



## TECHNICAL WHITEPAPER

### CONTENTS & NAVIGATION

## 2

Provision Intel® AMT  
HP ZCentral Remote Boost

---

## 3

Receiver installation

---

## 4

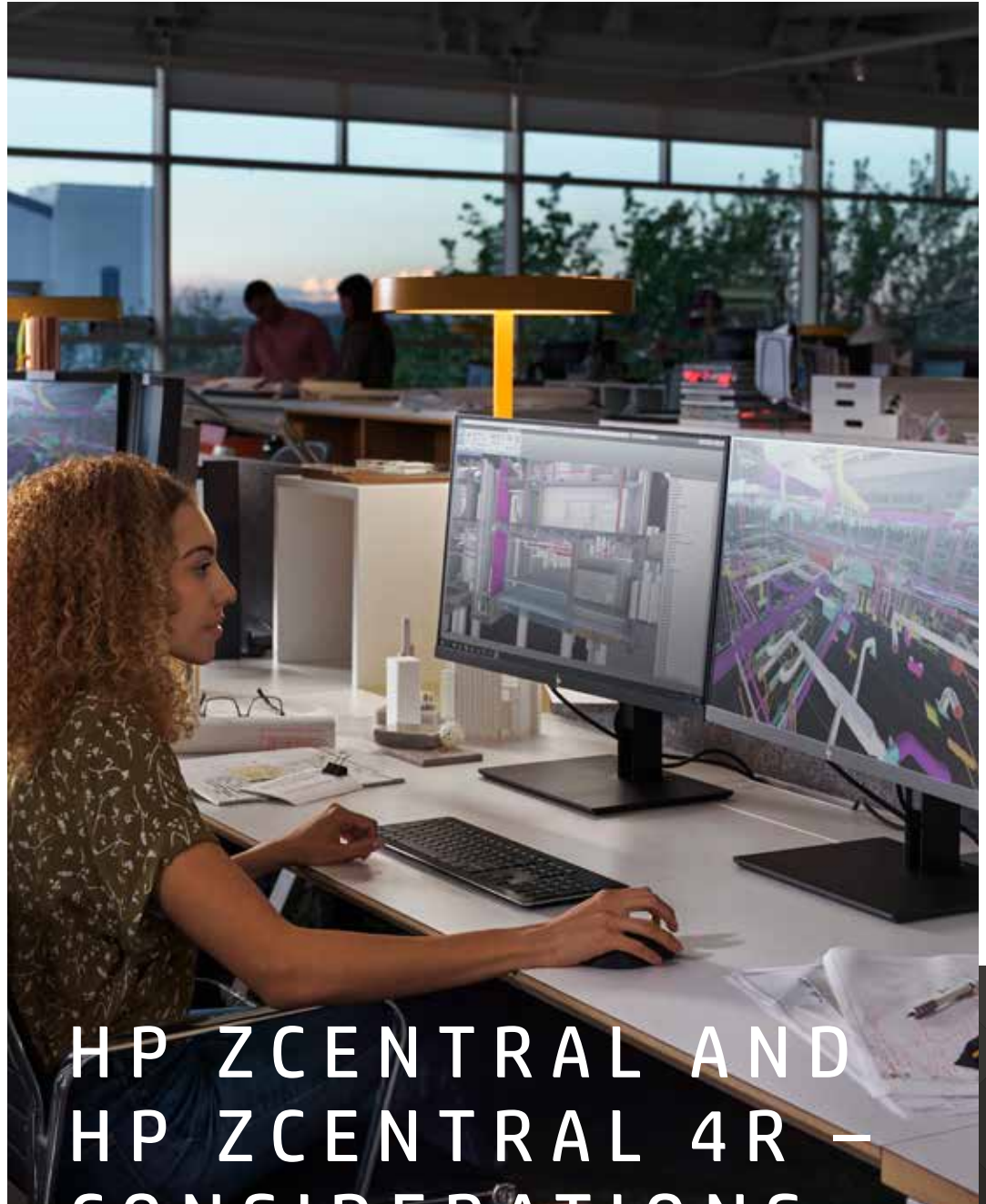
Sender installation  
Integrating with HP ZCentral  
Connect environment

---

## 5-6

Configuring for headless

---



# HP ZCENTRAL AND HP ZCENTRAL 4R – CONSIDERATIONS WHEN DEPLOYING CUSTOM IMAGE WITH SCCM

## CONTENTS & NAVIGATION

### 2

Provision Intel® AMT  
HP ZCentral Remote Boost

### 3

Receiver installation

### 4

Sender installation  
Integrating with HP ZCentral  
Connect environment

### 5-6

Configuring for headless

Your company may want to develop and deploy your own custom image for the HP ZCentral 4R Workstation. Furthermore, you may want to deploy that image using SCCM. This guide is intended to help you with considerations of deploying via SCCM and using Remote Boost in a headless configuration.

