



# Client Guide

Version 8.2

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## Welcome to VERDE VDI

VERDE, the next generation of VDI, removes the management burden, complexity, and costs associated with desktop virtualization. With hundreds of millions of professional desktops set to refresh, organizations of all sizes are turning to VERDE to provide an easy-to-use, cost-effective approach to provisioning, managing, updating, and securing PC and BYOD (bring your own device) environments.

### What is VDI?

With Virtual Desktop Infrastructure (VDI), all programs, applications, and data that traditionally resides on local storage of a desktop is “virtualized” and stored on a remote central server.

### What does VDI mean for business?

Organizations enjoy reduced risk and lessen needless downtime. With VDI, your business has greater control over a user's desktop and corporate data. Whether on site or remote, VDI offers real protection to ensure valuable data is no longer stolen, lost, or destroyed.

### What does VDI mean for IT?

VDI means not having to rollout an update to every PC individually. With VDI, desktops are managed from a central location. Whether migrating to the latest Windows, installing a new security patch, or re-imaging a single machine, it is easier than ever to administer a PC environment, even across tens of thousands of machines. IT can create a single image and seamlessly roll it out to every machine on the network with the push of a button.

Additionally, should instability occur, the IT administrator can simply rollback to the most recent acceptable state and redeploy.

### What does VDI mean for the end user?

End users can access their desktop from any device (PC, notebook, tablet, thin client) and from any location (work, home, library, or while traveling) and access all data. Additionally, VDI often improves productivity by delivering LAN performance for remote branch office users



## VERDE VDI and Desktop Cloud Fabric

VDI focuses on the total value delivered, not just in terms of cost, but in other areas such as security, resiliency, continuity, agility, and efficiency. VDI is about helping organizations future-proof their operations for change. If you've done a good job providing that value, then the introduction (and mass adoption) of devices like androids, becomes just another endpoint to support, not an either or proposition.

We've come a long way since first-generation server-hosted desktop solutions that were not only costly, but also complex. VDI enables companies to deliver on the promises of VDI, removing the cost and complexity burdens by offering features that include: integrated online and branch VDI; the ability to transcend on-premises and cloud; unified endpoint management and a high definition end-user experience.

### SUPPORTED LANGUAGES

The following languages are available for VERDE and User Consoles.

- » Chinese (Simplified)
- » Chinese (Traditional)
- » English
- » French
- » German
- » Italian
- » Japanese
- » Korean
- » Portuguese
- » Spanish

### CONTACT INFORMATION

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## Connecting Users to VERDE

Remote users connect to VERDE from the VERDE User Console, the VERDE User Console5, or the VERDE Client.

The User Console supports access to virtual desktops using SPICE and RDP protocols. VERDE secures the remote session with SSL/TLS encryption when applicable.

The VERDE User Console5 contains functionality similar to the standard console, but with the benefit of not requiring additional software to be installed on the client. Only users wanting to connect to a Windows guest session should use the VERDE User Console5 for access; currently, Linux guest sessions are not supported on this platform.

The VERDE Client will be the primary way that end users will access their virtual desktops. The VERDE Client is installed with the VERDE user tools. VERDE provides all of the tools required to enable the client for virtual sessions. The VERDE client is currently the only software client that supports the UXP protocol. The UXP protocol is also available using the NComputing RX-300 thin client. See [Starting the User Console](#) on p. 6 for more details.

Confirm the following items are configured to support virtual desktop sessions:

- » Enable RDP support in the Windows Gold Images to launch an RDP session from the User Console.
- » Advanced RDP features like multimedia redirection and support of multiple monitors are only available with Windows 7 Enterprise or Ultimate Editions.
- » The VERDE User Console requires a browser that is Java-enabled. Confirm only one version of the Java Runtime Environment is installed.
- » Ubuntu 12.04 client requires installation of the `libjpeg62` package to support SPICE.

## CONFIGURING THE FIREWALL FOR THE VERDE USER CONSOLE

User Console connections use outbound ports only—meaning that the client computers themselves can be behind a standard firewall or NAT device. If the VERDE server(s) is also behind a firewall, verify the following ports are open and can route to the appropriate VERDE server(s):

- » **8443**. https access to the VERDE Management Consoles.
- » **48622/tcp**. VERDE Use Console – RDP and SPICE connections.
- » **48642**. Used by the SmartSync protocol (Branch). Previous versions of VERDE used port 48632. Keep this port available in deployments that have been upgraded.

