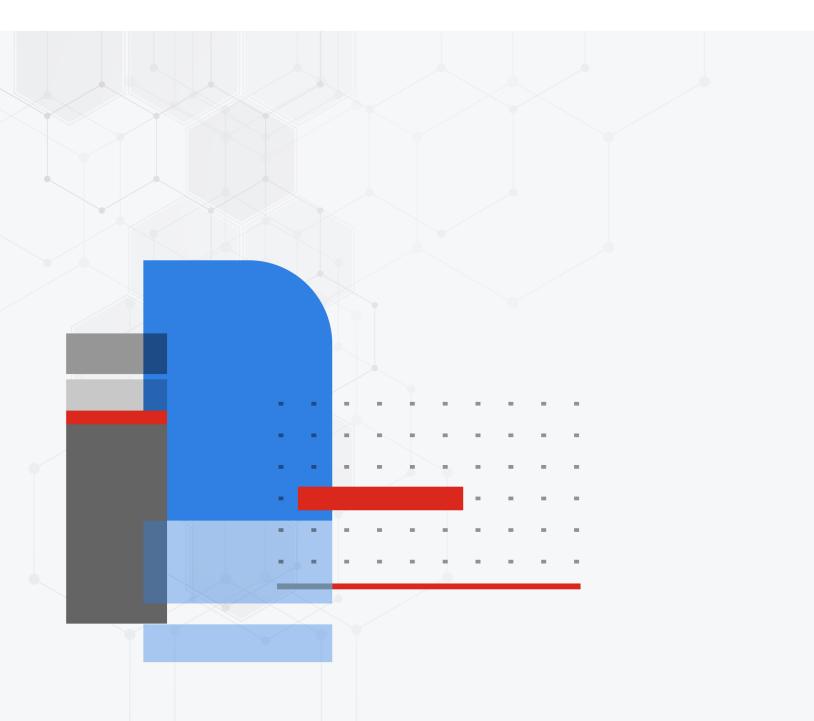


# Integration API Guide

FortiSIEM 6.7.5



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08/03/2023

FortiSIEM 6.7.5 Integration API Guide

# **TABLE OF CONTENTS**

Change Log	8
Overview	9
CMDB Integration	10
Add or Update an Organization	
Get the List of Monitored Organizations	
Create or Update Device Credentials	
Discover Devices	
Get the List of Monitored Devices and Attributes	
Add, Update or Delete Device Maintenance Schedule	
Update Device Monitoring	
Get Short Description of All Devices	
Get Short Description of All Devices in an Address Range	
Get Full Information about One Device	
Get a Section of Information (Applications, Interfaces, Processors, Storage) about One	
Device	17
Get Agent Status for a Specific Host	18
Add CMDB Device(s)	19
Delete CMDB Device(s)	19
Get CMDB Device List	. 20
Get Device Add Request Status	21
Get Device Custom Property	22
Update Device by Id	23
Update Device Custom Property	24
Dashboard Integration	.26
Add a Dashboard Folder	26
Events and Report Integration	.27
Request API Specifications	28
Polling API Specifications	. 28
Results API Specifications	. 28
Event/Query Worker Configuration API	.29
Get Event Worker	29
HTTP Method	29
Output	-
Add Event Worker	
Input Credentials	30
HTTP Method	
Request Body	
Output	
Delete Event Worker	
	31
HTTP Method	

Request Body	31
Request Body Example	31
Output	32
Get Query Worker	32
Input Credentials	
HTTP Method	
Output	
Add Query Worker	
Input Credentials	
HTTP Method	
Request Body	
Request Body Example	
Output	
·	
Delete Query Worker	
Input Credentials	
Request Body Everyle	
Request Body Example	
Output	
External Help Desk/CMDB Inbound Integration	36
External Threat Intelligence Integration	37
ncident Integration	38
Incident Notification Integration	
Notification via Email	
Notification via SMS	
Notification via SNIS  Notifications via HTTPS	
Notification via SNMP Trap	
Notification via API	
Request API Specifications	
Polling API Specifications	
Results API Specifications	
Incident Attribute List	
Incident Attribute List Incident Notification XML Schema	
Get Triggering Event IDs for One or More Incidents	
. = . =	
Update Incident Attributes	
JSON API Incident Integration	
Fetch Incidents	
Fetch Trigger Events	
Update Incidents	54
Integer Field Mapping to Descriptions	
FortiSIEM Incident Attributes List	
Lookup Table Integration	57
POST pub/lookupTable	57
LookupTable - Post	
Resource	57
Authorization	57
Post Parameters	57

Example	58
Response	58
HTTP Error Codes	
GET pub/lookup Table	59
LookupTable - Get	
Resource	
Authorization	
Query Parameters	
Example Request	
Response	
Request Parameters	
HTTP Error Codes	
DELETE pub/lookupTable/{lookupTableId}	
LookupTable - Delete	
Resource	
Authorization	
Path Parameters	
Query Parameters	
Example Request	
Response	
POST pub/lookupTable/{lookupTableId}/import	
LookupTable import data - Post	
Resource	
Authorization	
Post Parameters	
Example Request	
Response	
HTTP Error Codes	
GET pub/lookupTable/{lookupTableId}/task/{taskId}	
LookupTable check importing task status - Get	
Resource	
Authorization	
Path Parameters	
Example Request	
Response	
HTTP Error Codes	
GET pub/lookupTable/{lookupTableId}/data	
Query LookupTable/{iookupTableid}/data	
Resource	
Authorization	
Query Parameters	
Example Request	
Response	
HTTP Error Codes	
PUT pub/lookupTable/{lookupTableId}/data	
Update LookupTable Data - PUT	
Resource Authorization	88
50000000000000000000000000000000000000	no.

Path Parameters	68
Query Parameters	68
Example Request	68
PUT Body	69
Response	69
HTTP Error Codes	69
PUT pub/lookupTable/{lookupTableId}/data/delete	69
Delete LookupTable Data- PUT	
Resource	
Authorization	70
Path Parameters	
Post Parameters	
Example Request	70
Response	
HTTP Error Codes	
Performance and Health API	
Get Health Summary	
Input Credentials	
HTTP Method	
Output	
·	
Get Health Details by Instance Id	
Input Credentials	
HTTP Method	
Request Path Parameter	
Output	
Get Health Details – Complete Response	
Input Credentials	
HTTP Method	
Output	
REST API to Return Worker Queue State	76
Watchlist Integration	77
Read APIs for Integration with FortiGate Firewalls	
Get IPs	
Get Domains	79
Get Hash	
Generic Read APIs	
Get All Watch Lists	
Get Watch List Entries Count	
Get Watch List by Watch List ID	
Get Watch List by Watch List Entry Value	
Get Watch List by Watch List Entry ID	
Get Watch List Entry by Watch List Entry ID	
Update APIs	
Update State of Watch List Entry by Watch List Entry ID	
Update State of Watch List Entry by Watch List Entry Value	
Update Last Seen Time of Watch List Entry by Watch List Entry ID	
Update Last Seen Time of Watch List Entry by Watch List Entry Value	

Update Count of Watch List Entry by Watch List Entry ID	94
Update Count of Watch List Entry by Watch List Entry Value	
Add Watch List Entry(s) to Watch List Groups	
Save Watch List Groups with Watch List Entry(s)	
Update Specific Watch List Entry	100
Delete APIs	102
Delete Watch List Entry by ID	102
Delete Watch List by ID	103
JSON Object Formats	104
Watch List Entry JSON	104
Watch List JSON	105
Example Usage	106
Example Performance and Health, CMDB Device, and Event/Query Worker	
Configuration APIs	106
Python Support	106
Python 2.7 Release	106
Python 3.9 Release	106
Appendix	107
Description of Device Attributes	
Description of Health JSON Attributes	111
Current Thresholds for Health Status	115

# Change Log

Date	Change Description
05/09/2022	CMDB Device APIs added. The following API sections were added: Event/Query Worker Configuration API, and Performance and Health API.
06/09/2022	Lookup Table Integration section updated: POST pub/lookupTable and GET pub/lookup Table.
06/20/2022	Updated INPUT URL for Update Device by Id, Get Device Custom Property, and Update Device Custom Property.
07/26/2022	Added FortiGate Watchlist Integration APIs to Watchlist Integration section.
11/29/2022	Appendix: Current Thresholds for Health Status section updated.
02/24/2023	Polling API Specifications, Events and Report Integration - Request, Polling, Results API, and Dashboard Integration - Add a Dashboard updated for 6.7.x.
06/01/2023	Corrected Input URL for Update Device by Id.
06/06/2023	Added note that 6.7.5 and later API documentation transitioning to https://fndn.fortinet.net/index.php?/fortiapi/2627-fortisiem/.
06/13/2023	Updated Polling API Specifications Input URL under Events and Report Integration.
08/03/2023	Updated Results API Specifications Input URL under Events and Report Integration.

### Overview



FortiSIEM 6.7.5 and later API documentation is transitioning to https://fndn.fortinet.net/index.php?/fortiapi/2627-fortisiem/. Fortinet recommends checking this link first for the latest API updates.

FortiSIEM provides integrations that allows you to query and make changes to the CMDB, Dashboard, query events, and send incident notifications. Most of these integrations are via REST API.

This document provides integration specifications and example usage.

- CMDB Integration
- Dashboard Integration
- Event/Query Worker Configuration API
- Events and Report Integration
- External Help Desk/CMDB Integration
- External Threat Intelligence Integration
- Incident Integration
- · Performance and Health API
- · Rest API to Return Worker Queue State
- · Watchlist Integration
- Example Usage
- Appendix
  - Description of Device Attributes
  - Description of Health JSON Attributes
  - · Current Thresholds for Health Status

# **CMDB** Integration

The following APIs are available for interacting with the FortiSIEM CMDB.

- Organization API
- · Discovery and Monitoring API
- CMDB Device API

#### Organization API

- 1. Add or Update an Organization
- 2. Get the List of Monitored Organizations

#### **Discovery and Monitoring API**

- 1. Create or Update Device Credentials
- 2. Discover Devices
- 3. Get the List of Monitored Devices and Attributes
- 4. Add, Update or Delete Device Maintenance Schedule
- 5. Update Device Monitoring

#### **CMDB Device API**

- 1. Get Short Description of All Devices
- 2. Get Short Description of All Devices in an Address Range
- 3. Get Full Information about One Device
- 4. Get a Section of Information (Applications, Interfaces, Processors, Storage) about One Device
- 5. Get Agent Status for a Specific Host
- 6. Add CMDB Device(s)
- 7. Delete CMDB Device(s)
- 8. Get CMDB Device List
- 9. Get Device Add Request Status
- 10. Get Device Custom Property
- 11. Update Device by Id
- 12. Update Device Custom Property

### Add or Update an Organization

This API enables you to add or update an Organization in Service Provider deployments.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML containing the organization information using organization name as key.
Request URL	<ul> <li>Add an organization:         https://<fortisiem_supervisor_ip>/phoenix/rest/organization/add</fortisiem_supervisor_ip></li> <li>Update an organization:         https://<fortisiem_supervisor_ip>/phoenix/rest/organization/update</fortisiem_supervisor_ip></li> </ul>
Input Parameters	Organization definition file
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123             If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Input XML	Contains organization details - the key is the organization name, which means that entries with the same name will be merged.
Output	None

Refer to Example Usage for adding or updating an Organization.

# **Get the List of Monitored Organizations**

This API enables you to get the list of monitored organizations in Service Provider deployments.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML (optional). An output XML is returned.
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/config/Domain</fortisiem_supervisor_ip>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123</li> <li>If querying for a specific organization, replace "super" with the organization name.</li> </ul>

Output	An XML that contains Organization id, Organization name, Status, Included and
	Excluded IP range.

Refer to Example Usage to get the list of monitored organizations.

# **Create or Update Device Credentials**

This API enables you to create or update device credentials in Enterprise and Service Provider deployments.

The key is the credential name in the input XML. If a credential with the same name exists, then the credential in the database will be updated with the new content.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML.
Request URL	https:// <fortisiem_supervisor_ ip="">/phoenix/rest/deviceMon/updateCredential</fortisiem_supervisor_>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123</li> <li>If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Input XML	An XML file containing credentials and IP to credential mappings.
Output	An HTTP status code.

Refer to Example Usage creating or updating device credentials.

### **Discover Devices**

This API enables you to discover devices in Enterprise and Service Provider deployments.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML containing the devices to be discovered. An output XML containing the task ld is returned. The task ld can then be used to get the status of the discovery results.
Request URL	• Send Discovery request:  https:// <fortisiem_supervisor_ ip="">/phoenix/rest/deviceMon/discover</fortisiem_supervisor_>

	• Get Discovery result:  https:// <fortisiem_supervisor_ ip="">/phoenix/rest/deviceMon/status?taskId=XXX</fortisiem_supervisor_>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123</li> <li>If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Output	<ul><li>Discovery request: XML containing task ld.</li><li>Discovery result: XML containing discovered devices and attributes.</li></ul>

Refer to Example Usage for discovering devices.

## **Get the List of Monitored Devices and Attributes**

This API enables to get the list of monitored devices and attributes in Enterprise and Service Provider deployments.

Methodology       REST API based: Caller makes an HTTP(S) request with an input XML (optional An output XML is returned.         Input URL       https:// <fortisiem_supervisor_ ip="">/phoenix/rest/deviceInfo/monitoredDevices         Input Credentials       • Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.</fortisiem_supervisor_>
Input Credentials  • Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.  Curl example: curl -k -u super/admin:Admin*123  • Service Provider deployments: User name and password of Super Global
account that has the appropriate access. Use "super" as the organization for Enterprise deployments.  Curl example: curl -k -u super/admin: Admin*123  • Service Provider deployments: User name and password of Super Globa
account has the appropriate access.  Curl example with super organization: curl -k -u super/admin: Admin*123  If querying for a specific organization, replace "super" with the organization name.
Output An XML that contains device name, device type, organization name and list of monitored attributes.

Refer to Example Usage to get the list of monitored devices and attributes.

# Add, Update or Delete Device Maintenance Schedule

This API enables you to add, update or delete device maintenance schedule in Enterprise deployments and Service Provider deployments.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML (optional).
Input URL	<ul> <li>For adding or updating:         <pre>https://<fortisiem_supervisor_ ip="">/phoenix/rest/deviceMaint/update</fortisiem_supervisor_></pre> </li> <li>For deleting:         <pre>https://<fortisiem_supervisor_ ip="">/phoenix/rest/deviceMaint/delete</fortisiem_supervisor_></pre> </li> </ul>
Input Parameters	An XML file Containing devices and maintenance calendar updates.
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123</li> <li>If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Output	An HTTP status code.

Refer to *Example Usage* for adding or updating device maintenance schedule and for deleting device maintenance schedule.

# **Update Device Monitoring**

This API enables you to update device monitoring in Enterprise and Service Provider deployments.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML (optional).
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/deviceMon/updateMonitor</fortisiem_supervisor_ip>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or</li> </ul>

	Organization specific account and name. Make sure that the account has the appropriate access.  Curl example with super organization: curl -k -u super/admin: Admin*123  If querying for a specific organization, replace "super" with the organization name.
Input Parameters	Input XML containing the updates to device monitoring configuration.
Output	HTTP Status Code

Refer to Example Usage for updating device monitoring.

