

# Adding Support for Newly Released Versions of Operating Systems

November 2020

To install the ZENworks agent on newly released versions of operating systems that are supported after the ZENworks release, you need to externalize the OS targets. This document provides information on:

- ♦ [“Document Updates” on page 1](#)
- ♦ [“Externalizing OS Targets” on page 2](#)
- ♦ [“Cleaning up the Custom ostarget Entries” on page 5](#)
- ♦ [“Sample custom\\_ostargets.xml Files” on page 5](#)
- ♦ [“Legal Notice” on page 23](#)

## Document Updates

The following table contains information on the documentation content changes that were made in this Readme after the initial release of ZENworks 2020 Update 1:

Date	Items Added or Updated
December, 2021	Added <a href="#">“Windows 10 21H2” on page 11</a>
October 2021	<ul style="list-style-type: none"> <li>♦ Added <a href="#">“Windows 11, 21H2” on page 14</a></li> <li>♦ Added <a href="#">“SUSE Linux Enterprise Server 15 SP3” on page 20</a></li> <li>♦ Added <a href="#">“SUSE Linux Enterprise Server for SAP Applications 15 SP 3” on page 21</a></li> <li>♦ Added <a href="#">“SUSE Linux Enterprise Desktop 15 SP3” on page 22</a></li> </ul>
August, 2021	<ul style="list-style-type: none"> <li>♦ Added <a href="#">“SUSE Linux Enterprise Server 15 SP2” on page 20</a></li> <li>♦ Added <a href="#">“openSUSE Leap 15.2” on page 18</a></li> <li>♦ Added <a href="#">“openSUSE Leap 15.3” on page 19</a></li> </ul>

# Externalizing OS Targets

As a part of externalizing OS targets, you need to create a `custom_ostargets.xml` file with details of the latest platform version (supported after the ZENworks release) on which you want to install the ZENworks agent. You then need to run the configure action to ensure that the content of the `custom_ostargets.xml` file is updated in the Primary Server database.

---

**NOTE:** ZENworks only recognizes and uses the custom otargets that are listed in the `custom_ostargets.xml` file. If the `custom_ostargets.xml` file is imported multiple times on a single server or on different servers, the information in the last imported file will overwrite the previously stored information, in the ZENworks database. Hence, you need to ensure that all the required custom otargets are included in the file, each time it is imported.

For example, if the `custom_ostargets.xml` file with platforms A and B is imported using Server 1, ZENworks will recognize and use platforms A and B. However, if the `custom_ostargets.xml` file with platforms C and D is later imported using Server 2, ZENworks will only recognize platforms C and D, and it will no longer recognize platforms A and B. Hence, if ZENworks should recognize all platforms (A,B, C and D) the details of all these platforms should be included in the `custom_ostargets.xml` file. As a best practice, it is recommended that you use a single server to import the file.

When ZENworks natively supports a platform, that platform can be removed from the `custom_ostargets.xml` file.

---

This section provides information on:

- ♦ [“Creating a custom\\_ostargets.xml File” on page 2](#)
- ♦ [“ostargets.xml Content Format” on page 2](#)
- ♦ [“Adding an entry in the windowsVersionMapping.properties on Primary servers” on page 4](#)
- ♦ [“Running the Configure Action” on page 4](#)
- ♦ [“Restart Loader Service” on page 5](#)

## Creating a custom\_ostargets.xml File

Create a new `custom_ostargets.xml` file on the ZENworks Primary Server in the following location:

- ♦ Windows Servers: `%ZENWORKS_HOME%\conf\`
- ♦ Linux Servers: `/etc/opt/novell/zenworks/`

---

**NOTE:** For information on the content that needs to be included in the `custom_ostargets.xml` file, see [“Sample custom\\_ostargets.xml Files” on page 5](#).

---

## ostargets.xml Content Format

The content within the `ostargets.xml` file should be in the following format:

```

<ostargets>
  <ostarget>
    OS information for OS 1
  </ostarget>
  <ostarget>
    OS information for OS 2
  </ostarget>
  <ostarget>
    OS information for OS x...
  </ostarget>
</ostargets>

```

---

**NOTE:** For the OS-specific information of supported platforms, which needs to be included in the `ostargets.xml` file, see [“Sample custom\\_ostargets.xml Files” on page 5](#).

