Configure ISE 3.4 Debug Log Settings

Contents

Introduction

This document describes how to configure Debug Log Settings on Cisco Identity Services Engine (ISE) 3.4 to customize the Max File Size and File Count.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco ISE

Components Used

The information in this document is based on these software and hardware versions:

- Cisco ISE version 3.4

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.
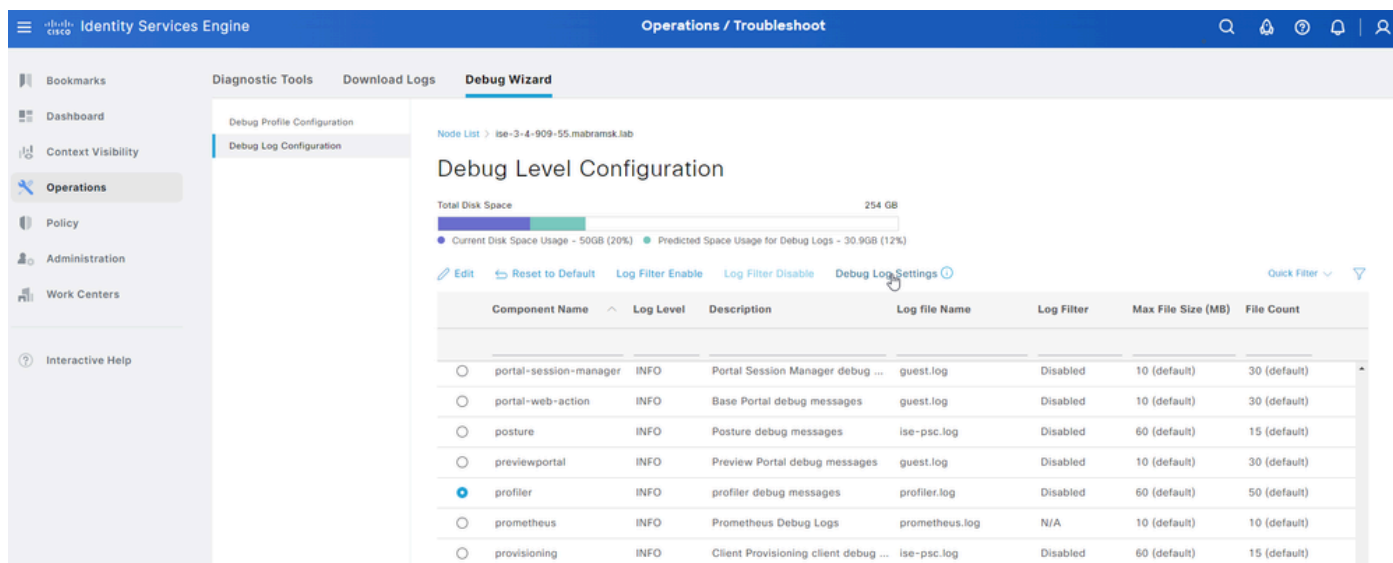
Configure

Commonly with components in more verbose log levels such as debug and trace, log files tend to rotate more quickly than anticipated due to the rapid generation of information. With this feature, you can customize the log file size and file count to allow for more information to be logged for specific components before the logs are written over.

Configurations

Navigate to **Operations > Troubleshoot > Debug Wizard > Debug Log Configuration**. Select the node which you want to change the debug log settings for from the Node List - note that any settings changed only affect this

selected node. Select the Component which you would like to change the settings for, and click **Debug Log Settings.**

> ✎ **Note**: You cannot change the Debug Log Settings for any component in Log file prrt-server.log

Debug Log Configuration Page

Set the Max File Size (MB) and File Count as needed to troubleshoot the issue. The Max File Size can be set in any range of 1-100 MB. There is no maximum File Count limit enforced.

> ⚠ **Warning**: In order to avoid filling up the disk with log files, the total Disk space usage for logs cannot exceed 60GB. If the Debug Log Settings inputted would exceed this threshold, you see a warning message "Disk space usage for logs exceeds 60GB. Please reduce Max File Size/File Count" and cannot save your changes.

Debug Log Settings

You can configure the maximum file size and the number of files for each debug log component. You can also specify the date/time after which these values must be reset to default.

Max File Size (MB)

100

Default: 60MB

File Count

100

Default: 50

☐ Specify Date/Time to Reset to Default

Cancel   **Save**

Debug Log Settings Window

Optionally, you can also specify a date and time for these setting to return to default. To do this, select the **Specify Date/Time to Reset to Default** checkbox and set the date and time when the settings reset.

⚠ **Warning**: The time that is used for this configuration is the Cisco ISE clock. Please ensure all the nodes are in sync with NTP server to avoid unexpected behaviors.

Debug Log Settings

You can configure the maximum file size and the number of files for each debug log component. You can also specify the date/time after which these values must be reset to default.

Max File Size (MB)

100
_____
                    Default: 60MB

File Count

100
_____
                    Default: 50

☑ Specify Date/Time to Reset to Default

⚠ This will override existing configurations for those particular files

08/07/2024   📅   5 ∨   40 ∨   PM ∨

Cancel   Save

Specify Date/Time Configuration

Click **Save** to put the settings into effect.

