Honeywell

Wyse R10L Remote Peripheral Solution Installation Instructions

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1 Introduction

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1.1 About this document

Revision history

Version	Date	Description
A	March, 2012	Initial release
B	October 2013	Updated Troubleshooting or servicing section to include *Replacing failed thin clients*.

1.1.1 Purpose

This document contains instructions for trained technicians to install the Wyse R10L Remote Peripheral Solution (RPS) with dual screen and thin client capability on a desktop station.

In addition, this document contains the procedures to install the Wyse R10L RPS on the Dell PWS 490, Dell T5400, Dell T5500, Dell T3500, and Dell R5500 host systems.

1.1.2 References

The following table lists the documents that are required as reference when installing or operating the Wyse R10L RPS.

Document Title	Document ID
Experion Virtualization Planning and Implementation Guide	EPDOC-X147-en-A
Configuration Rules, Wyse R10L Thin Client Dual Screen Remote Peripheral Solution	51155445

1.1.3 Supported nodes

Wyse R10L RPS can be installed on the following Experion R3xx.x, R4xx.x, and TPS R4xx.x supported nodes.

- Experion Flex station (ES-F)
- Experion Console station (ES-C)
- Experion Console station – TPN (ES-T)

TPS GUS R4xx.x is the supported TPS node.

1.1.4 Supported platforms

The following table lists the Dell precision host systems that are compatible with Wyse R10L RPS for Experion R3xx.x, TPS R4xx.x, and Experion R4xx.x.

Platforms	Experion R3xx.x	Experion R4xx.x	TPS R4xx.x
Dell PWS 490	Supported	Supported	Supported
Dell T5400	Supported	Supported	Supported
Dell R5500	Supported	Supported	Supported
Dell T5500	Supported	Supported	Supported
Dell T3500	Supported	Supported	Not supported

1.1.5 Abbreviations

The following table lists the various acronyms and abbreviations used in this document.

Term	Definition
BIOS	Basic Input/Output System is the firmware code on the motherboard of a computer.
DB-9	A 9-pin D-subminiature or D-type connector used for servers and PCs.
DDC	Display Data Channel is a collection of digital communication protocols. These protocols are used for communicating the display modes (supported by the display of a computer) to the graphics adapter. It also enables the computer to adjust its brightness, contrast, and other monitor parameters.
Desktop station	A desktop station is a setup where the host system (including the keyboard, mouse, and monitor) is connected to the Wyse R10L RPS.
DP	DisplayPort is a digital display interface used for transmitting audio, USB, and other forms of data. In addition, it is used for connecting a video source to a display device such as a monitor.
DVI-D	Digital Visual/Video Interface-Digital only. It is a video display interface used for connecting a digital video source to a display device such as a monitor.
DVI-I	Digital Visual/Video Interface-Integrated. It is a video display interface used for connecting a digital or analog video source to a display device such as a monitor (for DVI-A, DVI-D, and DVI-I to monitors).
eSATA	External Serial Advanced Technology Attachment is an interface that provides fast data transfer for external storage devices.
ES-C	Experion Console Station. This is the formal marketing name for the Console Station product. In addition to the Experion server, this station has direct access to process controllers.
ESD	Electrostatic Discharge. It is the sparking between an electrically charged object and a conductor or between two electrically charged objects.
ES-F	Experion Flex Station. It is a station that connects to Experion servers using either a static or a rotary connection.
ES-T	Experion Console Station TPN connected. An Experion Console Station that includes TPS components, including an LCNP4 card so that it can communicate over the TPS network.
FPD	Flat Panel Display are screens with flat front surfaces (LCD monitor).
FTE	Fault Tolerant Ethernet is the control network designed to provide not only fault-tolerance, but also the fast response, determinism, and security required for industrial control applications.
HD-15	High-density, 15-pin connector for VGA monitors.
Host system	Host systems are the Honeywell-qualified Dell precision workstations such as Dell PWS 490, Dell T5400, Dell R5500, Dell T5500, and Dell T3500.
Hz	It is the International Standard (IS) symbol for Hertz, the unit of frequency.
ICA	Independent Computing Architecture is a proprietary protocol that lays down a specification for passing data between server and clients, but is not bound to any specific platform.
IKB	Integrated Keyboard is a specialized process control keyboard, having imbedded QWERTY keyboard in the middle of two OEP sections.
KVM	Keyboard, Video, and Mouse is a switch connecting multiple computers to one device set.
LCD	Liquid Crystal Display is a flat panel display that uses the light modulating properties of liquid crystals.
LCN	Local Control Network (LCN) is a coaxial and, sometimes additionally, a fiber optic network that provides the data path for communication between the TPS system nodes.
LCNP	Local Control Network Processor (GUS)
LED	Light Emitting Diode is a semiconductor light source used as an indicator lamps in various devices.
MIM	Manual Input Module is one of the several input modules for Icon Series console.

Term	Definition
OEP	Operator Entry Panel is a specialized process control keyboard. Legacy Operator keyboard similar to a US stations.
p/n	Part number
POST	Power On Self Test refers to routines which run immediately after many digital electronic devices are powered on.
PS/2	Personal System/2 is an interface standard for keyboard and mouse.
QWERTY	Computer type keyboard – starts at left with the letters Q W E R T Y.
RDP	Remote Desktop Protocol is developed by Microsoft and provides graphical user interface (GUI) to another computer.
RPP	Redundant Port Protector is also known as Redundant Link Protector. The thin client is connected to the switch gear. The RPP is an optional component for the Wyse R10L and protects the switch gear against cable, port, and switch failures.
RPS	Remote Peripheral Solution. It is a peripheral device that allows you to remotely access a computer. It separates the keyboard, mouse, audio peripherals, and display screens up to a few meters from the rest of the computer through a network using a network cable or a fiber-optic cable.
SATA	Serial Advanced Technology Attachment. It is a computer bus interface used for connecting host bus adapters to mass storage devices such as hard disk drives and optical drives.
TCX	Wyse TCX software suite. Each software solution in the suite delivers an enhancement component designed to work seamlessly within Microsoft® Terminal Services, Citrix® XenApp, Citrix® XenDesktop, and VMware View environments.
USB	Universal Serial Bus. It is an industry standard defined for cables, connectors, and communication protocols used in a bus. It is used for connecting, communicating, and supplying power between computers and electronic devices.
Wyse R10L RPS	It is an RPS with thin client capability and dual screen support.

1.2 System overview

1.2.1 System functionality

The Wyse R10L RPS can be used as a thin client and provides dual screen support.

The Wyse R10L RPS extends the audio, video, serial, and USB signals through a network cable connection to the CPU of a remote computer. An operator sitting at a remote location, away from physical host system can use the Wyse R10L RPS for monitor, sound, keyboard, and mouse control. This configuration allows the flexibility of separating the CPU and hard disks from user interfaces (such as monitors, keyboard, mouse, and audio hardware) without losing signal integrity. This can also substantially reduce noise and heat in the control room while providing additional security for the remote computer.

The system supports up to two video displays and six USB peripherals (such as IKB USB). It also provides audio processing for microphone and stereo line-in or line-out signals for the stereo sound system.

The Wyse R10L RPS solution uses Remote Desktop Protocol (RDP) function which is similar to Windows operating system. The Wyse R10L RPS has its own dedicated gigabit network port. If you do not want to use the redundant network, connect the FTE Yellow or FTE Green switch to the dedicated gigabit network port and allocate a dedicated network IP address. An optional hardware Redundant Port Protector (RPP) or Redundant Link Protector (TP-THNPP1) is available for fault-tolerant ethernet and for the functionality of the RPP hardware covered in this document.

Wyse R10L RPS does not allow you to view the POST (Power On Self Test) screen and control or enter in to system BIOS of the host system which is being remotely accessed. Use the local video card, keyboard, and mouse residing on the host system to view the POST screen and to control or enter in to system BIOS of the host system which is being remotely accessed.

However, you can use Wyse R10L RPS to control the host system only when the host system is running in a supported operating system environment.

1.2.2 System compatibility and components

System compatibility

The Wyse R10L RPS is compactible with Microsoft Windows 7 Professional (32-bit), Microsoft Windows 7 Professional (64-bit), and Microsoft Windows XP (32-bit).

System components

The following figure provides an overview of the various Wyse R10L RPS components.

Figure 1: System components

The following table provides the description about Wyse R10L RPS components and its configurations.

Item	Component description	Honeywell part number	Mounting option
1	Wyse R10L Thin Client	51155444-100	1
2	SW TCX Suite VDI XENDESKTOP 32/64 (not shown in above image)	51155444-200	1
3	3-Year Maintenance for Thin Operating System - Version 5.0 (not shown in above image)	51155444-300	1
4	Power Adapter	51155444-902	1
5	PS/2 Keyboard	51155444-903	1
6	PS/2 Optical mouse	51155444-904	1
7	DVI-I to VGA converter	51155444-905	1
8	Quick Start guide & Hardware Warranty Documents	51155444-906	1
9	Vertical Mounting Stand	51155444-907	1
10	Adapter cable, USB 2.0-to-serial RS-232 (not shown in above image)	51153745-100	1
11	eSATA to USB Adapter cable (not shown in above image)	51154656-200	2
12	Horizontal Mounting Stand (not shown in above image)	51155444-400	Optional part, sold separately

Attention
Honeywell does not provide the network cable required for this system.