# **Get Short Description of All Devices**

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML. An output XML is returned.
Input URL	<ul> <li>Enterprise deployments:         https://<fortisiem_supervisor_ ip="">/phoenix/rest/cmdbDeviceInfo/devices</fortisiem_supervisor_></li> <li>Service Provider deployments:         https://<fortisiem_supervisor_ ip="">/phoenix/rest/cmdbDeviceInfo/devices&amp;organization=ACME</fortisiem_supervisor_></li> </ul>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Output	An XML that contains a short set of attributes for each device, including:  • Host Name  • Access IP  • Creation Method  • Description  • Vendor, Model, version  • Contact info  • Location  • Uptime  • Hardware Model  • Serial Number

· Business Service Groups to which the device belongs

### Get Short Description of All Devices in an Address Range

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML. An output XML is returned.
Input URL	<ul> <li>Enterprise deployments:         https://<fortisiem_supervisor_ip>/phoenix/rest/         cmdbDeviceInfo/devices?includeIps=&lt;         includeIpSet&gt;&amp;excludeIps=<excludeipset></excludeipset></fortisiem_supervisor_ip></li> <li>Service Provider deployments:         https://<fortisiem_supervisor_ip>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=&lt;         includeIpSet&gt;&amp;excludeIps=<excludeipset>&amp;organization=ACME</excludeipset></fortisiem_supervisor_ip></li> </ul>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of any FortiSIEM account for the ACME organization. Make sure that the account has the appropriate access. Curl example with ACME organization: curl -k -u         ACME/admin:Admin*123     </li> </ul>
Output	An XML that contains short description of devices with access IPs in the specified address range.

#### Formatting for the <IncludeIPset> and <ExcludeIPset> Attributes

Both < includeIpSet> and <excludeIpSet> can take any of these forms:

- IPaddress
- IPaddress1,IPaddress2
- IPaddress1-IPaddress2
- IPaddress1,IPaddress2-IPaddress3,IPaddress4,IPaddress5-IPaddress6

#### **Examples**

- If you want all devices in the range 192.168.20.1-192.168.20.100, then issue the API: https://<FortiSIEM\_Supervisor\_
  IP>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=192.168.20.1-192.168.20.100
- If you want all devices in the range 192.168.20.1-192.168.20.100, but want to exclude 192.168.20.20, 192.168.20.25, then issue the API: https://<FortiSIEM Supervisor

```
IP>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=192.168.20.1-
192.168.20.100&excludeIps=192.168.20.20,192.168.20.25
```

• If you want all devices in the range 192.168.20.1–192.168.20.100, but want to exclude 192.168.20.20–192.168.20.25, then issue the API:

https://<FortiSIEM\_Supervisor\_ IP>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=192.168.20.1-192.168.20.100&excludeIps=192.168.20.20-192.168.20.25

### **Get Full Information about One Device**

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML (optional). An output XML is returned.
Input URL	<ul> <li>Enterprise deployments:         https://<fortisiem_supervisor_ ip="">/phoenix/rest/cmdbDeviceInfo/device?ip=         <deviceip>&amp;loadDepend=true</deviceip></fortisiem_supervisor_></li> <li>Service Provider deployments:         https://<fortisiem_supervisor_ip>/phoenix/rest/cmdbDeviceInfo/device?ip=<deviceip>&amp;loadDepend=true&amp;organization=ACME</deviceip></fortisiem_supervisor_ip></li> </ul>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123         If querying for a specific organization, replace "super" with the organization name.     </li> </ul>
Output	An XML that contains full information FortiSIEM has discovered about a device.

# **Get a Section of Information (Applications, Interfaces, Processors, Storage) about One Device**

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML (optional). An output XML is returned.
Input URL	• Enterprise deployments:  https:// <fortisiem_supervisor_ ip<="" td=""></fortisiem_supervisor_>

>/phoenix/rest/cmdbDeviceInfo/device?ip=< deviceIp>&loadDepend=true&fields=<sectionName> Service Provider deployments: https://<FortiSIEM Supervisor IP>/phoenix/rest/cmdbDeviceInfo/device?ip=< deviceIp>&loadDepend=true&fields= <sectionName>&organization=ACME **Input Credentials** • Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin: Admin\*123 • Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access. Curl example with super organization: curl -k -u super/admin: Admin\*123 If querying for a specific organization, replace "super" with the organization name. Output An XML that contains the specified section discovered for the device.

Refer to Example Usage to get CMDB device info.

### **Get Agent Status for a Specific Host**

This API enables you to get Linux and Windows Agent status.

Release Added	5.2.5
Methodology	$\textbf{RESTAPI based: Caller makes an HTTPS request with query parameters:} \verb  orgId, hostName . \\$
Request URL	<pre>https://<fortisiem_supervisor_ ip="">/phoenix/rest/agentStatus/all?request=<orgid>,<hostname></hostname></orgid></fortisiem_supervisor_></pre>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123         If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Input Parameters	Query parameters: orgId, hostName.
Output	An XML file containing Type, AgentStatus, PolicyID, HeartbeatTime, LastEventReceiveTime

Refer to Example Usage to get the list of monitored devices and attributes.

# Add CMDB Device(s)

This API provides the ability to add one or more devices to CMDB. This is an asynchronous request that should be used as follows:

- Submit the device add request. A task id will be returned
- Get the device addition status by querying with this task id (See Get Device Add Request Status API)

Release Added	6.5.0
Input URL	https:// <fortisiem_supervisor_ IP&gt;/phoenix/rest/device/discovery/add</fortisiem_supervisor_ 
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.     </li> </ul>
HTTP Method	POST
Request Body	You need to create an XML for the device attributes and pass it in the HTTP request. A
	sample XML file is File5_AddDeviceExample.xml and the schema file XSD is File6_device.xsd. For an explanation the attribute definitions, see Appendix - Description of Device Attributes.
Output	device.xsd. For an explanation the attribute definitions, see Appendix - Description of

### **Delete CMDB Device(s)**

This POST API enables you to delete one or more CMDB devices by specifying device IDs. The list of device ids can be obtained via the Get CMDB Device List API.

Release Added	6.5.0
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/device/list/delete</fortisiem_supervisor_ip>
Input Credentials	Enterprise deployments: User name and password of any FortiSIEM account

	that has the appropriate access. Use "super" as the organization for Enterprise deployments.  Curl example: curl -k -u super/admin:Admin*123  • Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.  Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.
HTTP Method	POST
Request Body	The request body should be a JSON with a list of device ids. Note that the list of device ids can be obtained via the Get CMDB Device List API.  Input JSON array format: [id1, id2]  Request Body example:  [id1, id2]
Output	When the request succeeds (HTTP response code 200), a JSON object is returned. It contains the list of device ids that were successfully deleted and the list of device ids for which delete failed.  Sample JSON follows.
	"success": "[968352]", "failed": "[968351,968353]"

## **Get CMDB Device List**

You can use this GET API to retrieve list of devices with specific organization ID and device IP/host name.

Release Added	6.5.0
Input URL	<pre>https://<fortisiem_supervisor_ ip="">/phoenix/rest/device/list?orgId=<org_id>&amp;accessIp=<access_ ip="">&amp;name=<name></name></access_></org_id></fortisiem_supervisor_></pre>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.     </li> </ul>
HTTP Method	GET

Request Path Parameters	org_id long access_ string	Device IP required.	on ID which device belongs to. This is a required field.  Address. Must be an exact match. Either access_ip or name is  e of the device. Partial match is allowed. Either access_ip or
Output	contains key a Sample JSON  {     "id": 9     "orgId"     "orgNam     "hostNat     "access     "device     } ]	tributes of to follows.  68352,  1,  """ "Supe """ "FSM """ "172 "" "R	ds (HTTP response code 200), a JSON object is returned. It the CMDB devices matching the request filter.  r",  _Test_6501741_5835", .30.58.35", edhat Linux"
Output Key Fields	Field	Туре	Description
Output Ney Fielus	id orgld orgName hostName accesslp deviceType	long long string string string string	Device ID in FortiSIEM CMDB Organization ID which device belongs to. Organization Name Host Name Device IP Address Device Type

# **Get Device Add Request Status**

You can use this API to get the status of device add request with specific task id.

Release Added	6.5.0
Input URL	https:// <fortisiem_supervisor_ ip="">/phoenix/rest/device/list/source?identifier=RESTAPI_<taskid></taskid></fortisiem_supervisor_>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> </ul>

	·	-	er organization: curl -k -u super/admin:Admin*123 c organization, replace "super" with the organization name.
HTTP Method	GET		
Request Path Parameter	Replace < Tasklo the Add CMDB I	_	value in the URL. The TaskId is obtained from the response in PI.
Output	•	tributes of t askld.	ds (HTTP response code 200), a JSON object is returned. It he devices that were added to CMDB as part of the request with
	"hostNam "accessI "deviceI } ] When the reque	1, e": "Supe ne": "FSM pp": "172 Type": "Ro	r", _Test_6501741_5835", .30.58.35", edhat Linux"  sponse contains failed reason. of provided in this release.
Output Key Fields	Field id orgld orgName hostName accesslp deviceType	Type long long string string string string	Description  Device ID in FortiSIEM CMDB  Organization ID which device belongs to  Organization Name  Host Name  Device IP Address  Device Type
	<b>,</b> ,	<b>J</b>	

# **Get Device Custom Property**

This GET API returns the device properties for a particular device specified by organization name, organization ID, access IP or host name. Only the properties that are set are returned.

Release Added	6.5.0
Input URL	https:// <fortisiem_supervisor_ IP&gt;/phoenix/rest/cmdbDeviceInfo/properties?organization=<org_name>&amp;orgId=<org_ id&gt;&amp;ip=<device_ip>&amp;name=<hostname></hostname></device_ip></org_ </org_name></fortisiem_supervisor_ 
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.</li> </ul>

	<ul> <li>Curl example: curl -k -u super/admin: Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin: Admin*123 If querying for a specific organization, replace "super" with the organization name.</li> </ul>		
HTTP Method	GET		
Request Path Parameters	Field Type Description org_name string Organization name org_id long Organization ID. Required field. ip string Device Access IP. Must be an exact match. Either ip or name is required. name string Host name of the device. Either ip or name is required.	<b>3</b>	
Output	When the request succeeds (HTTP response code 200), then an XML is returne the set properties for that device. Schema XSD file is File9_device_properties.xs		

# **Update Device by Id**

This POST API allows user to update the CMDB device attributes for a CMDB Device. The device need to specified device id, that can be obtained via the Get CMDB Device List API. Only the attributes that need to be updated should be sent as part of API.

Release Added	6.5.0		
Input URL	https:// <fortisiem_supervisor_ ip="">/phoenix/rest/device/update?deviceId=<device_ id="">&amp;updateMode=OVERWRITE APPEND</device_></fortisiem_supervisor_>		
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.</li> </ul>		
HTTP Method	POST		
Request Path Parameters	List updateMode long Two	scription vice Id in CMDB - ids can be obtained via the Get CMDB Device API. o values are allowed. OVERWRITE – meaning overwrite the value like name or	

	Field Type Description  • APPEND – meaning add like network interface
Request Body	You need to create an XML as in Add CMDB Device(s) API to include the device attributes that you want to update and pass it in the HTTP request.  A sample XML file for OVERWRITE-ing a device host name is File7_OVERWRITE_DeviceExample.xml. A sample XML file for APPEND-ing a device network Interface is File7_APPEND_DeviceExample.xml. The schema XSD is File8_deviceAPPENDExample.xsd. For an explanation the attribute definitions, see Appendix - Description of Device Attributes.
Output	When the request succeeds (HTTP response code 200), the following message will appear depending on the update status.  • If update succeeds, a message "Successfully updated device" is returned.  • If update fails, a proper error message e.g. "Invalid Device Id" is returned.  Invalid attributes are ignored, and valid attributes are updated.

# **Update Device Custom Property**

This PUT API provides a way to modify the device properties of one or more devices.

Release Added	6.5.0	6.5.0			
Input URL	https:// <fo< th=""><th colspan="3">https://<fortisiem_supervisor_ip>/phoenix/rest/cmdbDeviceInfo/properties</fortisiem_supervisor_ip></th></fo<>	https:// <fortisiem_supervisor_ip>/phoenix/rest/cmdbDeviceInfo/properties</fortisiem_supervisor_ip>			
Input Credentials	that had deployed Curl ex  • Service account has the Curl ex	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123 If querying for a specific organization, replace "super" with the organization name.</li> </ul>			
HTTP Method	PUT				
Request Body	body. The 2	The modified properties and the list of devices need to be specified in an XML file in the body. The XSD is File9_device_properties.xsd. Key fields are  • ipAddr: the comma separated list of device access IP addresses for which properties have to be set  • propertyName: the name of the property  • propertyValue: the new value			
	Field	Туре	Description		
	Body	Properties XML	XML format can be obtained from - /rest/pub/cmdbDeviceInfo /properties		
	A sample X	ML example is Sample	_Device_Custom_Property_Request_Body.xml.		

Output

When the request succeeds (HTTP response code 200), the properties are modified as defined in the request.

# **Dashboard Integration**

This API enables you to interact with FortiSIEM Dashboard. You can perform the following operation:

• Add a Dashboard Folder

### Add a Dashboard Folder

This API enables you to add Dashboard folders to an Organization.

Release Added	5.1
Methodology	REST API based: Caller makes an HTTP(S) request with an input XML.
Request URL	Add a Dashboard folder to an Organization: https:// <fortisiem_supervisor_ip>/phoenix/rest/dashboard/html/add</fortisiem_supervisor_ip>
Input Parameters	Dashboard folder definition file.
Input Credentials	<b>Enterprise deployments</b> : User name and password of any FortiSIEM account. Use "super" as the organization for Enterprise deployments.
	Curl example: curl -k -u super/admin:Admin*123
	Service Provider deployments: User name and password of Super or organization specific account.  Curl example with super organization: curl -k -u super/admin:Admin*123  Note: If querying for a specific organization, replace "super" with the organization name.
Innut VMI	
Input XML	Contains dashboard details to be included in this folder:  - Dashboard folder name  - Organization name  - Time range  - Dashboard type
Output	An HTTP status code.

Refer to Example Usage for adding a Dashboard folder.

# **Events and Report Integration**

This REST API based caller makes an HTTP(S) request with an input XML that defines the query. Since a query can take some time and the number of returned results can be large, the query works as follows:

- 1. Caller submits the query and gets a Query Id back from FortiSIEM. This is done via Request API.
- 2. Caller polls for query progress and waits until the query is completed. This is done via Polling API.
- 3. When the query is completed, Caller gets the results via Results API.
  - a. Caller gets the total number of query results and the query result fields.
  - b. Caller gets the results one chunk at a time.

This API provides a way to programmatically run any query on the event data. Following are the specifications for:

- Request API
- Polling API
- Results API

# **Request API Specifications**

Release Added	5.1
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/query/eventQuery</fortisiem_supervisor_ip>
Input Parameters	XML file containing the query parameters.
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super account for getting incidents for all organizations. If incidents for a specific organization are needed, then an organization-specific account and an organization name is needed.         Curl example with super organization: curl -k -u super/admin:Admin*123         Note: If querying for a specific organization, replace "super" with the organization name.     </li> </ul>
Output	${\tt queryId}$ or an error code if there is a problem in handling the query or the query format.

# **Polling API Specifications**

The request will poll until the server completes the query.

Release Updated	6.7.0
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/query/progress/<requestid>, <expiretime></expiretime></requestid></fortisiem_supervisor_ip>
Output	progress (pct) Until progress reaches 100 (completed), caller needs to continue polling FortiSIEM. This is because the server may need to aggregate the results or insert meta-information before sending the results.

# **Results API Specifications**

Release Added	5.1
Input URL	https:// <fortisiem_supervisor_ IP&gt;/phoenix/rest/query/events/<requestid>,<expiretime>/<begin>/<end></end></begin></expiretime></requestid></fortisiem_supervisor_ 
Output	totalCount (first time) and an XML containing the incident attributes.  For the first call, <b>begin</b> = 0 and <b>end</b> can be 1000. You must continuously query the server by using the same URL, but increasing the begin and end until the totalCount is reached.

Refer to Example Usage for a sample query.

# **Event/Query Worker Configuration API**

These APIs enables you to query and make changes to event worker or query worker configurations.

