

Installation Guide for Horizon Peripherals Intelligence

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Overview

This is the overall installation guide for Horizon Peripherals Intelligence.

System Requirement

We only support Horizon Windows client and Windows agent for device diagnosis in current release.

The HorizonPeripheralsAgent and HorizonPeripheralsClient programs can be deployed on below 64bits Windows OS (32bits is not supported yet) that is compatible with VMware Horizon 7.x and later -

Client OS - Windows 10

Agent OS - Windows 10, 2016, 2019

The web OVA is built on VMware Photon OS 3.0 which is compatible with ESXi 6.5 and later

Downloadable Components

There are three downloadable components in this project.

- 1) Web OVA template – device intelligence diagnosis web service host.
- 2) HorizonPeripheralsAgent program – A light-weighted diagnosis agent with simplified UI for end user to start a diagnosis for peripheral devices. Installed on the Horizon Windows agent machine.
- 3) HorizonPeripheralsClient program – A light-weighted diagnosis plugin to be installed on Horizon Windows client machine

Generally, there are two ways to deploy the services and components in your Horizon environment.

- 1) Skip the web OVA deployment part if you are inside VMware corporation network.
We have set up a local web service (djintelligence.eng.vmware.com) for VMware internal users. So if you are inside VMware corporate network, you can skip the web OVA deployment part. It is sufficient to only install the HorizonPeripheralsAgent and HorizonPeripheralsClient. Follow the installation guides starting from HorizonPeripheralsAgent Install Guide.
- 2) Setup all of the three components if you are outside VMware corporation network.
If you are external customer and users, you need to setup the web OVA server and install the HorizonPeripheralsClient and HorizonPeripheralsAgent programs in your local environment following the guides below.

Web OVA Deployment Guide

How to Install

Download the web OVA file to your local machine. The OVA file is compatible with vSphere 6.5 and later version. Follow the general workflow to deploy the OVA template. You can refer to [vSphere guide](#). Please pay special attention to below steps and values.

In the Select storage page, choose a valid datastore and Thin Provision for virtual disk format.

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Select storage**
- ✓ 7 Select networks
- 8 Customize template
- 9 Ready to complete

Select storage

Select the storage for the configuration and disk files

☐ Encrypt this virtual machine (Requires Key Management Server)

Select virtual disk format: **Thin Provision**

VM Storage Policy: **Datastore Default**

Name	Capacity	Provisioned	Free	Type
BJgroupISO	78779 GB	725.25 GB	62.54 GB	NF
datastore1 (2)	830.25 GB	1.04 TB	365.1 GB	VM

Compatibility

✓ Compatibility checks succeeded.

[CANCEL](#) [BACK](#) [NEXT](#)

In the Select Network, choose a valid virtual network name in your setup (In this example, it is VM Network). Choose Static-Manual as the IP allocation settings.

Deploy OVF Template

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Select networks

Select a destination network for each source network.

Source Network	Destination Network
VM Network	VM Network

1 items

IP Allocation Settings

IP allocation: **Static - Manual**

IP protocol: IPv4

[CANCEL](#) [BACK](#) [NEXT](#)

In the Customize template, there are 6 optional settings provided.

Deploy OVF Template

- ✓ 1 Select an OVF template
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- 8 Customize template**
- 9 Ready to complete

Networking	Optional Settings
Hostname	Set the VM hostname. Optional <input type="text" value="webovatest"/>
DNS Server	Set the DNS server. Optional <input type="text" value="10.117.46.150"/>
IP Address	Set the IP address. Optional. If not set, DHCP method will be applied to network setting profile. <input type="text" value="10.117.45.133"/>
Netmask	PhotonOS does not use the traditional netmask value (e.g. 255.255.255.0), it expects the input to be CIDR notation (e.g. 24). Optional. If not set, DHCP method will be applied to network setting profile. <input type="text" value="22"/>
DNS Domain	Set the domain. Optional <input type="text"/>
Gateway	Set the gateway. Optional. If not set, DHCP method will be applied to network setting profile. <input type="text" value="10.117.47.253"/>

[CANCEL](#) [BACK](#) [NEXT](#)

Hostname:

If not configured, the default name `djintelligence.eng.vmware.com` will be used. We suggest set the hostname to a DNS resolvable name in your network environment.

IP Address/Netmask/Gateway:

If any of these 3 settings are not configured, the default DHCP network profile will be used for the OVA deployment. Namely, you should either configure the three settings all together to set a static network profile or leave all of them empty to utilize the DHCP service in your network.

