



**NetApp Element**

# **Element Python SDK Release Notes**

Version 12.3

April 2021 | 215-15247\_AO\_UR001  
[doccomments@netapp.com](mailto:doccomments@netapp.com)

Contents

Introduction.....3

Support matrix.....4

Installing the NetApp Element Python SDK.....5

What's new in this release..... 6

    NetApp Element SDK API methods..... 6

        New API methods for Element software 12.....6

        New API methods for Element software 11.....7

Known issues..... 9

Where to find product documentation and other information ..... 10

Contacting NetApp Support..... 11

Copyright, trademark, and machine translation..... 12

    Copyright..... 12

    Trademark..... 12

    Machine translation..... 12

## Introduction

---

The NetApp Element Python SDK is a collection of software modules and libraries that facilitate integration and orchestration between proprietary systems and third-party applications. The Python SDK allows developers to deeply integrate Element storage-based system API with their Python programming languages. The NetApp Element Python SDK reduces the amount of additional coding time required for integration.

The Python SDK is available from the NetApp Support [Site](#).

The intended audience for this document is Python developers who are responsible for integrating Element storage functionality into other applications.

**Note:** All version 12.3 SDK languages have identical Element storage functionality and available APIs.

## Support matrix

---

The Element Python SDK supports the following software.

- Python 2: Versions: 2.7 and later
- Python 3: Versions: 3.3 or later
- NetApp Element software: Versions 11.0 through 12.3

# Installing the NetApp Element Python SDK

---

You can install the NetApp Element Python SDK from the NetApp Support Site.

## Steps

1. Download the `solidfire-sdk-python-<version number>.tar.gz` from the [NetApp Support Site](#).
2. Unzip the downloaded file into your directory.
3. Navigate to the `solidfire-sdk-python` directory:

```
cd solidfire-sdk-python
```

4. Run the following command to install the Element Python SDK:

```
python setup.py install
```

5. To use the Element Python SDK in other Python scripts, append the SolidFire directory location to your `PYTHONPATH` environment variable:

```
export PYTHONPATH=$PYTHONPATH:/path/to/solidfire-sdk-python/
```

## What's new in this release

---

The Element SDK version 12.3 release expands supported NetApp Element software API methods through version 12.3. This release also contains revised parameters for existing methods.

### NetApp Element SDK API methods

NetApp Element SDK version 12.3 provides Element storage API methods. The availability of each API depends on the version of Element software.

- [New API methods for Element software 12](#) on page 6
- [New API methods for Element software 11](#) on page 7

For more detail on Element storage API methods, refer to the *Element API Reference Guide* for your operating system.

### New API methods for Element software 12

NetApp Element SDK version 12.3 includes Element 12 methods.

The following version 12.3 API methods have been added to all SDK languages:

#### Node

- GetPatchInfo
- ListNetworkInterfaceStats

#### Encryption

- GetEncryptionAtRestInfo
- GetSoftwareEncryptionAtRestInfo
- RekeySoftwareEncryptionAtRestMasterKey

The following version 12.2 API methods have been added to all SDK languages:

#### Cluster

- DisableMaintenanceMode
- EnableMaintenanceMode
- GetLicenseKey
- SetLicenseKey

The following version 12.0 API methods have been added to all SDK languages:

#### Cluster

- DeleteAuthSession
- DeleteAuthSessionsByClusterAdmin
- DeleteAuthSessionsByUsername
- GetBinAssignmentProperties
- GetProtectionDomainLayout
- ListActiveAuthSessions
- ListAuthSessionsByClusterAdmin
- ListAuthSessionsByUsername
- SetProtectionDomainLayout

#### IDP

- AddIdpClusterAdmin
- CreateIdpConfiguration

## What's new in this release

- DeleteIdpConfiguration
- DisableIdpAuthentication
- EnableIdpAuthentication
- GetIdpAuthentication
- ListIdpConfigurations
- UpdateIdpConfiguration

## New API methods for Element software 11

NetApp Element SDK version 12.3 includes Element 11 methods.

