

BLACKDUCK | Hub

Getting Started with the Hub SDK

Version 4.4.1



This edition of the *Getting Started with the Hub SDK* refers to version 4.4.1 of the Black Duck Hub.

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Please send your comments and suggestions to:

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The Hub documentation

The documentation for the Hub consists of online help and these documents:

Title	File	Description
Release Notes	release_notes_bd_hub.pdf	Contains information about the new and improved features, resolved issues, and known issues in the current and previous releases.
Installing Hub using Docker Compose	hub_install_compose.pdf	Contains information about installing and upgrading the Hub using Docker Compose.
Installing Hub using Docker Swarm	hub_install_swarm.pdf	Contains information about installing and upgrading the Hub using Docker Swarm.
Installing Hub using Kubernetes	hub_install_kubernetes.pdf	Contains information about installing and upgrading the Hub using Kubernetes.
Installing Hub using OpenShift	hub_install_openshift.pdf	Contains information about installing and upgrading the Hub using OpenShift.
Getting Started	hub_getting_started.pdf	Provides first-time users with information on using the Hub.
Scanning Best Practices	hub_scanning_best_practices.pdf	Provides best practices for scanning.
Getting Started with the Hub SDK	getting_started_hub_sdk.pdf	Contains overview information and a sample use case.
Report Database	report_db_bd_hub.pdf	Contains information on using the report database.

Hub integration documentation can be found on **Confluence**.

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Chapter 1: About the Hub SDK

The Black Duck Hub REST APIs provide a standard interface for interacting with the Hub.

REST APIs provide access to resources (data entities) via URI paths. To use a REST API, your application will make a HTTP request and parse the response. The methods used by your application will be the standard HTTP methods of GET, POST, PUT and DELETE. REST APIs operate over HTTP(S) making it easy to use with any programming language or framework. The input and output format for the Hub REST APIs is JSON.

Important: Black Duck does not support REST APIs that begin with "v1" or "internal".

Viewing and Testing the REST APIs

The Black Duck Hub provides online access and documentation to the REST servers and individual REST APIs. After logging in to the Hub application, you can enter the following url to access this information:

http://<your Hub server url>/api.html

Each supported REST API is documented with the required input parameters and expected response. A "Try it out" button allows you to do interactive testing of the API.

Note: The API page uses Swagger to document the Hub APIs. Swagger documentation should not be considered part of the Hub REST APIs and can change without warning or backward compatibility.

The following example shows the component-version REST API call, which returns component information:

GET /api/components/{componentId}/versions/{versionId}

where {componentID} and {versionID} are the internal Hub IDs for the OSS component in the Black Duck KB.

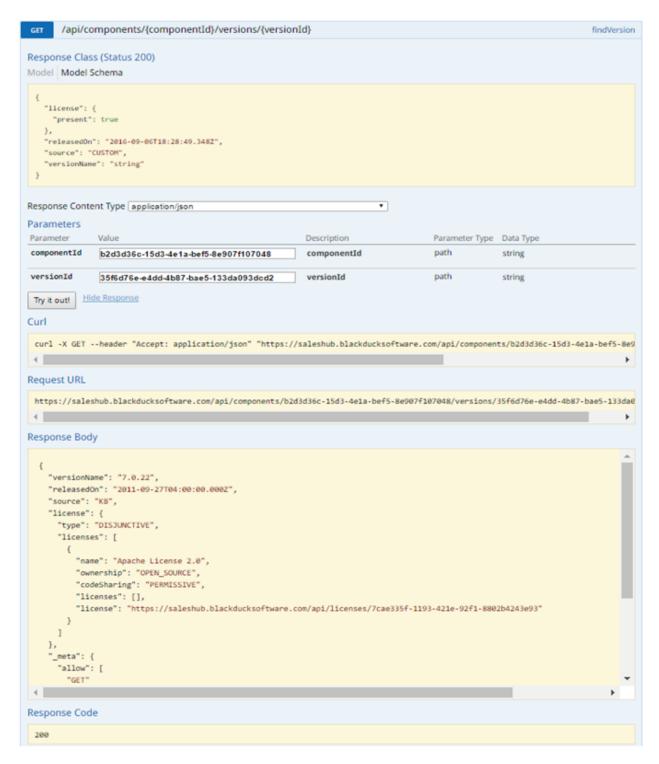
Curl

curl -X GET --header "Accept: application/json" "https://<HUB SERVER>/api/components/b2d3d36c-15d3-4e1a-bef5-8e907f107048/versions/35f6d76e-e4dd-4b87-bae5-133da093dcd2"

