Dell Wyse ThinLinux Version 2.1 Operating System and Add-ons

Release Notes

Notes, cautions, and warnings

> **NOTE: A NOTE indicates important information that helps you make better use of your product.**

> **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

> **WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

Contents

Overview

Wyse ThinLinux 2.1 combines the security, flexibility and market-leading usability of Ubuntu Linux with Dell's optimizations in management and user experience. It is ideal for organizations that want to run server-based, web-based, or local applications without the deployment and security concerns of a non-standard Linux distribution.

ⓘ **NOTE: For details about the previous versions, if applicable, or to determine which version of the operating system you need to select for your thin client, see Version matrix.**

Version matrix

The following section lists the platforms that are supported in each ThinLinux 2.1 release, and the add-ons required for ThinLinux 2.1.

Table 1. ThinLinux 2.1.x version matrix

Release version	Release date	Supported platforms	Release Notes
2.1.0.00	December 2018	• Wyse 3040 thin client • Wyse 5070 thin client	ThinLinux version 2.1.

Table 2. Security update add-on

Release version	Release date	Supported platforms	Release Notes
2.1.0.01	December 2018	• Wyse 3040 thin client • Wyse 5070 thin client	Security update for Dell Wyse password encoder.

Table 3. Citrix HDX RTME add-on

Release version	Release date	Supported platforms	Release Notes
2.7	February 2019	• Wyse 3040 thin client • Wyse 5070 thin client	Citrix HDX RTME 2.7 add-on.
2.6	January 2019		Citrix HDX RTME 2.6 add-on.

Table 4. VMware Horizon View Client add-on

Release version	Release date	Supported platforms	Release Notes
4.10	January 2019	• Wyse 3040 thin client • Wyse 5070 thin client	VMware Horizon client 4.10 add-on.

Table 5. Ericom PowerTerm add-on

Release version	Release date	Supported platforms	Release Notes
12.3.0.0.20171015.1-01	January 2019	• Wyse 3040 thin client • Wyse 5070 thin client	Ericom power term add-on.

Table 6. Wyse Settings add-on

Release version	Release date	Supported platforms	Release Notes
1.02.0-77	January 2019	• Wyse 3040 thin client • Wyse 5070 thin client	Wyse settings add-on.

ThinLinux Version 2.1

Release type and definition

This release includes new features and bug fixes for ThinLinux 2.1 platforms.

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Supported platforms

Table 7. Supported platforms

Platforms	Memory Configuration (eMMC/RAM)	UEFI BIOS
Wyse 5070 thin client with Celeron processor	16 GB/4 GB	1.1.3 and above
Wyse 5070 thin client with Pentium processor	16 GB/4 GB	
Wyse 3040 thin client	16 GB/4 GB	1.2.5 and above

Table 8. Build details

Platforms	Version	Build number	Build file name	Size in bytes
Wyse 5070 thin client	4.13.0-1028-oem	2.1.0.00	2.1.0.00_5070_merlin_16GB.exe	1,636,391,145
Wyse 3040 thin client	4.13.0-1028-oem	2.1.0.00	2.1.0.00_3040_merlin_16GB.exe	1,643,163,717

Table 9. Supported imaging

Imaging solution	Version
USB	3.1.0.28393
Wyse Management Suite	1.2 or later

New features

The following are the new features in this release:

- USB manager
- System proxy settings
- Firefox network proxy settings
- SCEP HTTPS support
- Configure system lock
- Home icon and back button in settings app
- Firewall support
- Custom Info support
- Hide default desktop options
- Force download wallpaper
- Desktop appliance mode with Citrix NetScaler Gateway server

- Localization
- Connections and third party applications

ⓘ **NOTE: For more information about configuring the UI settings, see the** *ThinLinux 2.1 Administrator's Guide*. **For information about newly added INI parameters, see the** *ThinLinux 2.1 INI Reference Guide*.

USB manager

USB Manager is a new feature to manage USB ports and devices. This feature allows the ports and devices to be configured using UI and INI parameters.

- USB ports—You can allow or block the USB ports with this feature. This feature configures USB ports in BIOS USB configuration settings. This feature can be set to on or off using UI or INI parameters.

  - Enable USB boot support—This feature enables USB boot support. By default this feature is turned on.
  - Enable front USB ports—This feature enables the front USB ports. By default this feature is turned on.
  - Enable rear USB ports—This feature enables the rear USB ports. By default this feature is turned on.

- USB Devices—You can manage the devices connected to the thin client using UI or INI parameters. Only one of the following features can be enabled at an instance.

  - Enable all USB devices—By default this feature is turned on. If this feature is enabled, the USB devices connected to the thin client are detected and works as expected. If the feature is disabled, one of the following features must be enabled:

    - Disable all USB Device
    - Disable all USB Devices excluding HID
    - Disable by USB Class

  - Disable all USB devices—By default this feature is turned off. If this feature is enabled, the USB devices connected to the thin client are not detected. If the feature is disabled, one of the following features must be enabled:

    - Disable all USB Device
    - Disable all USB Devices excluding HID
    - Disable by USB Class

  - Disable all USB Devices excluding HID—By default, this feature is turned off. If this feature is enabled, USB devices are not detected. This excludes Human Interface Devices (HID) like keyboard and mouse. If the feature is disabled, one of the following features must be enabled:

    - Disable all USB Device
    - Disable all USB Devices excluding HID
    - Disable by USB Class

  - Disable by USB Class —By default this feature is turned off. This feature can be used to configure USB devices, based on the USB device class. If a device class option is enabled, all the USB devices belonging to that particular USB class are not detected. If a device class option is disabled, all the USB devices belonging to that particular USB class are detected.

    When Disable by USB Class option is turned on, the following supported USB device classes are listed and all the options are turned off by default:

    - Disable Video Devices
    - Disable Storage Devices
    - Disable Smartcard Devices
    - Disable Audio Devices
    - Disable Printer Devices

ⓘ **NOTE: Any video devices connected to the thin client stop responding when you disable all the audio devices as each video device has an audio component.**

System proxy settings

This feature can be used to set system network proxy settings through INI parameters.

Table 10. System proxy settings

Proxy method	INI parameter	Description
None	Proxy_Method=None	This parameter resets the proxy settings which are set before.

Proxy method	INI parameter	Description
Automatic	Proxy_Method=Automatic \URL=<proxy server url>	This parameter sets the automatic proxy.
Manual Proxy	Proxy_Method=Manual \ Ignore_Host=<url want to ignore> \ Http_Host=<proxy server url> \ Http_Port=<proxy server port> Https_Host=<proxy server url> \ Https_Port=<proxy server port> Ftp_Host=<proxy server url> \ Ftp_Port=<proxy server port> Socks_Host=<proxy server url> \ Socks_Port=<proxy server port>	These parameters can be used to set manual proxy.

(i) **NOTE: For more information about the INI parameters, see the *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* at www.dell.com/support.**

Firefox network proxy settings

This feature can be used to set Firefox network proxy settings through INI parameters.

Table 11. List of Firefox network proxy INI parameters

Proxy Type	INI Parameter	Description
No Proxy	Firefox.Proxy=None	This parameter sets the Firefox proxy to none and resets the proxy settings which is set before.
Auto Detect	Firefox.Proxy=AutoDetect	This parameter sets the Firefox proxy to Auto Detect.
System Proxy	Firefox.Proxy=SystemProxy	This parameter sets the Firefox proxy to use System Proxy.
Manual Proxy	Firefox.Proxy=Manual \ Http_Host=< proxy server url > \ Http_Port=< proxy server port > \ Https_Host=< proxy server url > \ Https_Port=< proxy server port > \ Ftp_Host=< proxy server url > \ Ftp_Port=< proxy server port > \ Socks_Host=< proxy server url > \ Socks_Port=< proxy server port >\ NoProxy_For=<exclude list> \ Socks_Version=<socks version>	This parameter sets the Firefox proxy to manual and specifies the host IP and port details.
Proxy Config	Firefox.Proxy=ProxyConfig \ Proxy_URL=<proxy config url>	This parameter sets the Firefox proxy through the proxy configuration file and sets the proxy configuration URL.

