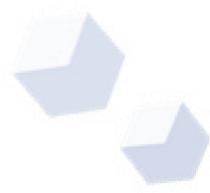




**dbWatch
Control Center**

for



dbWatch Control Center for PostgreSQL Databases

dbWatch Control Center is a database monitoring and management solution for PostgreSQL databases. It provides automated monitoring, keeps track of different performance metrics, and analyzes performance and resource trends across your database farm. It generates key performance reports for management and end-users.

Benefits of using dbWatch Control Center for PostgreSQL:

dbWatch Control Center is highly flexible and scalable solution that can connect to any database anytime, anywhere. It offers security at a granular level that limits access to databases within authorized users.

With *dbWatch Control Center*, you can add, remove, and edit databases using the User Interface. It scales easily from a handful of instances to the largest database farms with thousands of instances. Its structure ensures that scaling up or down has minimum impact on networks or servers while maintaining maximum performance in monitoring and management.

dbWatch Control Center enables DBAs to manage more instances effectively. With the power of *dbWatch Control Center*, DBAs can:

- Build workflows, customize reports, and automate the DBA tasks
- Have a better overview and insight of their databases health
- Spend less time on routine monitoring and maintenance
- Attain higher productivity with fewer incidents

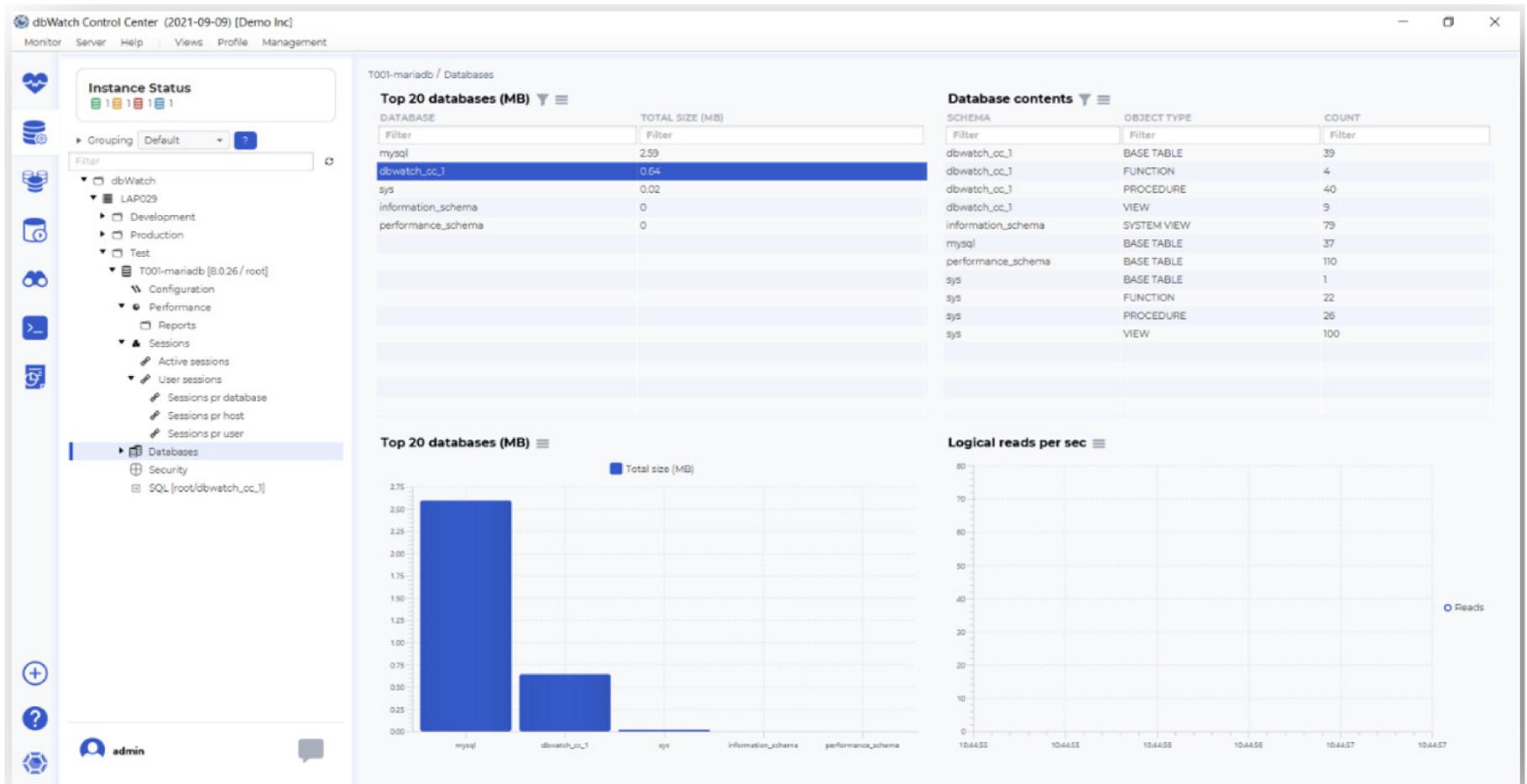
dbWatch Control Center - PostgreSQL Key Features

