Tanium™ Criticality User Guide

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Table of contents

Criticality overview

With Criticality, you can define levels for each endpoint that are available to other Tanium solutions, such as Tanium™ Risk, to add context about the endpoint.

Criticality scale

Possible criticality levels include the following values:

- **Critical**
- **High**
- **Medium**
- **Low**

By default, the criticality level is **Medium**. You can modify the default criticality level. For more information, see Assign default endpoint criticality on page 16.

All endpoints are assigned to the default level, unless they are assigned to rules. For more information on how rules work, see Criticality rules on page 5.

Criticality rules

Rules override default criticality for specific endpoints.

BEST PRACTICE

Create rules to override the default criticality based on attributes of the endpoints, for example, computer group or operating system. For example, you might create a rule to set all Windows endpoints in a specific domain to **High** criticality. If an endpoint is assigned to more than one unprioritized rule, the rule with a higher criticality level takes precedence. For example, if one rule sets all Windows endpoints to **Medium** and another rule sets all servers are set to **High**, a Windows server is always set to **High**.

You can prioritize rules to specify which rule takes precedence if an endpoint is assigned to more than one rule. The priority of the rule overrides the criticality level of the rule. For example, if one rule is prioritized to 2 and sets all Windows endpoints to **Medium** and another rule is prioritized to 1 and sets Windows endpoints within a specific domain to **Low**, then Windows endpoints within the specified domain are set to **Low**.

When a rule is deleted, the endpoint criticality is set to the next highest applicable rule based on prioritization or criticality level (if no prioritized rules apply to the endpoint). If no rule exists, Criticality assigns the default level to the endpoint.

If you import Criticality with the **Tanium Recommended Installation**, Criticality contains the following default rules. You can edit or delete the defaults.

Default rule	Criticality level
Domain Controllers	Critical
Servers	High
Workstations	Medium

For more information, see Create rules to assign criticality to specific endpoints on page 16.

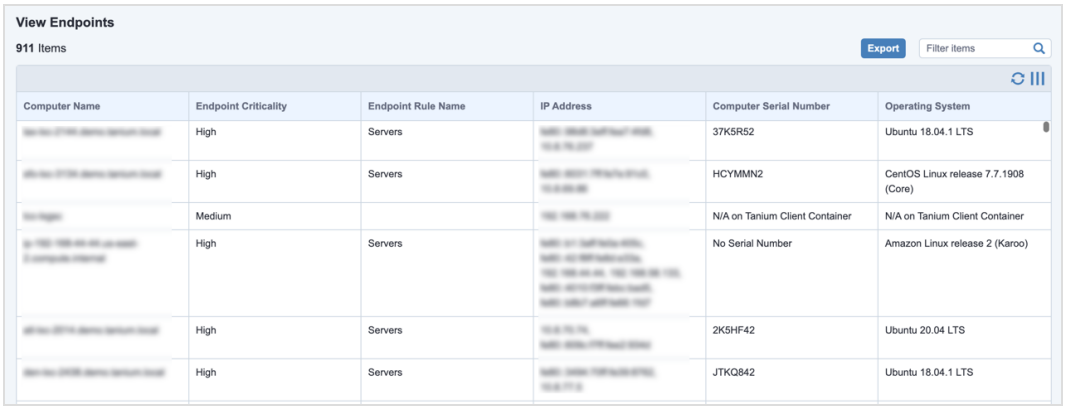
Schedule for criticality updates

Criticality updates endpoints and reports with different frequencies, depending on if you update the default criticality level or criticality rules.

Update to default criticality

If you modify the default criticality, the following events happen:

- Criticality immediately updates the **View Endpoints** table on the **Overview** page. Criticality updates the endpoints each hour. For more information, see View status of endpoint updates on page 22.



- Within one minute, Risk updates scores and reports for the endpoints.

Update to rules

If you modify endpoint criticality rules, Criticality updates endpoints and reports each hour.

IMPORTANT Risk uses a different update frequency than Criticality. Depending on your configuration, Risk can update from every 15 minutes or once a day, whereas Criticality updates each hour. If it is 10:00, for example, and you modify the Risk data collection time period to be 15 minutes, Risk does not receive updated criticality levels until 11:00, even though Risk collects data at 10:15, 10:30, and 10:45.