(i) **NOTE: For more information about the INI parameters, see the *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* at www.dell.com/support.**

SCEP HTTPS support

This feature enables you to deploy certificates with HTTPS Simple Certificate Enrollment Protocol (SCEP). The 802.1X authentication can be executed with HTTPS SCEP certificate for ThinLinux user and ThinLinux machine. This feature can be set using UI and INI parameters. To set up HTTPS support through UI:

1. Go to **Settings** > **Management** > **SCEP** > **Add a new Certificate**
2. Enter the following details:
   - Description—<SCEP certificate description>
   - Server URL—https://<FQDN>/certsrv/mscep/mscep.dll
   - Challenge password—<challenge password>
   - CA Distinguished Name—<SCEPDC>
3. Click **Save**.
4. Click **Enroll** and verify the SCEP certificate.

ⓘ **NOTE:** SCEP certificates used for 802.1x authentication are displayed under System Settings > Certificates. If you want to install the CA root certificate manually you must disable the auto-download of CA certificate. The certificate name must be cacert.der and the certificate must be in the DER format only.

To enable the HTTPS support using the INI parameter, set the following parameters in wlx.ini:

1. SCEPCLIENTCERTSETTINGS=CertName=<Certname> \

   URL=https://<FQDN>/certsrv/mscep/mscep.dll \

   ChallengePassword=<challenge password> \

   CADN=Marigold.local \

   AutoEnroll=Yes
2. Download the INI files to the thin client, and verify if the SCEP certificate is enrolled successfully.

ⓘ **NOTE: For more information about the INI parameters, see the** *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* **at www.dell.com/support.**

Configure system lock

This feature is used to enable or disable system manual lock—`CTRL+ALT+L` or `Win+ L` keys. This feature can be enabled or disabled through UI or INI parameters. To set this feature using UI go to **System** > **Power** > **Power saver setting**. Set **Turn off screen after** with the required value from the drop down list.

ⓘ **NOTE: For more information about the INI parameters, see the** *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* **at www.dell.com/support.**

Home icon and back button in settings app

Home icon is added in the **Settings** app for easy navigation. The home icon is disabled in the **Settings** home page. When you navigate to other pages on the **Settings** app the home icon is enabled. You can navigate back to the **Settings** app home page when you click the home icon.

Back button is added in all the level 3 pages in **Settings** app. When you click on this button, you can navigate to the previous level in the **Settings** app. For example, consider **Connections** > **Browser** > **Create a new Browser connection**. When you click the back button you can navigate to the **Browser** page.

Firewall Support

This feature can be used to configure system firewall settings. This can be enabled or disabled through UI or INI. To set this feature using UI go to **Settings** > **Security** > **Firewall**. Enable **Firewall** and enter the firewall configuration script. For example,

- /sbin/iptables -A OUTPUT -p icmp --icmp-type 8 -j DROP
- /sbin/iptables -A INPUT -p icmp --icmp-type 8 -j DROP

To configure this feature using INI parameters, set the following parameters:

- Firewall. Enable=Yes \

- script=script_file_name

Place the script in the `wyse/wlx2/firewall` directory on the INI server.

For more information about the INI parameters, see the *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* at www.dell.com/support.

Custom Info support

This feature is used to configure the **Custom Info** page on the thin client. This can be enabled or disabled through UI, INI parameters , Wyse Device Manager, and Wyse Management Suite. Values set in the Custom Info field is reflected in **System information** > **Identity** > **Custom Info**. To set this feature using UI, go to **System information** > **Identity** > **Custom Info**. Enter the values for location, contact, custom1, custom2, custom3 and click **Save**. The custom info is saved successfully and reflects on the System information.

To set the Custom Info using Wyse Device Manager check in the thin client to WDM server.

1. Log in to WDM web console using valid credentials.
2. Select the client and select **Update device information**.
3. Enter the valid values for location, contact, custom 1, custom 2, and custom 3.
4. Click **Save**.
5. Restart the client.

To set the Custom Info using Wyse Management Suite check in the thin client to Wyse Management Suite server.

1. Log in to Wyse Management Suite web console using valid credentials.
2. Go to **Groups and Config** > **Edit policies** > **Device info**.
3. Enter the valid values for location, contact, custom 1, custom 2, and custom 3.
4. Click **Save and Publish**.
5. Restart the client.

Hide default desktop options

This feature can be used to hide the default desktop icons in user mode. The feature can be enabled or disabled through UI or INI parameters. To set this feature using the UI go to **Settings** > **System** > **Other settings** > **Hide Desktop Icons**.

ⓘ NOTE: **For more information about the INI parameters, see the *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* at www.dell.com/support.**

Force download wallpaper

This feature is used to configure force download the wallpaper. Wallpaper images must be placed in `wyse/wlx2/bitmap` on INI server.

To enable the force download set the following parameters in wlx.ini:

- Desktop=Silence.jpg
- Layout=Center
- Opacity=25
- ForceDownload=Yes

To disable the force download set the following parameters in wlx.ini:

- Desktop=Silence.jpg
- Layout=Center
- Opacity=25
- ForceDownload=No

For more information about the INI parameters, see the *Dell Wyse ThinLinux Version 2.1 INI Reference Guide* at www.dell.com/support.

Desktop appliance mode with Citrix NetScaler Gateway server

This feature enables you to login to Citrix server using NetScaler Gateway server.

1. To enable Cltrix go to **Connections** > **Citrix** > **Manage Citrix** > **Global settings**. Enter the NS GW Server from and store name.

2. Select the browsing protocol as HTTPS and save the settings. Go to **System** > **Desktop Appliance mode** > **Enable VDI Theme**. Select the connection type as Storefront and save the settings.
3. Restart the client.

   The desktop appliance mode login window is displayed. User can log in to the desktop appliance mode.

Localization

The following features are localized in ThinLinux 2.1 with respect to the supported languages:
Table 12. Localization

Feature	UI path
USB controller	**Settings** > **Peripherals** > **USB manager**
Custom Info	**Settings** > **System** > **Custom Info**
Hide default desktop options	**Settings** > **Other Settings** > **Hide Desktop Icons**
Back button	All third level UI pages in **Settings** page.
Firewall	**Security** > **Firewall**

Connections and third party applications

Citrix Receiver 13.10

- Cryptographic update—On a secure network connection, Cipher suites with the prefix TLS_RSA do not support Forward Secrecy. However, the Citrix Receiver for Linux allows you to enable these cipher suites, and is backward compatible to support the earlier versions of XenApp and Xen Desktop.
- Multi-monitor layout persistence—This feature allows you to save the position of a desktop session, and then relaunch it in the same position. This feature avoids the overhead of repositioning sessions at every launch. It empowers you to dynamically adjust and save the layout information across endpoints, thus optimizing the end user experience in multi-monitor environments.

Table 13. INI parameters

Task	INI parameters
ICA Cryptographic Updates	• EnableTLSRSA=(yes/no) • EnableRC4MD5=(yes/no) • EnableRC4128SHA=(yes/no)
Multimonitor Layout Persistence	SaveMultiMonitorPref=(yes/no)

For more information about the Citrix features, see Citrix Receiver 13.10 for Linux document at www.citrix.com

VMware 4.8

- VMware Horizon Client selects an optimal network condition to deliver the best user experience with the VMware Blast protocol.
  - (i) **NOTE: Since the optimal transport is selected automatically, the UI and INI options for VMware Blast—Blast Extreme Advanced Transport—configurations are removed.**
- VMware Horizon performance tracker is supported on a remote desktop that is connected using VMware Horizon Client.

