

**BigFix Insights for Vulnerability Remediation  
Implementation Guide**



## Special notice

Before using this information and the product it supports, read the information in [Notices](#).

## Edition notice

This edition applies to BigFix version 10 and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Chapter 1. BigFix Insights for Vulnerability Remediation

Use this section to become familiar with BigFix Insights for Vulnerability Remediation infrastructure and key concepts necessary to understand how it works.

BigFix Insights for Vulnerability Remediation integrates BigFix with sources of vulnerability data. The purpose is to guide BigFix users on how to apply the best patch and configuration settings to remediate discovered vulnerabilities, and thus reduce risk and improve security.

BigFix Insights for Vulnerability Remediation uses advanced correlation algorithms to aggregate and process the vulnerability data with information from BigFix to drive analytics reports. The output of the analytics facilitates remediation through the Baseline Creation Wizard by recommending the latest available patches for the discovered vulnerabilities.

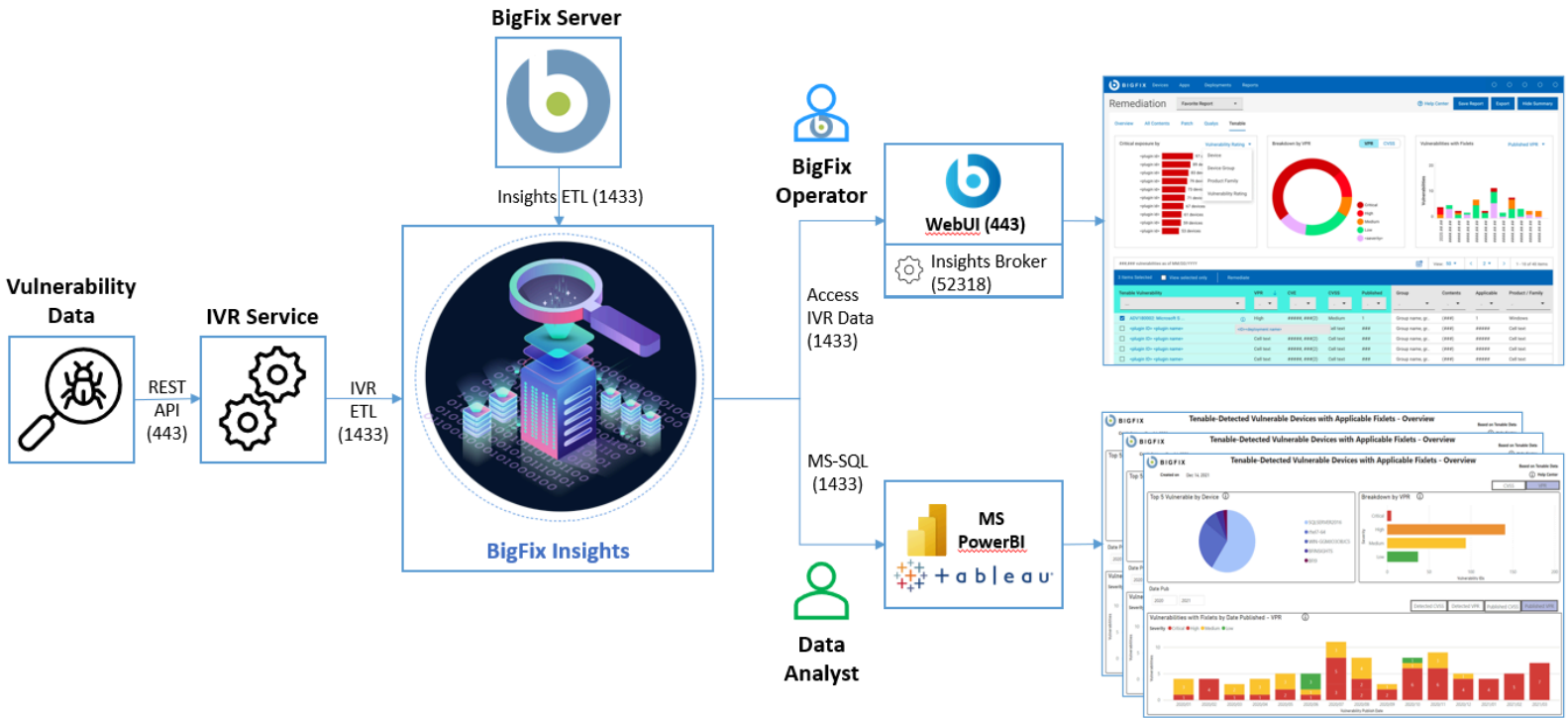
IVR data is available in:

- WebUI IVR app - it is required to enable WebUI to access IVR data through Insights. For more information on installing IVR app, see [Setting up IVR App](#).
- BI Tools for Data Analysis - existing IVR reports in PowerBI and Tableau. Refer to the [link](#) to find out more about IVR reports.

IVR limitations:

- Only one source of vulnerability data for automatic ingestion is supported for a given BigFix Insights instance
- One BigFix WebUI instance can manage only one BigFix Insights database. This limitation means that you cannot simultaneously connect or manage multiple instances of BigFix Insights through one WebUI instance.

Figure 1. Architecture overview of BigFix Insights for Vulnerability Remediation



## Chapter 2. System requirements



Learn more about the prerequisites and system requirements for BigFix Insights for Vulnerability Remediation (IVR) service.

**Table 1. Prerequisites and system requirements for IVR service**




<b>Hardware requirements</b>	
<b>CPU</b>	minimum 2 cores (recommended 4)
<b>RAM</b>	<p>On top of host OS requirements:</p> <ul style="list-style-type: none"> <li>• &lt; 1M Findings from Vulnerability Management Product = 16GB</li> <li>• &lt; 2M Findings from Vulnerability Management Product = 32GB</li> <li>• &lt; 3M Findings from Vulnerability Management Product = 48GB</li> <li>• &lt; 4M Findings from Vulnerability Management Product = 64GB</li> </ul>
<b>Disc space</b>	<ul style="list-style-type: none"> <li>• &lt; 1M Findings from Vulnerability Management Product = 4GB - 8GB preferred</li> <li>• &lt; 2M Findings from Vulnerability Management Product = 8GB - 12GB preferred</li> <li>• &lt; 3M Findings from Vulnerability Management Product = 12GB - 16GB preferred</li> <li>• &lt; 4M Findings from Vulnerability Management Product = 16GB - 20GB preferred</li> </ul>
<b>Execution Time</b>	<p>The overall run time of data synchronization and processing depends on:</p> <ul style="list-style-type: none"> <li>• CPU Speed</li> <li>• Number of findings</li> <li>• Number of assets in insights</li> <li>• Number of patch sites loaded within the BFE environment</li> <li>• API latency</li> <li>• Conflicting workloads on IVR machine</li> </ul>
<b>Software requirements</b>	



Table 1. Prerequisites and system requirements for IVR service (continued)

<b>BigFix Component Requirements</b>	<ul style="list-style-type: none"> <li>• <a href="#">BigFix Insights</a> WebUI App (v6) (minimum)</li> </ul>
<b>Prerequisites</b>	<ul style="list-style-type: none"> <li>• Microsoft VC++ Redistributable package 2012 <a href="https://www.microsoft.com/en-in/download/details.aspx?id=30679">https://www.microsoft.com/en-in/download/details.aspx?id=30679</a></li> <li>• Microsoft® ODBC Driver 17 for SQL Server® <a href="https://www.microsoft.com/en-us/download/details.aspx?id=56567">https://www.microsoft.com/en-us/download/details.aspx?id=56567</a></li> </ul> <p> <b>Note:</b> The Fixlet will attempt to deploy the pre-requisites automatically.</p>
<b>Operating system</b>	<ul style="list-style-type: none"> <li>• Microsoft Windows 2016</li> <li>• Microsoft Windows 2019</li> </ul>
<b>Supported BigFix versions</b>	<ul style="list-style-type: none"> <li>• Windows - based BigFix Server, Version 10</li> </ul> <p> <b>Note:</b> BigFix Insights for Vulnerability Remediation does not currently support non-Windows-based BigFix Server environments.</p>
<b>BigFix License Requirements</b>	<ul style="list-style-type: none"> <li>• BigFix Lifecycle</li> <li>• BigFix Compliance</li> <li>• BigFix Remediate</li> </ul>
<b>Supported Vulnerability Management Platforms</b>	<ul style="list-style-type: none"> <li>• Qualys VMDR v2 REST API: <a href="https://www.qualys.com/docs/qualys-api-vm-pc-user-guide.pdf">https://www.qualys.com/docs/qualys-api-vm-pc-user-guide.pdf</a></li> <li>• Tenable.SC versions from 5.17 up to 6.0.0.</li> <li>• Tenable.IO</li> </ul>

**Table 1. Prerequisites and system requirements for IVR service (continued)**

	<p> <b>Note:</b> It is required to use <b>Administrator</b> user role within Tenable to enable the generation of API keys that are used by IVR to maintain the interface with Tenable.</p>
<p><b>BI tool</b></p>	<ul style="list-style-type: none"> <li>• Power BI Desktop/Server, 2021 + (Rec. May 2021)</li> </ul> <p> <b>Note:</b> Microsoft offers two distinct products called Power BI desktop. Use the one that is optimized for Power BI Report Server: <a href="https://www.microsoft.com/en-us/download/details.aspx?id=56723">https://www.microsoft.com/en-us/download/details.aspx?id=56723</a></p> <ul style="list-style-type: none"> <li>• Tableau Desktop/Server, 2020.4 +</li> </ul>
<p><b>Network requirements</b></p>	<ul style="list-style-type: none"> <li>• Connectivity to Vulnerability Management API Server URL (port 443 by default)</li> <li>• Connectivity to BigFix Insights SQL database (port 1433 by default)</li> </ul> <p> <b>Note:</b> IVR now supports proxy-based connectivity. Refer to the <a href="#">link</a> for more information.</p> <ul style="list-style-type: none"> <li>• By default WebUI IVR app listens on port 52318. It can be changed in the WebUI application configuration file with <code>_WebUIAppEnv_INSIGHT_BROKER_PORT</code> setting.</li> </ul>

**Table 1. Prerequisites and system requirements for IVR service (continued)**

<b>System limitations</b>	<ul style="list-style-type: none"><li>• Only one source of vulnerability data for automatic ingestion is supported for a given BigFix Insights instance</li><li>• A single BigFix WebUI instance can manage only one BigFix Insights database.</li></ul>
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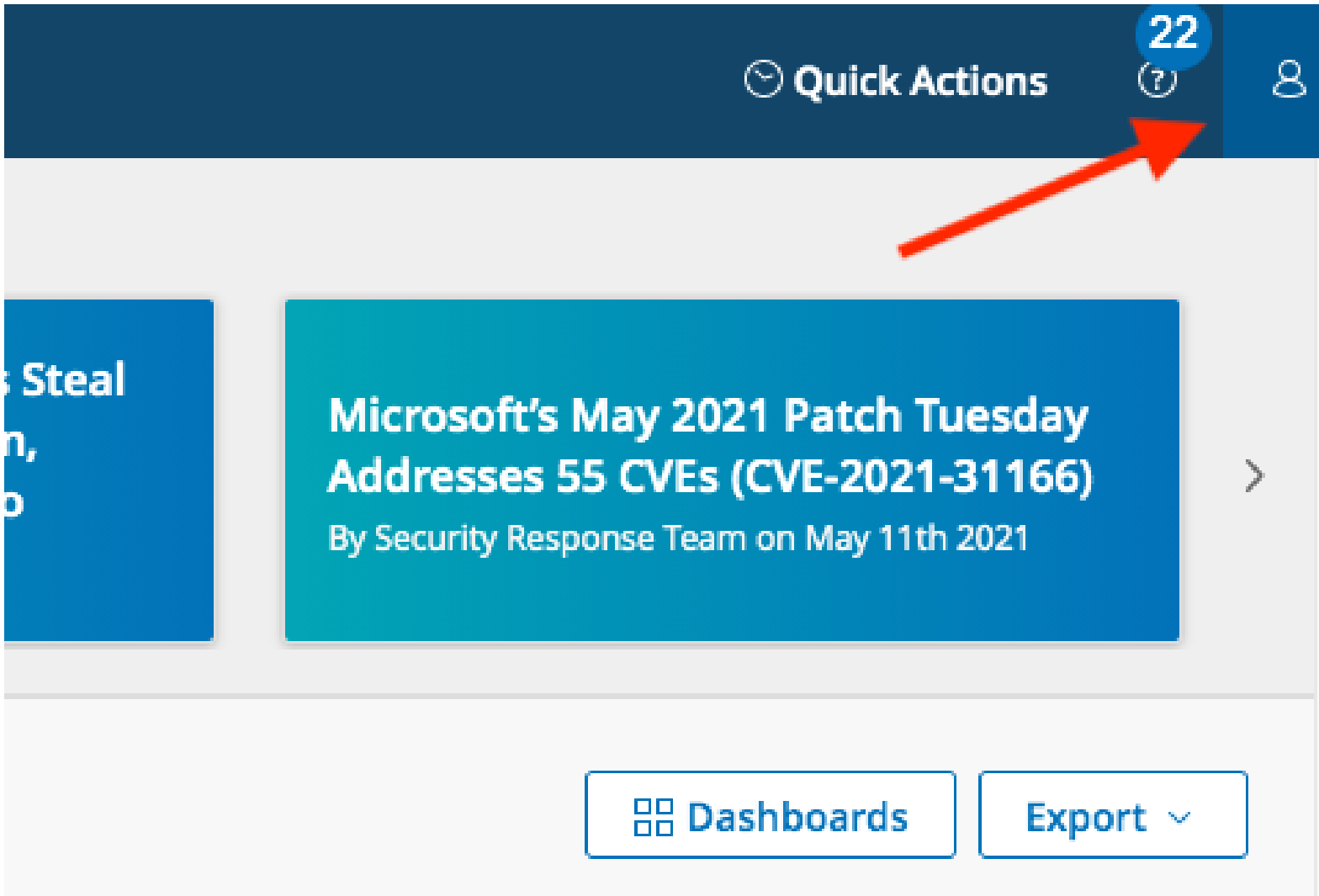
## API requirements for Tenable.io

To ensure that IVR can retrieve the essential vulnerability data from Tenable, it is necessary to meet the following requirements:

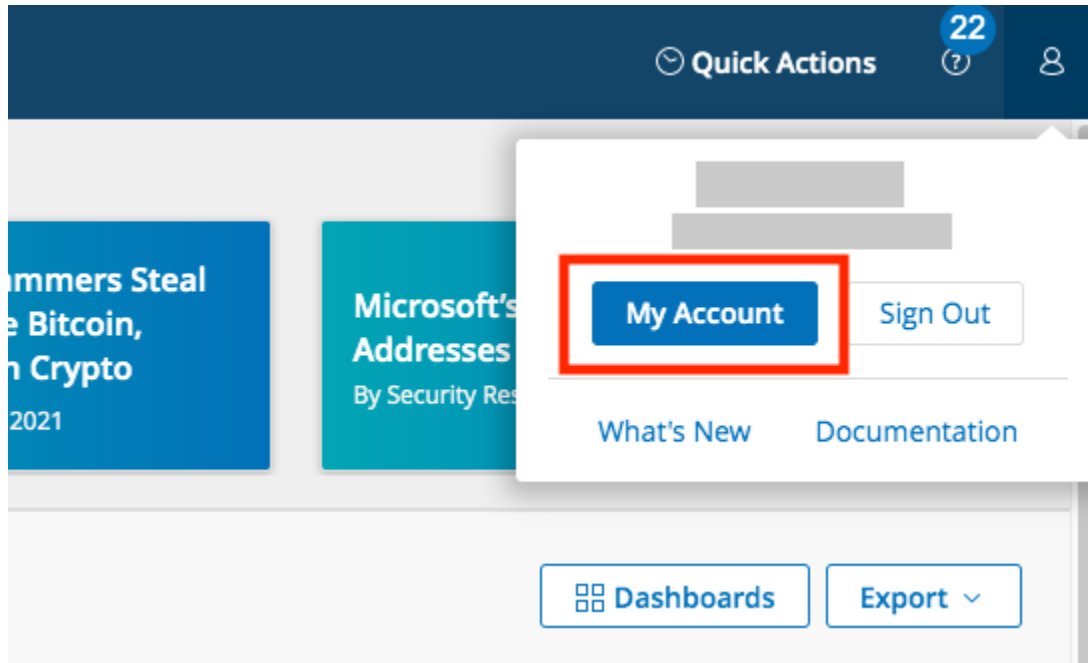
- User with **Administrator** user role within Tenable
- **All Assets** set to **Can View**. For more information, see [Tenable Permissions](#).

To generate User's API keys:

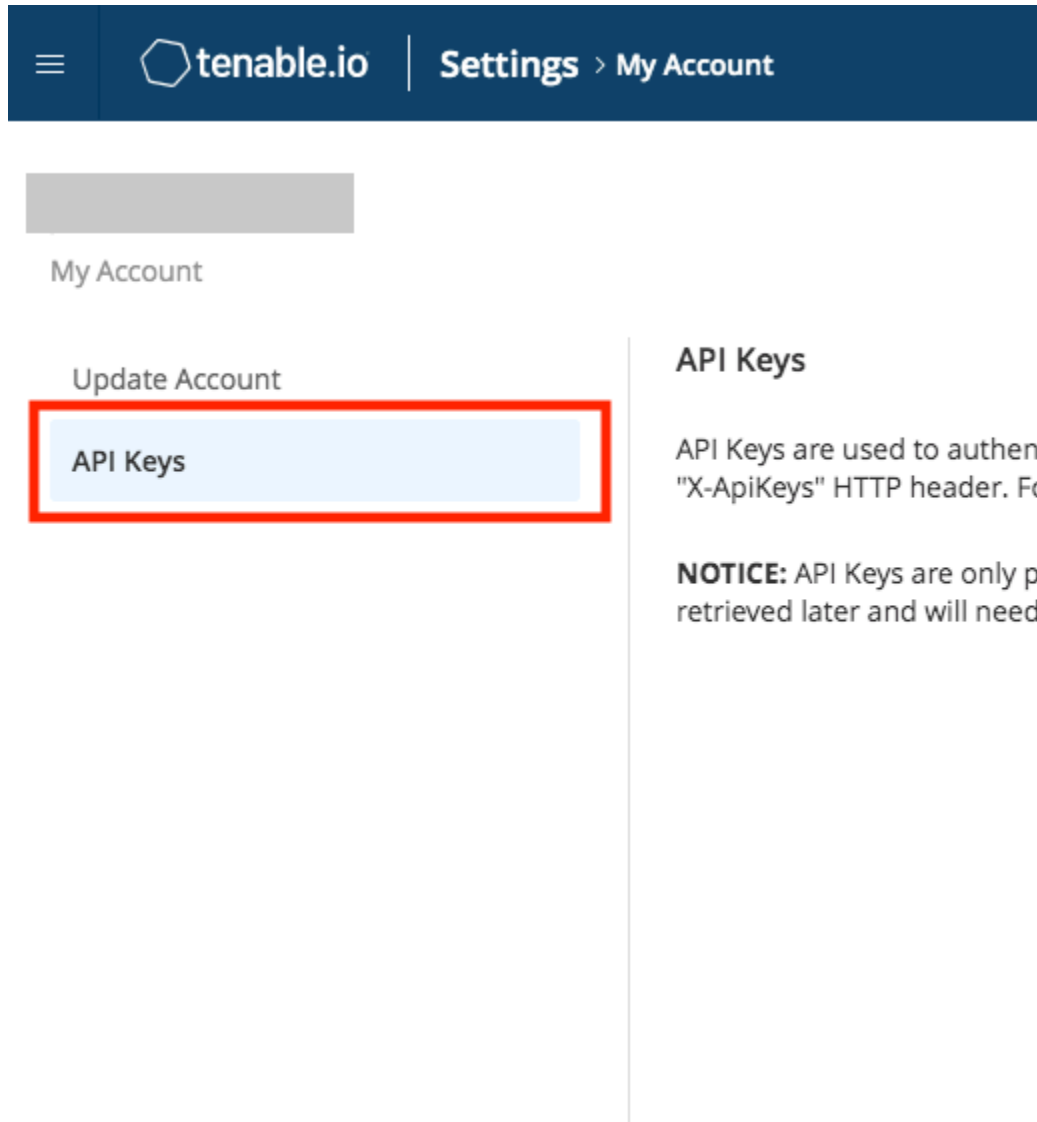
1. In the Tenable.io web user interface, click the button on the top right corner of the header.



2. Click **My account** button. The user account menu appears.



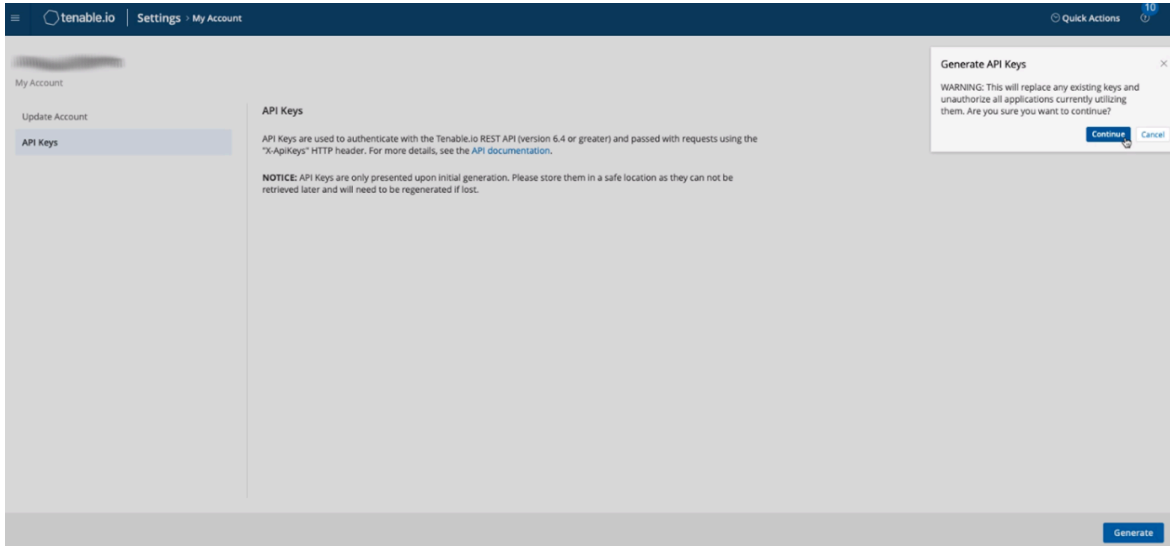
3. Select **API Keys** from the left-hand navigation.



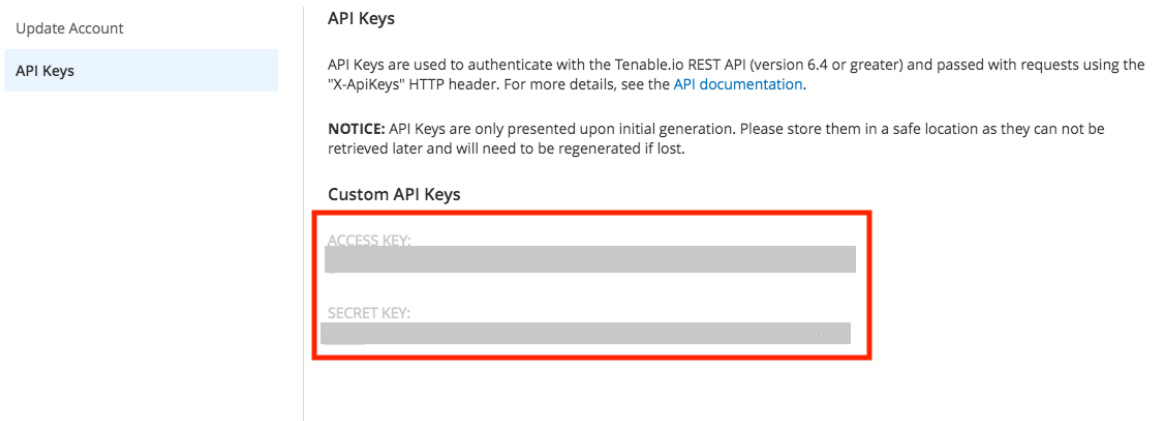
4. Click the **Generate** button in the lower right part of the browser.



5. Acknowledge the warning by clicking **Continue** in the pop-up box.



6. Tenable.io generates new access key and secret key. Copy the two generated keys and paste into the IVR configuration page to enable the interface. **Be sure to copy access and secret keys to a safe location as keys are displayed only once.** After the tab is closed, API keys cannot be retrieved from Tenable.io.



Once the API keys are generated, you can proceed with the [Deployment process](#). In the Deployment Fixlet, you will need to provide the Access Key and the Secret

Task: Deploy BigFix Insights for Vulnerability Remediation

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

Description | Details | Applicable Computers (5) | Action History (1)

**Import Vulnerability Data Into Insights**

ETL from the Vulnerability Management system to BigFix Insights will be enabled.

Vulnerability Import Schedule

Please specify the desired ETL schedule for Vulnerability data.

**Import BigFix Asset Data Into Tenable IO**

ETL for Asset data from BigFix insights to Tenable IO will be enabled.

Asset Import Schedule

Please specify the desired ETL schedule for Asset data.

VM Platform

TenableIO

Please specify the Vulnerability Management Platform

Connection String

Please provide the URI to the Vulnerability Management Platform

Access Key

Please provide the access key for the Vulnerability Management Platform.

Secret Key

Please provide the secret key for the Vulnerability Management Platform.

Key.

Refer to this page for more information about User Roles and Permissions: <https://docs.tenable.com/tenableio/Content/Settings/UserRoles.htm>

With the API keys generated, you can validate API credentials by using below curl commands:

- a. Get Vuln Export UUID:

```
curl --request POST --url https://cloud.tenable.com/vulns/export --header "Accept: application/json" --header "Content-Type: application/json" --header "X-ApiKeys: accessKey=redactedaccesskey; secretKey=redactedsecretkey"
```

- b. Get Vuln Export Status for given UUID:

```
curl --request GET --url https://cloud.tenable.com/vulns/export/21a70c98-8e8d-4b64-b7e0-4c57a245126f/status --header "Accept: application/json" --header "Content-Type: application/json" --header "X-ApiKeys: accessKey=redactedaccesskey; secretKey=redactedsecretkey"
```

- c. Get Chunk 1 of vuln data for given UUID:

```
curl --request GET --url https://cloud.tenable.com/vulns/export/21a70c98-8e8d-4b64-b7e0-4c57a245126f/chunks/1 --header "Accept: application/octet-stream" --header "X-ApiKeys: accessKey=redactedaccesskey; secretKey=redactedsecretkey"
```



In each example above, replace 'redactedaccesskey' and 'redactedsecretkey' with the same API keys/credentials as those being used for the integration. Also, for API calls 2 and 3, replace the example UUID in the request URL (21a70c98-8e8d-4b64-b7e0-4c57a245126f) with the UUID value returned from API call 1.

## API requirements for Tenable.sc

The IVR server requires a Tenable user account. A user leveraged to Tenable.sc IVR adapter needs compatible machines within the environment.

The Tenable account utilized for IVR should be assigned the default full access group, and auditor role permissions. This provides the account access needed to complete the dataflow. Additionally, the user can be defined using custom access permissions to limit the scope of assets retrieved by IVR. A group within Tenable can be limited by both the viewable hosts and the repositories. In general, the role of auditor should be leveraged as well, to follow the principle of least privileged. The IVR dataflow retrieves information only when the account has granted visibility to receive.

Here is how the "Create User" page, Membership section should look like the new user is created:

Scan Result  
Default  
Timeframe

Last 7 Days ▾

Cached Fetching

### Membership

Role\* Auditor ▾

Group\* Full Access ▾

### Group Permissions

Manage All Users  Manage All Objects

Search Groups Q

Group Name ▾	User Permission	Object Permission
Full Access	<input type="checkbox"/>	<input type="checkbox"/>

### Tenable impact statement

IVR uses the pytenable library (developed by Tenable). IVR leverages a default batch size of 1000, which is conservative and is prescribed by Tenable. With the default settings, the Tenable.sc server should not see a noticeable impact when the IVR adapter is running.

## API requirements for Qualys

### Qualys API requirements

The Qualys API enforces limits on the API calls a customer can make based on their subscription settings. The limits apply to the use of all Qualys APIs except “session” V2 API (session login/logout). Default API control settings are provided by the service. Note these settings may be customized per subscription by Qualys Support.

For more details, refer to the link: <https://www.qualys.com/docs/qualys-api-limits.pdf>.

To estimate the number of API calls, use the below formula:

```
Total number of API calls = (number of devices / batch size ) + (number of unique vulnerabilities / 350)
```

where;

- `batch size` - configurable parameter that describes the maximum number of devices which can be fetched in a single API call
- `number of devices` - number of available devices in the scanned network
- `number of unique vulnerabilities` - number of unique vulnerabilities discovered in the scanned network
- `350` - maximum number of vulnerabilities that can be fetched in a single API call into the Qualys Knowledge Base API.

### Qualys API User requirements

It is recommended to use 'Reader' user role. To edit user account, select **Users** tab in the **Vulnerability Management** dashboard. Hover the cursor over the **Login** and click **Edit**.

**Users** | Users | Business Units | Distribution Groups | Activity Log | Setup

Actions (1) | New | Search | Filters | 1 - 5 of 5

<input type="checkbox"/>	Name	Login	Title	Role	Business Unit	VIP	Phone	Disk Space	Status	Last Login	Modified
<input type="checkbox"/>	API Reader	[redacted]	API	Reader	Unassigned	[redacted]	212-555-1212	0	Pending Activation		03/30/2021
<input type="checkbox"/>	[redacted]	[redacted]	Sr Architect	Manager	Unassigned	[redacted]	415-420-8519	3 MB	Active	06/21/2021	06/04/2021
<input type="checkbox"/>	[redacted]	[redacted]	Associate General Manager	Manager	Unassigned	[redacted]	267-239-1191	0	Active	04/06/2021	11/10/2020
<input type="checkbox"/>	[redacted]	[redacted]	architect	Manager	Unassigned	[redacted]	5719267899	0	Active	03/04/2021	03/04/2021
<input checked="" type="checkbox"/>	Reader Account	[redacted]	account	Reader	Unassigned	[redacted]	7053767572	0	Active	06/21/2021	11/10/2020

**Reader Account**

- Quick Actions:** Info, Edit

**ID:** [redacted]

**Name:** Reader Account

**Role:** Reader

**Business Unit:** Unassigned

**GUI Access:** No

**API Access:** Yes

**Company:** HCL

**Title:** Reader Account

**E-mail Address:** [redacted]

**Fax:** -

**Phone:** [redacted]

**Address:** 623 5th Ave

**City:** New York

**Country:** United States of America

In the **User Role** tab, select **Reader** as a user role and **Allow access to API**.

## Edit User

Launch Help

**Information:** Users must be employees or contractors of your company who are bound to confidentiality obligations as protective as those contained in the Qualys® Service Agreement.

- General Information
- Locale
- User Role**
- Asset Groups
- Permissions
- Options
- Account Activity
- Security
- User Status

### User Role

User Role: \*

Allow access to:  GUI  API

Business Unit: \*



**User configurations to transfer:**

We recommend you allow the user to keep their configurations when they move to their new business unit. Otherwise user data is **removed permanently from your account** and it can't be recovered. [Learn more](#)

Transfer personal configurations  
Includes option profiles, report templates, scheduled tasks, distribution groups and search lists.

Transfer Asset Groups  
If not selected, configurations may become inactive (e.g. report templates, schedules) and you'll need to manually update them.

In the **Asset Groups** tab, you can select asset groups that you wish to have access to.

**Edit User** Launch Help  

**General Information** >

**Locale** >

**User Role** >

**Asset Groups** >

**Permissions** >

**Options** >

**Account Activity** >


**Security** >

**User Status** >

---

### Asset Groups

Use the selections below to designate which asset groups this user will have access to within this business unit.

Add asset groups:   Add All | Remove All

3 asset groups selected

All	Remove
My Windows Server VM Group	View   Remove
TestAssetGroup	View   Remove

For more information on how to assign asset groups to the user, refer to the [link](#).

In the **Permissions** tab select **Manage VM module**.

The screenshot shows a web interface titled "Edit User". At the top right, there is a "Launch Help" button with a magnifying glass icon and a close button with an "X" icon. On the left side, there is a vertical navigation menu with the following items: "General Information", "Locale", "User Role", "Asset Groups", "Permissions" (which is highlighted in blue), "Options", "Account Activity", "Security", and "User Status". Each item has a right-pointing chevron icon. The main content area is titled "Extended Permissions" and contains the text "Allow this user to perform the following actions:". Below this text are three checkboxes: "Manage VM module" (checked), "Purge host information/history" (unchecked), and "Manage SCA module" (unchecked). At the bottom of the interface, there are two buttons: "Cancel" on the left and "Save" on the right.

Refer to the [link](#) to find more information on User roles and permissions.

## Chapter 3. Deployment and configuration

This module provides the steps to deploy and configure the BigFix Insights for Vulnerability Remediation solution for:

[Tenable.io](#)

[Tenable.sc](#)

[Qualys](#)

Refer to the [link](#) to learn more about other Fixlets and Tasks available for BigFix Insights for Vulnerability Remediation solution.

### Deployment and configuration for Tenable.io

This module provides the steps to deploy and configure the BigFix Insights for Vulnerability Remediation solution.

To install and configure BigFix Insights for Vulnerability Remediation service, perform below steps:




**Note:** To use the latest release build, uninstall the old version.

1. Enable a content site.

Navigate to BigFix License Overview Dashboard. In **Compliance/Lifecycle** panel, click **Enable BigFix Insights for Vulnerability Remediation** Fixlet to gather the required content.

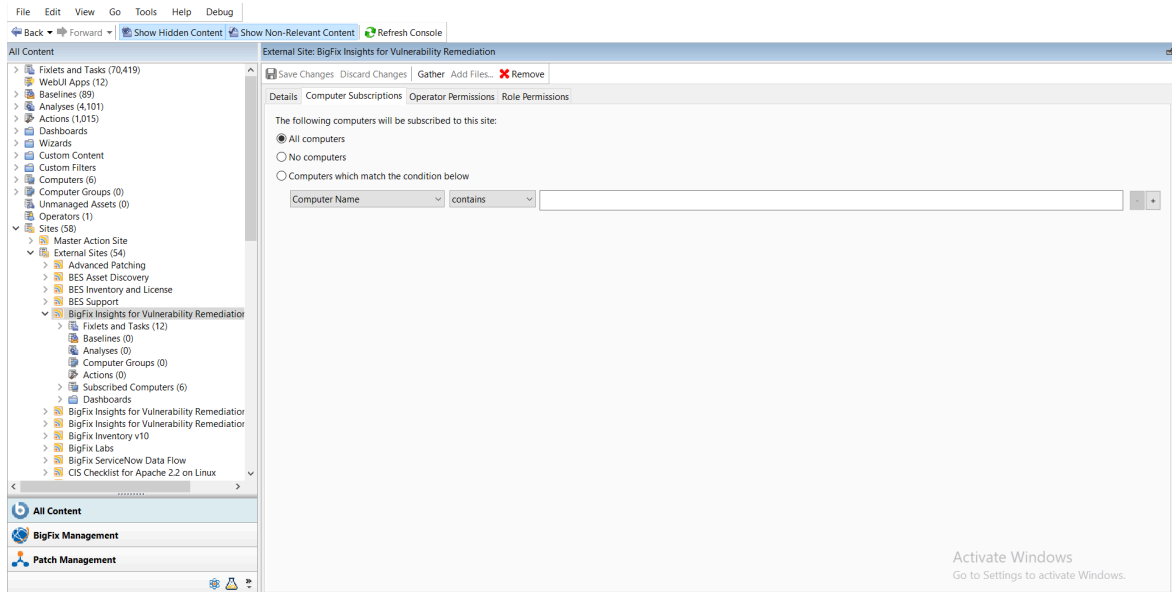
The screenshot shows the BigFix Console interface. On the left is a navigation pane with categories like Deployment Overview, License Overview, Warnings, and various management tools. The main area is titled 'BigFix License Overview' and displays a table of licenses. The table has columns for status, name, and count. The 'BigFix Insights for Vulnerability Remediation' license is highlighted with a green box.

Status	License Name	Count
ENABLED	Patches for Ubuntu 1804	0
ENABLED	Patches for Windows	19
ENABLED	Patching Support	21
ENABLED	Power Management	20
ENABLED	Remote Control	21
ENABLED	Server Automation	65
ENABLED	Software Distribution	21
ENABLED	Updates for Mac Applications	0
ENABLED	Updates for Windows Applications	19
ENABLED	Updates for Windows Applications Extended	19
ENABLED	Virtual Endpoint Manager	21
ENABLED	Vulnerability Reporting	0
ENABLED	Windows Point of Sale	0
ENABLE	BigFix Insights for Vulnerability Remediation	
ENABLE	Client Manager for Application Virtualization	
ENABLE	Client Manager for TPM/OSD	
ENABLE	MaaS360 Mobile Device Management	
ENABLE	OS Deployment	
ENABLE	Patches for CentOS 5 Native Tools (Deprecated)	
ENABLE	Patches for CentOS 6 Plugin R2	
ENABLE	Patches for CentOS 7 Plugin R2	
ENABLE	Patches for CentOS 8	

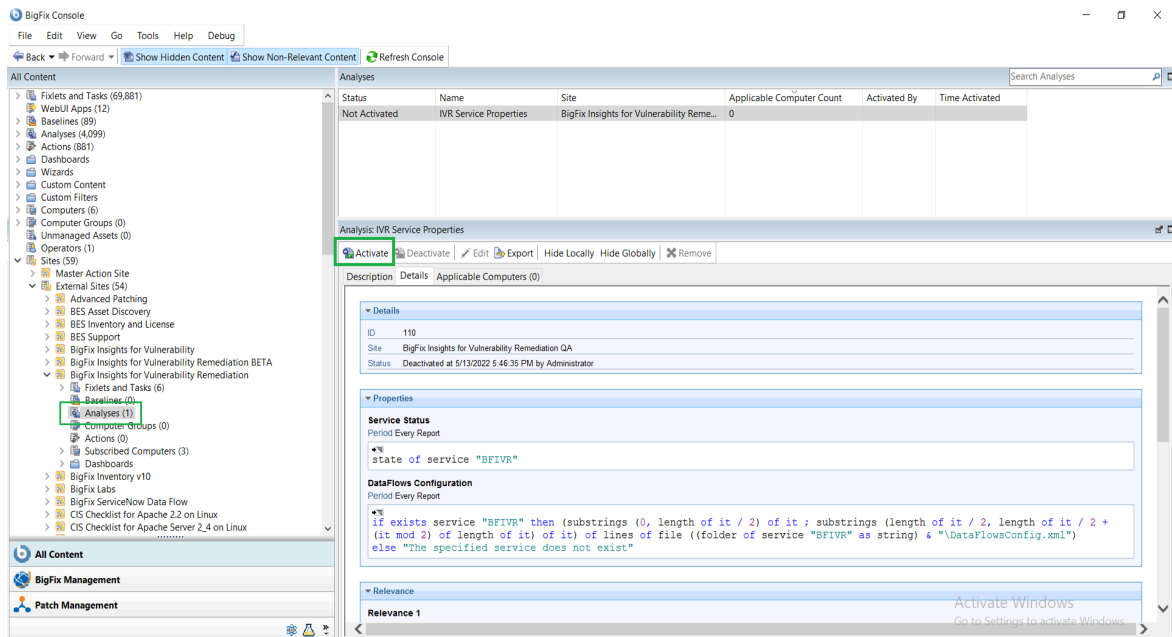
 **Note:** Refer to the following [link](#) for more information about **License Overview** dashboard.

2. Subscribe computers to the site. It is recommended to subscribe to All computers. For more information on **Computer Subscriptions Tab** refer to the [link](#).

