Oracle Virtual Desktop Client 2.0 Administration Guide

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About OVDC

About Oracle Virtual Desktop Client

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

Because you can install and run OVDC on your computer, it provides an alternative to using a Sun Ray Desktop Unit (DTU). For example, you can install OVDC 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 OVDC 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
- Full screen mode – The session fills the whole screen area

Release Notes

New Features in Version 2.1

This section includes details of the new features in version 2.1 of OVDC, as well as changes since the last release.

Support for Linux platforms

You can install OVDC on Linux platforms, see Supported Platforms for details.

New Features in Version 2.0

This section includes details of the new features in version 2.0 of OVDC, as well as changes since the last release.

Support for Mac OS X

You can install OVDC on Mac OS X platforms, see Supported Platforms for details.

Audio Recording

In previous releases, users could play audio from a Sun Ray session on the client computer. This release adds support for recording audio input from the client computer.

IPv6 Networking

This release includes support for Internet Protocol version 6 (IPv6) network addresses.

Smart Cards

This release includes support for using a smart card to log in to a Sun Ray server. Mobile sessions, also called hotdesking, using a smart card are supported.

Smart card logins using a PIN or a public key infrastructure (PKI) certificate are not supported.

In this release, OVDC smart card sessions are enabled using the `utpolicy` command.

Serial Devices

This release includes support for devices attached to a serial port on the client computer. Serial devices attached during a Sun Ray session are detected automatically. This feature is called hot plugging.

USB-to-serial adapters on the client computer can also be used.

This feature is supported on Microsoft Windows platforms.

Profile and Log File Locations

In previous releases, profiles and log files were stored in a default location on the client computer. In this release, users can specify a location.

Supported Platforms for Version 2.1

OVDC version 2.1 is supported on the following operating systems:

- Microsoft Windows XP (32-bit and 64-bit)
- Microsoft Windows Vista (32-bit and 64-bit)
- Microsoft Windows 7 (32-bit and 64-bit)
- Mac OS X 10.6
- Ubuntu Linux, at least version 10.4 (32-bit and 64-bit)
- Red Hat Enterprise Linux 6 (32-bit)

Supported Platforms for Version 2.0

OVDC version 2.0 is supported on the following operating systems:

- Microsoft Windows XP (32-bit and 64-bit)
- Microsoft Windows Vista (32-bit and 64-bit)
- Microsoft Windows 7 (32-bit and 64-bit)
- Mac OS X 10.6

Product Requirements

OVDC works with at least Sun Ray Server Software (SRSS) version 4.2.
To use the audio recording and smart card features of OVDC, you must install SRSS 4.2 patch, version -03.

Note
You must enable access for OVDC before you can use it with Sun Ray Server Software (SRSS). See Enabling Access for OVDC for details.

Limitations of OVDC

In the current release, the following features are not supported by OVDC:

- Universal Serial Bus (USB) redirection, except for smart card reader and serial devices
- Parallel port devices
- Copy and paste between the Sun Ray session and the local operating system running OVDC

Serial port redirection is only supported on Microsoft Windows platforms.

Known Issues

Exit Key Combination Might Not Work on Some Client Computers (CR 6876016)

Problem

An exit key combination selected using the Hot Key tab does not work on the client computer.

Workaround

Choose an alternative exit key combination that works on the client computer.

Only Latin-Based Characters Are Supported For the Configuration Dialog on Mac OS X (CR 6916545)

Problem

On Mac OS X platforms, the OVDC configuration dialog can only display Latin-based characters. Users in Chinese, Japanese, and Korean locales always see the English version of the configuration dialog.

Workaround

No known solution at present.

Installing and Upgrading OVDC

How to Install OVDC on Microsoft Windows Platforms

> **Note**
> To install OVDC, you must have administrator privileges on the client computer.

1. Copy the OVDC Windows install program, `vdc.msi`, to the client computer.
2. Double-click `vdc.msi` and follow the instructions.
   The OVDC software is installed on the client computer and entries for OVDC are added to the Windows Start Menu.

How to Install OVDC on Mac OS X Platforms

> **Note**
> To install OVDC, you must have administrator privileges on the client computer.

