



# Supported REST APIs

## SnapCenter Software 4.8

NetApp  
February 12, 2024

# Table of Contents

- Supported REST APIs ..... 1
  - REST APIs supported for SnapCenter Server and plug-ins..... 1
  - Disaster recovery (DR) REST APIs ..... 8

# Supported REST APIs

## REST APIs supported for SnapCenter Server and plug-ins

The resources available through the SnapCenter REST API are organized in categories, as displayed on the SnapCenter API documentation page. A brief description of each of the resources with the base resource paths is presented below, along with additional usage considerations where appropriate.

### Auth

You can use this API to log into the SnapCenter Server. This API returns a user authorization token that is used to authenticate subsequent requests.

### Domains

You can use APIs to perform different operations.

- retrieve all the domains in SnapCenter
- retrieve details of a specific domain
- register or unregister a domain
- modify a domain

### Jobs

You can use APIs to perform different operations.

- retrieve all the jobs in SnapCenter
- retrieve status of a job
- cancel or stop a job

### Settings

You can use APIs to perform different operations.

- register, modify, or remove a credential
- displays the credential information registered in the SnapCenter Server
- configure notification settings
- retrieves information about the SMTP server currently configured to send email notifications and displays the name of the SMTP server, the name of the recipients, and the name of the sender
- displays multi-factor authentication (MFA) configuration of the SnapCenter Server login
- enable or disable and configure MFA for the SnapCenter Server login
- create the configuration file required to setup MFA

## Hosts

You can use APIs to perform different operations.

- query all SnapCenter hosts
- remove one or more hosts from SnapCenter
- retrieve a host by name
- retrieve all resources on a host
- retrieve a resource using the resource ID
- retrieve the plug-in configuration details
- configure the plug-in host
- retrieve all resources of the plug-in for Microsoft SQL Server host
- retrieve all resources of the plug-in for Oracle database host
- retrieve all resources of the plug-in for custom application host
- retrieve all resources of the plug-in for SAP HANA host
- retrieve the plug-ins installed
- install plug-ins on an existing host
- upgrade host package
- remove plug-ins from an existing host
- add plug-in on a host
- add or modify host
- get the signature of the Linux host
- register the signature of the Linux host
- put the host to maintenance or production mode
- start or restart the plug-in services on the host
- rename a host

## Resources

You can use APIs to perform different operations.

- retrieve all resources
- retrieve a resource using the resource ID
- retrieve all resources of the plug-in for Microsoft SQL Server host
- retrieve all resources of the plug-in for Oracle database host
- retrieve all resources of the plug-in for custom application host
- retrieve all resources of the plug-in for SAP HANA host
- retrieve a Microsoft SQL Server resource using a key
- retrieve a custom resource using a key
- modify a resource of the plug-in for custom application host

- remove a resource of the plug-in for custom application host using a key
- retrieve a SAP HANA resource using a key
- modify a resource of the plug-in for SAP HANA host
- remove a resource of the plug-in for SAP HANA host using a key
- retrieve an Oracle resource using a key
- create an Oracle application volume resource
- modify an Oracle application volume resource
- remove an Oracle application volume resource using a key
- retrieve the secondary details of the Oracle resource
- backup the Microsoft SQL Server resource using plug-in for Microsoft SQL Server
- backup the Oracle resource using plug-in for Oracle database
- backup the custom resource using plug-in for custom application
- configure the SAP HANA database
- configure the Oracle database
- restore a SQL database backup
- restore an Oracle database backup
- restore a custom application backup
- create a custom plug-in resource
- create a SAP HANA resource
- protect a custom resource using plug-in for custom application
- protect a Microsoft SQL Server resource using plug-in for Microsoft SQL Server
- modify a protected Microsoft SQL Server resource
- remove protection for Microsoft SQL Server resource
- protect an Oracle resource using plug-in for Oracle database
- modify a protected Oracle resource
- remove protection from Oracle resource
- clone a resource from the backup using plug-in for custom application
- clone an Oracle application volume from the backup using plug-in for Oracle database
- clone a Microsoft SQL Server resource from the backup using plug-in for Microsoft SQL Server
- create a clone life cycle of a Microsoft SQL Server resource
- modify clone life cycle of a Microsoft SQL Server resource
- delete clone life cycle of a Microsoft SQL Server resource
- move an existing Microsoft SQL Server database from a local disk to a NetApp LUN
- create a clone specification file for an Oracle database
- initiate an on-demand clone refresh job of an Oracle resource
- create an Oracle resource from the backup using the clone specification file
- restores the database to the secondary replica and joins the database back to the availability group

- create an Oracle application volume resource

## Backups

You can use APIs to perform different operations.

