Dell Hybrid Client

Version 1.x Release Notes

Notes, cautions, and warnings

(i) **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

Dell Hybrid Client is a desktop solution that follows the Software-as-a-Service (SaaS) model of software delivery. It provides a hybrid operating environment that enables you to access virtual, cloud, or local applications and resources seamlessly. It encompasses the cloud and storage aggregation for maintaining security and simplicity.

(i) **NOTE:** For details about the previous versions, if applicable, or to determine which version of the software you need to select for your device, see Version matrix.

2

Version matrix

The following version matrix lists the platforms that are supported in each Dell Hybrid Client release:

Table 1. Version matrix

Release version	Release date	Supported platforms	Release Notes
1.6.2	March 2022	Supported platforms	Dell Hybrid Client Version 1.6.2
1.6.1	January 2022	Supported platforms	Dell Hybrid Client Version 1.6.1
1.6	December 2021	Supported platforms	Dell Hybrid Client Version 1.6
1.5	April 2021	Latitude 3320 device	Dell Hybrid Client Version 1.5
	March 2021	● Wyse 5070 device ● Wyse 5070 Extended device ● OptiPlex 7070 Ultra device ● OptiPlex 7090 Ultra device ● OptiPlex 3090 Ultra device	Dell Hybrid Client Version 1.5
1.1.01	July 2021	● Wyse 5070 device ● Wyse 5070 Extended device ● OptiPlex 7070 Ultra device	Dell Hybrid Client 1.1.01
1.1	December 2020	● Wyse 5070 device ● Wyse 5070 Extended device ● OptiPlex 7070 Ultra device	Dell Hybrid Client Version 1.1
1.0	September 2020	● Wyse 5070 device ● Wyse 5070 Extended device ● OptiPlex 7070 Ultra device	Dell Hybrid Client Version 1.0

Dell Hybrid Client 1.6.2

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.6.1096

Ubuntu version 20.04 LTS 64-bit

Wyse Management Suite Pro version 3.5.1_12

Wyse Management Suite Configuration UI package 1.5.304

Release date

March 2022

Compatibility

Build information

- File name—DellHybridClient_1.6.2_1096.tar.gz
- Version—1.6.1096
- Size—1,279,956,241 bytes
- Description—This package contains the Dell Hybrid Client application version 1.6.2.

Supported languages

The following languages are supported on Dell Hybrid Client:
- English—US
- German
- French
- Italian
- Spanish
- Japanese
- Korean
- Chinese Traditional
- Chinese Simplified
- Russian
- Portuguese-Brazil
- Hebrew

Supported browsers

Table 2. Supported browsers

Browsers	Version
Google Chrome	96.0
Mozilla Firefox	97.0

Supported platforms

Dell Hybrid Client 1.6.2 is a software solution that can be deployed on Ubuntu 20.04-based platforms with a minimum memory or RAM of 8 GB and disk storage of 32 GB or higher capacity.

Ubuntu 20.04-based devices that have Dell Client Agent - Enabler (DCA Enabler) installed can be converted to Dell Hybrid Client version 1.6.2 using Wyse Management Suite.

- The following platforms are preinstalled with Dell Hybrid Client:
  - Wyse 5070
  - Wyse 5070 Extended
  - OptiPlex 3090 Ultra
  - OptiPlex 7090 Ultra
  - Latitude 3320
  - OptiPlex 3000 Thin Client

  (i) **NOTE:** Dell Hybrid Client version 1.6.2 is shipped on Wyse 5070, Wyse 5070 Extended, OptiPlex 3090 Ultra, OptiPlex 7090 Ultra, and Latitude 3320 devices after March 2022.

- The following existing platforms with earlier versions of Dell Hybrid Client can be upgraded to Dell Hybrid Client version 1.6.2 using Wyse Management Suite:
  - Wyse 5070
  - Wyse 5070 Extended
  - OptiPlex 7070 Ultra
  - OptiPlex 3090 Ultra
  - OptiPlex 7090 Ultra
  - Latitude 3320
  - OptiPlex 3000 Thin Client

(i) **NOTE:** For information about supported platforms for Dell Hybrid Client conversions, see the *Dell Hybrid Client 1.x Conversion and Upgrade Guide* at www.dell.com/support. For information about how to install the Dell Hybrid Client, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Supported VDI clients and local applications

Table 3. Supported VDI clients and local applications

Client	Version
Dell RDP	8.1.08
Citrix Workspace App	21.12
VMware Horizon Client	2111
Imprivata	7.1.0
Zoom Client	5.9.1
VLC Media Player	3.0.9.2

Enhancements

Security updates

- **Mozilla Firefox version 97.0**—Fixed the security vulnerabilities for CVE-2022-26485 and CVE-2022-26486.
- **OpenSSL Security vulnerability fix**—Fixed the security vulnerability for CVE-2022-0778

Fixed issues

Table 4. Fixed issues

Issue ID	Description
DHC-35	In specific network scenarios, there is a delay in applying WMS configuration. Sometimes there is a delay in opening Dell Client Agent from **Device Settings**.
DHC-42	Added Chrome Policy Control from WMS is not getting reflected correctly in **Deny/Allow** list.

Conversion images

- **Merlin conversion image for Wyse 5070 devices**:
  - File name—DHC1.6.1096_Wyse_5070_Conversion_Merlin_Image_32GB.exe
  - Size—5,382,032,605 bytes
- **ISO conversion image for Wyse 5070 devices**:
  - File name—DellHybridClient_1.6_1096_5070.iso
  - Size—7,943,395,328 bytes
- **ISO conversion image for Wyse 7070 devices**:
  - File name—DellHybridClient_1.6_1096_7070.iso
  - Size—7,910,803,456 bytes
- **ISO conversion image for OptiPlex 3000 Thin Clients**:
  - File name—DellHybridClient_1.6_1096_3000_TC.iso
  - Size—7,892,484,096 bytes
- **ISO conversion image for OptiPlex 3090 Ultra and OptiPlex 7090 Ultra devices**:
  - File name—DellHybridClient_1.6_1096_3090_7090.iso
  - Size—8,015,745,024 bytes
- **ISO conversion image for Latitude 3320 devices**
  - File name—DellHybridClient_1.6_1096_L3320.iso
  - Size—7,965,589,504 bytes

Dell Hybrid Client 1.6.1

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.6.1033

Ubuntu version 20.04 LTS 64-bit

Wyse Management Suite Pro version 3.5.1_12

Wyse Management Suite Configuration UI package 1.5.304

Release date

January 2022

Compatibility

Supported platforms

Dell Hybrid Client 1.6.1 is a software solution that can be deployed on Ubuntu 20.04-based platforms with a minimum memory or RAM of 8 GB and disk storage of 32 GB or higher capacity.

Ubuntu 20.04-based devices that have Dell Client Agent - Enabler (DCA Enabler) installed can be converted to Dell Hybrid Client version 1.6.1 using Wyse Management Suite.

● The following platforms are preinstalled with Dell Hybrid Client:
  ○ Wyse 5070
  ○ Wyse 5070 Extended
  ○ OptiPlex 3090 Ultra
  ○ OptiPlex 7090 Ultra
  ○ Latitude 3320

  (i) **NOTE:** Dell Hybrid Client version 1.6.1 is shipped on Wyse 5070, Wyse 5070 Extended, OptiPlex 3090 Ultra, OptiPlex 7090 Ultra, and Latitude 3320 devices after March 2022.

● The following existing platforms with earlier versions of Dell Hybrid Client can be upgraded to Dell Hybrid Client version 1.6.1 using Wyse Management Suite:
  ○ Wyse 5070
  ○ Wyse 5070 Extended
  ○ OptiPlex 7070 Ultra
  ○ OptiPlex 3090 Ultra
  ○ OptiPlex 7090 Ultra
  ○ Latitude 3320

(i) **NOTE:** For information about supported platforms for Dell Hybrid Client conversions, see the *Dell Hybrid Client 1.x Conversion and Upgrade Guide* at www.dell.com/support. For information about how to install the Dell Hybrid Client, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Supported VDI clients and local applications

Table 5. Supported VDI clients and local applications

Client	Version
Dell RDP	8.1.08
Citrix Workspace App	21.12
VMware Horizon Client	2111
Imprivata	7.1.0
Zoom Client	5.9.1
VLC Media Player	3.0.9.2

Supported browsers

Table 6. Supported browsers

Browsers	Version
Google Chrome	96.0
Mozilla Firefox	95.0

Optional add-on packages

- **Dell Hybrid Client 1.6.1—Multimedia Extension Fix Addon for VDI**
  - File name—DHC-multimedia-extension-VDI-addon_1.6.01-02.tar.gz
  - Size—80,298,574 bytes
  - Description—This package contains the multimedia extension fix addon for VDI. The package is applicable for Dell Hybrid Client 1.6.1 customers who want to play YouTube on Internet Explorer inside a Citrix remote desktop session.
- **Dell Hybrid Client 1.6.1—Imprivata Addon Package**
  - File name—imprivata_1.6.01-02.tar.gz
  - Size—17,865,718 bytes
  - Description—This package contains the Imprivata addon package for Dell Hybrid Client version 1.6.1. This update helps to install the Imprivata client version on your device.
- **Dell Hybrid Client 1.6.1—Zoom VDI Plugin for VMware Addon Package**
  - File name—DHC-zoom-vmware_1.6.01_5.8.4-01.tar.gz
  - Size—45,618,281 bytes
  - Description—This package contains the Zoom VMWare VDI Plugin add-on. This update helps to plug-in Zoom application in the VMWare Client on Dell Hybrid Client 1.6.1 devices.
- **Dell Hybrid Client 1.6.1—Zoom VDI Plugin for Citrix Addon Package**
  - File name—DHC-zoom-citrix_1.6.01_5.8.4-01.tar.gz
  - Size—45,609,936 bytes
  - Description—This package contains the Zoom Citrix VDI Plugin add-on. This update helps to plug-in Zoom application in the Citrix Workspace application on Dell Hybrid Client 1.6.1 devices.
- **Dell Hybrid Client 1.6.1—Language Pack**
  - File name—full-language_1.6.01-02.tar.gz
  - Size—355,663,988 bytes
  - Description—This package contains the language pack for Dell Hybrid Client version 1.6.1. The update provides multilanguage support to Dell Hybrid Client 1.6.1 devices. The languages should be enabled from Dell Wyse Management Suite for the feature to work.

Supported languages

The following languages are supported on Dell Hybrid Client:

- English—US
- German
- French
- Italian
- Spanish
- Japanese
- Korean
- Chinese Traditional
- Chinese Simplified
- Russian
- Portuguese-Brazil
- Hebrew

Build information

- File name—DellHybridClient_1.6.1_1033.tar.gz
- Version—1.6.1_1033
- Size—1,281,442,125 bytes
- Description— This package contains the Dell Hybrid Client application version 1.6.1.

New and enhanced features

Third party application updates

- Citrix Workspace App is updated to version 21.12.
- VMware Horizon Client is updated to version 2111-8.4.0.
- Google Chrome is updated to version 96.0.
- Mozilla Firefox is updated to version 95.0.
- Zoom Client is updated to version 5.9.1.
- Zoom VDI plugin for VMware is updated to version 5.8.4.
- Zoom VDI plugin for Citrix is updated to version 5.8.4.
- Strong swan package is update to version 5.8.2.
- Nodejs is updated to version 14.18.2.

Wyse Management Suite update

Fixed the Dell Client Agent with Secure DHCP vulnerability in Dell Client Agent version 1.4.0-4.

Tested broker connections

Table 7. VMware Horizon

VDI version	Desktop	RDS server	
	Windows 10 Enterprise	Windows Server 2016	Applications
VMware Horizon 8	√	√	√

Table 8. Citrix Virtual Apps and Desktops

VDI version	Desktop	Server		Apps
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2012 R2	Windows Server 2016
Citrix Virtual Desktops 7 2012	√	√	√	√

Table 9. Dell Remote Desktop Protocol

VDI version	Desktop	Server	
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2019
Dell Remote Desktop Protocol	√	√	√

Dell Hybrid Client 1.6

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.6.743

Ubuntu version 20.04 LTS 64-bit

Wyse Management Suite Pro version 3.5.866

Wyse Management Suite Configuration UI package 1.5.295

(i) **NOTE:** Use Wyse Management Suite to upgrade your Dell Hybrid Client firmware to the latest version. Before upgrading to Dell Hybrid Client version 1.6, you must first install the **dhc-disable-sleep-suspend** package. For detailed information about the upgrade process, see the instructions mentioned on the Drivers and Downloads page of the Dell Hybrid Client product page at www.dell.com/support.

Release date

December 2021

Compatibility

Supported platforms

Dell Hybrid Client 1.6 is a software solution that can be deployed on Ubuntu 20.04-based platforms with a minimum memory or RAM of 8 GB and disk storage of 32 GB or higher capacity.

Ubuntu 20.04-based devices that have Dell Client Agent - Enabler (DCA Enabler) installed can be converted to Dell Hybrid Client version 1.6 using Wyse Management Suite.

- The following platforms are preinstalled with Dell Hybrid Client:
  - Wyse 5070
  - Wyse 5070 Extended
  - OptiPlex 3090 Ultra
  - OptiPlex 7090 Ultra
  - Latitude 3320

    (i) **NOTE:** Dell Hybrid Client version 1.6 is shipped on Wyse 5070, Wyse 5070 Extended, OptiPlex 3090 Ultra, OptiPlex 7090 Ultra, and Latitude 3320 devices after January 2022.
- The following existing platforms with earlier versions of Dell Hybrid Client can be upgraded to Dell Hybrid Client version 1.6 using Wyse Management Suite:
  - Wyse 5070
  - Wyse 5070 Extended
  - OptiPlex 7070 Ultra
  - OptiPlex 3090 Ultra
  - OptiPlex 7090 Ultra

○ Latitude 3320

> ⓘ **NOTE:** For information about supported platforms for Dell Hybrid Client conversions, see the *Dell Hybrid Client 1.x Conversion and Upgrade Guide* at www.dell.com/support. For information about how to install the Dell Hybrid Client, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Supported VDI clients and local applications

Table 10. Supported VDI clients and local applications

Client	Version
Dell RDP	8.1.08-06
Citrix Workspace App	21.8.0
VMware Horizon Client	2106
Imprivata	7.1.0
Zoom Client	5.7.4
VLC Media Player	3.0.9.2

Supported browsers

Table 11. Supported browsers

Browsers	Version
Google Chrome	94.0.4606.61
Mozilla Firefox	93.0

Optional add-on packages

- **Dell Hybrid Client 1.6 - Optimization Addon package**
  - File name—DHC-optimization_1.6-01.tar.gz
  - Size—78,266,642 bytes
  - Description—This package contains the optimization packages for Dell Hybrid Client version 1.6. These packages are supported only on Optiplex 3090 Ultra, Optiplex 7090 Ultra, and Latitude 3320.
- **Dell Hybrid Client 1.6 - Multimedia Extension Fix Addon for VDI**
  - File name—DHC-multimedia-extension-VDI-addon_1.6.01-01.tar.gz
  - Size—66,282,907 bytes
  - Description—This package contains the multimedia extension fix addon for VDI. The package is applicable for Dell Hybrid Client 1.6 customers who want to play YouTube on Internet Explorer inside a Citrix remote desktop session.
- **Dell Hybrid Client 1.6 - Imprivata Addon Package**
  - File name—imprivata_1.6.01-01.tar.gz
  - Size—66,282,907 bytes
  - Description—This package contains the Imprivata addon package for Dell Hybrid Client version 1.6. This update helps to install the Imprivata client version 7.1.0 on your device.
- **Dell Hybrid Client 1.6 - Zoom VDI Plugin for VMware Addon Package**
  - File name—DHC-zoom-vmware_1.6.01_5.7.0-01.tar.gz
  - Size—17,865,666 bytes
  - Description—This package contains the Zoom VMWare VDI Plugin add-on. This update helps to plug-in Zoom application in the VMWare Client on Dell Hybrid Client 1.6 devices.
- **Dell Hybrid Client 1.6 - Zoom VDI Plugin for Citrix Addon Package**
  - File name—DHC-zoom-citrix_1.6.01_5.7.0-01.tar.gz
  - Size—41,691,742 bytes
  - Description—This package contains the Zoom Citrix VDI Plugin add-on. This update helps to plug-in Zoom application in the Citrix Workspace application on Dell Hybrid Client 1.6 devices.

- **Dell Hybrid Client 1.6 - Language Pack**
  - File name—DHC-vnc-server_1.6.01_0.9.16-3-01.tar.gz
  - Size—355,602,539 bytes
  - Description—This package contains the language pack for Dell Hybrid Client version 1.6. The update provides multilanguage support to Dell Hybrid Client 1.6 devices. The languages should be enabled from Dell Wyse Management Suite for the feature to work.
- **Dell Hybrid Client 1.6 - Secure Shell (SSH) Addon Package**
  - File name—full-language_1.6.01-01.tar.gz
  - Size—1,644,044 bytes
  - Description—This package contains the Secure Shell (SSH) addon for Dell Hybrid Client version 1.6. The update helps to provide secure shell access to Dell Hybrid Client 1.6 devices. The SSH access should be enabled from Dell Wyse Management Suite for the feature to work.
- **Dell Hybrid Client 1.6 - VNC Server Addon Package**
  - File name—DHC-vnc-server_1.6.01_0.9.16-3-01.tar.gz
  - Size—3,430,233 bytes
  - Description—This package contains the VNC Server addon for Dell Hybrid Client version 1.6. The update provides VNC access to Dell Hybrid Client 1.6 devices. The VNC access should be enabled from Dell Wyse Management Suite for the feature to work.
- **Dell Hybrid Client 1.6 - Custom Connection Addon Package**
  - File name—custom-connections_1.6.01-01.tar.gz
  - Size—233,576 bytes
  - Description—This package contains the Custom Connection addon for Dell Hybrid Client version 1.6. The update provides Custom Connections support on Dell Hybrid Client 1.6 devices. The Custom Connections feature should enabled from Dell Wyse Management Suite the feature to work.
- **Dell Hybrid Client 1.6 - Addon Package to Disable Sleep/Suspend**
  - File name—DHC-disable-sleep-suspend_1.6.01-01.tar.gz
  - Size—3,413 bytes
  - Description—This package contains the addon package to disable Sleep or Suspend features on the Dell Hybrid Client version 1.6.

