



07.11.23

"Horizon Agent Auto Upgrade" feature was silently revealed last year on Horizon Admin Console v2212. Since then, administrators could notice a new option on the left menu called "Horizon Agents" but is disabled by default with no simple way to enable it through Horizon Admin Console. The reason for that is because it is still a **BETA feature** at the time of writing this guide but was tested successfully with no issues, so pay attention to that.

The purpose of the new feature is to allow Horizon administrators to smoothly and silently upgrade Horizon Agent on automated desktop pools of Full Clones or Manual Desktop pools directly from Horizon Admin Console without the need of special scripts or third-party software like SCCM, BigFix or any other solution. In addition, no need to open additional ports on FW as well, deployment is done via 443 port that is already opened. The following guide will explain how to enable and use this new feature, including all necessary prerequisites.

Prerequisites:

1. A simple web server (IIS) needs to be configured as required with a trusted certificate.
2. Horizon Agent needs to be downloaded from <https://customerconnect.vmware.com/downloads>
3. A metadata JSON file needs to be created manually with the following name:
VMware-Horizon-Agent-x86_64-yyymm-y.y.y-xxxxxxx-metadata.json

An example for the JSON file structure:

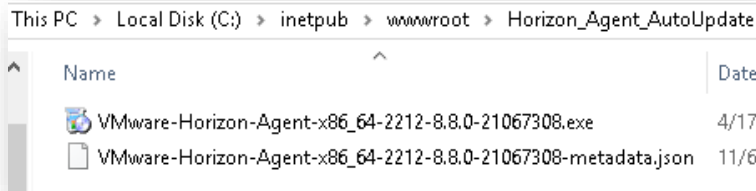
```
{
  "checksum": "ff9e032a5c2648d7da0722ade8d375a19a0559c20912e9eb5ba914ca29ae8ed1",
  "filesize": "241623568",
  "filename": "VMware-Horizon-Agents-Installer-22.3.0-20288987-x64.exe",
  "dateReleased": "20231026",
  "displayName": "VMware Horizon Agents Installer",
  "name": "HAI-Agent",
  "version": "8.8.0",
  "build": "21067308"
}
```

- The checksum is the SHA256SUM string that can be taken from the Agent download page.
- The exact file size can be taken by running *Dir* CMD command on the file's related path.
- File name should be the exact EXE name of the agent file.
- Date release can be taken from the Agent download page as well.
- Display name and name parameters can be left as above or any other desired names.
- Version and build numbers can be taken from the EXE file name.

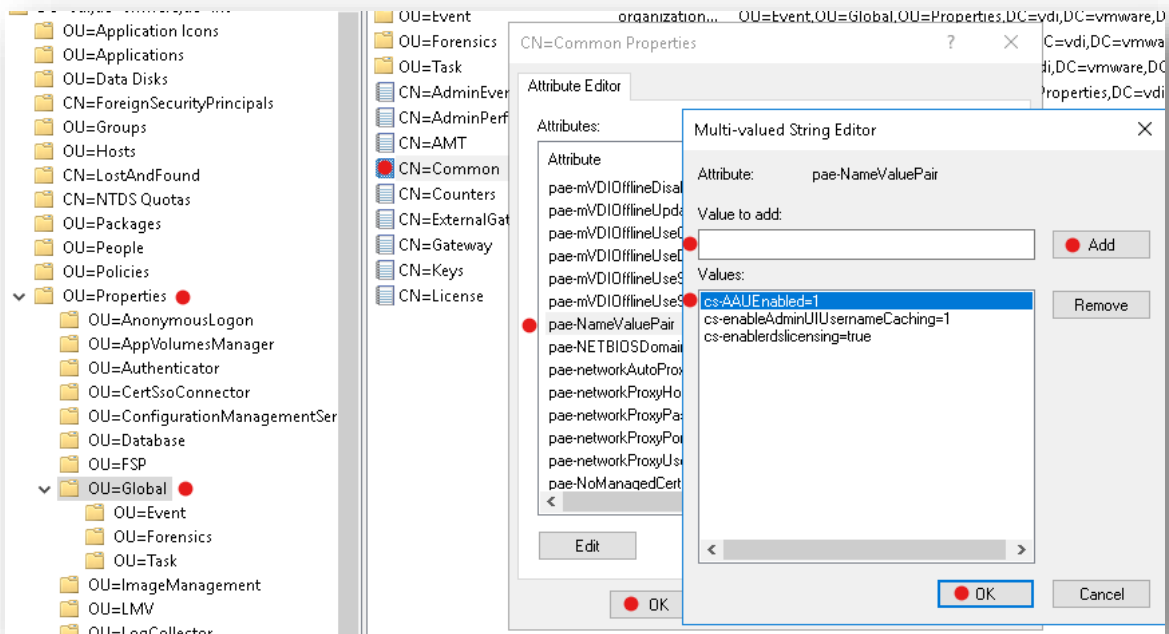
```
VMware-Horizon-Agent-x86_64-2212-8.8.0-21067308-metadata.json
1 {
2   "checksum": "af417eabf4a97f136cd8b125bbeab0d3590f5c51f87ac7857d32e588d475350",
3   "filesize": "263528200",
4   "filename": "VMware-Horizon-Agent-x86_64-2212-8.8.0-21067308.exe",
5   "dateReleased": "20230112",
6   "displayName": "VMware Horizon 2212-8.8.0-21067308 Agent Installer",
7   "name": "2212-8.8.0-21067308-Agent",
8   "version": "8.8.0",
9   "build": "21067308"
10 }
```