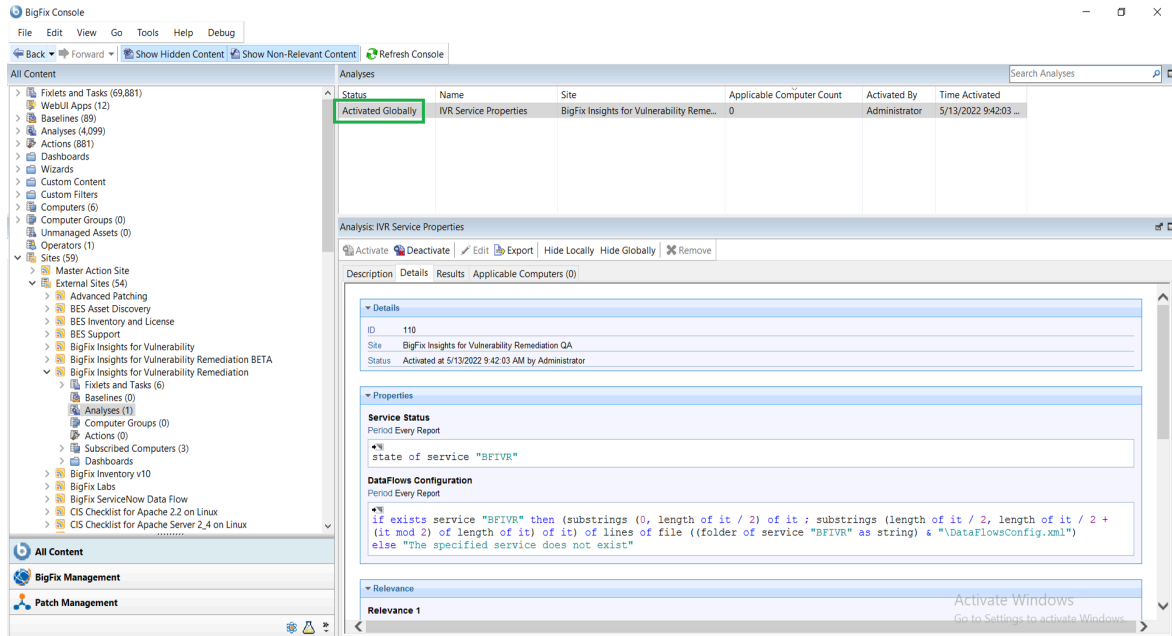





3. Activate the analysis.



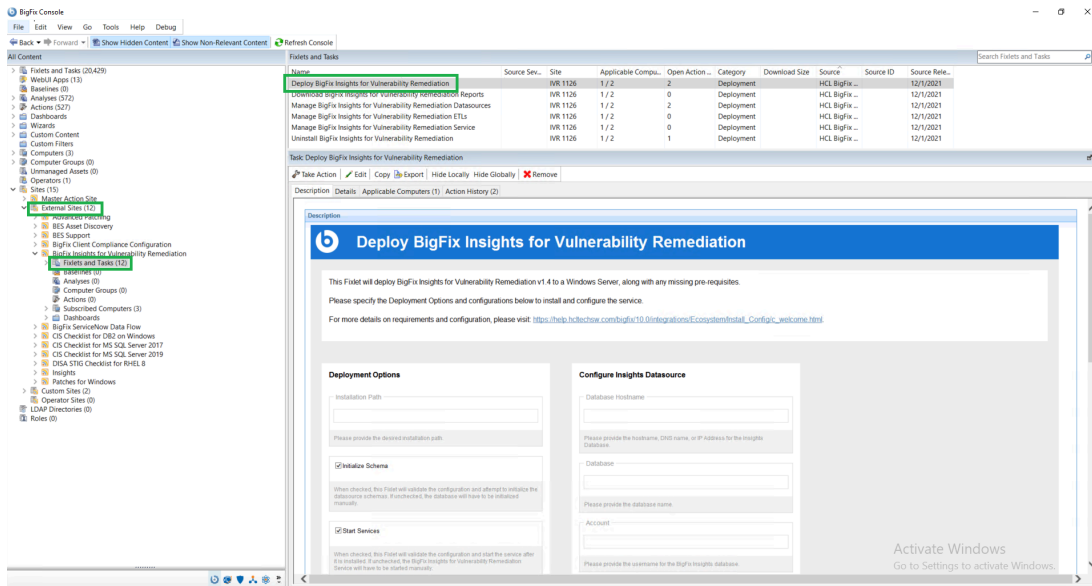
Status of the analysis should be **Activated Globally**.



 **Note:** Refer to the [link](#) to learn more about **Computer Subscriptions Tab**.

4. Deploy the solution to the target server.

- a. Click **Deploy Insights for Vulnerability Remediation** Fixlet in the **BigFix Insights for Vulnerability Remediation** external sites.



- b. Fill in the blanks in the description panel and **Take action** to deploy the IVR services.

Please provide:

- Deployment Options
- Installation path

- Configure Insights Datasource
  - Database Hostname - the hostname, DNS name, or IP address for the Insights Database
  - Database - database name
  - Account - the user name for the BigFix Insights Database
  - Password - the password for the user name specified above
- Configure IVR ETL
  - Import Vulnerability Data Into Insights - specify the desired ETL schedule for Vulnerability data
  - Import BigFix Asset Data Into Tenable.IO - specify the desired ETL schedule for Asset data\*

ETL schedule for Vulnerability data uses Cron Time String Format. Refer to the [link](#) to find out more about the Scheduler.

The column named `datasource_device_id` in Bigfix Insight serves as the device identifier for IVR purposes. This identifier is labeled as `bigfix_asset_id` and forwarded to TenableIO.

\*Tenable.IO offers an optional feature that allows BigFix IVR to transmit endpoint asset data to Tenable.IO. This can potentially give Tenable users access to information about assets that were previously unknown. By providing a more comprehensive and current view of the assets, Tenable.IO and BigFix can help in identifying and mitigating potential security risks, identifying under-utilized resources, and facilitating compliance efforts. For more information about assets in Tenable.IO refer to the following page: <https://docs.tenable.com/tenableio/Content/Platform/Explore/>

The screenshot displays the BigFix console interface. At the top, there is a table titled 'Fixlets and Tasks' with columns for ID, Name, Source, Severity, Site, Applicable Computers, Open Action Count, Category, Download Size, Source, and Source ID. Below the table, there are buttons for 'Take Action', 'Edit', 'Copy', 'Export', 'Hide Locally', 'Hide Globally', and 'Remove'. The main content area is divided into two panels: 'Configure IVR ETL' and 'Configure Vulnerability Management Datasource'. The 'Configure IVR ETL' panel has two sections: 'Import Vulnerability Data Into Insights' with a 'Vulnerability Import Schedule' field and 'Import BigFix Asset Data Into Tenable IO' with a checked checkbox and an 'Asset Import Schedule' field. The 'Configure Vulnerability Management Datasource' panel includes a 'VM Platform' dropdown menu set to 'TenableIO', and fields for 'Connection String', 'Access Key', and 'Secret Key'. A blue link 'ExploreAssets.htm.' is visible at the bottom left of the screenshot area.

- Configure Vulnerability Management Datasource

- VM Platform - specify the VM Platform
- Connection String - the URL to the Vulnerability Management Platform
- Access Key - access key for the Vulnerability Management Platform
- Secret Key - secret key for the user name specified above

**Task Deploy BigFix Insights for Vulnerability Remediation**

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

Description | Details | Applicable Computers (1) | Action History (2)

#### Deployment Options

Installation Path

Please provide the desired installation path.

**Initialize Schema**

When checked, this Fodet will validate the configuration and attempt to initialize the database schemas. If unchecked, the database will have to be initialized manually.

**Start Services**

When checked, this Fodet will validate the configuration and start the service after it is installed. If unchecked, the BigFix Insights for Vulnerability Remediation Service will have to be started manually.

#### Configure Insights Datasource

Database Hostname

Please provide the hostname, DNS name, or IP Address for the Insights Database.

Database

Please provide the database name.

Account

Please provide the username for the BigFix Insights database.

Password

Please provide the password for the user name specified above.

#### Configure IVR ETL

**Import Vulnerability Data into Insights**

When checked, the ETL from the Vulnerability Management system to BigFix Insights will be enabled.

Vulnerability Import Schedule

Please specify the desired ETL schedule for Vulnerability data.

**Import BigFix Asset Data into Tenable IO**

When checked, the ETL for Asset data from BigFix Insights to Tenable IO will be

#### Configure Vulnerability Management Datasource

VM Platform

Please specify the Vulnerability Management Platform

Connection String

Please provide the URI to the Vulnerability Management Platform

Access Key

To provide proxy details click on **Advanced Settings**. This option is not mandatory.

**Advanced Settings**

**Proxy Settings for Insights Datasource**

Proxy Host

Please provide the proxy/host for Insights Datasource.

Proxy User

Please provide the proxy/username.

Proxy Password

Please provide the proxy/password.

**Proxy Settings for VM**

Proxy Host

Please provide the proxy/host URI for VM

Proxy User

Please provide the proxy/username.

Proxy Password

Please provide the proxy/password.



**Note:** Please note the following pre-requisites:

- Microsoft Visual Studio C++ Redistributable 2012: <https://www.microsoft.com/en-in/download/details.aspx?id=30679>
- Microsoft ODBC Driver 17 for SQL Server: <https://www.microsoft.com/en-us/download/details.aspx?id=56567>
  - <https://www.microsoft.com/en-us/download/details.aspx?id=56567>

The Fixlet will attempt to deploy the pre-requisites automatically.

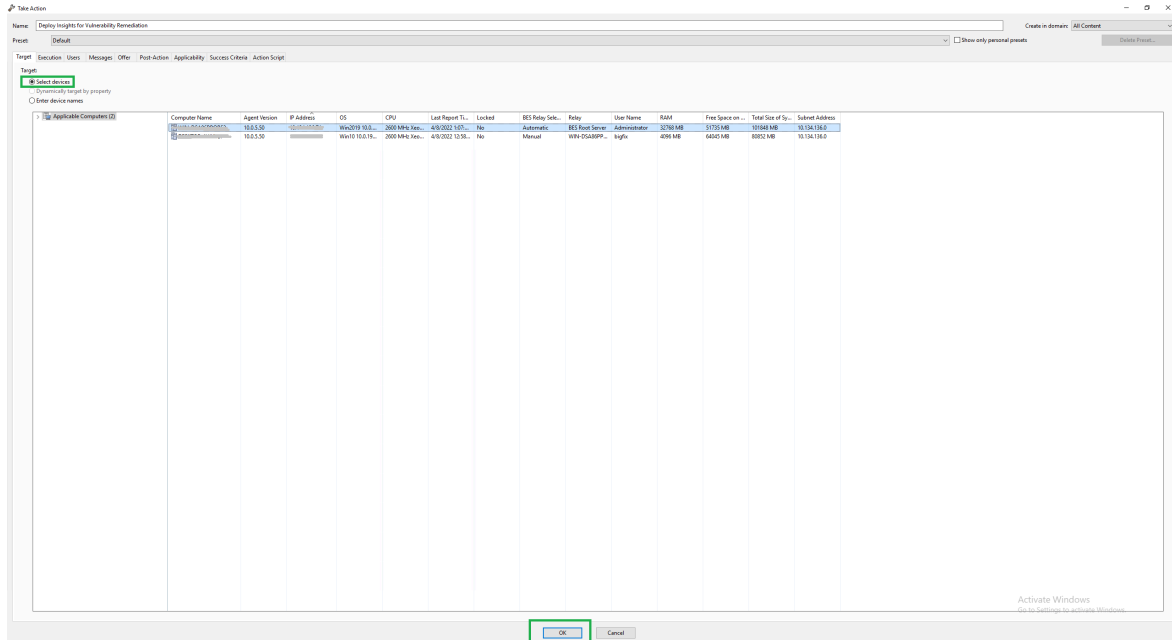


**Warning:** Do not deploy the **BigFix Insights for Vulnerability Service** to more than 1 machine.

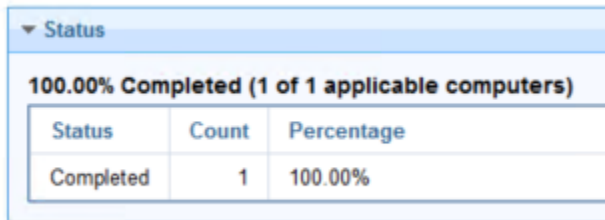


**Warning:** Do not have more than 2 dataflows per IVR Service.

5. Select target devices under Target tab and click **OK**.



Wait for the deployment to complete. Status should show 100% completed.




- If **Start services** option was selected in the Description panel **BigFix Insights for Vulnerability Remediation** service should be present and in **Running** state in the Services. Otherwise, the **BigFix Insights for Vulnerability Remediation** service must be started manually. This indicates deployment is completed. Deployment can be checked on the log file: install.log.

Refer to the following [link](#) to learn more about other IVR Tasks.

## Deployment and configuration for Tenable.sc

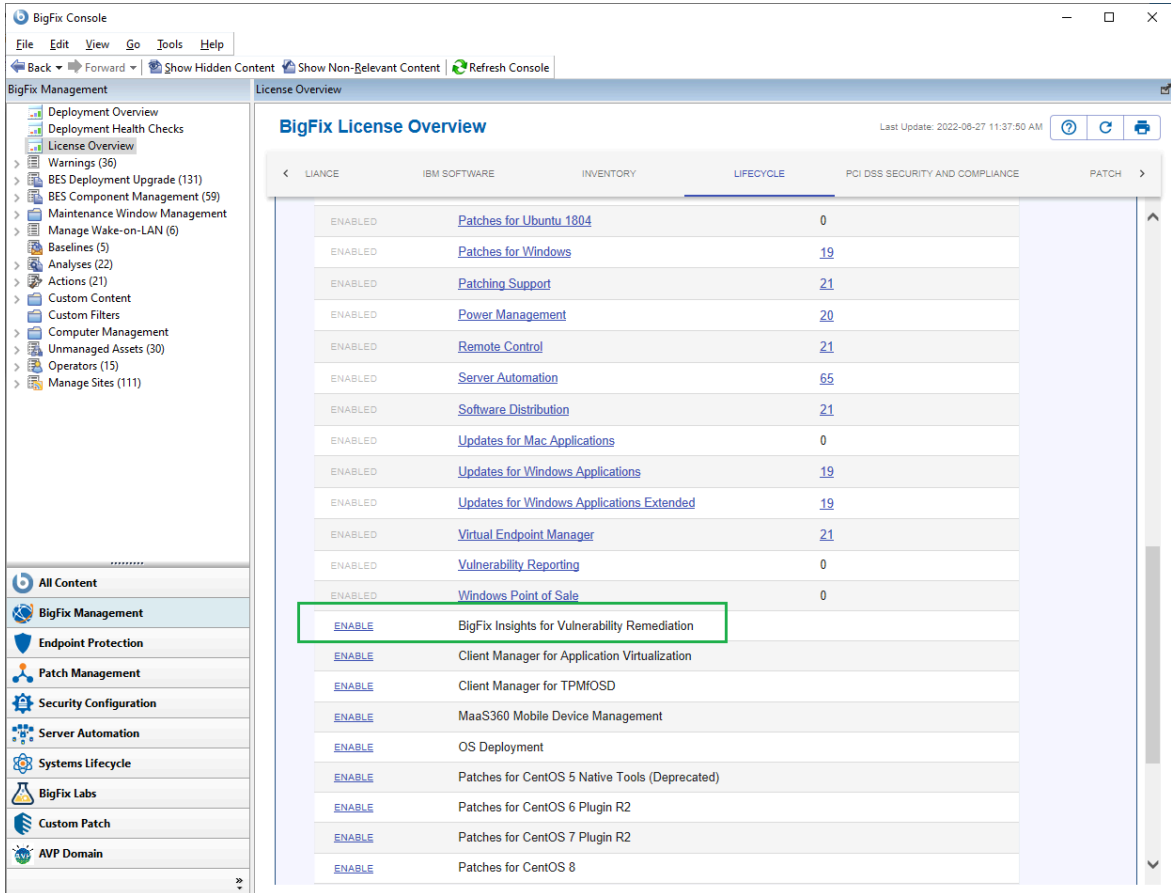
This module provides the steps to deploy and configure the BigFix Insights for Vulnerability Remediation solution.

To install and configure BigFix Insights for Vulnerability Remediation service, perform below steps:

 **Note:** To use the latest release build, the old version must be uninstalled.

1. Enable a content site.

Navigate to BigFix License Overview Dashboard. In **Compliance/Lifecycle** panel, click **Enable BigFix Insights for Vulnerability Remediation Fixlet** to gather the required content.



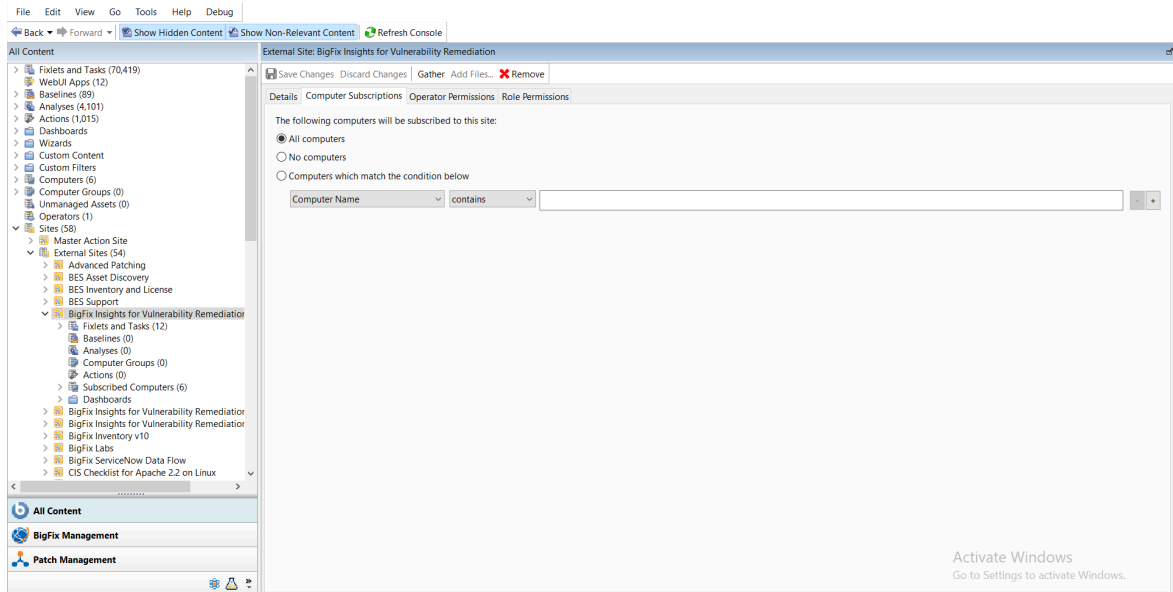
The screenshot shows the BigFix License Overview dashboard. The left sidebar contains a navigation menu with categories like Deployment Overview, License Overview, Warnings, BES Deployment Upgrade, BES Component Management, Maintenance Window Management, Manage Wake-on-LAN, Baselines, Analyses, Actions, Custom Content, Custom Filters, Computer Management, Unmanaged Assets, Operators, and Manage Sites. The main area displays the 'BigFix License Overview' dashboard with a 'LIFECYCLE' tab selected. The dashboard shows a list of content items with columns for status, name, and count. The item 'BigFix Insights for Vulnerability Remediation' is highlighted with a green box.

STATUS	CONTENT NAME	COUNT
ENABLED	Patches for Ubuntu 1804	0
ENABLED	Patches for Windows	19
ENABLED	Patching Support	21
ENABLED	Power Management	20
ENABLED	Remote Control	21
ENABLED	Server Automation	65
ENABLED	Software Distribution	21
ENABLED	Updates for Mac Applications	0
ENABLED	Updates for Windows Applications	19
ENABLED	Updates for Windows Applications Extended	19
ENABLED	Virtual Endpoint Manager	21
ENABLED	Vulnerability Reporting	0
ENABLED	Windows Point of Sale	0
<b>ENABLE</b>	<b>BigFix Insights for Vulnerability Remediation</b>	
ENABLE	Client Manager for Application Virtualization	
ENABLE	Client Manager for TPM/OSD	
ENABLE	MaaS360 Mobile Device Management	
ENABLE	OS Deployment	
ENABLE	Patches for CentOS 5 Native Tools (Deprecated)	
ENABLE	Patches for CentOS 6 Plugin R2	
ENABLE	Patches for CentOS 7 Plugin R2	
ENABLE	Patches for CentOS 8	

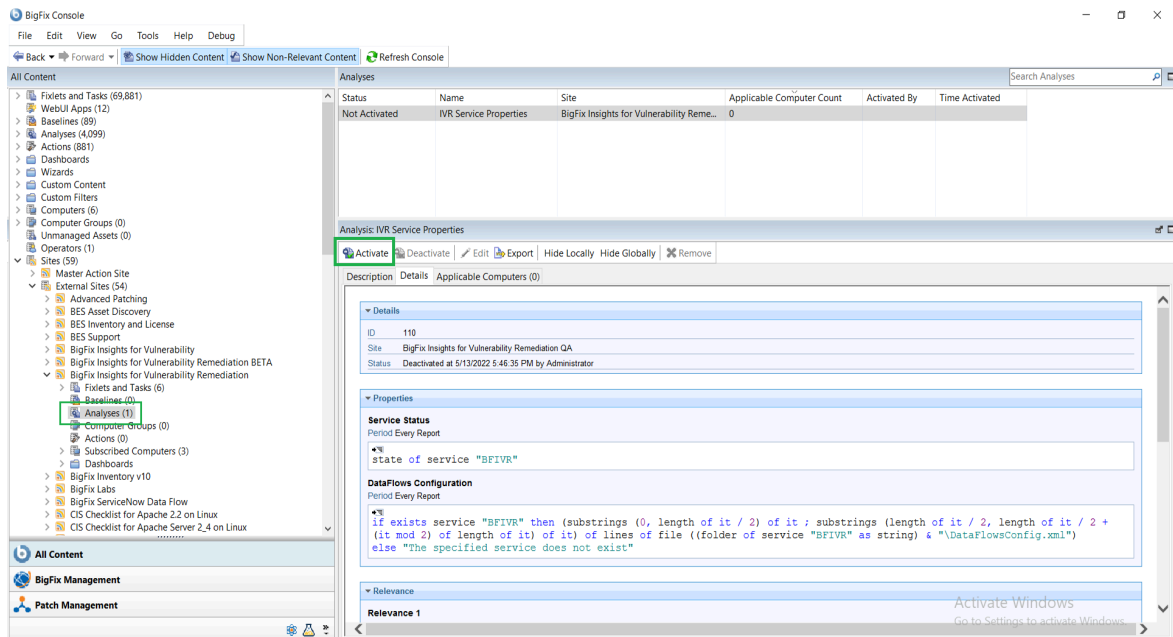


**Note:** Refer to the following [link](#) for more information about **License Overview dashboard**.

2. Subscribe computers to the site. It is recommended to subscribe to All computers. For more information on **Computer Subscriptions Tab** refer to the [link](#).

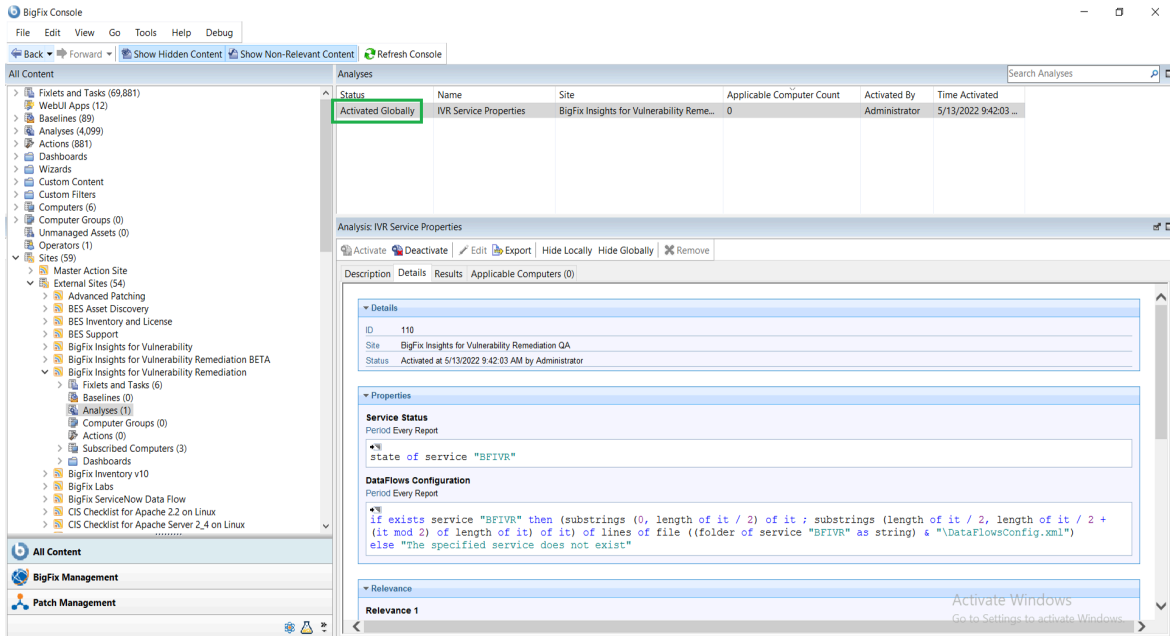


### 3. Activate the analysis.



Status of the analysis should be **Activated Globally**.

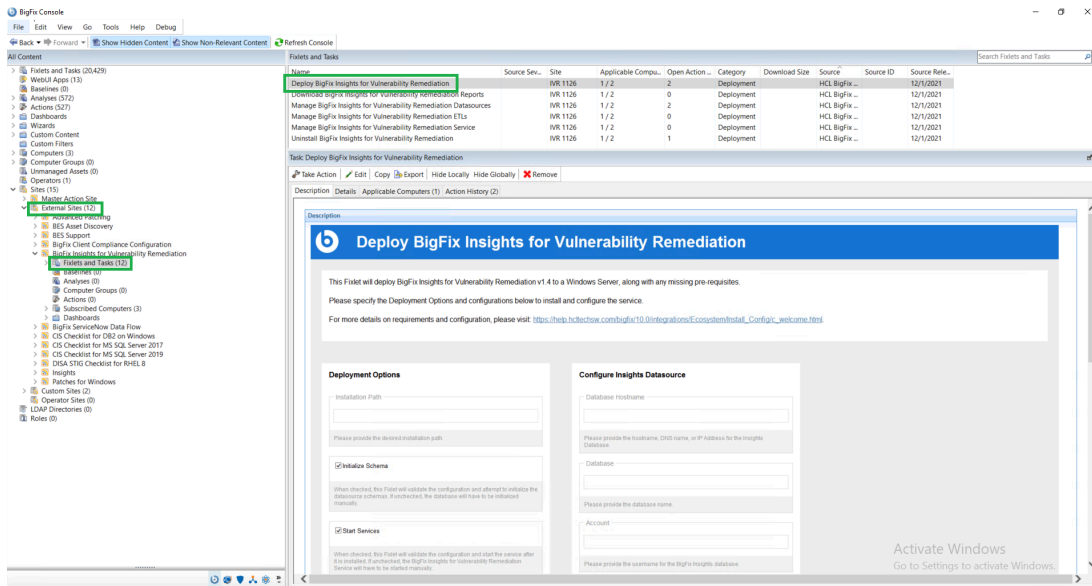




**Note:** Refer to the [link](#) to learn more about **Computer Subscriptions** Tab.

4. Deploy the solution to the target server.

- a. Click **Deploy Insights for Vulnerability Remediation** Fixlet in the **BigFix Insights for Vulnerability Remediation** external site.



- b. Fill in the blanks in the description panel and **Take action** to deploy the IVR services.

Please provide:

- Deployment Options
- Installation path

- Configure Insights Database
  - Database Hostname - the hostname, DNS name, or IP address for the Insights Database
  - Database - database name
  - Account - the user name for the BigFix Insights Database
  - Password - the password for the user name specified above
- Configure IVR ETL
  - Vulnerability Import Schedule - specify the desired ETL schedule for Vulnerability data. ETL schedule for Vulnerability data uses Cron Time String Format. Refer to the [link](#) to find out more about the Scheduler.
- Configure Vulnerability Management Datasource
  - specify the VM Platform
  - Connection String - the URL to the Vulnerability Management Platform
  - Account - the user name for the Vulnerability Management Platform
  - Password - the password for the user name specified above

**Task Deploy BigFix Insights for Vulnerability Remediation**

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

Description | Details | Applicable Computers (1) | Action History (2)

### Deployment Options

Installation Path

Please provide the desired installation path.

**Initialize Schema**

When checked, this Policy will validate the configuration and attempt to initialize the database schemas. If unchecked, the database will have to be initialized manually.

**Start Services**

When checked, this Policy will validate the configuration and start the service after it is installed. If unchecked, the BigFix Insights for Vulnerability Remediation Service will have to be started manually.

### Configure Insights Datasource

Database Hostname

Please provide the hostname, DNS name, or IP Address for the Insights Database.

Database

Please provide the database name.

Account

Please provide the username for the BigFix Insights database.

Password

Please provide the password for the user name specified above.

### Configure IVR ETL

**Import Vulnerability Data into Insights**

When checked, the ETL from the Vulnerability Management system to Big Fix Insights will be enabled.

Vulnerability Import Schedule

Please specify the desired ETL schedule for Vulnerability data.

### Configure Vulnerability Management Datasource

VM Platform

**tenableSC**

Please specify the Vulnerability Management Platform.

Connection String

Please provide the URI to the Vulnerability Management Platform.

Account

To provide proxy details click on **Advanced Settings**. This option is not mandatory.

The screenshot shows a configuration interface with a grey header bar labeled "Advanced Settings". Below the header, there are two side-by-side panels. The left panel is titled "Proxy Settings for Insights Datasource" and contains three input fields: "Proxy Host", "Proxy User", and "Proxy Password". Each field has a corresponding instruction below it: "Please provide the proxy/host for Insights Datasource.", "Please provide the proxyusername.", and "Please provide the proxy password." The right panel is titled "Proxy Settings for VM" and also contains three input fields: "Proxy Host", "Proxy User", and "Proxy Password", with instructions: "Please provide the proxy/host URI for VM", "Please provide the proxyusername.", and "Please provide the proxy password."



**Note:** Please note the following pre-requisites:

- Microsoft Visual Studio C++ Redistributable 2012: <https://www.microsoft.com/en-in/download/details.aspx?id=30679>
- Microsoft ODBC Driver 17 for SQL Server: <https://www.microsoft.com/en-us/download/details.aspx?id=56567>
  - <https://www.microsoft.com/en-us/download/details.aspx?id=56567>

The Fixlet will attempt to deploy the pre-requisites automatically.

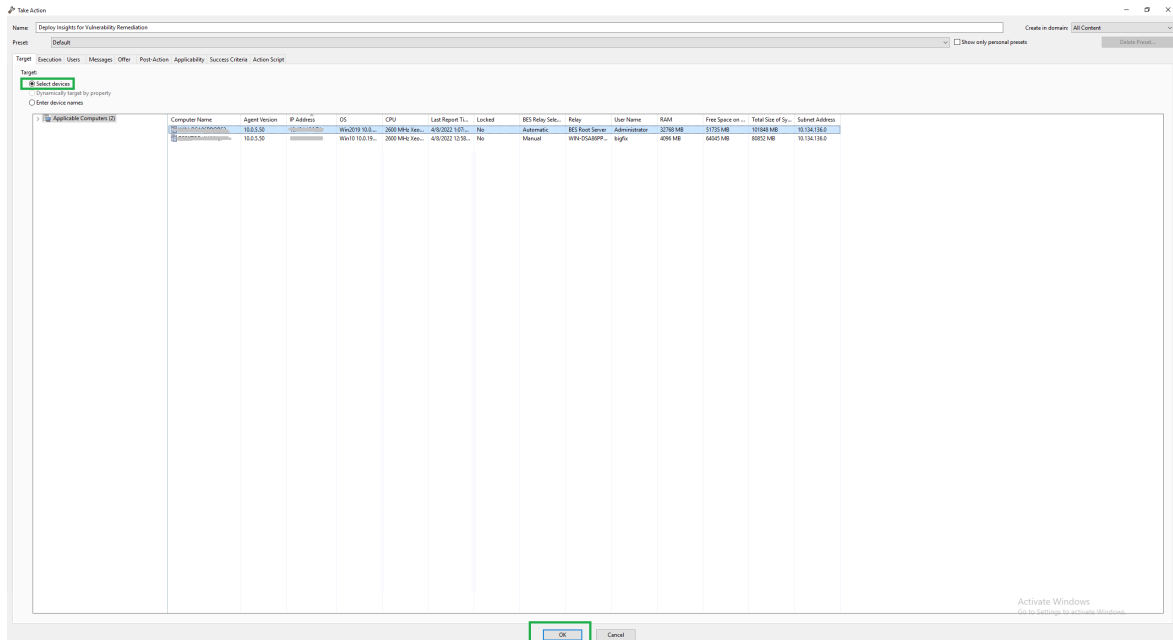


**Warning:** Do not deploy the BigFix Insights for Vulnerability Remediation Service to more than 1 machine.



**Warning:** Do not have more than 1 dataflow per IVR Service.

5. Select target devices and click **OK**.



Wait for the deployment to complete. Status should show 100% completed.

Status		
<b>100.00% Completed (1 of 1 applicable computers)</b>		
Status	Count	Percentage
Completed	1	100.00%

- If **Start services** option was selected in the Description panel **BigFix Insights for Vulnerability Remediation** service should be present and in **Running** state in the Services. Otherwise, the **BigFix Insights for Vulnerability Remediation** service must be started manually. This indicates deployment is completed. can be checked on the log file: install.log.

Refer to the following [link](#) to learn more about other IVR Tasks.

## Deployment and configuration for Qualys

This module provides the steps to deploy and configure the BigFix Insights for Vulnerability Remediation solution.

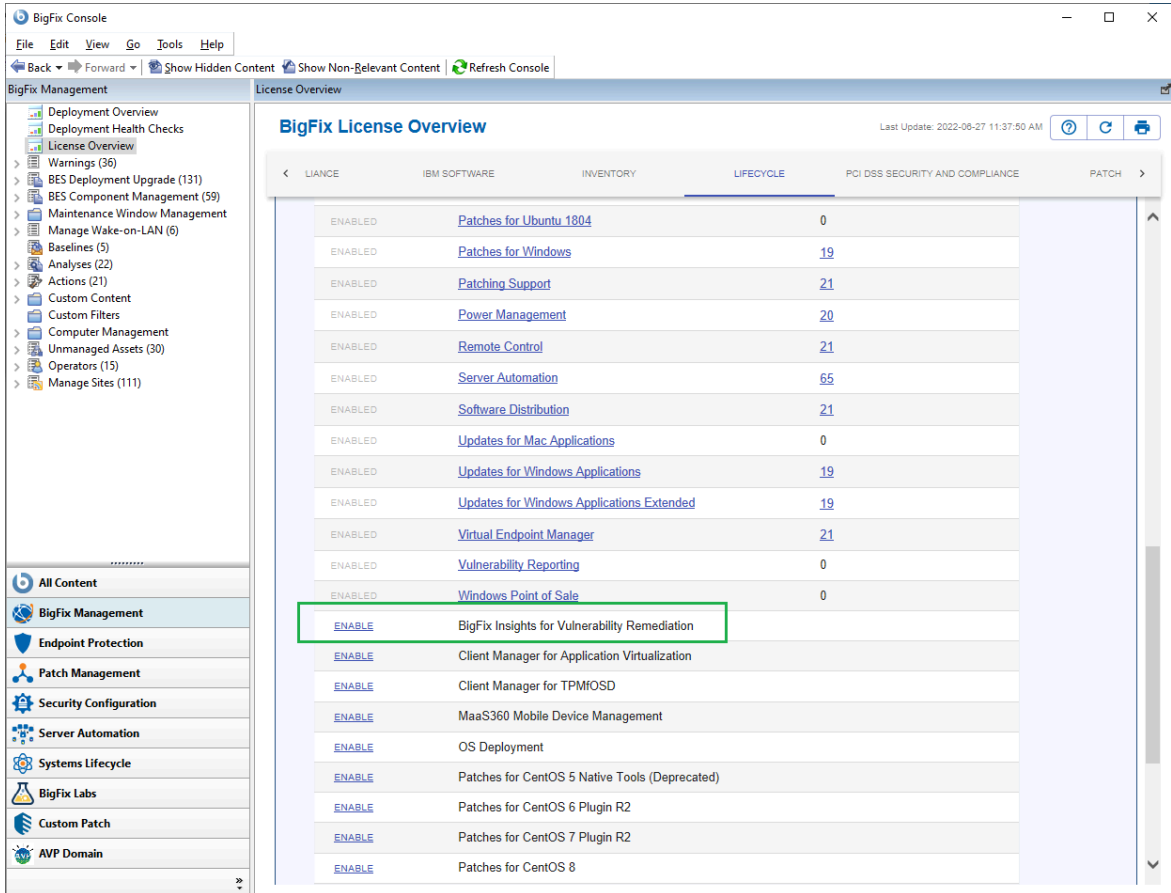
To install and configure BigFix Insights for Vulnerability Remediation service, perform below steps:



**Note:** To use the latest release build, the old version must be uninstalled.

## 1. Enable a content site.

Navigate to BigFix License Overview Dashboard. In **Compliance/Lifecycle** panel, click **Enable BigFix Insights for Vulnerability Remediation Fixlet** to gather the required content.



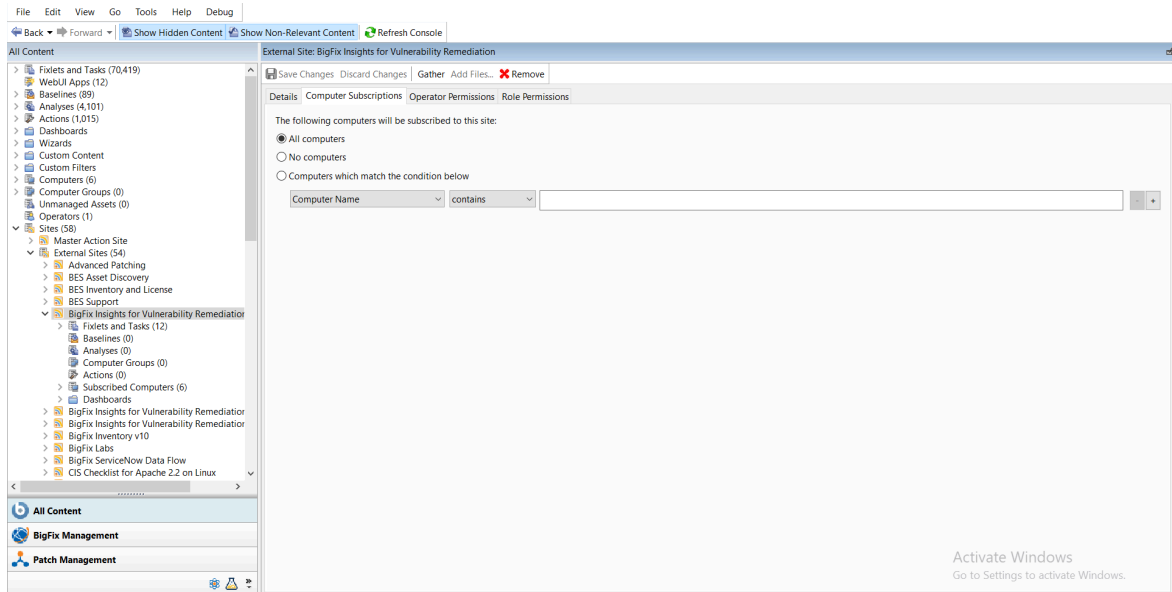
The screenshot shows the BigFix Console interface. The left sidebar contains a navigation menu with categories like Deployment Overview, License Overview, Warnings, BES Deployment Upgrade, BES Component Management, Maintenance Window Management, Manage Wake-on-LAN, Baselines, Analyses, Actions, Custom Content, Custom Filters, Computer Management, Unmanaged Assets, Operators, and Manage Sites. The main area displays the 'BigFix License Overview' dashboard with a 'LIFECYCLE' tab selected. The dashboard shows a list of content sites with columns for status, name, and count. The 'BigFix Insights for Vulnerability Remediation' site is highlighted with a green box.

