ScienceLogic

Monitoring Dynatrace

Dynatrace PowerPack version 105

Table of Contents

Introduction	. 3
What is Dynatrace?	. 4
What Does the Dynatrace PowerPack Monitor?	4
Installing the Dynatrace PowerPack	. 4
Configuration and Discovery	6
Generating a Dynatrace API Token	7
Configuring Dynatrace Credentials	. 7
Configuring the Dynatrace Credential in the Classic SL1 User Interface	. 9
Configuring Dynamic Applications to Monitor Dynatrace Devices	13
Discovering Dynatrace Devices	14
Creating a Dynatrace Virtual Device	14
Configuring the Dynatrace Device Template	15
Aligning the Device Template to Your Dynatrace Virtual Device	16
Filtering Partitions from Host Components	18
Viewing Dynatrace Component Devices	19
Relationships Between Component Devices	21
Dashboards	22
Device Dashboards	22
Dynatrace: Custom Application	22
Dynatrace: Host	23
Dynatrace: Mobile Application	24
Dynatrace: Service	25
Dynatrace: Web Application	26

Chapter

Introduction

Overview

This manual describes how to monitor Dynatrace environments in SL1 using the Dynatrace PowerPack.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon (三).
- To view a page containing all the menu options, click the Advanced menu icon (…).

The following sections provide an overview of Dynatrace environments and the Dynatrace PowerPack:

What is Dynatrace?	4
What Does the Dynatrace PowerPack Monitor?	4
Installing the Dynatrace PowerPack	4

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What is Dynatrace?

Dynatrace is an application performance management and monitoring platform for programs running onpremises (Dynatrace Managed) and in the cloud (Dynatrace SaaS). Dynatrace enables you to monitor various component types within your environment, such as applications, hosts, and services, and analyze the data collected through tools such as dashboards and reports.

What Does the Dynatrace PowerPack Monitor?

To monitor Dynatrace Managed environments using SL1, you must install the Dynatrace PowerPack. This PowerPack enables you to discover, model, and collect data about Dynatrace components.

The Dynatrace PowerPack includes:

- Dynamic Applications to discover and monitor Dynatrace component devices, including:
 - Applications
 - ° Hosts
 - Services
- Device Classes for each of the Dynatrace components that the Dynatrace PowerPack can monitor
- Event Policies that are triggered when Dynatrace component devices meet certain status criteria
- A sample SOAP/XML Credential that you can use to create your own Dynatrace Credential
- A Device Template that aligns Dynamic Applications to the Dynatrace Environment virtual device and enables you to discover component devices for that environment
- Device Dashboards that display information about Dynatrace component devices

NOTE: The Dynatrace PowerPack does not monitor Dynatrace SaaS environments.

Installing the Dynatrace PowerPack

Before completing the steps in this manual, you must import and install the latest version of the *Dynatrace* PowerPack.

TIP: By default, installing a new version of a PowerPack overwrites all content from a previous version of that PowerPack that has already been installed on the target system. You can use the *Enable Selective PowerPack Field Protection* setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields. (For more information, see the *System Administration* manual.)

To download and install a PowerPack:

- 1. Download the PowerPack from the <u>ScienceLogic Support Site</u>.
- 2. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
- 3. In the **PowerPack Manager** page, click the **[Actions]** button, then select Import PowerPack.
- 4. The Import PowerPack dialog box appears:

Import PowerPack™	×
Browse for file Browse License: Import	

- 5. Click the [Browse] button and navigate to the PowerPack file.
- 6. When the **PowerPack Installer** modal appears, click the **[Install]** button to install the PowerPack.

NOTE: If you exit the **PowerPack Installer** modal without installing the imported PowerPack, the imported PowerPack will not appear in the **PowerPack Manager** page. However, the imported PowerPack will appear in the **Imported PowerPacks** modal. This page appears when you click the **[Actions]** menu and select *Install PowerPack*.

Chapter

2

Configuration and Discovery

Overview

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon (三).
- To view a page containing all the menu options, click the Advanced menu icon (…).

The following sections describe how to configure and discover Dynatrace resources for monitoring by SL1 using the Dynatrace PowerPack:

Generating a Dynatrace API Token	. 7
Configuring Dynatrace Credentials	. 7
Configuring the Dynatrace Credential in the Classic SL1 User Interface	9
Configuring Dynamic Applications to Monitor Dynatrace Devices	13
Discovering Dynatrace Devices	14
Creating a Dynatrace Virtual Device	14
Configuring the Dynatrace Device Template	15
Aligning the Device Template to Your Dynatrace Virtual Device	16
Filtering Partitions from Host Components	18
Viewing Dynatrace Component Devices	19
Relationships Between Component Devices	21

Generating a Dynatrace API Token

To configure the SL1 system to monitor Dynatrace resources using the DynatracePowerPack, you must first generate a Dynatrace API token.