Google Chrome

Google Chrome is updated to the latest version 68.0.3440.75. By default, the ThinLinux 2.1 image includes the Chrome OPT add-on.

Fixed issues

Table 14. Fixed issues

JIRA ID	Description
LS-493	The **Settings** applet must be moved from the desktop. Require an option to hide the **Settings** applet.

JIRA ID	Description
LS-494	Built-in Firefox is available for the PNAgent users.
LS-478	Add HTTPS support for SCEP certificate management.
LS-529	Citrix Appliance mode does not work with Citrix Gateway access gateway and Citrix Virtual apps and desktops.
TL-1081	Chrome browser is launched, when you hold Shift or Ctrl key, and then click any of the settings icons.
TL-1076	Printer settings window must not be displayed more than once.
TL-1074	Printer popup window does not close, when you switch to User Mode.
TL-1100	Auto Start connections do not launch after restarting the device with WLAN connectivity.
LS-638	The Arduino Uno R3 microcontroller is not mapped in to the Citrix session.

Security updates

The following security issues are fixed in ThinLinux 2.1 release:

- CVE-2018-8897: Kernel Elevation of Privilege Vulnerability
- CVE-2018-3639: Variant 4 Derivatives of Side Channel
- CVE-2018-3640: Variant 3a of Side Channel

Known issues

Table 15. Known issues

JIRA ID	Description	Workaround
LS-571	The user can save **Manage USB Port** settings through GUI by using incorrect BIOS password. However, the changes are not applied in the BIOS settings.	Enter the appropriate password.
LS-573	Google Chrome browser takes 30–60 seconds to open, when you launch the browser the first time after imaging or after factory reset.	There is no workaround. Issue occurs only for the first time.
LS-577	The **Connect USB Device** option is listed in the VMware View drop-down list after parsing the INI, USB_Rule=Deny_Class Class=Storage	There is no workaround.
LS-588	Unable to set the **Custom Info** parameters from Wyse Management Suite server.	There is no workaround.
LS-607	Changes that are made in BIOS settings do not reflect in the USB Manager UI when the INI parameters for **USB Devices** are configured on the client without the BIOS administrator password.	Set the BIOS password.
LS-609	Firewall UI settings do not revert to the previous settings, when you click **Cancel** to discard the changes in the **Enable Firewall** confirmation window.	You can save without clicking cancel.
TL-1169	ThinLinux 2.1—CAC user is successfully logged in to Citrix and VMware connection broker with an invalid PIN.	Enter the appropriate PIN.
TL-1168	ThinLinux 2.1—CAC is not found in the login page of XenApp 7.18 desktop server 2016 R2.	There is no workaround.
TL-1167	ThinLinux 2.1—CAC is not found after removing the smart card with VMware Horizon 7.5.	There is no workaround.

JIRA ID	Description	Workaround
TL-1162	ThinLinux 2.1—Browsed History is not cleared in the new browser connection, when clear browser data is turned on.	There is no workaround.
TL-1165	ThinLinux 2.1—After factory reset, **History**, and **Downloads** options are not blocked in Chrome browser.	There is no workaround.
TL-1164	ThinLinux 2.1—COM2 port is not displayed in the **Port** section, when Ericom Power term connection is created through INI.	There is no workaround.
TL-1151	ThinLinux 2.1—802.1x configuration settings are not preserved across system restarts.	There is no workaround.
TL-1140	ThinLinux 2.1—Chrome Browser is opened with the **set as default browser** option enabled.	You can set Chrome as the default browser as Chrome browser works without any impact.
TL-1144	ThinLinux 2.1—Turn off functionality for H.264 for RDP in VMWare does not work.	There is no workaround.
TL-1155	ThinLinux 2.1—After factory reset, power settings do not use the default values for lock screen. It is set to **Never**.	This issue occurs occasionally. You can set the required value.
TL-1029	ThinLinux 2.0 for 5070—Smart card is not found during logon with RDP connection through the onboard smart card reader.	There is no workaround.
TL-1028	ThinLinux 2.0 for 5070—CAC is not found during logon with VMware Horizon session host with the onboard smart card reader.	There is no workaround.
TL-1094	Import Certificates UI does not store previous settings.	There is no workaround.
TL-1119	ThinLinux 2.0 and ThinLinux 2.1—After doing OEM branding, the services list is displayed during the system boot.	There is no workaround.
TL-853	ThinLinux 2.0—As per EDD data, only the supported resolution must be displayed when you connect to the AMD DP port on Wyse 5070 thin client.	There is no workaround.
TL-962	ThinLinux 2.0—The color of background and text in Ericom are not retained.	There is no workaround.
TL-896	ThinLinux 2.0—Ericom menu bar options are selected while typing using the keyboard in the console.	There is no workaround.
TL-731	ThinLinux 2.0—On Wyse 5070 thin client, after you connect from hidden network, the wireless network connection is disconnected when you restart and turn off the client.	Reconnect to the wireless network after restarting the client.
TL-729	ThinLinux 2.0—Two network profile connections are displayed when you click the network icon in task bar.	There is no workaround.
TL-980	ThinLinux 2.0 for 5070—The complete drop-down list is not displayed when two non-4k and one 4K monitors are connected.	There is no workaround.
TL-409	ThinLinux 2.0—Screen keyboard is displayed, however, you cannot enter any characters in the **User to admin** mode window.	There is no workaround.
TL-1088	ThinLinux 2.0—GDM login screen remains blank when you image with dual monitor.	There is no workaround.
TL-1052	ThinLinux 2.1—Multiple outputs are displayed in sound settings when you insert the USB headset.	There is no workaround.
TL-1079	ThinLinux 2.0—Unable to close, minimize, or maximize the settings window on the **Manage Citrix PAM** login page.	There is no workaround.
TL-874	ThinLinux 2.0 for 5070—PromptPassword=Yes option does not work.	There is no workaround.
TL-878	ThinLinux 2.0 Ericom—Language Keyboard layout is not mapped in the keyboard mapping.	There is no workaround.

JIRA ID	Description	Workaround
TL-877	ThinLinux 2.0 Ericom—Unable to open HTML5 links from the communication tab.	There is no workaround.
TL-1065	ThinLinux 2.0—While switching to the admin mode from system settings, the authentication popup window is not displayed when you provide the wrong password (other than English and Korean).	Enter the appropriate password.
TL-722	ThinLinux 2.0—AD PAM login takes more than 10 seconds.	There is no workaround.
TL-562	ThinLinux 2.0—Password expiry functionality is not working.	Reset the password on the server side.
TL-501	ThinLinux 2.0—Set time is not preserved in the **Date and Time Settings** window.	There is no workaround.
TL-1044	ThinLinux 2.0—Citrix Storefront connection does not launch the second time when the first attempt is a failure (when the target desktop is turned off).	There is no workaround.
TL-1007	ThinLinux 2.0—Removable disk is disconnected when you copy files more than 1 GB.	There is no workaround.
TL-819	ThinLinux 2.0—After dragging the **System information** applet, texts are blurred.	There is no workaround.
TL-817	ThinLinux 2.0—Display window is not displayed properly for a few seconds when you change the resolution and layout.	Wait for a few seconds.
TL-727	ThinLinux 2.0—Mouse pointer blinks in Mozilla Firefox browser when the Youtuber video is played.	There is no workaround.
TL-1090	ThinLinux 2.0—When Keyboard layout is set to Japanese, keyboard input does not change to Japanese.	There is no workaround.
TL-757	ThinLinux 2.0—Blank screen is observed in multi display when you connect to the high-resolution monitor.	Use 1920x1080 or lower resolution monitor.
TL-758	ThinLinux 2.0—The **You have Caps Lock on** message is displayed in admin password prompt when the Caps Lock is pressed repeatedly.	There is no workaround.
TL-753	ThinLinux 2.0—Unable to move mouse cursor to lower edge of screen when you change the display rotation to right using DP2.	There is no workaround.
TL-569	ThinLinux 2.0—The key Q on the keyboard stops working after a while.	There is no workaround.
TL-326	ThinLinux 2.0—Icons are not highlighted when you use the Tab key.	Select the icons using the mouse.
TL-383	ThinLinux 2.0—VMware tool bar is not displayed properly for dual monitor when you disconnect from the server.	There is no workaround.
TL-887	ThinLinux 2.0—Ericom show menu bar options are not displayed with the respective system language.	There is no workaround.
TL-681	ThinLinux 2.0—After connecting to hidden SSID wireless network, the connection is disconnected when you restart and turn off the client.	Reconnect to WLAN after restarting the thin client.
TL-683	ThinLinux 2.0—Messages that are sent through Wyse Management Suite are not displayed in remote sessions (Citrix, VMware, and RDP).	There is no workaround.
TL-1060	ThinLinux 2.0—Display on U2719D and U2719DC monitors fails when connected to Wyse 3040 thin client using DP to DP cables.	There is no workaround.

