BigFix SaaS User Guide

Contents

Chapter 1. Introduction

This section introduces a user to what is BigFix SaaS and what are the benefits of using it. It also

BigFix SaaS is an endpoint management platform based on Software as a Service (SaaS). It enables IT operations and security teams to automate and manage patches to hundreds of thousands of endpoints across multiple operating systems and apps, regardless of location, connection type or status as an on-premise, virtual, or cloud endpoint. HCL BigFix automates the management, patching and inventory of nearly 100 different operating system versions.

BigFix is a cloud-based service that leverages the BigFix team's decades of experience. The core HCL BigFix platform has the following additional components:

- HCL BigFix for Lifecycle Management (includes Patch Management, Remote Control, Software Distribution, and OS Deployment)
- HCL BigFix for Patch Management (includes vendor patches for Microsoft, UNIX, Linux, and Macintosh operating systems as well as patches for third-party applications by Adobe, Google, and Microsoft)
- HCL BigFix for Security and Compliance (provides common STIG, CIS, and third-party security baselines, network self-quarantine, and removable device control)
- HCL BigFix Inventory (gathers information about installed software and hardware in a customer's infrastructure)
- HCL BigFix for Server Automation (provides hypervisor operations to build and manage virtual machines in a datacenter environment)

Using BigFix has the following benefits:

- Cost savings
- Accessibility
- Scalability
- Automatic updates
- Quick deployment
- Reliability
- High compatibility
- SaaS security
- Decreased hardware requirements for implementation (SaaS version)

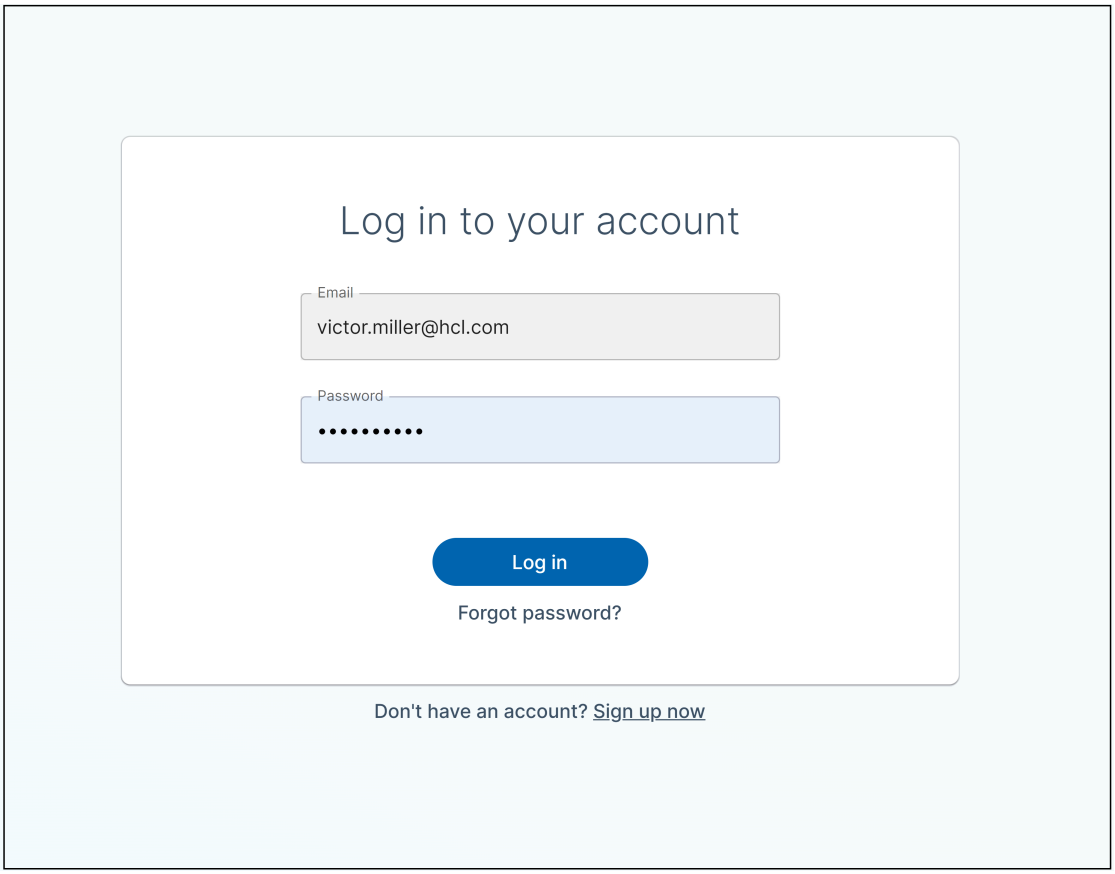
Chapter 2. Getting Started with BigFix SaaS

Learn how to access BigFix SaaS application.

Steps for accessing BigFix SaaS application using URL.

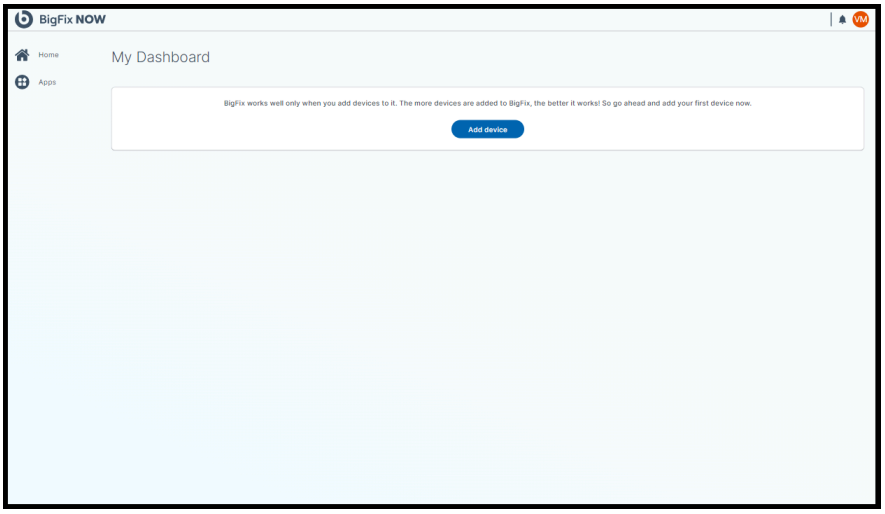
Follow the steps below to access BigFix SaaS:

1. Navigate to https://login.bigfix.com to access BigFix.



To login to BigFix, use the details previously provided to you by the BigFix team when you signed up for your BigFix account.

2. After successful login, you will be taken to *My Dashboard*, which is BigFix's home page.



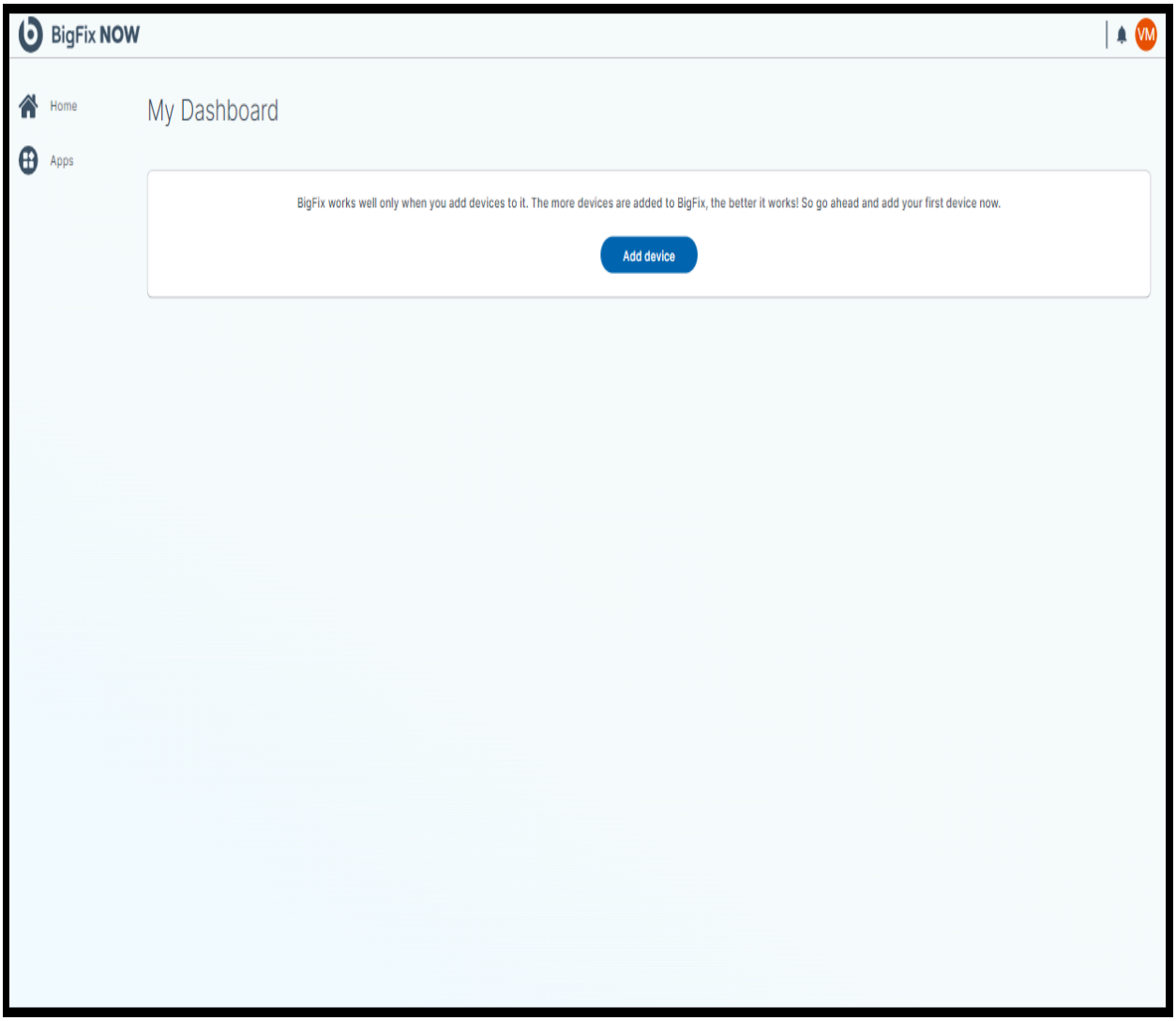
Chapter 3. BigFix SaaS User Guide

This guide is for the regular users of BigFix SaaS.

It provides details of the features that are available to a user when they access the SaaS application. For example: accessing BigFx SaaS, creating and managing users, using the available apps - the Deployment Manager, Device Explorer, and the Fixlet Explorer.

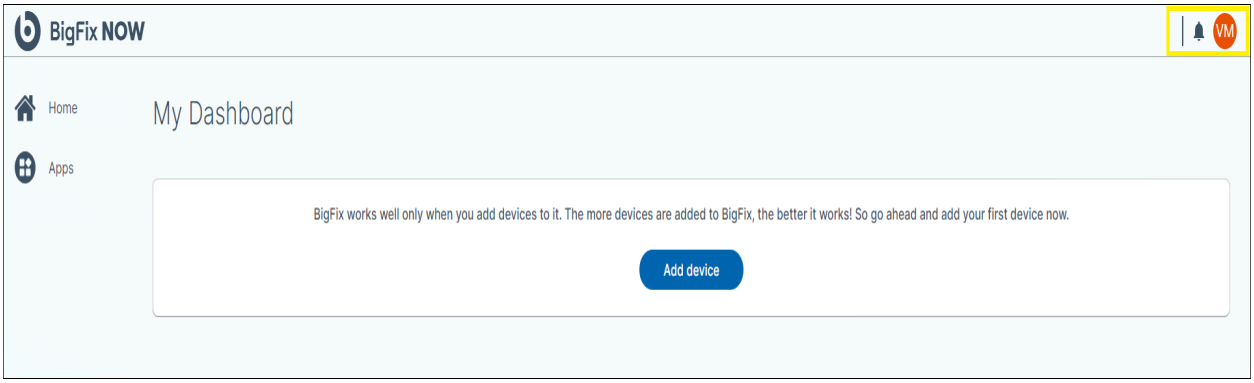
My Dashboard

My Dashboard is BigFix's home page.



When accessing BigFix for the first time, a prompt appears, encouraging the addition of devices to the BigFix deployment. The top right corner of the Home Page has the following two icons that provide additional functionality:

-  - The first one is the notification icon, where important prompts are displayed.
-  - The second one is the User Profile icon/photo, which links users to their account management page.



For customers who have multiple BigFix accounts, each account can set whether to use the light or dark mode.

Note: The Dark Mode feature is an account level feature which means that any change to the setting will apply across the application and for all users.

Click  to access your account's user profile. In your account's user profile, click the  switch to toggle between dark and light mode. Clicking the  icon shows important notifications for the user.

BigFix currently supports the following three apps:

- Deployment Manager
- Device Explorer
- Fixlet Explorer
- User Manager

Details about these applications and their functionality is available in separate sections. To unlock BigFix's full potential, it is essential to add your organization's devices into your BigFix deployment. This is extremely simple! To begin, click **Add device** and then follow the prompts on the screen.

Adding devices to BigFix

This task outlines the steps to add or onboard organizational devices to BigFix.

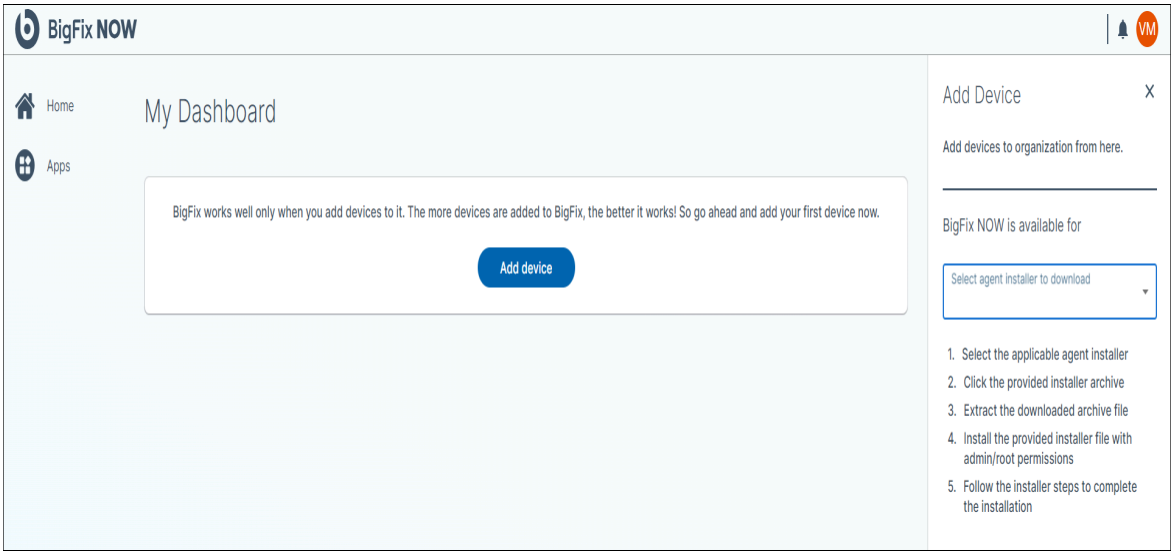
Administrators must be logged into BigFix to add additional users.

Note: BigFix requires at least one device to be added to your organization's deployment. Without at least one device, BigFix's applications cannot be used.

The more devices you add to BigFix, the better BigFix can help your organization. All devices added to your BigFix deployment are displayed in the Device Manager application.

Adding additional devices to your BigFix deployment is extremely easy. Follow the steps below to onboard devices:

1. Navigate to My Dashboard by clicking the Home icon on the left side of the screen. Once there, click Add devices. The Add Device panel will appear on the right side of the screen.



2. Enrolling a device in your BigFix deployment requires installing the BigFix agent. An agent is a small piece of code that runs on the computer and communicates with BigFix. Currently, BigFix SaaS supports agents that run on different operating systems. This means BigFix can be used on a broad range of device types.

In the **Add Device** panel, select the operating system that matches the one running on the device to be enrolled in BigFix. For example, select MacOS to enroll a MacBook in BigFix or select Ubuntu for an Ubuntu server.