In order to reset the Debug Log Settings to the default value for a component, you can select the component and click the **Reset to Default** option, then select **Yes** in the pop-up window.

|	Component Name	Log Level	Description	Log file Name	Log Filter	Max File Size (MB)	File Count
○	policy-engine-timelog	INFO	Timelog for policy engine	policy-eval-time.log	Disabled	60 (default)	15 (default)
○	portal	INFO	Portal (Guest, Hotspot, BYOD, C...	guest.log	Disabled	10 (default)	30 (default)
○	portal-session-manager	INFO	Portal Session Manager debug ...	guest.log	Disabled	10 (default)	30 (default)
○	portal-web-action	INFO	Base Portal debug messages	guest.log	Disabled	10 (default)	30 (default)
○	posture	INFO	Posture debug messages	ise-psc.log	Disabled	60 (default)	15 (default)
○	previewportal	INFO	Preview Portal debug messages	guest.log	Disabled	10 (default)	30 (default)
●	profiler	INFO	profiler debug messages	profiler.log	Disabled	100 (custom)	100 (custom)
○	prometheus	INFO	Prometheus Debug Logs	prometheus.log	N/A	10 (default)	10 (default)
○	provisioning	INFO	Client Provisioning client debug ...	ise-psc.log	Disabled	60 (default)	15 (default)
○	prrt-JNI	DEBUG	prrt policy decision request pro...	prrt-management.log	Disabled	10 (default)	30 (default)
○	pxgrid	INFO	pxGrid messages	pxgrid-server.log	Disabled	20 (default)	15 (default)
○	pxGrid Cloud	INFO	pxGrid Cloud messages	pxcloud.log, hermes.log	Disabled	20 (default)	15 (default)

Reset to Default Setting

Verify

After changing the Debug Log Settings, monitor the **Predicted Space Usage for Debug Logs** volume taken up on the **Total Disk Space** to ensure that the disk does not fill to capacity.

Total Disk Space — 254 GB

● Current Disk Space Usage – 50GB (20%) ● Predicted Space Usage for Debug Logs – 37.8GB (15%)
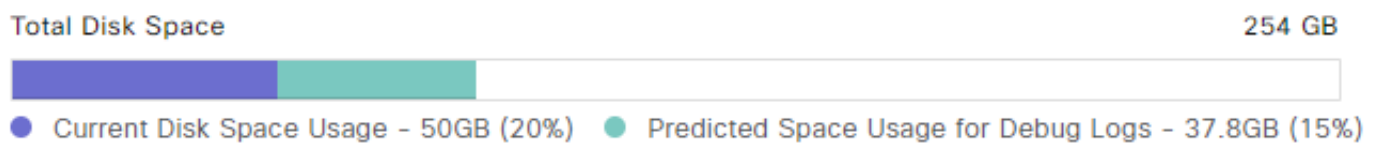
Total Disk Space Chart

Ensure that the **Max File Size (MB)** and **File Count** columns of the table reflect the saved changes.

Debug Level Configuration

Total Disk Space — 254 GB

● Current Disk Space Usage – 50GB (20%) ● Predicted Space Usage for Debug Logs – 37.8GB (15%)

	Component Name	Log Level	Description	Log file Name	Log Filter	Max File Size (MB)	File Count
○	portal-session-manager	INFO	Portal Session Manager debug ...	guest.log	Disabled	10 (default)	30 (default)
○	portal-web-action	INFO	Base Portal debug messages	guest.log	Disabled	10 (default)	30 (default)
○	posture	INFO	Posture debug messages	ise-psc.log	Disabled	60 (default)	15 (default)
○	previewportal	INFO	Preview Portal debug messages	guest.log	Disabled	10 (default)	30 (default)
○	profiler	INFO	profiler debug messages	profiler.log	Disabled	100 (custom)	100 (custom)
○	prometheus	INFO	Prometheus Debug Logs	prometheus.log	N/A	10 (default)	10 (default)
○	provisioning	INFO	Client Provisioning client debug ...	ise-psc.log	Disabled	60 (default)	15 (default)
○	prrt-JNI	INFO	prrt policy decision request pro...	prrt-management.log	Disabled	10 (default)	30 (default)
○	pxgrid	INFO	pxGrid messages	pxgrid-server.log	Disabled	20 (default)	15 (default)

You can verify the **log size** from the CLI of Cisco ISE. Issue the **show logging application | include collector.log** command. Replace **collector.log** with the appropriate log file to be verified.

```
<#root>

admin#

show logging application | include collector.log


84851938 Oct 15 2024 16:53:59 collector.log
```

Common Use Cases

Some components tend to rotate more frequently with more verbose log levels selected. Listed are some of these components and the recommended values to set when debugging issues related to these components:

- collector
  - Max File Size: 100 MB
  - File Count: 25
- profiler
  - Max File Size: 100 MB
  - File Count: 50 (default)