

ZENworks Endpoint Security Management - Scripting

December 2016



This document provides a test scenario that shows you how you can use scripting in ZENworks Endpoint Security Management to provide additional functionality for 3rd party products.

1 Enforcing the Running of a Required Application

As the ZENworks administrator, you want to ensure that a specific application is always running on your ZENworks managed devices. The following steps help you import a predefined Scripting policy that monitors whether or not an application is running and, if it is not, start the application and inform the user that it is a required application.

1 Import the Scripting policy:

1a Copy the following files to a directory on the ZENworks Primary Server:

- ♦ [Location-Assignment.xml](#)
- ♦ [Scripting-Enforce-App-Running.xml](#)
- ♦ [policykey.txt](#)

When you click a filename, the file will either be opened, saved, or you will be prompted to open or save it. You need to save the file. If it opens, click **File > Save**.

If you downloaded the Endpoint Security Resource Kit, you can copy the files from the `PolicyExamples` directory.

1b On the Primary Server, open a command prompt, change to the directory where you copied the files, then run the following commands one at a time, entering your ZENworks administrator username and password when prompted:

```
zman epi "Location Assignment" policykey.txt Location-Assignment.xml  
  
zman epi "Scripting - Enforce Application Running" policykey.txt Scripting-  
Enforce-App-Running.xml
```

A message similar to the following is displayed when a policy is successfully imported:

```
Successfully created the object "Location Assignment" in "/Policies".
```

2 Validate the policy import:

2a In ZENworks Control Center, click **Policies** to display the **Policies** list with the two imported policies.

Policies					
Status	Name	Type	Enabled	Version	Has Sandbox
<input type="checkbox"/>	 Location Assignment	Location Assignment Policy	Yes	0	No
<input type="checkbox"/>	 Scripting - Enforce Application Running	Scripting Policy	Yes	0	No

1 - 2 of 2 items show 25 items

2b Click the **Location Assignment** policy, then click its **Details** tab.

There are six locations included in the policy: the standard **Unknown** location and five locations that start with **BB_ZESM_ZONE**. The **BB_ZESM_ZONE** locations were imported with the policy and added as locations in your zone. If you go to the **Locations** page (**Configuration > Locations**), you will see them listed.

For this test scenario, only the **BB_ZESM_ZONE_Scripting Test Location** is used. The other locations are used with the test scenarios for other policies (Wireless, USB, and VPN).

The locations do not include any network environments, which means that the only way a device can switch to one of the locations is for the device's user to manually change to the location. For this reason, each location is configured to appear in the **Security Locations** list (available when right-clicking the ZENworks icon on the device) and to allow the user to manually change to the location.

[Policies](#) > [Location Assignment](#)

Location Assignment
 Displayed Version: 0 (Published)

Summary Relationships Requirements **Details** Settings Share Audit

Inheritance

Inherit from policy hierarchy

Allowed Locations

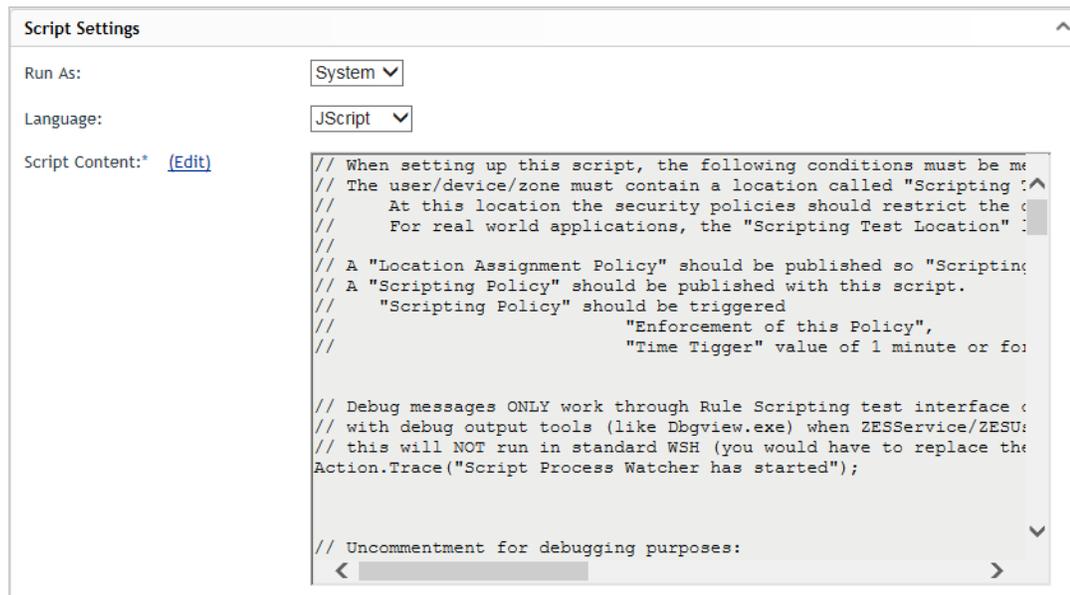
<input type="checkbox"/>	Name	Allow Manual Change	Show Location in Agent List	Display Message
<input type="checkbox"/>	 Unknown	Yes	Yes	No
<input type="checkbox"/>	 BB_ZESM_ZONE_VPN Switch To Location	Yes	Yes	Yes
<input type="checkbox"/>	 BB_ZESM_ZONE_Wi-Fi Minimum Security WPA	Yes	Yes	Yes
<input type="checkbox"/>	 BB_ZESM_ZONE_Wi-Fi Minimum Security WPA2	Yes	Yes	Yes
<input type="checkbox"/>	 BB_ZESM_ZONE_Work Location	Yes	Yes	Yes
<input type="checkbox"/>	 BB_ZESM_ZONE_Scripting Test Location	Yes	Yes	Yes