3. After selecting the correct operating system, click the link that appears below the dropdown to download the agent.

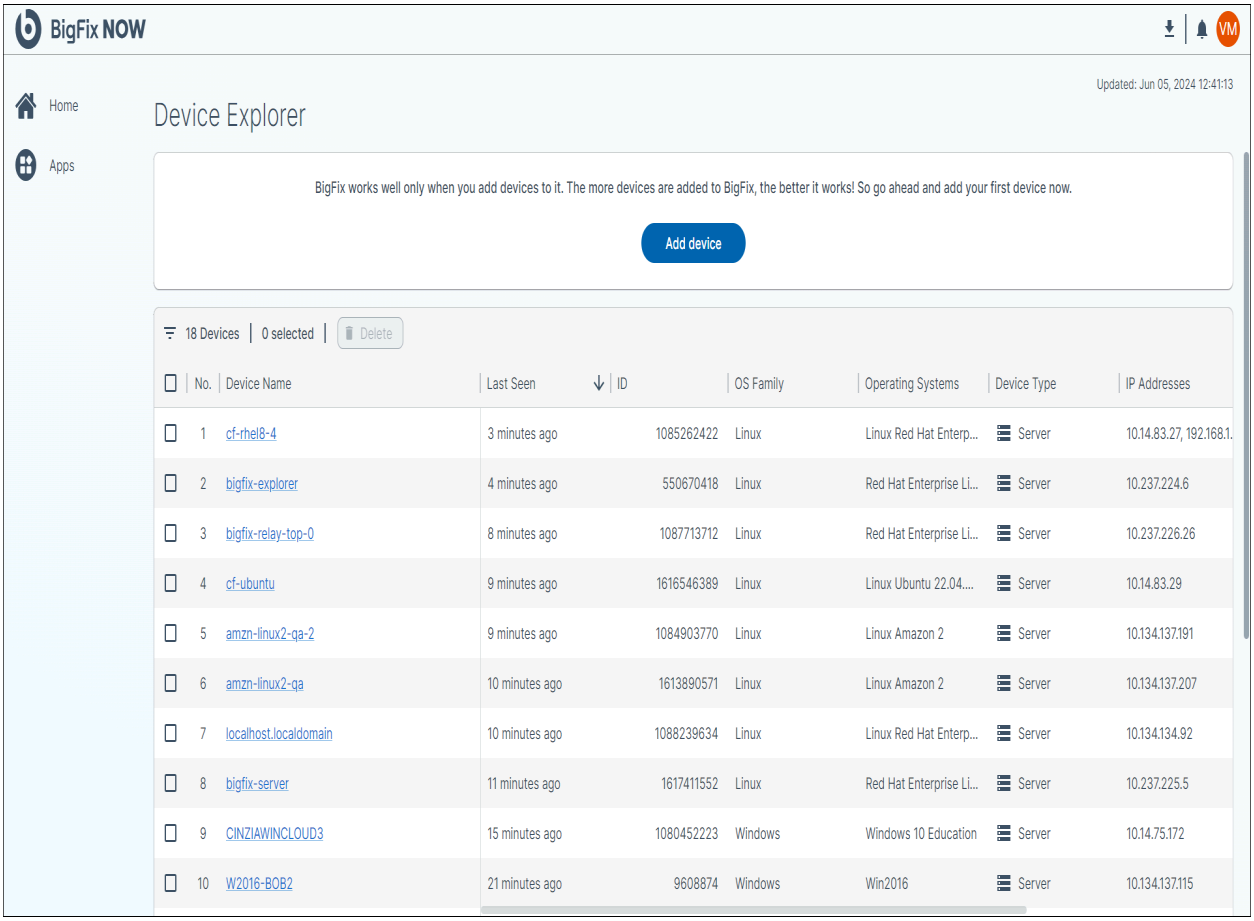
   BigFix currently supports the following operating systems:

   - Windows 10/2016+ (i386)
   - MacOS, 11, 12, 13, 14 (x86_64, arm64)
   - Amazon Linux 2, 2023 (x86_64)
   - RHEL 7, 8, 9 (x86_64)
   - Ubuntu 18, 20, 22 (x86_64)

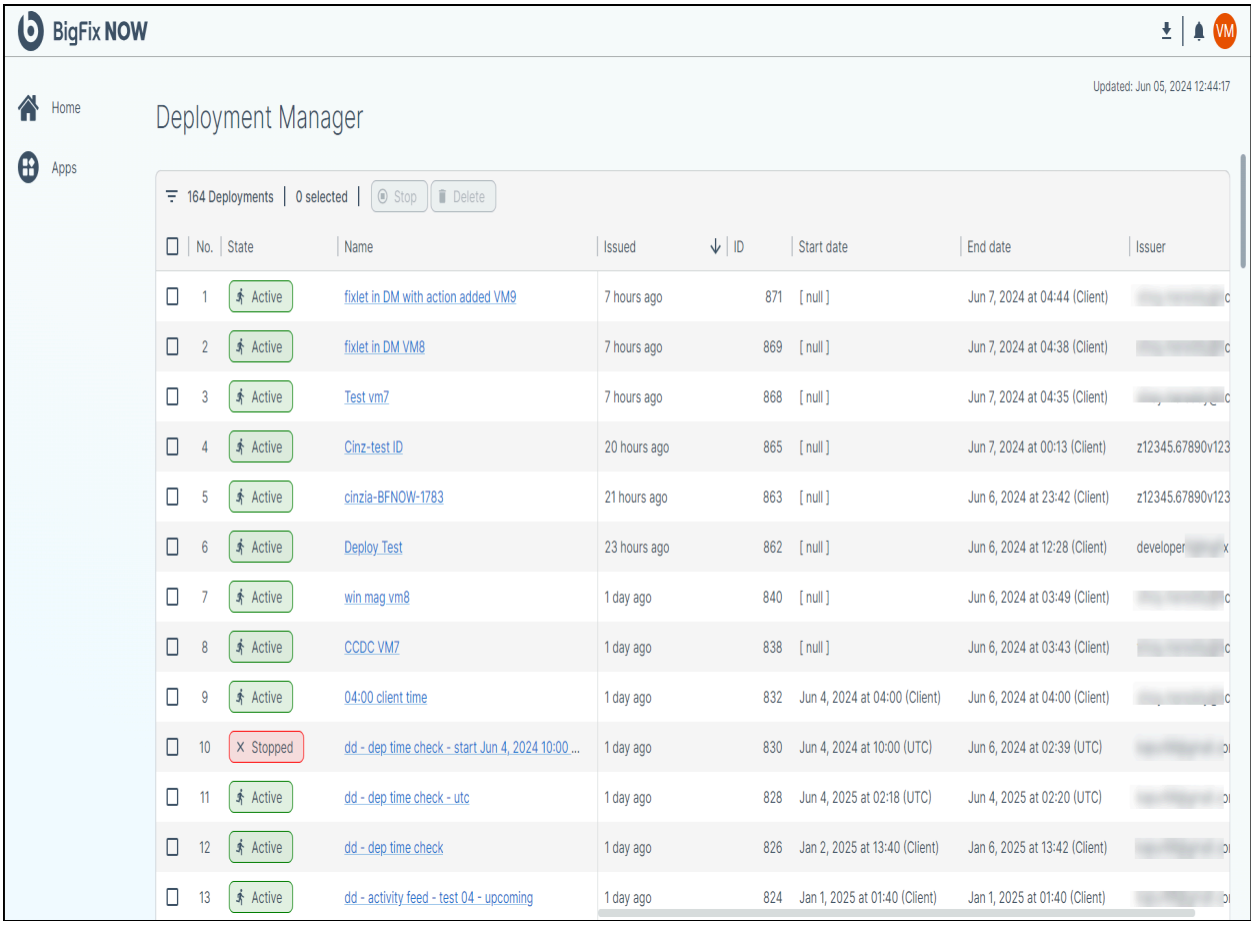
Currently, there is no method to install agents on multiple devices simultaneously; users must install the agent appropriate for that device on each device one by one.

4. Once downloaded, install the agent using standard processes for the device's operating system. To install the agent successfully, users must have admin/root privileges. Follow the steps in the installer until complete.

After the agent is installed on a device, it will automatically report back to the BigFix service. It will be visible in the Device Explorer page. BigFix currently allows users to manage 50,000 devices per deployment. Users can use the filter tool to search among the devices in their deployment. To remove device(s) from a deployment, please check the radio button next to the devices and then click the Delete button. This removes the selected devices from BigFix. If you decide you to re-enroll those devices at a later date, follow the instructions in this section again.



Deployment Manager



BigFix allows users to perform actions on devices included in a BigFix deployment. These actions are called Deployments. The complexity of a deployment can vary significantly. Some deployments may complete in minutes, while others may take days to successfully run on all targeted devices.

The Deployment Manager application allows users to see, manage, and control active and completed deployments. To see active or expired Deployments, click **Depolyment Manager**. This table view allows users to take basic actions on displayed deployments, including stopping and deleting the deployment.

Click the deployment name to drill down to the deployment details page which has extensive details about that deployment's configuration and status.

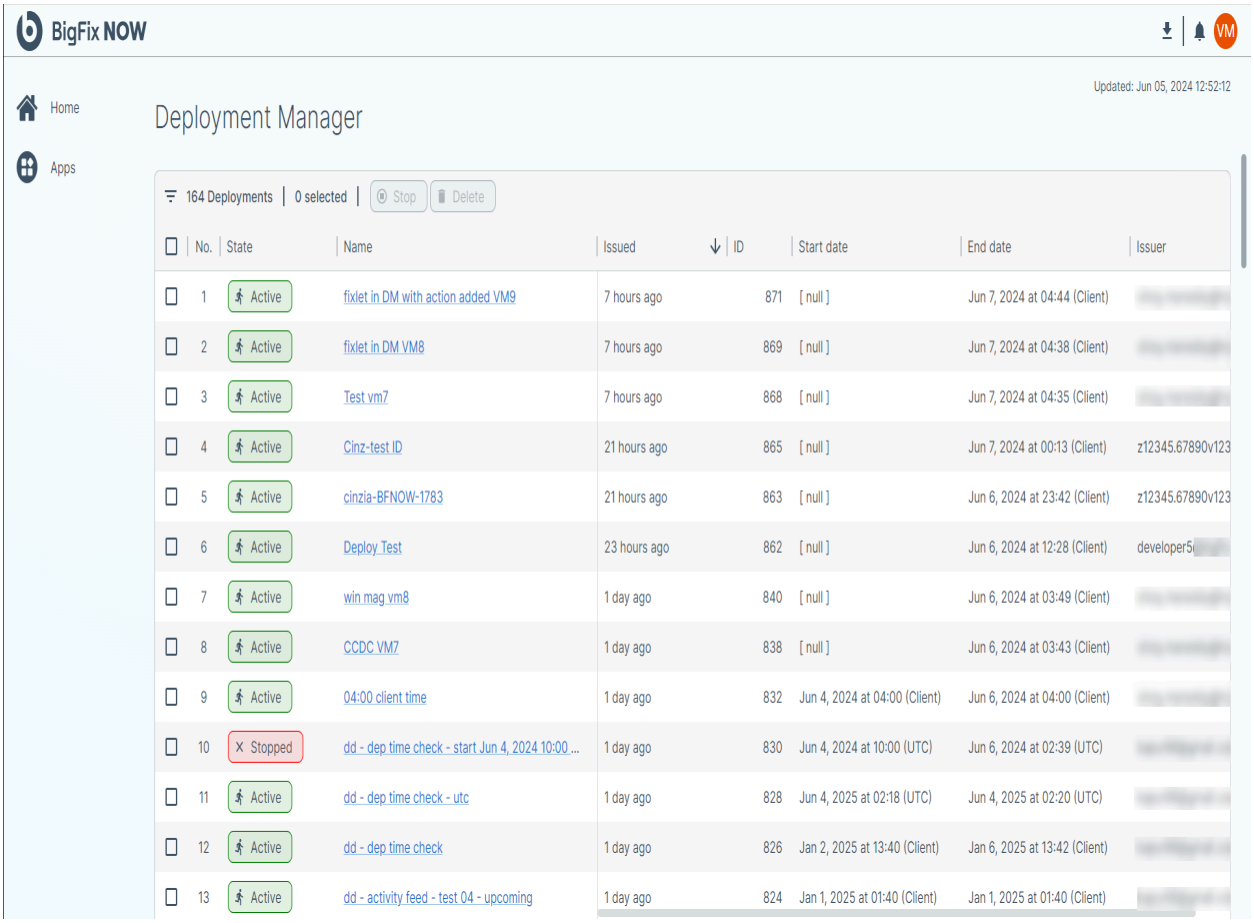
Access the Deployment Manager app through the App menu, on the left side of the homepage.

BigFix to showcases critical information to help leaders to support their business. Each application features a row of key performance indicators (KPIs) at the top, providing a real-time snapshot of the deployment and its status. We designed these KPIs to help users optimize their BigFix experience.

The Deployment Manager app currently has the following KPIs:

- Count of all deployments
- Count of active deployments
- Count of fixlets associated with active and/or scheduled deployments
- Average number of fixlets per active or pending deployments

In the Deployment Manager app, the deployment data table is below the KPIs. All deployments associated with your organization — both active and expired — are displayed in this table.



The deployment data table includes filtering, detail drill down, and deleting deployments.

- Click the **Filter** icon to view the filter panel. Using the filter tool makes it possible to reduce the number of deployments displayed in the data table.
- A count of the total of deployments associated with your account.
- A count of the deployments that the user has selected in the data table. Selecting deployments in the data table is required for actions such as stopping or deleting deployments.
- The **Stop** button stops the selected active deployments.
- The **Delete** button deletes selected deployments from the data table so that they will no longer be displayed. Only Expired deployments may be deleted. To delete an Active deployment, it must first be stopped.

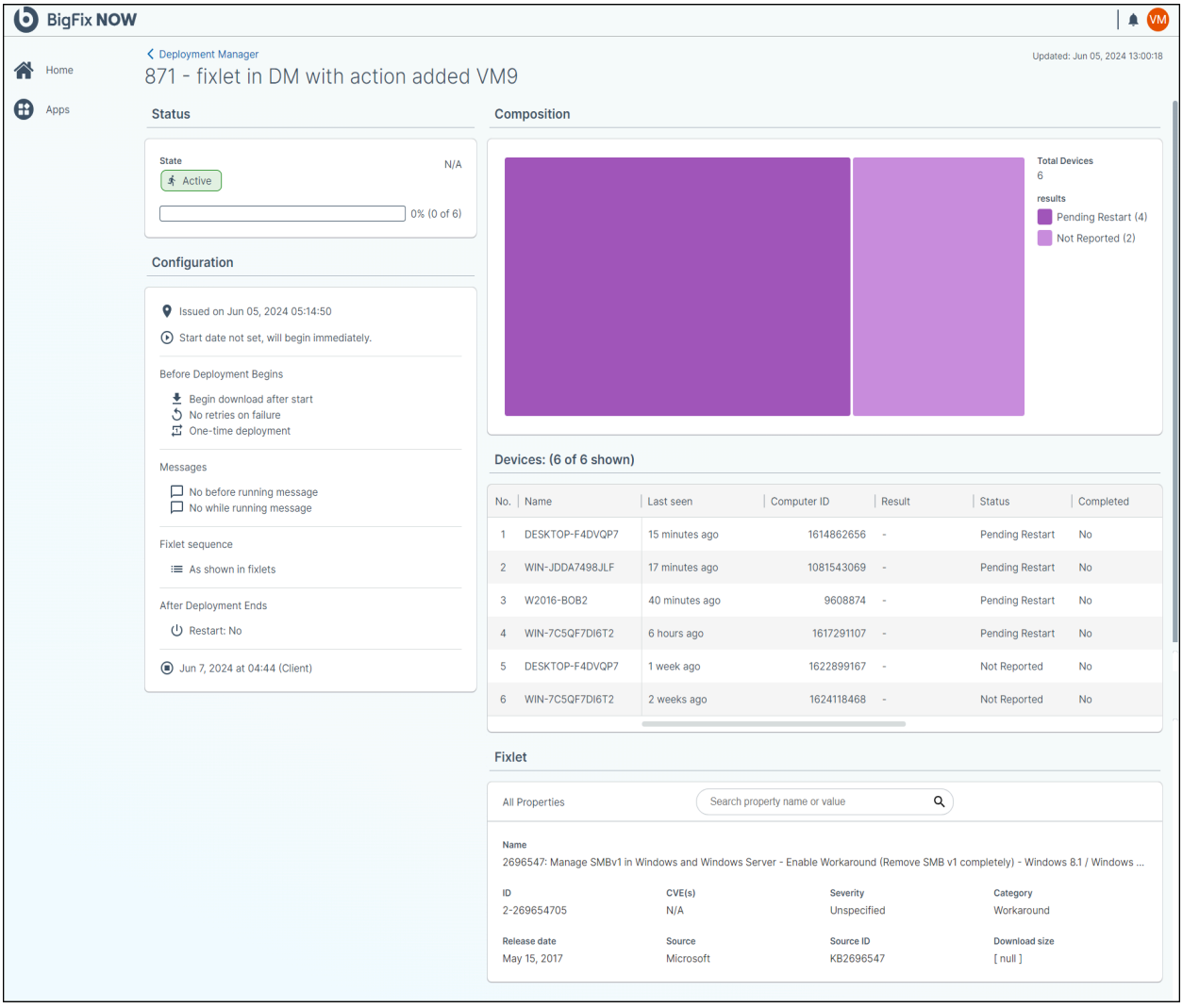
The **Stop** and **Delete** buttons are disabled by default and become selectable only after at least one deployment is chosen in the data table. User permissions, as assigned by administrators, may restrict some users from stopping or deleting deployments.

The data table also supports the sorting of each column. To do so, move your cursor near the column header name and then click. This will sort the data table using the values in that column. Reverse sorting requires clicking again.

The data table provides a comprehensive view of all your deployments. For detailed information on specific deployments, such as relevance code, current status, and other fields, users can access the Deployment Details page. To do this, click on the Name field of the desired deployment.

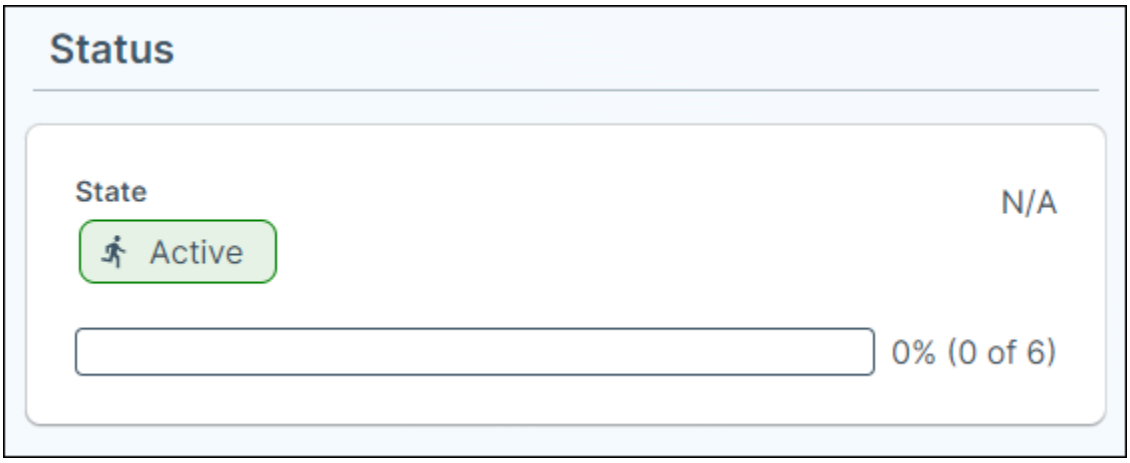
Deployment Details page

The Deployment Details Page provides comprehensive information about a specific deployment. It facilitates tracking deployment status, troubleshooting issues when a deployment fails on a device, and monitoring overall performance.

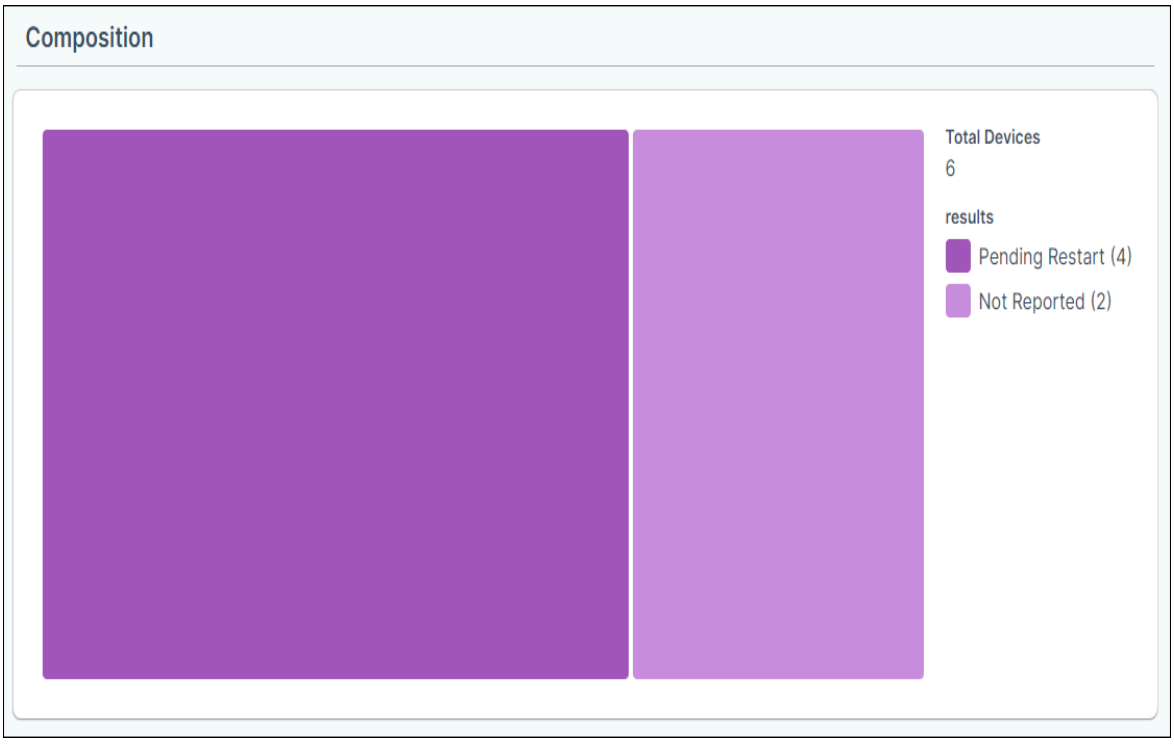


The Deployment Detail page contains various pieces of information displayed in widgets.