- · Get Event Worker
- · Add Event Worker
- · Delete Event Worker
- · Get Query Worker
- · Add Query Worker
- · Delete Query Worker

### **Get Event Worker**

This GET API retrieves the list of Event Workers defined in FortiSIEM.

Release Added: 6.5.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/system/eventworker

#### **Input Credentials**

- Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

  Curl example: curl -k -u super/admin:Admin\*123
- Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

  Curl example with super organization: curl -k -u super/admin:Admin\*123

  If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**GET** 

### **Output**

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of Event Workers as defined in GUI. Sample JSON follows.

```
"addresses": [
    "wkl.acme.com",
    "192.0.2.0"
```

```
]
```

### **Add Event Worker**

This POST API enables you to add an Event Worker to the list of Event Workers defined in FortiSIEM.

Release Added: 6.5.0

Input URL https://<FortiSIEM Supervisor\_IP>/phoenix/rest/system/add/eventworker

### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

Curl example: curl -k -u super/admin: Admin\*123

• **Service Provider deployments:** User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

Curl example with super organization: curl -k -u super/admin:Admin\*123

If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**POST** 

### **Request Body**

Field	Туре	Description
Body	JSON array of Event Worker addresses entry	Event Worker FQDN or IP

### **Request Body Example**

```
{
"addresses": ["wk1.acme.com","wk2.acme.com"]
}
```

### Output

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of successful and failed additions.

```
[
"success": [
```

```
"Event worker added: wkl.acme.com"
],
  "failed": [
    "Not a valid worker address: invalidworkaddress"
]
```

#### **Delete Event Worker**

This POST API enables you to delete an Event Worker from the list of Event Workers defined in FortiSIEM.

Release Added: 6.5.0

Request URL https://<FortiSIEM Supervisor IP>/phoenix/rest/system/delete/eventworker

### **Input Credentials**

- Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.
  - Curl example: curl -k -u super/admin:Admin\*123
- Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

  Curl example with super organization: curl -k -u super/admin:Admin\*123

  If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

POST

### **Request Body**

Field	Туре	Description
Body	JSON array of Event Worker addresses entry	Event Worker FQDN or IP

### **Request Body Example**

```
{
"addresses": ["wk1.acme.com","wk2.acme.com"]
}
```

### **Output**

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of successful and failed additions.

```
"success": [
    "Event worker deleted: wkl.acme.com"
],
    "failed": [
        "Not a valid worker address: invalidworkaddress"
]
```

## **Get Query Worker**

This GET API retrieves the list of Query Workers defined in FortiSIEM.

Release Added: 6.5.0

Input URL https://<FortiSIEM Supervisor IP>/phoenix/rest/system/queryworker

#### **Input Credentials**

- Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

  Curl example: curl -k -u super/admin: Admin\*123
- Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

  Curl example with super organization: curl -k -u super/admin:Admin\*123

  If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**GET** 

### **Output**

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of Query Workers as defined in GUI. Sample JSON follows.

```
"addresses": [
    "wkl.acme.com",
    "192.0.2.84"
]
```

## **Add Query Worker**

This POST API is available to add Query Worker IP addresses or resolvable host names.

Release Added: 6.5.0

Input URL https://<FortiSIEM Supervisor IP>/phoenix/rest/system/add/queryworker

### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

Curl example: curl -k -u super/admin: Admin\*123

• Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

Curl example with super organization: curl -k -u super/admin:Admin\*123

If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**POST** 

#### **Request Body**

Field	Туре	Description
Body	JSON array of Query Worker addresses entry	Query Worker FQDN or IP

### **Request Body Example**

```
{
"addresses": ["wk1.acme.com","wk2.acme.com"]
}
```

### **Output**

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of successful and failed additions.

```
"success": [
   "Query worker added: wk1.acme.com"
],
"failed": [
   "Not a valid worker address: invalidworkaddress"
```

```
]
```

### **Delete Query Worker**

This POST API enables you to delete a Query Worker from the list of Query Workers defined in FortiSIEM.

Release Added: 6.5.0

Request URL https://<FortiSIEM Supervisor IP>/phoenix/rest/system/delete/queryworker

### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

Curl example: curl -k -u super/admin: Admin\*123

• **Service Provider deployments:** User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

Curl example with super organization: curl -k -u super/admin:Admin\*123

If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**POST** 

### **Request Body**

Field	Туре	Description
Body	JSON array of Query Worker FQDN or IP	Query Worker FQDN or IP

### **Request Body Example**

```
{
"addresses": ["wk1.acme.com","wk2.acme.com"]
}
```

### **Output**

When the request succeeds (HTTP response code 200), then a JSON file is returned with the list of successful and failed additions.

```
{
    "success": [
```

```
"Query worker deleted: wkl.acme.com"
],
"failed": [
   "Not a valid worker address: invalidworkaddress"
]
}
```

# External Help Desk/CMDB Inbound Integration

FortiSIEM has inbuilt support for ServiceNow and ConnectWise for CMDB and two-way incident integration. Other systems can be supported by creating a new Java plug-in. Follow the instructions in the FortiSIEM Service API which can be obtained from this website: https://filestore.fortinet.com/docs.fortinet.com/upload/FortiSIEMServiceAPIDocs.zip.

# **External Threat Intelligence Integration**

New external threat intelligence sources can be supported by creating a new Java plug-in. Follow the instructions in the FortiSIEM Service API which can be obtained from this website:

https://filestore.fortinet.com/docs.fortinet.com/upload/FortiSIEMServiceAPIDocs.zip.

# **Incident Integration**

The follow Incident Integration APIs are available.

- Incident Notification Integration
- Update Incident Attributes API
- JSON API Incident Integration

# **Incident Notification Integration**

FortiSIEM can send notifications via email/SMS, HTTPS, SNMP traps, and over the FortiSIEM API.

These topics describe the notification types:

- Email/SMS
- HTTPS
- SNMP Trap
- API
- · Get Triggering Event IDs for One or More Incidents

### **Notification via Email**

Email is the most common form of incident notification. While FortiSIEM has a default email format, users can also create their own email templates from the FortiSIEM GUI.

The screenshots show three types of email that can be sent depending on whether an incident is NEW, UPDATEd or CLEARed.

Release Added: 5.1

### **NEW**

```
[New] qa-v-win03-ads: Server CPU Warning

    notify@accelops.net

To: Partha Bhattacharya <partha@accelops.net>
[New] qa-v-win03-ads: Server CPU Warning
Incident ID: 333516
 Time: Wed Aug 11 09:53:00 PDT 2010
Severity: MEDIUM (5)
Incident Count: 1
  Rule Name: Server CPU Warning
  Rule Description: Detects that server CPU has reached a warning level (between 75% and 85% based on 2 successive readings in a
10 minute interval
 Host IP: 172.16.10.15
 Host Name: qa-v-win03-ads.prospect-hills.net
 CPU Util: 75.25
 Affected Business Services: Auth Service, DHCP/DNS Service
 Triggering Attribute(s):
 CPU Util: 75.25
```

#### **UPDATE**

[Update] ACCELOPS-A804CE: Server Memory Warning

⊖ notify@accelops.net

To: Partha Bhattacharya <partha@accelops.net>

[Update] ACCELOPS-A804CE: Server Memory Warning

Incident ID: 362034

First Seen Time: Wed Aug 11 13:11:00 PDT 2010 Last Seen Time: Wed Aug 11 16:45:00 PDT 2010

Severity: MEDIUM (5) Incident Count: 34

Rule

Rule Name: Server Memory Warning

Rule Description: Detects that server Memory has reached a warning level (between 75% and 85% based on 2 successive readings in

a 10 minute interval

Target

Host IP: 172.16.10.139 Host Name: ACCELOPS-A804CE

Memory Util: 78.55

Triggering Attribute(s): Memory Util: 78.55

#### **CLEAR**

[Clear] qa-v-win03-ads: Server CPU Critical

● notify@accelops.net

To: Partha Bhattacharya <partha@accelops.net>

[Clear] qa-v-win03-ads: Server CPU Critical

Incident ID: 382113

Time: Wed Aug 11 16:14:10 PDT 2010

First Seen Time: Wed Aug 11 15:48:00 PDT 2010 Last Seen Time: Wed Aug 11 15:54:00 PDT 2010

Severity: HIGH (9) Incident Count: 2

Rule

Rule Name: Server CPU Critical

Rule Description: Detects that server CPU has reached a critical level (greater than 85% based on 2 successive readings in a 10 minute interval

Target

Host IP: 172.16.10.15

Host Name: qa-v-win03-ads.prospect-hills.net

Detail

CPU Util: 89.00

Affected Business Services: Auth Service, DHCP/DNS Service

**Identity And Location** 

IP Details

IP Address: 172.16.10.15 Domain: PROSPECT-HILLS Host Name: QA-V-WIN03-ADS

First Seen Time: Wed Aug 11 14:58:35 PDT 2010 Last Seen Time: Wed Aug 11 16:12:13 PDT 2010

# **Subject Line Format**

[New|Update|Clear] <HostName>: <Rule Name>

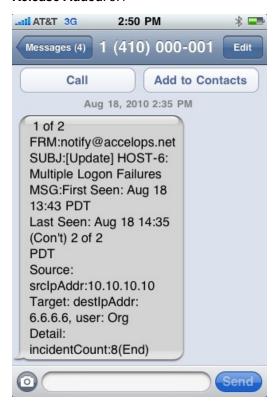
## **Body format**

Section	Field	Description		
Affected Business Services (optional)				
Generic				
Identity and Location		<ul> <li>Contains additional information for IP addresses in incident source or target. This information is present only if such information is discovered by FortiSIEM and shown in the Identity and Location tab.</li> <li>Host name</li> <li>User</li> <li>Domain</li> <li>Nearest switch name/port or VPN gateway or Wireless Controller</li> <li>First and last seen times for this IP address to identity/location binding</li> </ul>		
Incident Details		Rule-specific details that caused the incident to trigger		
Incident Source		For security-related incidents, where the incident originated		
Incident Target		Where the incident occurred, or the target of an IPS alert		
Rule	Rule Name	Name of the rule, repeated in the subject line		
	Incident Id	Unique ID of the incident in FortiSIEM. An incident can be searched in FortiSIEMby this ID.		
	Time	Time when this incident occurred		
	Severity	Incident severity: HIGH MEDIUM LOW and a numeric severity in the range 0-10 (0-4 LOW, 5-8 MEDIUM and 9-10 HIGH		
	Incident Count	How many times this incident has occurred. For NEW incidents, the count is 1.		
	Rule Description			
	Host Name (optional)			
	Host IP (optional)			
	Other attributes as defined in rule			
	Host Name (optional)			
	Host IP (optional)			

### **Notification via SMS**

SMS notification is a shortened version of email notification.

#### Release Added: 5.1



### **Notifications via HTTPS**

When an incident triggers, FortiSIEM can push an XML file containing Incident details via HTTP(S) POST.

#### Release Added: 5.1

The FortiSIEM AONotification.xsd file shows the XML schema for incident notifications.

```
<xs:complexType>
                       <xs:simpleContent>
                               <xs:extension base="xs:string">
                                        <xs:attribute type="xs:string" name="attribute"/>
                                        <xs:attribute type="xs:string" name="name"/>
                                 </xs:extension>
                       </xs:simpleContent>
       </xs:complexType>
</xs:element>
       </xs:sequence>
       </xs:complexType>
       </xs:element>
<xs:element name="incidentDetails">
       <xs:complexType>
       <xs:sequence>
       <xs:element name="entry">
               <xs:complexType>
                       <xs:simpleContent>
                               <xs:extension base="xs:float">
                                       <xs:attribute type="xs:string" name="name"/>
                               </xs:extension>
                       </xs:simpleContent>
               </r></xs:complexType>
       </xs:element>
       </xs:sequence>
       </xs:complexType>
</xs:element>
       <xs:element type="xs:string" name="affectedBizSrvc"/>
       <xs:element type="xs:string" name="identityLocation"/>
       </xs:sequence>
       <xs:attribute type="xs:short" name="incidentId"/>
       <xs:attribute type="xs:string" name="ruleType"/>
               <xs:attribute type="xs:byte" name="severity"/>
               <xs:attribute type="xs:byte" name="repeatCount"/>
               <xs:attribute type="xs:string" name="organization"/>
               <xs:attribute type="xs:string" name="status"/>
               </r></xs:complexType>
       </xs:element>
</xs:schema>
```

The description of each field is as follows:

Section	Field	Description
Generic		
	incidentId	Unique ID of the incident in FortiSIEM. An incident can be searched in FortiSIEM by this ID.
	ruleId	Unique id of the rule in FortiSIEM
	vendor	FortiSIEM
	severity	Incident severity: HIGH   MEDIUM   LOW

Section	Field	Description
	organization	The name of the organization for which this incident occurred
	status	New, Update or Clear
	repeatCout	how many times this incident has occurred
	name	Name of the rule that triggered the incident
	description	Description of the rule including conditions under which the rule is written to trigger
	displayTime	Time when this incident occurred
incidentTarget		Where the incident occurred, or the target of an IPS alert. It consists of attribute, name and value pairs.
	attribute	Parsed event attribute id
	name	Display name of the attribute. Common examples of attributes are srclpAddr, destlpAddr, hostlpAddr etc.
	value	The attribute's value
incidentSource		For security-related incidents, where the incident originated
	attribute	Parsed event attribute id
	name	Display name of the attribute. Common examples of attributes are srclpAddr, destlpAddr, hostlpAddr etc.
	value	The attribute's value
incidentDetails		Rule-specific details that caused the incident to trigger shown as an attribute with name and value pairs.
	attribute	Parsed event attribute id
	name	Display name of the attribute Common examples of attributes are srclpAddr, destlpAddr, hostlpAddr etc.
	value	The attribute's value
affectedBizSrvc		A comma-separated list of business service names
deviceDetails		Contains additional information for IP addresses in incident source or target. This information is present only if such information is discovered by FortiSIEM and shown in the Identity and Location tab.  • ipAddr

Section	Field	Description
		<ul> <li>hostName</li> <li>vendor</li> <li>model</li> <li>version</li> <li>users - Logged on users using this IP info obtained from Active Directory</li> <li>userName - Active Directory login name</li> <li>fullName - Full name of this user in Active Directory or defined manually</li> <li>email - email address of the user in Active Directory or defined manually</li> <li>jobTitle - jobTitle of the user in Active Directory or defined manually</li> <li>First and last seen times for this IP address to user binding</li> </ul>

### **Notification via SNMP Trap**

FortiSIEM can also send out SNMP traps when an incident triggers. Use the MIB file (available here) to configure your device to handle SNMP traps sent from FortiSIEM.

Release Added: 5.1

### **Notification via API**

You can also query for incidents via a REST API.

- · Request API Specifications
- Polling API Specifications
- Results API Specifications
- Incident Attribute List
- Incident XML Schema

This REST API based caller makes an HTTP(S) request with an input XML. An output XML is returned. Since the number of returned results can be large, the requester has to first get the total number of results, and then get the results one chunk at a time.

This REST API based caller makes an HTTP(S) request with an input XML that defines the query. Since a query can take some time and the number of returned results can be large, the query works as follows

- 1. Caller submits the query and gets a Query Id back from FortiSIEM. This is done via Request API.
- 2. Caller polls for query progress and waits until the query is completed. This is done via Polling API
- 3. When the query is completed, Caller gets the results via Results API.
  - a. Caller gets the total number of query results and the query result fields.
  - **b.** Caller gets the results one chunk at a time.

# **Request API Specifications**

Release Added	5.1
Input URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/query/eventQuery</fortisiem_supervisor_ip>
Input Parameters	XML file containing the query parameters
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123         If querying for a specific organization, replace "super" with the organization name.     </li> </ul>
Output	${\tt queryId}$ or an error code if there is a problem in handling the query or the query format.

# **Polling API Specifications**

The request will poll until the server completes the query.