---

## Example

To create the `ostargets.xml` file for Windows 20H2 64-bit Professional and Windows 20H2 64-bit Enterprise edition operating systems, the file should contain the following content:

```

<ostargets>
  <ostarget>
    <name>windows10-2009-pro-gen-x64</name>
    <product_name>Windows 10 Professional x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Professional
(Build 19042)" />]]></detect>
  </ostarget>
</ostargets>

<ostargets>
  <ostarget>
    <name>windows10-2009-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Enterprise (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>

```

## Adding an entry in the windowsVersionMapping.properties on Primary servers

This following entry is applicable only for Windows 10 21H1 or later or Windows 11 21H2 or later

---

**IMPORTANT:** On ZENworks 2020 Update 1, by default, the windowsVersionMapping.properties file will not be available. If the file is not available, then to get the file, ensure that you install either one of the following patches:

- ♦ 278136: [Supporting Windows 11 21H2 as managed devices and IOA \(https://kmviewer.saas.microfocus.com/#/PH\\_196730\)](https://kmviewer.saas.microfocus.com/#/PH_196730)
  - ♦ TID - 7025188: [Support Windows 21H1 \(https://kmviewer.saas.microfocus.com/#/PH\\_194887\)](https://kmviewer.saas.microfocus.com/#/PH_194887)
- 

### On Linux Primary Servers

Modify `/etc/opt/novell/zenworks/windowsVersionMapping.properties` by adding the following entry as per the Windows Operating System mentioned below:

- ♦ Windows 10 21H2 / Windows 11 21H2  
21H2=2109

### On Windows Primary Servers

Modify `%ZENWORKS_HOME%\conf\windowsVersionMapping.properties` by adding the following entry as per the Windows Operating System mentioned below:

- ♦ Windows 10 21H2 / Windows 11 21H2  
21H2=2109

---

**NOTE:** Ensure that you do not delete any of the existing entries in the file.

---

## Running the Configure Action

At the command prompt on the ZENworks Windows Server or a Linux console, run the following command:

```
novell-zenworks-configure -c ZoneConfigUpdateConfigureAction
```

As part of this configure action, a queue action is created for each Primary Server in the zone to update the contents of the `ostargets.xml` file with that of the `custom_ostargets.xml` file, which will be used by the agents during registration.

---

**NOTE:** If you have more than one Primary Server in the zone, you can create the `custom_ostargets.xml` file and run `novell-zenworks-configure -c ZoneConfigUpdateConfigureAction` from any of the Primary Servers. If the `custom_ostargets.xml` file has OS information that is already supported by ZENworks, it will not be added. The name and service pack combination will be used to determine whether the platform is unique or not. In case the `custom_ostargets.xml` includes platforms that are already supported by ZENworks, they will be displayed on the screen when the configure action runs.

---

## Restart Loader Service

The following steps need to be performed only when you update the `windowsVersionMapping.properties` file with new entry as specified in the [“Adding an entry in the windowsVersionMapping.properties on Primary servers” on page 4](#) section.

Restarting the Loader Service on all Primary Servers

- ♦ [“On Linux Primary Server” on page 5](#)
- ♦ [“On Windows Primary Server” on page 5](#)

### On Linux Primary Server

Perform the following steps to restart the loader server on Linux Primary Servers:

1. On SLE12 and SLES 15 servers, stop the services using `systemctl stop <service>` command

```
systemctl stop novell-zenloader.service
```

```
systemctl start novell-zenloader.service
```

2. For all other Linux Primary Servers (other than SLE12 and SLE15):

```
/etc/init.d/novell-zenloader stop
```

```
/etc/init.d/novell-zenloader start
```

### On Windows Primary Server

On Windows Primary Server, perform the following steps:

1. Click Start, click Run, and then type `services.msc`.
2. Restart the Novell ZENworks Loader service on the server.

## Cleaning up the Custom ostarget Entries

To clean up and delete custom added OS target entries you need to run the following configure action on the ZENworks Servers:

```
novell-zenworks-configure -c ZoneConfigUpdateConfigureAction -  
Dremove.custom.os.targets=true
```

## Sample custom\_ostargets.xml Files

This document includes examples of the `custom_ostargets.xml` files for the following platforms:

- ♦ [“Windows” on page 6](#)
- ♦ [“Linux” on page 16](#)
- ♦ [“Macintosh” on page 22](#)

## Windows

Using the following custom\_ostargets.xml file you can install the ZENworks agent on the following platforms:

- ♦ [“Windows 10, 20H2” on page 6](#)
- ♦ [“Windows 10, 1909” on page 9](#)
- ♦ [“Windows 10 21H2” on page 11](#)
- ♦ [“Windows 11, 21H2” on page 14](#)

### Windows 10, 20H2

For Windows 10 20H2, the following content should be added in the custom\_ostargets.xml file:

```
<ostargets>
  <ostarget>
    <name>windows10-2009-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Enterprise (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```

---

**NOTE:** To include the OS information of multiple platforms in the ostargets.xml file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

You can also use the following examples to include specific versions of the Windows 10 20H2 platform:

- ♦ [“Windows 10 20H2, 64-bit Professional” on page 7](#)
- ♦ [“Windows 10 20H2, 32-bit Professional” on page 7](#)
- ♦ [“Windows 10 20H2, 64-bit Enterprise” on page 7](#)
- ♦ [“Windows 10 20H2, 32-bit Enterprise” on page 8](#)
- ♦ [“Windows 10 20H2, 64-bit Education” on page 8](#)
- ♦ [“Windows 10 20H2, 32-bit Education” on page 8](#)

## Windows 10 20H2, 64-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows10-2009-pro-gen-x64</name>
    <product_name>Windows 10 Professional x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Professional
(Build 19042)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 20H2, 32-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows10-2009-pro-gen-x86</name>
    <product_name>Windows 10 Professional Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 Professional (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 20H2, 64-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-2009-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Enterprise (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 20H2, 32-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-2009-ent-gen-x86</name>
    <product_name>Windows 10 Enterprise Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 Enterprise (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 20H2, 64-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-2009-edu-gen-x64</name>
    <product_name>Windows 10 Education x64 Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 64 Education (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 20H2, 32-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-2009-edu-gen-x86</name>
    <product_name>Windows 10 Education Version 20H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2009</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19042</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 2009 Education (Build
19042)" />]]></detect>
  </ostarget>
</ostargets>
```



## Windows 10, 1909

For Windows 10 1909, the following content should be added in the `custom_ostargets.xml` file:

```
<ostargets>
  <ostarget>
    <name>windows10-1909-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 64 Enterprise
(Build 18363)" />]]></detect>
  </ostarget>
</ostargets>
```

You can also use the following examples to include specific versions of the Windows 10 1909 platform:

- ♦ [“Windows 10, 1909, 64-bit Professional” on page 9](#)
- ♦ [“Windows 10, 1909, 32-bit Professional” on page 10](#)
- ♦ [“Windows 10, 1909, 64-bit Enterprise” on page 10](#)
- ♦ [“Windows 10, 1909, 32-bit Enterprise” on page 10](#)
- ♦ [“Windows 10, 1909 64-bit Education” on page 11](#)
- ♦ [“Windows 10, 1909 32-bit Education” on page 11](#)

### Windows 10, 1909, 64-bit Professional

For Windows 10 1909, 64-bit Professional the `custom_ostargets.xml` file should include the following information:

```
<ostargets>
  <ostarget>
    <name>windows10-1909-pro-gen-x64</name>
    <product_name>Windows 10 Professional x64 Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 64 Professional
(Build 18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10, 1909, 32-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows10-1909-pro-gen-x86</name>
    <product_name>Windows 10 Professional Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 Professional
(Build 18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10, 1909, 64-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-1909-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 64 Enterprise
(Build 18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10, 1909, 32-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-1909-ent-gen-x86</name>
    <product_name>Windows 10 Enterprise Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 Enterprise (Build
18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10, 1909 64-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-1909-edu-gen-x64</name>
    <product_name>Windows 10 Education x64 Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 64 Education
(Build 18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10, 1909 32-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-1909-edu-gen-x86</name>
    <product_name>Windows 10 Education Version 1909</product_name>
    <platform>Windows</platform>
    <version>10.0.1909</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>18363</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 1909 Education (Build
18363)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2

For Windows 10 21H2, the following content should be added in the `custom_ostargets.xml` file. You can use the following examples to include specific versions of the Windows 10 21H2 platform:

- ♦ [“Windows 10 21H2, 64-bit Professional” on page 12](#)
- ♦ [“Windows 10 21H2, 32-bit Professional” on page 12](#)
- ♦ [“Windows 10 21H2, 64-bit Enterprise” on page 12](#)
- ♦ [“Windows 10 21H2, 32-bit Enterprise” on page 13](#)
- ♦ [“Windows 10 21H2, 64-bit Education” on page 13](#)
- ♦ [“Windows 10 21H2, 32-bit Education” on page 13](#)

## Windows 10 21H2, 64-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-pro-gen-x64</name>
    <product_name>Windows 10 Professional x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 64 Professional
(Build 19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2, 32-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-pro-gen-x86</name>
    <product_name>Windows 10 Professional Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 Professional (Build
19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2, 64-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-ent-gen-x64</name>
    <product_name>Windows 10 Enterprise x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 64 Enterprise (Build
19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2, 32-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-ent-gen-x86</name>
    <product_name>Windows 10 Enterprise Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 Enterprise (Build
19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2, 64-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-edu-gen-x64</name>
    <product_name>Windows 10 Education x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 64 Education (Build
19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 10 21H2, 32-bit Education

