# Dell Wyse ThinOS

## Version 8.2_015

## Release Notes

# Contents

# Release Type and Definition

Dell Wyse ThinOS software is designed to run on a broad array of Dell Wyse hardware platforms. New releases are created to support new hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on current, actively shipping hardware platforms, and those hardware platforms that are within their first year after their official End of Life date. Beyond that one year time period, new software releases are no longer certified for use with the older hardware, even though it is possible that they may still work. This allows us to advance our product with features and functions that might not have been supported by the previous hardware, with previous generation CPUs and supporting components.

## Version and Build

8.2, Build 015

## Release Date

March 7, 2016

## Previous Version

Release 8.1, Build 029

# Client Software Licensing and Maintenance Options

Dell Wyse thin client software maintenance is required to receive new versions of thin client software and subsequent releases of corresponding documentation and tools. Use of this software on more than one device requires you to first purchase the additional copies of, or licenses to, the software from Dell Wyse.

# Support Information

The following table lists the supported hardware platforms:

| Platform | Flash(NOR)/RAM |
|---|---|
| Wyse 5010 thin client with ThinOS (D10D)<br><br>Wyse 7010 thin client with ThinOS (Z10D)<br><br>Wyse 5040 AIO thin client (5212) | 2G / 2G |
| Wyse 5010 thin client with PCoIP (D10DP)<br><br>Wyse 5040 AIO thin client with PCoIP (5213) | 2G / 2G |

# New Features

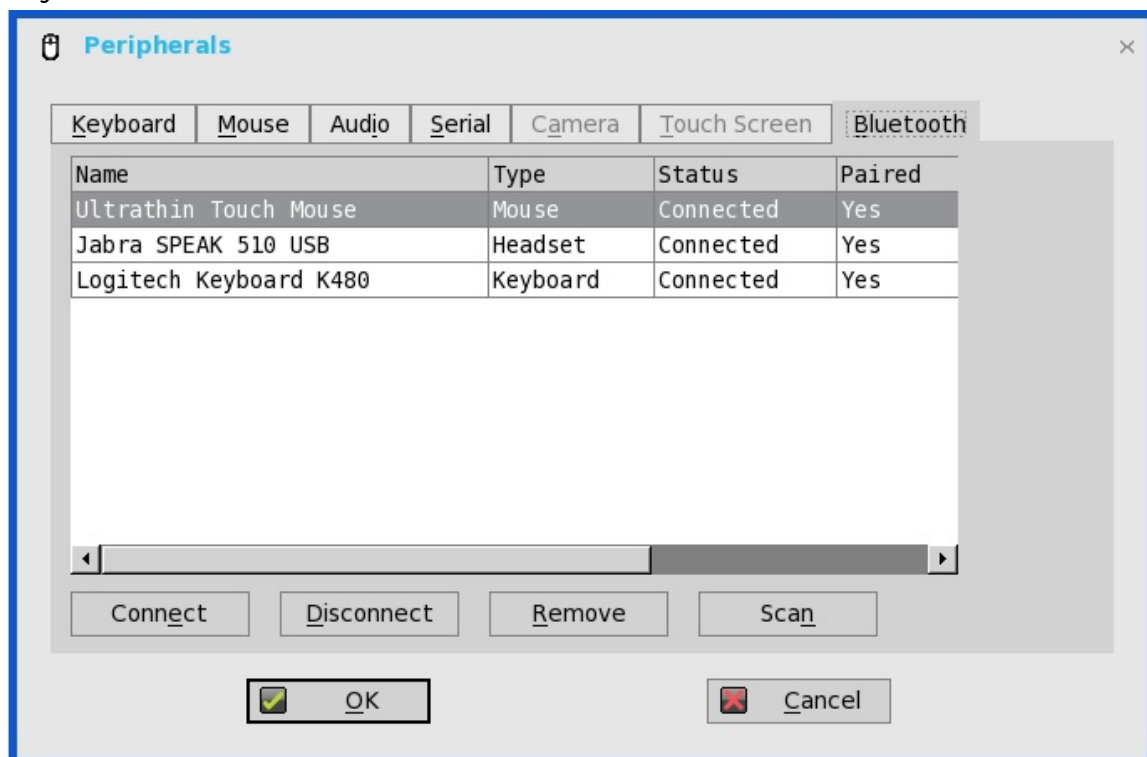This release consists of the following new features:

## 1. Bluetooth

This feature helps you to connect your thin client with the Bluetooth enabled devices such as headsets and mouse devices.

- **Supported Platform**

  Intel wireless chipset 7260 comes with an integrated Bluetooth module. ThinOS Bluetooth feature is based on this technology. The following platforms with **Intel wireless chipset 7260** support the Bluetooth feature.

  o Wyse 7010 thin client with ThinOS (Z10D)
  o Wyse 5010 thin client with ThinOS (D10D)
  o Wyse 5040 AIO thin client (5212)
  o Wyse 5010 thin client with PCoIP (D10DP)
  o Wyse 5040 AIO thin client with PCoIP (5213)



- **Bluetooth version**

  Bluetooth smart is not supported on ThinOS.

- **Bluetooth devices**

    ThinOS 8.2 supports Human Interface Devices (HID) and Headset Bluetooth devices.

    - ➢ **HID type**
        - HID includes mouse and keyboard.
        - The maximum number of HIDs that can be connected is seven.
    - ➢ **Headset type**
        - Bluetooth headset is supported.
        - The maximum number of Bluetooth headsets that can be connected is one.

    Other types of Bluetooth devices are not scanned and supported in this release.

- **Page Scan mode**

    All Bluetooth devices enter into Page Scan mode. Different Bluetooth devices enter into the Page Scan mode at different instances such as when a specific button is pressed three times or a specific button is pressed and held until the LED turns blue.

- **Difference between Status and Paired**

    ThinOS Bluetooth page has two columns, namely, **Status** and **Paired**.

| | | |
|---|---|---|
| **Status** | Connected | The Bluetooth device is connected to the ThinOS device. It is ready to work. |
| | Connecting | The Bluetooth device is connecting to the ThinOS device. |
| | Disconnected | The Bluetooth device is not connected to the ThinOS device. |
| **Paired** | YES | The Bluetooth device is paired with the ThinOS device. |
| | NO | The Bluetooth device is not paired with the ThinOS device. |

- **Auto Connect**

    The Auto Connect function is designed for HID devices.

    - ➢ Pre-condition
        - ThinOS has no HID devices connected such as USB or Bluetooth HID devices.

- The Bluetooth HID devices are configured as Page Scan mode.

> ➢ Auto connect
>
> When you start the ThinOS client, the Bluetooth HIDs can connect to ThinOS automatically without scanning or pairing operations.

- **Reconnect**

  When you restart the system with the Bluetooth device (HID/headset) that is already paired and connected, the Bluetooth device automatically reconnects within a few seconds.

  For example, you can hover the Bluetooth mouse, and then click a few times for the Bluetooth mouse to reconnect successfully. The Bluetooth headset reconnects automatically, but might require you to manually close or reopen the device on certain occasions.

- **Certified Devices**

  Following are the Bluetooth certified devices:

| |
|---|
| Dell WM713 Bluetooth Mouse |
| Dell Wireless Bluetooth Travel Mouse – WM524 |
| Rapoo E6100, Bluetooth Keyboard |
| ThinkPad Compact Bluetooth Keyboard |
| Logitech Ultrathin Touch Bluetooth Mouse T630 |
| Logitech K480 Bluetooth keyboard |
| Microsoft ARC touch Bluetooth mouse |
| Logitech M557 Bluetooth mouse |
| Plantronics Calisto 620-M Bluetooth headset |
| Plantronics BLACKWIRE C710 Bluetooth headset |
| Plantronics Voyager Legend UC B235 NA |
| Jabra PRO 9470 NCSA Bluetooth headset |
| Jabra MOTION UC+ MS / LINK 360, Bluetooth, Lync |
| Jabra SUPREME UC MS /LINK 360, Bluetooth |
| Jabra Speak 510 MS, Bluetooth |
| Jabra EVOLVE 65 MS stereo |

For known issues, refer to [Known Issues](#) in this release notes.

## 2. ThinOS Package update

- **Base package update and integration into firmware image**

  In the ThinOS 8.1 release, the `base.i386.pkg` was introduced for HDX FR to work on ThinOS. It was a separate package and only required when HDX FR was needed.

  In the ThinOS 8.2 release, the `base.i386.pkg` package is updated to newer version and integrated into the ThinOS firmware image. You need not install or update this package on the system running ThinOS 8.2. If you delete this package by using the **Delete All** button, the package is reinstalled automatically on the system after the system restart.

- **FR.i386.pkg package update**

  The `FR.i386.pkg` package was introduced in ThinOS 8.1. In this release, the FR package is updated to resolve a few issues.

  If the latest version of the `FR.i386.pkg` package is not installed on the thin client, you must manually download this package and then install or update it on the ThinOS 8.2 system. The manual installation procedure is the same as described in the RTME package section.

  The `FR.i386.pkg` version in this release is v1.09.

- **RTME.i386.pkg package**

  The `RTME.i386.pkg` is a new package introduced in the ThinOS 8.2 release for RTME 1.8 support (Citrix HDX Realtime Optimization Pack 1.8 for Lync).

  If this package is not installed on your thin client, you must manually download this package, and then install it on the ThinOS 8.2 system. For manual installation, see [Installation of Packages](#) in the RTME section.

  The `RTME.i386.pkg` version in this release is v1.07.

- **PCoIP.i386.pkg update**

  In the 8.2 release, the `PCoIP.i386.pkg` package is displayed in the **Packages** tab in the **System Tools** dialog box for Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client with PCoIP (5213).

You need not have to install this package manually. If you delete the package using the **Delete All** button, it is automatically reinstalled on the system after the system restart.

The `PCoIP.i386.pkg` version in this release is v1.04.