STATUS	CONTENT SITE NAME	COUNT
ENABLED	Patches for Ubuntu 1804	0
ENABLED	Patches for Windows	19
ENABLED	Patching Support	21
ENABLED	Power Management	20
ENABLED	Remote Control	21
ENABLED	Server Automation	65
ENABLED	Software Distribution	21
ENABLED	Updates for Mac Applications	0
ENABLED	Updates for Windows Applications	19
ENABLED	Updates for Windows Applications Extended	19
ENABLED	Virtual Endpoint Manager	21
ENABLED	Vulnerability Reporting	0
ENABLED	Windows Point of Sale	0
<b>ENABLE</b>	<b>BigFix Insights for Vulnerability Remediation</b>	
ENABLE	Client Manager for Application Virtualization	
ENABLE	Client Manager for TPM/OSD	
ENABLE	MaaS360 Mobile Device Management	
ENABLE	OS Deployment	
ENABLE	Patches for CentOS 5 Native Tools (Deprecated)	
ENABLE	Patches for CentOS 6 Plugin R2	
ENABLE	Patches for CentOS 7 Plugin R2	
ENABLE	Patches for CentOS 8	

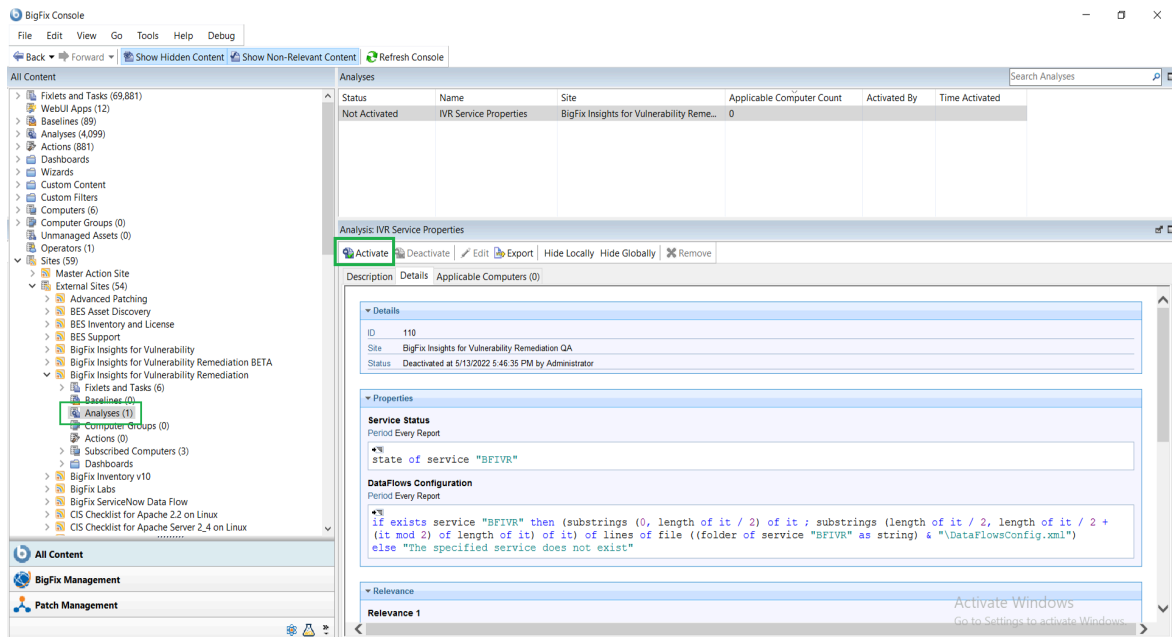


**Note:** Refer to the following [link](#) for more information about **License Overview dashboard**.

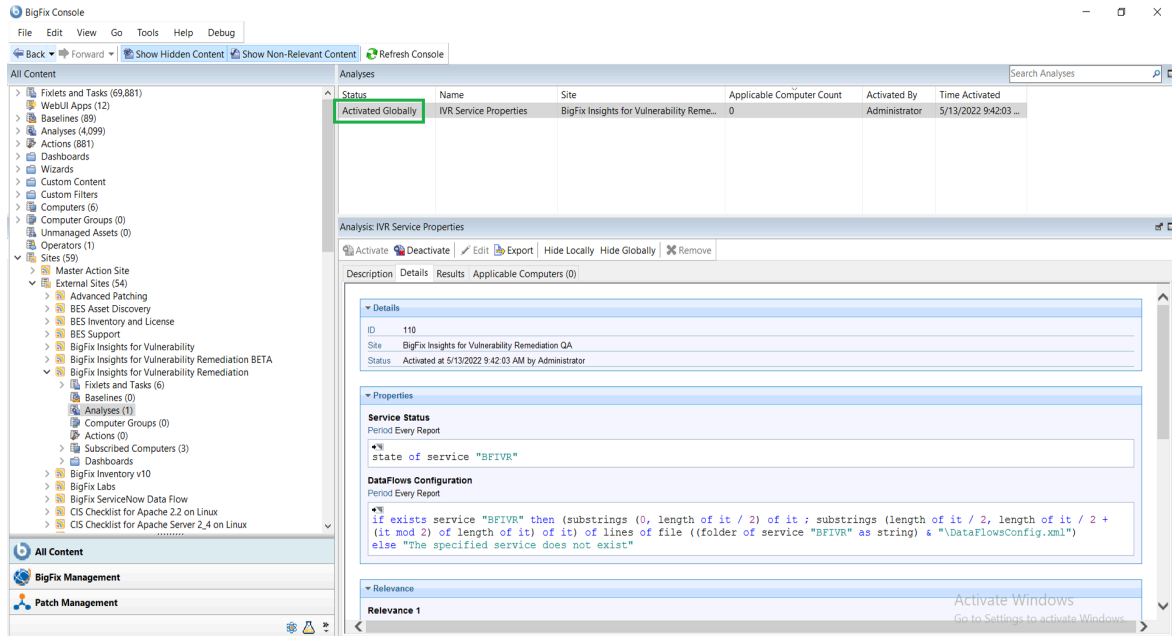
2. Subscribe computers to the site. It is recommended to subscribe to All computers. For more information on **Computer Subscriptions Tab** refer to the [link](#).




3. Activate the analysis.



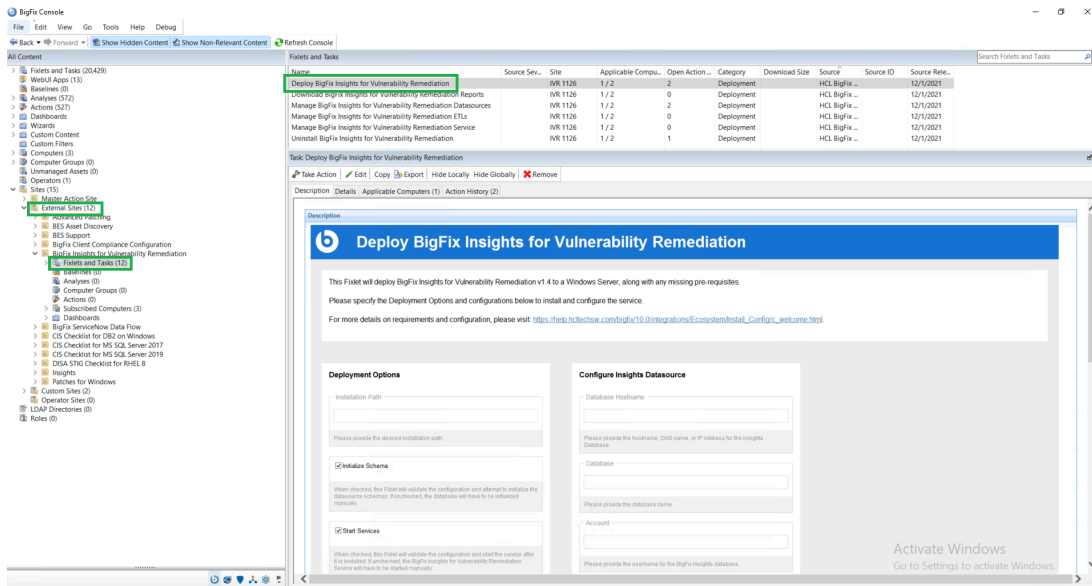
Status of the analysis should be **Activated Globally**.



 **Note:** Refer to the [link](#) to learn more about **Computer Subscriptions Tab**.

4. Deploy the solution to the target server.

a. Click **Deploy Insights for Vulnerability Remediation** Fixlet in the **BigFix Insights for Vulnerability Remediation** external site.



b. Fill in the blanks in the description panel and **Take action** to deploy the IVR services.

Please provide:

- Deployment Options:
  - Installation path



- Configure Insights Database
  - Database Hostname - the hostname, DNS name, or IP address for the Insights Database
  - Database - database name
  - Account - the user name for the BigFix Insights Database
  - Password - the password for the user name specified above
- Configure IVR ETL
  - Vulnerability Import Schedule - ETL schedule for Vulnerability data uses Cron Time String Format. Refer to the [link](#) to find out more about the Scheduler
- Configure Vulnerability Management Datasource:
  - specify the VM Platform
  - Connection String - the URL to the Vulnerability Management Platform
  - Account - the user name for the Vulnerability Management Platform
  - Password - the password for the user name specified above

Task Deploy BigFix Insights for Vulnerability Remediation

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

Description | Details | Applicable Computers (1) | Action History (2)

### Deployment Options

Installation Path

Please provide the desired installation path.

Initialize Schema

When checked, this Policy will validate the configuration and attempt to initialize the database schema. If unchecked, the database will have to be initialized manually.

Start Services

When checked, this Policy will validate the configuration and start the service after it is installed. If unchecked, the BigFix Insights for Vulnerability Remediation Service will have to be started manually.

### Configure Insights Datasource

Database Hostname

Please provide the hostname, DNS name, or IP Address for the Insights Database.

Database

Please provide the database name.

Account

Please provide the username for the BigFix Insights database.

Password

Please provide the password for the username specified above.

### Configure IVR ETL

Import Vulnerability Data Into Insights

When checked, the ETL from the Vulnerability Management system to BigFix Insights will be enabled.

Vulnerability Import Schedule

Please specify the desired ETL schedule for Vulnerability data.

### Configure Vulnerability Management Datasource

VM Platform

QualysAPI

Please specify the Vulnerability Management Platform

Connection String

Please provide the URI to the Vulnerability Management Platform

Account

To provide proxy details click on **Advanced Settings**. This option is not mandatory.

**Advanced Settings**

**Proxy Settings for Insights Datasource**

Proxy Host

Please provide the proxy/host for Insights Datasource.

Proxy User

Please provide the proxy/username.

Proxy Password

Please provide the proxy/password.

**Proxy Settings for VM**

Proxy Host

Please provide the proxy/host URI for VM

Proxy User

Please provide the proxy/username.

Proxy Password

Please provide the proxy/password.



**Note:** Please note the following pre-requisites:

- Microsoft Visual Studio C++ Redistributable 2012: <https://www.microsoft.com/en-in/download/details.aspx?id=30679>
- Microsoft ODBC Driver 17 for SQL Server: <https://www.microsoft.com/en-us/download/details.aspx?id=56567>
  - <https://www.microsoft.com/en-us/download/details.aspx?id=56567>

The Fixlet will attempt to deploy the pre-requisites automatically.

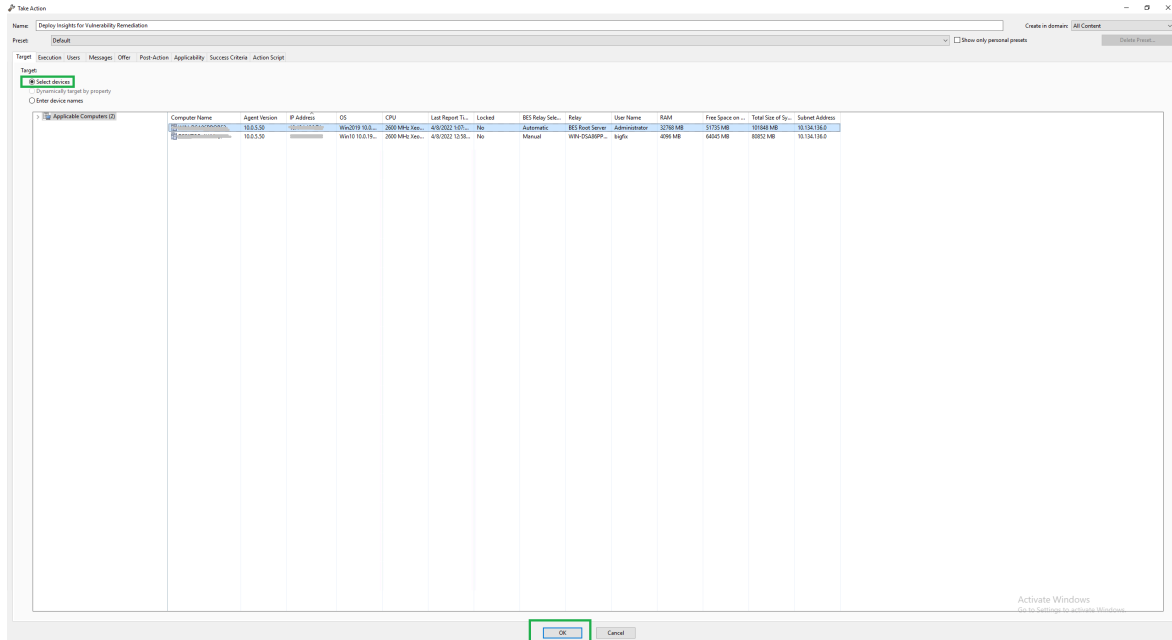


**Warning:** Do not deploy the BigFix Insights for Vulnerability Remediation Service to more than 1 machine.



**Warning:** Do not have more than 1 dataflow per IVR Service.

5. Select target devices and click **OK**. Wait for the deployment to complete.



Status should show 100% completed.

▼ Status		
<b>100.00% Completed (1 of 1 applicable computers)</b>		
Status	Count	Percentage
Completed	1	100.00%

- If **Start services** option was selected in the Description panel **BigFix Insights for Vulnerability Remediation** service should be present and in **Running** state in the Services. Otherwise, the **BigFix Insights for Vulnerability Remediation** service must be started manually. This indicates deployment is completed. can be checked on the log file: install.log.

Refer to the following [link](#) to learn more about other IVR Tasks.

# Chapter 4. Setting up IVR App

Use this module to install and set up your WebUI IVR app.

In order to make WebUI IVR app fully functional, ensure that all the following actions are performed:

1. Deploy **WebUI**.

Refer to the BigFix [WebUI documentation](#), where you can find information about how to install, maintain, and use *BigFix WebUI*.

2. Deploy **Insights**.

Refer to the [BigFix Insights documentation](#), where you can find information about how to setup your BigFix Insights.

3. Deploy and configure **IVR Service**.

Refer to [IVR documentation](#) to deploy and configure the BigFix Insights for Vulnerability Remediation solution for the different Vulnerability Management products.

4. Run **ETLs**.

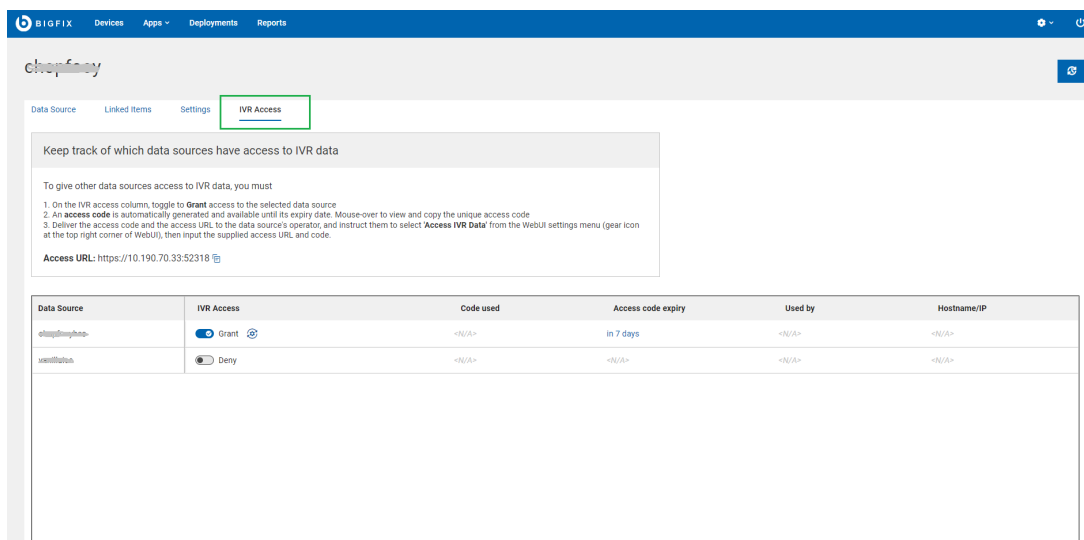
- a. Run Insights ETL - refer to the Insights ETL documentation to learn how to run Insights ETL.
- b. Run IVR dataflow - refer to the [IVR dataflow documentation](#) to learn how to run IVR ETL.

5. Configure WebUI IVR Access.


There are two ways to configure WebUI IVR:

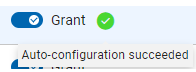
- As primary datasource

Once your initial setup of BigFix Insights is performed. Click the **gear icon** in the WebUI navigation bar, select **Insights**, connect to the database and click **Access IVR Data** tab.



- Toggle to Grant access to the selected data source

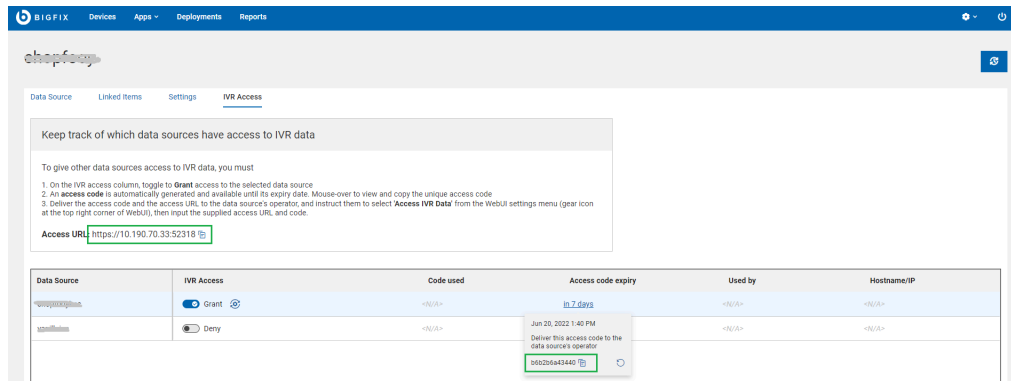
- Click  to automatically configure IVR. Once it is completed symbol will be changed to



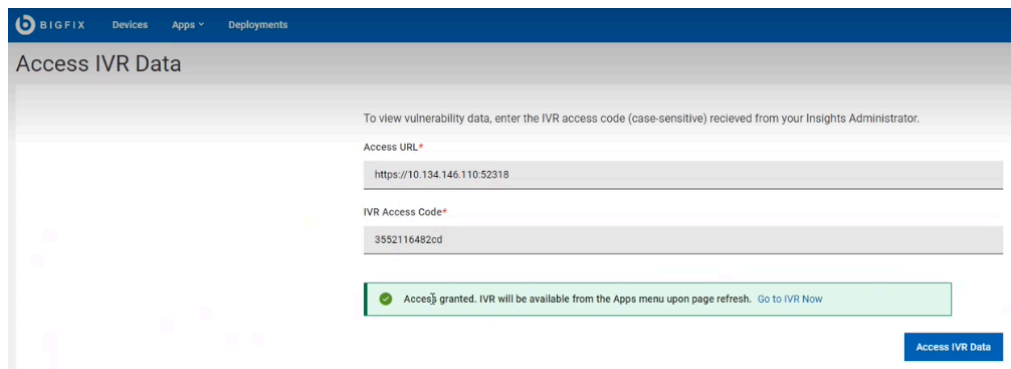
- As secondary datasource

To configure access as a secondary datasource, follow the steps provided in IVR Access tab:

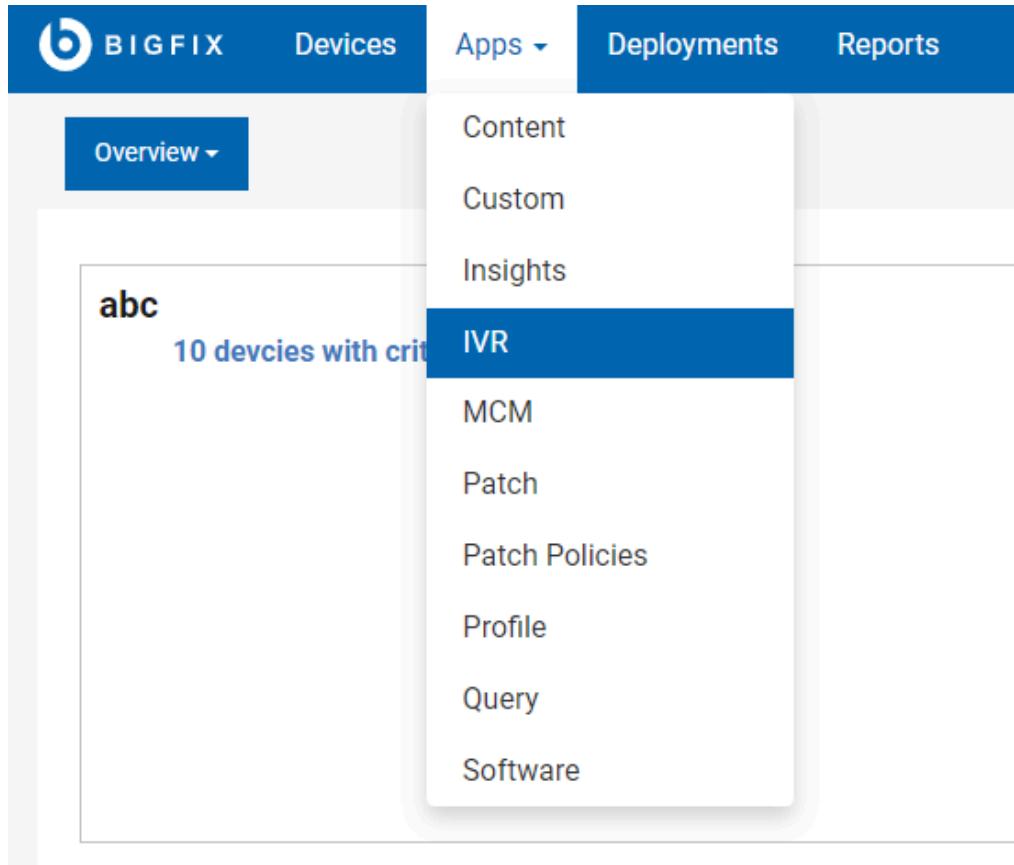
- On the IVR access column, toggle to **Grant** access to the selected data source.
- An **access code** is automatically generated and available until its expiry date. Mouseover to view and copy the unique access code.



- Deliver the access code and the access URL to the data source's operator and instruct them to select '**Access IVR Data**' from the WebUI settings menu (gear icon at the top right corner of WebUI), then input the supplied access URL and code.



- Once the access is granted, IVR app appears in the WebUI Apps drop-down menu.



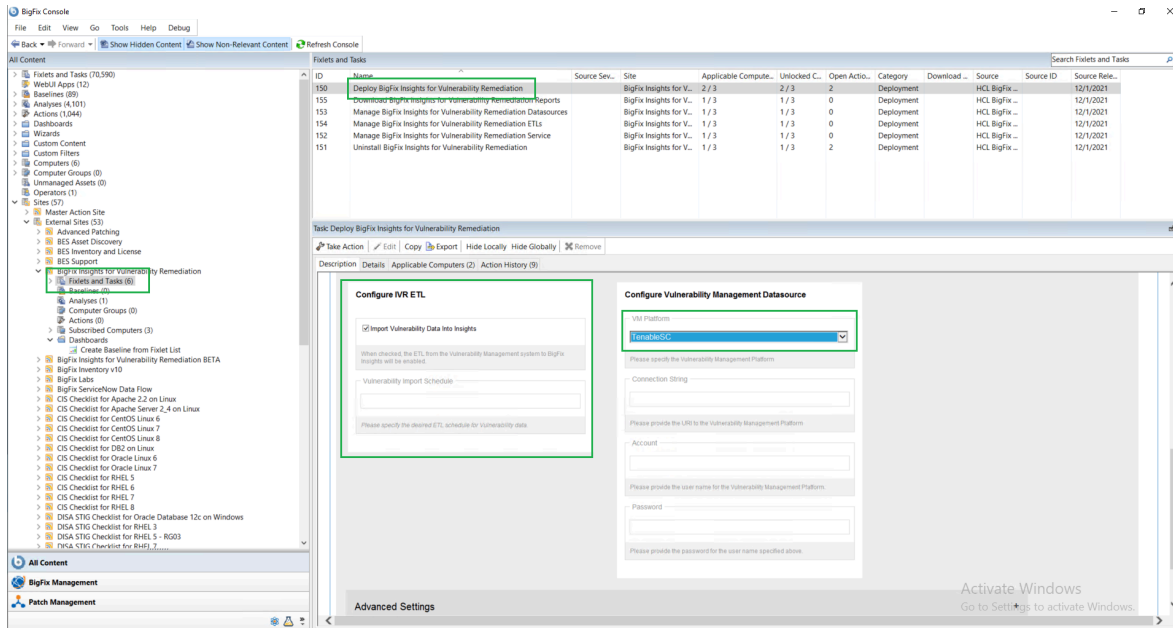
## 6. IVR App User's Guide

# Chapter 5. Scheduling IVR ETL

The Extract, Transform, Load (ETL) process pulls data from a datasource and stores it in the IVR database. An ETL process consumes significant time and resources and hence must be performed on a customized schedule to minimize disruption. In IVR, you can schedule an ETL daily, weekly, or monthly.

Perform the following steps to schedule an ETL in IVR:

1. Initial IVR ETL scheduling is made during deployment. Refer to the [link](#) to see how to deploy IVR Service and configure ETL.



2. After you complete the initial configuration of IVR Service, you can configure IVR ETL using [Manage BigFix Insights for Vulnerability Remediation ETLs](#) Fixlet.





**Note:** IVR Service must be stopped to perform this task. To stop the service use [Manage BigFix Insights for Vulnerability Remediation Service Fixlet and Take Action on Stop IVR Service](#).

ID	Name	Source Serv.	Site	Applicable Compute...	Unlocked C...	Open Actio...	Category	Download...	Source	Source ID	Source Refe...
150	Deploy BigFix Insights for Vulnerability Remediation	BigFix Insights for V...		2/3	2/3	2	Deployment	HCL BigFix...			12/1/2021
155	Download BigFix Insights for Vulnerability Remediation Reports	BigFix Insights for V...		1/3	1/3	0	Deployment	HCL BigFix...			12/1/2021
153	Manage BigFix Insights for Vulnerability Remediation Datasources	BigFix Insights for V...		1/3	1/3	0	Deployment	HCL BigFix...			12/1/2021
154	Manage BigFix Insights for Vulnerability Remediation ETL	BigFix Insights for V...		1/3	1/3	0	Deployment	HCL BigFix...			12/1/2021
152	Manage BigFix Insights for Vulnerability Remediation Service	BigFix Insights for V...		1/3	1/3	0	Deployment	HCL BigFix...			12/1/2021
151	Uninstall BigFix Insights for Vulnerability Remediation	BigFix Insights for V...		1/3	1/3	2	Deployment	HCL BigFix...			12/1/2021

**Task: Manage BigFix Insights for Vulnerability Remediation Service**

Click here to start the IVR Service.

Click here to stop the IVR Service.

Click here to restart the IVR Service.

Click here to validate the IVR Service configuration.

**Current Service Status:** Running

**Actions:**

- Click here to start the IVR Service.
- Click here to stop the IVR Service.
- Click here to restart the IVR Service.
- Click here to validate the IVR Service configuration.

To ensure that dataflow has completed successfully, go to logs folder and open a respective dataflow\_\*.log file. Check if the following message appears in the file:

```
execute LogLevels.INFO DataFlow Execution Completed
```

```
2022-06-10 13:40:32.188547 22552 perform_aggregations LogLevels.INFO Executing Stored Procedure: ivr.PerformAggregates_VulnerabilityDiscrepan
2022-06-10 13:40:33.266659 22552 perform_aggregations LogLevels.INFO Aggregations Performed In: 0:00:04.421870
2022-06-10 13:40:33.266659 22552 execute_logLevels.INFO DataFlow Execution Completed In: 0:00:57.671877
2022-06-10 13:40:33.297909 22552 execute_ivrmetrics_sql_command LogLevels.INFO IVR_Metrics table inserted with execution details
```

# Chapter 6. IVR Fixlets and Tasks

Learn more about available Fixlets and Tasks for BigFix Insights for Vulnerability Remediation.

[Deploy Insights for Vulnerability Remediation](#)

[Download BigFix Insights for Vulnerability Remediation Reports](#)

[Manage BigFix Insights for Vulnerability Remediation Datasources](#)

[Manage BigFix Insights for Vulnerability Remediation ETLs](#)

[Manage BigFix Insights for Vulnerability Remediation Service](#)

[Uninstall BigFix Insights for Vulnerability Remediation](#)

[Upgrade BigFix Insights for Vulnerability Remediation](#)

[Whitelist Report Download URLs of BigFix Insights for Vulnerability Remediation](#)

## Deploy Insights for Vulnerability Remediation

[Tenable.io](#)

[Tenable.sc](#)

[Qualys](#)

## Download BigFix Insights for Vulnerability Remediation Reports

Use this task to deploy the reports for PowerBI or Tableau platform.

BigFix Insights for Vulnerability Remediation provides business intelligence reports to address three main use cases:

- **Vulnerabilities With Available Fixlets** - A list of vulnerabilities that have matching BigFix Fixlets available for remediation. The report will list the most recent Fixlet related to each vulnerability, and the CVE entries that are associated to the vulnerability.
- **Vulnerabilities Without Available Fixlets** - A list of vulnerabilities that do not have an available Fixlet for remediation.
- **Vulnerability Discrepancies** - A list of vulnerabilities where the scanning system identifies the issue, but BigFix does not see an applicable remediation.

Reporting fixlet uses dynamic downloading. To download the report, ensure that specific URL is added in the DownloadWhitelist.txt:

- Tenable.io
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_PowerBI\\_Tenableio.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_PowerBI_Tenableio.tmp)
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_Tableau\\_Tenableio.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_Tableau_Tenableio.tmp)

- Tenable.sc
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_PowerBI\\_Tenable.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_PowerBI_Tenable.tmp)
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_Tableau\\_Tenable.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_Tableau_Tenable.tmp)
- Qualys
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_PowerBI\\_Qualys.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_PowerBI_Qualys.tmp)
  - [http://software.bigfix.com/download/ivr/1.4/Dashboards\\_Tableau\\_Qualys.tmp](http://software.bigfix.com/download/ivr/1.4/Dashboards_Tableau_Qualys.tmp)

The location of the file on the BigFix server is:

`C:\Program Files (x86)\BigFix Enterprise\BES Server\Mirror Server\Config`

If the file does not exist, create a new one with the same name. The file should contain file formats such as the following:

`http://127.0.0.1:52311/*.*`

`http://software.bigfix.com/*.*`

Refer to the following [link](#) to find out more about **Dynamic download White-lists**.



**Note:** To use this task, you must have only one instance of IVR Dataflows service deployed in this environment.

The screenshot shows a task configuration window titled "Task: Download BigFix Insights for Vulnerability Remediation Reports". The window has a menu bar with "Take Action", "Edit", "Copy", "Export", "Hide Locally", "Hide Globally", and "Remove". Below the menu bar, there are tabs for "Description", "Details", "Applicable Computers (1)", and "Action History (1)". The "Description" tab is active, showing a blue header with the BigFix logo and the title "Download BigFix Insights for Vulnerability Remediation Reports". The main content area contains text explaining the task's purpose and providing a link to a help document. Below this, there is a "Select Reporting Platform" section with a "Report Download Path" field containing "C:\Program Files (x86)\BigFix Enterprise\BFIVR\reports" and a "Reporting Platform" dropdown menu set to "PowerBI". At the bottom, there is an "Actions" section with a button labeled "Click here" to deploy the BI Reports for IVR.

## Manage BigFix Insights for Vulnerability Remediation Datasources

You can use this task to update the specified datasource or validate the IVR Service configuration. This task additionally provides option to specify proxy settings configuration for respective datasources.



**Note:** To use this task, you must have only one instance of IVR Dataflows service deployed in this environment.

Task: Manage BigFix Insights for Vulnerability Remediation Datasources

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

**Click here To update the specified datasource** y (3)  
Click here To validate the IVR Service configuration.

Description

## Manage BigFix Insights for Vulnerability Remediation Datasources

Use this Task to configure/re-configure the BigFix Insights for Vulnerability Remediation Datasources.

**Select Datasource**

<Create New Datasource>

**Datasource Settings**

Datasource Name  
BigfixINSIGHT

Please select the datasource.

Connection String  
[Empty field]

Please specify the connection string.

Account  
[Empty field]

Please provide the user name for the datasource

Password  
[Empty field]

Please provide the password for the user specified above.

**Proxy Settings**

Proxy Host  
[Empty field]

Please specify the proxy host (if applicable).

Proxy User  
[Empty field]

Please specify the proxy user (if applicable).

Proxy Password  
[Empty field]

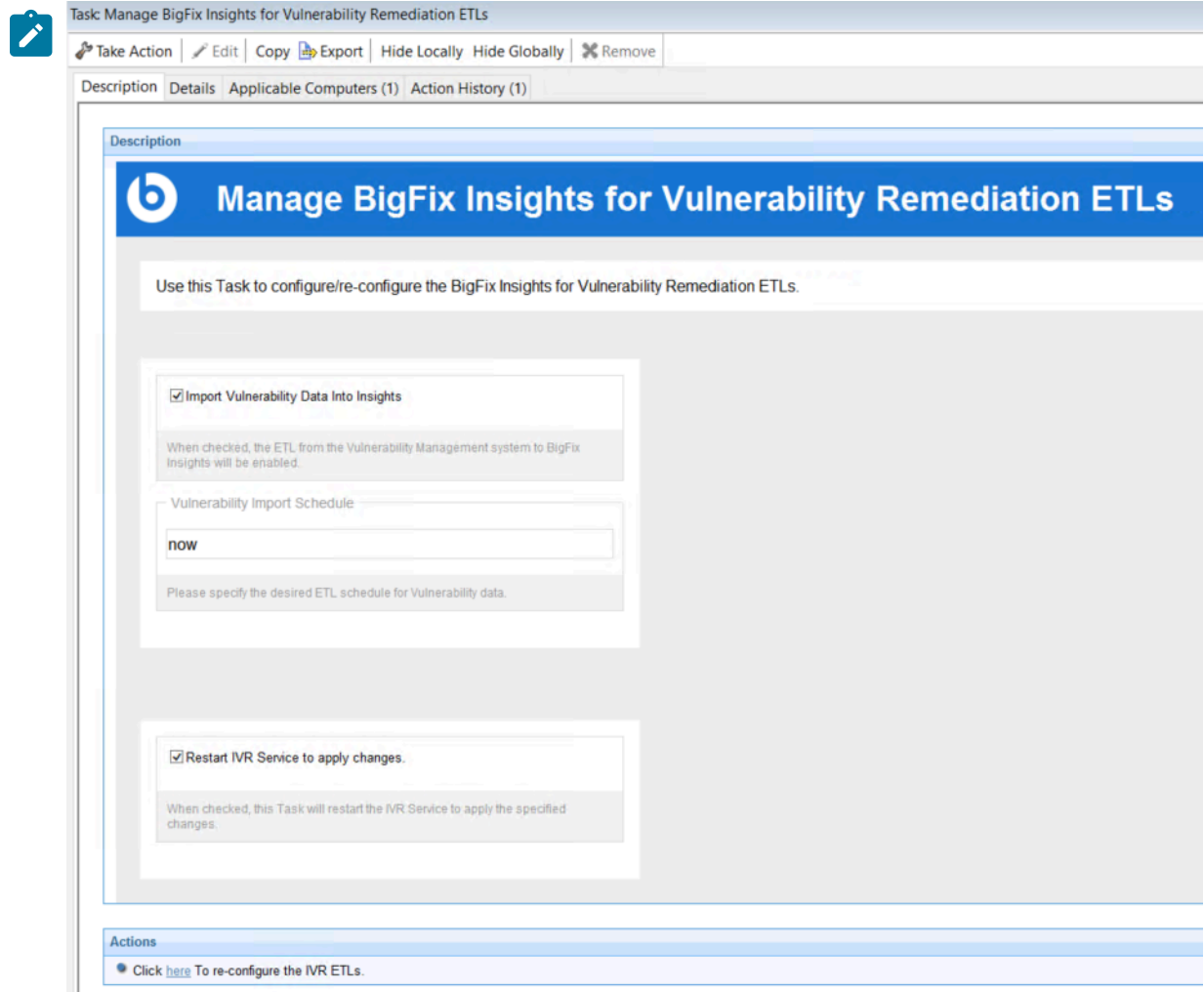
Please specify the proxy password (if applicable).

### Manage BigFix Insights for Vulnerability Remediation ETLs

Use this task to configure/re-configure the BigFix Insights for Vulnerability Remediation ETLs. You can also use this fixlet to restart the IVR Service.



**Note:** To use this task, you must have only one instance of IVR Dataflows service deployed in this environment.



Task: Manage BigFix Insights for Vulnerability Remediation ETLs

Take Action | Edit | Copy | Export | Hide Locally | Hide Globally | Remove

Description | Details | Applicable Computers (1) | Action History (1)

**Manage BigFix Insights for Vulnerability Remediation ETLs**

Use this Task to configure/re-configure the BigFix Insights for Vulnerability Remediation ETLs.

Import Vulnerability Data Into Insights

When checked, the ETL from the Vulnerability Management system to BigFix Insights will be enabled.

Vulnerability Import Schedule

now

Please specify the desired ETL schedule for Vulnerability data.

Restart IVR Service to apply changes.

When checked, this Task will restart the IVR Service to apply the specified changes.

**Actions**

Click [here](#) To re-configure the IVR ETLs.

## Manage BigFix Insights for Vulnerability Remediation Service

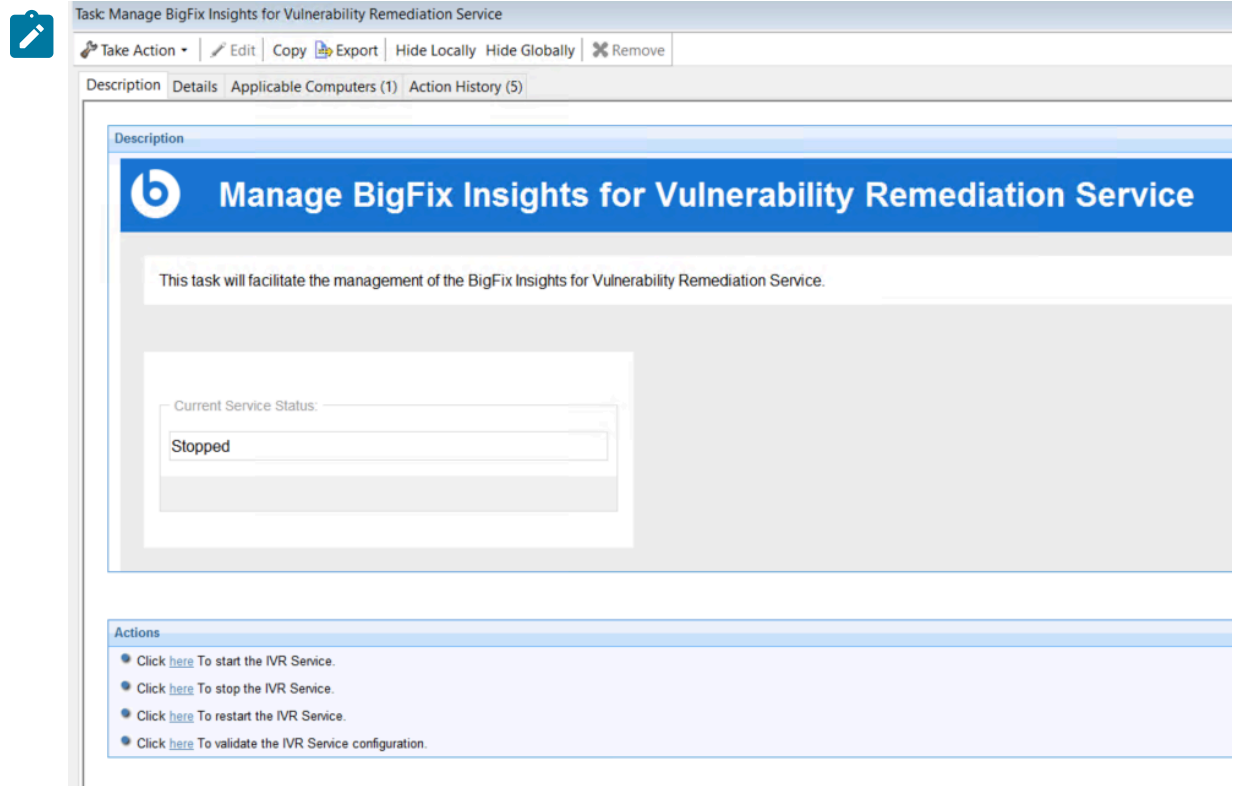
This task facilitates the management of the BigFix Insights for Vulnerability Remediation Service. You can use this task to Start, Stop, Restart or validate the configuration of the IVR Service.



