

PostgreSQL Solution 1.1

vRealize Operations Manager

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VMware, Inc.
3401 Hillview Ave.
Palo Alto, CA 94304
www.vmware.com

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About the PostgreSQL Solution Guide

1

The *PostgreSQL Solution Guide* provides information about installing the PostgreSQL Solution, and describes the objects, metrics, and configurations.

Intended Audience

The information in this guide is intended for operations personnel who set up and support the vRealize Operations Manager infrastructure.

VMware Technical Publications Glossary

VMware Technical Publications provides a glossary of terms that might be unfamiliar to you. For definitions of terms as they are used in VMware technical documentation, see <https://www.vmware.com/support/pubs>.

Introduction to the PostgreSQL Solution

2

The PostgreSQL plug-in is deployed to the Endpoint Operations Management agent that helps to monitor PostgreSQL databases and PostgreSQL database servers.

Monitored Objects

The PostgreSQL plug-in discovers and collects metrics for the following objects.

- PostgreSQL server
- PostgreSQL database server

Installing and Configuring the PostgreSQL Solution

3

When you install the PostgreSQL Solution, you install the PAK file that you downloaded as part of the solution, and then you configure the plug-in instance.

This chapter includes the following topics:

- [“Install the PostgreSQL Solution,”](#) on page 9
- [“Configure PostgreSQL Credentials,”](#) on page 9

Install the PostgreSQL Solution

The PostgreSQL Solution consists of a PAK file. You can install the PostgreSQL Solution to monitor PostgreSQL databases and PostgreSQL database servers.

Prerequisites

Verify that you enabled the `cluster.exe` command line interface tool on the monitored machine.

Procedure

- 1 Log in to the vRealize Operations Manager user interface with administrator privileges.
- 2 In the left pane of vRealize Operations Manager, click **Administration** and then click **Solutions**.
- 3 In the Solutions pane, click the plus sign icon and follow the prompts to complete the installation.

After you install the PostgreSQL Solution, the Endpoint Operations Management agent discovers and monitors the objects of the PostgreSQL plug-in.

Configure PostgreSQL Credentials

After you install the vCenter Solution, if you want to monitor the PostgreSQL server and its databases, you must configure the credentials of the PostgreSQL instance from which you are collecting data.

Prerequisites

Wait for vRealize Operations Manager to complete one collection cycle.

Procedure

- 1 In the left pane of vRealize Operations Manager, click **Administration** and then click **Inventory Explorer**.
- 2 Select **Adapter Instances > EP Ops Adapter Instance**.

- 3 Select the PostgreSQL instance for which you want to collect metrics and click the **Edit Object** icon.
The Edit Object dialog box opens.
- 4 Click on the **Add New** plus sign beside **Credentials**.
You will see the Manage Credentials dialog box.

NOTE Ensure that the user has the permission to view tables and statistics objects in the PostgreSQL cluster.

For example:

```
GRANT SELECT ON ALL TABLES IN SCHEMA public TO <user name>;
```

- 5 Enter the credential details.

Option	Description
Credential Name	Name for the credential.
postgresql.user	A user name that has access to the PostgreSQL instance.
postgresql.pass	A password that has access to the PostgreSQL instance.

- 6 Click **OK**.

PostgreSQL Solution Metrics

The PostgreSQL plug-in collects metrics for PostgreSQL servers and PostgreSQL database servers.

You can view these metrics in the vRealize Operations Manager user interface.

This chapter includes the following topics:

- [“PostgreSQL Server Metrics,”](#) on page 11
- [“PostgreSQL Database Metrics,”](#) on page 12

PostgreSQL Server Metrics

The PostgreSQL plug-in allows vRealize Operations Manager to collect metrics for the PostgreSQL server.