Integration with other Tanium products

Criticality has built in integration with Tanium™ Reporting and Tanium™ Risk.

Reporting

Create and view reports in Reporting that include criticality levels. For more information, see Tanium Reporting User Guide: Working with reports.

Risk

Risk uses the criticality levels when calculating endpoint scores. For more information, see Tanium Risk User Guide: Configure Risk.

Getting started with Criticality

Follow these steps to configure and use Criticality.

Step 1: Install and configure Criticality

See Installing Tanium Criticality on page 13 and Configuring Criticality on page 15.

Step 2: Review the default endpoint criticality level

The default criticality level is **Medium**. You can change the default.

For more information, see Assign default endpoint criticality on page 16.

Step 3: Create rules to assign criticality to specific endpoints

Create rules to override the default criticality level for specified endpoints.

For more information, see Create rules to assign criticality to specific endpoints on page 16.

Criticality requirements

Review the requirements before you install and use Criticality.

Core platform dependencies

Make sure that your environment meets the following requirements:

- **Tanium™ Core Platform servers:** 7.5.4.1158 or later
- **Tanium™ Client**: Any supported version of Tanium Client. For the Tanium Client versions supported for each OS, see Tanium Client Management User Guide: Client version and host system requirements.
  If you use a client version that is not listed, certain product features might not be available, or stability issues can occur that can only be resolved by upgrading to one of the listed client versions.

Solution dependencies

Other Tanium solutions are required for Criticality to function (required dependencies) or for specific Criticality features to work (feature-specific dependencies). The installation method that you select determines if the Tanium Server automatically imports dependencies or if you must manually import them.

> NOTE Some Criticality dependencies have their own dependencies, which you can see by clicking the links in the lists of Required dependencies on page 9. Note that the links open the user guides for the latest version of each solution, not necessarily the minimum version that Criticality requires.

Tanium recommended installation

If you select **Tanium Recommended Installation** when you import Criticality, the Tanium Server automatically imports all your licensed solutions at the same time. See Tanium Console User Guide: Import all modules and services.

Import specific solutions

If you select only Criticality to import, you must manually import dependencies. See Tanium Console User Guide: Import, re-import, or update specific solutions.

Required dependencies

Criticality has the following required dependencies at the specified minimum versions. You must install the dependencies in the listed order

1. Tanium™ Interact 2.12.113 or later
2. Tanium™ System User Service 1.0.77 or later
3. Tanium™ RDB Service 1.2.11 or later
4. Tanium™ Reporting 1.8.40 or later
    - Tanium™ Blob Service 1.0.6 or later

Tanium™ Module Server

Criticality is installed and runs as a service on the Module Server host computer. The impact on the Module Server is minimal and depends on usage.

For information about Module Server sizing in a Windows deployment, see Tanium Core Platform Deployment Guide for Windows: Host system sizing guidelines.

Endpoints

Supported Internet protocols

Criticality supports IPv4 and IPv6 addresses.

Supported operating systems

Criticality does not deploy packages to endpoints. For Tanium Client operating system support, see Tanium Client Management User Guide: Client version and host system requirements.

Host and network security requirements

Specific ports and processes are needed to run Criticality.

Ports

The following ports are required for Criticality communication.

Source	Destination	Port	Protocol	Purpose
Module Server	Module Server (loopback)	17532	TCP	Internal purposes, not externally accessible

Configure firewall policies to open ports for Tanium traffic with TCP-based rules instead of application identity-based rules. For example, on a Palo Alto Networks firewall, configure the rules with service objects or service groups instead of application objects or application groups.

Security exclusions

If security software is in use in the environment to monitor and block unknown host system processes, Tanium recommends that a security administrator create exclusions to allow the Tanium processes to run without interference. The configuration of these exclusions varies depending on AV software. For a list of all security exclusions to define across Tanium, see Tanium Core Platform Deployment Reference Guide: Host system security exclusions.

Criticality security exclusions

Target Device	Notes	Exclusion Type	Exclusion
Module Server		Process	`<Module Server>\services\criticality-service\TaniumCriticalityService.exe`

User role requirements

The following tables list the role permissions required to use Criticality. To review a summary of the predefined roles, see Set up Criticality users on page 15.

