# BigFix
# WebUI User's Guide

# Special notice

Before using this information and the product it supports, read the information in Notices *(on page 133)*.

# Edition notice

This edition applies to version 9.5 of BigFix and to all subsequent releases and modifications until otherwise indicated in new editions.

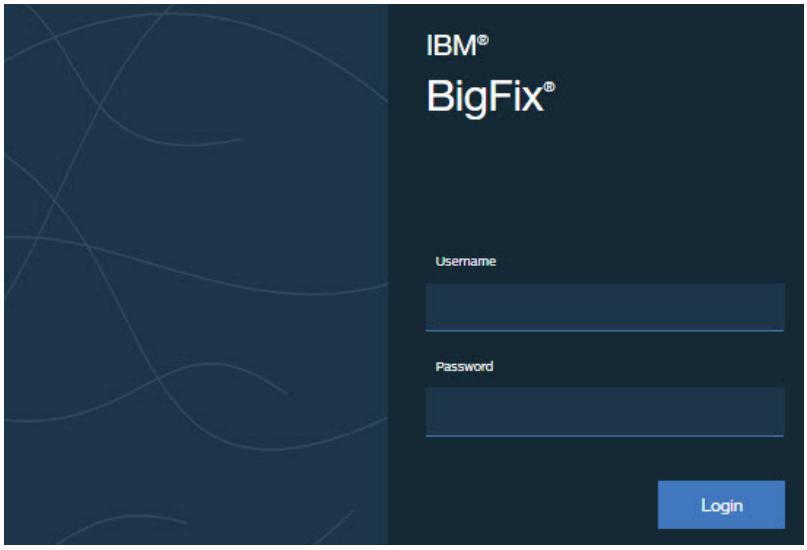
# Contents

# Chapter 1. Welcome

Welcome to BigFix WebUI. The WebUI delivers a powerful set of functions for BigFix operators. It simplifies BigFix workflow, speeds access to data, and improves flexibility, visibility, and performance.

No prior BigFix experience is needed to learn and use the WebUI. A browser, the WebUI URL, and a BigFix user name and password are all that is required. Supported browsers include the latest versions of Edge, Safari, Firefox, and Chrome.

Administrators and operators familiar with the BigFix console will find a useful introduction to the WebUI in this guide. For information about installing and administering the WebUI, see the *BigFix WebUI Administration Guide*.




To open the WebUI use the URL provided by your administrator and enter your BigFix user name and password. Single Sign On users will bypass the BigFix login screen and authenticate through their service provider. Following a successful login the BigFix Overview displays.

**Note:** The look of the BigFix interface is changing. We are in the process of updating the graphics in this guide to reflect the new colors and theme. Thank you for your patience as we complete this work.

# Chapter 2. Meet the WebUI

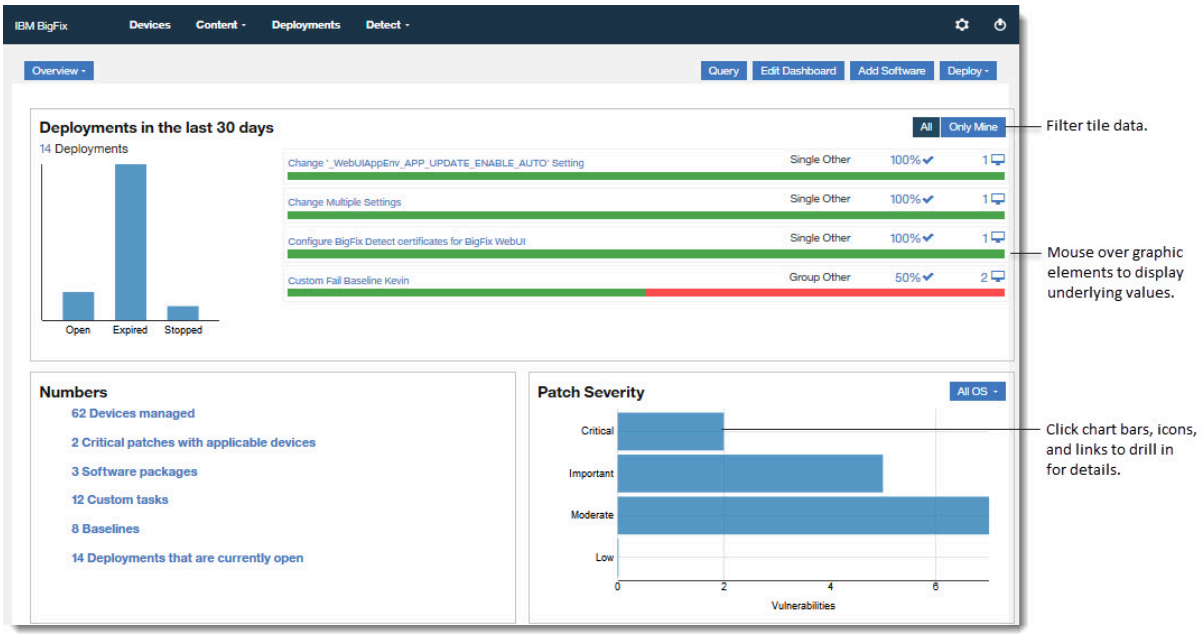
Take a quick tour of the WebUI screens, controls, and workflow.

A detailed description of each of the main WebUI screens, including the Deploy Sequence and its options, begins in Get Started with Devices *(on page 13)*. For an introduction to BigFix terms and concepts, see the Glossary *(on page 118)*.

## Overview Page

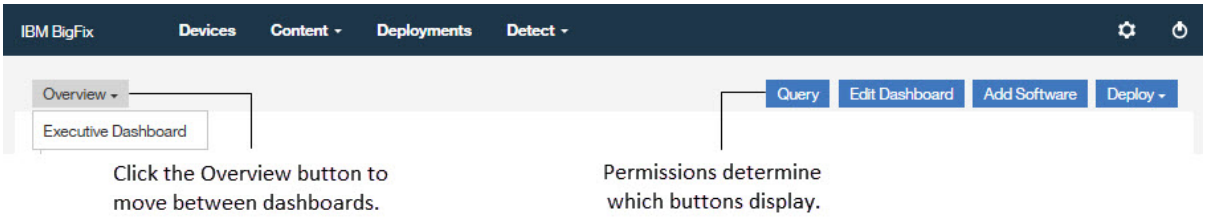
The WebUI Overview provides a summary of your environment. Its interactive charts and rich set of links make it easy to move quickly to areas that require immediate attention.

Refresh the screen to see the latest data. In WebUI, the Overview page is the default landing page. Display it from any WebUI screen by clicking on the BigFix logo on the WebUI navigation bar.




Operator permissions and site and role assignments govern which page and data elements display on WebUI pages. For example, an operator who does not have access to the

Software Distribution component will not see the **Add Software** button on the **Overview**. For more information, see Permissions and Their Effects *(on page 11)*.




The **Executive Overview** dashboard provides information of particular interest to IT Officers, Security Officers, and Analysts. To display it click the **Overview** button beneath the navigation bar and select **Executive Dashboard**. Use the **Overview** button to move between dashboards. For more information about the Executive Dashboard and its tiles, see the WebUI Administration Guide.

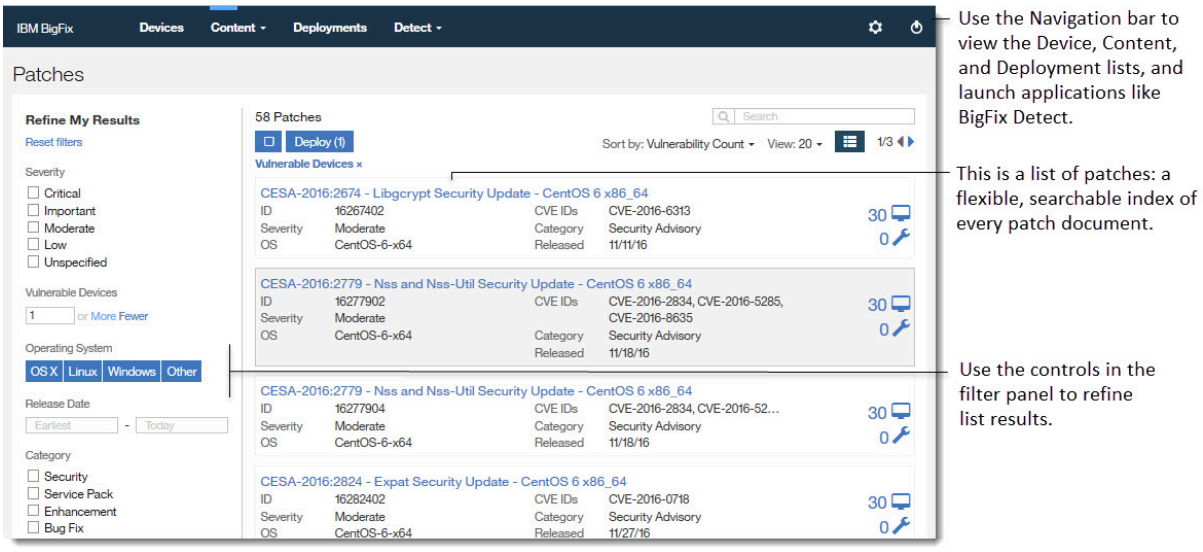
WebUI sessions close automatically after a period of inactivity. If your session expires, you will be returned to the page that you were on the next time you log in.

**Note:** When a tile on a dashboard takes over 10 seconds to load, load time details appear on the tile. Click **Close** to clear the message. Factors that can influence response times include changes to hardware, to the number of endpoints, and the amount of data you have access to.

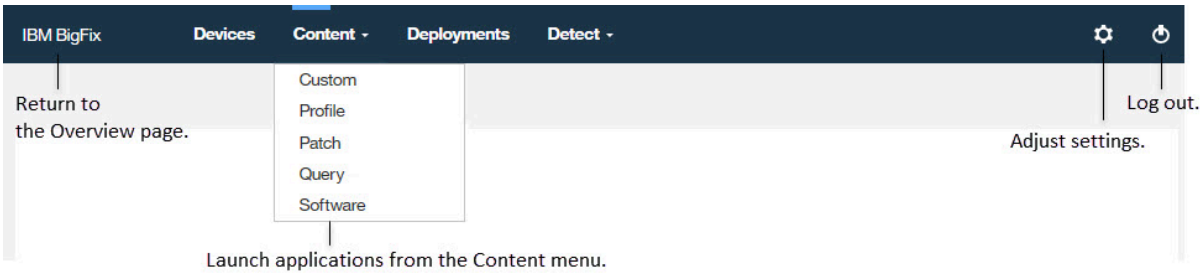
# Navigation Bar

Use the navigation bar to access the Overview, Device, and Deployment screens as well as to access different applications under Apps. Use the controls in the filter panel to refine list results.

Following is a list of patches – a flexible, searchable index of every patch document.



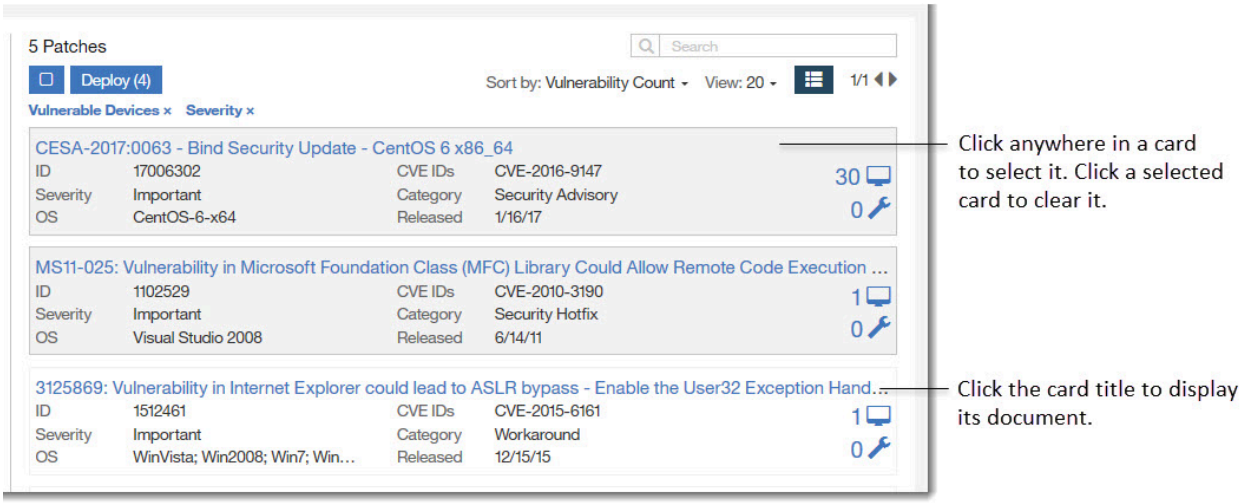

Links throughout the WebUI provide shortcuts between views.




# List Views

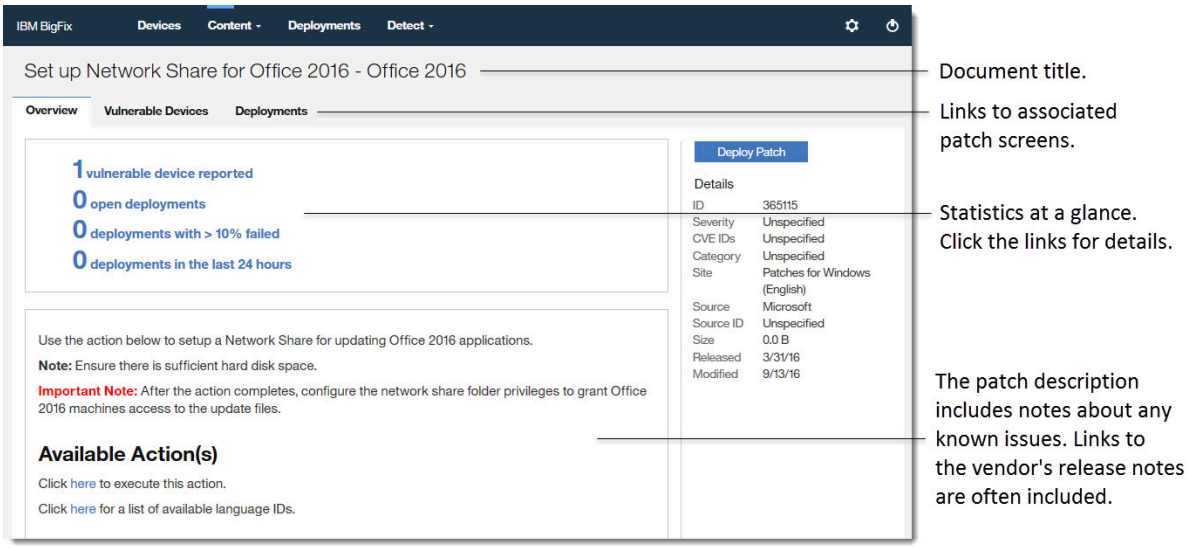
List views show your BigFix environment in directory form: a flexible, searchable index of devices, deployments, and content.

Click the title on a card to open the corresponding document. (To preview a title too long for its card, hover over it with the mouse.) To take an action, for example, to deploy a patch or target a device, highlight its card and click the **Deploy** button. For more information, see Take Action: The Deploy Sequence *(on page 89)*.

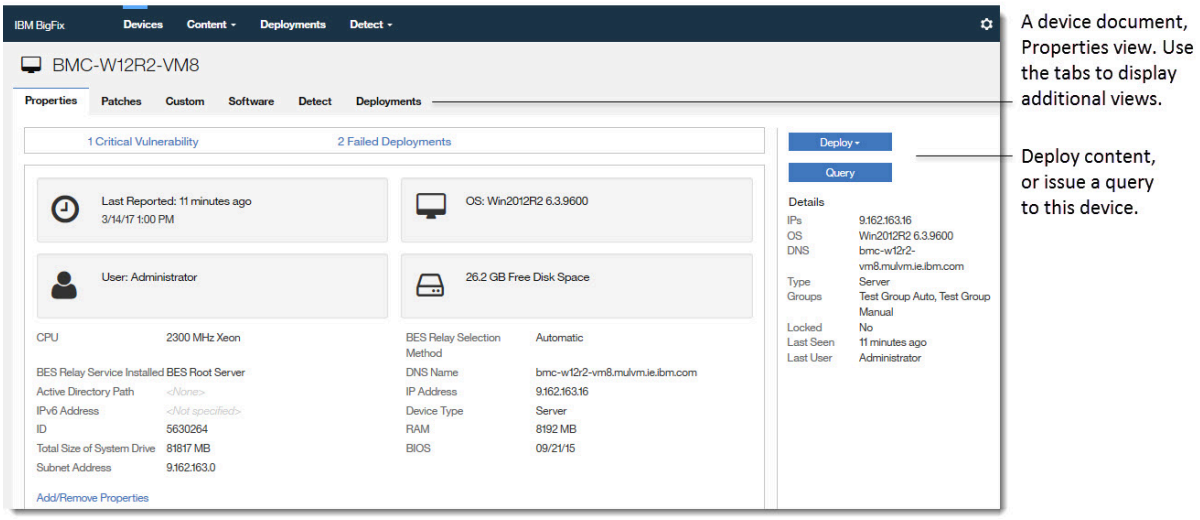



# Document Views

The WebUI's document views present detailed information about a particular device, deployment, or piece of content. Use document navigation links to drill down into the data on associated views. The diagram shows a patch document.



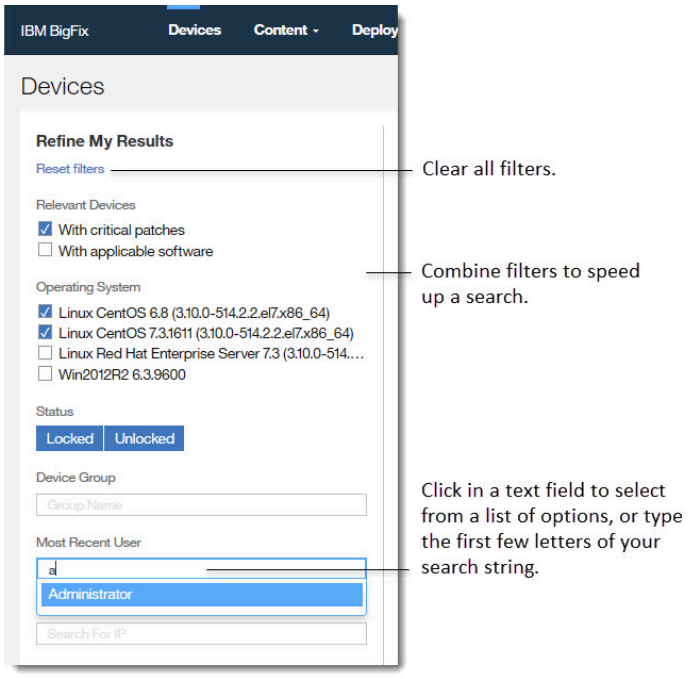

Key details are summarized in the right side panel; the **Deploy** button appears on all device and content documents.



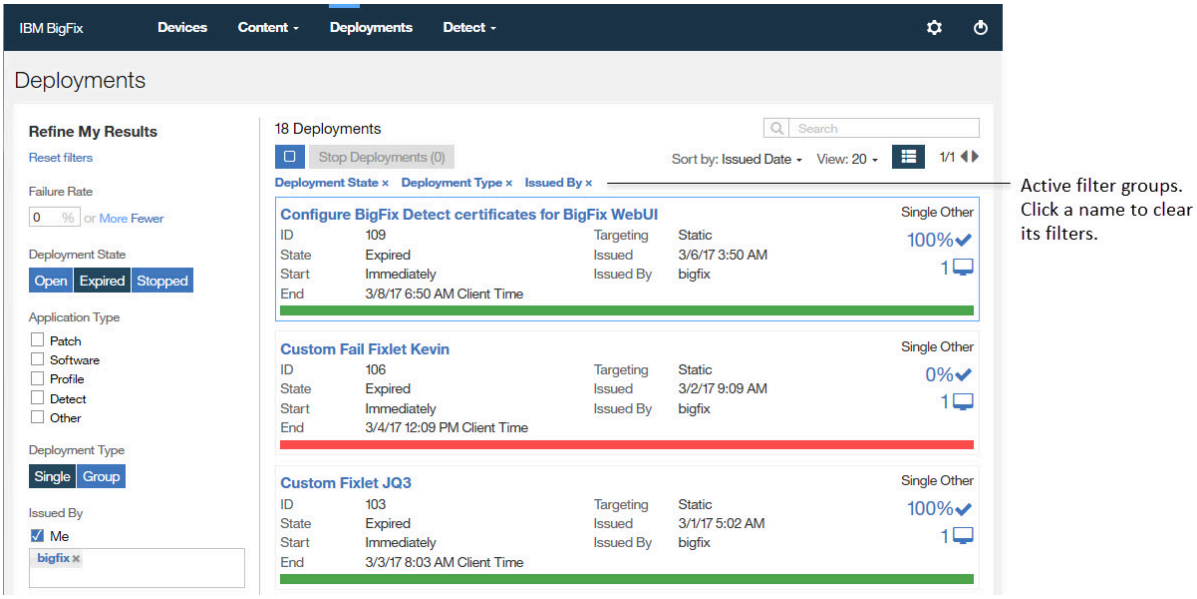

# Filters and Search Tools

Use the WebUI filters to reduce a long list to a short list of specific items.

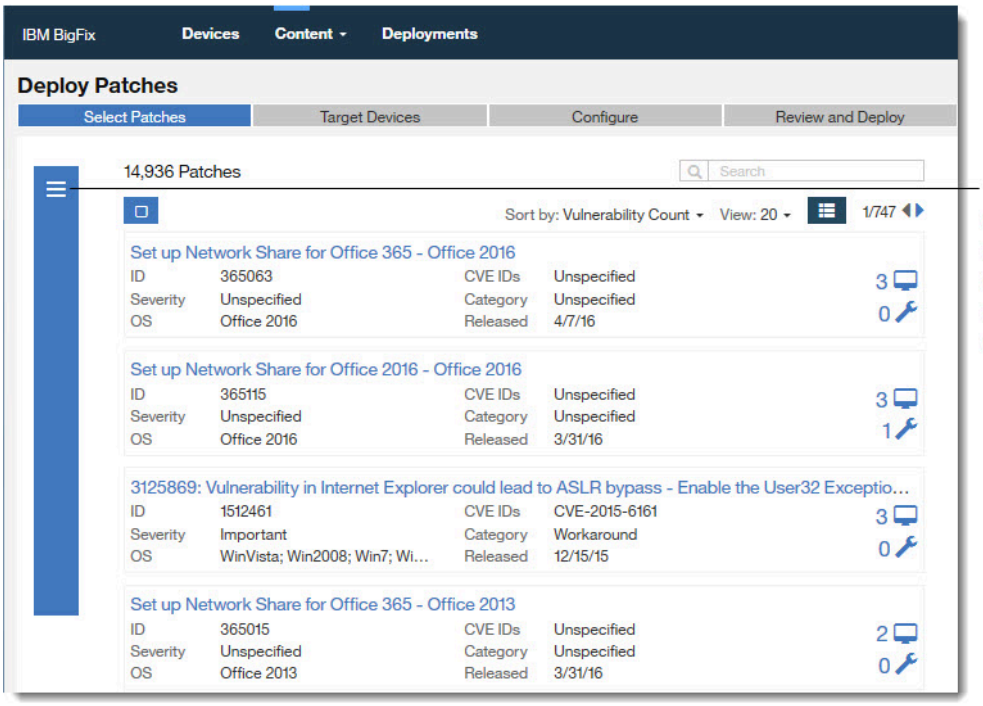
For example, filter the Software list by Operating System to see software for OS X computers. Combine filters, for example, to find expired deployments issued by a specific operator at particular time.




The list of active filter groups are displayed across the top of the list.

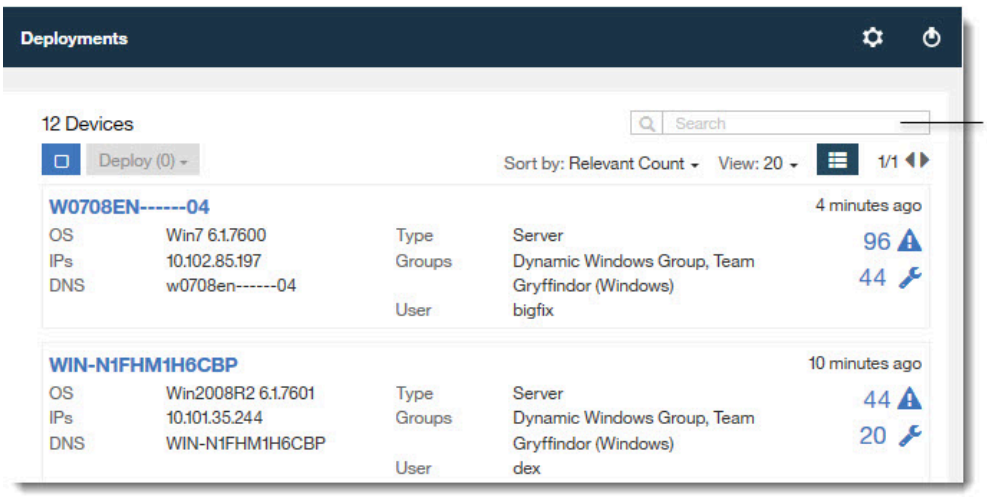



The filter panel appears in a closed state on some screens.




# Text Search

Use a text search to find items based on words or characters they contain. For example, search the Device list for *"2"* to find every device with the character *"2"* in its name.



Use a multiple word search to find any items that contain those terms. For example, results for a search for *"MS13-035 Vista"* would include the patch *"MS13-035 MSHTML Security Vulnerability Vista"*. Searches are not case-sensitive. For example, a patch list search for the word *"advisory"* returns patches with either *"advisory"* or *"Advisory"* in their name.

Wildcard searches, and searches for text within the body of a document, are not currently supported.

# List Controls

Sort a list, adjust the number and appearance of list items, and move between pages with the list view controls.

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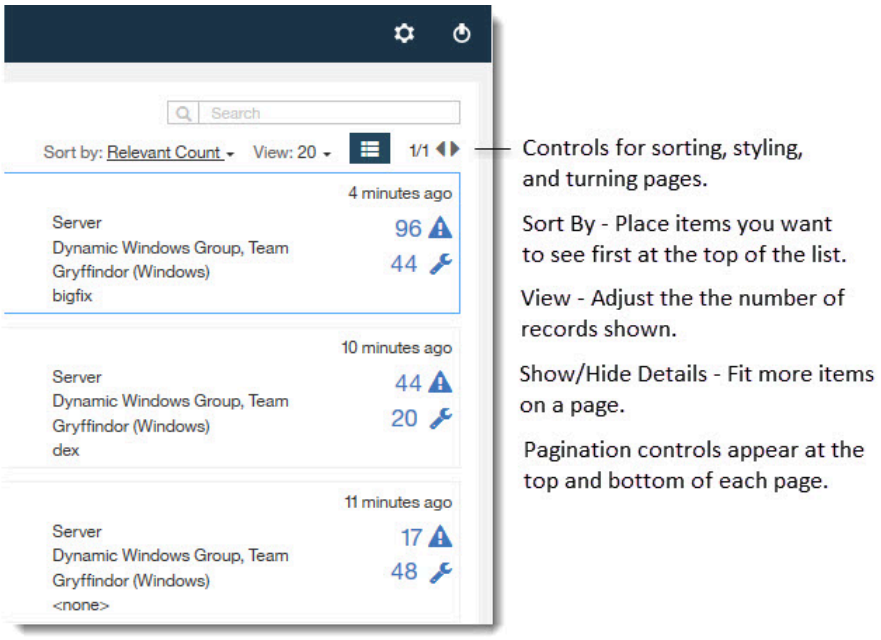


# Select All

The Select All check box selects or clears every item on a page.

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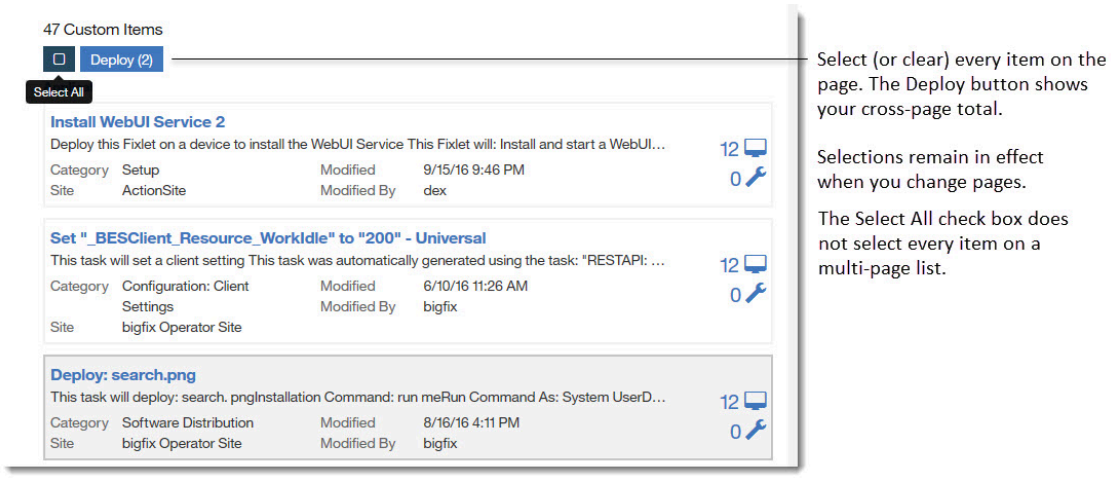



# Permissions and Their Effects

The elements that are shown on a WebUI screen reflect the permission levels of the user, and the device, site, and group assignments set for them by the BigFix administrator.

For example, an operator responsible for patching Windows machines might not see Linux patches in their patch list or Linux machines in their device list. An operator who deploys software but does no patching might not see the Patch content or Custom content options in the Content submenu. For more information about permissions and their influence on WebUI screens and data elements, see the *BigFix WebUI Administrators Guide*.

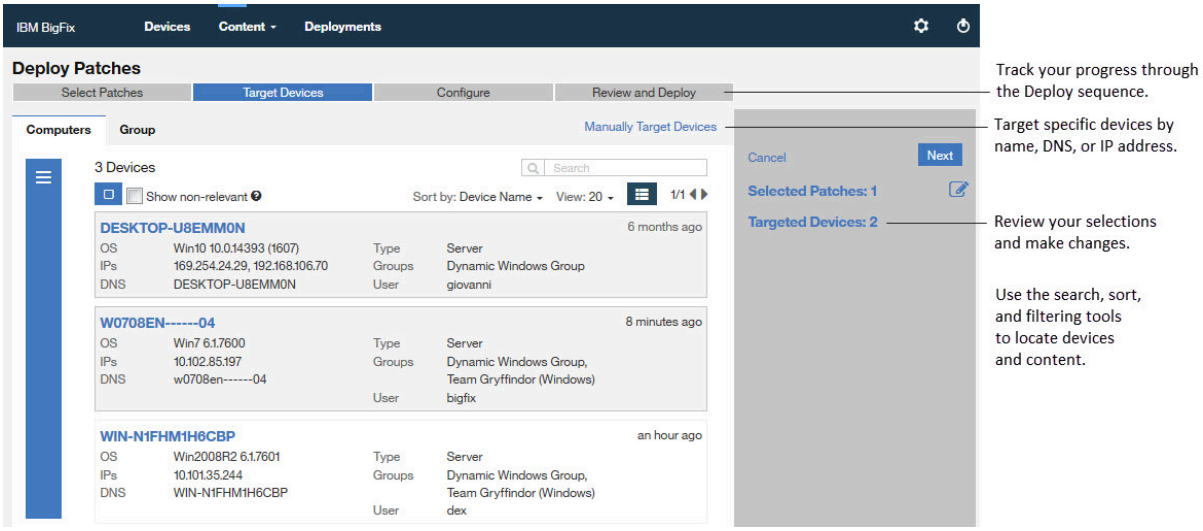
# WebUI Workflow and Deploy Sequence

To deploy means to dispatch content to one or more endpoints for execution. You can start a deployment two ways: by selecting content and targeting one or more devices, or by selecting devices and targeting the content that you want to deploy.

Start a deployment from any device or content screen, or from the Overview page.

Here is an overview of the process. For details, see Take Action: The Deploy Sequence *(on page 89)*.

1. Select devices or content for deployment.
2. Select content or device targets.
3. Configure any deployment options.
4. Review selections and deploy.