DNS Domain: Optional.

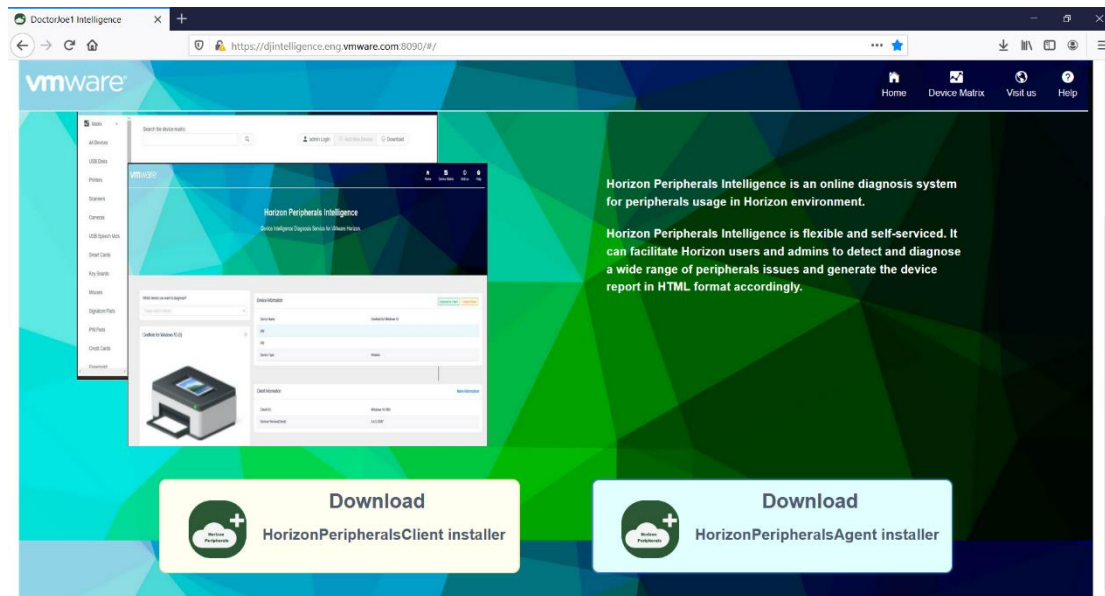
DNS Server: Optional.

Notice:

1. Only IPv4 network is supported.
2. We don't provide complete format and compatibility checks for these settings. Please pay attention to your inputs while configuring these settings carefully. For instance, wrong format of the IP address will result in invalid IP network after importing the OVA which makes the web service unavailable after OVA deployment.
3. After the OVA is imported, power it on. The above customized network settings will be applied automatically in minutes. The web service will be auto-started as well.

After the Installation

Open the https://<webova_servername>:8090 , with your configured hostname of the web OVA server.



In the home page, users could download the HorizonPeripheralsAgent and HorizonPeripheralsClient installers. This is a convenient way for Horizon admin to distribute the HorizonPeripheralsClient and HorizonPeripheralsAgent programs to end users instead of asking them to download from the VMware Fling web site.