Apply Reset

2c Return to the **Policies** list.

3 Click the **Scripting - Enforce Application Running** policy, then click its **Details** tab:

The script is a JScript that is configured to run in the System space with the same rights as a Windows service. The script is written to monitor the calc.exe application. If calc.exe is not running, it is launched and this message is displayed: The following application is required to run in this security location: calc.exe



- 3a** Next to **Script Content**, click **Edit** to display the Edit Script Content dialog box. Change the LocationName variable from **Scripting Test Location** to **BB_ZESM_ZONE_Scripting Test Location**, then click **OK** to save the change.
- 3b** If desired, change any of the trigger events.

The script is configured to run when the ZENworks Agent enforces the policy (initial assignment, device startup, policy update), detects a network change, or detects a network connection or disconnection. It is also configured to run whenever the device's location changes.

Agent Triggers

<input checked="" type="checkbox"/> Enforcement of this policy	<input checked="" type="checkbox"/> Network connect
<input type="checkbox"/> Any security policy change	<input checked="" type="checkbox"/> Network disconnect
<input checked="" type="checkbox"/> Network change	

Location Trigger

Enable location trigger

Run when switching from:

Any location

Selected locations:

Add Remove

<input type="checkbox"/>	Name
--------------------------	------

No items selected, click add to select items

And when switching to:

Any location

Selected locations:

Add Remove

<input type="checkbox"/>	Name
--------------------------	------

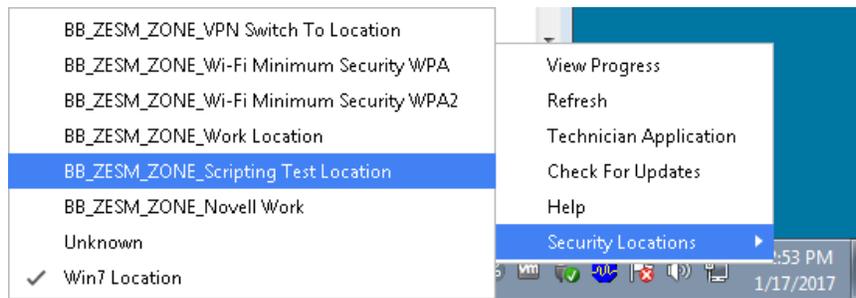
No items selected, click add to select items

Must be a manual change

- 3c Click **Apply** to save the policy changes.
- 3d Click **Publish** to make the new policy the published version.
- 3e Return to the **Policies** list.
- 4 Assign the Location Assignment and Scripting policies to a device:
 - 4a In the **Policies** list, select the check boxes next to the following policies:
 - ◆ **Location Assignment**
 - ◆ **Scripting - Enforce Application Running**
 - 4b Click **Action** > **Assign to Device**, then follow the prompts to assign the policies to the appropriate device.

When prompted for the policy conflict method, you can leave it set to **User Precedence**.
- 5 Test the policy on the assigned device:
 - 5a On the device, make sure that calc.exe (Calculator) is not running.
 - 5b Right-click the ZENworks icon, then click **Refresh** to retrieve the new policies.

When the device finishes refreshing and the policies are enforced, the script is run because of the Enforcement of this policy trigger. Because calc.exe is not running, a message will temporarily appear indicating that calc.exe is required to run in “this security location.” The Calculator will also open.
 - 5c Right-click the ZENworks icon, and select **Security Locations** > **BB_ZESM_ZONE_Scripting Test Location**.



Changing to the BB_ZESM_ZONE_Scripting Test Location triggers the script again, displaying the message and launching calc.exe.

- 6 If you want to use this script for other applications, you can simply create new policies by copying the sample policy. If you want to create a new policy from scratch:

6a Retrieve the script.

When you click the filename, the file will either be opened, saved, or you will be prompted to open or save it. You need to save the file. If it opens, click **File > Save**.

If you downloaded the Endpoint Security Resource Kit, you can copy the file from the `ScriptExamples` directory.

6b In ZENworks Control Center, create a Scripting policy. When doing so:

- ◆ Copy the `applicationWatcher.js` script into the Script Contents box.
- ◆ Modify the `LocationName` variable to specify the security location in which you want the script run. Any time the device enters this location, the script is run.
- ◆ Modify the `requiredApp` variable to specify the application you want to require.
- ◆ Modify the **Agent Triggers** and **Location Triggers** to specify any other events that you want to trigger the script.

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