To do so:

- 1. Log in to your Dynatrace portal. On the left menu, click **Settings > Integration > Dynatrace API**. The **Dynatrace API** page appears.
- 2. Click the [Generate Token] button.
- 3. In the blank box that appears, type a token name, and then under the API v1 section activate (at a minimum) the "Access problem and event feed, metrics, topology, and Real User Monitoring JavaScript tag management" permission.
- 4. Click [Generate] to generate the API token.

TIP: You can click the **[Copy]** button next to the generated token to copy the token to your computer's clipboard.

- 5. The newly generated API token appears in your list of API tokens. Ensure that the **Disable/enable** switch is activated.
- 6. Optionally, if you want to verify the token, you can use an API tool like Postman or cURL to send a GET request for your Dynatrace environment, and then attach the token to the Api-Token realm for the Authorization HTTP header. For example:

```
curl --request GET \
    --url https://<Hostname>/e/<Environment-ID>.live.dynatrace.com/api/v1/time \
    --header 'Authorization: Api-Token <generated API token>' \
```

Configuring Dynatrace Credentials

To configure SL1 to monitor Dynatrace devices, you must first create a SOAP/XML credential. This credential allows the Dynamic Applications in the Dynatrace PowerPack to use your Dynatrace user account to retrieve information from the Dynatrace environment and component devices.

The PowerPack includes an example SOAP/XML credential (**Dynatrace Credential Example**) that you can edit for your own use.

NOTE: If you are using an SL1 system prior to version 11.1.0, the new user interface does not include the Duplicate option for sample credential(s). ScienceLogic recommends that you use the classic user interface and the Save As button to create new credentials from sample credentials. This will prevent you from overwriting the sample credential(s).

To configure a SOAP/XML credential to access Dynatrace:

- 1. Go to the **Credentials** page (Manage > Credentials).
- 2. Locate the **Dynatrace Credential Example** credential, click the actions icon (---) and select **Duplicate**. A copy of the credential, called **Dynatrace Credential Example copy** appears.
- 3. Click the [Actions] icon (--) for the Dynatrace Credential Example copy credential and select *Edit*. The Edit Credential modal page appears:

Name' Dynatrace Credential Example						Credential Tester	
All Organizations	nization manages this service?		÷	Timeout (mi) 120000		Select Credential Test	
Content Encoding text/xml	Method ~ GET		HTTP Version http:/1.1		÷	Select Collector CUG 50C-ISO-AIO-10: 10.2.21.10	
ust. https://HOST-NAME/e/ENVIRONMENT-ID/	ani/vd/					IP or Hostname to test *	
HTTP Auth User	alat kar	HTTP.Auth Password				4	Test Creden
Hostname/IP		Port (number optional) 0					
User		Pessword					
Embedded Password [%P]							
Embed Value [%1] true		Embed Value [%2]					
Embed Value [%3]		Embed Value [%4]					
HTTP Headers				Add Hea	der		

- 4. Complete the following fields:
 - Name. Type a new name for the Dynatrace credential.
 - All Organizations. Toggle on (blue) to align the credential to all organizations, or toggle off (gray) and then select one or more specific organizations from the What organization manages this service? drop-down field to align the credential with those specific organizations.
 - URL. Type your URL in the following format, replacing <Hostname> with your Dynatrace hostname and <Environment-ID> with your Dynatrace environment ID:

https://<Hostname>/e/<Environment-ID>/api/v1/

- HTTP Auth User. This field must be blank.
- HTTP Auth Password. This field must be blank.
- **Embedded Password [%P]**. Type your authorization API token in the following format, replacing <API-Token> with your actual API token: Authorization: Api-Token <API-Token>

HTTP Headers

• If you want to change the default page size, or change the page size for hosts, services, or applications, use the header in the "Dynatrace Credential Example" sample credential.

Update the header(s) in the following format(s):

- ° PageSizeDefault: <int>. Setting this will replace the default pagination.
- If you want to filter hosts and services by Management Zone or Tag Key, the HTTP headers for these filters will appear in the "Dynatrace Cred MZFilter Example" and "Dynatrace Cred TagFilter Example" credentials.

Update the headers in the following format:

```
ManagementZoneFilter: <Management Zone ID>
```

```
TagFilter: <TagKey>orTagFilter:<TagKey>:<TagValue>
```

NOTE: The tag must be exactly as you defined it in Dynatrace, so it could be the TagKey or the TagKey **and** the TagValue if the Value is defined.

