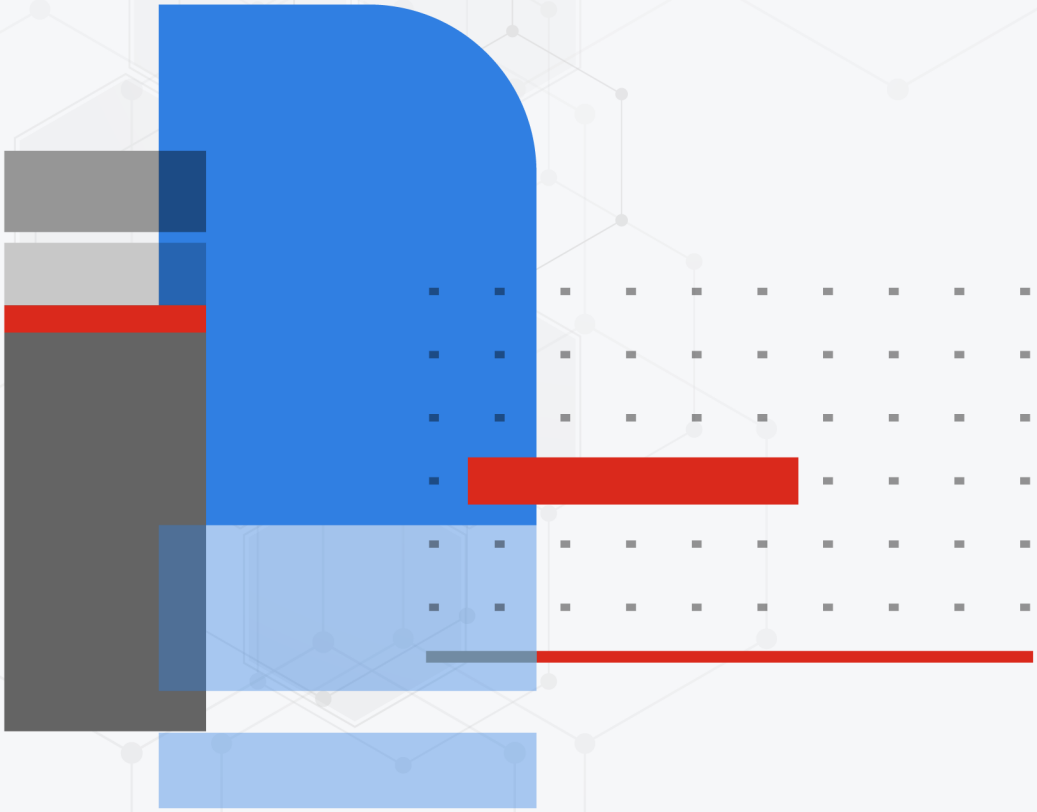
Integration API Guide

FortiSIEM 6.7.2



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08/03/2023
FortiSIEM 6.7.2 Integration API Guide

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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 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

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	• **Add an organization:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/organization/add` • **Update an organization:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/organization/update`
Input Parameters	Organization definition file
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.
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`
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 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`
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.
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 Id is returned. The task Id 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`

	• **Get Discovery result:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/deviceMon/status?taskId=XXX`
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	• Discovery request: XML containing task Id. • Discovery result: XML containing discovered devices and attributes.

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.

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/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. 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 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	• **For adding or updating:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/deviceMaint/update` • **For deleting:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/deviceMaint/delete`
Input Parameters	An XML file Containing devices and maintenance calendar updates.
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 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`
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.
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	• **Enterprise deployments:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/cmdbDeviceInfo/devices` • **Service Provider deployments:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/cmdbDeviceInfo/devices&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 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	• **Enterprise deployments:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=<includeIpSet>&excludeIps=<excludeIpSet>` • **Service Provider deployments:** `https://<FortiSIEM_Supervisor_IP>/phoenix/rest/cmdbDeviceInfo/devices?includeIps=<includeIpSet>&excludeIps=<excludeIpSet>&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 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`
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	• **Enterprise deployments:** https://<*FortiSIEM_Supervisor_IP*>/phoenix/rest/cmdbDeviceInfo/device?ip=<*deviceIp*>&loadDepend=true • **Service Provider deployments:** https://<*FortiSIEM_Supervisor_IP*>/phoenix/rest/cmdbDeviceInfo/device?ip=<*deviceIp*>&loadDepend=true&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 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*

	>/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.

