

# AsterionDB Cloud Free-Tier Getting Started Guide

## Introduction

Thank you for joining us on this journey to realizing a secure, resilient, efficient and powerful software architecture enabled by The AsterionDB Converged Computing™ Platform.

The purpose of this Getting Started Guide is to show you how easy it is to get started with AsterionDB. AsterionDB can be used with Oracle's Free-Tier product offerings and provides a powerful platform for individual use and software development.

## Prerequisites

This guide presumes that you have already created an account in the Oracle Cloud Infrastructure. Access the following link to create your account if you have not done so already:

<https://www.oracle.com/cloud/free/>

We will be working with the Oracle Autonomous Database and a corresponding AsterionDB Compute Instance. The compute instance runs all of the AsterionDB framework components as well as an Nginx based web application.

One of the central tasks in this process is the requirement to access the AsterionDB Compute Node. We will do so in two ways:

1. The Oracle Cloud Infrastructure's built in Cloud Shell
2. From your local computer using SSH

Modern versions of Windows now come with a built-in SSH client. Older versions of Windows may require you to install PuTTY, a common, freely available SSH terminal application. Detailed information provided by Oracle on connecting to a compute instance is available here:

<https://docs.oracle.com/en-us/iaas/Content/GSG/Tasks/testingconnection.htm>

You should also be familiar with common, simple power-user tasks such as:

- Downloading a file to a known location
- Accessing a file through a file-browser or the command line
- Changing file permissions and properties
- SSH
- Copying and pasting text
- Installing software applications (e.g. OpenSSH, PuTTY)

Finally, you should have some appropriate evaluation content available for uploading into AsterionDB such as a few photographs and PDF documents. Nothing too big or extensive – just enough to get yourself going.



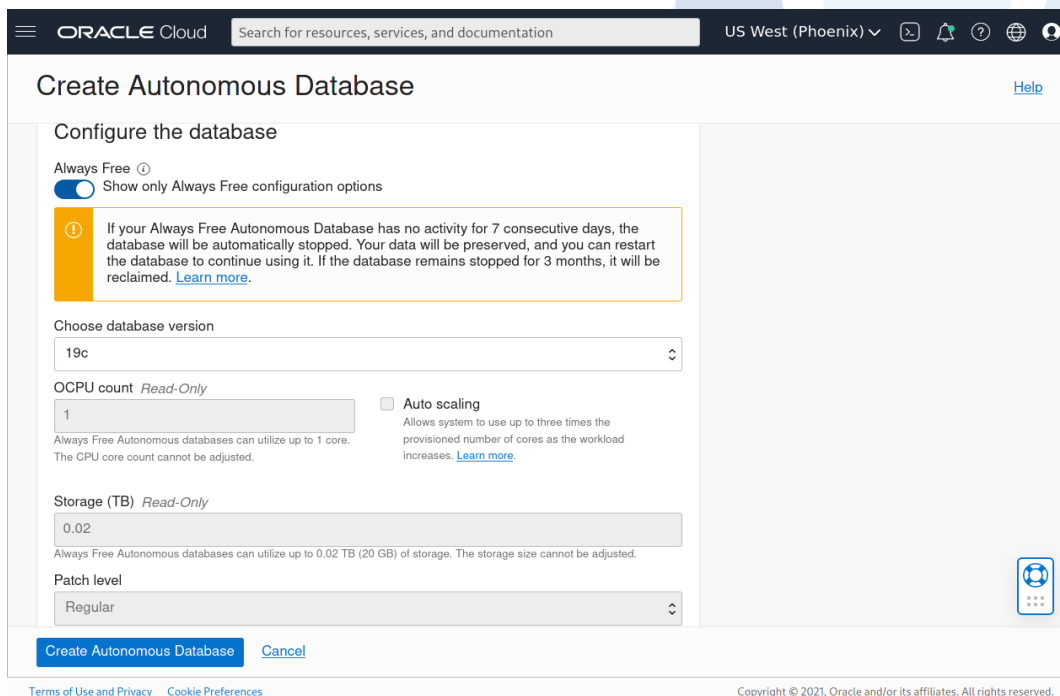
## The Installation Process

Here are the steps we will take to install The AsterionDB Converged Computing Platform. If you are already familiar with Oracle Cloud Infrastructure, we suggest that you work through this process as laid out once and then adapt it to your specific needs and requirements.