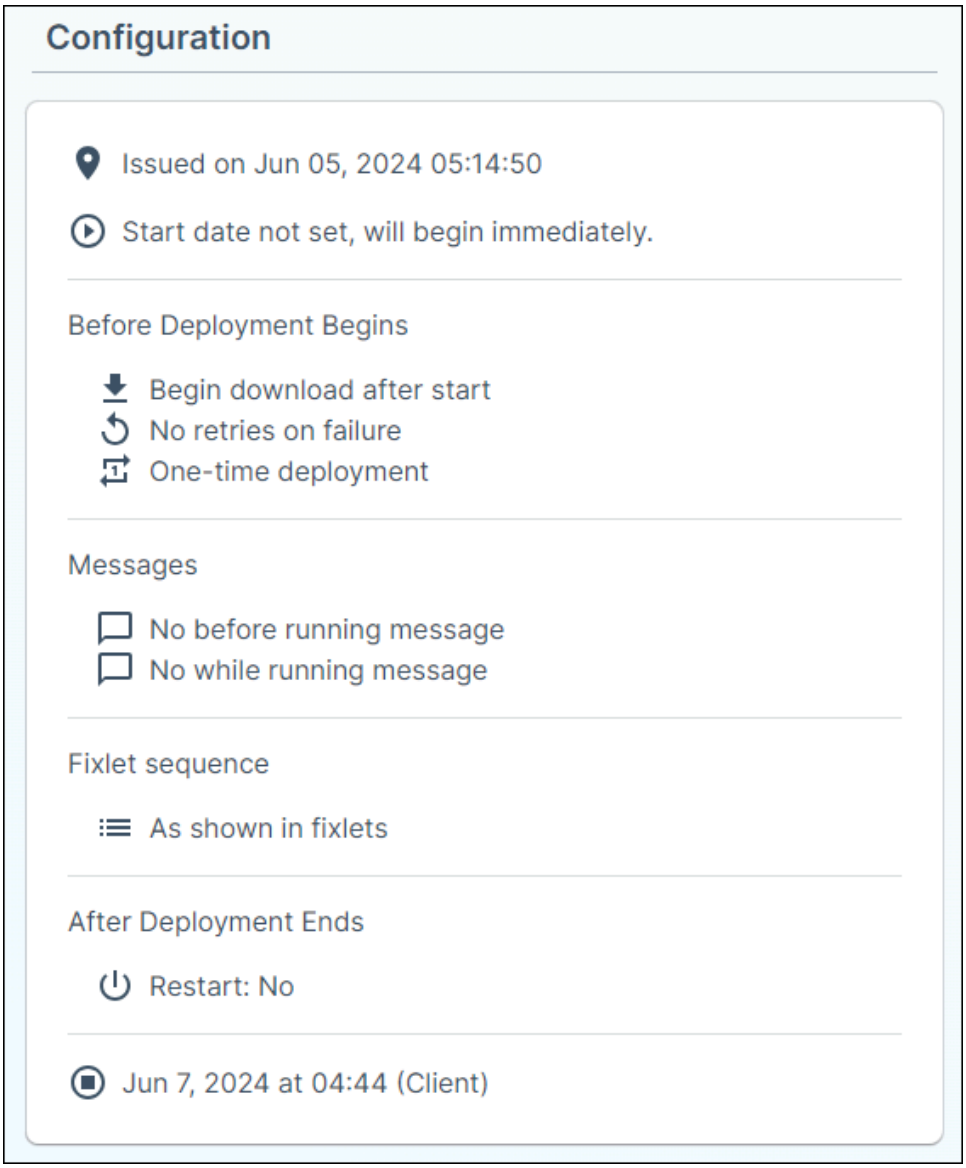
- **Status** - The **Status** widget displays real-time information about the statuses associated with the devices included in the deployment. This includes the deployment's progress and its failure rate. Example statuses include pending restart, complete, and failed.



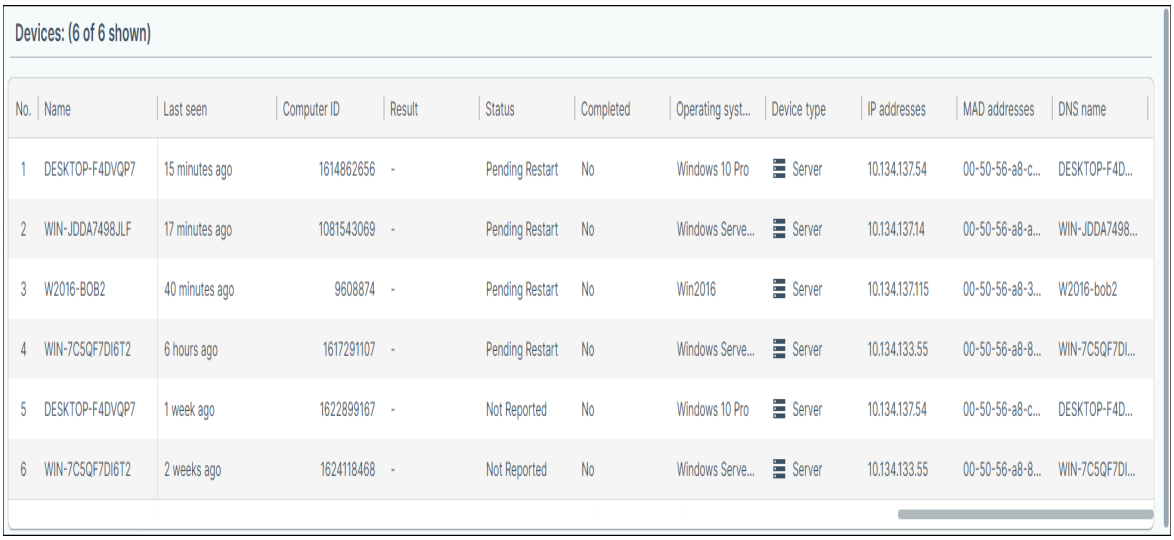
- **Composition** - Beyond the high-level status of completed or failed, a device can have multiple statuses. Examples include pending restart, waiting to download, etc. The **Composition** widget shows a treemap of all of the statuses for devices included within the deployment whose details are being displayed. This information is especially useful to troubleshoot issues.



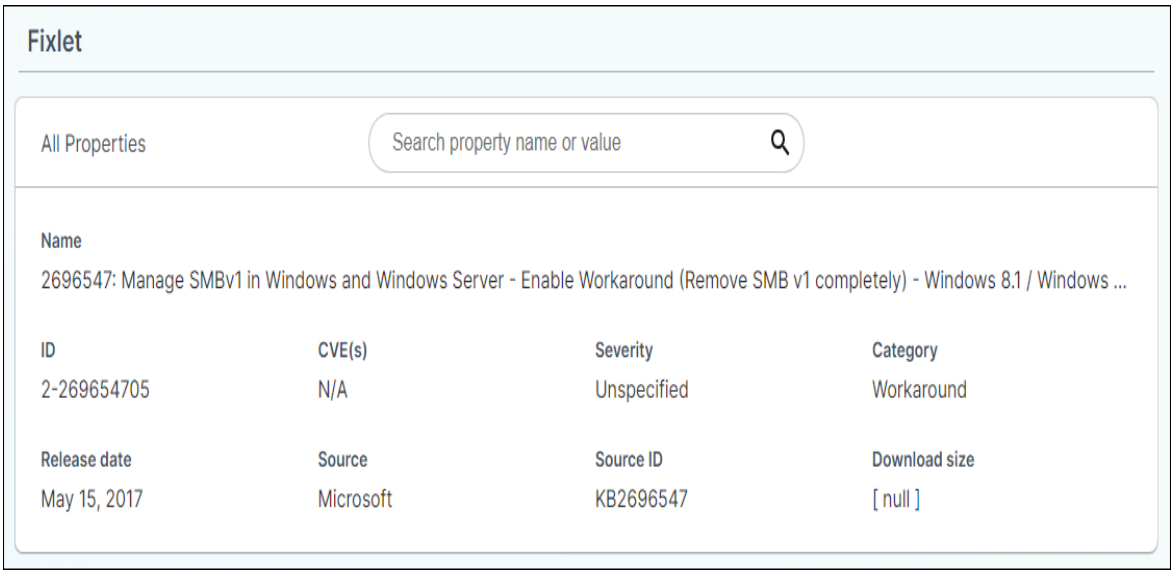
- **Configuration** - The **Configuration** widget summarizes how users configured the initial deployment. At a single glance, this shows all the customizable parameters such as start time, end time, and pre- and post-actions.



- **Device** - The **Device** widget shows a subset of all of the devices that are part of the selected deployment. Users can see the full list of devices by clicking **Show All**.



- **Fixlets** - The **Fixlet** widget lists a subset of all fixlets that were included in the selected deployment. To see the full list of Fixlets, click **Show All**.



Device Explorer

The Device Explorer app shows all of the devices connected to your BigFix account. BigFix currently supports adding up to 50,000 devices. The Device Explorer app presents these devices in a tabular format and allows detailed exploration of specific devices.

The data table contains multiple fields that empower users to see and explore all of the devices associated with their account. Note that a device will not appear in the Device Explorer table unless the BigFix agent is installed.

The data table contains the following information:

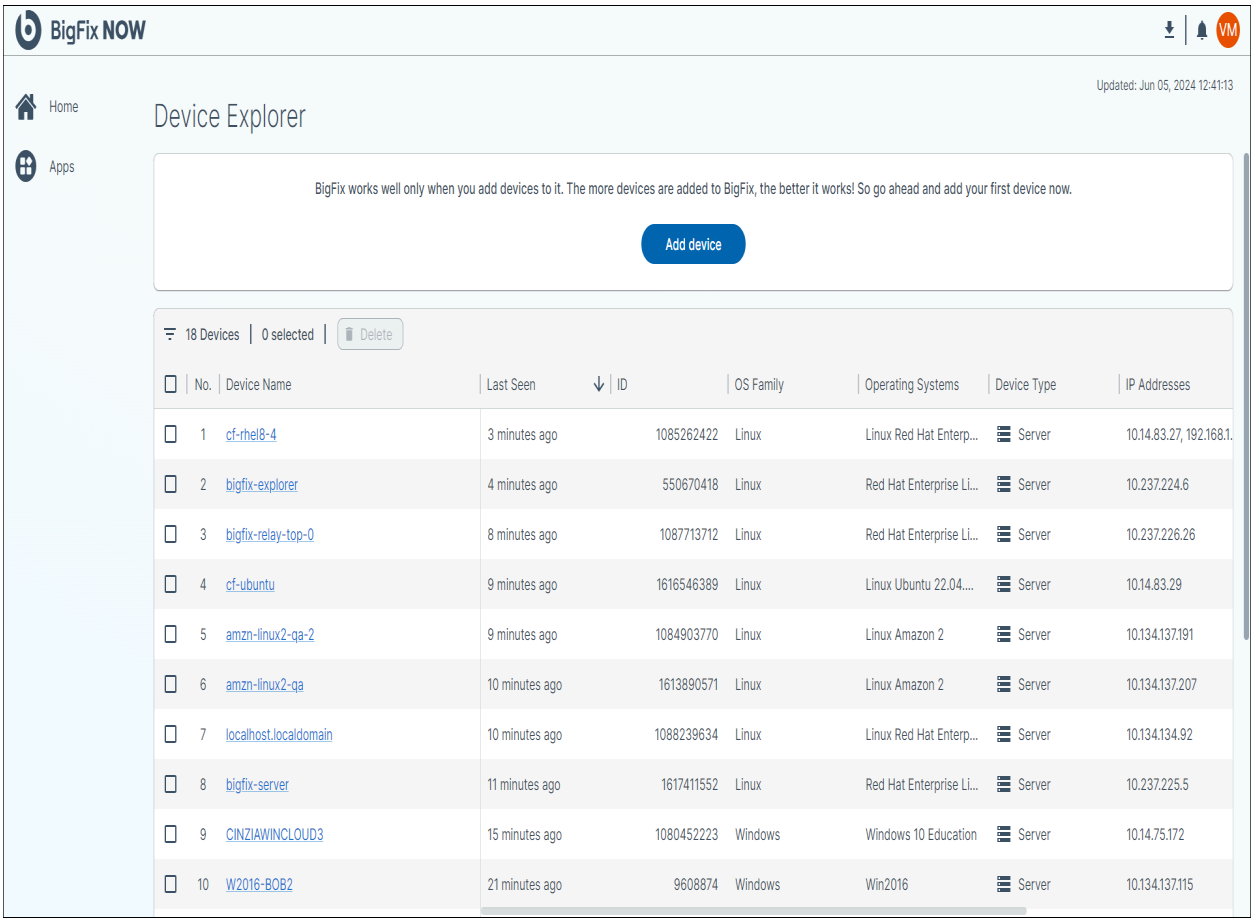
- Device Number - This is a BigFix-assigned value that represents the sequence in which the device was added to a user's BigFix account.
- Device Name - The local name of the device.
- Date and Time Device Last Seen - The time the device's agent was last able to connect to the BigFix service.
- Device ID - A unique identifier for the device.
- Device OS Family - The operating system running on the device, for example, Mac OS or Red Hat Linux.
- Operating System Installed on the Device - The specific version of the operating system installed on the device.
- Device Type - This indicates the type of device, such as a computer or server.
- Device IP Address - The IP address from which the device last connected to the BigFix service.

Based upon extensive user feedback, Device Explorer shows 100 devices and does not support pagination. This prevents users from endlessly scrolling through all the devices associated with their account.

BigFix customers, , can have thousands of devices associated with their account. The design focuses on filtering to enable customers to explore and select devices associated with their account.

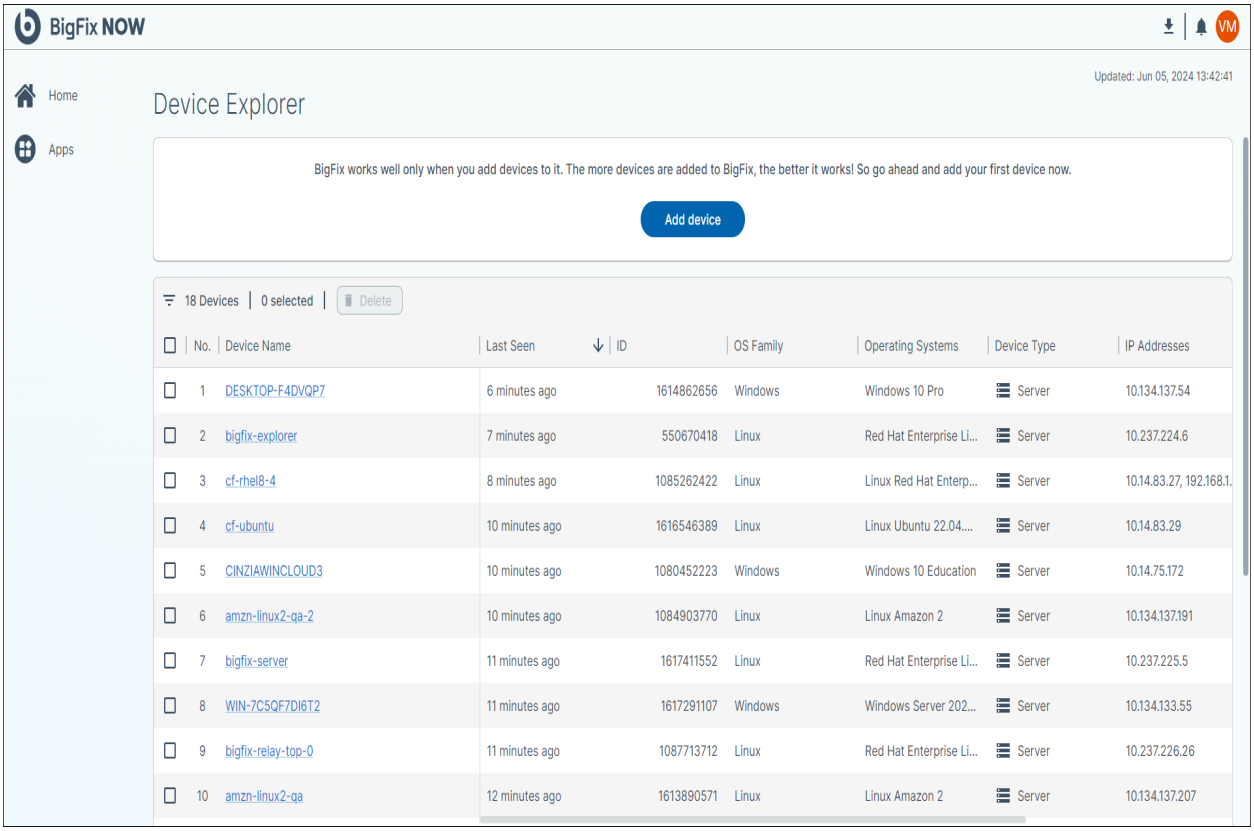
To access the filter in the Device Explorer app, click the **Filter** button at the top left of the device table list. The filter panel will slide out from the right side of the screen. Various device properties, such as device name, operating system, and IP address, can be used to filter.

Once a device is deleted from Device Explorer, it will no longer send or receive data from BigFix. To resume using BigFix on that device, the BigFix agent must be reinstalled.