1.2.3 Software requirements

Wyse R10L RPS uses the TCX suite 4 software. Wyse TCX suite is a software solution that improves user experience in Citrix, Microsoft, and VMware virtualization environments, by enhancing industry standard protocols such as ICA and RDP. Wyse TCX suite 4 software adds several key features that improves the quality

of the user experience, while reducing server and network load to achieve rich audio and video. The Wyse TCX suite enables multiple monitor support, rich multimedia playback, seamless USB device access, high quality bi-directional audio capabilities, and rich flash playback for Wyse R10L RPS.

1.2.4 Cable specification

Wyse R10L RPS supports CAT5 network cable specification to interface with the network. The CAT5 network cable supports a maximum length of 100 meter for a point-to-point (POP) connection. However, if you require a cable length beyond 100 meter, you must use a signal repeater and an additional cable.

1.2.5 Wyse R10L RPS limitations

The Wyse Thin OS runs on the Wyse R10L RPS and has very limited hardware support. Wyse R10L RPS does not support the following hardware and software combinations.

You must consider the limitations before using Wyse R10L RPS.

- Carroll touch screen monitors.
- Elo or MicroTouch touchscreen monitors in Display SPAN mode.
- Pop up ZIP drive. You must update your Pop up ZIP drive to eSATA Pop up ZIP drive. Refer to the latest revision of 51195195-368 *ZIP to DVD Drive Upgrade in Classic, Z, and EZ Consoles Upgrase Kit Instruction* document.
- Pop up IDE CD or DVD drive. You must update your Pop up IDE drive to eSATA Pop up drive.
- Four or seven port USB HUB.
- Honeywell Operator Keyboard IKB or OEP with serial interface.
- Vertical SPAN mode must not exceed more that 1280 x 1024 resolution. It is a limitation of Microsoft RDP.
- Display SPAN with two monitor, requires identical model or monitors of the same resolution. It is a limitation of Microsoft RDP.
- Printer and Parallel Operation Keyboard (POK) compatibility is not tested.
- Honeywell Operator Keyboard IKB or OEP with serial interface or IKB USB for TPS software running on Windows XP operating system.

2 Registering the Wyse R10L RPS at the Wyse Technology Support and Self-Service website

You must register the Wyse R10L RPS at the following **Wyse Technology Support and Self-Service** website for accessing and downloading the updates (software and hardware), software suites, licenses, warranty, and so on required for the Wyse R10L RPS.

http://support.wyse.com/selfservice.html

For further information, refer to the following **Self Service Center FAQ** website.

http://www.wyse.com/serviceandsupport/wssfaq/SelfServiceCenterFAQ.html

3 Software Installation

This section provides the instructions for the following:

- Installing the Wyse TCX suite on the host system.
- Enabling remote connection on host system.
- Installing the Wyse R10L RPS in desktop station.

Related topics

“Installing the Wyse TCX suite” on page 16
“Enabling remote connection on host system” on page 19
“Installing the Wyse R10L RPS in desktop station” on page 20

3.1 Installing the Wyse TCX suite

You must install the Wyse TCX suite software on the host system to perform the following:

- Access the host systems from a Wyse R10L RPS.
- Access a USB, IKB, or any other USB device connected to the Wyse R10L RPS hardware.

Attention

For host systems running the Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit) operating system, disable the **User Account Control (UAC)** before installing the Wyse TCX suite software. For more information refer to the procedure “Installing the Wyse TCX suite on Microsoft Windows 7 Professional or Microsoft Windows XP” on page 16.

3.1.1 Installing the Wyse TCX suite on Microsoft Windows 7 Professional or Microsoft Windows XP

The Wyse TCX suite can be installed on Microsoft Windows 7 Professional (32-bit), Microsoft Windows 7 Professional (64-bit), and Microsoft Windows XP (32-bit) operating systems.

Prerequisites

Download the ***TCX_Wyse TCX Server Suite_4.2.0.2_prod32.msi*** or ***TCX_Wyse TCX Server Suite_4.2.0.2_prod64.msi*** updated the version package from the following **Wyse Technology Support and Self-Service** website depending on the operating system installed on your host system.

http://support.wyse.com/selfservice.html

Ensure that you have the license key for the Wyse TCX suite package. This key can be generated once you register the TCX suite registration code at the following **Wyse Technology Support and Self-Service** website.

Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
1. Perform the following steps to disable the **User Account Control (UAC)**. a. Choose **Start** > **Control Panel** > **User accounts and family safety** > **User accounts** > **Change User account control settings**. The **User Account Control (UAC)** dialog box is displayed. b. Scroll the **Notification** bar and change the settings to **Never notify** by dragging it down. c. Click **OK**. d. In the **User Account Control (UAC)** dialog box, click **Yes**. e. Restart the host system. 2. To install the Wyse TCX suite software, log on to the host system with administrator privileges. 3. Browse to the location where the Wyse TCX suite installation package is saved. 4. Double-click the ***TCX_Wyse TCX Server Suite_4.2.0.2_prod32.msi*** or ***TCX_Wyse TCX Server Suite_4.2.0.2_prod64.msi*** file depending on the operating system installed on the host system. 5. Click **Next**. 6. To accept the EULA, click **I Accept the terms in the license agreement**. 7. Enter the license key and click **Next**. 8. From the Setup type option, click **Custom Install** and then click **Next**. 9. Ensure the following options are selected and then click **Next**. • **USB Virtualizer** • **Multimedia** • **Multi-Display** • **Flash Redirection** 10. Click **Install**. 11. Select **Always trust software from Wyse technology Inc** and click **Install**. 12. Click **Finish**. 13. After installing the Wyse TCX suite software, enable **User Account Control (UAC)**.	1. To install the Wyse TCX suite software, log on to the host system with Administrator privileges . 2. Browse to the location where the Wyse TCX suite installation package is saved. 3. Double-click the ***TCX_Wyse TCX Server Suite_4.2.0.2_prod32.msi*** file. 4. Click **Next**. 5. To accept the EULA, click **I Accept the terms in the license agreement**. 6. Enter the license key and click **Next**. 7. From the Setup type option, click **Custom Install** and then click **Next**. 8. Ensure the following options are selected and then click **Next**. • **USB Virtualizer** • **Multimedia** • **Multi-Display** • **Rich sound** • **Flash Redirection** 9. Click **Install**. 10. Click **Finish**.

3.1.2 Verifying the installation

1 Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
Choose **Start** > **Control Panel** > **System and security** > **Administrative Tools**.	Choose **Start** > **Settings** > **Control Panel** > **Administrative Tools**.

The **Administrative Tools** dialog box is displayed.

2 Double-click **Services**.
The **Services** dialog box is displayed.

3 Ensure that the **Wyse Technology USB Virtualizer** service is listed and that the service is running.

3.1.3 Verifying the Wyse TCX suite license and software version

1 Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
Choose **Start** > **All Programs** > **WyseTCX Server Suite Configuration**.	Choose **Start** > **Programs** > **Wyse** > **WyseTCX Server Suite Configuration**.

The **TCX Server Suite Configuration Utility** dialog box is displayed.

2 Click the **General** tab.

3 Click **About**.
The **About** dialog box is displayed.

4 Ensure that the license status is valid.

3.2 Enabling remote connection on host system

Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
1. Choose **Start** > **Control Panel** > **System and Security** > **Windows Firewall**. The **Windows Firewall** dialog box is displayed. 2. On the left pane, select **Allow a program or feature through Windows Firewall**. The **Allowed Programs** dialog box is displayed. 3. Click **Change settings**. The **Change settings** dialog box is displayed. 4. Select the **Remote Desktop** option and click **OK**. 5. Close all open dialog boxes. 6. Shutdown the host system and remove the power cord.	1. Choose **Start** > **My Computer**. The **My Computer** dialog box is displayed. 2. On the left pane, from **Other Places**, click **My Network Places**. The **My Network Places** dialog box is displayed. 3. Select the **FTE Yellow** adapter connection. 4. Right-click **FTE Yellow** adapter and select **Properties**. The **FTE Yellow Properties** dialog box is displayed. 5. Click the **Advance** tab and then click **Settings** . The **Windows Firewall** dialog box is displayed. 6. Select **Exception** tab, from **Program and services**, select **Remote Desktop** option and then click **OK**. 7. On the **FTE Yellow Properties** dialog box click **OK**. Perform step 1 through step 7 for FTE Green adapter. 8. Choose **Start** > **Settings** > **Control Panel** > **System**. The **System Properties** dialog box is displayed. 9. Click the **Remote** tab. The **Remote** dialog box is displayed. 10. Select **Allow users to connect remotely to this computer**. 11. Click **Apply** and then click **OK**. 12. Close the **System Properties** dialog box. 13. Shutdown the host system and remove the power cord.

3.3 Installing the Wyse R10L RPS in desktop station

3.3.1 Workstation configuration

Honeywell recommends desktop mounting option for Wyse R10L RPS. Based on the usage scenario, you can mount the Wyse R10L RPS on a vertical mounting stand or on a horizontal mounting stand. By default, each Wyse R10L RPS is shipped with vertical mounting stand. If you want to use the horizontal mounting stand, you must procure it separately using the Honeywell part number 51155444-400.

The following image illustrates the interconnection of the Wyse R10L RPS for desktop configurations without Redundant Link Protector.