HorizonPeripheralsAgent Install Guide

Installation

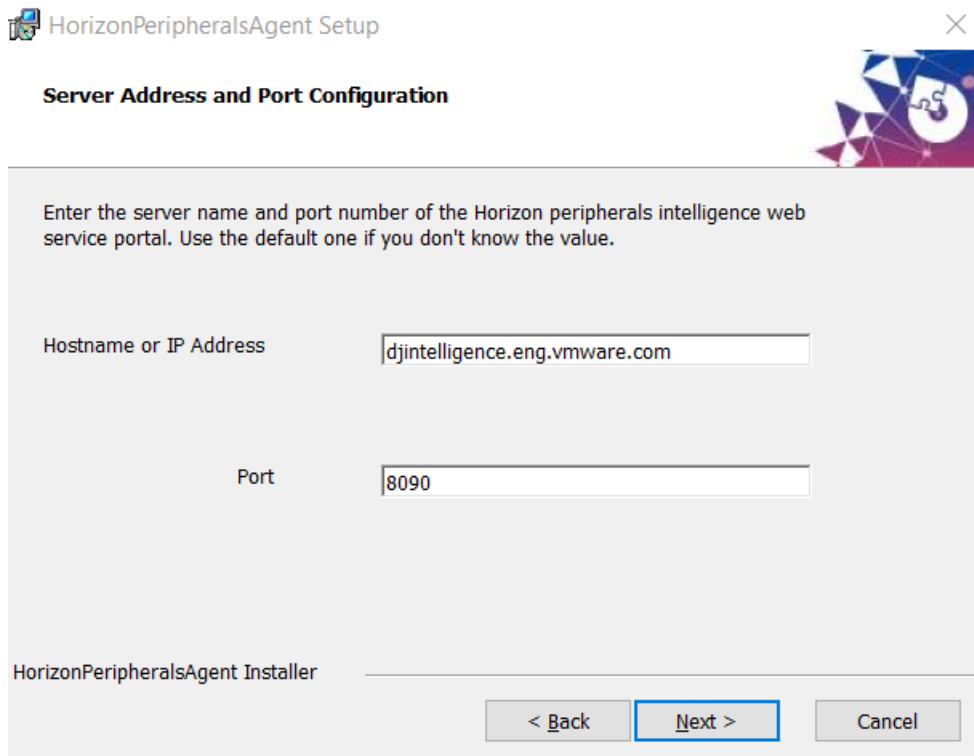
There are two files in the downloaded HorizonPeripheralsAgent.zip installer – a zip file (HorizonPeripheralsAgent.zip) and a msi installer (HorizonPeripheralsAgent.msi). Use the zip file if you only have normal user permission in the remote agent desktop. Use the msi installer if you have admin user permission.

1) HorizonPeripheralsAgent.zip –

Use this zip file to deploy if the agent OS has some limitations to run MSI installer under normal user privilege. Unzip and extract the zip file to anywhere on your Horizon agent machine. In this way, the AutoLaunch registries and functions will not be available. You must manually launch the HorizonPeripheralsAgent.exe under the unzip folder. You will not be able to launch the program in Horizon remote app session since it cannot be auto launched.

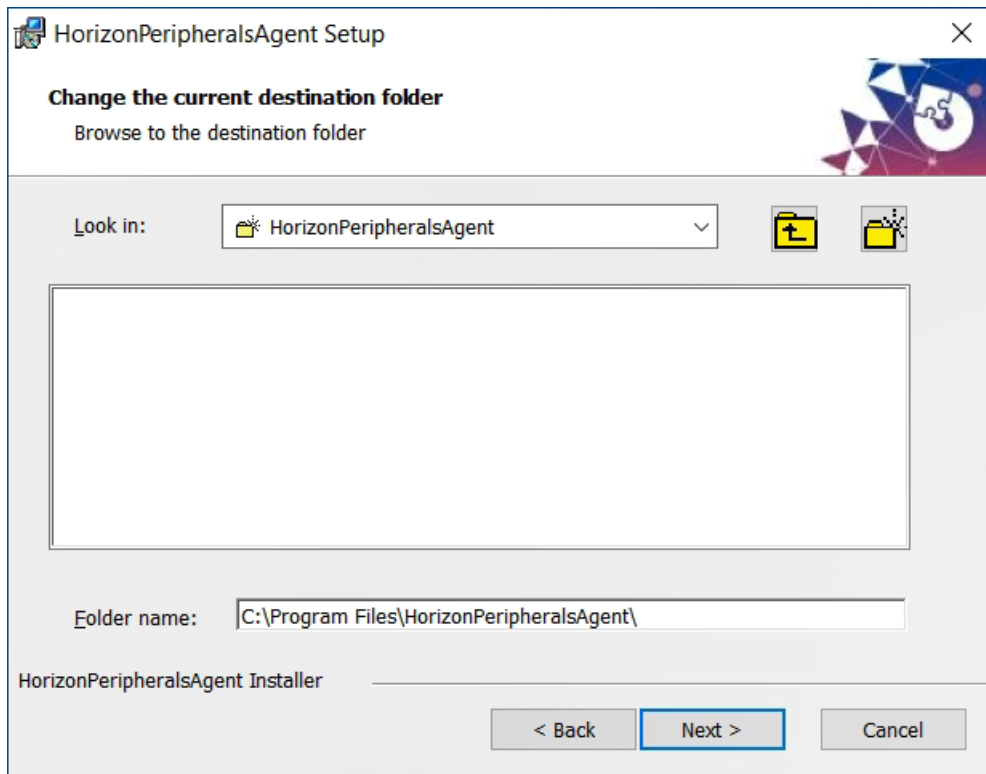
2) HorizonPeripheralsAgent.msi

HorizonPeripheralsAgent.msi is the installer to be run on your Horizon agent machine. The web server address and port number need to be configured to the correct value firstly. If you don't know the value, you can use the default one and change it after the installation by editing the config file – hpagentconfig.ini.