**Note:** It is always recommended to stop the service before making any update on datasource or ETL fixlet to the already deployed service and then restart the service to apply the latest changes.

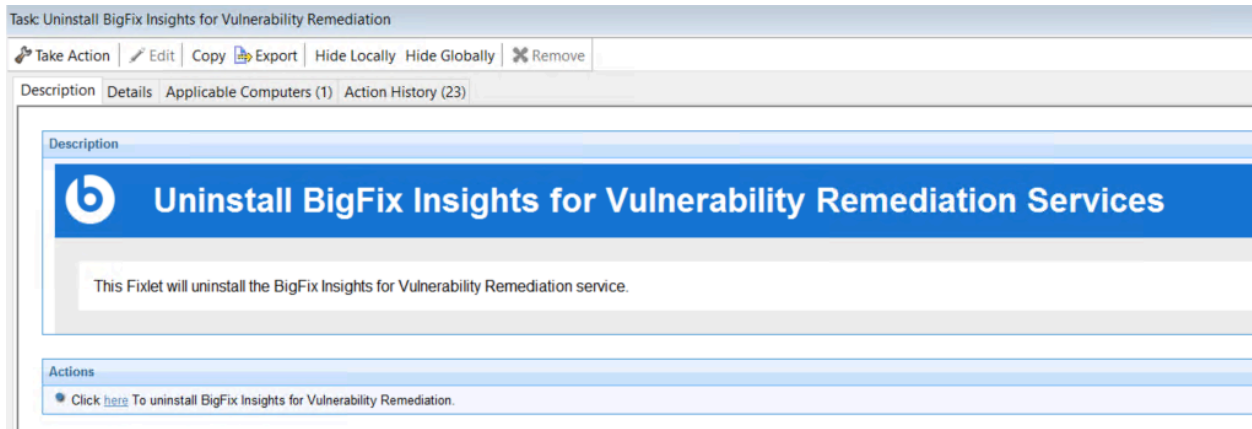


**Note:** To use this task, you must have only one instance of IVR Dataflows service deployed in this environment.



## Uninstall BigFix Insights for Vulnerability Remediation

This Fixlet uninstalls the BigFix Insights for Vulnerability Remediation service.



## Upgrade BigFix Insights for Vulnerability Remediation

The fixlet will upgrade the BigFix Insights for Vulnerability Remediation service to the most recent version. To initiate the upgrade, it is required to provide the BigFix Insights user credentials and vulnerability management datasource credentials.

## Upgrade BigFix Insights for Vulnerability Remediation

This Fixlet will Upgrade the BigFix Insights for Vulnerability Remediation service.

### Provide Vulnerability Management Datasource Credentials

Vul Platform

VulnerabilityManagementPlatform

Account/Access key

If vulnerability management platform is TenableIO please provide access key for others provide account name.

Password/Secret Key

If the vulnerability management platform is TenableIO please provide secret key for others provide password.

### Provide Insights Credential

Account

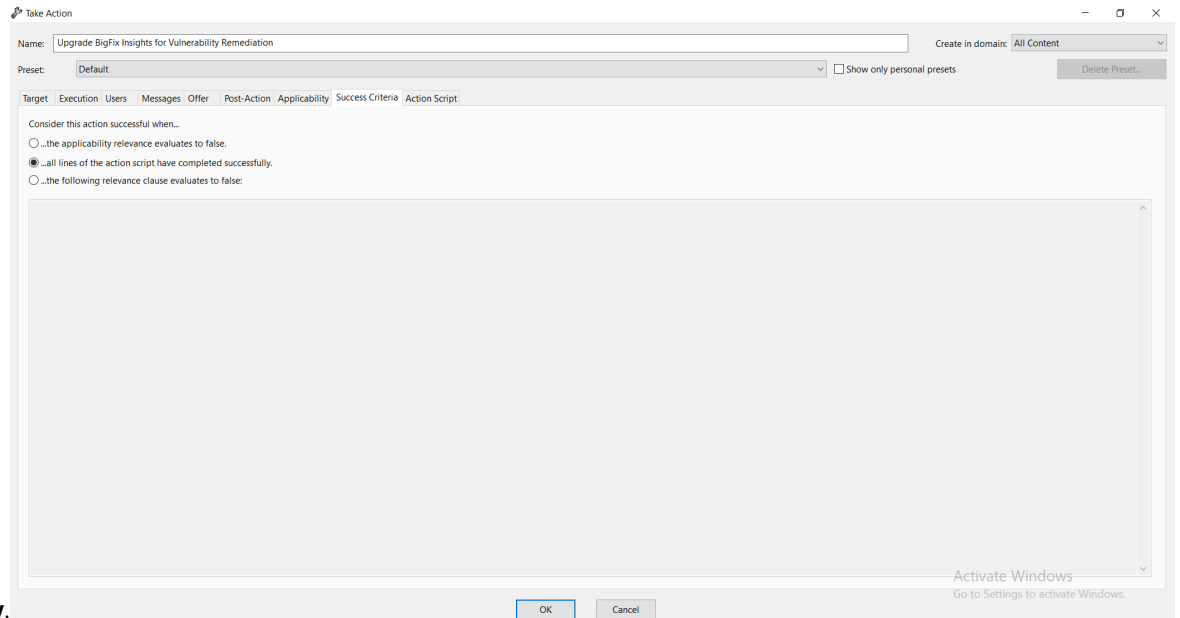
Please provide the use name for the BigFix Insights database.

Password

Please provide the password for the user name specified above.



**Note:** Before you install the Fixlet, go to **Success Criteria** tab and select **all lines of the action script have completed**



Take Action

Name: Upgrade BigFix Insights for Vulnerability Remediation Create in domain: All Content

Preset: Default Show only personal presets Delete Preset...

Target Execution Users Messages Offer Post-Action Applicability **Success Criteria** Action Script

Consider this action successful when...

- ...the applicability relevance evaluates to false.
- ...all lines of the action script have completed successfully.
- ...the following relevance clause evaluates to false:

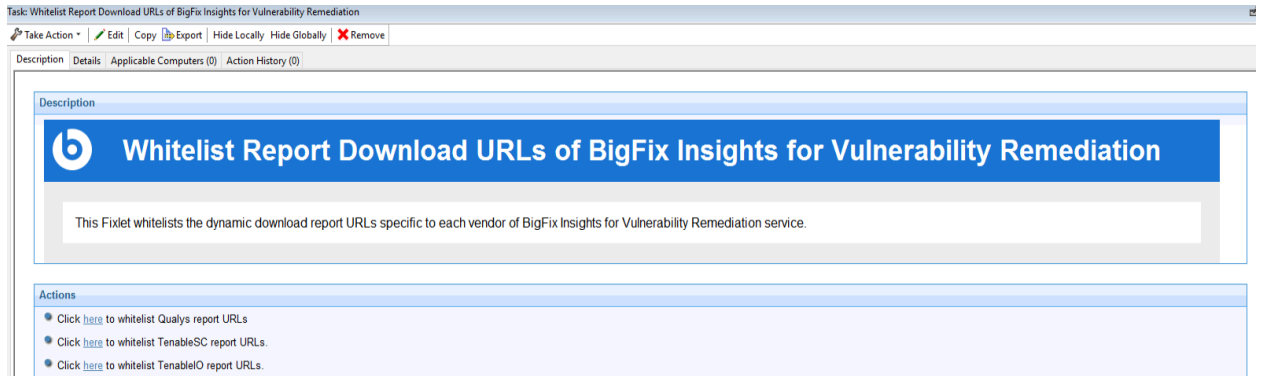
OK Cancel

Activate Windows  
Go to Settings to activate Windows.

successfully.


## Whitelist Report Download URLs of BigFix Insights for Vulnerability Remediation

This Fixlet whitelists the dynamic download report URLs specific to each vendor of BigFix Insights for Vulnerability Remediation



The screenshot shows a configuration window for a Fixlet. At the top, the title is "Task: Whitelist Report Download URLs of BigFix Insights for Vulnerability Remediation". Below the title is a toolbar with icons for "Take Action", "Edit", "Copy", "Export", "Hide Locally", "Hide Globally", and "Remove". The main content area is divided into two sections: "Description" and "Actions".

**Description**

 **Whitelist Report Download URLs of BigFix Insights for Vulnerability Remediation**

This Fixlet whitelists the dynamic download report URLs specific to each vendor of BigFix Insights for Vulnerability Remediation service.

**Actions**

- Click [here](#) to whitelist Qualys report URLs
- Click [here](#) to whitelist TenableSC report URLs.
- Click [here](#) to whitelist TenableIO report URLs.

service.



# Chapter 7. Updating and validating the IVR configuration file

You can update and validate the IVR configuration.



**Note:** Configuration-file changes remove all IVR data that is associated with the current data flow configuration (from which a hash is generated). Additionally, all data that is not associated with existing data flow configurations are removed. For more information, see the [PurgeFindingsOnExecutionOfDataflow](#) setting.

## Updating the configuration file

1. Log in to the target server.
2. Go to the product installation directory.
3. Open the `DataFlowsConfig.xml` file in a text editor.
4. Update configuration. For more information, see Configuration Settings.

## Validating the configuration file

1. Open CLI (Command Line Interface) and run the `BFIVR.exe --ValidateConfiguration` command.
2. Restart BigFix Insights for Vulnerability Remediation to import the new configuration. On successful completion, the message, *Configuration verified successfully* appears.

## Chapter 8. Updating IVR credentials

You can update the IVR credentials.

1. Open the command-line interface (CLI) and run the `BFIVR.exe --ProvideCredentials` command.
2. Enter a username/access key and password/secret key, as prompted.
3. To access the data source, enter the updated username/access key and password/secret key credentials.

After the update is complete, the following message is displayed: `The entered credentials are encrypted successfully.`

# Chapter 9. Business Intelligence reports

Use this section to become familiar with Power BI and Tableau reports.

The reporting functionality of the IVR (BigFix Insights for Vulnerability Remediation) solution addresses the three main use cases for the application:

- **Vulnerabilities with Available Fixlets** - A list of vulnerabilities that have matching BigFix fixlets available for remediation. The report will list the most recent fixlet related to each vulnerability, and the CVE entries that are associated to the vulnerability
- **Vulnerabilities Without Available Fixlets** - A list of vulnerabilities that do not have an available fixlet for remediation
- **Vulnerability Discrepancies** - A list of vulnerabilities where the scanning system identifies the issue, but BigFix declares it resolved. This occurs primarily because of timing differences in the scan processes

The reports are produced in both Power BI (Desktop, optimized for BI Server, May 2020) and Tableau version 2020.4+.

[Power BI reports](#)

[Tableau reports](#)

## Power BI reports

Use this section to become familiar with Power BI reports.

Power BI reports for:

- [Qualys](#)
- [Tenable.io](#)
- [Tenable.sc](#)

The reports are produced in Power BI (Desktop, optimized for BI Server, May 2020)

- Reporting differences: the functionality of the reports is nearly identical between Power BI and Tableau. This section details the differences between the reports.
- Navigation: each visualization is portrayed on the dashboard page. Visualizations that do not apply to your business process can be removed as necessary.
- Qualys Severity

The Severity value is provided by Qualys to measure the relative security risk associated with the vulnerability. Factors included in this measure are:

- Possible consequences
- Complexity
- Likelihood that the exploit will work under normal conditions

- Network location
- Privileges needed by the attacker
- Prevalence of affected software
- Existence of known attacks

In the IVR database, the information is stored in the vulnerabilities.severity column. The reporting aggregation tables return both the numerical score and a value (where applicable) corresponding to the following matrix:

**Table 2.**

Severity Value	Level Value
1	Minimal
2	Medium
3	Serious
4	Critical
5	Urgent

For more information regarding this topic from the vendor, please visit [https://qualysguard.qualys.com/qwebhelp/fo\\_portal/knowledgebase/severity\\_levels.htm](https://qualysguard.qualys.com/qwebhelp/fo_portal/knowledgebase/severity_levels.htm)

- Tenable Severity

The Vulnerability Priority Rating (VPR) value is provided by Tenable to measure the relative security risk associated with the vulnerability. Factors included in this measure are:

- Vulnerability Age
- CVSSv3 Impact Score
- Exploit Code Maturity
- Product Coverage
- Threat Sources
- Threat Intensity
- Threat Recency

In the IVR database, the information is stored in the vulnerabilities.vendor\_rating column. The reporting aggregation tables return both the numerical score and a value (where applicable) corresponding to the following matrix:

**Table 3.**

VPR Value	Level Value
9.0 – 10.0	Critical
7.0 – 8.9	High

VPR Value	Level Value
4.0 – 6.9	Medium
0.1 – 3.9	Low

For more information regarding this topic from the vendor, please visit <https://docs.tenable.com/tenablesc/Content/RiskMetrics.htm>

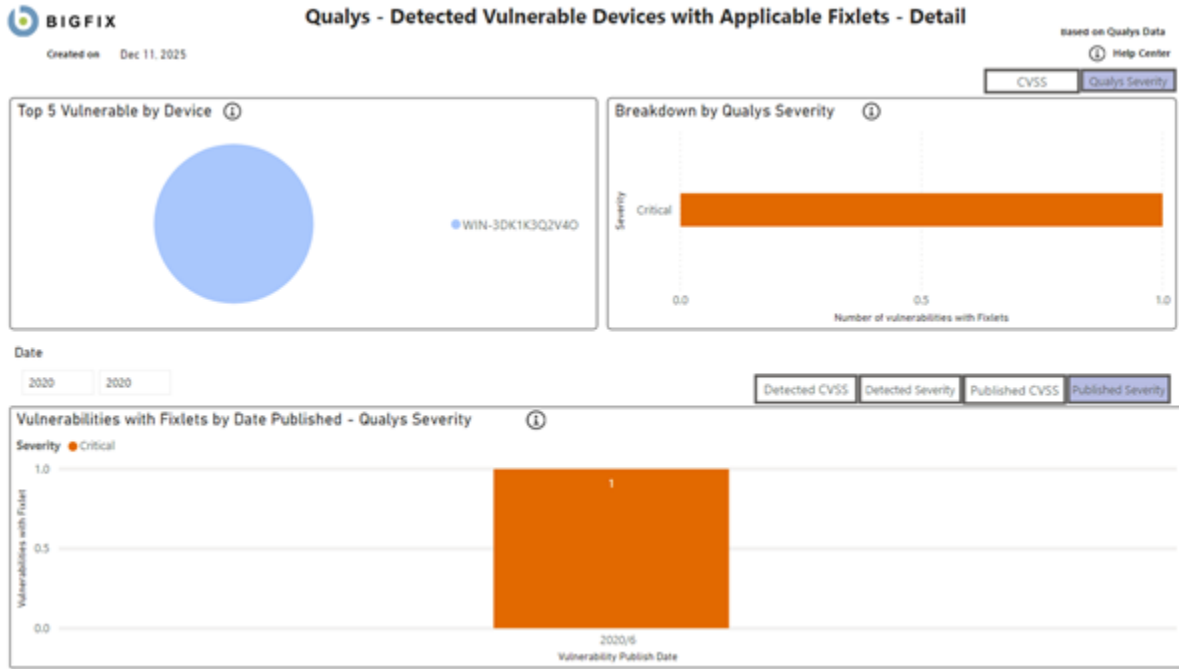
## Power BI reports for Qualys

Use this section to become familiar with Power BI reports for Qualys.

Chart details:

- Vulnerability Title - vulnerability title
- Vulnerability ID - a unique identifier assigned to a vulnerability
- QID - Qualys ID. Unique identifier assigned to a vulnerability in the Qualys vulnerability database
- CVSS2 - Common Vulnerability Scoring System, version 2
- Qualys Severity - level of risk associated with a vulnerability.
- Qualys Severity Score - numerical value assigned to a vulnerability, representing the level of risk associated with that vulnerability. The severity score ranges from 1 to 5, with 5 being the highest severity.
- Weighted Score - value calculated based on  $cvss\_base * applicable\_computers$  as 'weighted score'
- Published Date - date when the information about a vulnerability was first available
- Detected Date - date when a vulnerability was first detected
- Applicable Devices - devices that are affected by a vulnerability

## Detected Vulnerabilities with Applicable Fixlets



**BIGFIX** **Qualys - Detected Vulnerable Devices with Applicable Fixlets - Detail**

Right-click on Vulnerability ID to drill down \* BigFix data

Vulnerability Title	Vulnerability ID	QID	CVSS	CVSS3	Qualys Severity	Qualys Severity Score	Weighted Score	Published Date	Detected Date	Applicable Devices	Product/Family
Red Hat Update for .NET Core on Red Hat Enterprise Linux 7 (RHSA-2020-2475)	CVE-2020-1108	238356	Low	High	Critical	4	3	6/15/2020	6/16/2020	1	Windows

**Qualys - Detected Vulnerable Devices with Applicable Fixlets - Device Detail**

\* BigFix data

\* Device Name: DESKTOP-99268DV  
 \* BigFix Computer: 1  
 \* IP Address: 10.134.146.136  
 \* OS: Win10 10.0.19041.804 (20H4)  
 \* Type: Server  
 \* Group: Reports\_Computer\_Group  
 \* Group Source Site:  
 \* Last Report Time: 2/11/2021 8:26:41 AM

Vulnerability Title	QID	CVE	CVSS2	CVSS3	Qualys Severity	Qualys Severity Score	Weighted Score	DeviceID	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Source ID	* Fixlet Category
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for Client Software (Disable SSL 3.0 in Windows)	300900813	Patches for Windows	K8300900	Un
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for IE Settings (Disable SSL 3.0 and enable TLS 1.0, TLS 1.1, and TLS 1.2 in Internet Explorer)	300900825	Patches for Windows	K8300900	Un
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for IE Settings (Disable SSL 3.0 in Internet Explorer)	300900817	Patches for Windows	K8300900	Un
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for Server Software (Disable SSL 3.0 in Windows)	300900809	Patches for Windows	K8300900	Un

**Qualys - Detected Vulnerable Devices with Applicable Fixlets - Device Detail**

\* BigFix data

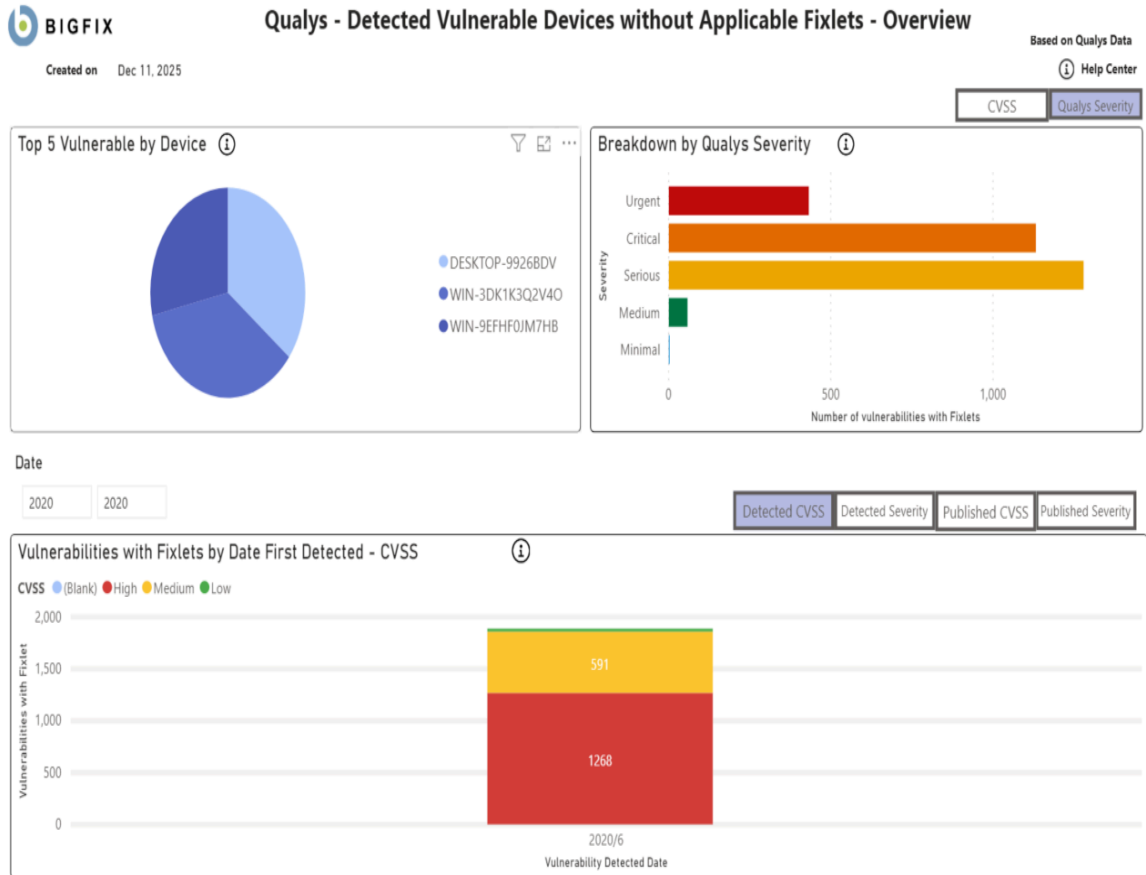
Vulnerability Title: CentOS Security Update for openssl (CESA-2014:1653)  
 CVE: CVE-2014-3566  
 CVSS: High  
 Qualys Severity: Critical  
 Qualys Severity Score: 3

\* Fixlet Title: 3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for Client Software (Disable SSL 3.0 in Windows)  
 \* Fixlet ID: 902505  
 \* Fixlet Site: Patches for Windows  
 \* Fixlet Source ID: K82553376  
 \* Fixlet Category: Critical Updates  
 \* Source Release Date: 01/03/2018

Right-click on Device ID to drill down

Date Detected	BigFix Computer ID	Computer Name	OS	IP Address	Type	Group	Last Report Time
6/16/2020	1	DESKTOP-99268DV	Win10 10.0.19041.804 (20H4)	10.134.146.207	Server	Reports_Computer_Group	2/11/2021 8:26:41 AM
1/1/2025	1	DESKTOP-99268DV	Win10 10.0.19041.804 (20H4)	10.134.146.207	Server	Reports_Computer_Group	2/11/2021 8:26:41 AM
6/16/2020	3	WIN-3DK1KQ2V40	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	Reports_Computer_Group	2/16/2021 4:05:18 PM
1/1/2025	3	WIN-3DK1KQ2V40	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	Reports_Computer_Group	2/16/2021 4:05:18 PM
6/16/2020	2	WIN-9EHPQM7H8	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	Reports_Computer_Group	2/16/2021 4:11:07 PM
1/1/2025	2	WIN-9EHPQM7H8	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	Reports_Computer_Group	2/16/2021 4:11:07 PM

## Detected Vulnerabilities without Available Fixlets







### Qualys - Detected Vulnerable Devices without Applicable Fixlets - Detail

Right-click on Vulnerability ID to drill down

\* BigFix data

Vulnerability Title	Vulnerability ID	QID	CVSS	CVSS3	Weighted Score	Qualys Severity	Qualys Severity Score	Published Date	Detected Date	DeviceID	Solution
CGI Vulnerability	CVE-1999-0070	10015	Medium		5	Urgent	5	1/1/1999	6/16/2020	1627259-1	You should remove t
Sendmail 8.8.0/8.8.1 MIME Buffer Overflow Vulnerability	CVE-1999-0206	74121	High		10	Urgent	5	8/6/2002	1/1/2025	1622894162-1	Workaround:&lt;BR& The /etc/sendmail.cf
CentOS Security Update for Squid (CESA-2005415)	CVE-1999-0710	117917	High		7	Medium	2	4/16/2010	6/16/2020	1627259-1	To resolve this issue, ia&lt;/A&gt; &lt;/A.
ISC BIND SIG Record Denial of Service (sig bug) Vulnerability	CVE-1999-0835	15023	High		10	Urgent	5	7/29/2002	6/16/2020	1622894162-1	The ISC (Internet Soft
McAfee VirusScan 4.0.3 Alert File Vulnerability	CVE-2000-0502	38313	Low		2	Serious	3	9/25/2004	1/1/2025	1627259-1	There are no solution
YaBB Arbitrary File Read Vulnerability	CVE-2000-0853	10107	Medium		5	Critical	4	1/1/1999	6/16/2020	1622894162-1	Upgrade to the latest
Lotus Domino SMTP Server ENVID Buffer Overflow and Denial of Service Vulnerability	CVE-2000-1047	74054	High		10	Urgent	5	11/8/2000	6/16/2020	1622894162-1	S.A.F.E.R recommend 10.lotus.com/ldd/r5fi
Lotus Domino Mail Server &#x27;Policy&#x27; Buffer Overflow Vulnerability	CVE-2001-0260	50027	High		7	Urgent	5	2/20/2001	1/1/2025	14456361-1	Lotus has addressed
Datawizards FtpXQ Directory Traversal Vulnerability	CVE-2001-0293	27102	Medium		5	Serious	3	3/28/2001	6/16/2020	14456361-1	There are no vendor TARGET=&quot;_blar
IBM WebSphere/Net.Commerce Installation Directory Revealing	CVE-2001-0389	10976	Medium		5	Medium	2	12/31/2002	6/16/2020	14456361-1	Upgrade to the latest site&lt;/A&gt; for the



## Qualys - Detected Vulnerable Devices without Applicable Fixlets - Device Detail

\* BigFix data

**Vulnerability Title:** | "CGI Vulnerability" | **CVE:** | CVE-1999-0070 |  
**QID:** | 10005 | **CVSS:** | (Blank) |  
**Published Date:** | 1/1/1999 | **Qualys Severity:** | Critical |  
**Qualys Severity Score:** | 1 |

Right-click on Device ID to drill down

Date Detected	BigFix Computer ID	Computer Name	OS	IP Address	Device Type	Last Report Time
6/16/2020	1627259-1	DESKTOP-9926BDV	Win10 10.0.19041.804 (2004)	10.134.146.207	Server	2/11/2021 8:26:41 AM
1/1/2025	1627259-1	DESKTOP-9926BDV	Win10 10.0.19041.804 (2004)	10.134.146.207	Server	2/11/2021 8:26:41 AM
6/16/2020	1622894162-1	WIN-3DK1K3Q2V4O	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	2/16/2021 4:05:18 PM
1/1/2025	1622894162-1	WIN-3DK1K3Q2V4O	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	2/16/2021 4:05:18 PM
6/16/2020	14456361-1	WIN-9EFHFQJM7HB	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	2/16/2021 4:11:07 PM
1/1/2025	14456361-1	WIN-9EFHFQJM7HB	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	2/16/2021 4:11:07 PM



### Qualys - Detected Vulnerable Devices without Applicable Fixlets - Device Detail

\* BigFix data

\* Device Name: DESKTOP-9926BDV  
 \* BigFix Computer: 14456361-1  
 \* IP Address: 10.134.144.136  
 \* OS: Win10 10.0.19041.804 (2004)  
 \* Type: Server  
 \* Last Report Time: 2/11/2021 8:26:41 AM

Vulnerability Title	QID	CVE	CVSS2	Qualys Severity	Qualys Severity Score	Detected Date
&quot;sudeep&quot; CGI Vulnerability	10015	CVE-1999-0070	Medium	Urgent	5	6/16/2020
Sendmail 8.8.0/8.8.1 MIME Buffer Overflow Vulnerability	74121	CVE-1999-0206	High	Urgent	5	1/1/2025
CentOS Security Update for Squid (CESA-2005:415)	117917	CVE-1999-0710	High	Medium	2	6/16/2020
ISC BIND SIG Record Denial of Service (sig bug) Vulnerability	15023	CVE-1999-0835	High	Urgent	5	6/16/2020
McAfee VirusScan 4.0.3 Alert File Vulnerability	38313	CVE-2000-0502	Low	Serious	3	1/1/2025
YaBB Arbitrary File Read Vulnerability	10107	CVE-2000-0853	Medium	Critical	4	6/16/2020
Lotus Domino SMTP Server ENVID Buffer Overflow and Denial of Service Vulnerability	74054	CVE-2000-1047	High	Urgent	5	6/16/2020
Lotus Domino Mail Server &#x27;Policy&#x27; Buffer Overflow Vulnerability	50027	CVE-2001-0260	High	Urgent	5	1/1/2025
Datawizards FtpXQ Directory Traversal Vulnerability	27102	CVE-2001-0293	Medium	Serious	3	6/16/2020
IBM WebSphere/Net.Commerce Installation Directory Revealing Vulnerability	10976	CVE-2001-0389	Medium	Medium	2	6/16/2020
Multiple Oracle 8i Listener Vulnerabilities	19055	CVE-2001-0498	High	Critical	4	6/16/2020
Multiple Oracle 8i Listener Vulnerabilities	19055	CVE-2001-0499	High	Critical	4	6/16/2020
Cisco IOS HTTP Configuration Arbitrary Administrative Access Vulnerability	43005	CVE-2001-0537	High	Critical	4	6/16/2020
Drummon Miles A1Stats Directory Traversal Vulnerability	10340	CVE-2001-0561	High	Serious	3	6/16/2020
iPlanet Calendar Server Plaintext Admin Password Vulnerability	86154	CVE-2001-0620	Low	Urgent	5	1/1/2025
Dream Catchers Post-It! CGI Remote Arbitrary Command Execution Vulnerability	10431	CVE-2001-0844	High	Urgent	5	1/1/2025
Hassan Consulting Shopping Cart Arbitrary Command Execution Vulnerability	23013	CVE-2001-0985	High	Urgent	5	1/1/2025
Red Hat PHP SafeMode Arbitrary File Execution Vulnerability	115006	CVE-2001-1246	High	Urgent	5	6/16/2020
Ipswitch IMail Server Path Disclosure Vulnerability	74094	CVE-2001-1282	Medium	Serious	3	6/16/2020
Horde IMP Cross Site Scripting Vulnerability	11014	CVE-2002-0181	High	Serious	3	1/1/2025
CSSearch Remote Command Execution Vulnerability	10850	CVE-2002-0495	High	Urgent	5	1/1/2025
Hosting Controller Default Account Vulnerability	10674	CVE-2002-0774	High	Serious	3	6/16/2020
W3C Jigsaw Device Name Path Disclosure Vulnerability	86370	CVE-2002-1052	Medium	Medium	2	6/16/2020
Microsoft Data Access Components RDS Enabled	86432	CVE-2002-1142	High	Minimal	1	6/16/2020
Apache 2 WebDAV CGI POST Request Information Disclosure Vulnerability	86512	CVE-2002-1156	Medium	Critical	4	1/1/2025

## Vulnerability Discrepancies

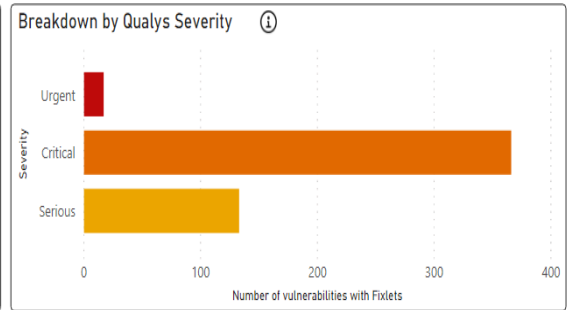
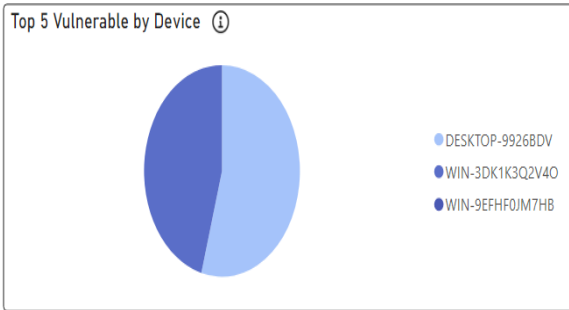


Created on Dec 11, 2025

### Qualys - Detected Vulnerability Discrepancies - Overview

Based on Qualys Data

[Help Center](#)



Date





### Qualys - Detected Vulnerability Discrepancies - Detail

Right-click on Vulnerability ID to drill down

\* BigFix data

Vulnerability Title	Vulnerability ID	QID	CVSS	CVSS3	Weighted Score	Qualys Severity	Qualys Severity Score	Published Date	Applicable Devices	Product/Family
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Developer Tools, Runtimes, and Red
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Windows
SUSE Security Update for FlashPlayer (SUSE-SA2009:041)	CVE-2009-0901	165158	High		0	Serious	3	8/25/2010		Windows



## Qualys - Detected Vulnerability Discrepancies - Device Detail

\* BigFix data

<b>Vulnerability Title:</b>   CentOS Security Update for openssl (CESA-2014-1653)	<b>CVE:</b>   CVE-2009-0901	<b>* Fixlet Title:</b>   3009008: Security Advisory: Vulnerability in SSL 3.0 Could A
<b>QID:</b>   110168	<b>CVSS:</b>   High	<b>* Fixlet ID:</b>   903505
<b>Published Date:</b>   9/8/2009	<b>Qualys Severity:</b>   Critical	<b>* Fixlet Site:</b>   Patches for Windows
	<b>Qualys Severity Score:</b>   3	<b>* Fixlet Source ID:</b>   KB2553374
		<b>* Fixlet Category:</b>   Critical Updates
		<b>* Source Release Date:</b>   01/03/2018

Right-click on Device ID to drill down

Date Detected	BigFix Computer ID	Computer Name	OS	IP Address	Type	Last Report Time
6/16/2020	1627259-1	DESKTOP-99268DV	Win10 10.0.19041.804 (2004)	10.134.146.207	Server	2/11/2021 8:26:41 AM
1/1/2025	1627259-1	DESKTOP-99268DV	Win10 10.0.19041.804 (2004)	10.134.146.207	Server	2/11/2021 8:26:41 AM
6/16/2020	1622894162-1	WIN-3DK1K3Q2V4O	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	2/16/2021 4:05:18 PM
1/1/2025	1622894162-1	WIN-3DK1K3Q2V4O	Win2019 10.0.17763.107 (1809)	10.134.146.184	Server	2/16/2021 4:05:18 PM
6/16/2020	14456361-1	WIN-9EFHF0JM7HB	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	2/16/2021 4:11:07 PM
1/1/2025	14456361-1	WIN-9EFHF0JM7HB	Win2016 10.0.14393.1884 (1607)	10.134.146.136	Server	2/16/2021 4:11:07 PM

**BIGFIX** \* BigFix data

\* Device Name: DESKTOP-9928BDV  
 \* BigFix Computer: 14456361-1  
 \* IP Address: 10.134.146.136  
 \* OS: Win10 10.0.19041.804 (2004)  
 \* Type: Server  
 \* Last Report Time: 2/11/2021 8:26:41 AM

Vulnerability Title	QID	CVE	CVSS2	CVSS3	Qualys Severity	Qualys Severity Score	Weighted Score	DeviceID	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Source ID	* Fixlet
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for Client Software (Disable SSL 3.0 in Windows)	300900813	Patches for Windows	KB3009008	Undo V
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for IE Settings (Disable SSL 3.0 and enable TLS 1.0, TLS 1.1, and TLS 1.2 in Internet Explorer)	300900805	Patches for Windows	KB3009008	Undo V
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for IE Settings (Disable SSL 3.0 in Internet Explorer)	300900817	Patches for Windows	KB3009008	Undo V
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure - Disable Workaround for Server Software (Disable SSL 3.0 in Windows)	300900809	Patches for Windows	KB3009008	Undo V
CentOS Security Update for openssl (CESA-2014:1653)	122778	CVE-2014-3566	Medium	Low	Serious	3	0	14456361-1	3009008: Security Advisory: Vulnerability in SSL 3.0 Could Allow Information Disclosure -	300900811	Patches for Windows	KB3009008	Security

## Power BI reports for Tenable.io

Use this section to become familiar with Power BI reports for Tenable.io

BigFix Insights for Vulnerability Remediation can consume vulnerability data from Tenable.io. With Tenable Lumin available, BigFix Insights for Vulnerability Remediation also consumes asset prioritization data:

- Asset Criticality Rating (ACR): 1-10 rating that represents the asset’s relative criticality based on device type, device purpose, and network location/proximity to the Internet.
- Asset Exposure Score (AES): A metric that combines ACR & VPR (Vulnerability Priority Rating) into a single score to represent an asset’s relative exposure.

Refer to the link for more information: [Lumin Metrics](#)

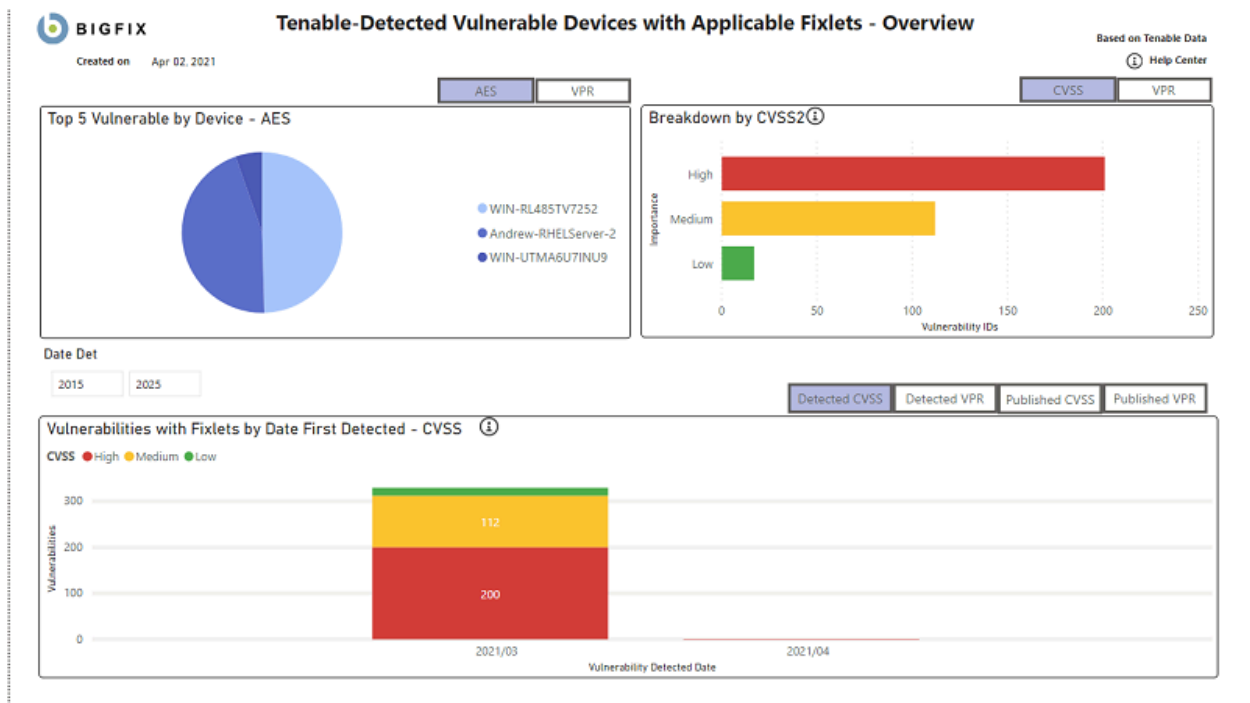
Additionally, uniquely for Tenable.io, BigFix sends its endpoint asset data to Tenable.io to give it visibility into potentially unmanaged assets.

Chart details:

- Vulnerability Title - Vulnerability title
- PluginID - a unique identifier assigned to a vulnerability detection

- Applicable Devices - devices that have been scanned by Tenable and for which vulnerabilities have been identified
- CVE List - list of CVE
- CVSS2 - (Common Vulnerability Scoring System version 2), scoring system used to assess the severity and potential impact of security vulnerabilities.
- CVSS3 - (Common Vulnerability Scoring System version 3), updated version of the scoring system
- VPR - Vulnerability Priority Rating
- VPR Score - numerical value ranging from 0 to 10, with 10 being the highest priority
- Detected Date - the date when a vulnerability was first detected
- Published Date - date when the information about a vulnerability was first available
- ACR - Asset Criticality Rating: 1-10 rating that represents the asset's relative criticality based on device type, device purpose, and network location/proximity to the Internet.
- AES - Asset Exposure Score: A metric that combines ACR & VPR (Vulnerability Priority Rating) into a single score to represent an asset's relative exposure.