**Note**: From this release, `base.i386.pkg` is mandatory for all ThinOS clients. PCoIP package is mandatory for Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client (5213). These two packages are integrated into the ThinOS firmware image. Installing the latest ThinOS firmware image will automatically install the latest version of these packages on ThinOS client.  You cannot manually install or upgrade these embedded packages. However, the package version details of respective packages are displayed in the **Packages** tab in the **System Tools** dialog box for engineering information purpose only.
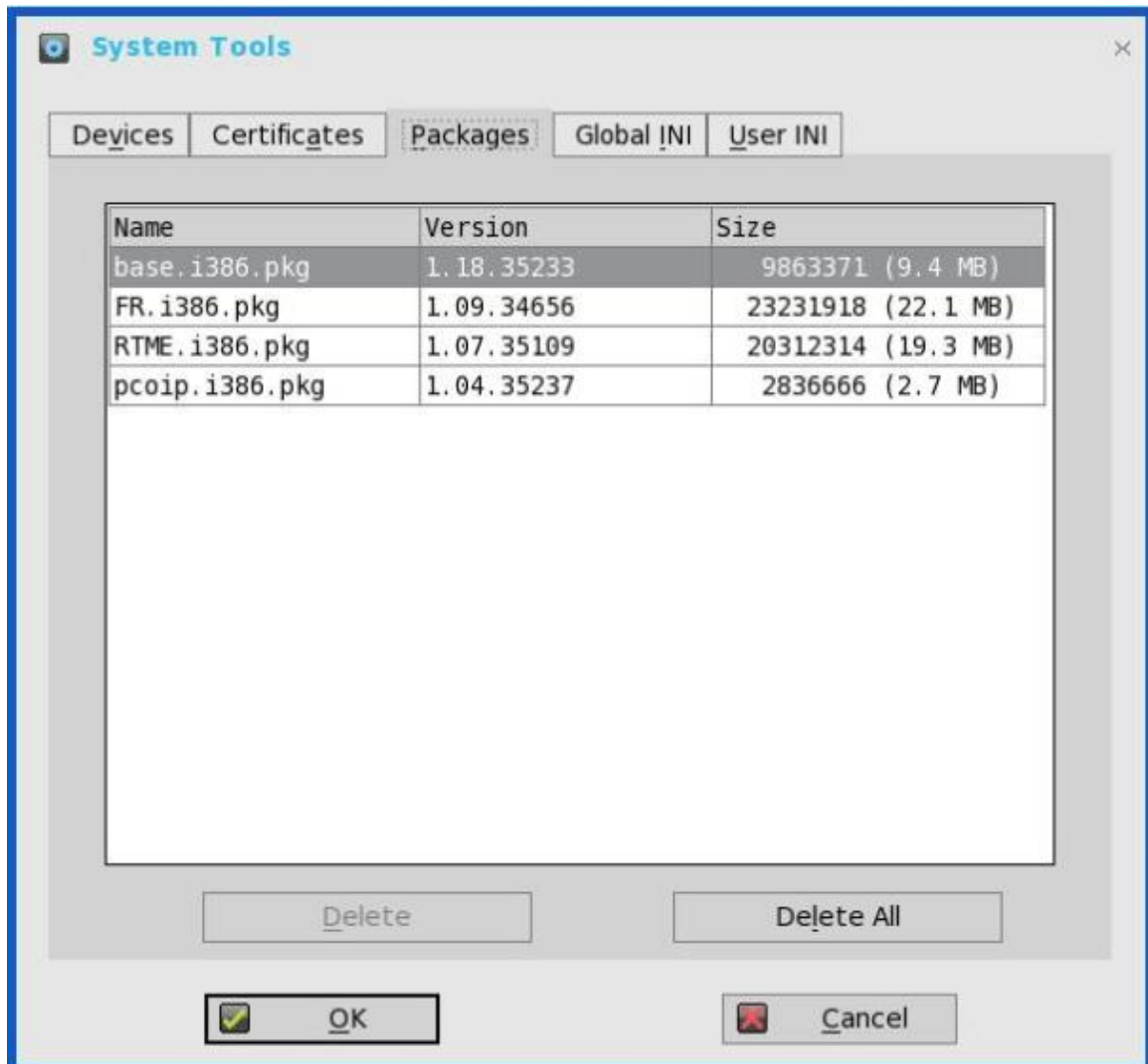
## 3. RTME 1.8 (Citrix HDX RealTime Optimization Pack 1.8 for Lync)

- **Basic knowledge**

  Citrix HDX RealTime Optimization pack offers high-definition audio and video calls on Lync.

  For more information about Citrix RTME 1.8 feature, go to

  [docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-about.html.](docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-about.html.)

  For information on how to use Citrix RTME 1.8 feature, go to

  [docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-troubleshooting.html.](docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-troubleshooting.html.)

- **Supported environments**
  - Citrix environment: XenDesktop and XenApp 5.6/6.5/7.x are supported.
  - Lync server and client version 2010 and 2013; Skype for Business client in Lync 2013 GUI is also supported.
  - Supported networks: LAN, WAN (VPN), wireless and so on.
  - Supports calls between RTME clients or between RTME and standard Lync client.

- **Installation of Packages**

  `RTME.i386.pkg` package is required for the RTME feature to work on ThinOS. If this package is not installed on your thin client, then you must manually install this package. Do the following tasks to install the package:

  a) Upload the package to directory `\wnos\pkg\`

  b) Ensure that the INI `autoload` is not set to 0.

  c) Restart the client and wait till the auto installation of packages is complete.

     The installed package can be viewed in the **Packages** tab in the **System Tools** dialog box.

- **Citrix Remote Server/Desktop Host Preparation**
  - HDX RealTime Multimedia Engine is the package installed on ThinOS.
  - Install the HDX RealTime Connector for Lync 2010/2013 on the remote server and VDA. For more information about installing

the HDX RealTime Connector for Lync, go to [docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-install.html.](docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-install.html.)

- If the version is the latest Lync version-Skype for Business, then only the Lync 2013 GUI is supported in Citrix HDX Multimedia Optimization. As per Citrix Release Notes, the connector must be installed using Connector for Lync 2013.

- The upgrade option is specified at [docs.citrix.com/en-us/hdx-optimization/1-8/upgrade-1-7-to-1-8.html.](docs.citrix.com/en-us/hdx-optimization/1-8/upgrade-1-7-to-1-8.html.)

- Firewall configuration is required on remote server and VDA. For more information, go to [docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-configure-firewall.html.](docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-configure-firewall.html.)

- **Configuration on ThinOS**
  - Ensure that the client, and server DNS settings are correct for Lync server.
  - Ensure that the client does not have USB redirection for video/audio devices in order to have RTME working correctly.

- **RTME status check / Trouble shooting**
  1. Start a Citrix session.
  2. Start Lync application and, then click the **audio device setting** icon in the lower-left pane.
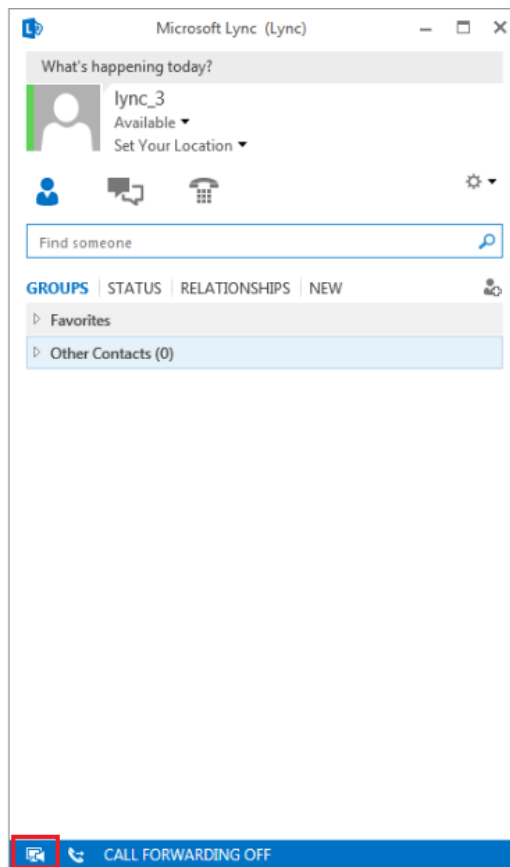
3. Go to **About**, and check for the RTME status. The status is registered, connection type is secured, and mode is optimized.
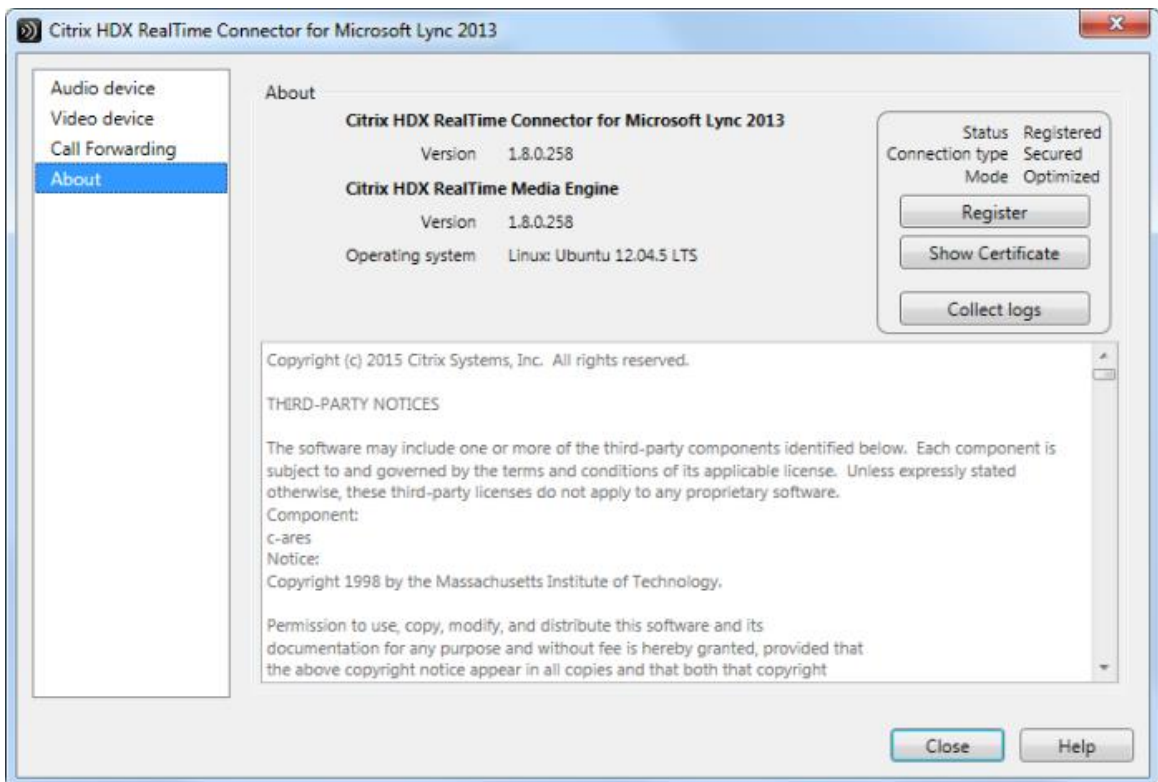
For more information about trouble shooting, go to docs.citrix.com/en-us/hdx-optimization/1-8/hdx-realtime-optimization-pack-troubleshooting.html.

- **Certified devices**

    Following are the RTME certified devices:

| |
|---|
| Plantronics BLACKWIRE C435-M |
| Plantronics Calisto 620-M, Bluetooth |
| POLYCOM Desk phone CX300 |
| Jabra PRO 935 MS |
| Jabra MOTION 360 hands free, Bluetooth |
| Plantronics BLACKWIRE C-310M |
| Plantronics Voyager Legend UC B235 NA, Bluetooth |
| Jabra UC Voice 750MS Duo Dark |
| Logitech USB Webcam 9000 |
| Logitech C525 HD Webcam |
| Microsoft LifeCam 3.0 Cinema |

| Logitech HD Webcam C310 |
| --- |
| Logitech HD Webcam C910 |
| Logitech HD Webcam C920 |
| Logitech HD Webcam C930 |

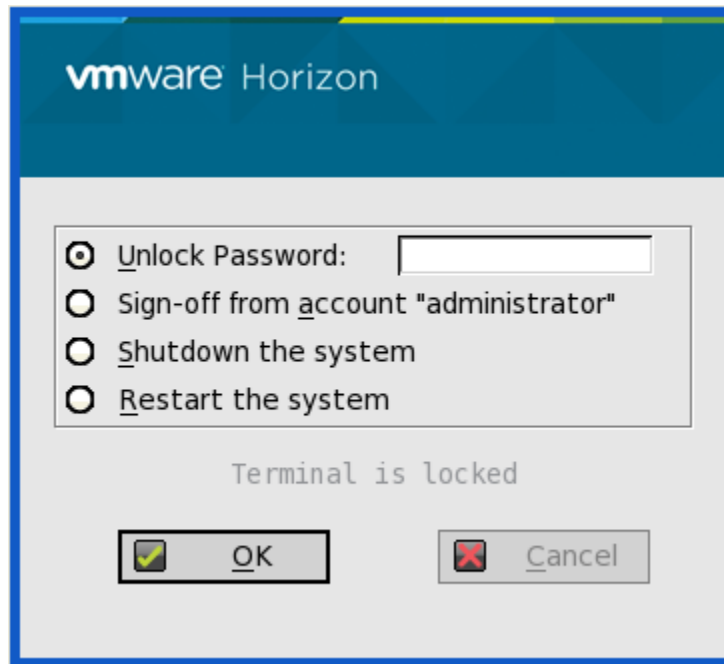For known issues, refer to Known Issues section in this release notes.