JIRA ID	Description	Workaround
STRATUS-18205	ThinLinux 2.0—Device does not check in, and the WDA UI is refreshed multiple times in both devices when you push the ThinLinux 2.0.19 pulled image to the thin client running ThinLinux 1.0.4.	There is no workaround.

Upgrade ThinLinux 2.0 to 2.1 on Wyse 3040 thin client

Use Wyse Management Suite version 1.2 or later to upgrade the ThinLinux build version 2.0.19 to 2.1.

To upgrade ThinLinux by using Wyse Management Suite for Wyse 3040 thin client:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   ⓘ **NOTE: If you do not have Service Tag, manually browse for your thin client model.**
3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
5. Scroll down the page, and do the following:
   - Download the `wda3040_3.0.10-01_amd64.deb`, `wda_3.2.13-01_amd64.tar`, and `merlin-nonpxe_3.7.7-00.05_amd64.deb` add-ons.
   - Download the latest ThinLinux version 2.1 image file (`2.1.0.00_3040_merlin_16GB.exe`).
6. On the thin client, go to **Settings** > **Management** > **Wyse Device Agent**.
7. Register the device to the Wyse Management Suite server.
8. Log in to the Wyse Management Suite console.
9. Create and deploy app policy for `wda3040_3.0.10-01_amd64.deb`, `wda_3.2.13-01_amd64.tar`, and `merlin-nonpxe_3.7.7-00.05_amd64.deb` add-ons.
10. Reboot the thin client.
11. Log in to the Wyse Management Suite server.
12. Copy the downloaded image (`2.1.0.00_3040_merlin_16GB.exe` file) to `<drive C>/wms/localrepo/repository/osimages/zipped/`.
13. Log in to the Wyse Management Suite console.
14. Go to **Apps & Data** > **OS Image repository** > **WES/ThinLinux** and verify that the ThinLinux image is available.
15. Go to **Apps & Data** > **OS Image policies (WES/ThinLinux)** and click **Add Policy**.
16. Update the required fields, and click **Save**.
17. Schedule the job.
18. Click **Update now** on the client to update the image.

If imaging fails during upgrade due to the incorrect security key, install the pre-upgrade add-on first and then follow the upgrade procedure. For information about the pre-upgrade add-on, see the Dell Wyse ThinLinux 2.1 pre-upgrade add-on for Wyse 3040 thin client Release Notes.

Upgrade ThinLinux 2.0 to 2.1 on Wyse 5070 thin client

Use Wyse Management Suite version 1.2 or later to upgrade the ThinLinux build version 2.0.27 to 2.1

To upgrade ThinLinux by using Wyse Management Suite for Wyse 5070 thin client:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   ⓘ **NOTE: If you do not have Service Tag, manually browse for your thin client model.**
3. Click **Drivers and downloads**.

4. From the **Operating system** drop-down list, select **ThinLinux**.

5. Scroll down the page, and download the latest ThinLinux version 2.1 image file (`2.1.0.00_5070_merlin_16GB.exe`).

6. On the thin client, go to **Settings** > **Management** > **Wyse Device Agent**.

7. Register the device to the Wyse Management Suite server.

8. Log in to the Wyse Management Suite server.

9. Copy the downloaded image (`2.1.0.00_5070_merlin_16GB.exe` file) to `<drive C>/wms/localrepo/repository/osimages/zipped/`.

10. Log in to the Wyse Management Suite console.

11. Go to **Apps & Data** > **OS Image repository** > **WES/ThinLinux** and verify that the ThinLinux image is available.

12. Go to **Apps & Data** > **OS Image policies (WES/ThinLinux)** and click **Add Policy**.

13. Update the required fields, and click **Save**.

14. Schedule the job.

15. Click **Update now** on the client to update the image.

Upgrade ThinLinux 1.0.4 to 2.1 on Wyse 3040 thin client

Use Wyse Management Suite version 1.2 or later to upgrade the ThinLinux build version 1.0.4 to 2.1

To upgrade ThinLinux by using Wyse Management Suite:

1. Go to www.dell.com/support.

2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.

4. From the **Operating system** drop-down list, select **ThinLinux**.

5. Scroll down the page, and do the following:

   - Download the `Platform_util-1.0.26-0.3.x86_64.rpm`, `wda-2.1.23-00.01.x86_64.rpm`, and `merlin_nonpxe-3.7.7-00.05.x86_64.rpm` add-ons.
   - Download the latest ThinLinux version 2.1 image file (`2.1.0.00_3040_merlin_16GB.exe`).

6. On the thin client, go to **Settings** > **Management** > **Wyse Device Agent**.

7. Register the device to the Wyse Management Suite server.

8. Log in to the Wyse Management Suite console.

9. Create and deploy app policy for `Platform_util-1.0.26-0.3.x86_64.rpm`, `wda-2.1.23-00.01.x86_64.rpm`, and `merlin_nonpxe-3.7.7-00.05.x86_64.rpm`.

10. Reboot the thin client.

11. Log in to the Wyse Management Suite server.

12. Copy the downloaded image (`2.1.0.00_3040_merlin_16GB.exe` file) to `<drive C>/wms/localrepo/repository/osimages/zipped/`.

13. Log in to the Wyse Management Suite console.

14. Go to **Apps & Data** > **OS Image repository** > **WES/ThinLinux** and verify that the ThinLinux image is available.

15. Go to **Apps & Data** > **OS Image policies (WES/ThinLinux)** and click **Add Policy**.

16. Update the required fields, and click **Save**.

17. Schedule the job.

18. Click **Update now** on the client to update the image.

Upgrade ThinLinux 1.0.7.1 to 2.1 on Wyse 3040 thin client

Use Wyse Management Suite version 1.2 or later to upgrade the ThinLinux build version 1.0.7.1 to 2.1

To upgrade ThinLinux by using Wyse Management Suite:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**
3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
5. Scroll down the page, and do the following:
   - Download the `merlin_nonpxe-3.7.7-00.05.x86_64.rpm` add-on.
   - Download the latest ThinLinux version 2.1 image file (`2.1.0.00_3040_merlin_16GB.exe`).
6. On the thin client, go to **Settings** > **Management** > **Wyse Device Agent**.
7. Register the device to the Wyse Management Suite server.
8. Log in to the Wyse Management Suite console.
9. Create and deploy app policy for `merlin_nonpxe-3.7.7-00.05.x86_64.rpm`.
10. Reboot the thin client.
11. Log in to the Wyse Management Suite server.
12. Copy the downloaded image (`2.1.0.00_3040_merlin_16GB.exe` file) to `<drive C>/wms/localrepo/repository/osimages/zipped/`.
13. Log in to the Wyse Management Suite console.
14. Go to **Apps & Data** > **OS Image repository** > **WES/ThinLinux** and verify that the ThinLinux image is available.
15. Go to **Apps & Data** > **OS Image policies (WES/ThinLinux)** and click **Add Policy**.
16. Update the required fields, and click **Save**.
17. Schedule the job.
18. Click **Update now** on the client to update the image.