### Detected Vulnerabilities with Applicable Fixlets





### Tenable-Detected Vulnerable Devices with Applicable Fixlets - Detail

Number of Records: 112

Vulnerability Title	Plugin ID	Applicable Devices	CVE List	CVSS	VPR	VPR Score	Published Date	Fixlet ID
MS KB3009008: Vulnerability in SSL 3.0 Could Allow Information Disclosure (POODLE)	78447	1	CVE-2014-3566	Medium	Medium	5	10/14/2014	3009008 Vulnerabil Informa Workar [Disable
MS KB3009008: Vulnerability in SSL 3.0 Could Allow Information Disclosure (POODLE)	78447	1	CVE-2014-3566	Medium	Medium	5	10/14/2014	3009008 Vulnerabil Informa Workar [Disable
MS15-029: Vulnerability in Windows Photo Decoder Component Could Allow Information Disclosure (3095126)	81743	1	CVE-2015-0076	Medium	Medium	6	03/10/2015	MS15-0 Photo D Allow In Window KB3035
MS15-050: Vulnerability in Service Control Manager Could Allow Elevation of Privilege (3055642)	83355	1	CVE-2015-1702	Medium	Medium	6	05/12/2015	MS15-0 Control Elevatio 2012 R2
MS15-069: Vulnerabilities in Windows Could Allow Remote Code Execution (3072631)	84734	1	CVE-2015-2368	Medium	High	9	07/14/2015	MS15-0 Could A Windows KB30611
MS15-088: Unsafe Command Line Parameter Passing Could Allow Information Disclosure (3082458)	85334	1	CVE-2015-2423	Medium	Medium	4	08/11/2015	MS15-0 Paramet Informa Server 2
MS15-120: Security Update for IPsec to Address Denial of Service (3102939)	86830	1	CVE-2015-6111	Medium	Low	3	11/10/2015	MS15-1- to Addd Window KB31021
MS15-121: Security Update for Schannel to Address Spoofing (3081320)	86827	1	CVE-2015-6112	Medium	Medium	6	11/10/2015	MS15-1- Schanne Window KB30811
MS16-021: Security Update for NPS RADIUS Server to Address Denial of Service (3133043)	88653	1	CVE-2016-0050	Medium	Low	1	02/09/2016	MS16-0- RADIUS

### Tenable-Detected Vulnerable Devices with Applicable Fixlets - Vulnerability Detail

Number of Records: 1

**Vulnerability Title:** MS15-069: Vulnerabilities in Windows Could Allow Remote Code Execution (3072631)

**Plugin ID:** 84734

**Published Date:** 07/14/2015

**CVSS:** Medium

**VPR:** High

**VPR Score:** 9

**\* Fixlet Title:** MS15-069: Vulnerabilities in Windows Could Allow Remote ...

**\* Fixlet ID:** 1506905


**\* Fixlet Site:** Patches for Windows

**\* Fixlet Source ID:** KB3061512

**\* Fixlet Category:** Security Update

**\* Source Release Date:** 07/14/2015

DeviceID	ComputerName	OS	IP Address	Device Type	ACR	AES	Last Report Time
1076613427-2	WIN-RL485TV7252	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM



## Tenable-Detected Vulnerable Devices with Applicable Fixlets - Device Detail

\* BigFix data

<p>* Device Name:   WIN-RL485TV7252</p> <p>* BigFix Computer ID:   1078612427-2</p> <p>* IP Address:   10.134.146.46</p> <p>* OS:   Win2012R2 6.3.9600</p> <p>* Type:   Server</p> <p>* Last Report Time:   4/1/2021 9:02:51 PM</p>	<p>* ACR:   735</p> <p>* AES:   848</p>
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Number of Records: 330

Plugin ID	Vulnerability Title	CVE List	CVSS2	VPR	VPR Score	Date Detected	* Fixlet Title
76447	MS KB3009008: Vulnerability in SSL 3.0 Could Allow Information Disclosure (POODLE)	CVE-2014-3566	Medium	Medium	5	03/20/2021	3009008: Secur Vulnerability in Allow Informat Enable Workan Software (Disal Windows)
76447	MS KB3009008: Vulnerability in SSL 3.0 Could Allow Information Disclosure (POODLE)	CVE-2014-3566	Medium	Medium	5	03/20/2021	3009008: Secur Vulnerability in Allow Informat Enable Workan Software (Disal Windows)
87253	MS15-124: Cumulative Security Update for Internet Explorer (3116180)	CVE-2015-6161	High	High	9	03/20/2021	3125869: Vulnr Explorer could bypass - Enabl Exception Hanr Feature
108291	KB4088879: Windows 8.1 and Windows Server 2012 R2 March 2018 Security Update (Meltdown/Spectre)	CVE-2017-5715	High	High	8	03/20/2021	4072698: Enab help protect ag execution side-vulnerabilities i (Spectre Variant 2017-5754 (MELT)

### Detected Vulnerabilities without Available Fixlets

**BIGFIX** **Tenable-Detected Vulnerable Devices Without Available Fixlets - Overview** Based on Tenable Data [Help Center](#)

Created on Apr 02, 2021

**AES** **VPR** **CVSS** **VPR**

#### Top 5 Vulnerable by Device - AES

- Andrew-RHELServer-2
- W10-BOBCLIENT8
- W2016-BOB2
- WIN-RL485TV7252
- WIN-UTMAGU7INU9

#### Breakdown by CVSS2


Importance	Vulnerability IDs
High	107
Medium	78
Low	~10
N/A	~5

Date Det  
Year/Month  
All

**Detected CVSS** **Detected VPR** **Published CVSS** **Published VPR**

#### Vulnerabilities by Date First Detected - CVSS

Vulnerability Detected Date	High	Medium	Low	N/A
2021/03	107	78	~10	~5



## Tenable-Detected Vulnerable Devices Without Available Fixlets - Detail

Right-click on Plugin ID to drill down Number of records: 78

Vulnerability Title	Plugin ID	CVE List	CVSS2	CVSS3	VPR	VPR Score	Applicable_Devices	Detected Date
Adobe Flash Player <= 27.0.0.159 Type Confusion Vulnerability (APSB17-32)	103922	CVE-2017-11292	Medium	High	High	9	1	03/20/2021
KB4049179: Security update for Adobe Flash Player (October 2017)	103924	CVE-2017-11292	Medium	High	High	9	1	03/20/2021
TLS Version 1.0 Protocol Detection	104743		Medium	Medium	N/A	0	5	03/08/2021
TLS Version 1.0 Protocol Detection	104743		Medium	Medium	N/A	0	5	03/16/2021
TLS Version 1.0 Protocol Detection	104743		Medium	Medium	N/A	0	5	03/20/2021
TLS Version 1.0 Protocol Detection	104743		Medium	Medium	N/A	0	5	03/22/2021
TLS Version 1.0 Protocol Detection	104743		Medium	Medium	N/A	0	5	03/24/2021
Adobe Flash Player <= 27.0.0.187 (APSB17-42)	105175	CVE-2017-11305	Medium	High	Low	4	1	03/20/2021
KB4053577: Security update for Adobe Flash Player (December 2017)	105178	CVE-2017-11305	Medium	High	Low	4	1	03/20/2021
Adobe Flash Player <= 28.0.0.126 (APSB18-01)	105691	CVE-2018-4871	Medium	High	Low	4	1	03/20/2021
KB4056687: Security update for Adobe Flash Player (January 2018)	105693	CVE-2018-4871	Medium	High	Low	4	1	03/20/2021
Adobe Flash Player <= 30.0.0.113 (APSB18-24)	110979	CVE-2018-5007; CVE-2018-5008	Medium	High	Medium	6	2	03/20/2021
Adobe Flash Player <= 30.0.0.113 (APSB18-24)	110979	CVE-2018-5007; CVE-2018-5008	Medium	High	Medium	6	2	03/23/2021
KB4338832: Security update for Adobe Flash Player (July 2018)	110988	CVE-2018-5007; CVE-2018-5008	Medium	High	Medium	6	2	03/20/2021
KB4338832: Security update for Adobe Flash Player (July 2018)	110988	CVE-2018-5007; CVE-2018-5008	Medium	High	Medium	6	2	03/23/2021
Adobe Flash Player <= 30.0.0.154 (APSB18-31)	117410	CVE-2018-15967	Medium	High	Low	4	2	03/20/2021
Adobe Flash Player <= 30.0.0.154 (APSB18-31)	117410	CVE-2018-15967	Medium	High	Low	4	2	03/23/2021
KB4457146: Security update for Adobe Flash Player (September 2018)	117419	CVE-2018-15967	Medium	High	Low	4	2	03/20/2021
KB4457146: Security update for Adobe Flash Player (September 2018)	117419	CVE-2018-15967	Medium	High	Low	4	2	03/23/2021
Adobe Flash Player <= 31.0.0.122 (APSB18-39)	118909	CVE-2018-15978	Medium	High	Medium	7	3	03/08/2021
Adobe Flash Player <= 31.0.0.122 (APSB18-39)	118909	CVE-2018-15978	Medium	High	Medium	7	3	03/20/2021
Adobe Flash Player <= 31.0.0.122 (APSB18-39)	118909	CVE-2018-15978	Medium	High	Medium	7	3	03/23/2021
KB4467694: Security update for Adobe Flash Player (November 2018)	118917	CVE-2018-15978	Medium	High	Medium	7	3	03/08/2021
KB4467694: Security update for Adobe Flash Player (November 2018)	118917	CVE-2018-15978	Medium	High	Medium	7	3	03/20/2021
KB4467694: Security update for Adobe Flash Player (November 2018)	118917	CVE-2018-15978	Medium	High	Medium	7	3	03/23/2021
Adobe Flash Player <= 32.0.0.114 (APSB19-06)	122117	CVE-2019-7090	Medium	Medium	Low	4	3	03/08/2021
Adobe Flash Player <= 32.0.0.114 (APSB19-06)	122117	CVE-2019-7090	Medium	Medium	Low	4	3	03/20/2021
Adobe Flash Player <= 32.0.0.114 (APSB19-06)	122117	CVE-2019-7090	Medium	Medium	Low	4	3	03/23/2021
KB4487038: Security update for Adobe Flash Player (February 2019)	122130	CVE-2019-7090	Medium	Medium	Low	4	3	03/08/2021
KB4487038: Security update for Adobe Flash Player (February 2019)	122130	CVE-2019-7090	Medium	Medium	Low	4	3	03/20/2021
KB4487038: Security update for Adobe Flash Player (February 2019)	122130	CVE-2019-7090	Medium	Medium	Low	4	3	03/23/2021
Security Updates for Microsoft SQL Server (May 2019)	125070	CVE-2019-0819	Medium	Medium	Low	4	1	03/20/2021
Microsoft Windows Remote Desktop Protocol Server Man-in-the-Middle Weakness	18405	CVE-2005-1794	Medium		Medium	4	1	03/20/2021



### Tenable-Detected Vulnerable Devices Without Available Fixlets - Vulnerability Detail

Vulnerability Title: | Adobe Flash Player <- 30.0.0.154 (APSB18-31)

Plugin ID: | 117410

Published Date: | 09/11/2018

CVSS: | Medium

VPR: | Low

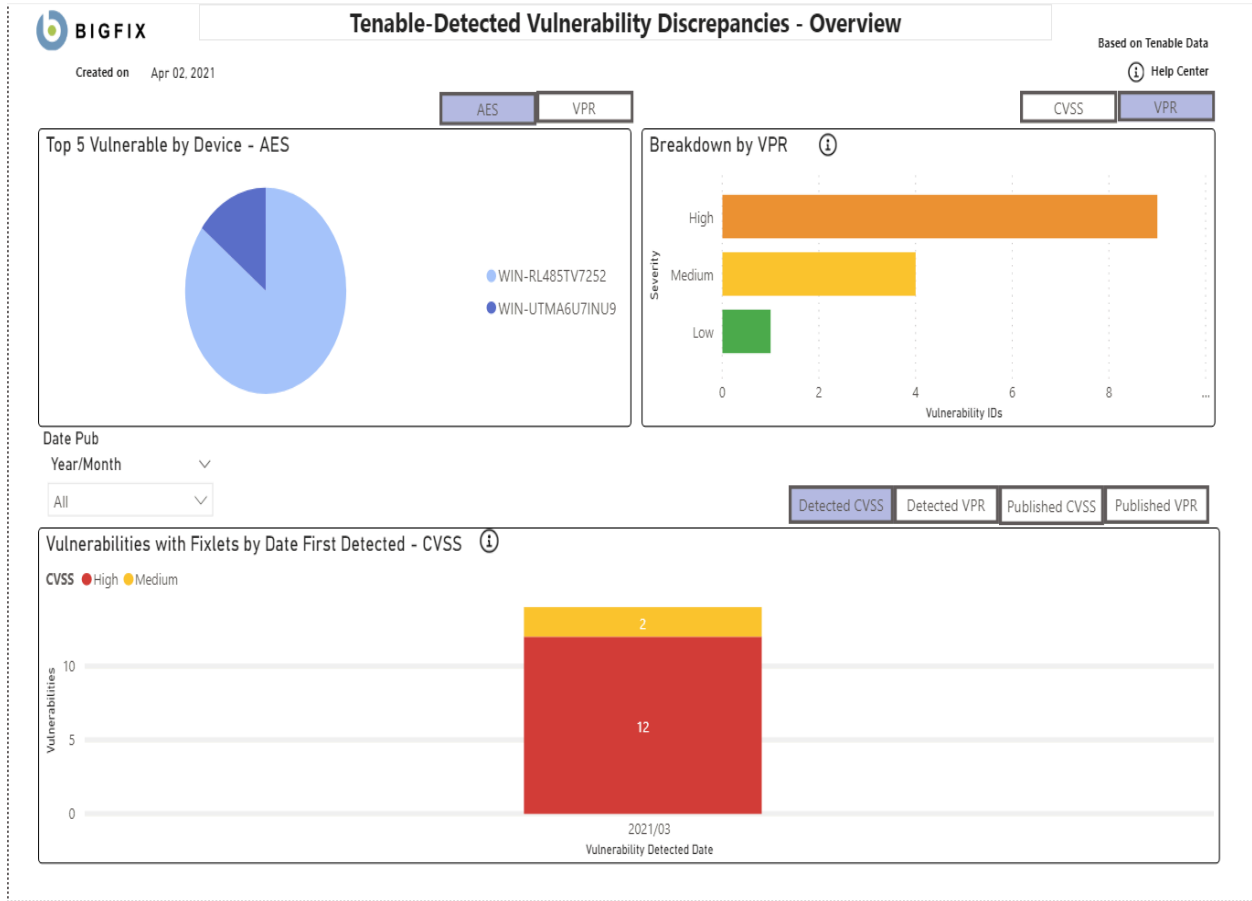
VPR Score: | 4


Number of records: 1

Right-click on Device ID to drill down

Detected Date	BigFix Computer ID	Computer Name	OS	IP Address	Device Type	ACR	AES	Last Report Time
03/23/2021	1076613427-2	WIN-RL485TV7252	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM
03/23/2021	545314002-1	W10-BOBCLIENT8	Win10 10.0.17134.1304 (1803)	10.134.146.97	Laptop	6.57	604	4/1/2021 9:08:23 PM

## Vulnerability Discrepancies



 <span style="float: right;"><b>Tenable-Detected Vulnerability Discrepancies - Detail</b></span>												
Right-click on Vulnerability ID to drill down				* BigFix data					Number of records: 12			
Vulnerability Title	Plugin ID	CVE List	CVSS2	VPR	VPR Score	Applicable Devices	Published Date	* Fixlet Title	Fixlet ID	* Fixlet Site	* Fixlet Source ID	* Fixlet Cat
Windows 8.1 and Windows Server 2012 R2 May 2017 Security Updates	100057	CVE-2017-0248	High	High	9	1	05/09/2017	MS17-MAY: Security Only Quality Update - Security Only - Windows Server 2012 R2 - .NET Framework 4.6/4.6.1 - KB4014590 (x64)	401459003	Patches for Windows	KB4019111	Sec
KB4088879: Windows 8.1 and Windows Server 2012 R2 March 2018 Security Update (Meltdown)(Spectre)	108291	CVE-2017-5715	High	High	8	1	03/13/2018	4072698: Enable mitigations to help protect against CVE 2018-3639, CVE-2017-5715, CVE-2017-5754, CVE-2018-11091, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130 - Windows Server 2008 / 2008 R2 / 2012 / 2012 R2 / Windows 2016	407269805	Patches for Windows	KB4072698	Sec Adv
Windows 8.1 and Windows Server 2012 R2 September 2017 Security Updates	103131	CVE-2017-8759	High	High	9	1	09/12/2017	MS17-SEP: Security Only Quality Update - Security Only - Windows Server 2012 R2 - .NET Framework 4.6/4.6.1/4.6.2/4.7 - KB4040956 (x64)	404109201	Patches for Windows	KB4041092	Sec
KB4103715: Windows 8.1 and Windows Server 2012 R2 May 2018 Security Update	109607	CVE-2018-0765; CVE-2018-1039	High	High	10	1	05/08/2018	MS18-MAY: Security Only Quality Update - Security Only - Windows Server 2012 R2 - .NET Framework 4.6/4.6.1/4.6.2/4.7/4.7.1 - KB4096236 (x64)	409623603	Patches for Windows	KB4096639	Sec
KB4499165: Windows 8.1 and Windows Server 2012 R2 May 2019 Security Update (MDSUM/RIDL) (MFBDS/RIDL/ZombieLoad) (MLPDS/RIDL) (MSBDS/Fallout)	125061	CVE-2018-12126	High	High	9	1	05/14/2019	4072698: Enable mitigations to help protect against CVE 2018-3639, CVE-2017-5715, CVE-2017-5754, CVE-2018-11091, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130 - Windows Server 2008 / 2008 R2 / 2012 / 2012 R2 / Windows 2016	407269805	Patches for Windows	KB4072698	Sec Adv
KB4338824: Windows 8.1 and Windows Server 2012 R2 July 2018 Security Update	110981	CVE-2018-8202; CVE-2018-8260; CVE-2018-8284; CVE-2018-8356	High	High	9	1	07/10/2018	MS18-JUL: Security Only Quality Update - Security Only - Windows Server 2012 R2 - .NET Framework 4.6/4.6.1/4.6.2/4.7/4.7.1 - KB4338605 (x64)	433860503	Patches for Windows	KB4340006	Sec
KB4480964: Windows 8.1 and Windows Server 2012 R2 January 2019 Security Update	121014	CVE-2019-0545	High	High	10	1	01/08/2019	MS19-JAN: Security Only Quality Update - Security Only - Windows Server 2012 R2 - .NET Framework 4.6/4.6.1/4.6.2/4.7/4.7.1/4.7.2 - KB4480071 (x64)	448007103	Patches for Windows	KB4480071	Sec



## Tenable-Detected Vulnerability Discrepancies - Vulnerability Detail

**Vulnerability Title:** | KB4103715: Windows 8.1 and Windows Server 2012 R2 May 2018 Security ...

**Plugin ID:** | 109607

**Published Date:** | 05/08/2018

**CVSS:** | High

**VPR:** | High

**VPR Score:** | 10

**\* Fixlet Title:** | MS18-MAY: Security Only Quality Update - Security Only - ...

**\* Fixlet ID:** | 409623603

**\* Fixlet Site:** | Patches for Windows

**\* Fixlet Source ID:** | KB4099639

**\* Fixlet Category:** | Security Update

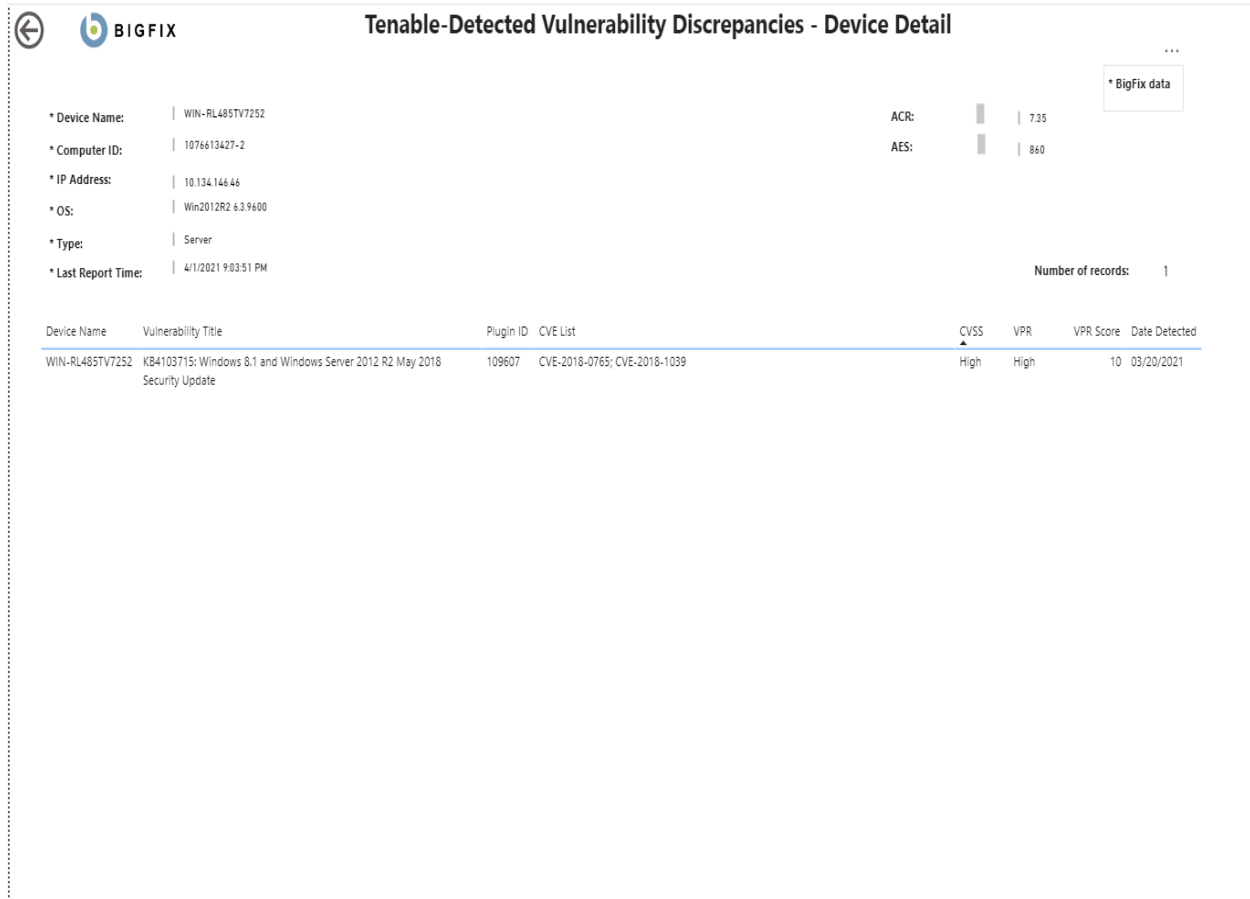
**\* Source Release Date:** | 05/08/2018

Right-click on Device ID to drill down

Number of records: 1

Date Detected	* BigFix Computer ID	* Computer Name	* OS	IP Address	Device Type	ACR	AES	Last Report Time
03/20/2021	1076613427-2	WIN-RL485TV7252	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM





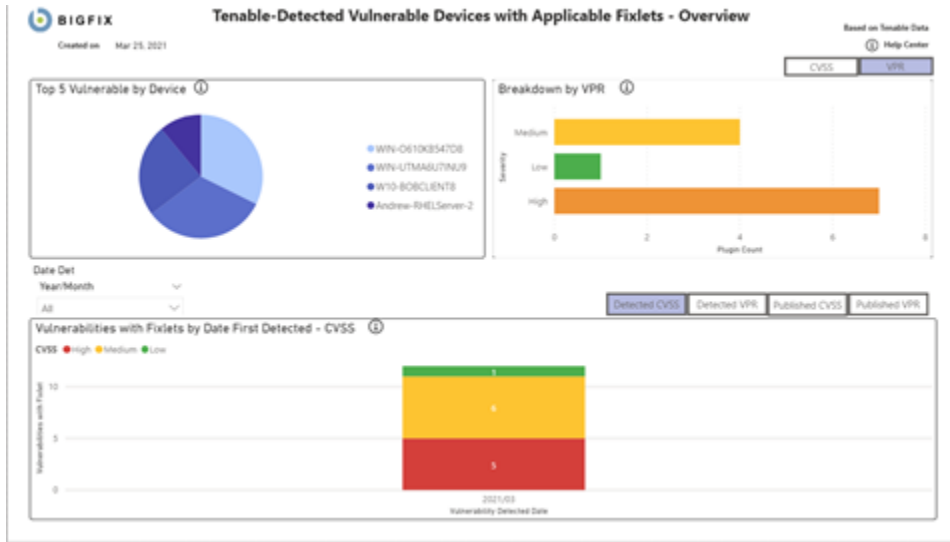
## Power BI reports for Tenable.sc

Use this section to become familiar with Power BI reports for Tenable.sc.

Chart details:

- Vulnerability Title - Vulnerability title
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- CVE List - list of CVE
- CVSS2 - (Common Vulnerability Scoring System version 2), scoring system used to assess the severity and potential impact of security vulnerabilities.
- CVSS3 - (Common Vulnerability Scoring System version 3), updated version of the scoring system
- VPR - Vulnerability Priority Rating
- VPR Score - numerical value ranging from 0 to 10, with 10 being the highest priority
- Detected Date - the date when a vulnerability was first detected
- Published Date - date when the information about a vulnerability was first available

## Detected Vulnerabilities with Applicable Fixlets



**Tenable-Detected Vulnerable Devices with Applicable Fixlets - Detail**

Vulnerability Title	Plugin ID	Applicable Devices	CVSS	VPR	VPR Score	Published Date	Fixlet Title
Security Updates for Microsoft .NET Framework September 2019	138742	2 CvE-2019-1006; CvE-2019-1063; CvE-2019-1113; CvE-2019-1142; CvE-2020-0825; CvE-2020-0826; CvE-2020-0848; CvE-2020-1108	Low	Low	4	9/10/2019 12:00:00 AM	MS20-0441 Cumulative Update for .NET Framework 3.5 and 4.7.2 for Windows Server 2009 - Windows Server 2019 - .NET Framework 3.5x4.7.2 - KB4512624 (x64)

### Tenable-Detected Vulnerable Devices with Applicable Fixlets - Vulnerability Detail

**Vulnerability Title:** Security Updates for Microsoft .NET Framework (September 2018)  
**Plugin ID:** 124742  
**Published Date:** 9/19/2018 12:00:00 AM

**CVEs:** Low  
**WPE:** Low  
**WPE Score:** 4

**\* Fixlet Title:** MS20-0897 Cumulative Update for .NET Framework 3.5 and...  
**\* Fixlet ID:** 40528405  
**\* Fixlet Site:** Patches for Windows  
**\* Fixlet Source ID:** KB4013441  
**\* Fixlet Category:** Security updates  
**\* Source Release Date:** 09/12/2018

Right-click on Device ID to drill down

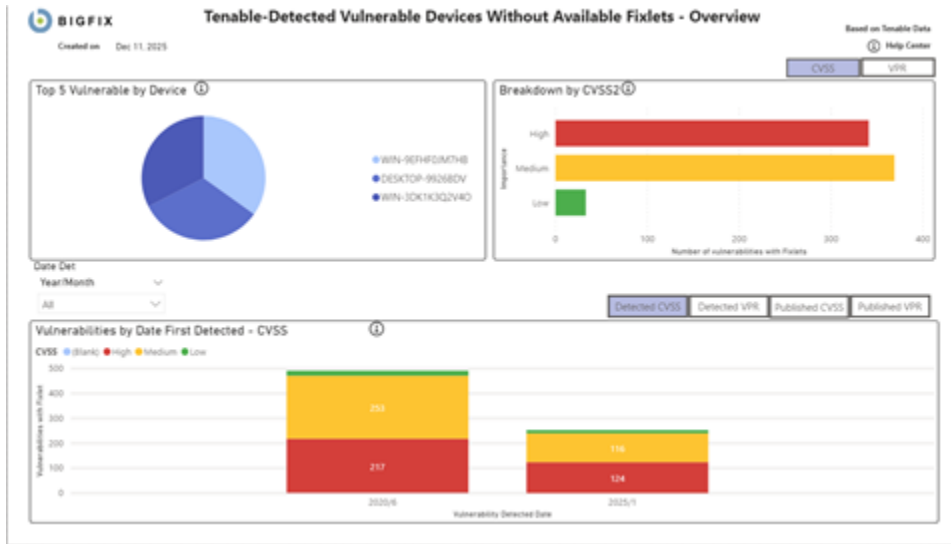
DeviceID	ComputerName	OS	IP Address	Device Type	Last Report Time
108840206-1	WIN-0E10K8147C8	WIN2016 10.0.14393.2271 (1807)	10.134.146.134	Server	3/25/2021 4:19:18 PM
10271201-1	WIN-L79666279628	WIN2016 10.0.17763.107 (1808)	172.17.126.1 10.134.146.110	Server	3/25/2021 4:37:12 PM

### Tenable-Detected Vulnerable Devices with Applicable Fixlets - Device Detail

**\* Device Name:** WIN-0E10K8147C8  
**\* BigFix Computer ID:** 108840206-1  
**\* IP Address:** 10.134.146.134  
**\* OS:** WIN2016 10.0.14393.2271 (1807)  
**\* Type:** Server  
**\* Last Report Time:** 3/25/2021 4:19:18 PM

Plugin ID	CVEs List	CVEs	WPE	WPE Score	Date Detected	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Source ID	* Fixlet Category	* Source Release
118239	CVE-2017-8715, CVE-2017-8754, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130	Medium	High	8	3/8/2021 12:00:00 AM	4072886: Enable mitigations to help protect against CVE-2018-3639 (Speculative Store Bypass), CVE-2017-8715 (Speculative Variant 2), CVE-2017-8754 (Meltdown), CVE-2018-11081, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130 - Windows Server 2016 / Windows Ser	40728805	Patches for Windows	KB4072886	Security Advisory	01/04/2018
121028	CVE-2017-8715, CVE-2017-8754, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130	Medium	High	8	3/8/2021 12:00:00 AM	4072886: Enable mitigations to help protect against CVE-2018-3639 (Speculative Store Bypass), CVE-2017-8715 (Speculative Variant 2), CVE-2017-8754 (Meltdown), CVE-2018-11081, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130 - Windows Server 2016 / Windows Ser	40728805	Patches for Windows	KB4072886	Security Advisory	01/04/2018
132101	CVE-2017-8715, CVE-2017-8754, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130	Medium	High	8	3/8/2021 12:00:00 AM	4072886: Enable mitigations to help protect against CVE-2018-3639 (Speculative Store Bypass), CVE-2017-8715 (Speculative Variant 2), CVE-2017-8754 (Meltdown), CVE-2018-11081, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130 - Windows Server 2016 / Windows Ser	40728805	Patches for Windows	KB4072886	Security Advisory	01/04/2018

## Detected Vulnerabilities without Available Fixlets



**Tenable-Detected Vulnerable Devices Without Available Fixlets - Detail**

Right-click on Plugin ID to drill down

Vulnerability Title	Plugin ID	CVSS2	CVSS3	Severity	VPR Score	Applicable Devices	Published Date
SuSE_PX3812 Default Credentials Detected	36702	High	High	Medium	3	1	4/25/2018 12:00:00 AM
VMware ESXi 6.0 Patch Release ESX600-20180101-03 Missing (VMSA-2018-0014)	214210	High	High	Low	3	1	10/14/2018 12:00:00 AM
Visual Studio Code Remote Code Execution Vulnerability	371756	High	High	Medium	4	1	4/29/2019 12:00:00 AM
Ubuntu Security Notification for Desktop Vulnerabilities (USN-2570-1)	199274	High	High	Low	3	1	3/11/2019 12:00:00 AM
Ubuntu Security Notification for Linux, Linux-arm, Linux-armv7l, Linux-mips64 Big Vulnerabilities (USN-4295-1)	189526	High	Critical	Low	3	1	8/16/2019 12:00:00 AM
Ubuntu Security Notification for Linux, Linux-arm, Linux-armv7l Vulnerabilities (USN-4391-1)	187918	High	Medium	Low	3	1	8/16/2019 12:00:00 AM
Ubuntu Security Notification for Firefox Vulnerabilities (USN-2295-1)	195567	High	High	Medium	4	1	12/12/2014 12:00:00 AM
Trend Micro Mobile Security (Enterprise) Multiple Vulnerabilities	87302	High	Critical	Medium	5	1	10/9/2017 12:00:00 AM
Synceco A2_Pu_The_BCH_Accept_Control_half_style_File_Overwrite_Vulnerability	116179	High	High	Medium	4	1	2/5/2008 12:00:00 AM
Symantec Endpoint Protection Multiple Security Vulnerabilities (SEPM15-007)	123784	High	High	Medium	4	1	8/4/2015 12:00:00 AM
SUSE Security Update for Multiple Packages (SUSE-SA-20101010)	165229	High	High	Medium	5	1	8/27/2011 12:00:00 AM
SUSE Security Update for libxml2 (SUSE-SA-20130729-1)	166154	High	High	Medium	4	1	10/15/2013 12:00:00 AM
SUSE Security Update for Kernel (SUSE-SA-2008010)	163216	High	High	Low	3	1	8/7/2008 12:00:00 AM
SUSE Security Update for PatchPlayer (SUSE-SA-2009041)	165158	High	High	Low	3	1	8/25/2010 12:00:00 AM
SUSE Enterprise Linux Security Update for wscntest (SUSE-SU-20111174-1)	169864	High	High	Low	3	1	3/10/2017 12:00:00 AM
SUSE Enterprise Linux Security Update for gcc (SUSE-SU-20184128-1)	171576	High	Critical	Low	3	1	12/18/2018 12:00:00 AM
SUSE Enterprise Linux Security update for php53 (SUSE-SU-20151818-1)	168107	High	High	Medium	4	1	10/28/2015 12:00:00 AM
SUSE Enterprise Linux Security Update for php5 (SUSE-SU-20161603-1)	169005	High	Critical	Low	3	1	7/27/2016 12:00:00 AM
SUSE Enterprise Linux Security Update for netatalk (SUSE-SU-20184217-1)	171798	High	Critical	Medium	4	1	12/27/2018 12:00:00 AM
SUSE Enterprise Linux Security update for MozillaFirefox, mozilla-misc, mozilla-nspr (SUSE-SU-20160727-1)	166556	High	Critical	Medium	4	1	3/16/2016 12:00:00 AM
Symantec Endpoint Protection Buffer Overflow Vulnerability	74123	High	High	Medium	3	1	8/6/2002 12:00:00 AM
Red Hat Update for thunderbird (RHSA-2018.2251)	238604	High	Critical	Medium	4	1	7/26/2018 12:00:00 AM
Red Hat Update for thunderbird (RHSA-2018.1726)	236803	High	Critical	Medium	4	1	5/29/2018 12:00:00 AM
Red Hat Update for thunderbird (RHSA-2011.1386)	119914	High	High	Medium	5	1	8/17/2011 12:00:00 AM
Red Hat Update for ssh-rootkit (RHSA-2011.0729)	123491	High	High	Low	3	1	3/30/2011 12:00:00 AM
Red Hat Update for RH-redis10-middleware (RHSA-2020.3084)	239486	High	High	Medium	4	1	7/23/2020 12:00:00 AM
Red Hat Update for Rsyslog (RHSA-2019.2396)	134397	High	High	Low	3	1	12/14/2019 12:00:00 AM
<b>Total</b>						<b>124</b>	

### Tenable-Detected Vulnerable Devices Without Available Fixlets - Device Detail

\* BigFix date

\* Device Name: | Wn-2019022V40  
\* Computer ID: | 162284162-1  
\* IP Address: | 10.134.146.184  
\* OS: | Win2019 10.0.17763.107 (809)  
\* Type: | Server  
\* Last Report Time: | 2/16/2021 4:05:18 PM

Vulnerability Title	Plugin ID	CVSS	VPR	VPR Score	Date Detected
Ubuntu Security Notification for Linux, Linux-aws, Linux-ark, Linux-aws2, Linux-aws-ec2, Linux-aws-ec2-ami, Linux-aws-ec2-ami, Linux-aws-ec2-ami, Linux-aws-ec2-ami (CVE-2021-4035-1)	187374	High	Low	3	5/1/2025 12:00:00 AM

### Tenable-Detected Vulnerable Devices Without Available Fixlets - Vulnerability Detail

Vulnerability Title: | Ubuntu Security Notification for Linux, Linux-aws, Linux-ark, Linux-aws2, Linux-aws-ec2, Linux-aws-ec2-ami, Linux-aws-ec2-ami, Linux-aws-ec2-ami, Linux-aws-ec2-ami (CVE-2021-4035-1)

Plugin ID: | 187374 | CVSS: | High  
Published Date: | 5/1/2025 12:00:00 AM | VPR: | Low  
VPR Score: | 3

Right-click on Device ID to drill down

Date Detected	BigFix Computer ID	Computer Name	OS	IP Address	Device Type	Last Report Time
5/1/2025 12:00:00 AM	162284162-1	Wn-2019022V40	Win2019 10.0.17763.107 (809)	10.134.146.184	Server	2/16/2021 4:05:18 PM

Vulnerability Discrepancies

### Tenable-Detected Vulnerability Discrepancies - Overview

Created on: Mar 25, 2021

Based on Tenable Data | Help Center

#### Top 5 Vulnerable by Device

- Wn-0610K8547D8
- Wn-UTMAMU7N9U9
- W10-B08CLIENT8
- Andrew-RHELServer-2

#### Breakdown by CVSS2

Date Pub: Year/Month | All

#### Vulnerabilities with Fixlets by Date First Detected - CVSS

Vulnerability Detected Date	Count
2021/03	26

### Tenable-Detected Vulnerability Discrepancies - Device Detail

**\* BigFix data**

**\* Device Name:** WIN-0410R24708  
**\* Computer ID:** 108842206-1  
**\* IP Address:** 10.134.148.134  
**\* OS:** Win2016 1603.14293.1273 (1607)  
**\* Type:** Server  
**\* Last Report Time:** 3/25/2021 4:59:14 PM

Vulnerability Title	CVSS	VPR	VPR Score	Applicable Devices	Published Date	* Fixlet Title	Fixlet ID	* Fixlet Size	* Fixlet Source ID
KB344570: Windows 10 Version 1807 and Windows Server 2016 March 2020 Security Update	10.4389	High	High	10	3/10/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2016...	300062201	Patches for Windows	KB344570

### Tenable-Detected Vulnerability Discrepancies - Vulnerability Detail

**\* BigFix data**

**\* Vulnerability Title:** KB344570: Windows 10 Version 1807 and Windows Server 2016 March 2020 Security Update  
**\* Plugin ID:** 134347  
**\* Published Date:** 3/10/2020 12:00:00 AM  
**\* CVSS:** High  
**\* VPR:** High  
**\* VPR Score:** 10

**\* Fixlet Title:** MS21-0688: Cumulative Update for Windows Server 2016...  
**\* Fixlet ID:** 300062201  
**\* Fixlet Size:** Patches for Windows  
**\* Fixlet Source ID:** KB344570  
**\* Fixlet Category:** Security Update  
**\* Source Release Date:** 3/10/2020

**Right-click on Device ID to drill down**

Date Detected	* BigFix Computer ID	* Computer Name	* OS	IP Address	Device Type	Last Report Time
3/25/2021 12:00:00 AM	108842206-1	WIN-0410R24708	Win2016 1603.14293.1273 (1607)	10.134.148.134	Server	3/25/2021 4:59:14 PM

### Tenable-Detected Vulnerability Discrepancies - Detail

**Right-click on Vulnerability ID to drill down**

**\* BigFix data**

Vulnerability Title	Plugin ID	CVSS	VPR	VPR Score	Applicable Devices	Published Date	* Fixlet Title	Fixlet ID	* Fixlet Size	* Fixlet Source ID
KB453881: Windows 10 Version 1809 and Windows Server 2019 March 2020 Security Update	134386	High	High	10	1	3/10/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453881
KB453886: Windows 10 Version 1809 and Windows Server 2019 April 2020 Security Update	135483	High	High	9	1	4/14/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453886
KB453890: Windows 10 Version 1809 and Windows Server 2019 May 2020 Security Update	136581	High	High	10	1	5/13/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453890
KB453895: Windows 10 Version 1809 and Windows Server 2019 July 2020 Security Update	138433	High	High	9	1	7/14/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453895
KB453908: Windows 10 Version 1809 and Windows Server 2019 June 2020 Security Update	137256	High	High	10	1	6/9/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453908
KB453949: Windows 10 Version 1809 and Windows Server 2019 August 2020 Security Update	139484	High	Critical	10	1	8/11/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB453949
KB457023: Windows 10 Version 1809 and Windows Server 2019 September 2020 Security Update	140414	High	High	9	1	9/8/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB457023
KB457066: Windows 10 Version 1809 and Windows Server 2019 October 2020 Security Update	141433	High	High	9	1	10/13/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB457066
KB458470: Windows 10 Version 1809 and Windows Server 2019 November 2020 Security Update	142883	High	Info	0	1	11/10/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB458470
KB458340: Windows 10 Version 1809 and Windows Server 2019 December 2020 Security Update	143261	High	High	8	1	12/8/2020 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB458340
KB458320: Windows 10 Version 1809 and Windows Server 2019 January 2021 Security Update	144687	High	High	10	1	1/12/2021 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB458320
KB461345: Windows 10 Version 1809 and Windows Server 2019 February 2021 Security Update	146337	High	High	10	1	2/9/2021 12:00:00 AM	MS21-0688: Cumulative Update for Windows Server 2019 - Windows Server 2019 - KB5005822 (x64)	300062201	Patches for Windows	KB461345

## Tableau reports

Use this section to become familiar with Tableau reports.