## 4. VMware Horizon View broker and PCoIP updates
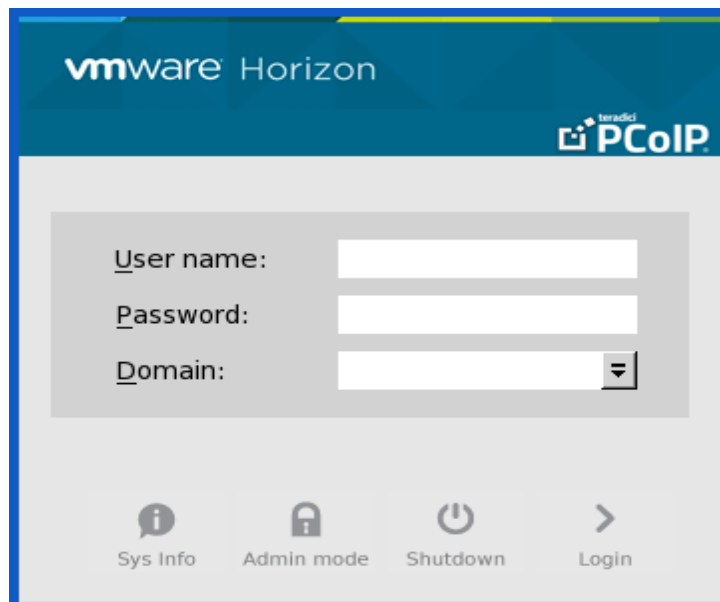
- **VMware Horizon View broker**
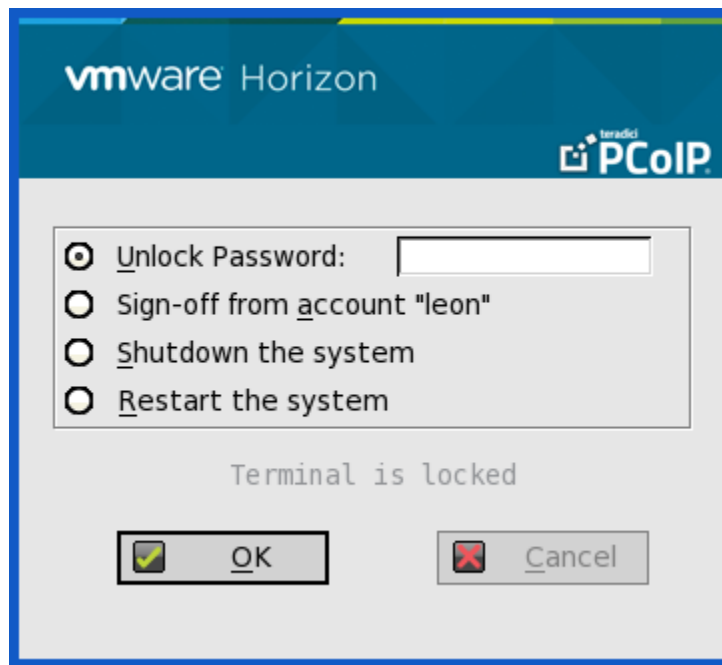  The VMware Horizon View broker icon is updated.
  For example,

The following are the screenshots of PCoIP enabled Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client with PCoIP (5213):

- **VMware Horizon View Broker timeout**

  The VMware Horizon View Broker timeout does not force the user to sign out the broker when the secure tunnel is enabled.
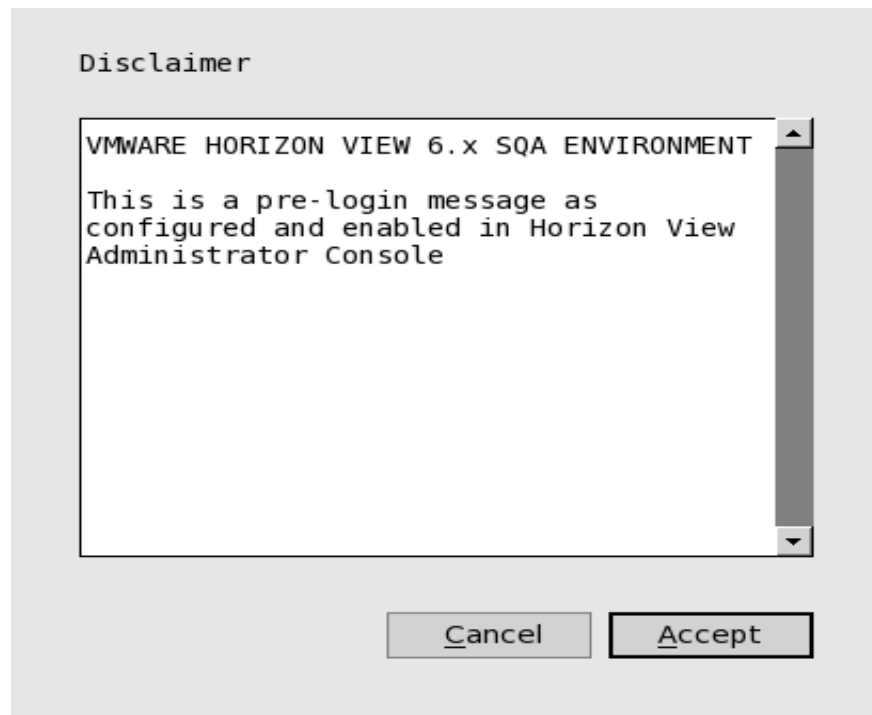
  In earlier versions of ThinOS, when the broker times out, the user session is disconnected and the user is logged out from the broker. In ThinOS 8.2, ThinOS disconnects the user session from the broker, but does not force user logout. This is because the user has local connections other than the broker desktop, and these connections are active when the broker timeout is reached.

- **The Disclaimer window**

  VMware Horizon View broker - The **Disclaimer** window is provided in this release.

  In the Disclaimer window, if you click **Accept**, you are directed to the user login window. If you click **Cancel**, the login window displays the message-**broker initialization failed**.

Disclaimer

VMWARE HORIZON VIEW 6.x SQA ENVIRONMENT

This is a pre-login message as configured and enabled in Horizon View Administrator Console

Cancel     Accept

- **Changes applicable to Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client with PCoIP (5213)**

  - **PCoIP session NUM/CAP keyboard status will sync-up with session instead of client**

    This is applicable for session startup only. The PCoIP session keyboard NUM/CAP status synchronizes from remote session to client whereas the RDP/ICA synchronize status from local to remote session.

    For example,

    i. Set keyboard NUM=off in current PCoIP session.
    ii. Disconnect the session.
    iii. Set client keyboard NUM=on.
    iv. Reconnect the PCoIP session.
    v. The keyboard NUM status in both session and client is updated to NUM=off.

  - **RDS desktop through PCoIP is supported in this release**

    You can view and connect to RDS desktop through the PCoIP protocol in the broker. In VMware Horizon View 6.0 and later versions, the RDS desktop has RDP and PCoIP connections available based on server configurations.

In Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client with PCoIP (5213) running ThinOS 8.0, you can only view the RDP connection for the RDS desktop. In this release, the PCoIP connection is available for both Wyse 5010 thin client with PCoIP (D10DP) and Wyse 5040 AIO thin client with PCoIP (5213) running ThinOS 8.2.

The RDS application over PCoIP is not supported in this version.

The RDS desktop protocol switch message dialog box is provided in this release. A typical user scenario is as follows:

    i.    Connect to the RDS desktop for the first time through protocol. For example, RDP.

    ii.    Disconnect the desktop.

    iii.    Connect to same RDS desktop through another protocol. For example, PCoIP.

The message dialog box is displayed and allows you with an option to continue.

The available options are:

- **Cancel** - You can end the PCoIP connection and connect the desktop in RDP again.
- **Log Out and Reconnect** - You connect to the desktop through PCoIP and the earlier session in RDP is logged out.
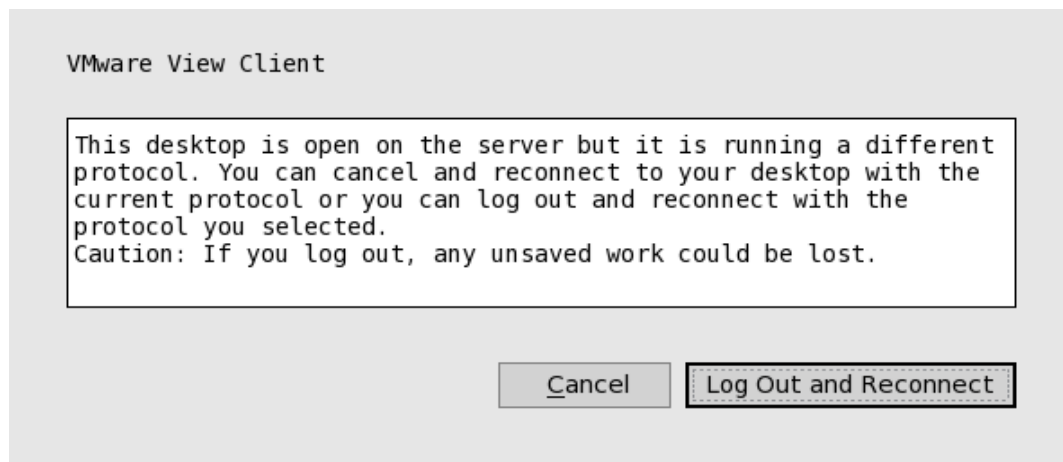


- **USB redirection RDS desktop through PCoIP**

This feature is not supported in this version. The same limitation applies to VMware Horizon View Linux client as well.
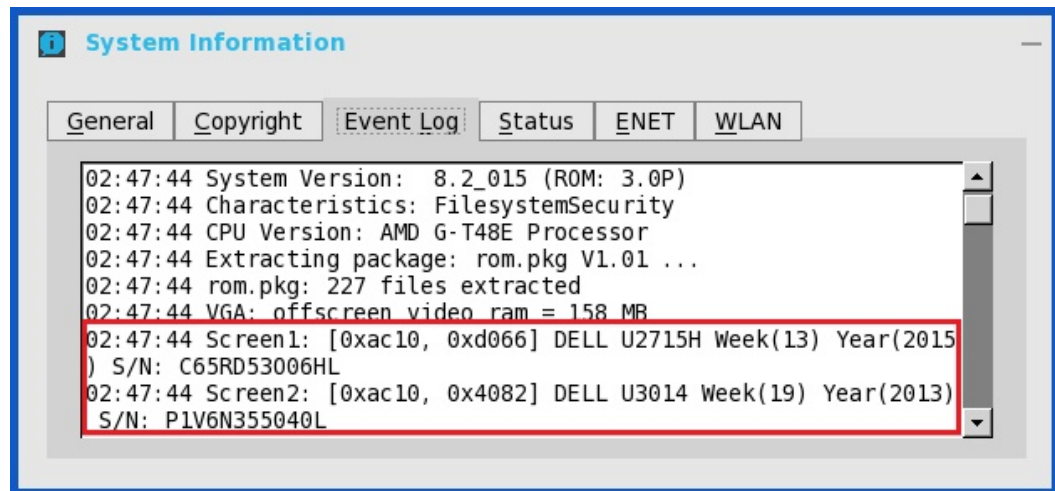
## 5. Removal of VOR from ThinOS 8.2

RDP VOR (H.264) was supported on ThinOS v8.0. However, this feature is not supported on ThinOS v8.2.