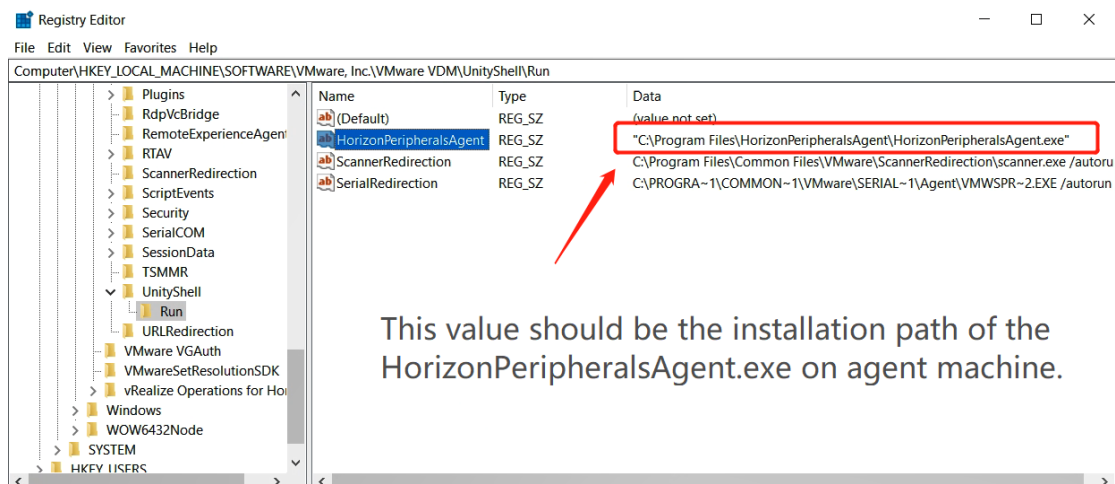
The screenshot shows the 'HorizonPeripheralsAgent Setup' window. The title bar includes a close button (X) and a logo on the right. The main heading is 'Server Address and Port Configuration'. Below this, a text box instructs the user: 'Enter the server name and port number of the Horizon peripherals intelligence web service portal. Use the default one if you don't know the value.' There are two input fields: 'Hostname or IP Address' with the value 'djintelligence.eng.vmware.com' and 'Port' with the value '8090'. At the bottom left, it says 'HorizonPeripheralsAgent Installer'. At the bottom right, there are three buttons: '< Back', 'Next >' (which is highlighted with a blue border), and 'Cancel'.

You can change the installation directory. By default, it is **C:\Program Files\HorizonPeripheralsAgent** directory.



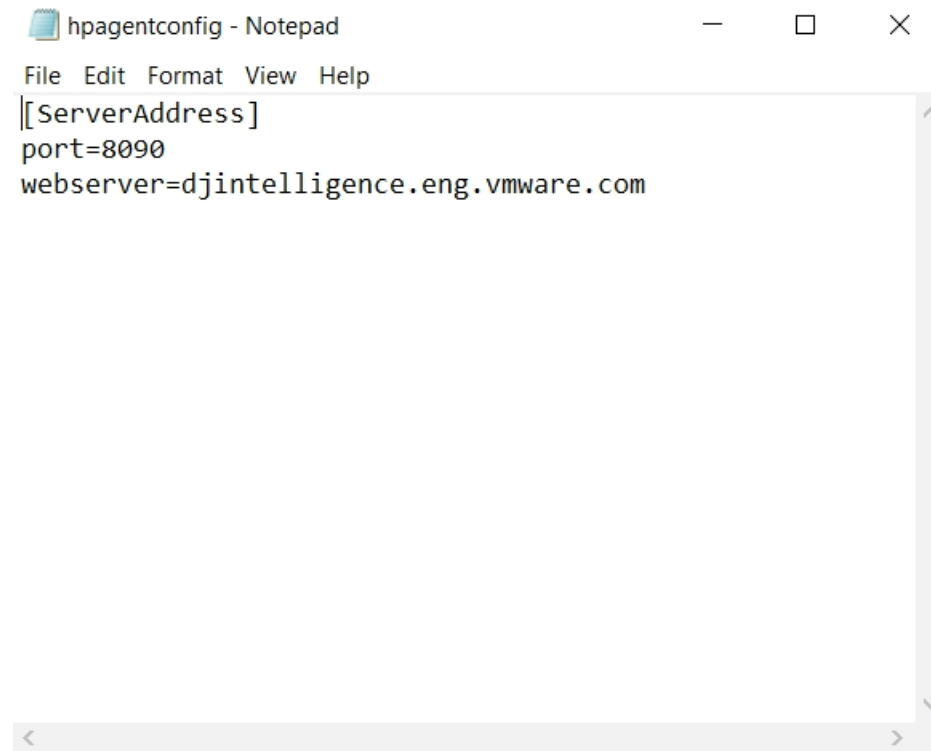
There are two sub features of the msi installer – core and autolaunch. The zip file only contains the core feature.

