



**NetApp Element**

# **Element Python SDK Release Notes**

Version 12.3

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## Introduction

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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

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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 11.8 through 12.3

# Installing the NetApp Element Python SDK

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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

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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

- `ModifyKeyServerKmip`
- `RemoveKeyServerFromProviderKmip`
- `TestKeyProviderKmip`
- `TestKeyServerKmip`

### **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

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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

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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

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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)

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