- retrieve backup details by backup name, type, plug-in, resource, or date
- retrieve all backups
- retrieve backup details
- rename or delete backups
- mount an Oracle backup
- unmount an Oracle backup
- catalog an Oracle backup
- uncatalog an Oracle backup
- get all the backups required to be mounted to perform point-in-time recovery

## Clones

You can use APIs to perform different operations.

- create, display, modify, and delete Oracle database clone specification file
- display Oracle database clone hierarchy
- retrieve clone details
- retrieve all clones
- delete clones
- retrieve clone details by ID
- initiate an on-demand clone refresh job of an Oracle resource
- clone an Oracle resource from the backup using the clone specification file

## Clone split

You can use APIs to perform different operations.

- estimate the clone split operation of the cloned resource
- retrieve the status of a clone split operation
- start or stop a clone split operation

## Resource Groups

You can use APIs to perform different operations.

- retrieve details of all resource groups
- retrieve the resource group by name
- create a resource group for plug-in for custom application

- create a resource group for plug-in for Microsoft SQL Server
- create a resource group for plug-in for Oracle database
- modify a resource group for plug-in for custom application
- modify a resource group for plug-in for Microsoft SQL Server
- modify a resource group for plug-in for Oracle database
- create, modify, or delete clone life cycle of a resource group for plug-in for Microsoft SQL Server
- back up a resource group
- put the resource group to maintenance or production mode
- remove a resource group

## Policies

You can use APIs to perform different operations.

- retrieve policy details
- retrieve policy details by name
- delete a policy
- create a copy of an existing policy
- create or modify policy for plug-in for custom application
- create or modify policy for plug-in for Microsoft SQL Server
- create or modify policy for plug-in for Oracle database
- create or modify policy for plug-in for SAP HANA database

## Storage

You can use APIs to perform different operations.

- retrieve all the shares
- retrieve a share by name
- create or delete a share
- retrieve storage details
- retrieve storage details by name
- create, modify, or delete a storage
- discover resources on a storage cluster
- retrieve resources on a storage cluster

## Share

You can use APIs to perform different operations.

- retrieve the details of a share
- retrieve details of all the shares

- create or delete a share on the storage
- retrieve a share by name

## Plugins

You can use APIs to perform different operations.

- list all the plug-ins for a host
- retrieve a Microsoft SQL Server resource using a key
- modify a custom resource using a key
- remove a custom resource using a key
- retrieve a SAP HANA resource using a key
- modify a SAP HANA resource using a key
- remove a SAP HANA resource using a key
- retrieve an Oracle resource using a key
- modify an Oracle application volume resource using a key
- remove an Oracle application volume resource using a key
- backup the Microsoft SQL Server resource using plug-in for Microsoft SQL Server and a key
- backup the Oracle resource using plug-in for Oracle database and a key
- backup the custom application resource using plug-in for custom application and a key
- configure the SAP HANA database using a key
- configure the Oracle database using a key
- restore a custom application backup using a key
- create a custom plug-in resource
- create a SAP HANA resource
- create an Oracle application volume resource
- protect a custom resource using plug-in for custom application
- protect a Microsoft SQL Server resource using plug-in for Microsoft SQL Server
- modify a protected Microsoft SQL Server resource
- remove protection for Microsoft SQL Server resource
- protect an Oracle resource using plug-in for Oracle database
- modify a protected Oracle resource
- remove protection from Oracle resource
- clone a resource from the backup using plug-in for custom application
- clone an Oracle application volume from the backup using plug-in for Oracle database
- clone a Microsoft SQL Server resource from the backup using plug-in for Microsoft SQL Server
- create a clone life cycle of a Microsoft SQL Server resource
- modify clone life cycle of a Microsoft SQL Server resource
- delete clone life cycle of a Microsoft SQL Server resource



- create a clone specification file for an Oracle database
- initiate an on-demand clone life cycle of an Oracle resource
- clone an Oracle resource from the backup using the clone specification file

## Reports

You can use APIs to perform different operations.

- retrieve reports of backup, restore, and clone operations for respective plug-ins
- add, run, delete, or modify schedules
- retrieve data for the scheduled reports

## Alerts

You can use APIs to perform different operations.

