



# Release Notes

## Version 8.2

Copyright 2018 NComputing Global, Inc. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of NComputing Global, Inc.

VERDE, NComputing, and the NComputing logo are trademarks of NComputing Co., Ltd. Other company, product, or service names may be trademarks or service marks of others.

NComputing Global, Inc.  
1875 S. Grant Street  
Suite 570  
San Mateo, CA 94402

Phone: 1.650.409.5959  
Fax 1.650.409.5958



# New Features

## VERDE support for RX-300

VERDE 8.2 now supports our own NComputing RX-300 thin client. The RX-300 is an enhanced ARM based Raspberry Pi-3 device that provides support for the following features.

- » Pre-installed VERDE client software including USB redirection
- » Support for the NComputing award winning UXP protocol as well as the standard Microsoft RDP protocol
- » A physical power on / off button – no need to pull the power cord to turn off the device
- » Support for dual monitor with the attached NComputing dual monitor adapter (sold separately)
- » Remote management of the RX-300 using the NComputing Pi Management Console (PMC)
- » Ability to switch between VERDE Client and native Raspbian OS modes
- » USB redirection is supported for RDP and UXP Protocols on Windows-64 guests

## VERDE support for UX 2.0

The NComputing UXP protocol has been added to those available to VERDE host/guest communications. The features provided by the use of the UXP protocol include:

- » Improved media streaming performance using the proprietary vCAST streaming
- » Compatibility with both NComputing's vSpace session-based virtualization solution and VERDE 8.2
- » Improved compression algorithm with UXP 2 lowering bandwidth consumption up to 43%

## New VERDE license management process and key

VERDE now supports the NComputing License management protocol and process.

Product registration and licensing are now managed by the NComputing Cloud-based Management Portal. All newly registered VERDE 8.2 installations automatically receive trial seat licenses upon successful registration.

Paid seat licenses can be obtained by contacting your NComputing reseller or logging in to the NComputing Management Portal to use a credit card to directly purchase the desired number of licenses. The Management Portal is now the master repository of your seat licenses. Licenses can be deallocated and reallocated across all of your VERDE deployments. This provides flexibility in managing your VERDE 8.2 deployment including fresh installs on new servers. The Management Portal always retains your licenses.

## Gold image now supports both QCOW2 and QCOW3 image file formats

VERDE gold images will now be created using the industry-standard QCOW3 format. QCOW2 images are also supported so there is no need to migrate earlier version QCOW2 images to QCOW3. QCOW3 offers improved performance and uses less disk space than QCOW2 formatted images.

## VERDE core package upgrades

- » VERDE 8.2 has been upgraded to use QEMU-KVM version 2.10 offering superior performance and emulation support for the latest physical devices.
- » Virt-IO has been upgraded to the latest stable release.

## QXL is automatically selected for Linux images

In prior releases, certain Linux image types required the admin to add the QXL drivers manually. This is now automatically handled by VERDE.

## New client and guest support

Verde now supports these additional end-points and guest images: End-point devices:

- » RX-300 thin client
- » Windows Server 2016
- » Windows 10 creator edition
- » Mint Cinnamon 18.x
- » Red Hat and CentOS 6.9 and 7.0
- » Fedora 26

Gold Images

- » Windows Server 2016
- » Windows 10 creator edition
- » Red Hat and CentOS 6.9 and 7.0
- » Mint–Cinnamon 18.x
- » Linux Lite

## Web Services restart

Web services used by VERDE are now monitored and restarted if the web service process stops unexpectedly.

## Cache IO refresh button added to the maintenance tab

Administrators can now manually reset the server gold image cache.

## MC log file auto delete function added

The MC log files are saved on a per day basis and it is now possible to limit the number of days that these logs are saved. The setting for the number of days of log file storage can be set in the maintenance tab of the VERDE management console.

## A warning message has been added prior to deleting a user's image file

When a local user is removed from the list of valid VERDE end users the user's image file is deleted. In VERDE 8.2 a warning message is provided to the operator so he can choose to back-up the image file before it is deleted.

## Additional Support for RX300 and UXP protocol

Additional support is available for NComputing's RX300 and UXP protocol, including support for NComputing's Chrome browser-based VCAST add-on, which will offer smoother streaming of YouTube and Windows Media videos to the end-user device. Please note: If you are using UXP/vCast, you should download the 2.2.6 version of the VLC software and install it in the gold image.

## Other Improvements

Various minor UI and UX improvements have been made throughout the management and UC5.