Supported languages

The following languages are supported on Dell Hybrid Client:

- English—US
- German
- French
- Italian
- Spanish
- Japanese
- Korean
- Chinese Traditional
- Chinese Simplified
- Russian
- Portuguese-Brazil
- Hebrew

Build information

- **Dell Hybrid Client bundle**
  - File name—DellHybridClient_1.6_743.tar.gz
  - Version— 1.6.743
  - Size—1,517,748,221 bytes
  - Description— This package contains the Dell Hybrid Client application version 1.6.
  - (i) **NOTE:** If you are upgrading from Dell Hybrid Client version v1.5, ensure that you have a minimum of 5 GB of free hard disk space available for upgrading to version 1.6.
- **Kernel package**

- File name—DHCServicePack_1.6.01_01-5.10.0-1011.tar.gz
- Size—78,266,642 bytes
- Description— This package contains the Service Pack updates for Dell Hybrid Client. This package is to be deployed on devices after upgrading to Dell Hybrid Client version 1.6.

Conversion images

- **Merlin conversion image for Wyse 5070 devices**:
  - File name—DHC1.6.743_Wyse_5070_Conversion_Merlin_Image_32GB.exe
  - Size—5,123,758,089 bytes
- **ISO conversion image for Wyse 7070 devices**:
  - File name—DellHybridClient_1.6_743_7070.iso
  - Size—8,148,598,784 bytes
- **ISO conversion image for OptiPlex 3090 Ultra and OptiPlex 7090 Ultra devices**:
  - File name—DellHybridClient_1.6_743_3090_7090.iso
  - Size—8,253,534,208 bytes
- **ISO conversion image for Latitude 3320 devices**
  - File name—DellHybridClient_1.6_743_L3320.iso
  - Size—8,203,380,736 bytes

New and enhanced features

Simple Certificate Enrollment Protocol

Dell Hybrid Client supports the secure issuance of certificates using Simplified Certificate Enrollment Protocol (SCEP). SCEP is used in a closed network where all end-points are trusted. The goal of SCEP is to support the secure issuance of certificates to network devices in a scalable manner. Within an enterprise domain, it enables network devices that do not run with domain credentials to enroll for certificates from a Certification Authority (CA). The network device has a private key and an associated certificate that is issued by a CA. Applications on the device may use the key and its associated certificate to interact with other entities on the network.

You can configure the SCEP settings using Wyse Management Suite policy settings. For information about how to configure SCEP, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Network authentication using IEEE 802.1x

IEEE 802.1x is the standard that is used for authenticating a device on the network. In Dell Hybrid Client version 1.6, you can configure the IEEE 802.1x authentication for a wired network connection.

The following 802.1x authentication types are supported:

- EAP-Protected EAP (MSCHAPv2)—You can configure the EAP-PEAP authentication by selecting the PEAP version and Inner Authentication option.
- EAP-TLS—You can configure the EAP-TLS authentication using a private key password.

ⓘ **NOTE:** 802.1x network configuration depends on SCEP. You must enable SCEP before configuring the IEEE 802.1x settings.

Since 802.1x is an admin configuration, there is no personalization and you cannot configure the options using Device Settings. You can configure the 802.1x settings using Wyse Management Suite policy settings. For information about how to configure the 802.1x settings, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Multi-Keyboard layout updates

Dell Hybrid Client allows you to select multiple keyboard layouts either from Device Settings or Wyse Management Suite. It depends on the supported keyboard layout from Ubuntu.

The following are the newly added keyboard layouts in this release:

- Japanese keyboard layout for Hiragana variation
- Japanese keyboard layout for Kanji variation

Multilanguage User Interface updates

Dell Hybrid Client supports localized user interface to view system menus and local applications such as Device Settings and Dell File Explorer in your preferred language.

In the Dell Hybrid Client version 1.6 release, three additional languages are supported—**Russian**, **Portuguese-Brazil**, and **Hebrew**. These are available as individual language add-on package and full-language add-on package. Use the standard application policy on Wyse Management Suite to deploy the add-on to Dell Hybrid Client. For information about how to download and install language add-ons on Dell Hybrid Client, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Imprivata authentication

Imprivata OneSign enables secure authentication to virtual desktops and applications. Dell Hybrid Client supports Imprivata on Citrix and VMware. Fast User Switching (FUS), Azure Virtual Desktop (AVD) and WyseRDP are not supported. Dell Hybrid Client version 1.6 supports Imprivata client version 7.1 (OneSign and Confirm ID) only with Prove ID Embedded (PIE) feature.

Imprivata client is supported in two different modes:

- Imprivata as a connection—This is similar to other VDI connections. Imprivata shortcut is created in the favorite bar on Dell Hybrid Client. When the user clicks the shortcut icon, the Imprivata client is launched.
- Imprivata autologon (Single Application Mode)—Administrator must enable the autologon option from the Imprivata Session Settings page on Wyse Management Suite. After you restart the system, the Imprivata client is launched automatically in full screen mode replacing the Ubuntu login screen. This is a Tap and Go mechanism to access the desktop and applications quickly.

You can configure the Imprivata OneSign settings using Wyse Management Suite policy settings. For information about how to configure the Imprivata OneSign settings, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Open box security profile

In the Dell Hybrid Client version 1.6 release, a new security profile called the Open Box mode is added. This profile enables you to install all types of files extensions, such as Debian, Bundle, Python script, Shell script, Javascript, Image file extensions, and VLC extensions without any security restrictions.

The firewall and Kernel hardening features are disabled. All default applications including System Settings, Nautilus, Developer tools in browsers and disabled services are enabled. Both default and custom firejail profiles are disabled.

You can configure the Open Box mode using Wyse Management Suite policy settings.

ⓘ **NOTE:** Once Open Box Mode is enabled, Wyse Management Suite administrator cannot change to different security profiles and devices have to be re-imaged.

For information about how to configure Open Box mode, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support. For more information about security profiles, see the *Dell Hybrid Client 1.x Security Configuration Guide* at www.dell.com/support.

Troubleshooting options

In the Dell Hybrid Client version 1.6 release, troubleshooting options are added under **Advanced Settings** on the Device Settings UI. These options allow IT administrators to diagnose and resolve client issues. The following troubleshooting options are supported:

- Export Dell Hybrid Client logs
- Export CMOS settings
- Export Wyse Management Suite settings
- Reset CMOS
- Enable or disable the print screen option

- Ping
- Traceroute
- Trace network and USB packets
- Export core dump files
- Export crash dump files

For information about how to use the troubleshooting options, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Automatic launch of VDI applications

In the Dell Hybrid Client version 1.6 release, the autolaunch feature is supported for VDI applications. Enabling this option allows the VDI applications to be automatically launched when a user logs in to the Dell Hybrid Client. The autolaunch of an application is supported in Citrix, VMware, RDP, and Azure Virtual Desktop sessions.

You can enable or disable the autolaunch option using Wyse Management Suite policy settings. For information about how to configure the autolaunch option, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Azure Virtual Desktop connection

Azure Virtual Desktop (AVD), formerly known as Windows Virtual Desktop, is a comprehensive desktop and app virtualization service that runs on the cloud. In the Dell Hybrid Client version 1.6 release, Azure Virtual Desktop, formerly known as Windows Virtual Desktop, is supported. You can access the Azure Virtual Desktop resources that are created on Azure cloud from your Dell Hybrid Client-powered device.

You can configure the AVD Broker agent connection settings using Wyse Management Suite policy settings, or use the native AVD client on your device to establish the AVD connection. For information about how to configure Azure Virtual Desktop connection, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Single application mode

Dell Hybrid Client supports the single application mode. This option allows the administrator to limit a device to present or use a single application that takes over the local gnome desktop. Users cannot access the desktop functionality or other features on the device that are outside the single application mode.

You can configure the single application mode settings using the Wyse Management Suite policy settings. When enabled, only the configured application is launched on the device. When you close the application, the configured exit action is applied. For information about how to configure the single application mode, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Cisco Webex and Cisco Jabber for VDI

Dell Hybrid Client supports the Unified Communications optimization in a VDI environment using Cisco Webex and Cisco Jabber. You must install the device plugins for each UC along with dependencies. Device plugins for Cisco Webex and Cisco Jabber can be downloaded from the vendor website. You can use the standard application policy to install the plugins.

For information about how to install a package using standard or advanced application policy, see the *Dell Wyse Management Suite Administrator's Guide* at www.dell.com/support.

User switching

Dell Hybrid Client supports switching between users by utilizing the Ubuntu capability. If you lock the system and leave the system for the idle time that is configured from Wyse Management Suite, the user is logged out or the device shuts down.

You can enable the **Inactivity Action** option from **Power Settings** > **Suspend & Power Button** on Wyse Management Suite policy. Once enabled, you can set the inactive timeout period and select the action to be performed by the device after the timeout period is elapsed.

For information about how to configure the Power Settings, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Pinning applications to the desktop with follow-me

Dell Hybrid Client allows you to pin an application to the desktop for quick access. To pin an application, right-click the application icon from the activity menu and click **Add to Desktop**. If the same domain user logs in to another device, the pinned shortcuts are still displayed on the desktop.

Pinning browser URLs to the desktop with follow-me

Dell Hybrid Client allows you to pin a URL from the Google Chrome browser to the desktop for quick access. To pin a browser URL, drag and drop the URL to the desktop. A browser shortcut is created on the desktop. Double-click the desktop shortcut, the URL is launched in the default browser. If the same domain user logs in to another device, the pinned URL shortcut is still displayed on the desktop.

EULA acceptance

From Dell Hybrid Client 1.6 onwards, you can read and accept EULA from Wyse Management Suite. If EULA is accepted on Wyse Management Suite, and if your device is discovered by Wyse Management Suite using DNS/DHCP, the EULA acceptance window is not displayed on the device screen when you boot the device for the first time. If your device is not automatically discovered, you must manually accept EULA on the device.

Box cloud drive

Dell Hybrid Client supports Box cloud drive. Box account is a personal cloud storage without any associated applications.

Optimization package for better performance

An optimization package is delivered in this release to support Intel Optimization. The package is tested on OptiPlex 3090 Ultra, 7090 Ultra, and Latitude 3320 devices. Installing this package improves the overall battery life, system performance for audio-video, network, and responsiveness.

Supports BIOS upgrade using Wyse Management Suite

From Dell Hybrid Client version 1.6 onwards, you can use Wyse Management Suite to upgrade BIOS. For steps to upgrade BIOS, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Third-party application dependency

From Dell Hybrid Client version 1.6 onwards, when you are installing a third-party Debian package, the Dell Hybrid Client-powered device checks for dependency. When the dependency check fails, the device reports the dependency error details to Wyse Management Suite. You can view the dependency details along with the failed status on the Wyse Management Suite page.

Network drives updates

Users can manually create network drives from the Device Settings UI. You can also configure the network drive using Wyse Management Suite. By default, the network drives feature is disabled in Device Settings.

You can enable the Network Drive option from **Advanced** > **Network Drives** on Wyse Management Suite. This option is available for both device-level and user-level group policies.

(i) **NOTE:** Supported file systems are CIFS, SMB, and FTPS.

Blocking keyboard shortcuts

Dell Hybrid Client allows you to disable certain keyboard shortcut combinations. You can block the keyboard shortcuts, making them unavailable for users. The blocked keyboard combinations do not work in any of the local desktop or applications excluding the VDI sessions. Blocking of keyboard shortcuts is not supported within VDI sessions.

Changing the log password

By default, all Dell Hybrid Client log files are password-protected for security reasons. The initial password is same as the randomized password that is generated using the serial number and UUID of the device. This password is unique to a device. As an administrator, you can change the log password using Wyse Management Suite.

Local user account

Dell Hybrid Client supports local user accounts. By default, Local user account is disabled. You can enable the local user account using Wyse Management Suite. Local user account properties are applicable only for Device level group policy.

You can configure the local user account settings using Wyse Management Suite policy settings. For information about how to configure the local user account settings, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Registry location

The Dell Hybrid Client enables you to use the following two methods to set the custom values for registry location:

- Use the command *set_custom_info <key>:<value>* in developers mode, where *<key>* can have one of the following values:
  - Custom1
  - Custom2
  - Custom3
  - Contact
  - Location

  The *<value>* may be set as the required value for the particular key. Here are a few examples:

  ```
  set_custom_info "Custom3:$somevariable"
  set_custom_info "Location:$somevariable" "Custom1:$somevariable2"
  ```

  Example as a script:

  ```
  Location_name=$(dnsdomainname |cut -f1 -d'.')

  # get machine ID and assign to variable
  machID=$(cat '/etc/machine-id')

  # set Location at location and machine ID in custom info 3
  set_custom_info "Custom3:$machID" "location:$Location_name"
  ```

- Custom values for registry location can be set from Wyse Management Suite, using the .sh and .py files. You can create a standard application policy and push it from Wyse Management Suite.

(i) **NOTE:** The custom information values set from Wyse Management Suite device policy settings have higher priority over values set locally by using the *set-custom-info* command.

Power control settings

The following power control settings can be configured using Wyse Management Suite policy settings:

- **Power off**
- **Restart**
- **Suspend**
- **Logout**

These options are enabled by default, and can be restricted from the **Device Policy Group** and **User Policy Group** level of Wyse Management Suite.

Automatic time zone

Dell Hybrid Client supports the automatic time zone feature. This option is enabled by default, and updates the system time automatically, depending upon the geographical location.

You can configure the **Auto Time Zone** option using either Wyse Management Suite policy settings or the Device Settings UI. For information about how to configure region and time settings, see the *Dell Hybrid Client version 1.x Administrator's Guide* at www.dell.com/support.

Installed applications listing in Wyse Management Suite

All applications deployed in Dell Hybrid Client including the third-party applications, and DHC-bundle information are displayed in **System Information** on the local device. The same information is displayed in **Devices** > **Installed Apps** section of Wyse Management Suite.

Important notes

Limitations

- Local user takes priority over the guest user when the auto sign-on option is enabled.
- When multiple local users are created, the first user who is enabled in the local user list takes priority when the auto sign-on feature is enabled.
- Bluetooth, Audio, and Printer settings cannot be directly edited under Device Settings. These pages contain Advanced Settings buttons. Clicking the Advanced Setting button opens the Ubuntu Settings page, where users can modify the relevant settings.
- Imprivata Biometric or Fingerprint authentication is not supported. Only smart card authentication is supported.
- Monitor resolution values are static. All the supported resolution may not be displayed for some monitors. You cannot apply the unsupported display resolutions.
- Some keys may not work when blocking keyboard shortcuts. Workaround is as follows:

Table 12. Key workarounds

Key	Workaround
Parenleft (**(**)	Shift+9
Parenright (**)**)	Shift+0
Lesser (**,**)	Shift+, (comma)

- The reset button in Wyse Management suite does not work for Password fields and Guest User Account Properties. Workaround is to disable the options instead of reset.
- When data roaming for browser is enabled, the browser autolaunch fails when the Citrix application is opened in the previous login session.
- The hostname resets to default when you perform reimaging or conversion.
- The following display combinations are supported on Wyse 5070 Extended device:
  - Two 4K displays and four 2K displays.
  - Six 2K displays.
- Multi-Monitor configurations for a clone display are supported only for two displays.
- Single display selection in a two-display setup is not supported.
- Notification window gets extended in a multidisplay setup with span mode enabled,
- Control buttons such as Volume up/Down, Mute, Call Connect and Disconnect do not work in a VDI session and local client when using a USB headset or sound bar.
- You must require a specific model name for network printing using Google browser and for the printer driver configuration from Wyse Management Suite. Example for specific model names—Generic PCL5, PCL XL Printer Foomatic, Pxlcolor.

Supported peripherals

The supported platforms are not limited to the devices listed in this section. The following table lists only the peripheral devices that have been tested by Dell Technologies.

Table 13. Supported peripherals

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
Audio or video	Dell 2.0 Speaker System- AE215	✓	N/A	N/A	N/A	✓
	Dell 2.1 Speaker System- AE415	✓	N/A	N/A	N/A	✓
	Dell UC Headset- UC150	✓	✓	✓	✓	✓
	Dell UC Headset- UC350	✓	✓	✓	✓	✓
	Microsoft Corporation LifeChat LX-6000 Headset	N/A	N/A	N/A	✓	N/A
	Dell Professional Sound Bar- AE515	N/A	N/A	✓	✓	N/A
	Dell USB Sound Bar- AC511	N/A	N/A	✓	✓	N/A
	Jabra Pro 935 MS Wireless headset (Mono)- Office Centric	N/A	N/A	N/A	✓	N/A
	Jabra Evolve 65 MS Stereo Headset	✓	✓	N/A	N/A	✓
	Jabra Engage 65 MS Stereo Headset	✓	✓	N/A	N/A	✓
	Logitech C525 HD Webcam	✓	✓	N/A	N/A	✓
	Logitech BRIO 4k Ultra HD Webcam	✓	✓	N/A	N/A	✓
	Logitech C930e HD Webcam	✓	✓	N/A	N/A	✓
	Plantronics Savi W440M-400	✓	✓	N/A	N/A	✓

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Series convertible wireless headset- DECT 6.0					
	Plantronics Voyager Focus UC B825-M headset for Microsoft Lync	✓	✓	N/A	N/A	✓
	Dell Mobile Adapter Speakerphone- MH3021P	✓	✓	✓	N/A	N/A
Input devices	Dell Laser Wired Mouse - MS3220 - Morty	✓	✓	✓	N/A	✓
	Dell Mobile Pro Wireless Mice- MS5120W- Splinter	✓	✓	✓	N/A	✓
	Dell Mobile Wireless Mouse- MS3320W- Dawson	✓	✓	✓	N/A	✓
	Dell Multi-Device Wireless Keyboard and Mouse Combo- KM7120W	✓	✓	✓	N/A	✓
	Dell Premier Wireless Keyboard and Mouse- KM717	✓	✓	N/A	N/A	✓
	Dell Wireless Keyboard and Mouse- KM117 - Auburn	N/A	N/A	✓	N/A	✓
	Dell Wireless Mouse- WM126_BLACK- Rosewood	✓	✓	✓	N/A	✓
	Logitech MK850 Performance - Wireless Keyboard and Mouse Combo - MK850	N/A	N/A	✓	N/A	N/A