Preupgrade add-on for Wyse 3040 thin client Release Notes

Release type and definition

This release addresses the issue on Wyse 3040 thin clients that are shipped from the factory with the incorrect security key for ThinLinux 2.0. For more information about the issue, see Fixed issue.

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Supported platform

- **Platform**—Wyse 3040 thin client
- **Memory configuration (RAM/Flash)**—16 GB/ 2 GB
- **BIOS version**—1.2.5

Add-on details

- **Build number**—1.0.0-14
- **File name**—`3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb`
- **File size**—366,558 bytes

Fixed issue

The following issue is fixed in this release:

You cannot upgrade ThinLinux from version 2.0 to 2.1 on Wyse 3040 thin clients that are shipped from the factory with the incorrect security key. Merlin imaging fails during upgrade due to the incorrect security key, and the following error message is displayed:

```
Error while validating security key.(error code 233).
```

To resolve this issue, you must install the preupgrade add-on that is delivered in this release.

Important notes

- If the security key is correct, installing the preupgrade add-on does not change the security key on your thin client.
- After you install the preupgrade add-on, and upgrade the ThinLinux version from 2.0 to 2.1, you do not have to install the preupgrade add-on again when you reimage your client.
- To verify if the security key is updated, check the **3010-tl2.1-pre-upgrade-fix.XXXXXX/sec_patch.log** file in the **/tmp** folder. If the security key is successfully updated, the following log entry is registered:

```
Success: Key successfully changed on device. Device ready for upgrade
```

- Only plain text passwords are supported.
- The plain text password is displayed in the INI log.

FeatureEnhancementChange 1 **OPTIONAL**

FeatureEnhancementChange 2 **OPTIONAL**

FeatureEnhancementChange 3 **OPTIONAL**

Installing the add-on on the thin client with the default BIOS password and without the BIOS password

Follow any of the methods described in this section to install the preupgrade add-on on your thin client.

Install the add-on using Wyse Management Suite

Prerequisite—Install the Wyse Device Agent (WDA) add-on `wda_3.2.13-01` or later versions on your thin client. If the WDA version is lesser than 3.2.13, install the `wda3040_3.0.10-01` add-on to upgrade WDA to the latest version. For more information about deploying WDA, see the latest *Dell Wyse Management Suite Administrator's Guide* at www.dell.com/manuals.

To install the add-on by using the Wyse Management Suite, do the following:

1. Register the thin client to the Wyse Management Suite version 1.2 or later.
2. Go to www.dell.com/support.
3. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

4. Click **Drivers and downloads**.
5. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
6. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
7. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the Wyse Management Suite repository.
8. Create and deploy the app policy for `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb`.
9. Reboot the thin client.

Install the add-on using INI parameter

To install the add-on by using the INI parameter, do the following:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
5. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
6. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the root directory `wyse/addons`.
7. Copy the following INI parameter in to wlx.ini or mac.ini file:
   `InstallAddons=3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb`
8. Reboot the thin client.

Install the add-on using USB drive

To install the add-on by using the USB drive, do the following:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   ⓘ **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
5. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
6. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the USB drive.
7. Connect the USB drive to the Wyse 3040 thin client.
8. Locate the mount point for the USB drive and change the directory to the location where you have placed the package file in the USB drive—`cd\media\<USBdrive>`.
9. Run the following commands in the command shell:

```
$ su
# dpkg -i 3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb
```

Install the add-on manually

To install the add-on manually by using ThinLinux, do the following:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   ⓘ **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
5. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
6. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the ftp `<root path>\addons` folder and create the entry in the directory file.
7. Log in to the thin client.
8. To enter the admin mode, and click the **Switch to Admin** button.
9. Go to **Management** > **INI**.
10. To enable the **Specify server details manually** option, click the **ON/OFF** button.
11. In the **Update Server URL** section, enter the URL address of the specified server.
    You can also enter the user name and password of the specified server.
12. Click **Save**.
13. Go to the **Addons** page, and click the **Plus sign (+)** button.
14. Select the **3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb** add-on and click **Install**.

Installing the add-on on Wyse 3040 thin client with the customized BIOS password

Follow any of the methods described in this section to install the preupgrade add-on on your thin client.

Install the add-on using Wyse Management Suite

Prerequisite—Install the Wyse Device Agent (WDA) add-on `wda_3.2.13-01` or later versions on your thin client. If the WDA version is lesser than 3.2.13, install the `wda3040_3.0.10-01` add-on to upgrade WDA to the latest version. For more information about deploying WDA, see the latest *Dell Wyse Management Suite Administrator's Guide* at www.dell.com/manuals.

To install the add-on by using the Wyse Management Suite, do the following:

1. Register the thin client to the Wyse Management Suite.
2. Go to **Groups & Configs** and select the **ThinLinux** policy.
3. Go to **Advanced** and enter the following parameter in line 1:
   `BIOS_Password=<Your custom password>`
4. Save and publish the policy.
5. Go to www.dell.com/support.
6. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

7. Click **Drivers and downloads**.
8. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
9. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
10. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the Wyse Management Suite repository.
11. Create and deploy the app policy for `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb`.
12. Reboot the thin client.

Install the add-on using INI parameter

To install the add-on by using the INI parameter, do the following:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.
5. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.
6. Copy the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the root directory `wyse/addons`.
7. Copy the following INI parameter in to wlx.ini or mac.ini file:

   ```
   InstallAddons=3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb
    BIOS_Password=<Your custom password>
   ```

8. Reboot the thin client.

Install the add-on using USB drive

To install the add-on by using the USB drive, do the following:

1. Go to www.dell.com/support.
2. Click **Product Support**, enter the **Service Tag** of your thin client, and then press Enter.

   (i) **NOTE: If you do not have Service Tag, manually browse for your thin client model.**

3. Click **Drivers and downloads**.
4. From the **Operating system** drop-down list, select **ThinLinux**.
   The add-ons are listed on the page.

5. Select **ThinLinux version 2.1 preupgrade fix add-on for Dell Wyse 3040 thin clients** and download the `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on.

6. Copy `3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb` add-on to the USB drive.

7. Connect the USB drive to the Wyse 3040 thin client.

8. Locate the mount point for the USB drive and change the directory to the location where you have placed the package file in the USB drive—`cd\media\<USBdrive>`.

9. Run the following commands in the command shell:

```
$ su
# echo BIOS_Password= <Your custom password> > /home/thinuser/wnos.ini
# dpkg -i 3040-tl2.1-pre-upgrade-fix_1.0.0-14_amd64.deb
```

Security update for Dell Wyse Password Encoder

Release type and definition

This release resolves a security vulnerability in Dell Wyse Password Encryption on ThinLinux version 2.x. The vulnerability issue is observed when the passwords are configured using INI parameters.

From this release, a new encrypted password is generated every time when the password is encrypted. The `WyseINIKeyCrypt.exe` tool that is used to generate encrypted password is deprecated for an INI user. You cannot use the password encrypted strings generated using the `WyseINIKeyCrypt.exe` tool for INI configurations. If old password encrypted strings are used, then the password decryption fails, and the INI configuration is applied to thin clients.

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Password encoder

By default, passwords in INI parameters use base-64 encoding. Dell recommends that you use the AES encryption for high security purpose. From this release onwards, an AES encrypted password is generated by using the **iniencrypt** tool on thin clients running ThinLinux version 2.x.