For more information about role permissions and associated content sets, see Tanium Console User Guide: Managing RBAC.

IMPORTANT On installation, Criticality creates a **Criticality** user to automatically manage the Criticality service account. Do not edit or delete the **Criticality** user.

Criticality user role permissions

Permission	Criticality Administrator[1,2]	Criticality Operator[1,2]	Criticality User[1,2]
Criticality Accesses the Criticality workbench	✓ SHOW READ WRITE	✓ SHOW READ WRITE	✓ SHOW READ
Criticality Support Bundle Provides privileges for the support bundle	✓ READ	✗	✗

[1]This role provides module permissions for Tanium Interact. You can view which Interact permissions are granted to this role in the Tanium Console. For more information, see Tanium Interact User Guide: Tanium Data Service permissions.

[2] This role provides permissions for the Tanium Reporting service. You can view which Reporting service permissions are granted to this role in the Tanium Console. For more information, see Tanium Reporting User Guide: User role requirements.

Provided Criticality administration and platform content permissions

Permission	Permission Type	Criticality Administrator[1,2,3]	Criticality Operator[1,2,3]	Criticality User[1,2,3]
Computer Group	Administration	READ	READ	READ
Filter Group	Platform Content	READ	READ	READ
Plugin	Platform Content	READ EXECUTE	READ EXECUTE	READ EXECUTE
Sensor	Platform Content	READ	READ	READ

You can view which content sets are granted to any role in the Tanium Console.

[1]This role provides module permissions for Tanium Interact. You can view which Interact content sets are granted to this role in the Tanium Console. For more information, see Tanium Interact User Guide: User role requirements.

[2] This role provides permissions for the Tanium Reporting service. You can view which Reporting service permissions are granted to this role in the Tanium Console. For more information, see Tanium Reporting User Guide: User role requirements.

[3] This role provides content set permissions for Tanium Data Service. You can view which Tanium Data Service content sets are granted to this role in the Tanium Console. For more information, see Tanium Interact User Guide: User role requirements.

Installing Tanium Criticality

Use the Tanium Console **Solutions** page to install Criticality and choose either automatic or manual configuration:

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

Before you begin

- Read the release notes.
- Review the Criticality requirements on page 9.
- Assign the correct roles to users for Criticality. Review the User role requirements on page 11.
    - To import the Criticality solution, you must be assigned the Administrator reserved role.

Import Criticality with default settings

When you import Criticality with automatic configuration, the following default settings are configured:

Setting	Default value
Rules	• **Domain Controllers** • **Servers** • **Workstations**

To import Criticality and configure default settings, see Tanium Console User Guide: Import all modules and services. After the import, verify that the correct version is installed: see Verify Criticality version on page 14.

Import Criticality with custom settings

To import Criticality without automatically configuring default settings, be sure to clear the **Apply All Tanium recommended configurations** check box while performing the steps in Tanium Console User Guide: Import, re-import, or update specific solutions. After the import, verify that the correct version is installed: see Verify Criticality version on page 14.

If you import with custom settings, the default criticality rules are not created.

Manage solution dependencies

Other Tanium solutions are required for Criticality to function (required dependencies) or for specific Criticality features to work (feature-specific dependencies). See Solution dependencies.

Verify Criticality version

After you import or upgrade Criticality, verify that the correct version is installed:

1. Refresh your browser.
2. From the Main menu, go to **Administration > Shared Services > Criticality** to open the Criticality **Overview** page.
3. To display version information, click Info  .

Troubleshoot issues

If you experience issues with installing Criticality, see Troubleshooting Criticality on page 23.

Configuring Criticality

Set up Criticality users

You can use the following set of predefined user roles to set up Criticality users.

To review specific permissions for each role, see User role requirements on page 11.

IMPORTANT On installation, Criticality creates a **Criticality** user to automatically manage the Criticality service account. Do not edit or delete the **Criticality** user.

For more information about assigning user roles, see Tanium Core Platform User Guide: Manage role assignments for a user.

NOTE Do not assign the **Criticality Service Account** role to users. This role is for internal purposes only.

Criticality Administrator

Assign the **Criticality Operator** role to users who manage the Criticality service.
This role can perform the following tasks:

- View the Criticality workbench.
- View and download Criticality data.
- Upload Criticality data.
- Download the Criticality support bundle.