NOTE: You can filter only one Management Zone or Tag Key at a time.

CURL Options

- SSLCERT. Keep the default value of "True".
- 4. For the remaining fields, use the default values.
- 5. Click the [Save & Close] button.

Configuring the Dynatrace Credential in the Classic SL1 User Interface

To configure SL1 to monitor Dynatrace devices, you must first create a SOAP/XML credential. This credential allows the Dynamic Applications in the *Dynatrace* PowerPack to use your Dynatrace user account to retrieve information from the *Dynatrace* environment and component devices.

The PowerPack includes example SOAP/XML credentials that you can edit for your own use:

- Dynatrace Credential Example. The standard credential for monitoring Dynatrace.
- **Dynatrace Cred MZFilter Example**. Use this credential for filtering hosts and services by Management Zone.
- Dynatrace Cred TagFilter Example. Use this credential for filtering hosts and services by Tag Key.

To configure a SOAP/XML credential to access Dynatrace:

1. Go to the Credential Management page (System > Manage > Credentials).

2. Locate the **Dynatrace Credential Example** credential, and then click its wrench icon (*P*). The **Edit SOAP/XML Credential** modal page appears:

Credential Editor [90]	×
Edit SOAP/XML Credential #90	New Reset
Basic Settings Profile Name Content Encoding Method HTTP Version Dynatrace Credential Example [[text/xml] [[GET] [[HTTP/1.1]) URL [https://HOSt.Port/Path %D = Aligned Device Address %N = Aligned Device Host Name] https://HOST-NAME/e/ENVIRONMENT-ID/api/v1/ HTTP Auth User HTTP Auth Password Timeout (seconds) [120	Soap Options Embedded Password [%P] Embed Value [%1] Embed Value [%2] Embed Value [%3] Embed Value [%4]
Proxy Settings A Hostname/IP Port User	HTTP Headers + Add a header PageSizeDefault:1000
CURL Options CAINFO CAPATH CLOSEPOLICY CONNECTTIMEOUT COOKIEFILE COOKIEFILE COOKIEFILE COOKIEFILE COOKIELIST CRLF CUSTOMREQUEST DNSCACHETIMEOUT	
Save Save As	

3. Complete the following fields:

Basic Settings

- Profile Name. Type a new name for the Dynatrace credential.
- URL. Type your URL in the following format, replacing <Hostname> with your Dynatrace hostname and <Environment-ID> with your Dynatrace environment ID:

https://<Hostname>/e/<Environment-ID>/api/v1/

- HTTP Auth User. This field must be blank.
- HTTP Auth Password. This field must be blank.

SOAP Options

• **Embedded Password [%P]**. Type your authorization API token in the following format, replacing <API-Token> with your actual API token:

Authorization: Api-Token <API-Token>

HTTP Headers

• If you want to change the default page size, or change the page size for hosts, services, or applications, use the header in the "Dynatrace Credential Example" sample credential.

Credential Editor [85]	×
Edit SOAP/XML Credential #85	New Reset
Basic Settings Profile Name Content Encoding Method HTTP Version Dynatrace Credential Example [[text/xml] [[GET] [[HTTP/1.1]) URL [https://Host.Port/Path %D = Aligned Device Address %N = Aligned Device Host Name] [https://HOST-NAME/e/ENVIRONMENT-ID/api/v1/ HTTP Auth User HTTP Auth Password Timeout (seconds) 120 [120	Soap Options Embedded Password [%P] Embed Value [%1] Embed Value [%2] Embed Value [%3] Embed Value [%4]
Proxy Settings Hostname/IP Port User	HTTP Headers + Add a header PageSizeDefault:1000
CURL Options CAINFO CAPATH CLOSEPOLICY CONRECTTIMEOUT COOKIEFILE COOKIELIST CRLF CUSTOMREQUEST DNSCACHETIMEOUT	
Save Save As	

Update the header(s) in the following format(s):

- ° PageSizeDefault: <int>. Setting this will replace the default pagination.
- If you want to filter hosts and services by Management Zone or Tag Key, the HTTP headers for these filters will appear in the "Dynatrace Cred MZFilter Example" and "Dynatrace Cred TagFilter Example" credentials.