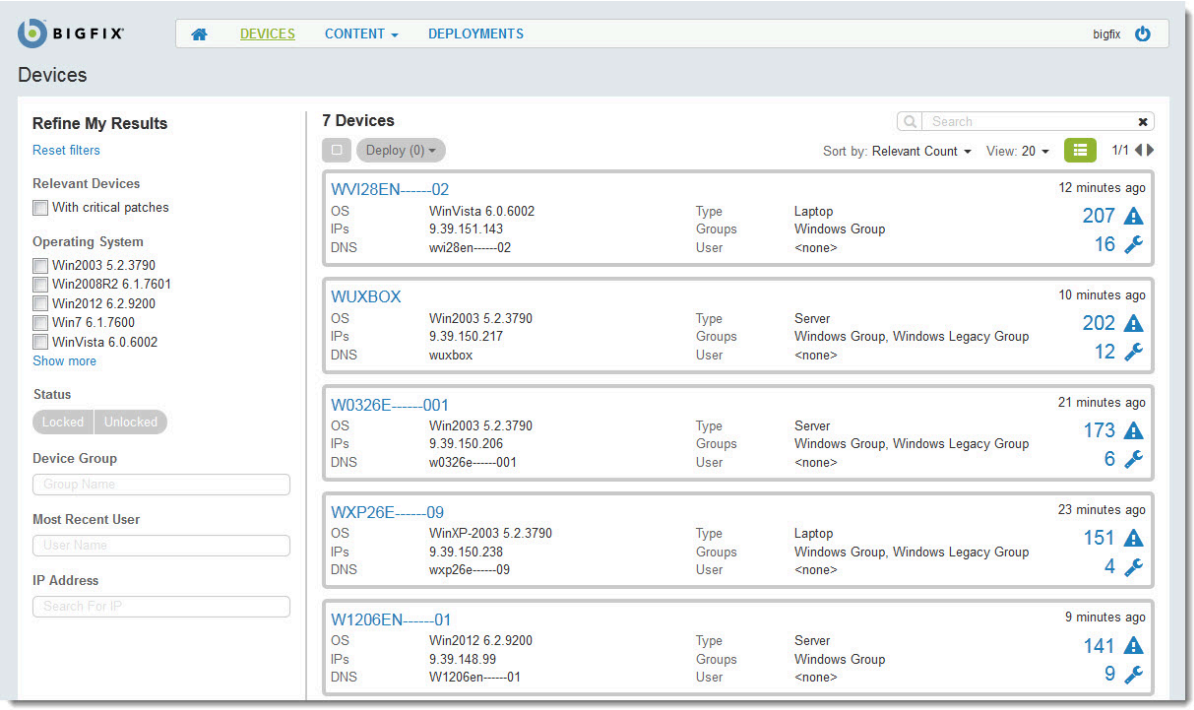


# Chapter 3. Get Started with Devices

Use the Device screens to view and manage all the devices in your environment as determined by your permission levels. You can find specific devices, access device documents, select devices for deployment, generate and export device reports and do much more.

## The Device List

View a list of BigFix managed devices, create customized device reports, and review the detailed information about each device to effectively and proactively monitor the health and activity of endpoints.




- **Operator permission settings**, device, and site assignments govern list contents.
- **See a list of devices eligible for software** in your catalog using the **Relevant Devices with applicable software** filter.

- **BigFix Lock** – A machine with a BigFix lock on it does not run BigFix actions until it is unlocked.
- **See a list of devices used by a specific person** with the **Most Recent User** filter. If a device has one user account, the device holder is listed. If a device has multiple user accounts the last person to log on is listed.

If Inline Reporting feature is enabled, you can visualize summary report of the real-time data and export the data to .csv or .xlsx files. For more information, see The Device List in BigFix 10 Help Center.

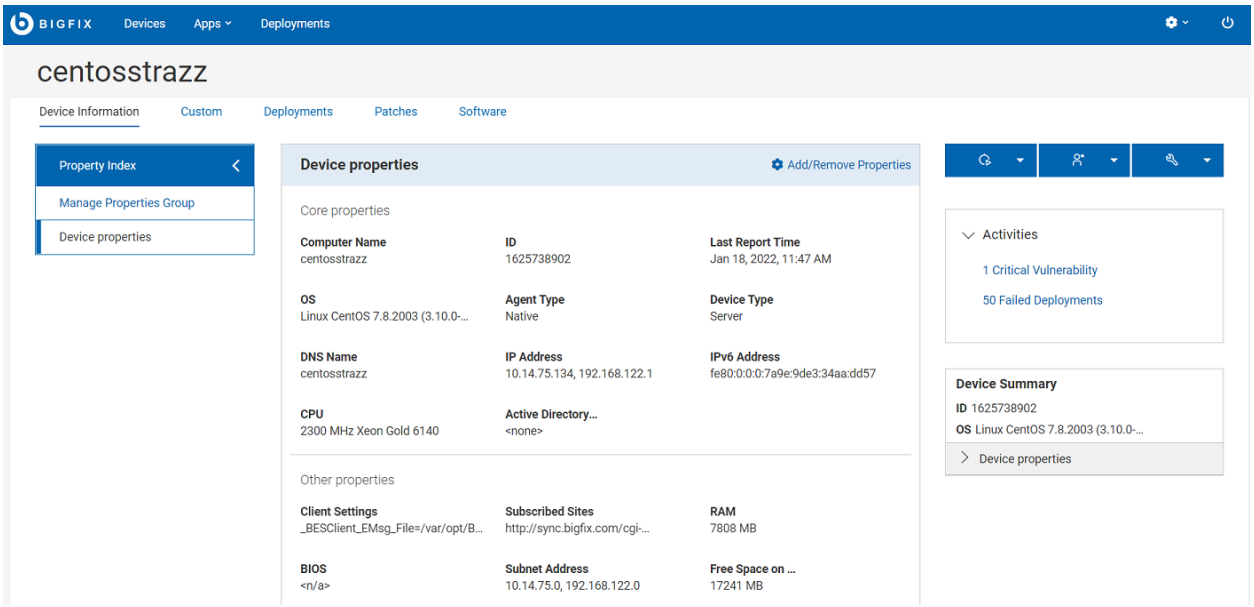
**Note:** Inline Reporting feature is not extensively tested in WebUI running on versions earlier than BigFix 10 Platform.

# Device Document

Click a device name to get the information related to that device including its properties, status, relevant content, deployment status, history, and much more. Drill further into device details by using the associated views.

As a BigFix Operator, you can view the Device document. Device document provides information gathered from various sources.

The following image shows the device document page of a device.




## Document views

The tabs in the device document page displays different views as follows:

- **Device Information** – Displays general information of the device.
- **Custom** – Displays custom content relevant to this device.
- **Deployments** – Deployment history for this device.
- **Patches** – Patches relevant to this device.

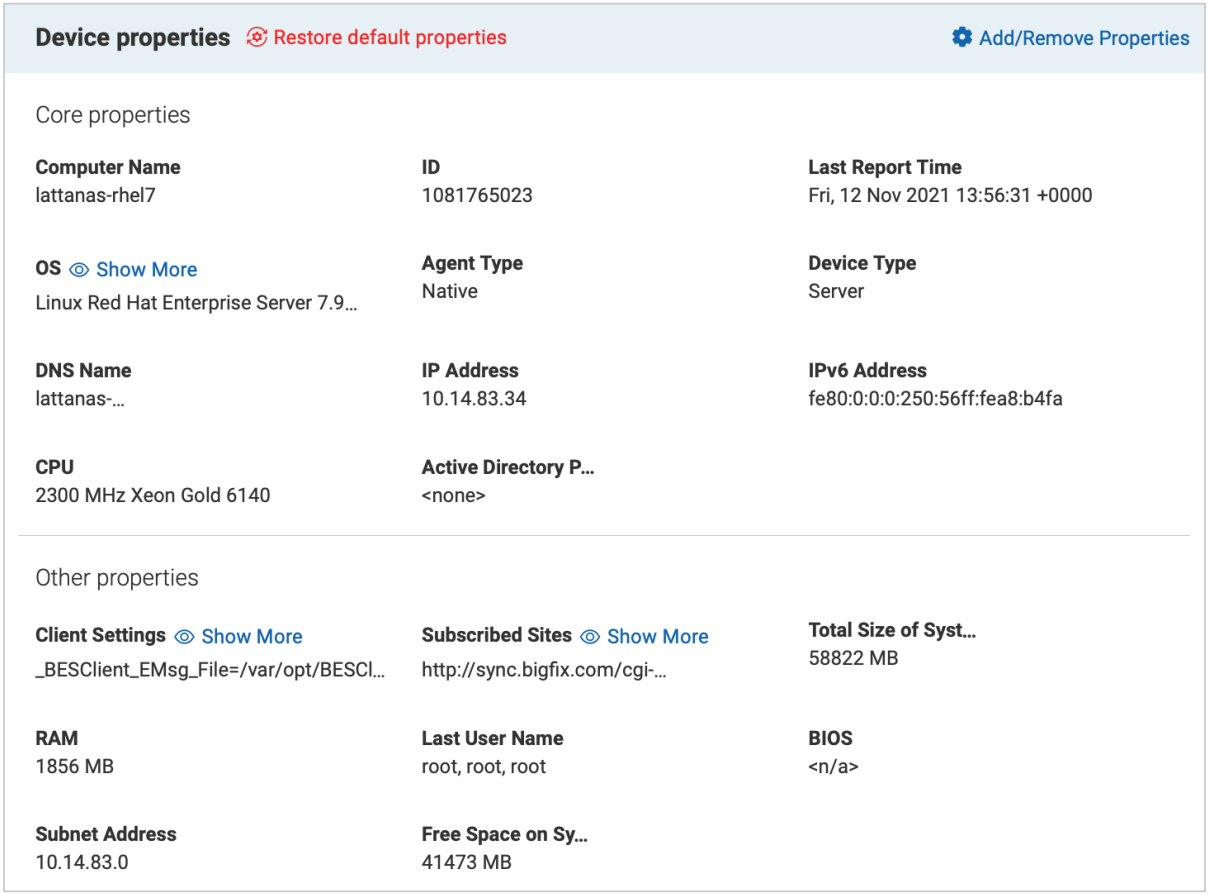
**Note:** The tab shows only patches coming from the sites managed in the Patch List *(on page 27)*; other patches can be reached from the Content menu.

- **Software** – Software relevant to this device.

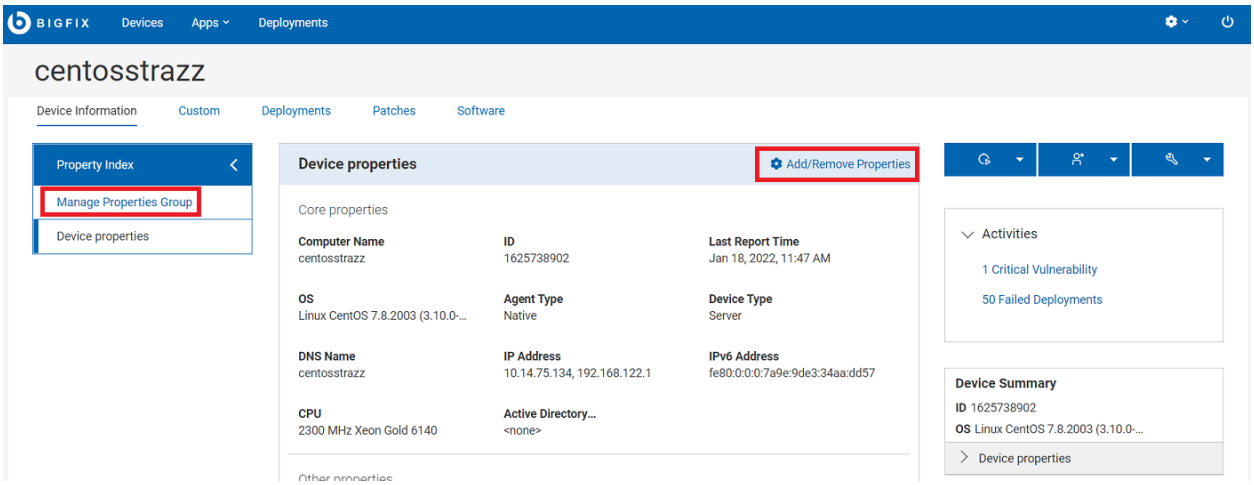
**Important:** An operator's permission settings govern the views that are displayed. For example, an operator without access to custom content cannot see the **Custom** view.

## Customize the layout of the device document page

The default view displays property groups under Property Index and the set of properties in the Device properties box.



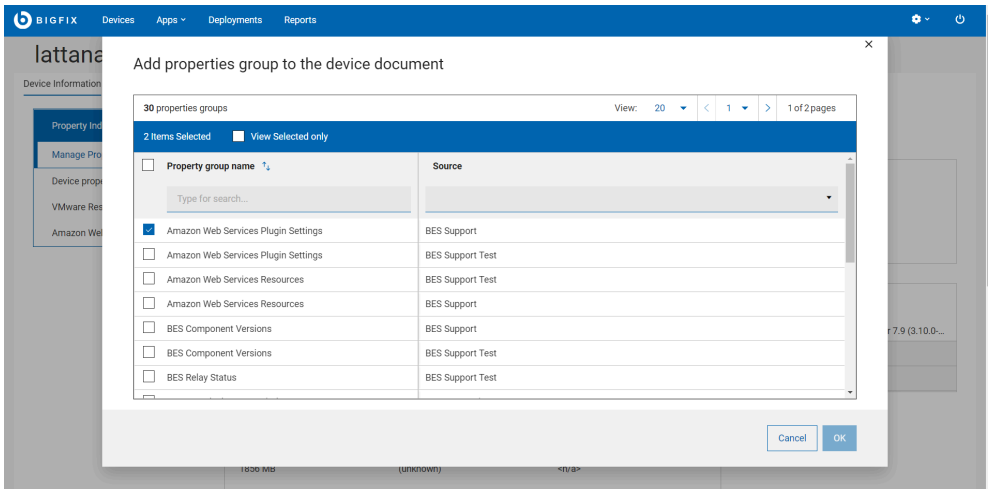

In the device document, you can customize the display of Property Index and Device properties through **Manage property group** or **Add/Remove properties**.



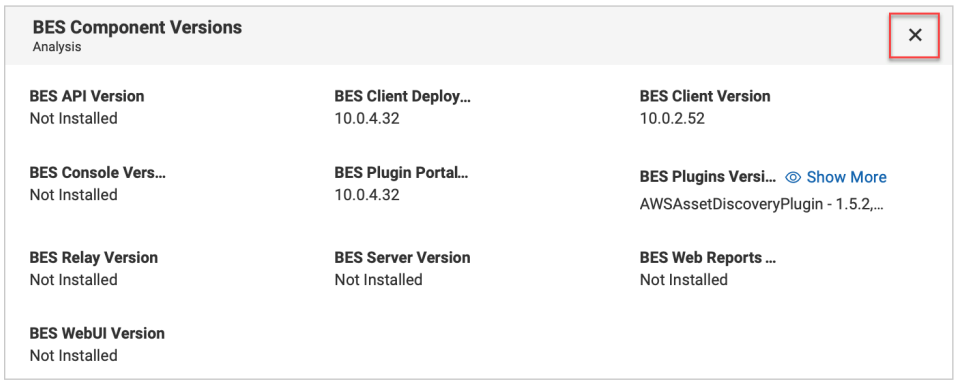

## Manage properties group

Click this link to modify the default properties groups displayed under Property Index. You can add as many property groups as you wish. The added property groups are appended to the **Property Index** box. You can expand or collapse Property Index to view the side navigation. If you click on a property group, it automatically scrolls to bring up that property group in focus.

- Add a property group: To add a property group, click the **Manage property group** link, select the checkbox next to a property group, and click OK.

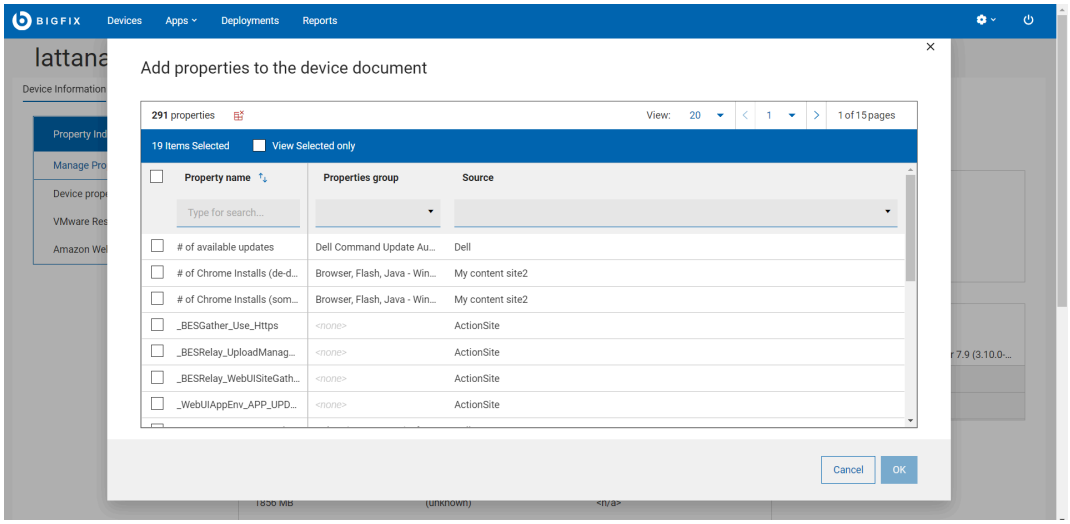


- Remove a property group: To remove a property group, click on the X at the top right of that box and click OK for confirmation.




## Add/Remove Properties

Click this link to display the list of available properties and select or deselect the ones that you want to add or remove in the device properties view. From here, you can also add or remove custom properties. If you want to go back to default display, click **Restore default properties**. Upon confirmation, the default view is reset.



### Trigger actions

From the device document page, you can trigger actions that are relevant to the device. When you click the action buttons, they display the options based on the type of the device and the permissions of the user.

- Deploy: Click the  button to deploy custom content, patch, profile, software.
- Administration: Click the  button to send refresh or install the agent.
- Configuration: Click the  button to issue a query, send a file, or send a message to this device.

### Activities

The Activities section of the device document page provides the links for critical vulnerabilities and failed deployments applicable for the device. Clicking on the links takes you to the pre-filtered list of relevant patches or deployments.

- **Critical Vulnerabilities** – Brings you to the Patches tab pre-filtered by critical and applicable to this device.
- **Failed Deployments** – Brings you to the Deployments tab pre-filtered by deployment status.

### Device Summary

The Device Summary section of the device documents provides a recap of the most relevant properties related to the device.

## Send a File

You can upload, list, delete your files and send a file to multiple devices from your file system.

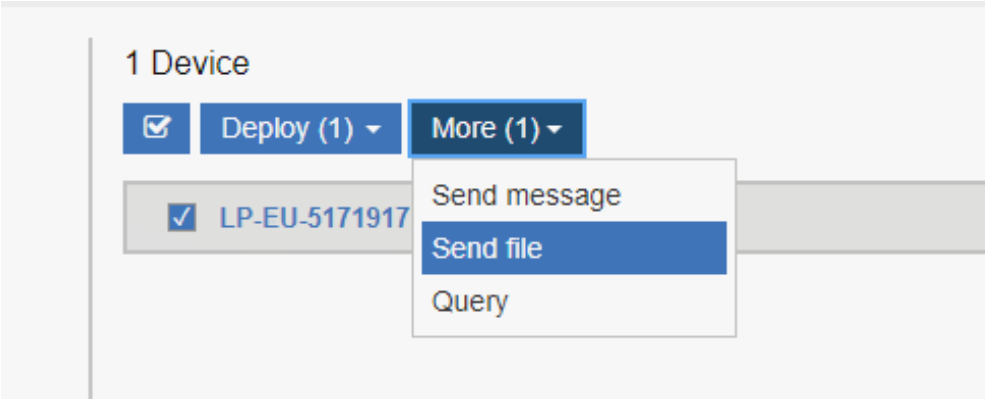
- The operator must have the following permissions:
  - Can Create Actions
  - Custom Content
- SWD must be running and the operator must have access to it.

This section explains you on how to upload a file, send a file to target devices, and delete a file from the list.

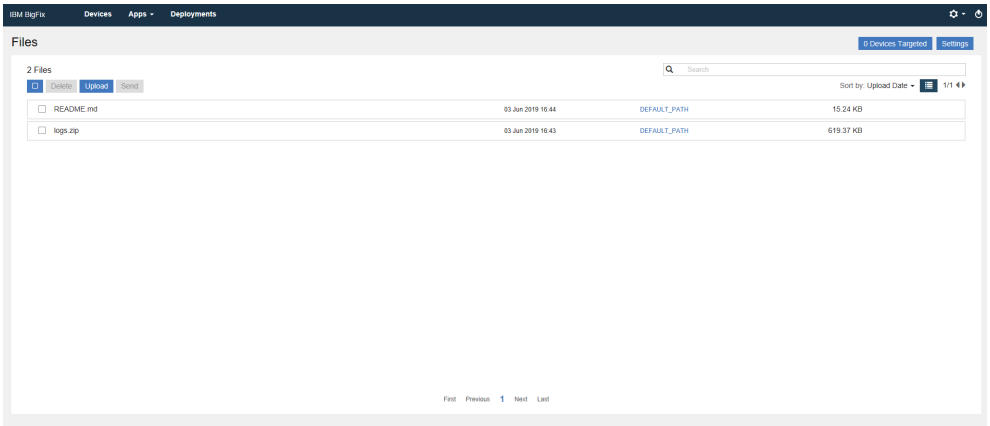
### Upload files

To upload a new file into the server:

1. From the **Devices** page, click **More** and select **Send file**.




   The **Files** page is displayed that lists all the files that are already uploaded by the user.
2. Click **Upload**, navigate to and select the file you want to upload, and click **Open**.




- The file upload starts and you can see the status of the upload in the progress bar.
- If you want to cancel the upload, click the red x icon next to the progress bar.

Once the file is uploaded, the file list is updated and the uploaded file becomes available to be sent on target devices.

**Note:** If you are using Microsoft Edge browser to upload a file, ensure you are using the MS Edge version 18.18218 or later. With earlier versions of Microsoft Edge, the progress bar does not show the file upload status; however, the file list gets updated with the uploaded file.

When the file is uploaded, it is saved in the default path. To change the default path:

a. Click the link **DEFAULT_PATH** against the file for which you want to change the default path.

b. In the **Destination file path** window:


i. Enter the desired path

ii. Select the option **Overwrite if the file already exists on target** if necessary.

c. Click **Ok**.

The specified path is set as the destination path.

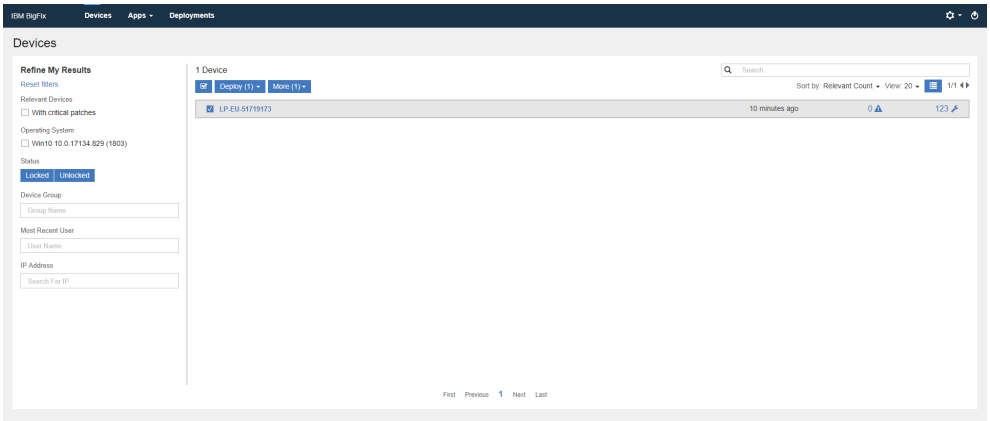
### Send a file

You can select a file and send it to one or more selected devices.

Prerequisites: The user permission required to send a file are Create Action and Custom Create

To send a file to one or more destination devices:

1. In the **Devices** page, from the list of devices, select one or more destination devices to which you want to send a file.



**Important:**

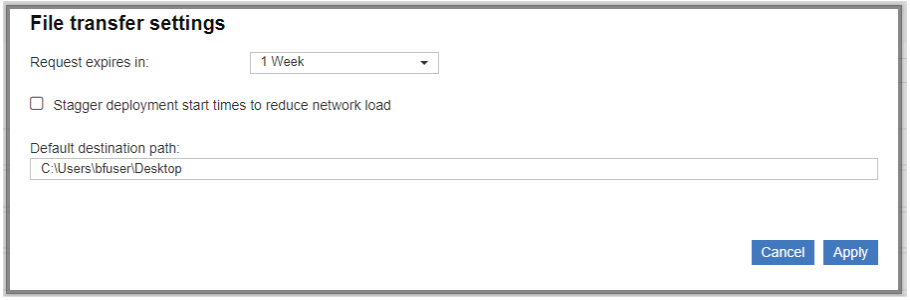
- Select at least one destination device.
- If you want to select more than one device, then select devices that belong to the same operating system.

2. Click **More** and select **Send file**.
3. From the list of files, select a file to transfer.

**Important:** You can send only one file at a time.

**Note:** You can search and find a file; sort by upload date, file name, or file size.

a. **Devices Targeted** – This displays the number of devices selected. Click this button if you want to modify your device selection.
b. **Settings** – Click this button to define file transfer settings:




- **Request expires in** – Select a time period from the drop-down list within which the file can be transferred to the destination devices. After this time period, the file transfer request expires and the file cannot be transferred.

- **Stagger deployment start times to reduce network load** – Select this option if you want to reduce network load.
- **Default destination path** – Specify the default destination path where you want to transfer the file in all selected devices.

4. Click **Send**.

After successful transfer, the file becomes available in the destination devices at the default path set.

**Delete**

To delete files from the server, from the list of files, select one or more files and click **Delete**.

 **Note:** When a file is removed, only the reference of the file is removed.

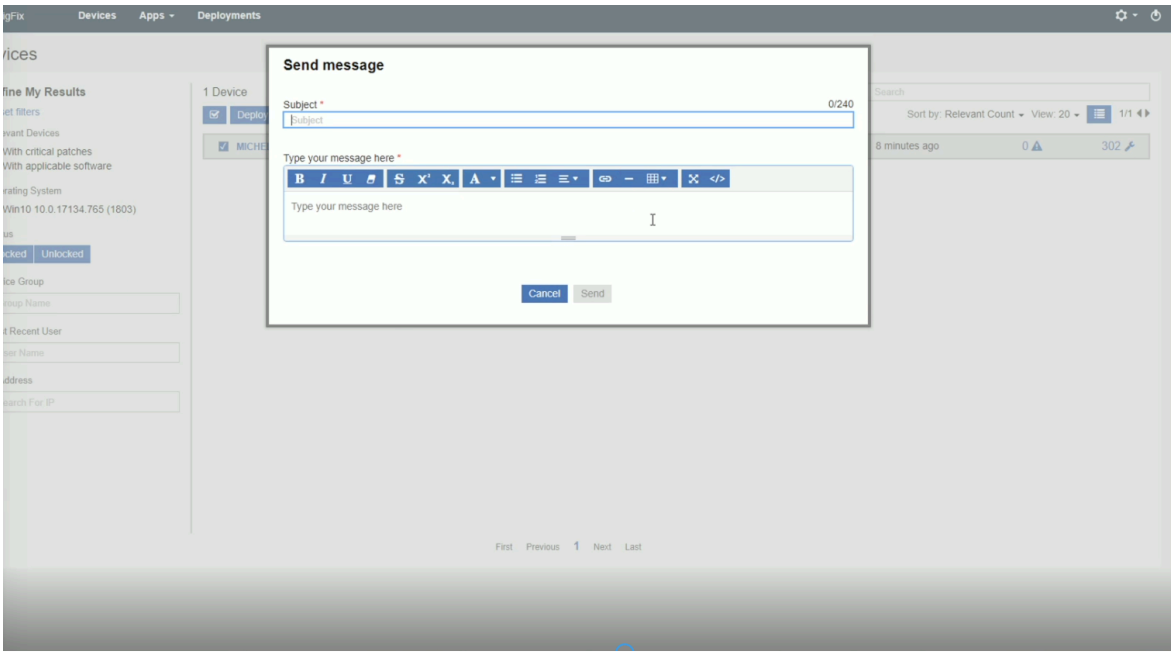
# Send Messages to Devices

Using Send Messages feature, you can send a short message notification to multiple selected devices. You can determine if the message is read by the end user and also configure to automatically delete messages from the target devices after a specified number of days.

- The operator must have the following permissions:
  - Can Create Actions
  - Custom Content
- SWD must be running and the operator must have access to it.
- Target devices must have SSA 3.1.0 or later installed with Messages tab setting enabled.

This section explains you about how to send message notifications to selected target devices.

1. Open the **Devices** tab.
2. In the **Devices** page, from the list of devices, select one or more devices to which you want to send the message.
3. Click **More** and select **Send message** from the drop-down.
4. In the **Send message** window, enter your subject and message in the relevant sections.




**Note:**

- You can enter up to 240 characters including the title.
- You can format your content using the formatting options in the toolbar.
- You can copy/paste HTML code into the editor and/or save your message as HTML code.

5. Click **Send**.
   - When the message is sent, a success message is displayed and the relevant action is created for the message sent. If the target device is not installed with SSA 3.1.0 or later, then the message cannot be delivered and the status of this action becomes not relevant.

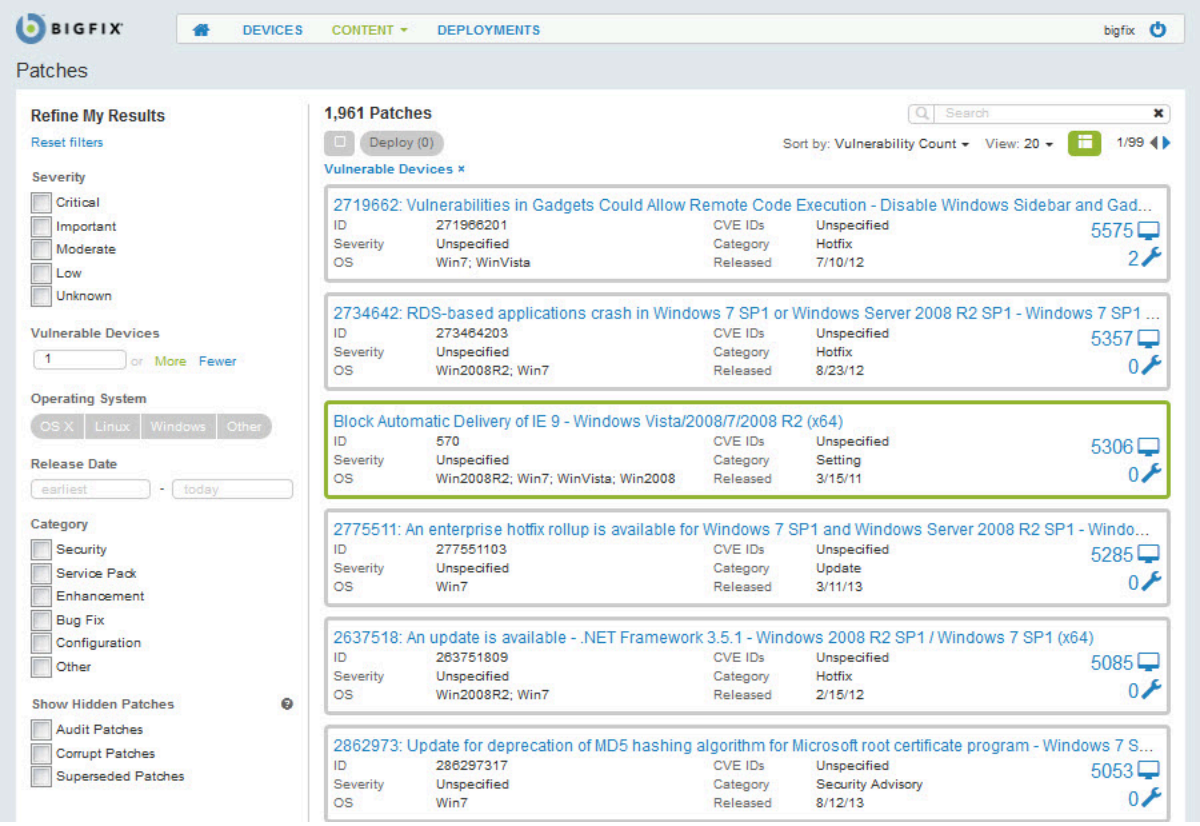
- When the user reads the message, the status of the action becomes completed. With this, the operator can determine if the message is read by the end user.
- To automatically delete messages from the target device user's SSA Message tab after a specified number of days, message expiration days can be set through the WebUI Server setting _WebUIAppEnv_NOTIFICATION_EXPIRATION_DAYS.

# Chapter 4. Get Started with Patch

Use the Patch screens to list patches, find specific patches, and view detailed patch information including known issues, vulnerable devices, and deployments.

## The Patch List

View a list of all patches, create customized patch reports to obtain patching intelligence, make smart patch decisions, report patch compliance, and communicate risks. You can also download and install missing patches using the links in the report.




- **Operator permission settings**, device, and site assignments govern list contents.
- **Search bar** to search patches by name and CVE IDs.

- **See patches for the most critical threats** or a specific threat level using the Severity filters. Patch Severity is assigned by the patch vendor (for example, Microsoft), not BigFix.
    - Critical
    - Important
    - Moderate
    - Low
    - Unknown - patch has no vendor-assigned rating.
- **See patches required by many devices** by entering a value in the Vulnerable Devices field.
- **See the latest patches** using the **Release Date** field. Specify a date range to see patches that were issued during a specific time period.
- **See patches associated with a specific task** using the Category filters:
    - Security – Apply a software change to address a vulnerability.
    - Service Pack – Apply patches to installed software. A collection of updates, fixes, or enhancements delivered in a single installable package. Typically used to update existing files, but can also be used to fix bugs, close security holes, or add new features.
    - Audit – Type of BigFix patch that is used to detect conditions that cannot be remediated and require the attention of an administrator.
    - Enhancement – Apply a change that provides new features.
    - Bug Fix – Apply a change that fixes one or more bugs.
    - Configuration – Apply a change that addresses a configuration issue.
- **Show Hidden Patches** – Control the display of audit, corrupt, and superseded patches in the patch list.