- Cross platform database monitoring and management
- Manage different database platforms/versions in a single view
- Resource tracking- keep track of your PostgreSQL resource usage
- Database farm performance, capacity and resource management
- Full monitoring for On-Premises, Cloud or Hybrid setups/multi-site support
- Web dashboards
- Bulk installation of instances
- Flexible Alerts and Notification configuration
- SQL Worksheet for easy query across the server farm
- Autodiscover of new instances in network
- Customizable views and integration with 3rd party infrastructure monitoring solutions
- Chat system for inter-DBA communication
- Advanced, customizable Reporting features



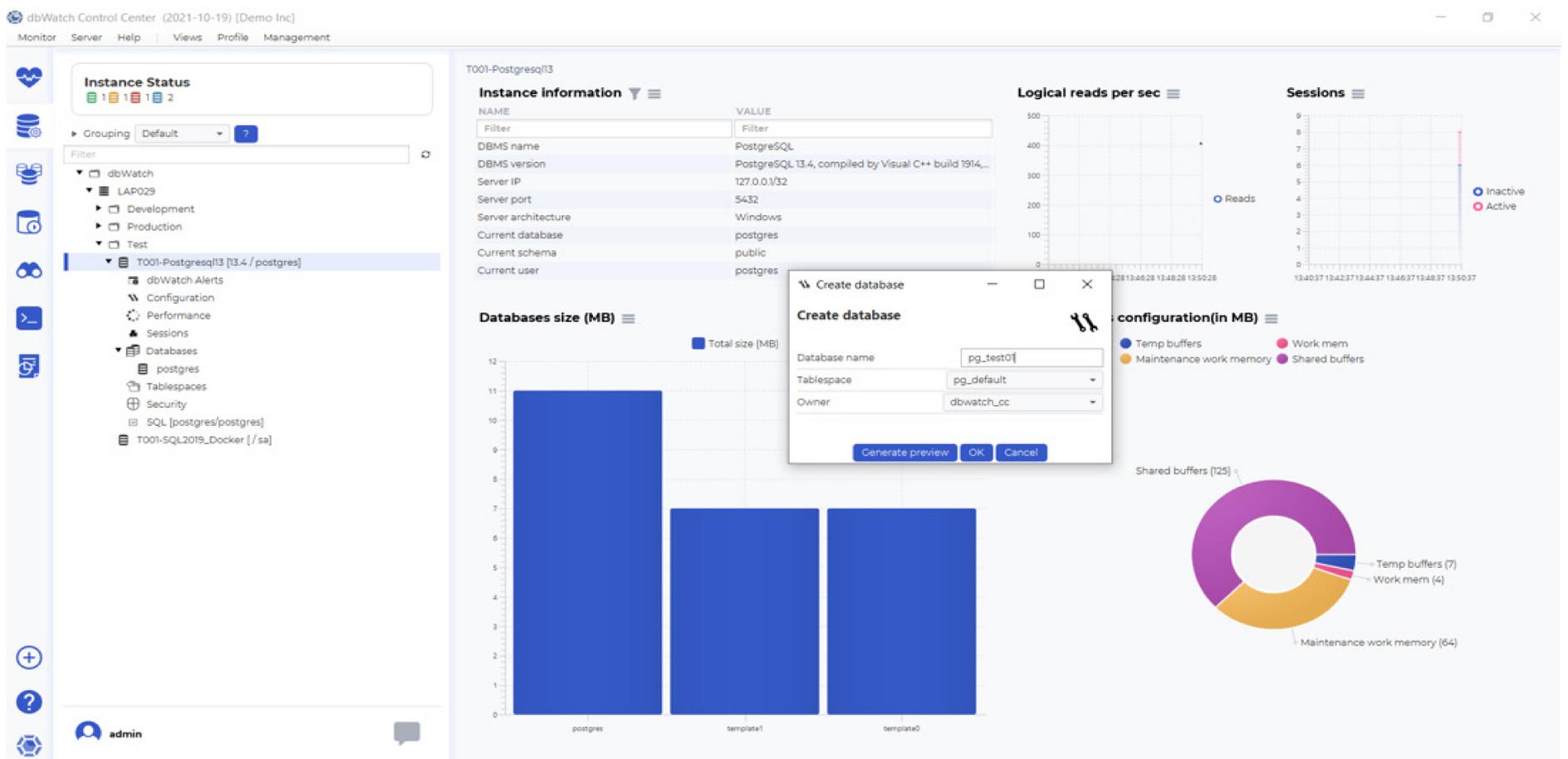
dbWatch Control Center: Drill down on your PostgreSQL performance