Credential Editor [94]	×
Edit SOAP/XML Credential #94	New Reset
Basic Settings Profile Name Content Encoding Method HTTP Version [Dynatrace Cred MZFilter Example] [text/xml] v) [GET] v) [HTTP/1.1] v) URL [http(s)://Host:Port/Path 1 %D = Aligned Device Address 1 %N = Aligned Device Host Name] [https://HOST-NAME/e/ENVIRONMENT-ID/api/v1/ HTTP Auth User HTTP Auth Password Timeout (seconds) [120 [120	Soap Options Embedded Password (%•P] Embed Value [%•1] Embed Value [%•2] Embed Value [%•3] Embed Value [%•4]
Proxy Settings Hostname/IP Port User	HTTP Headers + Add a header ManagementZoneFilter. <management_zon< td=""></management_zon<>
CURL Options CAINFO CAPATH CLOSEPOLICY CONKECTTIMEOUT COOKIEFILE COOKIEFILE COOKIELIST CRLF CUSTOMREQUEST DNSCACHETIMEOUT	
Save Save As	

Update the headers in the following format:

```
ManagementZoneFilter: <Management_Zone_ID>
```

TagFilter: <TagKey> or TagFilter:<TagKey>:<TagValue>

NOTE: The tag must be exactly as you defined it in Dynatrace, so it could be the TagKey or the TagKey **and** the TagValue if the Value is defined.

NOTE: You can filter only one Management Zone or Tag Key at a time.

CURL Options

• SSLCERT. Keep the default value of "True".

NOTE: If you have any backwards compatibility issues with CURL options, set the *Embed Value [%1]* field to "false".

- 4. For the remaining fields, use the default values.
- 5. Click the **[Save As]** button.

Configuring Dynamic Applications to Monitor Dynatrace Devices

If you are monitoring a large Dynatrace devices, the default polling frequency of 5 minutes will lead to SIGTERMs and gaps in data collection. Before discovering your devices, it is recommended that you update the poll frequency of your Dynamic Applications as follows:

- Between 1,000 and 3,000 devices. 10 minutes.
- Between 3,000 and 8,000 devices. 15 minutes.
- Over 8,000 devices. 30 minutes.

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After changing the polling frequency, the relative time for collections objects in performance Dynamic Applications should be updated to match. To do this, run the following SQL query in the **Database Tool** (System > Tools > DB Tool):

```
UPDATE
master.dynamic_app_objects dao
INNER JOIN
master.dynamic_app da on dao.app_guid = da.app_guid
SET
oid = REPLACE(oid, '5mins', '15mins')
WHERE
da.ppguid = '85AD7CD29ADF5F3EADA62D98D8AB9972' and da.app_type = 24;
```

This example changes the polling time from 5 to 15 minutes. The accepted values are 5mins, 10mins, 15mins, and 30mins.

Discovering Dynatrace Devices

To discover and monitor your Dynatrace environment, you must do the following:

- Create a virtual device representing the environment
- Configure the Dynatrace device template that is included in the Dynatrace PowerPack
- Align the device template to the Dynatrace virtual device

Each of these steps is documented in the following sections.

Creating a Dynatrace Virtual Device

Because the Dynatrace environment does not have a static IP address, you cannot discover a Dynatrace device by running a discovery session. Instead, you must create a **virtual device** that represents the Dynatrace environment. A virtual device is a user-defined container that represents a device or service that cannot be discovered by SL1. You can use the virtual device to store information gathered by policies or Dynamic Applications.

To create a virtual device that represents your Dynatrace environment:

- 1. Go to the **Device Manager** page (Devices > Device Manager or Registry > Devices > Device Manager in the SL1 classic user interface).
- 2. Click the **[Actions]** button and select Create Virtual Device from the menu. The **Virtual Device** modal page appears:

Virtual Device		×
Create Virtual Device	Reset	
Device Name		
Organization	System	
Device Class	Dynatrace Environment	
Collector	CUG	
	Add	

- 3. Complete the following fields:
 - Device Name. Type a name for the device.
 - **Organization**. Select the organization for this device. The organization you associate with the device limits the users that will be able to view and edit the device. Typically, only members of the organization will be able to view and edit the device.

- Device Class. Select Dynatrace | Environment.
- **Collector**. Select the collector group that will monitor the device.
- 4. Click **[Add]** to create the virtual device.

Configuring the Dynatrace Device Template

A *device template* allows you to save a device configuration and apply it to multiple devices. The *Dynatrace* PowerPack includes the "Dynatrace Template," which enables SL1 to align all of the necessary Dynamic Applications to the environment root component device.

Before you can use the "Dynatrace Template", you must configure the template so that each Dynamic Application in the template aligns with the **credential you created earlier**.