AES password encoding—All passwords that are set using the INI parameter support the AES password encoding. Use the INI parameter `PasswordEncryptionCode` to specify the password encoding. Use the INI parameter `PasswordEncryptionCode=2` to specify the AES password.

> (i) NOTE: **If the INI parameter `PasswordEncryptionCode` is set to 2, and if you use a password value that is not encrypted using the iniencrypt tool, the result is undefined.**

> (i) NOTE: **The iniencrypt tool is supported on ThinLinux version 2.1.0.01 or later.**

To generate an AES encrypted password, do the following:

1. Log in as an administrator on the thin client.
2. Start the X term.
3. Enter the `iniencrypt` command along with the password which you want to encrypt in the following format:

```
$ iniencrypt <password in plain text>
```

For example, to encode the text **password**, enter the command as `$ iniencrypt password`.

The encrypted password is displayed on the terminal screen.

To generate a password with special characters or space, use the shell escape character **** before the special character. For example, to encode the string **password#123**, enter the command as $ **iniencrypt password\#123**.

> (i) NOTE:
> * **An AES password encoding supports only English characters.**
> * **This release supports iniencrypt only for the INI user. However, the functionality of Wyse Management Suite, and Wyse Device Manager remain the same.**

Supported platforms

The following platforms are supported in this release:

Table 16. Supported platforms

Platform	Memory configuration	BIOS version
Wyse 5070 thin client—Celeron processor	16 GB/4 GB	1.1.3
Wyse 5070 thin client—Pentium processor	16 GB/4 GB	1.1.3
Wyse 3040 thin client	16 GB/2 GB	1.2.5

Build information

Table 17. Wyse 5070 thin client

Feature	Specification
Build number	2.1.0.01
Kernel version	4.13.0-1028-oem
File name	`2.1.0.01_5070_16GB_merlin.exe`
Size	1,636,466,842 bytes

Table 18. Wyse 3040 thin client

Feature	Specification
Build number	2.1.0.01
Kernel version	4.13.0-1028-oem
File name	`2.1.0.01_3040_16GB_merlin.exe`
Size	1,642,613,210 bytes

Test environment

Table 19. VMware VDI server/desktops

VDI version	Desktop		RDS server		Applications
	Windows 7 Enterprise	Windows 10 Enterprise	Windows Server 2012 R2	Windows Server 2016	
VMware Horizon 7.5	√	√	√	Not applicable	√
VMware Horizon 7.6	√	√	√	√	√

Table 20. Xen Desktop VDI server/desktops

VDI version	Desktop		Server operating system		Applications
	Windows 7 Enterprise	Windows 10 Enterprise	Windows Server 2012 R2	Windows Server 2016	
Xen Desktop 7.15	√	√	√	Not applicable	Not applicable
Xen Desktop 7.18	Not applicable	√	√	√	√

Table 21. Xen App VDI

VDI version	Server operating system		Applications
	Windows Server 2012 R2	Windows Server 2016	
Xen App 7.15	√	√	√

Table 22. Microsoft RDP VDI

VDI version	Desktop		RDS server	
	Windows 7 Enterprise	**Windows 10 Enterprise**	**Windows Server 2012 R2**	**Windows Server 2016**
Microsoft RDP	√	√	√	√

Table 23. Management and Imaging applications

Component	Version
Dell Wyse Management Suite	1.2
Dell Wyse USB Imaging tool	3.1.0

ⓘ **NOTE: For imaging instructions, see the ThinLinux Version 2.1 Release Notes at www.dell.com/support. If imaging fails during upgrade due to the incorrect security key, install the pre-upgrade add-on first and then follow the upgrade procedure. For information about the pre-upgrade add-on, see the** *Dell Wyse ThinLinux 2.1 pre-upgrade add-on for Wyse 3040 thin client Release Notes* **at www.dell.com/manuals.**

Fixed issues

None

Known issues

None

Citrix HDX Realtime Media Engine 2.7 add-on

Release summary

This release notes contains information about the add-on to update the Citrix HDX RealTime Media Engine (ICA client) to the latest version 2.7. This add-on is supported on Wyse 3040 thin client and Wyse 5070 thin client running ThinLinux version 2.1.

To download and install the add-on, see Installing the add-on.

Version

Citrix HDX RTME 2.7

Release date

February 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Compatibility

Supported platforms

Table 24. Supported platforms

Platform	Memory configuration		BIOS version
	Flash size	RAM size	
Wyse 3040 thin client	16 GB	2 GB	1.2.5
Wyse 5070 thin client	16 GB	4 GB	1.1.4

Previous version

Citrix HDX RTME 2.6

Supported operating systems

Table 25. Supported operating systems

Platform	Operating system	Version—English Standard Build
Wyse 3040 thin client	ThinLinux	2.1.0.01.02.32167
Wyse 5070 thin client	ThinLinux	2.1.0.01.02.32167

Add-on details

- Debian add-on
  - **File name**—`citrix-rtme_2.7.0-2113-01_amd64.deb`.
  - **File size**—11,031,466 bytes.
- RSP add-on
  - **File name**—`citrix-rtme_2.7.0-2113-01_amd64.zip`.
  - **File size**—11,033,648 bytes.

New and enhanced features

Added support for Citrix HDX RealTime Media Engine (RTME) version 2.7.

For more information about the Citrix RTME 2.7 features, see the *HDX RealTime Media Engine for Microsoft Skype for Business* article at www.citrix.com.

Important notes

Tested environment

Table 26. Citrix Virtual Apps and Desktops

VDI version	Desktop			Server operating system			Apps
	Windows 7 Enterprise	**Windows 8.1 Enterprise**	**Windows 10 Enterprise**	**Windows Server 2008 R2**	**Windows Server 2012 R2**	**Windows Server 2016**	
Citrix Virtual Apps and Desktop 7.15	Tested	Tested	Tested	Tested	Tested	Tested	Tested
Citrix Virtual Apps and Desktop 7.17	Not Tested	Not Tested	Tested	Not Tested	Tested	Tested	Tested
Citrix Virtual Apps and Desktop 7.18	Not Tested	Not Tested	Tested	Not Tested	Tested	Tested	Tested

Table 27. Citrix Virtual Apps

VDI version	Server operating system			Apps
	Windows Server 2008 R2	**Windows Server 2012 R2**	**Windows Server 2016**	
Citrix Virtual Apps 7.15	Tested	Tested	Tested	Tested
Citrix Virtual Apps 7.18	Not Tested	Tested	Tested	Tested

Citrix HDX RealTime Media Engine 2.6 add on

Release summary

This release notes contains information about the add-on to update the Citrix HDX RealTime Media Engine (ICA client) to the latest version 2.6. This add-on is supported on Wyse 3040 thin client and Wyse 5070 thin client running ThinLinux version 2.1.

To download and install the add-on, see Installing the add-on.

Version

Citrix HDX RTME 2.6

Release date

January 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Compatibility

Supported platforms

Table 28. Supported platforms

Platform	Memory configuration		BIOS version
	Flash size	RAM size	
Wyse 3040 thin client	16 GB	2 GB	1.2.5
Wyse 5070 thin client	16 GB	4 GB	1.1.4

Previous version

- Citrix HDX RTME 2.5

Supported operating systems

Table 29. Supported operating systems

Platform	Operating system	Version—English Standard Build
Wyse 3040 thin client	ThinLinux	2.1.0.01.02.32167
Wyse 5070 thin client	ThinLinux	2.1.0.01.02.32167

Add-on details

- Debian add-on
  - **File name**—`citrix-rtme_2.6.0-2030-01_amd64.deb`.
  - **File size**—11,011,520 bytes.
- RSP add-on
  - **File name**—`citrix-rtme_2.6.0-2030-01_amd64.zip`.
  - **File size**—11,013,701 bytes.