## 6. Details about Monitors displayed in Event Log and System Tools
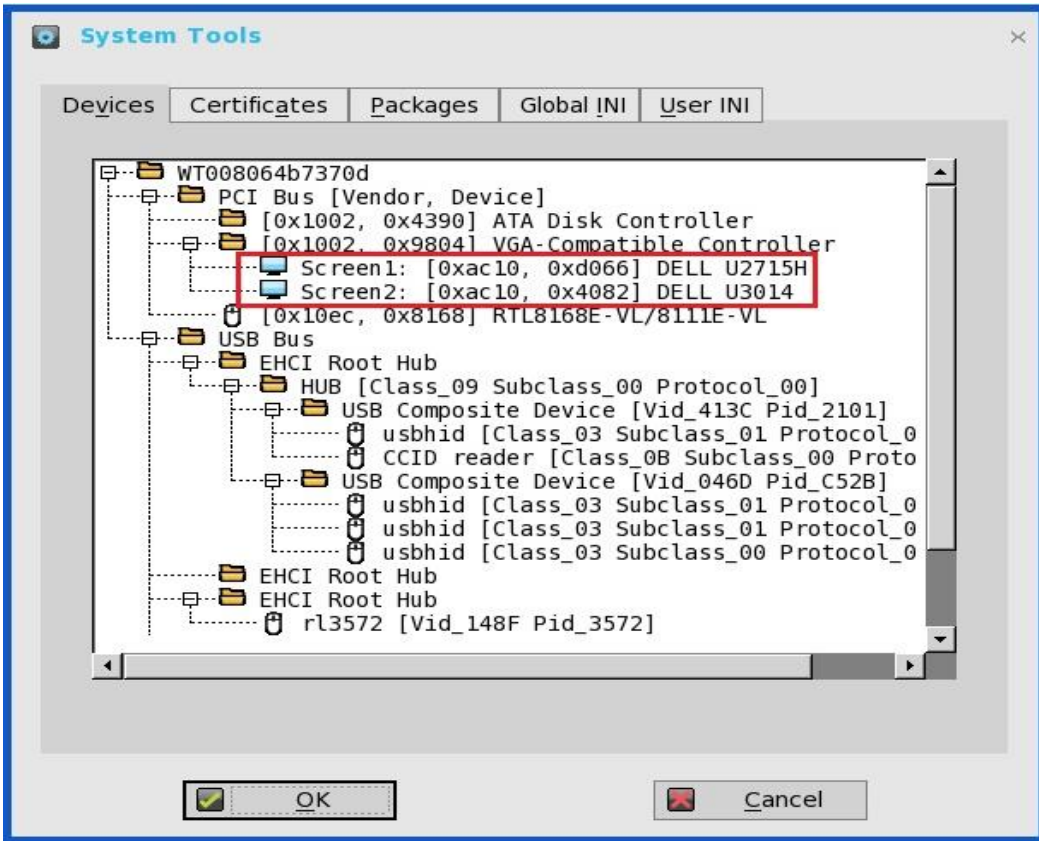
- **Event log**

    Following is the screenshot displaying the **Event Log** tab:



- **System tools**

    Following is the screenshot of the **System Tools** dialog box:

## 7. Default format of the USB camera

In this release, the default format of the USB camera is set to MJPEG.
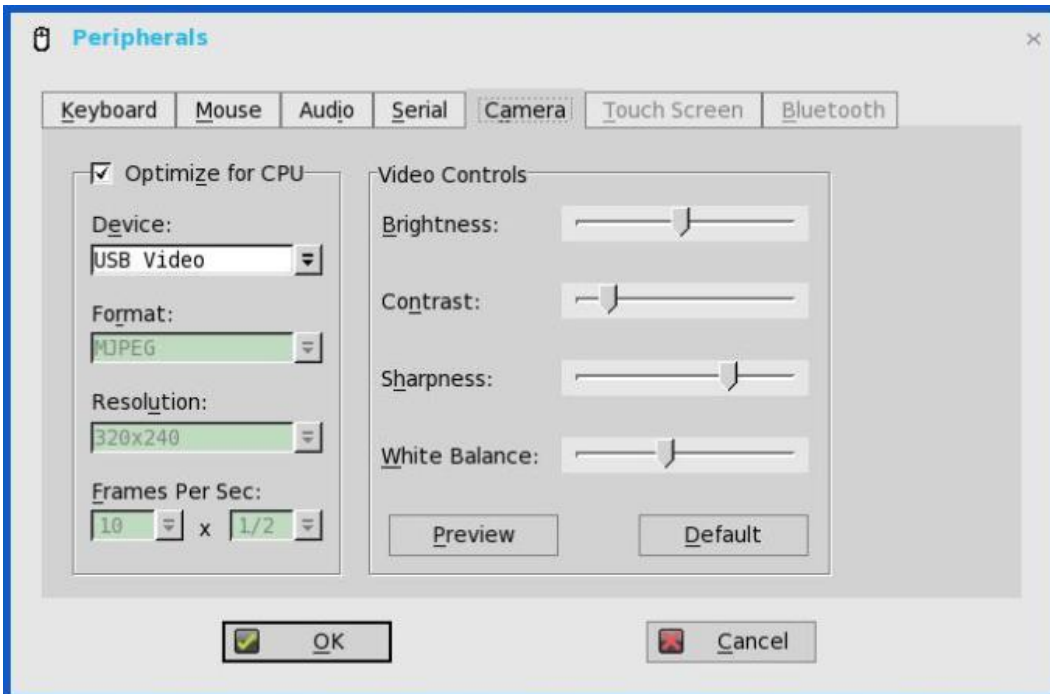
## 8. Transport Layer Security(TLS) Upgradation from v1.0 to v1.2

By default, the ThinOS client applies TLS 1.2 to secure any communication protocols/connection/application upon SSL/TLS in general and falls back to the previous SSL/TLS version, when negotiating with the server.

# INI Parameters

The ThinOS v8.2 release contains the following newly added INI parameters:

| Reference | Description |
|---|---|
| `SessionConfig=ICA`<br>`[desktopmode={`**`fullscreen,`**`window}]`<br>`[mapdisksunderz={yes,` **`no,`**`A-Z, a-z, A:-Z:, a:-z:}]`<br>`[DiskMapTo=a sequence of characters]`<br>`[OutBufCount=count]`<br>`[SysMenu={remote|`**`local`**`}]`<br>`[SessionReliability={yes,`**`no`**`}]`<br>`[WarnPopup={`**`yes`**`,no}]`<br>`[ondesktop={yes,`**`no`**`,all,none,desktops,applications}]`<br>`[ProgressiveDisplay]={yes,`**`no`**`}]`<br>`[BranchRepeater={yes,`**`no`**`}]`<br>`[DisableIcaPing={no,yes}]`<br>`[AudioQuality={`**`default`**`,high,medium,low}]`<br>`[USBRedirection={TCX,`**`ICA|`**`**`HDX`**`}]`<br>`[CGPParseMessageLen={`**`yes,`**`no}]`<br>`[ZLKeyboardMode={0,1,2}]`<br>`[ZLMouseMode={0,1,2}]`<br>`[SucConnTimeout=seconds]`<br>`[HDXFlashUseFlashRemoting={`<br>`Never,Always}]`<br>`[HDXFlashEnableServerSideCo`<br>`ntentFetching={Disabled,`<br>`Enabled}]`<br>`[EnableRTME={`**`Yes`**`,No}]` | Additional parameter for RTME control is added in `SessionConfig=ICA`.<br><br>Set ICA to establish the default settings for ICA sessions.<br>The option `desktopmode` can specify the display mode of ICA published desktop when the ICA PNAgent logon is used. The default is full screen mode for PNA desktop application.<br>**Note**: If `mapdisks` is set to yes, the `mapdisksunderz=yes` will take effect. `MapdisksUnderZ` option can specify a driver letter to replace the default driver letter Z.<br><br>For example, if `MapdisksUnderZ=X`, all disks will be under the drive X instead of drive Z. (CIR54875)<br>A sequence of characters is used by `DiskMapTo` such as RTNM. Each letter will be mapped to single disk in an order.<br><br>For example, R is mapped to first disk (in ThinOS, it will be D: /) and T is the second letter mapped to second disk (in ThinOS, it will be E: /).<br><br>Only a - y and A – Y are accepted, and all lower characters will be changed to uppercase. Other characters are skipped and duplicate characters are excluded.<br><br>For example, #GGefZzedAF1JaE is mapped to GEFDAJ. The number of disks mapped to Session depends on the number of valid letters provided. If no letter is provided, then all disks will be mapped to session with default driver letters. |

| Reference | Description |
|---|---|
|  | The option `OutBufCount` can specify the output buffer count of ICA server and client. The default value is 0x2c. In Citigroup network environment, it is set to 6. (CIR36822) |
|  | The option `SysMenu` can specify the system menu mode when you right-click the taskbar button of seamless window. If it is remote, then the system menu will be from remote server, otherwise it is from local server. The default value is local sys menu. (CIR37219) |
|  | The option `SessionReliability=yes` can enable session reliability. (CIR40218) |
|  | The option `WarnPopup=no` can disable the warning message when session reliability happens in order to decrease the administrative support calls. |
|  | The option `ondesktop=yes` can show all PNA/PNLite applications on the desktop. (CIR41291) From 7.0.0_31, there is a new logic for the ondesktop parameter. (CIR53288)<br><br>        1. If `AutoConnectList` is set in the PNLite Server statement, all connections configured in `AutoConnectList` parameter are displayed.<br>        2. The default value of the `ondesktop` parameter is no. It means that the property of `ondesktop` is controlled by the server. But the connections are always added into connection manager list and PNA menu list.<br>        3. In other cases except no, the connection is controlled by local. If it does not show on the desktop, then it is not added into the connection manager list and PNA menu list.<br>            all - same as yes, show all on desktop.<br>            none – do not show any on desktop.<br>            desktops - only show desktops.<br>            applications - only show applications. |

| Reference | Description |
|---|---|
| | Others are handled as an `ondesktop_list`. For example, if `ondesktop="word; excel"`, only the applications word and excel are displayed. The `ondesktop_list` also supports wildcard "*" like `AutoConnectList` parameter in PNLite Server. |
| | For example, if `ondesktop="*IE*"`, any application having the name with string `"IE"` (`"farm1:IE"`,`"farm2:IExplore"`) are displayed. |
| | The option `ProgressiveDisplay=yes`, can enable ICA session progressive display feature, which would result in lossy image or video quality, but faster and smoother viewing experience. Default value is set to no. |
| | The option `BranchRepeater=yes`, enables the branch repeater function including Reducer V3 and high throughput. |
| | The option `DisableIcaPing=yes`, can disable ICA session to send ping packet. Default value is set to no. |
| | The option `AudioQuality` can specify the audio quality of ICA sessions. For example, `SessionConfig=ICA AudioQuality=high`, that means for all default ICA connections, the connection audio quality is set to high. |
| | The option `USBRedirection` can specify the channel for redirection of USB devices. Default is HDX or ICA. |
| | This option is recommended to replace old setting `device=vusb type={TCX,HDX}`. |
| | The option `CGPParseMessageLen` can specify, if CGP parses the incoming stream before receiving the full package. By default, CGP parses the incoming stream. |