Request URL

 $https: // < HUB_SERVER > / api/components/b2d3d36c-15d3-4e1a-bef5-8e907f107048 / versions/35f6d76e-e4dd-4b87-bae5-133da093dcd2 / api/components/b2d3d3d5c-15d3-4e1a-bef5-8e907f107048 / versions/35f6d76e-e4dd-4b87-bae5-133da093dcd2 / api/components/b2d3d3d5c-15d3-4e1a-bef5-8e907f107048 / versions/35f6d76e-e4dd-4b87-bae5-133da093dcd2 / api/components/b2d3d3d5c-15d3-4e1a-bef5-8e907f107048 / versions/35f6d76e-e4dd-4b87-bae5-133da093dcd2 / api/components/b2d3d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3d5c-15d3-4e1a-bef5-8e907f107048 / api/components/b2d3d5c-15d3-4e1a-bef5-8e907f10704 / api/component$

The equivalent API call can also be made using the API GUI, for example:



Authentication

The Black Duck Hub REST APIs currently support session authentication. In order to access the REST APIs, you must first authenticate with the Hub application. For example, the following curl command shows how to authenticate with the Hub application prior to making the REST API calls:

curl -X POST --data 'j_username=username&j_password=password' -i http://<your Hub server url>/j_spring_security_check

where the username and password in bold are the credentials for logging in to your Hub instance.

Chapter 2: Example of using the Hub SDK

Use Case: I'm interested in using the REST APIs to find risk counts for my project "Application1" version "1.0".

Step 1: Authentication

You must first authenticate with the Hub application. For example, the following curl command shows how to authenticate with the Hub application prior to making the REST API calls:

```
curl -X POST --data 'j_username=username&j_password=password' -i http://<your
Hub server url>/j spring security check
```

Note: the username and password in bold are the credentials for logging in to your Hub instance.

Step 2: Get the Application1 project

https://<Hub server url>:443/api/projects?q=name%3AApplication1

Included in the JSON response are all your available http calls. Notice you can call "versions" or "canonicalVersion".

Step 3: Get the Application1 project versions

Get the versions of Application1 project.

Using the links provided in the ISON response in step 1 I can use the following to get my project

versions:

https://<Hub server url>/api/projects/4bfe0d5a-6b3d-4d11-8212-6b3b2f7b61b5/versions

Included in the JSON response are all your available http calls. Notice you can call "riskProfile".

Step 4: Get the Risk Profile for "1.0" version

Using the links in the JSON response from above I can call the following to get the risk profile:

https://<Hub server url>/api/projects/4bfe0d5a-6b3d-4d11-8212-6b3b2f7b61b5/versions/f7838043-f144-4853-9c62-d1c4c49b909f/risk-profile

```
-categories: {
   -VERSION: { ... }
   -ACTIVITY: { ... }
   -VULNERABILITY: {
       MEDIUM: 1
       LOW: 0
       OK: 8
       UNKNOWN: 0
  -LICENSE: {
HIGH: 0
       MEDIUM: 1
       LOW: 0
       OK: 8
       UNKNOWN: 0
   -OPERATIONAL: { ... }
   href: "https://
                                                 /api/projects/4bfe0d5a-6b3d-4d11-8212-6b3b2f7b61b5/versions/f7838043-f144-4853-9c62-d1c4c49b909f/risk-profile"
  -links: [1]
-0: {
          {
rel: "version"
          href: "https://
                                                       api/projects/4bfe0d5a-6b3d-4d11-8212-6b3b2f7b61b5/versions/f7838043-f144-4853-9c62-d1c4c49b909f"
```

The JSON response includes all risk counts for Version, Activity, Vulnerability, License, and Operational risk. The user can now use those values for whatever external activity they'd like to do (fail a build, create bug tracking tickets, and so on)

Chapter 3: CSRF security

Cross-site request forgeries (CSRF) are types of attacks which perform unwanted actions on a web application without the user's intent. This type of vulnerability happens on web applications which use cookies to identify the user. For example, the attacker uses the same cookies to make a fraudulent request, and attempts to lure the user to click a fraudulent link. If the user clicks the link after being authenticated, the fraudulent request performs any actions available to the logged-in user, but without the knowledge of the user.