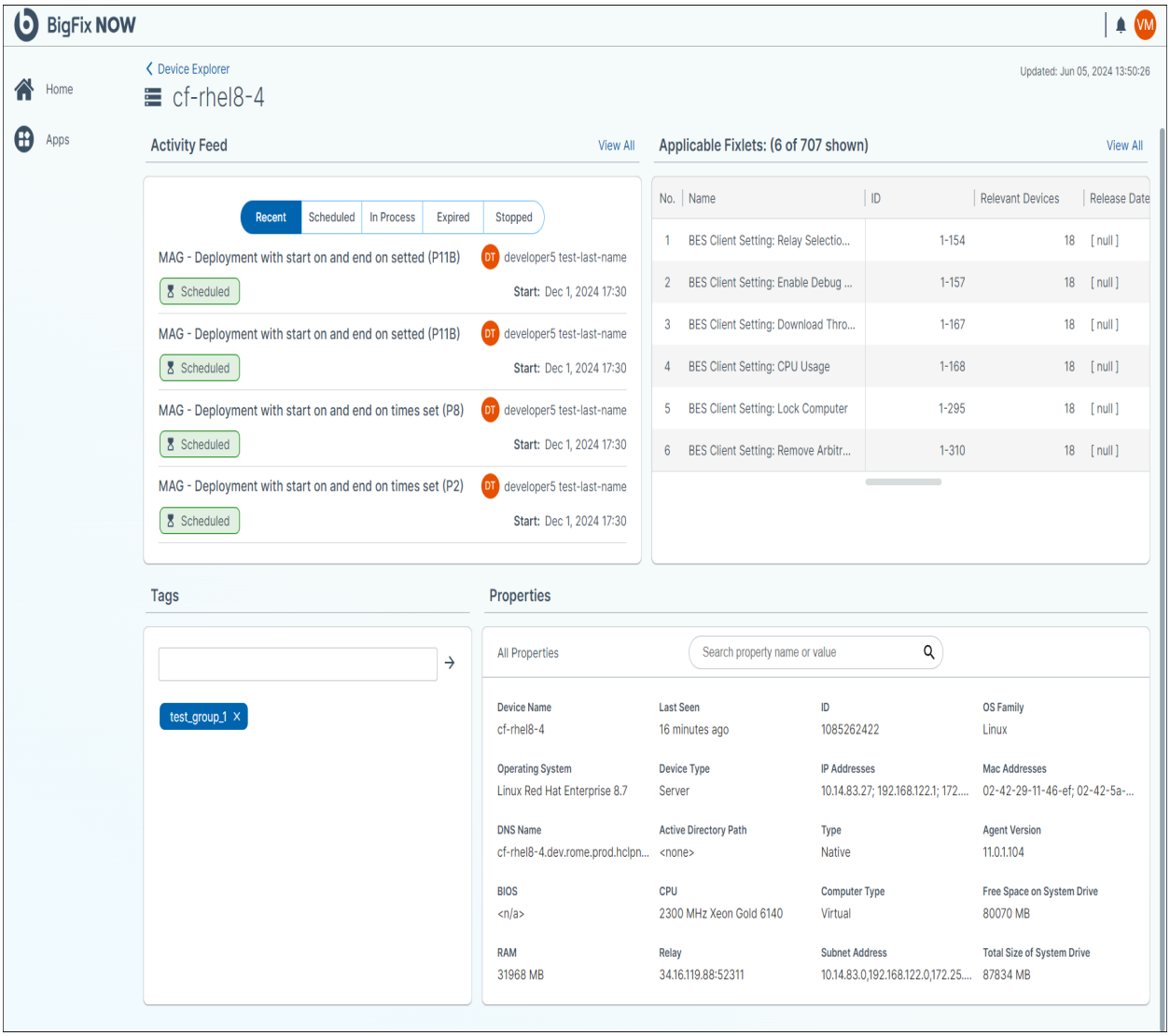
Clicking on a specific device in the data table takes users to the Device Details page which has extensive information about the selected device.

Device Details page



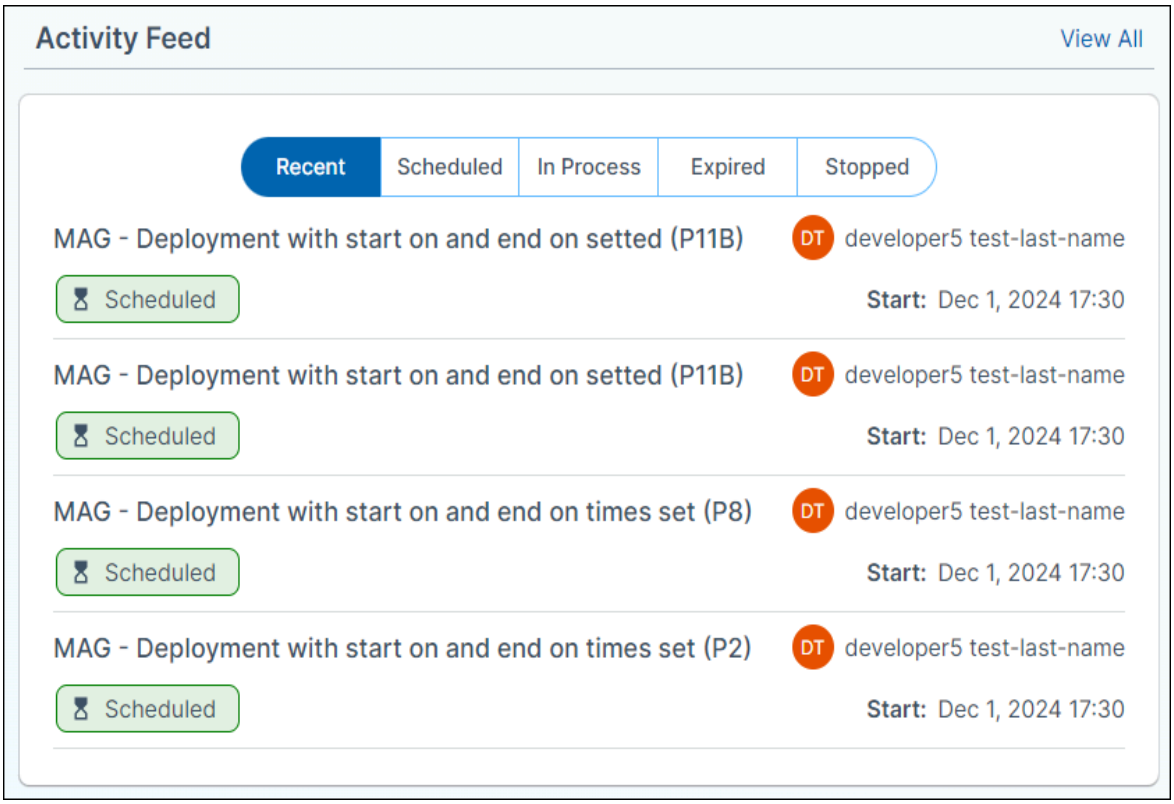
The Device Details Page provides detailed information about a device enrolled in a BigFix account. These details are especially useful for troubleshooting issues on specific devices by showing the device's location and its attributes.

To access the Device Details page, click on the name of a device in the data table on the Device Explorer page. Once loaded, the Device Details page displays several widgets that show properties unique to the selected device.

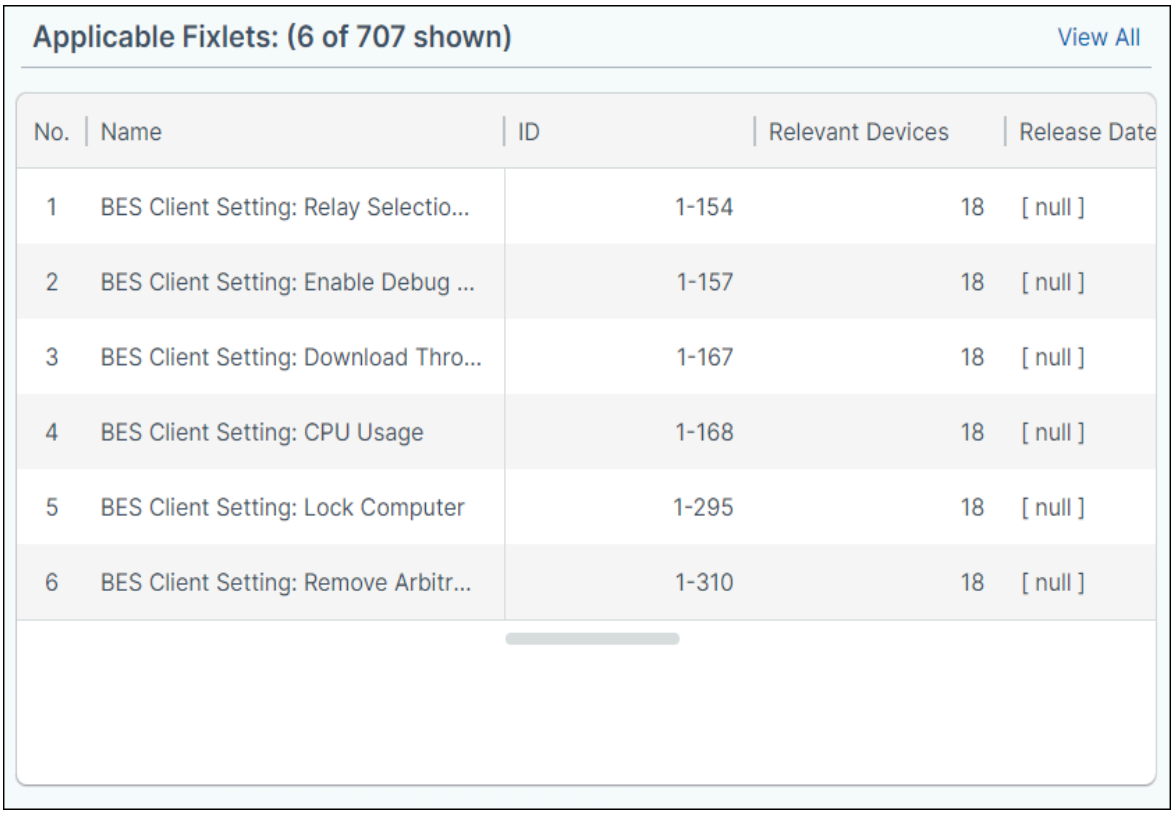


From the top left, the Device Explorer page displays the following widgets:

- Activity Feed - This widget shows a chronological list of every BigFix action that has been performed on the device.



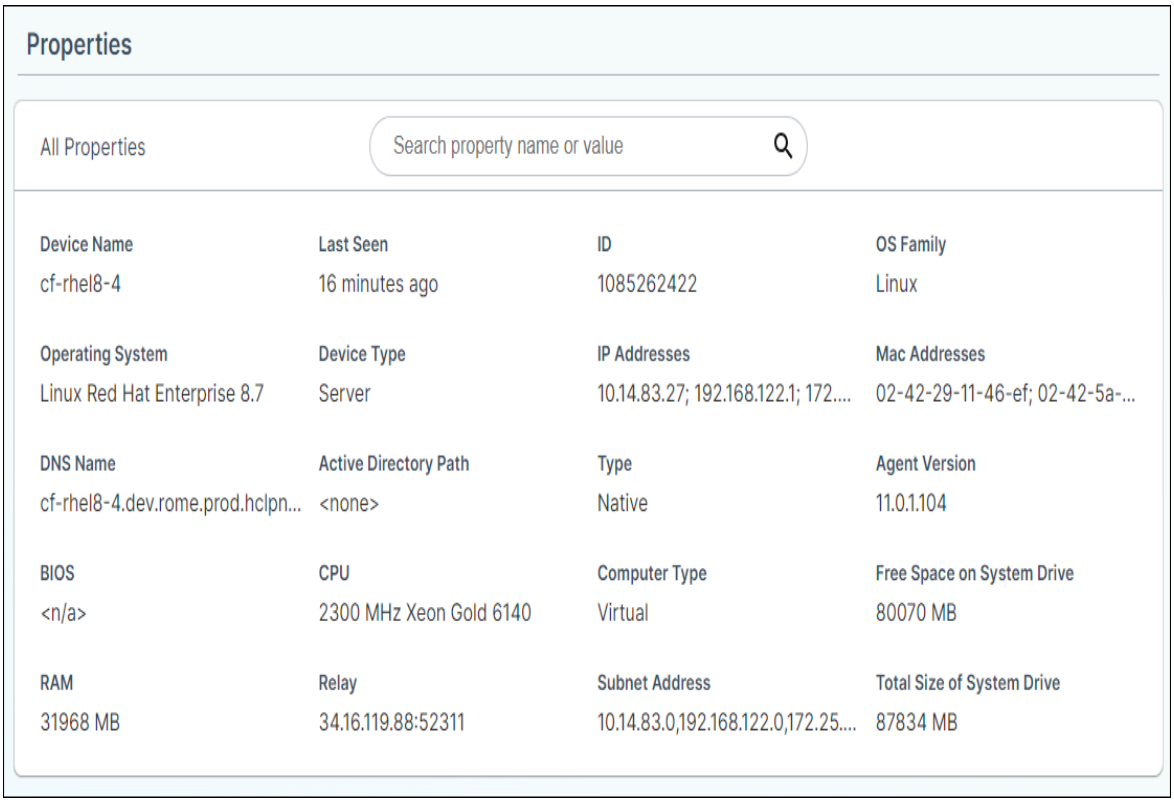
- Applicable Fixlets - This widget shows all of the fixlets that are relevant to the specific device.



Applicable Fixlets: (6 of 707 shown) View All

No.	Name	ID	Relevant Devices	Release Date
1	BES Client Setting: Relay Selectio...	1-154	18	[null]
2	BES Client Setting: Enable Debug ...	1-157	18	[null]
3	BES Client Setting: Download Thro...	1-167	18	[null]
4	BES Client Setting: CPU Usage	1-168	18	[null]
5	BES Client Setting: Lock Computer	1-295	18	[null]
6	BES Client Setting: Remove Arbitr...	1-310	18	[null]

- Device Properties - This widget is available at the bottom of the page and displays properties of the device such as its operating system, MAC address, and device type. These properties cannot be edited by users.

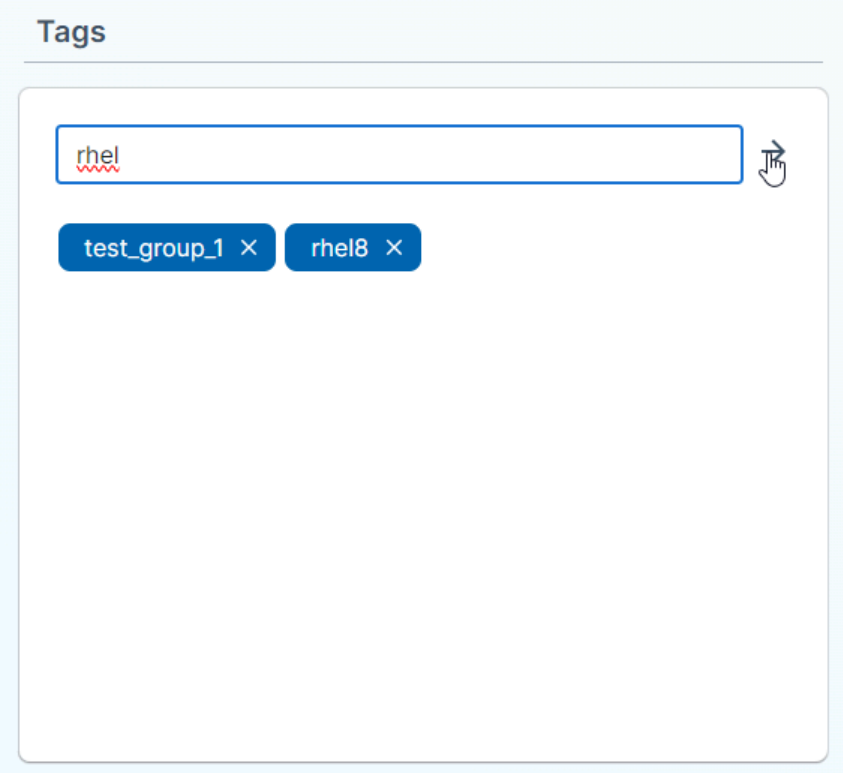


Properties

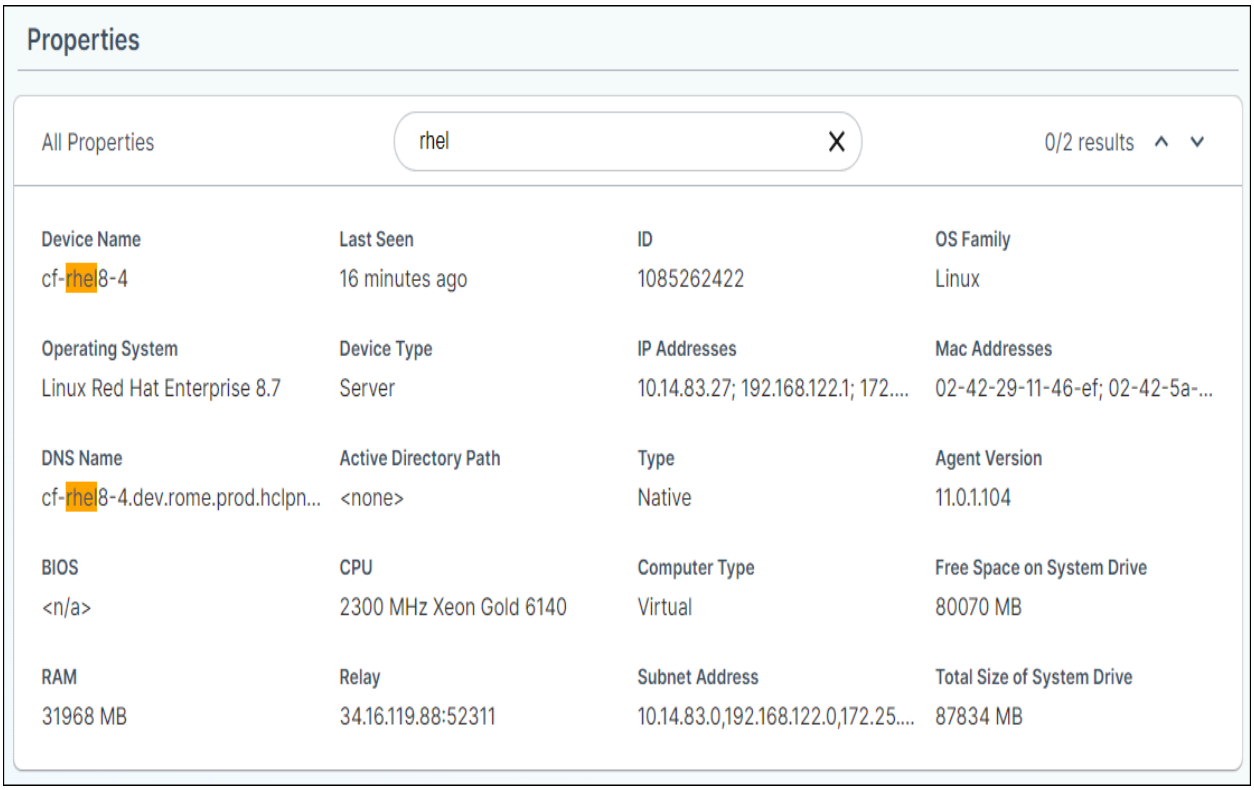
All Properties Search property name or value

Device Name cf-rhel8-4	Last Seen 16 minutes ago	ID 1085262422	OS Family Linux
Operating System Linux Red Hat Enterprise 8.7	Device Type Server	IP Addresses 10.14.83.27; 192.168.122.1; 172....	Mac Addresses 02-42-29-11-46-ef; 02-42-5a-...
DNS Name cf-rhel8-4.dev.rome.prod.hclpn...	Active Directory Path <none>	Type Native	Agent Version 11.0.1.104
BIOS <n/a>	CPU 2300 MHz Xeon Gold 6140	Computer Type Virtual	Free Space on System Drive 80070 MB
RAM 31968 MB	Relay 34.16.119.88:52311	Subnet Address 10.14.83.0,192.168.122.0,172.25....	Total Size of System Drive 87834 MB

