



# Tanium™ End-User Notifications User Guide

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# End-User Notifications overview

End-User Notifications is used by Tanium™ Deploy and Tanium™ Patch to notify users about deployments to Windows endpoints. It is also used by Deploy to configure End-User Self Service capabilities.

## End-User Notifications

When you use End-User Notifications with other solutions such as Deploy and Patch, you can create a notification message with your deployment to notify the user that the system is about to begin a deployment, has completed a deployment, and if postponements are enabled, to give the user the option to postpone the deployment or restart now.

For more information, see [Tanium Deploy User Guide: Endpoint restarts](#) and [Tanium Patch User Guide: Endpoint restarts](#).

## End-User Self Service

When you use End-User Notifications with Deploy 1.2 or later, you can configure the Self Service application for endpoints. With the Self Service application, you can publish software to endpoints so that users can install software on their own without the need for IT to install for them. For more information, see [Customizing the end-user interface on page 15](#) and [Tanium Deploy User Guide: Using the Self Service application](#).

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# Getting started

1. Install and configure Tanium End-User Notifications. For more information, see [Installing End-User Notifications on page 12](#).
2. Configure endpoint restarts for Deploy or Patch deployments. For more information, see [Tanium Deploy User Guide: Deploying packages and bundles](#) or [Tanium Patch User Guide: Deploying patches](#).
3. Customize the end-user interface to use with Deploy 1.2 or later. For more information, see [Customizing the end-user interface on page 15](#).

# End-User Notifications requirements

Review the requirements before you install and use End-User Notifications.

## Tanium dependencies

In addition to a license for the End-User Notifications product module, make sure that your environment also meets the following requirements.

Component	Requirement
Tanium™ Core Platform	7.2 or later.
Tanium™ Client	6.0.314.1540 or later <ul style="list-style-type: none"><li>Windows 7 Service Pack 1 or later</li><li>Windows Server 2008 R2 Service Pack 1 or later</li></ul> 7.2.314.3476 or later <ul style="list-style-type: none"><li>Windows 7 Service Pack 1 or later</li><li>Windows Server 2008 R2 Service Pack 1 or later</li></ul>
Tanium Deploy	(Required for end-user notifications) 1.0 or later. (Required for end-user self service) 1.3 or later.
Tanium Patch	(Required for end-user notifications) 2.1 or later.
Computer groups	When you first log into the Tanium Console after installing the Tanium Server, the server automatically imports the computer groups that End-User Notifications requires: <code>ALL Computers</code> .

## Tanium™ Module Server

End-User Notifications is installed and runs as a service on the Module Server host computer. The impact on the Module Server is minimal and depends on usage.

## Endpoints

End-User Notifications supports the following Windows client operating systems:

- Windows 10
- Windows Server 2016
- Windows 8.1
- Windows Server 2012 R2
- Windows 8
- Windows Server 2012
- Windows 7 Service Pack 1 or later
- Windows Server 2008 R2 Service Pack 1 or later

## Host and network security requirements

Specific ports and processes are needed to run End-User Notifications.

### Ports

The following ports are required for End-User Notifications communication.

Component	Port	Direction	Purpose
Module Server	17476	Loopback	Internal purposes; not externally accessible

### Security exclusions

If security software is in use in the environment to monitor and block unknown host system processes, your security administrator must create exclusions to allow the Tanium processes to run without interference.

**Table 1: End-User Notifications security exclusions**

Target Device	Process
Module Server	<Module Server>\services\end-user-notifications-service\node.exe
	<Module Server>\services\twsm-v1\twsm.exe



Target Device	Process
Windows endpoints	<Tanium Client>\Python27\TPython.exe (7.2.x clients)
	<Tanium Client>\Python38\TPython.exe (7.4.x clients)
	<Tanium>\Tanium End User Notification Tools\UserSessionProxy.exe
	<Tanium>\Tanium End User Notification Tools\bin\end-user-notifications.exe
	<Tanium>\Tanium End User Notification Tools\ (exclude from on-access or real-time scans)

## User role requirements

**Table 2: End-User Notifications user role permissions**

Permission	End-User Notifications Administrator	End-User Notifications Read Only User
<b>Show Endusertnotifications<sup>1</sup></b> View the End-User Notifications shared service	✔ <sup>2</sup>	✔ <sup>2</sup>
<b>End User Notifications Use Api</b> Access to the End-User Notifications API	✔ <sup>2</sup>	✔ <sup>2</sup>
<b>End User Notifications Module Read</b> Read access to the End-User Notifications shared service	✔	✔

Permission	End-User Notifications Administrator	End-User Notifications Read Only User
<b>End User Notifications Module Write</b>  Write access to the End-User Notifications shared services	✓	✗
<sup>1</sup> To install End-User Notifications, you must have the reserved role of Administrator. <sup>2</sup> Denotes a provided permission.		