To configure the Dynatrace device template:

- 1. Go to the **Configuration Templates** page (Devices > Templates or Registry > Devices > Templates in the SL1 classic user interface).
- 2. Locate the "Dynatrace Template" and click its wrench icon (
- 3. Click the [Dyn Apps] tab. The Editing Dynamic Application Subtemplates page appears:

Device Template Editor Editing Dynamic	Application Subtemplates (Click field labels	to enable/disable then	n)		New	Reset
Templa	ate Name Dynatrace Template					
Config Interface	CV Policies Port Policies	Svc Policies	Proc Policies	Dyn Apps	LC	ogs
Subtemplate Selection 1. App: Dynatrace: Host Container Dic 2. App: Dynatrace: Application Conta 3. App: Dynatrace: Service Container 4. App: Dynatrace: Component Counce 5. App: Dynatrace: Events 6. App: Dynatrace: Problems 6. App: Dynatrace Problems 6. Add New Dynamic App Sub-Template 6. Add New Dynamic App Sub-Temp	Template Application Behavior All devices (align new applications and upd Dynamic Application Settings Dynatrace: Host Container Discovery	ate collection states)	c Application With			¥)
The Add New Dynamic App Sub-remplate		dentials			Poll Rate	
	Dynatrace Credential Example		Presentation Object(s)	Every 1 Minute		Ψ
	Environment Discovery UUID Name Hosts	Enabled V Enabled V Enabled V Enabled V				
	Dynamic Application Thresholds Raw Data Retention	1 1	1 <u>1</u>	5 records		
	Save	Save As				

4. In the **Credentials** drop-down list, select the credential that you created for Dynatrace.

- 5. Click the next Dynamic Application listed in the **Subtemplate Selection** section on the left side of the page and then select the credential you created in the **Credentials** field.
- 6. Repeat step 5 until you have selected your Dynatrace credential in the **Credentials** field for all of the Dynamic Applications listed in the **Subtemplate Selection** section.
- 7. Click [Save].

NOTE: To maintain a "clean" version of the template, type a new name in the **Template Name** field and then click **[Save As]** instead of **[Save]**.

NOTE: The "Dynatrace: Events" Dynamic Application is disabled by default in the Dynatrace PowerPack. To collect Dynatrace events, you must enable it. To do so, go to the **Dynamic Applications Manager** page (System > Manage > Applications), locate the "Dynatrace: Events" Dynamic Application and click its wrench icon (), change the **Operational State** setting to *Enabled*, and then click **[Save]**.

Aligning the Device Template to Your Dynatrace Virtual Device

After you have configured the Dynatrace device template so that each Dynamic Application in the template aligns with your Dynatrace credential, you can use that template to align the Dynamic Applications to the virtual device that you created to act as the root device for your Dynatrace environment. When you do so, SL1 discovers and models all of the components in your Dynatrace environment.

To align the Dynatrace device template to the Dynatrace virtual device:

1. Go to the **Device Manager** page (Devices > Device Manager or Registry > Devices > Device Manager in the SL1 classic user interface).

- 2. On the **Device Manager** page, select the checkbox for the Dynatrace virtual device.
- 3. In the **Select Actions** field, in the lower right corner of the page, select the option MODIFY by Template and then click the **[Go]** button. The **Device Template Editor** page appears.

Device Name •	IP Address	Device Category	Device Class Sub-class	DID	Organization	Current State	Collection Group	Collection State	SNMP Credential	SNMP Version	SL Agent	
a	_)()[)[<u>_</u>](][)[)
Azure Device			Microsoft Azure Services	3	System	Minor <u>4</u>		Active	-		No	19 19 19
Account 🥬 🥂 🎾	•		Dynatrace Environment	7	Acme Inc	<u> </u>	CUG	Active			No	11
🤌 📶 em7ao	127.0.0.1	System.EM7	ScienceLogic, Inc. EM7 All-In-One	1	System	Major <u>1</u>	CUG	Active	EM7 Default V2	V2	No	🖷 🎝 💊
<i>∲</i> <u>∰</u> em7ao	10.64.68.16	System.EM7	ScienceLogic, Inc. EM7 All-In-One	2	System	Major 🥼	CUG	Active	E [Select Action]			
Am Integration Service Docs	· ·	System.EM7	ScienceLogic Integration Service	5	System	Healthy	CUG	Active	Administration			
🤌 📶 maggie-doc-vm-180	10.100.100.180	System.EM7	ScienceLogic, Inc. EM7 All-In-One	6	System	Major /	CUG	Active	E MODIFY			
P M ServiceNow Instance 1		Cloud.Service	ServiceNow Instance	4	System	Healthy	CUG	Active	CLEAR De	<u> </u>		
									_SCHEDULE _FIND Cole Change Collect	ction Lab	el Duplicate	5
									_Active Disabled			
									Change Mainte	enance M	Aode:	
									_Enabled w	th Collect	ion	
									[_Enabled w	thout Col	lection	
									_Disabled	-		
									Change Collect	tor Grou	ıp:	
									I CUG2			
									1			