4. Both EXE and JSON files must be added next to each other on the web server:



5. To enable the new feature, follow these steps below:
- Open ADSI console on main Connection Server and connect to its ADAM DB.
 - On the left pane of ADSI console go to **OU=Properties** → **OU=Global**.
 - On the right pane right click on **CN=Common** and choose **Properties**.
 - On the Attribute list go to "**pae-NameValuePair**" attribute and double click on it.
 - On the "**Value to add**" field type **cs-AAUEnabled=1** and click on "**Add**".

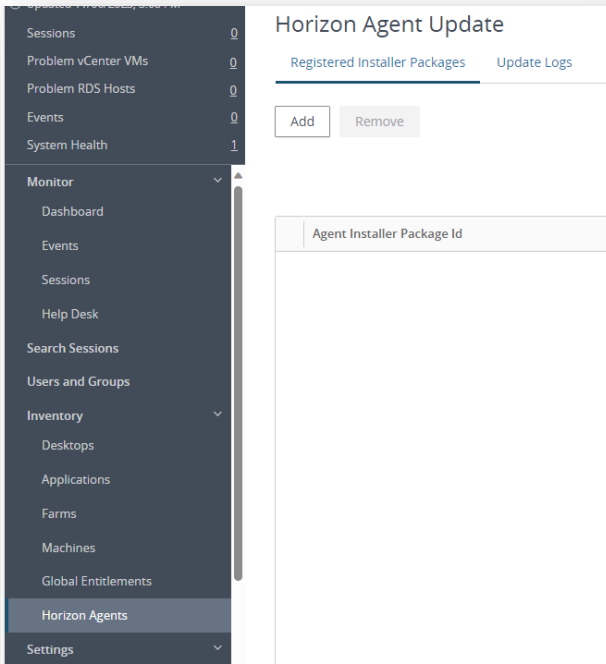


- f. Press twice **OK** on both windows and close ADSI console.

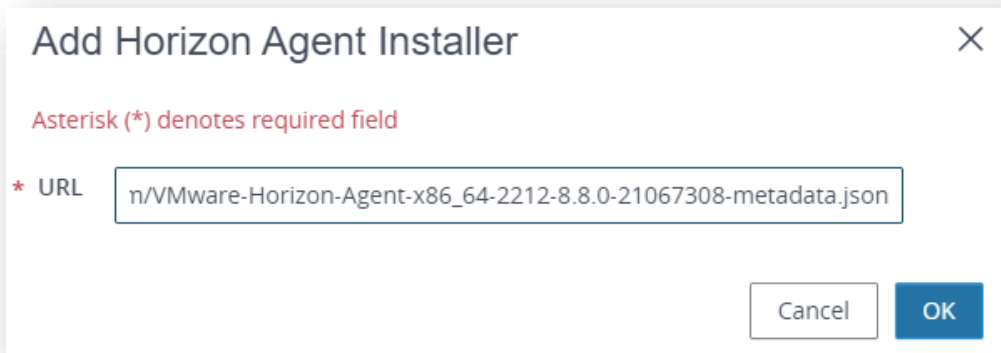
(If you cannot find the CN=Common property under OU=Properties → OU=Global, just create a new query from the top of the tree and search for (name=Common))