**Table 3: Provided End-User Notifications Micro Admin and Advanced user role permissions**

Permission	Role Type	Content Set for Permission	End-User Notifications Administrator	End-User Notifications Read Only User
Read User Group	Micro Admin		✓	✓
Read Computer Group	Micro Admin		✓	✓
Ask Dynamic Questions	Advanced		✓	✓
Read Sensor	Advanced	Reserved	✓	✓
Read Sensor	Advanced	Default	✓	✓
Read Sensor	Advanced	Base	✓	✓
Read Sensor	Advanced	End-User Notifications	✓	✓
Approve Action	Advanced	End-User Notifications	✓	✗
Execute Plugin	Advanced	End-User Notifications	✓	✓
Write Action	Advanced	End-User Notifications	✓	✗

Permission	Role Type	Content Set for Permission	End-User Notifications Administrator	End-User Notifications Read Only User
Write Package	Advanced	End-User Notifications	✓	✗
Write Saved Question	Advanced	End-User Notifications	✓	✗

For more information and descriptions of content sets and permissions, see [Tanium Core Platform User Guide: Users and user groups](#).

# Installing End-User Notifications

Use the **Tanium Solutions** page to install End-User Notifications and choose either automatic or manual configuration:

- **Automatic configuration with default settings** (Tanium Core Platform 7.4.2 or later only): End-User Notifications is installed with any required dependencies and other selected products. After installation, the Tanium Server automatically configures the recommended default settings. This option is the best practice for most deployments. For more information about the automatic configuration for End-User Notifications, see [Import and configure End-User Notifications with default settings on page 12](#).
- **Manual configuration with custom settings:** After installing End-User Notifications, you must manually configure required settings. Select this option only if End-User Notifications requires settings that differ from the recommended default settings. For more information, see [Import and configure End-User Notifications with custom settings on page 13](#).

## Before you begin

- Read the [release notes](#).
- Review the [End-User Notifications requirements on page 7](#).
- If you are upgrading from a previous version, see [Upgrade End-User Notifications on page 14](#).

## Import and configure End-User Notifications with default settings

When you import End-User Notifications with automatic configuration, the following default settings are configured:

- The End-User Notifications service account is set to the account that you used to import the module.
- The End-User Notifications action group is set to the computer group `All Computers`.
- The End-User Notifications tools are distributed to endpoints.

To import End-User Notifications and configure default settings, be sure to select the **Apply Tanium recommended configurations** check box while performing the steps in [Tanium Console User Guide: Manage Tanium modules](#). After the import, verify that the correct version is installed. For more information, see [Verify End-User Notifications version on page 14](#).


## Import and configure End-User Notifications with custom settings

To import End-User Notifications without automatically configuring default settings, be sure to clear the **Apply Tanium recommended configurations** check box while performing the steps in [Tanium Console User Guide: Manage Tanium modules](#). After the import, verify that the correct version is installed. For more information, see [Verify End-User Notifications version on page 14](#).

### Configure service account

The service account is a user that runs background processes for End-User Notifications. This user requires the **Content Administrator** and **End-User Notifications Administrator** roles or the **Tanium Administrator** role.

For more information about End-User Notifications permissions, see [User role requirements on page 9](#).

1. From the Main menu, click **End-User Notifications** to open the End-User Notifications **Home** page.
2. Click Settings  and open the **Service Account** tab.
3. Update the service account settings and click **Save**.

### Configure End-User Notifications action group

1. From the Main menu, click **Actions > Scheduled Actions**.
2. In the list of action groups, click **Tanium End-User Notifications**.
3. Click **Edit**, select computer groups to include in the action group, and click **Save**.

### Customize notifications

Add a company logo and relevant information to personalize the End-User Self-Service experience.

You must create at least one End-User Notifications profile. For more information about creating a profile, see [Create a profile on page 15](#).