4. In the *Template* drop-down list, select your Dynatrace device template.

emplate [Dynatrace Te	mplate]	Save Wh	Save When Applied & Confirmed Template Name Dynatrace Template						
Config	Interface	CV Policies	Port Policies	Svc Policies	Proc Polici	ies Dyn Apps	Logs		
cess & Monitoring						Device Preferences			
Device Organization	Acme Inc		\sim			Auto-Clear Events	Scan All IPs		
SNMP Read	Cisco SNMPv2 - Exam	ple	SNMP Write	None	\sim				
Availability Protocol	ТСР		Avail Port	ICMP	\sim	Accept All Logs	Dynamic Discovery		
Latency Protocol	ТСР		Latency Port	ICMP	\sim				
Avail+Latency Alert	Disabled					Daily Port Scans	Preserve Hostname		
Collection			Collector Grp		\sim				
Coll. Type						Auto-Update	Disable Asset Update		
Critical Ping			\sim			Bypass Interface			
Event Mask	Disabled		\sim			Inventory			
evice Retention & Basic	Thresholds				I				
System Latence	· · ·	1	100 ms	Daily Rollup Bandwidth Data	I	<u> </u>	730 days		
				Hourly Rollup Bandwidth Data	<u> </u>	1 I	120 days		
Availabililty Packet Siz		1	56 bytes	Raw Performance Data	iu———	1 1	7 days		
Availability Ping Cou	nt di		1 pings	Daily Rollup			730 days		
	1			Performance Data			730 days		

5. Click the **[Apply]** button, and then click **[Confirm]** to align the Dynamic Applications to the root component device.

Filtering Partitions from Host Components

You can filter out partitions from host components in the "Dynatrace: Host Disk Performance" Dynamic Application. To do this, perform the following steps:

- 1. Go to the **Dynamic Applications Manager** page (System > Manage > Applications).
- 2. Locate the "Dynatrace: Host Disk Performance" Dynamic Application and click its wrench icon (🥍).
- 3. Click on the [Snippets] tab.
- 4. In the **Snippet Editor & Registry** page, click the wrench icon (*P*) for the "host disk performance" snippet.
- 5. Edit the partitions=["/var/lib/docker"]) line to specify the partition(s) you want to filter out. You can specify more than one partition by separating them with commas and enclosing the partitions in quotation marks. Remove the partition if you want to collect data for it.

NOTE: When filtering Windows partitions, make sure you use "C:\\" when specifying the partition. Using "C:\" will cause issues and affect the collection of data from the partitions.

Snippet Name	Active State		Required	
host_disk_performance	[Enabled]	V [Requir	ed - Stop Collection]	~
	Snippet Code			
import logging				
import time				
<pre># Imports error handling library from content import content errors</pre>				
# Imports log handling library				
from content import content logger				
# Imports core collector library for data c				
<pre>from silo.dynatrace.AppCollector import App</pre>	Collector			
<pre>from silo.dynatrace.dynatrace credential im</pre>	most build substitutions			
from silo.dynacrace.dynacrace_credencial im	port build_substitutions			
# Filtered partitions				
<pre>filtered_partitions = ["/var/lib/docker"]</pre>				
# Start a timer so we can log how long exec	ution took			
<pre>start time = time.time()</pre>	ACTON COOK			
<pre># Performance Bulk Snippet with Series data</pre>				
<pre>def store_cobjs(store_results): """</pre>				
Method used to save the result handler				
for bulk app types (24, 25)				
:param results:				
:return:				
try:				
for did. info in self.devices.items	0:			•
	Save Save As			
Snippet Registry				
Snipp	et Name	State	Required ID	Date Edit
1. 🤌 host_disk_performance		Enabled	Required snip_2126	2021-11-06 16:41:46 💣

NOTE: The snippet will revert to default values each time the PowerPack is updated. You will need to update the snippet again each time you update the PowerPack.