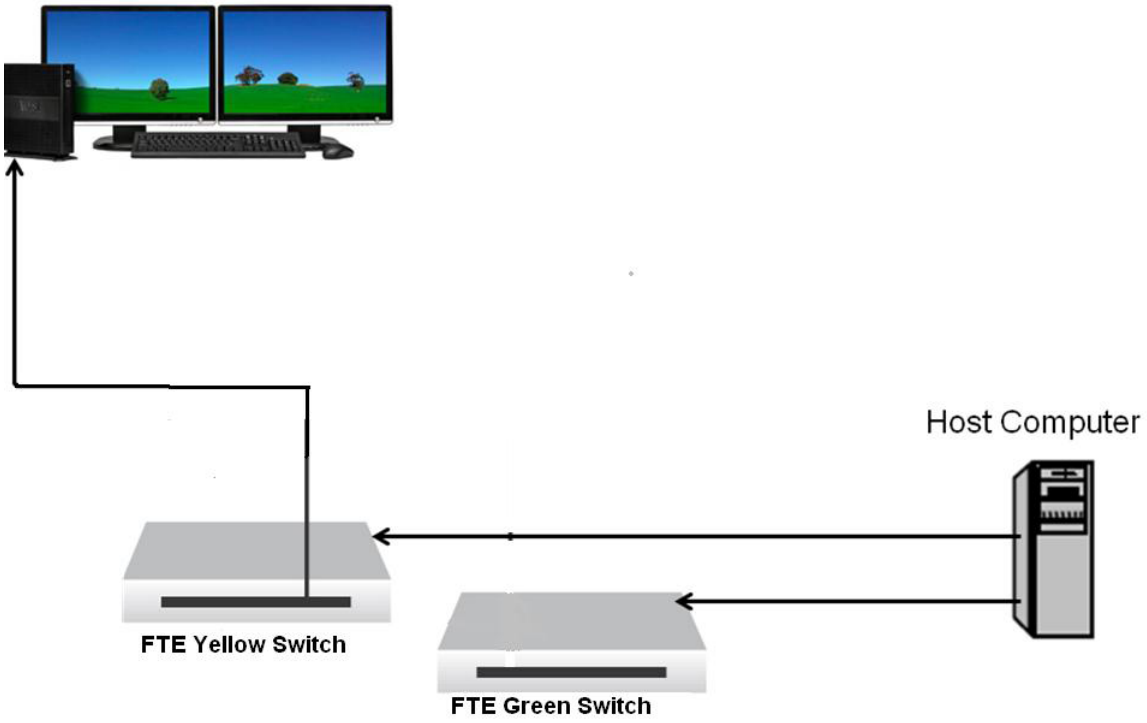


Figure 2: Wyse R10L RPS desktop configurations without Redundant Link Protector

The following image illustrates the interconnection of the Wyse R10L RPS for desktop configurations with Redundant Link Protector.

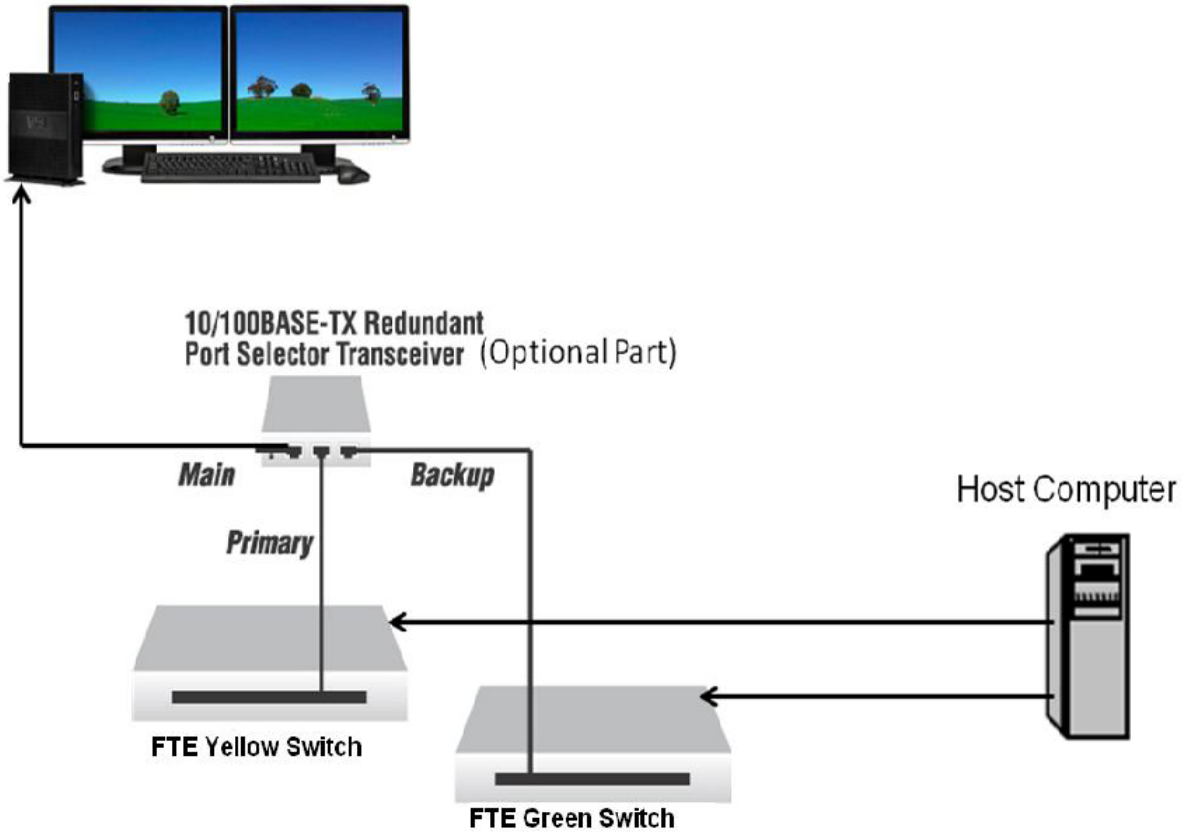


Figure 3: Wyse R10L RPS desktop configurations with Redundant Link Protector

Redundant Link Protector for Wyse R10L RPS is optional. Wyse R10L RPS uses a 10/100 ethernet fault-tolerant transceiver as an optional Redundant Link Protector. Redundant Link Protector significantly reduces network downtime, adding a new level of redundancy to 10/100 ethernet connections. It also provides a redundant path for critical 10/100 devices.

In a 10/100 ethernet network, the redundant transceiver has three ports: one for the critical (main) device, one for the default (primary) path for the critical device, and another (backup) for the backup path. It is a smart device that does not send any signal on a path that is not active. If the primary path loses its link, then the transceiver immediately (in less than one microsecond) switches to the backup path. When the primary path re-establishes its link, the Redundant Link Protector automatically switches back to the primary path. Optional functionality, controlled through a dip switch, allows the unit to move from the fault-tolerant mode to a 3-port switch mode.

Attention

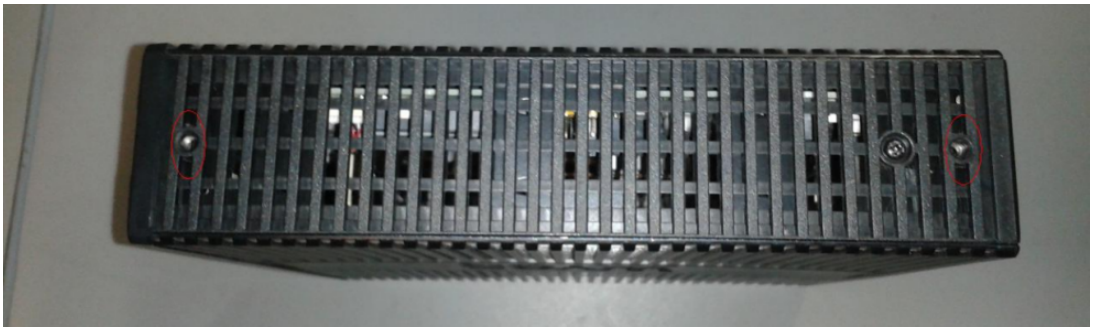
The Redundant Link Protector for Wyse R10L RPS is optional and if required, it must be procured separately using Honeywell model number TP-THNPP1.

3.3.2 Assembling the Wyse R10L RPS vertical mounting stand

Each Wyse R10L RPS is shipped with a vertical mounting stand for operations. You must assemble the vertical mounting stand which is shipped with your Wyse R10L RPS.

Perform the following steps to mount the Wyse R10L RPS on the vertical mounting stand.

1 Locate the thumb screw hole at the bottom of the Wyse R10L RPS as illustrated in the following image.



2 Place the vertical mounting stand at the bottom of the Wyse R10L RPS.

3 Position the vertical mounting stand firmly to align the screw holes on the feet with the mounting holes on the Wyse R10L RPS. Place the two thumb screws back into the holes and tighten it using a screwdriver, as illustrated in the following image.