## Starting the User Console

After signing into the console, users are able to connect to different Gold Image sessions that have been assigned to them by the administrator. The VERDE User Console can be accessed at one of the following locations:

`http://<server-name-or-IP>:80` or `https://<server-name-or-IP>:443`

Upon accessing one of these locations, the **Login** screen is displayed. If the console is connected to the Active Directory, log in with Active Directory credentials—if not, sign in using the account credentials created on the VERDE Server. Any additional users must be defined in the Gold Image.



**Note:** A Java plugin is required for viewing the VERDE User Console.



**Note:** For security reasons, many modern-day browsers no longer support Java Applets. As a result, end-users will not be able to use the VERDE User Console to launch desktops. See <https://java.com/en/download/faq/chrome.xml> for more details.



## VERDE User Console5

VERDE also offers an HTML5-based console that can be accessed on the majority of HTML5-ready browsers. The VERDE User Console5 has similar functionality as the VERDE User Console—but unlike the standard console, you won't need to install a Java plugin to launch virtual desktops. Once you select a desktop, the VDI session will open in the browser.



**Important:** The current version of the VERDE User Console5 only supports RDP protocol, and does not support USB drives functionality.

The VERDE User Console5 is the only available option for VERDE users utilizing a Chromebook client to connect to the VERDE application.

To access the VERDE User Console5, you'll need to open a browser and navigate to one of the following addresses:

`http://<server-name-or-IP>:8080/uc5` or `https://<server-name-or-IP>:8443/uc5`

Once you've navigated to the site, add the appropriate username and password in the fields provided, then select "Login."



## VERDE Client

The VERDE client is an alternative to the VERDE User Console. It is installed with the VERDE Client Software Tools. If you configured VERDE using General Settings, Windows tools and the VERDE Client can be updated automatically.

Linux and MAC tools and the client are verified to ensure you're using the latest version.

MAC clients can only run guest sessions from the VERDE Client. Sessions cannot be launched from the VERDE User Console.

### USING VERDE CLIENT

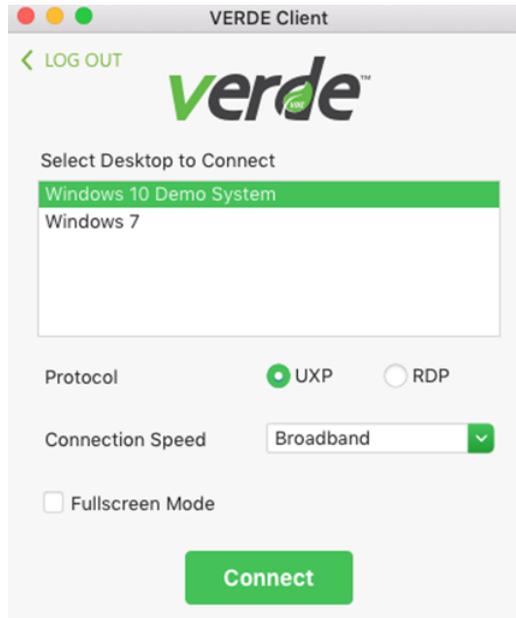
Perform the following steps to launch a desktop from the VERDE Client:

1. After VERDE Client Software Tools are installed on a client machine, double-click the VERDE Client desktop icon.

The image shows a screenshot of the VERDE Client application window. The window has a title bar with the text 'VERDE Client' and three colored window control buttons (red, yellow, green). The main content area features the 'verde' logo at the top. Below the logo are three text input fields: 'Connection Server', 'Username', and 'Password'. At the bottom center of the window is a green button with the text 'Log In'.

2. In the field under "Connection Server," enter the URL for the server on which this user can run sessions.
3. Under "Username", enter the username. If the user account resides on an LDAP server, the entry is `user@<name>`, where `<name>` is the name specified when the server was added on the LDAP Servers screen.
4. Enter the account password.

5. **For Linux Clients Only.** If you are on a Linux client, you will also see a "Domain" field where you'll need to apply the domain name of the server. You can select a domain name from the drop-down list. If the drop-down list is empty, an administrator will need to run an executable through the command line on the VERDE server to provide domain name options.
6. Select "Login." The desktops that have been assigned to this user will be listed.



7. Select the desktop to launch. If necessary, adjust the connection speed, fullscreen mode, and the preferred protocol.
8. Select "Login."