- **Supported Patch Sites** - Only patches from these sites appear in the WebUI; future releases will include more patch sites.
    - Windows
    - Red Hat Linux
    - Mac OS X
    - CentOS

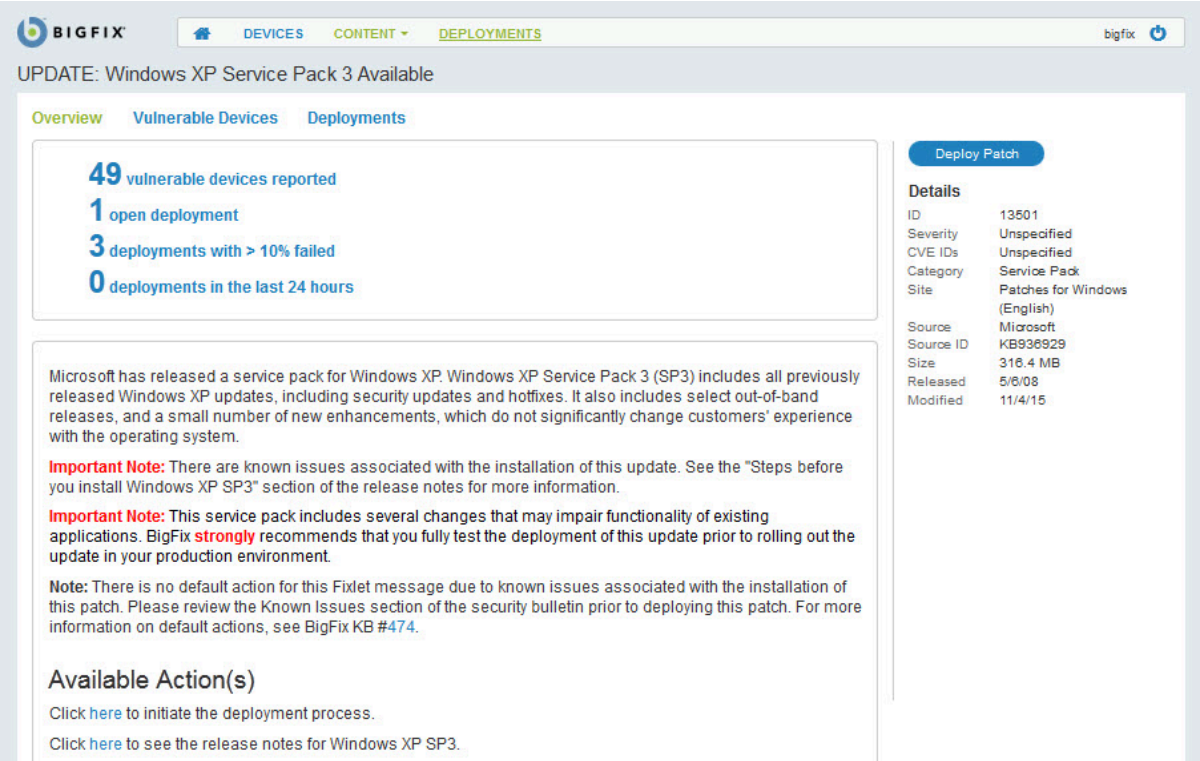
- Windows Applications (Adobe Acrobat, Adobe Flash Player, Adobe Reader, Adobe Shockwave, Google Chrome, ImgBurn, Mozilla Firefox, Notepad++, Nullsoft, Oracle, Real Networks, Skype, Winamp, Winzip)
- Debian
- Oracle Linux
- SUSE
- Ubuntu

If Inline Reporting feature is enabled, you can visualize summary report of the real-time data and export the data to .csv or .xlsx files. For more information, see The Patch List in BigFix 10 Help Center.

**Note:** Inline Reporting feature is not extensively tested in WebUI running on versions earlier than BigFix 10 Platform.

# Patch Document

Click a patch name to see its description, vulnerable devices, and deployment history. Drill further into patch details using the links to associated views. Pay particular attention to the Notes and Important Notes in a content document: they contain valuable information, including known issues associated with the content.




The Patch Document views:

- Overview – Detailed description of the patch, including metadata, available actions, and vendor links.
- Vulnerable Devices – List of relevant devices for targeting.
- Deployments – Patch deployment history.

The material in the Available Actions section is pulled directly from the BigFix database, so options and formatting can vary. A link to the vendor's release notes is often included. For example, "Click here to see the release notes for Windows XP SP3."

# Chapter 5. Get Started with Patch Policy

Use the Patch Policy application to establish continuous patching across your enterprise. A patch policy is a set of criteria that defines a patch list; that is, a collection of Fixlets that meet the patching criteria of a specific set of endpoints. Create patching schedules for different groups of machines and assign different deployment behaviors to each. Set patch timing, frequency and duration, pre-caching and retry behavior. Stagger start times, bypass errors, and notify device owners when a restart is pending.

Implement a patching strategy that meets your organization's patching cycles and security guidelines. Use patch policies to establish and maintain a process of continuous security and compliance for your organization. Patch Policies currently supports Windows and Red Hat Enterprise Linux (RHEL) patching.

### Requirements

- BigFix Platform version 9.5.5, or above.
- BigFix WebUI installed and running.
- Subscriptions to all applicable BigFix patch sites.

Patch Policies supports the Windows and Red Hat Enterprise Linux (RHEL) patch sites. From the BigFix Console, enable any patch sites that are relevant to your deployment, and subscribe all computers to those sites.

## Patch Policy Overview

To open the Patch Policy application, from the WebUI **Apps** menu, select **Patch Policy**.

Creating a patch policy is straight forward.

1. Enter a name for the policy, and select the types of patches it should include. For example, create a policy that includes important service packs for operating system updates.
2. Create a roll out schedule for the policy, including deployment timing, frequency, and behavior.

3. Select policy targets: the devices to be patched.
4. Activate the policy.

   The process is described in detail in Create a Patch Policy *(on page 34)*.

### Keeping Policies Current

The Patch Policy app notifies you when new patches that meet policy criteria become available. The delta icon next to a policy name on the Policy List tells you patch content has been added or changed. Refresh a policy to include the new material. Refresh policies manually, or use the Auto-refresh option to keep policies up-to-date.

### Exclusions

You can exclude patches from a policy that otherwise meet its inclusion criteria. For example, manually exclude a patch you know causes problems in a custom application. Or set a dynamic exclusion to automatically exclude Microsoft Office updates from a policy that updates Windows. Once set exclusions remain in effect until you remove them. Patch policies never include patches used for auditing, corrupt patches, or patches without a default action.

Use the WebUI Deployment views to monitor policy-based patching results. See [link]: Get Started with Deployments, for more information.

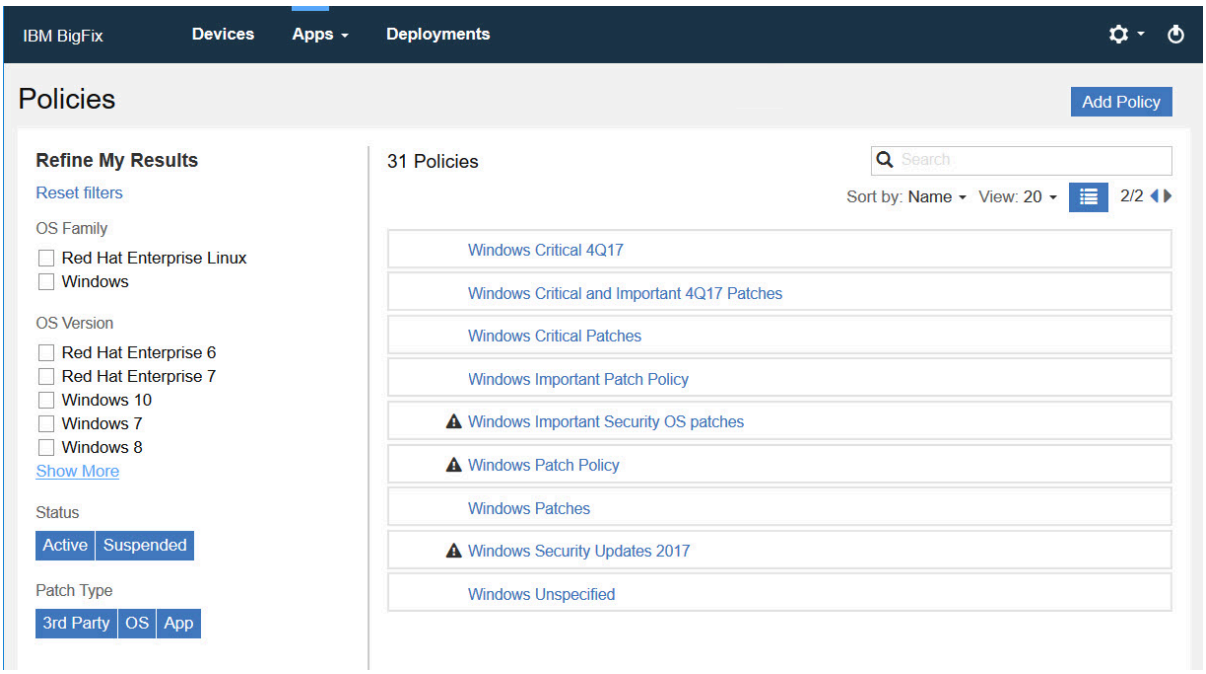
### Permissions and Patch Policy

BigFix Master Operators (MOs) have full access to all Patch Policy functions. MOs can create, edit, delete, activate, and suspend polices, manage patch rollouts and schedules, and refresh policies when new patches are released. Non Master Operators (NMOs) can add, edit or delete a policy and they can add targets to an existing schedule, and remove targets from a schedule if they have relevant permissions.

## The Patch Policy List

**Important:** Non-Master operators need relevant permissions to perform different actions in the Patch Policies app. For more information on permissions, see The WebUI Permissions Service.

Policies are listed alphabetically. Use the Sort, Search, View, and filter controls to find policies quickly. Click a policy name to open its document. Click the **Add Policy** button to create a new policy.




## Out of Date Policies

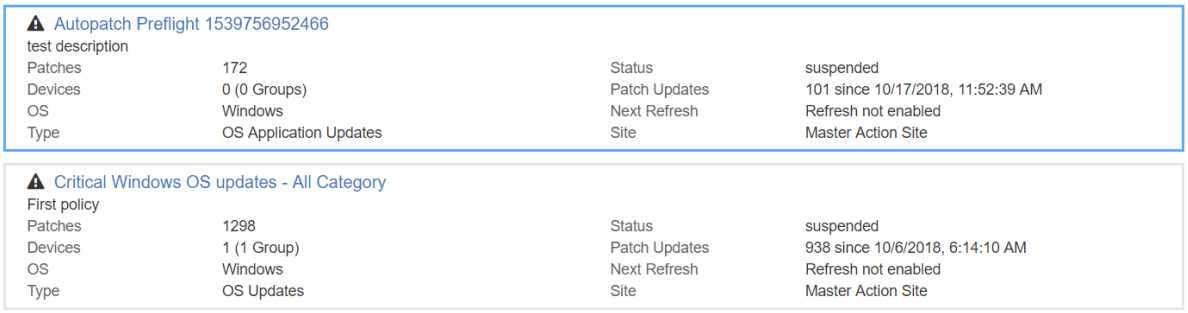
The Delta icon indicates that new patches that meet the patch inclusion criteria have become available since the policy was created or updated. Policies can also fall out of date when their patches have been modified or replaced.

Refresh a policy to include the new content. Active out of date policies continue to run, though they are not particularly effective. For example, say you create a new policy that runs daily at 3pm. On the first day it runs, patches are deployed to its designated targets. On the second day new patches become available and the policy falls out of date. On the third and

subsequent days the policy runs but does nothing, since the patches it knows about have already been deployed. As soon as you refresh the policy it will deploy the new patches.

Patches that have been superseded by the new content are no longer be deployed.

Use the **Show/Hide Details** control to toggle between the Detail and List views.




- Patches: number of patches in the policy.
- Devices: number of targeted computers and computer groups.
- OS: Operating system of patches in the policy.
- Patch Type: OS update, Application update, or 3rd Party application update.
- Policy Status: Active or Suspended.
- Patch Updates: number of Fixlets changed since date and time of creation, or last refresh.
- Next Refresh: date of next scheduled Auto-refresh, if enabled.
- Site: associated site with a patch policy.

### Policy Status: Active or Suspended

Patch policies have two states: Active or Suspended. Suspend an Active policy to refresh it, add a new schedule, or make other changes. You do not have to suspend a policy to add or remove targets. New policies remain suspended until you active them.

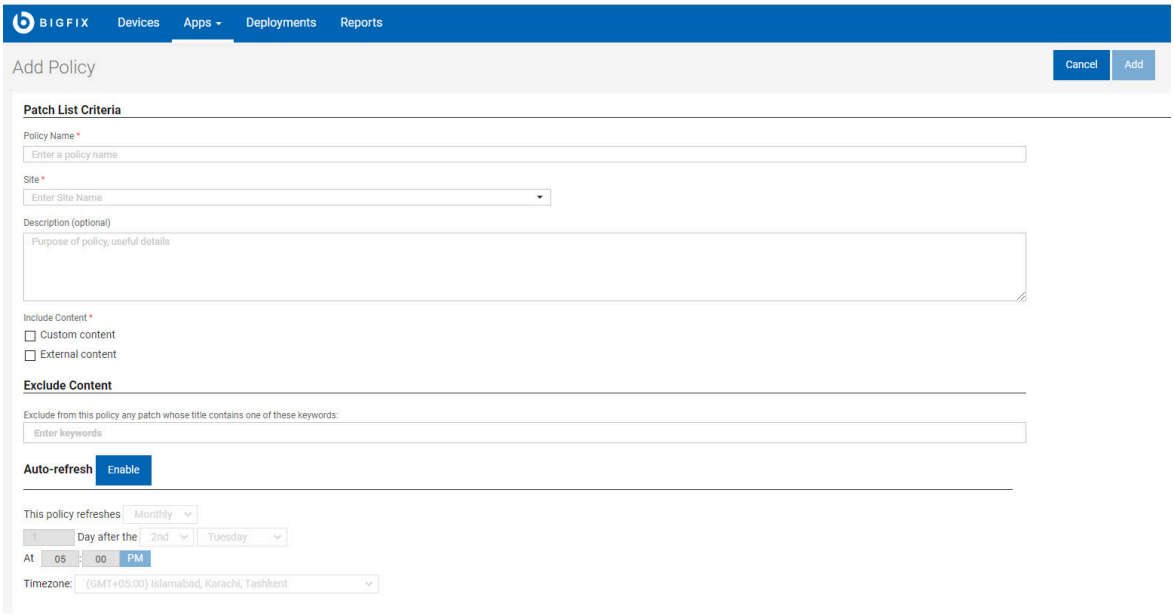
# Create a Patch Policy

In this page, steps for creating a patch policy, selecting patches to include, setting deployment options, and designating targets are provided in detail.

To open the application, select **Patch Policy** from the WebUI **App** menu. For a summary of Patch Policy tasks, see Patch Policy Operations *(on page 48)*.

1. On the **Policies** page, click **Add Policy**.
   The **Add Policy** page is displayed.

   **Note:** A Non-Master operator needs Create/Edit Policy and Delete Policy permissions to add, edit or delete policy. For more information on permissions, see The WebUI Permissions Service. Non-Master operators cannot edit definition of the policy stored in the Master Action Site despite having the permission to Create/Edit Policy. Currently, non-master operators are not allowed to access the Master Action Site and they can access only their custom site.




2. Provide the following information under Patch List Criteria:

   **Policy Name**

   Enter the new policy name.

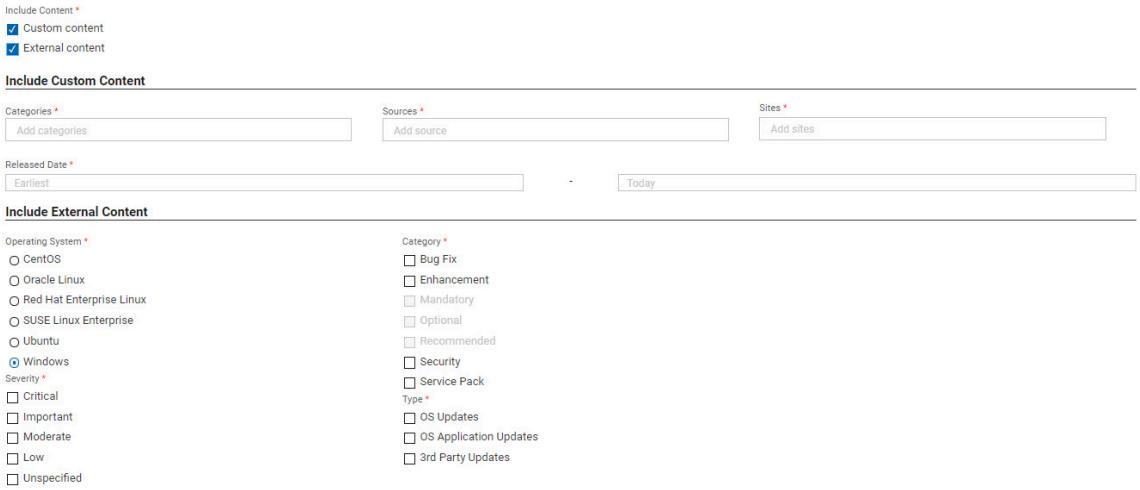
   **Site**

Select the **Master Action Site** from the drop-down to store the policy and its schedules.

**Description**

Enter the description.

3. You can include two types of content: Custom content and/or External content




**Custom content**

a. Check this option to include fixlets from a custom site.

b. Under **Include Custom Content**, select the **Categories**, **Sources**, **Sites**, and **Release Dates** from the drop-down that the new policy must include.

**Note:** Custom fixlets must include the above fields in order to be included in the policy.

**External content**

a. Check this option to include fixlets from an external site.

b. Under **Include External Content**, select one or more items from each column.

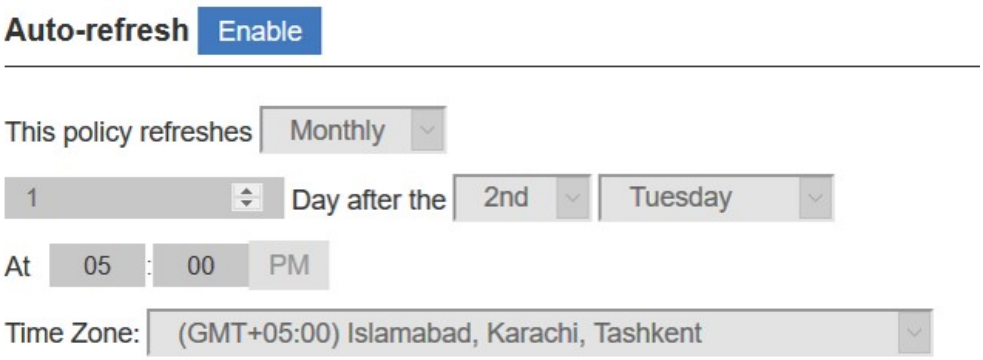
- Operating System (choose one): CentOS, Oracle Linux, Red Hat Enterprise Linux, SUSE Linux Enterprise, Ubuntu, Windows.
- Category: Bug Fix, Enhancement, Security, Service Pack.

- Severity: Critical, Important, Moderate, Low, Unspecified.
- Type: OS Updates, OS Application Updates, 3rd Party Updates.

**Note:** While creating the patch policy, ensure the following:

- Fixlets must have a default action. If not, the Fixlets will not be included in the patch policy.
- Patch policies will only detect Fixlets that has a default action.
- Tasks will not be detected.

4. Specify any patch exclusions. Type a keyword or phrase from the patch title in the **Exclude Content** field, and press **Enter** to add more. The Exclude Content field is not case-sensitive, so capitalization can be ignored.
5. Click **Add** on the top right corner, a new page is created with list of patches that are included and excluded as highlighted below.
6. Specify any patch exclusions. Type a keyword or phrase from the patch title in the **Exclude Content** field, and press **Enter** to add more. The Exclude Content field is not case-sensitive, so capitalization can be ignored.
7. Specify Auto-refresh behavior. Use the optional Auto-refresh feature to automatically include new patch content in your policy. To control update timing and frequency, set a refresh interval. Auto-refresh is disabled by default.

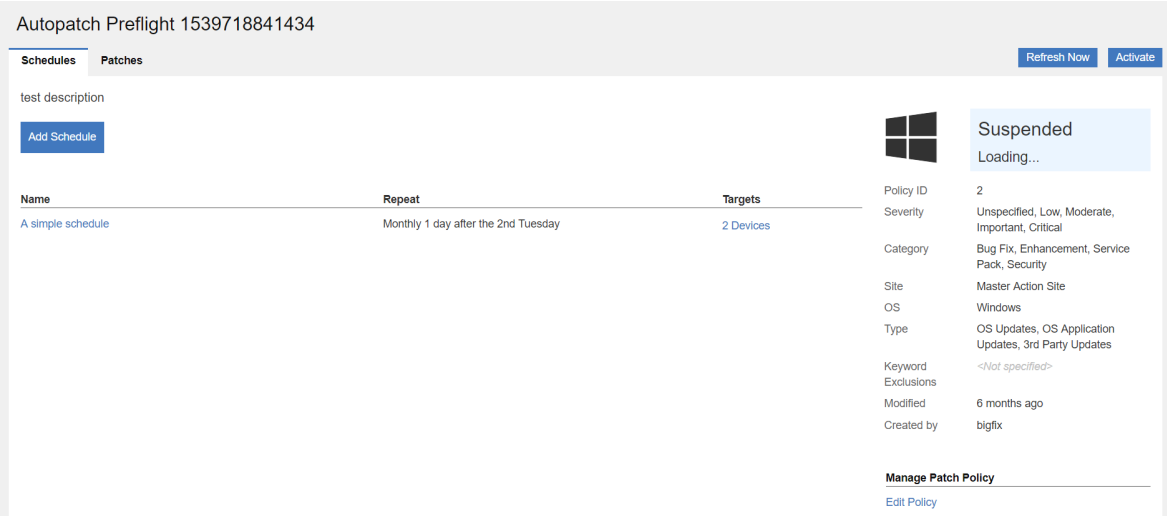



- Frequency (daily, weekly, monthly), on a specific day (of week/month) at (hour).
- Day After: use the optional Day After controls to schedule Auto-refresh updates relative to a monthly event, such as patch Tuesday. The second Tuesday of the month often falls in the second week—but not always. (For example, in

August of 2018, Patch Tuesday fell on the 14th.) Use the Day After options to coordinate refreshes with events whose dates change month to month.

- Time Zone: defaults to time zone of logged in user. The default time zone is the one the operator is in.

8. Click **Add** to save policy settings and display the policy document.



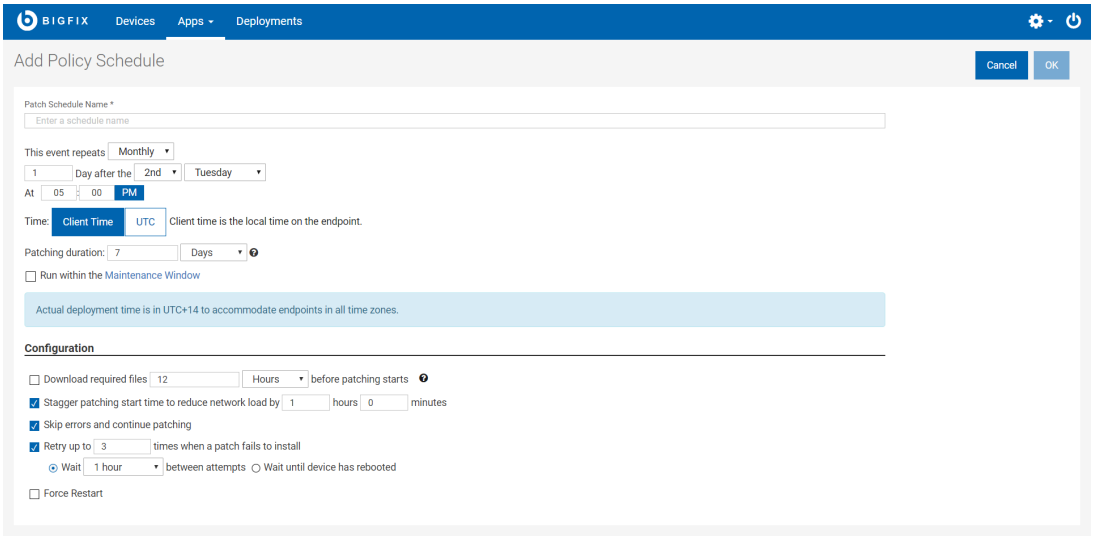

The **Schedules** and **Patches** tabs appear at the upper left, beneath the policy name. A policy summary appears on the right. Once established, policy schedules will display on the left. The **Edit Policy** and **Delete Policy** controls appear at the lower right.

9. Click the **Add Schedule** button to set policy deployment timing, behavior, and targets. A policy can have multiple schedules, each with its own deployment options and targets. A policy without a schedule does not deploy.
   Scheduling adds predictability to patching and can help minimize errors. It also ensures that your environment meets company security policies in time for compliance audits. Some vendors follow a regular patch release schedule, which can tailor your policy schedule to meet. You may want to roll out a policy in a test environment prior to deploying to production. Consider defining separate patch rollouts for Test, QA, and production stages, each with their own timing and duration.

**Note:** Non-Master operators need Create/Edit Schedule and Delete Schedule permissions to add or edit or delete a schedule. For more information on permissions, see The WebUI Permissions Service. Non-Master operators also

need write access to the site where the policy is stored to add or edit or delete a schedule.

a. Enter a name for the schedule and set the deployment interval.




i. This event repeats (daily, weekly, monthly), on (day of week/month).

ii. Day after - Use the optional Day after controls to schedule patching relative to a monthly event, such as Patch Tuesday. The second Tuesday of the month often falls in the second week—but not always. (For example, in August of 2018, Patch Tuesday fell on the 14th.) Use the Day after options to coordinate patching with events whose dates change month to month.

iii. At (Start time).

iv. Time Zone. Use Client time to initiate a process relative to its time zone, for example, to initiate patching in the overnight maintenance window where each endpoint resides. Use UTC time when you want all endpoints to act simultaneously across all time zones.

- Client Time - the local time on each endpoint; the time on the device where the BigFix agent is installed.
- Universal Time - Coordinated Universal Time (UTC) is the global standard used to regulate clocks and time worldwide.

**Note:** If you specify Client Time, the policy Start time will begin at the specified time in UTC+14 time zone. For more information. See Deployment Time *(on page 42)*.

v. Patching Duration (minutes, hours, or days, up to 30 days). The amount of time the policy will attempt to install patches on a target device that is not responding.

vi. Run within the Maintenance Window - This option allows you to run patch policies during maintenance activities. You can use the Maintenance Windows Dashboard to schedule maintenance activities run by BigFix.

**Note:** To use this feature, a global In Maintenance Window property must exist.

To create the global In Maintenance Window property:

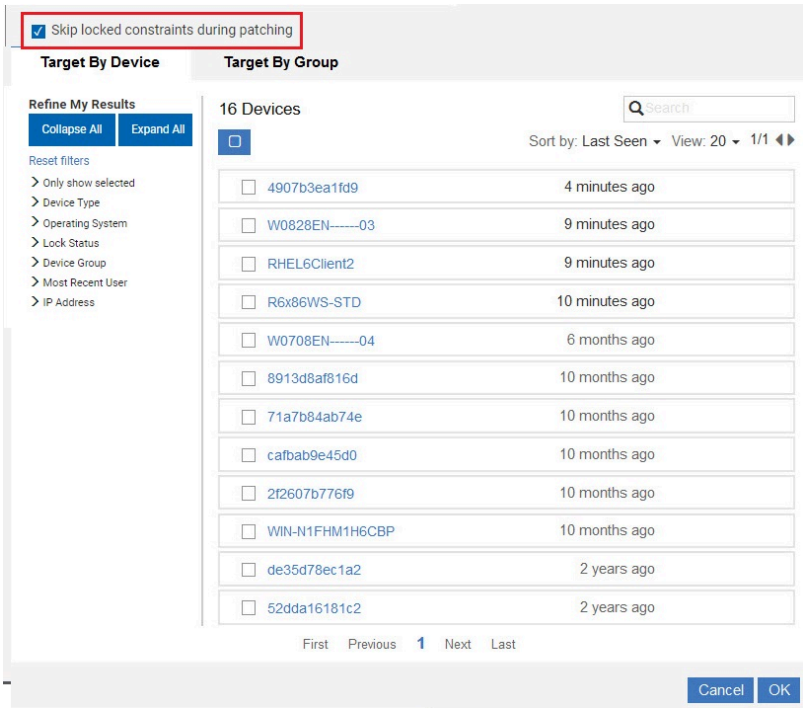
1. From the BigFix console, goto **Tools** > **Manage Properties**.
2. Select **In Maintenance Window** property from the BES support site, click **Make Custom Copy**, and then click **OK**.

10. Set deployment and post-deployment behavior.
    - Pre-caching: To download required files before patching starts, set the in minutes, hours, or days up to 5 days.
    - Stagger patching start time, for example, to reduce network load. Set an unlimited number of minutes or hours.
    - Bypass patch errors and continue patching. Patch policies are Multiple Action Groups (MAGs). MAGs run sequentially and stop on the first action that fails. Use the Bypass patch errors option to ignore failures and proceed to the next action. Use this option when the actions in a MAG do not depend on the actions that precede them. For more information about policies and Multiple Action Group (MAG) processing, see Monitoring Deployed Policies *(on page 47)*.
    - Retry up to *n* times (unlimited). If a patch fails to install on a device, for example, due to lack of space on the hard drive, set a retry value and the wait period between attempts.

- Wait *n* (minutes, hours, up to 30 days) between attempts to install.
- Wait until device has rebooted to install.

• Force a Restart - Force a restart on completion. Notify device owners when a restart is required and provide options for restarting at a convenient time. (1, 7, 15 days). Use the default message or type in your own.

11. Click **OK** to save the schedule and return to the policy document.
12. The new schedule appears at the top of the list. Click **Add Targets**.




**Skip locked constraints during patching**: Use this feature to deploy patches to locked devices without having to unlock the device. This option is only available to an operator with console lock or unlock permissions, and only applies to targets added by that operator. For information on lock permission, see **Can Lock** - Adding Local Operators.

**Note:** Non-Master operators need Add/Remove Your Own Targets permission to add or remove the self created targets. Non-master operators need Remove Other Operator's Targets permission to delete the targets that are created by

other operators. Non-Master operators can target only the permitted number of devices and cannot exceed the limit. In case of violation, WebUI app will display an error message and the non-master operators cannot proceed further. For more information on permissions, see The WebUI Permissions Service. Non-Master operators need read access to the site where the policy is stored to add/remove the targets.

13. Select devices or computer groups from the **Target By Device** or **Target By Group** tabs. Note that you cannot target both devices and groups in a single schedule.
    A schedule without targets does not deploy. Use the **Sort**, **Search**, **View**, and filter controls to find targets quickly. Click anywhere in a card to select or deselect it. Click a device or group name to open its document. Use your browser's **Back** button to return to the Patch Policy app.
14. Click **OK** to save targets and return to the Policy document.
15. To set a manual exclusion, click the **Patches** tab.
    a. Check the **Exclude** box next to patches you want to exclude. The **Exclude** button tallies your selections.
    b. Click the **Exclude** button.
16. When you are ready, click **Activate** to activate the policy and commence patching.
    Activating a policy activates each of its schedules. Suspend an active policy at any time to halt patch deployment.
    To monitor policy-based patching activity, use the WebUI's Deployment views *(on page 97)*

**Note:**

If you have specified Client Time in your policy schedule, the policy start time will be the specified client time in UTC+14 time zone after activating the policy. This is to ensure that clients in all time zones will be receiving the policy at the specified time.

In WebUI, the start time will be displayed in browser time, after the policy is activated.

- Client time = The time on the endpoint receiving the policy.
- Browser time = The time on the machine on which the browser resides.

The following calculation can be used to convert from UTC+14 time to your browser's time:

- Start_time (in browser time) = <specified_client_time> - 14 hrs + <utc_hour_offset_for_browser_timezone> hrs

**Example**

You have specified a Client Time of 5 AM, because you want the policy to be executed at 5 AM in each endpoint's timezone, that is 5 AM PST, 5 AM EST, 5 AM IST, etc. This means the policy action will be issued at 5 AM in the UTC+14 time zone but the policy will not execute on a client endpoint until it is 5 AM in the client's local time.

Consider your browser is in Pacific Daylight Time (PDT). PDT is UTC-7, therefore the UTC offset here is -7.

Start time in PDT = 5 AM – 14 hours + (-7 hours) = 5 AM – 21 hours = 8 AM PDT.

Now let us consider that your browser is in Indian Standard Time (IST). IST is UTC +5:30 so the UTC offset here is +5:30.

Start time in IST = 5 AM – 14 hours + (5:30 hours) = 5 AM – 8:30 hours = 20:30 IST or 8:30 PM IST.