Tableau reports for:

- [Qualys](#)
- [Tenable.io](#)
- [Tenable.sc](#)

The reports are produced in Tableau version 2020.4+.

- Reporting differences: the functionality of the reports is nearly identical between Power BI and Tableau. This section details the differences between the reports
- Navigation: each visualization is portrayed on the dashboard page. Visualizations that do not apply to your business process can be removed as necessary
- Qualys Severity

The Severity value is provided by Qualys to measure the relative security risk associated with the vulnerability. Factors included in this measure are:

- Possible consequences
- Complexity
- Likelihood that the exploit will work under normal conditions
- Network location
- Privileges needed by the attacker
- Prevalence of affected software
- Existence of known attacks

In the IVR database, the information is stored in the vulnerabilities.severity column. The reporting aggregation tables return both the numerical score and a value (where applicable) corresponding to the following matrix:

**Table 4.**

Severity Value	Level Value
1	Minimal
2	Medium
3	Serious
4	Critical
5	Urgent

For more information regarding this topic from the vendor, please visit [https://qualysguard.qualys.com/qwebhelp/fo\\_portal/knowledgebase/severity\\_levels.htm](https://qualysguard.qualys.com/qwebhelp/fo_portal/knowledgebase/severity_levels.htm)

- Tenable Severity

The Vulnerability Priority Rating (VPR) value is provided by Tenable to measure the relative security risk associated with the vulnerability. Factors included in this measure are:

- Vulnerability Age
- CVSSv3 Impact Score
- Exploit Code Maturity
- Product Coverage
- Threat Sources
- Threat Intensity
- Threat Recency

In the IVR database, the information is stored in the vulnerabilities.vendor\_rating column. The reporting aggregation tables return both the numerical score and a value (where applicable) corresponding to the following matrix:

**Table 5.**

VPR Value	Level Value
9.0 – 10.0	Critical
7.0 – 8.9	High
4.0 – 6.9	Medium
0.1 – 3.9	Low

For more information regarding this topic from the vendor, please visit <https://docs.tenable.com/tenablesc/Content/RiskMetrics.htm>

## Tableau reports for Qualys

Use this section to become familiar with Tableau reports for Qualys.

Chart details:

- Vulnerability Title - vulnerability title
- Vulnerability ID - a unique identifier assigned to a vulnerability
- Device Name - name of the device
- Severity - level of risk associated with a vulnerability. Severity rating scale ranges from 1 to 5
- Detected Date - date when a vulnerability was first detected
- CVSS2 - Common Vulnerability Scoring System version 2
- Applicable Devices - devices that are affected by a vulnerability



Detected Vulnerabilities with Applicable Fixlets



Right click on Vulnerability ID to drill down

Vulnerability Title	Vulnerability	CVE List	CVSS2	Severity	Applicab...	Year of Pub.	* Fixlet Title	* Bugfix ID	* Fixlet Sev.	* Fixlet Site
Adobe Flash Player <= 32.0.0...	121723	CVE-2020-3767, CVE-2020-9633	High	Critical	2	2020	MS20-027 Security Update for Adobe Flash	458025218	KB4580215	Patches for...
KB4537953 Security update...	133618	CVE-2019-3767, CVE-2020-9633	High	Serious	2	2020	MS20-027 Security Update for Adobe Flash	458025218	KB4580215	Patches for...
KB4512853 Windows 10 Ver...	134501	CVE-2019-1006, CVE-2019-1083, CVE...	High	Serious	1	2020	MS20-1047 Cumulative Update for .NET Fr...	458292405	KB4586441	Patches for...
KB4558950 Windows 10 Ver...	138463	CVE-2020-1346	High	Serious	1	2020	MS21-0048 Servicing Stack Update for Wi...	600089301	KB5000889	Patches for...
Security Updates for Microso...	132999	CVE-2019-1006, CVE-2019-1083, CVE...	High	Critical	2	2020	MS20-1047 Cumulative Update for .NET Fr...	458292405	KB4586441	Patches for...



### Device Detail Summary

\* BigFix data

* Device Name	DeviceID	* IP Address	* OS	* Type	* Last Report Time
WIN-9EFHFQJM7HB	14456361-1	10.134.146.136	Win2016 10.0.14393.1884 (1607)	Server	2/16/2021 4:11:07 PM

### Vulnerability Detail

Vulnerability Title	Vulnerability CVSS2	Severity	Detected Date
ActivePerl UTF-8 Denial of Service Vulnerability	116904	Medium	1/1/2025
Adobe Flash Player SWF File Unspecified Remote Code Execution Vulnerability	115811	High	Critical
Adobe Reader and Acrobat Multiple Vulnerabilities (APSB16-26)	370084	High	Critical
Amazon Linux Security Advisory for dbus ALAS-2019-1246	351628	Low	Critical
Amazon Linux Security Advisory for gc ALAS-2013-245	350499	Medium	Serious
Amazon Linux Security Advisory for golang.docker ALAS-2015-588	350114	High	Serious
Amazon Linux Security Advisory for mod_security ALAS-2014-335	350393	Medium	Serious
Amazon Linux Security Advisory for perl-YAML-LibYAML-AL2012-2015-056	350775	Medium	Serious
Amazon Linux Security Advisory for ruby2D ALAS-2015-547	350155	Medium	Serious
Apple QuickTime Prior to 7.7.5 Multiple Vulnerabilities (APPLE-SA-2014-02-25-3)	121819	High	Critical
Atlassian JIRA Multiple Security Vulnerability (JRASERVER-69784, JRASERVER-69...	13609	Medium	Serious
Atlassian Jira Server and Data Center Improper Authorization Vulnerability (JRASE...	13831	Medium	Medium
CentOS Security Update for Firefox (CESA-2012-1210)	120578	High	Critical
CentOS Security Update for Firefox (CESA-2017-0558)	256179	High	Urgent
CentOS Security Update for Firefox Security Update (CESA-2018-2693)	256482	High	Critical
CentOS Security Update for Flatpak (CESA-2019-0375)	256573	Medium	Critical
CentOS Security Update for Ghostscript (CESA-2012-0096)	120039	Medium	Medium
CentOS Security Update for HelixPlayer (CESA-2010-0094)	116908	High	Serious



### Vulnerability Device Summary

\* BigFix Data

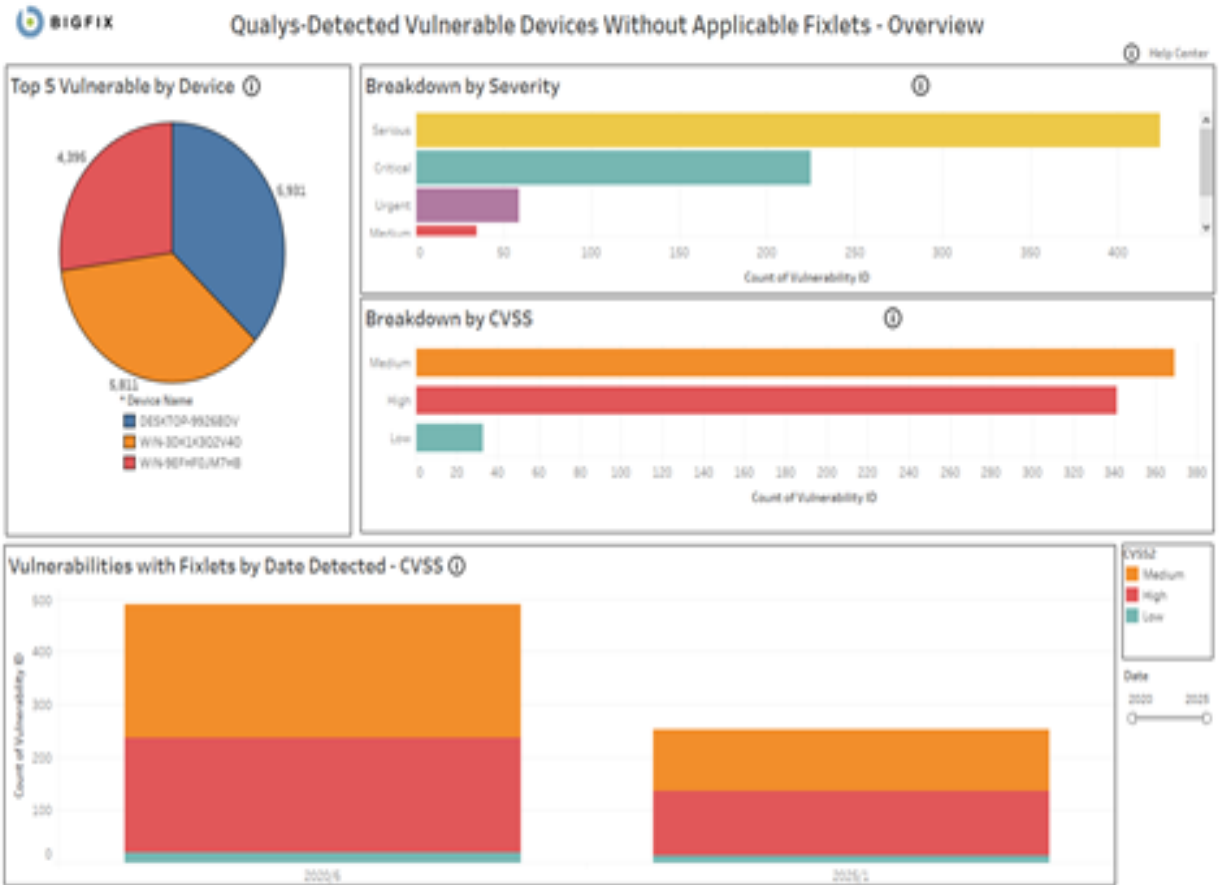
Vulnerability	Vulnerability CVE List	Year of Pub.	CVSS2	Severity	* Fclet Title	* Fclet ID	* Fclet Site	* Fclet Sou.	* Fclet Category	* Source Release Da.	
Adobe Flash	137263	CVE-2020-9...	2020	High	Critical	MS20-027: Security Update for Adobe Flash Player No...	4880323-US	Windows for Win...	484880326	Security Update	20/2/2020

Right-click on Device ID to drill down

### Vulnerability Device Detail

Detected Date	DeviceID	* Device Name	* OS	* IP Address	* Type	* Last Report Time
1/8/2021	20175120-1	WIN-7755AAL726L9	Win2019 10.0.17763.1201	172.17.128.5	Server	3/16/2021 4:57:12 PM
	565214002-2	WCS-8080L6N78	Win10 10.0.17134.1304 (1...	10.134.146.97	Laptop	3/16/2021 4:58:11 PM

## Detected Vulnerabilities without Available Fixlets





Right-click on Vulnerability ID to dr...

\* BigFix data

### Vulnerability List

Vulnerability Title	Vulnerability ID	CVSS2	Severity	Applicable Devices	Year of Published Date
Amazon Linux Security Advisory for elvcs ALAS-2019-1286	261629	Low	Critical	1	2019
Amazon Linux Security Advisory for gupke ALAS-2012-070	260877	Low	Serious	1	2012
Blissian Probe and Crucible Cross-Site Scripting Vulnerability	13402	Low	Serious	1	2019
CentOS Security Update for libvirt (CESA-2012-1202)	120574	Low	Medium	1	2012
CentOS Security Update for libvirt-libs (CESA-2011-0478)	119287	Low	Serious	1	2011
CentOS Security Update for OpenSSH (CESA-2007-0297)	117547	Low	Medium	1	2007
CentOS Security Update for PAM (CESA-2007-0483)	117815	Low	Serious	1	2007
CentOS Security Update for qemu-kvm (CESA-2007-1890)	204277	Low	Critical	1	2007
CentOS Security Update for util-linux-ng (CESA-2011-0517)	121109	Low	Serious	1	2011
Debian Security Update for mailman (DSA-4246-1)	176429	Low	Serious	1	2018
Drupal core File Module Cross Site Scripting Vulnerability (SA-C-13483)	13483	Low	Serious	1	2019
Fedora Security Update for libatm (FEDORA-2015-11865)	124023	Low	Serious	1	2015
Fedora Security Update for qemu (FEDORA-2016-26264a6a6)	276023	Low	Serious	1	2016
Fedora Security Update for slurm (FEDORA-2014-1442)	122292	Low	Serious	1	2014
Fedora Security Update for sudo (FEDORA-2015-1247)	121047	Low	Serious	1	2015
Fedora Security Update for xan (FEDORA-2016-d4d61d277)	276204	Low	Serious	1	2016
iPlanet Calendar Server Plaintext Admin Password Vulnerability	96154	Low	Urgent	1	2001
McAfee VirusScan 4.0.3 Root File Vulnerability	38111	Low	Serious	1	2004
OpenSUSE Security Update for libvirt (openSUSE-SU-2014-0018-1)	164706	Low	Serious	1	2014
OpenSUSE Security Update for lib (openSUSE-SU-2015-0245-1)	167600	Low	Serious	1	2015
OpenSUSE Security Update for libvirt (openSUSE-SU-2015-1-1)	167564	Low	Serious	1	2015
Oracle Enterprise Linux Security Update for libcrypt (ELSA-2011-164707)	164707	Low	Serious	1	2011
Oracle Enterprise Linux Security Update for qemu-kvm (ELSA-2007-104022)	104022	Low	Medium	1	2007
Postfix Cross Site Scripting Vulnerability	10543	Low	Serious	1	2003
Red Hat Update for OpenShift Container Platform 4.5.4 jenkins...	209510	Low	Serious	1	2020
Skype Technologies Skype URI Handling Remote File Download V...	38147	Low	Serious	1	2004
SUSE Enterprise Linux Security Update for elvcs-1 (SUSE-SU-2011-167211)	167211	Low	Serious	1	2011
SUSE Enterprise Linux Security Update for libage1 (SUSE-SU-2008-171132)	171132	Low	Serious	1	2008
SUSE Enterprise Linux Security Update for WireShark (SUSE-SU-10-160499)	160499	Low	Serious	1	2010
SUSE Security Update for libage1 (openSUSE-SU-2013-0404-1)	166870	Low	Medium	1	2013



### Vulnerability Device Summary

\* BigFix data

Vulnerability Title	Vulnerability ID	Year of Pub.	CVSS2	Severity
CentOS Security Update for libvirt (CESA-2012-1202)	120574	2012	Low	Medium

Right-click on Device ID to drill down

### Vulnerability Device Detail

Detected Date	DeviceID	* Device Name	* OS	* IP Address	* Type	* Last Report Time
6/16/2020	14456363-1	WIN-9EFHP0JM7HB	Win2016 10.0.14393.1884	10.134.146.136	Server	2/16/2021 4:11:07 PM



### Device Detail Summary

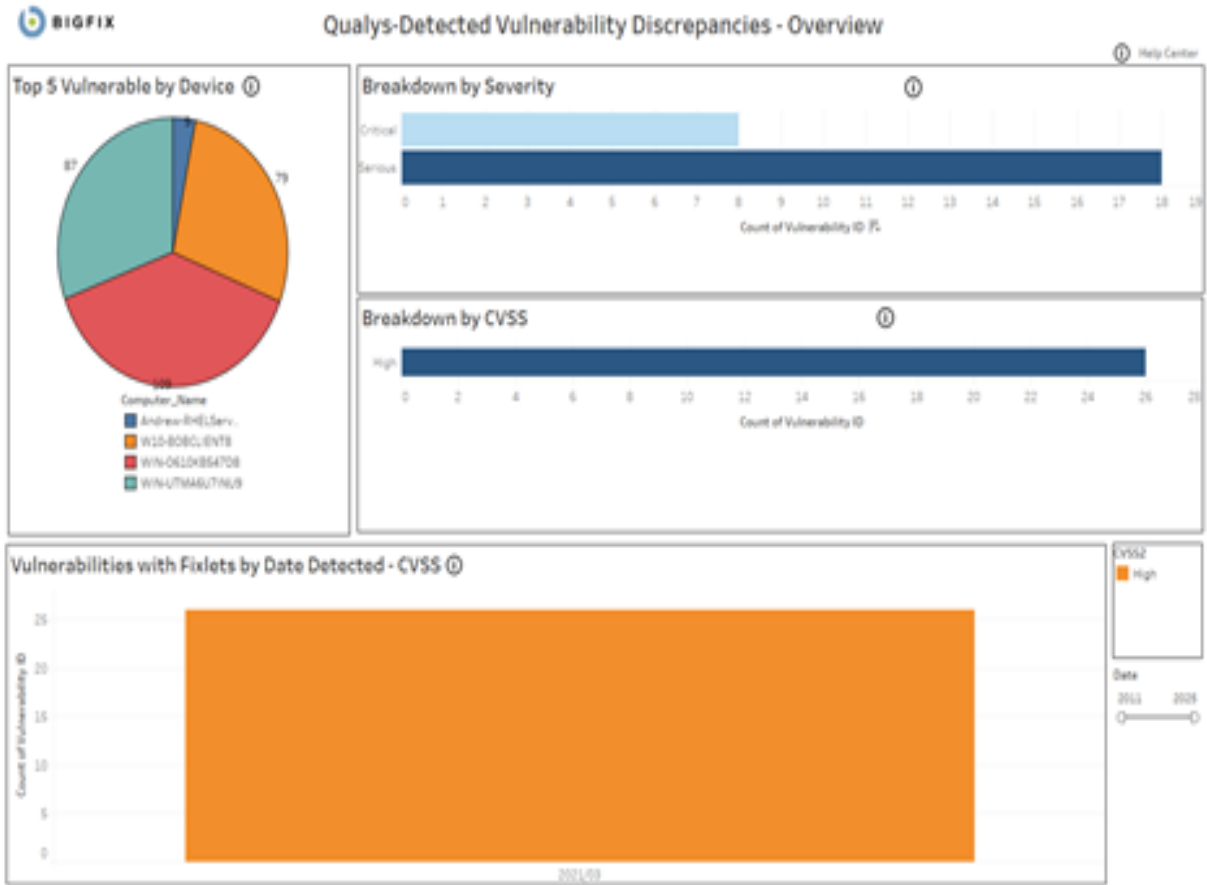
\* BigFix data

* Device Name	DeviceID	* IP Address	* OS	* Type	* Last Report Time
WIN-9EFHFQJM7HB	14456361-1	10.134.146.136	Win2016 10.0.14393.1884 (1607)	Server	2/16/2021 4:11:07 PM

### Vulnerability Detail

Vulnerability Title	Vulnerabilit..	CVSS2	Severity	Detected Date
ActivePerl UTF-8 Denial of Service Vulnerability	116904	Medium	Serious	1/1/2025
Adobe Flash Player SWF File Unspecified Remote Code Execution Vulnerability	115811	High	Critical	6/16/2020
Adobe Reader and Acrobat Multiple Vulnerabilities (APSB16-26)	370084	High	Critical	6/16/2020
Amazon Linux Security Advisory for dbus ALAS-2019-1246	351628	Low	Critical	6/16/2020
Amazon Linux Security Advisory for gc ALAS-2013-245	350499	Medium	Serious	1/1/2025
Amazon Linux Security Advisory for golang.docker ALAS-2015-588	350114	High	Serious	6/16/2020
Amazon Linux Security Advisory for mod_security ALAS-2014-335	350393	Medium	Serious	6/16/2020
Amazon Linux Security Advisory for perl-YAML-LibYAML-AL2012-2015-056	350775	Medium	Serious	6/16/2020
Amazon Linux Security Advisory for ruby20 ALAS-2015-547	350155	Medium	Serious	6/16/2020
Apple QuickTime Prior to 7.7.5 Multiple Vulnerabilities (APPLE-SA-2014-02-25-3)	121819	High	Critical	6/16/2020
Atlassian JIRA Multiple Security Vulnerability (JRASERVER-69784, JRASERVER-69...	13609	Medium	Serious	6/16/2020
Atlassian Jira Server and Data Center Improper Authorization Vulnerability(JRASE...	13831	Medium	Medium	6/16/2020
CentOS Security Update for Firefox (CESA-2012-1210)	120578	High	Critical	1/1/2025
CentOS Security Update for firefox (CESA-2017-0558)	256179	High	Urgent	1/1/2025
CentOS Security Update for firefox Security Update (CESA-2018-2693)	256482	High	Critical	1/1/2025
CentOS Security Update for flatpak (CESA-2019-0375)	256573	Medium	Critical	1/1/2025
CentOS Security Update for Ghostscript (CESA-2012-0096)	120039	Medium	Medium	6/16/2020
CentOS Security Update for HelixPlayer (CESA-2010-0094)	116908	High	Serious	6/16/2020

## Vulnerability Discrepancies



**Qualys-Detected Vulnerability Discrepancies - Detail**

Vulnerability	Vulnerability	CVE List	CVSS2	Severity	Applicable...	Year of Pub.	* Fixlet Title	* Fixlet ID	* Fixlet Src.	* Fixlet Site	* Fixlet Category	* Source Ref.
KB615861	134368	CVE-2020-0	High	Critical	1	2020	WS22-MAAR: Cumulative Update for Windows	800082201	KB5000802	Patches for Windows	Security Update	03/09/2021
KB504979	134369	CVE-2020-0	High	Critical	1	2020	WS22-MAAR: Cumulative Update for Windows	800080003	KB5000803	Patches for Windows	Security Update	03/09/2021
KB454979	142653	CVE-2020-0	High	Critical	1	2020	WS22-MAAR: Cumulative Update for Windows	800082201	KB5000802	Patches for Windows	Security Update	03/09/2021
KB4549830	142690	CVE-2020-0	High	Critical	1	2020	WS22-MAAR: Cumulative Update for Windows	800080003	KB5000803	Patches for Windows	Security Update	03/09/2021
KB4601328	146329	CVE-2020-0	High	Critical	1	2021	WS22-MAAR: Cumulative Update for Windows	800080003	KB5000803	Patches for Windows	Security Update	03/09/2021
KB4601345	146327	CVE-2020-0	High	Critical	1	2021	WS22-MAAR: Cumulative Update for Windows	800082201	KB5000802	Patches for Windows	Security Update	03/09/2021
KB5000803	147222	CVE-2020-0	High	Critical	1	2021	WS22-MAAR: Cumulative Update for Windows	800080003	KB5000803	Patches for Windows	Security Update	03/09/2021
KB5000802	147223	CVE-2020-0	High	Critical	1	2021	WS22-MAAR: Cumulative Update for Windows	800082201	KB5000802	Patches for Windows	Security Update	03/09/2021

**BIGFIX** \*BigFix data

**Qualys-Detected Vulnerability Discrepancies - Device Summary**

DeviceID	*Computer Name	*IP Address	*OS	*Type	*Last Report Time
1887322-1	WIN-U7M6U7N6U9	172.17.128.1	WIN2019-10.0.17763.107 (20H2)	Server	3/25/2021 4:57:12 PM

**Vulnerability Detail**

Vulnerability Title	Vulnerability	CVE_List	CVSS2	Severity	Detected Date	*Buglet Title	*Buglet ID	*Buglet Site	*Buglet Sec.	*Buglet Category	*Source Ref.
KB4518462 Wed.	134368	CVE-2020-0646, CVE-2	High	Critical	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4519545 Wed.	139463	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4518533 Wed.	139461	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4509998 Wed.	139463	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4516108 Wed.	137296	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4516349 Wed.	139464	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4519333 Wed.	142414	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4517668 Wed.	141433	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4506793 Wed.	143933	CVE-2020-0646, CVE-2	High	Critical	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4516230 Wed.	143941	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB4516377 Wed.	144837	CVE-2020-0646, CVE-2	High	Serious	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB451345 Wed.	146337	CVE-2020-0646, CVE-2	High	Critical	3/8/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021
KB5006822 Wed.	147223	CVE-2020-0646, CVE-2	High	Critical	3/12/2021	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021

**BIGFIX** \*BigFix Data

**Qualys-Detected Vulnerability Discrepancies - Device Summary**

Vulnerability	Vulnerability	CVE_List	Year of Pub.	CVSS2	Severity	*Buglet Title	*Buglet ID	*Buglet Site	*Buglet Sec.	*Buglet Category	*Source Ref.
KB4518462	134368	CVE-2020-0646, CVE-2	2020	High	Critical	MS21-0648: Cumulative Update for Windows	500982201	Patches for Windows	485009822	Security Update	23/09/2021

Right-click on Device ID to drill down **Qualys-Detected Vulnerability Discrepancies - Device Detail**

Detected Date	DeviceID	*Computer Name	*OS	*IP Address	*Type	*Last Report Time
3/8/2021	1887322-1	WIN-U7M6U7N6U9	WIN2019-10.0.17763.107 (20H2)	172.17.128.1	Server	3/25/2021 4:57:12 PM

## Tableau reports for Tenable.io

Use this section to become familiar with Tableau reports for Tenable.io

BigFix Insights for Vulnerability Remediation can now also consume vulnerability data from Tenable.io. With Tenable Lumin available, BigFix Insights for Vulnerability Remediation also consumes asset prioritization data:

- Asset Criticality Rating (ACR): 1-10 rating that represents the asset's relative criticality based on device type, device purpose, and network location/proximity to the Internet.
- Asset Exposure Score (AES): A metric that combines ACR & VPR (Vulnerability Priority Rating) into a single score to represent an asset's relative exposure.

Refer to the link for more information: [Lumin Metrics](#)

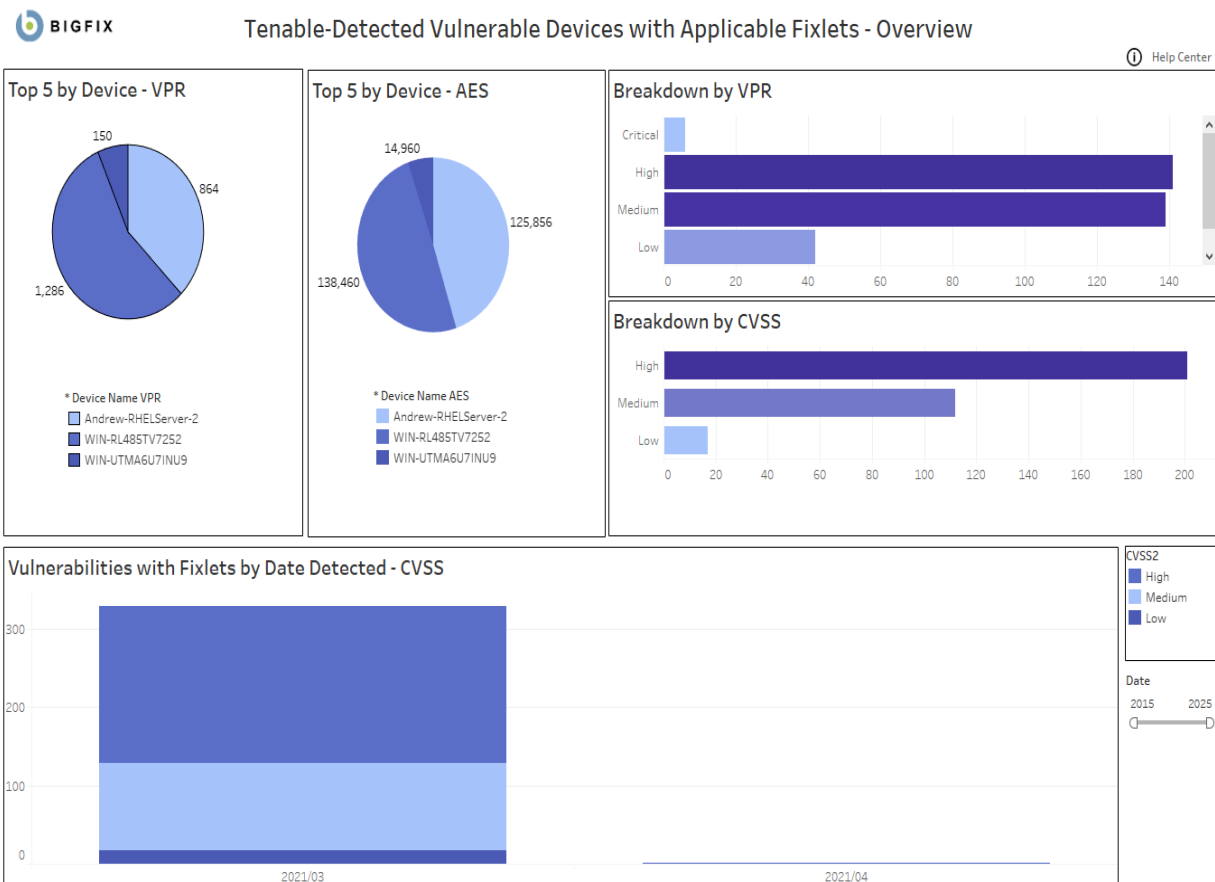
Additionally, uniquely for Tenable.io, BigFix sends its endpoint asset data to Tenable.io to give it visibility into potentially unmanaged assets.

Chart details:

- Vulnerability Title - Vulnerability title
- PluginID - a unique identifier assigned to a vulnerability detection

- Applicable Devices - devices that have been scanned by Tenable and for which vulnerabilities have been identified
- CVE List - list of CVE
- CVSS2 - (Common Vulnerability Scoring System version 2), scoring system used to assess the severity and potential impact of security vulnerabilities.
- CVSS3 - (Common Vulnerability Scoring System version 3), updated version of the scoring system
- VPR - Vulnerability Priority Rating
- VPR Score - numerical value ranging from 0 to 10, with 10 being the highest priority
- Detected Date - the date when a vulnerability was first detected
- Published Date - date when the information about a vulnerability was first available
- ACR - Asset Criticality Rating: 1-10 rating that represents the asset's relative criticality based on device type, device purpose, and network location/proximity to the Internet.
- AES - Asset Exposure Score: A metric that combines ACR & VPR (Vulnerability Priority Rating) into a single score to represent an asset's relative exposure.

### Detected Vulnerabilities with Applicable Fixlets







Right-click on Plugin ID to drill down

Vulnerability List - 139 Rows

\* BigFix data

Vulnerability Title	Plugin ID	Applicable Devices	CVE List	CVSS2 $\frac{2}{5}$	CVSS3	VPR	VPR Score	Total VPR S.	Detected D.	Published D.	Product/
MS KB3009008: Vulnerability in SSL 3.0 Could Allow Information Disclosure (POODLE)	78447	1	CVE-2014-3566	Medium		Medium	4.9	5	3/20/2021	10/14/2014	Windows
MS15-006: Vulnerability in Windows Error Rep.	80495	1	CVE-2015-0001	Low		Medium	4.2	4	3/20/2021	01/13/2015	Windows
MS15-014: Vulnerability in Group Policy Could..	81267	1	CVE-2015-0009	Low		Medium	4.4	4	3/20/2021	02/10/2015	Windows
MS15-029: Vulnerability in Windows Photo De..	81743	1	CVE-2015-0076	Medium		Medium	5.7	6	3/20/2021	03/10/2015	Windows
MS15-050: Vulnerability in Service Control Ma..	83355	1	CVE-2015-1702	Medium		Medium	5.9	6	3/20/2021	05/12/2015	Windows
MS15-060: Vulnerability in Microsoft Common ..	84056	1	CVE-2015-1756	High		Medium	6.7	7	3/20/2021	06/09/2015	Windows
MS15-082: Vulnerability in RDP Could Allow Re..	85332	1	CVE-2015-2472	High		Medium	5.9	6	3/20/2021	08/11/2015	Windows
MS15-088: Unsafe Command Line Parameter P..	85334	1	CVE-2015-2423	Medium		Medium	4.2	4	3/20/2021	08/11/2015	Windows
MS15-089: Vulnerability in WebDAV Could Allo..	85323	1	CVE-2015-2476	Low		Medium	4.4	4	3/20/2021	08/11/2015	Windows
MS15-119: Security Update for Winsock to Ad..	86826	1	CVE-2015-2478	High		Medium	5.9	6	3/20/2021	11/10/2015	Windows
MS15-121: Security Update for Schannel to Ad..	86827	1	CVE-2015-6112	Medium		Medium	5.5	6	3/20/2021	11/10/2015	Windows
MS15-133: Security Update for Windows PGM ..	87262	1	CVE-2015-6126	High		Medium	5.9	6	3/20/2021	12/08/2015	Windows
MS16-013: Security Update for Windows Jour..	88645	1	CVE-2016-0038	High	High	Medium	6.7	7	3/20/2021	02/09/2016	Windows
MS16-027: Security Update for Windows Media to Address Remote Code Execution (3143146)	89750	1	CVE-2016-0098	High	High	Medium	6.7	7	3/20/2021	03/08/2016	Windows
			CVE-2016-0101	High	High	Medium	6.7	7	3/20/2021	03/08/2016	Windows
MS16-033: Security Update for Windows USB ..	89779	1	CVE-2016-0133	High	Medium	Medium	6.7	7	3/20/2021	03/08/2016	Windows
MS16-047: Security Update for SAM and LSAD ..	90510	1	CVE-2016-0128	Medium	Medium	Medium	6	6	3/20/2021	03/23/2016	Windows
MS16-067: Security Update for Volume Manag..	91016	1	CVE-2016-0190	Low	Medium	Medium	4.4	4	3/20/2021	05/10/2016	Windows
MS16-072: Security Update for Group Policy (3..	91600	1	CVE-2016-3223	High	High	Medium	6.7	7	3/20/2021	06/14/2016	Windows
MS16-076: Security Update for Netlogon (316..	91604	1	CVE-2016-3228	High	High	Medium	6.7	7	3/20/2021	06/14/2016	Windows
MS16-087: Security Update for Windows Print..	92018	1	CVE-2016-3238	High	High	Medium	6.7	7	3/20/2021	07/12/2016	Windows
MS16-124: Security Update for Windows Regis..	94013	1	CVE-2016-0070; CVE-2016-0073..	Medium	Medium	Medium	6.6	7	3/20/2021	10/11/2016	Windows
MS16-134: Security Update for Common Log Fi..	94635	1	CVE-2016-0026; CVE-2016-3332..	High	High	Medium	5.9	6	3/20/2021	11/08/2016	Windows
MS16-137: Security Update for Windows Auth..	94638	1	CVE-2016-7237; CVE-2016-7238	High	High	Medium	5.9	6	3/20/2021	11/08/2016	Windows
MS16-149: Security Update for Microsoft Win..	95813	1	CVE-2016-7219; CVE-2016-7292	High	High	Medium	5.9	6	3/20/2021	11/17/2016	Windows
RHEL 7 : avahi (RHSA-2020-1176)	135048	1	CVE-2017-6519	Medium	Critical	Medium	5.2	5	3/11/2021	03/03/2015	Null
RHEL 7 : bash (RHSA-2020-1113)	135062	1	CVE-2019-9924	High	High	Medium	6.7	7	3/11/2021	03/22/2019	Null
RHEL 7 : bind (RHSA-2020-2344)	137082	1	CVE-2020-8616; CVE-2020-8617	Medium	High	Medium	6	6	3/11/2021	05/19/2020	Null
RHEL 7 : cpio (RHSA-2020-2908)	141056	1	CVE-2019-14866	Medium	High	Medium	6.7	7	3/11/2021	01/07/2020	Null



### Vulnerability Device Summary

\*BigFix Data

Vulnerabilit...	Pugin ID	CVE List	CVSS2	CVSS3	VPR	VPR Score	Total VPR S..	Detected D..	Published D..	Product/Fa..	* Fixlet Title	* Fixlet ID	* Fixk
MS15-050:..	83355	CVE-2015-1..	Medium		Medium	5.9	6	3/20/2021	05/12/2015	Windows	MS15-050: Vulnerability in Service Control Manager ..	1505015	Patch

Right-click on Device ID to drill down

### Vulnerability Device Detail - 1 Rows

Detected Date	DeviceID	* Device Name Detail	* OS	* IP Address	* Type	ACR	AES	* Last Report Time
3/20/2021	1076613427-2	WIN-RL485TV7252	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM



Device Detail Summary

\* BigFix data

DeviceID	* Device Name Det..	* IP Address	* OS	* Type	ACR	AES	* Last Report Time
1076613427-2	WIN-RL485TV7252	10.134.146.46	Win2012R2 6.3.9600	Server	7.35	860	4/1/2021 9-03-51 PM

Vulnerability Detail - 161 Rows

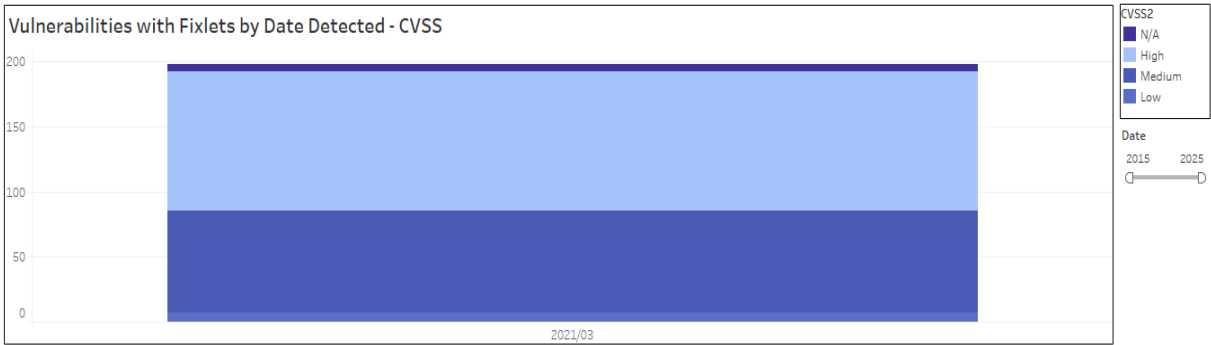
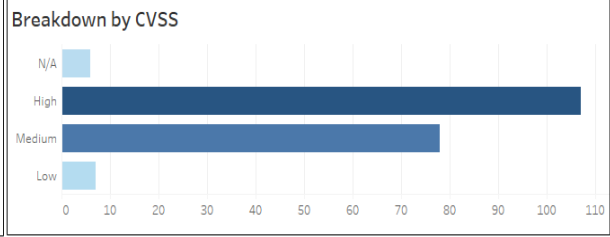
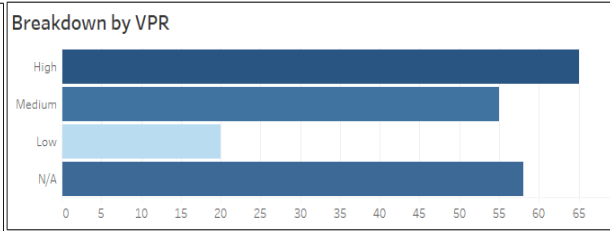
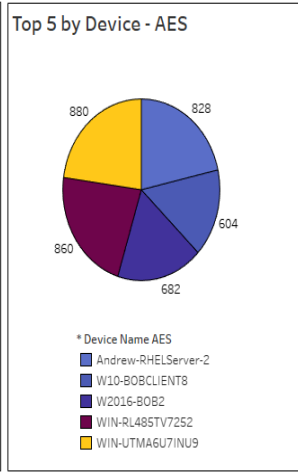
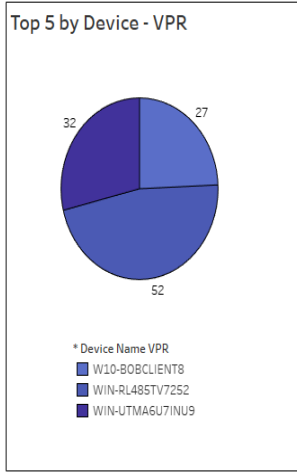
Vulnerability Title	Pulgin ID	CVE List	CVSS2	CVSS3	VPR	VPR Score	Total VPR S..	Detected Date	Published D..	Product/Fa..	* Fixlet Title	* Fixlet ID	* F
KB4088879: Wind..	108291	CVE-2017-5..	High	High	High	8.4	8	3/20/2021	03/13/2018	Windows	4072698: Enable mitigations to help pr...	407269801	Pat ^
KB4093115: Wind..	108965	CVE-2018-0..	High	High	High	9	9	3/20/2021	04/10/2018	Windows	MS18-APR: Security Only Quality Updat..	409311501	Pat
KB4103715: Wind..	109607	CVE-2018-0..	High	High	High	9.8	10	3/20/2021	05/08/2018	Windows	MS18-MAY: Security Only Quality Updat..	410371501	Pat
KB4338824: Wind..	110981	CVE-2018-8..	High	High	High	9	9	3/20/2021	07/10/2018	Windows	MS18-JUL: Security Only Quality Updat..	433882403	Pat
KB4457143: Wind..	117412	CVE-2018-8..	High	Critical	High	9	9	3/20/2021	09/11/2018	Windows	MS18-SEP: Security Only Quality Updat..	445714303	Pat
KB4462941: Wind..	118002	CVE-2018-8..	High	High	High	9.6	10	3/20/2021	10/09/2018	Windows	MS18-OCT: Security Only Quality Updat..	446294101	Pat
KB4467703: Wind..	118918	CVE-2018-8..	High	Critical	High	8.9	9	3/20/2021	11/13/2018	Windows	MS18-NOV: Security Only Quality Updat..	446770303	Pat
KB4471322: Windows 8.1 and ..	119583	CVE-2018-8..	High	Critical	High	9.4	9	3/20/2021	12/11/2018	Windows	MS18-DEC: Security Only Quality Updat..	447132201	Pat
KB4480964: Wind..	121014	CVE-2019-0..	High	High	High	9.8	10	3/20/2021	01/08/2019	Windows	MS19-JAN: Security Only Quality Updat..	448096401	Pat
KB4487028: Windows 8.1 and ..	122120	CVE-2019-0..	High	High	High	8.9	9	3/20/2021	02/12/2019	Windows	MS19-FEB: Security Only Quality Updat..	448702801	Pat
KB4489883: Wind..	122784	CVE-2019-0..	High	High	High	8.4	8	3/20/2021	03/12/2019	Windows	MS19-MAR: Security Only Quality Upda..	448988301	Pat
KB4493467: Wind..	123940	CVE-2019-0..	High	High	High	9.5	10	3/20/2021	04/09/2019	Windows	MS19-APR: Security Only Quality Updat..	449346701	Pat
KB4499165: Wind..	125061	CVE-2019-0..	High	High	High	8.9	9	3/20/2021	05/14/2019	Windows	MS19-MAY: Security Only Quality Upda..	449916503	Pat
KB4503290: Wind..	125818	CVE-2019-0..	High	High	High	9.8	10	3/20/2021	06/11/2019	Windows	MS19-JUN: Security Only Quality Updat..	450329003	Pat
KB4507457: Windows 8.1 and ..	126570	CVE-2019-0..	High	High	High	9	9	3/20/2021	07/09/2019	Windows	MS19-JUL: Security Only Quality Updat..	450745701	Pat v