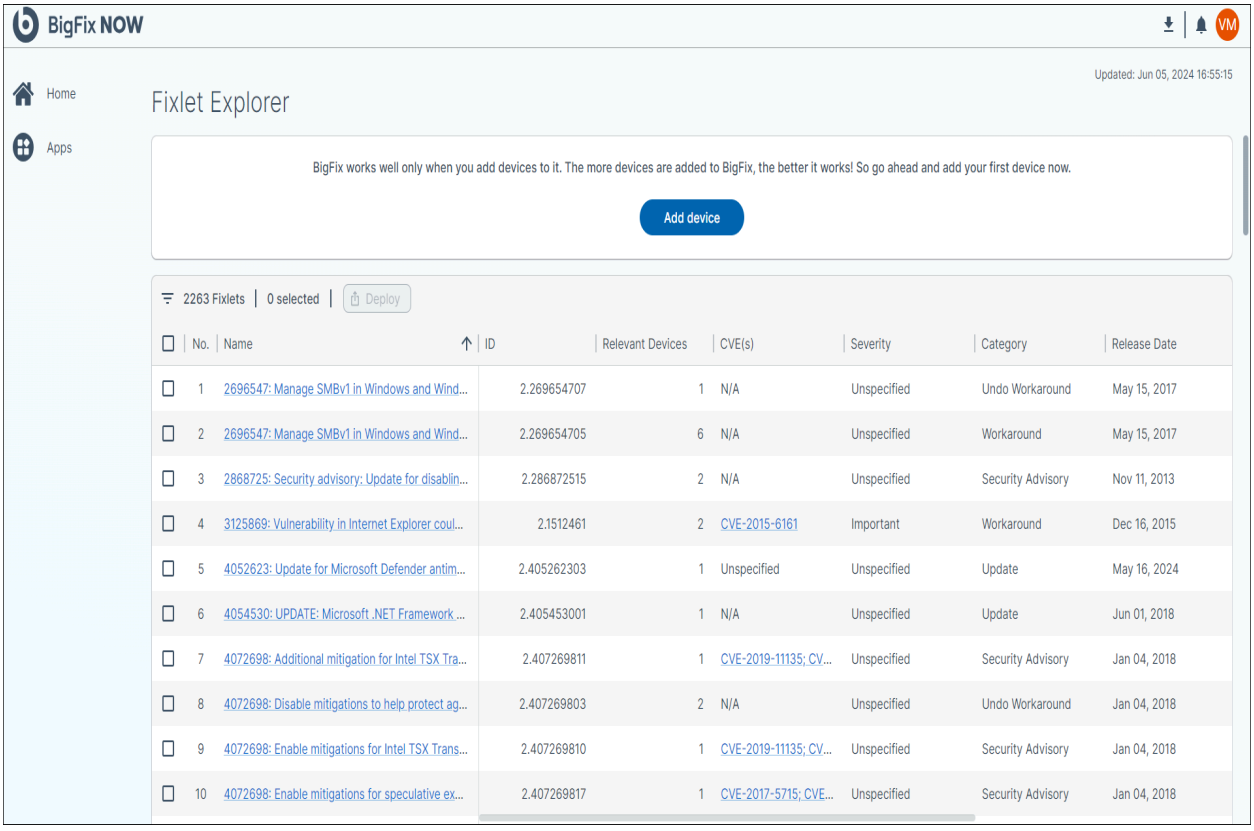
- Tags - This widget is used for viewing existing tags associated with a particular device or you can create one by typing the tag name and pressing enter (or clicking the "arrow" icon).



Search and highlight specific property fields in the **Properties** widget using its search feature.



Fixlet Explorer

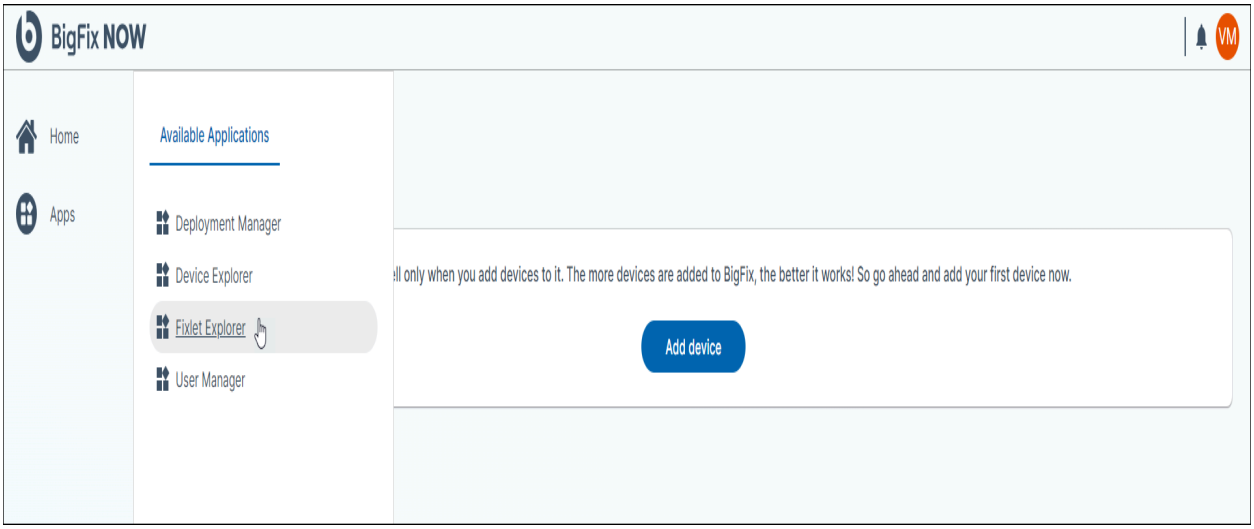


BigFix's data/content is based upon fixlets. A fixlet is a set of instructions that the BigFix agent executes on an enrolled or on boarded device. Examples include updating installed software, remediating particular CVEs, or removing malware. These are only a very small sample of BigFix's capabilities. BigFix customers benefit from end-to-end security, protection, monitoring, and management delivered through this out of the box content.

Fixlets are lines of code that contain instructions to perform a set of actions on relevant devices. A fixlet will also define what those actions are and specify the criteria that determine whether those actions are relevant for a specific device.

After installation, BigFix agents continuously evaluate the relevance criteria on the enrolled device. It then determines whether a fixlet is relevant to that device, e.g., whether it is relevant or not.

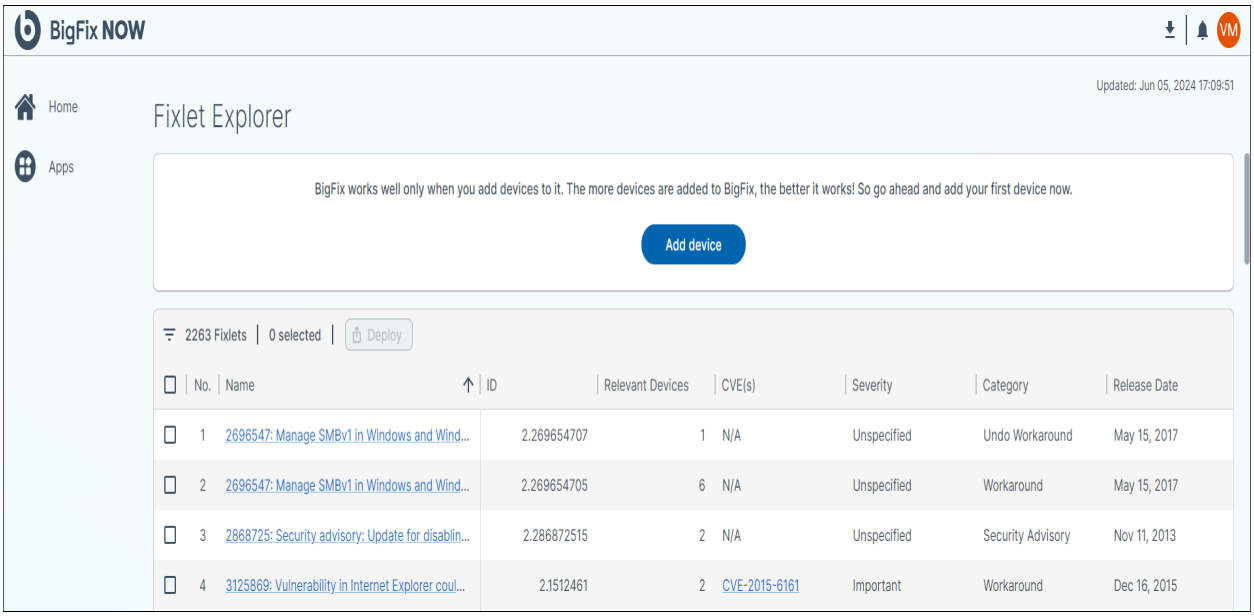
To access the Fixlet Explorer app, click on Fixlet Explorer from the Application sidebar.



The first widget on the page is the "Add device" widget previously described.

When accessing the Fixlet Explorer application, a data table with 100 fixlets is displayed. Based on extensive user feedback, Fixlet Explorer shows only 100 fixlets and does not support pagination or endless scrolling.

There can be thousands of fixlets relevant to the devices associated with an account. The design focuses on filtering to enable customers to explore the fixlets relevant to their account and specific associated devices.



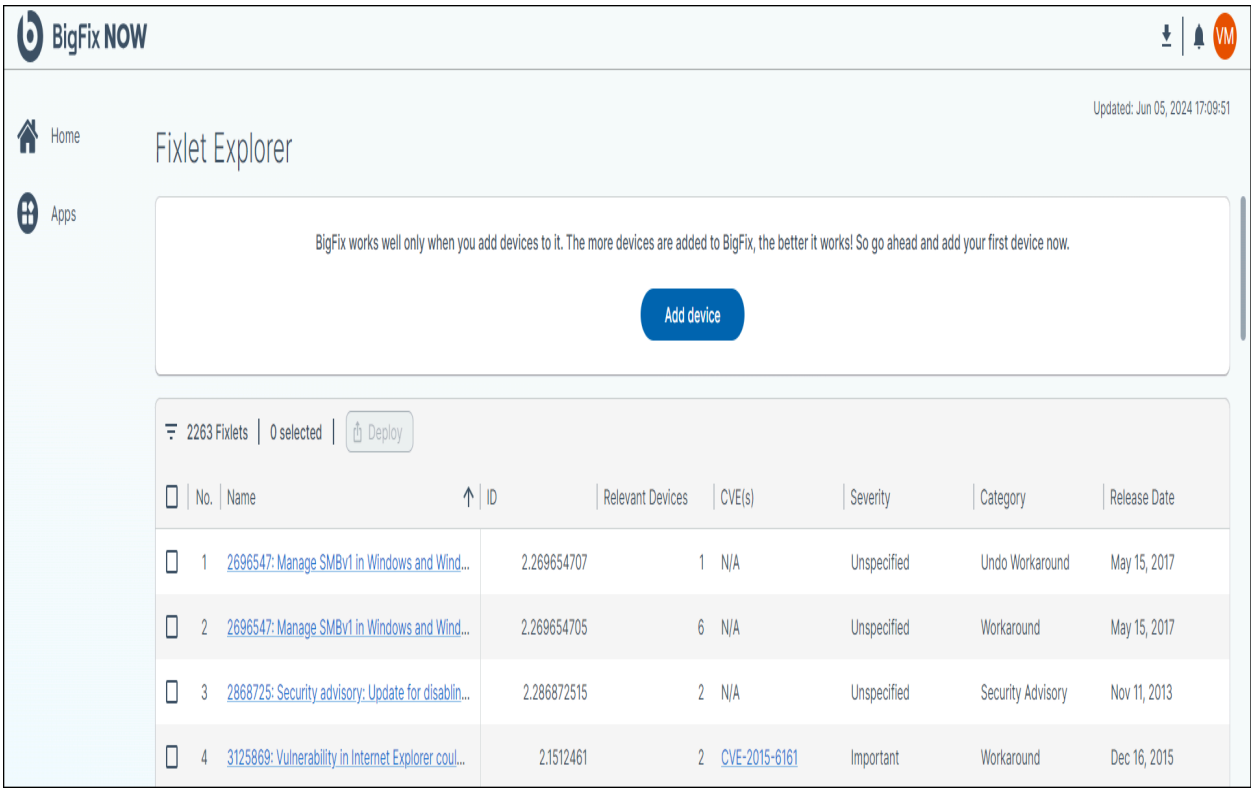
The Fixlet Explorer data table contains multiple columns. From left to right:

- The **Filter** icon brings up the filter sidebar. In this sidebar, users can narrow down the displayed fixlets using a variety of parameters.

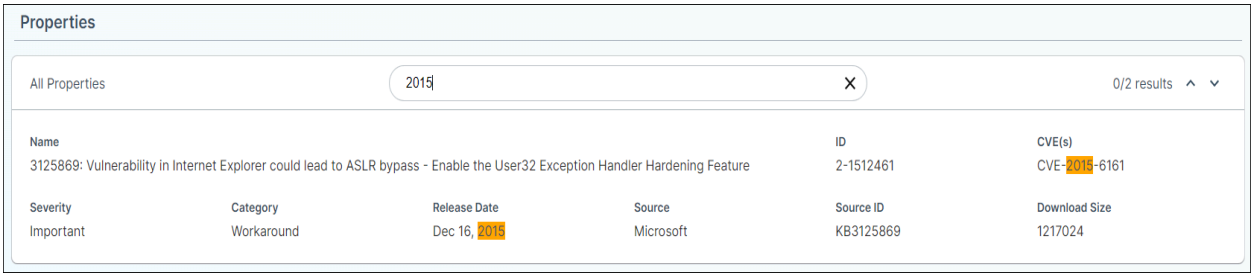
- The total number of fixlets relevant to the devices enrolled in your account
- The number of fixlets that have been selected in the data table. The **Deploy** button brings up the deployment menu, which enables users to turn fixlets into deployments that will be run on relevant devices. Users must select fixlets by clicking the radio button next to the fixlet name in order to access the deployment menu.

By default, the Deploy button is disabled and can only be clicked when at least one fixlet is selected in the data table. For users whose local administrators have not granted deployment rights, the Deploy button may remain permanently disabled.

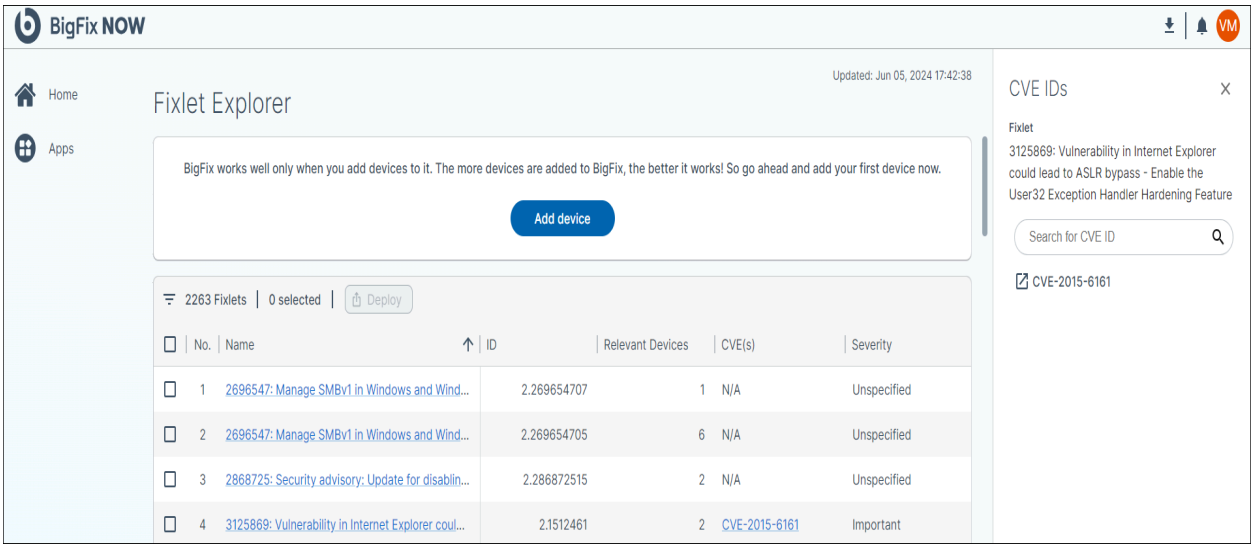
The Fixlet Explorer data table supports sorting by each column. To sort, move the cursor near the column header name and click. Clicking again will reverse the sorting order.



The Fixlet Data table only shows a summary of the fixlet. Click on the fixlet name to bring up a more focused Fixlet Explorer page for that fixlet, which contains additional details about the fixlet.



To learn more about the CVE(s) associated with a fixlet, click on the blue highlighted CVE number in the CVE column. This action will cause the CVE panel to slide out from the right side of the screen, providing additional information about the CVE.



The Fixlet Explorer data table contains the following fields:

- No - A number out of one hundred. This helps the user navigate around the 100 fixlets displayed in the table prior to filtering.
- Name - The unique name for the fixlet.
- ID - The identity number associated with the fixlet.
- Relevant Devices - A count of the number of devices for which this specific fixlet is relevant in a user's account. Fixlets that are relevant to zero devices will not be displayed in the Fixlet Explorer data table.
- CVE(s) - A list of the relevant CVE(s) addressed by this particular fixlet.
- Severity - A measure of the severity of the issue(s) addressed by this fixlet.
- Category - A high-level summary of the type of action taken by the fixlet.
- Release Date - The date this fixlet was published by BigFix.
- Source - The author of the fixlet's content.
- Source ID - A unique ID associated with the fixlet's source.
- Download Size - The size of the fixlet that will be downloaded onto each device.

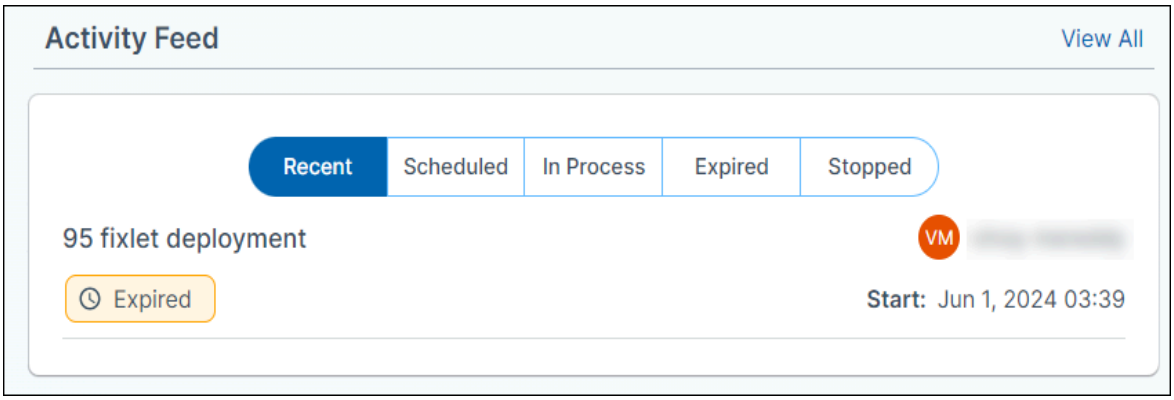
The Fixler Explorer data table also supports sorting by each column. To do so, move your cursor near the column header name and click. This will sort the data table using the values in that column. Reverse sorting requires clicking again.