Options for <*sectionName*>: `applications`, `interfaces`, `processors` or `storages`

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	REST API based: Caller makes an HTTPS request with query parameters: `orgId`, `hostName`.
Request URL	https://<*FortiSIEM_Supervisor_IP*>/phoenix/rest/agentStatus/all?request=<*orgId*>,<*hostName*>
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.
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>/phoenix/rest/device/discovery/add`
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	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	When the request succeeds (HTTP response code 200), a taskId will be returned. You can query Device add status using this task Id in a separate API (see Get Device Add Request Status).
	`<response>`
	`<status>Discovery xml is queued</status>`
	`<sourceIdentifier>RESTAPI_<TaskId></sourceIdentifier>`
	`</response>`

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
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	`https://<FortiSIEM_Supervisor_IP>/phoenix/rest/device/list?orgId=<org_id>&accessIp=<access_ip>&name=<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.
HTTP Method	GET

Request Path Parameters	**Field**	**Type**	**Description**
	org_id	long	Organization ID which device belongs to. This is a required field.
	access_ip	string	Device IP Address. Must be an exact match. Either access_ip or name is required.
	name	string	Host name of the device. Partial match is allowed. Either access_ip or name is required.

Output

When the request succeeds (HTTP response code 200), a JSON object is returned. It contains key attributes of the CMDB devices matching the request filter.

Sample JSON follows.

```
  {
    "id": 968352,
    "orgId": 1,
    "orgName": "Super",
    "hostName": "FSM_Test_6501741_5835",
    "accessIp": "172.30.58.35",
    "deviceType": "Redhat Linux"
  }
]
```

If there are no matching devices, then the JSON is empty.

Output Key Fields	**Field**	**Type**	**Description**
	id	long	Device ID in FortiSIEM CMDB
	orgId	long	Organization ID which device belongs to.
	orgName	string	Organization Name
	hostName	string	Host Name
	accessIp	string	Device IP Address
	deviceType	string	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>`
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	Replace <*TaskId*> with long value in the URL. The TaskId is obtained from the response in the Add CMDB Device(s) API.
Output	When the request succeeds (HTTP response code 200), a JSON object is returned. It contains key attributes of the devices that were added to CMDB as part of the request with the specified TaskId. Sample JSON follows. `[ { "id": 968352, "orgId": 1, "orgName": "Super", "hostName": "FSM_Test_6501741_5835", "accessIp": "172.30.58.35", "deviceType": "Redhat Linux" } ]` When the request fails, response contains failed reason. **Note**: Failed devices are not provided in this release.

Output Key Fields

Field	Type	Description
id	long	Device ID in FortiSIEM CMDB
orgId	long	Organization ID which device belongs to
orgName	string	Organization Name
hostName	string	Host Name
accessIp	string	Device IP Address
deviceType	string	Device Type

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*>/phoenix/rest/cmdbDeviceInfo/properties?organization=<*org_name*>&orgId=<*org_id*>&ip=<*device_ip*>&name=<*hostname*>
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 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.
Output	When the request succeeds (HTTP response code 200), then an XML is returned with the set properties for that device. Schema XSD file is File9_device_properties.xsd.

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>&updateMode=OVERWRITE|APPEND`
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 Path Parameters	**Field** / **Type** / **Description** deviceId / string / Device Id in CMDB - ids can be obtained via the Get CMDB Device List API. updateMode / long / Two 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
Input URL	https://<*FortiSIEM_Supervisor_IP*>/phoenix/rest/cmdbDeviceInfo/properties
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	PUT
Request Body	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** **Type** **Description** Body Properties XML XML format can be obtained from - `/rest/pub/cmdbDeviceInfo /properties` A sample XML 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`
Input Parameters	Dashboard folder definition file.
Input Credentials	**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` **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.
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`
Input Parameters	XML file containing the query parameters.
Input Credentials	• **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` • **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.
Output	`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*>
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>/phoenix/rest/query/events/<requestId>,<expireTime>/<begin>/<end>`
Output	totalCount (first time) and an XML containing the incident attributes. For the first call, **begin** = 0 and **end** 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

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": [
    "wk1.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	Type	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: wk1.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	Type	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: wk1.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": [
    "wk1.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	Type	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	Type	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: wk1.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