## Detected Vulnerabilities without Available Fixlets



### Tenable-Detected Vulnerable Devices Without Applicable Fixlets - Overview

[Help Center](#)





Right-click on Plugin ID to drill down

\* BigFix data

Vulnerability List - 107 Rows

Vulnerability Title	Plugin ID	Applicable Devices	CVE List	CVSS2	CVSS3	VPR	VPR
Adobe Flash Player <= 23.0.0.207 Multiple Vulnerabilities (APSB16-39)	95762	1	CVE-2016-7867; CVE-2016-7868; CVE-2016-7869; CVE-2016-7870; C...	High	Critical	High	8.9
Adobe Flash Player <= 24.0.0.186 Multiple Vulnerabilities (APSB17-02)	96388	1	CVE-2017-2925; CVE-2017-2926; CVE-2017-2927; CVE-2017-2928; C...	High	Critical	High	8.9
Adobe Flash Player <= 24.0.0.194 Multiple Vulnerabilities (APSB17-04)	97142	1	CVE-2017-2982; CVE-2017-2984; CVE-2017-2985; CVE-2017-2986; C...	High	Critical	High	8.9
Adobe Flash Player <= 25.0.0.127 Multiple Vulnerabilities (APSB17-10)	99283	1	CVE-2017-3058; CVE-2017-3059; CVE-2017-3060; CVE-2017-3061; C...	High	Critical	High	7.4
Adobe Flash Player <= 25.0.0.148 Multiple Vulnerabilities (APSB17-15)	100052	1	CVE-2017-3068; CVE-2017-3069; CVE-2017-3070; CVE-2017-3071; C...	High	Critical	High	8.9
Adobe Flash Player <= 25.0.0.171 Multiple Vulnerabilities (APSB17-17)	100756	1	CVE-2017-3075; CVE-2017-3076; CVE-2017-3077; CVE-2017-3078; C...	High	Critical	High	8.9
Adobe Flash Player <= 26.0.0.131 Multiple Vulnerabilities (APSB17-21)	101362	1	CVE-2017-3080; CVE-2017-3099; CVE-2017-3100	High	Critical	High	8.9
Adobe Flash Player <= 26.0.0.137 Multiple Vulnerabilities (APSB17-23)	102262	1	CVE-2017-3085; CVE-2017-3106	High	High	Medium	6.7
Adobe Flash Player <= 26.0.0.151 Multiple Vulnerabilities (APSB17-28)	103124	1	CVE-2017-11281; CVE-2017-11282	High	Critical	High	8.9
Adobe Flash Player <= 27.0.0.183 (APSB17-33)	104544	1	CVE-2017-11213; CVE-2017-11215; CVE-2017-11225; CVE-2017-311...	High	Critical	Medium	6.7
Adobe Flash Player <= 28.0.0.137 Use-after-free Remote Code Execution (A...	106606	1	CVE-2018-4877; CVE-2018-4878	High	Critical	High	9.6
Adobe Flash Player <= 28.0.0.161 (APSB18-05)	108281	1	CVE-2018-4919; CVE-2018-4920	High	Critical	Medium	6.7
Adobe Flash Player <= 29.0.0.113 (APSB18-08)	108958	1	CVE-2018-4932; CVE-2018-4933; CVE-2018-4934; CVE-2018-4935; C...	High	Critical	High	8.9
Adobe Flash Player <= 29.0.0.171 (APSB18-19)	110397	1	CVE-2018-4945; CVE-2018-5000; CVE-2018-5001; CVE-2018-5002	High	Critical	High	9.2
Adobe Flash Player <= 30.0.0.134 (APSB18-25)	111683	2	CVE-2018-12824; CVE-2018-12825; CVE-2018-12826; CVE-2018-12827; CVE-2018-12828	High	Critical	Medium	6.7
Adobe Flash Player <= 31.0.0.148 (APSB18-44)	119094	3	CVE-2018-15981	High	Critical	Medium	5.9
Adobe Flash Player <= 31.0.0.153 (APSB18-42)	119462	3	CVE-2018-15982; CVE-2018-15983	High	Critical	High	9.7
Adobe Flash Player <= 32.0.0.156 (APSB19-19)	123938	3	CVE-2019-7096; CVE-2019-7108	High	Critical	Medium	5.9
Adobe Flash Player Unsupported Version Detection	59196	3	Null	High		N/A	0
KB4018483: Security update for Adobe Flash Player (April 2017)	99290	1	CVE-2017-3058; CVE-2017-3059; CVE-2017-3060; CVE-2017-3061; C...	High	Critical	High	7.4
KB4020821: Security update for Adobe Flash Player (May 2017)	100052	1	CVE-2017-3068; CVE-2017-3069; CVE-2017-3070; CVE-2017-3071; C...	High	Critical	High	8.9



## Vulnerability Device Summary

\*BigFix data

Vulnerability Title	Plugin ID	CVE List	CVSS2	CVSS3	VPR	VPR Score	Published D.	Solution
Adobe Flash Player <= 26.0.0.151 Multiple Vulnerabilities (APSB17-28)	103124	CVE-2017-11281; CVE-2017-11282	High	Critical	High	8.9	09/12/2017	Upgrade to Adobe Fla

Right-click on Device ID to drill down

## Vulnerability Device Detail - 1 Rows

* Device Name Detail	Device ID	* OS	* IP Address	* Type	ACR	AES	* Last Report Time
WIN-RL485TV7252	1076613427-2	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM



### Device Detail Summary

\* BigFix data

* Device Name Detail	Device ID	* IP Address	* OS	* Type	ACR	AES	* Last Report Time
WIN-RL485TV7252	1076613427-2	10.134.146.46	Win2012R2 6.3.9600	Server	7.35	860	4/1/2021 9:03:51 PM

### Vulnerability Detail - 178 Rows

Vulnerability Title	Plugin ID	CVE List	CVSS2	CVSS3	VPR	VPR Score	Publi
Adobe Flash Player <= 23.0.0.207 Multiple Vulnerabilities (APSB16-39)	95762	CVE-2016-7867; CVE-2016-7868; CVE-2016-7869; CVE-2016-7...	High	Critical	High	8.9	12/1/14
Adobe Flash Player <= 24.0.0.186 Multiple Vulnerabilities (APSB17-02)	96388	CVE-2017-2925; CVE-2017-2926; CVE-2017-2927; CVE-2017-2...	High	Critical	High	8.9	01/14
Adobe Flash Player <= 24.0.0.194 Multiple Vulnerabilities (APSB17-04)	97142	CVE-2017-2982; CVE-2017-2984; CVE-2017-2985; CVE-2017-2...	High	Critical	High	8.9	02/14
Adobe Flash Player <= 25.0.0.127 Multiple Vulnerabilities (APSB17-10)	99283	CVE-2017-3058; CVE-2017-3059; CVE-2017-3060; CVE-2017-3...	High	Critical	High	7.4	04/14
Adobe Flash Player <= 25.0.0.148 Multiple Vulnerabilities (APSB17-15)	100052	CVE-2017-3068; CVE-2017-3069; CVE-2017-3070; CVE-2017-3...	High	Critical	High	8.9	05/04
Adobe Flash Player <= 25.0.0.171 Multiple Vulnerabilities (APSB17-17)	100756	CVE-2017-3075; CVE-2017-3076; CVE-2017-3077; CVE-2017-3...	High	Critical	High	8.9	06/14
Adobe Flash Player <= 26.0.0.131 Multiple Vulnerabilities (APSB17-21)	101362	CVE-2017-3080; CVE-2017-3099; CVE-2017-3100	High	Critical	High	8.9	07/04
Adobe Flash Player <= 26.0.0.137 Multiple Vulnerabilities (APSB17-23)	102262	CVE-2017-3085; CVE-2017-3106	High	High	Medium	6.7	08/04
Adobe Flash Player <= 26.0.0.151 Multiple Vulnerabilities (APSB17-28)	103124	CVE-2017-11281; CVE-2017-11282	High	Critical	High	8.9	09/14
Adobe Flash Player <= 27.0.0.159 Type Confusion Vulnerability (APSB17-32)	103922	CVE-2017-11292	Medium	High	High	8.9	10/14
Adobe Flash Player <= 27.0.0.183 (APSB17-33)	104544	CVE-2017-11213; CVE-2017-11215; CVE-2017-11225; CVE-201...	High	Critical	Medium	6.7	11/14
Adobe Flash Player <= 27.0.0.187 (APSB17-42)	105175	CVE-2017-11305	Medium	High	Low	3.6	12/14
Adobe Flash Player <= 28.0.0.126 (APSB18-01)	105691	CVE-2018-4871	Medium	High	Low	3.6	01/04
Adobe Flash Player <= 28.0.0.137 Use-after-free Remote Code Execution (APSA18-01) ..	106606	CVE-2018-4877; CVE-2018-4878	High	Critical	High	9.6	02/04
Adobe Flash Player <= 28.0.0.161 (APSB18-05)	108281	CVE-2018-4919; CVE-2018-4920	High	Critical	Medium	6.7	03/14
Adobe Flash Player <= 29.0.0.113 (APSB18-08)	108958	CVE-2018-4932; CVE-2018-4933; CVE-2018-4934; CVE-2018-4...	High	Critical	High	8.9	04/14
Adobe Flash Player <= 29.0.0.171 (APSB18-19)	110397	CVE-2018-4945; CVE-2018-5000; CVE-2018-5001; CVE-2018-5...	High	Critical	High	9.2	06/04

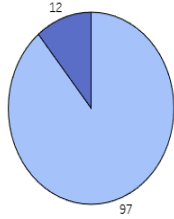
## Vulnerability Discrepancies



### Tenable-Detected Vulnerability Discrepancies - Overview

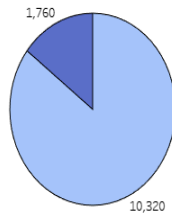
[Help Center](#)

Top 5 by Device - VPR



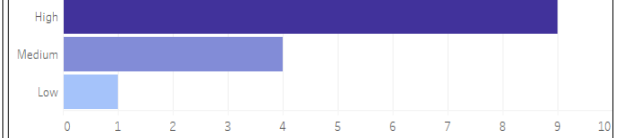
\* Device Name VPR  
■ WIN-RL485TV7252  
■ WIN-UTMA6U7INU9

Top 5 by Device - AES

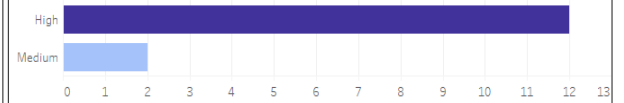


\* Device Name AES  
■ WIN-RL485TV7252  
■ WIN-UTMA6U7INU9

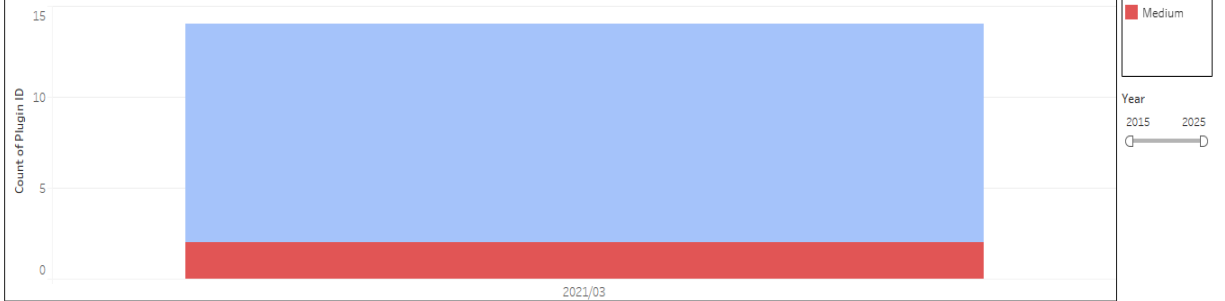
Breakdown by VPR



Breakdown by CVSS



Vulnerabilities with Fixlets by Date Detected - CVSS



CVSS2  
■ High  
■ Medium

Year  
 2015 2025





Right-click on Plugin ID to drill down

### Vulnerability Discrepancies List - 4 Rows

\* BigFix data

Vulnerability Title	Plugin ID	Applicable..	CVE-List	CVSS2	CVSS3	VPR	VPR Score	Detected D..	Published D..	Product/Fa..	* Fixlet Title	* Fixl
Adobe Flash Player <= 32.0.0.371 (APSB20-30)	137253	1	CVE-2020-9..	High	Critical	Medium	5.9	3/8/2021	06/09/2020	Windows	MS20-OCT: Security Update for Adobe Flas..	4580
								3/20/2021	06/09/2020	Windows	MS20-OCT: Security Update for Adobe Flas..	4580
KB4537759: Security update for Adobe Flash Player (February 2020)	133618	1	CVE-2020-3..	High	High	Medium	5.9	3/8/2021	02/11/2020	Windows	MS20-OCT: Security Update for Adobe Flas..	4580
								3/20/2021	02/11/2020	Windows	MS20-OCT: Security Update for Adobe Flas..	4580

<

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### Vulnerability Discrepancies Device Summary

\* BigFix Data

Vulnerability Title	Plugin ID	Applicable ..	CVE List	CVSS2	CVSS3	VPR	VPR Score	Detected D..	Published D..	Product/Fa..	* Fixlet Title
KB4537759: Security update for Adobe Flash Player (February 2020)	133618	1	CVE-2020-3757	High	High	Medium	5.9	3/8/2021	02/11/2020	Windows	MS20-OCT: Security Update
								3/20/2021	02/11/2020	Windows	MS20-OCT: Security Update

Right-click on Device Name to drill down

### Vulnerability Discrepancies Device Detail - 2 Rows

Detected Date	DeviceID	* Device Name Detail	* OS	* IP Address	* Type	ACR	AES	* Last Report Time
3/8/2021	10373101-1	WIN-UTMAGU7INU9	Win2019.10.0.17763.107 (1809)	172.17.128.1..	Server	8.14	880	4/1/2021 9:03:48 PM
3/20/2021	1076613427-2	WIN-RL485TV7252	Win2012R2 6.3.9600	10.134.146.46	Server	7.35	860	4/1/2021 9:03:51 PM



## Tenable-Detected Vulnerability Discrepancies - Device Summary

\*BigFix data

DeviceID	*Device Name Detail	*IP Address	*OS	*Type	ACR	AES	*Last Report Time
10373101-1	WIN-UTMAGU7INU9	172.17.128.1..	Win2019 10.0.17763.107 (1809)	Server	8.14	880	4/1/2021 9:03:48 PM

## Tenable-Detected Vulnerability Discrepancies - Vulnerability Detail - 2 Rows

Vulnerability Title	Plugin ID	Applicable..	CVE List	CVSS2	CVSS3	VPR	VPR Score	Detected Date	Published D..	Product/Fa..	*Fixlet Title	*Fixlet ID	*Fixlet Site
Adobe Flash Playe..	137253	1	CVE-2020-9..	High	Critical	Medium	5.9	3/8/2021	06/09/2020	Windows	MS20-OCT: Security Update for Ado..	458032515	Patches for ..
KB4537759: Secur..	133618	1	CVE-2020-3..	High	High	Medium	5.9	3/8/2021	02/11/2020	Windows	MS20-OCT: Security Update for Ado..	458032515	Patches for ..

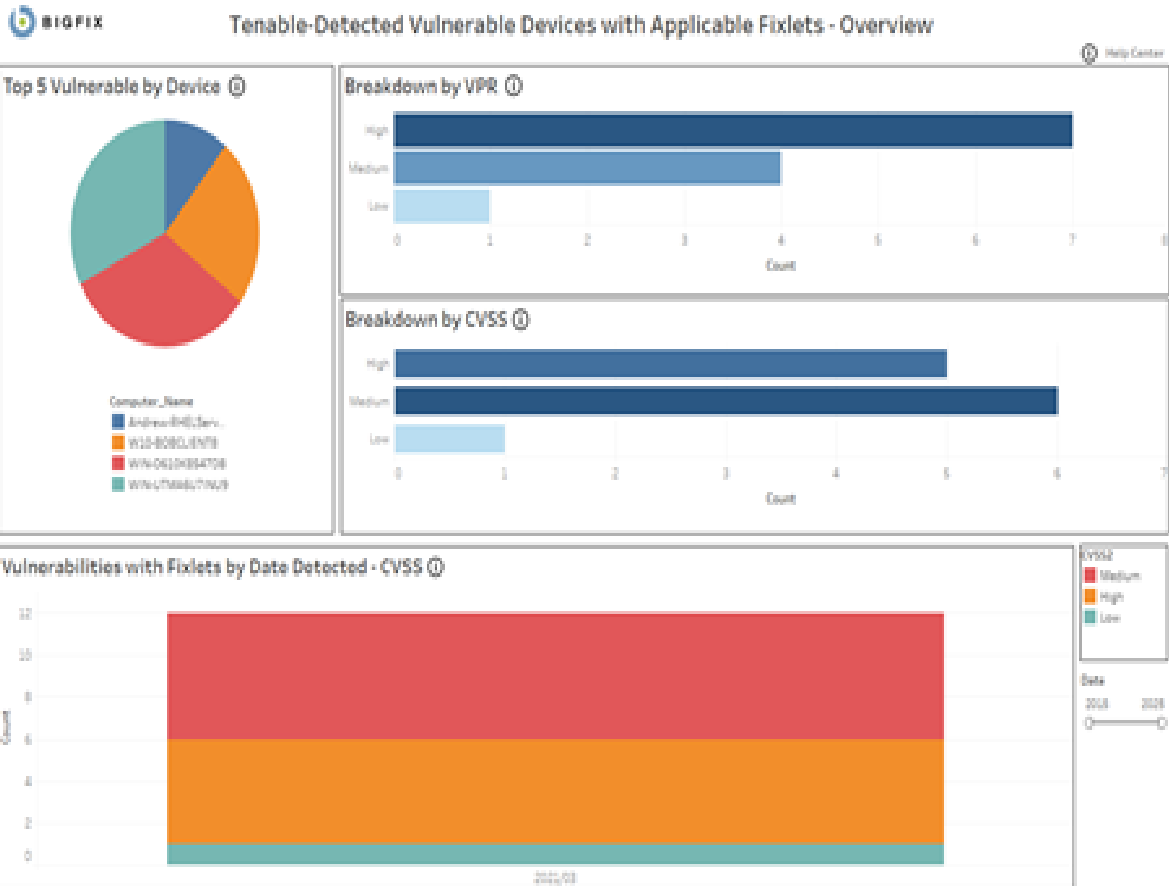
## Tableau reports for Tenable.sc

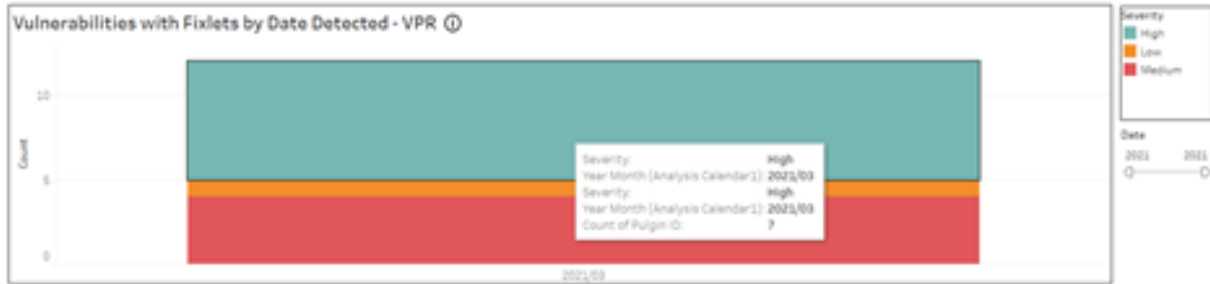
Use this section to become familiar with Tableau reports for Tenable.sc

Chart details:

- Vulnerability Title - Vulnerability title
- PluginID - a unique identifier assigned to a vulnerability detection
- Applicable Devices - devices that have been scanned by Tenable and for which vulnerabilities have been identified
- CVE List - list of CVE
- CVSS2 - (Common Vulnerability Scoring System version 2), scoring system used to assess the severity and potential impact of security vulnerabilities.
- CVSS3 - (Common Vulnerability Scoring System version 3), updated version of the scoring system
- VPR - Vulnerability Priority Rating
- VPR Score - numerical value ranging from 0 to 10, with 10 being the highest priority
- Detected Date - the date when a vulnerability was first detected
- Published Date - date when the information about a vulnerability was first available

### Detected Vulnerabilities with Applicable Fixlets





Right-click on Plugin ID to drill down

### Tenable-Detected Vulnerability List - Detail

\* Bigfix data

Vulnerability Title	Pulgin ID	CVE List	CVSS2	Severity	Applicable Devices	Year of Pub.	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Category	* Source Ref.
Adobe Flash Player	137253	CVE-2020-3757	High	Medium	2	2020	MS20-OCT Security Update for A...	45802515	KB4580255	Patches for Windows	Security Update 20/10/2020
KB4537799 Secur...	136428	CVE-2020-3757	High	Medium	2	2020	MS20-OCT Security Update for A...	45802515	KB4580255	Patches for Windows	Security Update 20/10/2020
KB4512653 Wind...	136521	CVE-2019-1226	High	High	3	2020	MS20-MAY Cumulative Update f...	455292405	KB4556441	Patches for Windows	Security Update 05/12/2020
KB4508998 Wind...	136453	CVE-2020-1346	High	High	1	2020	MS21-MAR Servicing Stack Upd...	500089302	KB5000899	Patches for Windows	Security Update 03/09/2021
Security Upd...	132999	CVE-2019-1006	High	High	2	2020	MS20-MAY Cumulative Update f...	455292405	KB4556441	Patches for Windows	Security Update 05/12/2020



### Device Detail Summary

\* Bigfix data

DeviceID	* Device Name	* IP Address	* OS	* Type	* Last Report Time
18879393-1	WIN-67M46J796J9	172.17.128.1	Win2019-10-037963-107	Server	3/26/2021 4:57:12 PM

### Vulnerability Detail

Vulnerability Title	Pulgin ID	CVE List	CVSS2	Severity	Detected Date	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Category	* Source Ref.
Adobe Flash Player	137253	CVE-2020-3757	High	Medium	3/8/2021	MS20-OCT Security Update for Adobe F...	45802515	Patches for Windows	KB4580255	Security Update 20/10/2020
KB4537799 Secur...	136428	CVE-2020-3757	High	Medium	3/8/2021	MS20-OCT Security Update for Adobe F...	45802515	Patches for Windows	KB4580255	Security Update 20/10/2020
KB4512653 Wind...	136521	CVE-2019-1226	High	High	3/8/2021	MS20-MAY Cumulative Update for .NET...	455292405	Patches for Windows	KB4556441	Security Update 05/12/2020
KB4508998 Wind...	136453	CVE-2020-1346	High	High	3/8/2021	MS21-MAR Servicing Stack Update for .NET...	500089302	Patches for Windows	KB5000899	Security Update 03/09/2021
Security Update...	132999	CVE-2019-1006	High	High	3/8/2021	MS20-MAY Cumulative Update for .NET...	455292405	Patches for Windows	KB4556441	Security Update 05/12/2020
Security Update...	136400	CVE-2019-1046	Medium	Medium	3/8/2021	MS20-MAY Cumulative Update for .NET...	455292405	Patches for Windows	KB4556441	Security Update 05/12/2020
Security Update...	136454	CVE-2020-1046	Medium	High	3/8/2021	MS20-OCT Security Update for .NET...	457896403	Patches for Windows	KB4579975	Security Update 20/10/2020
Security Update...	128742	CVE-2019-1006	Low	Low	3/8/2021	MS20-MAY Cumulative Update for .NET...	455292405	Patches for Windows	KB4556441	Security Update 05/12/2020
Windows Specifi...	132121	CVE-2017-8715	Medium	High	3/8/2021	4072636 Enable mitigations to help pr...	407263605	Patches for Windows	KB4072636	Security Advis. 01/04/2018

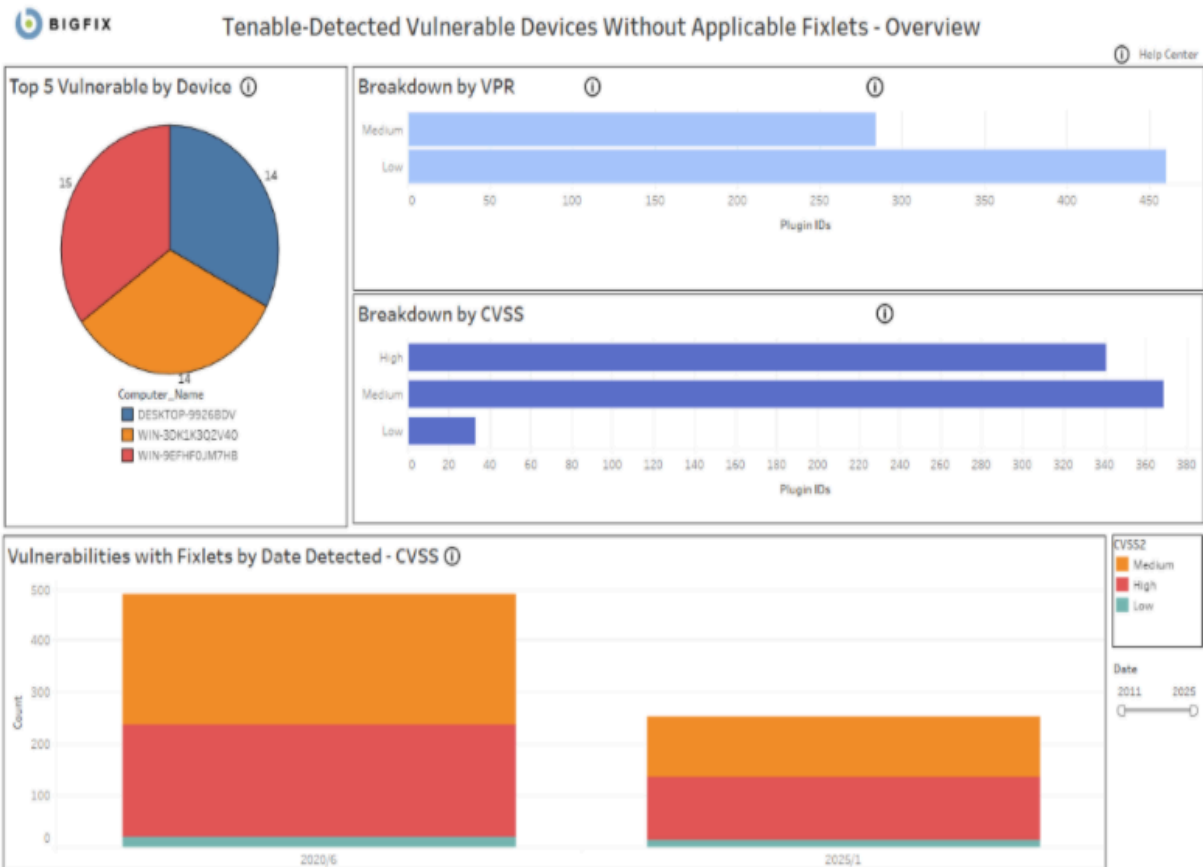
**BIGFIX** Vulnerability Device Summary \*Click to Date

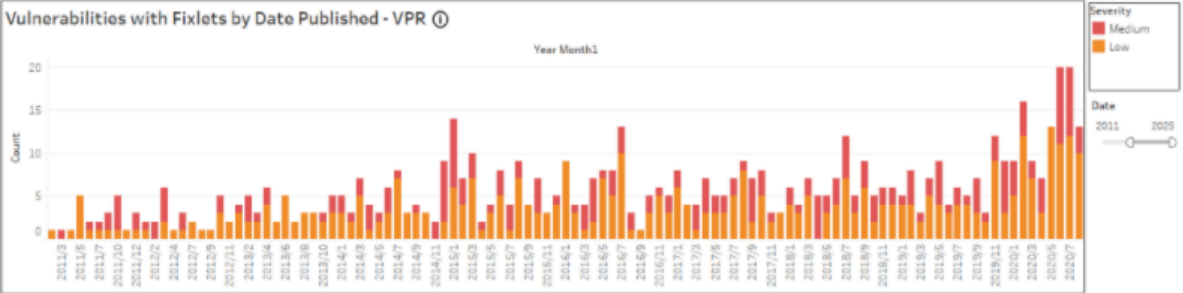
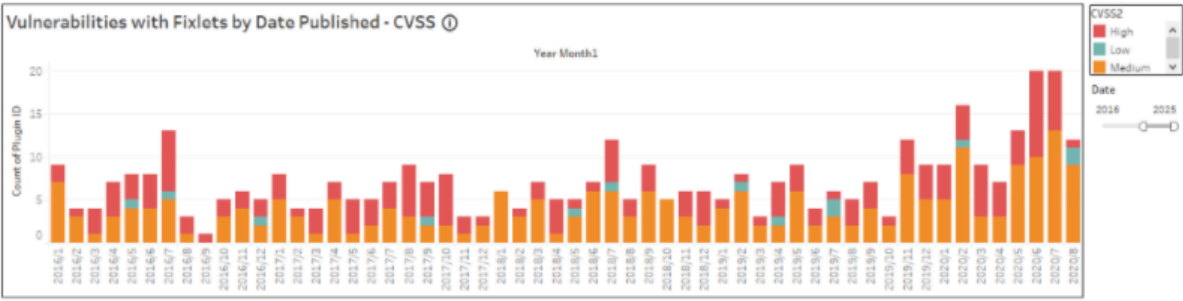
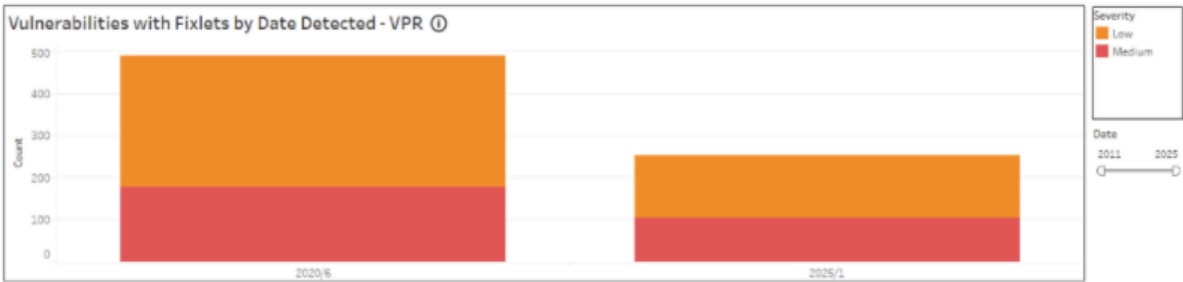
Vulnerability	Plugin ID	CVE_List	Year of Pub.	CVSS2	Severity	*Fixlet Title	*Fixlet ID	*Fixlet Site	*Fixlet Src.	*Fixlet Category	*Source Release Date
Adobe Flash	137253	CVE-2020-9	2020	High	Medium	MS20-OCT: Security Update for Adobe Flash Player for	45902515	Patches for Win	KB4580325	Security Update	10/13/2020

Right-click on Device ID to drill down **Vulnerability Device Detail**

Detected Date	DeviceID	*Device Name	*OS	*IP Address	*Type	*Last Report Time
3/9/2021	13379101-1	WIN-UTMABU7AL9	Win2019 10.0.17763.1071	172.17.128.1	Server	3/05/2021 4:57:12 PM
	548314002-1	WIN-808CJ4NT8	Win10 10.0.17134.1304 (G)	10.134.146.97	Laptop	3/05/2021 4:54:11 PM

### Detected Vulnerabilities without Available Fixlets





Right-click on Plugin ID to drill down

\* BigFix data

### Vulnerability List

Vulnerability Title	Plugin ID	CVSS2	Severity	Applicable_	Year of Pub.
Amazon Linux Security Advisory for dbus:ALAS-2019-1246	351628	Low	Medium	1	2019
Amazon Linux Security Advisory for quagga:ALAS-2012-070	350677	Low	Low	1	2016
Atlassian Fisheye and Crucible Cross-Site Scripting Vulnerability (CRUC-8381,FE-7163,CRUC-8380,FE-...	13422	Low	Low	1	2019
CentOS Security Update for libvirt (CESA-2012-1202)	120574	Low	Low	1	2012
CentOS Security Update for libvirt.test (CESA-2011-0478)	119287	Low	Low	1	2011
CentOS Security Update for OpenSSH (CESA-2007-0257)	117547	Low	Low	1	2010
CentOS Security Update for PAM (CESA-2007-0465)	117515	Low	Low	1	2010
CentOS Security Update for qemu-kvm (CESA-2017-1856)	256277	Low	Medium	1	2017
CentOS Security Update for util-linux-ng (CESA-2013-0517)	121109	Low	Low	1	2013
Debian Security Update for mailman (DSA 4246-1)	176429	Low	Low	1	2018
Drupal core File Module Cross Site Scripting Vulnerability (SA-CORE-2019-004)	13453	Low	Low	1	2019
Fedora Security Update for libuwind (FEDORA-2015-11465)	124023	Low	Low	1	2015
Fedora Security Update for qemu (FEDORA-2016-1b254ab4a4)	276023	Low	Low	1	2016
Fedora Security Update for slapi-nis (FEDORA-2014-1442)	122951	Low	Low	1	2015
Fedora Security Update for sudo (FEDORA-2015-2247)	123347	Low	Low	1	2015
Fedora Security Update for xen (FEDORA-2016-da6b1d277b)	276264	Low	Low	1	2016
iPlanet Calendar Server Plaintext Admin Password Vulnerability	86154	Low	Medium	1	2001
McAfee VirusScan 4.0.3 Alert File Vulnerability	38313	Low	Low	1	2004
OpenSUSE Security Update for libvirt (openSUSE-SU-2014-0010-1)	166705	Low	Low	1	2014
OpenSUSE Security Update for libvm (openSUSE-SU-2015-0245-1)	167600	Low	Low	1	2015
OpenSUSE Security Update for XWayland (openSUSE-SU-2015-1095-1)	167944	Low	Low	1	2015
Oracle Enterprise Linux Security Update for libcrypt (ELSA-2013-1457)	156707	Low	Low	1	2014
Oracle Enterprise Linux Security Update for qemu-kvm (ELSA-2019-1650)	158022	Low	Low	1	2019
PostNuke Cross Site Scripting Vulnerability	10543	Low	Low	1	2002
Red Hat Update for OpenShift Container Platform 4.5.4 Jenkins 2 plugins (RHSA-2020-3207)	238533	Low	Low	1	2020
Skype Technologies Skype URI Handling Remote File Download Vulnerability	38547	Low	Low	1	2006
SUSE Enterprise Linux Security Update for dbus-1 (SUSE-SU-2014-0846-1)	167211	Low	Low	1	2014
SUSE Enterprise Linux Security Update for libapr1 (SUSE-SU-2018-1322-1)	171132	Low	Low	1	2018
SUSE Enterprise Linux Security Update for WireShark (SUSE-SU-2012-0792-1)	165499	Low	Low	1	2012
SUSE Security Update for libqt4 (openSUSE-SU-2013-0404-1)	165870	Low	Low	1	2013



### Device Detail Summary

\* BigFix data

* Device Name	DeviceID	* IP Address	* OS	* Type	* Last Report Time
WIN-9E9FHFOJM7HB	14456361-1	10.134.146.136	Win2016 10.0.14393.188	Server	2/16/2021 4:11:07 PM

### Vulnerability Detail

Vulnerability Title	Plugin ID	CVSS2	Severity	Detected Date
ActivePerl UTF-8 Denial of Service Vulnerability	116904	Medium	Low	1/1/2025
Adobe Flash Player SWF File Unspecified Remote Code Execution Vulnerability	115811	High	Medium	6/16/2020
Adobe Reader and Acrobat Multiple Vulnerabilities (APSB16-26)	370084	High	Medium	6/16/2020
Amazon Linux Security Advisory for dbus:ALAS-2019-1246	351628	Low	Medium	6/16/2020
Amazon Linux Security Advisory for gcc:ALAS-2013-245	350499	Medium	Low	1/1/2025
Amazon Linux Security Advisory for golang.docker:ALAS-2015-588	350114	High	Low	6/16/2020
Amazon Linux Security Advisory for mod_security:ALAS-2014-335	350393	Medium	Low	6/16/2020
Amazon Linux Security Advisory for perl-YAML-LibYAML-AL2012-2015-056	350775	Medium	Low	6/16/2020
Amazon Linux Security Advisory for ruby20:ALAS-2015-547	350155	Medium	Low	6/16/2020
Apple QuickTime Prior to 7.7.5 Multiple Vulnerabilities (APPLE-SA-2014-02-25-3)	121819	High	Medium	6/16/2020
Atlassian JIRA Multiple Security Vulnerability (JRASERVER-69784, JRASERVER-69783, JRASERVER-69782, JRASERVER-69781)	13609	Medium	Low	6/16/2020
Atlassian Jira Server and Data Center Improper Authorization Vulnerability(JRASERVER-70526)	13831	Medium	Low	6/16/2020
CentOS Security Update for Firefox (CESA-2012-1210)	120578	High	Medium	1/1/2025
CentOS Security Update for firefox (CESA-2017-0558)	256179	High	Medium	1/1/2025
CentOS Security Update for firefox Security Update (CESA-2018-2693)	256482	High	Medium	1/1/2025
CentOS Security Update for flatpak (CESA-2019-0375)	256573	Medium	Medium	1/1/2025
CentOS Security Update for Ghostscript (CESA-2012-0096)	120039	Medium	Low	6/16/2020
CentOS Security Update for HelixPlayer (CESA-2010-0094)	116908	High	Low	6/16/2020



### Vulnerability Device Summary

\* BigFix data

Vulnerability Title	Plugin ID	Year of Pub.	CVSS2	Severity
Amazon Linux Security Advisory for dbus:ALAS-2019-1246	351628	2019	Low	Medium

Right-click on Device ID to drill down

### Vulnerability Device Detail

Detected Date	Device ID	* Device Name	* OS	* IP Address	* Type	* Last Report Time	Plugin_ID
6/16/2020	14456361-1	WIN-9E9FHFOJM7HB	Win2016 10.0.14393.1884	10.134.146.136	Server	2/16/2021 4:11:07 PM	351628