26   Dell Hybrid Client 1.6

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Logitech Wireless Combo MK320	N/A	N/A	✔	N/A	N/A
	Logitech Wireless Wave Combo MK550	N/A	N/A	✔	N/A	N/A
	Dell Laser Scroll USB 6-Buttons Silver and Black Mouse	N/A	N/A	N/A	N/A	✔
	Dell Multimedia Keyboard-KB216	✔	✔	✔	✔	✔
	Dell Optical Mouse- MS116	✔	✔	✔	✔	✔
	Dell Premier Wireless Mouse - WM527	N/A	N/A	N/A	✔	✔
	Dell Wireless Keyboard and Mouse-KM636	✔	✔	✔	✔	✔
	Dell Wired Mouse with Fingerprint Reader-MS819	✔	✔	N/A	N/A	✔
	Dell USB Wired Laser mouse–Naruto	N/A	N/A	N/A	✔	N/A
	Dell Wireless Mouse-WM326	N/A	N/A	✔	N/A	✔
Cables, dongles and adapters	Dell Adapter - HDMI to DVI - DAUARBN004	N/A	N/A	✔	N/A	N/A
	Dell Adapter - USB-C to DisplayPort - DBQANBC067	✔	✔	✔	✔	✔
	Dell Adapter - USB-C to Dual USB-A with Power Pass-Through - DBQ2BJBC070 - Combo Adapter	N/A	N/A	✔	N/A	✔
	Dell Adapter - USB-C to	N/A	N/A	✔	N/A	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	HDMI/Display Port with Power Pass-Through DBQAUANBC070 - Combo Adapter					
	Dell Adapter - USB-C to HDMI/VGA/Ethernet/USB 3.0 - DA200 - Slayer 2	N/A	N/A	✓	N/A	N/A
	Dell Adapter-USB-C to USB-A 3.0 (DA300)-DBQBJBC054	N/A	N/A	✓	N/A	N/A
	Dell Adapter-USB-C to HDMI-DBQAUBC064	N/A	N/A	N/A	✓	✓
	Dell Adapter - USB-C to VGA - DBQBNBC064	N/A	N/A	N/A	✓	✓
	Dell Display Port to Display Port (.6M)-CJ2Y1	✓	✓	N/A	N/A	✓
	Dell Adapter - USB-C to VGA	N/A	N/A	N/A	N/A	✓
	USB-A to USB-B 3.0 Cable (0.6 meter)	✓	✓	N/A	N/A	✓
	USB-C to USB-C cable (0.6 meter) to enable USB-C Displays	✓	✓	N/A	N/A	✓
	Dell Adapter - DisplayPort to HDMI 2.0 (4K)-DANAUBC087	N/A	N/A	N/A	✓	N/A
	Dell Adapter - DisplayPort to VGA-DANBNBC084	N/A	N/A	N/A	✓	N/A
	DP to DVI D-SL Adapter	N/A	N/A	N/A	✓	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	USB to Serial adapter - Trendnet	N/A	N/A	N/A	✓	N/A
	USB to Serial adapter - Cables-2-Go	N/A	N/A	N/A	✓	N/A
	C2G 15ft Cat6 Snagless Unshielded (UTP) Network Patch Ethernet Cable - Dell part A5309444 (US); A6927862 (EMEA) - Dell part A5309444 (US); A6927862 (EMEA)	✓	✓	N/A	N/A	✓
	C2G USB C to Display Port Adapter Converter - USB-C to Display Port Black external video adapter-Black	✓	N/A	N/A	N/A	N/A
Monitors	Dell Collaboration 24 USB-C Hub Monitor-C2422HE	✓	✓	N/A	N/A	N/A
	Dell Collaboration 27 USB-C Hub Monitor-C2722DE	✓	✓	N/A	N/A	N/A
	Dell Collaboration 34 USB-C Hub Monitor-C3422WE	✓	✓	N/A	N/A	N/A
	Dell 19 Monitor-E1916H	N/A	N/A	N/A	✓	✓
	Dell 19 Monitor-E1916HV	✓	N/A	N/A	N/A	N/A
	Dell 19 Monitor-E1920H	✓	N/A	✓	N/A	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Dell 20 Monitor-E2016H	N/A	N/A	N/A	✓	✓
	Dell 20 Monitor-E2016HV	✓	N/A	N/A	N/A	N/A
	Dell 20 Monitor-E2020H	✓	✓	✓	N/A	N/A
	Dell 22 Monitor-E2216H	N/A	N/A	N/A	N/A	✓
	Dell 22 Monitor-E2216HV	✓	N/A	N/A	N/A	N/A
	Dell E Series Monitor-E2220H	✓	✓	✓	✓	N/A
	Dell 22 Monitor-E2218HN	N/A	N/A	N/A	✓	N/A
	Dell 23 Monitor-E2318H	N/A	N/A	N/A	✓	✓
	Dell 24 Monitor-E2417H	N/A	N/A	N/A	✓	✓
	Dell E Series Monitor-E2420H	✓	✓	✓	✓	N/A
	Dell E Series Monitor-E2420HS	N/A	N/A	✓	✓	N/A
	Dell E Series Monitor-E2720H	✓	✓	✓	✓	N/A
	Dell E Series Monitor-E2720HS	N/A	N/A	✓	✓	N/A
	Dell 24 Monitor-MR2416	N/A	N/A	N/A	✓	N/A
	Dell 19 Monitor-P1917S	✓	N/A	✓	N/A	✓
	Dell 20 Monitor-P2016	N/A	N/A	N/A	✓	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Dell 20 Monitor-P2018H	✓	✓	✓	N/A	✓
	Dell 22 Monitor-P2217	✓	N/A	✓	N/A	✓
	Dell 22 Monitor-P2217H	N/A	N/A	N/A	✓	N/A
	Dell 22 Monitor-P2219H	✓	✓	✓	✓	✓
	Dell 22 Monitor-P2219HC	N/A	N/A	✓	✓	N/A
	Dell 23 Monitor-P2317H	N/A	N/A	N/A	✓	N/A
	Dell 23 Monitor-P2319H	✓	✓		✓	✓
	Dell 24 Monitor-P2415Q	N/A	N/A	N/A	✓	✓
	Dell 24 Monitor-P2417H	N/A	N/A	N/A	✓	N/A
	Dell 24 Monitor-P2418D	N/A	N/A	N/A	N/A	✓
	Dell 24 Monitor-P2418HZm	✓	✓	✓	✓	✓
	Dell 24 Monitor-P2418HT (Touch)	✓	✓	✓	✓	✓
	Dell 24 Monitor-P2419H	✓	✓	✓	✓	✓
	Dell 24 Monitor-P2419HC	✓	✓	✓	✓	✓
	Dell 24 Monitor-P2421	✓	✓	✓	N/A	N/A
	Dell 24 Monitor-P2421D	✓	✓	✓	N/A	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Dell 24 USB-C Monitor-P2421DC	✓	✓	✓	✓	N/A
	Dell 27 Monitor-P2719H	✓	✓	✓	✓	✓
	Dell 27 Monitor-P2719HC	✓	✓	✓	✓	✓
	Dell 27 Monitor-P2720D	✓	✓	✓	✓	N/A
	Dell 27 Monitor - P2720DC	✓	✓	✓	✓	N/A
	Dell UltraSharp 34 Monitor-P3418HW	N/A	N/A	N/A	✓	N/A
	Dell 43 Multi-Client Monitor-P4317Q	N/A	N/A	N/A	✓	✓
	Dell UltraSharp 24 Monitor-U2415	✓	✓	✓	✓	✓
	Dell UltraSharp 24 Ultrathin Monitor-U2419H	✓	✓	✓	✓	✓
	Dell UltraSharp 24 Ultrathin USB-C Monitor-U2419HC	✓	✓	✓	✓	✓
	Dell UltraSharp Monitor-U2421HE	✓	✓	✓	✓	N/A
	Dell UltraSharp 25 Monitor-U2518D	N/A	N/A	✓	✓	✓
	Dell Ultrasharp Monitor-U2520D	N/A	✓	✓	✓	N/A
	Dell UltraSharp 27 Monitor-U2718Q	N/A	N/A	✓	✓	✓
	Dell UltraSharp 27 Ultrathin Monitor-U2719D	✓	✓	✓	✓	✓
	Dell UltraSharp 27 Ultrathin	✓	✓	✓	✓	✓

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	USB-C Monitor-U2719DC					
	Dell Ultrasharp Monitor-U2720Q	N/A	✓	✓	✓	N/A
	Dell UltraSharp Monitor-U2721DE	✓	✓	✓	✓	N/A
	Dell UltraSharp 32 4K USB-C Monitor-U3219Q	✓	✓	N/A	N/A	✓
	Dell UltraSharp 34 Curved USB-C Monitor-U3419W	N/A	N/A	✓	N/A	✓
	Dell UltraSharp 34 Curved USB-C HUB Monitor-U3421WE	✓	✓	N/A	N/A	N/A
	Dell UltraSharp 38 Curved Monitor-U3818DW	N/A	N/A	✓	N/A	✓
	Dell Ultrasharp Monitor-U4320Q	N/A	✓	N/A	✓	N/A
	Dell UltraSharp 49 Curved Monitor-U4919DW	N/A	✓	✓	N/A	N/A
	Dell UltraSharp 30 Monitor-UP3017	N/A	N/A	N/A	N/A	✓
Docking Stations	Dell Dock-WD15	N/A	N/A	✓	N/A	N/A
	Dell Dock-WD19	✓	✓	✓	N/A	N/A
	Dell Performance Dock-WD19DC	✓	✓	✓	N/A	N/A
	Dell Thunderbolt Dock- WD19TB	✓	✓	✓	N/A	N/A
	Dell Universal Dock- D6000	N/A	N/A	✓	N/A	N/A

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
Networking	Dell Adapter-USB-C to Ethernet (PXE Boot)-DBQBCBC064	✓	✓	N/A	N/A	✓
	Dell FCLF-8521-3-(DL)	N/A	N/A	N/A	✓	N/A
External Data Storage	Dell USB Slim DVD/RW Drive- DW316	✓	✓		N/A	✓
	Dell External SSD, Typ C, USB3.1 Gen2, 250GB	N/A	N/A	N/A	✓	N/A
	Western Digital My Passport Ultra 1TB, Black	✓	✓	✓	N/A	✓
Smart Cards and Reader	CARD_IDPrime MD 830 B FIPS 140-2 L2 White PVC	✓	✓	N/A	N/A	✓
	CARD_IDPrime MD 3840 B w/o OTP	✓	✓	N/A	N/A	✓
	Card_IDPrime MD840B_white_PVC	✓	✓	N/A	N/A	✓
	CARD_IDPrime MD3811, Mifare EV1 4K&DESFire EV1, 4K _MPH150_New	✓	✓	N/A	N/A	✓
	Standard Card _IDPrime NET 510_ white PVC	✓	✓	N/A	N/A	✓
	Yubikey Neo 5.0	✓	✓	N/A	N/A	✓
	Yubikey OTP+FIDO+CCID	✓	✓	N/A	N/A	✓
	Sun microsystem SRC 3311	✓	✓	N/A	N/A	✓
	IDBridge CT30 (GemPC Twin/TR USB)	✓	✓	N/A	N/A	✓

Table 13. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Cherry SmartTerminal SMART Card Reader - ST-1044UCherry SmartTerminal SMART Card Reader - ST-1044Uv	✓	✓	N/A	✓	✓
	Cherry SmartTerminal ST-1144 SMART Card Reader - USB 2.0	✓	✓	N/A	✓	✓
Printers	Dell C2660dn Color Laser printer	✓	✓	✓	✓	✓
	Dell E515dn multifunctional printer	✓	✓	✓	✓	✓

✓ -Supported

Supported printer matrix

Table 14. Supported printer matrix

Printer type	Local printing			Printer Configuration push from Wyse Management Suite	VDI Sessions				
	Firefox	Chrome	File explorer		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
USB	√	√	√	N/A	×	×	×	×	×
LPD	√	√	√	√	√	×	×	×	×
SMB	√	√	√	√	√	×	×	×	×
URI	√	√	√	√	√	×	×	×	×

Supported display matrix

Table 15. Supported display matrix

Supported display matrix						
Hardware	Monitors	VDI sessions				
		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
Wyse 5070 Extended	**Two 4K Monitors**	√	√	√	√	√

Table 15. Supported display matrix (continued)

Supported display matrix						
	DP1:P2415Q (DP-cable)					
	DP2:P2415Q (DP-cable)					
Wyse 5070 Extended	**Three 4K Monitors** DP1:P2415Q (DP-cable) DP2:P2415Q (DP-cable) DP4:P2415Q (DP to mDP cable)	√	√	√	√	√
Wyse 5070 Extended	**Six 2K Monitors** DP1:E2016 (DP-cable) DP2:E2016 (DP-cable) DP3:UP3017 (DP-cable) AMD DP4:E1916H (DP to mDP cable) AMD DP5:E2216H (DP to mDP cable) DP6:UP3017 (DP-cable)	x	√	x	x	√
Wyse 5070 Extended	**Two 4K Monitors** DP1:P2415Q (DP-cable) DP2:P2415Q(DP-cable) **Two 2K Monitors:** DP3: UP3017 (DP-cable) DP6:UP3017 (DP-cable)	x	√	√	√	√
Wyse 5070 Extended	**Two 4K Monitors** DP1:P2415Q(DP-cable) DP2:P2415Q (DP-cable) **Three 2K Monitors:** DP3:UP3017 (DP-cable) DP6:UP3017 (DP-cable) AMD DP5:E2016 (DP to mDP cable)	√	√	x	√	√
Wyse 5070 Extended	**One 4K Monitor**	x	√	x	x	√

Table 15. Supported display matrix (continued)

Supported display matrix						
	DP1:P2415Q (DP-cable)					
	Five 2K Monitors:					
	DP2:P2417H (DP-cable)					
	DP3:P2417H (DP-cable)					
	DP6:P2417H(DP-cable)					
	AMD DP4:P2417H (DP to mDP cable)					
	AMD DP5:P2417H (DP to mDP cable)					

Known issues

Table 16. Known issues

Description	Workaround
The device summary details on the Wyse Management Suite dashboard show that the device is compliant, but the Devices tab displays the noncompliance status.	There is no workaround in this release.
System languages are not applied on the Zoom application.	Change the language from the Zoom application menu.
The USB Redirection feature does not work for domain users in a VMware session.	There is no workaround in this release.
When File Type Association is configured for VMware, launching a file may fail with an error message.	There is no workaround in this release.
The printer functionality does not work when you configure the printer settings using Wyse Management Suite.	There is no workaround in this release.
When you connect more than three displays to the device, the user cannot arrange the display layout properly.	There is no workaround in this release.
When you connect six displays (Four 4K and two 2K) to the device, the user is locked out. After unlocking the user, a black screen is displayed on all displays.	There is no workaround in this release.
When you change the language from Device Settings, the restart window is displayed twice.	Click Restart from any one of the notification windows.
802.1x notifications for other languages are displayed in English.	There is no workaround in this release.
After configuring 802.1x authentication, you may get the same notifications twice.	There is no workaround in this release and there is no impact to the functionality.
The logoff notification appears for each configuration when the Chinese or Korean keyboard layout is enabled.	Log off and log in to the device again.
After you modify the group name in Wyse Management Suite, the correct group name is not displayed on the Events tab.	There is no workaround in this release and there is no impact to the functionality.
When you hot plug displays in a dual-display setup, one display stays in the VDI session, and another display stays in the local UI, This is observed in a Citrix session.	There is no workaround in this release.

Table 16. Known issues (continued)

Description	Workaround
You cannot apply the 1024 x 768 and 1280 x 720 display resolutions in portrait mode. This is observed in a VMware session.	There is no workaround in this release.
ICA session stops responding when you click logout, disconnect, and sign out buttons.	Restart the device using the power button.
A few option tags are not localized in the configuration UI parameters.	There is no workaround in this release and there is no impact to the functionality.
Korean, Chinese Traditional and Hebrew languages do not get applied in a Citrix Workspace app session.	There is no workaround in this release. This feature is not supported by Citrix.
After you change the pointer size, the pointer size remains same in the Device Settings window.	Close and reopen the Device Settings window.
In Wyse 5070 Extended devices, you cannot use the VMware Blast protocol in a VMware horizon session when the Allow H.264 decoding feature is enabled.	There is no workaround in this release.
When you configure the File Type Association for Citrix, the unsupported file type message may be displayed while launching the Excel, Word, and PowerPoint file. The Dell File Explorer window is also opened while launching the Excel file.	There is no workaround in this release.
Display settings are displayed on the secondary screen when using span mode.	There is no workaround in this release.
After disabling the access control for all applications from Wyse Management Suite, you cannot select the Show Applications menu.	Press the super key in the keyboard.
After you unplug a headset during a Zoom call, the Citrix VDI session gets disconnected immediately.	There is no workaround in this release.
The volume up, down, mute, call connect and disconnect control buttons do not work in a Citrix session.	There is no workaround in this release.
When the file name is in multibyte characters (Japanese, Korean, and Chinese) and the system language set to English, you cannot open the file using Citrix FTA.	There is no workaround in this release.
Video does not work when the Pop-Up camera is closed and opened on C2422HE and C2722DE monitors.	No Workaround
Internal audio speakers and USB headset do not get selected automatically inside a Zoom application.	Manually select the audio devices.
Multimedia and function keys do not work when using the MK550 keyboard.	There is no workaround in this release.
VMware applications cannot be launched when a smart card is configured.	There is no workaround in this release.
The printer redirection feature does not in Citrix and VMware sessions.	There is no workaround in this release.
You cannot open the audio and video files using VMware FTA when the DHC mode is set to VDI.	There is no workaround in this release.
The mouse pointer settings are not applied on the taskbar.	There is no workaround in this release.
When you move a window in a Citrix session, the video screen becomes black.	There is no workaround in this release.
The primary monitor resolution and orientation may not change in a VMware session. Icons are also distorted.	There is no workaround in this release.

Dell Hybrid Client 1.5

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.5.750

Ubuntu version 20.04 LTS 64-bit

Wyse Management Suite Pro version 3.2.780

Release date

March 2021

Compatibility

Supported platforms

Table 17. Supported platforms and configurations

Platform	Configuration		
	Processor	**Memory/RAM**	**Storage**
Wyse 5070	Intel Celeron Dual Core	8 GB and higher capacity	32 GB or higher capacity SSD/eMMC
	Intel Pentium Quad Core		
Wyse 5070 Extended	Intel Pentium Quad Core		
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7		128 GB and higher capacity SSD/HDD
OptiPlex 3090 Ultra	11 th Generation Intel Core i3/i5		32 GB and higher capacity SSD/ eMMC
OptiPlex 7090 Ultra	11 th Generation Intel Core i3/i5/i7		128 GB or higher capacity SSD/HDD
Latitude 3320	11 th Generation Intel Core i5/i7		

(i) **NOTE:** For information about supported platforms for Dell Hybrid Client conversions, see the *Dell Hybrid Client 1.x Conversion and Upgrade Guide* at www.dell.com/support. For information about how to install the Dell Hybrid Client, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Supported browsers

Table 18. Supported browsers

Browsers	Version
Google Chrome	88.0.4324
Mozilla Firefox	85.0.1

Supported VDI clients and local applications

Table 19. Supported VDI clients and local applications

VDI Client Description	Version
Dell RDP	8.1.08-06
Citrix Workspace App	2101
VMware Horizon Client	2012
Zoom Client	5.5.27011
VLC Media Player	3.0.9.2

Supported cloud platforms

- Office 365 applications with Azure Active Directory sync with On-Premise Active Directory User.
- Google Workspace (formerly Gsuite) applications with On-Premise users sync with Google Cloud Platform using Active Directory Federation Services (ADFS) enablement.