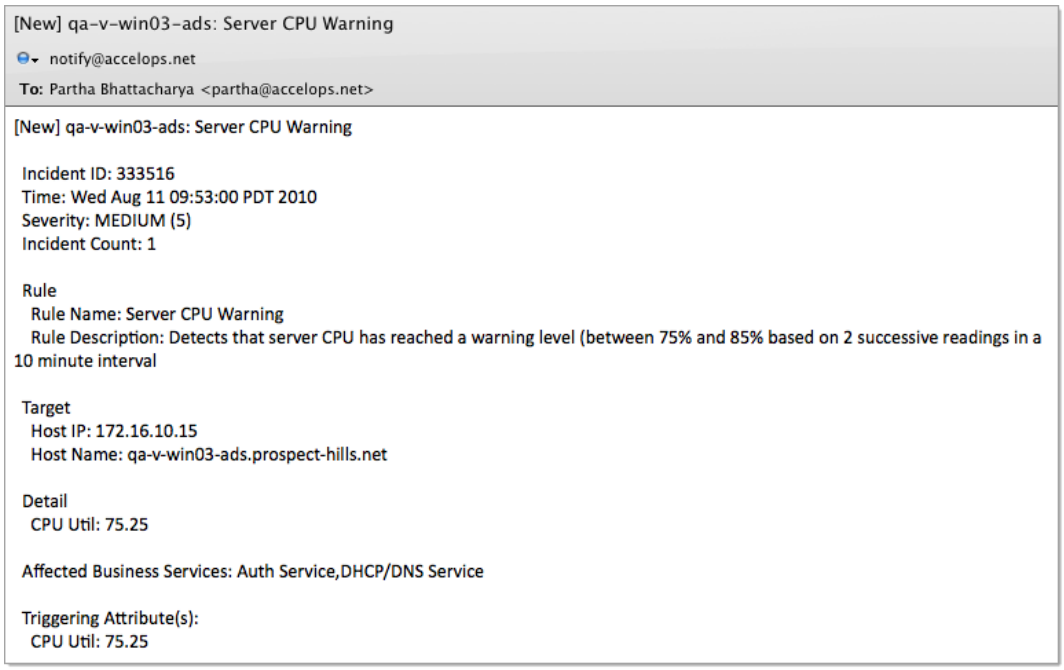
Notification via Email

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
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

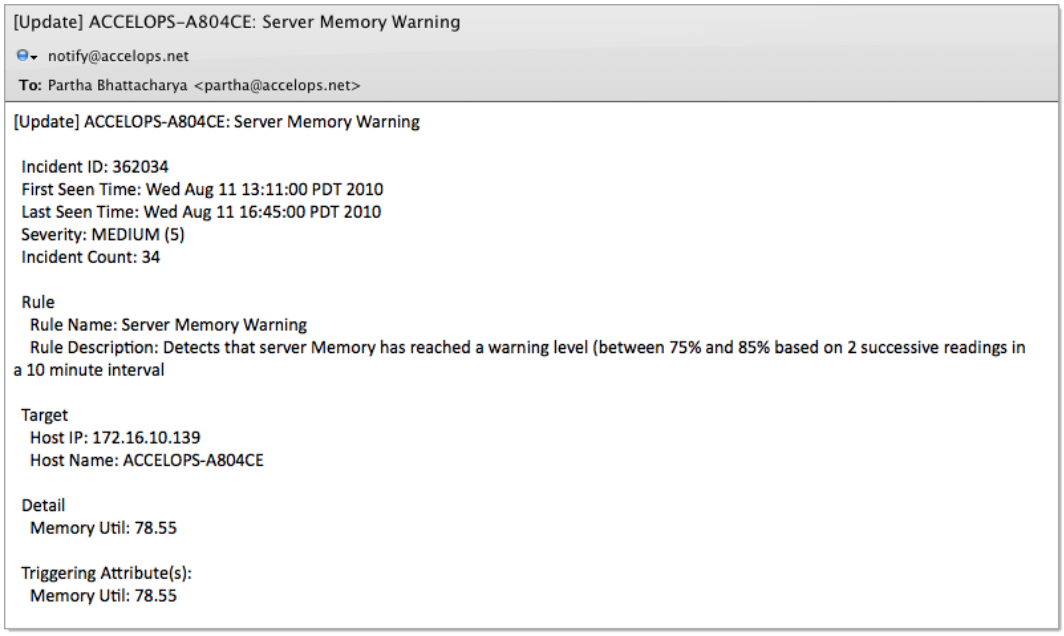
Target
Host IP: 172.16.10.15
Host Name: qa-v-win03-ads.prospect-hills.net