Release Updated	6.7.0
Input URL	https:// <fortisiem_supervisor_ ip="">/phoenix/rest/query/progress/<requestid>,<expiretime></expiretime></requestid></fortisiem_supervisor_>
Output	progress (pct) Until progress reaches 100, at which point the server completes the query, you must continue polling the server. This is because the server may need to aggregate the results or insert meta-information before sending the results.

# **Results API Specifications**

Release Added	5.1
Input URL	https:// <fortisiem_supervisor_ IP&gt;/phoenix/rest/query/events/<queryid>/<begin>/<end></end></begin></queryid></fortisiem_supervisor_ 
Output	totalCount (first time) and an XML containing the incident attributes.  For the first call, <b>begin</b> = 0 and <b>end</b> can be 1000. You must continuously query the server by using the same URL, but increasing the begin and end until the totalCount is reached

#### **Incident Attribute List**

bizService, eventType, phCustId, incidentClearedReason, incidentTicketStatus, incidentLastSe en, eventSeverity, incidentTicketUser, hostIpAddr, eventName, phEventCategory, incidentTicket Id, count, incidentDetail, incidentSr

c, eventSeverityCat, incidentFirstSeen, incidentViewUsers, incidentComments, incidentCleared
User, incidentNoti

Recipients, incidentId, phRecvTime, incidentStatus, incidentViewStatus, incidentTarget, incidentRptIp

#### **Incident Notification XML Schema**

#### The following is the schema for incident notification output file:

```
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"</pre>
xmlns:xs="http://www.w3.org/2001/XMLSchema">
<xs:element name="incident">
<xs:complexType>
<xs:sequence>
       <xs:element type="xs:string" name="name"/>
       <xs:element type="xs:string" name="description"/>
       <xs:element type="xs:string" name="displayTime"/>
       <xs:element type="xs:string" name="incidentSource"/>
       <xs:element name="incidentTarget">
               <xs:complexType>
                       <xs:sequence>
                               <xs:element name="entry">
                               <xs:complexType>
                               <xs:simpleContent>
                                        <xs:extension base="xs:string">
                                        <xs:attribute type="xs:string" name="attribute"/>
                                        <xs:attribute type="xs:string" name="name"/>
                               </xs:extension>
                               </xs:simpleContent>
                       </xs:complexType>
               </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="incidentDetails">
<xs:complexType>
<xs:sequence>
<xs:element name="entry"> <xs:complexType>
               <xs:simpleContent>
                       <xs:extension base="xs:float">
                               <xs:attribute type="xs:string" name="attribute"/>
                                        <xs:attribute type="xs:string" name="name"/>
                                                </xs:extension>
                                                        </xs:simpleContent>
                                                        </xs:complexType>
                                                </xs:element>
                                        </xs:sequence>
                               </xs:complexType>
                               </xs:element>
```

Refer to Example Usage for incident notification via API.

## **Get Triggering Event IDs for One or More Incidents**

This API enables you to get the triggering event IDs for one or more incidents

### **API Specifications**

Release Added	5.2.5
Methodology	REST API based: Caller makes an HTTPS request with query parameter: incidentId.
Request URL	https:// <fortisiem_supervisor_ip>/phoenix/rest/incident/triggeringEvents?incidentIds=<incidentid1>,<incidentid2></incidentid2></incidentid1></fortisiem_supervisor_ip>
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123     </li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.</li> <li>Curl example with super organization: curl -k -u super/admin:Admin*123</li> <li>If querying for a specific organization, replace "super" with the organization name.</li> </ul>
Input Parameters	Query parameters: incidentIds
Output	XML that contains the triggered event IDs for all incidents in the input list.

Refer to Example Usage to get the list of monitored devices and attributes.

# **Update Incident Attributes**

This API enables you to update certain incident attributes.

Release Added	5.2.5	
Methodology	REST API based: Caller makes an HTTPS request with an input JSON containing the updated incident attributes	
Request URL	https:// <fortisiem_supervisor_ip>/phoenix /rest/incident/external</fortisiem_supervisor_ip>	
Input Credentials	<ul> <li>Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.         Curl example: curl -k -u super/admin:Admin*123</li> <li>Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.         Curl example with super organization: curl -k -u super/admin:Admin*123         If querying for a specific organization, replace "super" with the organization name.</li> </ul>	
Input JSON	<pre>RequestPayload: {"incidentId":"1", "comments":"XYZ", "incidentStatus": "3", "externalTicketType":"MEDIUM", "externalTicketId": "1111", "externalTicketState":"CLOSED", "externalAssignedUser":"ABC"}  • incidentId - Incident ID for the incident to be updated • comments - Any comments • incidentStatus - 0 (Active), 1 (Auto Cleared), 2 (Manually Cleared), or 3 (System Cleared) • externalTicketType - Low, Medium, or High • externalTicketId - External Ticket ID</pre>	
	<ul> <li>externalTicketState - New, Assigned, In Progress, or Closed</li> <li>externalAssignedUser - External Assigned User</li> </ul>	

Refer to Example Usage to get the list of monitored devices and attributes.

# **JSON API Incident Integration**

These JSON REST APIs allow you to integrate incidents from FortiSIEM. This is used for ServiceNow SecOps integration.

- Fetch Incidents
- Fetch Trigger Events

- Update Incidents
- Integer Field Mapping to Description

A list of FortiSIEM Incident attributes can be found here.

Refer to Example Usage for Incident Integration examples.

## **Fetch Incidents**

This API retrieves incidents from FSIEM database.

Release Added: 6.3.0

URI	Method	Additional Information
/phoenix/rest/pub/incident	GET	Parameters  "status": [0],  * "incidentId":[8064],  * "timeFrom": 1620677781736, (Required)  * "timeTo": 1620684981736, (Required)  * "start":0,(optional)  * "size": 500 (by default, return 500 incidents each time)
/phoenix/rest/pub/incident	POST	Payload:
		<pre>"filters": {         " status": [0],         "incidentId":[8064] }, "start":0,(optional) "size":500,(by default, return 500 incidents each time)         "timeFrom": 1620677781736, (Required if incidentId is not specified) "timeTo": 1620684981736, (Required if incidentId is not specified)         "orderBy": "incidentLastSeen", (this field must be in the list of fields)         "descending": true,         "fields": [             "eventSeverityCat",             "eventSeverity",             "incidentLastSeen",             "incidentFirstSeen",             "eventType",</pre>

```
URI
                         Method
                                    Additional Information
                                            "eventName",
                                            "incidentSrc",
                                            "incidentTarget",
                                            "incidentDetail",
                                            "incidentRptIp",
                                            "incidentRptDevName",
                                            "incidentStatus",
                                            "incidentComments",
                                            "customer",
                                            "incidentClearedReason",
                                            "incidentClearedTime",
                                            "incidentClearedUser",
                                            "count",
                                            "incidentId",
                                            "incidentSrc",
                                            "incidentTarget",
                                            "incidentExtUser",
                                            "incidentExtClearedTime",
                                            "incidentExtTicketId",
                                            "incidentExtTicketState",
                                            "incidentExtTicketType",
                                            "incidentReso",
                                            "phIncidentCategory",
                                            "phSubIncidentCategory",
                                            "incidentTitle",
                                            "attackTechnique",
                                            "attackTactic"
                                        1
                                    }
                                    Returns:
                                        "total": 317,
                                       "start":0,
                                        "size": 10,
                                        "data": [
                                                "incidentTitle": "SNMP service down on
                                   wk5794.fortinet.com",
                                                "eventSeverity": 10,
                                                "incidentFirstSeen": 1621941030000,
                                                "incidentReso": 1,
                                                "incidentRptIp": "172.30.57.94",
                                                "incidentLastSeen": 1621987770000,
```

```
URI
                        Method
                                   Additional Information
                                               "incidentSrc": "",
                                               "count": 54,
                                               "attackTechnique": "[{\"name\": \"Service
                                   Stop\", \"techniqueid\": \"T1489\"}]",
                                               "eventType": "PH_RULE_SNMP_DOWN",
                                               "phIncidentCategory": 1,
                                               "incidentClearedTime": 0,
                                               "incidentTarget": "hostIpAddr:172.30.57.94,
                                   hostName:wk5794.fortinet.com,",
                                               "attackTactic": "Impact",
                                               "eventSeverityCat": "HIGH",
                                               "incidentDetail": "",
                                               "incidentRptDevName":
                                   "wk5794.fortinet.com",
                                               "eventName": "SNMP Service Unavailable",
                                               "incidentId": 114780,
                                               "incidentStatus": 0,
                                               "customer": "Super"
                                      ]
```

# **Fetch Trigger Events**

This API retrieves triggering events from incidents.

Release Added: 6.3.0

URI	Method	Additional Information
/phoenix/rest/pub/incident/triggeringEvents?incidentId=8&size =10	GET	Parameters: incidentId: FortiSIEM incident Id (Required) size: indicates how many trigger events return, 10 events by default if no size specific.  Returns:  [

URI Method Additional Information	
"id": 6482650188627892000,	PH

URI	Method	Additional Information
		ayDevName]=sp5875,
		[relayDevIpAddr]=172.30.58.7
		<pre>5,[phLogDetail]=A performance</pre>
		metric delay for a single
		device crossed high water
		mark",
		"15":
		6482650188627892000,
		"16": 3,
		"17": 1,
		"21": 1,
		"24": "LOW",
		"43": "Fortinet",
		"44":
		"FortiSIEM",
		"53": "Super",
		"110": 1,
		"122":
		"PHBoxParser",
		"129": 1,
		"1005":
		"172.30.58.50",
		"1006":
		"FGT50E3U17000553",
		"2007":
		"AppServer",
		"4506": "CPU Util
		(SNMP)"
		},
		"eventAttributes": [
		1,
		"dataStr": { }
		}
		]

# **Update Incidents**

This API allows you to update incident ticket status.

Release Added: 6.3.0

URI	Method	Additional Information
/phoenix/rest/pub/incident/update/ {incidentId}	POST	Parameter: IncidentId: FortiSIEM incident Id (Required) Payload:

URI	Method	Additional Information
		{
		"incidentExtUser":"User A",
		"incidentExtClearedTime":1620677781736,
		(Timestamp)
		"incidentExtTicketId":"INS00456",
		(Required)
		"incidentExtTicketState":"Closed",
		"incidentExtTicketType":""
		}

# **Integer Field Mapping to Descriptions**

### **Incident Status**

```
"incidentStatus":,

ACTIVE = 0;

AUTOMATICALLY CLEARED = 1;

MANUALLY CLEARED = 2;

SYSTEM CLEARED = 3
```

### **Incident Resolution**

```
None = 0
Open = 1
TruePositive = 2
FalsePositive = 3
InProgress = 4
```

"incidentReso":

## **Incident Category**

```
"phIncidentCategory":,
AVAILABILITY = 1;
PERFORMANCE = 2;
CHANGE = 3;
SECURITY = 4;
```

OTHER = 5;

### **FortiSIEM Incident Attributes List**

```
"eventSeverityCat",
"eventSeverity",
"incidentLastSeen",
"incidentFirstSeen",
"eventType",
"eventName",
"incidentSrc",
"incidentTarget",
"incidentDetail",
"incidentRptlp",
"incidentRptDevName",
"incidentStatus",
"incidentComments",
"customer",
"incidentClearedReason",
"incidentClearedTime",
"incidentClearedUser",
"count",
"incidentId",
"incidentExtUser",
"incidentExtClearedTime",
"incidentExtTicketId",
"incidentExtTicketState",
"incidentExtTicketType",
"incidentReso",
"phIncidentCategory",
"phSubIncidentCategory",
"incidentTitle",
"attackTechnique",
```

"attackTactic"

# **Lookup Table Integration**

The following Lookup Table Integration APIs are available:

- POST pub/lookupTable
- · GET pub/lookup Table
- DELETE pub/lookupTable/{lookupTableId}
- POST pub/lookupTable/{lookupTableId}/import
- GET pub/lookupTable/{lookupTableId}/task/{taskId}
- GET pub/lookupTable/{lookupTableId}/data
- PUT pub/lookupTable/{lookupTableId}/data
- PUT pub/lookupTable/{lookupTableId}/data/delete

# POST pub/lookupTable

## **LookupTable - Post**

The LookupTable endpoint allows you to create the definition of a lookupTable.

Release Added: 6.4.0

### Resource

POST /pub/lookupTable

### **Authorization**

Basic access authentication

### **Post Parameters**

Name	Туре	Description
name	string	The lookup table name.
description	string	Description of the lookup table.
custID	integer	The Organization ID: id of the organization on which to create the lookup table. To

Name	Туре	Description
(optional)		retrieve this ID, navigate to <b>ADMIN &gt; Setup &gt; Organizations</b> , and refer to the <b>ID</b> column.
columnList[]	array	The list of column definitions of the lookup table.
columnList [].key	boolean	Whether the primary column is key.
columnList [].name	string	The column name.
columnList [].type	string	The column type, which can be STRING, LONG, or DOUBLE

## **Example**

```
"name": "csurl_scores",
  "description": "",
  "organizationName": "Super",
  "columnList": [
      "key": true,
     "name": "url",
     "type": "STRING"
    },
      "key": false,
      "name": "wfCategoryID",
      "type": "LONG"
    },
     "key": false,
      "name": "score",
      "type": "DOUBLE"
  ]
}
```

# Response

```
Status-Code: 200 OK
{
   "id": 1250451,
   "name": "csurl_scores",
   "description": "",
   "organizationName": "Super",
```

### **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# **GET pub/lookup Table**

# LookupTable - Get

The LookupTable endpoint lets you retrieve the list of lookupTable definitions.

Release Added: 6.4.0

### Resource

GET /pub/lookupTable

## **Authorization**

Basic access authentication

## **Query Parameters**

Name	Туре	Description
status (optional)	integer	Offset the list of returned results by this amount. Default is zero.
size (optional)	integer	Number of items to retrieve. Default is 25, maximum is 1000.

### **Example Request**

Replace < credentials > in the example below with the Base64 encoding of username and password joined by a single colon :

```
curl -H 'Authorization: Basic <credentials>' \
    -H 'content-type: application/json' \
    'https://<IP>/phoenix/rest/pub/lookupTable'
```

### Response

```
Status-Code: 200 OK
```

```
"data": [
    "columnList": [
        "key": true,
        "name": "url",
        "type": "STRING"
      },
        "key": false,
        "name": "wfCategoryID",
        "type": "LONG"
      },
        "key": false,
        "name": "score",
        "type": "DOUBLE"
    ],
    "organizationName": "Super",
    "description": "",
    "id": 1250451,
    "lastUpdated": 1632432976253,
    "lastUpdatedResult": "importDataViaFile : 24181 rows are imported successful.",
    "name": "csurl_scores"
],
"total": 1,
"start": 0,
"size": 25
```

# **Request Parameters**

Name	Туре	Description
total	string	Total number of items.
start	integer	Position in pagination.
size	integer	Number of items to retrieve.
data	array	An array of lookup Table definition.
data[].id	integer	The lookup Table ID.
data[].organizationName	integer	The organization name.
data[].name	string	The lookup Table name.
data[].description	string	The description of the lookup Table.
data[].lastUpdated	integer	Unix timestamp when the last update of the lookup Table content occurred.
data[].lastUpdatedResult	string	The result of the last updated lookup Table content.
data[].columnList[]	array	The list of column definitions of the lookup Table.
data[].columnList[].key	boolean	Whether it is the primary column key.
data[].columnList[].name	string	The column name.
data[].columnList[].type	string	The column type, which can be STRING, LONG, or DOUBLE.

## **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# DELETE pub/lookupTable/{lookupTableId}

# **LookupTable - Delete**

The LookupTable endpoint allows you to delete the lookupTable definition.

Release Added: 6.4.0

#### Resource

DELETE /pub/lookupTable/{lookupTableId}

### **Authorization**

Basic access authentication

#### **Path Parameters**

Name	Туре	Description
lookupTableId	integer	Unique identifier representing the lookup Table.

