NetApp

Release notes

Astra Control Center

NetApp
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Release notes

We're pleased to announce the initial release of Astra Control Center.

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What's in this release of Astra Control Center

We're pleased to announce the release of Astra Control Center.

5 August 2021 (21.08)

Initial release of Astra Control Center.

- What it is
- Understand architecture and components
- What it takes to get started
- Install and setup
- Manage and protect apps
- Manage buckets and storage backends
- Manage accounts
- Automate with API

Find more information

- Known issues for this release
- Known limitations for this release

Known issues with this release

Known issues identify problems that might prevent you from using this release of the product successfully.

The following known issues affect the current release:

- Incorrect ClusterRoleBinding created by Astra Control Center CRD during installation
- App with user-defined label goes into "removed" state
- Unable to stop running app backup
- Backup or clone fails for apps using PVCs with decimal units in Astra Control Center
- Astra Control Center UI slow to show changes to app resources such as persistent volume changes
- During app restore from backup Trident creates a larger PV than the original PV

- Clone performance impacted by large persistent volumes
- App clones fail using a specific version of PostgreSQL
- App clones fail when using Service Account level OCP Security Context Constraints (SCC)
- S3 buckets in Astra Control Center do not report available capacity
- Reusing buckets between instances of Astra Control Center causes failures
- Selecting a bucket provider type with credentials for another type causes data protection failures
- Backups and snapshots might not be retained during removal of an Astra Control Center instance
- Extra backups are retained as part of scheduled backup
- Clone operation can't use other buckets besides the default
- Managing a cluster with Astra Control Center fails when default kubeconfig file contains more than one context
- Can't determine ASUP tar bundle status in scaled environment
- Uninstall of Astra Control Center fails to clean up the monitoring-operator pod on the managed cluster
- Uninstall of Astra Control Center fails to clean up Traefik CRDs
- ASUP collection stuck in a generating or uploading state

Incorrect ClusterRoleBinding created by Astra Control Center CRD during installation

Apply the following patch to all Kubernetes clusters where the acc-operator version 21.08.65 has been deployed. It should also be applied if the acc-operator is re-deployed.

To resolve this issue:

1. Replace `ACC_NAMESPACE` in the script below with the namespace you used to deploy Astra Control Center.

```
cat <<EOF | kubectl apply -f -
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: acc-operator-manager-rolebinding
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: acc-operator-manager-role
subjects:
- kind: ServiceAccount
  name: default
  namespace: netapp-acc-operator
- apiGroup: rbac.authorization.k8s.io
  kind: Group
  name: system:serviceaccounts:ACC_NAMESPACE
EOF
```

2. Run the script.

The patch removes the following two subjects from `ClusterRoleBinding: "acc-operator-manager-rolebinding"`

```
 - apiGroup: rbac.authorization.k8s.io
   kind: Group
   name: system:serviceaccounts
 - apiGroup: ""
   kind: Group
   name: system:serviceaccounts
```

App with user-defined label goes into "removed" state

If you define an app with a non-existent k8s label, Astra Control Center will create, manage, and then immediately remove the app. To avoid this, add the k8s label to pods and resources after the app is managed by Astra Control Center.

Unable to stop running app backup

There is no way to stop a running backup. If you need to delete the backup, wait until it has completed and then use the instructions in Delete backups. To delete a failed backup, use the Astra API.

Backup or clone fails for apps using PVCs with decimal units in Astra Control Center

Volumes created with decimal units fail using the Astra Control Center backup or clone process. See the knowledgebase article for more information.

Astra Control Center UI slow to show changes to app resources such as persistent volume changes

After a data protection operation (clone, backup, restore) and subsequent persistent volume resize, there is up to a twenty-minute delay before the new volume size is shown in the UI. This delay in the UI can also occur when any app resources are added or modified. In this case, a data protection operation is successful within minutes and you can use the management software for the storage backend to confirm the change in volume size.

During app restore from backup Trident creates a larger PV than the original PV

If you resize a persistent volume after creating a backup and then restore from that backup, the persistent volume size matches the new size of the PV instead of using the size of the backup.

Clone performance impacted by large persistent volumes

Clones of very large and consumed persistent volumes might be intermittently slow, dependent on cluster access to the object store. If the clone is hung and no data has been copied for more than 30 minutes, Astra Control terminates the clone action.