Detail
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

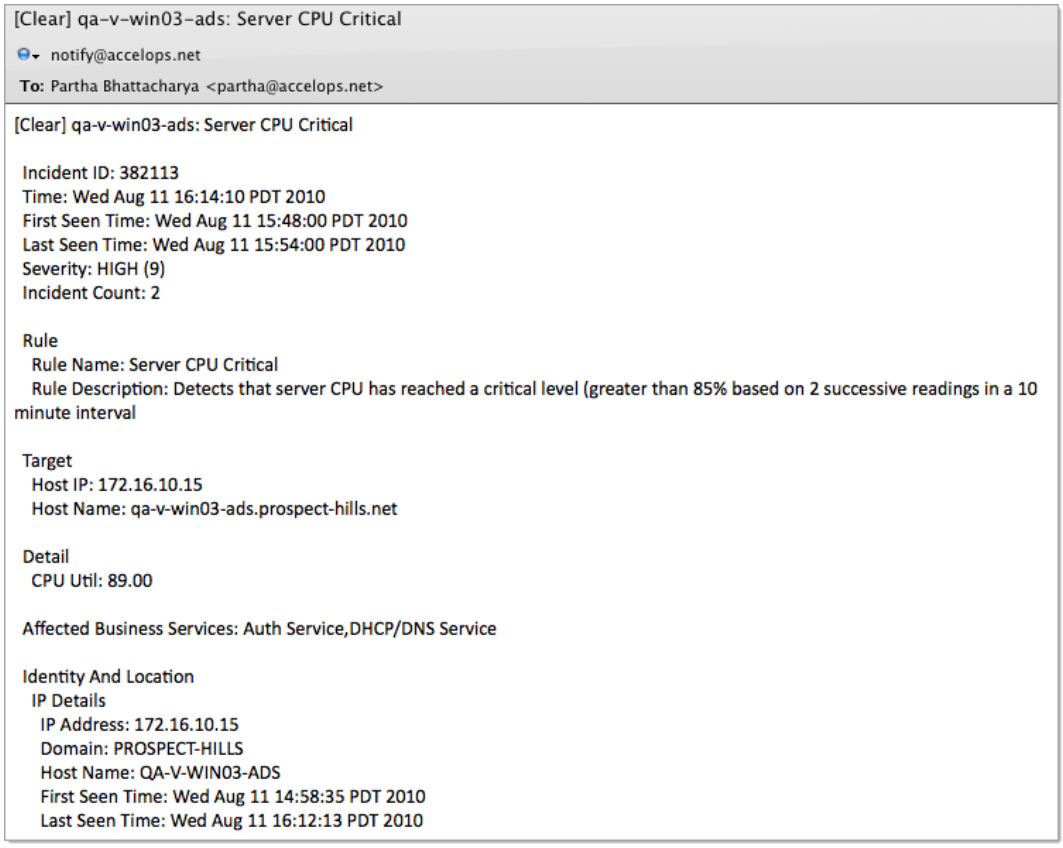
Rule
Rule Name: Server Memory Warning
Rule Description: Detects that server Memory has reached a warning level (between 75% and 85% based on 2 successive readings in a 10 minute interval

Target
Host IP: 172.16.10.139
Host Name: ACCELOPS-A804CE

Detail
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>
```

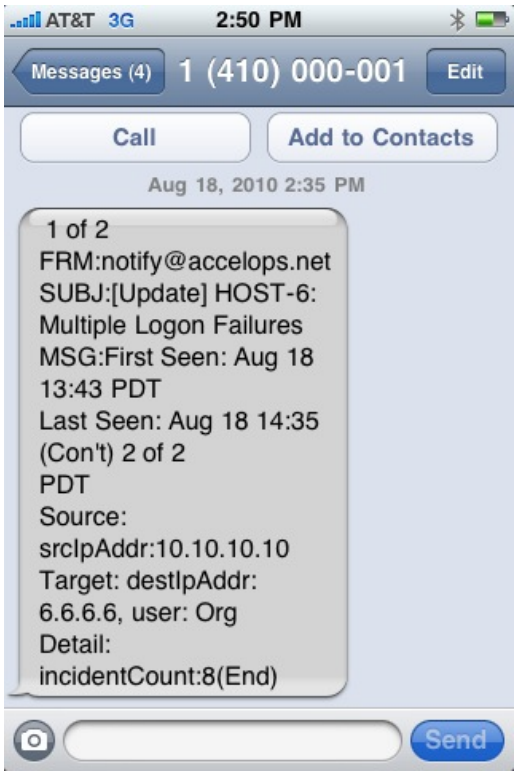
Body format

Section	Field	Description
Affected Business Services (optional)		
Generic		
Identity and Location		- 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. - Host name - User - Domain - Nearest switch name/port or VPN gateway or Wireless Controller - First and last seen times for this IP address to identity/location binding
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:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
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="name"/>
                                </xs:extension>
                        </xs:simpleContent>
                </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"/>
                </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 srcIpAddr, destIpAddr, hostIpAddr 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 srcIpAddr, destIpAddr, hostIpAddr 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 srcIpAddr, destIpAddr, hostIpAddr 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

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

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`
Input Parameters	XML file containing the query parameters
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	`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>`
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>/phoenix/rest/query/events/<queryId>/<begin>/<end>`
Output	totalCount (first time) and an XML containing the incident attributes. For the first call, **begin** = 0 and **end** 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,incid
entRptIp
```