The forged request works because browser requests automatically include all credentials associated with the web application, such as the logged-in user's session information in cookies. The server cannot distinguish between the forged request from the user and the legitimate request form the user.

Other names

CSRF attacks are also known by other names; the main difference is the technique used to perform the attack. The names include XSRF, Sea Surf, Session Riding, and Hostile Liking.

CSRF security in The Hub

Black Duck Hub version 4.0.0 now features improved security for attempted cross-site request forgeries (CSRF). The Hub uses a Synchronized Token Pattern (STP) to address CSRF. This is a technique where a secret and unique token value is passed along with every request through form data or the header. This token is then verified on the server side. If the tokens do not match, then the request is ignored, and a 403 forbidden error displays. The unique token is generated for each session, not for each request. The same unique token is used for the duration of the session, and a new token is generated for each new session. The token is destroyed when its session is destroyed. The following is an example of the CSRF format:

```
headerName = X-CSRF-TOKEN

parameterName = _csrf

token = 484dcea0-82a7-4f3e-9158-f80513ed86f9
```

When making a REST call to authenticate the user, a POST request (login request) is made to the URL /j_spring_security_check. The CSRF information is returned in the response header. The following is an example of the *login request header*:

```
POST /j_spring_security_check HTTP/1.1
Host: qa-hub21.dc1.lan
Connection: keep-alive
Content-Length: 40
```

```
Origin: https:
//qa-hub21.dc1.lan

User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_5)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/58.0.3029.110
Safari/537.36

Content-Type: application/x-www-form-urlencoded; charset=UTF-8
Accept: */*
X-Requested-With: XMLHttpRequest
X-FirePHP-Version: 0.0.6
Referer: https://qa-hub21.dc1.lan/
Accept-Encoding: gzip, deflate, br
Accept-Language: en-US,en;q=0.8,ja;q=0.6,cs;q=0.4
Cookie: JSESSIONID=5AB917FDED71241D77EB2EAC4C364DA0
```

The following is an example of the returned login response header. The CSRF token is highlighted.

```
HTTP/1.1 204

Server: nginx/1.10.3

Date: Wed, 14 Jun 2017 16:27:50 GMT

Connection: keep-alive

X-CSRF-HEADER: X-CSRF-TOKEN

X-CSRF-PARAM: _csrf

X-CSRF-TOKEN: 484dcea0-82a7-4f3e-9158-f80513ed86f9

Set-Cookie:
JSESSIONID=EC4F20CE9ADAACD02421803421B75D9B;path=/;HttpOnly

X-Content-Type-Options: nosniff

X-XSS-Protection: 1; mode=block

Cache-Control: no-cache, no-store, max-age=0, must-revalidate

Pragma: no-cache

Expires: 0

X-Frame-Options: SAMEORIGIN
```

- To add the CSRF security header to the request:
 - 1. Copy the CSRF token from the login response header, and include the CSRF token in each subsequent POST, PUT, PATCH and DELETE request headers.

The following is a sample request with the CSRF token passed in using the request header:

```
POST /api/v1/projects HTTP/1.1
```

Host: qa-hub21

Connection: keep-alive Content-Length: 180

Origin: https://qa-hub21

X-CSRF-TOKEN: 484dcea0-82a7-4f3e-9158-f80513ed86f9

User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_{12}_{5}) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/58.0.3029.110

Safari/537.36

Content-Type: application/json

Accept: application/json, text/javascript, */*; q=0.01

X-Requested-With: XMLHttpRequest

X-FirePHP-Version: 0.0.6

Referer: https://qa-hub21/ui/projects/view:create/action:modal

Accept-Encoding: gzip, deflate, br

Accept-Language: en-US, en; q=0.8, ja; q=0.6, cs; q=0.4 Cookie: JSESSIONID=3515A2241A424B3523436B354823F86D

Note: You must use the CSRF token from your specific HTTP session in your request. Any integration with a Hub 4.0.0 (or higher) server must include the token.

