Adding Support for Newly Released Versions of Operating Systems

October 2019

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:

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 ostargets 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 ostargets 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

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 4.

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 4.

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>
  <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>
```

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.

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

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

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

```
<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

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>
```

Linux

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

SLES 12 SP5

For SLES 12 SP5, the following content should be added in the `custom_ostargets.xml` file:

```
<ostargets>
    <ostarget>
          <name>sles-12-x86_64</name>
          <product_name>SUSE Linux Enterprise Server 12</product_name>
          <platform>Linux</platform>
          <version>12</version>
          <arch>x86_64</arch>
          <vendor>SUSE</vendor>
          <support_pack>5</support_pack>
          <pkgmgr>rpm</pkgmgr>
          <primary_role>Server</primary_role>
          <detect><![CDATA[<file source="/etc/os-release" substring="SUSE LINUX
Enterprise Server 12"/>]]></detect>
    </ostarget>
</ostargets>
```

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

```
<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>
```

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

```
<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>
```

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 12

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/.