### Create an Autonomous Database

Oracle Cloud Infrastructure provides a wizard that will walk you through the steps to create an Autonomous database. AsterionDB is compatible with both versions of Autonomous – Transaction Processing and Data Warehouse. You can choose either one.

The ‘Create an Autonomous’ link is located on the main OCI page’s Get Started tab, in the Launch Resources section. Be sure to select the Always Free configuration as shown in the following screen shot. You will also need to provide a password for the ADMIN account. Oracle enforces strict passwords so you may want to save your password in a text file for quick and easy reference during this workshop – you’re going to need it.



ORACLE Cloud Search for resources, services, and documentation US West (Phoenix) Help

### Create Autonomous Database

Configure the database

Always Free ⓘ  
☒ Show only Always Free configuration options

ⓘ If your Always Free Autonomous Database has no activity for 7 consecutive days, the database will be automatically stopped. Your data will be preserved, and you can restart the database to continue using it. If the database remains stopped for 3 months, it will be reclaimed. [Learn more.](#)

Choose database version  
19c

OCPU count Read-Only  
1  
Always Free Autonomous databases can utilize up to 1 core. The CPU core count cannot be adjusted.

☐ Auto scaling  
Allows system to use up to three times the provisioned number of cores as the workload increases. [Learn more.](#)

Storage (TB) Read-Only  
0.02  
Always Free Autonomous databases can utilize up to 0.02 TB (20 GB) of storage. The storage size cannot be adjusted.

Patch level  
Regular

Create Autonomous Database Cancel

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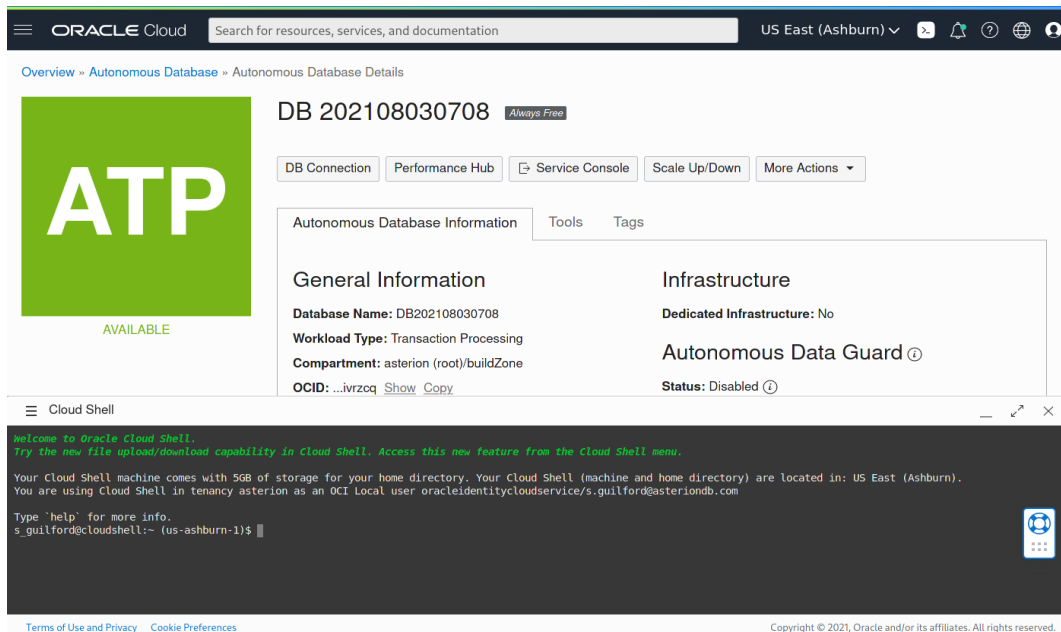
### Open up the Oracle Cloud Shell

OCI provides a built-in Cloud Shell that you can use to access the AsterionDB compute instance. We will use this to kick-start the installation prior to accessing the compute instance via SSH from your local computer.