| Reference | Description |
|---|---|
| | The option `ZLKeyBoardMode/ZLMouseMode` can specify `SpeedScreen Latency Reduction (SLR)` feature's state. |
| | By default, `ZLKeyBoardMode` is set to 0, and `ZLMouseMode` is set to 2.<br>      0 - close<br>      1 - open<br>      2 - auto, turns on or turns off the SLR on depending on the current connection latency. |
| | The option `SucConnTimeout` enhances the seamless session share. When you log in the first time, and then log in again immediately for the second or third sessions, it waits for the time set with `SucConnTimeout` or the logon success to make sure the new applications are shared with the session you logged in first. |
| | The option `HDXFlashUseFlashRemoting` is used to enable HDX always or never. The default value is always, which means the HDX is always enabled. |
| | The option `HDXFlashEnableServerSideContentFetching` controls the server side content retrieval. The default value is disabled, which means disable server side fetching content is disabled. The value enabled is to enable this function. |
| | The option `EnableRTME` controls the start of RTME service. The default value is enabled. |

| Reference | Description |
|---|---|
| `LpdSpool={0-50}` | Specifies the size of spool to buffer all the data before sending them to the LPD printer. The range of value is from 0 to 10, that specifies 0 MB to 10 MB. If the specified value is above the range, then the value will be set to 5. The range of value is extended to 50. (CIR40359) In ThinOS 8.2_001 or later versions, the LPD data will be spooled to a file in ram disk instead of a buffer. So the value of the parameter will not be related to the spool size as before. |
| | If `LpdSpool=0,` the function is disabled, otherwise the function is enabled. |
| `Device=Wireless`<br>`[Mode={Infrastructure,`<br>`AdHoc}]`<br>`[SSID=ssid Channel={1-14}]`<br>`[WepKey={None,1-4}]`<br>`[Key1=k1]`<br>`[Key2=k2]`<br>`[Key3=k3]`<br>`[Key4=k4]`<br>`[Key1Enc=key1 encrypted]`<br>`[Key2Enc=key2 encrypted]`<br>`[Key3Enc=key3 encrypted]`<br>`[Key4Enc=key4 encrypted]`<br>`[RoamSensitive={high,`<br>`medium, low}]`<br>`[Algorithm={Open,`<br>`SharedKey}]`<br>`[DisableBand={None,2.4G,`<br>`5G}]`<br>`[PreferBand={None,2.4G,`<br>`5G}]`<br>`[Priority=ssid_list]`<br>`[DisableN={yes,no}]`<br>`[DisableWlan={yes,no,`<br>`EnetUp}]` | Defines wireless Ethernet device remotely and saves to the local NVRAM. All the parameters are not needed. |
| | For example, to get a key k1, you must define Keyk1 and not define Key2 to Key4. |
| | The encrypted key is of high priority. If both key# and key#Enc are configured, the key#Enc overwrites the key#. (# can be 1, 2, 3, 4） The `RoamSensitive` parameter is set to define the sensitive level of wireless roaming. In the following case, roaming daemon will be launched. high - signal lower than -60 dBm medium - signal lower than -70 dBm low - signal lower than -80dBm The `RoamSensitive` parameter is also used to enable wireless roaming. If it is not configured in INI file, roaming will not start even if the signal is lower than -80dbm, unless it totally loses wireless signal. The Algorithm parameter is set to specify authentication method of WEP between ThinOS and AP. If set to Open, the Open authentication will be selected. If set to `ShareKey,` the shared Key authentication will be selected. `Algorithm=open wepkey={1,2,3,4}` means open along with WEP for wireless connection (Access type in GUI will be Open (WEP)), while |

| Reference | Description |
|-----------|-------------|
|  | `Algorithm=open wepkey=none` means open. (Access type in GUI will be displayed as Open). The `DisableBand` is used to disable 2.4G or 5G 802.11 band. Default is None. The `PreferBand` is used to set the priority of wireless connection band, and select the 2.4G or 5G access point to connect. Default is None. The option Priority is used to set the priority of wireless profiles. The SSID list is separated by semicolon or comma and the priority is from high to low. The option `DisableN` is used to disable 802.11n mode. This option is enabled by default. The option `DisableWlan` is used to disable wireless connection. If you set `DisableWlan=EnetUp`, and the Ethernet is on when booting, the wireless connection is disabled.<br><br>For example,<br>`Device=Wireless Mode=Infrastructure`<br>`SSID=ThinIsIn`<br>`IEEE8021X=yes network=wireless`<br>`profile=ThinIsIn access=WPA2-ENT`<br>`eap=yes eaptype=EAP-PEAP peapeap=EAP-`<br>`MSCHAPV2`<br><br>`Device=Wireless Mode=Infrastructure`<br>`SSID=wtos_95 roamsensitive=high`<br>`IEEE8021X=yes network=wireless`<br>`profile=wtos_95 access=WPA2-ENT`<br>`eap=yes eaptype=EAP-PEAP peapeap=EAP-`<br>`MSCHAPV2`<br><br>`Device=Wireless Mode=Infrastructure`<br>`SSID=wtos_11n`<br>`IEEE8021X=yes network=wireless`<br>`profile=wtos_11n access=WPA2-PSK`<br>`wpa2pskpwd=2wsx3edc`<br><br>`Device=Wireless`<br>`Priority="wtos_11n,wtos_95,ThinIsIn"` |

| Reference | Description |
|---|---|
| AutoLoad={0, 1, 2, 101, 102, 201, 202} | Selects firmware update mode: |

Selects firmware update mode:

| Value | Action |
|---|---|
| 0 | Disable checking for image |
| 1 (default) | Enable firmware upgrade/downgrade process |
| 2 | Enable upgrade only |
| 101 | Enable firmware upgrade/downgrade process, but popup a message box with OK/Cancel button before the process with a note of the version to downgrade/upgrade, pop up a completion message box. |
| 102 | Enable firmware upgrade only, but popup a message box with OK/Cancel button before the process with a note of the version to upgrade, pop up a completion message box. |
| 201 | Enable firmware upgrade/downgrade process, but popup a message box with OK button before the process, pop up a completion message box. |
| 202 | Enable firmware upgrade only, but popup a message box with OK button before the process, pop up a completion message box. |

| Reference | Description | | | |
|---|---|---|---|---|
| `PRIVILEGE=[None,Low,`**`High`**`]`<br>`[LockDown={yes,`**`no`**`}]`<br>`[HideSysInfo={yes,`**`no`**`}]`<br>`[HidePPP={yes,`**`no`**`}]`<br>`[HidePN={yes,`**`no`**`}]`<br>`[HideConnectionManager={yes,`**`no`**`}]`<br>`{EnableNetworkTest={yes,`**`no`**`}}`<br>`[EnableTrace={yes,`**`no`**`}]`<br>`[ShowDisplaySettings={yes,`**`no`**`,`<br>`ddc-only}]`<br>`[EnableKeyboardMouseSettings={`<br>`yes,`**`no`**`}]` | | **High (default)** | **Low** | **None** |
| | HideSysInfo | Disable | Disable | Enable |
| | HidePPP | Disable | Enable | Disable |
| | HidePN | Enable | Enable | Enable |
| | HideConnectionManager | Enable | Enable | Enable |
| | EnableNetworkTest | Disable | Disable | Enable |

Additional reference column (continued):

`[KeepDHCPRequestIP={yes,`**`no`**`}]`
`[SuppressTaskBar={yes,`**`no`**`,auto}]`
`[EnablePrinterSettings={yes,`
`no}]`
`[CoreDump={`**`ide`**`,disabled]`
`[EnableNetworkSetup={yes,no}]`
`[DisableNetworkOptions={yes,no}]`
`[EnableSystemPreferences={yes,`
`no}]`
`[DisableTerminalName={yes,no}]`
`[DisableSerial={yes,no}]`
`[DisableRotate={yes,no}]`
`[DisableChangeDateTime={yes,`**`no`**`}]`

Description (continued):

If the optional `HideSysInfo=yes` is set, then the system Information will be disabled.

If `HidePPP` is specified, then Dialup Manager, PPPoE Manager and PPTP Manager will be disabled.

If `HidePN` is specified, then the PN Agent or PN Lite icon is not displayed on the taskbar.

If `HideConnectionManager` is specified, then the connection manager window is not displayed.
In `Privilege=none`, if you set HideConnectionManager=no, you will be able to see the connection manager. (CIR38832)

After v5.0.015, the value set by HideSysInfo, HidePPP, HidePN and HideConnectionManager are saved into nvram, if `Lockdown=yes` is specified.
If the optional `EnableNetworkTest=yes` is set with `Privilege=None`, the Network Test feature in the displayed window is enabled.
If the optional `EnableTrace` is set to yes, then additional two menu items will be added when you right click the mouse on desktop. But if the Privilege is not set to High, then the menu items are disabled in grey color.
If the optional `ShowDisplaySettings=yes` is set with `Privilege=None`, the display feature in displayed window is enabled.

| Reference | Description |
|---|---|
|  | If the optional `ShowDisplaySettings=ddc-only` is set, the display setting window only displays the DDC-relative radio boxes. The user defined display settings will be greyed out. (CIR40342) |
|  | If the optional `EnableKeyboardMouseSettings=yes` is set with `Privilege=None`, the configurations of keyboard and mouse in the Preference table will be enabled. |
|  | If the optional `EnablePrinterSettings=yes` is set with `Privilege=None`, the configurations of printer will be enabled. |
|  | The optional `KeepDHCPRequestIP=yes` will keep request IP from DHCP server, if it fails and will not invoke network setting window. (CIR39283) |
|  | The optional `SuppressTaskbar=yes` will hide the taskbar. The optional `SuppressTaskbar=auto` will automatically hide or display the taskbar when you click or move the mouse pointer away from the area of taskbar. |
|  | The optional `SuppressTaskbar=no` is set as default value and always displays taskbar. This setting in wnos.ini will be saved into nvram, if `EnableLocal` is set to yes in wnos.ini. |
|  | The optional `CoreDump=disabled` will disable core dump function. |
|  | If `PlatformConfig=ALL EnctypFS=yes` is configured, the core dump function is forced to be disabled. |
|  | By default, it is set to ide. When an issue occurs, a core dump is written to the IDE flash. |
|  | Then you reboot the client and the core dump can be uploaded to USB (that is, `/WTOS_coredump`). |
|  | If the value is set other than disabled and ide, the core dump is written to a network (that is, `/wnos/trace/coredump.$TN`). |
|  | $TN - Terminal Name |
|  | If the optional `EnableNetworkSetup=yes` is set with `Privilege={none,low,` the network setup is enabled. |