Chapter 4: API list

Each supported REST API is documented with the required input parameters. Below is the API list for the Hub 4.4.1:

aggregate-bom-rest-server : Aggregate Bom Rest Server	Show/Hide List Operations Expand Operations
GET /api/components/{componentId}/versions/{versionId}/references	find Project Version By Component Version Id
GET /api/projects/{projectId}/versions/{versionId}/components	findBomComponents
/api/projects/{projectId}/versions/{versionId}/components	addBomComponent
GET /api/projects/{projectId}/versions/{versionId}/components/{componentI	d} findBomComponent
рит /api/projects/{projectId}/versions/{versionId}/components/{componentI	d} updateBomComponent
/api/projects/{projectId}/versions/{versionId}/components/{componentI	d}/licenses/{licenseId} findBomComponentLicense
/api/projects/{projectId}/versions/{versionId}/components/{componentI	d}/licenses/{licenseId}/text
	findBomComponentLicenseText
/api/projects/{projectId}/versions/{versionId}/components/{componentI	id}/versions/{componentVersionId} findBomComponentVersion
/api/projects/{projectId}/versions/{versionId}/components/{componentI	d}/versions/{componentVersionId} updateBomComponentVersion
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/versionId}/components/	ions/{componentVersionId}/licenses/{licenseId} findBomComponentVersionLicense
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/versionId}/components/	ions/{componentVersionId}/licenses/{licenseId}/text findBomComponentVersionLicenseText
api-token-rest-server : Api Token Rest Server	Show/Hide List Operations Expand Operations
GET /api/current-user/tokens	getApiTokens
POST /api/current-user/tokens	createApiToken
DELETE /api/current-user/tokens/{tokenId}	deleteApiToken
GET /api/current-user/tokens/{tokenId}	getApiToken
POST /api/current-user/tokens/{tokenId}	regenerateApiToken
рит /api/current-user/tokens/{tokenId}	updateApiToken
POST /api/tokens/authenticate	authenticateApiToken

bom-component-comment-rest-server : Bom Component Comment Rest Server

Show/Hit	de List Operations	Expand Operations
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/comments	findBomCo	mponentComments
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/comments	createBomCo	omponentComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/comments/{c		omponentComment
GET /api/projects/{projectId}/versions/{versionId}/components/{componentId}/comments/{c		omponentComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/comments/{c		omponentComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/componentversions/{componentVersionId}/comments	findBomComponer	ntVersionComments
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/componentversions/{componentVersionId}/comments	createBomCompone	entVersionComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/component-versions/{componentVersionId}/comments/{commentId}	deleteBomCompone	untVersionComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/component-versions/{componentVersionId}/comments/{commentId}	·	entVersionComment
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/componentversions/{componentVersionId}/comments/{commentId}	updateBomCompone	entVersionComment
bom-component-issue-rest-server : Bom Component Issue Rest Server Show/H	ide List Operations	Expand Operations
<pre>post /api/projects/{projectId}/versions/{versionId}/components/{componentId}/component- versions/{componentVersionId}/issues</pre>	reated issue is manned	to issue tracker issue
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/component-versions/{componentVersionId}/issues/{hubIssueId}		deleteIssue
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/component-versions/{componentVersionId}/issues/{hubIssueId} Updates issue for component version.	odated issue is mapped	to issue tracker issue
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/issues Creates a new issue for component. C	reated issue is mapped	to issue tracker issue
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/issues/{huble	ssueId}	deleteIssue
/api/projects/{projectId}/versions/{versionId}/components/{componentId}/issues/{hubI		to issue tracker issue
Updates issue for component. Updates issue fo		esByProjectVersionId
/upi/reicuses/(reicusetu/rissues	miuissu	caby. Tojectveratoritu