Table 4-1. PostgreSQL Server Metrics

Metric Name	Category
Buffer Hits %	THROUGHPUT
Buffer Hits per Second	THROUGHPUT
Buffer Read	THROUGHPUT
Buffer Read per Second	THROUGHPUT
Commits	THROUGHPUT
Commits per Second	THROUGHPUT
Connections	UTILIZATION
Connections Idle	UTILIZATION
Connections Usage	UTILIZATION
Cpu System Time	UTILIZATION
Cpu System Time per Minute	UTILIZATION
Cpu Total Time	UTILIZATION
Cpu Total Time per Minute	UTILIZATION
Cpu Usage	UTILIZATION
Cpu User Time	UTILIZATION
Cpu User Time per Minute	UTILIZATION
Memory Size	UTILIZATION
Number of Processes	UTILIZATION
PostgreSQL Index Index Fetches	UTILIZATION

Table 4-1. PostgreSQL Server Metrics (Continued)

Metric Name	Category
PostgreSQL Index Index Fetches per Minute	UTILIZATION
PostgreSQL Index Index Reads	UTILIZATION
PostgreSQL Index Index Reads per Minute	UTILIZATION
PostgreSQL Index Resource Availability	AVAILABILITY
PostgreSQL Index Index Scans	UTILIZATION
PostgreSQL Table Index Scans per Minute	UTILIZATION
PostgreSQL Table Index Scan Rows Read	UTILIZATION
PostgreSQL Table Index Scan Rows Read per Minute	UTILIZATION
PostgreSQL Table Index Scans	UTILIZATION
PostgreSQL Table Index Scans per Minute	UTILIZATION
PostgreSQL Table Index Space Used	UTILIZATION
PostgreSQL Table Data Space Used	UTILIZATION
PostgreSQL Table Number of Row Deletes	THROUGHPUT
PostgreSQL Table Number of Row Deletes per Minute	THROUGHPUT
PostgreSQL Table Number of Row Inserts	THROUGHPUT
PostgreSQL Table Number of Row Inserts per Minute	THROUGHPUT
PostgreSQL Table Number of Row Updates	THROUGHPUT
PostgreSQL Table Number of Row Updates per Minute	THROUGHPUT
PostgreSQL Table Resource Availability	AVAILABILITY
PostgreSQL Table Sequential Scan Rows Read	UTILIZATION
PostgreSQL Table Sequential Scan Rows Read per Minute	UTILIZATION
PostgreSQL Table Sequential Scans	UTILIZATION
PostgreSQL Table Sequential Scans per Minute	UTILIZATION
Resident Memory Size	UTILIZATION
Rollbacks	THROUGHPUT
Rollbacks per Second	THROUGHPUT
Rows Read	THROUGHPUT
Rows Read per Second	THROUGHPUT
Rows Write	THROUGHPUT
Rows Write per Second	THROUGHPUT

PostgreSQL Database Metrics

The PostgreSQL plug-in allows vRealize Operations Manager to collect metrics for the PostgreSQL database.

Table 4-2. PostgreSQL Database Metrics

Metric Name	Category
Buffer Hits	THROUGHPUT
Buffer Hits %	THROUGHPUT
Buffer Hits per Second	THROUGHPUT

Table 4-2. PostgreSQL Database Metrics (Continued)

Metric Name	Category
Buffer Read	THROUGHPUT
Buffer Read per Second	THROUGHPUT
Commits	THROUGHPUT
Commits per Second	THROUGHPUT
Connections	UTILIZATION
Connections Idle	UTILIZATION
Connections Usage	UTILIZATION
Data Space Used	UTILIZATION
Database Size	UTILIZATION
Index Space Used	UTILIZATION
Indexes Blocks Hit	UTILIZATION
Indexes Blocks Hit per Minute	UTILIZATION
Indexes Blocks Reads	UTILIZATION
Indexes Blocks Reads per Minute	UTILIZATION
Indexes Scan Rows Read	UTILIZATION
Indexes Scan Rows Read per Minute	UTILIZATION
Locks Awaited	UTILIZATION
Locks Held	UTILIZATION
Resource Availability	AVAILABILITY
Rollbacks	THROUGHPUT
Rollbacks per Second	THROUGHPUT
Rows Read	THROUGHPUT
Rows Read per Second	THROUGHPUT
Rows Write	THROUGHPUT
Rows Write per Second	THROUGHPUT
Tables Sequential Scan Rows Read	UTILIZATION
Tables Sequential Scan Rows Read per Minute	UTILIZATION
Tables Sequential Scans	UTILIZATION
Tables Sequential Scans per Minute	UTILIZATION

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