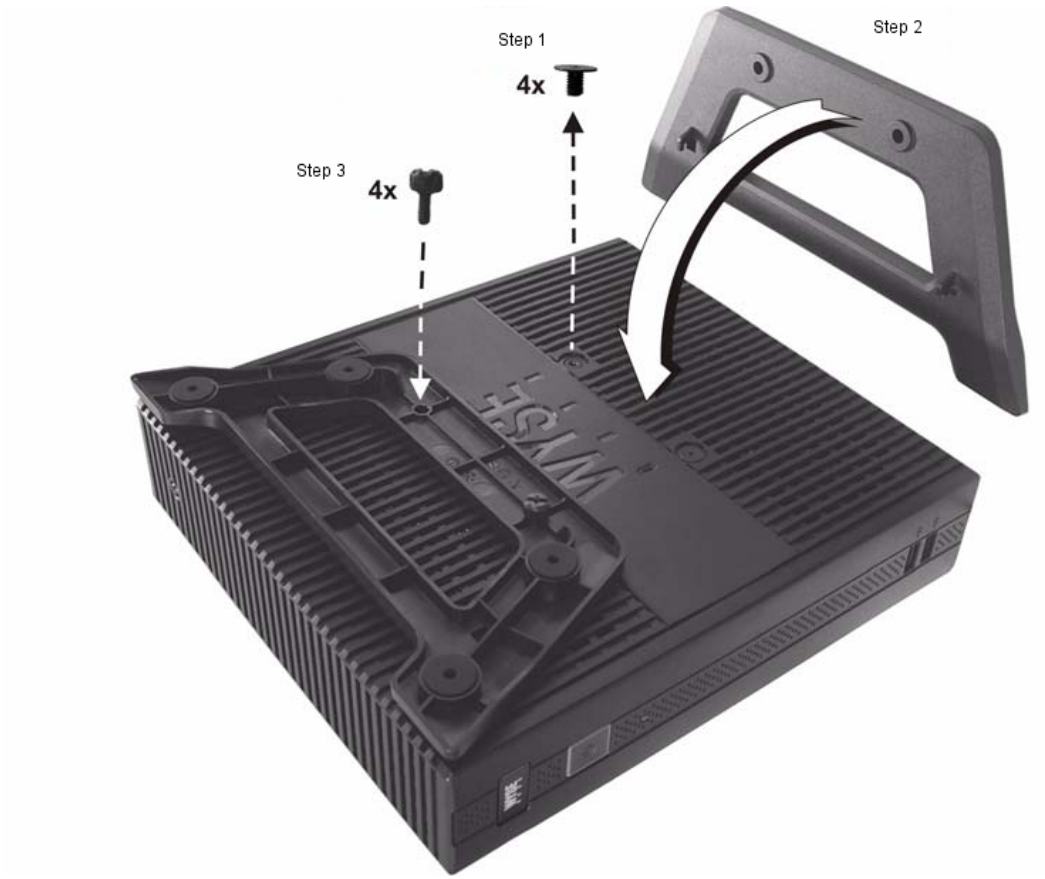
The following image illustrates the Wyse R10L RPS mounted on a vertical mounting stand.

3.3.3 Assembling the Wyse R10L RPS horizontal mounting stand (optional)

Due to the number of cables connected to the Wyse R10L RPS, Honeywell recommends using the horizontal mounting stand option with Wyse R10L RPS as this option secures the cable routing.

1. Remove the four filler screws.
2. Position the feet to align the thumb screw holes on the feet with the mounting holes on the Wyse R10L RPS housing, and slide into place.
3. Insert the four thumb screws and snug the screws to hold the feet firmly in place . Ensure that you do not overtighten the filler screws.

   The following image illustrates step 1 through step 3 of mounting the Wyse R10L RPS to a horizontal mounting stand.



The following image illustrates the Wyse R10L RPS mounted on a horizontal mounting stand.

3.3.4 Connecting the Wyse R10L RPS to the desktop station

Prerequisites

- Ensure that the desktop station and all the supported devices are turned off and removed from the power supply.
- When you install the Wyse R10L RPS, ensure that you do not block any of the vent openings.
- Verify that the following tasks are completed before connecting the Wyse R10L RPS to the desktop station.
  - Remove the host system from the desktop station and place it at the required location.
  - Re-route the FTE and the LCN cables to connect them to the host system.

To install Wyse R10L RPS in desktop station

1 Identify the place where you want to place the Wyse R10L RPS.

2 Ensure that all the peripherals such as monitor, keyboard, mouse, and so on has sufficient cable length to interface with the Wyse R10L RPS.

3 Connect the components of the Wyse R10L RPS as illustrated in the following figure.

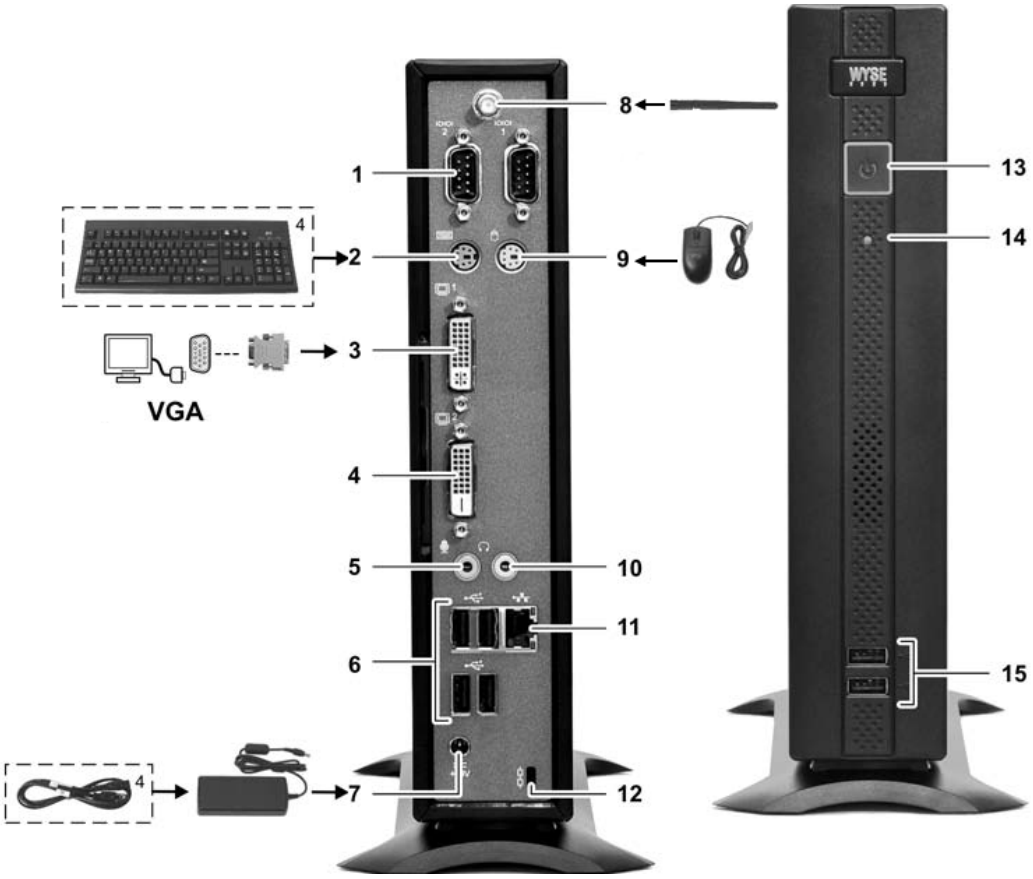


Figure 4: Wyse R10L RPS components connection

The numbered components of the Wyse R10L RPS are as follows:

1. Serial port (2)
2. PS/2-type keyboard port
3. DVI-I #1 port (1x DVI-D or 1x VGA)
4. DVI-D #2 port (1x DVI-D)
5. Microphone in
6. USB port (4)[1]
7. +19V Power adapter input
8. Wireless antenna port (optional)[2]
9. PS/2-type mouse port
10. Line out/Speaker out[3]
11. Network port, 10/100/1000BaseT
12. Lock receptacle
13. Power on/off button/light
14. Activity light

15. USB port (2)[1]

[1]- Not all USB devices are supported; check with your Wyse local support team or representative if a particular device is supported on Wyse R10L RPS.

[2]- The Honeywell offering model number TP-THNCL1 is not available for this Wireless.

[3]- Listening to audio at high volume levels for long durations can damage your ears.

[4]- This component is supplied only for U.S.A. customers. Customers of other locales must check the content of your package or contact your local Wyse reseller.

4 If you do not want to use Redundant Link Protector for fault-tolerant connection then connect the Wyse R10L RPS to an FTE Yellow switch using a CAT5 ethernet cable. To continue with the installation go to "Software Configuration" on page 27.

5 If you want to use Redundant Link Protector with Wyse R10L RPS for fault-tolerant connection then perform the following:

- Connect the Yellow FTE network cable (connected to the FTE Yellow switch) to the primary link (port 2) of the Redundant Link Protector.
- Connect the Green FTE network cable (connected to the FTE Green switch) to the secondary/backup link (port 3) of the Redundant Link Protector.

Refer to the image "Figure 3: Wyse R10L RPS desktop configurations with Redundant Link Protector" to connect the Redundant Link Protector to the Yellow and Green FTE network cables.