New and enhanced features

Added support for Citrix HDX RealTime Media Engine (RTME) version 2.6.

ⓘ **NOTE: Citrix HDX RTME supports Microsoft Skype for Business Server 2019, Microsoft Skype for Business Server 2015, Microsoft Lync Server 2013, and Office 365 (Skype for Business Online).**

For more information about the Citrix RTME 2.6 features, see the *HDX RealTime Media Engine for Microsoft Skype for Business* article at www.citrix.com.

Important notes

Tested environment

Table 30. Citrix Virtual Apps and Desktops

VDI version	Desktop			Server operating system			Apps
	Windows 7 Enterprise	**Windows 8.1 Enterprise**	**Windows 10 Enterprise**	**Windows Server 2008 R2**	**Windows Server 2012 R2**	**Windows Server 2016**	
Citrix Virtual Apps and Desktop 7.15	Tested	Tested	Tested	Tested	Tested	Tested	Tested
Citrix Virtual Apps and Desktop 7.17	Not Tested	Not Tested	Tested	Not Tested	Tested	Tested	Tested
Citrix Virtual Apps and Desktop 7.18	Not Tested	Not Tested	Tested	Not Tested	Tested	Tested	Tested

Table 31. Citrix Virtual Apps

VDI version	Server operating system			Apps
	Windows Server 2008 R2	**Windows Server 2012 R2**	**Windows Server 2016**	
Citrix Virtual Apps 7.15	Tested	Tested	Tested	Tested
Citrix Virtual Apps 7.18	Not Tested	Tested	Tested	Tested

VMware Horizon View Client 4.10 Add-on

Release summary

This release notes contains information about the add-on to update VMware Horizon View client to the latest version 4.10. This add-on is supported on Wyse 3040 thin client and Wyse 5070 thin client running ThinLinux version 2.1 operating system.

To download and install the add-on, see Installing the add-on.

Version

4.10

Release date

January 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Compatibility

Supported operating systems

Table 32. Supported operating systems

Platform	Operating system	Version—English Standard build
Wyse 3040 thin client	ThinLinux	2.1.0.01.02.32167
Wyse 5070 thin client	ThinLinux	2.1.0.01.02.32167

Previous versions

- 4.8

Add-on details

- Debian add-on
  - File name— vmware-viewclient_4.10.0-11053294-00.02_amd64.deb
  - File size— 26,648,768 bytes
- RSP add-on
  - File name— vmware-viewclient_4.10.0-11053294-00.02_amd64.zip
  - File size— 26,651,306 bytes

New features

The new features in VMware Horizon View client version 4.10 are:

- Supports virtual printing on physical RDS host machine
- Supports multi session mode
- Supports logging copy and paste

ⓘ **NOTE: For more information about the VMware Horizon Client 4.10 features, see the VMware Horizon Client 4.10 for Linux Release Notes at docs.vmware.com.**

The new features in VMware Horizon View client version 4.9 are:

- Supports H.264 high color accuracy
- Supports relative mouse capability
- Supports configuring Horizon View Client data sharing capability with other systems
- Supports serial port redirection
- Supports auto hide of tool bar

ⓘ **NOTE: For more information about the VMware Horizon Client 4.9 features, see the VMware Horizon Client 4.9 for Linux Release Notes at docs.vmware.com.**

INI parameters

Table 33. INI parameters

INI Parameter	Description	Value
`AllowH264HighColorAccuracy=yes/no`	By default, this is in the OFF state, If the value is set to ON, the parameter is enabled.	Boolean [Yes/No]
`AllowDataSharing=yes/no`	If the parameter is set to YES, data sharing with other thin clients is enabled; If the value is set to NO, data sharing is not allowed.	Boolean [Yes/No]
`AutoHideToolbar=Yes/no`	By default, this is in the OFF state, If the value is set to ON, the auto hide option for the tool bar is enabled.	Boolean [Yes/No]

Fixed issues

Table 34. Fixed issues

Issue ID	Description
LS-645	Fixed an issue where the messages do not get displayed in the primary screen when VMware Horizon View client is used in the dual monitor configuration mode.

Known issues

Table 35. Known issues

Issue ID	Description	Workaround
TL-1144	Turn off option in the VMware Horizon View client does not work in the RDP session.	There is no workaround in this release.
LS-644	Minimizing a view sometimes displays overlap of Windows session and local Linux.	There is no workaround in this release.

Ericom PowerTerm Add-on

Release summary

This release notes contains information about the add-on to update Ericom PowerTerm to the latest version 12.3. This add-on is supported on Wyse 3040 thin client and Wyse 5070 thin client running ThinLinux version 2.1 operating system.

To download and install the add-on, see Installing the add-on.

Version

12.3.0.0.20171015.1-01

Release date

January 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Compatibility

Supported platforms

Table 36. Supported platforms

Platform	Memory Configuration		BIOS version
	Flash size	RAM size	
Wyse 3040 thin client	16 GB	2 GB	1.2.5
Wyse 5070 thin client	16 GB	4 GB	1.1.4

Previous versions

- 12.3.0.0.20171015.1-00.09

Supported operating systems

Table 37. Supported operating systems

Platform	Operating system	Version—English Standard build
Wyse 3040 thin client	ThinLinux	2.1.0.01.02.32167
Wyse 5070 thin client	ThinLinux	2.1.0.01.02.32167

Add-on details

- Debian add-on
  - **File name**— `ericom-powerterm_12.3.0.0.20171015.1-01_amd64.deb`
  - **File size**— 7,804,728 bytes
- RSP add-on
  - **File name**— `ericom-powerterm_12.3.0.0.20171015.1-01_amd64.zip`
  - **File size**— 7,807,264 bytes

Fixed issues

Table 38. Fixed issues

Issue ID	Description
TL-877	Fixed an issue where you cannot open the HTML5 links from the communication tab.
LS-627	Added the Italian language layout option in the keyboard mapping drop-down list.
TL-962	Fixed an issue where you cannot retain the color of the background and text in Ericom PowerTerm.
LS-650	Fixed an issue where you cannot save Ericom PowerTerm settings.

Known issues

Table 39. Known issues

Issue ID	Description	Workaround
TL-887	Ericom menu bar options are not displayed with the respective system languages.	There is no workaround in this release.
TL-878	Language keyboard layouts available in Ericom PowerTerm console cannot be mapped.	There is no workaround in this release.
TL-896	The fields in the Ericom PowerTerm menu bar get populated automatically when you enter any value using the keyboard.	There is no workaround in this release.

Wyse Settings Add-on Update for Swiss-French Language Keyboard Layout Issue

Release summary

This release notes contains information about the package to address the Swiss-French language keyboard layout issue. For more information about the issue, see Fixed issue.

Installing this add-on allows you to enable the Swiss-French language keyboard layout in system settings by using the INI parameter. This package is supported on Wyse 3040 thin client and Wyse 5070 thin client running ThinLinux version 2.1.

To download and install the add-on, see Installing the add-on.

Version

Wyse settings 1.02.0-77

Release date

January 2019

Priority and recommendations

Recommended: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Compatibility

Supported platforms

Table 40. Supported platforms

Platform	Memory Configuration		BIOS version
	Flash size	RAM size	
Wyse 3040 thin client	16 GB	2 GB	1.2.5
Wyse 5070 thin client	16 GB	4 GB	1.1.4

Previous version

Wyse settings 1.02.0-76

Supported operating systems

Table 41. Supported operating systems

Platform	Operating system	Version—English Standard build
Wyse 3040 thin client	ThinLinux	2.1.0.01.02.32167

Platform	Operating system	Version—English Standard build
Wyse 5070 thin client	ThinLinux	2.1.0.01.02.32167

Add-on details

- Debian add-on
  - **File name**—`wyse-settings_1.02.0-77_amd64.deb`
  - **File size**—74,414 bytes
- RSP add-on
  - **File name**—`wyse-settings_1.02.0-77_amd64.zip`
  - **File size**—76,500 bytes

New and enhanced features

- Updated the **wyse-settings** add-on to the latest version 1.02.0-77.
- Added support for Swiss-French language keyboard layout.