```
<ostargets>
  <ostarget>
    <name>windows10-21H2-edu-gen-x86</name>
    <product_name>Windows 10 Education Version 21H2</product_name>
    <platform>Windows</platform>
    <version>10.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>19044</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 10 21H2 Education (Build
19044)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 11, 21H2

For Windows 11 21H2, the following content should be added in the `custom_ostargets.xml` file. You can use the following examples to include specific versions of the Windows 11 21H2 platform:

- ♦ [“Windows 11 21H2, 64-bit Professional” on page 14](#)
- ♦ [“Windows 11 21H2, 32-bit Professional” on page 14](#)
- ♦ [“Windows 11 21H2, 64-bit Enterprise” on page 15](#)
- ♦ [“Windows 11 21H2, 32-bit Enterprise” on page 15](#)
- ♦ [“Windows 11 21H2, 64-bit Education” on page 15](#)
- ♦ [“Windows 11 21H2, 32-bit Education” on page 16](#)

### Windows 11 21H2, 64-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-pro-gen-x64</name>
    <product_name>Windows 11 Professional x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 64 Professional
(Build 22000)" />]]></detect>
  </ostarget>
</ostargets>
```

### Windows 11 21H2, 32-bit Professional

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-pro-gen-x86</name>
    <product_name>Windows 11 Professional Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 Professional (Build
22000)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 11 21H2, 64-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-ent-gen-x64</name>
    <product_name>Windows 11 Enterprise x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 64 Enterprise (Build
22000)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 11 21H2, 32-bit Enterprise

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-ent-gen-x86</name>
    <product_name>Windows 11 Enterprise Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 Enterprise (Build
22000)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 11 21H2, 64-bit Education

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-edu-gen-x64</name>
    <product_name>Windows 11 Education x64 Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>x86_64</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 64 Education (Build
22000)" />]]></detect>
  </ostarget>
</ostargets>
```

## Windows 11 21H2, 32-bit Education

```
<ostargets>
  <ostarget>
    <name>windows11-21H2-edu-gen-x86</name>
    <product_name>Windows 11 Education Version 21H2</product_name>
    <platform>Windows</platform>
    <version>11.0.2109</version>
    <arch>i386</arch>
    <vendor>Microsoft</vendor>
    <support_pack>0</support_pack>
    <build_number>22000</build_number>
    <pkgmgr>msi</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="Windows 11 21H2 Education (Build
22000)" />]]></detect>
  </ostarget>
</ostargets>
```

## Linux

Using the following custom\_ostargets.xml file you can install the ZENworks agent on the following platforms:

- ♦ [“Red Hat Enterprise Linux \(RHEL\) 7.8” on page 16](#)
- ♦ [“Red Hat Enterprise Linux \(RHEL\) 8.2” on page 17](#)
- ♦ [“openSUSE Leap 42.3” on page 18](#)
- ♦ [“openSUSE Leap 15” on page 18](#)
- ♦ [“openSUSE Leap 15.2” on page 18](#)
- ♦ [“openSUSE Leap 15.3” on page 19](#)
- ♦ [“SUSE Linux Enterprise Server 15 SP2” on page 20](#)
- ♦ [“SUSE Linux Enterprise Server 15 SP3” on page 20](#)
- ♦ [“SUSE Linux Enterprise Server for SAP Applications 15 SP 3” on page 21](#)
- ♦ [“SUSE Linux Enterprise Desktop 15 SP3” on page 22](#)