Incident Notification XML Schema

The following is the schema for incident notification output file:

```
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
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>
```

```
                        <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"/>
        </xs:complexType>
        </xs:element>
</xs:schema>
```

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>`
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.
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`
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.
Input JSON	**ContentType:** `application/json` **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 • `externalTicketState` – New, Assigned, In Progress, or Closed • `externalAssignedUser` – External Assigned User
Output	HTTP status code

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:**
		{
		"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",

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"
        ]
}
```

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

		<pre>"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"
		},
		. ..
		]
		}</pre>

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:
		<pre>[
		{
		"custId": 1,
		"index": 0,</pre>

URI	Method	Additional Information
		"id": 6482650188627892000, "eventType": "PH_DEV_MON_PERFMON_JOB_DELAY_HIGH", "receiveTime": 1621557630000, "rawMessage": "<174>May 20 17:40:30 [PH_DEV_MON_PERFMON_JOB_DELAY_HIGH]:[jobName]=CPU Util (SNMP),[phCustId]=1, [hostName]=FGT50E3U17000553, [eventSeverity]=PHL_INFO, [phEventCategory]=3, [hostIpAddr]=172.30.58.50, [procName]=AppServer, [relayDevName]=sp5875, [relayDevIpAddr]=172.30.58.75,[phLogDetail]=A performance metric delay for a single device crossed high water mark", "nid": "6482650188627892238", "attributes": { "1": "PH_DEV_MON_PERFMON_JOB_DELAY_HIGH", "2": 1, "7": 1621557630000, "8": "172.30.58.75", "9": "172.30.58.75", "10": "sp5875", "11": "sp5875", "12": 1, "13": "<174>May 20 17:40:30 [PH_DEV_MON_PERFMON_JOB_DELAY_HIGH]: [jobName]=CPU Util(SNMP), [phCustId]=1, [hostName]=FGT50E3U17000553, [eventSeverity]=PHL_INFO, [phEventCategory]=3,

URI	Method	Additional Information
		ayDevName]=sp5875, [relayDevIpAddr]=172.30.58.75,[phLogDetail]=A performance 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": [ ], "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

"incidentReso":

None = 0

Open = 1

TruePositive = 2

FalsePositive = 3

InProgress = 4

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",

"incidentRptIp",

"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	Type	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	Type	Description
(optional)		retrieve this ID, navigate to **ADMIN > Setup > Organizations**, and refer to the **ID** 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",
```

```
  "columnList": [
    {
      "key": true,
      "name": "url",
      "type": "STRING"
    },
    {
      "key": false,
      "name": "wfCategoryID",
      "type": "LONG"
    },
    {
      "key": false,
      "name": "score",
      "type": "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.

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	Type	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	Type	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	Type	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	Type	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:
		{
		"<*LookupTable_Column_Name_1*>":<*Position_1*>,
		"<*LookupTable_Column_Name_2*>":<*Position_2*>,
		……
		}
		<*LookupTable_Column_Name_1*>: string
		<*Position*>: integer (from 1)
		{
		"url":1,
		"wfCategoryID":2
		}

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	Type	Description
taskId	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	Type	Description
lookupTableId	integer	The lookup Table Id.
taskId	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	Type	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 or DESC for ascending or descending order respectively>*

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>/data?size=25&start=0&searchText=example&sortBy=score%20acs>'
```