# Patch Policy Document

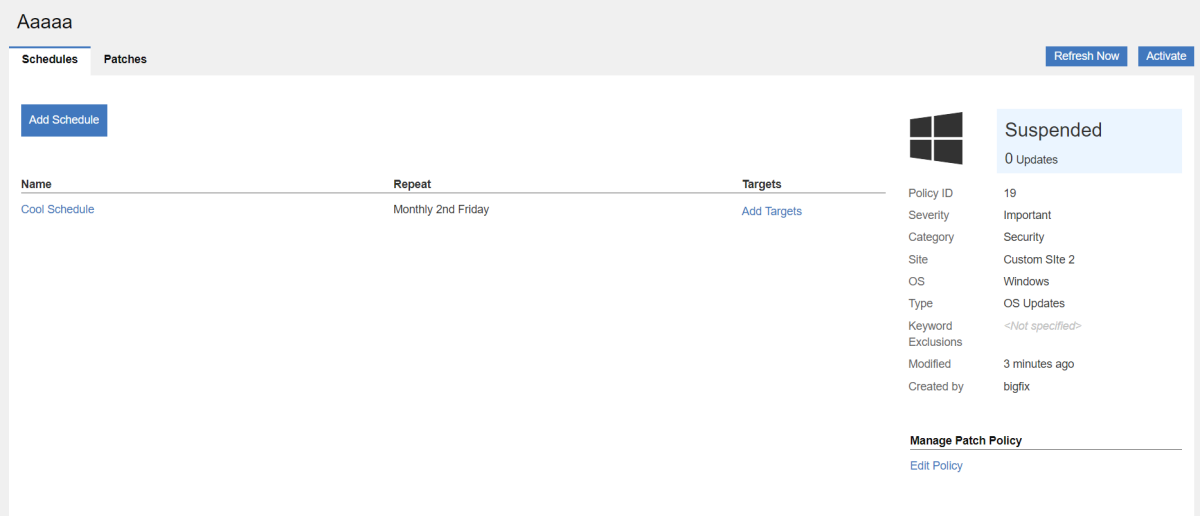
Use the Patch Policy Document to view and manage policy settings. Policy information appears on the right.

- Status – Active or Suspended.
- Updates – Number of patch updates available.
- Policy ID – unique identifier for this policy.
- Severity, Category, OS, Type – inclusion criteria.
- Site - name of the site where the policy is stored.
- Next Refresh (Active policies) – Time of next Auto-refresh, if enabled.

- Modified – time policy was last changed.
- Created by: operator name.

## Schedules Tab

The Schedules tab displays a list of policy schedules in order of creation. Click a schedule name to display it's Summary page.




- Name – Schedule name.
- Repeat – Deployment interval.
- Targets – Number of targeted devices or computer groups. Click the link to display the target list. The **Add Targets** control appears when a schedule has no targets; click the link to add them.
- Next Deployment: The time the schedule's Multiple Action Groups will be issued to the BigFix root server. It is subsequently adjusted to accommodate endpoints in all time zones, ensuring the policy executes at the correct time in each location.

Click the **Suspend** button to refresh or edit an Active policy. Some Schedules tab controls are inactive until the policy is Suspended.

**Schedules** Tab controls:

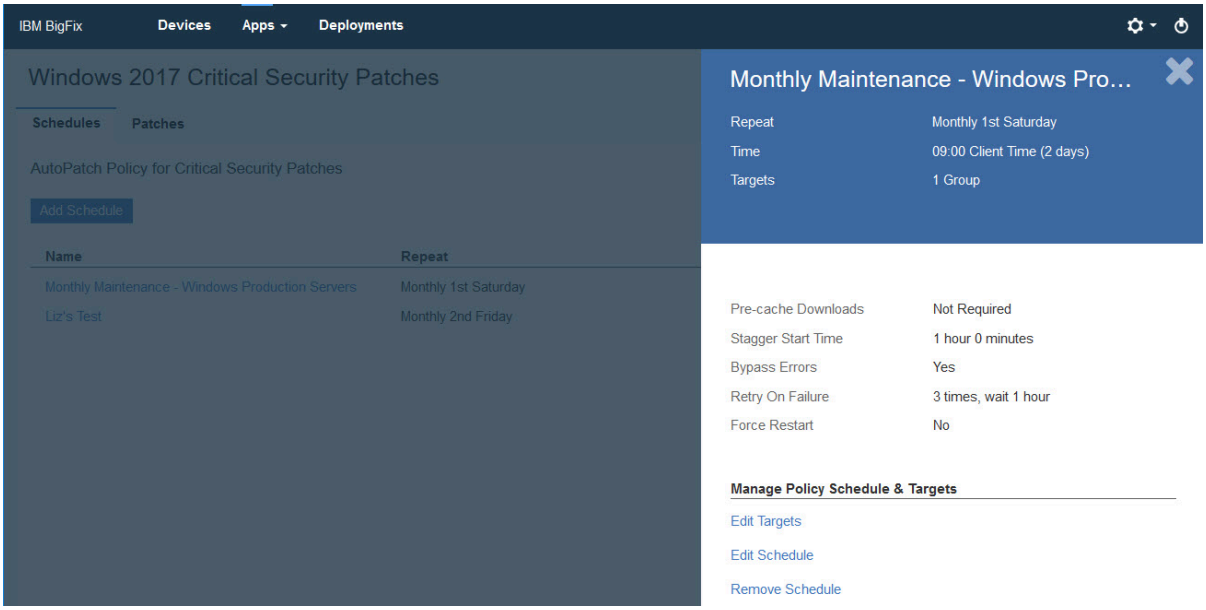
- **Add Schedule**
- **Activate/Suspend**

- **Refresh Now**
- **Edit Policy**
- **Delete Policy**

**Note:** Non-master operators need Activate/Suspend Policy permission to activate or suspend the policy and they need Refresh Policy permission to refresh the policy. For more information on permissions, see The WebUI Permissions Service. Non-master operators also need write access to the site where the policy is stored to activate/suspend or refresh the policy.

## Schedule Summary Page

Click a schedule to display the Schedule summary and its controls. To make changes to a schedule you must suspend its policy. This is not required when adding or removing targets.




- Pre-cache Downloads – The time when policy patches are pre-cached.
- Stagger Start Time – Amount of time to stagger patching time to reduce network load.

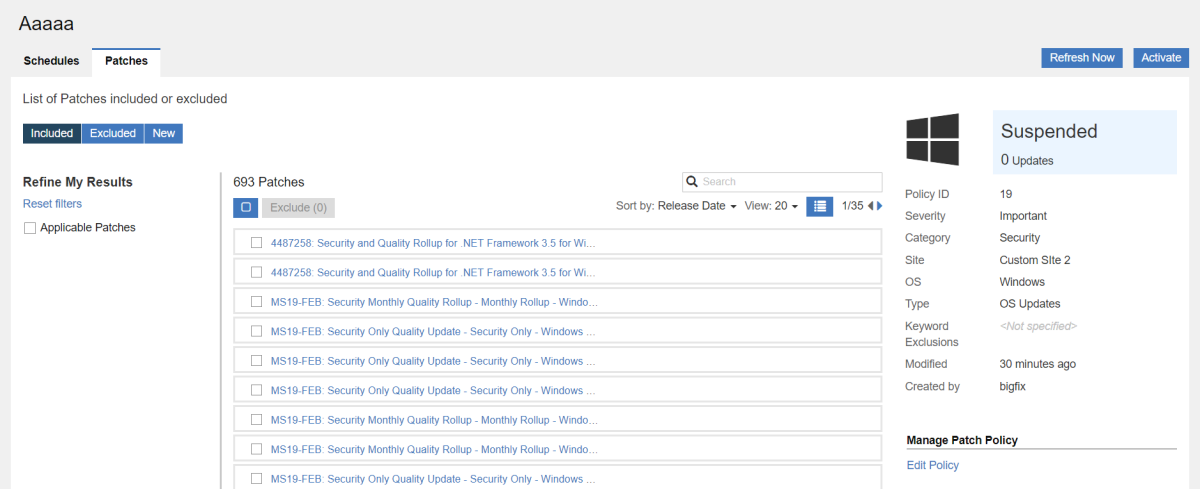
- Bypass errors – Ignore Multiple Action Group (MAG) failures and proceed to the next action. For more information about patch policies and MAG processing, see Monitoring Deployed Policies *(on page 47)*.
- Retry on Failure – number of times to retry if a patch fails to install, and the retry interval.
- Force Restart – Force a restart on completion, and the interval to wait before restarting.

**Schedule Summary** controls:

- **Edit Targets**
- **Edit Schedule**
- **Remove Schedule**

## Patches Tab

Displays patches for the selected policy. Patches used for auditing, corrupt patches, and patches with no default action are not included in patch policies. Superseded patches are flagged but not deployed; they will be removed from the patches list once the policy has been refreshed.




To exclude individual patches from the policy check the **Exclude** box to the left of the title. A device that has been targeted using a computer group (either a manual or dynamic group), cannot be individually excluded.

Filters:

- Included – displays included patches.
- Excluded – displays excluded patches, including both dynamic and manual exclusions.
- New – displays patches that will be added to the policy once it is refreshed.
- Applicable Patches – lists patches associated with the devices the logged in user has permission to operate on. For example, suppose a Non-Master Operator (NMO) is authorized to patch Windows machines, but not Linux machines. When viewing a policy that includes both Windows and Linux patches:
  - When the Applicable patches box is checked the NMO will see only Windows patches.
  - When the Applicable box is clear the NMO will see both Windows and Linux patches.
  - Master Operators, with unlimited permissions, will see the same patches whether the **Applicable Patches** filter is selected or not.

**Patches** Tab controls:

- **Activate/Suspend**
- **Refresh Policy**
- **Edit Policy**
- **Delete Policy**

**Note:** Buttons in the policy document appears only when the respective permissions are granted to the non-master operators.

# Monitoring Deployed Policies

## Monitoring Results

Use the WebUI's Deployment *(on page 97)* views to monitor policy-based patching activity.

### Working with Multiple Action Groups

A policy is a package of Fixlets and schedules. At the time indicated by the schedule, all patches meeting policy criteria are collected to create a BigFix Multiple Action Group (MAG). If a patch is not relevant on a particular device, no individual action will be taken.

A single policy may contain hundreds of patches, and its MAG may contain hundreds of components. To improve performance, when the number of patches in a policy exceeds 200 it is divided into Multiple Action Groups.

Default behavior of a Multiple Action Group (MAG)

- Staggers deployment start time over the course of an hour to reduce network load.
- Retries three times with a one hour interval on each try.
- Uses default action.
- Expires in 2 days (48 hours).
- The targeting method depends on the target type, whether it is: a) a static endpoint, b) a manual computer group, or c) an automatic computer group.

# Patch Policy Operations: Task Reference

The Patch Policy operations are summarized in this page. If you suspend an Active policy to make changes, re-activate it when you are done to resume patching.

Add a Policy *(on page 49)*

Activate a Policy *(on page 49)*

Suspend a Policy *(on page 49)*

Refresh a Policy *(on page 50)*

Edit a Policy *(on page 50)*

Add a Schedule to a Policy *(on page 50)*

Edit a Policy Schedule *(on page 50)*

Add Targets to a Schedule *(on page 51)*

Remove Targets from a Schedule *(on page 51)*

## Add a Policy

1. On the Policy List, click **Add Policy**.
2. Enter a policy name and description.
3. Select policy inclusion criteria: Severity, Category, OS, and Type.
4. Add dynamic exclusions and set Auto-refresh options, as required. Click **Add**.
5. On the policy document, click **Add Schedule**.
6. Enter a schedule name. Select options for deployment frequency, and behavior. Click **OK**.
7. On the policy document, click the **Add Targets** link for the new schedule.
8. Select patching targets from the **Target By Device** or **Target By Group** tab. Click **OK**.
9. On the policy document, click **Activate**.

## Activate a Policy

1. From the Policy List, open the policy document.
2. Click the **Activate** button

## Suspend a Policy

1. From the Policy List, open the policy document.
2. Click the **Suspend** button.

## Refresh a Policy

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click the **Refresh Now** button.

## Edit a Policy

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click the **Edit Policy** link.
4. Make required changes, and **Save**.

## Delete a Policy

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click the **Delete Policy** link.

## Add a Schedule to a Policy

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click **Add Schedule**.
4. Enter a schedule name, and set scheduling and execution options. Click **OK**.
5. Click the schedule's **Add Targets** link.
6. On the **Target By Device** or **Target By Group** tab, select devices or groups to add. Click **OK**.

## Edit a Policy Schedule

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click the schedule name.

4. Click **Edit Schedule**.
5. Make changes and click **OK**

## Add Targets to a Schedule

1. From the Policy List, open the policy document.
2. Click the schedule's Targets link.
3. On the **Target By Device** or **Target By Group** tab, select devices or groups to add. Click **OK**.

## Remove Targets from a Schedule

1. From the Policy List, open the policy document.
2. Click the schedule's Targets link.
3. On the **Target By Device** or **Target By Group** tab, select devices or groups to remove. Click **OK**.

## Delete a Policy Schedule

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Remove all target devices or groups.
    a. Click the schedule's Targets link.
    b. On the **Target By Device** or **Target By Group** tab, click **Deselect All**. Click **OK**.
4. On the **Schedules** tab, click the schedule name.
5. Click **Remove Schedule**. Click **OK**.

## Exclude Individual Patches from a Policy (Manual Exclusions)

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click the **Patches** tab.
4. Check the **Exclude** box next to the patches you want to exclude.
5. Click the **Exclude** button.

## Exclude Patch Types from a Policy (Dynamic Exclusions)

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click **Edit Policy**.
4. Type a keyword or phrase in the **Exclude** field and press **Enter**; repeat as required. Exclusions keywords are not case-sensitive.
5. Click **Save**.

## Enable Auto-refresh

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click **Edit Policy**.
4. Click Auto-refresh **Enable**, and set refresh timing and frequency.
5. Click **Save**.

## Adjust Auto-refresh Schedule

1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click **Edit Policy**.
4. Adjust Auto-refresh timing and frequency.
5. Click **Save**.

## Disable Auto-refresh

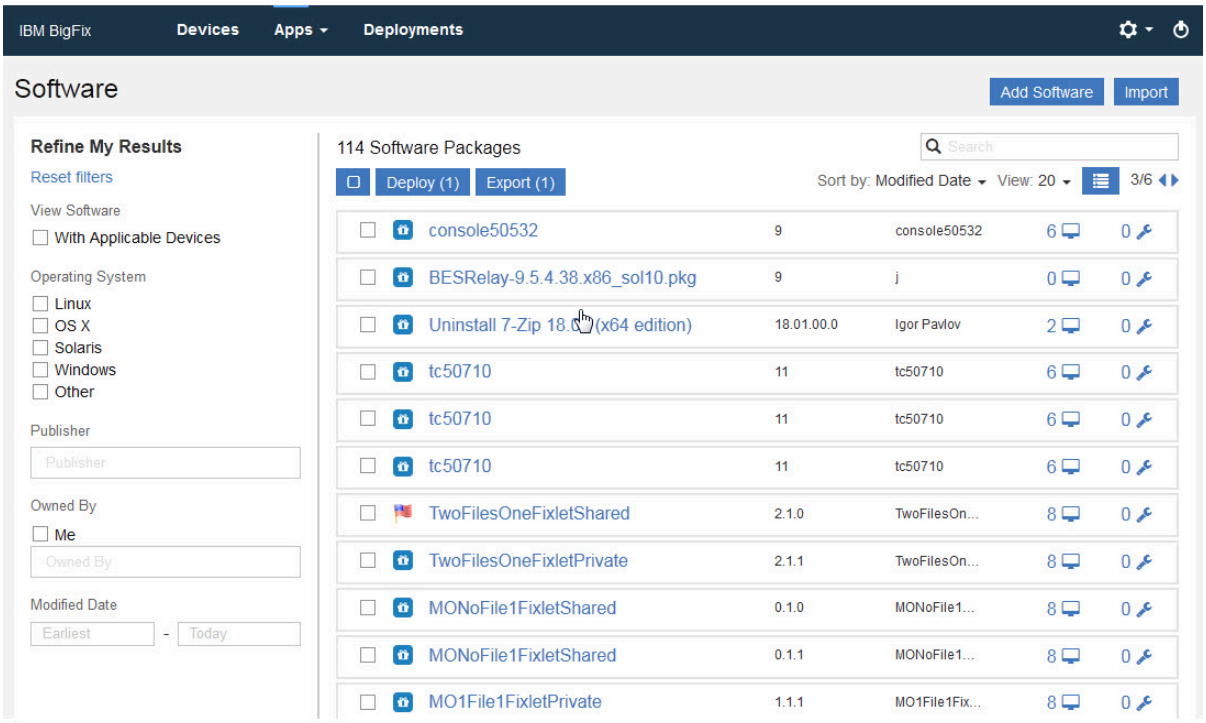
1. From the Policy List, open the policy document.
2. If the policy is active, click the **Suspend** button.
3. Click **Edit Policy**.
4. Click Auto-refresh **Disable**.
5. Click **Save**.

# Chapter 6. Get Started with Software

Use the Software-related screens to list software packages, find specific software, and view detailed package information. A BigFix software package is the collection of Fixlets used to install software on a device. The package includes the installation files, the Fixlets that install them, and information about the package itself.

Use the Software app screens to add, edit, and remove packages from your organization's software catalog. Use the multiple task feature to create packages with more than one action. For example, create a single package that can both install and uninstall a piece of software, or install it multiple ways, using different options.

## The Software Package List



- **List contents reflect the operator's device and site assignments**, and whether a particular package was shared, or marked private by the owner.
- **Add Software to your catalog** with the **Add Software** link. The link does not display if the operator does not have permission to add software.

Use the **Export** and **Import** functions to transfer software packages from one BES server to another. These tools are useful if you are running multiple BigFix deployments, or want to make a backup.

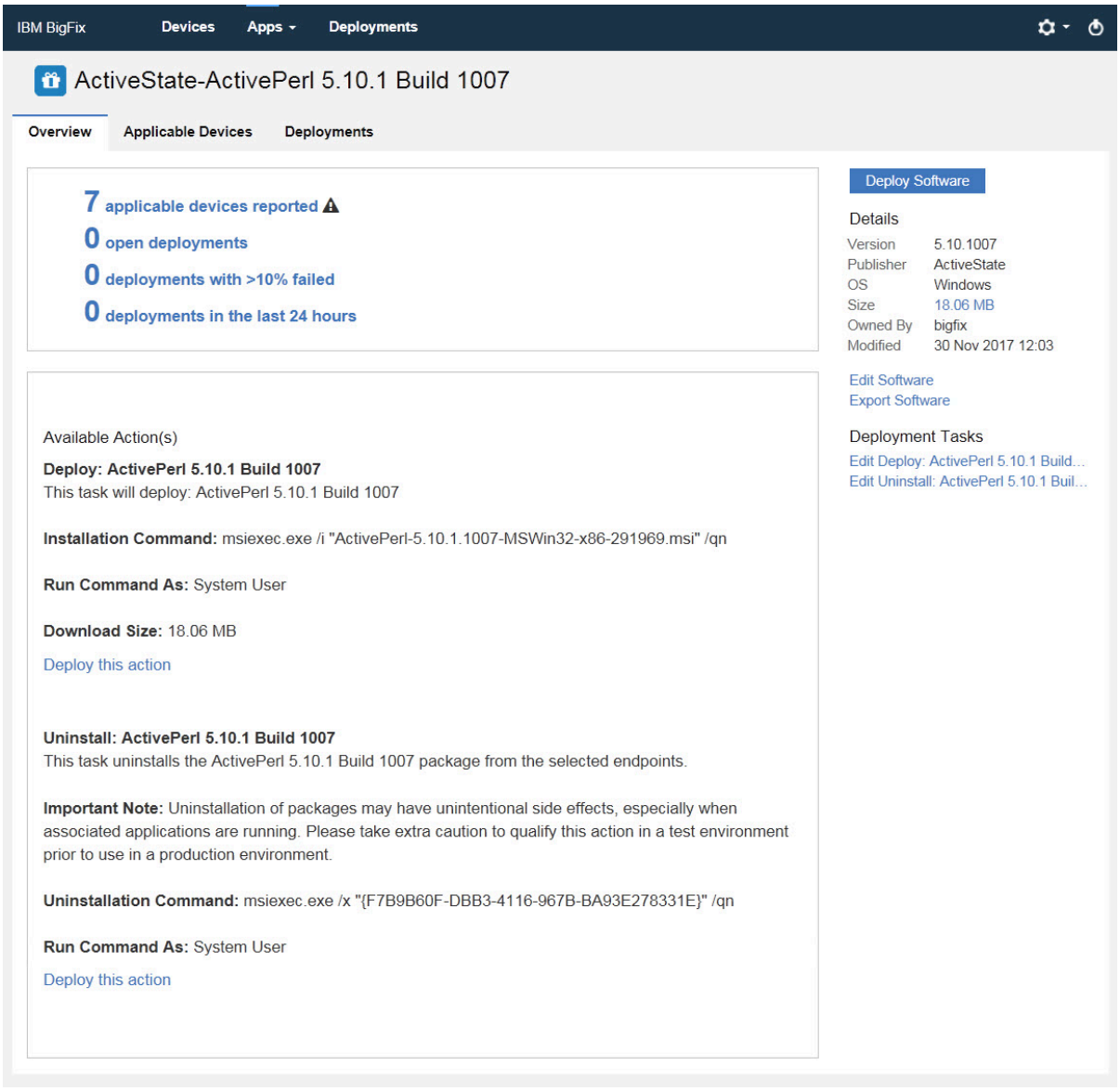
- **Export** - Click to export software packages on the BES server as a zip file. The browser will prompt you to specify a directory. Multiple packages selected for export are placed in a single zip file.
- **Import** - Click to import packages created with the **Export** function. Operators who do not have permission to import packages do not see this button.

**Note:** Importing software packages that include text-based files may sometimes fail. The import process can change the file's SHA value and when the SHA validation check fails, the import fails. This is a known BigFix Platform bug.

# Software Documents

Click a software package name to see its description, applicable devices, and deployment history. Drill further into package details using the links provided in the sidebar, and associated views. The Software Document views:

- Overview – Detailed description of software package.
- Applicable Devices – Machines eligible for this software.
- Deployments – Software deployment history.




- Click **Deploy Software** to deploy the package.
- Edit or remove a software package from your catalog using the **Edit Software** link.
- Export the package using the **Export Software** link.
- Click a deployment task link to edit it. To learn more about task editing see, Editing Custom Content *(on page 70)*.

# Software Catalog Operations

This section shows how to add software to your catalog, edit software packages, and delete packages from the catalog. Note that the permissions used for adding software to the catalog and the permissions used for editing and deleting software are calculated differently.

A single BigFix console setting determines whether or not an operator has permission to add software. Permission to edit and remove software from the catalog is also affected by who owns the software package, whether it was created using the BigFix console or the WebUI, and whether a package created in the WebUI was later modified using the console. If you run into permission issues attempting to edit a software package, talk with your BigFix administrator.

## Add a Software Package

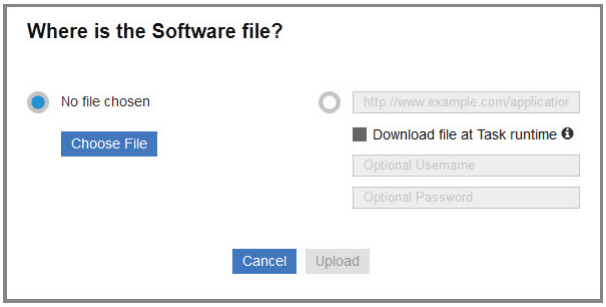
To simplify package creation and editing, installation and uninstallation commands are generated automatically for supported file types. Feel free to edit these defaults, or type your own. For unsupported file types, enter the commands you want to use.

- Supported installation file types: .appv, .appx, .bat, dmg, .exe, .msi, .msp, .msu, .pkg (Mac and Solaris), .rpm.

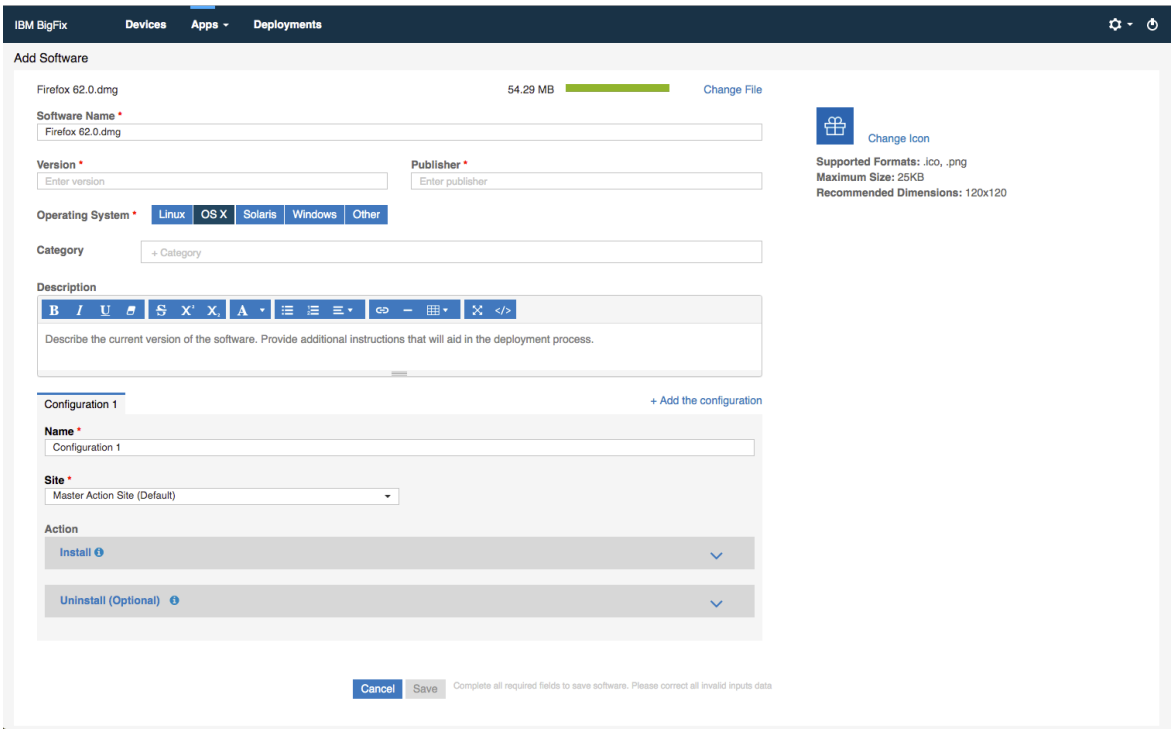
- Supported uninstallation file types: .appv, .msi, .rpm.

### Add a Software Package

1. On the **Software Package List** click **Add Software** to open the **Upload Software Package** dialog.



2. Choose a local file or enter a URL to download a package. Upload the file to place it on the BigFix server, where it will remain until the package is deleted. Check the **Download file at Task runtime** box to have the file cached when the package is deployed, a useful alternative if you do not want to permanently store the file.
3. Click **Upload**.



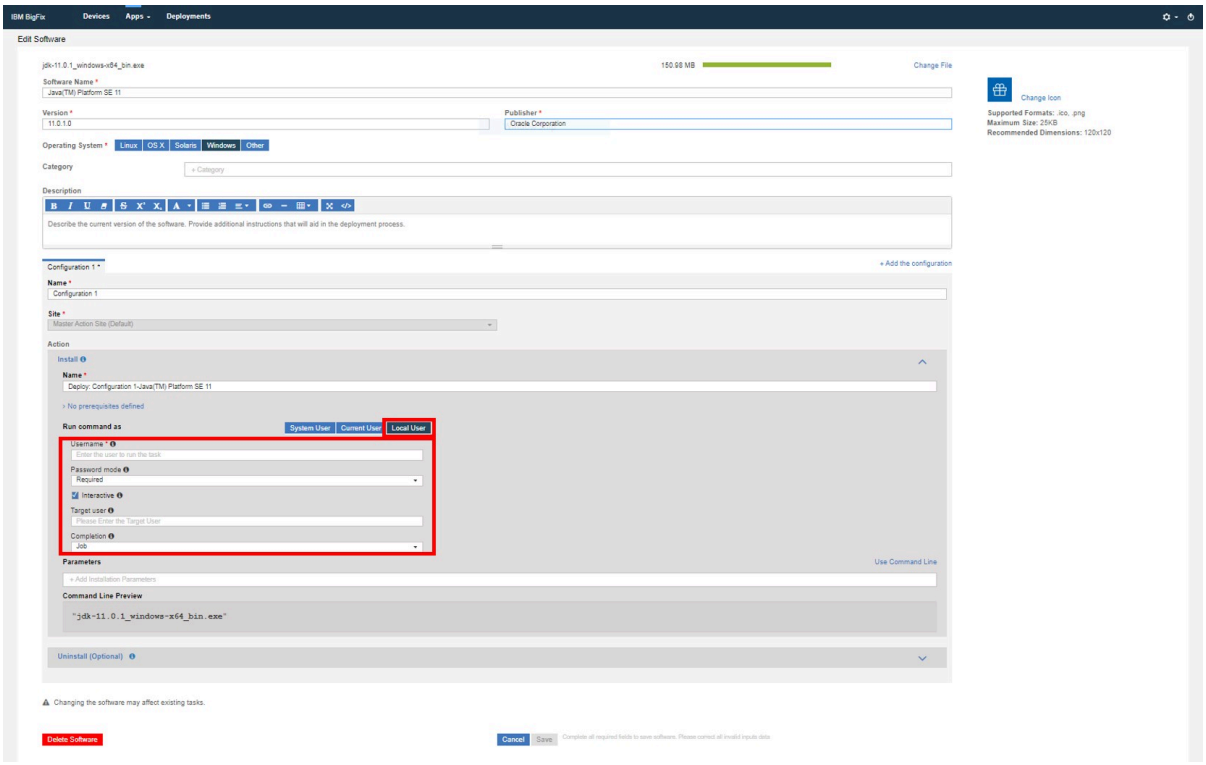

4. Complete the catalog record. Verify, enter, or select:
    - Software Name
    - Version number
    - Publisher
    - Package Icon - To replace the default icon for the package click **Change icon**, and upload a .ico or .png file.
    - Operating System - Linux, OS X, Solaris, Windows, or Other.
    - Category - Type of software. Select one or more existing categories or type a new category name to create one.
    - Description - Describe the package and any instructions that will aid others responsible for deploying it.

- Configuration - The configuration in this context includes two operations: Install and Uninstall (optional).
- To add the configurations:
  - Click **+ Add the configuration**. From the **Site** list. select the BigFix site where the Fixlet is stored.
  - To remove the configuration, select the configuration tab you want to remove and click **Delete**. The **Delete** button will be hidden if there is only one configuration tab.
- On Windows systems, you can run the commands as a System User, Current User, or as a Local User. Commands that are run by BigFix Clients default to System User (On OS X, UNIX, and Linux computers, the software is installed as root). In some cases, you might want to install by using the credentials and local context of the Current User or a Local User. For details on how to set various parameters associated with Local User, see Running deployment commands as a Local User *(on page 58)*.
- Select from the list of installation parameters provided, or click **Use Command Line** to edit the installation command. Use the **Command Line Preview** to verify that it is correct and complete.

5. Click **Save** to add the package.

## Running deployment commands as a Local User

This section explains the various parameters you can configure when you run a command as a local user that is different than the logged-in user.




- **Username**: Name of a user who is different than the user that is currently logged in, in either of the following formats:
    1. user@domain. Example: "myname@tem.test.com"
    2. domain\user. Example: "TEM\myname"
- **Password mode**: Defines the mode of authentication. The following options are available:
    1. **Required**: The application prompts you to enter a password, and the value you enter is passed on to the agent as a Secure Parameter.
    2. **Impersonate**: The agent searches for a session running for the user specified in **Username** and runs the command in the session of that user.
    3. **System**: The command is run as the local system account. For this option to work, the user specified in **Username** must be logged in to the system when the command is run.
- **Interactive**: Select the checkbox. The command opens the user interface of the user specified in **Username** and runs in that user's session.

- **Target user**: Optional. This option becomes active when you select **Interactive**. The command opens the user interface in the session of the user you specify in this field and runs in that session. The command runs with the primary user privileges, but the target user must be logged in to the system for the command to work.
- **Completion**: specifies whether the command must wait for the process to end.
    1. **None**: The command does not wait for the process to end. The user must be logged in to the system before the command starts running. The `SWD_Download` folder is retained if this option is selected. Deploy the `SWD_Download` folder cleanup fixlet to clean up the client computer, after the process ends.
    2. **Process**: The command waits for the process to end. This option does not require the specified user to be logged in to the system.
    3. **Job**: The command waits for the process to end. This option expects the process to do its own job control management and does not require the specified user to be logged in to the system.

## Edit a Software Package

To simplify package creation and editing, installation and uninstallation commands are generated automatically for supported file types. Feel free to edit these defaults, or type your own. For unsupported file types, enter the commands you want to use.