Press the little console icon to open up the Cloud Shell. The icon looks like this:



The Cloud Shell opens up in the bottom third of your browser screen as shown in this screenshot:



## Download and Run the AsterionDB Cloud Install Script

We deliver a cloud installation helper script using Docker that you will run from the Cloud Shell. This helper script will perform some initial setup actions on the compute instance and install the wallet that enables connections to the database. Here is the docker command to get the helper script:

```
docker container run --rm asteriondb/install helper | bash -s
```

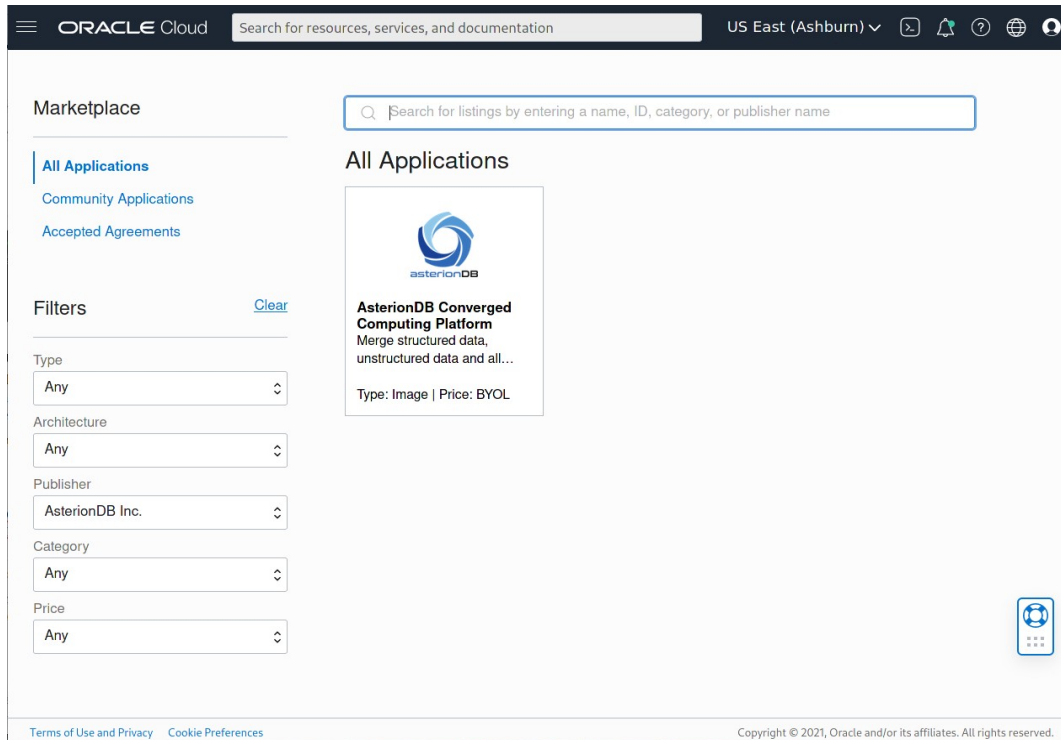
Run the helper script from your Cloud Shell command prompt:

```
./helper.sh
```

The helper script will first ask you for your database OCID. In the screenshot above you can see how a link is provided that allows you to easily copy the OCID.

The helper script will then download the database wallet and check for existence of an RSA key-pair in the local Cloud Shell. If an RSA key-pair does not exist, one will be created for you with no password.


The helper script will display your public key and instruct you to create your AsterionDB Compute Instance. The compute instance is located in the Oracle Cloud Marketplace:




Click on the entry for the AsterionDB Converged Computing Platform and the Launch Instance button to start the creation process of a compute instance from the marketplace image.

Select your desired shape by pressing the Change Shape button. If you intend to use a free-tier compute instance, you will have to select the appropriate availability domain when selecting the shape; free-tier compute instances are not available in all availability domains. Furthermore, the free-tier shape is only available in the Specialty and Previous Generation shape series.

## Create Compute Instance

**AsterionDB Converged Computing Platform**  
Merge structured data, unstructured data and all business logic at the data layer.  
[Return to Marketplace](#)

Shape

**VM.Standard.E2.1.Micro** Always Free Eligible  
Virtual Machine, 1 core OCPU, 1 GB memory, 0.48 Gbps network bandwidth  
[Change Shape](#)

As mentioned, the Cloud Shell has printed out public key. Paste the Cloud Shell's public key in the section Add SSH Keys:

## Create Compute Instance

### Add SSH keys

Generate an [SSH key pair](#) to connect to the instance using SSH, or upload a public key that you already have.