The HP ZCentral 4R will require the following be included as part of the SCCM deployment:

1. Download the latest HP ZCentral 4R HP driver pack from the client management solutions website:  
[https://ftp.hp.com/pub/caps-softpaq/cmit/HP\\_Driverpack\\_Matrix\\_x64.html](https://ftp.hp.com/pub/caps-softpaq/cmit/HP_Driverpack_Matrix_x64.html)
- HP Client Management: <https://www8.hp.com/us/en/ads/clientmanagement/overview.html>

If you choose not to use the HP ZCentral 4R driver package you want to ensure you obtain and install the following:

- NVIDIA® driver
- Intel® MEI driver

For the HP ZCentral Hardware Monitor to be able to log power supply events in the Intel® Management Engine (ME) the Intel® ME Interface (MEI) driver needs to be installed. Linux Kernels and the factory HP Windows image already contain this driver. For custom Windows images the driver will need to be installed. This driver is available in the Intel Management Engine Software Softpack provided by HP. The Softpack is listed as a Chipset Driver on the HP Drivers website.

## PROVISION INTEL® AMT

Intel® AMT provides an out of band channel for management. If using HP ZCentral 4R units in a HP ZCentral Connect environment, Intel® AMT needs to be provisioned for full functionality. The Integrating with Intel® AMT section of the HP ZCentral Connect User guide contains information about manually provisioning AMT for use within a HP ZCentral Connect environment.

For additional security and a simpler process for provisioning a large number of systems Enterprise provisioning is recommended. The following white paper has been written to help guide you in the process.

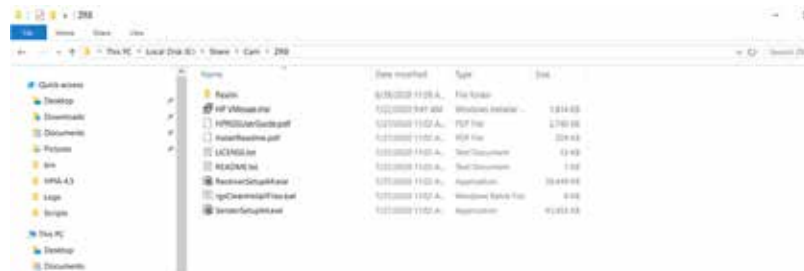
<http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-7256ENW>

## HP ZCENTRAL REMOTE BOOST

The HP ZCentral Remote Boost Sender software will need to be installed on the HP ZCentral 4R. Please see the HP ZCentral Remote Boost User Guide for instructions on how to install and configure the HP ZCentral Remote Boost Sender software.

### SCCM FOR INSTALLING WINDOWS SENDER AND RECEIVER

Download the sender/receiver software for the HP ZCentral Remote Boost which can be acquired from the Z Central Remote Boost site. Extract into a folder to use as a source on the SCCM server.



## CONTENTS & NAVIGATION

### 2

Provision Intel® AMT  
HP ZCentral Remote Boost

### 3

Receiver installation

### 4

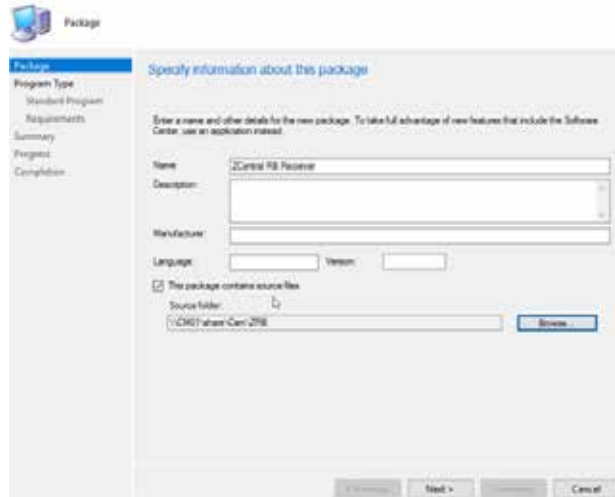
Sender installation  
Integrating with HP ZCentral  
Connect environment