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/case1",
       "wfCategoryID": 26,
       "score": 0.25635383
    },
    {
       "url": "http://www.instance.com/case2",
       "wfCategoryID": 26,
       "score": 0.25635383
    }
  ],
  "total": 4,
  "start": 0,
  "size": 25
}
```


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

Query Parameters

Name	Type	Description
key	map	The primary key of item column and its value. Format: {"<*keyColumn_1*>":<*value*>} `key={"url":"http://example.com"}`

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*>	string	Column name.
<*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	Type	Description
lookupTableId	integer	Unique identifier representing the lookup Table.

Post Parameters

Name	Type	Description
<*array*>	list	List of primary key and value map.
<*map*>	map	The primary key of item column and its value. Format: {"<*keyColumn_1*>":<*value*>} `{"url":"http://example.com"}`

Example Request

```
curl -g -H 'Content-Type: application/json' \
     -H 'Authorization: Basic <credentials>' \
     -X PUT \
'https://<IP>/phoenix/rest/pub/lookupTable/<lookupTableId>/data/delete' \
     --data-raw \
'[
    {
            "url": "http://www.sample.com/wp-login.php"
        },
    {
            "url": "http://www.instance.com/case1"
        },
    {
            "url": "http://www.sample.com/case2"
        }
     ]'
```

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 (FortiSIEM Supervisor)	`https://<FortiSIEM_Supervisor_IP>/phoenix/rest/system/health/summary`
Input URL (FortiSIEM Manager)	`https://<FortiSIEM_Manager_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 URL	`https://<FortiSIEM_Supervisor_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 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:

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

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

Request Path Parameter

Field	Type	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 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).	1. Response contains failed reason. Example: Wrong watchlist name error. `{"response":"DyWatchList@DNS was not found","status":"Failed"}` 2. Response empty.

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 URL 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	Type	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).	1. Response contains failed reason. Example: Wrong watchlist name error. `{"response":"DyWatchList@DNS was not found","status":"Failed"}` 2. Response empty.

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 URL 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	Type	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).	1. Response contains failed reason. Example: Wrong watchlist name error. `{"response":"DyWatchList@DNS was not found","status":"Failed"}` 2. Response empty.

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

Output

Response Status	Response

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 Status	Response

	<pre>"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"
	}</pre>

Failure	<pre>{
	"response": "Reason for failure",
	"status": "Failed"
	}</pre>

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 of a specific watch list.

Output

Response Status	Response

Success	<pre>{
	"response": [
	{
	"topGroup": true,
	"entries": [
	{
	"lastSeen": null,
	"naturalId": "172.30.57.65_
	1616469746578",
	"dataCreationType": null,
	"firstSeen": null,</pre>

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 Ex: If ID contains non-numeric values (invalid data) Status Code – 404 Not Found	{ "response": "DyWatchList@<watch_list_id> was not found", "status": "Failed"

Response Status	Response
	}

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

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	Type	Description
entryValue	String	Entry value of watch list entry.

Output

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
Ex: If no match, Status Code – 200
	{
	"response": "No such Watch List with entry value: <entryValue>
	and watch list name: <watchlistName>",
	"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	Type	Description
Replace <*watch_list_entry_id*> with specific watch list entry id	Long	Watch list entry id

Output

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",
	"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"

Response Status	Response

	<pre>{
	}
	],
	"isCaseSensitive": false,
	"dataCreationType": "USER",
	"displayName": "Test WL Group",
	"valueType": "STRING",
	"description": "",
	"id": 881750,
	"valuePattern": null,
	"ageOut": "1w"
	},
	"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 exists",
	"status": "Failed"
	}</pre>

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	Type	Description
Replace <*watch_list_entry_id*> with specific watch list entry id.	Long	Watch list entry id

Output

Response Status	Response
Success	<pre>{</pre>

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": "1w"
	},
	"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	Type	Description
Replace <*watch_list _entry_id*> with specific watch list entry id	Long	Watch list entry id

Request Parameters

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

Output

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": "1w"
	},
	"status": "Success"
	}</pre>

Failure	<pre>{
	"response": "Reason for failure",
	"status": "Failed"
	}</pre>

Failure	{

Response Status	Response

Ex – If no match, status code - 200	<pre>"response": "Can't update state of watch list entry - No such watch list entry exists",
	"status": "Failed"
	}</pre>

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

Output

Response Status	Response

Success	<pre>{
	"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"
	},</pre>

Response Status	Response
	"status": "Success" }

Failure	{
	"response": "Reason for failure",
	"status": "Failed"
	}

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

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	Type	Description
Replace <*watch_list_ entry _id*> with specific watch list entry id	Long	Watch list entry id

Request Parameters

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

Output

Response Status	Response
Success	{ "response": {

Response Status	Response
	"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" }

Failure
Ex: If ID contains non-numeric values (invalid data)
Status Code – 404 Not Found
	{
	"response": "Reason for failure",
	"status": "Failed"
	}

Failure
Ex – If no match, status code - 200
	{
	"response": "Can't update last seen time of watch list entry - No such watch list entry exists",
	"status": "Failed"
	}

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	Type	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
Ex – If no match, status code - 200
	{
	"response": "Can't update last seen time of watch list entry - No such watch list entry exists",
	"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	Type	Description
Replace <*watch_list_ entry _id*> with specific watch list entry id	Long	Watch list entry id

Request Parameters

Field	Type	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
Ex: If ID contains non-numeric values (invalid data)
Status Code – 404 Not Found
	{
	"response": "Reason for failure",
	"status": "Failed"
	}

Failure
Ex – If no match, status code - 200
	{
	"response": "Can't update count of watch list entry - No such watch list entry exists",
	"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	Type	Description
custId	Long	Customer ID
watchlistId	Long	Watchlist ID
value	String	Entry value of watch list entry
count	Long	Count of watch list entry occurrence

Output

Response Status	Response

Success	<pre>{
	"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"
	}</pre>

Failure	<pre>{
	"response": "Reason for failure",
	"status": "Failed"
	}</pre>

Failure
Ex – If no match, status code - 200
	<pre>{
	"response": "Can't update count of watch list entry - No such watch list entry exists",
	"status": "Failed"
	}</pre>

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	Type	Description
watchlistId	Long	Watchlist ID

Request Body

Field	Type	Description
Body	JSON Array of Watch list entry objects	Watch Entry
entryValue(required)	String	Watch List entry value