code-location-rest-server : Code Location Rest Server	Show/Hide List Operations Expand Operations
GET /api/codelocations	findCodeLocations
GET /api/codelocations/{codeLocationId}	findCodeLocation
рит /api/codelocations/{codeLocationId}	updateCodeLocation
/api/projects/{projectId}/versions/{versionId}/codelocations	findCodeLocationForProjectVersions
component-rest-server : Component Rest Server	Show/Hide List Operations Expand Operation
GET /api/components	getComponent
GET /api/components/{componentId}	findComponen
GET /api/components/{componentId}/versions/{versionId}/origin/{originId}/d	direct-dependencies directDependencie
component-version-rest-server : Component Version Rest Server	Show/Hide List Operations Expand Operation
GET /api/components/{componentId}/versions	findVersionsByProjectI
GET /api/components/{componentId}/versions/{versionId}	findVersio
GET /api/components/{componentId}/versions/{versionId}/crypto-algorithms	getVersionCryptoAlgorithm
GET /api/components/{componentId}/versions/{versionId}/licenses/{licenseId}	findLicenseForComponentVersio
GET /api/components/{componentId}/versions/{versionId}/licenses/{licenseId}/te	ext getLicenseTex
GET /api/components/{componentId}/versions/{versionId}/origin	findOrigin
GET /api/components/{componentId}/versions/{versionId}/origin/{originId}	findOrigi
omponent-version-risk-profile-rest-server : Component Version	Risk Profile Rest Server
	Show/Hide List Operations Expand Operations
/api/components/{componentId}/versions/{versionId}/risk-profile	findComponentVersionRiskProfile
composite-code-location-rest-server : Composite Code Location R	Rest Server
(ani/godalogations//godalogationId)	Show/Hide List Operations Expand Operations
/api/codelocations/{codeLocationId}	deleteCodeLocation
end-user-license-agreement-rest-server : End User License Agree	ment Rest Server
	Show/Hide List Operations Expand Operations
GET /api/enduserlicenseagreement	getEndUserLicenseAgreementAcceptance
POST /api/enduserlicenseagreement	createOrUpdateEndUserLicenseAgreementAcceptance
health-check-rest-server : Health Check Rest Server	Chau/Hida List Operations Evanad Operation
	Show/Hide List Operations Expand Operation
	s status to determine if the system is in a normal, healthy state
/api/health-checks/readiness Determine the readiness	is status to determine if the system is ready to receive requests

license	e-rest-server : License Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/licenses			findLicenses
POST	/api/licenses			createLicense
DELETE	/api/licenses/{licenseId}			deleteLicense
GET	/api/licenses/{licenseId}			findLicense
PUT	/api/licenses/{licenseId}			updateLicense
GET	/api/licenses/{licenseId}/text			getLicenseText
PUT	/api/licenses/{licenseId}/text			updateLicenseText
linked	-data-rest-server : Linked Data Rest Server	Show/Hide	List Operations	Expand Operations
HEAD	/api/bom-import			head
POST	/api/bom-import			importBom
match	ed-file-rest-server : Matched File Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/projects/{projectId}/versions/{versionId}/components/{componentId}/mat	ched-files		findMatchedFiles
GET	/api/projects/{projectId}/versions/{versionId}/components/{componentId}/vers	ions/{compo	nentVersionId}	matched-files findMatchedFiles
GET /api/pi files	ojects/{projectId}/versions/{versionId}/components/{componentId}/versions/{co	omponentVe	rsionId}/origins/	{componentOrigir
meta-	rest-server : Meta Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/current-version		fin	dCurrentHubVersion
notific	cation-rest-server : Notification Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/notifications			findNotifications
GET	/api/notifications/{notificationId}			findNotification
GET	/api/users/{userId}/notification-counts		findUs	erNotificationsCount
PUT	/api/users/{userId}/notification-states		updat	eAllNotificationState
GET	/api/users/{userId}/notifications		f	indUserNotifications
GET	/api/users/{userId}/notifications/{notificationId}			findUserNotification
PUT	/api/users/{userId}/notifications/{notificationId}		up	dateUserNotification