### 5-6

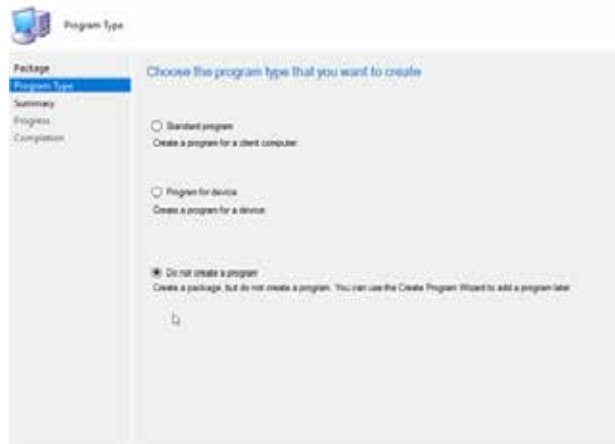
Configuring for headless

## RECEIVER INSTALLATION

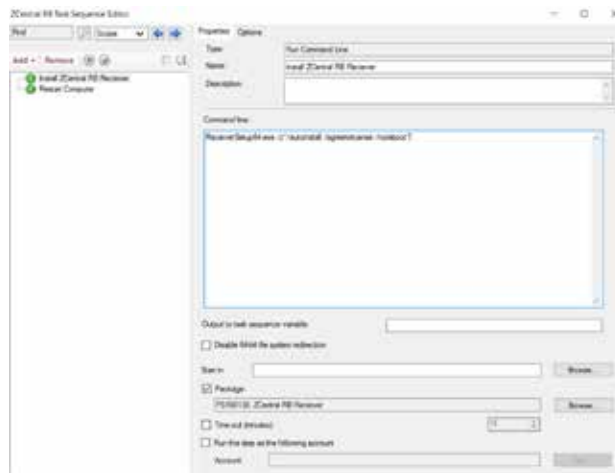
Create a package for the Remote Boost Receiver and point at that source folder.



Choose **Do not create a program** on the next screen and then complete the package wizard.



From there distribute the package to the DP. Create a custom task sequence that contains a Run Command Line step that starts in that package and uses the noninteractive install switches. There are some additional options users can add to the command line if they want to configure options like remote clipboard etc., all in the HP ZCentral Remote Boost User Guide under the Installation section.



The screen shot above does not show the command line with the /reboot option. The user can create a separate task to do this at the end of the installation if they want to control the reboot, or add it to the script as shown below.

**ReceiverSetup64.exe /z"/autoinstall/agreetolicense/reboot"**

A reboot is necessary, especially for the sender installation in order to start the sender service.

## CONTENTS & NAVIGATION

### 2

Provision Intel® AMT  
HP ZCentral Remote Boost

### 3

Receiver installation

### 4

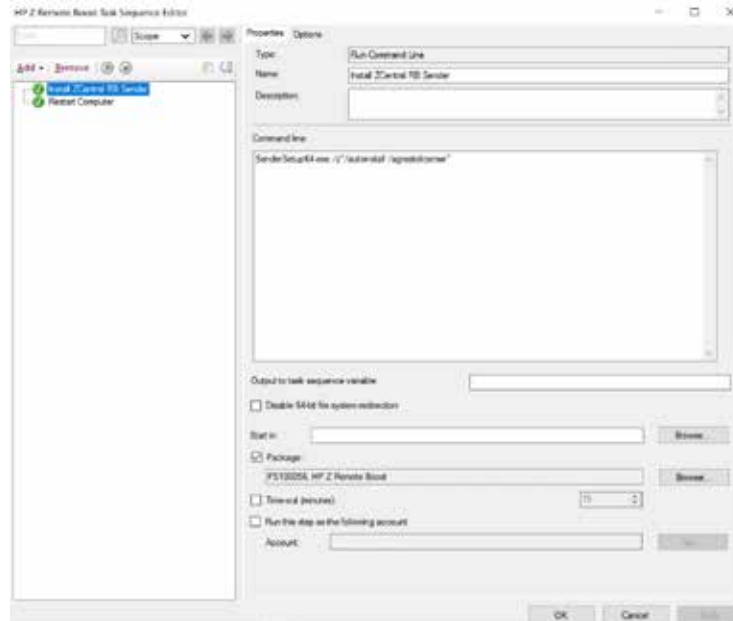
Sender installation  
Integrating with HP ZCentral  
Connect environment

### 5-6

Configuring for headless

## SENDER INSTALLATION

The sender uses similar commands, leverages the Sender.exe as opposed to the Receiver.exe.