6 Connect the LAN connection on the RPP to the ethernet connection on the Wyse R10L RPS.

7 To achieve optimal network connectivity between the Wyse R10L RPS and the Experion/TPS host system, configure the DIP switches on the transition networks RPP as follows:

- DIP Switch1: [DOWN POSITION] - Auto Negotiation OFF
- DIP Switch2: Speed = [UP POSITION] - 100Base -TX ENABLED
- DIP Switch3: Duplex = [UP POSITION] - Full Duplex ENABLED
- DIP Switch4: Redundancy = [UP POSITION] - Redundancy ENABLED

8 Connect the RPP-supplied power adapter to the RPP and turn on the RPP.

9 Do not turn on the Wyse R10L RPS, to continue the installation go to section "Software Configuration" on page 27.

4 Software Configuration

This section provides the instructions to configure the Wyse Thin OS and Wyse TCX suite software.

Related topics

“Configuring the Wyse Thin OS” on page 28
“Preparing the connection to host system” on page 39
“Configuring the TCX suite software” on page 42

4.1 Configuring the Wyse Thin OS

Related topics

“Preparing the Wyse R10L RPS hardware” on page 28
“Configuring the Wyse R10L RPS network connection” on page 29
“Choosing how to configure the Wyse R10L RPS” on page 30
“Configuring the Wyse R10L RPS using the Wyse Zero desktop” on page 30
“Maintaining the Wyse R10L RPS firmware” on page 33
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4.1.1 Preparing the Wyse R10L RPS hardware

Before connecting a Wyse R10L RPS to an Experion/TPS host system, you must prepare the Wyse R10L RPS hardware.

Task	Description
Connect Devices	1. Connect the power, network, and peripheral devices to the Wyse R10L RPS, as described in the Wyse R10L RPS manufacturer's instructions. 2. If the Wyse R10L RPS is to be used in single monitor mode, the monitor must be connected to the DVI-I port on the Wyse R10L RPS using DVI to VGA converter if it is an analog or VGA monitor. **Attention** In case of the Dual monitor mode, the second monitor must support DVI-D connection with required monitor cable. 3. If the Wyse R10L RPS is to be used in dual monitor mode, the primary monitor must be connected to the DVI-I port of the Wyse R10L RPS using DVI to VGA converter if it is an analog or VGA monitor. However, the secondary monitor must be connected to the DVI-D port of the Wyse R10L RPS. 4. Standard PS/2 and USB mouse and keyboards can be connected to the Wyse R10L RPS. 5. A Honeywell IKB USB keyboard can also be connected through a USB interface on the Wyse R10L RPS.
Single LAN Networks	Connect the Wyse R10L RPS to the Yellow FTE network.

Task	Description
Dual LAN Networks	Dual LAN connections to a Wyse R10L RPS is possible using the Transition Networks 10/100Base-TX Bridging Media Converter (Redundant Port Protector). Perform the following: • Connect the Yellow FTE network cable (connected to the FTE Yellow switch) to the primary link (port 2) of the Redundant Link Protector. • Connect the Green FTE network cable (connected to the FTE Green switch) to the secondary/backup link (port 3) of the Redundant Link Protector. • Connect the LAN connection on the Redundant Link Protector to the ethernet connection on the Wyse R10L RPS. Refer to the image “Figure 3: Wyse R10L RPS desktop configurations with Redundant Link Protector” to connect the Redundant Link Protector to the Yellow and Green FTE network cables. To achieve optimal network connectivity between the Wyse R10L RPS and the Experion or TPS host system, configure the DIP switches on the Transition Networks Redundant Port Protector as follows: • DIP Switch1: [DOWN POSITION] - Auto Negotiation OFF • DIP Switch2: Speed = [UP POSITION] - 100Base -TX ENABLED • DIP Switch3: Duplex = [UP POSITION] - Full Duplex ENABLED • DIP Switch4: Redundancy = [UP POSITION] - Redundancy ENABLED
Powering On	Once you have completed the device and peripheral connections, turn on the Wyse R10L RPS using the power button at the front of the device. The status LED indicates the state of the Wyse R10L RPS. For more information, refer to the manufacture's documentation.

4.1.2 Configuring the Wyse R10L RPS network connection

Task	Description
Switch to the Zero desktop	The Wyse R10L RPS can be configured using the two different desktops. • Classic desktop • Wyse Zero desktop- The Wyse documentation and instructions are based on the Wyse Zero desktop. Perform the following to switch the Wyse R10L RPS to the Wyse Zero desktop. 1. Choose **Desktop** > **System Setup** > **Remote Connection**. 2. Click the **Visual Experience** tab. 3. Click **Zero Launchpad**. 4. Click **OK**. 5. Choose **Desktop** > **Menu Bar** > **Shut Down Terminal**. 6. Click **Restart the System**. 7. Click **OK** to restart the Wyse R10L RPS.
Prepare the network	You must complete the following tasks before configuring the Wyse R10L RPS. 1. Reserve IP address and DNS (host) name for the Wyse R10L RPS. 2. Update relevant system networking records (host files) with Wyse R10L RPS IP and name details.

Task	Description
Configure Wyse R10L RPS network properties	To configure the Wyse R10L RPS IP address, perform the following: 1. On the Wyse Zero toolbar, choose **System Settings** > **Network Setup**. The **Network Setup** dialog box is displayed. 2. Click the **General** tab and configure the following: • In the **Ethernet Speed** list, select **100 Mb Full-Duplex**. • Click **Statically specified IP Address** and type the **IP Address**, **Subnet Mask**, and **Default Gateway** addresses. 3. Click the **Name Servers** tab and configure the following: • In the **DNS Domain** box, type the domain name. • In the **DNS Servers** box, type the IP addresses of the DNS servers. Separate the IP addresses with a semicolon (;). • Optional, in the **WINS Servers** box, type the IP addresses of the WINS servers. Separate the IP addresses with a semicolon (;).

4.1.3 Choosing how to configure the Wyse R10L RPS

The Wyse R10L RPS must be initially configured using the Wyse R10L RPS (thin client) interface. The desktop interface must be used for configuring the IP address of the device and for configuring the most common Wyse R10L RPS settings and RDP connections.

If you want to perform an advanced Wyse R10L RPS configuration or configure devices connected to the Wyse R10L RPS, then install the configuration data to the Wyse R10L RPS using a configuration file (WNOS.ini) and an FTP server.

Attention

- FTP servers and associated traffic may not be permitted on the network where the Wyse R10L RPS is used for production usage. The impact of this must be considered when choosing how to configure the Wyse R10L RPS.
- Not all Wyse R10L RPS configurations can be implemented using the WNOS.ini file. For example, IP configuration must be performed using the Wyse Zero desktop.

4.1.4 Configuring the Wyse R10L RPS using the Wyse Zero desktop

You must complete the following tasks to configure the Wyse R10L RPS using the Wyse Zero desktop.

Task	Description
Configure the display	Perform the following to configure the monitors 1. On the Wyse Zero toolbar, choose **System Settings** > **Display**. The **Display** dialog box is displayed. 2. Click the **General** tab. 3. If you have only one monitor connected to the Wyse R10L RPS then choose **select best display setting on DDC monitor** option. 4. If you have two identical monitors connected to the Wyse R10L RPS, from display screen list select **Screen 1** and then choose **select best display setting on DDC monitor** option. Perform this step for Screen 2 also. 5. If you have two monitors with different model connected to the Wyse R10L RPS then you must configure both monitor with same display resolution to get better performance. a. From the display screen, select **Screen 1** and then select **DDC table** option. b. From the **DDC table** listed resolution, select the best supported resolution for the monitor. c. If the resolution is not available from the **DDC table**, then select **user defined display setting** option and enter the resolution manually. Perform step a through step c for **Screen 2** monitor. 6. After completing the display resolution, click **Test** to ensure the resolution selected is supported by the connected monitor. A **Notice** dialog box is displayed. 7. Click **OK** to accept the new settings. The Wyse R10L RPS operating system restarts to save the changes.
Configure the display mode	The monitor connected to the Wyse R10L RPS can be configured in the following two modes. • Mirror Mode: If you want to use a single monitor attached to Wyse R10L RPS, then select **Mirror Mode**. • Span Mode: If you want to use dual monitor attached to the Wyse R10L RPS, then select **Span Mode**. 1. On the Wyse Zero toolbar, choose **System Settings** > **Display**. The **Display** dialog box is displayed. 2. Click the **Dual Head** tab. 3. Depending on the number of monitors connected to Wyse R10L RPS, select **Mirror Mode** or **Span Mode**. 4. To configure the primary display, in the **Main Screen** option, choose **Screen 1** or **Screen 2**. 5. In the **Layout** option, choose **Horizontal** or **Vertical** option for the Span Mode. If the monitors are physically arranged side by side then select horizontal mode. If the monitors are arranged one above the other then select vertical mode. Ensure that the maximum resolution does not exceed 1280x1024 for vertical mode. **Attention** Do not change any setting in **Alignment** option. 6. After completing the settings, click **Test** to ensure the settings are supported by the connected monitor. A **Notice** dialog box is displayed. 7. Click **OK** to accept the new settings. The Wyse R10L RPS operating system restarts to save the changes.

