



Knowledge and support

Astra Data Store

NetApp
April 18, 2022

Table of Contents

- Knowledge and support 1
 - Troubleshooting 1
 - Get help 1
 - Automatic support monitoring 1

Knowledge and support

Troubleshooting

Learn how to work around some common problems you might encounter.

https://kb.netapp.com/Advice_and_Troubleshooting/Cloud_Services/Astra

Get help

NetApp provides support for Astra Data Store preview in a variety of ways. Free self-service support options are available 24x7, such as knowledgebase (KB) articles and a Slack channel.



You can get community technical support for Astra Data Store preview. Case creation using the [NetApp Support Site \(NSS\)](#) is not available for the preview release. You can get in touch with Support via the feedback option or use the Slack channel for self service.

Self-service support options

These options are available for free 24x7:

- [Knowledge base \(login required\)](#)

Search for articles, FAQs, or Break Fix information related to Astra Data Store preview.

- Documentation

This is the doc site that you're currently viewing.

- [NetApp "containers" Slack channel](#)

Go to the "containers" channel to connect with peers and experts.

- Feedback email

Send an email to astra.feedback@netapp.com to let us know your thoughts, ideas, or concerns.

Find more information

- [How to upload a file to NetApp \(login required\)](#)
- [NetApp Knowledge Base articles](#)

Automatic support monitoring

AutoSupport monitors the Astra Data Store preview system run-time and information and sends messages to NetApp Support. These system components can be monitored, depending on your configuration:

- Control plane
- Storage

AutoSupport is enabled by default during [Astra Data Store preview cluster installation](#) or after an AutoSupport custom resource (CR) is applied to the cluster. Once enabled, AutoSupport (ASUP) bundles are automatically uploaded to the [NetApp Support Site \(NSS\)](#) or made available for manual downloads.

Options

- [AutoSupport triggers and scenarios](#)
- [Configure custom control plane AutoSupport collection](#)
- [Configure custom storage AutoSupport collection](#)
- [List ASUPs in the system](#)
- [Download an ASUP Bundle](#)
- [Upload a core file](#)

AutoSupport triggers and scenarios

AutoSupport bundles are triggered in the following ways:

- **Periodically:** ASUP Bundles are created at intervals defined in a CR.
- **User Triggered:** You can manually create your own ASUPs to look at the log.
- **Coredumps:** If there are core dumps on a node, an ASUP is generated, and the core is sent to NetApp for further investigation.
- **Callhome event based:** An ASUP is generated from a particular callhome event from the operating system.
- **Kubernetes event based:** An ASUP is generated from a particular kubernetes event in the control plane.

These trigger scenarios generate one of these Autosupport types:

- **ControlPlane AutoSupport:** A collection of Astra Data Store preview control plane logs and CRs.
- **Storage AutoSupport:** A collection of storage reports and performance data.
- **Core Dump AutoSupport:** A collection of system core dumps.

Configure custom control plane AutoSupport collection

You can create a custom AutoSupport collection configuration that reports on control plane events. Most installations already enable periodic event reporting by default during [Astra Data Store preview cluster installation](#). This procedure describes how to configure an AutoSupport CR that reports based on parameters you select:

Steps

1. Customize the following command to create a control plane collection CR:

```
kubectl astasds asup collect -c controlplane --namespace=astrads-system
```

- a. Define custom parameters:

- `<myASUPname>`: The name of the AutoSupport CR to be generated.
- `-e <event name>`: The event name that triggers collection. The event name should be predefined in component.yaml (which is mounted to support controllers).

Example:

```
kubectl astrasds asup collect -c controlplane custom-asup-name -e debug --namespace=astrads-system
```

b. Add additional parameters as needed for your system:

- `--cluster`: This flag is required in a multi-cluster environment.
- `--localCollection`: Enables local collection. The default is `false`.
- `--forceUpload`: Enables force upload. The default is `false`.
- `--retry`: Enables retry. The default is `false`.