Viewing Dynatrace Component Devices

In addition to the **Device Manager** page (Devices > Device Manager or Registry > Devices > Device Manager in the SL1 classic user interface), you can view Dynatrace environments and all associated component devices in the following places in the user interface:

• The **Device Investigator** Map page (click **Map** in the **Device Investigator** page) displays a map of a particular device and all of the devices with which it has parent-child relationships. Double-clicking any of the devices listed reloads the page to make the selected device the primary device:



• The **Device Components** page (Devices > Device Components) displays a list of all root devices and component devices discovered by SL1 in an indented view, so you can easily view the hierarchy and relationships between child devices, parent devices, and root devices. To view the component devices associated with Dynatrace, find the Dynatrace root device and click its plus icon (+):

=	Device Co	omponents						× /	ctivity Em7admin N	< Desciencelog
8	Device Con								Actions	Reset Guide
▲	•	Device Name *	IP Address	Device Category	Device Class Sub-class		Orpanization	Current Collection State (r-Health V	Collection State	
	1. + 🖉 🚮	10.2.21.176	9 10.2.21.176	Pingable	Ping I ICMP	25	Auto_IBM_DB2	A Healthy CUG2	Active	10 10 10 10
3	2. + 🤌 🚮	10.2.21.208	10.2.21.208	Pingable	Ping LICMP	26	Auto_IBM_DB2	A Healthy CU32	Active	🖶 👯 🗞 🙈
	3. + 🥕 🚮	10.2.21.67	910.2.21.67	Pingable	Ping LICMP	24	Auto_IBM_DB2	A Healthy CUG2	Active	🖶 🎝 🗞 😹
2	4. + 🤌 🚮	Auto_Microsoft_Azure	۰. ا	Service	Microsoft I Azure Services	27	AzureAutomation	A Healthy CU32	Active	🖶 😂 🗞 😹
	5. + 🤌 🚮	Auto_Microsoft_Office_365		Account	Microsoft I Office 365 Account	3	Auto_Office_365	A Healthy CUG2	Active	🖶 🔀 🗞 🖂
å	6. – 🤌 🚮	dynatrace135_6003	·	APM	Dynatrace I Environment	683	SILO	A Healthy CUG	Active	🖶 🎝 🗞 🚲
	(Device Name •	IP Address	Device Celeviory	Device Class I Sub-class	010	Organization	Current Collection State Group	Collection State	
	1. ÷	🤌 📶 Applications	·	APM	Dynatrace I Applications	685	SILO	A Healthy CUG	Active	📾 😂 🗞 😹
	2. +	🥕 📊 Hosts	۰. ۲	APM	Dynatrace I Hosts	696	SILO	Healthy CUG	Active	📾 🎝 🗞 🙈
	3. —	🔑 📊 Services	۰. الا	APM	Dynatrace I Services	684	SILO	A Healthy CUG	Active	🖶 💐 🗞 😹
		Device Name •	IP Address	Device Categor	x Device Class I Sub-class	DID	Organization	Current Collection State Group	Collection State	
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	2			Service	Dynatrace I Webservice Service	1011	SILO	A Healthy CUG	Active	
	3	l. 🤌 Mair.word.biz		Service	Dynatrace I Webservice Service	1005	SILO	A Healthy CUG	Active	m 12 % &
	4	🥜 🔐 area.book.tv	۰. ۲	Service	Dynatrace I Webservice Service	905	SILO	A Healthy CUG	Active	₩ ₩ 8 8
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	6	🛃 🔐 area.triend.com	۰. ۲	Service	Dynatrace I Webservice Service	742	SILO	A Healthy CUG	Active	80 € 8
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	8	🥕 🚮 art. bibble.edu	۰. ۲	Service	Dynatrace I Webservice Service	865	SILO	A Healthy CUG	Active	10 13 10 16
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	10). 🧀 🚮 art.child.online	۰. ۲	Service	Dynatrace I Webservice Service	907	SILO	A Healthy CUG	Active	🖶 🖏 🗞 🐻
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	13	🤌 🚮 bibble.number.biz	۰. ۲	Service	Dynatrace I Webservice Service	1086	SILO	A Healthy CUG	Active	🖶 👯 🗞 😹
									[Select Action]	▼ Go

The Device Component Map page (Classic Maps > Device Maps > Components) allows you to view devices by root node and view the relationships between root nodes, parent components, and child components in a map. This makes it easy to visualize and manage root nodes and their components. SL1 automatically updates the Component Map as new component devices are discovered. The platform also updates each map with the latest status and event information. To view the map for Dynatrace devices, go to the Component Map page and select the map from the list in the left NavBar. To learn more about the Component Map page, see the Maps manual.