The following version 11.8 API methods have been added to all SDK languages:

### Cluster

- CreateClusterInterfacePreference
- CheckProposedNodeAdditions
- DeleteClusterInterfacePreference
- GetActiveTlsCiphers
- GetClusterInterfacePreference
- GetClusterStructure
- GetSupportedTlsCiphers
- ListClusterInterfacePreferences
- ListProtectionDomainLevels
- ModifyClusterInterfacePreference
- ResetSupplementalTlsCiphers
- SetClusterStructure (Not supported in Python SDK and the CLI)
- SetSupplementalTlsCiphers
- TestAddressAvailability

### Node

- CheckProposedCluster
- ControlPower
- DisableAutoIp
- EnableAutoIp
- GetLldpConfig
- GetNodeFipsDrivesReport
- SetLldpConfig

### Security

- AddKeyServerToProviderKmp
- CreateKeyProviderKmp
- CreateKeyServerKmp
- CreatePublicPrivateKeyPair
- DeleteKeyProviderKmp
- DeleteKeyServerKmp
- GetClientCertificateSignRequest
- GetFipsReport
- GetKeyProviderKmp
- GetKeyServerKmp
- ListKeyProvidersKmp
- ListKeyServersKmp

## What's new in this release

- `ModifyKeyServerKmp`
- `RemoveKeyServerFromProviderKmp`
- `TestKeyProviderKmp`
- `TestKeyServerKmp`

### **SnapMirror**

- `AbortSnapMirrorRelationship`
- `BreakSnapMirrorRelationship`
- `CreateSnapMirrorEndpointUnmanaged`
- `CreateSnapMirrorRelationship`
- `CreateSnapMirrorVolume`
- `DeleteSnapMirrorRelationships`
- `GetOntapVersionInfo`
- `GetSnapMirrorClusterIdentity`
- `InitializeSnapMirrorRelationship`
- `ListSnapMirrorAggregates`
- `ListSnapMirrorLuns`
- `ListSnapMirrorNetworkInterfaces`
- `ListSnapMirrorNodes`
- `ListSnapMirrorPolicies`
- `ListSnapMirrorRelationships`
- `ListSnapMirrorSchedules`
- `ListSnapMirrorVolumes`
- `ListSnapMirrorVservers`
- `ModifySnapMirrorEndpointUnmanaged`
- `ModifySnapMirrorRelationship`
- `QuiesceSnapMirrorRelationship`
- `ResumeSnapMirrorRelationship`
- `ResyncSnapMirrorRelationship`
- `UpdateSnapMirrorRelationship`

### **SSH sessions**

- `DisableClusterSSH`
- `EnableClusterSSH`
- `GetClusterSSHInfo`



## Known issues

---

The following APIs are not supported in the Element SDK version 12.3 release.

| API Name            | Description   |
|---------------------|---|
| SetClusterStructure | Fails when the "schedules" input parameter is provided. Works for all other parameters. |
| CheckPingOnVlan     | The SDK is unable to parse the response received from the cluster.                      |

## Where to find product documentation and other information

---

You can learn more about using and managing NetApp HCI and SolidFire all-flash storage from the resources available in the Documentation Centers and Resources pages for both products.

In the Documentation Centers, you can also find information about hardware installation and maintenance, additional content resources available, links to known issues and resolved issues, and the latest release notes. On the Resources pages, you can find links to data sheets, technical reports, white papers, and videos.

- [\*NetApp HCI Documentation\*](#)
- [\*NetApp HCI Documentation Center\*](#)
- [\*NetApp HCI Resources page\*](#)
- [\*SolidFire and Element 12.3 Documentation Center\*](#)
- [\*SolidFire and Element 12.2 Documentation Center\*](#)
- [\*SolidFire and Element 12.0 Documentation Center\*](#)
- [\*SolidFire and Element 11.8 Documentation Center\*](#)
- [\*SolidFire and Element 11.7 Documentation Center\*](#)
- [\*SolidFire and Element 11.5 Documentation Center\*](#)
- [\*SolidFire Resources page\*](#)

## Contacting NetApp Support

---

If you need help with or have questions or comments about NetApp products, contact NetApp Support.

- Web:  
[mysupport.netapp.com](https://mysupport.netapp.com)
- Phone:
  - 888.4.NETAPP (888.463.8277) (US and Canada)
  - 00.800.44.638277 (EMEA/Europe)
  - +800.800.80.800 (Asia/Pacific)

# Copyright, trademark, and machine translation

---

## Copyright

Copyright © 2021 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.

Data contained herein pertains to a commercial item (as defined in FAR 2.101) and is proprietary to NetApp, Inc. The U.S. Government has a non-exclusive, non-transferrable, non-sublicensable, 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).

## Trademark

NETAPP, the NETAPP logo, and the marks listed on the NetApp Trademarks page are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.

<https://www.netapp.com/company/legal/trademarks/>

## Machine translation

See important information about localized content at [netapp.com](https://www.netapp.com/company/legal/machine-translation/).

<https://www.netapp.com/company/legal/machine-translation/>