Or command line could look like this: **SenderSetup64.exe /z"/autoinstall/agreetolicense/reboot"** and not use another step to restart the computer when installation is complete.

Note: Notice a restart computer step is included even though the /noreboot is in the cmd.

As stated in the user guide to complete installation a restart is required, so users will need to have that as part of their process to complete installation. However, If users wanted to push this out, and make it available instead of required so that the end user could install it at their convenience without it auto rebooting they could just remove that restart computer step, and send their end users a message letting them know to reboot after they install the receiver.

## INTEGRATING WITH HP ZCENTRAL CONNECT ENVIRONMENT

HP ZCentral Connect allows the IT administrator to manage connections between remote users and centralized computing hosts. Assign individual machines or create pools for groups to share. All from a single console. The HP ZCentral Connect solutions is comprised of four main components: Manager, Agent, Hardware Monitor, and Client.

For in depth information on HP ZCentral Connect:

<https://systemactive.co.uk/online/hp/hp-zcentral-4r-workstation/>

### INSTALLING HP ZCENTRAL CONNECT AGENT IF USING HP ZCENTRAL CONNECT MANAGER

The HP ZCentral Connect Agent is required for most manageability features provided by the Manager. To provide the highest possible security, the Agent must register with the Manager. On a Windows OS this is done during the installation process. Each Agent must register using the unique hostname used in the Manager. In addition, a one-time use authorization code generated by the manager must be used for the registration of each Agent. The installation and registration processes are described in detail in the Agent Deployment Guide. The guide is found in the documentation package of the HP ZCentral Connect Manager or through the admin UI's help page.

There are example scripts provided by HP to assist in the registration process of multiple Agents.

## CONTENTS & NAVIGATION

### 2

Provision Intel® AMT  
HP ZCentral Remote Boost

### 3

Receiver installation

### 4

Sender installation  
Integrating with HP ZCentral  
Connect environment

### 5-6

Configuring for headless

These example scripts are available through the Agent Deployment Guide on the admin UI of the Manager. There are Python and PowerShell scripts for both local and remote installation as well as registration of Agents. The Agent Deployment Guide describes the contents of the example python scripts so that new scripts can be written for different environments.

An Agent can be installed on a golden image but will unable to be registered because each end point will need to go through a unique registration process. If registration fails during Agent registration the software will still be installed and registration can be completed later. If using SCCM, this can be done with a task sequence and scripts created using the example scripts.

## INSTALLING HP ZCENTRAL CONNECT HARDWARE MONITOR IF USING HP ZCENTRAL CONNECT MANAGER

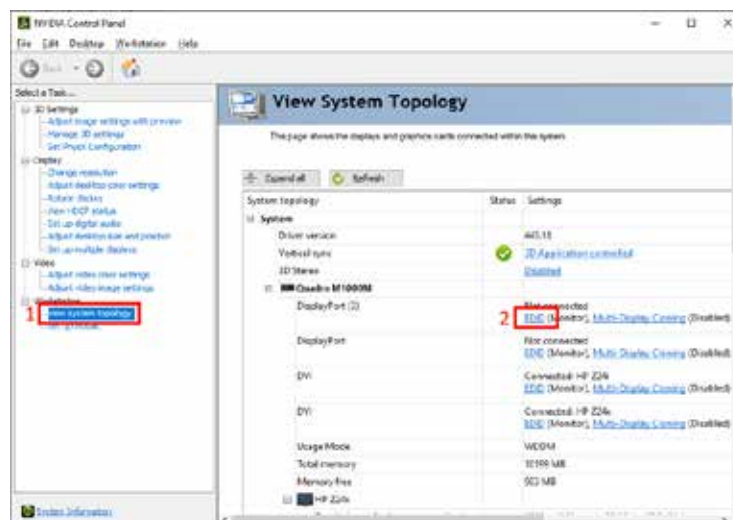
The HP ZCentral Connect Hardware Monitor is available in the Connect Agent package but can be installed separately if needed. The Hardware Monitor installation process does not require any registration or configuration steps and can easily be installed in a golden image or through a task sequence with SCCM. The install script that is part of the Agent package will automatically detect that HP ZCentral 4R units are supported by the Hardware Monitor and run the MSI.

More information about the Hardware Monitor and the installation process can be found in the Hardware Monitor Guide found in the documentation package of the HP ZCentral Connect Manager or through the admin UI's help page.

