code>--exit-key-sequence num</code></p>	<p>Exit key combination, used to display the Disconnect dialog.</p> <p>1 = Left Shift 2 = Right Shift 3 = Left Control 4 = Right Control 5 = Alt 6 = Menu Key 7 = Left Windows Key 8 = Right Windows Key 9 = Num Lock 10 = Scroll Lock</p> <p>To specify a key combination, use the command option multiple times. For example, <code>-x 1 -x 3 -x 5</code> is equivalent to Left Shift-Left Control-Alt.</p>
<p><code>--profile profilename</code></p>	<p>Run the Desktop Access Client using the settings defined in the specified profile file.</p> <p>If the <code>--profile</code> option is not used, the <code>default</code> profile is used for the Sun Ray session.</p> <p>If the <code>profilename</code> file does not exist, it is created automatically on connection and contains the values from the Sun Desktop Access Client configuration dialog.</p> <p>Note: The settings in the profile can be overridden by other command line options. See Overriding Profile Settings on page 17.</p>

Command-Line Examples

The following examples show how you can configure and run the Desktop Access Client from the command line.

To start the Desktop Access Client and display the Sun Desktop Access Client configuration dialog:

```
sdac
```

To connect to a Sun Ray server on your network automatically, without displaying the Sun Desktop Access Client configuration dialog:

```
sdac --autoconnect
```

To display a full screen session from the Sun Ray server `sr-1.example.com`:

```
sdac --fullscreen sr-1.example.com
```

To change the exit key combination to Alt-Left Windows Key:

```
sdac -x 5 -x 8 sr-1.example.com
```

To record warning and critical messages for audio services:

```
sdac -l 2 -d 32 sr-1.example.com
```

To connect using an MTU of 1366 bytes:

```
sdac --mtu 1366 sr-1.example.com
```

To run the Desktop Access Client using the settings defined in the `fullscreenmode` profile:

```
sdac --profile fullscreenmode sr-1.example.com
```

Using Profiles

A *profile* is a text file on the client computer that contains configuration settings for the Desktop Access Client.

The first time that you run the Desktop Access Client, a default profile called `default` is created. This profile is used automatically when you use the configuration dialog tabs to configure and run the Desktop Access Client.

When you run the Desktop Access Client from the command-line, you can specify a different profile to use for the session. For example:

```
sdac --profile myprofile sr-1.example.com
```

If you do not specify a profile name when you run the Desktop Access Client from the command line, the `default` profile is used.

Each profile has a corresponding log file, with the same name as the profile. The profile is stored in the same location as the log file. See Logging Tab on page 10 for more details.

Creating a New Profile

- 1. Start the Desktop Access Client from the command line, specifying the new profile name.**

For example, to create a new profile called `myprofile`, run the following command:

```
sdac --profile myprofile
```

The Sun Desktop Access Client configuration dialog is displayed, showing the default settings.

- 2. Configure settings for the new profile.**

Use the tabs in the Sun Desktop Access Client configuration dialog to change settings.

- 3. Click the Connect button.**

The Desktop Access Client configuration settings are saved automatically to a new profile file.

In this example, the new profile file is called `myprofile`. A corresponding log file, `myprofile.log` is also created.

To use the new profile when you next start the Desktop Access Client, use the following command:

```
sdac --profile myprofile --autoconnect
```


Editing a Profile

Profile files are updated automatically when you change settings for the Desktop Access Client. Use the following procedure if you need to edit a profile, rather than editing the profile file directly.

- 1. Start the Desktop Access Client from the command line, specifying the profile name.**

For example, to edit a profile called `fullscreenmode`, run the following command:

```
sdac --profile fullscreenmode
```

The Sun Desktop Access Client configuration dialog is displayed, showing the settings defined in the `fullscreenmode` profile.

- 2. Change configuration settings for the profile.**

Use the tabs in the Sun Desktop Access Client configuration dialog to change settings.

- 3. Click the Connect button.**

The Desktop Access Client configuration settings are saved automatically to the profile file.

Overriding Profile Settings

When you start the Desktop Access Client from the command line, you can *override* one or more of the settings in a profile. The overridden settings are valid for the current session only and are not permanently changed in the profile.

To override profile settings, specify command options for the settings you want to override.

For example, to override the audio setting in a profile called `myprofile`, run the following command:

```
sdac --profile myprofile --noaudio sr-1.example.com
```

For example, to override the logging level and screen span settings in the `default` profile, run the following command:

```
sdac --logging-level 0 --nospan --autoconnect
```

Known Issues and Limitations

The following are the known issues for this release:

- The following features are not supported on the client computer:
 - Accessing a Universal Serial Bus (USB) device
 - Logging in using a smart card
 - Audio input and recording
- Configuration changes cannot be enabled during a Sun Ray session. If you wish to change Desktop Access Client configuration settings, you must disconnect from your Sun Ray session and restart the Desktop Access Client.

Removing the Desktop Access Client on Microsoft Windows Platforms

1. Uninstall the Desktop Access Client program.

Choose the All Programs → Sun Desktop Access Client → Uninstall Sun Desktop Access Client option in the Windows Start Menu and follow the instructions on screen.

The Desktop Access Client program files and menu entries are removed from the client computer.