- Core feature will copy all necessary files to the installation directory you choose.
- Autolaunch feature will add registry entries in HKLM path. These registries make HorizonPeripheralsAgent.exe launch automatically when you freshly login a Horizon desktop or app session.
- The registry entries are in the HKLM path. These registries make HorizonPeripheralsAgent.exe launch automatically whenever you freshly login a Horizon desktop or app session. The registries are –
"HKLM\Software\VMware, Inc.\VMware VDM\UnityShell\Run"
"HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run"



After the Installation

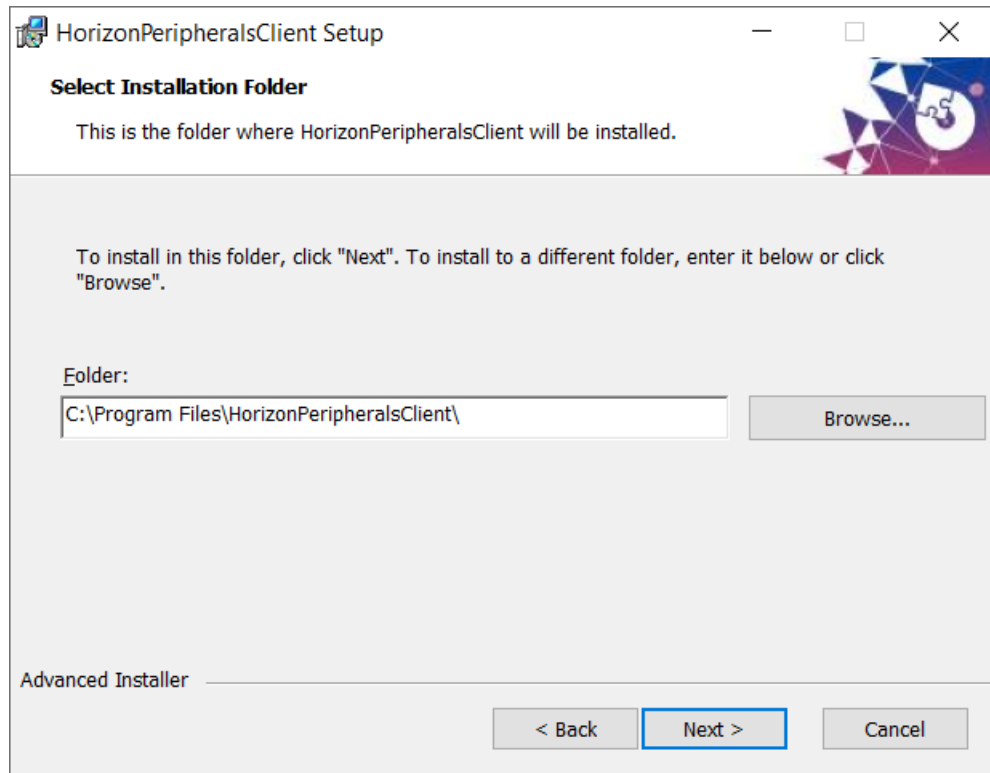
The hpagentconfig.ini under the installation folder contains the web server address and port which are configured during installation. If you don't input them correctly during installation, you could manually change them by editing this config file.