Criticality Operator

Assign the **Criticality Operator** role to users who manage the Criticality service.
This role can perform the following tasks:

- View the Criticality workbench.
- View and download Criticality data.
- Upload Criticality data.

Criticality User

Assign the **Criticality User** role to users who view Criticality data.
This role can view the Criticality workbench.

Assigning endpoint criticality

Manage the criticality level of endpoints by assigning a default criticality level to apply to all endpoints or creating rules to override the default for specified endpoints.

For information on how often endpoints and reports are updated with criticality levels, see Schedule for criticality updates on page 6.

Assign default endpoint criticality

Assign a default criticality level to apply to all endpoints not targeted by a rule. By default, the criticality level is **Medium**.

TIP

The default **Workstations** rule (automatically created unless you selected a custom import) is similar to and overrides the default criticality level. If you want to change the default criticality level for endpoints with a rule, modify the **Workstations** rule. If you want to change the default criticality level for endpoints without a rule, delete the **Workstations** rule and set the criticality level using the **Default Criticality** drop-down list.

1. From the Main menu, go to **Administration > Shared Services > Criticality**.
2. In **Configuration > Endpoints**, select the **Default Criticality** level.

Create rules to assign criticality to specific endpoints

To specify different criticality levels for different groups of endpoints, create rules. You can create rules only for endpoints that you have permissions to manage.

You can create rules that use any Tanium sensor or computer group. You can also create rules by a static list of names. If you create a rule that uses a sensor that is not already registered, Tanium Server automatically registers the sensor.

NOTE

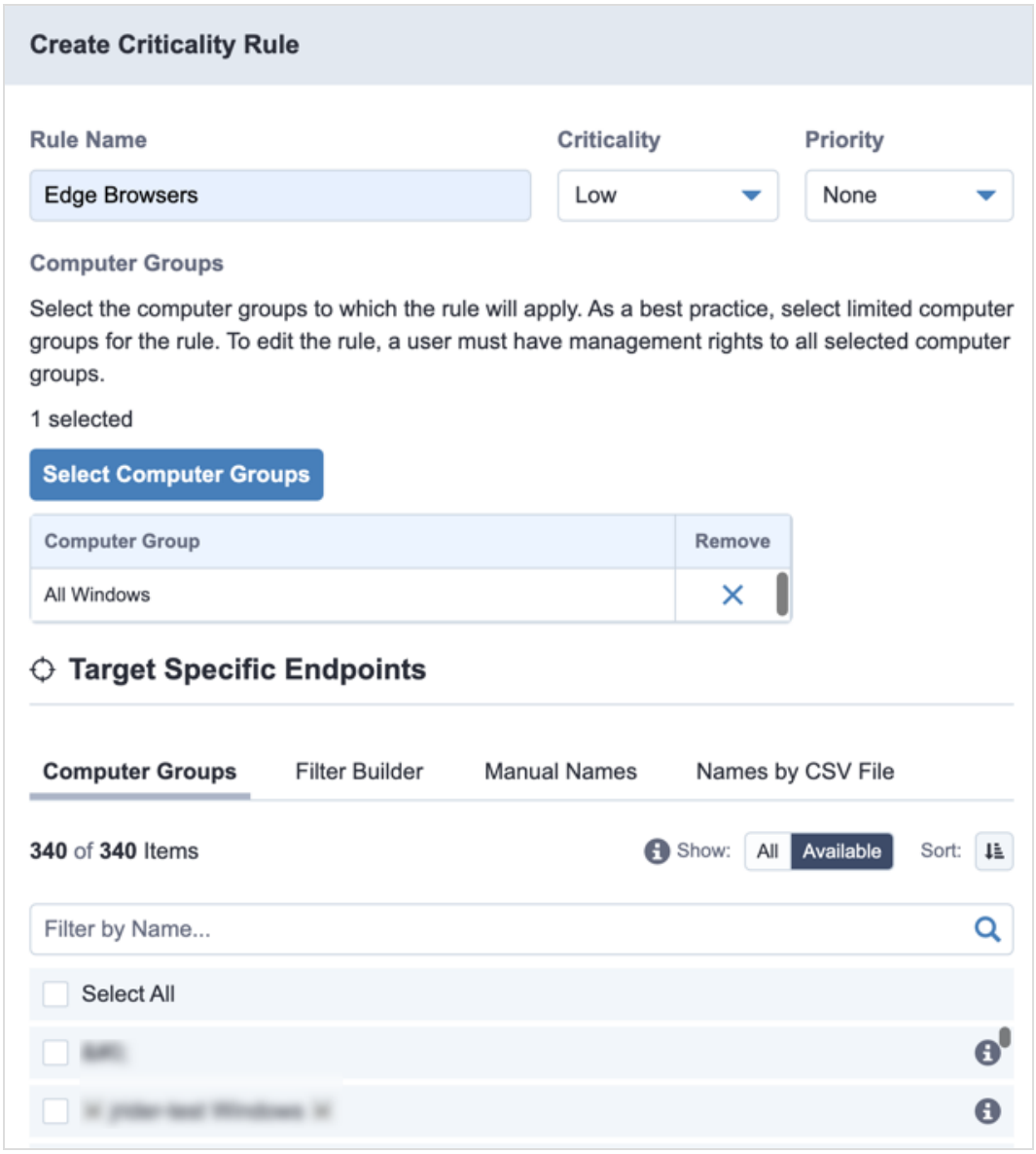
If you previously uploaded a CSV file to assign endpoint criticality in the Risk **Settings** tab, Criticality created a rule for each criticality level specified in the CSV and assigned the specified endpoints to each rule. For example, **rule name v1-criticality-csv-critical** is assigned to all endpoints that were listed as critical in the Risk CSV file.