Fixlet Details page

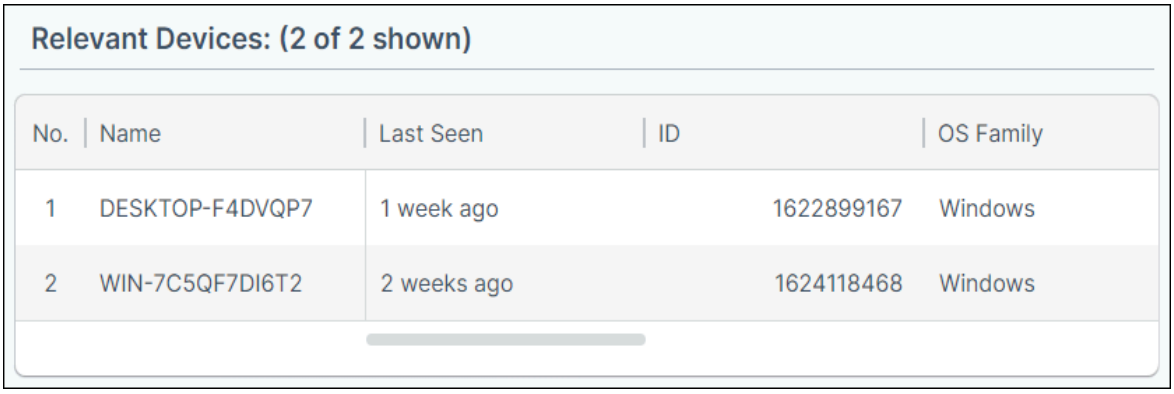
The Fixlet Details page allows to drill down into specific information about a fixlet. These details can be especially useful when evaluating whether to deploy a particular fixlet, explore the specific relevance script, or understand more about the fixlet's origins.

To access the Fixlet Details page, click on the name of a fixlet in the data table. Once loaded, the Fixlet Details page has several widgets that display properties that are unique to the selected device.

- Activity Feed - This widget shows a chronological list of every deployment in which this fixlet has been included.

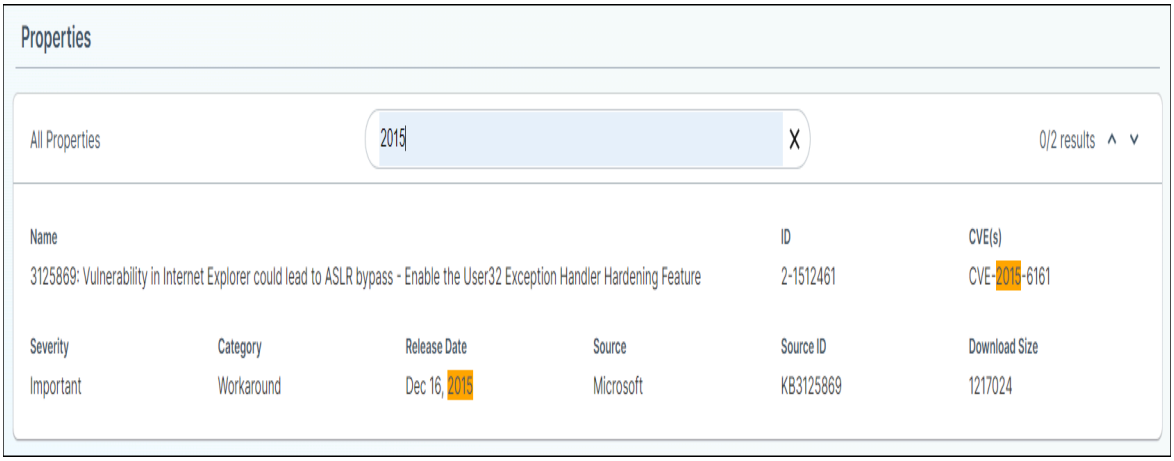


- Relevant Devices - This widget shows a selection of six device(s) for which this fixlet is relevant. As a given fixlet may be relevant to many more than six devices, clicking on View All will bring up a separate table that presents all of the devices for which the fixlet is relevant. This widget also displays information about the relevant devices, including their names, dates last seen, IDs, OS family, operating systems, device types, associated IP addresses, DNS name, and associated MAC addresses.

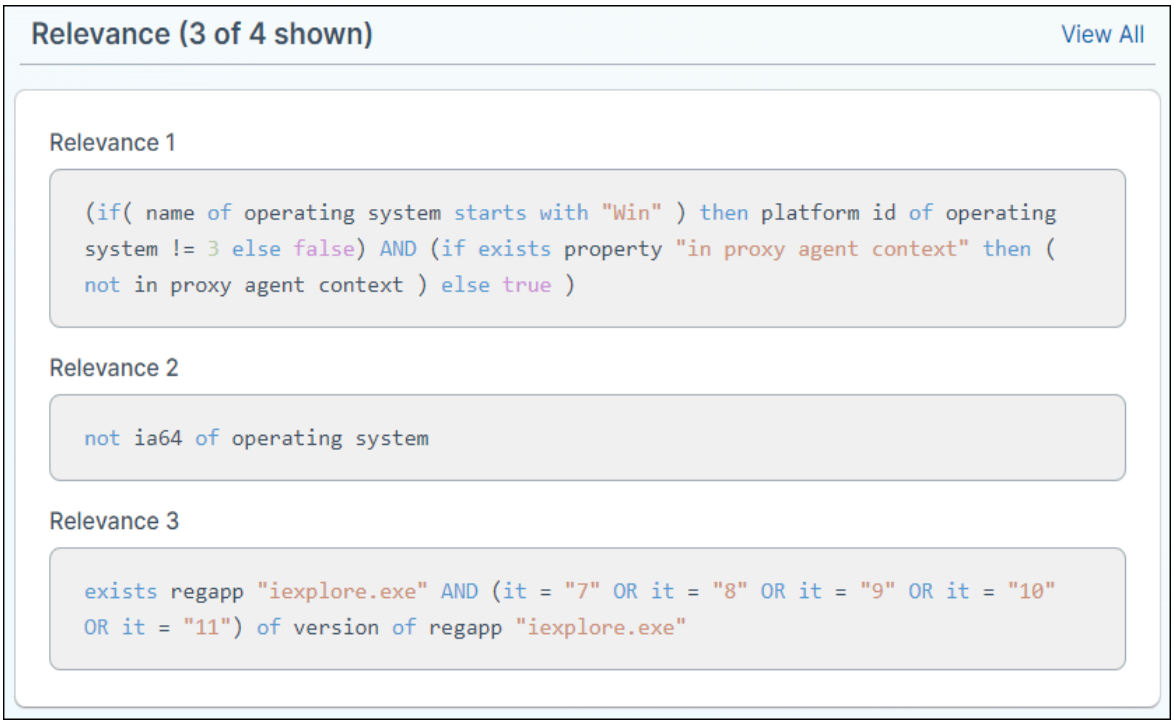


- Fixlet Properties - The Fixlet Properties widget is located in the center of the page. The Fixlet Properties widget displays properties associated with the fixlet, such as its severity, its author, and its release date.

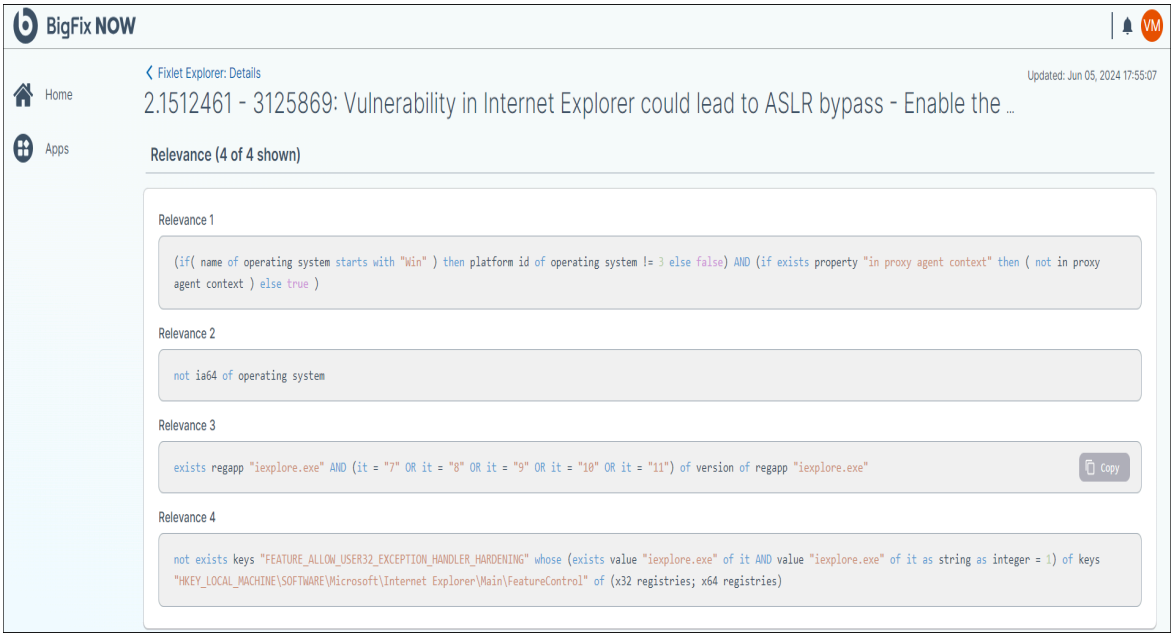
  Users can also search and highlight specific fields using the search feature included in the widget.



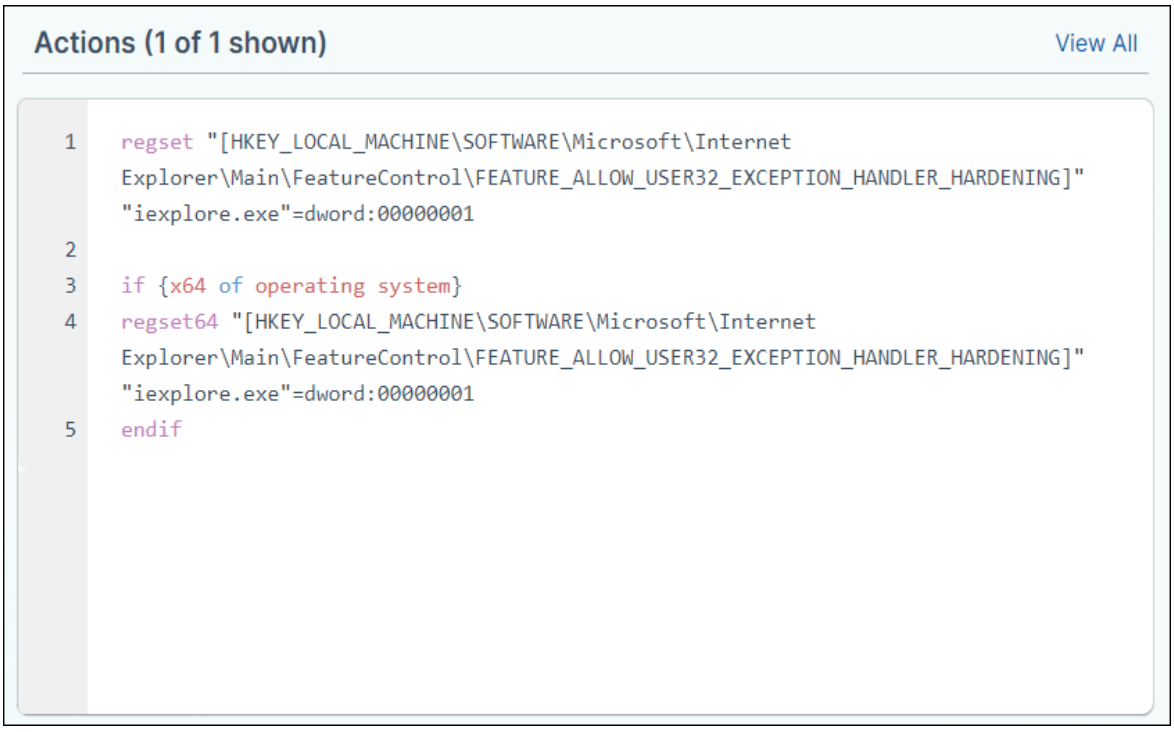
- Relevance - Relevance is a scripting language used by BigFix to create fixlets. While it is not required to learn Relevance, understanding the relevance definitions and the criteria that the fixlet satisfies can be beneficial. Users can click **View All** in the widget's header to see the full Relevance query.



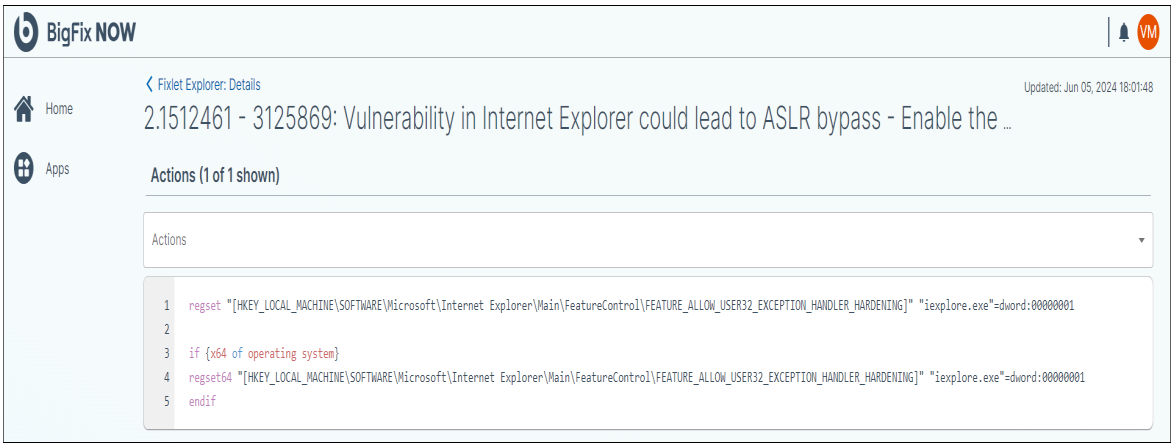
This widget presents the fixlet relevance code, allowing comprehension of the relevance definitions and criteria fulfilled by the fixlet. Clicking **View All** in this widget displays the entire relevant statement for the selected fixlet.



- Actions - This widget displays the actions that the selected fixlet will execute when it is run on targeted, relevance devices. These actions are the actual commands that are run on the devices.



click **View All** in the widget's header to see the full Relevance query. As some fixlets contain multiple actions, these can be seen by selecting the Action drop down menu.



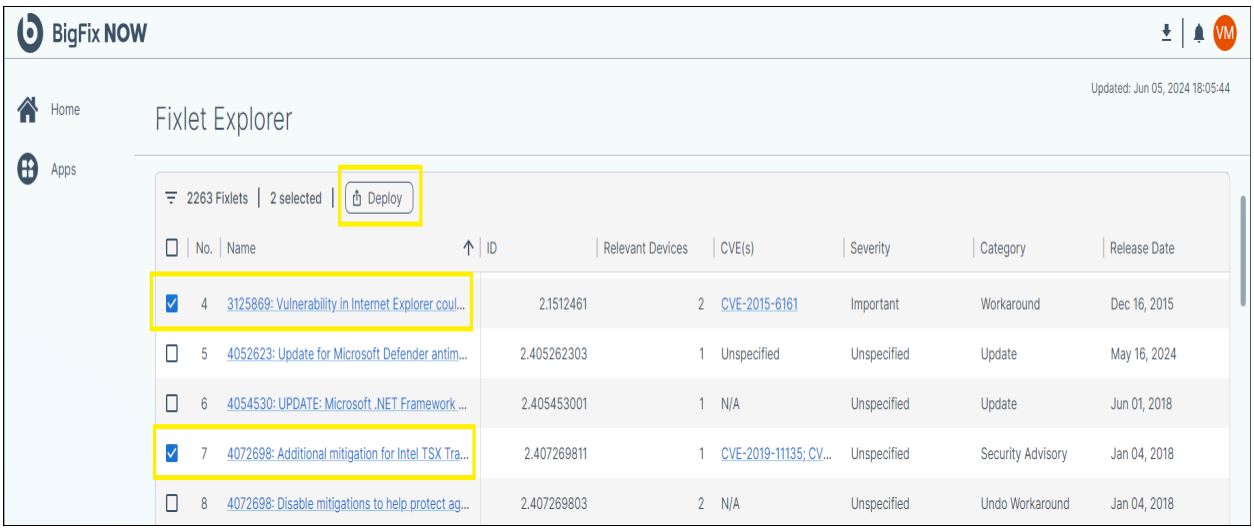
Deploying Fixlets

A fixlet comprises instructions executed by the BigFix agent on an enrolled device. At BigFix, the process of executing a fixlet is termed a "deployment." BigFix provides numerous customization opportunities for optimizing performance during fixlet deployment.

This section elaborates on using the Deploy Wizard within the Fixlet Explorer app. To access the deploy menu, navigate to Fixlet Explorer in the app menu.