| Reference | Description |
|---|---|
| | If the optional `DisableNetworkOptions=yes` is set at the same time, the options table is disabled. If the optional `EnableSystemPreferences=yes` is set with `Privilege={none,low}`, the system preferences setup is enabled. |
| | If the optional `DisableTerminalName=yes` is set at the same time, the terminal name field is disabled. If the optional `DisableSerial=yes` is set with `Privilege={none,low}`, the serial table in peripherals setup is enabled. If the optional `DisableRotate=yes` is set, the rotate setting in display setup is disabled. This is only valid for C-class because of the C-class performance. If the optional `DisableChangeDateTime` is set, the function of changing date and time locally are disabled. |
| | For example, if you right-click the time label in taskbar, nothing is displayed. The **Change Date and Time** button in System Preference is not displayed. |
| `SessionConfig=ALL`<br>`[unmapprinters={yes,no}]`<br>`[unmapserials={yes,no}]`<br>`[smartcards={yes,no}]`<br>`[mapdisks={yes,no}]`<br>`[disablesound={yes,no,2}]`<br>`[unmapusb={yes,no}]`<br>`[DisksReadOnly={yes,no}`<br>`[MouseQueueTimer={0-99}]`<br>`[WyseVDA={yes,no}]`<br>`[WyseVDA_ENABLE_MMR={yes,no}]`<br>`[WyseVDA_ENABLE_USB={yes,no}]`<br>`[WyseVDA_PortRange=startPort,endPort]`<br>`[WyseVDAServerPort=serverPort]`<br>`[OffScreen={yes,no}]`<br>`[UnmapClipboard={yes,no}]`<br>`[DefaultColor={0,1,2}]` | Set ALL to establish the default settings for all sessions. If connection parameters are set to yes, the default settings are changed accordingly. The optional keyword `DisksReadOnly` specifies the mount mass storage as read-only. (CIR38166) The optional keyword `MouseQueueTimer` specifies the default queue timer of mouse event in ICA/RDP session. The unit is 1/100 second. It can adjust the bandwidth of network (CIR40532). If you set `Disablesound=2`, it disables sound at remote computer. Set `WyseVDA=yes` to enable Wyse Virtual Desktop accelerator for all RDP/ICA sessions. Default value is disabled. If `WyseVDA` is disabled, RDP/ICA sessions including MMR and USB, will not use WYSE VDA. Set `WyseVDA_ENABLE_MMR=no`, to disable TCX MMR over WyseVDA. Set `WyseVDA_ENABLE_USB=no`, to disable TCX USB over WyseVDA. |

| Reference | Description |
|---|---|
| [VUSB_DISKS={yes,**no**}]<br>[VUSB_AUDIO={yes,**no**}]<br>[VUSB_VIDEO={yes,**no**}]<br>[VUSB_PRINTER={yes,**no**}]<br>[FullScreen={yes,**no**}]<br>[Resolution={default,<br>vga_resolution}]<br>[DisableResetVM={yes,no}]<br>[FontSmoothing={yes,no}]<br>[AutoConnect={**yes**,no}]<br>[MultiMonitor={**yes**,no}]<br>[EnableImprivataVC={**yes**,no}]<br>[Locale=LocaleID] | Set `WyseVDA_PortRange` for ThinOS VDA client port range.<br><br>The port range must follow the rules mentioned here:<br>1. The port range is a list of start port and end port separated by ";" or ","<br>2. The both ports must be between 1 and 65535.<br>3. The end port must be greater than start port.<br>For example, `WyseVDA_PortRange=3000,3010`, the start port is 3000, and the end port is 3010.<br>Set `WyseVDAServerPort` for ThinOS VDA client. The default port is 3471, the port range must be from 1029 to 40000.<br>For example, `WyseVDAServerPort=3000`, specifies VDA server port to 3000, and client connects the VDA server with this port.<br>Set `OffScreen=yes`, to enable offscreen support for all sessions. Currently only ICA is supported. (CIR45080)<br><br>Set `UnmapClipboard=yes`, to disable clipboard redirection for all sessions. This setting in wnos.ini is saved into nvram, if `EnableLocal` is set to yes in wnos.ini.<br>The optional keyword `DefaultColor` specifies the default color depth of the session.<br><br>The options `VUSB_DISKS`, `VUSB_AUDIO`,`VUSB_VIDEO`,`VUSB_PRINTER` are specified, if these USB devices are redirected to the server using TCX Virtual USB or ICA/RDP USB redirection when USB redirection is enabled. By default, these devices are handled as local devices.<br><br>For example,<br>If you want to use USB disks as a network disk, you can set `SessionConfig=all mapdisks=yes VUSB_DISKS=no`.<br><br>If you want to use USB disks as server side device which are displayed in session device manager, you can set `SessionConfig=all mapdisks=no VUSB_DISKS=yes`. |

| Reference | Description |
|---|---|
|  | The option `FullScreen` specifies the default screen mode. |
|  | The option Resolution specifies the session resolution. It can be default or vga_resolution, for example, 640 x 480, 1024 x 768 and so on. For more information, refer to resolution in connection parameters. |
|  | Set `DisableResetVM=yes` to disable the Reset VM function. By default, this function is controlled by server side including VMview or Citrix PNA. |
|  | Set `FontSmoothing=no` to disable font smoothing option. By default, font smoothing is allowed. |
|  | Set `AutoConnect=no` to disable auto connection function. |
|  | Set `MultiMonitor=no` to disable multiple monitor layout function. The session has the same desktop width and height with local virtual desktop size, spanning across multiple monitors, if necessary. |
|  | If `EnableImprivataVC` is set to no, the Imprivata Virtual Channel is disabled. The user can use vusb redirect instead of Imprivata Virtual Channel mode to use the Rfideas or finger print device in session as server side remote device.<br>Set `Locale=LocaleID` to set locale in session to make some localization configure to work. For information about Locale ID, refer to link [msdn.microsoft.com/en-us/library/windows/desktop/dd318693(v=vs.85).aspx.](msdn.microsoft.com/en-us/library/windows/desktop/dd318693(v=vs.85).aspx.) (CIR74503) |
| `reboot={`**`yes,`**`no}` `time=hh:mm[-hh:mm]` `[Wday={Sunday,Monday,Tuesday,W ednesday,Thursday,Friday,Satur day}]` `[Idle=minutes]` | Schedules a reboot in given time. This is for CIR43015. If you set time as `hh:mm-hh:mm`, a random time during the configured time period is selected.<br>The option `Wday` specifies the week day of scheduled reboot.<br>The option `Idle` specifies the idle minutes. After the scheduled reboot time is reached, the system |

| Reference | Description |
|---|---|
| | reboots, if there is no session or the terminal is idle for the specified idle minutes. If the session is still active, it will delay to reboot till the idle time is reached or log off the sessions.<br>For example,<br>Set `Reboot=yes time=20:30`, the unit reboots on local time 20:30.<br>Set `Reboot=yes time=20:30-4:30`, the unit reboots on random time through 20:30 to 4:30.<br>Set `Reboot=yes time=23:00 Wday=Friday,Monday,` the unit reboots on local time 23:00 of Friday and Monday.<br>Set `Reboot=yes time=1:00 Idle=10`, the unit reboots on 1:00, if there are no sessions. If there is any active session, then the system reboots when the unit is idle for 10 minutes or logs off from the sessions. |
| `DHCPOptionsRemap={yes,no}`<br>`[DisableOption12={yes,no}]`<br>`[FileServer={128-254}]`<br>`[RootPath={128-254}]`<br>`[FtpUserName={128-254}]`<br>`[FtpPassWord={128-254}]`<br>`[RapportServer={128-254}]`<br>`[RapportPort={128-254}]`<br>`[PnliteServer={128-254}]`<br>`[DomainList={128-254}]`<br>`[VDIBroker={128-254}]`<br>`[RapportSecurePort={128-254}]`<br>`[Discover={yes,no}]` | If `DHCPOptionsRemap=yes`, the following parameters can be set. The value must be between 128 and 254. Each value must be different. These options are used to configure DHCP server tags for ThinOS booting. The option `DisableOption12` is configured even if the option tag 12 in DHCP is accepted or not. By default, the DHCP option 12 sets the hostname and domain name of the terminal. For example, if the information of option 12 is terminal name.wyse.com, then the terminal name is set as terminal name and the domain name is set as wyse.com.<br><br>If the setting of `DisableOption12` is different from the value in NVRAM, the system automatically reboots to make the value valid. (CIR36891) `RapportSecurePort` specifies the HTTPS port of WDM server. It is in 6.3 to support WDM 4.7.<br>If `Discover=yes`, the device fetches Wyse DHCP |

| Reference | Description |
|---|---|
|  | options from DHCP server, otherwise, it prevents the device from fetching those information. Default value of Discover is yes. If the device obtains FileServer/WDMServer information through the DHCP server, then the associate UI is protected. |
| WDMService={**yes,**no}<br>[DHCPinform={yes,**no**}]<br>[DNSLookup={yes,**no**}]<br>[QuickMode={yes,no}]<br>[Discover={**yes,**no}] | To disable WDM, the value is set to no. The default is yes.<br>You can discover the WDM server using the following options:<br>1. DHCP option tag values received from standard or WDM proxy DHCP service for vendor class RTIAgent.<br>2. DNS service location record _wdmserver._tcp<br>3. DNS host name lookup wdmserver<br>When WDMService=yes, setting DHCPinform=yes will do #1, and setting DNSLookup=yes will do #2 and #3.<br><br>If QuickMode=yes is specified, the rapport agent does not block any other process during ThinOS boot up and increases the boot time of ThinOS.<br><br>**Caution**: If file server is changed by WDM server, the device reboots automatically to make sure all the settings from WDM server takes effect. Default value is yes.<br><br>If Discover=yes is specified, the rapport discovers the WDM server information from the DHCP option tag, DNS service location record and DNS host name. If WDM server is discovered, WDM server UI is protected on device. Default value is yes. |

| Reference | Description |
|---|---|
| `RapportDisable={yes,`**`no`**`}`<br>`[DHCPinform={yes,`**`no`**`}]`<br>`[DNSLookup={yes,`**`no`**`}]`<br>`[QuickMode={`**`yes`**`,no}]`<br>`[Discover={`**`yes`**`,no}]` | If this option is set to yes, the Rapport agent is disabled.<br>You can discover the WDM server using the following options:<br>1. DHCP option tag values received from standard or WDM proxy DHCP service for vendor class RTIAgent.<br>2. DNS service location record `_wdmserver._tcp`<br>3. DNS host name lookup `wdmserver`.<br>When `RapportDisable=no`, setting `DHCPinform=yes` will do #1, and setting `DNSLookup=yes` will do #2 and #3.<br>If `QuickMode=yes` is specified, then the rapport agent does not block any other process during ThinOS boot up and increases the boot time of ThinOS.<br><br>**Caution**: If `file server` is changed by WDM server, the device reboots automatically to make sure all settings from WDM server takes effect. Default value is yes.<br>If `Discover=yes` is specified, the rapport discovers the WDM server information from the DHCP option tag, DNS service location record and DNS host name. If WDM server is discovered, the WDM server UI is protected on device. Default value is yes. |
| `Device=camera`<br>`[format=raw]`<br>`[width={camera supported width}]`<br>`[height={camera supported height}]`<br>`[fps={camera supported fps}]`<br>`[samplerate={0,1,2,3,4,5}]`<br>`[optimize={yes,`**`no`**`}]`<br>`[Disable={yes,`**`no`**`}]` | Specifies the ThinOS local camera settings.<br>For format, `raw` video type is only supported. Hence `format=raw`.<br>Parameter `width` specifies the width of resolution that local camera supports.<br>Parameter `height` specifies the height of resolution that local camera supports.<br>Parameter `fps` specifies the fps (frame per second) of resolution that local camera supports.<br>Parameter `Samplerate` specifies the software level sample rate |