1. From the Criticality **Overview** page, go to **Configuration > Endpoints > Create Rule**.
2. Enter the rule name.
3. Select the criticality level and priority number for the rule.

   If you select 1, for example, rule 1 is prioritized over rule 2. You can also set the priority after creating the rule. See Prioritize criticality rules on page 19.
4. Click **Select Computer Groups**, select the groups to assign to the rule, and click **Done**. You can select from computer groups to which you have write permission.

   Select limited computer groups for the rule. To edit the rule, a user must have management rights to all selected computer groups.
5. Use one of the following options to specify the endpoints to include in the rule.
   - **Computer Groups**: Select the computer groups to include.
   - **Filter Builder**: Specify the criteria to filter on all endpoints. For example, you can type `Operating System contains win` to target all Windows endpoints. The rule is applied to all endpoints that meet the criteria. Individual endpoints cannot be selected. Add rows or groupings to specify additional filter conditions.



- **Manual Names**: Enter the computer names, separated by commas. The names must be the exact names as returned by the **Computer Name** sensor.
- **Names by CSV File**: Upload a CSV file. The CSV file must contain each endpoint name on its own line without additional information. The endpoint name must be the name exactly as it is returned by the **Computer Name** sensor, similar to the following example:

```
computername1.domain.com
computername2.domain.com
```

6. Click **Create Rule**.

Work with existing criticality rules

View criticality rules

1. From the Criticality **Overview** page, go to the **Rules** section.
2. View the rules. The table contains the following columns:
    - **Priority**: Numerical value indicating rule importance or **None** if no priority is set
    - **Rule**: Name of the rule
    - **Criticality**: Criticality level of the rule
    - **Targeted Endpoints**: Endpoint targeting criteria for rule
    - **Endpoints**: Number of endpoints targeted by rule
3. To filter the rules based on criticality levels, click the corresponding toggle.