Build information

- **Dell Hybrid Client bundle**
  - File name—DellHybridClient_1.5_750.tar.gz
  - Version—1.5
  - Build—750
  - Size—876,950,770 bytes
- **Dell Hybrid Client for Wyse 5070 and OptiPlex 7070 devices**
  - File name—DHCServicePack_1.5.1.tar.gz
  - Build—1.5-01
  - Size—78,245,069 bytes

Conversion images

- **ISO conversion image for Dell Hybrid Client image upgrade add-on**:
  - File name—DHCImageUpgradeAddon.tar.gz
  - Size—76,193,792 bytes
- **ISO conversion image for OS upgrade package for Dell Client Agent Enabler**:
  - File name—os-upgrade_1.1-16_amd64.deb
  - Size—9,968 bytes
- **ISO conversion image for OptiPlex 3090 Ultra and OptiPlex 7090 Ultra devices**:
  - File name—DellHybridClient_1.5_750_3090_7090.iso
  - Size—8,064,782,336 bytes
- **ISO conversion image for Wyse 7070 devices**:
  - File name—DellHybridClient_1.5_750_7070.iso
  - Size—8,001,179,648 bytes

- **ISO conversion image for Wyse 5070 devices**:
  - File name—DellHybridClient_1.5_750_5070.iso
  - Size—8,033,769,472 bytes
- **ISO conversion image for Latitude 3320 devices**
  - File name—DellHybridClient_1.5_750_L3320.iso
  - Size—8,055,957,504 bytes
- **Merlin conversion image for Wyse 5070 devices**:
  - File name—DHC1.5.750_Wyse_5070_Conversion_Merlin_Image_32GB.exe
  - Size—205,738,547 bytes
- **Windows 10 IoT Enterprise Merlin common package**:
  - File name—MerlinPackage_Common.exe
  - Size—51,068,416 bytes

Optional add-ons

- **Optional add-on for Dell Hybrid Client multimedia extension**
  - File name—DHC_multimedia_extension_VDI_addon_1.5-01.tar.gz
  - Version—1.5-01
  - Size—65,875,674 bytes
- **Optional add-on for Zoom VMware**
  - File name—zoom-vmware_1.5-01.tar.gz
  - Version—1.5-01
  - Size—34,884,202 bytes
- **Optional add-on for Zoom Citrix**
  - File name—zoom-citrix_1.5-01.tar.gz
  - Version—1.5-01
  - Size—34,947,544 bytes
- **Optional add-on for language package**
  - File name—full_language_1.5-01.tar.gz
  - Version—1.5-01
  - Size—309,545,937 bytes
- **Optional add-on for VNC**
  - File name—vnc-server_1.5-01.tar.gz
  - Version—1.5-01
  - Size—3,068,729 bytes
- **Optional add-on for SSH**
  - File name—ssh-server_1.5-01.tar.gz
  - Version—1.5-01
  - Size—1,370,357 bytes
- **Optional add-on for custom connection**
  - File name—custom-connections_1.5-01.tar.gz
  - Version—1.5-01
  - Size—6,837 bytes

New and enhanced features

Supports new hardware platforms

Dell Hybrid Client supports new hardware platforms such as OptiPlex 3090 Ultra, OptiPlex 7090 Ultra, and Latitude 3320.

Supports security profiles

Dell Hybrid Client enables you to set different levels of **Security Profiles** to provide an enhanced device security for deploying third-party applications.

As part of security profiles, Dell Hybrid Client supports application sandboxing using Firejail and AppArmor. The following are the types of security profiles supported on Dell Hybrid Client:
- **High**—This profile enables you to install Dell-signed, custom-signed, and unsigned Debian files with metadata. Based on the metadata, the firejail is applied.
- **Medium**—This profile enables you to install the following types of third-party application packages or files:
  - Unsigned Debian files with or without metadata
  - Custom-signed Debian files
  - Dell-signed applications
- **Low**—This profile enables you to install all types of file extensions, such as, Debian, Bundle, Python script, Shell script, Javascript, Image file extensions, and VLC extensions.

For more information about security profiles, see the *Dell Hybrid Client 1.x Security Guide* at www.dell.com/support.

You can use Wyse Management Suite to configure the security profile settings. For more information about how to configure the security profiles, see the *Dell Hybrid Client Version 1.x Administrator's Guide* at www.dell.com/support.

Supports Power Profiles

Power Profiles provide efficient power management capabilities for devices that are powered by Dell Hybrid Client. This feature is newly added for user personalization. The available Power Profile options are as below:
- Energy Savings—This mode saves power on your device by reducing system performance.
- Balanced—By default, the Balanced power mode is selected. This mode balances energy consumption and system performance by adapting the processor speed of the device to your activity.
- Maximum Performance—This mode maximizes system performance by running processor at higher speeds.

(i) **NOTE:** Power Profile is also supported for Device Settings Data Personalization along with previously supported options from Dell Hybrid Client 1.1.

Supports Virtual Private Network (VPN)

Dell Hybrid Client enables you to connect to your corporate network from home or external networks using a virtual private network. Dell Hybrid Client uses the OpenConnect client that is based on the SSL protocol for connecting to a VPN connection. The VPN option is disabled by default and it supports GlobalProtect and Cisco Anyconnect.

Supports User Data Encryption using ZFS file system

Dell Hybrid Client is designed to protect a domain user's data such as user files, user database, and user application details. Dell Hybrid Client uses the ZFS file system to encrypt the user home directory. Each user home directory is encrypted with an autogenerated passphrase. When a user logs in to the device, the user home directory of the user is automatically mounted by ZFS. When the user logs out of the device, the user home directory is unmounted by ZFS.

For more information about User Data Encryption using ZFS file system, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Supports secure boot

Supports Secure Boot to guard the boot process of the device that is powered by Dell Hybrid Client. This option is enabled by default.

Supports multifactor and Single Sign-on authentication

Dell Hybrid Client supports multifactor authentication for the following:

- Supports multifactor authentication for local and Active Directory login using a smart card.
- Supports multifactor authentication for browser-based Azure and Google Workspace login to cloud applications using a smart card.
- Supports multifactor authentication from initial login to the Citrix VDI session (SSO) using a smart card.
- Supports multifactor authentication for Citrix and VMware VDI sessions using a smart card.
- Supports Single Sign-on (SSO) into Google Cloud using Active Directory Federation Services (ADFS).

(i) **NOTE:** Smart cards that are supported for authentication are Gemalto, YubiKey PIV, and Common Access Card (CAC).

Supports personal cloud drive

Dell Hybrid Client supports personal OneDrive account for Azure and Google Workspace. Personal cloud accounts can be accessed from Dell File Explorer. You can add up to a maximum of five personal accounts.

For more information about how to configure the personal cloud account, see the *Dell Hybrid Client 1.x Administrator's Guide* at www.dell.com/support.

Dell file explorer enhancements

Dell Hybrid Client supports the following enhancements:

- Enhanced user interface.
- Automatic and immediate synchronization of file data when a file is edited on the local, network share, cloud, or VDI.
- **Open with** function that enables you to choose an application to open a file in Dell File Explorer.
- Formatting a USB storage device that is connected to Dell Hybrid Client. The supported formats are VFAT, NTFS, ext2, ext3, ext4, and exFAT.
- Compress and decompress of .zip files.

User data roaming

Dell Hybrid Client supports user data roaming across devices that are powered by Dell Hybrid Client. When a user logs in to another device with same username, all opened applications and browser data are restored from the previous device. The user data roaming feature supports the following options:

- **Chrome Browser Data**—Bookmarks, current tabs, history, last tabs, preferences, shortcuts, and top sites are supported for data roaming.
- **Mozilla Firefox Browser Data**—Bookmarks, downloaded files, previously visited websites, website favicon images, Mozilla Firefox permissions, search bar history, information that is entered into forms on websites, and file store preferences are supported for data roaming.
- **Desktop Customization**—Favorite bar customization and App folders customization are supported for data roaming.
- **Custom Wallpaper**—The wallpaper can be customized based on your needs.
- **Browser Apps State**—If Mozilla Firefox or Google Chrome is open when you log out of the device, it reopens automatically when you log in to another device.
- **Cloud Data**—Supports the state of cloud files that are opened from the Dell File Explorer, cloud apps opened from the launcher, and cloud files marked offline from the Dell File Explorer.
- **VDI session**—Supports Citrix, VMware, Remote Desktop Protocol connections, and sessions for Follow-me. The VDI session allows File Open using published and remote application, where the application is launched in a new session. All Citrix, VMware, and Remote Desktop Protocol client connections are created and launched when the session is active while logging off from previous session.

(i) **NOTE:** User data roaming is enabled by default with the cloud repository, and the administrator can disable it from Wyse Management Suite, if required. Log off and restart may take a few seconds based on the user data size and network bandwidth for uploading to the cloud or the Wyse Management Suite repository.

Auto Update applications

Dell Hybrid Client supports the **Auto Update** feature to automatically update certain applications when a new version of the application is launched. The **Auto Update** feature is disabled by default, and it does not require you to create an **Advanced**

app policy. The autoupdate feature is available for Google Chrome, Mozilla Firefox, Dell Hybrid Client service pack, and image upgrade packages that are released by Dell.

GRUB password randomization

The administrator can generate a random GRUB password when the device is powered on for the first time. When the device registration to Wyse Management Suite fails, you can use the Device UUID and the serial number to generate the GRUB password. This option is available in the Portal Administration tab on the Wyse Management Suite console.

(i) **NOTE:** Wyse Management Suite administrator must change the GRUB password on registration. The device remains in noncompliance state until the GRUB password is changed.

Wyse Management Suite config UI enhancement

Menu options under the Dell Hybrid Client Policy Settings on Wyse Management Suite version 3.2 are rearranged for better grouping and visibility.

Device Settings enhancement

Enhanced User Interface for Device Settings and Dell File Explorer.

Known issues

Table 20. Known issues

Issue number	Issue description	Workaround
HC-6224	While playing YouTube videos, the Mozilla Firefox browser displays distorted images in Latitude 3320 devices.	Google Chrome can be used as an alternative.
HC-6226	Restart notification window is displayed when the display resolution is pushed from Wyse Management Suite.	There is no workaround in this release.
HC-6222	Zoom video call stops responding when the in-build camera is launched and closed. This issue occurs when the system is connected to Dell C2422HE and C2722DE monitors.	There is no workaround in this release.
HC-6210	Once the system language is changed in Wyse Management Suite, the operating system displays messages to change folder names not observed for guest user.	There is no workaround in this release.
HC-5336	Keyboard and mouse take the default input settings when unplugged and plugged back to the client.	Input settings can be changed after the device is plugged back.
HC-6191	Internal audio speakers and USB headset does not get selected automatically inside the Zoom application.	Devices can be selected manually.
HC-5866	USB keeps mapping instead of redirecting when the USB is connected before launching the Citrix desktop.	Remove USB and reconnect. It gets connected as a redirected device.
HC-6152	VMware Horizon Blast sessions fail to launch.	Disable H264 decoding for VMBlast protocol from Wyse Management Suite. The default setting for H264 for VMBlast protocol is Disable. Alternatively, you can disable this from the VMware preference window also.
HC-5056	Smart card login does not work for domain user with .cer certificate.	Use .pfx certificate for smart card local login .

Table 20. Known issues (continued)

Issue number	Issue description	Workaround
HC-6133	Multimedia and function keys do not work.	There is no workaround in this release.
HC-6127	A message stating Choose password for new key ring is displayed when auto sign-in is enabled.	Enter the guest user password.
HC-5581	VMware apps fail to launch when using the smart card with FTA configured.	There is no workaround in this release.
HC-5748	After reimaging with no configurations from Wyse Management Suite, you must press Ctrl+Alt+Delete on Latitude 3320 devices to log in for the first time.	Press **Ctrl+Alt+Delete** after reboot.
HC-5790	The Wyse Management Suite DNS SRV discovery fails when the DNS is manually added in Device Settings. This issue occurs when the network is configured with DNS routing.	There is no workaround in this release.
HC-5298	The display in portrait mode changes back to the default landscape mode. This issue occurs after unplugging and plugging back the connection cable.	You must log out and log in to apply the configurations.
HC-2388	Lower resolution settings do not function when a 4K monitor is connected to OptiPlex 3090 and 7090.	The Display Data Channel resolution can be used to set the highest supported resolution.
HC-6254	Connections do not get deleted from taskbar and desktop screen, after removed from Wyse Management Suite.	There is no workaround in this release.
HC-6235	Azure SSO fails intermittently after the first imaging.	The Timezone Settings must be pushed from Wyse Management Suite so that there is a time sync and SSO works.
HC-6253	Citrix FTA does not open when the file name is in multibyte characters such as, Japanese, Korean, and Chinese. This issue occurs when the system language is set to English.	You can open the document using **File** > **Open** option and then go to the file location and open the file.
HC-6290	Gemalto smart card certificate list comes up in light text for Citrix Workspace app after domain login to client using smart card.	There is no workaround in this release.
HC-5231	Printer redirection does not work for Citrix and VMware.	There is no workaround in this release.
HC-6291	.pdf files display a window asking to save the file whenever the .pdf file is opened using cloud app.	If **File Affiliation** priority is set to **Local** it will work seamlessly and .pdf files will launch using LibreOffice even after saving the file locally. If first priority is set to Cloud, you must go to **File menu context** > **Open With** option and select **LibreOffice** as the app to open the application.

Important notes

Limitations

- Bluetooth, audio, and printer settings cannot be directly edited in Device Settings. These pages contain Advanced Settings button which opens the Ubuntu Settings page, where you can modify these settings.
- Monitor display values are static and for some monitors it may not show all the supported resolutions. Hence, some of the resolutions cannot be applied from the Display Settings page.

- In Network configuration, IP details can be added or modified only when the device does not receive IP configuration from the DHCP server.
- You cannot manually enter credentials while accessing the network drives. Credentials must be configured in the Wyse Management Suite Server while creating drives.
- When the network is not connected, log off and restart may take nearly a minute as the server attempts to upload the user data roaming content.
- Reset button in Wyse Management Suite does not work for password fields and guest user account properties. The workaround is to disable the options instead of reset.
- The administrator must configure **Time Zone & Time Server** from Wyse Management Suite.
- VPN Auto Connect is not supported. Configuring Auto Connect for VPN does not work.
- Data Roaming browser auto launch fails when the Citrix app is opened on last login.
- Host name resets to default on reimaging or conversion.
- Multiple display setups of up to six monitors is supported on the Dell Wyse 5070 Extended devices for the following combinations only:
  - Two 4k monitors
  - Four 2k monitors
  - Six 2k monitors

Tested peripherals

Supported peripherals

Table 21. Supported peripherals

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
Audio or video	Dell 2.0 Speaker System- AE215	✓	N/A	N/A	N/A	✓
	Dell 2.1 Speaker System- AE415	✓	N/A	N/A	N/A	✓
	Dell UC Headset- UC150	✓	✓	✓	✓	✓
	Dell UC Headset- UC350	✓	✓	✓	✓	✓
	Microsoft Corporation LifeChat LX-6000 Headset	N/A	N/A	N/A	✓	N/A
	Dell Professional Sound Bar- AE515	N/A	N/A	✓	✓	N/A
	Dell USB Sound Bar- AC511	N/A	N/A	✓	✓	N/A
	Jabra Pro 935 MS Wireless headset (Mono)- Office Centric	N/A	N/A	N/A	✓	N/A

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Jabra Evolve 65 MS Stereo Headset	✓	✓	N/A	N/A	✓
	Jabra Engage 65 MS Stereo Headset	✓	✓	N/A	N/A	✓
	Logitech C525 HD Webcam	✓	✓	N/A	N/A	✓
	Logitech BRIO 4k Ultra HD Webcam	✓	✓	N/A	N/A	✓
	Logitech C930e HD Webcam	✓	✓	N/A	N/A	✓
	Plantronics Savi W440M-400 Series convertible wireless headset- DECT 6.0	✓	✓	N/A	N/A	✓
	Plantronics Voyager Focus UC B825-M headset for Microsoft Lync	✓	✓	N/A	N/A	✓
	Dell Mobile Adapter Speakerphone-MH3021P	✓	✓	✓	N/A	N/A
Input devices	Dell Laser Wired Mouse - MS3220 - Morty	✓	✓	✓	N/A	✓
	Dell Mobile Pro Wireless Mice- MS5120W- Splinter	✓	✓	✓	N/A	✓
	Dell Mobile Wireless Mouse- MS3320W- Dawson	✓	✓	✓	N/A	✓
	Dell Multi-Device Wireless Keyboard and Mouse Combo- KM7120W	✓	✓	✓	N/A	✓
	Dell Premier Wireless	✓	✓	N/A	N/A	✓

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Keyboard and Mouse- KM717					
	Dell Wireless Keyboard and Mouse- KM117 - Auburn	N/A	N/A	✔	N/A	✔
	Dell Wireless Mouse- WM126_BLACK- Rosewood	✔	✔	✔	N/A	✔
	Logitech MK850 Performance - Wireless Keyboard and Mouse Combo - MK850	N/A	N/A	✔	N/A	N/A
	Logitech Wireless Combo MK320	N/A	N/A	✔	N/A	N/A
	Logitech Wireless Wave Combo MK550	N/A	N/A	✔	N/A	N/A
	Dell Laser Scroll USB 6-Buttons Silver and Black Mouse	N/A	N/A	N/A	N/A	✔
	Dell Multimedia Keyboard- KB216	✔	✔	✔	✔	✔
	Dell Optical Mouse- MS116	✔	✔	✔	✔	✔
	Dell Premier Wireless Mouse - WM527	N/A	N/A	N/A	✔	✔
	Dell Wireless Keyboard and Mouse- KM636	✔	✔	✔	✔	✔
	Dell Wired Mouse with Fingerprint Reader- MS819	✔	✔	N/A	N/A	✔
	Dell USB Wired Laser mouse– Naruto	N/A	N/A	N/A	✔	N/A
	Dell Wireless Mouse- WM326	N/A	N/A	✔	N/A	✔