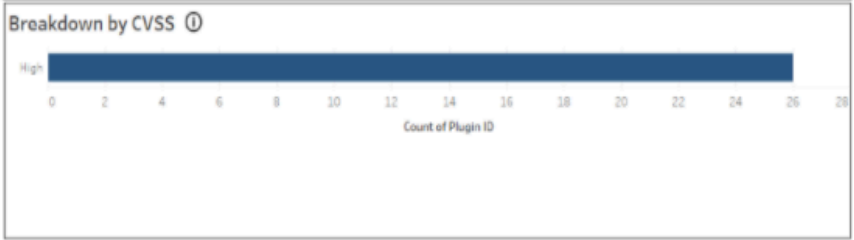
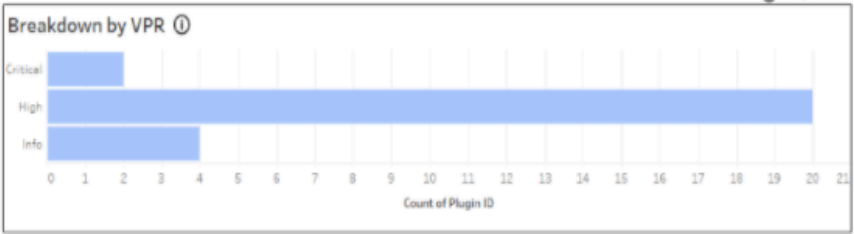
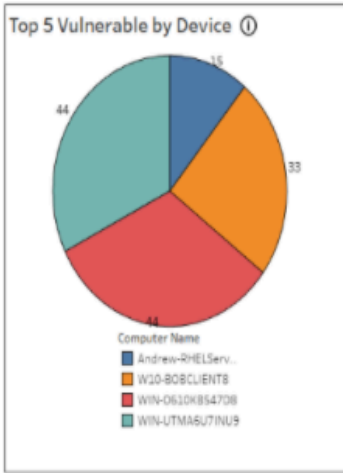


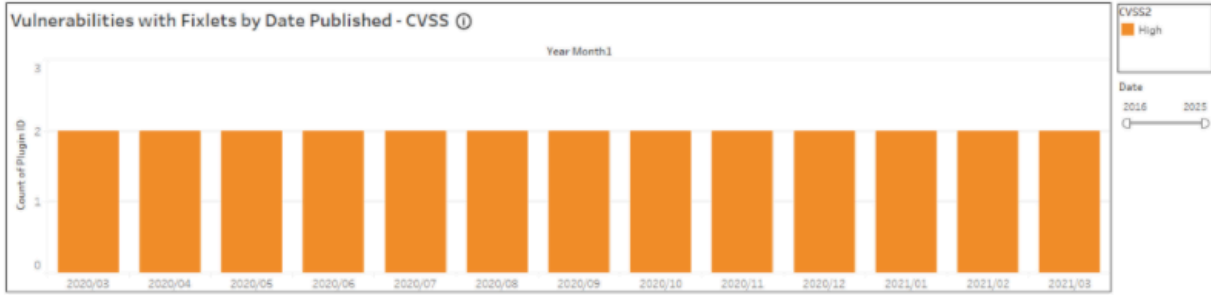
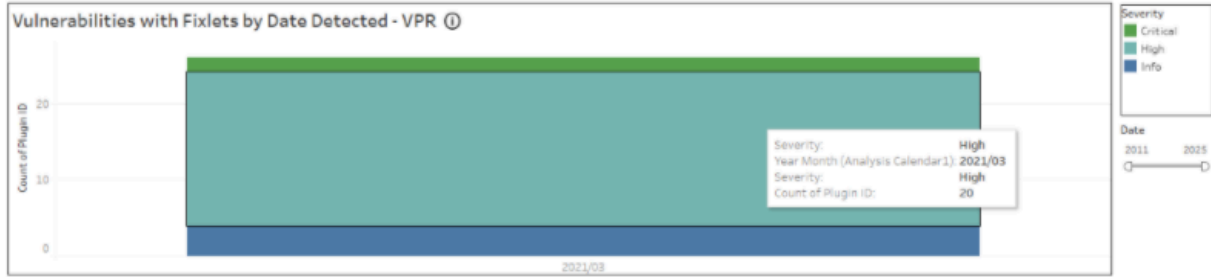
## Vulnerability Discrepancies



### Tenable-Detected Vulnerability Discrepancies - Overview

[Help Center](#)





Right-click on Plugin ID to drill down

**Tenable-Detected Vulnerability Discrepancies - Detail**

\* BigFix data

Vulnerability	Plugin ID	CVE_List	CVSS2	Severity	Applicable	Year of Pub.	* Fixlet Title	* Fixlet ID	* Fixlet Sou.	* Fixlet Site	* Fixlet Category	* Source Ref.
KB4586793	142693	CVE-2020-0	High	Info	1	2020	MS21-MAR: Cumulative Update for Windo...	500082201	KB5000822	Patches for Windows	Security Update	03/09/2021
KB4586830	142690	CVE-2020-0	High	Info	1	2020	MS21-MAR: Cumulative Update for Windo...	500080303	KB5000803	Patches for Windows	Security Update	03/09/2021
KB5000803	147222	CVE-2020-0	High	Info	1	2021	MS21-MAR: Cumulative Update for Windo...	500080303	KB5000803	Patches for Windows	Security Update	03/09/2021
KB5000822	147223	CVE-2020-0	High	Info	1	2021	MS21-MAR: Cumulative Update for Windo...	500082201	KB5000822	Patches for Windows	Security Update	03/09/2021



Tenable-Detected Vulnerability Discrepancies - Device Summary

\*BigFix data

DeviceID	* Device Name	* IP Address	* OS	* Type	* Last Report Time
10373101-1	WIN-UTMA6U7INU9	172.17.128.1	Win2019 10.0.17763.107 (1809)	Server	3/25/2021 4:57:12 PM

Tenable-Detected Vulnerability Discrepancies - Vulnerability Detail

Vulnerability Title	Plugin ID	CVE_List	CVSS2	Severity	Detected Date	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Sou.	* Fixlet Category	* Source Rel.
KB4538461: Wind.	134368	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4549949: Wind.	135463	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4551853: Wind.	136501	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4558998: Wind.	138453	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4561608: Wind.	137256	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4565349: Wind.	139484	CVE-2020-0645; CVE-2.	High	Critical	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4570333: Wind.	140414	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4577668: Wind.	141433	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4586793: Wind.	142693	CVE-2020-0645; CVE-2.	High	Info	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4592440: Wind.	143561	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4598230: Wind.	144887	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB4601345: Wind.	146337	CVE-2020-0645; CVE-2.	High	High	3/8/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021
KB5000822: Wind.	147223	CVE-2020-0645; CVE-2.	High	Info	3/12/2021	MS21-MAR: Cumulative Update for	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021



Tenable-Detected Vulnerability Discrepancies - Device Summary

\*BigFix Data

Vulnerability	Plugin ID	CVE_List	Year of Pub.	CVSS2	Severity	* Fixlet Title	* Fixlet ID	* Fixlet Site	* Fixlet Sou.	* Fixlet Category	* Source Rel.
KB4586793.	142693	CVE-2020-0645; CVE-2.	2020	High	Info	MS21-MAR: Cumulative Update for Windows	500082201	Patches for Windows	KB5000822	Security Update	03/09/2021

Right-click on Device ID to drill down

Tenable-Detected Vulnerability Discrepancies - Device Detail

Detected Date	DeviceID	* Device Name	* OS	* IP Address	* Type	* Last Report Time
3/8/2021	10373101-1	WIN-UTMA6U7INU9	Win2019 10.0.17763.107 (1809)	172.17.128.1	Server	3/25/2021 4:57:12 PM

# Chapter 10. Reference

The following topics contain information on how you can work with the configuration file and settings, the CLI that comes with the package. They also describe how to use the log files for troubleshooting purposes.

## Configuration file


Data Flow service uses `DataflowsConfig.xml` configuration file. The file is located in the default installation path: `C:\Program Files (x86)\BigFix Enterprise\Dataflow`. The file contains three sections: Data Sources, Data Flows, and Settings. All tags and attribute names in the file must be in lower case. There is also an `DataFlowsConfig.xsd` file that you can use to validate the configuration file on startup.

### <datasources>



The `<datasources>` tag of the Configuration File represents a collection of the different data sources that the solution is configured to interact with. For a configuration to be valid, two datasources are required at the minimum. The `<datasourcename>` attribute should be unique.

The `<datasource>` tag is a child node of the `<datasources>` tag in the configuration document and represents the configuration information for a single datasource.

**Table 6. Attribute details of the configuration file**

Attribute name	Default value	Required	Description
datasourcename	N/A	Yes	<p>This attribute is used to uniquely identify the datasource. With this attribute, datasources can be mapped to specific adapters within each data flow.</p> <p> <b>Note:</b> The <code>datasourcename</code> attribute's values should be "TenableSC" or "TenableIO" for Tenable. Ex: <code>&lt;datasource datasource-</code></p>

**Table 6. Attribute details of the configuration file (continued)**

Attribute name	Default value	Required	Description
			 name="Tenable-IO" .../>
connectionstring	N/A	Yes	<p>URL of the respective data sources. For example:</p> <p><code>https://[Qualys-APIURL],https://[TenableAPI_URL]:443</code></p> <p> <b>Note:</b> Port number is not required for Tenable.io. Ex: <code>https://cloud.tenable.com</code></p>
username	N/A	System generated	This attribute is managed through the ProvideCredentials command. The data is encrypted prior to being persisted in the configuration file.
password	N/A	System generated	This attribute is managed through the ProvideCredentials command. The data is encrypted prior to being persisted in the configuration file.
verifycert	True	No	This attribute enables or disables SSL certificate validation with this data source.

**Table 6. Attribute details of the configuration file (continued)**

Attribute name	Default value	Required	Description
			<p><b>Tenable.sc:</b> If <code>verifycert</code> set to <code>true</code> ensure that the certificates for internal Certificate Authorities (CAs) include the following:</p> <ul style="list-style-type: none"> <li>• Root Certificates</li> <li>• Intermediate Certificates</li> </ul> <p>Default vaule for <code>Tenable.sc</code> is <code>False</code></p>
<code>proxy_host</code>	N/A	Yes	This attribute provides the proxy server host along with a port number (format: <code>HTTP://</code> or <code>HTTPS://proxy_host:proxy_port</code> ).
<code>proxy_username</code>	N/A	Optional	This attribute is managed through the <code>configureproxy</code> command. The data is encrypted prior to being persisted in the configuration file.
<code>proxy_password</code>	N/A	Optional	This attribute is managed through the <code>configureproxy</code> command. The data is encrypted prior to being persisted in the configuration file.



**Note:** If the `verify cert` is set to `True` in case of proxy, ensure the proxy machine certificate is added to the client of the machine.

<dataflows>

The `<dataflows>` tag of the configuration file represents a collection of the different data flows that the solution is configured to execute.

Each `<dataflow>` tag represents an instance of the flow of data from one system to another and consists of a Source Adapter tag and a Target Adapter tag.

**Table 7. Attribute details of the configuration file.**

Attribute name	Required	Description
displayname	Yes	This attribute is used to describe the individual data flow.
datatype	Yes	asset (only for Asset Exchange)/finding (for all other dataflows)
schedule*	Yes	Find more information about schedule <a href="#">here</a>

#### Schedule\*

Cron Time String Format: The Cron time string format consists of five fields that Cron converts into a time interval. Cron then uses this interval to determine how often to schedule the DataFlow. 5 place values specify Minute, Hour, Day of the Month, Month, Day of the week respectively.

Character	Descriptor	Acceptable values
1	Minute	0 to 59, or *** (no specific value)
2	Hour	0 to 23, or *** for any value. The time is your local server time.
3	Day of month	1 to 31, or *** (no specific value)
4	Month	1 to 12, or *** (no specific value)
5	Day of the week	0 to 7 (0 and 7 both represent Sunday), or *** (no specific value)

Example usecases:

- Execute data flow after specific minutes past the hour, every hour.
- Execute data flow at specific time of local server time every Monday.
- Execute data flow every five minutes.
- Execute data flow every second hour, on the hour.

Example1: Cron time string of `0 10 15 * *` executes a command on the 15th of each month at 10:00 A.M. local server time.

Example2: Cron time string of `10/30 10 * * *` executes a command on the 10th minute of 10th hour of each day and for every 30 minutes thereafter.



**Note:** The scheduler value should be configured one minute later to the current time if the dataflow needs to be executed immediately once the start of DataFlows service. For example, if the current time is 11:35:30 the scheduler can be configured to `36 11 * * *`.



**Note:** When initially testing the integration, “now” can be used in the scheduler and Dataflow execution can be tested manually. Once the configuration works, then configure the schedule as per convenience. Ex: schedule = “now”.

### <sourceadapter>

The `<sourceadapter>` tag identifies the source system from which the data is extracted. It must include a Properties collection, with a minimum of one property being valid.

**Table 8. Attribute details of the configuration file**

Attribute name	Required	Description
displayname	Yes	This attribute is used to describe this adapter configuration.
adapterclass	Yes	qualys , tenable, insight (for Asset Exchange only)  This attribute determines which adapter is used to extract data from the data source
datasourcename	Yes	This attribute value must match the name of a data source defined in the data sources collection. It is used to provide connection information to the adapter.

### <targetadapter>

The `<targetadapter>` tag identifies the target system into which the data is loaded. It must include a Properties collection, with a minimum of one property being valid.



**Table 9. Attribute details of the configuration file**

Attribute name	Required	Description
displayname	Yes	This attribute is used to describe this adapter configuration.
adapterclass	Yes	insight, tenable  This attribute determines which adapter is used to extract data from the data source
datasourcename	Yes	This attribute value must match the name of a data source defined in the data sources collection. It is used to provide connection information to the adapter.

**<device\_properties>**

The `<device_properties>` tag represents a collection of properties in a specific adapter. Each property in this collection is mapped by position to the collection in the corresponding target or source adapter.

Target and source adapter devices are mapped with weight attribute in `<identityproperty>` tag.

```

<dataflows>
  <dataflow displayname="Endpoint data from Qualys To Bigfix Insights" datatype="finding" schedule="0 */2 * * *">
    <dataflowdescription/>
    <sourceadapter displayname="Qualys Adapter" adapterclass="qualys" datasourcename="QualysAPI">
      <device_properties>
        <identityproperty displayname="IP Address" propertyname="IP" datatype="string" weight="20"/>
        <property displayname="Computer Name" propertyname="DNS" datatype="string"/>
        <property displayname="Operating System" propertyname="OS" datatype="string"/>
      </device_properties>
    </sourceadapter>
    <targetadapter displayname="BigFix Insight Adapter" adapterclass="insight" datasourcename="BigfixINSIGHT">
      <device_properties>
        <identityproperty displayname="IP Address" propertyname="IP Address" datatype="string" weight="20"/>
        <property displayname="Computer Name" propertyname="Computer Name" datatype="string"/>
        <property displayname="Operating System" propertyname="OS" datatype="string"/>
      </device_properties>
    </targetadapter>
  </dataflow>
</dataflows>

```



**Note:** By default, there are two dataflows in Tenable.io: Tenable.io dataflow and Asset Exchange dataflow. To disable Asset Exchange dataflow, delete the part of the XML file that includes AE dataflow. **Important:** Dataflow must be deleted from XML file, not commented out.



```
<?xml version="1.0" ?><dataflowconfig xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="DataflowsConfig.xsd">
  <datasources>
    <datasource datasourcename="BigfixINSIGHT" connectionstring="DRIVER={ODBC Driver 17 for SQL Server};SERVER=DATABASE-BFInsights verifycert="false" username="" password=""/>
    <datasource datasourcename="TenableIO" connectionstring="https://cloud.tenable.com" verifycert="false" accesskey="" secretkey="" pagesize="5000"/>
  </datasources>
  <dataflows>
    <dataflow displayname="Endpoint data from Tenable.io To BigFix Insights" datatype="finding" schedule="*/60 * * * *">
      <dataflowdescription/>
      <sourceadapter displayname="Tenable Adapter" adapterclass="tenable" datasourcename="TenableIO">
        <device_properties>
          <identityproperty displayname="IP Address" propertyname="asset_ips" datatype="string" weight="20"/>
          <property displayname="DNS Name" propertyname="asset_dns_names" datatype="string"/>
          <property displayname="NetBIOS Name" propertyname="asset_netbios_names" datatype="string"/>
        </device_properties>
      </sourceadapter>
      <targetadapter displayname="BigFix Insights Adapter" adapterclass="insight" datasourcename="BigfixINSIGHT">
        <device_properties>
          <identityproperty displayname="IP Address" propertyname="IP Address" datatype="string" weight="20"/>
          <property displayname="DNS Name" propertyname="DNS Name" datatype="string"/>
          <property displayname="NetBIOS Name" propertyname="BIOS" datatype="string"/>
        </device_properties>
      </targetadapter>
    </dataflow>
    <dataflow displayname="Asset Exchange from BigFix Insights To Tenable.io" datatype="asset" schedule="*/60 * * * *">
      <dataflowdescription/>
      <sourceadapter displayname="BigFix Insights Adapter" adapterclass="insight" datasourcename="BigfixINSIGHT">
        <device_properties>
          <property displayname="IP Address" propertyname="IP Address" datatype="string"/>
          <property displayname="MAC Address" propertyname="MAC Address" datatype="string"/>
          <property displayname="DNS Name" propertyname="DNS Name" datatype="string"/>
          <property displayname="Computer Name" propertyname="Computer Name" datatype="string"/>
          <property displayname="Remote ID" propertyname="ID" datatype="string"/>
        </device_properties>
      </sourceadapter>
      <targetadapter displayname="Tenable Adapter" adapterclass="tenable" datasourcename="TenableIO">
        <device_properties>
          <property displayname="IP Address" propertyname="ipw4" datatype="list"/>
          <property displayname="MAC Address" propertyname="mac_address" datatype="list"/>
          <property displayname="DNS Name" propertyname="fgdn" datatype="list"/>
          <property displayname="Netbios Name" propertyname="netbios name" datatype="string"/>
          <property displayname="Remote ID" propertyname="bigfix_remote_id" datatype="string"/>
        </device_properties>
      </targetadapter>
    </dataflow>
  </dataflows>
  <settings>
    <setting key="MinimumConfidenceLevel" value="20"/>
    <setting key="NumberOfConcurrentDataflows" value="1"/>
    <setting key="LogLevel" value="INFO"/>
    <setting key="CacheRefreshLimit" value="10"/>
    <setting key="rest_api_response_timeout" value="120"/>
    <setting key="rest_api_read_timeout" value="300"/>
  </settings>
</dataflowconfig>
```

**<property>**

The `<property>` tag represents a single column of data that is either extracted from or loaded into a system. It may include simple transformation logic to facilitate the transformation of the data received.

**Table 10. Attribute details of the configuration file**

Attribute name	Required	Description
displayname	Yes	This attribute is used to describe the property being configured.
propertyname	Yes	This attribute is used to identify the corresponding column using a notation specific to each adapter.
datatype	Yes	Type: String
weight	No	This attribute assigns a weight to the property, which is used for the weighted confidence matching of records. Type: Int.

**<settings>**

The `<settings>` tag represents a collection of settings for the solution. For a detailed list of settings, see [Configuration settings for IVR solution](#).

**Table 11. Attribute details of the configuration file**


Attribute name	Required	Description
key	Yes	This attribute is the name of the setting that is being configured.
value	yes	This attribute is the value of the setting that is being configured.


## Configuration settings for IVR solution

List of available settings you may change in a configuration file.

Setting name	Data type	Default value	Description	Possible values	Remarks
LogLevel	String	DEBUG	Sets the logging level for the service.	<ul style="list-style-type: none"> <li>• INFO</li> <li>• DEBUG</li> <li>• ERROR</li> </ul>	
Ivr_insight.worker_threads	Int	8	Sets the number of worker process (for Correlation) that can be run concurrently.		
Logger.RetentionInDays	Int	5	Indicates the duration of log that you want to retain.		
NumberOfConcurrentDataflows	Int	1	Sets the number of dataflow processors that can be run concurrently.		
DataFlow.QueueRefreshInterval	Int	120	The time interval at which the data flow is refreshed.		

Setting name	Data type	Default value	Description	Possible values	Remarks
MinimumConfidenceLevel	Int	20	The minimum criteria for a record to match.		
CacheRefreshLimit	Int	10	Configures the system to refresh cache at a specified time interval. Changing this setting may affect the freshness of data with a tradeoff efficient processing of data		
qualys.batch_size	Int	10000	Specifies the maximum number of host records processed per request. When not specified, the <code>qualys.batch_size</code> is set to 10,000 host records. You may specify a value less than the default (1-999) or greater than the default (1001-1000000).		
PurgeFindingsOnExecutionOfDataflow		FALSE		When set to true, will attempt to purge all *invalid ivr data associated with the current dataflow configuration (from which we	

Setting name	Data type	Default value	Description	Possible values	Remarks
				<p>generate a hash), as well as all data <i>*not*</i> associated with existing dataflow configurations.</p> <p><i>*invalid</i> - When the user modifies properties of a dataflow, a new hash is calculated. Data in the IVR schema is linked to the configuration hash from which it was derived.</p> <p> <b>Note:</b> When the IVR service starts, a purge is performed (regardless of this setting) to attempt to automatically remove all invalid data (again, that is, data</p>	

Setting name	Data type	Default value	Description	Possible values	Remarks
				 in IVR tables linked to a hash that was calculated from a dataflow configuration that has been changed/modified by the user).	
rest_api_read_timeout	Int	By default none of the timeouts will be set, so it is important to configure values accordingly.	Number of seconds BFIVR waits until connection to a server is established.	Example: <pre>&lt;setting key="rest_api_read_timeout" value="5"/&gt;</pre>	It is recommended to set connect timeouts slightly larger than a multiple of 3, which is the default TCP packet retransmission window.
rest_api_response	Int		Once BFIVR is connected to a server and HTTP request is sent, this timeout is the number of seconds the user waits for server to respond with data.	Example: <pre>&lt;setting key="rest_api_response_timeout" value="5"/&gt;</pre>	

## Command line interface

The BigFix Insights for Vulnerability Remediation service executable (*BFIVR.exe*) provides a Command Line Interface (CLI) that we can use to perform several distinct functions related to the setup and execution of the solution. This includes installing, uninstalling, starting, and stopping the solution as a native system service. This allows us to

securely provide credentials for data sources and validate configuration before starting the service from the BigFix console.

## BigFix Insights for Vulnerability Remediation command arguments

The `BFIVR.exe` executable file is found in the default deployment folder. To view a list of all the commands supported, type `--Help` or `-h` at the command prompt.

```

.\BFIVR.exe -h
usage: BFIVR.exe [-h] [--Install | --Uninstall | --Start | --Stop | --Run | --ProvideCredentials [PROVIDECREDENTIALS] | --ValidateConfiguration | --InitializeSchemas]
               [--ConfigFilePath <FilePath>] [--UserName <UserName>] [--Password <Password>]

Integration Services Command-Line Help

optional arguments:
  -h, --help            show this help message and exit
  --Install             This command will install this application as a system service.
  --Uninstall          This command will uninstall this application as a system service.
  --Start              This command will start the system service.
  --Stop               This command will stop the system service.
  --Run                This command will execute the application as a Console application
  --ProvideCredentials [PROVIDECREDENTIALS]
                       This command will securely ask for credentials for all configured datasources
  --ValidateConfiguration
                       This command will attempt to validate the Integration Services XML Configuration file
  --InitializeSchemas This command will attempt to initialize the datasources configured within a dataflow.
  --ConfigFilePath <FilePath>
                       Use this argument to provide the path to the Configuration File to store Encrypted Credentials
  --UserName <UserName>
                       Use this argument to provide the username for the system service to authenticate with, during installation.
  --Password <Password>
                       Use this argument to provide the password for the system service to authenticate with, during installation.

```

**Table 12. List of command line arguments**

Command	Purpose	Additional information
<code>--ProvideCredentials &lt;DataSourceName&gt;</code>	To securely capture credentials for single datasource	
<code>--provideCredentials</code>	To securely capture credentials for all datasources	
<code>--ValidateConfiguration</code>	To validate the configuration	
<code>--InitializeSchemas</code>	To initialize the schema	
<code>--configureproxy</code>	To configure proxy parameters	



**Note:** The command line parameters are case sensitive.

## Logs

You can find log files in the `logs` folder in the installation path. Logs are updated every day. Configure the solution with INFO as the log level unless you intend to troubleshoot an issue.

### Connections.[date].log

With DEBUG enabled, this log file contains detailed logging information related to the external connections to third-party datasources.

## DataFlow.[date].log

With DEBUG enabled, this log file contains detailed logging information related to the execution of each dataflow. It is the primary interface used for debugging issues related to the ETL (Extract, Transform, Load)..

## Main.[date].log

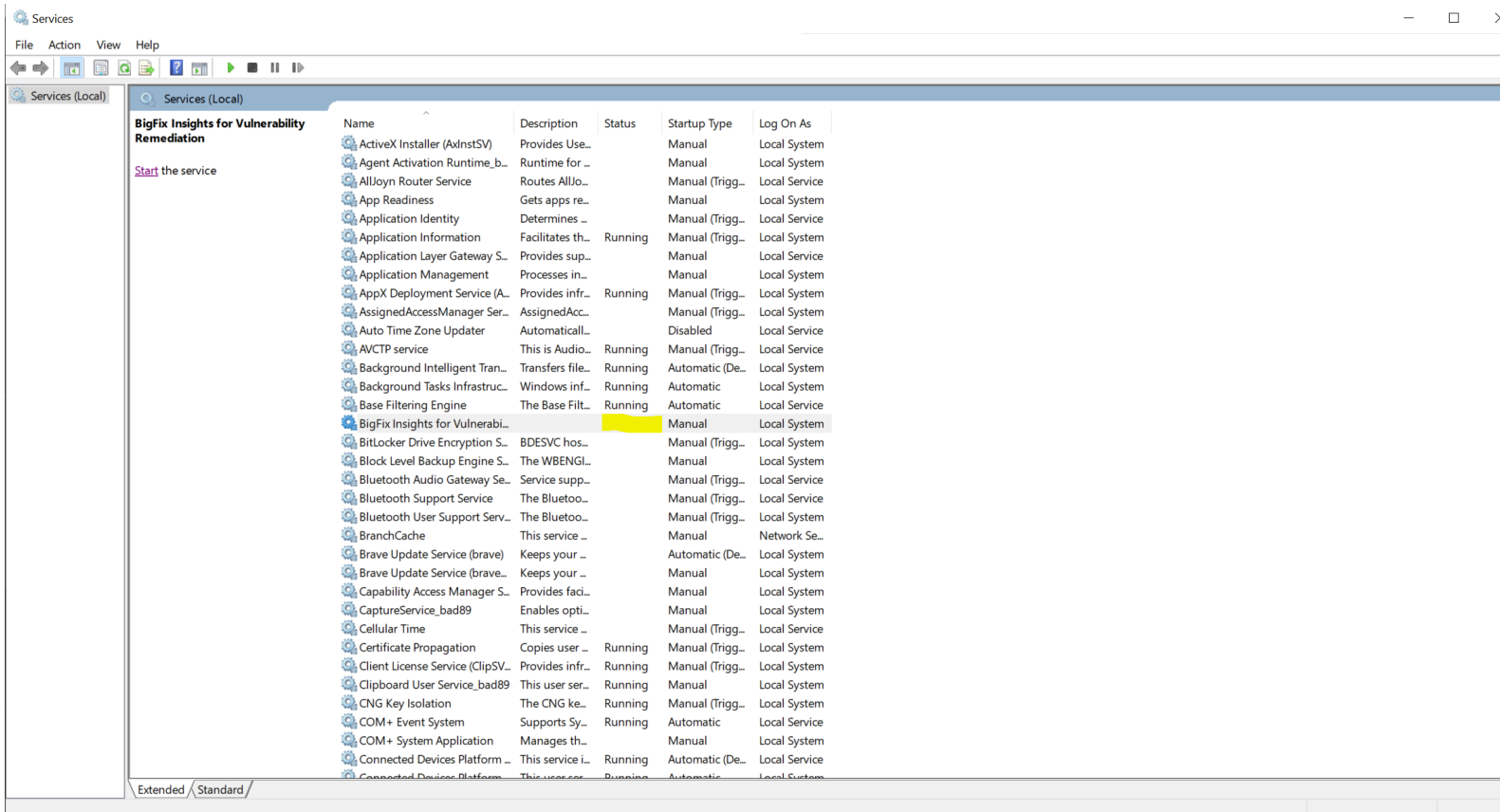
With DEBUG enabled, this log file contains detailed logging information related to the primary processes. It should show issues related to service start and configuration.

## Troubleshooting

This topic helps you in troubleshooting various issues encountered in IVR (BigFix Insights for Vulnerability Remediation) service.

### Diagnostic procedures:

- Check Windows Service Manager for Service State. The service should be in a running state.



- Check logs for errors & timestamp. Logs are found in the logs directory.

[DatetimeOfExecution] [ProcessID] [Method] [Message]



```

29 2021-03-20 23:13:27.730910 3896 DataFlowRunner LogLevels.DEBUG Executing DataFlow Task : Endpoint data from Qualys To Bigfix Insights
30 2021-03-20 23:13:27.730910 3896 GetDataSource LogLevels.DEBUG Read Single Datasource details: QualysAPI
31 2021-03-20 23:13:27.730910 3896 GetDataSource LogLevels.DEBUG Read Single Datasource details: BigfixINSIGHT
32 2021-03-20 23:13:27.746534 3896 __init__ LogLevels.DEBUG DataFlow Initialized
33 2021-03-20 23:13:27.746534 3896 execute LogLevels.INFO Starting DataFlow: Endpoint data from Qualys To Bigfix Insights
34 2021-03-20 23:13:27.746534 3896 validate_configuration LogLevels.DEBUG Validating Configuration
35 2021-03-20 23:13:27.746534 3896 validate_configuration LogLevels.DEBUG Source Adapter Validation: qualys
36 2021-03-20 23:13:27.762156 3896 ExecuteRESTCommand LogLevels.INFO Executing REST Command

```


Table 13. DataFlow logs details

Message	Description
<b>Executing DataFlow Task: Endpoint data from Qualys to BigFix Insights</b>	Indicates start of data flow
<b>Loading Qualys Data</b>	Indicates loading of Qualys data
<b>Loading Insights Data</b>	Indicates loading of Insights data
<b>RecordCaches Loaded In</b>	Indicates time it took to get data from Insights and Source Adapter (Qualys or Tenable)
<b>Processing Changes From Source Adapter</b>	At this point, we will take the changes and prepare updates for the IVR tables. The time when the processing changes from source adapter are considered and are updated in the IVR tables.
<b>Done Processing Devices</b>	Indicates that the device correlation is complete.
<b>Updates Performed In</b>	Indicates the time taken to stick data in the IVR tables.
<b>Saving RecordCaches</b>	The final step in which the record cache is saved.
<b>DataFlowExecution Completed In</b>	Indicates the end of data flow.
<b>Starting Dataflow: Endpoint data from Tenable.io to Bigfix Insights</b>	Indicates start of data flow
<b>Connected to Tenable.io Server VERSION 6.9.1</b>	Indicates loading of Tenable data is about to start

- Setting Verbosity - refer to the [link](#) for more information.

## Known limitations

Refer to the below list of limitations in BigFix Insights for Vulnerability Remediation.

 **Warning:** Do not use more than 1 dataflow per BigFix Insights for Vulnerability Remediation service.

 **Warning:** Do not deploy BigFix Insights for Vulnerability Remediation service to more than 1 machine.

1. IVR( BigFix Insights for Vulnerability Remediation)1.1 currently officially supports BigFix Insights instances with only one BigFix Datasource.
2. IVR Tenable.sc: Allow Session Management must be disabled. For more information, refer to the [Tenable.sc configuration settings](#).
3. Currently we do not support multi-instance data flow service even for the same datasource type.
4. PowerBI and Tableau reports: The maximum number of records which can be exported to CSV file:
  - 50k records for Tableau
  - 30k records for PowerBI
5. Power BI: The sorting of severities in the breakdown visualizations may yield unpredictable results.
  - Sort order of the bars come up differently in an unpredictable order, but does not affect the functionality of the data.
6. IVR Tenable.io: Findings in the IVR.findings table whose asset has been deleted on Tenable.io are not removed until the finding/vulnerabilities themselves are updated on Tenable.io.
7. To run Asset Exchange and Tenable.io, the service should be stopped and restarted in between an Asset Exchange dataflow and Tenable.io dataflow.
8. Tenable.io: IP Addresses Multiplicity - If a property result set for a given device/asset contains more than one IPv4 address, this device/asset is not correlated. Currently not supported.
9. IVR Insights: Deleted custom fixlets remain in the IVR.vulnerability\_fixlet\_nexus table.
10. The drill-through filter to the Vulnerability List from the Overview dashboard for the Date Detected/Published visualization may not work correctly.

# Chapter 11. Release Notes

The **release notes** outline the features, updates and patches that are included in each version of BigFix Insights for Vulnerability Remediation, including the latest application updates.

## IVR 2.0.3 Release Notes

The BigFix team is pleased to announce the release of version 2.0.3 of the BigFix Insights for Vulnerability Remediation application (included in the BigFix Lifecycle and Compliance sites). This application will enable IT Security and Operations teams to collaborate much more effectively by automatically correlating discovered vulnerabilities to their proper remediations, while providing prioritization data to focus remediation efforts.

The main features of this release are as follows:

- Security improvements
- Bugfixes
- User agent support for Tenable.sc

Additional information about this release:

- Please find the **BigFix Insights for Vulnerability Remediation** Fixlet Site from the License Overview Dashboard under the Lifecycle or Compliance Sections.

For more information on enabling sites, please see [https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c\\_license\\_overview\\_dashboard.html](https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c_license_overview_dashboard.html)

- Published site version: 13

Useful links

- Documentation: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install\\_Config/c\\_welcome.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install_Config/c_welcome.html)
- Insights for Vulnerability Remediation Schema: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c\\_IVR\\_schema.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c_IVR_schema.html)
- Learn more on our Product Page: <https://www.hcltechsw.com/bigfix/ivr-home>

## IVR 1.4 Release Notes

The BigFix team is pleased to announce the release of version 1.4 of the BigFix Insights for Vulnerability Remediation application (included in the BigFix Lifecycle and Compliance sites). This application will enable IT Security and Operations teams to collaborate much more effectively by automatically correlating discovered vulnerabilities to their proper remediations, while providing prioritization data to focus remediation efforts.

The main features of this release are as follows:

- Simplified Deployment, Configuration, and Management of IVR through Fixlets
  - You can now deploy as well as configure IVR through a single Fixlet to get up and running that much more quickly and easily! For more information, please see the [Deployment and configuration](#) section of the documentation
  - Additional Tasks are available to simplify general management of IVR including data synchronization schedules, credentials, and service states. Please see the [IVR Fixlets and Tasks](#) section of the documentation for more information

Additional information about this release:

- Please find the **BigFix Insights for Vulnerability Remediation** Fixlet Site from the License Overview Dashboard under the Lifecycle or Compliance Sections

For more information on enabling sites, please see [https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c\\_license\\_overview\\_dashboard.html](https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c_license_overview_dashboard.html)

- Published site version: 10

Useful links

- Documentation: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install\\_Config/c\\_welcome.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install_Config/c_welcome.html)
- Insights for Vulnerability Remediation Schema: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c\\_IVR\\_schema.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c_IVR_schema.html)
- Learn more on our Product Page: <https://www.hcltechsw.com/bigfix/ivr-home>

### IVR 1.3 Release Notes

The BigFix team is pleased to announce the release of version 1.3 of the BigFix Insights for Vulnerability Remediation application (included in the BigFix Lifecycle and Compliance suites). This application will enable IT Security and Operations teams to collaborate much more effectively by automatically correlating discovered vulnerabilities to their proper remediations, while providing prioritization data to focus remediation efforts.

The main features of this release are as follows:

- Introduced support for Tenable.sc version 5.20.x

Additional information about this release:

- Please find the **BigFix Insights for Vulnerability Remediation** Fixlet Site from the License Overview Dashboard under the Lifecycle or Compliance Sections

For more information on enabling sites, please see [https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c\\_license\\_overview\\_dashboard.html](https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c_license_overview_dashboard.html)

- Published site version: 9

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- Learn more on our Product Page: <https://www.hcltechsw.com/bigfix/ivr-home>

#### IVR 1.2 Release Notes

The BigFix team is pleased to announce the release of version 1.2 of the BigFix Insights for Vulnerability Remediation application (included in the BigFix Lifecycle and Compliance suites). This application will enable IT Security and Operations teams to collaborate much more effectively by automatically correlating discovered vulnerabilities to their proper remediations, while providing prioritization data to focus remediation efforts.

The main features of this release are as follows:

- Better scheduling support
  - You can now define granular schedules for BigFix Insights for Vulnerability Remediation to better control and manage when data will be synchronized and processed
- Proxy support
  - Connections from BigFix Insights for Vulnerability Remediation to your vulnerability management products can now be directed through a proxy for improved security
- Other minor enhancements and bug fixes

Additional information about this release:

- Find the **BigFix Insights for Vulnerability Remediation** Fixlet Site from the License Overview Dashboard under the Lifecycle or Compliance Sections

For more information on enabling sites, please see [https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c\\_license\\_overview\\_dashboard.html](https://help.hcltechsw.com/bigfix/10.0/platform/Platform/Console/c_license_overview_dashboard.html)

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- Documentation: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install\\_Config/c\\_welcome.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Install_Config/c_welcome.html)
- Insights for Vulnerability Remediation Schema: [https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c\\_IVR\\_schema.html](https://help.hcltechsw.com/bigfix/10.0/integrations/Ecosystem/Schema/c_IVR_schema.html)
- Learn more on our Product Page: <https://www.hcltechsw.com/bigfix/ivr-home>

# Appendix A. Glossary

This glossary provides terms and definitions for the Modern Client Management for BigFix software and products.

The following cross-references are used in this glossary:

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

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#)

## A

### **action**

1. See [Fixlet](#).
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](#).

### **ambiguous software**

Software that has an executable file that looks like another executable file, 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 that the group can and does change. See also [computer group](#).

## 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](#).

### **BigFix agent**

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

**BigFix client**

See [BigFix agent](#).

**BigFix console**

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

**BYOD**

Bring Your Own Device (BYOD) refers to employees using personal devices to connect to their organizational networks and access work-related systems and potentially sensitive or confidential data.

## C

**client**

A software program or computer that requests services from a server. See also [server](#).

**client time**

The local time on a BigFix client device.

**Cloud**

A set of compute and storage instances or services that are running in containers or on virtual machines.

**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](#).

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

A reference of officially 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](#).

**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](#) and [manual computer group](#).

**console**

See [BigFix console](#).

**content**



Digitally-signed files that contain 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](#).

**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 situation can occur when an earlier service pack or application overwrites later files, which results in patched files that are not current. The corrupt patch flags the situation and can be used to re-apply the later patch.

**custom content**

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

**CVE**

See [Common Vulnerabilities and Exposures system](#).

**CVE ID**

See [Common Vulnerabilities and Exposures Identification Number](#).

## D

**data stream**

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

**default action**

The action designated to run 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 that is 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](#), [component](#), [deployment window](#), and [multiple action group](#).

**deployment state**

The eligibility of a deployment to run on endpoints. The state includes parameters that the operator sets, 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 to run. 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](#).

**device**

An endpoint, for example, a laptop, desktop, server, or virtual machine that BigFix manages; 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 a device, for example, where a patch should be applied, software installed, or a baseline run. See also [content relevance](#).

**device result**

The state of a deployment, including the 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](#).

**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 that contains 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.

**Full Disk Encryption**

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

**G****group deployment**

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

**L****locked**

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

**M****MAG**

See [multiple action group](#).

**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](#).

**master operator**

A console operator with administrative rights. A master operator can do everything that a site administrator can do, except creating operators.

**masthead**

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

**MCM and BigFix Mobile**

Refers to the offering by Bigfix that is common for both Modern Client Management to manage laptops (Windows and macOS) and BigFix Mobile to manage mobile devices (Android, iOS, and iPadOS).

**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.

**Multicloud**

The utilization of distinct sets of cloud services, typically from multiple vendors, where specific applications are confined to a single cloud instance.

**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](#).

## N

**National Vulnerability Database (NVD)**

A catalog of officially known information security vulnerabilities and exposures, which is maintained by the National Institute of Standards and Technology (NIST). See also [Common Vulnerabilities and Exposures Identification Number](#).

**NVD**

See [National Vulnerability Database](#).

## 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, a device holder can decide whether 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 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 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 that is used to determine the applicability of a piece of content to a specified 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](#).

**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](#).

**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 who is in charge of installing BigFix and 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](#).

## 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](#).

**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-IBM 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](#).

**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).



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