Fixed issue

Table 42. Fixed issue

Issue number	Description
LS-633	Fixed an issue where the Swiss-French language keyboard layout is not available in ThinLinux 2.1 and the keyboard layout cannot be changed using the advanced setting option in Wyse Management Suite version 1.2.

Important notes

Tested environment

Table 43. VMware Horizon Server and Desktops

VDI version	Desktop			Server operating system			Apps
	Windows 7 Enterprise	Windows 8.1 Enterprise	Windows 10 Enterprise	Windows Server 2008 R2	Windows Server 2012 R2	Windows Server 2016	
VMware Horizon 7.6	Tested	Tested	Tested	Tested	Tested	Tested	Tested
VMware Horizon 7.7	Tested	Tested	Tested	Not Tested	Tested	Tested	Tested

Table 44. Citrix Virtual Apps and Desktops

VDI version	Desktop			Server operating system			Apps
	Windows 7 Enterprise	Windows 8.1 Enterprise	Windows 10 Enterprise	Windows Server 2008 R2	Windows Server 2012 R2	Windows Server 2016	
Citrix Virtual Apps and Desktop 7.18	Not Tested	Not Tested	Tested	Not Tested	Tested	Tested	Tested

Table 45. Citrix Virtual Apps

VDI version	Server operating system			Apps
	Windows Server 2008 R2	Windows Server 2012 R2	Windows Server 2016	
Citrix Virtual Apps 7.15	Tested	Tested	Tested	Tested

VDI version	Server operating system			Apps
	Windows Server 2008 R2	Windows Server 2012 R2	Windows Server 2016	
Citrix Virtual Apps 7.18	Not Tested	Tested	Tested	Tested

Installing the add-on

Download the add-on package

This section describes the steps to download the add-on from Dell support site.

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** field, type the Service Tag or the model number of your device, and press Enter or click the search icon.
3. On the product support page, click **Drivers & downloads**.
4. Select the appropriate operating system.
5. From the list, locate the add-on entry and click the download icon.

Install the add-on using Wyse Management Suite

Ensure that you download either the DEB file or RSP file of the add-on package based on your preference.

- If you download the DEB file, add the file to `C:\WMS\LocalRepo\repository\thinClientApps` repository on the Wyse Management Suite server.
- If you download the RSP file, add the compressed ZIP folder to `C:\WMS\LocalRepo\repository\rspPackages\zipped` repository on the Wyse Management Suite server and wait for 2-3 minutes. The compress folder is extracted automatically, and the extracted files are copied to `C:\WMS\LocalRepo\repository\rspPackages\valid`.

This section describes the steps to install the add-on by using Wyse Management Suite.

1. Log in to Wyse Management Suite.
2. Click **Portal Administration**, and then click **File Repository** under **Console Settings**.
3. Select the **Local Repository** check box.
4. Click **Sync Files**.
   Wait for the synchronization process to complete. The synchronization process copies the package from the repository to **Apps and Data**.
5. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
6. Verify the copied package in the applications list.
7. To create a group in the Wyse Management Suite server, click **Groups & Configs**.
   The **Groups & Configs** page is displayed.
8. Click the **Plus sign (+)** button and enter the required details to register your client in the same group.
9. Click **Apps and Data**.
   The **Apps and Data** page is displayed.
10. Click **Thin Clients** under **App Policies**.
11. Click **Add Policy** to add the policy to the required group.
12. Update the required fields, and then click **Save**.
    An **Alert** window is displayed.
13. Click **Yes**.
    The lock screen is displayed during the add-on installation process on all the thin clients. The add-on is deployed immediately.

Install the add-on using Wyse Device Manager

Copy the RSP file to the Wyse Device Manager server. The copied RSP file is included in the ZIP file.

This section describes the steps to install the add-on by using Wyse Device Manager (WDM).

1. Launch Wyse Device Manager and login using valid credentials.

2. Click **Applications** in the Dell Wyse Device Manager dashboard page.
   The options **Images**, **Other Packages**, **Agent Update**, **Device Configuration**, and PCoIP Device Configuration are displayed.

3. Select one of the options except **Device Configuration**, and **PCoIP Device Configuration**.

4. Click **Create Package Plus (+)**.
   The application prompts to download the Package Register utility.

5. Click **Allow**.
   The **Create Package** window is displayed.

6. Download the .zip file on your local repository.

7. Navigate to the folder, and run the **Package Register** utility file.
   The **WDM Package Registration Utility** window is displayed.

8. Enter WDM server address and user credentials in the respective fields.

9. Select **RSP** to register, and click **Browse**.
   The **WDM Package Uploader** window is displayed.

10. Click **Open**.
    The list of selected packages is displayed.

11. Select the packages that you want to register, and click **Upload**.
    The status is displayed as **Success**.

12. Click **Devices** and select the **Device ID** check box.

13. Click **Update**, and select the preferred package.

14. Click **Save**.
    The add-ons installation is scheduled to the device and the add-on is installed to the thin client.

Install the add-on manually using INI parameter

This section describes the steps to install the add-on by using INI parameters.

1. Copy the add-on and the directory file to the `<root path>/add-ons` folder.

2. Add the following INI parameter in to the wlx.ini file:

   `InstallAddons=<deb file>`.

3. Log in to the thin client.

4. To enter into the **Admin mode**, click the **Switch to Admin** button.

5. Enter the default password.
   The default password is admin.

6. Click the **Settings** icon on the desktop.
   The System Settings page is displayed.

7. Click the **Management** icon.

8. Click **INI**.
   The Manage INI Configuration page is displayed.

9. From the drop-down list, select the configuration source and provide the server details.

10. Click **Save**.

11. Restart the thin client.
    The add-on is successfully installed on the thin client.

Install the add-on manually

This section describes the steps to install the add-on by using ThinLinux UI.

1. Copy the add-on and the directory file to the `<root path>\add-ons` folder.

2. Log in to the thin client.

3. To enter into the **Admin mode**, click the **Switch to Admin** button.

4. Enter the default password.
   The default password is admin.

5. Go to the **Management** page and click **INI**.
   The Manage INI configuration page is displayed.

6. To enable the **Specify server details manually** option, click the **ON/OFF** button.

7. In the **Server URL** field, enter the path of the add-on.

   You can also enter the user name and password of the specified server in respective fields.

8. Click **Save**.

9. Go to the **Add-ons** page and click **Install Add-ons**.

10. Select the add-on and click **Save**.

    The add-on is installed on the thin client.

Resources and support

Accessing documents using the product search

1. Go to www.dell.com/support.
2. In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** search box, type the product name. For example, `Wyse 3040 thin client` or `Wyse ThinOS`.

   A list of matching products is displayed.
3. Select your product and click the search icon or press Enter.
4. Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

1. Go to www.dell.com/support.
2. Click **Browse all products**.
3. Click **Thin Clients**.
4. Click the desired category, either **Wyse Hardware** or **Wyse Software**.
5. Click the desired product.
6. Click **Manuals & documents**.

Topics:

• Additional resources

Additional resources

Table 46. Additional resources

Resource	Content
Dell support website—www.dell.com/manuals.	Administrator's Guide, INI Reference Guide, and Release Notes.
Citrix support website—docs.citrix.com.	Documentation for Citrix software.
VMware support website—docs.vmware.com.	Documentation for VMware software.
Microsoft support website—support.microsoft.com.	Documentation for Microsoft software.

Contacting Dell

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for technical support or customer service issues, see www.dell.com/contactdell.

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.