Configure custom storage AutoSupport collection

You can create a custom AutoSupport collection configuration that reports on storage component events. Most installations already enable periodic event reporting by default during [Astra Data Store preview cluster installation](#). This procedure describes how to configure an AutoSupport CR that reports based on parameters you select:

Steps

1. Customize the following command to create a storage collection CR:

```
kubectl astrasds asup collect -c storage --namespace=astrads-system
```

a. Define custom parameters:

- `<myASUPname>`: The name of the AutoSupport CR to be generated.
- `-e <event name>`: The event name that triggers collection. The event name should be predefined in `component.yaml` (which is mounted to support controllers).

Example with performance event:

```
kubectl-astrads asup collect -c storage -e performance example-perf-storage-asup
```

- `-t <ISO_format> -d <hours>`: Collect a storage ASUP for all nodes for a specified duration. Use standard ISO date time format (`-t`) with a duration (`d`) in hours. For example:

```
kubectl astrads asup collect -c storage -t 2021-01-01T15:00:00Z -d 24
```

- `--nodes <nodename>`: Collect a storage ASUP for specified node. For example:

```
kubectl astrads asup collect -c storage --nodes example1
```

- `--nodes nodename1,nodename2,nodename3`: Collect a storage ASUP for specified nodes:

```
kubectl astrads asup collect -c storage --nodes  
example1,example2,example3
```

b. Add additional parameters as needed for your system:

- `--cluster`: This flag is required in a multi-cluster environment.
- `--localCollection`: Enables local collection. The default is `false`.
- `--forceUpload`: Enables force upload. The default is `false`.
- `--retry`: Enables retry. The default is `false`.

List ASUPs in the system

Use the following command to list ASUPs in the system by name:

```
kubectl astrads asup list --namespace=astrads-system
```

Sample response:

NAMESPACE	NAME	SEQUENCE	NUMBER	EVENT
SIZE	STATE	LOCAL	COLLECTION	
astrads-system	storage-callhome.reboot.unknown-...	1		
callhome.reboot.unknown	0	uploaded		astrads-ds-support-tdl2h:
astrads-system	storage-callhome.reboot.unknown-...	2		
callhome.reboot.unknown	0	uploaded		astrads-ds-support-xx6n8:
astrads-system	storage-callhome.reboot.unknown-...	3		
callhome.reboot.unknown	0	uploaded		astrads-ds-support-qghnx:

Download an ASUP Bundle

You can download locally-collected ASUP bundles using this command. Use `-o <location>` to specify a location other than the current working directory:

```
./kubectl-astrasds asup download <ASUP_bundle_name> -o <location>
```

Upload a core file

If a service crashes, an AutoSupport (ASUP) message is created along with a file containing relevant memory contents at the time of the crash (known as a core file). Astra Data Store preview automatically uploads the

ASUP message to NetApp Support, but you need to manually upload the core file so that it is associated with the ASUP message.

Steps

1. Use the following `kubectl` commands to view the ASUP message:

```
kubectl astrads asup list --namespace=astrads-system
```

You should see output similar to the following:

NAMESPACE	NAME	SEQUENCE NUMBER	EVENT
SIZE	STATE	LOCAL COLLECTION	
astrads-system	storage-coredump-2021...	1	coredump
197848373	compressed	astrads-ds-support-sxxn7:/var/...	

2. Use the following `kubectl` commands to download the core file from the ASUP message. Use the `-o` option to specify a destination directory for the downloaded file.

```
kubectl astrads asup download storage-coredump-20211216t140851311961680  
-o <absolute_path_to_destination_directory>
```



In rare cases, you might not be able to download the core file because other core files have taken its place. When this happens, the command returns the error `Cannot stat: No such file or directory`. If you see this error, you can [get help](#).

3. Open a web browser and browse to the [NetApp Authenticated File Upload tool](#), entering your NetApp Support credentials if you are not already logged in.
4. Select the **I don't have a case number** check box.
5. In the **Closest Region** menu, select the closest region to you.
6. Select the **Upload** button.
7. Browse to and select the core file you downloaded earlier.

The upload begins. When the upload is finished, a success message appears.

Find more information

- [How to upload a file to NetApp \(login required\)](#)

Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.