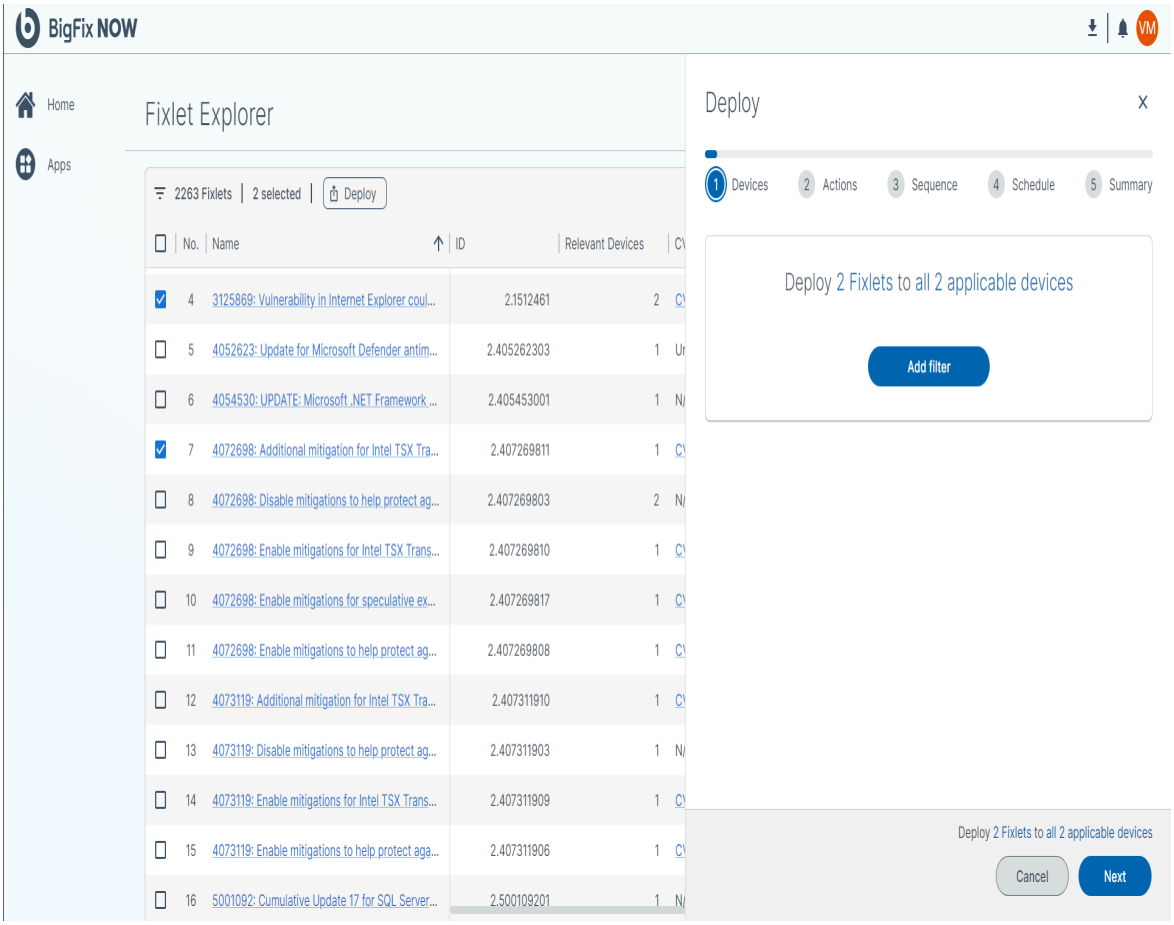
By default, the Deploy Wizard is inactive. It becomes active once fixlets are selected in the data table. Multiple fixlets can be selected and combined into a single deployment.

After selecting at least one fixlet, the Deploy Wizard slides out from the right upon clicking the **Deploy** button. The wizard guides through creating a new deployment step by step.



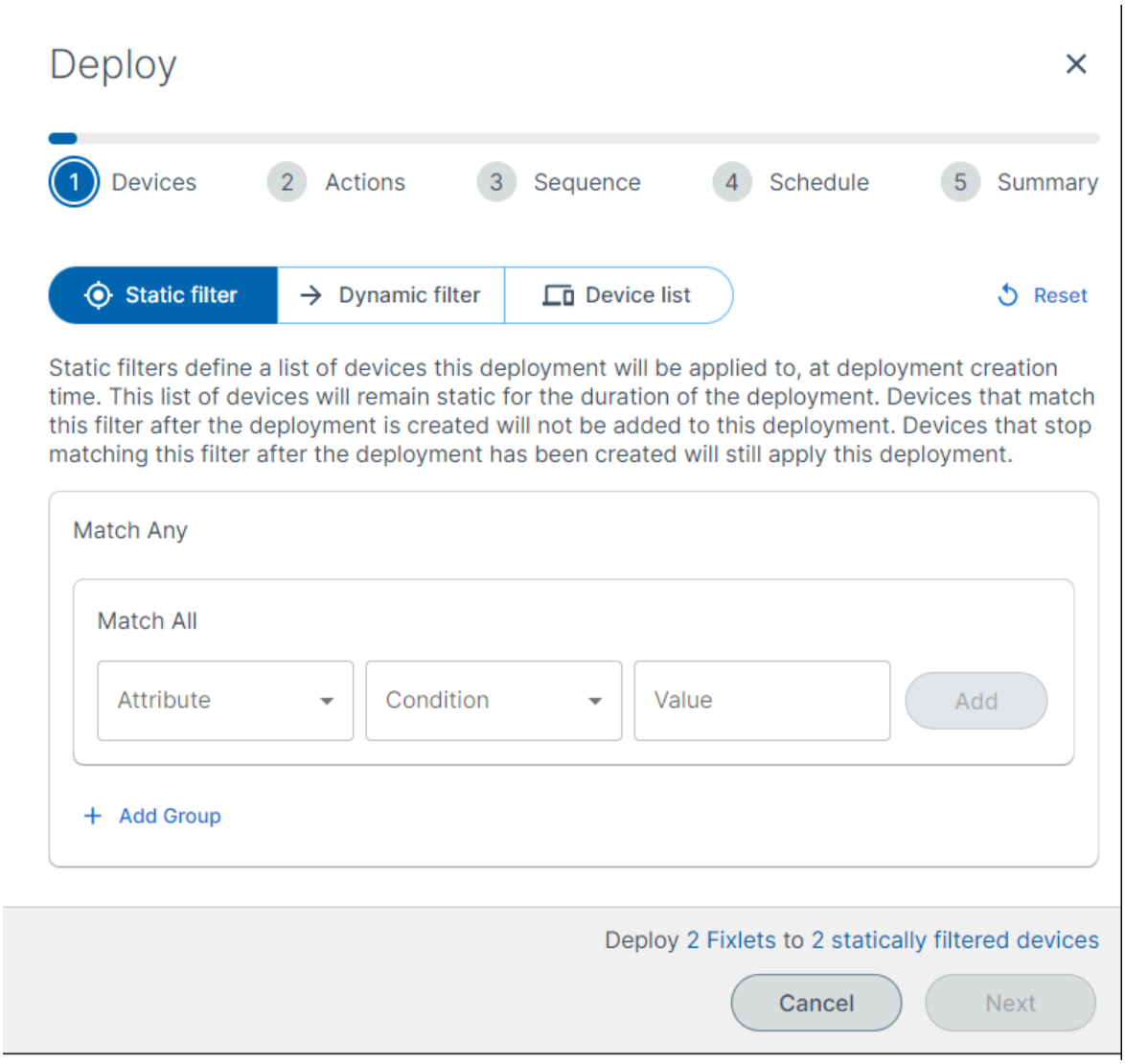
- Devices - The first tab of the Deployment Wizard prompts the user to confirm the devices for the deployment. Choose to deploy to all applicable devices or utilize various filters to narrow down the deployment size. Since filtering is optional, it is possible to skip this step by clicking **Next**.

  To access the filter menu, click the **Add Filter** button. BigFix supports three types of filtering: static, dynamic, and device list.

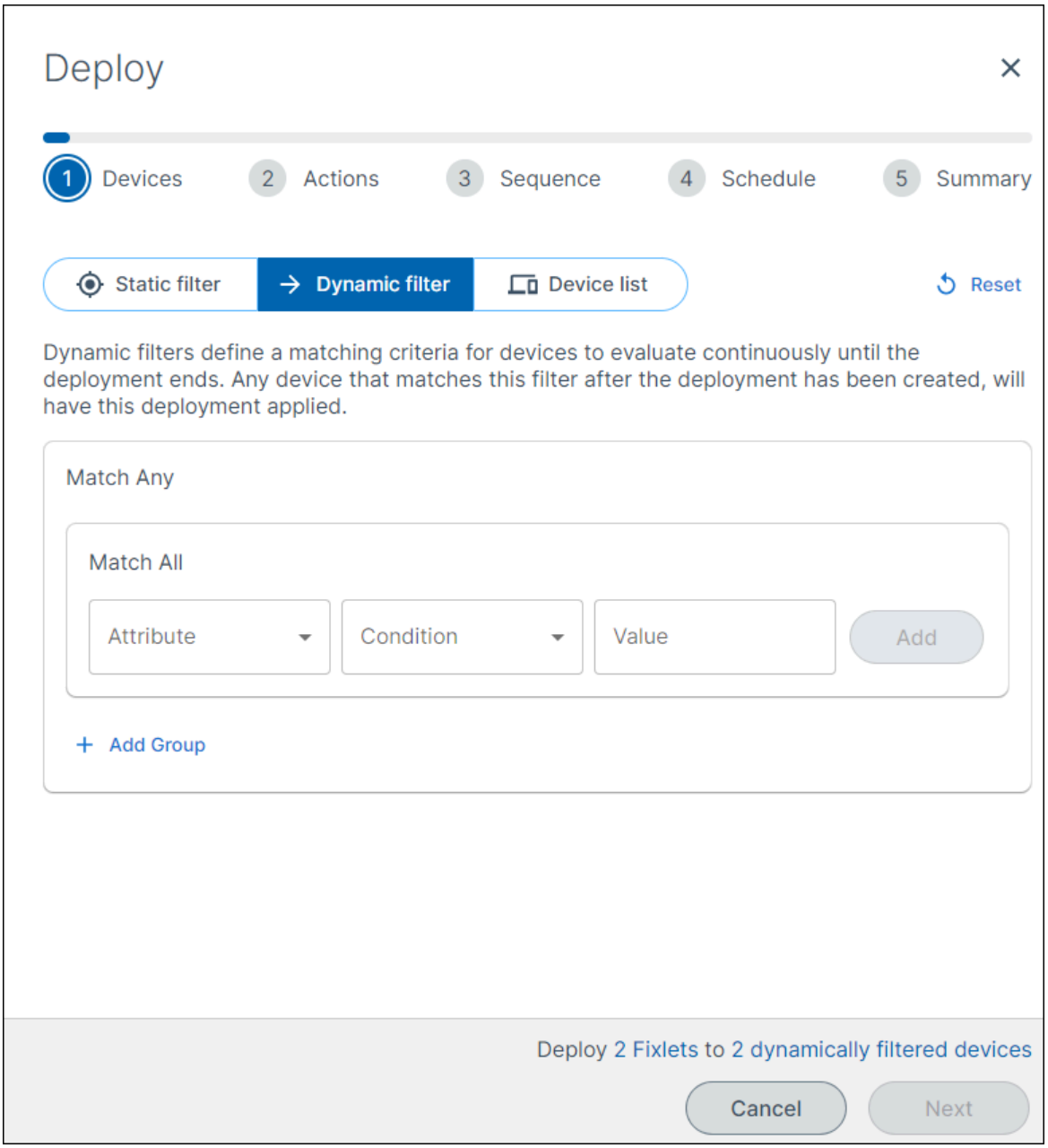


- Static Filter - a static filter reduces the number of devices using information that is known about a device when the deployment is created. In the static filter tab, users must first select an attribute that they want to use to filter devices. Examples of attributes include computer type, BIOS, and Agent Version. , users specify the condition they require, such as contains, equals, or starts with. Finally, users input a value in free text that is used for purposes of filtering.

  To add additional static filter groups, click **Add Group**.



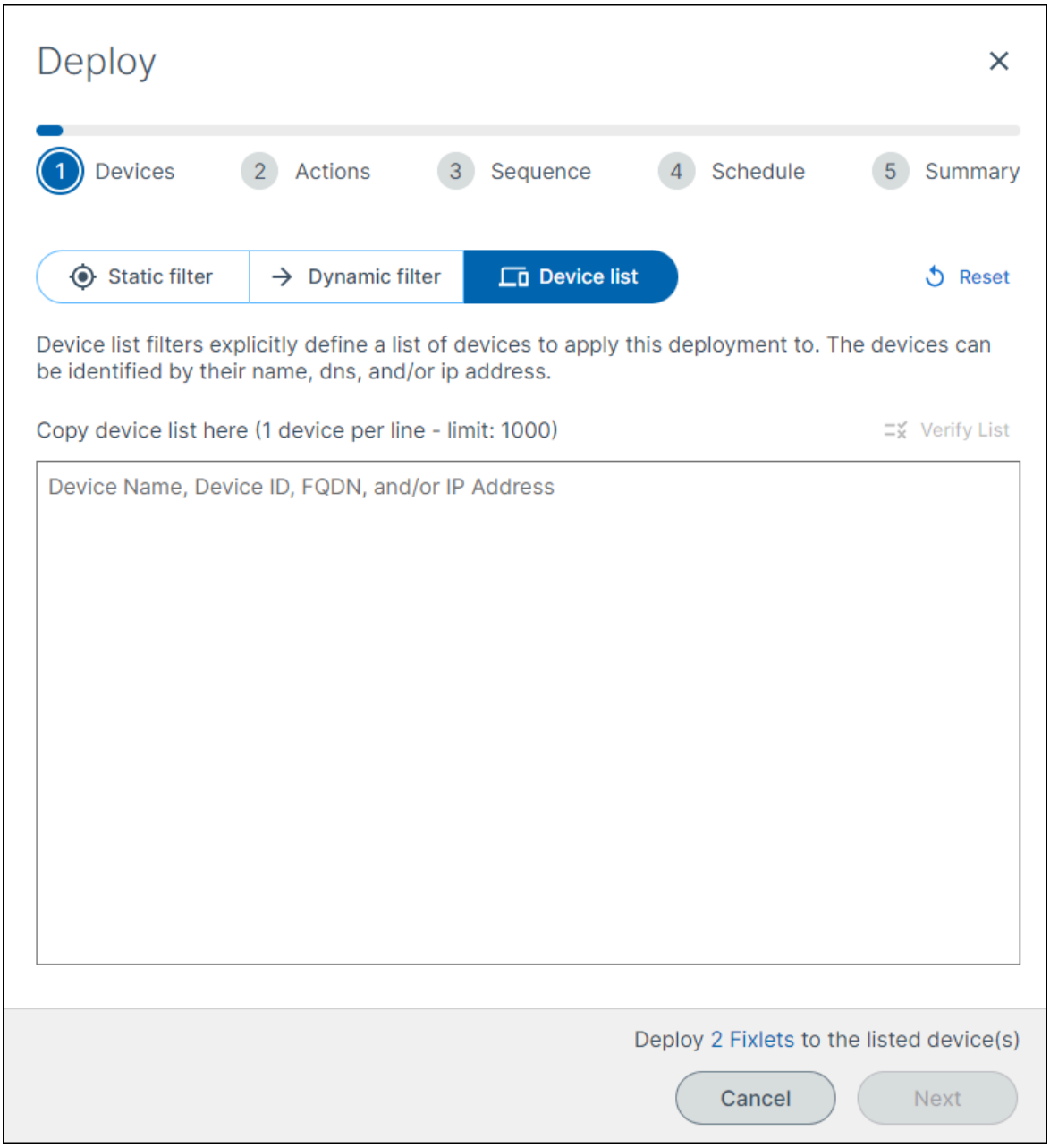
- Dynamic Filter - If static filtering subset a list of applicable devices at the time the deployment is created, dynamic filtering continuously evaluates whether a device is applicable as long as the deployment is active. When using dynamic filtering, the Deployment Wizard displays the number of applicable devices at that time. That number, , may go up if additional devices become eligible for the deployment.



In the dynamic filter tab, users must first select an attribute that they want to use to filter devices. Examples of attributes include computer type, BIOS, and Agent Version. Then, users specify the condition they require, such as contains, equals, or starts with. Finally, users input a value in free text that is used for purposes of filtering.

To add additional dynamic filter groups, click **Add Group**.

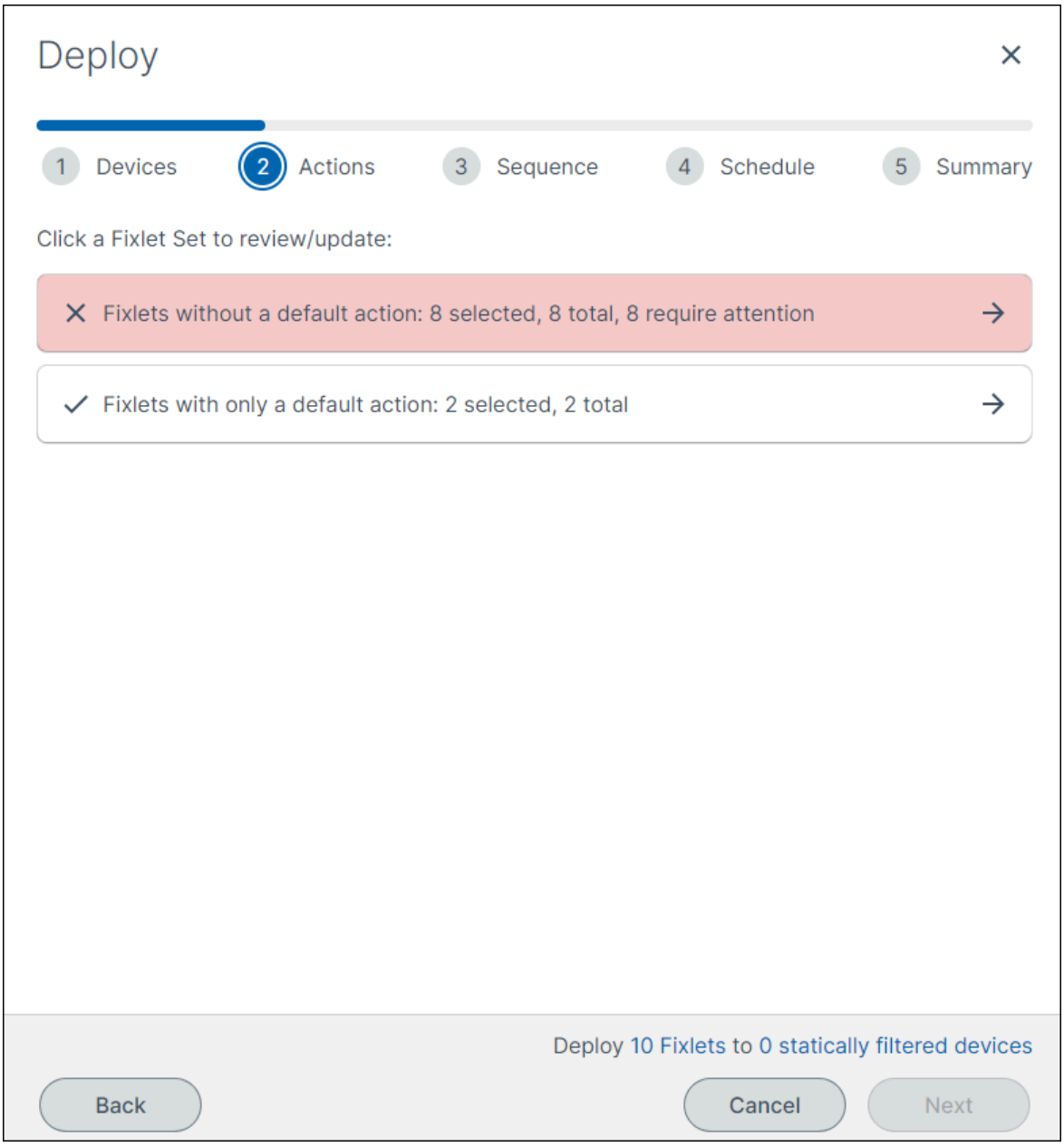
- Device List - This option allows users to input a fixed list of devices where the deployment will be applied. Devices can be identified using their name, DNS, and IP address.