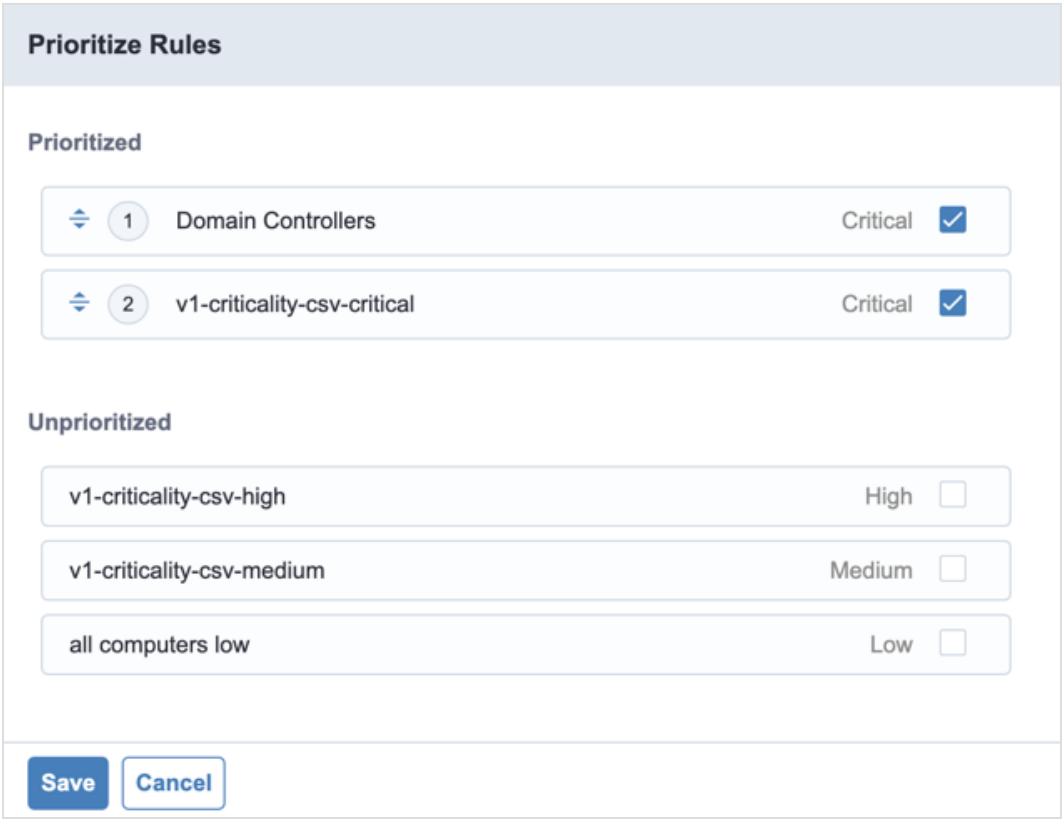
Prioritize criticality rules

You can prioritize rules to specify which rule takes precedence if an endpoint is assigned to more than one rule.

BEST PRACTICE

Consider limiting the number of rules you prioritize to simplify criticality level management.

1. From the Criticality **Overview** page, go to **Configuration > Endpoints > Rules**.
2. Click **Prioritize**.



   a. For existing prioritized rules, drag and drop the rules into the order you want, or use the ⇕ arrows to specify the position.
   b. To prioritize an unprioritized rule, select the box next to the rule and then assign priority.
   c. To remove a priority, clear the box next to the rule.
   d. Click **Save**.

Review rules applied to endpoints

You can download a `txt` file with the rule of each endpoint. To download the `txt` file, click **Download Criticality Status** in the **Rules** table heading.

Manage rules

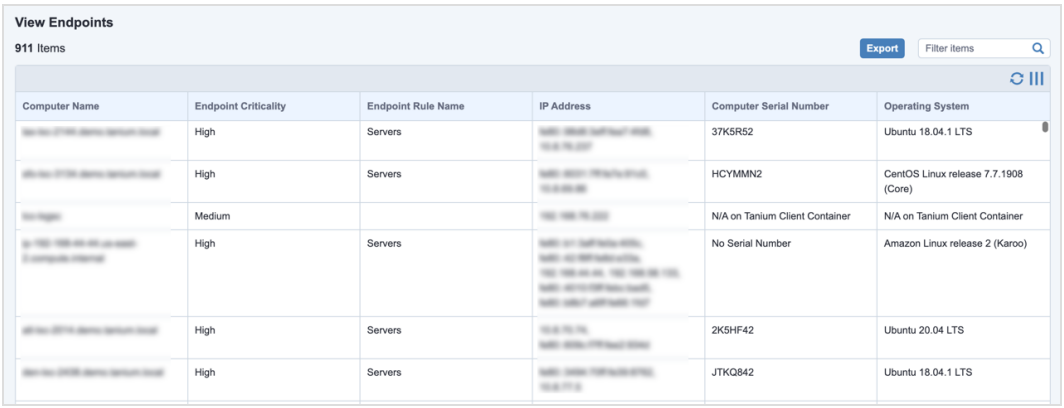
Edit or delete a rule using the options available in the **Actions** column in the **Rules** table.