## **Query Parameters**

None

## **Example Request**

```
curl -H 'Authorization: Basic <credentials>' \
    -H 'content-type: application/json' \
    -X DELETE \
    'https://<IP>/phoenix/rest/pub/lookupTable/<lookupTableId>'
```

# Response

Status-Code: 204 No Content

# POST pub/lookupTable/{lookupTableId}/import

# LookupTable import data - Post

The LookupTable endpoint allows importing the data of lookupTable.

Release Added: 6.4.0

### Resource

POST /pub/lookupTable/{lookupTableId}/import

## **Authorization**

Basic access authentication

### **Post Parameters**

Content-Type: multipart/form-data

Name	Туре	Description
file	file	CSV file.
mapping	string	The configuration matches the position of columns in the CSV file to columns in lookup Table. Format as below:
		<pre>{     "<lookuptable_column_name_1>":<position_1>, "<lookuptable_column_name_2>":<position_2>, } </position_2></lookuptable_column_name_2></position_1></lookuptable_column_name_1></pre> <pre> <lookuptable_column_name_1>: string </lookuptable_column_name_1></pre> <pre> <position>: integer (from 1) {     "url":1,     "wfCategoryID":2 }</position></pre>
fileSeparator (optional)	string	The csv file separator. Default is the comma character, ",".
fileQuoteChar (optional)	string	The csv file quote character. Default is the double quotation character, """.
skipHeader (optional)	boolean	Whether to ignore the csv file header. Default is false.
updateType (optional)	string	Data update type. Either "Overwrite" or "Append". Default is "Overwrite".

# **Example Request**

```
curl -H 'Authorization: Basic <credentials>' \
    -X POST \
    'https://<IP>/phoenix/rest/pub/lookupTable/<lookupTableId>/import'
    -F 'file=@"/<FileDir>/<FileName>.csv"' \
    -F 'mapping="{\"url\":1,\"wfCategoryID\":2}"' \
    -F 'fileSeparator=","' \
```

```
-F 'fileQuoteChar="\""' \
-F 'skipHeader="true"'
```

## Response

Content-Type: application/json

Status-Code: 200 OK

```
{
  "taskId": 1250
}
```

Name	Туре	Description
taskld	long	The task id of importing data to the lookupTable.

### **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# GET pub/lookupTable/{lookupTableId}/task/{taskId}

# LookupTable check importing task status - Get

The LookupTable endpoint allows checking the status of import data.

Release Added: 6.4.0

### Resource

GET /pub/lookupTable/{lookupTableId}/task/{taskId}

### **Authorization**

Basic access authentication

### **Path Parameters**

Name	Туре	Description
lookupTableId	integer	The lookup Table Id.
taskld	integer	The task id of the importing data to the lookup Table. It is retrieved from the Import API response.

## **Example Request**

Replace < credentials > in the example below with the Base64 encoding of username and password joined by a single colon:

```
curl -H 'Authorization: Basic <credentials>' \
    -H 'content-type: application/json' \
    'https://<IP>/phoenix/rest/pub/lookupTable/<lookupTableId>/task/<taskId>'
```

## Response

```
Status-Code: 200 OK
```

```
"id": 1250
"status": "Done",
"progress": 100,
  "actionResult": "557 rows are imported successful."
```

Name	Type	Description
id	integer	The id of task.
status	string	The status of task.
progress	integer	The progress of task.
actionResult	string	The action result of import data task.

### **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.

# GET pub/lookupTable/{lookupTableId}/data

## **Query LookupTable Data - Get**

The LookupTable endpoint allows retrieving items of lookupTable.

Release Added: 6.4.0

#### Resource

GET /pub/lookupTable/{lookupTableId}/data

### **Authorization**

Basic access authentication

## **Query Parameters**

Name	Туре	Description
start (optional)	integer	Offset the list of returned results by this amount. Default is zero.
size (optional)	integer	Number of items to retrieve. Default is 25, maximum is 1000.
searchText (optional)	string	Search text.
sortBy (optional)	string	Sorted by one of lookupTable columns with descending order. Format: <columnname><a blank="" space=""><acs ascending="" desc="" descending="" for="" or="" order="" respectively=""></acs></a></columnname>

# **Example Request**

Replace < credentials > in the example below with the Base64 encoding of username and password joined by a single colon :

## Response

```
Status-Code: 200 OK
  "data": [
     "url": "http://example.com",
     "wfCategoryID": 26,
     "score": 0.20050119
    } ,
       "url": "http://www.sample.com/wp-login.php",
       "wfCategoryID": 26,
       "score": 0.25293878
    },
       "url": "http://www.instance.com/casel",
       "wfCategoryID": 26,
       "score": 0.25635383
    },
       "url": "http://www.instance.com/case2",
       "wfCategoryID": 26,
       "score": 0.25635383
    }
  ],
  "total": 4,
  "start": 0,
  "size": 25
```

Name	Туре	Description
total	string	Total number of items.
start	integer	Position in pagination.
size	integer	Number of items to retrieve (1000 max).
data	array	An array of lookup Table items. Each item is a dictionary which contains lookupTable column name and its value.

## **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# PUT pub/lookupTable/{lookupTableId}/data

### **Update LookupTable Data - PUT**

The LookupTable endpoint allows updating the item of lookupTable.

Release Added: 6.4.0

#### Resource

PUT /pub/lookupTable/{lookupTableId}/data

### **Authorization**

Basic access authentication

### **Path Parameters**

Name	Туре	Description
lookupTableId	integer	Unique identifier representing the lookup Table.

# **Query Parameters**

Name	Туре	Description
key	map	The primary key of item column and its value. Format: {" <keycolumn_1>":<value>}</value></keycolumn_1>
		<pre>key={"url":"http://example.com"}</pre>

# **Example Request**

Replace < credentials > in the example below with the Base64 encoding of username and password joined by a single colon :

```
curl -g -H 'Content-Type: application/json' \
    -H 'Authorization: Basic <credentials>' \
    -X PUT \
'https://<IP>/phoenix/rest/pub/lookupTable/<lookupTableId>/data?key=
{%22url%22:%20%22http://example.com%22}' \
    --data-raw \
    '{
        "url": "www.test.com",
        "wfCategoryID": 30,
```

```
"score": 0.50119
```

# **PUT Body**

```
{
  "url": "http://test.com"
  "wfCategoryID": 30,
  "score": 0.50119
}
```

Name	Type	Description
<lookuptablecolumnname></lookuptablecolumnname>	string	Column name.
<value></value>	string, integer, double	Value.

## Response

Status-Code: 200 OK

## **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# PUT pub/lookupTable/{lookupTableId}/data/delete

# **Delete LookupTable Data- PUT**

The LookupTable endpoint allows deleting the lookupTable item.

Release Added: 6.4.0

### Resource

PUT /pub/lookupTable/{lookupTableId}/data/delete

### **Authorization**

Basic access authentication

### **Path Parameters**

Name	Туре	Description
lookupTableId	integer	Unique identifier representing the lookup Table.

### **Post Parameters**

Name	Type	Description	
<array></array>	list	List of primary key and value map.	
<map></map>	map	The primary key of item column and its value. Format: {" <keycolumn_1>":<value>}</value></keycolumn_1>	
		{"url":"http://example.com"}	

## **Example Request**

# Response

Status-Code: 204 No Content

## **HTTP Error Codes**

HTTP Status	Code	Description
401	unauthorized	The bearer credential is invalid.
400	bad request	The request made is incorrect or corrupt.
422	missing parameters	Parameters are missing in query/request body.
423	invalid parameters	The parameters are invalid in path/query/request body.

# Performance and Health API

The following GET APIs are available for retrieving health summary and health details of FortiSIEM Manger and the FortiSIEM Instances which are registered to the FortiSIEM Manager.

- · Get Health Summary
- · Get Health Details by Instance Id
- Get Health Details Complete Response

# **Get Health Summary**

This API can be run against the Supervisor of a single FortiSIEM instance or against FortiSIEM Manager.

- Single Instance Supervisor returns the health *summary* of the Supervisor, Workers and Collectors in that FortiSIEM Instance.
- FortiSIEM Manager returns the health *summary* of FortiSIEM Manager and all the FortiSIEM instances registered to that FortiSIEM Manager.

Release Added: 6.5.0

Input URL https://<FortiSIEM\_Supervisor\_

(FortiSIEM Supervisor) IP>/phoenix/rest/system/health/summary

### **Input Credentials**

• **Enterprise deployments:** User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

```
Curl example: curl -k -u super/admin: Admin*123
```

• **Service Provider deployments:** User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

```
Curl example with super organization: curl -k -u super/admin:Admin*123
```

If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**GET** 

### **Output**

When the request succeeds (HTTP response code 200), a JSON file is returned with all information included.

The Instance health summary returned by Single Instance Supervisor includes the health summary of the Supervisor, all Workers, and Collectors. If the health of a node is anything other than normal, then the offending metric indicator is also included. See File1\_InstanceHealthSummaryExample.txt.

The health summary returned by FortiSIEM Manager includes the health summary of all registered Instances and FortiSIEM Manager itself. The health summary of a registered FortiSIEM instance includes the health summary of the Supervisor, all Workers, and Collectors in that Instance. If the health of a node is anything other than normal, then the offending metric indicator is also included. See File2\_ManagerHealthSummaryExample.txt.

Health is based on the following.

- Generic metrics CPU, Load average, Memory, Swap, Disk space, Disk I/O, Process Uptime/CPU/Memory
- Supervisor specific metrics NFS I/O, Shared Store pointers
- Worker specific metrics Worker Upload Queue, NFS I/O, Shared Store pointers, Last Status Update
- Collector Specific metrics Event Upload Queue, Last Status Update, Last File Received, Last Event Received

The health metrics are defined in Appendix - Description of Health JSON Attributes. The thresholds used to determine normal/warning/critical status are in Appendix - Current Thresholds for Health Status. Note that only the latest values are returned by the API.

# Get Health Details by Instance Id

This API provides complete health information of specific FortiSIEM instance with given Instance Id. The instance Id can be obtained from running the Get Health Summary API.

Release Added: 6.5.0

Input https://<FortiSIEM\_Supervisor\_</pre>

URL IP>/phoenix/rest/system/health/instance?instanceId=<instance\_id>

#### **Input Credentials**

- Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

  Curl example: curl -k -u super/admin:Admin\*123
- Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

  Curl example with super organization: curl -k -u super/admin:Admin\*123

  If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**GET** 

#### **Request Path Parameter**

Field	Description
Replace <instance_id> with long value</instance_id>	Instance id of specific instance

#### **Output**

When the request succeeds (HTTP response code 200), a JSON file is returned with the following.

- Health metrics of each node (including Super, Workers and Collectors)
- · Health assessment of each node

See File3\_InstanceHealth\_DetailsExample.txt for an example.

Health metrics includes the following.

- Generic metrics CPU, Load average, Memory, Swap, Disk space, Disk I/O, Process Uptime/CPU/Memory, EPS
- Supervisor specific metrics NFS I/O, Shared Store pointers
- Worker specific metrics Worker Upload Queue, NFS I/O, Shared Store pointers, Last Status Update
- Collector Specific metrics Event Upload Queue, Last Status Update, Last File Received, Last Event Received

The health metrics are defined in Appendix - Description of Health JSON Attributes. The thresholds used to determine normal/warning/critical status are in Appendix - Current Thresholds for Health Status. Note that only the latest values are returned by the API.

# **Get Health Details – Complete Response**

This API returns the complete health information of FortiSIEM Manager and all FortiSIEM nodes belonging to each FortiSIEM Instance registered to the FortiSIEM Manager. This can be quite large depending on the number of registered instances and the number of nodes in each instance.

Release Added: 6.5.0

Input URL https://<FortiSIEM Manager IP>/phoenix/rest/system/health

# Input Credentials

- Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

  Curl example: curl -k -u super/admin: Admin\*123
- Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

  Curl example with super organization: curl -k -u super/admin:Admin\*123

  If querying for a specific organization, replace "super" with the organization name.

#### **HTTP Method**

**GET** 

#### **Output**

When the request succeeds (HTTP response code 200), a JSON file is returned with the following.

- · Health metrics of FortiSIEM Manager and each Super/Worker/Collector node in every registered Instance
- · Health assessment of each node

See File4\_ManagerHealth\_DetailsExample.txt for an example.

Health metrics includes the following.

- Generic metrics CPU, Load average, Memory, Swap, Disk space, Disk I/O, Process Uptime/CPU/Memory, EPS
- Supervisor specific metrics NFS I/O, Shared Store pointers
- Worker specific metrics Worker Upload Queue, NFS I/O, Shared Store pointers, Last Status Update
- Collector Specific metrics Event Upload Queue, Last Status Update, Last File Received, Last Event Received

The health metrics are defined in Appendix - Description of Health JSON Attributes. The thresholds used to determine normal/warning/critical status are in Appendix - Current Thresholds for Health Status. Note that only the latest values are returned by the API.

# REST API to Return Worker Queue State

The following public REST API can be used to query Worker Event Upload Queue state. An upstream load balancer can use the information to route events from Collectors to the least loaded Worker.

Release Added: 6.4.0

API:GET https://<Worker\_IP>/workerUploadHealth/response.json

Response: { allowUpload: true, fileQueueSizeMB: 500, fileQueueCount: 300 }

Response Parameter	Description
allowUpload	True means Worker upload queue is less than 100MB and Worker will accept events.  False means Worker upload queue is more than 100MB and Worker will reject events. This is likely because inserts to event database is slow.
fileQueueSizeMB	Current file queue size in MB.
fileQueueCount	Current file queue count.

# Watchlist Integration

The Watchlist Integration APIs are broken down into the following sections:

- · Read APIs for Integration with FortiGate Firewalls
  - · Get IPs
  - Get Domains
  - · Get Hash
- · Generic Read APIs
  - · Get All Watch Lists
  - · Get Watch List Entries Count
  - · Get Watch List by Watch List ID
  - Get Watch List by Watch List Entry Value
  - · Get Watch List by Watch List Entry ID
  - · Get Watch List Entry by Watch List Entry ID
- Update APIs
  - Update State of Watch List Entry by Watch List Entry ID
  - · Update State of Watch List Entry by Watch List Entry Value
  - Update Last Seen Time of Watch List Entry by Watch List Entry ID
  - Update Last Seen Time of Watch List Entry by Watch List Entry Value
  - Update Count of Watch List Entry by Watch List Entry ID
  - Update Count of Watch List Entry by Watch List Entry Value
  - Add Watch List Entry(s) to Watch List Groups
  - Save Watch List Groups with Watch List Entry(s)
  - Update Specific Watch List Entry
- Delete APIs
  - Delete Watch List Entry by ID
  - · Delete Watch List by ID
- · JSON Object Formats
  - Watch List Entry JSON
  - Watch List JSON

Refer to Example Usage for Watchlist Integration examples.

# Read APIs for Integration with FortiGate Firewalls

The following Read APIs return the content in a simplified way to make it easy for the requestor to process the results. FortiGate firewalls can use these APIs natively as a threat feed (For details, see FortiGate/FortiOS Cookbook Threat feeds).

- GET IPs
- GET Domains
- GET Hash

#### **Get IPs**

Use this GET API to retrieve list of watch list IPs with given watch list name. For use with FortiGate.

Release Added: 6.6.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/ip?name=<watchlist\_name>

#### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

Curl example: curl -k -u super/admin: Admin\*123

• Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

Curl example with super organization: curl -k -u super/admin:Admin\*123

If guerying for a specific organization, replace "super" with the organization name.