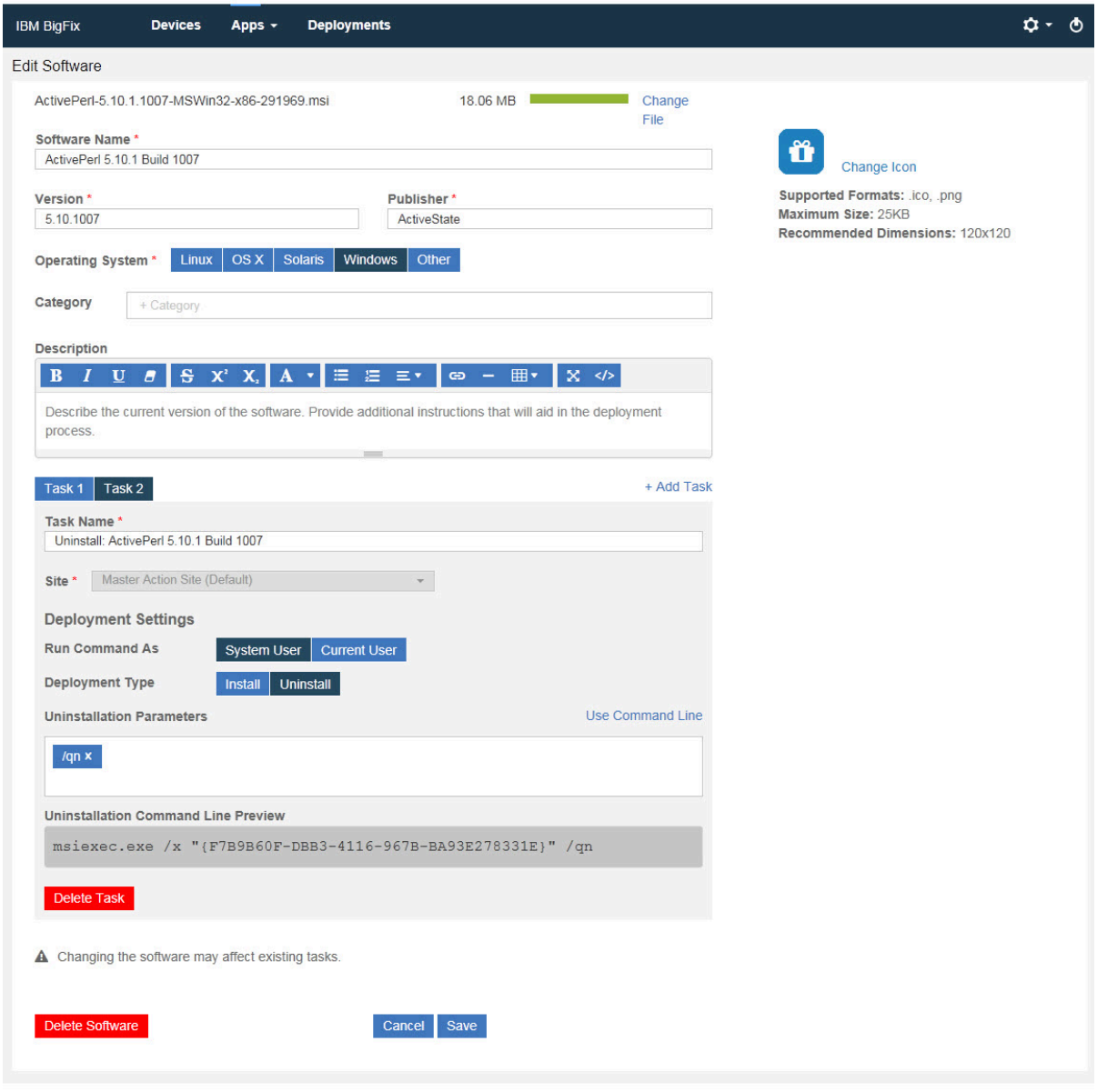
- Supported installation file types: .appv, .appx, .bat, dmg, .exe, .msi, .msp, .msu, .pkg (Mac and Solaris), .rpm.

- Supported uninstallation file types: .appv, .msi, .rpm.

**Edit a Software Package**

1. Open the software package document that you want to update.
2. Click the **Edit Software** link in the right side panel.

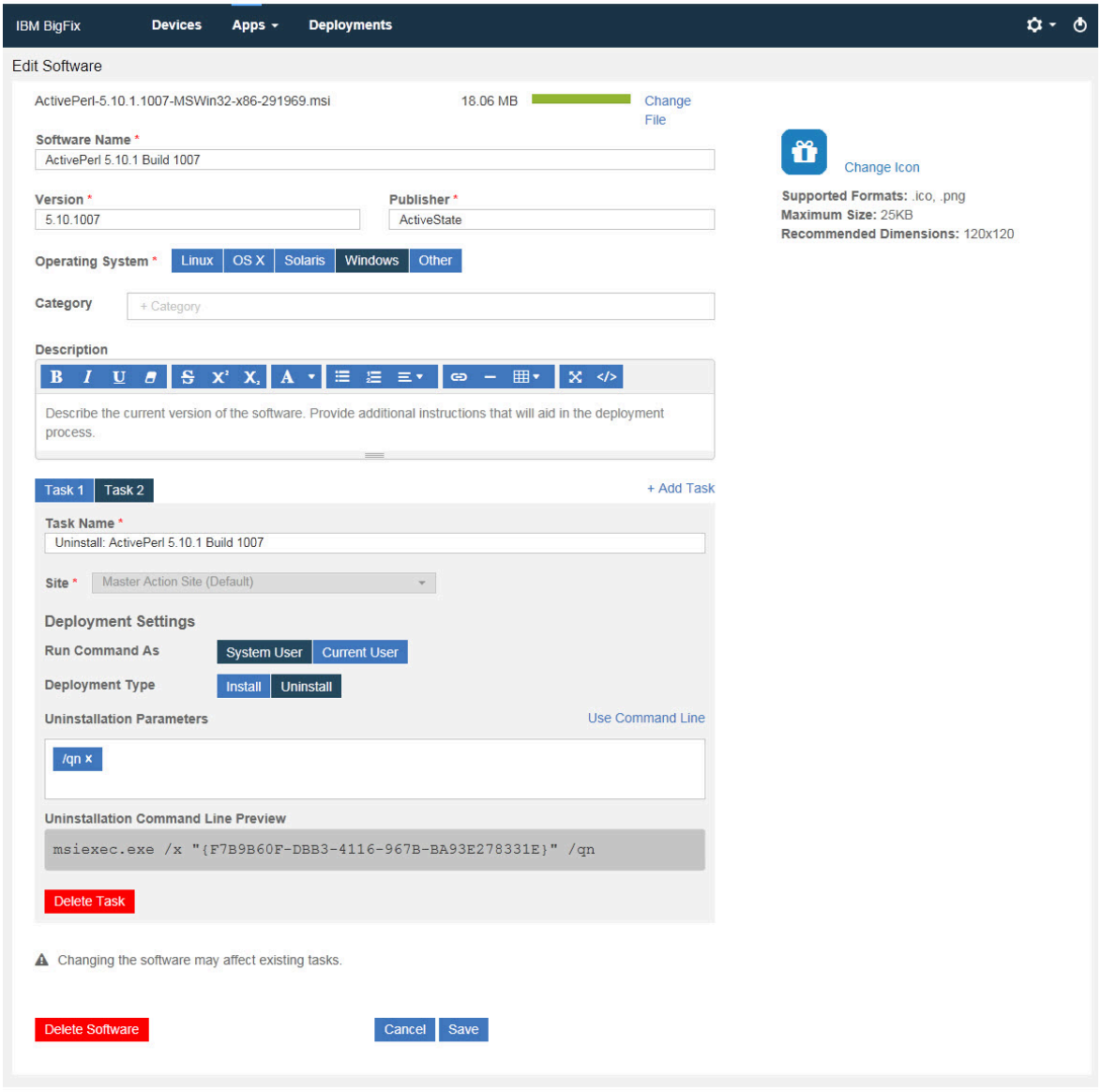
3. Make any wanted changes to the package data or deployment options. For more information about each field and its options, see Add Software Package *(on page 56)*.
4. Click **Save**.



**Note:** Packages edited in the SWD Dashboard such that the package no longer contains a file or Fixlet, cannot be edited in the WebUI.

## Delete a Software Package

1. Open the Software Package document you want to delete.
2. Click the **Edit Software** link, located in the right side panel.
3. Click **Delete** in the lower left corner of the dialog, and confirm at the prompt.

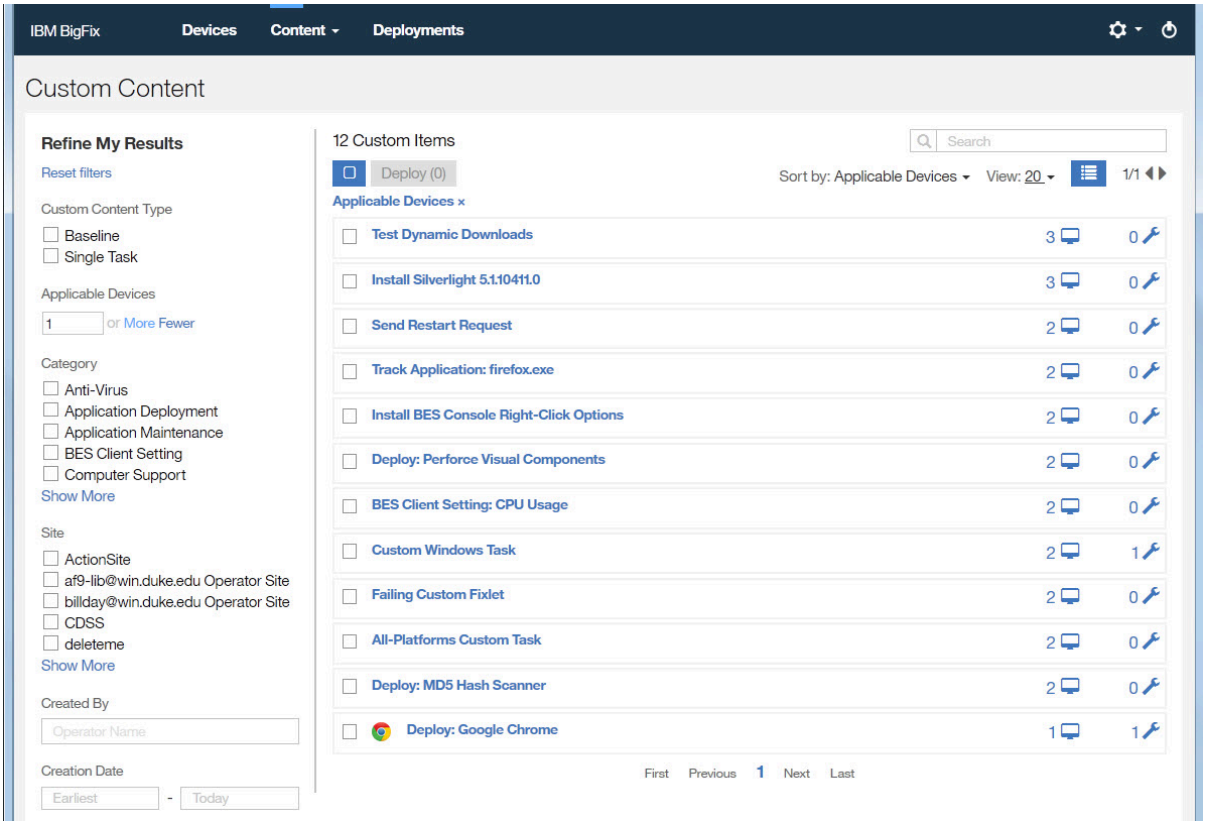

IBM BigFix
Devices
Apps
Deployments
Edit Software
ActivePerl-5.10.1.1007-MSWin32-x86-291969.msi
18.06 MB
Change File
Software Name *
ActivePerl 5.10.1 Build 1007
Change Icon
Supported Formats: .ico, .png
Maximum Size: 25KB
Recommended Dimensions: 120x120
Version *
5.10.1007
Publisher *
ActiveState
Operating System *
Linux
OS X
Solaris
Windows
Other
Category
+ Category
Description
Describe the current version of the software. Provide additional instructions that will aid in the deployment process.
Task 1
Task 2
+ Add Task
Task Name *
Uninstall: ActivePerl 5.10.1 Build 1007
Site *
Master Action Site (Default)
Deployment Settings
Run Command As
System User
Current User
Deployment Type
Install
Uninstall
Uninstallation Parameters
Use Command Line
/qn x
Uninstallation Command Line Preview
msiexec.exe /x "{F7B9B60F-DBB3-4116-967B-BA93E278331E}" /qn
Delete Task
Changing the software may affect existing tasks.
Delete Software
Cancel
Save

# Chapter 7. Get Started with Custom Content

Use the Custom Content pages to view custom content, edit tasks, and view related information, including applicable devices and deployments.

## The Custom Content List

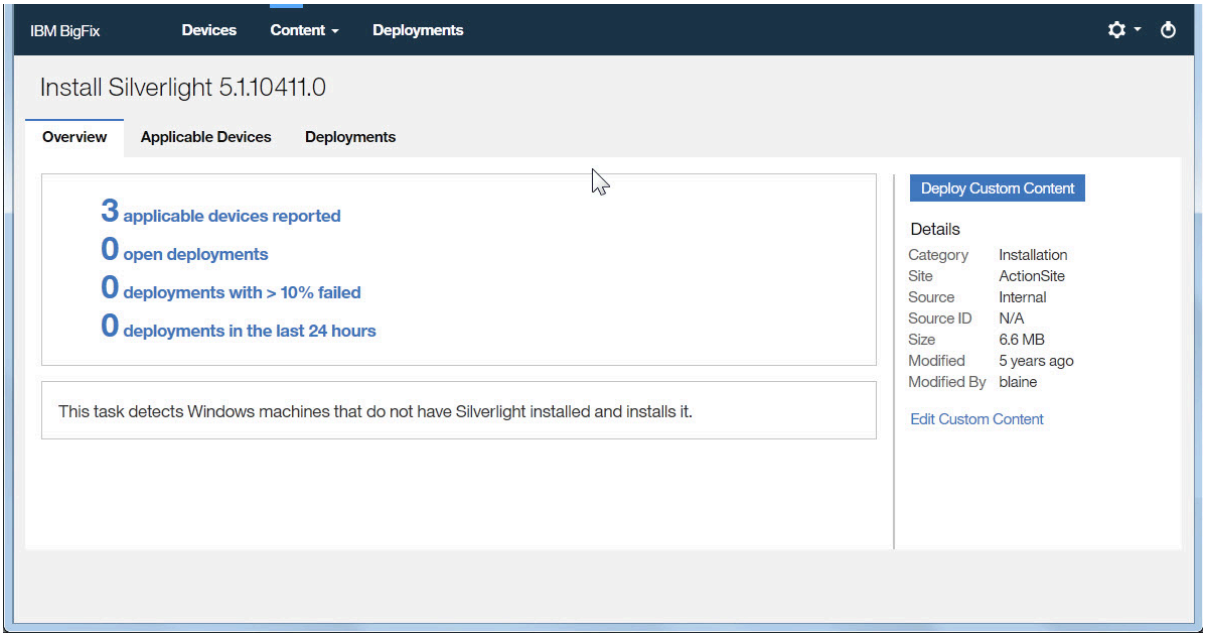
Use the filters to see specific types of content. Click on a title to open a content document.




Common categories often include installation, configuration, software distribution, security updates, and uninstallation. The site filters display content stored in a particular site.

# Custom Content Documents

Click a custom content name to see its description, list of applicable devices, and deployment history. Use the links to see details provided in the associated views.




The Custom Content views:

- Overview - detailed description of custom content.
- Applicable Devices - machines eligible for this content.
- Deployments - list of deployments for this piece of content.

If a piece of custom content involves multiple actions, as for a baseline, for example, the names of its components are listed in the Overview. For information about the differences between Single tasks and Baselines, see the Glossary *(on page 118)*.

# Creating Custom Content

Use the Custom Content Wizard screen to create custom content.

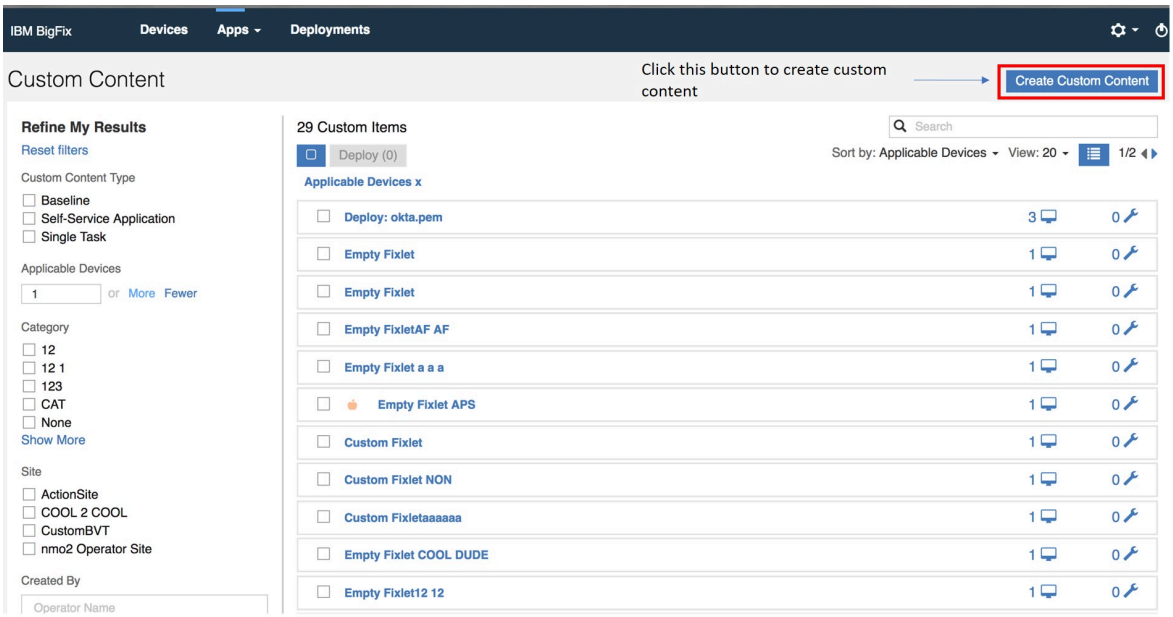
The WebUI application allows operators with the appropriate permissions to create new Fixlet content within the WebUI. The operator can create custom content by filling the required fields in the custom content creation wizard. The below listed fields in the custom content creation wizard are mandatory to create custom content:

- Name: Enter a desired name for the custom content.
- Relevance: Enter the required relevance.
- Action: Enter the action script.

**Note:** Though all the fields are not mandatory, it is recommended to enter the details in non-mandatory fields.

## Creating Custom Content

- To get to the custom content creation page in the global navigation, click **Apps** > select **Custom** from the drop-down, and then click **Create Custom Content** button.

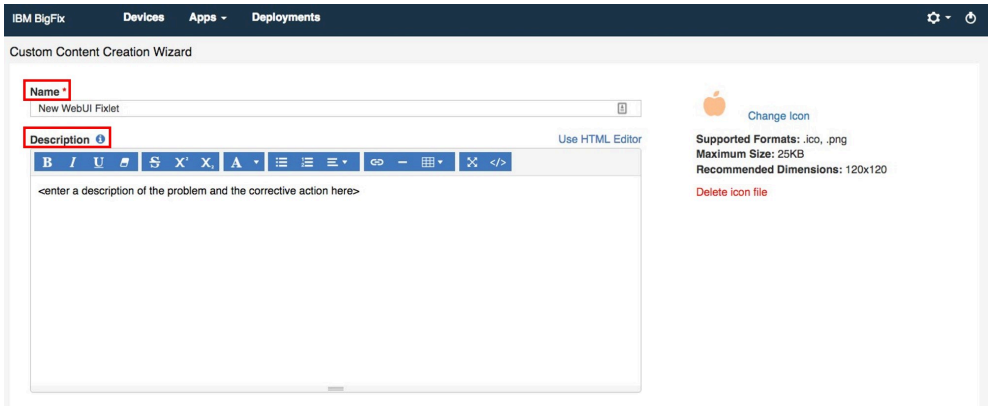



- On the Create Custom Content Wizard screen, enter the name, add the task description, relevance, and actionscript accordingly.

### Add Task Descriptions

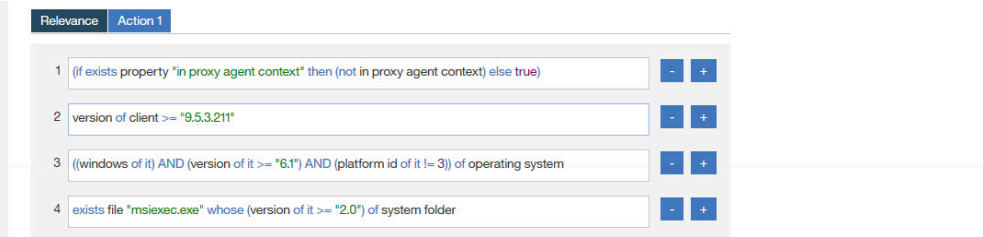
Add task descriptions using the Rich Text Format (RTF) or HTML editors; the **Use HTML Editor/Use Rich Text Editor** link toggles between them. The two editors are not kept in sync. In other words, changes made in one will not be replicated when you switch to the other. Click **Save** to save the contents of the active editor; any changes made in the other editor will be lost.

To protect against cross-site scripting attacks, text entered in the Rich Text editor is checked before it is saved. For example, style and script tags will be removed, and URLs and class/ID values might be modified or removed. Content that is created in the console is rendered accurately in the HTML editor, but might not be rendered accurately by the Rich Text editor.




### Add Task Relevance

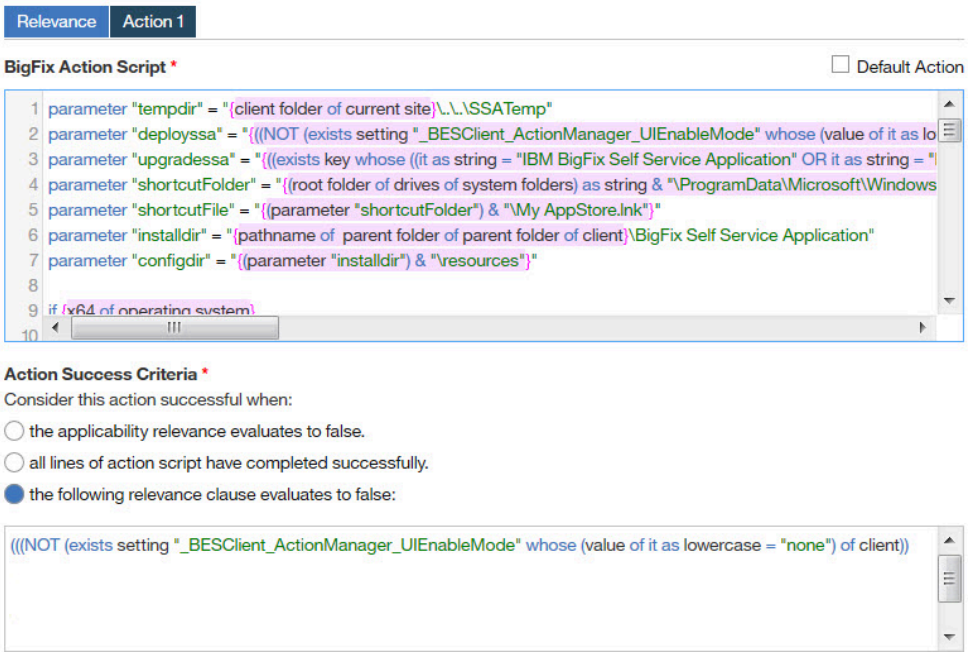
Click the boxed **+** and **–** controls to insert or remove a clause. An asterisk next to a tab name indicates that a change was made on that tab. Changes made on this page to Relevance created in the BigFix console using the Conditional Relevance option will subsequently appear in the console as Relevance clauses.




For more information about adding Relevance, see the BigFix Console Operators Guide.

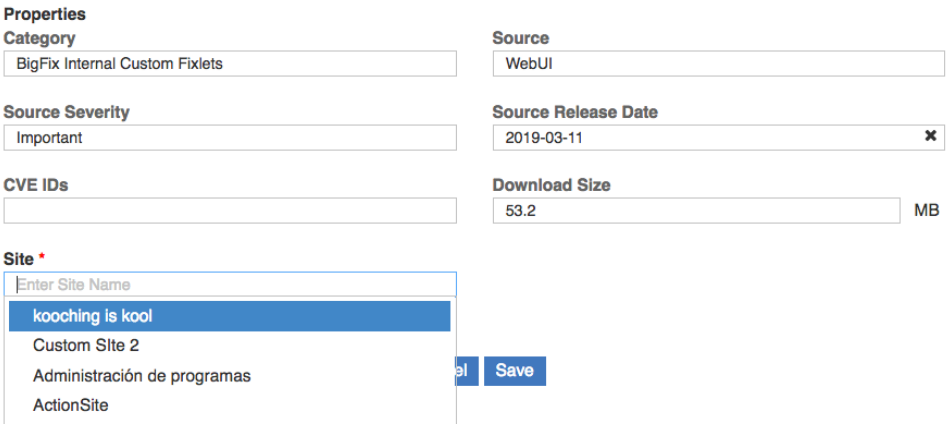
## Add Task Actions

Use the editor on the **Custom Content Wizard** page to modify an action. A bolded tab name marks the default action. Actions cannot be added or removed using this editor.




## Add Task Properties

Use the property fields on the **Custom Content Wizard** page to add or change property information. Add information appropriate to the task, for example, Common Vulnerabilities and Exposures (CVE) ID for patch-related tasks.




- Category - Type of task, for example, patch or software distribution.
- Download size - Used when a file is distributed with the task (as for software, or a patch).
- Source - Source of associated file, for example, a patch from Microsoft.
- Source Release Date - Date a piece of software or patch was released.
- Source Severity - Describes the level of risk associated with the problem fixed by a patch.
- CVE IDs - The CVE ID system number of a patch.
- Site – Custom content is saved to the selected site.

**Important:** Non-Master Operators can only save to their operator site and to the custom content sites that they have write permission.

**Important:** Master Operators can only save to custom site and the master action site.

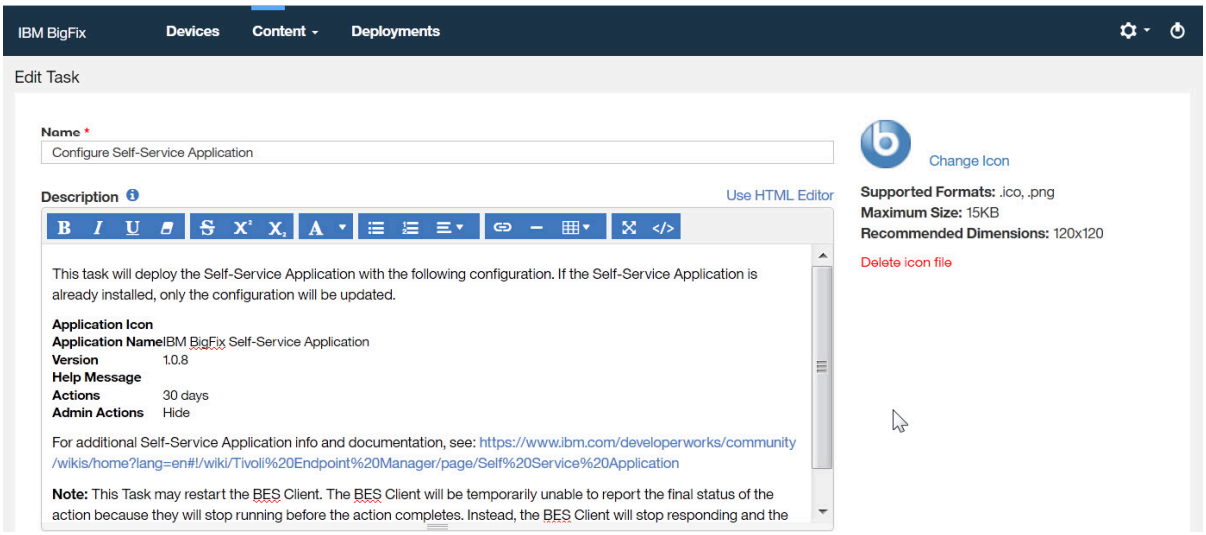
# Editing Custom Content

Use the Edit Task screen to edit custom content.

You can also,

- Add or change an icon.
- Edit Relevance - add and remove Relevance clauses.
- Edit Action Script - add or change an action and success criteria.
- Delete a task.

The link to the **Edit Task** page appears on custom content and software package documents when an operator has permission to edit tasks. The **Edit Task** page does not currently provide the full editing capabilities of the BigFix console. For example, it cannot be used to add actions, change script type, or include action setting locks. Use the BigFix console to edit baselines. Tasks that are created in the Profile Management application must be edited by using the Profile Management application.




## Edit Task Descriptions

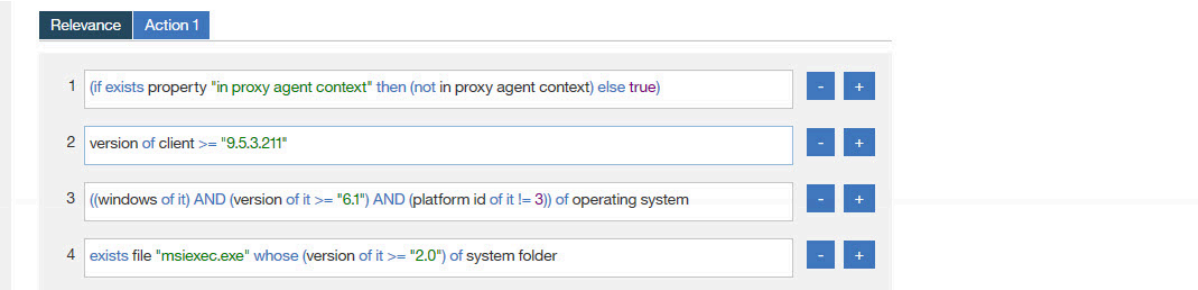
Edit task descriptions using the Rich Text Format (RTF) or HTML editors; the **Use HTML Editor/Use Rich Text Editor** link toggles between them. The two editors are not kept in sync.

In other words, changes made in one will not be replicated when you switch to the other. Click **Save** to save the contents of the active editor; any changes made in the other editor will be lost.

To protect against cross-site scripting attacks, text entered in the Rich Text editor is checked before it is saved. For example, style and script tags will be removed, and URLs and class/ID values might be modified or removed. Content that is created in the console is rendered accurately in the HTML editor, but might not be rendered accurately by the Rich Text editor.

## Edit Task Relevance

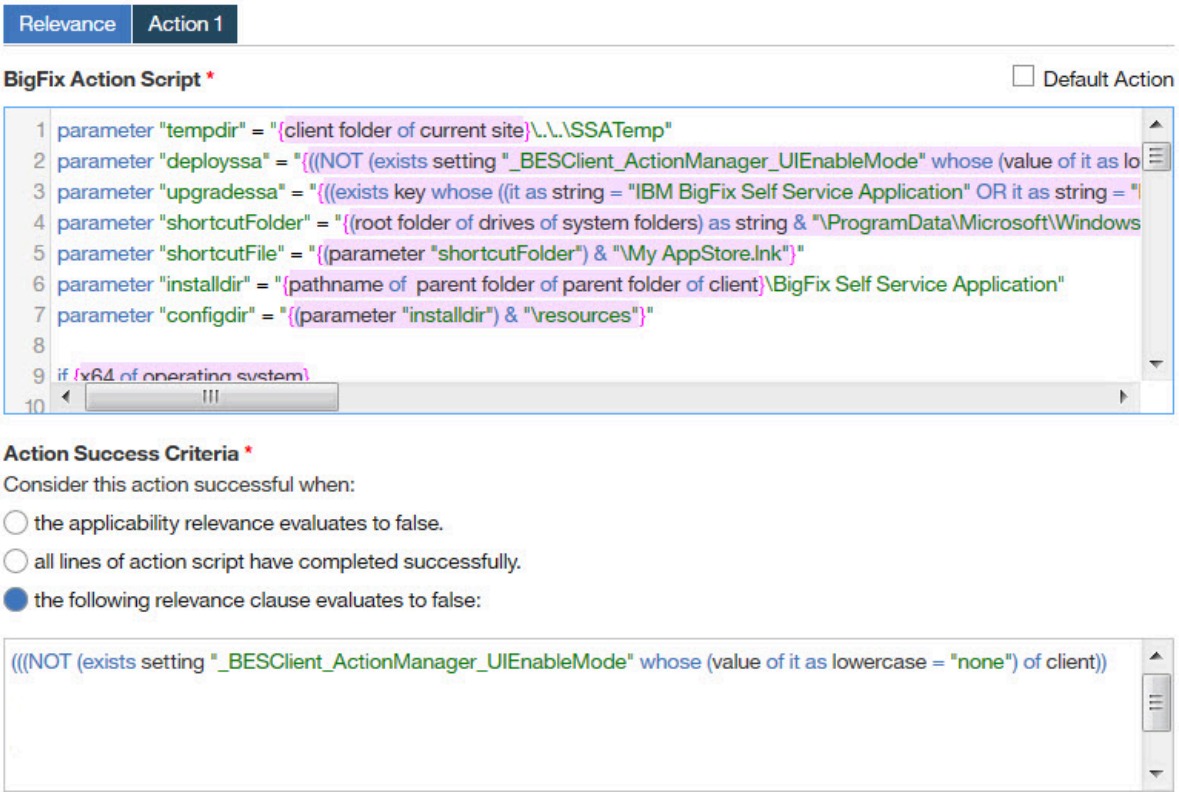
Use the editor on the **Edit Task** page to edit Relevance. Click the boxed **+** and **–** controls to insert or remove a clause. An asterisk next to a tab name indicates that a change was made on that tab. Changes made on this page to Relevance created in the BigFix console using the Conditional Relevance option will subsequently appear in the console as Relevance clauses.




For more information about editing Relevance, see the BigFix Console Operators Guide.