## CONFIGURING VERDE CLIENT

The VERDE Client can be customized to reflect the preferences of an organization and the default settings displayed to users. For example, the window title and default protocol settings can be configured. The VERDE Client can also be started from the command line with a set of configuration options. Review the table for Installation locations.

Table 1-1 VERDE Client Installation Locations

OS	Command
Linux	<code>/usr/bin/verde-client</code>
Windows	<code>C:\Program Files\VERDE\verde-client.exe</code>

Type `--help` or `-?` for a complete list of command and configuration options.



## Configure Client and Guest Time Zone

The guest session time zone matches that of the client machine if the two are the same operating system type. If the client is a Linux machine, and the guest session is a Windows desktop, or vice versa, a zone name conversion is required.

Microsoft (Windows) clients and guests use Microsoft time zone names, which can be found [here](#).

Linux clients and guests use a more standard set of names. You can review them [here](#).

VERDE provides a default set of name mappings in `/usr/lib/verde/etc/timezones.txt`, but these might not cover all that are needed in an environment. To customize the zone name mapping, create a `timezones.txt` file in the `.verde` directory in the home directory of the VERDE system account (`vb-verde`). Each line in the file should contain:

`<windows name>|<standard name>` which translates to: **Taipei Standard Time|Asia/Taipei**

Mappings provided by this file take precedence over VERDE mappings.

## ANTI-VIRUS SOFTWARE ON THE CLIENT

Anti-virus software may single out VERDE processes as suspicious. To circumvent this event from occurring, add the VERDE process, and any other required processes, to the anti-virus program's trusted list.

For the Windows client, these files include:

```
%ProgramFiles%\VERDE\rdppass.exe
%ProgramFiles%\VERDE\spicec.exe
%ProgramFiles%\VERDE\verde-usb-server.exe
%ProgramFiles%\VERDE\verdeprint.exe
%windir%\system32\vb-usb-service.exe
```



## RDP Connection Scripts

RDP connection scripts can be created to customize the connection settings permanently. These settings include components such as the display size, user experience, and compression.

Sample scripts are provided in:

```
/usr/lib/verde/etc/apache-tomcat/webapps/VIA/verde-scripts
```

The files must be named:

```
rdp-connection-settings
rdc-connection-settings
rdesktop-connection-settings
nx-connection-settings
```

Create a verde-scripts directory in:

```
/home/vb-verde
```

Create and store scripts in this directory. VERDE does not verify that the custom connection script is syntactically correct before it is used. If custom scripts are not present, the User Console will start the session with RDP connection defaults.

## CONFIGURING AUTOMATIC LOGOUT FOR THE USER CONSOLE

The auto log out feature closes the VERDE User Console as a security measure. To confirm that a user has logged out of the User Console, perform the following steps:

1. Log into the VERDE Server as root.
2. Change directory to:

```
/usr/lib/verde/etc/apache-tomcat/webapps/VIA/WEB-INF/classes
```

3. Edit the `uc.properties` file.
4. Change `logout.ondisconnect = false` to `logout.ondisconnect = true`
5. Restart VERDE Services.

To test the new settings in the User Console, launch several sessions. After you close the last session, the User Console will log out automatically.

In a cluster environment, manually apply this change to each node.

## Connections for iPad, iPhone, iPod, and Android

You can use an iPad, iPhone, iPod, or Android clients to access guest sessions by downloading Microsoft RD Client from their app store.

The client makes one Gold Image available to users or groups from a device. To install the client, perform the following steps:

1. From the device, access the Application Store, then select "FREE."
2. Search for and download iFreeRDP or Microsoft RD Client. Select "Install."
3. After the application has finished installing, launch the applet.
4. To connect to a guest session, at a minimum you'll need to add the following information:
  - » **Title.** Name of the connection.
  - » **Host Name.** The FQDN or IP address of the VERDE server.
  - » **Username.** Your username (`user@AD_domain` if it is an Active Directory domain user, `user-@0local` if it is a local user). The UPN username must be recognized by the Active Directory. If the LDAP configuration lists a friendly name for the UPN suffix, it must match the UPN suffix understood by the Active Directory.
  - » **Password.** The password associated with your username.
  - » **Domain.** (optional) If the domain is specified with the username, leave the field empty.
5. Select "Save." You should now be able to access a guest session from the device.



**Note:** If you already have a session running on a computer and start a session on another device, the original session will shut down.

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