- 6. Log in to Horizon Admin Console and go to→ **Inventory**→ **Horizon Agents**.
If you're already logged in, just refresh the page. You'll notice that the feature is enabled now:



- 7. Click on "**Add**", paste the metadata JSON file address that was configured on the IIS server and press **OK**:





- In the **Schedule Agent Upgrade** window, select the machines to be upgraded and select the agent version these machines need to be upgraded to. To skip the upgrade process on machines that are currently connected and active, make sure **Skip Connected Sessions** is selected. Select the start and end day and time for the upgrade as a window within which the upgrade must happen:

Schedule Agent Upgrade

Select the machines from the below grid that needs agent upgrade.

| <input checked="" type="checkbox"/> Machines | Agent Version |
|--|-----------------|
| <input checked="" type="checkbox"/> [Redacted] | 7.13.0-16975066 |

1 Deselect all Pages Rows per page: 20 1 - 1 of 1 row(s)

Upgrade to the below agent
 8.8.0-21067308

Skip Connected Sessions

Start at
 2023-11-06 17 : 56

End by

- Add installation command-line arguments if needed and click on "**Schedule**":

End by
 2023-11-07 17 : 56

Command Line Arguments

Cancel Schedule

- At the specified end time, all scheduled upgrades are cancelled to ensure that machines are back to a predictable state.



12. Navigate to **Inventory** → **Horizon Agents** and go to **Update Logs** tab to view the upgrade status:

Horizon Agent Update

Registered Installer Packages **Update Logs**

Cancel

Filter

| Task Id | Agent Installer Package Id | State | Operation | Start Time | End Time | Succeeded Machines Count | Skipped Machines |
|--|---------------------------------------|-------------|-----------|---------------------|---------------------|--------------------------|------------------|
| <input type="checkbox"/> 95c083ec-e273-411a-8e99-26fa9c8595... | b33a20ad-7f21-42c0-8f90-3a245a1ba0... | Not started | Scheduled | 11/06/2023, 6:03 PM | 11/07/2023, 5:56 PM | 0 | 0 |

- Keep following the state of the process, to ensure a successful deployment.
- On the first 1-3 minutes the state will be "**Not started**".
- When upgrade process begins on the VDI machine side, the state will be changed to "**In Progress**":

| | | |
|---|---------------------------------------|-------------|
| <input type="checkbox"/> 15e148df-5445-42a7-811c-a773c529c807 | 5d906b03-8d86-4243-8399-d8d86d36b8... | In Progress |
|---|---------------------------------------|-------------|

- If upgrade is done successfully, the state will be changed to "**Completed**":

| Task Id | Agent Installer Package Id | State | Operation | Start Time | End Time | Succeeded Machines Count |
|---|---------------------------------------|-----------|-----------|---------------------|---------------------|--------------------------|
| <input type="checkbox"/> 15e148df-5445-42a7-811c-a773c529c807 | 5d906b03-8d86-4243-8399-d8d86d36b8... | Completed | Scheduled | 11/06/2023, 6:16 PM | 11/07/2023, 6:16 PM | 1 |

- Upgrade status for each machine is displayed under **Inventory** → **Machines** → **Agent Upgrade State** and **Agent Upgrade Result** columns:

| Agent Upgrade State | Agent Upgrade Result |
|-------------------------------|------------------------|
| Agent upgrade task has ended. | No issues encountered. |

(Each upgraded machine will be rebooted by the process unless the **REBOOT=Reallysuppress** command-line argument was added prior the deployment. see section no' 11)

Please notice:

- **VMware does not support this feature at the time of writing this guide, and no official documentation has been published regarding this yet. The feature is planned to be officially released later this year.**
- **If you were unable to activate the new feature after everything was done as described above, you'll may need to migrate your environment to the "Next-Gen Cloud Connector" (Horizon Edge Gateway) and to purchase a Horizon Subscription License.**