#### **Request Path Parameter**

Field	Туре	Description
Name	String	Watch list name

Response Status	Response
Success: When the request succeeds (HTTP response code 200), an empty set or a list of list separated IPs is returned.	Example: 10.0.0.1 145.12.14.75 172.30.58.10
Error: When the request fails (HTTP response code not 200).	<ol> <li>Response contains failed reason.         Example: Wrong watchlist name error.         {"response":"DyWatchList@DNS was not found", "status":"Failed"}</li> <li>Response empty.</li> </ol>

#### **Get Domains**

Use this GET API to retrieve list of watch list domains with given watch list name. For use with FortiGate.

Release Added: 6.6.0

Input https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/domain?name=<watchlist\_name>

#### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments.

Curl example: curl -k -u super/admin:Admin\*123

• Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access.

Curl example with super organization: curl -k -u super/admin:Admin\*123

If querying for a specific organization, replace "super" with the organization name.

#### **Request Path Parameter**

Field	Туре	Description
Name	String	Watch list name

#### **Output**

Response Status	Response
Success: When the request succeeds (HTTP response code 200), empty set or a list of list separated domains is returned	Example: Google.com Fortinet.com Host.fsm-ip.com
Error: When the request fails (HTTP response code not 200).	<ol> <li>Response contains failed reason.         Example: Wrong watchlist name error.         {"response":"DyWatchList@DNS was not found", "status":"Failed"}     </li> <li>Response empty.</li> </ol>

#### **Get Hash**

Use this GET API to retrieve list of Hash (only MD5, SHA1 and SHA256 hash) with given watch list name. For use with FortiGate.

#### Release Added: 6.6.0

Input https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/hash?name=<watchlist\_name>

#### **Input Credentials**

• Enterprise deployments: User name and password of any FortiSIEM account that has the appropriate access. Use "super" as the organization for Enterprise deployments. Curl example: curl -k -u super/admin: Admin\*123

Service Provider deployments: User name and password of Super Global account or Organization specific account and name. Make sure that the account has the appropriate access. Curl example with super organization: curl -k -u super/admin:Admin\*123 If querying for a specific organization, replace "super" with the organization name.

#### **Request Path Parameter**

Field	Туре	Description
Name	String	Watch list name

#### **Output**

Response Status	Response
Success: When the request succeeds (HTTP response code 200), an empty set or a list of list separated hash (only get MD5, SHA1 and SHA256 hash) is returned.	Example: 771ab1c7c8e5c4ad1113ec58a41cc697 73e5eb7be756f6264gyy6e8c22ff5x97fb1fab17 D4C9D9059326271A89CE57FCAF328ED673F46BE33469FF979E8AB8DD501E554F
Error: When the request fails (HTTP response code not 200).	<ol> <li>Response contains failed reason.         Example: Wrong watchlist name error.         {"response":"DyWatchList@DNS was not found", "status":"Failed"}</li> <li>Response empty.</li> </ol>

# **Generic Read APIs**

These GET APIs are available to retrieve watch lists from the FortiSIEM database.

- · Get All Watch Lists
- · Get Watch List Entries Count
- · Get Watch List by Watch List ID

- · Get Watch List by Watch List Entry Value
- · Get Watch List by Watch List Entry ID
- · Get Watch List Entry by Watch List Entry ID

#### **Get All Watch Lists**

This API retrieves all the watch lists from FSIEM database.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/all

```
Response
                 Response
Status
Success
                       "response": [{
                             "topGroup": false,
                             "entries": [
                                      "lastSeen": 1613719690008,
                                      "naturalId": "PVVol A001 A000356 POWER2
                 1613719690011",
                                      "dataCreationType": "SYSTEM",
                                     "firstSeen": 1613719690008,
                                     "count": 10,
                                      "custId": 1,
                                     "triggeringRules": "Datastore Space Warning",
                                      "description": "WL Des",
                                     "id": 889401,
                                     "state": "Enabled",
                                      "entryValue": "PVVol_A001_A000356_POWER2",
                                     "expiredTime": 0,
                                      "ageOut": "1d"
                                 },
                                      "lastSeen": 1613719690000,
                                     "naturalId": "PVVol A001 A000356 POWER2
                 1613719690011",
                                     "dataCreationType": "SYSTEM",
                                      "firstSeen": 1613719000000,
                                     "count": 100,
                                      "triggeringRules": "Datastore Space Warning",
```

```
Response
                 Response
Status
                                                     "description": "WL Des Testing again",
                                      "id": 889402,
                                      "custId": 1,
                                      "state": "Disabled",
                                      "entryValue": "PVVol A001 A000356 POWER2",
                                      "expiredTime": 0,
                                      "ageOut": "10d"
                              ],
                              "isCaseSensitive": null,
                              "dataCreationType": null,
                              "displayName": "",
                              "valueType": "STRING",
                              "description": null,
                              "id": 0,
                              "custId": 1,
                              "valuePattern": null,
                              "ageOut": null
                         },
                              "topGroup": true,
                              "entries": null,
                              "isCaseSensitive": false,
                              "dataCreationType": "USER",
                              "displayName": "Test WL Group2",
                              "valueType": "STRING",
                              "description": "Testing",
                              "id": 897300,
                              "valuePattern": null,
                              "ageOut": "1w"
                     ],
                     "status": "Success"
                 }
Failure
                      "response": "Reason for failure",
                      "status": "Failed"
```

#### **Get Watch List Entries Count**

This API gives the count of watch list entries in any watch list group.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/cnt

# Output

Response Status	Response
Success	<pre>"response": {          "entry_count": 6 },          "status": "Success" }</pre>
Failure	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>

# **Get Watch List by Watch List ID**

This API retrieves a specific watch list with given watch list ID.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/<watch\_list\_id>

# **Request Path Parameter**

Field	Description
Replace <watch_list_id> with numeric value.</watch_list_id>	Watch list id of a specific watch list.

Response Status	Response
Success	{
	"response": [
	{
	"topGroup": true,
	"entries": [
	{
	"lastSeen": null,
	"naturalId": "172.30.57.65_
	1616469746578",
	"dataCreationType": null,
	"firstSeen": null,

```
Response Status
                                 Response
                                                      "count": null,
                                                      "triggeringRules": null,
                                                      "description": "Testing",
                                                      "id": 888900,
                                                      "custId": 1,
                                                      "state": "Enabled",
                                                      "entryValue": "172.30.57.65",
                                                      "expiredTime": null,
                                                      "ageOut": "1w"
                                                  },
                                                      "lastSeen": null,
                                                      "naturalId": "PVVol A001 A000356
                                 POWER23 1616480669538",
                                                      "dataCreationType": null,
                                                      "firstSeen": null,
                                                      "count": null,
                                                      "triggeringRules": "Datastore Space
                                 Warning",
                                                      "description": null,
                                                      "id": 889400,
                                                      "custId": 1,
                                                      "state": "Enabled",
                                                      "entryValue": "PVVol A001 A000356
                                 POWER23",
                                                      "expiredTime": null,
                                                      "ageOut": "1d"
                                                  }
                                              ],
                                              "isCaseSensitive": false,
                                              "dataCreationType": "USER",
                                              "displayName": "Test WL Group",
                                              "valueType": "STRING",
                                              "description": "",
                                              "id": 881750,
                                               "custId": 1,
                                              "valuePattern": null,
                                              "ageOut": "1w"
                                     ],
                                     "status": "Success"
Failure
                                     "response": "DyWatchList@<watch list id> was not
Ex: If ID contains non-numeric values
                                 found",
(invalid data)
                                     "status": "Failed"
Status Code - 404 Not Found
```

Response Status	Response
	}
Failure Ex: If no match, Status Code – 200	<pre>{     "response": "DyWatchList@<watch_list_id> was not found",     "status": "Failed" }</watch_list_id></pre>

## **Get Watch List by Watch List Entry Value**

This API retrieves watch lists which contains a watch list entry with given entry value.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/value

#### **Request Parameters**

Field	Туре	Description
entryValue	String	Entry value of watch list entry.

```
Response Status
                   Response
Success
                        "response": [
                                "topGroup": true,
                                "entries": [
                                        "lastSeen": null,
                                        "naturalId": "172.30.57.65 1616469746578",
                                        "dataCreationType": null,
                                        "firstSeen": null,
                                        "count": null,
                                        "triggeringRules": null,
                                        "description": "Testing",
                                        "id": 888900,
                                        "state": "Enabled",
                                        "entryValue": "172.30.57.65",
```

```
Response Status
                   Response
                                         "expiredTime": null,
                                         "ageOut": "1w"
                                     },
                                         "lastSeen": null,
                                         "naturalId": "PVVol A001 A000356 POWER23
                   1616480669538",
                                         "dataCreationType": null,
                                         "firstSeen": null,
                                         "count": null,
                                         "triggeringRules": "Datastore Space Warning",
                                         "description": null,
                                        "id": 889400,
                                         "state": "Enabled",
                                         "entryValue": "PVVol_A001_A000356_POWER23",
                                         "expiredTime": null,
                                         "ageOut": "1d"
                                "isCaseSensitive": false,
                                "dataCreationType": "USER",
                                "displayName": "Test WL Group",
                                "valueType": "STRING",
                                "description": "",
                                "id": 881750,
                                "valuePattern": null,
                                "ageOut": "1w"
                            }
                        ],
                        "status": "Success"
Failure
                    {
                         "response": "Reason for failure",
                         "status": "Failed"
                    }
Failure
                         "response": "No such Watch List with entry value: <entryValue>
Ex: If no match,
                   and watch list name: <watchlistName>",
Status Code - 200
                         "status": "Failed"
```

# **Get Watch List by Watch List Entry ID**

This API retrieves a specific watch list which contains a watch list entry with given entry ID.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/byEntry/<watch\_list\_entry\_id>

# **Request Path Parameters**

Field	Туре	Description
Replace <watch_list_entry_id> with specific watch list entry id</watch_list_entry_id>	Long	Watch list entry id

Response Status	Response
Success	{
	"response": {
	"topGroup": true,
	"entries": [
	{
	"lastSeen": null,
	"naturalId": "172.30.57.65_
	1616469746578",
	"dataCreationType": null,
	"firstSeen": null,
	"count": null,
	"triggeringRules": null,
	"description": "Testing",
	"id": 888900,
	"state": "Enabled",
	"entryValue": "172.30.57.65",
	<pre>"expiredTime": null,</pre>
	"ageOut": "1w"
	},
	{
	"lastSeen": null,
	"naturalId": "PVVol_A001_A000356_POWER23_
	1616480669538",
	"dataCreationType": null,
	"firstSeen": null,
	"count": null,
	"triggeringRules": "Datastore Space
	Warning",
	"description": null,
	"id": 889400,
	"state": "Enabled",
	"entryValue": "PVVol_A001_A000356_
	POWER23",
	"expiredTime": null,
	"ageOut": "1d"

```
Response
Response Status
                                             ],
                                             "isCaseSensitive": false,
                                             "dataCreationType": "USER",
                                             "displayName": "Test WL Group",
                                             "valueType": "STRING",
                                             "description": "",
                                             "id": 881750,
                                             "valuePattern": null,
                                             "ageOut": "1w"
                                        },
                                        "status": "Success"
Failure
                                    {
                                                "response": "Reason for failure",
Ex: If ID contains non-numeric values
                                                "status": "Failed"
(invalid data)
                                    }
Status Code - 404 Not Found
Failure
                                        "response": " No such watch list exists",
Ex: If no match, Status Code - 200
                                        "status": "Failed"
```

# **Get Watch List Entry by Watch List Entry ID**

This API retrieves a specific watch list entry given entry ID.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/<watch\_list\_entry\_id>

#### **Request Path Parameters**

Field	Туре	Description
Replace < watch_list_entry_id> with specific watch list entry id.	Long	Watch list entry id

Response Status	Response
Success	{

Response Status	Response
	<pre>"response": {         "lastSeen": null,         "naturalId": "172.30.57.65_ 1616469746578",         "dataCreationType": null,         "firstSeen": null,         "count": null,         "triggeringRules": null,         "description": "Testing",         "id": 888900,         "state": "Enabled",         "entryValue": "172.30.57.65",         "expiredTime": null,         "ageOut": "lw"     },         "status": "Success" }</pre>
Failure Ex: If ID contains non-numeric values (invalid data) Status Code – 404 Not Found	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure Ex: If no match, Status Code – 200	<pre>{ "response": " No such watch list entry exists", "status": "Failed" }</pre>

# **Update APIs**

These POST APIs are available to update watch lists from the FortiSIEM database.

- Update State of Watch List Entry by Watch List Entry ID
- Update State of Watch List Entry by Watch List Entry Value
- Update Last Seen Time of Watch List Entry by Watch List Entry ID
- Update Last Seen Time of Watch List Entry by Watch List Entry Value
- Update Count of Watch List Entry by Watch List Entry ID
- Update Count of Watch List Entry by Watch List Entry Value
- Add Watch List Entry(s) to Watch List Groups
- Save Watch List Groups with Watch List Entry(s)
- Update Specific Watch List Entry

# **Update State of Watch List Entry by Watch List Entry ID**

This API allows user to update watch list entry state (i.e., make it active/inactive).

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/active/<watch\_list\_entry\_id>

## **Request Path Parameters**

Field	Туре	Description
Replace <watch_list_entry_id> with specific watch list entry id</watch_list_entry_id>	Long	Watch list entry id

#### **Request Parameters**

Field	Туре	Description
state	Boolean	Set specific entry to true/false state.

Response Status	Response
Success	<pre>"response": {     "lastSeen": null,     "naturalId": "172.30.57.65_1616469746578",     "dataCreationType": null,     "firstSeen": null,     "count": null,     "triggeringRules": null,     "description": "Testing",     "id": 888900,     "state": "Disabled",     "entryValue": "172.30.57.65",     "expiredTime": null,     "ageOut": "lw"     },     "status": "Success" }</pre>
Failure	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure	{

Response Status	Response
Ex – If no match, status code - 200	"response": "Can't update state of watch list entry - No suc watch list entry exists", "status": "Failed"
	}

# **Update State of Watch List Entry by Watch List Entry Value**

This API allows user to update the watch list entry state (i.e., make it active/inactive). This API requires a watch list group name where a required watch list entry exists.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/active

#### **Request Parameters**

Field	Туре	Description
watchlistld	Long	Watchlist ID
value	String	Entry value of watch list entry
state	Boolean	Set specific entry to true/false state
custId	Long	Customer ID

```
Response Status
                      Response
Success
                          "response": {
                              "lastSeen": null,
                              "naturalId": "PVVol A001 A000356 POWER23 1616480669538",
                              "dataCreationType": null,
                              "firstSeen": null,
                              "count": 10,
                              "triggeringRules": "Datastore Space Warning",
                              "description": null,
                              "id": 889400,
                              "state": "Disabled",
                              "entryValue": "PVVol A001 A000356 POWER23",
                              "expiredTime": null,
                              "ageOut": "1d"
                          } ,
```

Response Status	Response
	"status": "Success" }
Failure	<pre>"response": "Reason for failure",</pre>
Failure Ex – If no match, status code - 200	<pre>{     "response": "Can't update state of watch list entry - No suc watch list entry exists",     "status": "Failed" }</pre>

# Update Last Seen Time of Watch List Entry by Watch List Entry ID

This API allows user to update watch list entry's last seen time.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/lastseen/<watch\_list\_entry\_id>

# **Request Path Parameters**

Field	Туре	Description
Replace <watch_list_entry_id> with specific watch list entry id</watch_list_entry_id>	Long	Watch list entry id

# **Request Parameters**

Field	Туре	Description
lastSeenTime	Long	Long value of last seen time i.e. Unix timestamp
custld	Long	Customer ID

Response Status	Response
Success	{ "reamance", {
	"response": {

Response Status	Response
	<pre>"lastSeen": 1612901760000,     "naturalId": "PVVol_A001_A000356_POWER23_1616480669538",     "dataCreationType": null,     "firstSeen": null,     "count": 10,     "triggeringRules": "Datastore Space Warning",     "description": null,     "id": 889400,     "state": "Disabled",     "entryValue": "PVVol_A001_A000356_POWER23",     "expiredTime": 1612988160000,     "ageOut": "1d" },     "status": "Success" }</pre>
Failure Ex: If ID contains non-numeric values (invalid data) Status Code – 404 Not Found	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure Ex – If no match, status code - 200	<pre>{     "response": "Can't update last seen time of watch list entry - No such watch list entry exists",     "status": "Failed" }</pre>