1. Copy the OVDC Mac disk image file, `Oracle Virtual Desktop Client.dmg`, to the client computer.
2. Double-click the `Oracle Virtual Desktop Client.dmg` disk image file icon.
   The `Oracle Virtual Desktop Client.mpkg` installer file is shown in a Finder window.
3.

3. Double-click the `Oracle Virtual Desktop Client.mpkg` installer file and follow the instructions.
   The OVDC software is installed on the client computer and an OVDC application icon is added to the Applications folder.

How to Install OVDC on Linux Platforms

> **Note**
> To install OVDC, you must have administrator privileges on the client computer.

1. Copy the OVDC package to the client computer.
   The OVDC package is available in `.rpm` and `.deb` package format.
2. Install the OVDC package.
   - On Red Hat Linux platforms. Run the following command.

     ```
     # rpm -ivh package-name.rpm
     ```

   - On Ubuntu platforms. Run the following command.

     ```
     # dpkg -i package-name.deb
     ```

The OVDC software is installed on the client computer and an OVDC application icon is added to the Applications → Internet folder.

How to Uninstall OVDC

> **Note**
> To uninstall OVDC, you must have administrator privileges on the client computer.

1. Uninstall the OVDC program.
   - On Microsoft Windows platforms. Choose the All Programs → Oracle Virtual Desktop Client → Uninstall option in the Windows Start Menu and follow the instructions on screen.
     The OVDC program files and menu entries are removed from the client computer.
   - On Mac OS X platforms. Open the Applications folder and drag the Oracle Virtual Desktop Client icon to the Trash.
   - On Red Hat Linux platforms. Run the following comand.

     ```
     # rpm -e ovdc
     ```

   - On Ubuntu platforms. Run the following command.

     ```
     # dpkg -r ovdc
     ```

     The OVDC program files are removed from the client computer.

How to Upgrade OVDC

> **Note**
> To upgrade OVDC, you must have administrator privileges on the client computer.

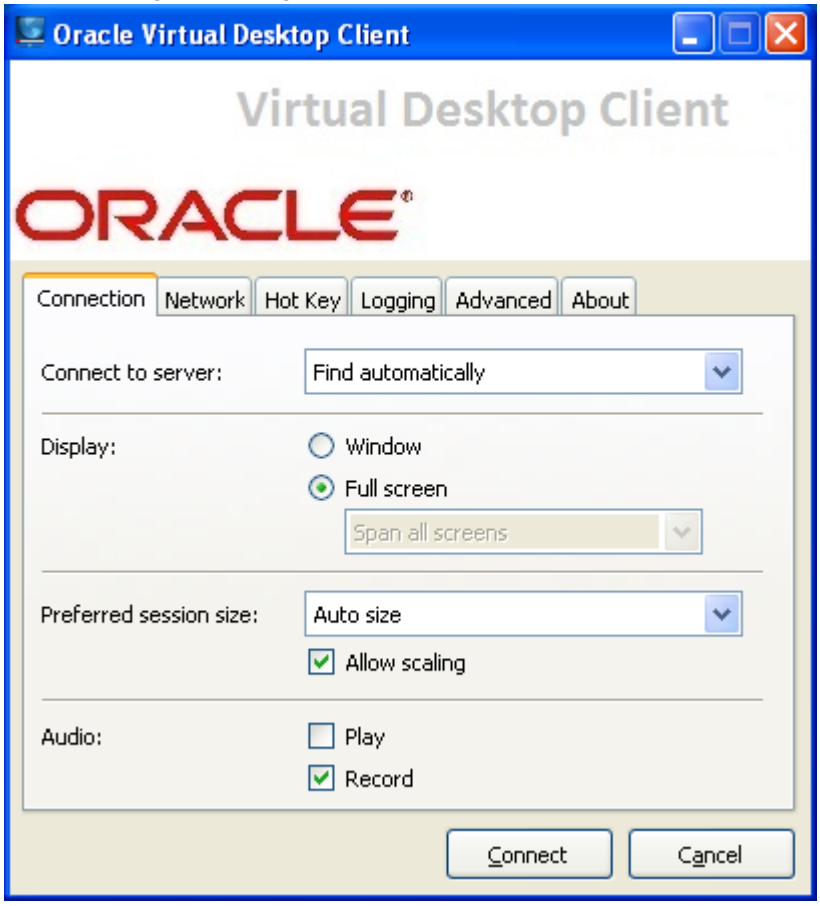
1. Uninstall the current version of OVDC.
   See How to Uninstall OVDC for instructions on how to do this.
2. Install the upgraded version of OVDC.
   - On Microsoft Windows platforms. See How to Install OVDC on Microsoft Windows Platforms.
   - On Mac OS X platforms. See How to Install OVDC on Mac OS X Platforms.
   - On Linux platforms. See How to Install OVDC on Linux Platforms.