```
[
    {
        "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"
    }
]
```

Output

Response Status	Response

Success	{
	"response": "Successfully added to watch list - [IDs]",
	"status": "Success"
	}

Failure	{ "response": "Reason for failure", "status": "Failed"

Response Status	Response
	}

Failure
Ex: Invalid data format in request parameters
Status code - 200
	{
	"response": " Error while adding entries to watch lists - Invalid data format",
	"status": "Failed"
	}

Failure
Ex: If no entry value exists in Watchlist Entry
Status code - 200
	{
	"response": "Error while adding entries to watch lists - WatchListEntry must have entryValue field",
	"status": "Failed"
	}

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	Type	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"
		}]
		}

Output

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>}
	],
	"isCaseSensitive": null,
	"dataCreationType": "SYSTEM",
	"displayName": "Resource Issues Test WL Grp4",
	"valueType": "STRING",
	"description": "Servers, network or storage devices",
	"id": 899753,
	"valuePattern": null,
	"ageOut": null
	}
	],
	"status": "Success"
	}</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	Type	Description
Body	JSON Object of Watch list with watch list entry	Watch list entry
entryValue(required)	String	Watch list entry value

```
{
    "lastSeen": 1612901760002,
    "dataCreationType": "USER",
    "firstSeen": 1612901760001,
    "count": 100,
    "custId": 1
    "triggeringRules": "Datastore Space Warning",
    "description": "Testing again",
    "id": 889400,
    "inclusive": true,
    "entryValue": "PVVol_A001_A000356_POWER23",
    "expiredTime": 1612988160001,
    "ageOut": "2d",
}
```

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

Output

Response Status	Response

Success	<pre>{
	"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"</pre>

Response Status	Response
	}

Failure	{
	"response": "Reason for failure",
	"status": "Failed"
	}

Failure
Ex: If entry doesn't have entry value
Response code - 200
	{
	"response": "HTTP 400 Bad Request",
	"status": "Failed"
	}

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

Output

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

Response Status	Response
	"status": "Success" }

Failure	{
	"response": "Reason for failure",
	"status": "Failed"
	}

Failure
Ex: If any exception occurs
	{
	"response": " Error in deleting watch list entries – Exception message ",
	"status": "Failed"
	}

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

Output

Response Status	Response

Success	{
	"response": "Deleted watch lists - [IDs]",
	"status": "Success"
	}

Failure	{
	"response": "Reason for failure",
	"status": "Failed"
	}

Failure	{ "response": "Deleting system defined group is

Response Status	Response
Ex: If group is system defined group	not allowed", "status": "Failed" }

Failure
Ex: If any exception occurs
	{
	"response": " Error in deleting watch lists – Exception message ",
	"status": "Failed"
	}

JSON Object Formats

- Watch List Entry JSON
- Watch List JSON

Watch List Entry JSON

Field	Type	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
naturalId	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	Type	Description
id	Long	Watch list group id
naturalId	String	Unique ID of watch list
isCaseSensitive	Boolean	
ageOut	String	Age out (Expiry)
entries	List<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

The following tables are available for device attributes.

Device Attribute	Type	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	Type	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	Type	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	Type	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	Type	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	Type	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	Type	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	Type	Description
custId	unsignedByte	The customer id.
count	unsignedByte	The number of installed software.

runningSoftware	Type	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	Type	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	Type	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	Type	Description