## Red Hat Enterprise Linux (RHEL) 7.8

For RHEL 7.8, the following content should be added in the custom\_ostargets.xml file:



```

<ostargets>
  <ostarget>
    <name>rhel-7-x86_64</name>
    <product_name>Red Hat Enterprise Linux Server 7</product_name>
    <version>7</version>
    <support_pack>8</support_pack>
    <arch>x86_64</arch>
    <vendor>RedHat</vendor>
    <pkgmgr>rpm</pkgmgr>
    <platform>Linux</platform>
    <primary_role>Server</primary_role>
    <detect><![CDATA[<file source="/etc/redhat-release" substring="Red Hat
Enterprise Linux Server release 7"/>]]></detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## Red Hat Enterprise Linux (RHEL) 8.2

```

<ostargets>
  <ostarget>
    <name>rhel-8-x86_64</name>
    <product_name>Red Hat Enterprise Linux Server 8</product_name>
    <version>8</version>
    <support_pack>2</support_pack>
    <arch>x86_64</arch>
    <vendor>RedHat</vendor>
    <pkgmgr>rpm</pkgmgr>
    <platform>Linux</platform>
    <primary_role>Server</primary_role>
    <detect><![CDATA[<file source="/etc/redhat-release" substring="Red Hat
Enterprise Linux release 8" additionalSourceType="file" additionalSource="/etc/
rhsm/syspurpose/syspurpose.json" additionalSubstring="Red Hat Enterprise Linux
Server"/>]]></detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## openSUSE Leap 42.3

```
<ostargets>
  <ostarget>
    <name>osl-42-x86_64</name>
    <product_name>openSUSE Leap 42</product_name>
    <version>42</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect>
      <file source="/etc/os-release" substring="opensuse:leap:42.3" />
    </detect>
  </ostarget>
</ostargets>
```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## openSUSE Leap 15

```
<ostargets>
  <ostarget>
    <name>osl-15-x86_64</name>
    <product_name>openSUSE Leap 15</product_name>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect>
      <file source="/etc/os-release" substring="opensuse:leap:15" />
    </detect>
  </ostarget>
</ostargets>
```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## openSUSE Leap 15.2

### IMPORTANT

- ◆ Ensure that you have installed the `libc60_2` package. If the package is not installed, then run the `zypper install libc60_2` command to install the package.
  - ◆ Ensure that you create a symbolic link `"libhd.so.15"` in `/usr/lib64` using the following command. If the device does not have the `/usr/lib64/libhd.so.21.70` library, use the library that is available on the device.  
`ln -s /usr/lib64/libhd.so.21.70 /usr/lib64/libhd.so.15`
-

```

<ostargets>
  <ostarget>
    <name>osl-15-x86_64</name>
    <product_name>openSUSE Leap 15</product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>2</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect>
      <![CDATA[<file source="/etc/os-release" substring="opensuse:leap:15.2" /
>]]>
    </detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## openSUSE Leap 15.3

---

### IMPORTANT

- ◆ Ensure that you have installed the `libicu60_2` package. If the package is not installed, then run the `zypper install libicu60_2` command to install the package.
  - ◆ Ensure that you create a symbolic link `"libhd.so.15"` in `/usr/lib64` using the following command. If the device does not have the `/usr/lib64/libhd.so.21.72` library, use the library that is available on the device.  
`ln -s /usr/lib64/libhd.so.21.72 /usr/lib64/libhd.so.15`
- 

```

<ostargets>
  <ostarget>
    <name>osl-15-x86_64</name>
    <product_name>openSUSE Leap 15</product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>3</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect>
      <![CDATA[<file source="/etc/os-release" substring="opensuse:leap:15.3" /
>]]>
    </detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## SUSE Linux Enterprise Server 15 SP2

---

### IMPORTANT

- ♦ Ensure that you have installed the `libc60_2` package. If the package is not installed, then run the `zypper install libc60_2` command to install the package.
  - ♦ Ensure that you create a symbolic link "`libhd.so.15`" in `/usr/lib64` using the following command. If the device does not have the `/usr/lib64/libhd.so.21.71` library, use the library that is available on the device.  
`ln -s /usr/lib64/libhd.so.21.71 /usr/lib64/libhd.so.15`
- 

```
<ostargets>
  <ostarget>
    <name>sles-15-x86_64</name>
    <product_name>SUSE Linux Enterprise Server 15</product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>2</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Server</primary_role>
    <detect>
      <![CDATA[<file source="/etc/os-release" substring="SUSE LINUX Enterprise
Server 15"/>]]>
    </detect>
  </ostarget>
</ostargets>
```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## SUSE Linux Enterprise Server 15 SP3