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
Cables, dongles and adapters	Dell Adapter - HDMI to DVI - DAUARBN004	N/A	N/A	✔	N/A	N/A
	Dell Adapter - USB-C to DisplayPort - DBQANBC067	✔	✔	✔	✔	✔
	Dell Adapter - USB-C to Dual USB-A with Power Pass-Through - DBQ2BJBC070 - Combo Adapter	N/A	N/A	✔	N/A	✔
	Dell Adapter - USB-C to HDMI/Display Port with Power Pass-Through DBQAUANBC070 - Combo Adapter	N/A	N/A	✔	N/A	N/A
	Dell Adapter - USB-C to HDMI/VGA/Ethernet/USB 3.0 - DA200 - Slayer 2	N/A	N/A	✔	N/A	N/A
	Dell Adapter- USB-C to USB-A 3.0 (DA300)- DBQBJBC054	N/A	N/A	✔	N/A	N/A
	Dell Adapter- USB-C to HDMI- DBQAUBC064	N/A	N/A	N/A	✔	✔
	Dell Adapter - USB-C to VGA - DBQBNBC064	N/A	N/A	N/A	✔	✔
	Dell Display Port to Display Port (.6M)- CJ2Y1	✔	✔	N/A	N/A	✔
	Dell Adapter - USB-C to VGA	N/A	N/A	N/A	N/A	✔
	USB-A to USB-B 3.0 Cable (0.6 meter)	✔	✔	N/A	N/A	✔

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	USB-C to USB-C cable (0.6 meter) to enable USB-C Displays	✔	✔	N/A	N/A	✔
	Dell Adapter - DisplayPort to HDMI 2.0 (4K)-DANAUBC087	N/A	N/A	N/A	✔	N/A
	Dell Adapter - DisplayPort to VGA-DANBNBC084	N/A	N/A	N/A	✔	N/A
	DP to DVI D-SL Adapter	N/A	N/A	N/A	✔	N/A
	USB to Serial adapter - Trendnet	N/A	N/A	N/A	✔	N/A
	USB to Serial adapter - Cables-2-Go	N/A	N/A	N/A	✔	N/A
	C2G 15ft Cat6 Snagless Unshielded (UTP) Network Patch Ethernet Cable - Dell part A5309444 (US); A6927862 (EMEA) - Dell part A5309444 (US); A6927862 (EMEA)	✔	✔	N/A	N/A	✔
	C2G USB C to Display Port Adapter Converter - USB-C to Display Port Black external video adapter-Black	✔	N/A	N/A	N/A	N/A
Monitors	Dell Collaboration 24 USB-C Hub Monitor-C2422HE	✔	✔	N/A	N/A	N/A
	Dell Collaboration 27 USB-C Hub	✔	✔	N/A	N/A	N/A

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Monitor-C2722DE					
	Dell Collaboration 34 USB-C Hub Monitor-C3422WE	✓	✓	N/A	N/A	N/A
	Dell 19 Monitor-E1916H	N/A	N/A	N/A	✓	✓
	Dell 19 Monitor-E1916HV	✓	N/A	N/A	N/A	N/A
	Dell 19 Monitor-E1920H	✓	N/A	✓	N/A	N/A
	Dell 20 Monitor-E2016H	N/A	N/A	N/A	✓	✓
	Dell 20 Monitor-E2016HV	✓	N/A	N/A	N/A	N/A
	Dell 20 Monitor-E2020H	✓	✓	✓	N/A	N/A
	Dell 22 Monitor-E2216H	N/A	N/A	N/A	N/A	✓
	Dell 22 Monitor-E2216HV	✓	N/A	N/A	N/A	N/A
	Dell E Series Monitor-E2220H	✓	✓	✓	✓	N/A
	Dell 22 Monitor-E2218HN	N/A	N/A	N/A	✓	N/A
	Dell 23 Monitor-E2318H	N/A	N/A	N/A	✓	✓
	Dell 24 Monitor-E2417H	N/A	N/A	N/A	✓	✓
	Dell E Series Monitor-E2420H	✓	✓	✓	✓	N/A
	Dell E Series Monitor-E2420HS	N/A	N/A	✓	✓	N/A

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Dell E Series Monitor-E2720H	✓	✓	✓	✓	N/A
	Dell E Series Monitor-E2720HS	N/A	N/A	✓	✓	N/A
	Dell 24 Monitor-MR2416	N/A	N/A	N/A	✓	N/A
	Dell 19 Monitor-P1917S	✓	N/A	✓	N/A	✓
	Dell 20 Monitor-P2016	N/A	N/A	N/A	✓	N/A
	Dell 20 Monitor-P2018H	✓	✓	✓	N/A	✓
	Dell 22 Monitor-P2217	✓	N/A	✓	N/A	✓
	Dell 22 Monitor-P2217H	N/A	N/A	N/A	✓	N/A
	Dell 22 Monitor-P2219H	✓	✓	✓	✓	✓
	Dell 22 Monitor-P2219HC	N/A	N/A	✓	✓	N/A
	Dell 23 Monitor-P2317H	N/A	N/A	N/A	✓	N/A
	Dell 23 Monitor-P2319H	✓	✓		✓	✓
	Dell 24 Monitor-P2415Q	N/A	N/A	N/A	✓	✓
	Dell 24 Monitor-P2417H	N/A	N/A	N/A	✓	N/A
	Dell 24 Monitor-P2418D	N/A	N/A	N/A	N/A	✓
	Dell 24 Monitor-P2418HZm	✓	✓	✓	✓	✓
	Dell 24 Monitor-	✓	✓	✓	✓	✓

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	P2418HT (Touch)					
	Dell 24 Monitor-P2419H	✔	✔	✔	✔	✔
	Dell 24 Monitor-P2419HC	✔	✔	✔	✔	✔
	Dell 24 Monitor-P2421	✔	✔	✔	N/A	N/A
	Dell 24 Monitor-P2421D	✔	✔	✔	N/A	N/A
	Dell 24 USB-C Monitor-P2421DC	✔	✔	✔	✔	N/A
	Dell 27 Monitor-P2719H	✔	✔	✔	✔	✔
	Dell 27 Monitor-P2719HC	✔	✔	✔	✔	✔
	Dell 27 Monitor-P2720D	✔	✔	✔	✔	N/A
	Dell 27 Monitor - P2720DC	✔	✔	✔	✔	N/A
	Dell UltraSharp 34 Monitor-P3418HW	N/A	N/A	N/A	✔	N/A
	Dell 43 Multi-Client Monitor-P4317Q	N/A	N/A	N/A	✔	✔
	Dell UltraSharp 24 Monitor-U2415	✔	✔	✔	✔	✔
	Dell UltraSharp 24 Ultrathin Monitor-U2419H	✔	✔	✔	✔	✔
	Dell UltraSharp 24 Ultrathin USB-C Monitor-U2419HC	✔	✔	✔	✔	✔
	Dell UltraSharp Monitor-U2421HE	✔	✔	✔	✔	N/A

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	Dell UltraSharp 25 Monitor-U2518D	N/A	N/A	✔	✔	✔
	Dell Ultrasharp Monitor-U2520D	N/A	✔	✔	✔	N/A
	Dell UltraSharp 27 Monitor-U2718Q	N/A	N/A	✔	✔	✔
	Dell UltraSharp 27 Ultrathin Monitor-U2719D	✔	✔	✔	✔	✔
	Dell UltraSharp 27 Ultrathin USB-C Monitor-U2719DC	✔	✔	✔	✔	✔
	Dell Ultrasharp Monitor-U2720Q	N/A	✔	✔	✔	N/A
	Dell UltraSharp Monitor-U2721DE	✔	✔	✔	✔	N/A
	Dell UltraSharp 32 4K USB-C Monitor-U3219Q	✔	✔	N/A	N/A	✔
	Dell UltraSharp 34 Curved USB-C Monitor-U3419W	N/A	N/A	✔	N/A	✔
	Dell UltraSharp 34 Curved USB-C HUB Monitor-U3421WE	✔	✔	N/A	N/A	N/A
	Dell UltraSharp 38 Curved Monitor-U3818DW	N/A	N/A	✔	N/A	✔
	Dell Ultrasharp Monitor-U4320Q	N/A	✔	N/A	✔	N/A
	Dell UltraSharp 49 Curved Monitor-U4919DW	N/A	✔	✔	N/A	N/A
	Dell UltraSharp 30 Monitor-UP3017	N/A	N/A	N/A	N/A	✔

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
Docking Stations	Dell Dock-WD15	N/A	N/A	✔	N/A	N/A
	Dell Dock-WD19	✔	✔	✔	N/A	N/A
	Dell Performance Dock-WD19DC	✔	✔	✔	N/A	N/A
	Dell Thunderbolt Dock- WD19TB	✔	✔	✔	N/A	N/A
	Dell Universal Dock- D6000	N/A	N/A	✔	N/A	N/A
Networking	Dell Adapter-USB-C to Ethernet (PXE Boot)-DBQBCBC064	✔	✔	N/A	N/A	✔
	Dell FCLF-8521-3-(DL)	N/A	N/A	N/A	✔	N/A
External Data Storage	Dell USB Slim DVD/RW Drive- DW316	✔	✔		N/A	✔
	Dell External SSD, Typ C, USB3.1 Gen2, 250GB	N/A	N/A	N/A	✔	N/A
	Western Digital My Passport Ultra 1TB, Black	✔	✔	✔	N/A	✔
Smart Cards and Reader	CARD_IDPrime MD 830 B FIPS 140-2 L2 White PVC	✔	✔	N/A	N/A	✔
	CARD_IDPrime MD 3840 B w/o OTP	✔	✔	N/A	N/A	✔
	Card_IDPrime MD840B_white_PVC	✔	✔	N/A	N/A	✔
	CARD_IDPrime MD3811, Mifare EV1 4K&DESFire EV1, 4K _MPH150_New	✔	✔	N/A	N/A	✔
	Standard Card _IDPrime NET	✔	✔	N/A	N/A	✔

Table 21. Supported peripherals (continued)

Product Category	Product Description	OptiPlex 3090 Ultra	OptiPlex 7090 Ultra	Latitude 3320	Wyse 5070	OptiPlex 7070 Ultra device
	510_ white PVC					
	Yubikey Neo 5.0	✔	✔	N/A	N/A	✔
	Yubikey OTP+FIDO+CCID	✔	✔	N/A	N/A	✔
	Sun microsystem SRC 3311	✔	✔	N/A	N/A	✔
	IDBridge CT30 (GemPC Twin/TR USB)	✔	✔	N/A	N/A	✔
	Cherry SmartTerminal SMART Card Reader - ST-1044UCherry SmartTerminal SMART Card Reader - ST-1044Uv	✔	✔	N/A	✔	✔
	Cherry SmartTerminal ST-1144 SMART Card Reader - USB 2.0	✔	✔	N/A	✔	✔
Printers	Dell C2660dn Color Laser printer	✔	✔	✔	✔	✔
	Dell E515dn multifunctional printer	✔	✔	✔	✔	✔

✔ -Supported

Printer matrix

Table 22. Supported printer matrix

Printer type	Local printing			Printer push from WMS	VDI Sessions				
	Mozilla Firefox	Google Chrome	File Explorer		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
USB	Supported	Supported	Supported	Not applicable	Not supported	Not supported	Not supported	Not supported	Not supported
LPD	Supported	Supported	Supported	Supported	Supported	Not supported	Not supported	Not supported	Not supported
SMB	Supported	Supported	Supported	Supported	Supported	Not supported	Not supported	Not supported	Not supported

Table 22. Supported printer matrix (continued)

Printer type	Local printing			Printer push from WMS	VDI Sessions				
	Mozilla Firefox	Google Chrome	File Explorer		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
URI	Supported	Supported	Supported	Supported	Supported	Not supported	Not supported	Not supported	Not supported

Display matrix

Table 23. Support for display matrix

Hardware	Monitors	VDI sessions				
		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
Wyse 5070 Extended	**Two 4K displays** ● P2415Q connected to Display Port 1 ● P2415Q connected to Display Port 2	Supported	Supported	Supported	Supported	Supported
	Three 4K displays ● P2415Q connected to Display Port 1 ● P2415Q connected to Display Port 2 ● P2415Q connected to Display Port 4 using the DP to mDP cable	Supported	Supported	Supported	Supported	Supported
	Six 2K displays ● E2016 connected to Display Port 1 ● E2016 connected to Display Port 2 ● UP3017 connected to Display Port 3 ● E1916H connected to AMD Display Port 4 using the DP to mDP cable ● E2216H connected to AMD Display Port 5 using the DP to mDP cable ● UP3017 connected to Display Port 6	Not supported	Supported	Not supported	Not supported	Supported
	Two 4K displays ● P2415Q connected to Display Port 1 ● P2415Q connected to Display Port 2 **Two 2K displays** ● UP3017 connected to Display Port 3	Not supported	Supported	Supported	Supported	Supported

Table 23. Support for display matrix (continued)

Hardware	Monitors	VDI sessions				
		RDP	**VMware RDP**	**VMware PCoIP**	**VMware Blast**	**Citrix**
	● UP3017 connected to Display Port 6					
	Two 4K displays ● P2415Q connected to Display Port 1 ● P2415Q connected to Display Port 2 **Three 2K displays** ● UP3017 connected to Display Port 3 ● UP3017 connected to Display Port 6 ● E2016 connected to AMD Display Port 5 using the DP to mDP cable	Supported	Supported	Not supported	Supported	Supported
	One 4K display ● P2415Q connected to Display Port 1 **Five 2K display** ● P2417H connected to Display Port 2 ● P2417H connected to Display Port 3 ● P2417H connected to Display Port 6 ● P2417H connected to AMD Display Port 4 using the DP to mDP cable ● P2417H connected to AMD Display Port 5 using the DP to mDP cable	Not supported	Supported	Not supported	Not supported	Supported

Tested broker connections

Table 24. VMware Horizon

VDI version	Desktop	RDS server	
	Windows 10 Enterprise	**Windows Server 2016**	**Applications**
VMware Horizon 8	√	√	√

Table 25. Citrix Virtual Apps and Desktops

VDI version	Desktop	Server		Apps
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2012 R2	Windows Server 2016
Citrix Virtual Desktops 7 2012	√	√	√	√

Table 26. Dell Remote Desktop Protocol

VDI version	Desktop	Server	
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2019
Dell Remote Desktop Protocol	√	√	√

Dell Hybrid Client 1.1.01

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.1.01.52

Ubuntu version 18.04 LTS 64-bit

Wyse Management Suite version 3.3, build–276

Configuration User Interface 1.5.181

> (i) **NOTE:** Configuration User Interface must be updated to v1.5.181 for on-premises Wyse Management Suite v3.3 to support Dell Hybrid Client 1.1.01 features. You can download the Configuration User Interface package from the Wyse Management Suite drivers page at www.dell.com/support. For public cloud tenants or customers, the Configuration User Interface package is upgraded by Dell Technologies. For more information about how to upload and apply the Configuration User Interface package, see the *Dell Wyse Management Suite v3.3 Administrator's Guide* at www.dell.com/support.

Release date

July 2021

Compatibility

Supported platforms

Table 27. Supported platforms for Dell Hybrid Client

Platform name	Configuration		
	Processor type	**Memory**	**Storage**
Wyse 5070	Intel Celeron Dual Core	8 GB	32 GB and higher capacity SSD/eMMC
	Intel Pentium Quad Core		
	Intel Pentium Quad Core		
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7	8 GB and higher capacity RAM	128 GB and higher capacity SSD/HDD

Table 28. Supported platforms for conversion

Platform name	Configuration		
	Processor type	Memory	Storage
Wyse 5070	Intel Celeron Dual Core	4 GB and higher capacity RAM	16 GB and higher capacity SSD/ eMMC
	Intel Pentium Quad Core		
	Intel Pentium Quad Core		
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7	8 GB and higher capacity RAM	128 GB and higher capacity SSD/HDD

(i) **NOTE:** Dell Technologies recommends to use 8 GB RAM for better performance.

Supported browsers

Table 29. Supported browsers

Browsers	Version
Google Chrome	91.0.4472.114
Mozilla Firefox	89.0.1

Supported VDI clients

Table 30. Supported VDI clients

VDI Client Description	Version
Dell Hybrid Client RDP	8.1.08-03
Citrix Workspace App	2106
VMware Horizon Client	2103
Zoom Client	5.7.1

(i) **NOTE:** Citrix Workspace App and VMware Horizon Client are released as optional add-ons for Wyse 5070 devices with 16 GB storage. By default, 16 GB devices do not have these add-ons installed. Citrix RTME is not part of Dell Hybrid Client 1.1 build, however you can download it from the Citrix portal.

Supported cloud platforms

- Office 365 applications with Azure Active Directory sync with On-Premise Active Directory User.
- GSuite applications with On-Premise users sync with Google Cloud Platform using Active Directory Federation Services (ADFS) enablement.