refId	unsignedInt	The reference Id.

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

errorMsgs	Type	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	instanceId	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/Collector
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.reason	attribute	All	Name of attribute e.g. CPU Utilization etc. See Appendix - Current Thresholds for Health Status for a complete list.
nodes.metrics.healthSummary.reason	value	All	Normal/Warning/Critical
nodes.metrics.healthSummary.reason	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.diskIO	read_ops	All	Read Operations/sec
nodes.metrics.diskIO	write_ops	All	Write Operations/sec
nodes.metrics.diskIO	read_kbps	All	Read Volume (KB/sec)
nodes.metrics.diskIO	write_kbps	All	Write Volume (KB/sec)
nodes.metrics.diskIO	readWait_ms	All	Read Wait Latency (msec)
nodes.metrics.diskIO	writeWait_ms	All	Write Wait Latency (msec)
nodes.metrics.diskIO	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	• 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 • 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 • 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
Memory Utilization	All nodes	• Normal - if memoryUsage.used_pct less than 75 • Warning - if memoryUsage.used_pct between 75 and 90 • Critical - if memoryUsage.used_pct greater than 90

Health JSON Attribute	Applicability	Threshold
Swap Space Utilization	All nodes	• Normal - if swapUsage.in_bps less than 7Mbps • Warning - if swapUsage.in_bps between 7Mbps and 10Mbps • Critical - if swapUsage.in_bps greater than 10Mbps
Disk Utilization	All nodes; skips /data, data-clickhouse	• Normal - if diskUsage.used_pct less than 65 • Warning - if diskUsage.used_pct between 65 and 85 • Critical - if diskUsage.used_pct greater than 85
I/O Utilization	All nodes	• Normal - if cpuUsage.ioWait_pct less than 15 AND diskIO.readWait_ms less than 30 AND diskIO.writeWait_ms less than 30 AND nfsIO.readLatency_ms less than 50 AND nfsIO.writeLatency_ms less than 50 • Warning - if cpuUsage.ioWait_pct between (15 and 30) OR diskIO.readWait_ms between (30 and 60) OR diskIO.writeWait_ms between (30 and 60) AND nfsIO.readLatency_ms between (50 and 75) AND nfsIO.writeLatency_ms between 50 and 75 • Critical - if cpuUsage.ioWait_pct more than 30 OR diskIO.readWait_ms more than 60 OR diskIO.writeWait_ms more than 60 OR nfsIO.readLatency_ms more than 75 OR nfsIO.writeLatency_ms more than 75
Process Health	All nodes	• Normal - if processStat.uptime more than 1 hour AND processStat.cpuUtil_pct less than 50 AND processStat.memoryUtil_pct less than 50 • Warning - if processStat.uptime less than 1 hour OR processStat.cpuUtil_pct between (50 and 75) OR processStat.memoryUtil_pct between (50 and 75) • Critical - if process is DOWN OR processStat.cpuUtil_pct greater than 75 OR processStat.memoryUtil_pct greater than 75
Event Pipeline	Collector only	This indicates whether queues are building up in Collectors. • Normal - if eventUploadQueue.total_mb less than 20 • Warning - if eventUploadQueue.total_mb between 20 and 50 • Critical - if eventUploadQueue.total_mb greater than 50
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
		• Warning - if difference between reader and writer's sharedStore_pct is between 15 and 30 • Critical - if difference between reader and writer's sharedStore_pct is more than 30
Last Status Updated	All nodes	This is based on the health updates between Collector and Supervisor; Worker and Supervisor; and Instance Supervisor and FortiSIEM Manager. • Normal - if nodes.metrics.lastStatusUpdated less than 15 minute delay • Warning - if nodes.metrics.lastStatusUpdated between (15 minute and 20 minute) delay • Critical - if nodes.metrics.lastStatusUpdated more than 20 minute delay
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	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. • Normal - if nodes.metrics.lastFileReceived less than 15 minute delay • Warning - if nodes.metrics.lastFileReceived between (15 minute and 20 minute) delay • Critical - if nodes.metrics.lastFileReceived more than 20 minute delay

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