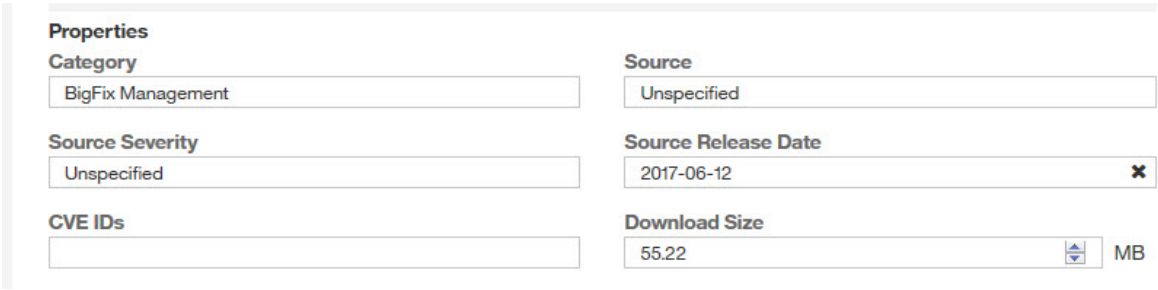
## Edit Task Actions

Use the editor on the **Edit Task** page to modify an action. A bolded tab name marks the default action. Actions cannot be added or removed using this editor.




## Edit Task Properties

Use the property fields on the **Edit Task** page to add or change property information. Add information appropriate to the task, for example, Common Vulnerabilities and Exposures (CVE) ID for patch-related tasks.



- Category - Type of task, for example, patch or software distribution.
- Download size - Used when a file is distributed with the task (as for software, or a patch).
- Source - Source of associated file, for example, a patch from Microsoft.
- Source Release Date - Date a piece of software or patch was released.
- Source Severity - Describes the level of risk associated with the problem fixed by a patch.
- CVE IDs - The CVE ID system number of a patch.

# Chapter 8. Get Started with BigFix Query

Use the BigFix Query feature to retrieve data from endpoints through a dedicated query channel, where the memory available on each Relay minimizes the impact to normal BigFix processing.

You can use BigFix Query to:

- Query individual computers, manual computer groups and dynamic computer groups
- Test Relevance expressions as you develop the content
- Export query results to a comma-separated value (.csv) file
- Create a library of custom queries and keep the collections private or share them with others

## Users and roles

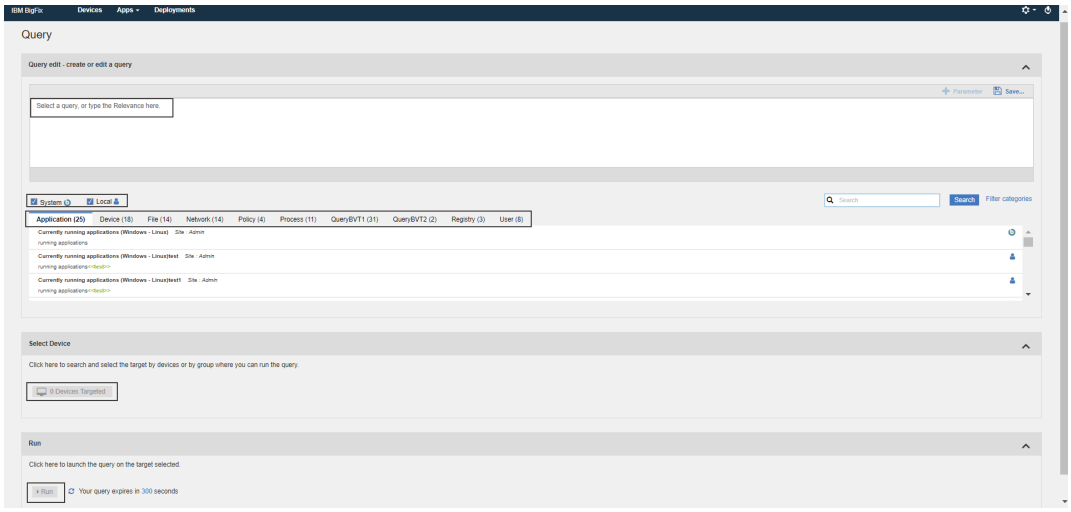
The Master Operator creates custom sites to host queries, and assigns access to BigFix Query Operators and Content Creators. This allows Content Creators to save queries on the custom site, group queries in to categories, and make them available to operators.

**Content Creator**

As a Content Creator, you can use BigFix Query to do the following tasks:

- Filter queries by selecting or unselecting system and local queries
- Load, hide, delete, or reload sample queries into your operator site
- Customize queries and build your own queries
- Save queries on a new site or with a new name and make them available to the operators to access it
- Select and filter target devices to run the query
- Switch to operator view to enter values for the parameters used in the Relevance expression of a query
- View the results of the query and save them to a .csv file
- Open a device document from query results to investigate or apply a fix

The following graphic shows the main Query editor page for a Content Creator:



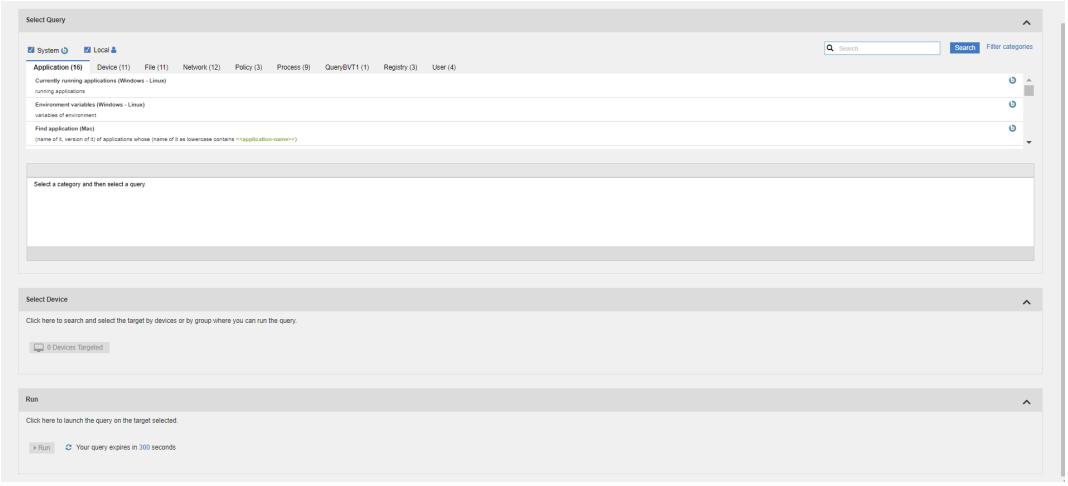

## Operator

As an Operator, you can use BigFix Query to do the following tasks:

- View the queries that a Content Creator shared with you
- Filter, search, or select a query
- View query descriptions
- Filter and select target devices
- Run a query
- Enter values for the parameters used in the Relevance expression of a query
- View query results and save them to a .csv file, if you have the required permission
- Open a device document from query results to investigate or apply a fix

Operators cannot create or delete queries and cannot view Relevance expressions.

The following graphic shows the main Query editor page for an Operator:




For details on the editor and how to use custom queries, see Building a query *(on page 83)*.

For information about the different types of users that can use BigFix Query, see Permissions for BigFix Query.

## About Accordions

The sections in BigFix Query page is organized with accordions to provide a better visibility of the tasks to retrieve data from endpoints.

- Query edit - create/edit query: This section allows you to view, edit, and create a query; search and filter queries
- Select device: This section allows you to select your target/endpoints
- Run: This section allows you to run the selected query on the selected target and fetch results

## About Search

You can search for queries by using basic **Search** and **Advanced Search** features.

To perform a basic search, enter a search string and click **Search**. This lists the queries that contain the specified string in the query title.

**Note:** The application displays entries from your previous searches if they match the current search string. If the number of entries in the search history is more than four, click **More** to view additional search results.

To perform an advanced search and find a string in Relevance expressions along with the query titles:

1. Enter the search string, and click **Advanced Search**.
2. Select the categories from the list to refine the search.

   **Note:** All categories are selected by default. To refine your search, clear check boxes against unwanted categories.

3. Click **Save** to save your selection for future searches.

This lists the queries that contain the specified string in the query titles and/or in the Relevance expressions.

## About Filters

Filter the queries based on creation type.

Select the **System** check box to view only the sample queries loaded from the database.

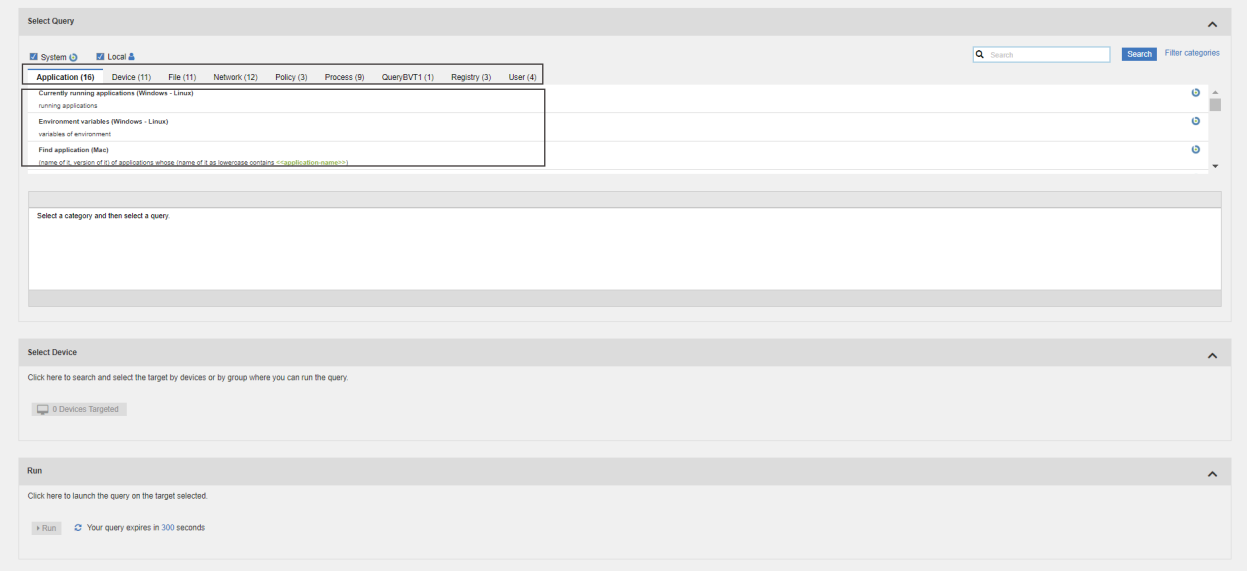
Select the **Local** check box to view only the custom queries.

**Note:**

- To view both sample and custom queries, select both **System** and **Local** check boxes.
- If you clear both **System** and **Local** check boxes, the query app displays both sample and custom queries.

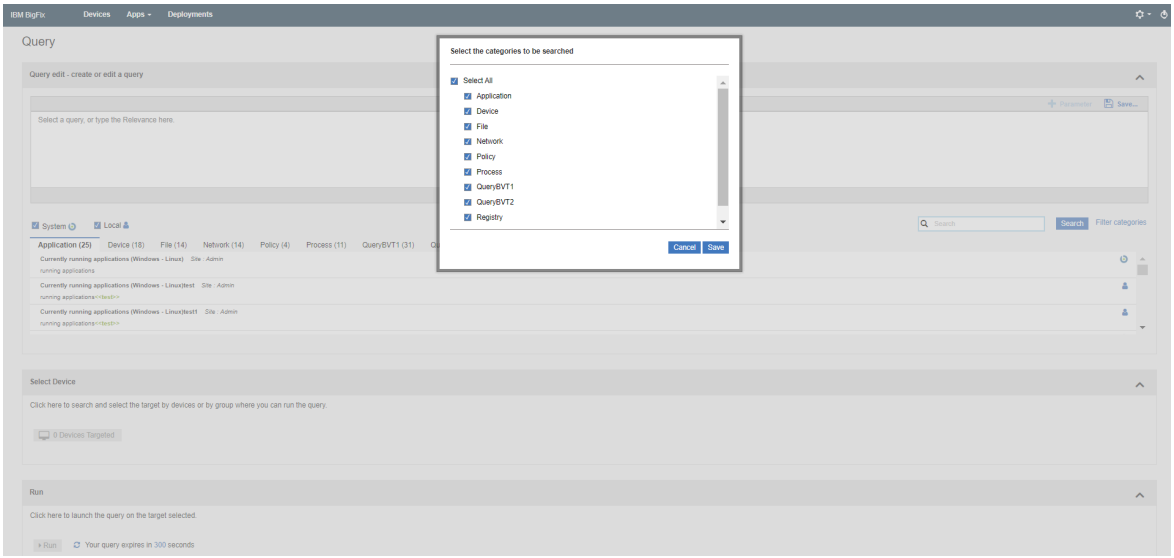
## About Categories

With Categories, Content Creators can group queries according to their needs. Content Creators can create, populate, and delete categories, while Operators can only show or hide categories. To add the sample queries to individual categories, click **Load Sample Queries**.




- The category cards display alphabetically from left-to-right, row by row. Query titles are listed alphabetically in each category.
- Each query must be saved in at least one category and each category can contain queries hosted by different sites.
- To delete a category, a Content Creator must delete all queries in the category.

- To create a category, a Content Creator must specify a name for the category name when saving a query.
- To filter queries by category, click Filter categories, select the desired categories, and click Save. Only queries that are relevant to the selected categories are displayed.




## About queries and sites

Each query is uniquely identified by the combination of its title and the name of the site that is hosting the query. If you change either of these two values, a copy of the query is automatically created. If you create a copy of a query in a different site, you must apply subsequent updates to each copy individually.

You can save queries only to sites to which you have access as assigned by a Master Operator. These sites can be either of the following:

- Custom sites created by a Master Operator to share it with Operators.
- Operator sites, if the Content Creator is a Non-Master Operator.

**Note:** Preexisting queries are not automatically imported into the current BigFix Query release. However, they are still available as dashboard variables. You can access them using the REST API dashboard variable resource, as documented on the following page https://developer.bigfix.com/rest-api/api/dashboardvariable.html.

To learn more about BigFix Query, visit the following links:

- Getting client information by using BigFix Query
- BigFix Query requirements
- BigFix Query restrictions
- Who can use BigFix Query
- How to run BigFix Query from the WebUI
- How BigFix manages BigFix Query requests

# Running a sample query

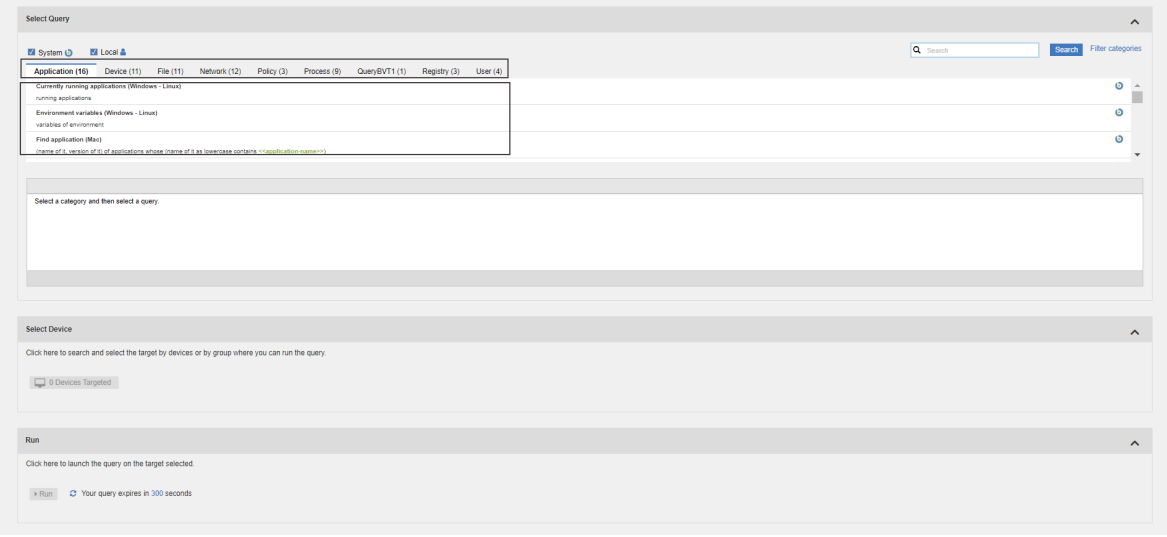
System queries are sample queries that are marked with the BigFix icon. As Content Creators, you can load, hide, delete, and reload sample queries in operator sites.

BigFix provides sample queries under the categories Applications, Files, Devices, Networks, Processes, Registry, Policies, and Users.

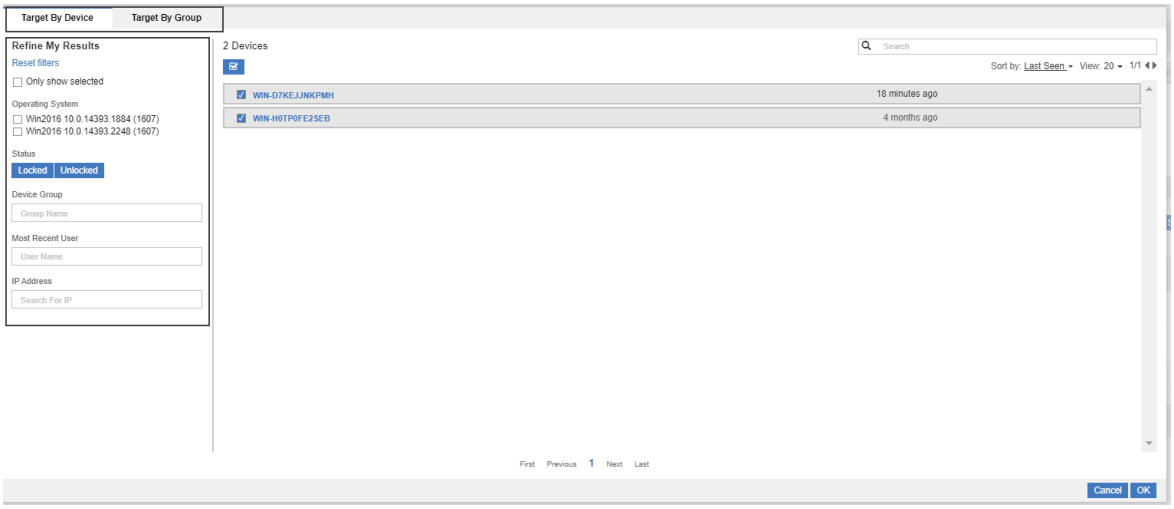
**Note:** If multiple content creators save a copy of query with the same name and category in different sites, the application creates multiple instances of the query.

To run a sample query, do the following steps:

1. Click on a category tab.



2. From the listed queries, select a query to display it in the editor.
3. If the query has parameters, enter the parameter values or accept the default values, if provided. You must use the Operator View to specify parameter values at run time. For more information, see Managing parameters in queries *(on page 87)*.
4. Click **Devices Targeted** to open the target list. To select the list of targets to display, click either **Target By Device** or **Target By Group**.

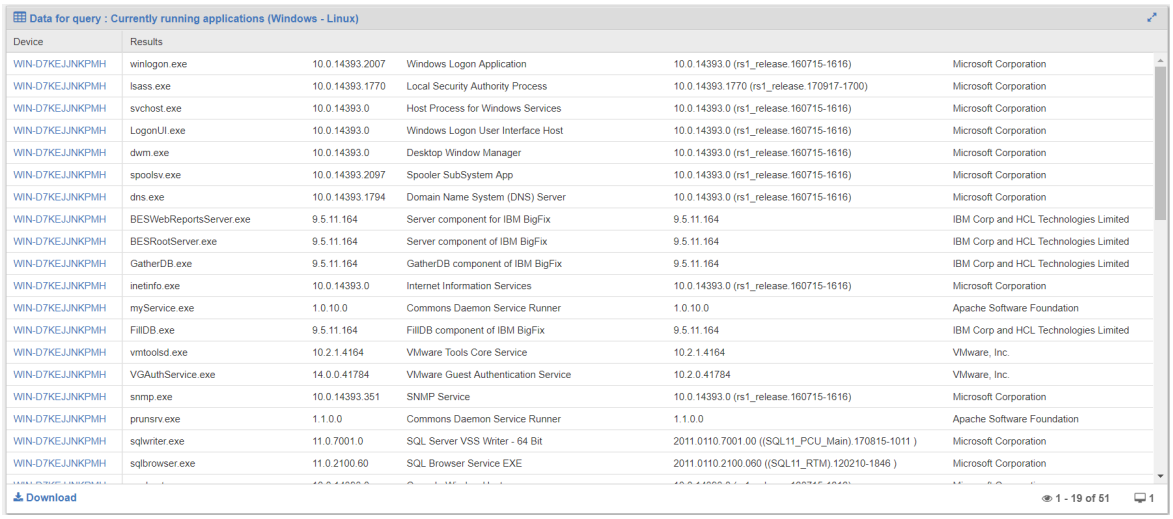



5. Specify the target where you want to run the query. You can select individual devices, manual computer groups or dynamic computer groups. The targets are listed as per the permissions of the user. Master Operators see all devices and groups. Non-Master Operators might see a subset of the complete list. Use the sort, search, and filtering functions to quickly locate targets. For a detailed description, see Meet the WebUI *(on page 3)*.
    - To find a specific device or group, enter its name in the **Search** field.
    - Sort a list of devices by device name or the time last seen. Sort a list of groups by group name, or member count.
    - Use filters to locate devices with specific properties. Click the funnel icon to open and close the filter panel.

    When the device or group selection is complete click **OK** to return to the editor. The **Devices Targeted** button displays the total number of devices selected.

**Note:** When pairing queries and targets, keep in mind that queries that are concise and limited in scope run most efficiently. Broad queries return larger data sets and use more resources.

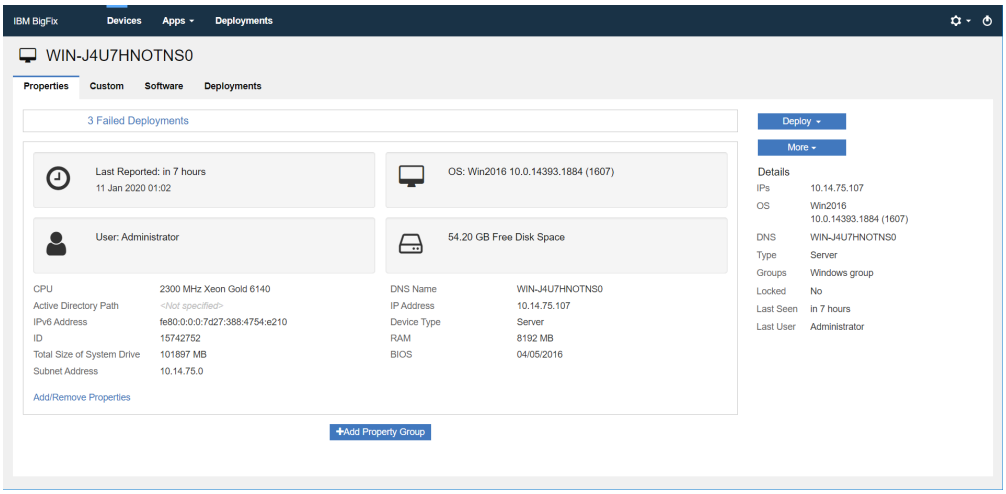
6. To run the query, click **Run**. If you want to cancel the query, you can do it while the results are loading.
7. Review your results. Devices report in real time, and new arrivals are appended to the list as clients report in.



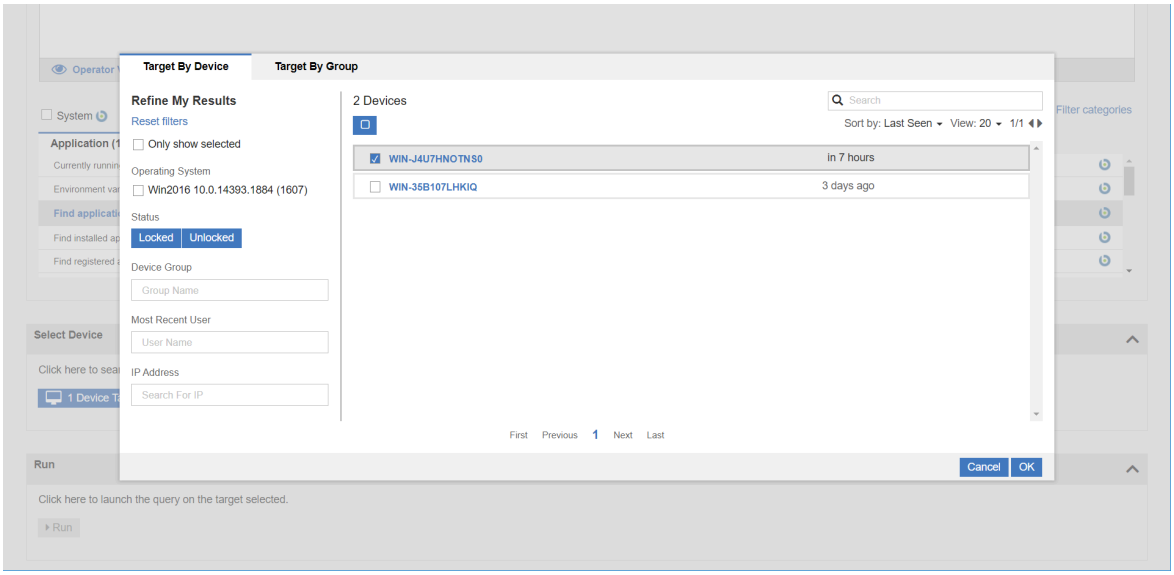

| Device | Results | | | | |
|---|---|---|---|---|---|
| WIN-D7KEJJNKPMH | winlogon.exe | 10.0.14393.2007 | Windows Logon Application | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | lsass.exe | 10.0.14393.1770 | Local Security Authority Process | 10.0.14393.1770 (rs1_release.170917-1700) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | svchost.exe | 10.0.14393.0 | Host Process for Windows Services | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | LogonUI.exe | 10.0.14393.0 | Windows Logon User Interface Host | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | dwm.exe | 10.0.14393.0 | Desktop Window Manager | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | spoolsv.exe | 10.0.14393.2097 | Spooler SubSystem App | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | dns.exe | 10.0.14393.1794 | Domain Name System (DNS) Server | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | BESWebReportsServer.exe | 9.5.11.164 | Server component for IBM BigFix | 9.5.11.164 | IBM Corp and HCL Technologies Limited |
| WIN-D7KEJJNKPMH | BESRootServer.exe | 9.5.11.164 | Server component of IBM BigFix | 9.5.11.164 | IBM Corp and HCL Technologies Limited |
| WIN-D7KEJJNKPMH | GatherDB.exe | 9.5.11.164 | GatherDB component of IBM BigFix | 9.5.11.164 | IBM Corp and HCL Technologies Limited |
| WIN-D7KEJJNKPMH | inetinfo.exe | 10.0.14393.0 | Internet Information Services | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | myService.exe | 1.0.10.0 | Commons Daemon Service Runner | 1.0.10.0 | Apache Software Foundation |
| WIN-D7KEJJNKPMH | FillDB.exe | 9.5.11.164 | FillDB component of IBM BigFix | 9.5.11.164 | IBM Corp and HCL Technologies Limited |
| WIN-D7KEJJNKPMH | vmtoolsd.exe | 10.2.1.4164 | VMware Tools Core Service | 10.2.1.4164 | VMware, Inc. |
| WIN-D7KEJJNKPMH | VGAuthService.exe | 14.0.0.41784 | VMware Guest Authentication Service | 10.2.0.41784 | VMware, Inc. |
| WIN-D7KEJJNKPMH | snmp.exe | 10.0.14393.351 | SNMP Service | 10.0.14393.0 (rs1_release.160715-1616) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | prunsrv.exe | 1.1.0.0 | Commons Daemon Service Runner | 1.1.0.0 | Apache Software Foundation |
| WIN-D7KEJJNKPMH | sqlwriter.exe | 11.0.7001.0 | SQL Server VSS Writer - 64 Bit | 2011.0110.7001.00 ((SQL11_PCU_Main).170815-1011 ) | Microsoft Corporation |
| WIN-D7KEJJNKPMH | sqlbrowser.exe | 11.0.2100.60 | SQL Browser Service EXE | 2011.0110.2100.060 ((SQL11_RTM).120210-1846 ) | Microsoft Corporation |

- To switch to full screen mode and see more results, click the **Expand** icon . Click the icon again, or press the **Escape** key, to exit from full screen mode.
- The icons in the lower right corner of the list show the row totals, and the number of devices that reported so far.

- To save the results to a file in comma-separated values (.csv) format, click the **Download** button. For easy identification of the file, consider including the date and some descriptive information in the file name.
- To open a device's document, click the device name.




- From the device document, click **More** and select **Query**to return to the query editor with that device targeted for a query.
- From the query editor, click **Device Targeted** to view the device list.




# Building a query

Working with local/custom queries. The queries created by Content Creators are local/ custom queries and are marked with the operator icon. Content Creators can create, load, run, hide, delete, and reload local queries in their operator sites.

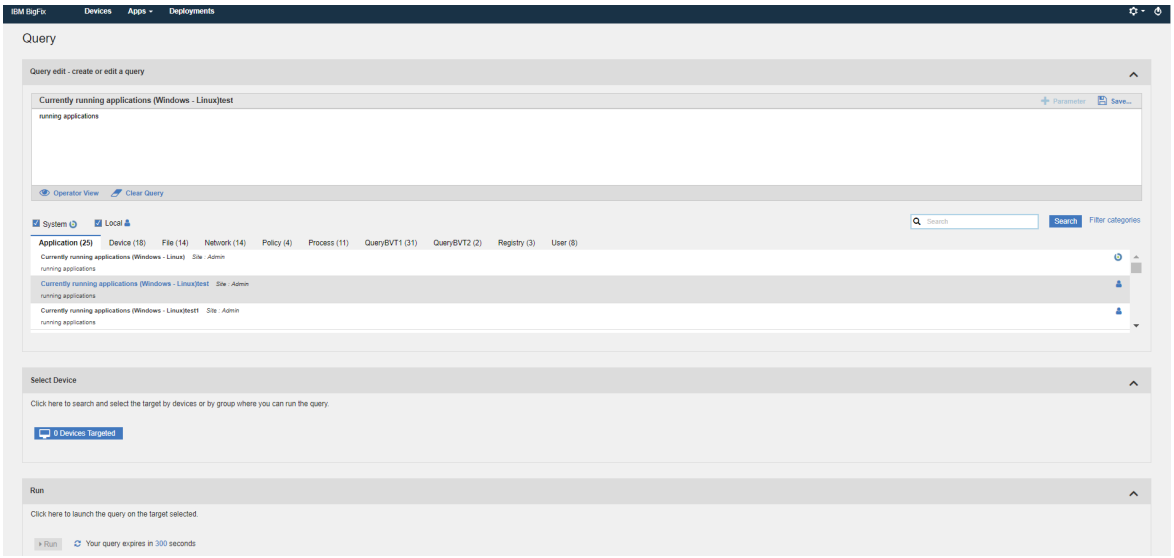
## Creating or editing a query

A Content Creator can create a new query in the following ways:

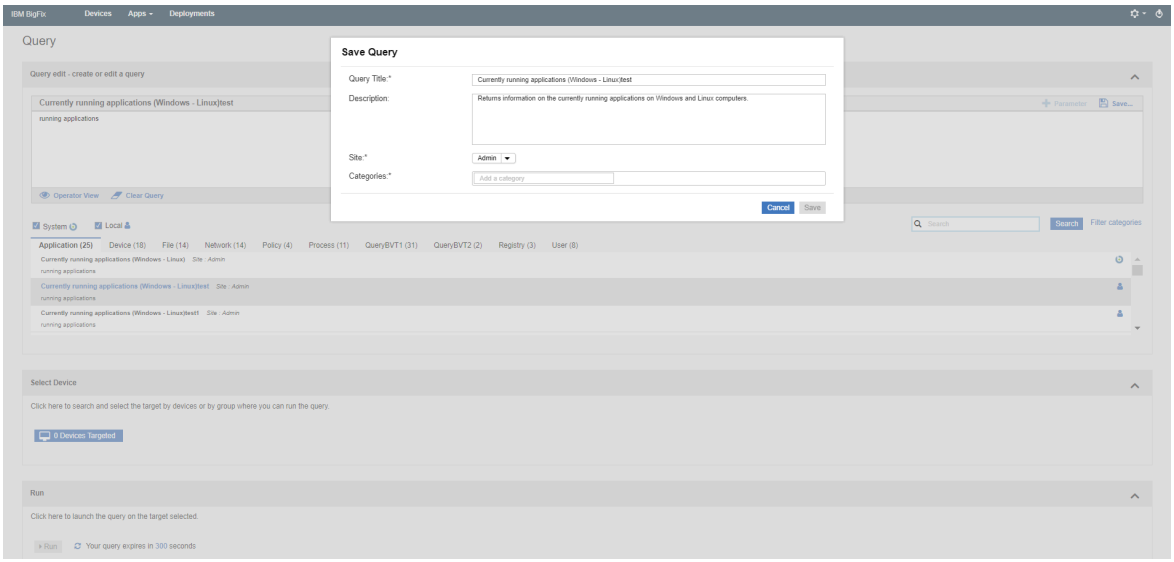
- Enter the Relevance expression in the Query editor and save it
- Create a copy of an existing query and edit as needed

To create or edit a query:

1. In the query editor, ensure you are in Admin View.




2. Enter the Relevance expression in the editor.
    a. To edit an existing query, select the desired query under a category. This displays the Relevance expression in the editor which you can edit. You can also click **Clear Query** to enter your Relevance expression.
3. Add parameters to the Relevance expression, if required. For details about parameters, see Managing parameters in queries *(on page 87)*
4. Click **Save**.




a. Enter a descriptive title for the query
b. Select a site that you are allowed to access and host the query on.
c. Specify at least one category for the query. If you enter a new name in the Categories field, a new category is created.
d. Click **Save**.