Conversion images

- **Conversion image for Dell Wyse 5070 16GB storage**:
  - File name—DHC1.1.01.52_Wyse_5070_Conversion_Merlin_Image_16GB.exe
  - Version—DHC1.1.01
  - Build—DHC1.1.01.52
  - Size—3,609,007,956 bytes
- **Conversion image for Dell Wyse 5070 32 GB and above storage**:
  - File name—DHC1.1.01.52_Wyse_5070_Conversion_Merlin_Image_32GB.exe

- ○ Version—DHC1.1.01
- ○ Build—DHC1.1.01.52
- ○ Size—3,977,871,640 bytes
- **ISO conversion image for OptiPlex 7070**:
  - ○ File name— DellHybridClient-1.1.01_52_7070.zip
  - ○ Version—DHC1.1.01
  - ○ Build—DHC1.1.01.52
  - ○ Size—3,695,801,549 bytes
    - (i) **NOTE:** Image deployment is supported only while using USB drive.
- **ISO conversion image for Dell Wyse 5070 Thin Client**:
  - ○ File name— DellHybridClient-1.1.01_52_5070.zip
  - ○ Version—DHC1.1.01.52
  - ○ Size— 3,984,828,143 bytes
    - (i) **NOTE:** Image deployment is supported only while using USB drive.
- **Dell Hybrid Client bundle**:
  - ○ File name—DellHybridClient_1.1.01_52.tar.gz
  - ○ Version—1.1.01_52
  - ○ Size—832,919,040 bytes
    - (i) **NOTE:** Dell Hybrid Client 1.1 package supports upgrade from Dell Hybrid Client v1.0_1288 and Dell Hybrid Client v1.1_1618 to Dell Hybrid Client v1.1.01.52 build. Upgrade package can be deployed from Wyse Management Suite. Bundle upgrade is not supported for 16 GB eMMC devices.
- **Merlin Boot Agent for Dell Wyse ThinLinux**
  - ○ File name—merlin-nonpxe_4.0.9-00.01_amd64.deb
  - ○ Version—4.0.9
  - ○ Size—50,979,338 bytes
    - (i) **NOTE:** Merlin Boot Agent supports conversion from ThinLinux to DHC 1.1.01 build. The devices running on ThinLinux can be converted to DHC only after installing Merlin Boot Agent
- **Merlin Boot Agent for Dell Wyse Windows 10 IoT Enterprise**
  - ○ File name—MerlinPackage_Common.exe
  - ○ Version— 4.0.9
  - ○ Size— 51,068,416 bytes
    - (i) **NOTE:** Merlin Boot Agent supports conversion from WIE10 to DHC 1.1.01 build. The devices running on Windows 10 IoT Enterprise can be converted to DHC only after installing Merlin Boot Agent.

Optional add-ons

- **Optional add-on for Dell Hybrid Client multimedia extension**—The Dell Hybrid Client Multimedia package is to enable HTML5 redirection for Citrix VDI session.
  - ○ File name—DHC-multimedia-extension-VDI-addon_1.1.01-10.tar.gz
  - ○ Size—47,324,160 bytes
- **Optional add-on for Zoom VMware**—The Zoom application can be used with VMware VDI solutions and can be delivered to a thin client.
  - ○ File name—DHC-zoom-vmware_1.1.01_5.5.6-10.tar.gz
  - ○ Size—40,048,640 bytes
- **Optional add-on for Zoom Citrix**—The Zoom application can be used with Citrix VDI solutions and can be delivered to a thin client.
  - ○ File name—DHC-zoom-citrix_1.1.01_5.5.6-10.tar.gz
  - ○ Size—40,049,152 bytes
- **Optional add-on for language package**—Language packages can be used to enable the supported languages.
  - ○ File name—full-language_1.1.01-10.tar.gz
  - ○ Size—340,326,912 bytes
    - (i) **NOTE:** You must install this language pack before configuring different languages from Wyse Management Suite. This full language addon is applicable only for 32 GB and more devices. For more information about setting language configuration, see the **Dell Hybrid Client Administrators's Guide** at www.dell.com/support .

- **Optional add-on for VNC**—VNC package is used to enable VNC access from Wyse Management Suite. To enable VNC access, install the package and configure VNC from Wyse Management Suite.
  - File name—DHC-vnc-server_1.1.01_0.9.13-3-10.tar.
  - Size—2,987,008 bytes
- **Optional add-on for SSH**—SSH package is used to enable SSH support. To allow sshuser to connect using SSH, install the package and configure SSH from Wyse Management Suite.
  - File name—DHC-ssh-server_1.1.01_7.6p1-4ubuntu0.3-10.tar.gz
  - Size—1,261,568 bytes
- **Optional add-on for custom connection**—Custom connection package is used to enable custom connection support. To enable the custom connection support, install the package.
  - File name—custom-connections_1.1.01-10.tar.gz
  - Size—9,728 bytes
  - (i) **NOTE:** If SSH, VNC, and custom connection settings are preconfigured before installing the add-on, you must log off or log in for the add-on to take effect.

Optional add-ons for Wyse 5070 devices with 16 GB storage

- Citrix Workspace App
  - File name—citrix-client_21.6.0.28-01_amd64.tar.gz
  - Version—CWA 2106
  - Size—143,387,136 bytes
- VMware View Client
  - File name—vmware-client_2103-8.2.0-02_amd64.tar.gz
  - Version—VMware 2103
  - Size—226,695,168 bytes

Optional language add-ons for devices with 16 GB storage

(i) **NOTE:** For Dell Wyse 5070 devices with 16 GB storage, language packs are released on language basis. For more information on setting language configuration, see the *Dell Hybrid Client Administrators's Guide* at www.dell.com/support.

Chinese Simplified

- File Name—chinese-simplified_1.1.01-10.tar.gz
- Size—171,379,200 bytes

Chinese Traditional

- File Name—chinese-traditional_1.1.01-10.tar.gz
- Size—158,234,112 bytes

German

- File Name—german_1.1.01-10.tar.gz
- Size—34,921,984 bytes

French

- File Name—french_1.1.01-10.tar.gz
- Size—24,830,976 bytes

Italian

- File Name—italian_1.1.01-10.tar.gz
- Size—20,318,720 bytes

Japanese

- File Name—japanese_1.1.01-10.tar.gz
- Size—189,272,576 bytes

Korean

- File Name—korean_1.1.01-10.tar.gz
- Size—157,211,648 bytes

Spanish

- File Name—spanish_1.1.01-10.tar.gz
- Size—25,662,464 bytes

New and enhanced features

Supports Local User Account Properties

Added the option **Local User Account Properties** in Wyse Management Suite policy settings. To access this option, go to **Device Policy Group** > **Advanced** > **Privacy & Security** > **Local User Account Properties**. This option enables you to create a local user to retain a configuration or setting after reboot. Local user can be configured and managed from Wyse Management Suite. The local user account is disabled by default, to configure the local user, you must enable the **Local user account** toggle key in **Local User Account Properties**. The following options are displayed when you enable the **Local user account**:

- **Set username for Local user**—You may set username for the local user account by using this option.
- **Set password for Local user**—You may set password for the local user account by using this option.
- **Auto SignOn**—The **Auto SignOn** option is disabled by default. You may enable the toggle key to turn on Auto SignOn for Local user.
- **Admin Rights**—The **Admin Rights** option is disabled by default. You may enable the toggle key to turn on **Admin Rights** for Local user.
  (i) **NOTE:** **Enable** the **Admin Rights** to get the privilege to run the root commands using sudo.
- **Remove Device Lock and Password prompt on wakeup**—The option **Remove Device Lock and Password prompt on wakeup** is disabled by default. You can enable this option to unlock the device without the password prompt.
  (i) **NOTE:** Enabling this option is a security risk.

Troubleshooting

Added the **Troubleshooting** option in the local device settings to allow IT administrators to diagnose and resolve client issues. To enable the **Troubleshooting** option, enter the Bremen **Password** and click **Authenticate**. After a valid authentication, the following troubleshooting options are displayed:

- **General**—The **General** tab provides the option **Export DHC Log**. You may export the DHC logs using the **Export to Downloads** and **Export to USB** options.
- **Ping**—The **Ping** tab provides the option to check the ping functionality, with **IP/Host Name**, and **Packet Count**.
  (i) **NOTE:** Packet count is in the range of 1 to 25.
- **Traceroute**—The **Traceroute** tab provides the option to check the traceroute functionality for the **IP/Host Name**.
- **Trace**—The **Trace** tab provides the option to export the **Network Packets** and **USB Packets** to the **Downloads** folder or USB drive.
- **Tools**—The **Tools** tab is displayed when development mode is disabled from GRUB menu. This tab displays the option **Open terminal**. On clicking **Open terminal**, a **Security Warning** is displayed. When you click **Yes**, the terminal launches, and remains active until the device settings session is active. On clicking **No**, the terminal launch cancels.
  (i) **NOTE:** When **Device Settings** is closed all active terminal is closed automatically without any notification.

Registry location

The Dell Hybrid Client enables you to use two methods to set the custom values for registry location. The methods are as below:

- Use the command *set_custom_info <key>:<value>* in developers mode, where *<key>* can have one of the following values:
  - Custom1
  - Custom2
  - Custom3
  - Contact
  - Location

The *<value>* may be set as the required value for the particular key. Here are a few examples:

```
set_custom_info "Custom3:$somevariable"
 set_custom_info "Location:$somevariable" "Custom1:$somevariable2"
```

Example as a script:

```
Location_name=$(dnsdomainname |cut -f1 -d'.')

 # get machine ID and assign to variable
 machID=$(cat '/etc/machine-id')

 # set Location at location and machine ID in custom info 3
 set_custom_info "Custom3:$machID" "location:$Location_name"
```

● Custom values for registry location can be set from Wyse Management Suite, using the .sh and .py files. You can create a Standard Application policy and push it from Wyse Management Suite.

ⓘ **NOTE:** The custom info values set from Wyse Management Suite device policy settings have higher priority over values set locally by using the *set-custom-info* command.

Power Control Settings option

Added the **Power Control Settings** option in Wyse Management Suite policy settings. To access the option, go to **Device/User Policy Group** > **Personalization** > **Desktop** > **Power Control Settings**. The options under **Power Control Settings** are as below:

● **Power off**—Turn off the toggle key to disable shutdown option.
● **Restart**—Turn off the toggle key to disable reboot option.
● **Suspend**—Turn off the toggle key to disable suspend option.
● **Logout**—Turn off the toggle key to disable logout option.

The options under **Power Control Settings** are enabled by default, and can be restricted from the **Device Policy Group** and **User Policy Group** level of Wyse Management Suite.

ⓘ **NOTE:** The **Power Control Settings** option prelogin can be restricted from Wyse Management Suite policy settings. To restrict the option, go to **Device Policy Group** > **Advanced** > **Login Experience** > **Login screen power options** > **GDM login screen power off**. The **GDM login screen power off** option is enabled by default.

Auto Time Zone option

Added the **Auto Time Zone** option in Wyse Management Suite policy settings. To access the **Auto Time Zone** option, go to **Device/User Policy Group** > **Advanced** > **Region & Language Settings** > **Region and Time** > **Auto Time Zone**. This option is enabled by default, and updates the system time automatically, depending upon the geographical location. **Time Format** can be set as **12 Hours** or **24 Hours**. The Wyse Management Suite administrator can disable the **Auto Time Zone** option and configure the **Time Zone** and **Time Format**.

Installed Apps Listing in Wyse Management Suite

All applications deployed in Dell Hybrid Client including the third-party applications, and DHC-bundle information are displayed in **System Information** on the local device. The same information is displayed in **Devices** > **Installed Apps** section of Wyse Management Suite.

Limitations

● If the dock is set to auto hide when you connect to the VNC session, moving the mouse cursor to top does not display the dock.
● Reimaging Dell Hybrid Client device does not preserve previously installed application and user data.
● When the mouse cursor size is changed from **Device Settings**, logoff and login is required for the change to take effect.
● The GRUB password must be minimum of nine characters from Wyse Management Suite, due to security reasons.

- When the guest and local user both sets the **Auto SignOn** option as **Enabled**, the last enabled auto signon user takes the precedence over the previous user.

Known issues

Table 31. Known issues

Issue number	Issue description	Workaround
HC-8201	After a fresh installation and restart, the **Device Settings** page displays a blank page intermittently.	Close and open the **Device Settings** page.
HC-8205	Zoom fails to detect camera inside Citrix VDI.	There is no workaround in this release.
HC-8032	In VMware session, USB Redirection does not work for domain users.	There is no workaround in this release.
HC-8044	The Citrix VDI session disconnects immediately when headset is unplugged during a Zoom call.	There is no workaround in this release.
HC-8043	Control buttons such as **Volume Up**, **Volume Down**, **Mute**, **Call Connect**, and **Call Disconnect** does not work in a Citrix VDI session.	There is no workaround in this release.

Important notes

Dell Technologies recommends to use an 8 GB RAM for better performance.

Tested broker connections

Table 32. VMware Horizon

VDI version	Desktop	RDS server	
	Windows 10 Enterprise	Windows Server 2016	Applications
VMware Horizon 8 2103	√	√	√

Table 33. Citrix Virtual Apps and Desktops

VDI version	Desktop	Server	Apps
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2016
Citrix Virtual Desktops 7 2106	√	√	√

Table 34. Microsoft Remote Desktop Protocol

VDI version	Desktop	Server	
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2019
Microsoft Remote Desktop Protocol	√	√	√

Dell Hybrid Client 1.1

Release summary

Maintenance releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

Dell Hybrid Client version 1.1.1618

Ubuntu version 18.04 LTS 64-bit

Wyse Management Suite Pro version 3.1

ⓘ **NOTE:** Configuration User Interface must be updated to v1.0.112 for on-premises Wyse Management Suite v3.1 to support Dell Hybrid Client 1.1 features. You can download the Configuration User Interface package from the Wyse Management Suite drivers page at www.dell.com/support. For public cloud tenants or customers, the Configuration User Interface package is upgraded by Dell Technologies. For more information about how to upload and apply the Configuration User Interface package, see the Dell Wyse Management Suite v3.1 Administrator's Guide at www.dell.com/support.

Release date

December 2020

Compatibility

Supported platforms

Table 35. Supported platforms for Dell Hybrid Client

Platform name	Configuration		
	Processor type	**Memory**	**Storage**
Wyse 5070	Intel Celeron Dual Core	8 GB	32 GB or higher capacity SSD/eMMC
	Intel Pentium Quad Core		
	Intel Pentium Quad Core		
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7	8 GB and higher capacity RAM	128 GB and higher capacity SSD/HDD

Table 36. Supported platforms for conversion

Platform name	Configuration		
	Processor type	**Memory**	**Storage**
Wyse 5070	Intel Celeron Dual Core	4 GB and higher capacity RAM	16 GB or higher capacity SSD/eMMC
	Intel Pentium Quad Core		

Table 36. Supported platforms for conversion (continued)

Platform name	Configuration		
	Processor type	**Memory**	**Storage**
	Intel Pentium Quad Core		
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7	8 GB and higher capacity RAM	128 GB and higher capacity SSD/HDD

(i) **NOTE:** Dell Technologies recommends to use 8 GB RAM for better performance.

Supported browsers

Table 37. Supported browsers

Browsers	Version
Google Chrome	87.0.4280.66
Mozilla Firefox	82

Supported VDI clients

Table 38. Supported VDI clients

VDI Client Description	Version
Dell Hybrid Client RDP	8.1.08-02
Citrix Workspace App	2010
VMware Horizon Client	2006
Zoom Client	5.4.54779

(i) **NOTE:** Citrix Workspace App, VMware Horizon Client, and Zoom Client are released as optional add-ons for Wyse 5070 devices with 16 GB storage. Citrix RTME is not part of Dell Hybrid Client 1.1 build, however you can download it from the Citrix portal.

Supported cloud platforms

- Office 365 applications with Azure Active Directory sync with On-Premise Active Directory User.
- GSuite applications with On-Premise users sync with Google Cloud Platform using Active Directory Federation Services (ADFS) enablement.

Conversion images

Table 39. Dell Wyse 5070 16 GB Storage

File name	DHC_Wyse_5070_Conversion_Merlin_Image_1618_16GB.exe
Version	1.1.1618
Build	1.1
Size	3,978,150,610 bytes

Table 40. Dell Wyse 5070 32 GB and above storage

File name	DHC_Wyse_5070_Conversion_Merlin_Image_1618_32GB.exe

Table 40. Dell Wyse 5070 32 GB and above storage (continued)

Version	1.1.1618
Build	1.1
Size	3,979,994,103 bytes

Table 41. Dell OptiPlex 7070 Ultra

File name	Dell-Hybrid-Client-OptiPlex7070Ultra-Bionic-Beaver_1618.zip
Version	1.1.1618
Build	1.1
Size	3,694,543,680 bytes

ⓘ **NOTE:** Image deployment is supported only using USB drive.

Table 42. Dell Hybrid Client bundle (1618)

File name	DellHybridClient_1.1_1618.tar.gz
Version	1.1.1618
Build	1.1
Size	832,168,795 bytes

ⓘ **NOTE:** DHC 1.1 upgrade package supports upgrade from DHC 1.0_1288 build to DHC 1.1 build. Upgrade package can be deployed from Wyse Management Suite. DHC 1.1 bundle upgrade is not supported for 16 GB Devices.

Table 43. Merlin Boot Agent for Dell Wyse ThinLinux

File name	merlin-nonpxe_4.0.8-00.02_amd64.deb
Version	4.0.8-00.02
Size	509,834,84 bytes

ⓘ **NOTE:** Merlin Boot Agent supports conversion from ThinLinux to DHC 1.1 build. The devices running on ThinLinux can be converted to DHC only after installing Merlin Boot Agent.

Table 44. Merlin Boot Agent for Dell Wyse Windows 10 IoT Enterprise

File name	MerlinPackage_Common.exe
Version	4.0.8
Size	511,989,76 bytes

ⓘ **NOTE:** Merlin Boot Agent supports conversion from WIE10 to DHC 1.1 build. The devices running on Windows 10 IoT Enterprise can be converted to DHC only after installing Merlin Boot Agent.

Optional add-on for all DHC-enabled device

Table 45. SSH

File name	ssh-server_7.6-05_amd64.tar.gz
Version	7.6-05
Size	1,259,231 bytes

Table 46. VNC

File name	vnc-server_0.9.13-06_amd64.tar.gz
Version	0.9.13-06
Size	2,984,778 bytes

Table 47. DHC Multimedia Extension VDI

File name	DHC_multimedia_extension_VDI_addon.tar.gz
Size	473,409,86 bytes

(i) **NOTE:** DHC Multimedia package enables HTML5 redirection for Citrix VDI session.

Table 48. Custom Connection

File name	custom-connections_1.00-01_amd64.tar.gz
Version	1.00-01
Size	4777 bytes

Table 49. Language

File name	Full_language.tar.gz
Size	340,473,780 bytes

(i) **NOTE:** You must install this language pack before configuring different languages from Wyse Management Suite. This full language addon is applicable only for 32GB and more devices. For more information on setting language configuration, see the Dell Hybrid Client Administrators's guide at the Dell support site.

