

ionir

Ionir CLI (ionirctl) Guide

Version 2.4



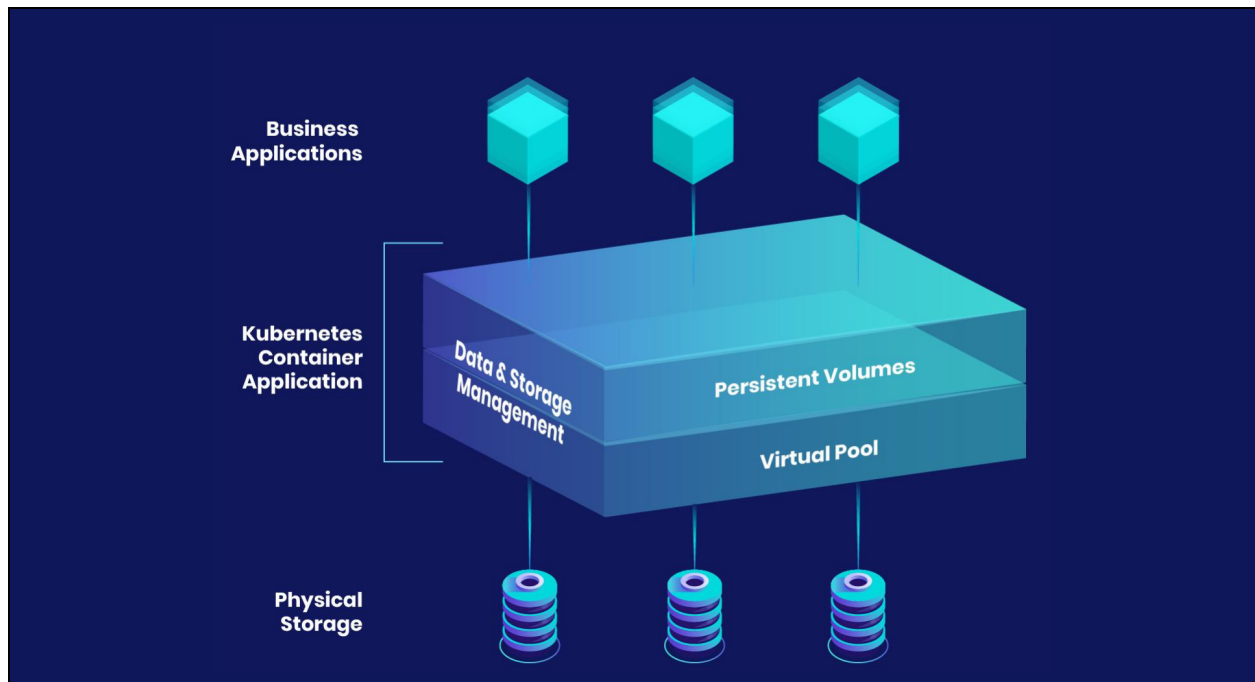
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Introduction To Ionir

Ionir is a container-native data platform for Kubernetes. Ionir can virtualize all available storage in a Kubernetes cluster to create a single pool of highly scalable storage. Ionir provides a Container Storage Interface (CSI) plugin that allows storage to be provisioned and managed by Kubernetes.

In addition to providing resilient, high-performance storage, Ionir provides end-to-end data management capabilities. The Ionir architecture separates the metadata from the data, which enables unique data management capabilities such as 1-second RPO, instant clones, and instant data mobility between clusters and clouds. Ionir's microservices architecture provides a unified data platform that is elastic, scalable, and agile, which is critical for the next containerized cloud applications.



Ionir CLI (ionirctl)

Ionir CLI (ionirctl) is the command line interface used to script or manage Ionir operations. Ionirctl enables users to manage Ionir storage, manage Ionir clusters and get information about the managed clusters.

Requirements

Ionir CLI (ionirctl) can be installed on any Linux machine. The machine must have network connectivity to the management urls of the Ionir clusters you would like to manage.

Installation Process

To install Ionir CLI perform the following steps (on a linux machine)

1. Copy relevant ionirctl.<locale> files to your local folder

You can use the following command to copy the directory:

```
kubectl -n ionir cp ionirctl-0:install <destination dir>
```

2. Copy ionir_install.sh to your local folder
3. Run

```
ionir_install.sh -l <locale>
```

with the relevant locale. Default value is en-US

Note: you may need to add execute permissions (chmod +x) to the install.sh file

Required packages - bash ; bash-completion curl miller jq

4. Run the following command to complete the installation:

```
source ~/ionirctl_bash_completion
```

Security

Ionir uses OpenID for user identification and authorization. All `ionirctl` commands are authenticated before they can run.