- retrieve all the alerts
- retrieve alerts by IDs
- delete multiple alerts or delete an alert by ID

## Rbac

You can use APIs to perform different operations.

- retrieve details of users, groups, and roles
- add or delete users
- assign user to role
- unassign user from role
- create, modify, or delete roles
- assign group to a role
- unassign group from a role
- add or delete groups
- create a copy of an existing role
- assign or unassign resources to user or group

## Configuration

You can use APIs to perform different operations.

- view the configuration settings
- modify the configuration settings

## CertificateSettings

You can use APIs to perform different operations.

- view the certificate status for the SnapCenter Server or plug-in host
- modify the certificate settings for the SnapCenter Server or plug-in host

## Repository

You can use APIs to perform different operations.

- retrieve the repository backups
- view the configuration information about the repository
- protect and restore the SnapCenter repository
- unprotect the SnapCenter repository
- rebuild and failover the repository

## Version

You can use this API to view the SnapCenter version.

## Disaster recovery (DR) REST APIs

SnapCenter disaster recovery (DR) functionality uses REST APIs to backup SnapCenter Server. Perform the following steps before using the DR REST APIs.

### Steps

1. Create a new Server DR backup, which restores a SnapCenter Server from a specified Server DR backup using DR Backup REST API: `/4.5/disasterrecovery/server/backup`
2. Bring up the secondary server machine, but before installing the SnapCenter Server on the secondary server you should complete the prerequisites.
  - The alternate server host name/Host FQDN should be same as the primary server host name, but the IP address can be different.
  - Secondary server version should be the same as the primary server.
  - Secondary SnapCenter should be installed on the same location and on same port as primary.
3. Before triggering the server DR restore operation, you should bring up the target path or the path where the DR backups are stored after the disaster.
  - Ensure that the DR backup files are copied to the new SnapCenter Server using the following command: `xcopy <Ssource_Path> \\<Destination_Server_IP>\<Folder_Path> /O /X /E /H /K {ex : xcopy C:\DRBackup \\10.225.81.114\c$\DRBackup /O /X /E /H /K}`
4. Install SnapCenter Server on the secondary machine.
  - While performing the DR restore operation, you should ensure that no jobs are running related to the SnapCenter Server.
5. Install the secondary SnapCenter Server in the same location and on the same port as primary server.
  - Perform server DR restore operation using the DR restore API: `/4.5/disasterrecovery/server/restore`

If the plug-in is not able to resolve the server hostname, log in to each of the plug-in host and add the etc/host entry for the new IP in the <New IP> SC\_Server\_Name format. For example, 10.225.81.35

SCServer1

The server etc/host entries will not be restored. You can restore it manually from the DR backup folder.



For an F5 setup, restore operation is performed as stand-alone, you should run a set of commands to create the F5 again. See, Link: [How to migrate SnapCenter to another server](#)



After DR restore, the host will be added but you should install the plug-in manually.



Repository backup schedule will be restored only if you install the SnapCenter Plug-in for Windows and attach NetApp LUN to the server machine.



If the DLLs are corrupt, you can attempt to repair SnapCenter Server or correct the faulty installation.



If NSM or config files are corrupt, you can uninstall and reinstall the SnapCenter Server with the same version.



Repository backup schedule will be restored only if you install the SnapCenter Plug-in for Windows and attach NetApp LUN to the server machine.

## REST API supported for disaster recovery of SnapCenter Server


Using REST APIs, you can perform the following operations on the REST APIs Swagger page. For information to access the Swagger page, see [How to access REST APIs using the swagger API web page](#).

### What you will need

- You should log in as the SnapCenter Admin user.
- The SnapCenter Server should be up and running to run DR restore API.

### About this task

SnapCenter Server DR supports all plug-ins.

Description	REST API	HTTP method
 You should provide the target path where the DR backups are stored.	<code>/4.5/disasterrecovery/server/backup?targetpath={path}</code>	GET
Create a new Server DR backup.	<code>/4.5/disasterrecovery/server/backup</code>	POST

Description	REST API	HTTP method
Restores a SnapCenter Server from a specified Server DR backup.	/4.5/disasterrecovery/server/restore	POST
Delete the Server DR backup based on backup name.	/4.5/disasterrecovery/server/backup	DELETE
Enable or disable the storage DR	/4.5/disasterrecovery/storage	POST

For more information, see the [Disaster Recovery APIs](#) video.

## Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.