Optional add-ons for Wyse 5070 devices with 16 GB storage

Table 50. Citrix Workspace App

File Name	citrix-client_20.10.0.6-04_amd64.tar.gz
Version	2010
Size	117,996,753 bytes

Table 51. VMware View Client

File Name	vmware-client_2006-8.0.0-06_amd64.tar.gz
Version	2006
Size	209,931,872 bytes

Table 52. Zoom Client

File Name	zoom-client_5.4.54779-03_amd64.tar.gz
Size	436,865,98 bytes

Table 53. Zoom plugin for VMware

File Name	zoom-vmware_5.4.53-01_amd64.tar.gz
Version	5.4.53-01
Size	306,543,63 bytes

Table 54. Zoom plugin for Citrix

File Name	zoom-citrix_5.4.53-01_amd64.tar.gz
Version	5.4.53-01
Size	306,397,37 bytes

Optional language add-ons for devices with 16 GB storage

Table 55. Chinese Simplified

File Name	chinese_simplified.tar.gz
Size	171,449,434 bytes

Table 56. Chinese Traditional

File Name	chinese_traditional.tar.gz
Size	158,298,433 bytes

Table 57. German

File Name	German.tar.gz
Size	349,314,83 bytes

Table 58. French

File Name	French.tar.gz
Size	248,359,64 bytes

Table 59. Italian

File Name	Italian.tar.gz
Size	203,216,91 bytes

Table 60. Japanese

File Name	Japanese.tar.gz
Size	189,350,411 bytes

Table 61. Korean

File Name	Korean.tar.gz
Size	157,275,311 bytes

Table 62. Spanish

File Name	Spanish.tar.gz
Size	256,675,42 bytes

New and enhanced features

ⓘ **NOTE:** Configuration User Interface must be updated to v1.0.112 for on-premises Wyse Management Suite v3.1 to support Dell Hybrid Client 1.1 features. You can download the Configuration User Interface package from the Wyse Management Suite drivers page at www.dell.com/support. For public cloud tenants or customers, the Configuration User Interface

package is upgraded by Dell Technologies. For more information about how to upload and apply the Configuration User Interface package, see the *Dell Wyse Management Suite v3.1 Administrator's Guide* at www.dell.com/support.

Support for unsigned and custom signed applications

Dell Hybrid Client supports installation of unsigned and custom signed applications. It supports loading and running datafile such as .tar, script, and binary. You can place any file on the local file system, such as image files, binary datafile, .txt files, and configuration files to the user-specific directory.

Support for SSH and Virtual Network Computing (VNC)

SSH—Administrators can **Enable** or **Disable** SSH from the Wyse Management Suite. This change allows the user to log in as **sshuser** using the SSH connection. No other user can log in using the SSH connection. The administrator must set the password from Wyse Management Suite for **sshuser** when enabling SSH. The elevated privileges for an **sshuser** are disabled by default. In order to access the elevated privileges, SSH must be enabled.

(i) **NOTE:** For security reasons the SSH is an optional add-on. The administrator must install the SSH add-on to enable SSH access. For more information about how to download and configure the SSH add-on, see the *Dell Hybrid Client Administrator's Guide* at www.dell.com/support.

VNC—Administrators can **Enable** or **Disable** VNC from the Wyse Management Suite. The options **Show VNC access warning at the start of connection** and **Must confirm access for each VNC connection** can be enabled or disabled. By default, these options are enabled to ensure secured connection. The administrator must configure the password from Wyse Management Suite to Dell Hybrid Client powered devices through VNC. The VNC option can be enabled or disabled by administrator on Wyse Management Suite.

(i) **NOTE:** For security reasons the VNC is an optional add-on. The administrator must install the VNC add-on to enable VNC access. For more information about how to download and configure the VNC add-on, see the *Dell Hybrid Client Administrator's Guide* at www.dell.com/support.

Custom connection support

Dell Hybrid Client enables you to create custom connections. Users can create custom connections for browsers and local applications. The browser connection supports both icon and windows size configuration, whereas, the custom connection only supports icon configuration. Auto login and Auto reconnect options can be configured for both custom connection and browser connection.

(i) **NOTE:** For security reasons the custom connection is an optional add-on. The administrator must install the custom connection add-on to create custom connections. for more information on how to download the custom connection add-on, see the Administrator's Guide at https://www.dell.com/support.

Enable or disable access to desktop shortcuts

You can enable or disable access to the following desktop shortcuts using Wyse Management Suite:
- Google Chrome
- Firefox
- Dell File Explorer
- Device Settings
- Citrix Default icon
- VMware Default icon
- RDP Default icon
- Text Editor
- VLC Media Player
- Image Viewer
- Libre Office

Guest user auto login

Dell Hybrid Client allows users to log in automatically as a guest user. However, autologin as a guest user is disabled by default. You can also configure the **Remove Device Lock** and **Password prompt on wakeup** options. When enabled, the lock screen is no longer displayed and the device does not prompt for a password after the device or display resumes from sleep mode.

Image conversion

Dell Hybrid Client supports the following conversions:
- Convert Wyse 5070 devices running Windows 10 IoT Enterprise, ThinLinux 2.x, or ThinOS 8.6 (Maintenance Release 8 and later) to Dell Hybrid Client using Wyse Management Suite Pro 3.1 or later version.
- Convert OptiPlex 7070 devices running Windows 10 and Ubuntu 18.04 to Dell Hybrid Client using a bootable USB drive.

For more information, see the *Dell Hybrid Client Conversion Guide* at www.dell.com/support.

(i) **NOTE:** Updated boot agent 4.0.8 must be installed before converting ThinLinux and Windows 10 IoT Enterprise-based devices to Dell Hybrid Client. For ThinOS devices, you must upgrade to ThinOS 8.6 Maintenance Release 8 and later versions.

Supported languages

- The following languages are supported on Dell Hybrid Client:
  - English—US
  - German
  - French
  - Italian
  - Spanish
  - Japanese
  - Korean
  - Chinese Traditional
  - Chinese Simplified
- By default, only English is installed. Language add-ons are released for other languages. As an administrator, you must first deploy the language add-on and then configure the language settings using Wyse Management Suite.
- On Wyse 5070 devices with 16 GB storage, you must first install the individual language add-on pack before configuring the language settings using Wyse Management Suite. These devices can support only one additional language in addition to English. When the second language add-on is deployed from Wyse Management Suite, it uninstalls the previously installed language pack.
- When you set a language, only the system local language is changed. Keyboard input language must be selected separately.
  - If the Japanese input language is used, select the keyboard layout as **Japanese (Macintosh)**.
  - If the Korean language pack is installed, the **ibus hangul** keyboard layout is used.
  - If the Chinese Simplified language pack is installed, the **ibus libpinyin** keyboard layout is used.
  - If the Chinese Traditional language pack is installed, the **Ibus chewing** keyboard layout is used.
  - (i) **NOTE:** For Korean and Chinese keyboard input languages, the respective language packages must be installed to change the input language.

For more information, see the *Dell Hybrid Client Administrator's Guide* at https://www.dell.com/support.

Limitations

1. If the Dock feature is set to auto hide, it does not show up when you connect to a VNC session using the cursor.
2. Any previously installed application and user data is not saved when a Dell Hybrid Client device is re-imaged.
3. Dell Hybrid Client restarts upon installation of any add-ons such as VNC and SSH.
4. Domain unjoin is not supported on devices upgraded from DHC 1.0.1288 to 1.1.1618.
5. Performance issues are observed when you use the Zoom application on Wyse 5070 devices with 16 GB storage.

Known issues

Table 63. Known issues

Issue number	Issue description	Workaround
HC-3502	There are two language locales listed in `locale-a` command even after setting the Multiple language installation flag to false.	There is no workaround in this release.
HC-3686	VNC does not connect when you are not logged into Dell Hybrid Client desktop.	There is no workaround in this release.
HC-4095	Browser shortcut opens in default window size and not in the required window size after logoff and login.	There is no workaround in this release.
HC-4149	Wallpapers for guest user desktop and lock screen may not be set after imaging	There is no workaround in this release.
HC-4216	There is no support for hotkeys in Dell Hybrid Client 1.1 EULA dialog box.	You can use the mouse control.
HC-4450	The VMware VDI session top menu bar options are greyed out when the session is launched.	There is no workaround in this release.
HC-4649	Files are not created if attempted before documents appears in Dell File Explorer.	The workaround is to wait for few seconds after opening Dell File Explorer to create files.
HC-4876	The monitor resolution changes does not reflect in the mirror mode.	There is no workaround in this release.
HC-4880	An error message, `Are you sure you want to permanently delete the file?` is displayed when a folder is deleted.	There is no workaround in this release.
HC-4898	An invalid meeting ID message may be displayed on Zoom when a meeting ID is entered manually.	There is no workaround in this release.
HC-4898	When you are sharing your screen on Zoom, black boxes are displayed in place of the chat window on the other participant's screen.	There is no workaround in this release.

Important notes

Dell Technologies recommends to use an 8 GB RAM for better performance.

Tested broker connections

Table 64. VMware Horizon

VDI version	Desktop	RDS server	
	Windows 10 Enterprise	Windows Server 2016	Applications
VMware Horizon 8 2006	√	√	√

Table 65. Citrix Virtual Apps and Desktops

VDI version	Desktop	Server		Apps
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2012 R2	Windows Server 2016
Citrix Virtual Desktops 7 2009	√	√	√	√

Table 66. Dell Remote Desktop Protocol

VDI version	Desktop	Server	
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2019
Dell Remote Desktop Protocol	√	√	√

Dell Hybrid Client 1.0

Release summary

Dell Hybrid Client is a desktop solution that follows the Software-as-a-Service (SaaS) model of software delivery. It provides a hybrid operating environment that enables you to access virtual, cloud, or local applications and resources seamlessly. It encompasses the cloud and storage aggregation for maintaining security and simplicity.

Devices powered by Dell Hybrid Client require a management software to configure, operate, and update, thereby eliminating the need for IT support to visit or touch the physical devices. You can manage the devices powered by Dell Hybrid Client using Wyse Management Suite version 3.0. As the number of devices grow, Wyse Management Suite offers process automation and helps lower costs for large deployments of hybrid clients.

Version

Dell Hybrid Client version 1.0

Ubuntu version 18.04 LTS 64-bit

Release date

September 2020

Compatibility

Build information

- Version—1.0
- Build number—1288
- Size—61,95,98,390 bytes

Supported platforms

Table 67. Supported platforms and configurations

Platform name	Configuration			Language
	Processor type	**Memory**	**Storage**	
Wyse 5070	Intel Celeron Dual Core	8 GB and higher capacity RAM	32 GB or higher capacity SSD/eMMC	English (EN-US)
	Intel Pentium Quad Core			English (EN-US)
Wyse 5070 Extended	Intel Pentium Quad Core			English (EN-US)
OptiPlex 7070 Ultra	8th Generation Intel Core i3/i5/i7		128 GB and higher capacity SSD/HDD	English (EN-US)

Supported management software

Table 68. Supported management software

Supported environment	
Management software	Wyse Management Suite
Edition	Pro
Version	3.0 and later

Supported browsers

Table 69. Supported browsers

Browsers	Version
Chrome	84.0.4147.89
Mozilla Firefox	73.0.1

If the Google Chrome browser version on your Dell Hybrid Client is 66.0.3359.181 or 74.0.3729.108, you must upgrade the version to 84.0.4147.89. To check the Google Chrome version on your Dell Hybrid Client, go to **System Information** > **Packages tab** and click **Show All Packages**.

To upgrade the Google Chrome version to 84.0.4147.89, do the following:
1. Download the Google Chrome v 84.0.4147.89 package from https://www.dell.com/support.
2. Create and deploy standard app policy using Wyse Management Suite Pro (On-prem or Public Cloud). For more information about how to deploy a standard app policy, see the *Create and deploy standard application policy* section in the *Dell Wyse Management Suite v3.0 Administrator's Guide* at https://www.dell.com/support.

Supported VDI clients

Table 70. Supported VDI clients

VDI Client Description	Version
RDP	8.1.07-06
Citrix Workspace App	1912
VMware Horizon Client	5.3

Supported cloud platforms

- Office 365 applications with Azure Active Directory sync with on premise Active Directory User
- Google Cloud platform

Salient features of Dell Hybrid Client

Active Directory authentication

Dell Hybrid client supports user authentication with Active Directory—local AD and on-premise user sync with Azure Active Directory.

Dell Hybrid Client supports login only with Active Directory user. The guest user account is supported with group level policy configurations from Wyse Management Suite. The local user accounts are not supported.

Azure Active Directory (Azure AD) is Microsoft's cloud-based identity and access management service. It helps your employees to sign in and access resources in both external resources such as Microsoft Office 365, the Azure portal, and thousands of

other SaaS applications and internal resources such as applications on your corporate network and intranet, along with any cloud applications developed by your own organization.

For more information about *Azure Active Directory On-Prem users sync*, see *Azure AD Connect sync: Understanding Users, Groups, and Contacts* at https://docs.microsoft.com/.

ⓘ **NOTE:** Azure Active Directory is not supported in Dell Hybrid Client, and only on-premise sync with Azure AD is supported.

Single Sign-On (SSO) to applications

Dell Hybrid client extends SSO to cloud applications and web applications along with VDI applications. It enables you to log in only one time with one set of credentials to access all applications.

Known issues and expected behavior

The following are the known issues and expected behavior of the Single Sign-On (SSO) support for applications in Dell Hybrid Client:

- Single SignOn is not supported for VMware connections and FTA.
- A connection must be created with FQDN, and the device time should be synchronized with the RDP server domain time to use SSO with RDP.
- SSO is not supported for Citrix PNAgent connection but is supported for Storefront connections. Also, SSO is only supported from device login to remote session and is not supported for applications in session.
- Dell Hybrid Client does not support SSO for GCP (GSuite), and you must enter the credentials when you log in for the first time. The subsequent login works with SAML-based SSO authentication until you delete the browser cache.

File Explorer

Dell Hybrid client delivers a seamless user experience for accessing local files, USB, network, or cloud files and folders through the custom File Explorer. The following are a few features of File Explorer in Dell Hybrid Client:

- Users can access only their respective local documents and downloads folders from the current drive in the File Explorer for security reasons. `Pictures` folder is available in Dell File Explorer if the **Print Screen** option is enabled.

  ⓘ **NOTE:** `Pictures` folder is available only for domain users if the **Print Screen** option is enabled.
- Azure or GCP cloud drive contents is available in the **Cloud** section.
- Network shares and USB storage devices are displayed in the **External Files** section.
- You can open the files using local, VDI, or cloud applications based on the priority configured in the **File Affiliation** settings.
- You can synchronize the files only when a user logs in for the second time on the same device when the local file or the local drive file is opened with cloud applications. For example, when you open cloud drive files in VDI or local applications and if you make any modifications, the synchronization happen after you log in again.
- You can upload local files to cloud. This option should be used after you log off and log in again, if the file is modified in the current logged in session and when the **File Type Association** is enabled with cloud applications.
- You can copy and paste, or move files between local folders, local drives, and external drives. If you make any changes when the file is opened in cloud, you must log off and log in again before you copy or move the file.
- Cloud files can be made available in the offline mode, where a user can access the file when the network is not available. Files made available offline can be accessed only for seven days, and a user should synchronize the files before seven days.
- You can use global file search to search for documents across any folder.

Known issues and expected behavior

The following are the known issues and expected behavior of File Explorer in Dell Hybrid Client:

- You cannot configure both Azure or GCP cloud providers simultaneously.
- Keyboard shortcuts and right click options are not supported. You must use mouse to navigate through various files and folders in file explorer.
- When you upload a local file to GCP folder, a new file is created under GCP with the same name after every upload. This is because you create multiple files with the same name in GCP. When any of the duplicate files is made offline, all files in the same name are also available in the offline mode.

- When you save any cloud file to a local drive using the **Save Offline** option, the UI displays all the files with the same name in the in offline mode. But, only the selected file is saved in the offline mode which is a known issue in the UI.
- You cannot manually enter credentials while accessing network drives. Credentials must be configured in the Wyse Management Suite server when you are creating drives.
- Cloud files launch with VDI, local file launch with cloud and file synchronization is achieved only after you log off and log in again.
- Device specific cache directory and drafts directory are created in the cloud root for Azure and GCP.
  - (i) **NOTE:** New device specific cache directory and drafts directory is created in the cloud root for GCP when you unregister the device from Wyse Management Suite or when you reset the device to factory settings.
- For GCP, any local file that is uploaded by a user is available in the cloud root. The Azure file is uploaded to the `Uploads` folder in the cloud drive.
- You can manually upload cloud files of any size. However, the automatic synchronization of VDI files that you edited offline is limited to 4 MB for Azure. For more information, see *Upload or replace the contents of a DriveItem* at https://docs.microsoft.com/.
- Occasionally, a file opened by the user in OneDrive may be temporarily locked with the error message **Error Code 423** and become inaccessible. This is as per the design from Azure. For more information, see *Microsoft Graph error responses and resource types* at https://docs.microsoft.com/.
- Progress bar is not displayed when you copy the files. You must click the **Sync** button to view the copied file.

File affiliation

File affiliation feature enables you to restrict the user's ability to access applications depending on the mode. In the cloud mode, the client displays applications that are supported by Cloud services. In the local mode, the client displays the local and VDI applications that are installed and configured using Wyse Management Suite. In the offline mode, the client displays the tools and applications that operate on the cached files. You can configure different modes on the same device for different users using the User Policy groups.

The following are the different modes that are supported for file affiliation:
- Cloud+VDI+Local
- Cloud+Local
- Cloud
- VDI+Local
- VDI

Files in the File Explorer launch based on the priority that is set. File open function falls back to the second priority application when the first priority fails.

Known issues and expected behavior

The following are the known issues and expected behavior of the file affiliation feature:
- Fallback mechanism works only when the server is not reachable. For example if the priority is set to VDI, and the VDI server is not reachable then file open falls back to second priority applications. But if the server is reachable and application fails to launch then the fallback mechanism does not work.
- When a network is not reachable, files always open using local applications.

Google Cloud Provider and Azure

Using File Explorer, users can access their files and applications in the Google cloud environment and Microsoft Azure environment. You can use Active Directory log-in and Single Sign-On support for Azure using Azure AD sync with On-prem Domain. You can configure these settings using Wyse Management Suite.

(i) **NOTE:** Dell Hybrid Client does not support SSO for GCP (GSuite), and you must enter the credentials when you log in for the first time. The subsequent login works with SAML-based SSO authentication until you delete the browser cache.

VDI clients support

Dell Hybrid Client supports Citrix, VMware, RDP connections, and File Type Association (FTA). Users can add multiple connections to access desktop or applications on VDI servers. File Type Association can also be configured with VDI applications.