Task	Description
Configuring standard keyboards and mouse	After you have connected standard mouse and keyboards to the USB or PS2 port of the Wyse R10L RPS, no further Wyse R10L RPS configuration is required.
Configuring a Honeywell IKB keyboard	After you have connected the Honeywell IKB keyboard to the USB port of the Wyse R10L RPS, no further Wyse R10L RPS configuration is required. **Attention** You must install the Wyse TCX software suite on the host system that need access to the IKB USB keyboard.
Configuring audio devices	To enable Experion Station alarms through PC audio, speakers can be connected to the Wyse R10L RPS. To enable the audio feature at the Wyse R10L RPS, perform the following: 1. On the Wyse Zero toolbar, choose **System Settings** > **Peripherals**. 2. Click the **Volume** tab. 3. Move the **Speaker** slider to the required volume. 4. If selected, clear the **Mute** option. 5. Click **OK**. The audio volume can now be controlled from within the host system using the standard operating system audio controls.
Configuring the Touchscreen	**Attention** The Wyse R10L RPS operating system supports limited touchscreen configuration. Wyse R10L RPS does not support Carroll touchscreen monitors. It does not support any type of touchscreen monitor in Span Mode. However, it supports Elo and MicroTouch touchscreen monitors only in Single Monitor mode. Hence, use other pointing devices such as mouse or trackball. The SAW USB touchscreen does not require to be calibrated, but the SAW Serial or MicroTouch Serial touchscreen must be calibrated before using it for any operations. Perform the following steps to calibrate SAW Serial or MicroTouch Serial touchscreen. 1. On the Wyse Zero toolbar, choose **System Settings** > **Peripherals**. The **Peripherals** dialog box is displayed. 2. Select the **Serial** tab. 3. Based on the touchscreen, from the list select **Elo** or **MicroTouch** option. 4. From the list, select the **Com** port from where the touchscreen cable is connected to the Wyse R10L RPS. 5. Click **OK**. The **Peripherals** dialog box is closed. 6. On the Wyse Zero toolbar, choose **System Settings** > **Peripherals**. The **Peripherals** dialog box is displayed. 7. To calibrate the touchscreen, select the **Touchscreen** tab. The calibration point is displayed, select the required calibration. Once the calibration is completed, the **Notice** dialog box is displayed. 8. Click **Yes**. The **Peripherals** dialog box is displayed. 9. Click **OK**.

Task	Description
Restart the Wyse R10L RPS	TheWyse R10L RPS can be restarted in the following ways. • Press the power button on the front panel of the Wyse R10L RPS device. The Wyse R10L RPS turns off. Press the power button once again to turn it on. • Once logged out of the RDP session, on the Wyse Zero toolbar, choose **Shut Down Terminal**, click **Restart the System**, and then click **OK**. **CAUTION** Be careful not to click **Reset the system settings to factory default** as this erases all settings on the Wyse R10L RPS.

4.1.5 Maintaining the Wyse R10L RPS firmware

Task	Description
Confirm the firmware	To confirm the firmware version of the Wyse R10L RPS perform the following tasks. 1. On the Wyse Zero toolbar, choose **System Information**. The **System Information** dialog box is displayed. 2. Click the **General** tab. 3. Look for the **System version**. The system version must be *7.1_036* or higher. If it is lesser that *7.1_036*, then it is must to update the Thin operating system firmware to *7.1_036* or higher. 4. Close the **System Information** dialog box.
Update the firmware	For more information about updating the firmware, refer to the *Wyse ThinOS Administrators Guide*.

4.1.6 Deploying Wyse R10L RPS configurations and firmware updates using an FTP server

Using an FTP server to deploy the Wyse R10L RPS configurations provides the opportunity to standardize preferences and the operating environment, system wide.

The following list identifies the high level overview of tasks that must be performed when deploying configuration or firmware to Wyse R10L RPS using FTP.

1. Consider the network requirements.
2. Prepare the FTP server.
3. Create the configuration file or obtain the firmware update.
4. Create the FTP folder structure, as required.
5. Place the configuration files or firmware in the appropriate FTP folder.
6. Configure the Wyse R10L RPS for FTP server communications.
7. Restart the Wyse R10L RPS to enable the new configuration or firmware deployment.

Attention

- Retention of Wyse R10L RPS configuration is not guaranteed when updating the Wyse R10L RPS firmware. Take a backup of the configuration or make a note of the configuration information before updating the firmware.
- Wyse firmware updates are only available when the Wyse ThinOS Maintenance option is purchased with the Wyse R10L RPS. Contact your Wyse reseller for further information.

4.1.7 Supported topologies for an FTP server

Network communication between the Wyse R10L RPS and an FTP server is required to deploy **WNOS.ini** configuration data or firmware updates to Wyse R10L RPS.

CAUTION

- If a Wyse R10L RPS is moved to a network that cannot communicate with the configured FTP server, the Wyse R10L RPS may experience a delay of several minutes during the device start up while it searches for the FTP connection. To avoid this event, the following topologies and guidance must be considered. Depending on the deployment topologies and configuration requirements, remove the FTP server configuration from the Wyse R10L RPS once the configuration is deployed, to avoid this possible delay.
- If the Wyse R10L RPS has been locked down using the **WNOS.ini "Privilege=None"** command, configuration of the Wyse R10L RPS FTP server details is restricted. Deploy the **Privilege=None** command only when Wyse R10L RPS is ready for production use.

Level 2 network connected Wyse R10L RPS

The use of FTP servers and associated network traffic is often restricted at the Level 2 network in a DCS architecture. In these circumstances, the Wyse R10L RPS configuration files must be deployed to the Wyse R10L RPS using an offline or isolated FTP server and then reconnected to the Level 2 network for production use.

To simplify the Wyse R10L RPS IP reconfiguration actions required when moving a Wyse R10L RPS between networks, Honeywell recommends that you perform offline configurations using an IP subnet that matches the production network.

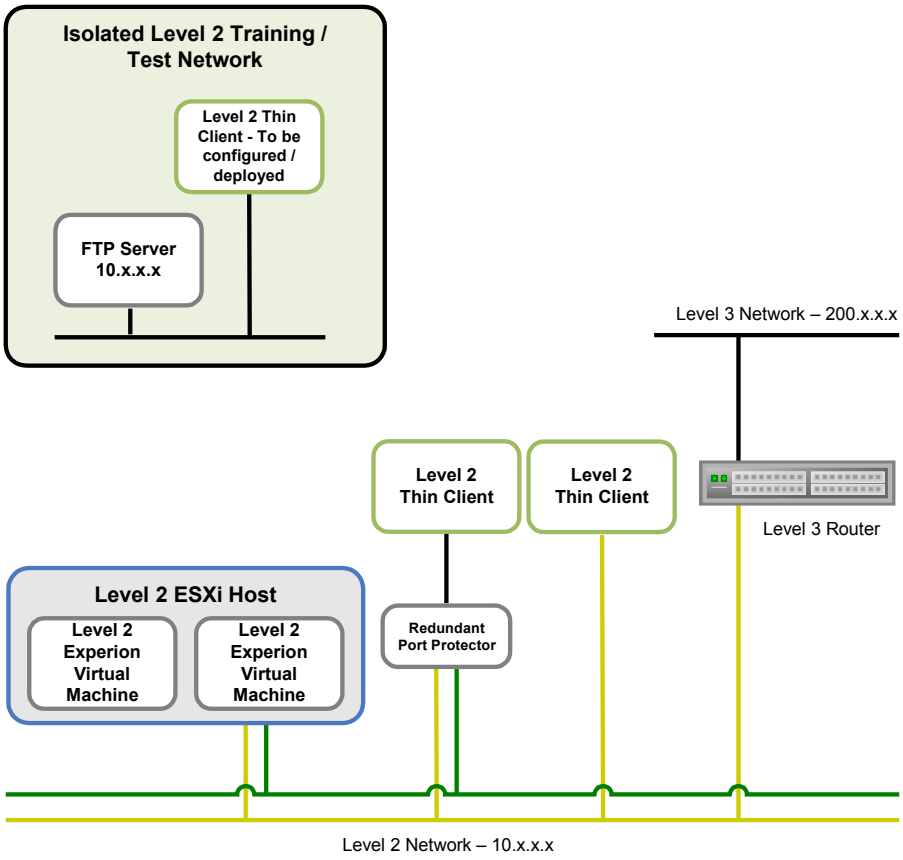

Figure 5: Level 2 network connected Wyse R10L RPS topology

Level 3 network, or higher, connected Wyse R10L RPS

Depending on your network security policy, if the use of FTP servers and associated network traffic is permitted on the target network for the Wyse R10L RPS, you can use a deployment model similar to the one illustrated in the following image.

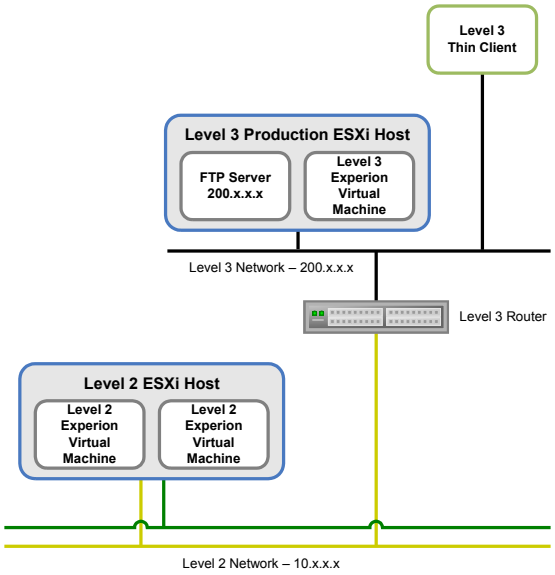

Figure 6: Level 3 network, or higher, connected Wyse R10L RPS topology

4.1.8 Preparing an FTP server

Wyse Thin operating system configuration and firmware files are transferred to the Wyse R10L RPS using FTP during device start up.