Identify key performance areas in your PostgreSQL database, pinpoint and troubleshoot potential bottlenecks which could affect your operational uptime. Spot sessions which have the highest utilization and pinpoint queries that are using the most resources in your server.



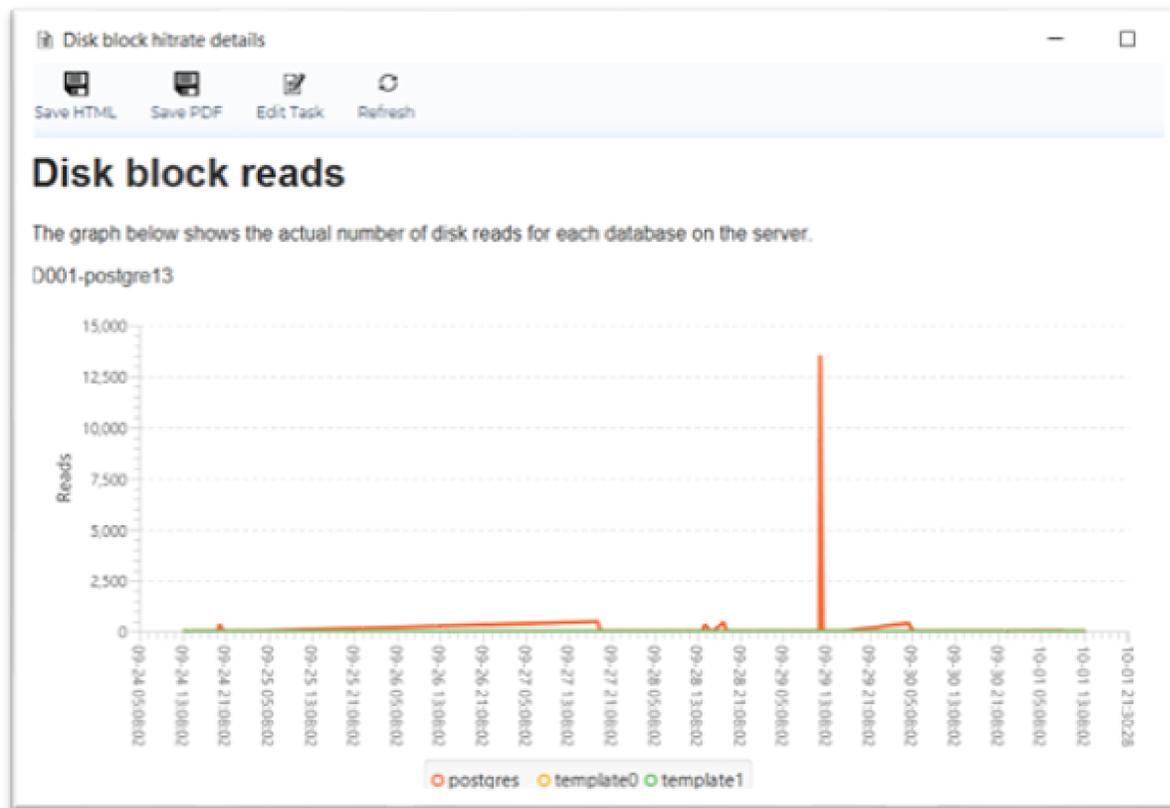
dbWatch Control Center: Manage your PostgreSQL Server directly