**Note:**

- It is recommended to be familiar with the Relevance language to build queries. To learn more about the Relevance language, see BigFix Developer.
- Writing Relevance expression in the query editor is similar to writing Fixlets in the BigFix Console using the Relevance language. Concise queries that are limited in scope run most efficiently. Broad, general queries that return large data sets consume more resources. Problems associated with poorly performing Relevance in the Console can also occur in the Query editor.

## Create copy of an existing query

A query is uniquely identified by its title and the site on which it is saved. To create a copy of a query, change either the title or the site of the query.

**Note:** If multiple content creators save a copy of a query with the same name and category in different sites, Master Operators might see multiple instances of the same query under a category.

To see who last edited a query, hover the cursor over the operator icon of the query.

## Deleting a query

To delete a query, select the query and click the **Delete Query** icon against it.

**Note:**

- Operators cannot delete queries.
- Master operators/Content Creators can delete the custom queries only and not the system queries.

## Using Client Context

As a content creator, you can enable the **Evaluation by Agent** flag to save a specific query and use the client context. Enabling the **Evaluation by Agent** flag and running a query helps you to retrieve accurate data from the client.

By default, the Queries are evaluated by Client Debugger. You can change it by using the `_WebUIAppEnv_USE_CLIENT_CONTEXT` client setting . If this setting is set to 1, the **Evaluation by Agent** flag is enabled. The value for each query can be overwritten only by the content creator. You can save the individual query by enabling the **Evaluation by Agent** flag, which allows an operator to use the client context.

**Note: Evaluation by Agent** flag is available only in BigFix Platform version 9.5.13 and later.

# Managing parameters in queries

As a Content Creator, you can add parameters to a query to customize it at run time. Operators are prompted to assign values to the parameters when they run the query, but they cannot see the Relevance expression.

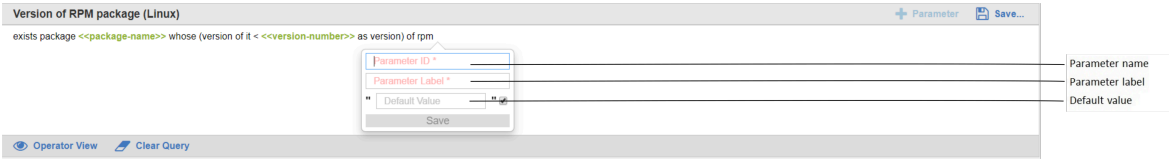
- To add a parameter, do the following steps:
  1. In the query editor, ensure you are in Admin view for the **+ Parameter** button to be enabled.
  2. In the Relevance expression, place the cursor at the point where you want to add the parameter and click **+ Parameter**.


  3. Enter **Parameter ID**, **Parameter Label**, and **Default Value** and click **Save**.

  The parameter is added to the Relevance expression.

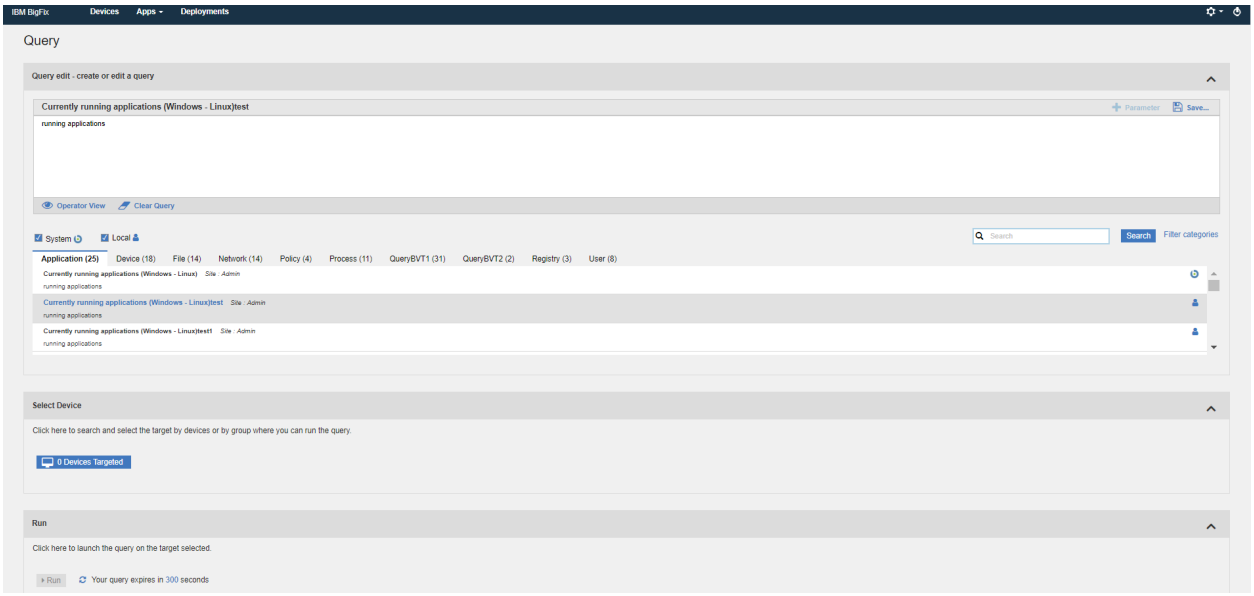
  Parameters with a default value are displayed in green, and parameters without a default value are displayed in blue.


- To reuse a parameter, do the following steps:
  1. Click **+ Parameter** and enter the Parameter ID that you want to reuse; the Parameter Label and Default Value fields are populated automatically.
  2. To insert that parameter into the Relevance expression, click **Save** .
- To see the definition of a parameter, click on the parameter in the query editor.



- To delete a parameter from a query, select the parameter in the query editor, and press the Backspace or Delete key.
- To assign a value to a parameter (that does not have a default value) at run time as a Content Creator, click **Operator View**.

The following graphic shows how a Content Creator sees a query with parameters in the **Admin View**:




To review what Operators see when they select the query, click **Operator View**.

To return to the query editor, click **Admin View**.

# Chapter 9. Take Action: The Deploy Sequence

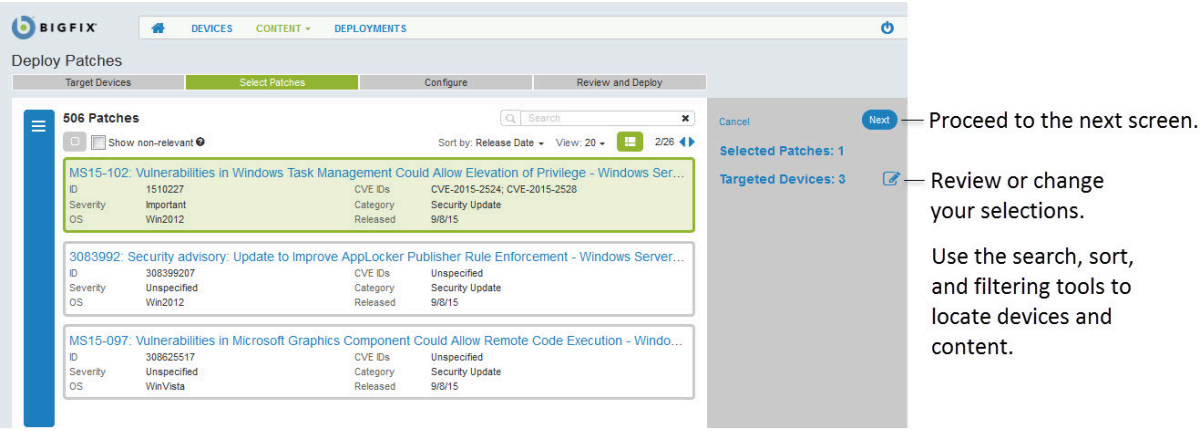
To deploy means to dispatch content to one or more endpoints for execution, for example, to update a patch, install software, or restart a machine. Collectively, the screens that are used to create deployments are collectively called the Deploy Sequence. The workflow is straightforward; you might find it similar to making a purchase online.

## Deploy Sequence Summary

In summary:

1. Select devices or content for deployment.
2. Select content or device targets.
3. Configure deployment options.
4. Review and deploy.

Prompts, status information, and selection tallies are shown in the side panel. At the top of the page the status bar reflects your location in the deploy sequence. Embedded help (question mark icon) is available for some options.



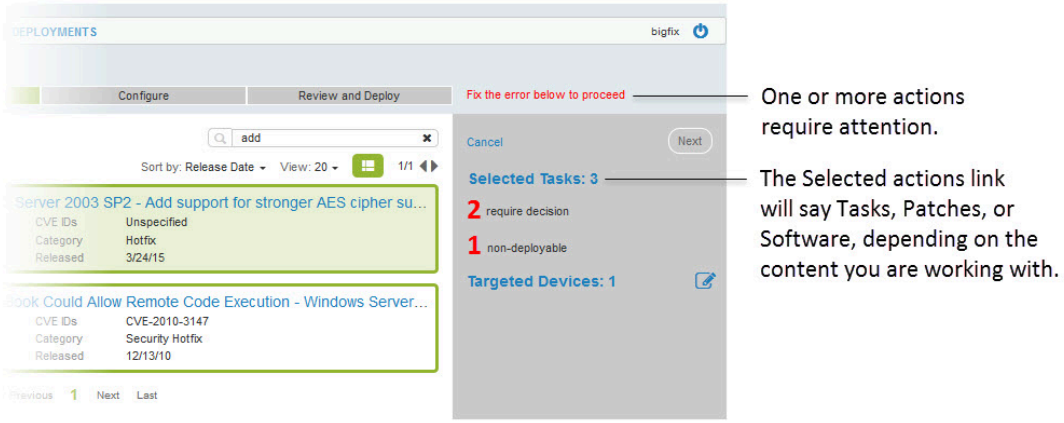
- **Target Limits**. An administrator can limit the amount of content that can be deployed at one time, and the number of devices you can deploy to or query at the same time. If you exceed it, a message displays until you reduce your selections to within the acceptable range. The message includes the target limit, for example, *"You have exceeded the maximum of 3 devices per deployment."*

  **Note:** If there is a target limit defined, the Non-Master Operators (NMOs) affected cannot deploy actions using the *Target by Group* option.

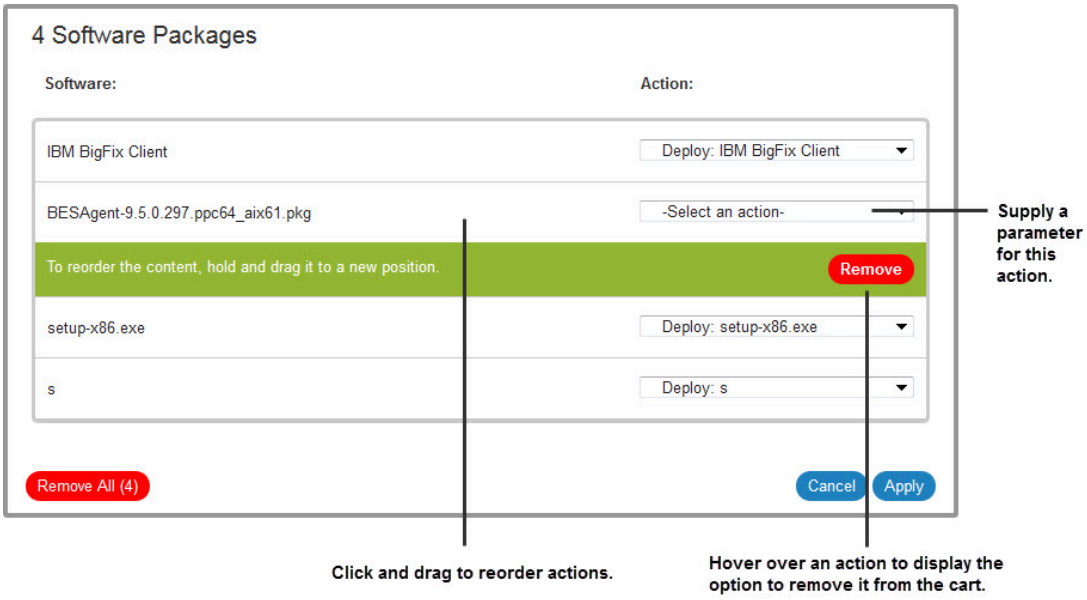
- **Not all content can be deployed.** If non-deployable content (such as an audit action) is selected, you will be prompted to remove it from the deployment.
- **No Default Action** – If content without a default action is selected, you will be prompted to choose one.
- **Action Parameters Required** – If content that requires a parameter is selected, you will be prompted to supply one.

# Deploy Procedure

1. Select devices or content for deployment; click **Deploy**.
   - Use the List views, filter, and search tools to find the records you want.
   - Review the content documents to ensure that you understand their effects.
2. Select content or device targets, respectively; click **Next**.
   - Use the lists, filters, and search tools, and review device and content documents as needed.
   - Alternatively, you can deploy an action directly from the Software Document as described in Software Documents *(on page 54)*.
3. If the "Require decision" or "Non-deployable" prompts display, one or more actions require input.




a. Click the **Selected** actions link (Tasks, Patches, or Software) to open the Decision dialog.




**Note:** Multiple Action Groups can be reordered by clicking and dragging individual actions. This is a feature of the BigFix® WebUI that cannot be performed in the traditional BigFix® console.

i. Specify any missing default actions.

- Fixlets with no default and multiple actions:
  1. Select an action from the drop-down list. For example, a single software package might be used to both install and uninstall an application.
- Fixlets with no default and a single action:
  1. Review the content document. The Fixlet® author is saying, "Proceed with caution." Pay close attention to any Notes®, Warnings, or Known Issues in the document and make an informed decision.
  2. To remove the action, click the x next to its name. To deploy the action, select "Click here to initiate the deployment process" from the drop-down list.

ii. Enter action parameters as required.

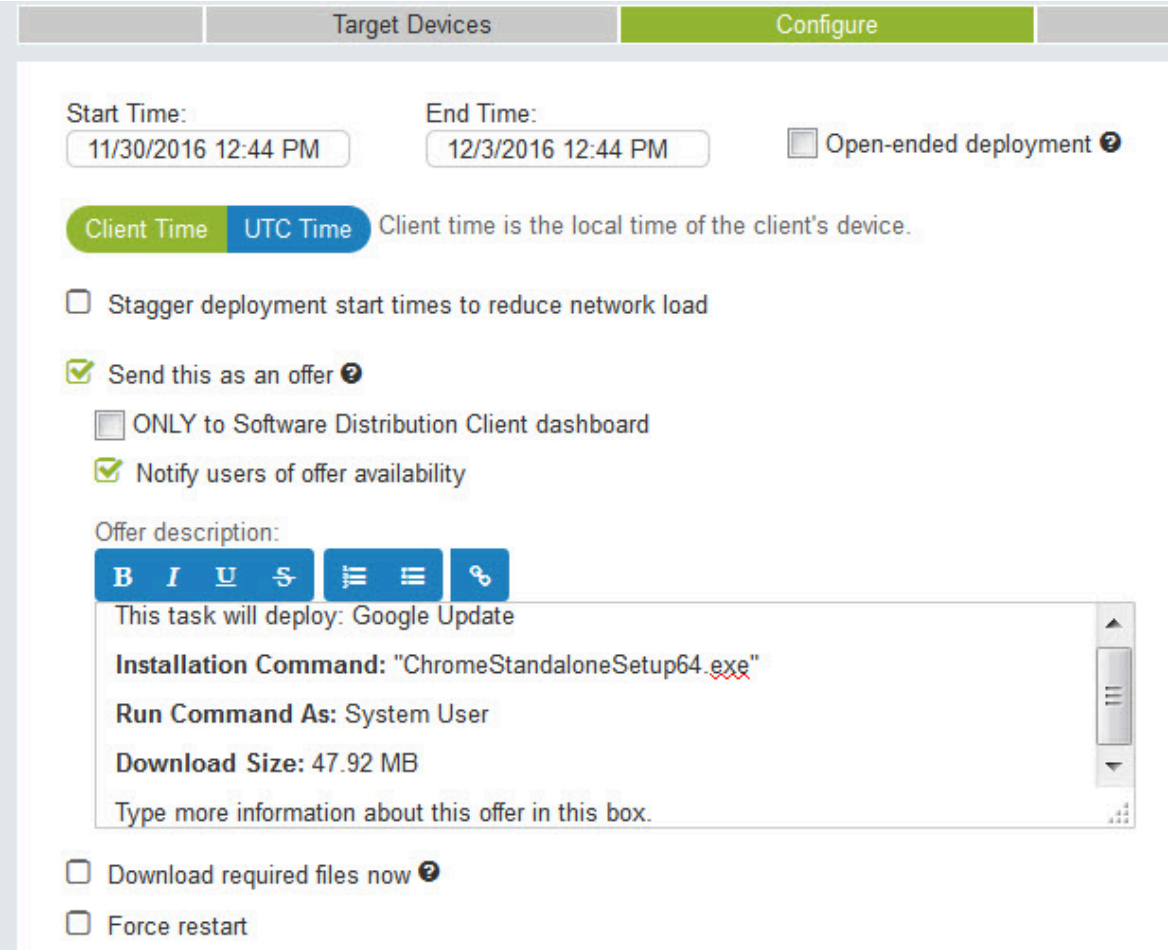
1. Select the action that is presented in the drop-down list to display the **Enter Parameters** link.
2. Click **Enter Parameters** and type in the required information, such as a path name or service name.

iii. Remove any non-deployable actions, such as audits or superseded patches.

b. Click **Apply** to return to the deploy sequence.

c. Click **Next** to open the Configuration page.

4. Select configuration options for the deployment; click **Next**. See Configuration Options *(on page 93)* for descriptions of each option.




5. Review your selections. Use the **Edit** icon to make any adjustments.
6. Click **Deploy**.
7. Monitor deployment results with the Deployment views.

## Configuration Options

The deployment options are listed below. Some options may not be available on your system, depending on how your BigFix administrator has configured it.

**Set Start and End Time**

Schedule a deployment to start at a specific time, for example, to reduce network load and device-holder inconvenience. When scheduling across time

zones you can schedule actions to start in the past, relative to your own time zone.

**Open-ended deployment**

An open-ended deployment has no end date. It runs continuously and checks whether endpoints comply. For more information, see the Glossary *(on page 118)*.

**Client time or UTC time**

Further refine when a deployment runs. Client Time is the local time on a BigFix client's device. Coordinated Universal Time is the primary standard for regulating clocks and time worldwide.

**Stagger deployment times to reduce network load**

Enter an interval in hours and minutes.

**Send this as an offer**

Allow device owners to accept or decline an action, and to control when it runs. For example, whether or not to install an application, or to run an installation at night rather than during the day.

**Note:** Do not send an offer as an open-ended deployment. Open-ended offers can cause problems for device owners, such as an optional piece of software they cannot permanently remove.

Offer options:

- **ONLY to the Software Distribution Client dashboard** - Display software offers on the Client UI's Software Distribution Client Dashboard when it is enabled on the device, and the Self-Service Application is not enabled. When the Self-Service Application is enabled, all offers display there.

- **Notify users of offer availability** - Include a notification on the endpoint that a new offer is available.
- **Offer Description** - Defaults to the Fixlet description, which can be amended or changed. If the offer contains multiple actions the name of each component is included.

**Download required files now**

Pre-cache deployment-related files, transferring them from a vendor's server to a BigFix server before deployment. Save time when working with large files or a tight maintenance window by completing this part of the job first.

**Send a Notification**

Trigger an email alert when a deployment fails or completes. Enter one or more recipients in the **To:** field, separating multiple addresses with a comma.

- Send on Failure - enter a threshold value (1 - 250,000) to receive an email if the deployment fails on the specified number of devices.
- Send on Completion - check the box to receive an email when the deployment completes on all targets. Note: this notification option is not available when targeting computer groups.

**Force restart**

Force a restart on an endpoint following a deployment, and offer the device holder a chance to restart the device themselves at convenient time. Set the restart to occur:

- Immediately (following completion of the deployment)
- 1 day later
- 7 days later
- 15 days later

Send a default message or enter your own. For example, *"Your system administrator requests that you restart your computer, please save your work and restart. Your device will restart automatically in 7 days."*

**Run all member actions of action group regardless of errors**

Multiple Action Groups only. Actions in a multiple action group run sequentially and stop on the first action that fails. Check this box to instruct the MAG to ignore a failure and proceed to the next action. Use this option when the actions in a MAG do not depend on the actions that precede them.

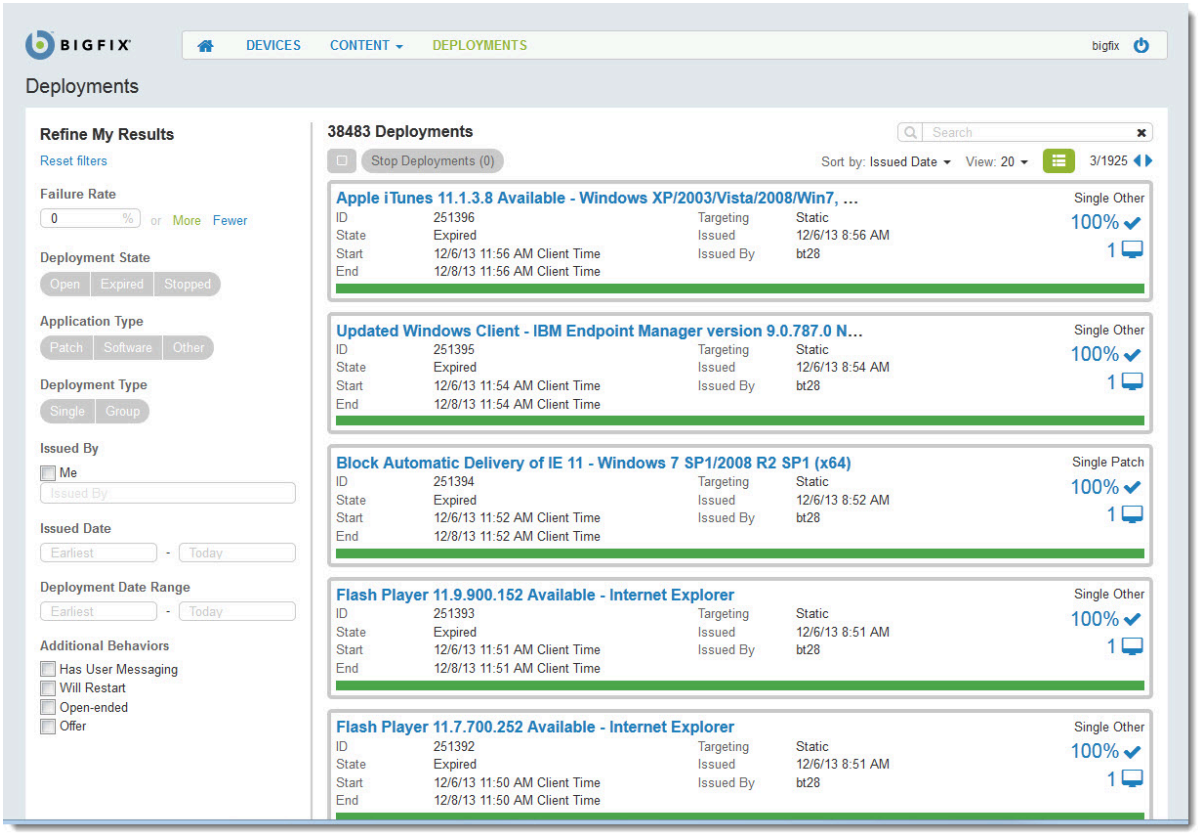
# Chapter 10. Get Started with Deployments

Use the Deployment views to monitor and verify completion of BigFix deployments.

## The Deployment List

View a list of all deployments, create customized deployment summary reports to review the detailed information about each deployment.

The colored bars on the Deployment list summarize the status of each deployment. Use the filters to find specific deployments by type.




WebUI deployment screens list every deployment. In this they are different from the other WebUI screens, where permission settings can limit the number of items displayed. While operators can see all deployments, permissions continue to govern the actions they can

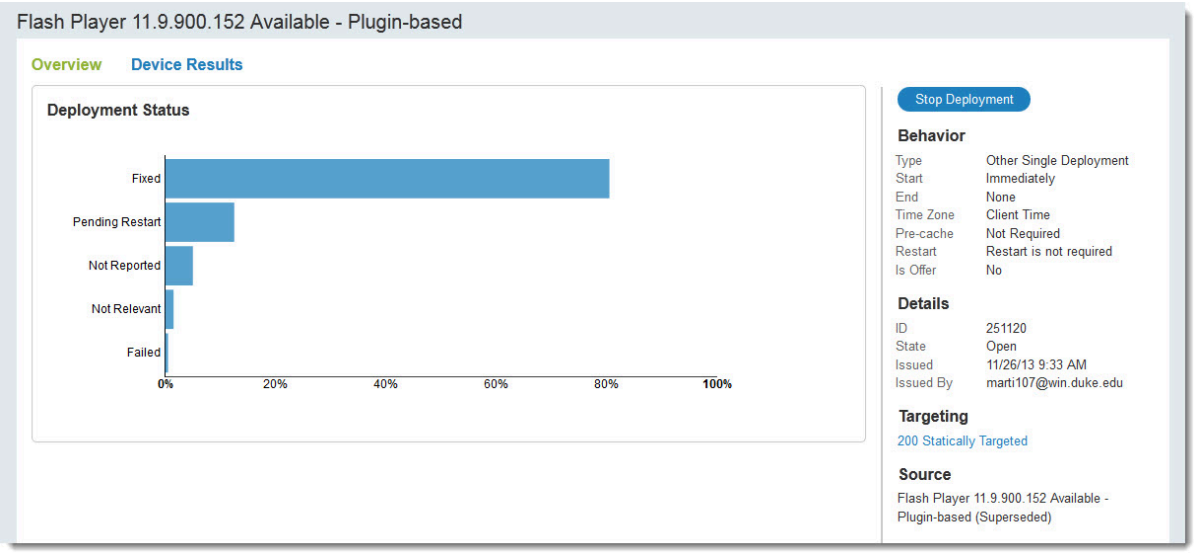
take. For example, an operator who cannot access the WebUI patch screens would see all patch deployments, but would not be able to stop one that was running.

The WebUI displays all actions initiated from The WebUI, the BigFix console, and external sites, including BES Support. For this reason, the Deployment list's Application Type filter is labeled, "Patch Software Other", rather than "Patch Software Custom." In this situation Custom includes any external site, not just Custom sites.

If Inline Reporting feature is enabled, you can visualize summary report of the real-time data and export the data to .csv or .xlsx files. For more information, see The Deployment List in BigFix 10 Help Center.

**Note:** Inline Reporting feature is not extensively tested in WebUI running on versions earlier than BigFix 10 Platform.

# Deployment Documents




Click a deployment name to see its deployment status, behavior (set at configuration), and targeting information. Drill further into deployment details using the links to associated views.

The Deployment Document views:

- Overview – detailed description of this deployment: status, behavior, targeting, and more.
- Device Results – target status – the state of the deployment on each endpoint.
- Component Results – for content with multiple actions: the deployment status of each component on targeted devices, expressed as a percentage of success.

**Note:** For performance reasons, the deployment status of each component is not retrieved if the action contains more than 200 items.

# Monitoring Deployments: State, Status, and Result

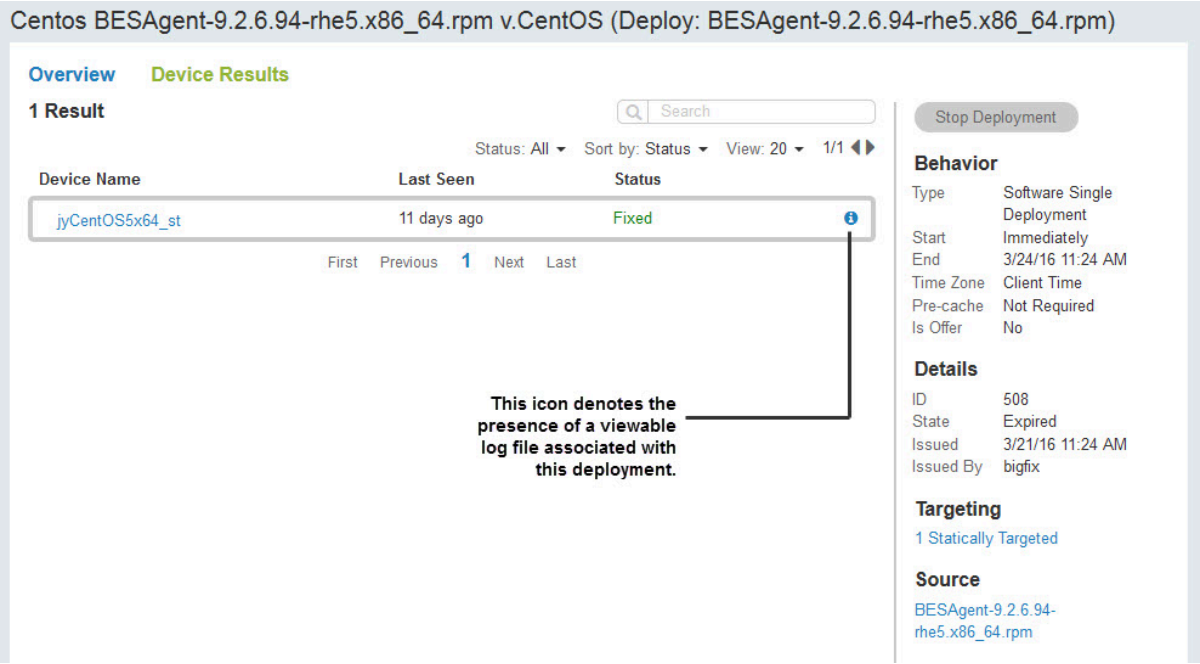
Interpret deployment results correctly by understanding the difference between Device Results, Deployment Status, and Deployment State.

## Device Results

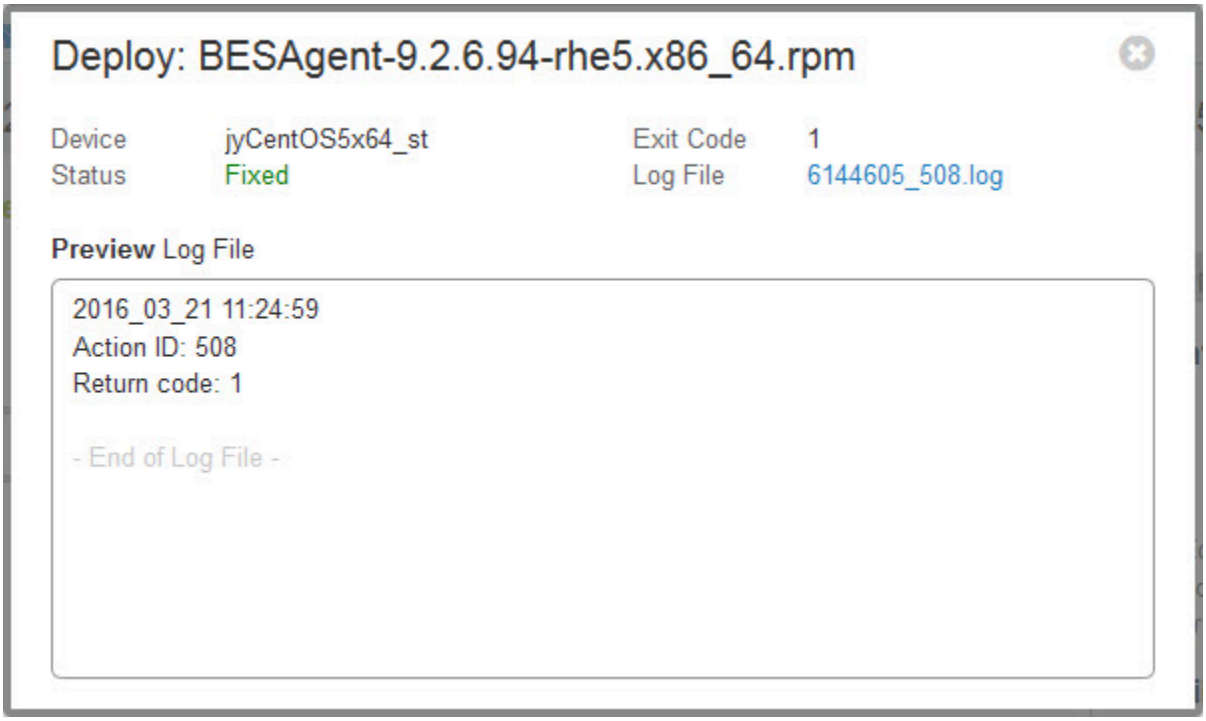
Device Results describe the state of a deployment on a particular endpoint. There are many different BigFix Device Result codes. The most common ones seen in the WebUI include:

- Fixed, or Completed – The deployment succeeded (on this device).
- Failed – The deployment failed (on this device).
- Pending Restart – Eventual success is implied.
- Not Relevant – The action is not relevant to this device.
- Running
- Evaluating
- Pending Download

Software deployments might have an associated log file. This log can be viewed in the Device Results screen. The presence of a viewable log file is denoted by an icon. Note that log files are only available for software deployments.