Regardless of how they are identified, each device must be in a separate row. A maximum of 1,000 devices can be added in a single device list. If users intend to target more than 1,000 devices using device lists for filtering, they must create separate deployments. Once the appropriate filters have been selected, or if no filter is needed, click **Next**.

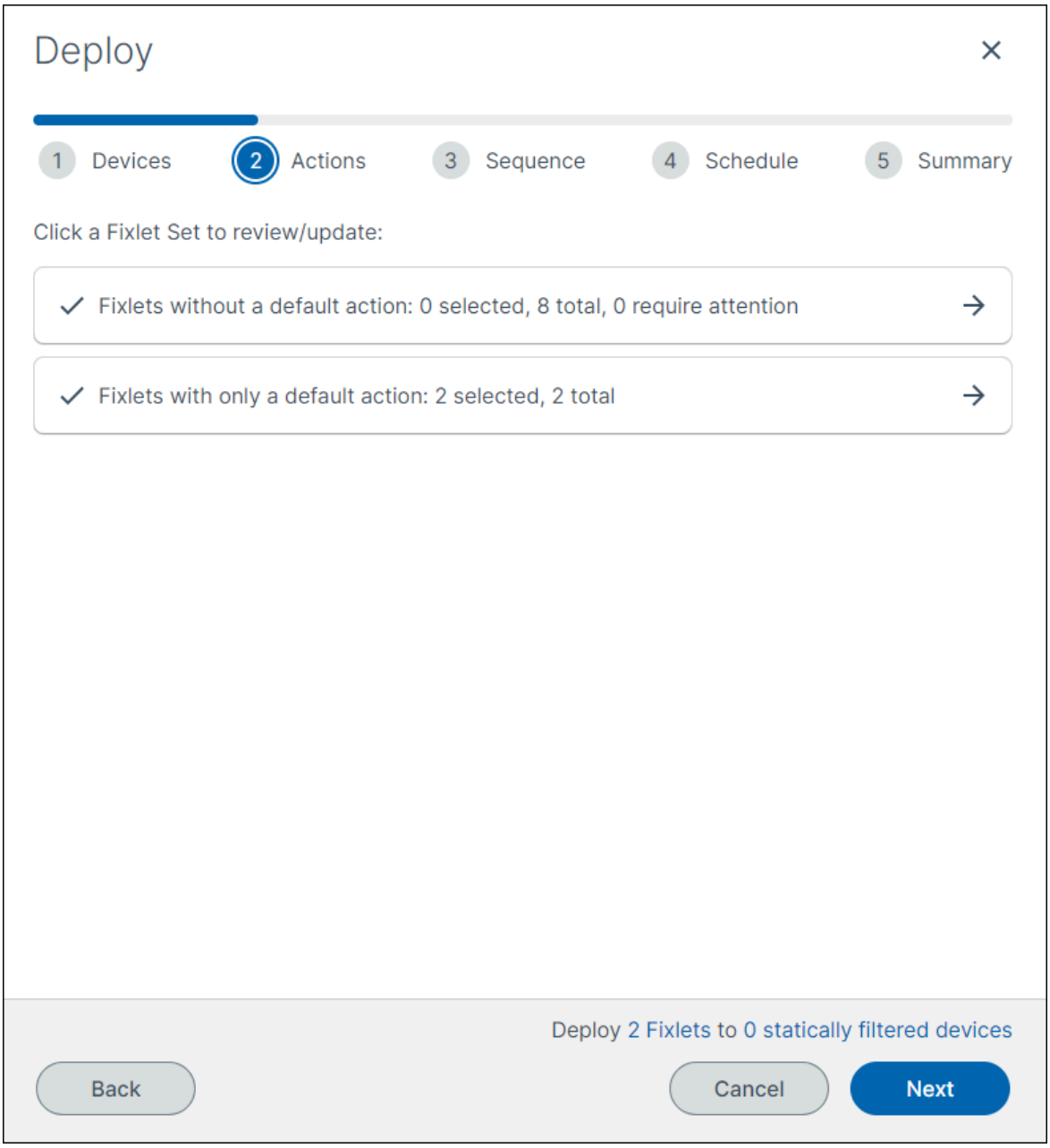
- Actions - The next tab in the Deployment Wizard is actions. In this tab, users confirm the actions they want the fixlets they have selected to perform. This is important because not every fixlet has a single, default action. It is also possible to remove fixlets that do not have any actions that can be performed on the devices selected in the prior tab.

  There are two different types of fixlets that may require attention before deployment:



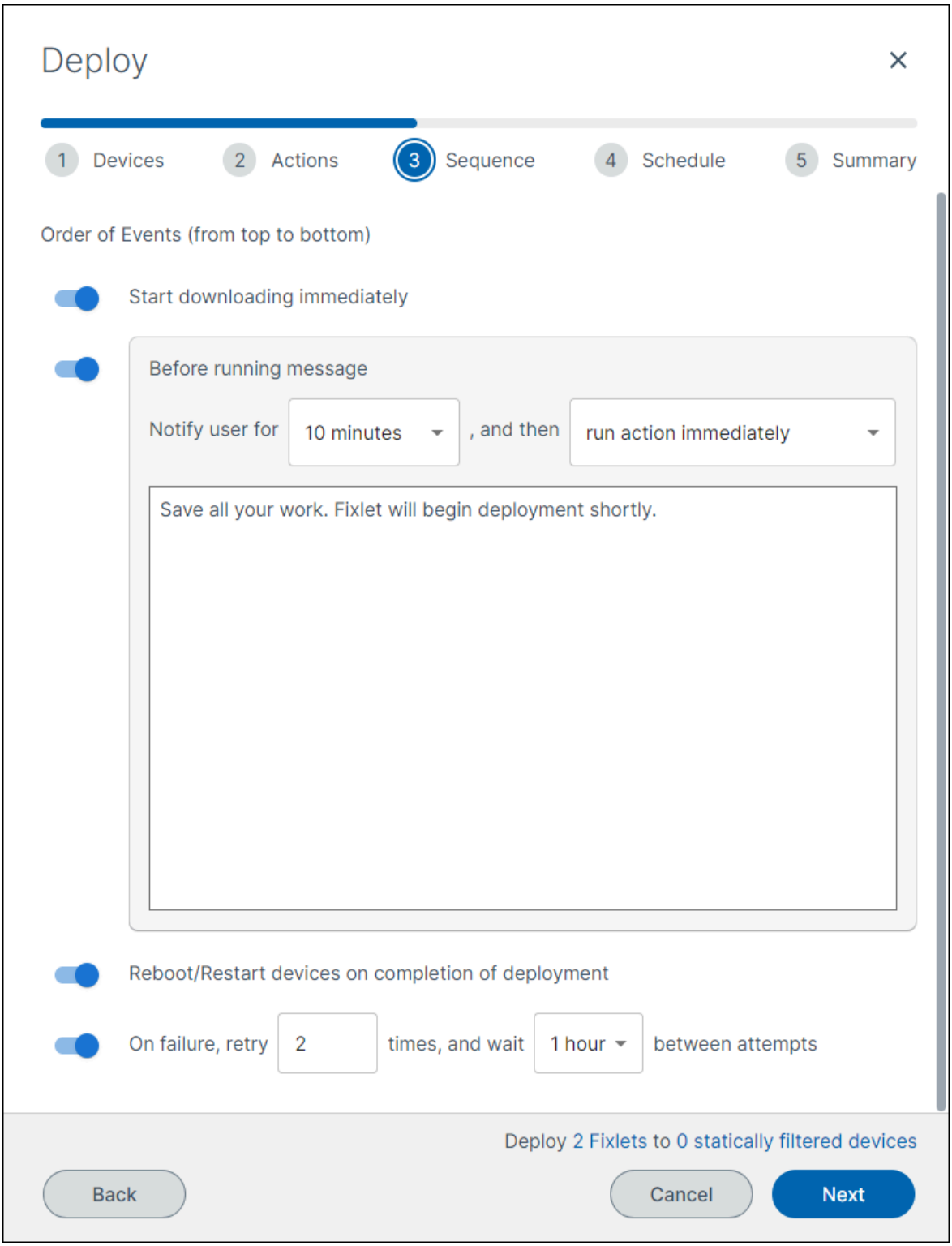
- **Attention required** - requires input from the user to be able to deploy successfully. To aid with visual identification, attention required fixlets are highlighted in red in the Deployment Wizard. Some fixlets require attention because they cannot run without some input from the user, such as a password.
- **Attention recommended** - requires user input to select the action the fixlet should perform. To aid with visual identification, attention recommended fixlets are highlighted in orange in the Deployment Wizard. Some fixlets have multiple possible actions and users must select which action they wish for the deployment to perform. Users must select at least one action per fixlet.

After the user has provided the necessary information for all fixlets to run correctly, a green checkmark will appear and the highlighting will be removed.



Until users provide the required information for all attention required and attention recommended fixlets, they cannot proceed with their deployment. Once this information is provided, click **Next** to proceed to the sequence tab.

- Sequence - Some deployments can affect many devices simultaneously. The sequence tab provides users with control over deployment timing, display of alerts indicating fixlet deployment availability for devices, and actions upon deployment completion. Note that selecting any of the provided options is not mandatory.



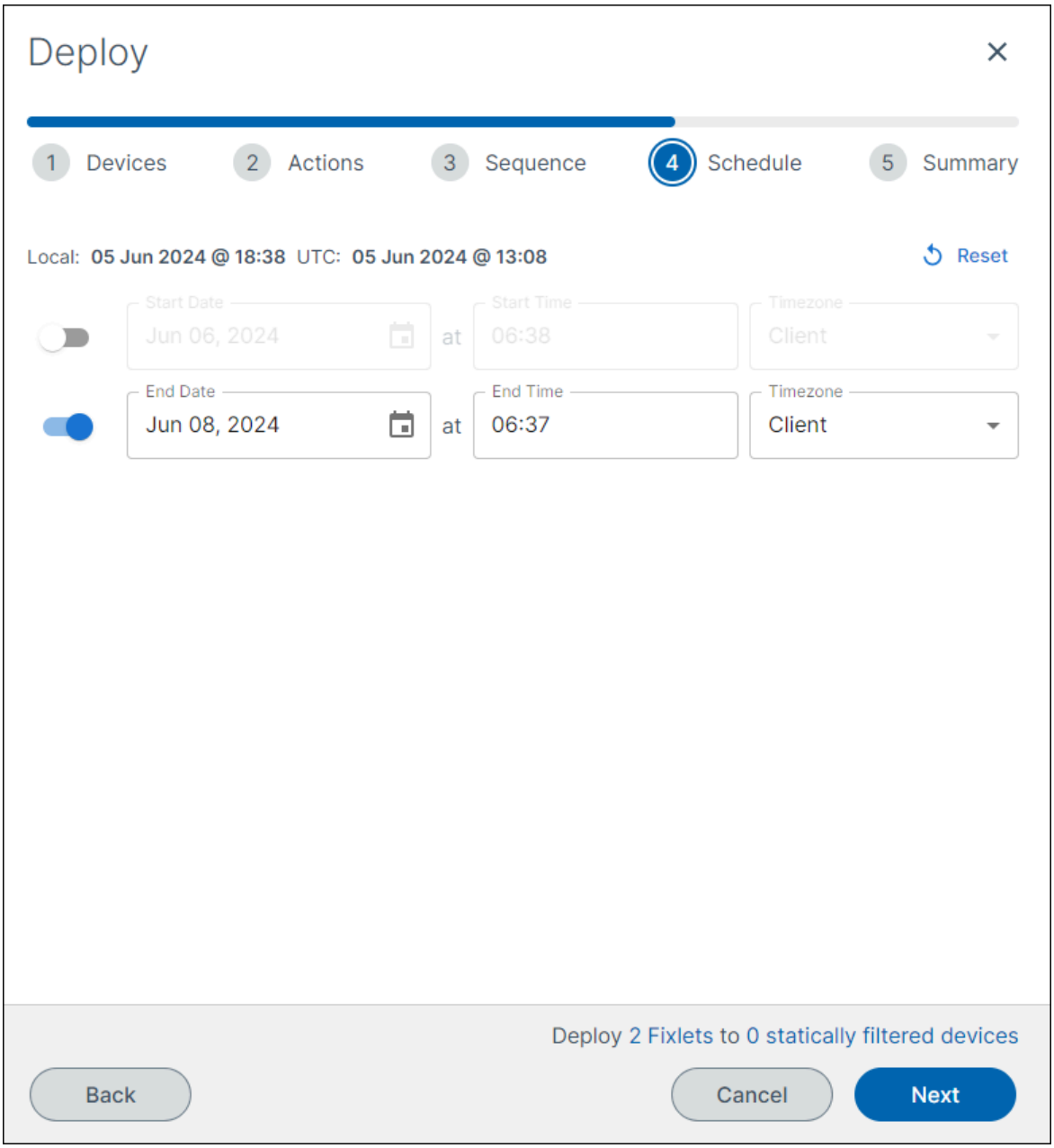
The sequence tab has a number of radio buttons that users toggle on and off. They are presented as an order of events from top to bottom. The sequence order is as follows:

1. Start download immediately - Some fixlets can contain large files. This option allows users to control whether all applicable devices should begin downloading the fixlet as soon as the deployment is created.
2. Before running message - As a device may become unresponsive while a fixlet is being deployed, this gives users the option to display a warning for an amount of time before the fixlet is applied. This may also be useful if a restart is required, so end users can save work.
3. While running message - As a device may be unresponsive while a fixlet is being deployed, this allows users to write a message that will be displayed on the screen until the deployment is complete.
4. Reboot/restart device on deployment completion - This determines whether the device will be forced to restart after the deployment is complete.
5. On failure retry - Occasionally, deployments fail to complete successfully on a device. Should this occur, this allows users to determine if they would like BigFix to automatically try the deployment again Users may also specify the maximum number of retries and the time interval between retry attempts.

After selecting the desired sequence, click **Next** to proceed to the schedule tab.

- Schedule - not required. determining a deployment's start and end time gives BigFix users a tool to control their deployments. Typically, deployments do not happen immediately. Some devices may be powered down, or disconnected from the Internet, or otherwise unable to have the fixlet applied. Scheduling allows users to control how long BigFix will attempt this particular deployment.

  There may be other reasons to control the end time. For example, an organization may wish to ensure that all deployments run overnight to minimize business impact.

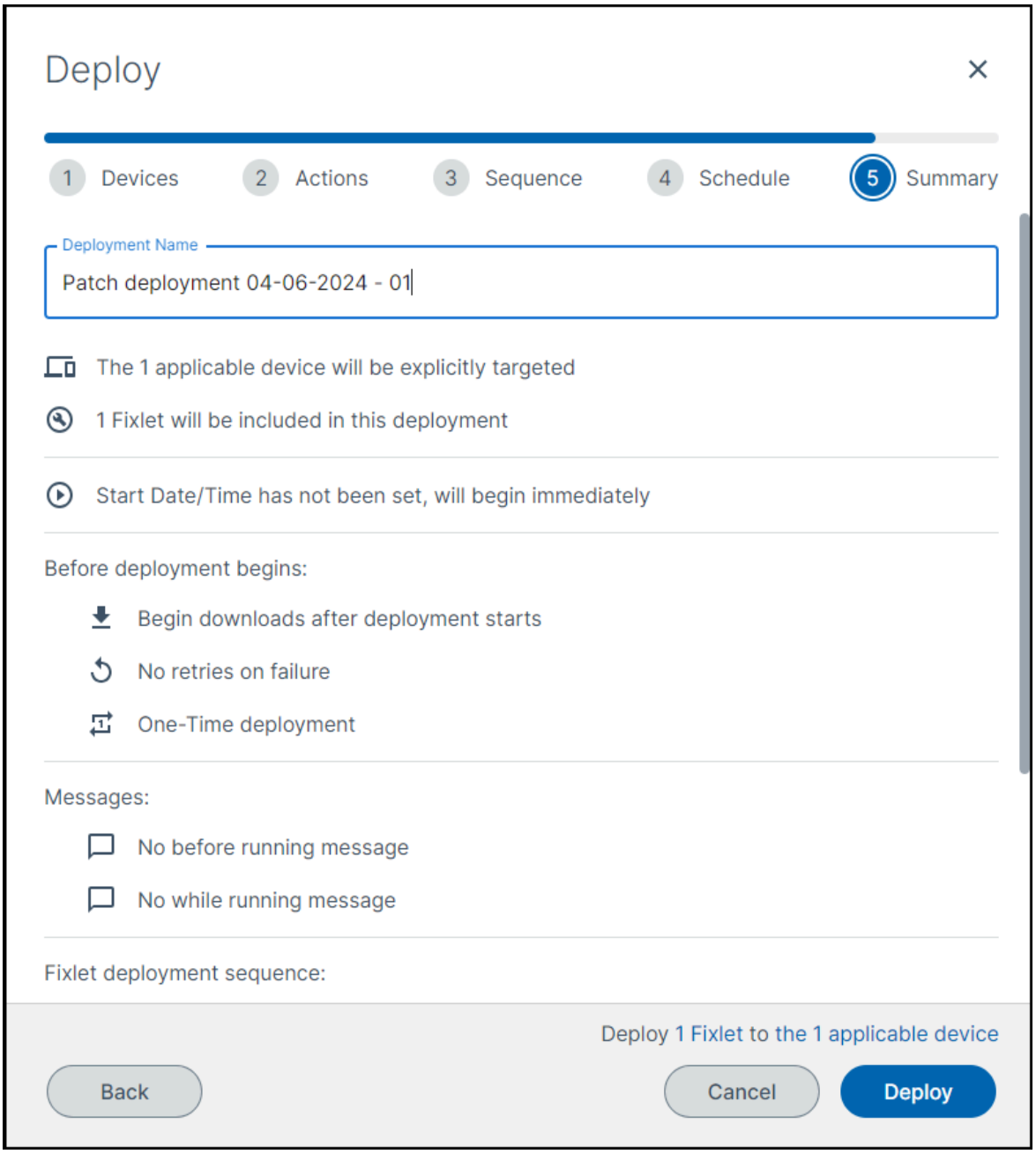


The schedule tab has two options: **Start Time** and **End Time**. In the first, users select the calendar date and the start time for when BigFix will begin attempting to apply the deployment. Users may also select if they want to use client time (e.g., the time zone where the device is located) or UTC.

In the second, users select the calendar date and the start time for when BigFix will stop attempting to apply the deployment. Users may also select if they want to use client time (e.g., the time zone where the device is located) or UTC.

If no scheduling option is selected, BigFix will begin the deployment immediately. After selecting the desired schedule, click **Next** to proceed to the summary tab.

- Summary - The summary tab shows all of the choices made related to the deployment created. This allows to review all of the things the deployment will do in one location. It is also required to input a name for the deployment on the summary page.



After reviewing your selections, click **Deploy**.

Chapter 4. Guides in PDF format

This section contains links to PDF versions of all the BigFix SaaS product guides.

BigFix SaaS guides

BigFix SaaS User Guide