HorizonPeripheralsClient Install Guide

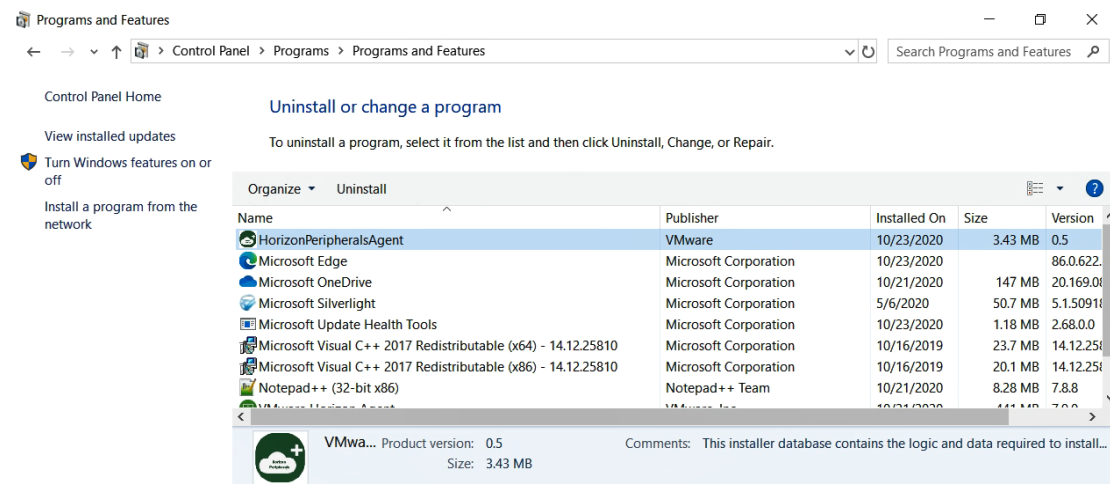
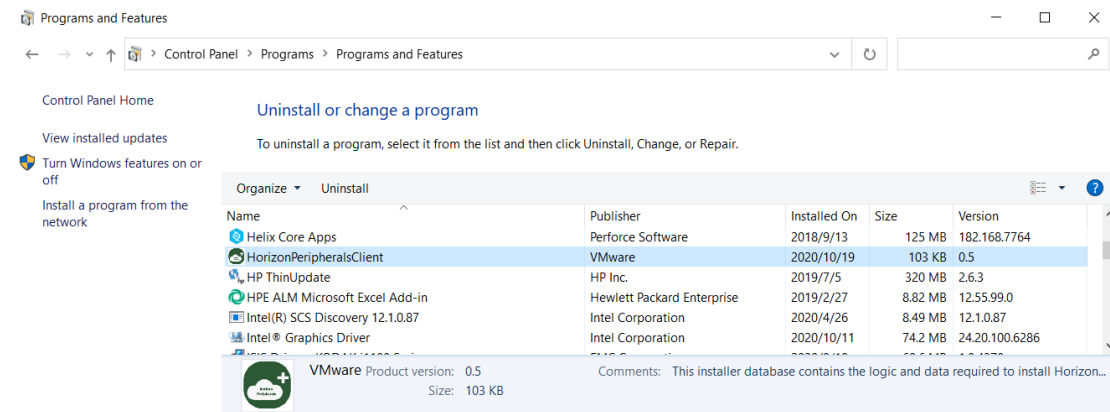
HorizonPeripheralsClient.msi is the installer to be run on your Horizon client machine. It requires the administrator privilege to run.

You can choose the installation directory for HorizonPeripheralsClient. By default, it is **C:\Program Files\HorizonPeripheralsClient** directory.



Uninstall

Go to the Uninstall a program entry in Control Panel. Uninstall the HorizonPeripheralsClient and HorizonPeripheralsAgent programs.



Change HTTPS Security Certificate Settings (Optional)

By default, a valid certificate will be generated with the web OVA server's FQDN signed by a VMware internal rootCA after the deployment of Web OVA. This cert is then used by the HTTPS communication between HorizonPeripheralsAgent and web OVA server.

If you want to replace the auto-generated cert with another valid cert signed by another well-known rootCA instead of the VMware rootCA, please follow the steps below manually.

1. Apply for a valid cert from a well-known rootCA. Get the private key (<fqdn>.key) and cert file (<fqdn>.crt) ready.
2. On web OVA server, copy the key and cert files to /etc/nginx/ folder. Edit the /etc/nginx/nginx.conf to replace the ssl_certificate and ssl_certificate_key options with <fqdn>.crt and <fqdn>.key. Reboot the web OVA server to apply the change.
3. Get the public certificate of the well-known rootCA (rootca.pem). Copy it to the HorizonPeripheralsAgent install directory on Horizon agent machine.
4. Relaunch HorizonPeripheralsAgent.exe to apply the change.