VMware Cloud Director extension for Data Solutions
Frequently Asked Questions (FAQ)

General Information

Q. What is VMware Cloud Director extension for VMware Data Solutions?
A. VMware Cloud Director extension for Data Solutions is a plug-in for VMware Cloud Director (VCD) that enables cloud providers to deliver VMware Data Solution portfolio of services: on-demand caching, messaging, and database software at a massive scale on their multitenant environment.

Q. How do I start using the VMware Cloud Director extension for VMware Data Solutions?
A. Download the plugin from the VMware Customer Connect portal. Version 1.0 brings you the following capabilities: on-demand messaging through RabbitMQ, and version 1.1 brings you database software support for MySQL and PostgreSQL.

Licensing

Q. How can I license a Data Solutions service?
A. To start deploying any of the data services provided through the Data Solutions extension, you need to add licenses for them in the Commerce Portal. To do so, log in to the Commerce Portal and under a Contract ID, click One-off Orders. Click New Order and then select the license which to be added to your contract.

Billing and Metering

Q. What are the commercial terms to use VMware Cloud Director extension for VMware Data Solutions?
A. The extension comes with no additional cost. It is a free to use plugin. However, the providers are charged for consuming VMware Data Solutions (RMQ/SQL) on ‘a per core’ basis. Refer to the latest VMware Partner Connect Program Product Usage Guide (Requires Partner Connect Login) for more details on VMware Data Solutions pricing.

Q. Do I have to license the entire Tanzu Kubernetes Grid cluster if I want to use Data Solutions?
A. No, you will only need to license the containers where the data services run, and you will only pay for the used CPU cores by the deployed services.

Q. Do I have to license the management cluster of the Tanzu Kubernetes Grid for using Data Solutions?
A. No. For Data Solutions, you only need to license the container where the data service is deployed.

Q. Do I have to license the entire worker on which the container with the data service run?
A. No, you just need to license the container where the data service is deployed.

Q. Do I have to license the whole container where the data service is deployed?
A. Yes. You need Data Solutions license if the service is activated and deployed in a container in a Tanzu Kubernetes Grid cluster.

Q. How is the usage of the deployed services calculated?
A. The usage for VMware SQL with MySQL and VMware SQL with PostgreSQL is calculated based on the used CPU cores for each container where the service runs. To calculate the usage of those services, identify all containers where they run. Determine the configured vCPUs for container. Sum the count of configured vCPUs and convert to Cores. For RabbitMQ, all configured Kubernetes vCPU Resource Limits for Containers with RabbitMQ Nodes must be identified for reporting. Containers with Kubernetes Operators do not need to be identified for reporting. Refer to the latest VMware Partner Connect Program Product Usage Guide to learn more.

Q. How should I meter the usage of the data services?
A. There is no automatic metering for Data Solutions usage. You need to manually calculate and report your
Data Solutions usage to the Commerce Portal. You can use VMware Chargeback to calculate the usage of your tenants.

Q. How much points should I report when I am using a VMware SQL with MySQL with a minimum deployment of 500 milliCores and hyperthreading enabled.
A. When hyperthreading is enabled, then the number of cores is half the vCPU cores. In this case, the CPU cores which will be reported are 500 milliCores/1000/2=0.25 cores. Then this number must be multiplied with the points for VMware SQL with MySQL per core = 0.25 X 98=24.5 points.

Operational

Q. What are the new features of VMware Data Solutions 1.1?
A. In this release, we provide VMware support for MySQL and PostgreSQL. We also provide Data Solutions operator with is installed in your Tanzu Kubernetes clusters and provisions data and messaging services there. In this release, tenant administrators can also upgrade their RabbitMQ, PostgreSQL, and MySQL solutions. Kindly refer to the documentation page for more info.

Q. What operations can I perform with VMware Data Solutions 1.1?
A. As a tenant administrator you can create, update, upgrade, rollback, and delete MySQL and PostgreSQL data services to selected Tanzu Kubernetes clusters. You can also apply advanced settings for improving the performance and security of those services. As a provider administrator you can publish MySQL and PostgreSQL data services to all or selected tenants, and you can also manage the container registries which keep your services Docker images. As a tenant user you will be able to create a data or messaging service, apply advanced settings to them (HA and TLS) and manage their lifecycle (create, update, delete).

Q. I am already using VMware Cloud Director extension for VMware Data Solutions 1.0. How to upgrade to version 1.1?
A. This is a simple and a straightforward process. Please follow the VMware Cloud Director extension for VMware Data Solutions 1.1 upgrade process to upgrade the extension from 1.0.

Q. I service NoSQL and other databases, can I expect VMware to support these in the future?
A. Yes, VMware is constantly working to support and service partner needs. Support for other databases is planned in the future.

Q. Can I monitor the provisioned data and messaging services?
A. Yes, the Data Solutions plug-in uses Grafana and Prometheus for data monitoring, alerting and visualization. They must be installed on a Tanzu Kubernetes workload cluster. The detailed steps can be found here.

Q. Is database backup possible with Data Solutions?
A. Not currently available through the user interface. Available through CLI.

Q. Is database replication available with Data Solutions?
A. Yes, while creating a database service you have the option to enable high availability for it. This results in the creation of another replica of the database which can be used in case the original database is down.

Technical Requirements

Q. Do I need VMware Cloud Director Container Service Extension for using VMware Data Solutions 1.1?
A. Yes, it is needed so that you can provision messaging and data services to your Tanzu Kubernetes clusters created through VMware Cloud Director Container Service Extension 4.0 or later.

Q. What are the requirements for using VMware Data Solutions 1.1?
A. The following products are needed for provisioning messaging and data services with the VMware Data Solutions 1.1:

VMware Data Solutions 1.1 plug-in:
- VMware RabbitMQ for Kubernetes - version 1.3 and 1.4;
- VMware SQL with MySQL for Kubernetes - version 1.5, and 1.6;
- VMware SQL with Postgres for Kubernetes – version 1.9 and 2.0;
VMware Cloud Director Container Service Extension – version 4.0 or later;
Kubernetes – version 1.22 or later;
Tanzu Kubernetes Grid – version 1.5.4 or later;
vSphere Cloud Provider Interface version 1.3.0 or later
if using load balancer with TLS for RabbitMQ