Using OVDC

Connecting to a Sun Ray Server

1. Start OVDC.
   - On Microsoft Windows platforms. In the Windows Start Menu, choose the All Programs → Oracle Virtual Desktop Client → Oracle Virtual Desktop Client option.
   - On Mac OS X platforms. In the Applications folder, click the Oracle Virtual Desktop Client application icon.
   - On Linux platforms. In the Launch Menu, choose the Applications → Internet → Oracle Virtual Desktop Client option.

   The OVDC configuration dialog is shown.



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 OVDC 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.
   OVDC connects to the Sun Ray server and displays the Sun Ray login screen.
4. Log in to the Sun Ray server.
   Do one of the following:
   a. Type the user name and password for your Sun Ray user account.
   b. Insert a smart card into a smart card reader attached to the client computer.

The Sun Ray session is displayed in a window on your computer screen.

Disconnecting From a Sun Ray Session

1.

1. Close down the Sun Ray session.
   For example, for a desktop session click Log Out in the Sun Ray Launch menu or remove your smart card.
2. Close down OVDC.
   Press the Left Shift-Left Ctrl-Left Alt keys, to display the Disconnect dialog.

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

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

Running OVDC From the Command Line

To configure and run OVDC from the command line, you use the `vdc` command in either of the following ways:

```
vdc

vdc [ 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 `vdc` command is used with no command-line arguments, the OVDC configuration dialog is shown.

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

The location of the `vdc` binary depends on the installation platform, as follows:

- Microsoft Windows platforms – `C:\Program Files\Oracle\Virtual Desktop Client\vdc.exe`
- Mac OS X platforms – `/Applications/Oracle Virtual Desktop Client.app/Contents/MacOS/vdc`
- Linux platforms – `/opt/ovdc/vdc`

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

Command Option	Description
`-?` `--help`	Display help for the command.
`-c` `--create-profile`	Create a new profile from the command line, without running OVDC or displaying the OVDC configuration dialog. Profile settings are saved to the profile file specified by the `--profile` option, or to the default profile if no `--profile` option is supplied. See Creating New Profiles From the Command Line.
`-v` `--version`	Display version information.
`--autoconnect`	Uses a discovery mechanism, such as DHCP, to select a Sun Ray server on your network automatically. The OVDC configuration dialog is not displayed.
`-f` `--fullscreen`	Display the Sun Ray session using the whole screen area.
`--windowed`	Display the Sun Ray session in a window on screen.
`--size` *`widthxheight`*	Dimensions of the Sun Ray session, in pixels. *`width`* is the width of the Sun Ray session, between 64 and 5120 pixels. *`height`* is the height of the Sun Ray session, between 64 and 5120 pixels.

`-s` `--scaling`	Rescale the display automatically when the display window is resized.
`--noscaling`	Do not rescale the display automatically when the display window is resized.
`--audio`	Enable audio output on the client computer.
`-n` `--noaudio`	Disable audio output on the client computer.
`-i` `--clientid`	Display the client ID for OVDC.
`-b` *`megabits`* `--bandwidth` *`megabits`*	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` *`num`* `--onscreen` *`num`*	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` *`bytes`* `--mtu` *`bytes`*	Maximum Transmission Unit. The maximum packet size for connections.
`--profile` *`profilename`*	Run OVDC using the settings defined in the specified profile file. For profile files that are not in the default location, type the full path name to the file. If the `--profile` option is not used, the `default` profile is used for the Sun Ray session. If the *`profilename`* file does not exist, it is created automatically on connection and contains the values from the OVDC configuration dialog. Note The settings in the profile can be overridden by other command line options. See Overriding Profile Settings.
`-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 or lossless compression for image data.
`-l` *`num`* `--logginglevel` *`num`*	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` *num* `--logging-domains` *num*	Categories of log messages to record. 1 = Session 2 = Network 4 = Input 8 = Appliance Link Protocol (ALP) commands 16 = Multimedia 32 = Audio 64 = Display 128 = Smart card 256 = Serial For multiple categories, add the values. For example, 33 = Audio + Session, 511 = All categories.
`-x` *num* `--exit-key-sequence` *num*	Exit key combination, used to display the Disconnect dialog. 0 = No Key Selected 1 = Left Shift 2 = Right Shift 3 = Left Control 4 = Right Control 5 = Left Alt 6 = Menu Key 7 = Left Windows Key (Windows and Linux platforms), Left Command Key (Mac OS X platforms) 8 = Right Windows Key (Windows and Linux platforms), Right Command Key (Mac OS X platforms) 9 = Num Lock 10 = Scroll Lock To specify a key combination, use the command option multiple times. For example, `-x 1 -x 3 -x 5` is equivalent to Left Shift-Left Control-Left Alt.
`-N` *num* `--network` *num*	Protocol used for network connections. 0 = Auto 4 = IPv4 6 = IPv6
`-R` `--audiorec`	Enable audio input from the client computer.
`-C` `--noaudiorec`	Disable audio input from the client computer.
`--logfile`	Name of the log file. If you do not type a full path name, the log file is stored in the default location.
`--serial`	Enable support for the serial port on the client computer.
`--noserial`	Disable support for the serial port on the client computer.
`--smartcard`	Enable support for using a smart card on the client computer.
`--nosmartcard`	Disable support for using a smart card on the client computer.
`--keyboard-country-code` *num*	Country code for the keyboard on the client computer. OVDC automatically detects the keyboard country code from the operating system on the client computer. Specify a value from 0 to 255 if you want to override this.

Command Line Examples

The following examples show how you can configure and run OVDC from the command line.

To start OVDC and display the OVDC configuration dialog:

```
vdc
```

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

```
vdc --autoconnect
```

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

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

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

```
vdc -x 5 -x 7 sr-1.example.com
```

To connect using an MTU of 1366 bytes:

```
vdc –-mtu 1366 sr-1.example.com
```

To run OVDC using the settings defined in the `fullscreenmode` profile:

```
vdc –-profile fullscreenmode sr-1.example.com
```

Frequently Asked Questions

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 OVDC 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 OVDC.

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 OVDC to access the Internet.

Can I Log In Using a Smart Card?

You can log in to a Sun Ray server from OVDC by inserting a smart card into a smart card reader attached to the client computer.

Mobile sessions, where you can start a Sun Ray session on one client computer and resume the session from a different client computer, are supported. This feature is called hotdesking.

To enable OVDC to use a smart card, select the Smart Card check box on the Advanced tab in the OVDC configuration dialog.

> **Note**
> Your administrator might need to enable hotdesking using a smart card for Sun Ray sessions.

Smart card logins using a PIN or a public key infrastructure (PKI) certificate are not supported.

Can I Use Multiple Monitors?

You can use OVDC 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**
  > For best results when using display spanning mode, set all monitors 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 and Record Audio on the Client Computer?

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

To record audio input from your computer in a Sun Ray session, select the Record check box on the Connection tab. You can then connect a microphone to your client computer, for example, and record the sound using software on the Sun Ray server.

> **Note**
> Your administrator might need to enable audio for Sun Ray sessions.

To change audio settings such as volume, you can use these keyboard shortcuts. Alternatively, use the `utsettings` command to display the Sun Ray Settings dialog.

Note
Changes to audio settings only take effect when using full screen mode.

How Can I Improve the Display 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 display quality.

If you want the best possible 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 screen. 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 window on screen, 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 window.

To exit from a full-screen session, use the exit key combination keyboard shortcut. This displays the Disconnect dialog, enabling you to disconnect from the Sun Ray session and close down OVDC.

Note
By default, the exit key combination is Left Shift-Left Ctrl-Left Alt. You can change this keyboard shortcut, using the settings on the Hot Key tab.

On Microsoft Windows platforms, you can minimize a full-screen session by including the M key with the exit key combination. For example, Left Shift-Left Ctrl-Left Alt-M.

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. You can then specify the required profile when you start the Desktop Access Client from the command line, for example:

```
vdc --profile sr1-profile
```

Note
You can use multiple profiles at the same time. For example, to run multiple concurrent Sun Ray sessions on the same client computer.

See the Profiles section for more information about creating and using profiles with OVDC.

Configuration Settings

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: • 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 full 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: • Window. The Sun Ray session is displayed in a window on screen. • Full Screen. The Sun Ray session fills the whole screen area. To exit from full screen mode, type Left Shift-Left Ctrl-Left Alt. If Full Screen is selected, the following options are available when using multiple monitors: • 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	The preferred display size for the Sun Ray session. The following options are available: • Auto Size. The Sun Ray session is displayed at the optimal size for the screen. 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. If Full Screen is selected and the session dimensions are greater than the dimensions of the screen, the display moves when your mouse pointer is near the edge of the screen. This is called panning. If the session dimensions are less than the width of the screen, black bands are shown around the visible screen area. 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. 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.
Allow Scaling	The display is scaled to fit the window. If you resize the window, the display is rescaled automatically. Deselect the check box to disable scaling of the display. The display size is then fixed and the window includes scroll bars. In windowed mode, the aspect ratio of the display is retained when the window is resized. In full screen mode, the aspect ratio is not retained during resizing.
Play	Enables you to play audio from the Sun Ray session on the client computer.
Record	Enables you to record audio from the client computer in a Sun Ray session.

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	Maximum bandwidth for the connection, in megabits per second. 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 OVDC.
Maximum Transmission Unit (MTU)	This is the maximum packet size for network connections, in bytes. The default setting is 1500 bytes, which is the maximum value. 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.
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 a high-quality display.
Network Protocol	The type of network addresses used by computers on the Sun Ray network. The default setting is Auto. This setting selects the network protocol automatically.

Hot Key Tab

You use the Hot Key tab to configure the keyboard shortcut used to exit from OVDC. 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 OVDC. The default setting is Left Shift-Left Ctrl-Left Alt.

Note
Some of the available exit key combinations might not work on your 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.

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

- Microsoft Windows XP platforms – `C:\Documents and Settings\username\Application Data\OVDC\profilename.log`
- Microsoft Windows Vista and Microsoft Windows 7 platforms – `C:\Users\username\AppData\Roaming\OVDC\profilename.log`
- Mac OS X platforms – `$HOME/.OVDC/profilename.log`

- Linux platforms – `$HOME/.OVDC/profilename.log`

You can use the `--logfile` command option to change the name and location of the log file.

Advanced Tab

You use the Advanced tab to configure advanced settings for OVDC.

The following table shows the available settings for this tab.

Setting	Description
Serial	Enables you to access a device that is connected to a serial port on the client computer from the Sun Ray session. USB-to-serial adapters on the client computer can also be used. Devices added during a Sun Ray session are detected automatically. Serial port device nodes are listed in the $DTDEVROOT directory in the Sun Ray session.
Smart Card	Enables you to log in to a Sun Ray session using a smart card. Mobile sessions, also known as hotdesking, are supported.
Keyboard Country Code	Country code for the keyboard on the client computer. OVDC automatically detects the keyboard country code from the operating system on the client computer. Specify a value from 0 to 255 if you want to override this.

About Tab

The About tab shows version information for OVDC and system resources for the client computer.

Using Profiles

About Profiles

A profile is a text file on the client computer that contains configuration settings for OVDC.

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

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

```
vdc –-profile myprofile sr-1.example.com
```

You can specify a full path name for the profile, as follows:

```
vdc –-profile C:\profiles\myprofile sr-1.example.com
```

If the path to the profile file contains spaces, surround the path with straight quotation marks (").

If you do not specify a full path name for the profile, one of the following default locations is assumed:

- Microsoft Windows XP platforms – `C:\Documents and Settings\username\Application Data\OVDC`
- Microsoft Windows Vista and Microsoft Windows 7 platforms – `C:\Users\username\AppData\Roaming\OVDC`
- Mac OS X platforms – `$HOME/.OVDC`
- Linux platforms – `$HOME/.OVDC`

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

> **Note**
> You can use multiple profiles at the same time. For example, to run multiple concurrent Sun Ray sessions on the same client computer.

Profiles and Log Files

By default, each profile has a corresponding log file, with the same name as the profile. The log file is stored in the same directory as the profile. You can use the `--logfile` command option to change the name and location of the log file. See Changing the Log File Location for more details.

Creating a New Profile

1. Start OVDC from the command line, specifying the new profile name.
   For example, to create a new profile called `myprofile` in the default location, run the following command:

   ```
   vdc –-profile myprofile
   ```

   > **Tip**
   > To create the profile in a different location, use the full path name with the `--profile` option.

   The OVDC configuration dialog is displayed, showing the default settings.

2. Configure settings for the new profile.
   Use the tabs in the OVDC configuration dialog to change settings.
3. Click the Connect button.
   The OVDC 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 in the same directory.
   To use the new profile when you next start OVDC, use the following command:

   ```
   vdc –-profile myprofile --autoconnect
   ```

Editing a Profile

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

1. Start OVDC from the command line, specifying the profile name.
   For example, to edit a profile in the default location called `fullscreenmode`, run the following command:

   ```
   vdc –-profile fullscreenmode
   ```

   The OVDC configuration dialog is displayed, showing the settings defined in the `fullscreenmode` profile.

2. Change configuration settings for the profile.
   Use the tabs in the OVDC configuration dialog to change settings.
3. Click the Connect button.
   The OVDC configuration settings are saved automatically to the profile file.

Overriding Profile Settings

When you start OVDC 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 in the default location called `myprofile`, run the following command:

```
vdc --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:

```
vdc --logging-level 0 --nospan --autoconnect
```

Creating New Profiles From the Command Line

You can use the `--create-profile` command option to create new profiles from the command line. When you use this option, OVDC does not run and the OVDC configuration dialog is not displayed.

Any configuration settings you make when using `--create-profile` are saved in the profile. Otherwise, default settings are used. If you specify a Sun Ray server to connect to, the server name is saved in the profile.

If the profile file name already exists, using the `--create-profile` option overwrites it.

For example, to create a new profile in the default location called `myprofile` that connects to the Sun Ray server `sr-1.example.com`, run the following command:

```
vdc --profile myprofile --create-profile sr-1.example.com
```

> **Tip**
> To create the profile in a different location, use the full path name with the `--profile` option.

Managing OVDC

Enabling Access for OVDC

The `utpolicy` setting for the Sun Ray Server Software (SRSS) must be configured to enable access using OVDC.

See How to Enable Access for OVDC for details of the required configuration.

You might also need to configure firewall settings as follows:

- Client computers. Ensure that firewall settings on the client computers allow OVDC to access the Internet.
- Sun Ray servers. See Ports and Protocols for information on the ports used by OVDC.

How to Enable Access for OVDC

OVDC can be used to access both smart card sessions and non-smart card sessions. Session mobility, or hotdesking, is supported with or without smart cards.

> **Note**
> The following procedure uses a warm restart of Sun Ray services. If you disable access for OVDC, use a cold restart.

Using the Command Line

1. View the current policy.
   Use the `utpolicy` command, as follows:

```
# /opt/SUNWut/sbin/utpolicy
Current Policy:
-a -g -z both -M
```

> **Note**
> (Solaris only) The `-M` option enables non-smart card mobile (NSCM) sessions.

2. Edit the current policy, to enable access for OVDC.
   Do one of the following:
   a. To enable both smart card and non-smart card sessions, add the `-u both` option to your policy options.

```
# /opt/SUNWut/sbin/utpolicy -a -g -z both -M -u both
```

   b. To enable only non-smart card sessions, add the `-u pseudo` option to your policy options.

```
# /opt/SUNWut/sbin/utpolicy -a -g -z both -M -u pseudo
```

   c. To enable only smart card sessions, add the `-u card` option to your policy options.

```
# /opt/SUNWut/sbin/utpolicy -a -g -z both -M -u card
```

3. Restart the Sun Ray services.

```
# /opt/SUNWut/sbin/utrestart
```

   After enabling or disabling access for OVDC, a restart of Sun Ray services in the server group is required.