Click the log icon to display the associated log data. The entire log can be downloaded by clicking the log file name.

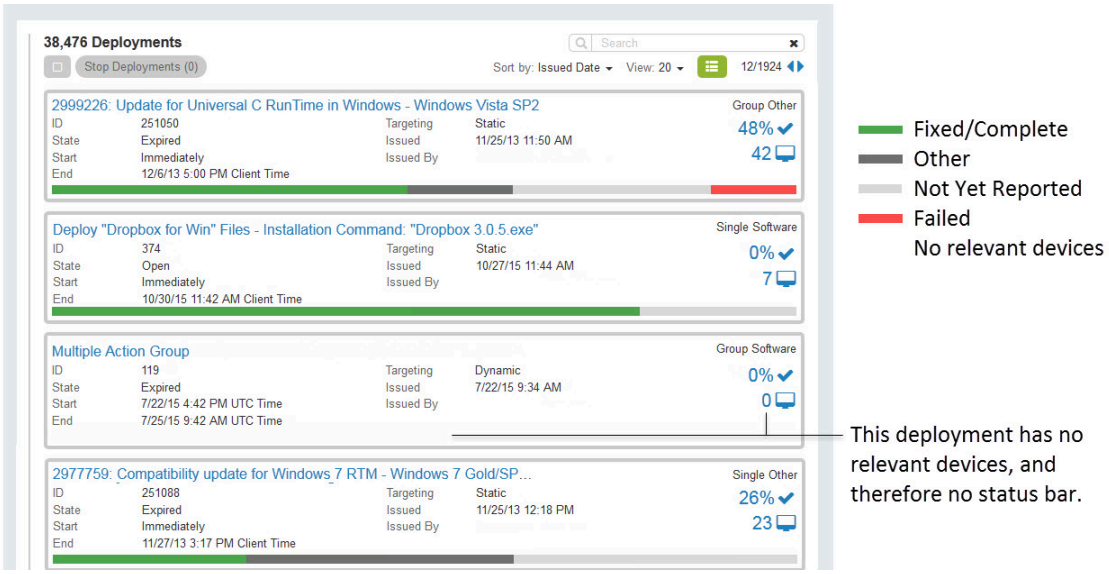


**Note:** Log files can only be viewed for software deployments. In addition, to view log files in the BigFix WebUI, the current user must be subscribed to the Software Distribution Site in the traditional BigFix Console, and Analysis 11 of the Software Distribution Site must be activated.

## Deployment Status

Deployment Status is formulated using Device Results.

- For deployments with single actions, Deployment Status is the cumulative deployment status of each targeted device, expressed as a percentage of success.
- For deployments with multiple actions, Deployment Status is the cumulative deployment status of each component on each targeted device, expressed as a percentage of success.




- Green – Fixed (patches), or Completed (software, custom content).
- Dark gray – Other. The category can include Pending Restart, Running, Evaluating,
- Pending Download, and more.

- Light gray – Not yet reported, or not relevant.
- Red – Failed.
- No Status Bar – No relevant devices.

## Deployment State

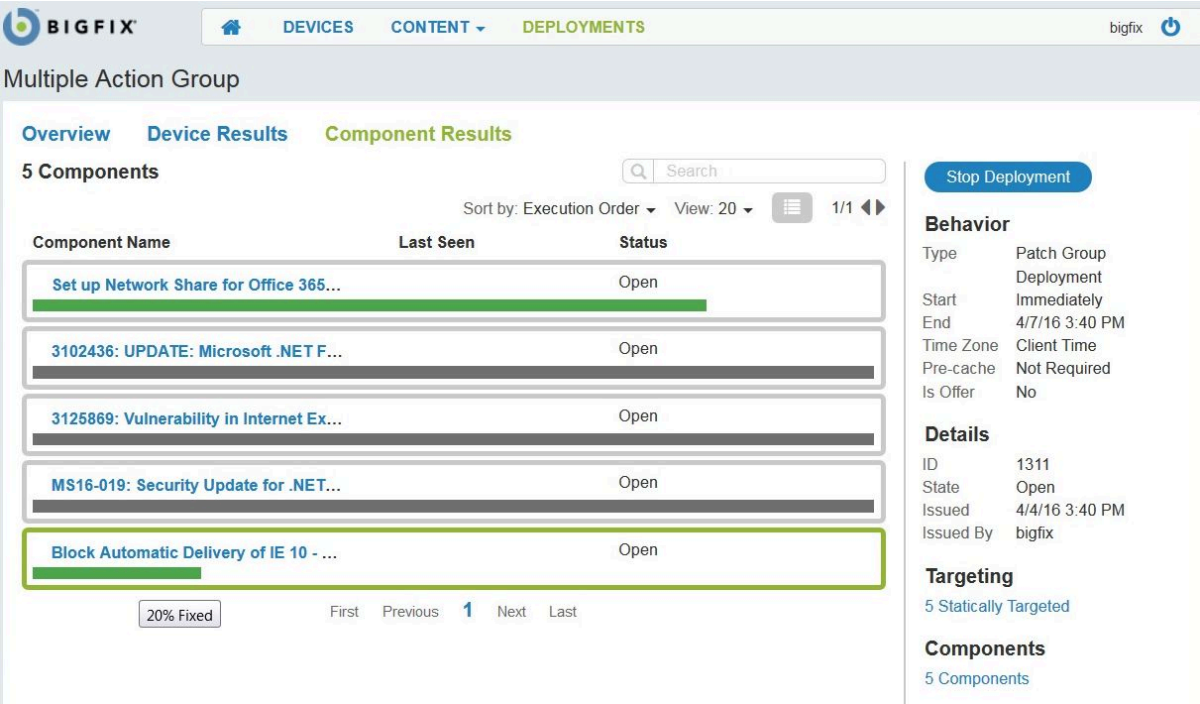
Deployment State describes the eligibility of a deployment to run on endpoints. It is not involved in calculating Deployment Status. Deployment State has three values:

- Open – The deployment is eligible to be run by endpoints.
- Expired – The deployment is no longer eligible to run because the end time has passed for all possible endpoints in all time zones. The default expiration time for an action is 2 days.
- Stopped – The deployment is no longer eligible to run because an operator or administrator stopped it.

In summary: Device Result is the result of a particular deployment on a specific device. Deployment State describes the eligibility of a deployment to run. Deployment Status provides the cumulative results of a deployment on targeted endpoints.

## Evaluating Deployments With Multiple Actions

To obtain an accurate picture of the state of a deployment with multiple actions, such as those involving a group or baseline, check the status of its individual components. In other words, if a deployment group’s status is less than 100%, check to see which of its components has not yet completed.




1. Open the Deployments list.
2. Use the Deployment Type filter to display a list of Group deployments.
3. Select the Deployment that you want and open its document.
4. Click **Component Results**.

**Note:** For performance reasons, the deployment status of each component is not retrieved if the action contains more than 200 items.

# Stop A Deployment

Not every deployment completes successfully the first time. Use the **Stop Deployment** button on any Deployment list or document view to terminate a deployment, if needed. Reasons to stop a deployment include:

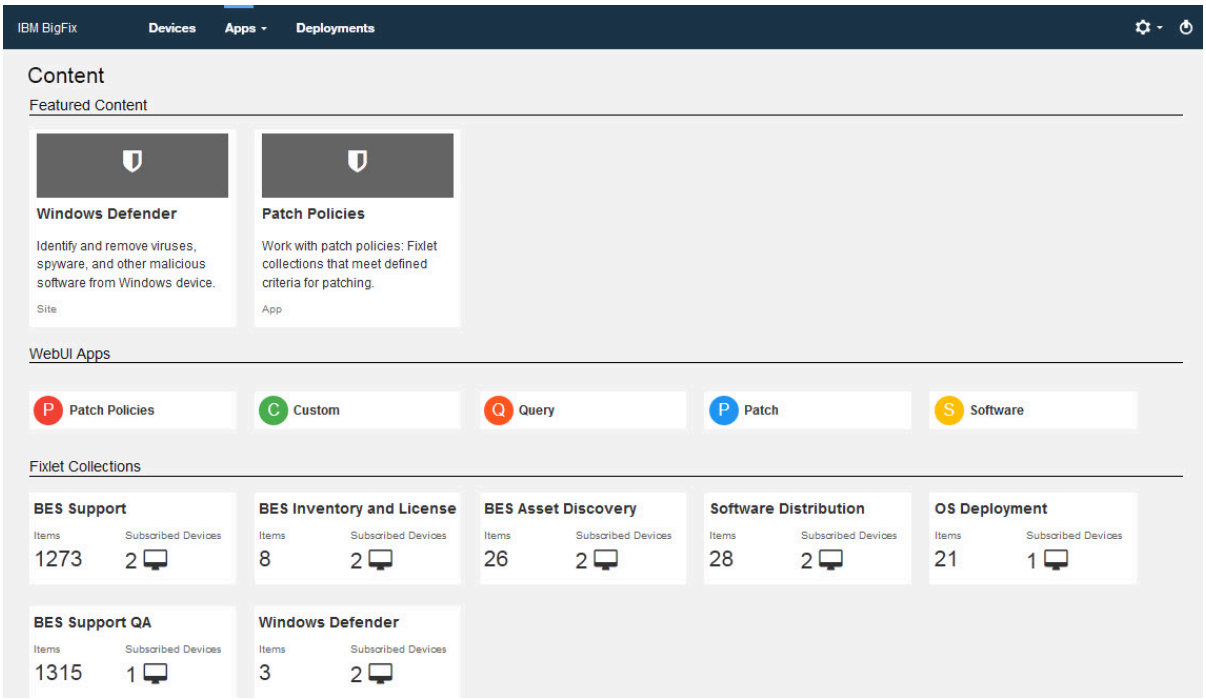
- Starting to see failures on many devices.
- Starting to get blue screens on the targeted devices.
- You have updated a baseline (or Fixlet) and need to stop the old one.

Use the Deployment views and the custom tools provided by your BigFix administrator to diagnose and fix deployment problems. Work with them to learn more about why deployments fail and effective methods for resolving issues when they arise. Reasons a deployment can fail include:

- A computer is offline.
- A computer is being rebuilt or reimaged.
- A computer has insufficient disk space.
- A computer is not communicating with the BigFix update server.
- The BigFix agent is not running on the computer.
- The computer is missing some dependent software.

# Chapter 11. Get Started with the Content App

Use the Content App to work with Fixlets, tasks, and baselines on the BigFix sites. Search, filter, and deploy content using standard WebUI tools.




New sites, new applications, and apps with new features are highlighted in the Featured Content section. Click the tiles in the WebUI Apps section to open WebUI applications. Operators see sites on the Content application's white list of permissible sites. Master operators see all sites that are not part of the WebUI App collection.

**Note:** Not all Fixlets are deployable. Do not use the Content App to deploy Fixlets that:

- Contain or employ JavaScript, for example, JavaScript that takes action or secure action.
- Use Session Relevance.
- Use specialized Console APIs.

The Fixlets will not run, and you will receive no errors or any other indication that something is wrong until devices start reporting back that there is a problem. If you are not sure whether a Fixlet is deployable or not, run it from the BigFix Console to avoid unpredictable behavior.

**Operator Access**

The below list associates the activities that an operator can perform with the type of operator.

- Non-master operators cannot access BES support in the WebUI application as it is intended only for the Master Operators.
- Master operators can view all the external sites, except for the two below listed sites in Table 1.
- Non-master operator can only access the external sites that they have visibility. See the accessible Whitelist sites listed in Table 2.

**Table 1. List of external sites that cannot be accessed by the Master operator**

| Site ID | Site Name |
|---|---|
| 8361 | OS Deployment and Bare Metal Imaging |
| 8363 | OS Deployment and Bare Metal Imaging Beta |

**Table 2. List of whitelist sites that can be accessed by the Non-master operator**

| Site ID | Site Name |
|---|---|
| 12249 | Advanced Patching |
| 3107 | BES Asset Discovery |
| 3073 | BigFix Client Compliance (IPSec Framework) |

| Site ID | Site Name |
|---|---|
| 3043 | BigFix Client Compliance Configuration |
| 9287 | BigFix Labs |
| 8253 | BitLocker Management (Labs) |
| 11316 | CIS Checklist for AIX 5.3 and 6.1 |
| 11316 | CIS Checklist for AIX 5.3 and 6.1 |
| 11522 | CIS Checklist for AIX 7.1 - RG03 |
| 12070 | CIS Checklist for Apache HTTP Server 2.2 on Linux |
| 12391 | CIS Checklist for CentOS Linux 6 |
| 12410 | CIS Checklist for CentOS Linux 7 |
| 11535 | CIS Checklist for DB2 on Linux |
| 11536 | CIS Checklist for DB2 on Windows |
| 15106 | CIS Checklist for Internet Explorer 10 |
| 12337 | CIS Checklist for Internet Explorer 11 |

| Site ID | Site Name |
|---|---|
| 12339 | CIS Checklist for Mac OS X 10.10 |
| 12354 | CIS Checklist for Mac OS X 10.11 |
| 12425 | CIS Checklist for Mac OS X 10.12 |
| 11313 | CIS Checklist for Mac OS X 10.6 |
| 12389 | CIS Checklist for Mac OS X 10.8 |
| 11566 | CIS Checklist for MS IIS 7 |
| 12509 | CIS Checklist for MS IIS 8 |
| 11568 | CIS Checklist for MS SQL Server 2005 |
| 11570 | CIS Checklist for MS SQL Server 2008 R2 |
| 11574 | CIS Checklist for MS SQL Server 2012 DB Engine |
| 11539 | CIS Checklist for Oracle Database 11-11g R2 on Linux |
| 11540 | CIS Checklist for Oracle Database 11-11g R2 on Windows |
| 11537 | CIS Checklist for Oracle Database 9i-10g on Linux |

| Site ID | Site Name |
|---|---|
| 11538 | CIS Checklist for Oracle Database 9i-10g on Windows |
| 12373 | CIS Checklist for Oracle Linux 6 |
| 12364 | CIS Checklist for Oracle Linux 7 |
| 11318 | CIS Checklist for RHEL 5 |
| 11366 | CIS Checklist for RHEL 6 |
| 12181 | CIS Checklist for RHEL 7 |
| 12187 | CIS Checklist for SLES 10 |
| 12518 | CIS Checklist for SLES 11 |
| 11317 | CIS Checklist for Solaris 10 |
| 11526 | CIS Checklist for Solaris 11 - RG03 |
| 12465 | CIS Checklist for SUSE 12 |
| 12453 | CIS Checklist for Ubuntu 12.04 LTS Server |
| 12439 | CIS Checklist for Ubuntu 14.04 LTS Server |
| 12429 | CIS Checklist for Ubuntu 16.04 LTS Server |
| 12288 | CIS Checklist for Windows 10 |

| Site ID | Site Name |
|---|---|
| 11356 | CIS Checklist for Windows 2003 DC |
| 11358 | CIS Checklist for Windows 2003 MS |
| 13083 | CIS Checklist for Windows 2008 DC - RG03 |
| 13085 | CIS Checklist for Windows 2008 MS - RG03 |
| 13075 | CIS Checklist for Windows 2008 R2 DC |
| 13077 | CIS Checklist for Windows 2008 R2 MS |
| 12064 | CIS Checklist for Windows 2012 DC |
| 12066 | CIS Checklist for Windows 2012 MS |
| 12057 | CIS Checklist for Windows 2012 R2 DC |
| 12061 | CIS Checklist for Windows 2012 R2 MS |
| 12469 | CIS Checklist for Windows 2016 DC |
| 12471 | CIS Checklist for Windows 2016 MS |
| 11491 | CIS Checklist for Windows 7 |
| 12093 | CIS Checklist for Windows 8 |

| Site ID | Site Name |
|---|---|
| 15107 | CIS Checklist for Windows 8.1 |
| 11360 | CIS Checklist for Windows XP |
| 9342 | Client Manager Builder |
| 8151 | Client Manager for Application Virtualization |
| 75 | Client Manager for Endpoint Protection |
| 9318 | Client Manager for TPMf-OSD |
| 11035 | DISA STIG Checklist for AIX 5.1 |
| 11036 | DISA STIG Checklist for AIX 5.2 |
| 11434 | DISA STIG Checklist for AIX 53 - RG03 |
| 11436 | DISA STIG Checklist for AIX 61 - RG03 |
| 11354 | DISA STIG Checklist for AIX 7.1 |
| 11040 | DISA STIG Checklist for HPUX 11.11 |
| 11460 | DISA STIG Checklist for HPUX 11.23 - RG03 |

| Site ID | Site Name |
|---|---|
| 11462 | DISA STIG Checklist for HPUX 11.31 - RG03 |
| 11458 | DISA STIG Checklist for Internet Explorer 10 - RG03 |
| 12068 | DISA STIG Checklist for Internet Explorer 11 - RG03 |
| 11454 | DISA STIG Checklist for Internet Explorer 8 - RG03 |
| 11456 | DISA STIG Checklist for Internet Explorer 9 - RG03 |
| 12309 | DISA STIG Checklist for Mac OS X 10.10 |
| 12427 | DISA STIG Checklist for Mac OS X 10.11 |
| 12225 | DISA STIG Checklist for Mac OSX 10.8 |
| 12346 | DISA STIG Checklist for Mac OSX 10.9 |
| 12497 | DISA STIG Checklist for Oracle Linux 6 |
| 11042 | DISA STIG Checklist for RHEL 3 |
| 11043 | DISA STIG Checklist for RHEL 4 |
| 11430 | DISA STIG Checklist for RHEL 5 - RG03 |

| Site ID | Site Name |
|---|---|
| 11440 | DISA STIG Checklist for RHEL 6 RG03, CentOS Linux 6 RG03 |
| 12412 | DISA STIG Checklist for RHEL 7, CentOS Linux 7 |
| 11432 | DISA STIG Checklist for Solaris 10 - RG03 |
| 12281 | DISA STIG Checklist for Solaris 11 |
| 11045 | DISA STIG Checklist for Solaris 8 |
| 11046 | DISA STIG Checklist for Solaris 9 |
| 11048 | DISA STIG Checklist for SUSE 10 |
| 11059 | DISA STIG Checklist for SUSE 11 |
| 11058 | DISA STIG Checklist for SUSE 9 |
| 12289 | DISA STIG Checklist for Windows 10 |
| 11141 | DISA STIG Checklist for Windows 2003 DC |
| 11142 | DISA STIG Checklist for Windows 2003 MS |

| Site ID | Site Name |
|---|---|
| 11143 | DISA STIG Checklist for Windows 2008 DC |
| 11144 | DISA STIG Checklist for Windows 2008 MS |
| 11145 | DISA STIG Checklist for Windows 2008 R2 DC |
| 11146 | DISA STIG Checklist for Windows 2008 R2 MS |
| 11575 | DISA STIG Checklist for Windows 2012 DC |
| 11577 | DISA STIG Checklist for Windows 2012 MS |
| 12467 | DISA STIG Checklist for Windows 2016 |
| 11140 | DISA STIG Checklist for Windows 7 |
| 11564 | DISA STIG Checklist for Windows 8 |
| 11147 | DISA STIG Checklist for Windows Vista |
| 11148 | DISA STIG Checklist for Windows XP |
| 11120 | FDCC Checklist for Internet Explorer 7 |
| 11123 | FDCC Checklist for Windows Vista |

| Site ID | Site Name |
|---|---|
| 11124 | FDCC Checklist for Windows Vista Firewall |
| 11121 | FDCC Checklist for Windows XP |
| 11122 | FDCC Checklist for Windows XP Firewall |
| 13013 | IBM License Reporting (ILMT) v9 |
| 8506 | MaaS360 Mobile Device Management |
| 12380 | Managed Vulnerabilities |
| 8150 | Patching Support |
| 8102 | Power Management |
| 15105 | QRadar Vulnerabilties |
| 8110 | Remote Control |
| 6113 | SCM Reporting |
| 9188 | Software Distribution |
| 8032 | Tivoli Endpoint Manager for Software Usage Analysis v1.3 |
| 9072 | Trend Common Firewall |
| 9095 | Trend Core Protection Module for Mac |
| 8232 | Updates for Mac Applications |

| Site ID | Site Name |
|---|---|
| 5095 | Updates for Windows Applications |
| 11119 | USGCB Checklist for Internet Explorer 7 |
| 11113 | USGCB Checklist for Internet Explorer 8 |
| 12106 | USGCB Checklist for RHEL 5 |
| 11110 | USGCB Checklist for Windows 7 |
| 11112 | USGCB Checklist for Windows 7 Energy |
| 11111 | USGCB Checklist for Windows 7 Firewall |
| 11116 | USGCB Checklist for Windows Vista |
| 11114 | USGCB Checklist for Windows Vista Energy |
| 11115 | USGCB Checklist for Windows Vista Firewall |
| 11118 | USGCB Checklist for Windows XP |
| 11117 | USGCB Checklist for Windows XP Firewall |
| 8346 | Virtual Endpoint Manager |
| 5040 | Vulnerabilities to Windows Systems |

| Site ID | Site Name |
|---|---|
| 9112 | Windows 7 Migration |
| 9173 | Windows Point of Sale |

# Appendix A. Glossary

This glossary provides terms and definitions for the [product name] software and products.

The following cross-references are used in this glossary:

- *See* refers you from a nonpreferred term to the preferred term or from an abbreviation to the spelled-out form.
- *See also* refers you to a related or contrasting term.

For other terms and definitions, see the HCL Terminology website (opens in new window).



## A

**action**

1. See Fixlet *(on page 124)*.
2. A set of Action Script commands that perform an operation or administrative task, such as installing a patch or rebooting a device.

**Action Script**

Language used to perform an action on an endpoint.

**agent**

See BigFix agent *(on page 119)*.

**ambiguous software**

Software that has an executable that looks like another executable, or that exists in more than one place in a catalog (Microsoft Word as a standalone product or bundled with Microsoft Office).

**audit patch**

A patch used to detect conditions that cannot be remediated and require the attention of an administrator. Audit patches contain no actions and cannot be deployed.

**automatic computer group**

A computer group for which membership is determined at run time by comparing the properties of a given device against the criteria set for group membership. The set of devices in an automatic group is dynamic, meaning it can and does change. See also computer group *(on page 120)*.

# B

**baseline**

A collection of actions that are deployed together. A baseline is typically used to simplify a deployment or to control the order in which a set of actions are applied. See also deployment group *(on page 122)*.

**BigFix agent**

The BigFix code on an endpoint that enables management and monitoring by BigFix.

**BigFix client**

See BigFix agent *(on page 119)*.

**BigFix console**

The primary BigFix administrative interface. The console provides a full set of capabilities to BigFix administrators.

# C

**client**

A software program or computer that requests services from a server. See also server *(on page 128)*.

**client time**

The local time on a BigFix client's device.

**Common Vulnerabilities and Exposures Identification Number (CVE ID)**

A number that identifies a specific entry in the National Vulnerability Database. A vendor's patch document often includes the CVE ID, when it is available. See also National Vulnerability Database *(on page 125)*.

**Common Vulnerabilities and Exposures system (CVE)**

A reference of publicly known network vulnerabilities which is part of the National Vulnerabilities Database (NVD), maintained by the US National Institute of Standards and Technology (NIST).

**component**

An individual action within a deployment that has more than one action. See also deployment group *(on page 122)*.

**computer group**

A group of related computers. An administrator can create computer groups to organize systems into meaningful categories, and to facilitate deployment of content to multiple computers. See also automatic computer group *(on page 119)*, manual computer group *(on page 124)*.

**console**

See BigFix console *(on page 119)*.

**content**

Digitally-signed files containing data, rules, queries, criteria, and other instructions, packaged for deployment across a network. BigFix agents use the detection criteria (Relevance statements) and action instructions (Action Script statements) in content to detect vulnerabilities and enforce network policies.

**content relevance**

A determination of whether a patch or piece of software is eligible for deployment to one or more devices. See also device relevance *(on page 123)*.

**Coordinated Universal Time (UTC)**

The international standard of time that is kept by atomic clocks around the world.

**corrupt patch**

A patch that flags an operator when corrections made by an earlier patch have been changed or compromised. This can occur when an earlier service pack or application overwrites later files, resulting in patched files that are no longer current. The corrupt patch flags the situation and can be used to re-apply the later patch.

**custom content**

BigFix code created by a customer for use on their own network, for example, a custom patch or baseline.

**CVE**

See Common Vulnerabilities and Exposures system *(on page 120)*.

**CVE ID**

See Common Vulnerabilities and Exposures Identification Number *(on page 120)*.

# D

**data stream**

A string of information that serves as a source of package data.

**default action**

The action designated to execute when a Fixlet is deployed. When no default action is defined, the operator is prompted to choose between several actions or to make an informed decision about a single action.

**definitive package**

A string of data that serves as the primary method for identifying the presence of software on a computer.

**deploy**

To dispatch content to one or more endpoints for execution to accomplish an operation or task, for example, to install software or update a patch.

**deployment**

Information about content dispatched to one or more endpoints, a specific instance of dispatched content.

**deployment group**

The collection of actions created when an operator selects more than one action for a deployment, or a baseline is deployed. See also baseline *(on page 119)*, component *(on page 120)*, deployment window *(on page 122)*, multiple action group *(on page 125)*.

**deployment state**

The eligibility of a deployment to run on endpoints; includes any parameters set by the operator, such as 'Start at 1AM, end at 3AM.'

**deployment status**

Cumulative results of all targeted devices, expressed as a percentage of deployment success.

**deployment type**

An indication of whether a deployment involved one action or multiple actions.

**deployment window**

The period during which a deployment's actions are eligible for execution. For example, if a Fixlet has a deployment window of 3 days and an eligible device that has been offline reports in to BigFix within the 3-day window, it gets the Fixlet. If the device comes back online after the 3-day window expires, it does not get the Fixlet. See also deployment group *(on page 122)*.

**device**

An endpoint, for example, a laptop, desktop, server, or virtual machine managed by BigFix; an endpoint running the BigFix Agent.

**device holder**

The person using a BigFix-managed computer.

**device property**

Information about a device collected by BigFix, including details about its hardware, operating system, network status, settings, and BigFix client. Custom properties can also be assigned to a device.

**device relevance**

A determination of whether a piece of BigFix content applies to applies to a device, for example, where a patch should be applied, software installed, or a baseline run. See also content relevance *(on page 120)*.

**device result**

The state of a deployment, including the end result, on a particular endpoint.

**Disaster Server Architecture (DSA)**

An architecture that links multiple servers to provide full redundancy in case of failure.

**DSA**

See Disaster Server Architecture *(on page 123)*.

**dynamically targeted**

Pertaining to using a computer group to target a deployment.

# E

**endpoint**

A networked device running the BigFix agent.

# F

**filter**

To reduce a list of items to those that share specific attributes.

**Fixlet**

A piece of BigFix content containing Relevance and Action Script statements bundled together to perform an operation or task. Fixlets are the basic building blocks of BigFix content. A Fixlet provides instructions to the BigFix agent to perform a network management or reporting action.

# G

**group deployment**

A type of deployment where multiple actions were deployed to one or more devices.

# L

**locked**

An endpoint state that prevents the majority of BigFix actions from running until the device is unlocked.

# M

**MAG**

See multiple action group *(on page 125)*.

**management rights**

The limitation of console operators to a specified group of computers. Only a site administrator or a master operator can assign management rights.

**manual computer group**

A computer group for which membership is determined through selection by an operator. The set of devices in a manual group is static, meaning they do not change. See also computer group *(on page 120)*.

**master operator**

A console operator with administrative rights. A master operator can do almost everything a site administrator can do, with the exception of creating new operators.

**masthead**

A collection of files that contain the parameters of the HCL BigFix process, including URLs to Fixlet content. The HCL BigFix agent brings content into the enterprise based on subscribed mastheads.

**mirror server**

A BigFix server required if the enterprise does not allow direct web access but instead uses a proxy server that requires password-level authentication.

**multiple action group (MAG)**

A BigFix object that is created when multiple actions are deployed together, as in a baseline. A MAG contains multiple Fixlets or Tasks. See also deployment group *(on page 122)*.

# N

**National Vulnerability Database (NVD)**

A catalog of publicly-known information security vulnerabilities and exposures maintained by the National Institute of Standards and Technology (NIST). See also Common Vulnerabilities and Exposures Identification Number *(on page 120)*.

**NVD**

See National Vulnerability Database *(on page 125)*.

# O

**offer**

A deployment option that allows a device holder to accept or decline a BigFix action and to exercise some control over when it runs. For example, whether or not to install a software application, and whether to run the installation at night or during the day.

**open-ended deployment**

A deployment with no end or expiration date; one that runs continuously, checking whether or not the computers on a network comply.

**operator**

A person who uses the BigFix WebUI, or portions of the BigFix console.

# P

**patch**

A piece of code added to vendor software in order to fix a problem, as an immediate solution that is provided to users between two releases.

**patch category**

A description of a patch's type and general area of operation, for example, a bug fix or a service pack.

**patch severity**

The level of risk imposed by a network threat or vulnerability and, by extension, the importance of applying its patch.

# R

**relay**

A client that is running special server software. Relays spare the server and the network by minimizing direct server-client downloads and by compressing upstream data.

**Relevance**

BigFix query language used to determine the applicability of a piece of content to a given endpoint. Relevance asks yes or no questions and evaluates the results. The result of a Relevance query determines whether an action can or should be applied. Relevance is paired with Action Script in Fixlets.

# S

**SCAP**

See Security Content Automation Protocol *(on page 128)*.

**SCAP check**

A specific configuration check within a Security Content Automation Protocol (SCAP) checklist. Checks are written in XCCDF and are required to include SCAP enumerations and mappings per the SCAP template.

**SCAP checklist**

A configuration checklist that is written in a machine readable language (XCCDF). Security Content Automation Protocol (SCAP) checklists have been submitted to and accepted by the NIST National Checklist Program. They also conform to a SCAP template to ensure compatibility with SCAP products and services.

**SCAP content**

A repository that consists of security checklist data represented in automated XML formats, vulnerability and product name related enumerations, and mappings between the enumerations.

**SCAP enumeration**

A list of all known security related software flaws (CVEs), known software configuration issues (CCEs), and standard vendor and product names (CPEs).

**SCAP mapping**

The interrelationship of enumerations that provides standards-based impact measurements for software flaws and configuration issues.

**Security Content Automation Protocol (SCAP)**

A set of standards that is used to automate, measure, and manage vulnerability and compliance by the National Institute of Standards and Technology (NIST).

**server**

A software program or a computer that provides services to other software programs or other computers. See also client *(on page 119)*.

**signing password**

A password that is used by a console operator to sign an action for deployment.

**single deployment**

A type of deployment where a single action was deployed to one or more devices.

**site**

A collection of BigFix content. A site organizes similar content together.

**site administrator**

The person in charge of installing BigFix, authorizing and creating new console operators.

**software package**

A collection of Fixlets that install a software product on a device. Software packages are uploaded to BigFix by an operator for distribution. A BigFix software package includes the installation files, Fixlets to install the files, and information about the package (metadata).

**SQL Server**

A full-scale database engine from Microsoft that can be acquired and installed into the BigFix system to satisfy more than the basic reporting and data storage needs.

**standard deployment**

A deployment of BigFix that applies to workgroups and to enterprises with a single administrative domain. It is intended for a setting in which all Client computers have direct access to a single internal server.

**statistically targeted**

Pertaining to the method used to target a deployment to a device or piece of content. Statically targeted devices are selected manually by an operator.

**superseded patch**

A type of patch that notifies an operator when an earlier version of a patch has been replaced by a later version. This occurs when a later patch updates the same files as an earlier one. Superseded patches flag vulnerabilities that can be remediated by a later patch. A superseded patch cannot be deployed.

**system power state**

A definition of the overall power consumption of a system. BigFix Power Management tracks four main power states Active, Idle, Standby or Hibernation, and Power Off.

## T

**target**

To match content with devices in a deployment, either by selecting the content for deployment, or selecting the devices to receive content.

**targeting**

The method used to specify the endpoints in a deployment.

**task**

A type of Fixlet designed for re-use, for example, to perform an ongoing maintenance task.

# U

**UTC**

See Coordinated Universal Time *(on page 121)*.

# V

**virtual private network (VPN)**

An extension of a company intranet over the existing framework of either a public or private network. A VPN ensures that the data that is sent between the two endpoints of its connection remains secure.

**VPN**

See virtual private network *(on page 130)*.

**vulnerability**

A security exposure in an operating system, system software, or application software component.

# W

**Wake-from-Standby**

A mode that allows an application to turn a computer on from standby mode during predefined times, without the need for Wake on LAN.

**Wake on LAN**

A technology that enables a user to remotely turn on systems for off-hours maintenance. A result of the Intel-HCL Advanced Manageability Alliance and part of the Wired for Management Baseline Specification, users of this technology can remotely turn on a server and control it across the network,

thus saving time on automated software installations, upgrades, disk backups, and virus scans.

**WAN**

See wide area network *(on page 131)*.

**wide area network (WAN)**

A network that provides communication services among devices in a geographic area larger than that served by a local area network (LAN) or a metropolitan area network (MAN).

# Appendix B. Support

For more information about this product, see the following resources:

- Knowledge Center
- BigFix Support Center
- BigFix Support Portal
- BigFix Developer
- BigFix Wiki
- HCL BigFix Forum

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