notification-subscription-rest-server : Notification Subscription Rest Server

		Show/Hide	List Operations	Expand Operations
GET	/api/users/{userId}/notification-subscriptions		findNot	ificationSubscriptions
POST	/api/users/{userId}/notification-subscriptions		createNo	tificationSubscription
DELETE	/api/users/{userId}/notification-subscriptions/{subscriptionId}		deleteNo	tificationSubscription
GET	/api/users/{userId}/notification-subscriptions/{subscriptionId}		findNo	tificationSubscription
policy	-rule-filter-rest-server : Policy Rule Filter Rest Server	01/11/4-	List Ossetians	F 1 O!'
GET	/api/policy-rule-enabled-filters	Show/Hide	List Operations	Expand Operations cyRuleEnabledFilters
GET	/api/policy-rule-enableu-liners		geti oli	cyrtaicEnabledr iitera
policy	-rule-rest-server : Policy Rule Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/policy-rules		fine	dPolicyRulesPublicV2
POST	/api/policy-rules			createPolicyRule
DELETE	/api/policy-rules/{policyRuleId}			deletePolicyRule
GET	/api/policy-rules/{policyRuleId}			findPolicyRulePublic
PUT	/api/policy-rules/{policyRuleId}			updatePolicyRule
	:t-assignment-rest-server : Project Assignment Rest Server	Show/Hide	List Operations	Expand Operations
GET	/api/projects/{projectId}/usergroups		get	AssignedUserGroups
POST	/api/projects/{projectId}/usergroups			addAssignedUser
DELETE	/api/projects/{projectId}/usergroups/{userGroupId}		remove	eAssignedUserGroup
GET	/api/projects/{projectId}/usergroups/{userGroupId}		ge	tAssignedUserGroup
GET	/api/projects/{projectId}/users			getAssignedUsers
POST	/api/projects/{projectId}/users			addAssignedUser
DELETE	/api/projects/{projectId}/users/{userId}		ı	emoveAssignedUser
GET	/api/projects/{projectId}/users/{userId}			getAssignedUser
GET	/api/usergroups/{userGroupId}/projects		getProjectsA	ssignedToUserGroup
GET	/api/users/{userId}/projects	get	tProjectsAssignedTo	UserOrUsersGroups
nroiec	t-rest-server : Project Rest Server	Charren Sala	List Ossentians	5
GET	/api/projects	Show/Hide	List Operations	Expand Operations findProjects
	/api/projects			createProject
POST				,
DELETE	/api/projects/{projectId}			deleteProject
GET	/api/projects/{projectId}			findProject
PUT	/api/projects/{projectId}			updateProject

projec	t-version-rest-server : Project Version Rest Server	Show/Hide List Operations Expand Operations
GET	/api/projects/{projectId}/versions	findVersionsByProjectId
POST	/api/projects/{projectId}/versions	createVersion
DELETE	/api/projects/{projectId}/versions/{versionId}	deleteVersion
GET	/api/projects/{projectId}/versions/{versionId}	findVersion
PUT	/api/projects/{projectId}/versions/{versionId}	updateVersion
renor	t-rest-server : Report Rest Server	Show/Hide List Operations Expand Operations
GET	/api/reports/{reportId}	Show/Hide List Operations Expand Operations download
GET	/api/reports/{reportId}/contents	findContents
GET	/api/versions/{versionId}/license-reports	findVersionLicenseReports
POST	/api/versions/{versionId}/license-reports	createVersionLicenseReport
DELETE	/api/versions/{versionId}/license-reports/{reportId}	deleteVersionLicenseReport
GET	/api/versions/{versionId}/license-reports/{reportId}	findVersionLicenseReport
GET	/api/versions/{versionId}/reports	findVersionReports
POST	/api/versions/{versionId}/reports	createVersionReport
DELETE	/api/versions/{versionId}/reports/{reportId}	deleteVersionReport
GET	/api/versions/{versionId}/reports/{reportId}	findVersionReport
GET	/api/vulnerability-remediation-reports	findVulnerabilityRemediationReports
POST	/api/vulnerability-remediation-reports	createVulnerabilityRemediationReport
DELETE	/api/vulnerability-reports/{reportId}	deleteVulnerabilityReport
GET	/api/vulnerability-reports/{reportId}	findVulnerabilityReport
GET	/api/vulnerability-status-reports	findVulnerabilityStatusReports
POST	/api/vulnerability-status-reports	createVulnerabilityStatusReport
GET	/api/vulnerability-update-reports	findVulnerabilityUpdateReports
POST	/api/vulnerability-update-reports	createVulnerabilityUpdateReport
ual	ant namen - Bala Bast Samer	
	est-server : Role Rest Server /api/roles	Show/Hide List Operations Expand Operations getRolesPublic
GET	'	ū
GET	/api/roles/{roleId}	getRolePublic