Attention

The use of FTP servers on Experion production networks is not recommended. Deployment of **WNOS.ini** files must be performed using a non-production network. Example topologies that can be used for this purpose are as follows:

- Using a portable computer as an FTP server that can be connected directly to the Wyse R10L RPS using a network cross over cable (or suitable non production network connection).
- Using an existing non-production network that has an existing FTP server, or the ability to host a new FTP server.

For instructions on FTP server setup and configuration, refer to the Microsoft Knowledge Base. Go to http://support.microsoft.com and click on the **Visit our Solution Centers** link. On this page, select the Windows operating system that you are using as the FTP server and search for documents "How to setup an FTP server".

Networking considerations

The Wyse R10L RPS and FTP server must be configured with IP addresses that allow FTP communications between the two devices. For more information about configuring the Wyse R10L RPS network connection, refer to the section “Configuring the Wyse R10L RPS network connection” on page 29.

CAUTION

If you configure the Wyse R10L RPS using the **WNOS.ini** file and use the **Privilege = None** command, the Wyse R10L RPS configuration pages are disabled (locked down). The Wyse R10L RPS’s IP address cannot be changed in this state. To avoid this situation, Honeywell recommends that you perform the FTP transfers from a network with the same IP address range as the production network. This approach also removes the need to configure the Wyse R10L RPS IP address after the deployment of the **WNOS.ini**.

4.1.9 Configuring the Wyse R10L RPS by editing the WNOS.ini file

The **WNOS.ini** file is a text-based file that must be created and maintained by using an ASCII text editor. For more information about the commands and parameters available for the **WNOS.ini** file, refer to the *Reference Guide - Wyse ThinOS INI Files*. The "WNOS.INI files reference" topic in this guide identifies a subset of the

WNOS.ini commands that are available and is considered to be an appropriate baseline for Wyse R10L RPS when used with Experion client systems.

An example configuration of the WNOS.ini file is available for download from the Honeywell Process Solutions website and can be modified to suit site specific conditions and requirements.

To configure the thin client by editing the WNOS.ini file

1 Create a text file and name it as **WNOS.ini**.

2 Edit the **WNOS.ini** file to contain the required commands.
For more information about the WNOS.ini commands, refer to the section “WNOS.ini file reference” on page 36.

> **Attention**
> Take a back up of the previous versions of the WNOS.ini file before making adjustments.

3 Save the WNOS.ini file to a location that can be later transferred to the FTP server.

4.1.10 WNOS.ini file reference

A subset of WNOS.ini commands must be considered when using when a Wyse R10L RPS.

The following table lists the required commands in the WNOS.ini file.

Command	Description
autoload=2	Enables Firmware Upgrade. The Firmware upgrade can only be done using an FTP server. To enable downgrade as well as upgrade set to 1.
Privilege=None SuppressTaskbar=yes	Access to the configuration interface disabled and the thin client toolbar is hidden when not used. **CAUTION** • Setting the **Privilege=None** restricts Wyse R10L RPS configuration using the Wyse desktop user interface. Other configurations for Wyse R10L RPS must be performed using the WNOS.ini file and deployed using an FTP server. • Alternatively, use the **Privilege=High** command to allow unrestricted Wyse R10L RPS configuration permissions using the Wyse desktop user interface.
EnableGKey=yes	Enables the G-Key factory default reset. To activate Factory reset, press the G—Key on a QWERTY keyboard connected to the Wyse R10L RPS during start up.
EnableCacheIni=yes	WNOS.ini commands are stored on the thin client flash memory. When the FTP server is not available on the network, the Wyse R10L RPS uses the locally stored WNOS.ini commands.
Autopower=yes	Enables the Wyse R10L RPS to automatically start up in the event of unexpected power loss.
SysMode=VDI	User interface is displayed in Zero Client mode.
Screen=1 Resolution=DDC	The Wyse R10L RPS automatically selects the native resolution for the monitor.
Dualhead=yes Mainscreen=1 Orientation=hort Taskbar=mainscreen Align=Left	Enables dual monitor support. Can be used even if a single monitor is used initially, allowing for simple expansion in future.
Device=Ethernet Speed="100M FD" KeepAlive=1 Warning=yes	The Wyse R10L RPS network speed is configured to operate at 100 MB, Full Duplex. Disconnect warning message is displayed if there is a network outage. **Attention** The Wyse R10L RPS network speed and duplex settings must match to network switch port configuration for optimal performance.

Command	Description
SignOn=No	Wyse operating system user authentication not used. Use the operating system security of the host system.
Service=VNCD disable=yes	Virtual Network Computing (VNC) service to the Wyse R10L RPS is disabled. Devices cannot access the Wyse R10L RPS using the VNC remote protocol. **Attention** The Wyse R10L RPS built in VNC service is enabled by default.
SessionConfig=RDP DefaultColor=2	Defines the connection protocol to the host system. Use the RDP protocol. The default color depth for the RDP session is 32-bit.
Fullscreen=yes	The RDP session runs in full screen mode. If dual monitors are enabled, the display spans across both monitors.
Autoconnect=yes	The RDP session automatically attempts to connect to the host system when the Wyse R10L RPS starts up.
Host=	Identifies the IP address or the fully qualified domain name (FQDN) for the host system to which the RDP session is connected.
Description=	The description of the RDP session.

4.1.11 Folders on the FTP server for WNOS.ini and firmware folders

When a Wyse R10L RPS is connected to an FTP server, by default it searches for the *\wnos* folder under the root of the FTP server.

Configuration files and/or firmware files can be placed directly in this folder.

An alternate approach is to build a suitable folder structure within the *\ftproot* folder and each Wyse R10L RPS can be configured to navigate to the appropriate folder.

Management of multiple WNOS.ini profiles

When Wyse R10L RPSs are mapped to individual systems, a separate WNOS.ini file is required for each Wyse R10L RPS connection. A folder structure, similar to the following, can be used for storing the WNOS.ini file for each system on the FTP server.

- *\ftproot\wyse\system1\wnos*
- *\ftproot\wyse\system2\wnos*
- *\ftproot\wyse\system3\wnos*

An alternate approach is to configure the WNOS.ini file with multiple RDP sessions and share it with multiple Wyse R10L RPSs. In this case, the WNOS.ini file can be stored in the following folder.

\ftproot\wyse\shared\wnos

This arrangement is useful when defining Engineering station Wyse R10L RPS configurations.

4.1.12 Configuring the Wyse R10L RPS to connect to the FTP server

To configure the Wyse R10L RPS to connect to the FTP server

1 On the Wyse Zero toolbar, choose **System Settings** > **Central Configuration**.
The **Central Configuration** dialog box is displayed.

2 Type the appropriate file server and path details for the Wyse R10L RPS.
For example, if the FTP server IP address is 10.1.1.200, and if the configuration files are placed in one of the following locations.

1. The default Wyse FTP folder location (*\ftproot\wnos*), then the correct value is `10.1.1.200`.

2. The FTP folder location `\ftproot\wyse\system1\wnos`, then the correct value is `10.1.1.200/wyse/system1`.

3 Type the user name, and password for the FTP connection.

4.1.13 Deploying Wyse R10L RPS configurations or Wyse R10L RPS operating system

The Wyse R10L RPS configuration file, WNOS.ini, is deployed to the Wyse R10L RPS using an FTP server connection. You can deploy an updated Wyse R10L RPS operating system versions to the Wyse R10L RPS using the FTP server connection.

Prerequisites

- The file is created and saved on the FTP server.
- The firmware file is saved on the FTP server.
- The Wyse R10L RPS is configured to connect to the FTP server.

To deploy the Wyse R10L RPS configuration or Wyse R10L RPS operating system

1 Connect the Wyse R10L RPS to the network where the FTP server is available.

2 Power on or restart the Wyse R10L RPS.
The WNOS.ini file is downloaded from FTP server and saved on the Wyse R10L RPS.

3 After the Wyse R10L RPS start up sequence is complete, validate that the required changes are applied.
If new firmware is applied, confirm the Wyse R10L RPS firmware version by choosing **Wyse Zero Toolbar** > **System Information** and then click the **General** tab.

4 Power off the Wyse R10L RPS and connect it to the production network.
The Wyse R10L RPS is ready for production use.

Attention
After flashing the Wyse R10L RPS operating system firmware, if the **SSL connection to CERT EXPIRED** error message is displayed, then from the Wyse Zero toolbar, select **global connection setting/RDP/** option and clear **NLA**.

4.2 Preparing the connection to host system

Related topics

“Creating the RDP connection to the host system” on page 39
“Connecting to host system” on page 40

4.2.1 Creating the RDP connection to the host system

Wyse R10L RPS can be configured to connect to a single host system, or to multiple host systems. For on-process usage, Honeywell recommends you to configure a Wyse R10L RPS with a dedicated RDP session, with auto login enabled. Enabling auto login simplifies the usage of the Wyse R10L RPS when it is required to be restarted.

Prerequisites

Turn on the host system to which you want to connect and ensure that the host system is running in the Windows operating system environment. Ensure that you know the IP address of the host system to which you want to connect.