# **Update Last Seen Time of Watch List Entry by Watch List Entry Value**

This API allows the user to update watch list entry's last seen time. This API requires a watch list group name where the required watch list entry exists.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/lastseen

## **Request Parameters**

Field	Туре	Description
watchlistId	Long	Watchlist ID
value	String	Entry value of watch list entry
lastSeenTime	Long	Long value of last seen time i.e. Unix timestamp
custId	Long	Customer ID

#### Output

```
Response Status
                     Response
Success
                         "response": {
                             "lastSeen": 1612901760001,
                             "naturalId": "PVVol A001 A000356 POWER23 1616480669538",
                             "dataCreationType": null,
                             "firstSeen": null,
                             "count": 10,
                             "triggeringRules": "Datastore Space Warning",
                             "description": null,
                             "id": 889400,
                             "state": "Disabled",
                             "entryValue": "PVVol A001 A000356 POWER23",
                             "expiredTime": 1612988160001,
                             "ageOut": "1d"
                         },
                         "status": "Success"
Failure
                     {
                                "response": "Reason for failure",
                                "status": "Failed"
Failure
                                "response": "Can't update last seen time of watch list entry - No
Ex - If no match, status
                     such watch list entry exists",
code - 200
                                "status": "Failed"
```

# **Update Count of Watch List Entry by Watch List Entry ID**

This API allows user to update watch list entry's count.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/count/<watch\_list\_entry\_id>

#### **Request Path Parameters**

Field	Туре	Description
Replace <watch_list_ entry_id=""> with specific watch list entry id</watch_list_>	Long	Watch list entry id

#### **Request Parameters**

Field	Туре	Description
count	Long	Count of watch list entry occurrence

#### Output

```
Response Status
                              Response
Success
                              {
                                  "response": {
                                       "lastSeen": 1612901760001,
                                       "naturalId": "PVVol A001 A000356 POWER23
                              1616480669538",
                                       "dataCreationType": null,
                                       "firstSeen": null,
                                       "count": 100,
                                       "triggeringRules": "Datastore Space Warning",
                                       "description": null,
                                       "id": 889400,
                                       "state": "Disabled",
                                       "entryValue": "PVVol_A001_A000356_POWER23",
                                       "expiredTime": 1612988160001,
                                       "ageOut": "1d"
                                  "status": "Success"
Failure
                                          "response": "Reason for failure",
Ex: If ID contains non-numeric
                                          "status": "Failed"
values (invalid data)
Status Code - 404 Not Found
Failure
                              {
                                          "response": "Can't update count of watch list entry - No
Ex - If no match, status code -
                              such watch list entry exists",
200
                                          "status": "Failed"
```

# **Update Count of Watch List Entry by Watch List Entry Value**

This API allows user to update watch list entry's count. This API requires watch list group name where required watch list entry exists.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/count

#### **Request Parameters**

Field	Туре	Description
custId	Long	Customer ID
watchlistld	Long	Watchlist ID
value	String	Entry value of watch list entry
count	Long	Count of watch list entry occurrence

#### **Output**

```
Response Status
                      Response
Success
                          "response": {
                              "lastSeen": 1612901760001,
                              "naturalId": "PVVol A001 A000356 POWER23 1616480669538",
                              "dataCreationType": null,
                              "firstSeen": null,
                              "count": 100,
                              "triggeringRules": "Datastore Space Warning",
                              "description": null,
                              "id": 889400,
                              "state": "Disabled",
                              "entryValue": "PVVol A001 A000356 POWER23",
                              "expiredTime": 1612988160001,
                              "ageOut": "1d"
                          },
                          "status": "Success"
Failure
                      {
                                 "response": "Reason for failure",
                                 "status": "Failed"
Failure
                                 "response": "Can't update count of watch list entry - No such
Ex – If no match, status
                      watch list entry exists",
code - 200
                                 "status": "Failed"
```

# Add Watch List Entry(s) to Watch List Groups

This API allows user to add watch list entry(s) to one or more watch list groups.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/addTo

# **Request Parameters**

Field	Туре	Description
watchlistld	Long	Watchlist ID

# **Request Body**

Field	Туре	Description
Body	JSON Array of Watch list entry objects	Watch Entry
entryValue(required)	String	Watch List entry value
	<pre>"inclusive": false, "count": 10, "custId": 1, "triggeringRules": "Datastore Space Warning", "entryValue": "PVVol_A001_A000356_POWER2", "ageOut": "1d", "lastSeen": 1613601369215, "firstSeen": 1613601369215, "disableAgeout": false, "dataCreationType": "USER" }</pre>	
]	J	

Response Status	Response
Success	<pre>{    "response": "Successfully added to watch list - [IDs]",    "status": "Success" }</pre>
Failure	<pre>"response": "Reason for failure", "status": "Failed"</pre>

Response Status	Response
	}
Failure Ex: Invalid data format in request parameters Status code - 200	<pre>"response": " Error while adding entries to watch lists - Invalid data format",     "status": "Failed" }</pre>
Failure Ex: If no entry value exists in Watchlist Entry Status code - 200	<pre>"response": "Error while adding entries to watch lists - WatchListEntry must have entryValue field",     "status": "Failed" }</pre>

# **Save Watch List Groups with Watch List Entry(s)**

This API allows user to save one or more watch list groups to FSM database. Each watch list can contain one or more watch list entries.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/save

# **Request Body**

Field	Туре	Description
Body	JSON Object of Watch list with watch list entry	Watch list with entry(s)
displayName (required)	String	Display name for watch list group
type (required)	String	Group type - ENUM
entryValue (required)	String	Entry value of DyWatchlistEntry
dataCreationType	String	Enum – {SYSTEM, USER} If value is null – Default value will be 'SYSTEM'
{	"description": "Servers, network	or storage devices",

```
Field
                          Type
                                                                      Description
                                 "displayName": "Resource Issues Test4",
                                 "type": "DyWatchList",
                                 "isCaseSensitive": false,
                                 "dataCreationType": "USER",
                                 "topGroup": false,
                                 "valuePattern": null,
                                 "valueType": "STRING",
                                 "ageOut": "1d",
                                 "custId": 1,
                                 "entries": [{
                                                  "inclusive": true,
                                                  "entryValue": "PVVol_A001_A000356_5new",
                                                  "ageOut": "1d",
                                                  "count": 1,
                                                  "custId": 1,
                                                  "firstSeen": 1612901760000,
                                                  "lastSeen": 1612901760000,
                                                  "triggeringRules": "Datastore Space
Warning",
                                                  "dataCreationType": "USER"
                                 } ]
```

```
Response Status
                                     Response
Success
                                         "response": [
                                                  "topGroup": false,
                                                  "entries": [
                                                          "lastSeen": 1612901760000,
                                                          "naturalId": "Nid",
                                                          "dataCreationType": "USER",
                                                          "firstSeen": 1612901760000,
                                                          "count": 1,
                                                          "triggeringRules": "Datastore
                                     Space Warning",
                                                          "description": null,
                                                          "id": 0,
                                                          "state": "Enabled",
                                                          "entryValue": null,
                                                          "expiredTime": null,
                                                          "ageOut": "1d"
```

Response Status	Response
	<pre></pre>
Failure	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure Ex: If entry doesn't have entry value Response code - 200	<pre>{     "response" : "Error while saving watch lists - WatchListEntry must have entryValue field",     "status" : "Failed" }</pre>
Failure  Ex:  If display name is duplicate (already exists) or body doesn't have filed – 'type'  Unrecognized fields in POST body  Response code - 200	<pre>"response": "Failed to save watchlist",    "status": "Failed" }</pre>

# **Update Specific Watch List Entry**

This API allows user to update any watch list entry. The JSON object of watch list entry must contain valid watch list entry id otherwise it will be saved as a new entry to ungrouped watch list.

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/save

#### **Request Body**

Field	Туре	Description
Body	JSON Object of Watch list with watch list entry	Watch list entry
entryValue(required)	String	Watch list entry value
"description": "id": 889400, "inclusive": tr	pe": "USER", 12901760001, s": "Datastore Space Warning", "Testing again", ue, PVVol_A001_A000356_POWER23",	

Note: ID is mandatory to update watch list entry. If there is no id in JSON body, a new entry will be created.

```
Response Status
                             Response
Success
                                 "response": {
                                     "lastSeen": 1612901760002,
                                     "naturalId": "PVVol_A001_A000356_POWER23_
                             1612901760002",
                                     "dataCreationType": "USER",
                                     "firstSeen": 1612901760001,
                                     "count": 100,
                                     "triggeringRules": "Datastore Space Warning",
                                     "description": "Testing again",
                                     "id": 889400,
                                     "state": "Enabled",
                                     "entryValue": "PVVol_A001_A000356_POWER23",
                                     "expiredTime": 1613074560002,
                                     "ageOut": "2d"
                                 },
                                 "status": "Success"
```

Response Status	Response
	}
Failure	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure Ex: If entry doesn't have entry value Response code - 200	<pre>"response": "HTTP 400 Bad Request",    "status": "Failed" }</pre>

# **Delete APIs**

The following **POST** Delete APIs are available.

- Delete Watch List Entry by ID
- Delete Watch List by ID

# **Delete Watch List Entry by ID**

This API allows user to delete watch list entry(s).

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/entry/delete

# **Request Body**

Field	Туре	Description
	List of Long values	Watch List Entry ids
Ex: [500000, 500001]		

Response Status	Response	
Success	{	
		"response": "Deleted entries - [IDs]",

Response Status	Response
	"status": "Success" }
Failure	<pre>"response": "Reason for failure", "status": "Failed" }</pre>
Failure Ex: If any exception occurs	<pre>"response": " Error in deleting watch list entries - Exception message ",</pre>

# **Delete Watch List by ID**

This API allows user to delete watch list(s).

Release Added: 6.3.0

Input URL https://<FortiSIEM\_Supervisor\_IP>/phoenix/rest/watchlist/delete

# **Request Body**

Field	Туре	Description
	List of Long values	Watch list ids
Ex: [500000, 500001]		

Response Status	Response
Success	<pre>{     "response": "Deleted watch lists - [IDs]",     "status": "Success" }</pre>
Failure	<pre>{     "response": "Reason for failure",     "status": "Failed" }</pre>
Failure	{ "response": "Deleting system defined group is

Response Status	Response
Ex: If group is system defined group	<pre>not allowed",</pre>
Failure Ex: If any exception occurs	<pre>"response": " Error in deleting watch lists - Exception message ",</pre>

# **JSON Object Formats**

- Watch List Entry JSON
- Watch List JSON

# **Watch List Entry JSON**

Field	Туре	Description
id	Long	Watch list entry id
firstSeen	Long	First seen time – Unix format
lastSeen	Long	Last seen time – Unix format
expiredTime	Long	Expiry time – Unix format
state	String	State of entry – Enabled/Disabled
naturalld	String	Unique ID of watch list entry
triggeringRules	String	FSM Rules – Comma separated
entryValue	String	Entry value of Watch list entry
description	String	Description
ageOut	String	Age out (Expiry)
count	Long	Occurrence count
dataCreationType	ENUM	[SYSTEM, USER]

# **Watch List JSON**

Field	Туре	Description
id	Long	Watch list group id
naturalld	String	Unique ID of watch list
isCaseSensitive	Boolean	
ageOut	String	Age out (Expiry)
entries	List <watchlistentry></watchlistentry>	List of Entries Refer to Watch List Entry JSON Table.
displayName	String	Display name of watch list group
name	String	Name of the watch list
description	String	Entry value of Watch list description
valueType	ENUM	Value type - STRING, IP, etc
topGroup	Boolean	True/false
dataCreationType	ENUM	[SYSTEM, USER]
valuePattern	ENUM	[IP, IPRANGE, CIDR]

# **Example Usage**

The sample codes provided are for instructional use only. Please adapt it to your environment. Download the appropriate zip file containing the samples from the following URLs:

# **Example Performance and Health, CMDB Device, and Event/Query Worker Configuration APIs**

A zip file containing example Performance and Health, CMDB Device (APIs 6-12), and Event/Query Worker Configuration API files is available here.

# **Python Support**

#### Python 2.7 Release

https://filestore.fortinet.com/docs.fortinet.com/upload/fsiem\_rest\_api\_630.zip

2.7 scripts are tested using version 2.7.16. You must install httplib2 and ssl manually, if they are not already installed.

# Python 3.9 Release

https://help.fortinet.com/fsiem/Public\_Resource\_Access/rest\_api\_python3/fsiem\_rest\_api\_python3.zip

3.9 scripts are tested using version 3.9.0. You must install httplib2 and ssl manually, if they are not already installed.

# **Appendix**

- Description of Device Attributes
- Description of Health JSON Attributes
- Current Thresholds for Health Status

# **Description of Device Attributes**

The following tables are available for device attributes.

- Device Attribute
- Bios
- Patch
- Processor
- Storage
- Network Interface
- · Installed Software
- Running Software/Application
- swService
- Monitor Types
- Event Pulling Types
- Error Messages

Device Attribute	Туре	Description
unmanaged	boolean	Identifies if the device is managed or unmanaged.
discoverMethod	string	The discovery method of the device.
accessMethodIds	string	The ids for the access method.
discoverTime	unsignedLong	The date and time the device was discovered.
name	string	The device name.
accessIP	string	The IP address.
vendor	string	The vendor name.
model	string	The model name.
version	string	The version.
buildNumber	string	The build number.
osSerialNum	string	The operating system's serial number.

Device Attribute	Туре	Description
osEdition	string	The edition of the operating system.
hwVendor	string	The hardware vendor.
assetCategory	string	The category that the asset belongs to.
assetWeight	unsignedByte	The weight (priority) given to the asset.
description	string	Any additional details/information.
sysUptime	unsignedInt	The system uptime.
bios		See bios table.

bios	Туре	Description
name	string	The bios name.
vendor	string	The vendor from where the bios came from.
serialNumber	string	The bios serial number.
version	string	The bios version.

Patch	Туре	Description
Name	string	The name of the patch.
Description	string	Information about the patch.
installedBy	string	The person who installed the patch.
installedOn	unsignedInt	The date and time the patch was installed.

Processor	Туре	Description
name	string	The processor name.
cpuUtil	unsignedByte	The CPU utilization of the processor.
manufacturer	string	The name of the processor manufacturer.
addrWidth	unsignedByte	The width of the DMA address space (in bytes).
dataWidth	unsignedByte	The maximum space available for data (in bytes)
currClockSpeed	unsignedShort	The current clock speed of the processor.
maxClockSpeed	unsignedShort	The maximum clock speed of the processor.

Storage	Туре	Description
type	string	The storage type.
description	string	Information about the storage.
size	string	The storage size.
used	string	The amount of storage used.
memUtil	unsignedByte	The amount of storage utilized for memory.
diskUtil	unsignedByte	The amount of disk utilization from storage.

networkInterface	Туре	Description
type	string	The network interface type.
name	string	Name of the network interface.
alias	string	The network alias name.
description	string	Information/details about the network interface.
ipv4Addr	string	The IPv4 address.
ipv4Mask	unsignedByte	The IPv4 subnet mask.
macAddr	string	The media access control address (MAC address).
speed	string	The Ethernet transmission speed.
snmpIndex	unsignedByte	The unique value of the interface.
isTrunk	boolean	Whether the network interface uses trunking or not.
adminStatus	string	The configured status of the interface (port).
operStatus	string	The working/running status of the interface.