☐ Generate a key pair for me ☐ Upload public key files (.pub) ☒ Paste public keys ☐ No SSH keys

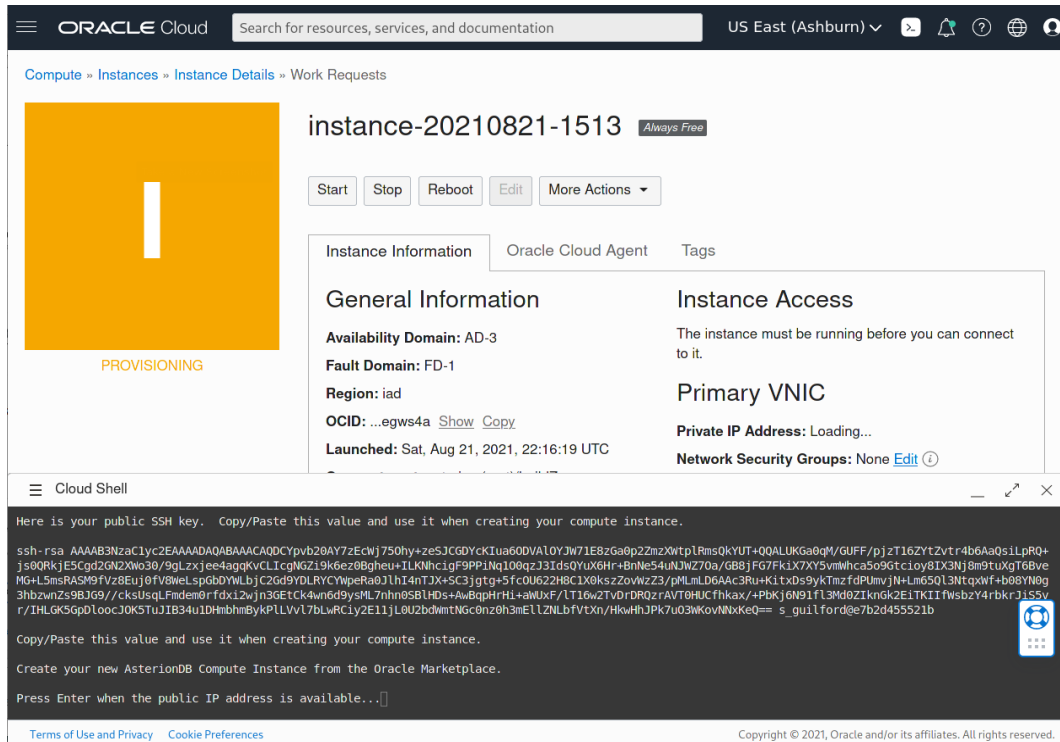
SSH keys

×

[+ Another Key](#)

Example: ssh-rsa AAAAB3Nza...NWap6Prb ssh-key-2021-01-27 [See all supported key types](#)

Press the Create button to initiate the creation of the compute instance. Instance creation only takes a few minutes. Your screen will look like this after pressing the create button:



The IP address will become available and then the screen will turn green. Wait another two minutes or so for the startup process to fully complete and then return to the helper script running in the Cloud Shell. It will ask you to paste the IP address. When the IP address is available there will also be a link that will allow you to easily copy the value.

Press Enter once more, after waiting a sufficient amount of time for the compute instance's startup process to finish (approximately 3 minutes) in order to complete the setup process.

If you pressed Enter too soon and the compute instance is not ready to accept SSH connections on port 22, the script will fail. Simply re-run the script in order to complete the setup process.

## Setting up a Local Copy of the Cloud Shell's Private SSH Key

The Cloud Shell provides a menu stack that allows you to select Download in order to download a file. Use this facility to easily download the private SSH key to your local computer. Be sure to reference the SSH key in this manner:

**Download File**

Enter the filename. The name cannot start with a "/" but can include a path relative to your home (~/) directory

~/

Files can only be downloaded from your home directory.

Download [Cancel](#)

We suggest that you rename the file upon download to helper\_rsa in order to avoid any conflict with existing RSA keys.

## Accessing the AsterionDB Compute Instance

As mentioned in the prerequisites, Oracle provides detailed instructions on connecting to a compute instance. Refer to this link for further information if necessary:

<https://docs.oracle.com/en-us/iaas/Content/GSG/Tasks/testingconnection.htm>

The helper script will display the SSH command that will use to connect to the compute instance.

Note that we utilize an SSH tunnel on port 8080 when establishing the connection. This allows for the secure transmission of HTTP based traffic with out having to initially install an SSL certificate on the web server.