### Initialize endpoints

End-User Notifications installs a set of tools on each endpoint that you have targeted. Initializing the endpoints starts the End-User Notifications service and starts the End-User Notifications process on every endpoint where it is not running.

1. From the End-User Notifications **Home** page, in the **Configure** section, click the **Initialize Endpoints** step and click **Initialize Endpoints**.

**Note:** If the **Configure** section is not visible in the End-User Notifications **Home** page, click **Manage Home Page**, select **Configure**, and click **Save**.

2. Enter your password and click **Confirm**.

**Note:** After deploying the tools for the first time, endpoints can take up to four hours to display status.

## Upgrade End-User Notifications

For the steps to upgrade End-User Notifications, see [Tanium Console User Guide: Manage Tanium modules](#). After the upgrade, verify that the correct version is installed. For more information, see [Verify End-User Notifications version on page 14](#).

## Verify End-User Notifications version

After you import or upgrade End-User Notifications, verify that the correct version is installed:

1. Refresh your browser.
2. From the Main menu, click **End-User Notifications** to open the End-User Notifications **Home** page.
3. To display version information, click Info ⓘ.

## What to do next

See [Getting started on page 6](#) for more information about using End-User Notifications.

# Customizing the end-user interface

To customize the End-User Self Service interface to use with Deploy 1.2 or later, you can create one or more End-User Notifications profiles, which define a set of configurations, rules, or parameters that applies to one or more computer groups.

## Create a profile

1. From the End-User Notifications menu, click **Customizations** and then click **New Profile**.
2. Provide a name and optional description.
3. Select target computers.

**Note:** Only one profile can apply to an endpoint.

4. Provide a title and upload a logo file.
5. (Optional) Select **Enable End-User Self Service**.
  - a. Provide a welcome message to display in the self-service dashboard on endpoints.
  - b. Select installation options.
  - c. Click **View Application Preview** to preview the application.
6. (Optional) Select **Enable Additional Languages**.
  - a. Select a language and provide a translated title and welcome message.
  - b. (Optional) Click **Add Language** to add more languages.

**Note:** Selecting additional languages requires End-User Notifications 1.6 or later and Deploy 1.3 or later. By default, the Self Service application displays content in the system language on the endpoints. If you enable additional languages, the user can select other languages to display.

7. Click **Save**.

After you customize the End-User Self Service interface, you can create a self service profile in Deploy. For more information, see [Tanium Deploy User Guide: Using the Self Service application](#).

## Prioritize profiles

1. From the End-User Notifications menu, click **Customizations** and then click **Prioritize**.
2. Drag and drop a profile to reprioritize it. End-User Notifications automatically adjusts the priority numbers for the other profiles and reorders the list by priority.

**Tip:** If you want to revert any changes before you save, click **Reset** and then click **Cancel**.

3. Click **Save** and confirm your action.

## View, edit, or delete profiles

To view profiles, click **Customizations** from the End-User Notifications menu.

To edit a profile, select a profile and click **Edit**. You can also click either the profile name or Edit  to make changes to a profile.

To delete a profile, select a profile and click **Delete**.




# Troubleshooting End-User Notifications

To collect and send information to Tanium for troubleshooting, collect logs and other relevant information.

## Collect logs

The information is saved as a ZIP file that you can download with your browser.

1. From the End-User Notifications home page, click Help , then the **Support** tab.
2. Click **Collect**.
3. When **Status** indicates that the package is collected, click **Download**.
4. Attach the ZIP file to your Tanium Support case form or send it to your TAM.

End-User Notifications maintains logging information in the log file in the `\Program Files\Tanium\Tanium Module Server\services\end-user-notifications-files\logs` directory.

## End user notifications are not displayed

If end user notifications are not being displayed on the endpoints:

1. Verify that the Tanium End-User Notifications solution is installed. For more information, see [Installing End-User Notifications on page 12](#).
2. Verify that endpoints have the end user notification tools by asking the question `End-User Notifications - Has Tools`.
3. Verify that any security software exclusions include the `\Tanium\Tanium End User Notification Tools` directory. For more information, see [Security exclusions on page 8](#).

## Uninstall End-User Notifications

1. From the Main menu, click **Tanium Solutions**.
2. In the **Tanium Content** section, select the **End-User Notifications** row.
3. Click **Uninstall Solution**. Click **Uninstall** to complete the process.