To configure the RDP session to a host system

1. On the Wyse Zero toolbar, choose **Home** > **Add Connections**.
   The **Add Connections** dialog box is displayed.
2. Select the connection protocol as **RDP**, and then click **OK**.
   The **Configure RDP Session** dialog box is displayed.
3. Click the **Connection** tab.
4. In the **Host Names** box, type the IP address of the host system to which you want to connect.
5. In **Connection** tab, perform the following.
   - Select **Full screen mode** if you have only one monitor connected to the Wyse R10L RPS.
   - Select **SPAN windows to both display** option if two monitors are connected to the Wyse R10L RPS.
6. Depending on the following auto-connection settings, you can select or clear the **Auto-connect on start-up** check box.
   - If you clear this check box, when the Wyse R10L RPS starts up, you can select the required RDP session and host system to which you want to connect.
   - If you select this check box, when the Wyse R10L RPS starts up, it automatically launches the RDP session to the configured host system.

   Tip
   If your requirements change, you can select or clear this check box at a later time, to suit your requirement.
7. In the **Display Configurations** group, select the required **Display Resolution** and **Colors**.
8. Click the **Logon** tab.
9. In the **Login Username**, **Password**, and **Domain name** boxes, type the log in credentials required to access the host system. If you do not enter these details, you are prompted for the log in credentials at the start of the RDP connection to the host system.
10. Click the **Options** tab.
11. Accept the default settings.
12. Click **OK**.

Next steps

Repeat step 1 through step 12 for each required RDP connection. When multiple RDP sessions are configured on the Wyse R10L RPS, they are available in the Wyse menu item.

4.2.2 Connecting to host system

The connection of Wyse R10L RPS to the host system is initiated either automatically or manually. If the RDP connection of the Wyse R10L RPS is configured with auto login, restarting a Wyse R10L RPS results in the automatic reconnection of the RDP session to the host system. If auto login is not configured, after restarting a Wyse R10L RPS, you must manually connect to the RDP session using the Wyse menu item.

Disconnecting a Wyse R10L RPS from an Experion/TPS host system produces a different result than logging off. Disconnecting a host system from the Wyse R10L RPS leaves the current session with the host system active, with the host system and applications still running. This active session is available when the connection is initiated the next time with the same log in credentials.

Logging off from an Experion/TPS host system

- Choose **Start** > **Log Off**.

  When logging off a host system from a Wyse R10L RPS, the RDP session also terminates and the Wyse R10L RPS desktop is displayed.

Disconnecting from an Experion/TPS host system

1. Choose **Start** and then click the arrow button next to **Log Off**.
2. Choose **Disconnect**.

   The current session to the host system terminates and the Wyse R10L RPS desktop is displayed.

Restarting the Experion/TPS host system

- Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
1. Choose **Start** > **Windows Security**. The **Windows Security** dialog box is displayed. 2. Click the arrow next to the **Power** icon (at the right corner of the dialog box). 3. From the list select **Restart**.	1. Choose **Start** > **Settings** > **Windows Security**. The **Windows Security** dialog box is displayed. 2. Click **Shutdown**. The **Shut down Windows** dialog box is displayed. 3. From the **Shutdown** list select **Restart**. 4. Click **OK**.

Shutdown the Experion/TPS host system

- Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
Choose **Start** > **Windows Security**, point the cursor on **Power** at the left down corner, click the arrow and select **Restart**. 1. Choose **Start** > **Windows Security**. The **Windows Security** dialog box is displayed. 2. Click the arrow next to the **Power** icon (at the right corner of the dialog box). 3. From the list select **Shut down**.	1. Choose **Start** > **Settings** > **Windows Security**. The **Windows Security** dialog box is displayed. 2. Click **Shutdown**. The **Shut down Windows** dialog box is displayed. 3. From the **Shutdown** list select **Shut down**. 4. Click **OK**.

4.3 Configuring the TCX suite software

Prerequisites

The recommended version of Wyse TCX suite must be installed on the host system to which you are connecting.

1 Log on the configured RDP session through the Wyse R10L RPS.

2 Perform the following steps depending on the operating system.

Microsoft Windows 7 Professional (32-bit) and Microsoft Windows 7 Professional (64-bit)	Microsoft Windows XP (32-bit)
If the monitors are configured in **Horizontal Span Mode**, the Windows taskbar is spanned to both Screen 1 and Screen 2.	If the monitors are configured in **Horizontal Span Mode**, the Windows taskbar is displayed only in Screen 1 monitor. 1. Choose **Start** > **Programs** > **Wyse** > **TCX Server Suite Configuration**. The **TCX Suite Configuration Utility** dialog box is displayed. 2. Select **Multi Display System** tab. 3. Click **Configure MDS**. The **Wyse TCX Multi-display option** dialog box is displayed. **Attention** It is recommended to configure the displays by selecting the **Automatically using virtual channel layout** option. 4. To configure the display manually, in the **Start up** tab, from **Monitor layout**, select **Manual Splitting the desktop**. 5. Select **Save as the default layout of current user**. 6. Enter the value. 7. Click **Apply**, and then click **OK**. 8. In the **TCX Suite Configuration Utility** dialog box click **OK**.

5 Troubleshooting or Servicing

Related topics

“Overview” on page 44
“Using Wyse R10L RPS with Experion Backup and Restore (EBR) software ” on page 45
“Migration support” on page 46
“Replacing failed thin clients” on page 47

5.1 Overview

This section provides the maintenance and service information for the Wyse R10L RPS components such as local host system and desktop station.

Servicing the Wyse R10L RPS RPS components

The following lists the external references required for servicing the Wyse R10L RPS components.

- For maintenance and service information about various RPS components, refer to the *Quick-Start Guide* supplied with the product. In addition, refer to the following **Self Service Center FAQ** website.

  http://www.wyse.com/serviceandsupport/wssfaq/SelfServiceCenterFAQ.html
- For maintenance and service information about your local host system and desktop station, refer to the appropriate computer manual.

5.2 Using Wyse R10L RPS with Experion Backup and Restore (EBR) software

The following points must be considered before performing the backup/restore operations using an EBR software on the host systems with Wyse R10L RPS.

1. Do not perform backup and restore operation on Wyse R10L RPS-connected hardware. You must perform the backup/restore operation using the local keyboard, mouse, and monitor connected to the host system.
2. EBR/RPS operations can only be run on Honeywell-qualified host systems that are qualified for that particular Experion release.
3. Do not disconnect the remote setup while EBR operations are performed using video, keyboard, and mouse.
4. While performing backup and restore operations on host systems connected to Wyse R10L RPS, remote hardware does not work.
5. You can create backup on the hard disk or external drive.
6. You can restore the backup image by using the standard EBR recovery disk DVD (not custom recovery disk).

5.3 Migration support

Ensure that you disconnect Wyse R10L RPS from the network before migrating from the previous Experion/TPS release to the target Experion/TPS release. However, do not remove the hardware or peripherals connected to the Wyse R10L RPS. Perform the migration using the local keyboard, mouse, and monitor connected to the host system.

After completing the migration, enable the remote desktop in the host system and connect the Wyse R10L RPS to the network. To continue with the installation, refer to the section “Preparing the connection to host system” on page 39.

5.4 Replacing failed thin clients

Thin clients, with no hard drive, no fan, or other moving parts, have a much longer lifespan than standard computers.

Attention
The virtual machine that the thin client is associated with, does not need to be shut down for thin client replacement.

To replace a failed thin client

1. If possible collect relevant configuration data from defective thin client.
2. Remove the defective thin client from operation.
3. Disconnect any cables and peripheral devices from the thin client.
4. Using the new or replacement thin client, prepare the thin client. For more information, see the related topics.

6 Notices

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6.1 Documentation feedback

You can find the most up-to-date documents on the Honeywell Process Solutions support website at:

http://www.honeywellprocess.com/support

If you have comments about Honeywell Process Solutions documentation, send your feedback to:

hpsdocs@honeywell.com

Use this email address to provide feedback, or to report errors and omissions in the documentation. For immediate help with a technical problem, contact your local Honeywell Process Solutions Customer Contact Center (CCC) or Honeywell Technical Assistance Center (TAC) listed in the “Support and other contacts” section of this document.

6.2 How to report a security vulnerability

For the purpose of submission, a security vulnerability is defined as a software defect or weakness that can be exploited to reduce the operational or security capabilities of the software.

Honeywell investigates all reports of security vulnerabilities affecting Honeywell products and services.

To report a potential security vulnerability against any Honeywell product, please follow the instructions at:

https://honeywell.com/pages/vulnerabilityreporting.aspx

Submit the requested information to Honeywell using one of the following methods:

- Send an email to security@honeywell.com.

  or

- Contact your local Honeywell Process Solutions Customer Contact Center (CCC) or Honeywell Technical Assistance Center (TAC) listed in the “Support and other contacts” section of this document.

6.3 Support

For support, contact your local Honeywell Process Solutions Customer Contact Center (CCC). To find your local CCC visit the website, https://www.honeywellprocess.com/en-US/contact-us/customer-support-contacts/Pages/default.aspx.

6.4 Training classes

Honeywell holds technical training classes on Experion PKS. These classes are taught by experts in the field of process control systems. For more information about these classes, contact your Honeywell representative, or see http://www.automationcollege.com.