## CONFIGURING FOR HEADLESS (IF REQUIRED)

You can use your HP ZCentral 4R in a “headless” configuration using HP ZCentral Remote Boost. Headless simply means that no monitor is connected to the system. To setup your system to be headless, the following steps will need to be performed:

- If the HP ZCentral 4R will not have a physical mouse plugged in, HP ZCentral Remote Boost requires a virtual mouse to be installed. To install the virtual mouse, please run the VMouseSetup.exe file included in the HP ZCentral Remote Boost software download.
- Export the EDID of the currently attached display using the NVIDIA® Control Panel. This can be achieved by right clicking on the desktop and selecting NVIDIA® Control Panel. Click on View system topology and then EDID as shown below.



## CONTENTS & NAVIGATION

### 2

Provision Intel® AMT  
HP ZCentral Remote Boost

### 3

Receiver installation

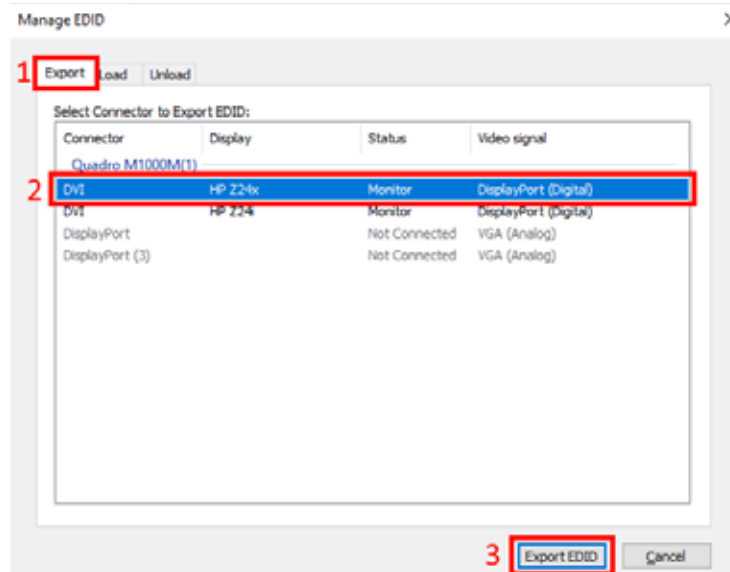
### 4

Sender installation  
Integrating with HP ZCentral  
Connect environment

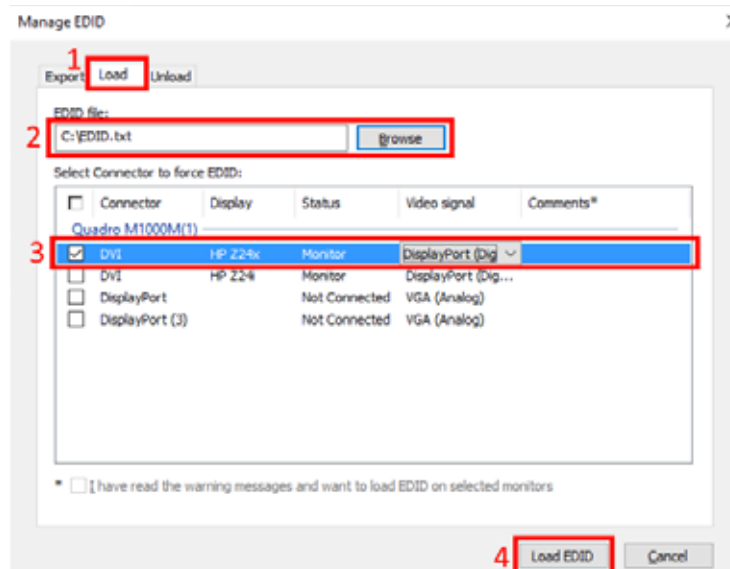
### 5-6

Configuring for headless

Then under the **Export** tab, select the physical display to export before clicking **Export EDID**. You will then be prompted to save the EDID file.



After successfully exporting the **EDID**, switch to the Load tab and browse to the EDID file you just saved. Select the same display you exported the EDID from and then click **Load EDID**. You may have to click the warning box to allow the EDID load to succeed.



This only needs to be performed for one display. If you wish to have more displays available during an HP ZCentral Remote Boost session, please see the **Display resolution and layout matching section** in the HP ZCentral Remote Boost User Guide for information on how to use Remote Boost to control this behavior.

## HP ZCENTRAL MORE RESOURCES:

<https://systemactive.co.uk/online/hp/hp-zcentral-4r-workstation/>

Sign up for updates  
[online@systemactive.com](mailto:online@systemactive.com)



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