| Reference | Description |
|---|---|
| | based on fps. So the frame per second for camera actually equals to the multiplication of value of fps and samplerate.<br><br>0 stands for 1/1   1 stands for 1/2   2 stands for 1/3<br>3 stands for 1/4   4 stands for 1/5   5 stands for 1/6<br>For `optimize`,<br>When you specify `optimize=yes`, 320 x 240 @ 10 fps is adopted for local camera irrespective of what you set for `format`, `width`, `height`, `fps`, in condition that the local camera supports those setting. When you specify `optimize=yes`, and the local camera does not support 320 x 240 @10 fps, then an error log is displayed in the **Event Log** tab of ThinOS.<br>When you specify `optimize=no`, or by default, the settings for `format`, `width`, `height`, `fps` takes effect, if they are valid for local camera.<br><br>When you specify `Disable=yes`, the device is disabled. For example, the **Camera** tab in peripherals setting and the **Exclude video devices** option in Global Connection settings are disabled. So the device cannot be accessed at local and remote sessions. |
| `WDMFlash=flash_size` | The specified value is saved into NVRAM, and then reports to the WDM server. This statement ensures that all the units would function with DDC regardless of flash size.<br><br>This statement is valid for all platforms and replaces the previous S10WDMFlash statement. |
| `Community=community`<br>`[Encrypt={yes,`**`no`**`}]` | Specifies the SNMP community name. A string up to 31 characters is valid. After you specify the community name, it is saved in the non-volatile memory. |

| Reference | Description |
|---|---|
| | If you set `encrypt=yes`, an encrypted string is used as a community name. You must use the Windows Password_Gen tool or built-in tool to generate the encrypted string. |
| `SignOn={`**`yes,`**`no,NTLM}` `[MaxConnect=max]` `[ConnectionManager={maximize,` **`minimize,`** ` hide}]` `[EnableOK={yes,`**`no`**`}]` `[DisableGuest={yes,`**`no`**`}]` `[DisablePassword={yes,`**`no`**`}]` `[LastUserName={yes,`**`no`**`}]` `[RequireSmartCard={yes,`**`no`**`}]` `[SCRemovalBehavior= {-1,`**`0`**`,1}]` `[SaveLastDomainUser={yes,no,` `user,domain}]` `[DefaultINI=filename]` `[IconGroupStyle={default,` `folder]` `[IconGroupLayout={`**`Vertical,`** `Horizontal}]` `[PasswordVariables={yes,`**`no`**`}]` `[LockTerminal={`**`yes,`**`no}]` `[ExpireTime={1-480}]` `[UnlockRefresh={yes,no}]` `[SCShowCNName]={yes,`**`no`**`}]` `[SCSecurePINEntry={yes,`**`no`**`}]` `[AutoConnectTimeout={10-300}]` `[DisableEditDomain={yes,no}]` `[AdGroupPrefix=adgrpnameprefix` `]` | Specifies yes/no choice to enable the sign-on process. Default is set to yes. If set to NTLM, you can authenticate the NTLM protocol. You must be a domain user and the same username.ini must be available in the `ftp://~/wnos/ini/directory`.

A WINS server is required by NTLM protocol. The optional keyword `MaxConnect` specifies the maximum number of connections that are allowed in the wnos.ini and username.ini together. The range allowed for `max` is 100 to 2000. If the value given is greater than 2000, then the value is set to 2000. If the value is lesser than 100, then the value is set to 100. The default maximum value is 216 entries. (CIR37285)

The option keyword `ConnectionManager` specifies the state of connection manager during sign-on. The following optional keywords are valid: The optional keyword `EnableOK` specifies to display **OK** and **Cancel** button in sign on window. The optional keyword `AutoConnectTimeout` sets the timeout for auto connect published application. The range is 10 seconds to 300 seconds. The default value is 30 seconds. The optional keyword `DisableGuest` specifies whether the guest sign on is disabled or not. The optional keyword `DisablePassword` is set to disable password box and new password check box in the sign on window. The optional keyword `LastUserName` is set to display the last sign-on username after the user logs off. |

| Reference | Description |
|---|---|
| | The optional keyword `RequireSmartCard` is specified to forcefully logon using smartcard. The option keyword `SaveLastDomainUser` is specified to save the username and domain into NVRAM after you sign on successfully. During the next reboot, B87 username and domain saved in the NVRAM is displayed in sign on server as default username and domain, if you do not set `DefaultUser` in wnos.ini. |
| | The size of domain\username is limited to 32 characters. If input domain\username size is greater than 32 characters, it will be shortened and then saved into NVRAM. If you set `SaveLastDomainUser=user`, then only the username is saved into NVRAM. If you set `SaveLastDomainUser=domain`, then only the domain name is saved into NVRAM. (CIR57726) The optional keyword `SCRemovalBehavior` configures the actions after the smart card is plugged out from the terminal. The optional keyword `DefaultINI` configures a file name available in the default folder of the username ini files. If the `{username}.ini` is not available, then this file is loaded as default. (CIR51869) The optional keyword `IconGroupStyle` configures the icon group style on desktop. PNAgent published applications can be configured using client folder in PNA server. If you set `IconGroupStyle=folder,` then the PNAgent published applications which are specified to display on desktop will display with the folder. When you click the folder icon, the subfolder or applications in this folder is displayed on desktop. |

| Reference | Description |
|-----------|-------------|
|  | In this case, there is an **Up to 1 Level** icon on the upper pane of the desktop. You can click this icon to navigate to the upper level folder contents. (CIR54333) |
|  | The optional keyword `IconGroupLayout` configures the alignment of the icon group on desktop. The default alignment is vertical. |
|  | The optional keyword `PasswordVariables` is specified to support variable mapping ($TN, $UN and so on) for password. |
|  | The optional keyword `LockTerminal` is used to lock the terminal. The default value is yes. If you set `LockTerminal=no`, then the function of locking the terminal is not enabled.  You cannot lock the terminal by either right-clicking on the desktop or clicking the Shutdown option -> Lock Terminal. Also, this parameter disables the lock terminal, even if you set `ScreenSaver=_minutes_ LockTerminal=yes`. |
|  | The option keyword `ExpireTime` configures the expiration time. The range is one minute to 480 minutes. The default value is zero which means no expiration. |
|  | If the value is greater than 480, then the value is set to 480. If the value is lesser than 0, then the value is set to 0. |
|  | After you log in or start a connection, you can start counting the expiration time. After the expiration time is reached, and you start a session (click icon, menu or connection manager), then a message box is displayed allowing you to enter the password. But the open sessions will still remain open. The session will start, if the password is same as the original sign on password. After you lock and unlock the terminal using password, start counting the sign on expiration time again. |

| Reference | Description |
|---|---|
| | The optional keyword `UnlockRefresh` specifies the action after you unlock the system in classic mode. If you set the default value as yes, when unlocking the system, it will refresh the PNA list to verify the password. To disable the refresh activity, you must set the value to no. (CIR63666)<br><br>You can set the optional keyword `SCShowCNName` to yes, to forcefully use the CN name of the certificate as the user name while using the smartcard sign on.<br><br>By default, you can use the UPN name as the user name.<br>You can set the optional keyword `SCSecurePINEntry` to yes, to enable the Secure PIN entry function for pkcs15 card with Cherry keyboard. The default value is no.<br>You can set the optional keyword `DisableEditDomain` to yes to stop typing in the domain box manually. Typing the character @ or \ as the format domain\user and user@domain in the username box are not allowed.<br>The option `AdGroupPreFix` is only valid, when you configure `SignOn=NTLM`. If the option is configured, then the thin client will verify all the AD group names that belongs to the sign on user to get the first group name so that the prefix matches `adgrpnameprefix`, and load `adgroup/"the_whole_ad_group_name".ini`, if the configuration file exists, before loading the user specific INI. For example, if the sign on user is user_111 in a domain, and the user_111 belongs to group domain user and `group tc_grp1_ad`, then the option is configured as `AdGroupPrefix=tc_grp1`. If the configuration file `adgroup/tc_grp1_ad.ini` is available, it is loaded. |

| Reference | Description | |
| --- | --- | --- |
| Keyboard language- Baltic language support. | **Language** | **INI code** |
| | English (United States) | Us |
| | Estonian (Estonia) | Et_ee |
| | Finnish | Fi |
| | French (Belgian) | Fr_be |
| | French (Belgian Comma) | Fr_be_c |
| | French (Canadian) | Fr_ca |
| | French (France) | Fr |
| | French (Swiss) | Fr_sf |
| | German | De |
| | German (IBM) | De_ibm |
| | German (Swiss) | De_sg |
| | Greek | El |
| | Hungarian | Hu |
| | Icelandic | Is |
| | Italian | It |
| | Latvian (Latvia) | lv_lv |
| | Latvian (Qwerty) | lv_lv_q |
| | Lithuanian (Standard) | lt_lt |
| | Lithuanian (IBM) | lt_lt_i |
| | Lithuanian (MS) | lt_lt_m |

| Reference | Description | |
|---|---|---|
| | **Language** | **INI code** |
| | Italian (Swiss) | It142 |
| | Japanese | Jp |
| | Japanese_109a | Jp_109a |
| FastDisconnect={yes,**no**,Signoff<br>}[CtrlKey={yes,no}][AltKey={ye<br>s,no}]<br>[PowerButton=signoff] | Set to yes, press F12 (default) or the key defined in `FastDiconnectKey=` statement will close the active window of the session. If the active window is a seamless window, it will just close it. If the window is not a seamless window, the session will be disconnected. If the option `CtrlKey` and/or `AltKey` is set to yes, the function key should be combined with Ctrl key and/or Alt key.<br>For PCoIP session, if you press **Ctrl+Alt+F12** key combination, it disconnects the session unless `FastDisconnect=no` is configured. This combined disconnect key is compatible with other platforms, for example, P25, Linux and so on.<br>Set to Signoff, press F12 (default) or the key defined in `FastDisconnectKey=` statement will disconnect all sessions and return to sign on window.<br>Set option `PowerButton=signoff`, if the unit has signed on, press power button of the unit will disconnect all sessions and return to logon window, otherwise shutdown the unit as normal. | |
| FastDisconnectKey={F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, Pause/Break} | Set the disconnect key that can close the active window from the session. | |

For detailed information about new INI parameters, see the *Dell Wyse ThinOS 8.2 INI Guide*.