InstalledSoftware	Туре	Description
custld	unsignedByte	The customer id.
count	unsignedByte	The number of installed software.

runningSoftware	Туре	Description
name	string	The name of the application.
groupName	string	The name of the application group that the application belongs to.
processName	string	The application's process name.

runningSoftware	Туре	Description
param	string	The application parameters.
procOwner		The process owner of the application.
path	string	The location of the application.
uptime	unsignedInt	The uptime of the running application.

swService	Туре	Description
name	string	The service name.
displayName	string	The display name of the service.
description	string	Description of the service.
processId	unsignedShort	The service process Id.
path	string	The location of the service.
state	string	The current service state.
status	string	The status of the service.
startMode	string	The start up mode of the service.

monitorTypes	Туре	Description
refld	unsignedInt	The reference Id.

eventPullingTypes	Туре	Description
id	string	The id of the pulling event type.

errorMsgs	Туре	Description
accessMethod	string	The access method error message.
error	string	The error message.
severity	string	The severity of the error.
impact	string	The impact of the error.
resolution	string	The resolution required to fix the error.

# **Description of Health JSON Attributes**

The following table provides a description of health attributes for FortiSIEM Manager, Supervisor, Worker, and Collector.

JSON Node	Attribute	Applicability	Description
instances	id	All	Instance Id
instances	name	All	Instance name
instances	healthStatus	All	Instance health based on Supervisor and Worker health: Normal/Warning/Critical. Collector health is now ignored.
nodes.summary.instanceId	instanceld	All	Instance Id as it appears in FortiSIEM Manager. This is defined when an Instance registers to the Manager.
nodes.summary.name	name	All	Name as it appears in the Supervisor GUI.
nodes.summary.nodeType	nodeType	All	Manager/Supervisor/Worker/Collecto r
nodes.summary.status	status	All	Health of the node: Normal/Warning/Critical
nodes.metrics.healthSummary	summary	All	Health of the node - Normal/Warning/Critical
nodes.metrics.healthSummary.reaso n	attribute	All	Name of attribute e.g. CPU Utilization etc. See Appendix - Current Thresholds for Health Status for a complete list.
nodes.metrics.healthSummary.reaso n	value	All	Normal/Warning/Critical
nodes.metrics.healthSummary.reaso n	reason	All	Reason explaining the value
nodes.metrics	lastUpdateTime	Worker	Last time a health update was received from this node.
nodes.metrics	lastFileRecvTime	Worker	Last time a file was received from Collector (Unix epoch time).
nodes.metrics	lastEventTime	Worker	Last time a heartbeat was received from Collector (Unix epoch time).
nodes.metrics.hostInfo	name	All	Host Name (same as nodes.summary.name)
nodes.metrics.hostInfo	ip	All	Host IP

JSON Node	Attribute	Applicability	Description
nodes.metrics.versionInfo	version	All	FortiSIEM Image Version
nodes.metrics.versionInfo	commitHash	All	FortiSIEM Image Commit hash (SHA- 1 hash made up of a few properties from the code commit.)
nodes.metrics.versionInfo	builtOn	All	Day when the image was built (Unix Epoch time).
nodes.metrics.versionInfo	contentVersion	All	FortiSIEM Content version running on this node.
nodes.metrics.hardware	vCPU	All	Number of vCPUs in this node
nodes.metrics.hardware	memory_gb	All	Total physical memory in this node
nodes.metrics.eps	3min	All	Average EPS calculated at 3 minute intervals.
nodes.metrics.eps	15min	All	Average EPS calculated at 15 minute intervals.
nodes.metrics.eps	30min	All	Average EPS calculated at 30 minute intervals.
nodes.metrics.eps	allocatedEPS	All	EPS allocated to a node (limited by license).
nodes.metrics.eps	incomingEPS	All	Incoming EPS to this node
nodes.metrics.eps	dropLicenseEPS	All	Dropped EPS because of license
nodes.metrics.eventUploadQueue	queue	Worker	Number of files in Event Upload Queue at Worker - this queue stores filed uploaded by Collector.
nodes.metrics.eventUploadQueue	disk_kb	Worker	Total file size in Event Upload Queue at Worker - this queue stores filed uploaded by Collector.
nodes.metrics.eventUploadQueue	total_mb	Collector	Total file size in Collector waiting to be uploaded to Worker or Supervisor.
nodes.metrics.eventUploadQueue	event_mb	Collector	Total event file size in Collector waiting to be uploaded to Worker or Supervisor.
nodes.metrics.eventUploadQueue	windows_mb	Collector	Total Windows Agent file size in Collector waiting to be uploaded to Worker or Supervisor.
nodes.metrics.eventUploadQueue	linux_mb	Collector	Total Linux Agent file size in Collector waiting to be uploaded to Worker or Supervisor.

JSON Node	Attribute	Applicability	Description
nodes.metrics.eventUploadQueue	svn_mb	Collector	Total Configuration (SVNLite) file size in Collector waiting to be uploaded to Worker or Supervisor.
nodes.metrics.loadAverage	1min	All	1 minute load average
nodes.metrics.loadAverage	5min	All	5 minute load average
nodes.metrics.loadAverage	15min	All	15 minute load average
nodes.metrics.cpuUsage	used_pct	All	Total CPU Utilization
nodes.metrics.cpuUsage	system_pct	All	System CPU utilization
nodes.metrics.cpuUsage	user_pct	All	User CPU Utilization
nodes.metrics.cpuUsage	free_pct	All	Free CPU Utilization
nodes.metrics.cpuUsage	idleWait_pct	All	Percentage of time CPU is waiting for I/O to complete.
nodes.metrics.memoryUsage	total_mb	All	Total Memory (MB)
nodes.metrics.memoryUsage	used_mb	All	Used Memory (MB)
nodes.metrics.memoryUsage	free_mb	All	Free Memory (MB)
nodes.metrics.memoryUsage	used_pct	All	Memory Utilization (pct)
nodes.metrics.swapUsage	total_mb	All	Total Swap memory (MB)
nodes.metrics.swapUsage	used_mb	All	Used Swap Memory (MB)
nodes.metrics.swapUsage	in_bps	All	Swap In rate (Bits/sec)
nodes.metrics.swapUsage	out_bps	All	Swap Out rate (Bits/sec)
nodes.metrics.swapUsage	used_pct	All	Swap Utilization
nodes.metrics.diskUsage	filesystem	All	File system
nodes.metrics.diskUsage	mountedOn	All	File system mount point like /svn, /cmdb etc
nodes.metrics.diskUsage	type	All	File system type e.g. xfs
nodes.metrics.diskUsage	size_mb	All	Total File system Size (MB)
nodes.metrics.diskUsage	used_mb	All	Used File system Size (MB)
nodes.metrics.diskUsage	avail_mb	All	Free File system Size (MB)
nodes.metrics.diskUsage	used_pct	All	Percentage of file system used.
nodes.metrics.upgradeStat	upgradeVersion	Collector	Last Image version the Collector upgraded to.

JSON Node	Attribute	Applicability	Description
nodes.metrics.upgradeStat	installStatus	Collector	Last Image version install status (Completed or Failed followed by reason.)
nodes.metrics.upgradeStat	downloadStatus	Collector	Last Image version download status (Completed or Failed followed by reason.)
nodes.metrics.diskIO	device	All	Linux device for measuring disk I/O
nodes.metrics.diskIO	mountedOn	All	Device mount point like /svn, /cmdb etc
nodes.metrics.disklO	read_ops	All	Read Operations/sec
nodes.metrics.disklO	write_ops	All	Write Operations/sec
nodes.metrics.disklO	read_kbps	All	Read Volume (KB/sec)
nodes.metrics.disklO	write_kbps	All	Write Volume (KB/sec)
nodes.metrics.disklO	readWait_ms	All	Read Wait Latency (msec)
nodes.metrics.disklO	writeWait_ms	All	Write Wait Latency (msec)
nodes.metrics.disklO	util_pct	All	Disk I/O utilization
nodes.metrics.nfsIO	location	Super, Worker	Remote path
nodes.metrics.nfsIO	path	Super, Worker	Local directory (e.g. /data)
nodes.metrics.nfsIO	read_ops	Super, Worker	NFS Read Operations/second for EventDB based deployments
nodes.metrics.nfsIO	read_kbps	Super, Worker	NFS Read Volume (KBytes/second) for EventDB based deployments
nodes.metrics.nfsIO	read_kbpop	Super, Worker	NFS Read Volume (Kbytes/operation) for EventDB based deployments
nodes.metrics.nfsIO	readLatency_ms	Super, Worker	NFS Read Latency (ms) for EventDB based deployments
nodes.metrics.nfsIO	write_ops	Super, Worker	NFS WriteOperations/second for EventDB based deployments
nodes.metrics.nfsIO	write_kbps	Super, Worker	NFS WriteVolume (KBytes/second) for EventDB based deployments
nodes.metrics.nfsIO	write_kbpop	Super, Worker	NFS Write Volume (Kbytes/operation) for EventDB based deployments
nodes.metrics.nfsIO	writLatency_ms	Super, Worker	NFS Write Latency (ms) for EventDB based deployments

JSON Node	Attribute	Applicability	Description
nodes.metrics.processStat	processName	All	FortiSIEM process name
nodes.metrics.processStat	owner	All	FortiSIEM process owner
nodes.metrics.processStat	uptime_sec	All	Process Uptime (seconds)
nodes.metrics.processStat	cpuUtil_pct	All	Process CPU Utilization
nodes.metrics.processStat	residentMemory_ mb	All	Process Resident Memory Usage (MB)
nodes.metrics.processStat	memoryUtil_pct	All	Process Memory Utilization
nodes.metrics.processStat	diskRead_kbps	All	Process Aggregate Disk Read Volume (KB/sec)
nodes.metrics.processStat	diskWrite_kbps	All	Process Aggregate Write Volume (KB/sec)
nodes.metrics.processStat	sharedStore_type	All	Reader or Writer or none
nodes.metrics.processStat	sharedStore_ position	All	Shared store read/write position (Bytes written or read.)
nodes.metrics.processStat	sharedStore_pct	All	Shared store read/write position (Percentage) - 100% means end of circular buffer.

# **Current Thresholds for Health Status**

The following table provides information on what normal thresholds are for certain Health JSON attributes.

Health JSON Attribute	Applicability	Threshold
CPU Utilization	All nodes	<ul> <li>Normal - if cpuUsage.used_pct less than 75 AND loadAverage 15 minutes less than nodes.hardware.vCPU and the loadAverage of last 15 minutes are less than 1 * number_of_cores</li> </ul>
		<ul> <li>Warning - if (cpuUsage.used_pct between (75 and 90) OR (loadAverage 15 minutes between (nodes.hardware.vCPU and 2* nodes.hardware.vCPU) and the loadAverage of the last 15 minutes are less than 2 * number_of_cores</li> </ul>
		<ul> <li>if cpuUsage.used_pct greater than 90 OR loadAverage 15 minutes greater than 2*nodes.hardware.vCPU and the loadAverage of the last 15 minutes is greater than 2 * number_of_cores</li> </ul>
Memory Utilization	All nodes	<ul> <li>Normal - if memoryUsage.used_pct less than 75</li> <li>Warning - if memoryUsage.used_pct between 75 and 90</li> <li>Critical - if memoryUsage.used_pct greater than 90</li> </ul>

Health JSON Attribute	Applicability	Threshold
Swap Space Utilization	All nodes	<ul> <li>Normal - if swapUsage.in_bps less than 7Mbps</li> <li>Warning - if swapUsage.in_bps between 7Mbps and 10Mbps</li> <li>Critical - if swapUsage.in_bps greater than 10Mbps</li> </ul>
Disk Utilization	All nodes; skips /data, data- clickhouse	<ul> <li>Normal - if diskUsage.used_pct less than 65</li> <li>Warning - if diskUsage.used_pct between 65 and 85</li> <li>Critical - if diskUsage.used_pct greater than 85</li> </ul>
I/O Utilization	All nodes	<ul> <li>Normal - if cpuUsage.ioWait_pct less than 15 AND disklO.readWait_ms less than 30 AND disklO.writeWait_ms less than 30 AND nfslO.readLatency_ms less than 50 AND nfslO.writeLatency_ms less than 50</li> <li>Warning - if cpuUsage.ioWait_pct between (15 and 30) OR disklO.readWait_ms between (30 and 60) OR disklO.writeWait_ms between (30 and 60) AND nfslO.readLatency_ms between (50 and 75) AND nfslO.writeLatency_ms between 50 and 75</li> <li>Critical - if cpuUsage.ioWait_pct more than 30 OR disklO.readWait_ms more than 60 OR disklO.writeWait_ms more than 60 OR nfslO.readLatency_ms more than 75 OR nfslO.writeLatency_ms more than 75</li> </ul>
Process Health	All nodes	<ul> <li>Normal - if processStat.uptime more than 1 hour AND processStat.cpuUtil_pct less than 50 AND processStat.memoryUtil_pct less than 50</li> <li>Warning - if processStat.uptime less than 1 hour OR processStat.cpuUtil_pct between (50 and 75) OR processStat.memoryUtil_pct between (50 and 75)</li> <li>Critical - if process is DOWN OR processStat.cpuUtil_pct greater than 75 OR processStat.memoryUtil_pct greater than 75</li> </ul>
Event Pipeline	Collector only	<ul> <li>This indicates whether queues are building up in Collectors.</li> <li>Normal - if eventUploadQueue.total_mb less than 20</li> <li>Warning - if eventUploadQueue.total_mb between 20 and 50</li> <li>Critical - if eventUploadQueue.total_mb greater than 50</li> </ul>
Event Pipeline	Worker only	This indicates whether queues are building up in Workers and may be caused by Workers slow in ingesting events to storage.  • Normal - if eventUploadQueue.disk_mb less than 25  • Warning - if eventUploadQueue.disk_mb between 25 and 75  • Critical - if eventUploadQueue.disk_mb greater than 75
Shared Store	Worker, Supervisor	This indicates that some FortiSIEM processes are slow in processing events and may eventually block the writer phParser process from ingesting events. Events may eventually be lost.  • Normal - if difference between reader and writer's sharedStore_pct is less than 15

Health JSON Attribute	Applicability	Threshold
		<ul> <li>Warning - if difference between reader and writer's sharedStore_pct is between 15 and 30</li> <li>Critical - if difference between reader and writer's sharedStore_pct is more than 30</li> </ul>
Last Status Updated	All nodes	<ul> <li>This is based on the health updates between Collector and Supervisor;</li> <li>Worker and Supervisor; and Instance Supervisor and FortiSIEM Manager.</li> <li>Normal - if nodes.metrics.lastStatusUpdated less than 15 minute delay</li> <li>Warning - if nodes.metrics.lastStatusUpdated between (15 minute and 20 minute) delay</li> <li>Critical - if nodes.metrics.lastStatusUpdated more than 20 minute delay</li> </ul>
Last Event Time	Collector	This information is sent by each Worker to Supervisor based on what each Worker receives from Collectors. This detects whether Collectors are falling behind in sending events to Workers. This may be caused by Workers slow in ingesting events to storage or Collectors slow processing events and uploading to Workers.  • Normal - if nodes.metrics.lastEventTime less than 15 minute delay  • Warning - if nodes.metrics.lastEventTime between (15 minute and 20 minute) delay  • Critical - if nodes.metrics.collectorUploadStatus.lastEventTime more than 20 minute delay
Last File Received	Collector	<ul> <li>This information is sent by each Worker to Supervisor based on what each Worker receives from Collectors. This may be caused by Workers slow in ingesting events to storage or Collectors slow processing events and uploading to Workers.</li> <li>Normal - if nodes.metrics.lastFileReceived less than 15 minute delay</li> <li>Warning - if nodes.metrics.lastFileReceived between (15 minute and 20 minute) delay</li> <li>Critical - if nodes.metrics.lastFileReceived more than 20 minute delay</li> </ul>



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