Relationships Between Component Devices

In addition to parent/child relationships between component devices, SL1 also creates relationships between the following Dynatrace component devices:

- Hosts and Services
- Services and Applications

Additionally, the platform can automatically build relationships between Dynatrace component devices and other associated devices:

- If you discover Azure devices using the Dynamic Applications in the *Microsoft: Azure* PowerPack version 108 or later, SL1 will automatically create relationships between the following device types:
 - Dynatrace Hosts and Azure Virtual Machines
 - Dynatrace Hosts and Azure Virtual Machine Scale Sets
- If you discover Linux devices using the Dynamic Applications in the *Linux* Base Pack PowerPack version 102 or later, SL1 will automatically create relationships between Dynatrace Hosts and Linux Servers.
- If you discover VMware devices using the Dynamic Applications in the VMware: vSphere Base Pack PowerPack version 210 or later, SL1 will automatically create relationships between Dynatrace Hosts and VMware Virtual Machines.
- If you discover Windows devices using the Dynamic Applications in the *Microsoft: Windows* Server PowerPack version 107 or later or the *Microsoft Base Pack* PowerPack version 106 or later, SL1 will automatically create relationships between Dynatrace Hosts and Windows Servers.

Chapter



Dashboards

Overview

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon (=).
- To view a page containing all the menu options, click the Advanced menu icon (…).

The following sections describe the device dashboards that are included in the Dynatrace PowerPack:

Device Dashboards	
Dynatrace: Custom Application	22
Dynatrace: Host	23
Dynatrace: Mobile Application	24
Dynatrace: Service	25
Dynatrace: Web Application	26

Device Dashboards

The Dynatrace PowerPack includes device dashboards that provide summary information for Dynatrace component devices. Each of the device dashboards in the Dynatrace PowerPack is set as the default device dashboard for the equivalent device class.

Dynatrace: Custom Application

The Dynatrace: Custom Application dashboard displays the following information:

- The basic information about the device
- A list of active events and open tickets associated with the device
- A count of, and links to, the elements associated with the device
- Four instances of the Multi-series Performance Widget that display the following metrics trended over the last 12 hours:
 - ° Apdex rating
 - $^{\circ}$ User actions
 - ° Web requests
 - ° Error rates

Dynatrace: Host



The **Dynatrace**: **Host** dashboard displays the following information:

- The basic information about the device
- A list of active events and open tickets associated with the device
- A count of, and links to, the elements associated with the device
- Four instances of the Multi-series Performance Widget that display the following metrics trended over the last 12 hours:

- ° Availability
- ° Disk utilization
- Server CPU and memory utilization
- Page faults per second

Dynatrace: Mobile Application

The **Dynatrace**: Mobile Application dashboard displays the following information:

- The basic information about the device
- A list of active events and open tickets associated with the device
- A count of, and links to, the elements associated with the device
- Four instances of the Multi-series Performance Widget that display the following metrics trended over the last 12 hours:
 - Apdex rating
 - User actions
 - Web requests
 - ° Error rates

Dynatrace: Service

Clos Log Device Dash	_ /	<u>P</u> erformance T <u>T</u> ickets S	opology <u>C</u> ont oftware Proce	figs Joi sses Se		Interfaces P/UDP Ports	Orga	anization		
On Ro Pare	vice Name SProxy ID 472 Class Dynatrace ganization System oot Device dynatraceAccount ent Device Services Hostname			Category Sub-Class Uptime	Component Devic APM.Service Messaging Servic 0 days, 00:00:00 Collector28 50C-f	e				Message Service
		There	are no events or tickets) for this device					Elements	Active Events - 4 Cleared Events 2 4 ctive Tickets (OWP) - 2 Resolved Tickets - 2 Log Messages 3 3 Software Titles - 3 Process - 3 Services - 3 Services - 3
Server Req	quests		HTTP Error Counts				Error Po	ercentages		
	175Count/Minute	Reset zoom					0.07%			Reset zoom
2ks -	125Count/Minute						0.05%			
1.5ks -	100Count/Minute 75Count/Minute	1					0.04%			
1.0001ks -	50Count/Minute						0.02%			
0.50001ks	25Count/Minute	the second					0.01%	1:	2:00	14:00
0ks -	0Count/Minute 12	- Response Time	08:00	09:00	12:00 Data	15:00			Error Count -	- No Matching Data

The **Dynatrace**: **Service** dashboard displays the following information:

- The basic information about the device
- A list of active events and open tickets associated with the device
- A count of, and links to, the elements associated with the device
- Three instances of the Multi-series Performance Widget that display the following metrics trended over the last 12 hours:
 - ° Service requests
 - HTTP error counts
 - Error percentages

Dynatrace: Web Application



The **Dynatrace**: Web Application dashboard displays the following information:

- The basic information about the device
- A list of active events and open tickets associated with the device
- A count of, and links to, the elements associated with the device
- Four instances of the Multi-series Performance Widget that display the following metrics trended over the last 12 hours:
 - Apdex rating
 - User actions
 - Web requests
 - Error rates

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