# Fixed Issues

Since the previous **HF release 8.1_029**, the following issues are fixed in this release:

| CIR | Description |
| --- | --- |
| CIR 85967 | Ability for Wireless connection to be disabled when a wired connection is present. |
| CIR 85968 | Client does not reboot automatically when updating from 8.0_512 to 8.2_002.08. |
| CIR 83710 | eID Card Reader error. |
| CIR 86954 | WTOS C10LE 8.1_029 - Need assistance in configuring the device using Dell vWorkspace. |
| CIR 86753 | Xenith Pro 2 does not reboot when `Shutdowncounter=0` |
| CIR 86887 | ThinOS - 5010 /w PCoIP - PCoIP - Power Button when pressed will shut down the unit. |
| CIR 86700 | Sub parameter `mute=1` does not work. |
| CIR 86732 | D10D - Unable to use right-click menu on XA 6.5 applications. |
| CIR 85597/ CIR 86190 | Need to support new Gemalto smartcard IdPrime MD 830. |
| CIR 86500 | ThinOS: 8.1_027: DHCP timeout results in Network Setup dialog being displayed. |
| CIR 86341 | ThinOS 8.1: Network setup is invoked. |
| CIR 86319 | Issues with DHCP after upgrade to 8.1_027. |
| CIR 86354 | Cannot use `EnableCacheINI` function on ThinOS 8.1_027, if the FTP Server IP is removed. |
| CIR 86501 | The blue Citrix Password Manager icon is not available. |
| CIR 86338 | Citrix beacons are not working as expected. |
| CIR 86523 | T00X: `AccountSelfService=no` does not work. |
| CIR 86495 | ThinOS: 8.1_027: Admin mode: ThinOS Logon prompt does not go away. |
| CIR 86380 | WIFI connection does not accept static IP on ThinOS 8.1_027. |
| CIR 86268 | Unable to enter a static IP for wireless connection on 8.1_027. |
| CIR 86049 | Volume issue on X10J. |
| CIR 86288 | Xenith/Xenith 2 needs encrypt SNMP Community Name support PART-2. |
| CIR 80775 | Xenith/Xenith2 needs encrypt SNMP Community Name support. |
| CIR 85478 | Smart Card does not read when it is unplugged in 8.1_027. |

| CIR | Description |
| --- | --- |
| CIR 85887 | Caradigm-Badge tap does not unlock the user's locked session. |
| CIR 85787 | Caradigm-Current user notification is displayed. |
| CIR 86218 | ThinOS - 5212 AIO - RDP - Access to Troubleshooting Menu when you set `Privilege=None`. |
| CIR 82992 | T10 hotkey pass through not working, especially with Windows key. |
| CIR 86036 | 5212/5213 - Need an INI parameter to disable the web cam. |
| CIR 86159 | ThinOS/Select Group and Imprivata login loop - flashing screen is seen. |
| CIR 85279 | Citrix XA pre-launch feature fails when having a desktop published. |
| CIR 85862 | Application Path field is too small. |
| CIR 74503 | Specifying location and keyboard layout for remote spell check. |
| CIR 86003 | Connection Description and Host Name receives different values. |
| CIR 85901 | Wireless Authentication Issue - ThinOS PD10_wnos 8.2_002.08 pre-release code. |
| CIR 85812 | Smartcard logon cause core dump, if user has more than 26 Active Directory security groups. |
| CIR 85257 | ThinOS: 8.0.512: Enable/Disable Time updates on the taskbar. |
| CIR 84008 | 2862944: ThinOS 5212 8.0_510 - popping sound comes from internal speaker while the client is in sleep mode. |
| CIR 84186 | D10D ThinOS - 8.0_510 - ThinOS traffic is forced to default port 16500. |
| CIR 85820 | Customer wants to have a way to disable Wi Fi automatically, if device is connected to wired connection. |
| CIR 85400 | ThinOS - 5212 AIO - ICA – Print Screen does not work in Meditech application. |
| CIR 85503 | ThinOS and smart cards from Oberthur. |
| CIR 85803 | rDNS not working on 8.1_027. |
| CIR 85923 | Images for screen saver do not load using WDM as File Server. |
| CIR 85716 | ThinOS D10D 8.0_510 and 512 - Intermittent error code 110 when connected through RDP to 2008 R2. |
| CIR 85441 | 5213 Wi fi model cannot switch between SSID when the previous wireless connection is lost. |

| CIR | Description |
|---|---|
| CIR 82418 | Locked Session Tap over not working. |
| CIR 85583 | T10/ C10 8.0_512 Citrix Published App connection randomly displays an error message. |
| CIR 85354 | ePad device is not recognized on ThinOS 8.0_512 Hotfix. |
| CIR 85642 | ThinOS cannot connect to WIN10 VM without NLA enabled. |
| CIR 85662 | ThinOS cannot display list of vWorkspace applications when Broker proxy is on same port as RDP/ WA proxy. |
| CIR 85662 | ThinOS cannot display list of vWorkspace apps when Broker proxy is on same port as RDP / WA proxy. |
| CIR 85572 | When opening some audio files (No video), the unit stops responding sometimes. |
| CIR 85531 | ThinOS Z10D 8.0_512 - Desktop icons are not displayed (Intermittently). |
| CIR 85205 | Local cached configuration 'Mirror Server' is removed after you reboot twice from VNC when WDM is unavailable. |
| CIR 85336 | Network Auto-negotiation is not working with four wire cable on PoE switch. |
| CIR 83835 | Caradigm SSO support for D10DP with View Horizon. |

# Important Notes

## Peripherals List

The following peripheral devices are supported on ThinOS 8.2:

| Keyboard/mouse |
| --- |
| DELL Wireless Keyboard/Mouse KM632 |
| DELL Wireless Keyboard/Mouse KM714 |
| Dell Mouse MS111-P |
| Dell Keyboard KB113p |
| Dell Keyboard KB212-B |
| Dell Keyboard KB522 |
| Dell Keyboard KB813 (Smartcard reader) |
| Dell Keyboard SK-3205 (Smartcard reader) |
| Think pad Compact Bluetooth Keyboard |
| Dell Laser USB 6-Button Mouse |
| Dell Wireless Mouse – WM324 |
| Dell Optical Wireless Mouse – WM123 |
| Dell Wireless Bluetooth Travel Mouse – WM524 |
| Logitech K480 Bluetooth keyboard |
| Logitech Media Keyboard K200 |
| Logitech T400 Zone Touch Mouse |
| Microsoft ARC Mouse 1350 |
| Logitech M557 Bluetooth Mouse |

| USB Webcam |
| --- |
| Logitech C920 HD Pro Webcam |
| Logitech C930e HD Webcam |
| Logitech C270 HD Webcam |
| Logitech HD 720P |
| Logitech BCC950 Conference Cam |
| Logitech HD Webcam C310 |
| Logitech C525 HD Webcam |
| Logitech USB Webcam 9000 |
| Microsoft LifeCam 3.0 Cinema |
| Microsoft LifeCam HD-3000 |

| Printer |
| --- |
| Dell B1265dnf Multifunction Laser Printer |
| Dell B2360dn Laser Printer |
| HP Laser Jet P2055D |

| Printer |
| --- |
| HP Laser Jet P2035 |
| **Mobile Phone** |
| Samsung Galaxy Note 4 |
| iPhone 6 |
| HTC one-XL |
| **USB Disk** |
| SanDisk Extreme USB 3.0 Flash Drive 16 GB |
| SanDisk Cruzer 16 GB |
| SanDisk Extreme USB 3.0 16 GB |
| SanDisk Cruzer 8GB |
| Kingston DataTraveler 100 G3 |
| Kingston DataTraveler G3 8GB |
| ADATA S107 USB 3.0 16 GB |
| ADATA S107/ 16 GB |
| ADATA UV150 USB 3.0 16 GB |
| **Headset** |
| Jabra Speak 510 MS, Bluetooth |
| Jabra MOTION UC+ MS / LINK 360, Bluetooth with Lync |
| Jabra SUPREME UC MS /LINK 360, Bluetooth |
| Jabra BIZ 2400 Duo USB MS |
| Jabra PRO 9470 NCSA, Bluetooth |
| Jabra PRO 935 MS |
| Jabra UC Voice 550 MS Duo |
| Jabra BIZ 2300 Duo, USB, MS |
| Jabra EVOLVE 65 MS Stereo |
| Plantronics BLACKWIRE C310-M, Lync |
| Plantronics BLACKWIRE C420 |
| Plantronics BLACKWIRE C435-M |
| Plantronics BLACKWIRE C520 |
| Plantronics BLACKWIRE C610 |
| Plantronics BLACKWIRE C710, Bluetooth |
| Plantronics Voyager Legend UC B235 NA, Bluetooth |
| Plantronics DA45 |
| Plantronics SupraPlus HW251N |
| Plantronics W440,SAVI,CONVERTIBLE,DECT 6.0(D100) |
| Plantronics Calisto P240 D1K3 USB handset |
| Plantronics Calisto P820-M |

| Headset |
| --- |
| Plantronics Calisto 620-M, Bluetooth |
| Plantronics USB DSP DA40(B) |
| Plantronics 655 DSP |
| Plantronics List Savi 400 series |
| POLYCOM Desk phone CX300 |
| NORTEL Mobile USB headset adapter N0071606   NTEX14MAE6 |

| Monitor |
| --- |
| Dell ST24 (1920 x 1080) |
| Dell P2714Hc (1920 x 1080) |
| Dell E2215HVf (1920 x 1080) |
| Dell UZ2715Hb (1920 x 1080) |
| Dell S2415H (1920 x 1080) |
| Dell U2415 (1920 x 1200) |
| Dell U2713H (2560 x 1400) |
| Dell U2913 WM (2560 x 1080) |
| Dell U2713Hb (2560 x 1440) |
| Dell U2713HM (2560 x 1440) |
| Dell 3008WFP (2560 x 1600) |
| Dell U3014 (2560 x 1600) |
| ViewSonic VX2433wm (1920 x 1080) |

| DVD ROM |
| --- |
| BENQ DVD Drive |
| BUFFALO DVD RW |
| SAMSUNG Portable DVD Writer SE-208 |

| SPEECHMIKE PREMIUM |
| --- |
| LFH3500/00 |
| LFH3610/00 |
| LFH3200/00 |
| LFH3210/00 |

| Smartcard Reader |
| --- |
| OMNIKEY OK CardMan3121 |
| HID OMNIKEY 3021 |
| Cherry Keyboard RS 6700 with smart card |

| Smartcard |
| --- |
| Etoken 72K (USB key) |
| Etoken 72K no java |
| Etoken 72K java |

| Smartcard |
| --- |
| Etoken 64K (USB key) |
| ActivIdentity V2 |
| ActivIdentity V1 |
| Gemalto .net V2 |
| Gemalto .net V2+ |
| Cryptovision (Startcus 3.0) |
| Cryptovision (Startcus 3.2) |
| SafeSign  (Startcus 3.0) |
| **TouchScreen** |
| Elo Touch Screen Serial |

# Known Issues

## For Bluetooth

**Note**: The following issues will not be fixed in this release.

1. More than two Bluetooth mouse devices connected to ThinOS with more than two other Bluetooth devices may cause low performance of Bluetooth connectivity.

   Workaround: Dell recommends using one mouse, one keyboard in ThinOS with Bluetooth connection.

2. The Bluetooth device name displays N/A sometimes.

   Workaround: Remove this device from the list and rescan.

3. The Bluetooth device status is not refreshed sometimes when wireless chipset 7260 is shut down.

   Workaround: Close the ThinOS Bluetooth window and re-open it. Now, the status will be updated.

4. Only supports volume button and mute button on Bluetooth headset.

5. The performance of Bluetooth feature is low during wireless connection.

## For RTME

1. RTME operation system on ThinOS is displayed as Linux.
2. RTME audio device on ThinOS shows only one device from ThinOS local playback device.  It can actually work the way they are configured at ThinOS local playback device and record device. The RTME audio device for ringtone is limited to use ThinOS local playback device.
3. The RTME 1.8 feature on ThinOS does not work with other versions of HDX RealTime connector because of a known Citrix limitation.
4. If you change the audio device during an RTME call, the audio input or output might stop responding.
5. Using similar hardwares such as Dx0D, ThinOS, Linux and Windows (D90D7) produces similar video frame rate (20-30) and video resolution (320-400). It produces better video quality using laptop or PC because of better CPU capability.
6. In a video conference call, when different user is speaking, the on-screen video switches to the active user, but takes a few seconds to switch over.