## Completing the Installation of AsterionDB

Once you have connected to the compute instance you will run two scripts to complete the installation process. The first script updates a the installation settings and the second script applies the settings and performs final installation. Run the update settings script:

```
./updateConfig.sh
```

Accept the default values for all prompts except for the passwords. Enter your ADMIN password that you used when you created the Autonomous database. The script will also prompt you for an application administrative password.

Run the apply settings script:

```
./applyConfig.sh
```

The apply script will install all of the required database objects and start the AsterionDB services.

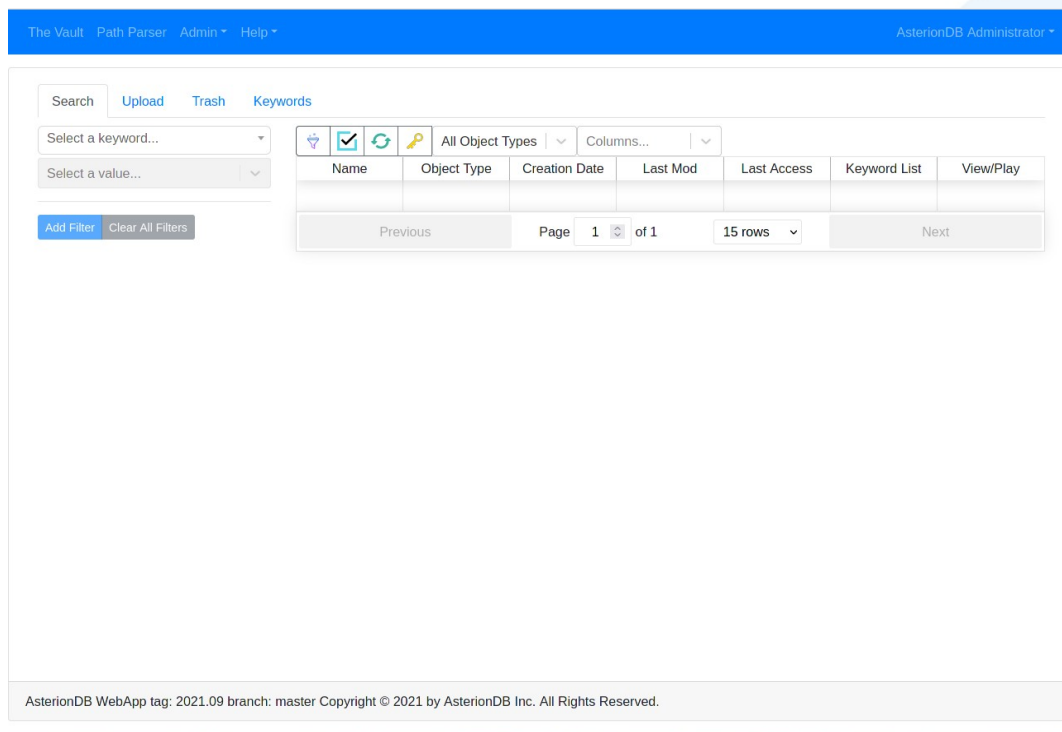


## Accessing your AsterionDB Installation

From a browser, navigate to this link in order to access your AsterionDB installation:

<http://localhost:8080>

You will be presented with a login screen. Your administrative username is `asteriondb_admin` and the password is the value entered during the update settings step described just previously. Upon logging in you will be on the main AsterionDB page. It will look like this:



## Upload Some Content

Select the Upload tag and upload some content. After uploading, your screen will look similar to this:

The Vault Path Parser Admin Help
AsterionDB Administrator

Search Upload Trash Keywords

Select Files

Drop files here

When dragging and dropping files, hold the mouse button down until the box around the drop-zone becomes a solid line.