Work with endpoints

View endpoints

View all online and offline endpoints managed by Tanium, along with the corresponding criticality levels.

1. From the Criticality **Overview** page, go to the **View Endpoints** section.
2. View the endpoints. The table contains the following columns:



   - **Computer Name**: Result from **Computer Name** sensor
   - **Endpoint Criticality**: Criticality level assigned by default or a rule
   - **Endpoint Rule Name**: Rule assigned to the endpoint
     The column is blank if a rule is not assigned to the endpoint. (The endpoint is assigned the default criticality level.)
   - **IP Address**: Result from **IP Address** sensor
   - **Computer Serial Number**: Result from **Computer Serial Number** sensor
   - **Operating System**: Result from **Operating System** sensor
3. If necessary, filter the items by searching the table.

Customize columns

You can change which columns are displayed in the table, and adjust the order of the columns.

1. In the report, click Customize Columns .

2. To remove a column, clear the box for the column.
3. To adjust the column order, click and drag the column names.

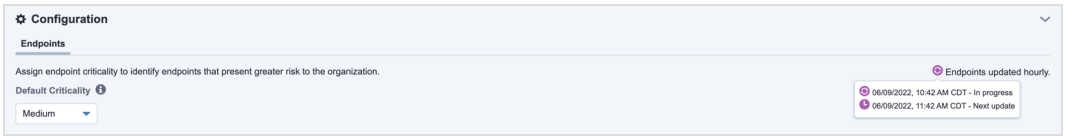
Export table

You can export the table to a CSV file that contains the data for each entry in the table, including column headings. To export a table, click **Export** in the **View Endpoints** table heading.

View status of endpoint updates

Each hour, Criticality updates the **Endpoint Criticality** sensor with any criticality changes (which you made to default level, rules, or priority), and then Tanium then uses the results of this sensor to update impacted endpoints.

To view the status of endpoint updates, from the Criticality **Overview** page, hover over the icon next to **Endpoints updated hourly**. You can view the in-progress and planned update dates and times.



Troubleshooting Criticality

If Criticality is not performing as expected, you might need to troubleshoot issues or change settings.

Collect logs

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

To download logs:

1. From the Criticality **Overview** page, click Help .
2. From the **Troubleshooting** tab, select the solutions for which to gather troubleshooting packages and click **Create Packages**. By default, all solutions are selected.
3. When the packages are ready, click **Download Packages**.
   ZIP files of all the selected packages download to the local download directory.

   > TIP Some browsers might block multiple downloads by default. Make sure to configure your browser to permit multiple downloads from the Tanium Console.

4. Contact Tanium Support to determine the best option to send the ZIP files. For information, see Contact Tanium Support on page 24.

Tanium Criticality maintains logging information in the `Criticality.log` file in the `\Program Files\Tanium\Tanium Module Server\services\Criticality` directory.

Troubleshoot endpoint criticality

If an endpoint has an unexpected criticality level or an unexpected Tanium risk score based on criticality level, consider the following resolutions:

- In the **View Endpoints** table, identify the rule assigned to the endpoint in the **Endpoint Rule Name** column. If the column is blank, the endpoint does not have a rule assigned to it and is assigned the default criticality level.
- If you want the endpoint to be assigned to a different rule, edit the desired rule or its rule priority in the **Rules** section.
- Confirm that your environment has the required Criticality dependencies. For more information, see Solution dependencies on page 9.
- Confirm that the endpoint status is healthy. For more information, see Tanium Client Management User Guide: Troubleshooting Tanium Clients and Client Management.

Uninstall Criticality

1. Sign in to the Tanium Console as a user with the Administrator role.
2. From the Main menu, go to **Administration > Configuration > Solutions**.
3. In the **Content** section, select the **Criticality** row and click **Uninstall**.
4. Review the summary and click **Yes** to proceed with the uninstallation.
5. When prompted to confirm, enter your password.

Contact Tanium Support

To contact Tanium Support for help, sign in to https://support.tanium.com.