Using the Administration GUI

> **Note**
> You can only enable non-smart card mobile sessions from the Administration GUI. Use the command line if you want to enable smart card sessions.

1. Click the Advanced tab.
2. Click the System Policy tab.
3. Select the Sun Virtual Desktop Client option in the Non-Card Users section.
   This enables non-smart card sessions.
4. Restart all servers in the server group using the Warm Restart button.

Client ID Differences Between OVDC and Sun Ray DTUs

If you have existing scripts using the Sun Ray Server Software (SRSS) commands, or you plan to create scripts, you must be aware of the client ID differences between OVDC and Sun Ray DTUs.

All Sun Ray clients are represented in the SRSS administration tools by a client ID, also called CID, terminal CID, or client identifier. A client ID has both a full ID and a short ID version:

- Full client ID: namespace.id-part

- Short client ID: id-part

The namespace value is a tag that determines the format of the id-part value. Short client IDs are usually used and accepted because the current namespaces, one for DTUs and one for OVDC, use different id-part formats. The full client ID is used to help distinguish between these different types of clients more easily.

The details of the client ID are as follows:

Client	Namespace	Id-Part Meaning	Id-Part Format
Sun Ray DTU	IEEE802	MAC address of DTU	12 hex digits
OVDC	MD5	MD5 hash of client key	32 hex digits

The client key is part of an OVDC profile, so every OVDC profile has its own Client ID.

Example Sun Ray DTU IDs

Short ID	Full CID
0003badc1b9d	IEEE802.0003badc1b9d
00144f85f52f	IEEE802.00144f85f52f
080020b5ca55	IEEE802.080020b5ca55

Example OVDC IDs

Short ID	Full CID
1bd97b44ea9458fac256a7a778a282fe	MD5.1bd97b44ea9458fac256a7a778a282fe
d8b3a4eb29497e0c6fbb0f2a810267f5	MD5.d8b3a4eb29497e0c6fbb0f2a810267f5

Troubleshooting OVDC

Connection Problems When Using a VPN or WAN

The Maximum Transmission Unit (MTU) is the maximum packet size for connections. By default, the MTU is set to 1500 bytes.

If you experience problems when using a Virtual Private Network (VPN) or a wide area network (WAN), the MTU setting might be too high for your network.

To diagnose the correct MTU setting for your network, use the `ping` command to find the largest packet size that can be transmitted successfully.

On Windows platforms:

```
ping server-name -l <bytes> -f
```

where *`server-name`* is the name of the Sun Ray server and *`bytes`* is the packet size.

On Mac OS X platforms:

```
ping server-name -s <bytes> -D
```

where *server-name* is the name of the Sun Ray server and *bytes* is the packet size.

On Linux platforms:

```
ping server-name -s <bytes>
```

where *server-name* is the name of the Sun Ray server and *bytes* is the packet size.

To calculate the MTU setting, add eight bytes to the packet size.

To set the MTU, either change the setting on the Network tab or run the following command:

```
vdc --mtu <bytes> server-name
```

where *bytes* is the MTU, in bytes and *server-name* is the name of the Sun Ray server.

Screen Rendering Problems

Screen rendering problems, such as slow screen redraw or blocks of black pixels, can occur if the Maximum Transmission Unit (MTU) setting is too high for the network.

The MTU is the maximum packet size for connections. By default, the MTU is set to 1500 bytes.

See Connection Problems When Using a VPN or WAN for details of how to diagnose the correct MTU setting for your network.

Setting the Logging Level

To help you to diagnose problems with OVDC, you can increase the logging level.
The available logging levels are shown in the following table.

Level	Description
0	No logging
1	Critical messages
2	Warnings
3	Informational messages

By default, the logging level is `0`, which sets logging to off.
The logging level is cumulative. For example, the maximum logging level 3 includes informational messages, warnings, and critical messages.

To set the logging level, either change the setting on the Logging tab or run the following command:

```
vdc --logging-level <num> server-name
```

where *num* is the logging level and *server-name* is the name of the Sun Ray server.