Performance improvements have been made throughout the product as a part of upgrades to internal core OS packages.

# Resolved Issues

Issue #	Description
VER-16	An unintentional image was displayed during gold image creation for a brief second.
VER-75	UC5 did not launch a tenant desktop if it was not in the global tenant.
VER-76	UC5 failed to launch a desktop if the image name and title did not match.
VER-97	Mac OS client download resulted in a 404 HTTP status error.
VER-103	An incorrect time was displayed in the last updated field of the UC5 console settings dialog.
VER-105	When using the Spice protocol, Win10 does not fill the screen in Full Screen mode.
VER-203	Ubuntu 1604 64bit image does not populate the entire screen in full screen mode is now fixed.
VER-239	Management Console crashed if the description was above 255 characters.
VER-361	Session setting names had to be unique even if they were in different tenant organizations.
VER-429	Screen display is blurred for Ubuntu 12.04 (32-bit&64-bit) OS after installation.
VER-590	Launching Desktop sessions failed if VERDEOS is installed with data on CIFS External Storage.
VER-602	Multiple VLANs could not be resolved in the session settings network tab.

# Limitations

## Windows XP

Windows XP is no longer supported as a client or as a guest OS.

## Deprecated feature removed

The session setting "Store user document files outside user image. [DEPRECATED]" has been removed. Files can be added outside of the image by adding an additional drive to a shared storage area via a Group Policy mapping or to a web based cloud connected drive.

## UXP runs on Windows 64-bit OS clients only

The UXP client software is designed to run on Windows 64-bit OS Operating Systems. It does not run and should not be installed on any 32-bit Windows device or on any Linux workstation.

# Known Issues

Issue #	Description
VER-823	Verde Gateway ISO Installation fails with exception error on VMware ESXi. Workaround is to install via RPM.
VER-819	If an AD user is accessing a guest session using SSO for Server OS, their first attempt to shutdown the session will not work. They will need to attempt the shutdown twice in order for the session to be properly shut down.
VER-837	Local users with WIN 2012r2 who attempt to connect via UXP will receive the following error: "The specified domain either does not exist or could not be contacted."
VER-838	After upgrading Verde Tools QEMU Guest Agent in Windows 7, the guest agent is not installed and the desktop session cannot be connected as end user. It is recommended that the user restart after first login.
VER-821	Windows Server OS power options are not available in guest sessions. Workaround is to press "Alt-F4" to close the session.
VER-830	UXP Dual Display: If both monitors have different native resolutions, then UXP uses only the primary monitor's native resolution on both monitors.

VER-839	VERDE Android client app: After disconnecting the RDP session, the Verde Android Client app, Verde Client does not disconnect automatically. The workaround is to close the dialog box manually.
VER-811	Session Settings displays obsolete protocol for Linux images: NX protocol is no longer available for Linux images.
VER-726	When a user connects to a desktop session that has previously been shut down, KVM-related errors appear on the VERDE Server Console. This is a cosmetic issue in Linux and is harmless. Users should press "Enter" on the console to clear the errors.

# Known Issues

Issue #	Description
VER-823	Verde Gateway ISO Installation fails with exception error on VMware ESXi. Workaround is to install via RPM.
VER-819	If an AD user is accessing a guest session using SSO for Server OS, their first attempt to shutdown the session will not work. They will need to attempt the shutdown twice in order for the session to be properly shut down.
VER-837	Local users with WIN 2012r2 who attempt to connect via UXP will receive the following error: "The specified domain either does not exist or could not be contacted."
VER-838	After upgrading Verde Tools QEMU Guest Agent in Windows 7, the guest agent is not installed and the desktop session cannot be connected as end user. It is recommended that the user restart after first login.
VER-821	Windows Server OS power options are not available in guest sessions. Workaround is to press "Alt-F4" to close the session.
VER-830	UXP Dual Display: If both monitors have different native resolutions, then UXP uses only the primary monitor's native resolution on both monitors.
VER-839	VERDE Android client app: After disconnecting the RDP session, the Verde Android Client app, Verde Client does not disconnect automatically. The workaround is to close the dialog box manually.
VER-811	Session Settings displays obsolete protocol for Linux images: NX protocol is no longer available for Linux images.
VER-726	When a user connects to a desktop session that has previously been shut down, KVM-related errors appear on the VERDE Server Console. This is a cosmetic issue in Linux and is harmless. Users should press "Enter" on the console to clear the errors.