With dbWatch Control Center you can manage and execute changes on your PostgreSQL database directly.



dbWatch Control Center: PostgreSQL performance reports

Predict performance trends in your PostgreSQL server, keep track of your servers' activity rate and determine which time of the day your servers are actively processing requests.



dbWatch Control Center: PostgreSQL historical data reports.

Analyzes historic data of your databases, allows DBAs to predict database usage rate in the future, guides DBAs with their capacity and resource planning.



What dbWatch Control Center offers:

1. Cross Platform Monitoring



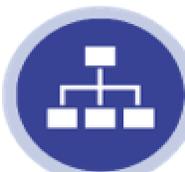
dbWatch Control Center handles most major database platforms such as Microsoft SQL, Postgres, MySQL and Oracle, on-premises or in Azure or AWS.

2. Automated Monitoring



Database jobs captures database status and performance data, memory information, back-up information, and other database-related information. Fully agentless, the dbWatch server handle all scheduling and information collection.

3. Database Monitoring and Management in a single window

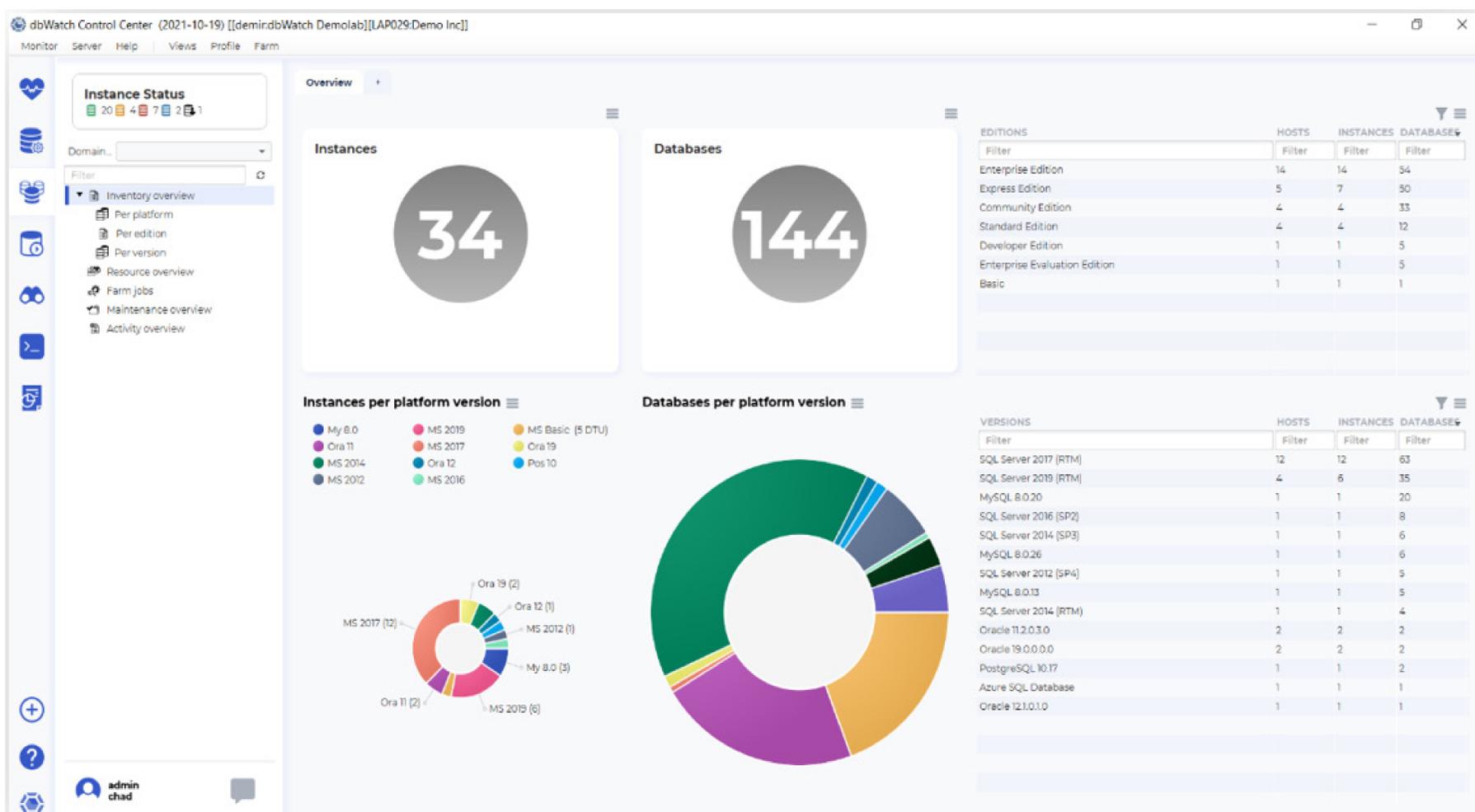


Access your database's information and modify its configuration in the same window. Perform database tuning, and backups in the Management module. Drill down flagged issues and fix them on the fly without the need of executing an SQL statement.

4. Customizable Farm Views



Monitor any number of instances in a single global view. Personalize your dashboard displays as you see fit. Have a complete overview of your entire database farm database system.



5. Database Security and Access Control



Control and limit access to your database. Limit the users viewing and utilizing Control Center. Set privileges and restrict access to users.

6. Report Generation



Generate daily or weekly reports for managers. Produce reports on the fly. Customize reports based on your organization's needs. Schedule automatic report production and distribution.

7. Chat System



Enable communication with other DBAs to notify them about existing issues and tag existing tasks you're working on across the database farm.

Functional Modules

	Monitoring	The Monitoring module provides a wide range of monitoring tasks and alerts. Tasks provide statistics and growth rates for your database, which allows for better planning and performance analysis of how your system is behaving.
	Management	The Management module provides an administration GUI for the day-to-day administration DBA work. Role-based access control defines what tasks the user may do on any instance.