For example, to record warnings and critical messages for a connection to the `sr-1.example.com` Sun Ray server, run the following command:

```
vdc --logging-level 2 sr-1.example.com
```

Changing the Log File Location

By default, 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 default location of the log file depends on the installation platform, as follows:

- Microsoft Windows XP platforms – `C:\Documents and Settings\username\Application Data\OVDC\profilename.log`
- Microsoft Windows Vista and Microsoft Windows 7 platforms – `C:\Users\username\AppData\Roaming\OVDC\profilename.log`
- Mac OS X platforms – `$HOME/.OVDC/profilename.log`
- Linux platforms – `$HOME/.OVDC/profilename.log`

If you use the `--profile` command option to specify the path to a profile, the log file is created automatically in the same directory as the profile. In the following example, log messages are written to the `C:\temp\fullscreen.log` file.

```
vdc --profile C:\temp\fullscreen
```

Using the `--logfile` Command Option

You can use the `--logfile` command option to change the name and location of the log file. If the path to the log file contains spaces, surround the path with straight quotation marks (").

The following example uses the default profile and writes log messages to the `mylog.txt` file in the default location.

```
vdc --logfile mylog.txt
```

The following example uses the default profile and writes log messages to the `C:\temp\logfile.txt` file.

```
vdc --logfile C:\temp\logfile.txt
```

The following example uses the `C:\profiles\fullscreen` profile and writes log messages to the `C:\temp\logfile.txt` file.

```
vdc --profile C:\profiles\fullscreen --logfile C:\temp\logfile.txt
```

The following example uses the `C:\profiles\fullscreen` profile and writes log messages to the `mylog.txt` file in the default location.

```
vdc --profile C:\profiles\fullscreen --logfile mylog.txt
```

Displaying Client ID Information

To display the client ID for OVDC, use either of the following methods:

- Type a keyboard shortcut during a Sun Ray session. Use `Ctrl-Pause-K` on Windows or Linux platforms and `Ctrl-F15-K` on Mac OS X platforms.
  To display the software version number in addition to the client ID information, use `Ctrl-Pause-V` on Windows or Linux platforms and `Ctrl-F15-V` on Mac OS X platforms.
- Use the `-i` or `--clientid` command option of the `vdc` command, as follows:

  ```
  vdc -i

  vdc --clientid
  ```

The format of the client ID for OVDC is different to the client ID for a Sun Ray DTU. See Client ID Differences for more information.

Using On-Screen Displays to Diagnose Connection Problems

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

See Sun Ray Icons for more details about the available icons and messages used by SRSS.

Changing the Keyboard Country Code

OVDC automatically detects the keyboard country code from the operating system on the client computer.
In some cases, you might want to change the keyboard country code. For example, if the correct key strokes are not being sent to the Sun Ray server.

To change the keyboard country code, do the following:

1. Go to the Advanced tab in the OVDC configuration dialog.
2. Type a number from 0 to 255 in the Keyboard Country Code field.

Valid country codes are listed in the `keytable.map` file in the `/usr/openwin/share/etc/keytables` directory on the Sun Ray server. Some examples of country codes are shown on this page

Using 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-Pause-Down Arrow (Windows/Linux) Ctrl-F15-Down Arrow (Mac)	Mute	Mutes audio output
Ctrl-Pause-Right Arrow (Windows/Linux) Ctrl-F15-Right Arrow (Mac)	Louder	Increases audio volume
Ctrl-Pause-Left Arrow (Windows/Linux) Ctrl-F15-Left Arrow (Mac)	Softer	Decreases audio volume
Ctrl-Pause-N (Windows/Linux) Ctrl-F15-N (Mac)	Mute-Louder-Softer	Displays network connection details
Ctrl-Pause-V (Windows/Linux) Ctrl-F15-V (Mac)	Stop-V	Displays the software version number and client ID for OVDC
Ctrl-Pause-K (Windows/Linux) Ctrl-F15-K (Mac)	Stop-K	Displays the client ID for OVDC

Note
The keyboard shortcuts in this table use the Ctrl-Pause or Ctrl-F15 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.

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