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scan-service-proxy-rest-server : Scan Service Proxy Rest Server	Show/Hide List Operations Expand Operations
/api/codelocations/{codeLocationId}/scan-summaries	findScanSummaries
POST /api/fp-import/scans/{scanId}	fpImportPost
GET /api/scan-summaries/{scanId}	findScanSummary
GET /api/scan/data/	listBdio2
POST /api/scan/data/	uploadBdio2ViaForm
GET /api/scan/data/{id}	summarizeBdio2
GET /api/scan/data/{id}.bdio	download
search-rest-server : Search Rest Server	Show/Hide List Operations Expand Operations
GET /api/search/components	searchByComponentName
url-directory-rest-server : Url Directory Rest Server	Show/Hide List Operations Expand Operations
GET /api/	getUrlDirectory
user-filters-rest-server : User Filters Rest Server	Show/Hide List Operations Expand Operations
GET /api/user-status-filters	findUserStatusFilterView

user-group-rest-server : User Group Rest Server	Show/Hide List Operations Expand Operations
GET /api/usergroups	page
POST /api/usergroups	create
DELETE /api/usergroups/{userGroupId}	delete
GET /api/usergroups/{userGroupId}	get
РUT /api/usergroups/{userGroupId}	update
/api/usergroups/{userGroupId}/roles	getRolesByUserGroup
POST /api/usergroups/{userGroupId}/roles	addRoleForUserGroup
/api/usergroups/{userGroupId}/roles/{roleAssignmentId}	${\sf deleteRoleAssignmentForUserGroup}$
/api/usergroups/{userGroupId}/roles/{roleAssignmentId}	getRoleAssignmentForUserGroup
GET /api/usergroups/{userGroupId}/users	getAssignedUsers
POST /api/usergroups/{userGroupId}/users	addUsersToUserGroup
/api/usergroups/{userGroupId}/users/{userId}	removeUserFromUserGroup
/api/usergroups/{userGroupId}/users/{userId}	getAssignedUser
GET /api/users/{userId}/usergroups	getUserAssignedGroups
POST /api/users/{userId}/usergroups	addUserToGroups
/api/users/{userId}/usergroups/{userGroupId}	deleteUserFromGroup
/api/users/{userId}/usergroups/{userGroupId}	getSpecificUserAssignedToGroup
ser-notification-filter-rest-server : User Notification Filter Res	st Server Show/Hide List Operations Expand Operations
/api/notification-state-filters	findNotificationStateFilterView
/api/notification-type-filters	getNotificationTypeFilters
user-rest-server : User Rest Server	Show/Hide List Operations Expand Operations
GET /api/current-user	getCurrentUser
GET /api/users	findUsers
POST /api/users	createUser
GET /api/users/{userId}	findUser
PUT /api/users/{userId}	updateUser
PUT /api/users/{userId}/changepassword	changePasswordCurrentUser
Put /api/users/{userId}/resetpassword	resetPassword

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vulnerability-rest-server : Vulnerability Rest Server Show/Hide List Operations Expand Operations
GET /api/components/{componentId}/versions/{versionId}/origin/{originId}/vulnerabilities
Finds vulnerabilities by component version and origin Appl/components/{componentId}/versions/{versionId}/vulnerabilities Finds vulnerabilities by component version Finds vulnerabilities Fin
GET /api/components/{componentId}/vulnerabilities Finds vulnerabilities by component
GET /api/cwes/{cweld} Finds a specific CWE (common weakness enumeration) record
/api/vulnerabilities/{vulnerabilityId} Finds a specific vulnerability record
rulnerable-component-rest-server : Vulnerable Component Rest Server Show/Hide List Operations Expand Operations
/api/projects/{projectId}/versions/{versionId}/vulnerable-bom-components findVulnerableComponents