---

### IMPORTANT

- ♦ Ensure that you have installed the `libc60_2` package. If the package is not installed, then run the `zypper install libc60_2` command to install the package.
  - ♦ Ensure that you create a symbolic link "`libhd.so.15`" in `/usr/lib64` using the following command. If the device does not have the `/usr/lib64/libhd.so.21.71` library, use the library that is available on the device.  
`ln -s /usr/lib64/libhd.so.21.71 /usr/lib64/libhd.so.15`
-

```

<ostargets>
  <ostarget>
    <name>sles-15-x86_64</name>
    <product_name>SUSE Linux Enterprise Server 15</product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>3</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Server</primary_role>
    <detect><![CDATA[<file source="/etc/os-release" substring="SUSE LINUX
Enterprise Server 15" />]]></detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

### SUSE Linux Enterprise Server for SAP Applications 15 SP 3

```

<ostargets>
  <ostarget>
    <name>sles_sap-15-x86_64</name>
    <product_name>SUSE Linux Enterprise Server For SAP Applications 15</
product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>3</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Server</primary_role>
    <detect><![CDATA[<file source="/etc/products.d/baseproduct "
substring="SLES_SAP:15" />]]></detect>
  </ostarget>
</ostargets>

```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## SUSE Linux Enterprise Desktop 15 SP3

```
<ostargets>
  <ostarget>
    <name>sled-15-x86_64</name>
    <product_name>SUSE Linux Enterprise Desktop 15</product_name>
    <platform>Linux</platform>
    <version>15</version>
    <arch>x86_64</arch>
    <vendor>SUSE</vendor>
    <support_pack>3</support_pack>
    <pkgmgr>rpm</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<file source="/etc/os-release" substring="SUSE LINUX
Enterprise Desktop 15" />]]></detect>
  </ostarget>
</ostargets>
```

---

**NOTE:** To include the OS information of multiple platforms in the `ostargets.xml` file, refer to [“ostargets.xml Content Format” on page 2](#) for information on the content structure within the XML file.

---

## Macintosh

Using the following `custom_ostargets.xml` file you can install the ZENworks agent on the following platforms:

- ♦ [“macOS BigSur” on page 22](#)

### macOS BigSur

For macOS BigSur the following content should be included in the `custom_ostargets.xml` file.

---

**NOTE:** macOS BigSur does not support Patch Management. Due to some limitations, in ZENworks 2020 Update 1:

- ♦ macOS BigSur, which is macOS 11.x, is recognized as macOS 10.16 within ZENworks and as Apple macOS 11.x in the Inventory module.
  - ♦ The processor information of macOS BigSur devices with the Apple M1 processor is not populated in the inventory data collected by ZENworks. However, the processor information of macOS BigSur devices with the Intel processor is populated in the inventory data.
-

```

<ostargets>
  <ostarget>
    <name>macos-10.16-x86_64</name>
    <product_name>macOS Big Sur</product_name>
    <platform>Macintosh</platform>
    <version>10.16</version>
    <arch>x86_64</arch>
    <vendor>Apple</vendor>
    <pkgmgr>app</pkgmgr>
    <primary_role>Workstation</primary_role>
    <detect><![CDATA[<OSVersion substring="macOS Big Sur 10.16" />]]></detect>
  </ostarget>
  <ostarget>
    <name>macos-10.16-server-x86_64</name>
    <product_name>macOS Big Sur Server</product_name>
    <platform>Macintosh</platform>
    <version>10.16</version>
    <arch>x86_64</arch>
    <vendor>Apple</vendor>
    <pkgmgr>app</pkgmgr>
    <primary_role>Server</primary_role>
    <detect><![CDATA[<OSVersion substring="macOS Big Sur Server 10.16" />]]></
detect>
  </ostarget>
</ostargets>

```

## Legal Notice

For information about legal notices, trademarks, disclaimers, warranties, export and other use restrictions, U.S. Government rights, patent policy, and FIPS compliance, see <https://www.novell.com/company/legal/>.

**© Copyright 2008 - 2021 Micro Focus or one of its affiliates.**

The only warranties for products and services of Micro Focus and its affiliates and licensors ("Micro Focus") are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