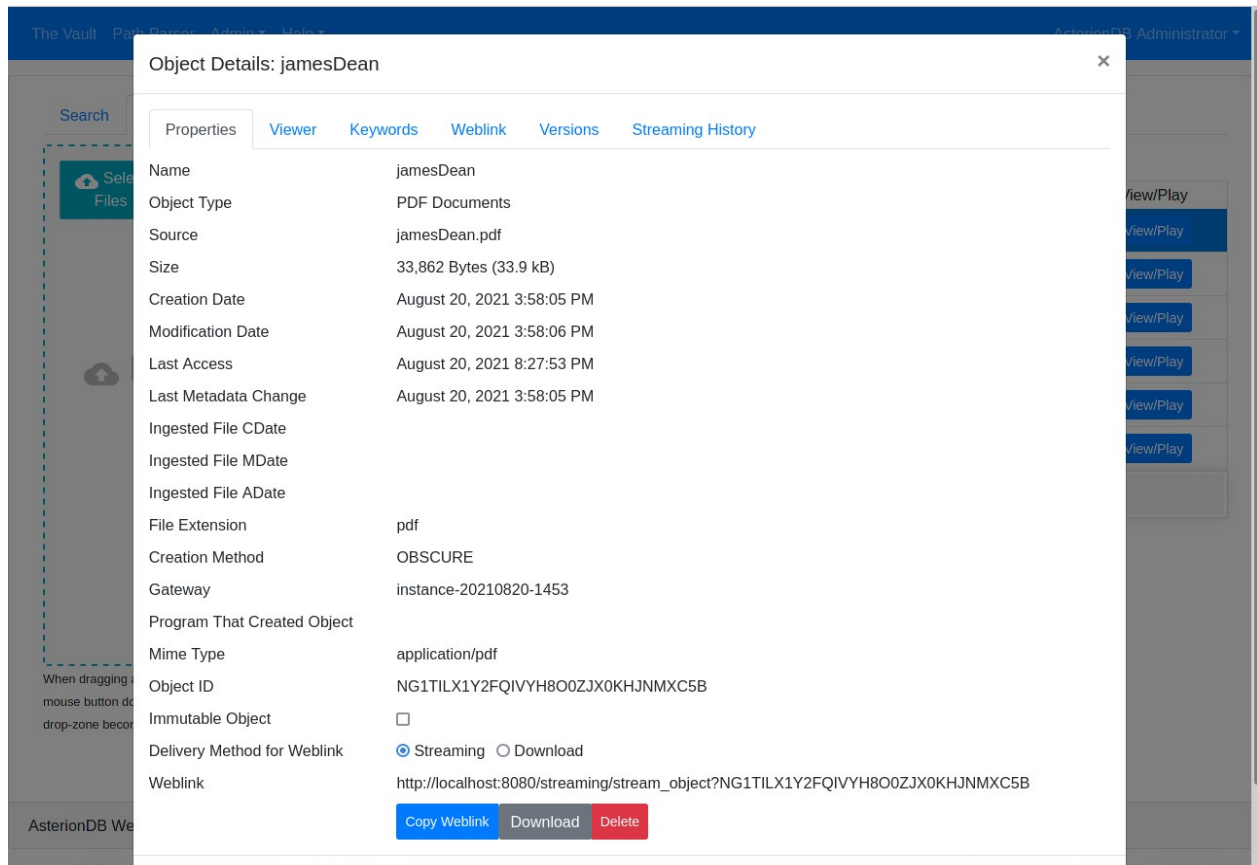
All Object Types Columns...

Name	Object Type	Creation Date	Last Mod	Last Access	View/Play
jamesDean	PDF Documents	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 8:27 PM	View/Play
jamesDean_1	Image Files	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 3:59 PM	View/Play
jamesDean_2	Image Files	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 3:59 PM	View/Play
vanGogh	PDF Documents	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 3:59 PM	View/Play
vincentVanGogh_1	Image Files	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 8:28 PM	View/Play
vincentVanGogh_2	Image Files	08/20/2021 3:58 PM	08/20/2021 3:58 PM	08/20/2021 3:59 PM	View/Play

Previous
Page 1 of 1
15 rows
Next

AsterionDB WebApp tag: 2021.09 branch: master Copyright © 2021 by AsterionDB Inc. All Rights Reserved.

You can press the View/Play button to look at an object. Double-clicking on an object will bring you to the details modal where you can look at properties, generate links and perform other actions upon the object.



## Next Steps

The AsterionDB web application provides a link in the Help section that allows you to access system documentation. Within this document is further details on using the AsterionDB web application to perform actions such as:

- Create keywords and keyword groups
- Assign keywords to objects
- Query and search for objects based on assigned keywords
- Generate secure weblinks
- Manage object versions

Please consult this documentation as you continue exploring AsterionDB.

Further information is available for programmers and system integrators that show you how easily AsterionDB can be integrated into your computing environment.