To configure the cluster url and the user credentials run the following command

```
ionirctl configure
```

The command will prompt for the cluster DNS/IP (Ionir Cloud Manager), User and Password.

```
$ ionirctl configure
Ionir Cluster DNS/IP []: <cluster-url>
User: <user>
Password: <Password>
```

To update the cluster information or credentials, rerun the command.

IonirCLI Operations

CLi Commands

Ionir CLI (ionirctl) is based on Ionir REST commands. To view the list of the available REST commands, see the [Ionir REST commands](#) section.

Ionir CLI requires a cluster url (endpoint) and the credentials in order to connect to the Ionir cloud. It uses the information that was entered in during the [configuration step](#) to connect to the Ionir Cloud and run CLI commands on the clusters that are part of the cloud.

The following example displays all the clusters in the Ionir Cloud:

```
ionirctl getClusters
```

Ionirctl Usage

When the REST command does not have a body, run:

```
ionircli <operation>
```

Example:

```
ionirctl getClusters
```

When the REST command has a body, run:

With body: <json> | ionirctl <operation>

```
echo '{"extClusterId":"2"}' | ionirctl
```

Example:

```
echo '{"clusterName":"Miko","clusterColor":"#EF9B0F"}' | ionirctl  
setupCluster clusterId=0
```

Ionirctl Autocomplete

Ionirctl has an autocomplete mechanism:

To use autocomplete, tap the “Tab” button.

To view all available options, double tap the “Tab” button to view all options.

Ionirctl Help

Use `ionirctl --help` or `ionirctl -h` to view the help

Ionir REST Calls

To get the full list of Ionir REST commands, open the Ionir API page by going to:

`<Ionir-address>/api/v1/swagger#/`

This will open the

The screenshot displays the Swagger UI for the Ionir REST API. At the top, a 'Schemes' dropdown menu is set to 'HTTPS'. The API is organized into several resource categories, each with a description and a list of endpoints:

- cluster**: Cluster is an object which describes a Magellan cluster.
 - GET `/clusters`: Get list of clusters
 - GET `/clusters/{clusterId}`: Find cluster by ID
- volume**: Volume is an object that represent a Magellan volume. A Volume is own by a single cluster.
 - GET `/clusters/{clusterId}/volumes`: Find volumes cluster ID
 - POST `/clusters/{clusterId}/volumes`: Instant copy of data between Magellan clusters
 - POST `/clusters/{clusterId}/volumes/clone`: Create an instant independent clone of data from any second in time
 - GET `/clusters/{clusterId}/volumes/{volumeId}`: Find a volume by id from a cluster by ID
- events**: Magellan Events API
 - GET `/clusters/{clusterId}/events`: Filter Magellan system events
- app**: App is an object that represent a group of volumes encapsulated with a identifier. An App is own by a single cluster.
 - GET `/clusters/{clusterId}/apps`: Find apps by cluster ID
 - GET `/clusters/{clusterId}/apps/{appId}`: Find a volume by id from a cluster by ID
- connections**:
 - GET `/clusters/{clusterId}/asn`: Get cluster asn
 - POST `/clusters/{clusterId}/concheck`: Run connectivity check
 - GET `/clusters/{clusterId}/connections`: Get cluster connection info
 - POST `/clusters/{clusterId}/connections`: Connects this cluster to another
 - DELETE `/clusters/{clusterId}/connections`: Disconnects cluster from our cloud
- tools**:
 - GET `/clusters/{clusterId}/diagnostics`: Get diagnostics from system.

Note: the app POST command has been deprecated



Ionirctl Commands Reference

[app]

getClusterAppById	Find a volume by id from a cluster by ID
getClusterApps	Find apps by cluster ID

[cluster]

getClusterById	Find cluster by ID
getClusters	Get list of clusters

[connections]

connectExternalCluster	Connects this cluster to another
disconnectExternalCluster	Disconnects cluster from our cloud
getConnections	Get cluster connection info
getAsn	Get cluster asn
runConcheck	Run connectivity check

[events]

getEvents	Filter Ionir system events
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[namespace]

getClusterNamespaces	Get cluster namespaces
----------------------	------------------------

[tools]

getDiagnostics	Get diagnostics from system.
getHistoryPolicies	Get cluster historyPolicies

[volume]

cloneVolume	Create an instant independent clone of data from any second in time
copyVolume	Instant copy of data between Ionir clusters
editVolume	Edit a volume by id at a cluster by ID
getClusterVolumeById	Find a volume by id from a cluster by ID
getClusterVolumes	Find volumes cluster ID
setVolumeTeleportIntensity	