App clones fail using a specific version of PostgreSQL

App clones within the same cluster consistently fail with the Bitnami PostgreSQL 11.5.0 chart. To clone successfully, use an earlier or later version of the chart.

App clones fail when using Service Account level OCP Security Context Constraints (SCC)

An application clone might fail if the original security context constraints are configured at the service account level within the namespace on the OCP cluster. When the application clone fails, it appears in the Managed Applications area in Astra Control Center with status `Removed`. See the knowledgebase article for more information.

S3 buckets in Astra Control Center do not report available capacity

Before backing up or cloning apps managed by Astra Control Center, check bucket information in the ONTAP or StorageGRID management system.

Reusing buckets between instances of Astra Control Center causes failures

If you try to reuse a bucket used by another or previous installation of Astra Control Center, backup and restore will fail. You must use a different bucket or completely clean out the previously used bucket. You can't share buckets between instances of Astra Control Center.

Selecting a bucket provider type with credentials for another type causes data protection failures

When you add a bucket, select the correct bucket provider type with credentials that are correct for that provider. For example, the UI accepts NetApp ONTAP S3 as the type with StorageGRID credentials; however, this will cause all future app backups and restores using this bucket to fail.

Backups and snapshots might not be retained during removal of an Astra Control Center instance

If you have an evaluation license, be sure you store your account ID to avoid data loss in the event of Astra Control Center failure if you are not sending ASUPs.

Extra backups are retained as part of scheduled backup

Sometimes one or more backups in Astra Control Center are retained beyond the number specified to be retained in the backup schedule. These extra backups should be deleted as part of a scheduled backup but are not deleted and are stuck in a `pending` state. To resolve the issue, force delete the extra backups.

Clone operation can't use other buckets besides the default

During an app backup or app restore, you can optionally specify a bucket ID. An app clone operation, however, always uses the default bucket that has been defined. There is no option to change buckets for a clone. If you want control over which bucket is used, you can either change the bucket default or do a backup followed by a restore separately.

Managing a cluster with Astra Control Center fails when default kubeconfig file contains more than one context

You cannot use a kubeconfig with more than one cluster and context in it. See the knowledgebase article for more information.

Can't determine ASUP tar bundle status in scaled environment

During ASUP collection, the status of the bundle in the UI is reported as either `collecting` or `done`. Collection can take up to an hour for large environments. During ASUP download the network file transfer speed for the bundle might be insufficient, and the download might time out after 15 minutes without any indication in the UI. Download issues depend on the size of the ASUP, the scaled cluster size, and if collection time goes beyond the seven day limit.

Uninstall of Astra Control Center fails to clean up the monitoring-operator pod on the managed cluster

If you did not unmanage your clusters before you uninstalled Astra Control Center, you can manually delete the pods in the netapp-monitoring namespace and the namespace with the following commands:

Steps

1. Delete `acc-monitoring` agent:

```
oc delete agents acc-monitoring -n netapp-monitoring
```

   Result:

```
agent.monitoring.netapp.com "acc-monitoring" deleted
```

2. Delete the namespace:

```
oc delete ns netapp-monitoring
```

Result:

```
namespace "netapp-monitoring" deleted
```

3. Confirm resources removed:

```
oc get pods -n netapp-monitoring
```

Result:

```
No resources found in netapp-monitoring namespace.
```

4. Confirm monitoring agent removed:

```
oc get crd|grep agent
```

Sample result:

```
agents.monitoring.netapp.com                          2021-07-21T06:08:13Z
```

5. Delete custom resource definition (CRD) information:

```
oc delete crds agents.monitoring.netapp.com
```

Result:

```
customresourcedefinition.apiextensions.k8s.io
"agents.monitoring.netapp.com" deleted
```

Uninstall of Astra Control Center fails to clean up Traefik CRDs

You can manually delete the Traefik CRDs:

Steps

1. Confirm which CRDs were not deleted by the uninstall process:

```
kubectl get crds |grep -E 'traefik'
```

Response

```
ingressroutes.traefik.containo.us               2021-06-23T23:29:11Z
ingressroutetcps.traefik.containo.us            2021-06-23T23:29:11Z
ingressrouteudps.traefik.containo.us            2021-06-23T23:29:12Z
middlewares.traefik.containo.us                 2021-06-23T23:29:12Z
serverstransports.traefik.containo.us           2021-06-23T23:29:13Z
tlsoptions.traefik.containo.us                  2021-06-23T23:29:13Z
tlsstores.traefik.containo.us                   2021-06-23T23:29:14Z
traefikservices.traefik.containo.us             2021-06-23T23:29:15Z
```

2. Delete the CRDs:

```
kubectl delete crd ingressroutes.traefik.containo.us
ingressroutetcps.traefik.containo.us
ingressrouteudps.traefik.containo.us middlewares.traefik.containo.us
serverstransports.traefik.containo.us tlsoptions.traefik.containo.us
tlsstores.traefik.containo.us traefikservices.traefik.containo.us
```

ASUP collection stuck in a generating or uploading state

If an ASUP pod is killed or restarted, an ASUP collection might become stuck in a generating or uploading state. Perform the following Astra Control REST API call to initiate manual collection again:

HTTP method	Path
POST	/accounts/{accountID}/core/v1/asups

ⓘ   This API workaround works only if performed more than 10 minutes after ASUP is started.

Find more information

- Known limitations for this release

Known limitations with this release

Known limitations identify platforms, devices, or functions that are not supported by this release of the product, or that do not interoperate correctly with it. Review these limitations carefully.

The same cluster cannot be managed by two Astra Control Center instances

If you want to manage a cluster on another Astra Control Center instance, you should first unmanage the cluster from the instance on which it is managed before you manage it on another instance. After you remove

the cluster from management, verify that the cluster is unmanaged by executing this command:

```
oc get pods n -netapp-monitoring
```

There should be no pods running in that namespace or the namespace should not exist. If either of those are true, the cluster is unmanaged.

Cluster is in `removed` state although cluster and network are otherwise working as expected

If a cluster is in `removed` state yet cluster and network connectivity appears healthy (external attempts to access the cluster using Kubernetes APIs are successful), the kubeconfig you provided to Astra Control might no longer be valid. This can be due to certificate rotation or expiration on the cluster. To correct this issue, update the credentials associated with the cluster in Astra Control using the Astra Control API:

1. Run a POST call to add an updated kubeconfig file to the `/credentials` endpoint and retrieve the assigned `id` from the response body.

2. Run a PUT call from the `/clusters` endpoint using the appropriate cluster ID and set the `credentialID` to the `id` value from the previous step.

After you complete these steps, the credential associated with the cluster is updated and the cluster should reconnect and update its state to `available`.

OLM-enabled and cluster-scoped operator deployed apps not supported

Astra Control Center does not support apps that are deployed with Operator Lifecycle Manager (OLM)-enabled operators or cluster-scoped operators.

Cloning apps can only be done with same K8s distribution

If you clone an app between clusters, the source and destination clusters must be the same distribution of Kubernetes. For example, if you clone an app from an OpenShift 4.7 cluster, use a destination cluster that is also OpenShift 4.7.

OpenShift 4.8 is not supported

OpenShift 4.8 is not supported for the July release of Astra Control Center. For more information, see Astra Control Center requirements.

Apps deployed with Helm 2 are not supported

If you use Helm to deploy apps, Astra Control Center requires Helm version 3. Managing and cloning apps deployed with Helm 3 (or upgraded from Helm 2 to Helm 3) are fully supported. For more information, see Astra Control Center requirements.

Astra Control Center does not validate the details you enter for your proxy server

Ensure that you enter the correct values when establishing a connection.

Data protection for Astra Control Center as app not yet available

This release does not support the ability to manage Astra as an app using snapshot, backup, or restore options.

Unhealthy pods affect app management

If a managed app has pods in an unhealthy state, Astra Control can't create new backups and clones.

Existing connections to a Postgres pod causes failures

When you perform operations on Postgres pods, you shouldn't connect directly within the pod to use the psql command. Astra Control requires psql access to freeze and thaw the databases. If there is a pre-existing connection, the snapshot, backup, or clone will fail.

Trident isn't uninstalled from a cluster

When you unmanage a cluster from Astra Control Center, Trident isn't automatically uninstalled from the cluster. To uninstall Trident, you'll need to follow these steps in the Trident documentation.

Find more information

- Known issues for this release