Known issue and expected behavior

The following are the known issues and expected behavior of the VDI clients with Dell Hybrid Client:

- You must create a connection using FQDN and time should be synchronized with RDP server domain to use SSO with RDP.
  - (i) **NOTE:** SSO is supported from Windows 10 operating system and Windows server 2016.
- For VMware FTA, administrator must provide file extensions and respective application names from Wyse Management Suite. However, for Citrix and RDP FTA settings, Extensions and Application name that is configured from Citrix and RDP Broker agent server is fetched automatically after your login. While launching files from explorer, matching application opens the files automatically based on the file type.
- After changing the keyboard layout, you must sign out from the current session for the changes to reflect inside the session.
- Citrix session launch from the Chrome browser is not supported. It is supported only from the Firefox browser. Desktop and application files are downloaded, and launched.

Local applications support

By default, the following applications are installed on your Dell Hybrid Client:

- **VLC Media Player**—Enables you to play most of the multimedia files.
- **Image Viewer**—Enables you to open most of the image files.
- **Libre Office**—Enables you to view, create, or edit text documents, spreadsheets, presentations, drawings, and compose a mathematical formula.

Network drives

Network drives can be configured from Wyse Management Suite with different protocols such as FTPS, SMB, and CIFS. Based on the user requirement user can create drives with anonymous mode or with credentials.

Known issues and expected behavior

Users cannot manually enter the credentials while accessing the network drives. Credentials must be configured using the Wyse Management Suite server while creating the drives.

Device settings

Users can view and modify the device settings locally using the device settings. Local Settings which are configured using Wyse Management Suite policy are reflected and the same can be modified and saved by the user. The following are the device settings that can be configured:

- Network Configuration
  - (i) **NOTE:** Using the network configuration you can manually add IP when DHCP is not available in the subnet, DNS to resolve network domain and to enable or disable Bluetooth.
- Monitor settings
- Peripheral management
- Display personalization
- Region settings
- Power settings
- Password
- Dell Client Agent

User personalization

User personalized roaming is supported for device settings. You can configure user specific settings, and the same settings are enabled in another device when you log in with the same user credentials. The following features can be personalized:

- Peripheral Management
  - Mouse
    - Speed
    - Swap
    - Scroll wheel
    - Pointer size
  - Keyboard
    - Keyboard Repeat rate
    - Keyboard Repeat delay
    - Keyboard layout
    - Number lock
    - Print screen
- Display personalization
  - Desktop color
  - Wallpaper mode
  - Scale
  - Brightness
  - Dock icon size
  - Dock position
  - Auto hide dock
- Region settings
  - Time zone
  - Time format
- Power settings
  - Power saving
    - WiFi
  - Suspend and power
    - Blank screen
    - Auto suspend
    - Power button action

Known issues and expected behavior

The following are the known issues and expected behavior of the user personalization feature:

- Bluetooth, audio, and printer settings cannot be configured using the **Device Settings** option. These pages contain Advanced Settings buttons which display the **Ubuntu Settings** page, where users can modify these settings.
- Monitor resolution values are static and for some monitors it may not display all the supported resolution. So, some of the resolutions cannot be applied from this page.
- Under Network configuration, IP details can be added or modified only when the device does not receive IP configuration from the DHCP server.
- Multi-display six monitor setup is supported for the following combinations for Wyse 5070:
  - Two 4K monitor and four 2K monitor
  - Six 2K monitor

(i) **NOTE:** Six monitor display setup is supported only on Wyse 5070 Extended.

User security

Dell Hybrid Client provides a high level of user security in which the data of a user is locked and cannot be viewed by other users. A user's access to Dell Hybrid Client is controlled through specific permissions and the data profiles that are managed using Wyse Management Suite.

Secure browsing

Dell Hybrid client provides a secure end point for your browser-based work environment. You can enable or disable Site Isolation and Extensions for Google Chrome. You can also enable or disable Multi Containers feature for the Firefox browser.

Browser settings

Dell Hybrid Client supports Google Chrome and Firefox browsers. Google chrome is the default browser. You can customize the following browsers settings using Wyse Management Suite:

- Change default browser
- Create Browser Shortcuts such as browser connections
- Blacklist and Whitelist URLs

The **URLBlacklist** option prevents users from accessing a list of blocked URLs. The following are the few examples to allow or block the URLs:

- Allowing only a small set of sites. For example, "mail.example.com", "wikipedia.org", "google.com". You can also block URLs. For example, Block "URL" .
- Block all access to a domain, except to the mail server using HTTPS and to the main page. For example, Block "example.com", Allow "https://mail.example.com", or Allow ".example.com", and maybe ".www.example.com".
- Block all access to YouTube, except for selected videos. For example, Block "youtube.com", Allow "youtube.com/watch?v=V1", or Allow "youtube.com/watch?v=V2".

(i) **NOTE:** With Firefox, while adding blocklist URL, you must specify one or more URLs without the https/http schema. For example, instead of *https://www.youtube.com* we should specify only youtube.com or www.youtube.com which will block youtube.com with all schemas. The same is applicable when you configure whitelist URLs(exceptions) also. Firefox supports only http/https, and the prefix is added by default.

Known issues and expected behavior

The following are the known issues and expected behavior of the browser settings:

- Except browser shortcuts, all other browser settings must be configured from the User Policy groups. These settings are not applicable for a guest user.
- If you blacklist an entire website and whitelist a specific webpage URL for that site, blacklist and whitelist functionality does not work as expected. Users might be able to access other content on that website.
- Only *http* and *https* addresses are supported for Firefox. For more information, go to https://github.com/mozilla/policy-templates.

USB lockdown

You can allow or block access to specific USB devices using the USB lockdown feature. By default, all USB devices can be accessed. If you disable the **Enable All** option, all USB devices are blocked.

You can use the **Disable all excluding HID** option to disable all USB devices excluding keyboard and mouse. Also, you can use the **Disable USB devices using Vendor ID/Product ID/Class** option to disable specific set of USB devices using VID and PID combination of the device or using the USB class.

Known issues and expected behavior

The following are the known issues and expected behavior of the USB lockdown feature:

- When you disable the **Audio** USB class, the webcam stops working.
- USB lockdown cannot be configured from User Policy groups in Wyse Management Suite.

General features

The following are the general features of Dell Hybrid Client:
- Monitor, keyboard, mouse, and printer settings can be configured from the **Peripheral Management** page.
- Proxy, Bluetooth, and wireless settings can be configured from the **Network Configuration** page.
- Wallpaper, brightness, and dock settings can be configured from the **Desktop Personalization** page.
- You can import and delete certificates, change GRUB password, and configure guest user account properties, power settings, application security, and BIOS settings.

(i) **NOTE:** Automatic operating system security updates are disabled for Dell Hybrid Client 1.0 release. Also, only Dell Signed applications can be installed in Dell Hybrid Client from Wyse Management Suite.

Important notes

Server details

Wyse management Suite version— 3.0.588

Tested broker connections

Table 71. VMware Horizon

VDI version	Desktop	RDS server	
	Windows 10 Enterprise	Windows Server 2016	Applications
VMware Horizon 7.11	√	√	√

Table 72. Citrix Virtual Apps and Desktops

VDI version	Desktop	Server		Apps
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2012 R2	Windows Server 2016
Citrix Virtual Desktops 7 1912 LTSR	√	√	√	√

Table 73. Remote Desktop Protocol

VDI version	Desktop	Server		
	Windows 10 Enterprise	Windows Server 2016	Windows Server 2012 R2	Windows Server 2019
Remote Desktop Protocol	√	√	√	√

Supported peripherals

Table 74. Supported peripherals

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
Audio or video	Dell 2.0 Speaker System - AE215	N/A	✓
	Dell 2.1 Speaker System - AE415	N/A	✓

Table 74. Supported peripherals (continued)

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
	Dell UC Headset - UC150	N/A	✔
	Dell UC Headset - UC350	✔	✔
	Microsoft Corporation LifeChat LX-6000 Headset	✔	N/A
	Dell Professional Sound Bar - AE515	✔	N/A
	Dell USB Sound Bar - AC511	✔	N/A
	Jabra Pro 935 MS Wireless headset (Mono) - Office Centric	✔	N/A
	Jabra Evolve 65 MS Stereo Headset	N/A	✔
	Jabra Engage 65 MS Stereo Headset	N/A	✔
	Plantronics Savi W440M-400 Series convertible wireless headset - DECT 6.0	N/A	✔
	Plantronics Voyager Focus UC B825-M headset for Microsoft Lync	N/A	✔
Input devices	Dell Laser Scroll USB 6-Buttons Silver and Black Mouse	N/A	✔
	Dell Multimedia Keyboard - KB216	✔	✔
	Dell Optical Mouse - MS116	✔	✔
	Dell USB Wired Keyboard with Smart Card reader - KB813	✔	N/A
	Dell Premier Wireless Mouse - WM527	N/A	✔
	Dell Wireless Keyboard and Mouse - KM636	✔	✔
	Dell USB Wired Laser mouse - Naruto	✔	N/A
	Dell Wireless Mouse - WM326	N/A	✔
Cables, dongles and adapters	USB-C to USB-C cable (0.6 meter) to enable USB-C Displays	N/A	✔
	Dell Adapter - USB-C to DisplayPort	✔	✔

Table 74. Supported peripherals (continued)

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
	- DBQANBC067 - DBQANBC067		
	Dell Adapter - USB-C to VGA - DBQBNBC064 - DBQBNBC064	✓	✓
	Dell Adapter - USB-C to HDMI - DBQAUBC064 - DBQAUBC064	✓	✓
	Dell Adapter - DisplayPort to HDMI 2.0 (4K) - DANAUBC087 - DANAUBC087	✓	N/A
	Dell Adapter - DisplayPort to VGA - DANBNBC084 - DANBNBC084	✓	N/A
	USB - C to DP adapter	✓	✓
	USB to Serial adapter - Trendnet	✓	N/A
	USB to Serial adapter - Cables-2-Go	✓	N/A
	StarTech.com 1 Port USB to RS232 DB9 Serial Adapter Cable - Serial adapter - USB 2.0 - RS-232	✓	N/A
	C2G USB C to DisplayPort Adapter Converter - USB-C to DisplayPort Black external video adapter - black	✓	N/A
Monitors	Dell 19 Monitor - E1916H	✓	✓
	Dell 19 Monitor - E1920H	✓	✓
Monitors	Dell 20 Monitor - E2016H	✓	✓
	Dell 20 Monitor - E2020H	✓	N/A
	Dell 22 Monitor - E2216H	✓	✓
	Dell FY20 E Series Monitor - E2220H	✓	N/A
	Dell 22 Monitor - E2218HN	✓	N/A

Table 74. Supported peripherals (continued)

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
	Dell 23 Monitor - E2318H	✓	✓
	Dell 24 Monitor - E2417H	✓	✓
	Dell FY20 E Series Monitor - E2420H	✓	N/A
	Dell FY20 E Series Monitor - E2420HS	✓	N/A
	Dell FY20 E Series Monitor - E2720H	✓	N/A
	Dell FY20 E Series Monitor - E2720HS	✓	N/A
	Dell 24 Monitor - MR2416	✓	N/A
	Dell 19 Monitor - P1917S	N/A	✓
	Dell 20 Monitor - P2016	✓	N/A
	Dell 22 Monitor - P2217	✓	✓
	Dell 22 Monitor - P2217H	✓	N/A
	Dell 23 Monitor - P2317H	✓	N/A
	Dell 23 Monitor - P2319H	N/A	N/A
	Dell 24 Monitor - P2415Q	✓	✓
	Dell 20 Monitor - P2018H	N/A	✓
	Dell 22 Monitor - P2219H	N/A	✓
	Dell 22 Monitor - P2219HC	✓	N/A
	Dell 23 Monitor - P2319H	N/A	✓
	Dell 24 Monitor - P2417H	✓	N/A
	Dell 24 Monitor - P2418HZm	✓	✓
	Dell 24 Monitor - P2418HT (Touch)	✓	✓
	Dell 24 Monitor - P2419H	N/A	✓
	Dell 24 Monitor - P2419HC	N/A	✓
	Dell 27 Monitor - P2719H	N/A	✓

Table 74. Supported peripherals (continued)

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
	Dell 27 Monitor - P2719HC	N/A	✓
	Dell 27 Monitor - P2720D	✓	N/A
	Dell 27 Monitor - P2720DC	✓	N/A
	Dell UltraSharp 34 Monitor - P3418HW	✓	N/A
	Dell 43 Multi-Client Monitor - P4317Q	✓	✓
	Dell UltraSharp 24 Monitor - U2415	✓	✓
	Dell UltraSharp 24 Ultrathin Monitor - U2419H	N/A	✓
	Dell UltraSharp Monitor - U2421HE	✓	✓
	Dell UltraSharp Monitor - U2721DE	✓	✓
	Dell UltraSharp 24 Ultrathin USB-C Monitor - U2419HC	N/A	✓
	Dell UltraSharp 25 Monitor - U2518D	✓	✓
	Dell Ultrasharp Monitor - U2520D	✓	N/A
	Dell UltraSharp 27 Monitor - U2718Q	✓	✓
	Dell Ultrasharp Monitor - U2720Q	✓	N/A
	Dell UltraSharp 27 Ultrathin Monitor - U2719D	N/A	✓
	Dell UltraSharp 27 Ultrathin USB-C Monitor - U2719DC	N/A	✓
	Dell UltraSharp 34 Curved USB-C Monitor - U3419W	N/A	✓
	Dell Ultrasharp Monitor - U4320Q	✓	N/A
Networking	Dell Adapter - USB-C to Ethernet	✓	N/A
	Dell FCLF-8521-3-(DL)	✓	N/A
External Data Storage	Dell USB Slim DVD/RW Drive - DW316	N/A	✓

Table 74. Supported peripherals (continued)

Product Category	Product Description	Wyse 5070	OptiPlex 7070 Ultra
	Dell External SSD, Typ C, USB3.1 Gen2, 250GB	N/A	✔
Smart Cards and Reader	ETOKEN, SAFENET 5110, FIPS, JAVA/80K, BLACK, ID, (HEX)	✔	✔
	ETOKEN, SAFENET, 5110+, CC, JAVA/80K, BLACK, ID (HEX)	✔	✔
	CARD_IDPrime MD 830 B FIPS 140-2 L2 White PVC	✔	✔
	CARD_IDPrime MD 3840 B w/o OTP	✔	✔
	Card_IDPrimeMD840B _white_PVC	✔	✔
	CARD_IDPrime MD3811, Mifare EV1 4K&DESFire EV1, 4K _MPH150_New	✔	✔
	Standard Card _IDPrime NET 510_ white PVC	✔	✔
	Yubikey Neo 5.0	✔	✔
	E-token pro Alladin 72 K	✔	✔
	Sun microsystem SRC 3311	✔	✔
	Dell keyboard KB813t	✔	✔
	Dell keyboard KB813	✔	✔
	Cherry SmartTerminal SMART Card Reader - ST-1044U	✔	✔
	Cherry SmartTerminal ST-1144 SMART Card Reader - USB 2.0	✔	✔
	CHERRY KC 1000 SC - Keyboard - with Smart Card reader - USB - English - US - black - TAA Compliant - JK-A0104EU-2	✔	✔
Printers	Dell C2660dn Color Laser Printer	✔	N/A
	Dell E515dn multifunctional printer	✔	N/A
	Dell Color Multifunction Printer - E525w	✔	N/A

Supported display matrix

Table 75. Supported display matrix

Supported display matrix						
Hardware	**Monitors**	**VDI sessions**				
		RDP	**VMware RDP**	**VMware PCoIP**	**VMware Blast**	**Citrix**
Wyse 5070 Extended	**Two 4K Monitors** DP1:P2415Q(DP-cable) DP2:P2415Q(DP-cable)	√	√	√	√	√
Wyse 5070 Extended	**Three 4K Monitors** DP1:P2415Q(DP-cable) DP2:P2415Q(DP-cable) DP4:P2415Q(Dp to mDP cable)	√	√	x	x	x
Wyse 5070 Extended	**Six 2K Monitors** DP1:E2016(DP-cable) DP2:E2016(DP-cable) DP3:UP3017(DP-cable) AMD DP4:E1916H(DP to mDP cable) AMD DP5:E2216H (DP to mDP cable) DP6:UP3017(DP-cable)	√	√	x	√	√
Wyse 5070 Extended	**One 4K Monitors** DP1:P2415Q(DP-cable) **Three 2K Monitors:** DP3:P2417H(DP-cable) DP4:P2417H(Dp to mDP cable) DP6:P2417H(Dp-cable)	√	√	x	x	x
Wyse 5070 Extended	**Two 4K Monitors** DP1:P2415Q(DP-cable) DP2:P2415Q(DP-cable) **Four 2K Monitors:** DP3:UP3017(DP-cable)	√	√	x	√	x

Table 75. Supported display matrix (continued)

Supported display matrix						
	DP6:UP3017(DP-cable) AMD					
	DP4:E2016 (DP to mDP cable) AMD					
	DP5:E2016 (DP to mDP cable)					
Wyse 5070 Extended	**Three 4K Monitors** DP1:P2415Q(DP-cable) DP2:P2415Q(DP-cable) AMD DP4:P2415Q (DP to mDP cable) **Three 2K Monitors:** DP3:UP3017(DP-cable) DP6:UP3017(DP-cable) AMD DP5:E2016 (DP to mDP cable)	√	√	x	√	x
Wyse 5070 Extended	**One 4K Monitor** DP1:P2415Q(DP-cable) **Five 2K Monitors:** DP2:P2417H(DP-cable) DP3:P2417H(DP-cable) DP6:P2417H(DP-cable) AMD DP4:P2417H (DP to mDP cable) AMD DP5:P2417H (DP to mDP cable)	√	√	x	√	x

Supported printer matrix

Table 76. Supported printer matrix

Printer type	Local printing			Printer Configuration push from Wyse Management Suite	VDI Sessions				
	Firefox	Chrome	File explorer		RDP	VMware RDP	VMware PCoIP	VMware Blast	Citrix
USB	√	×	√	N/A	×	×	√	√	×
LPD	√	×	√	√	√	×	√	√	×

Table 76. Supported printer matrix (continued)

SMB	√	×	√	√	√	×	√	√	×
URI	√	×	√	√	√	×	√	√	×

Limitations

RDP supports only Single Sign-on (SSO) to log in to remote desktops and applications. SSO is not supported for applications running inside a session. This issue is due to the limitation from Microsoft.

Resources and support

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 or the product model. For example, `Dell Hybrid Client`.

   A list of matching products is displayed.

3. Click your product from the list.
4. Click **DOCUMENTATION**.

Contacting Dell

ⓘ **NOTE:** If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

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 sales, technical support, or customer service issues:

1. Go to www.dell.com/support.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.