	Farm	Farm module gives you an overview of all your monitored instances. Group monitoring can be done per platform, per version, job statuses and many more. Farm module also provides resource overview for your server's memory and disk memory.
	Worksheet	The SQL Worksheet is your handy SQL Editor. Write SQL queries in your database's native language and execute as ad-hoc queries or stored procedures. Save and load them for future use. Use multiple tabs to execute queries in multiple instances.
	Autodiscover	Autodiscover module automatically finds new database instances in a defined network range. You can freely set schedules and network range(s).
	FDL Console	With FDL Console, you can customize or create farm views and dashboards. FDL is a powerful query language to query multiple instances and platforms and build custom dashboards and views.
	Reporting	Report module is a powerful reporting tool that lets you automatically generate and distribute reports in html or pdf formats to designated recipients. Report module comes with standard DBA reports for each platform.

dbWatch Control Center jobs:

dbWatch Control Center has a large variety of jobs that helps you monitor and manage your servers. We have jobs to manage your needs on availability, capacity, clusters and replication, maintenance, and performance.

Each category has specialized jobs that collect statistics and status from your database instance. Some jobs collect information, some alter database states, optimize database performance, and configure databases directly. All jobs can be triggered manually or in a set frequency. You can customize these jobs parameters to suit your monitoring preference and provide proactive management for your database instance. Below is a list of currently available jobs for PostgreSQL:

dbWatch Control Center Jobs	Description
Availability	
Archive status	Checking pg_stat_archiver for archiving errors
Auto vacuum freeze	Checks for transactions vs auto vacuum freeze max age
Backup check – pg_dump	Checks that there exists an up-to-date backup file.
Backup check – pg_dump (ssh)	Checks that there exists an up-to-date backup file.
Backup check – WAL	Checks that the WAL files have been backed up.
DBMS uptime	Collects database uptime statistics.
Max connections	Comparing max_connections setting with current number of connections, warning and alarm is given when count threshold is greater than setting.
Archive status	Checking pg_stat_archiver for archiving errors
Capacity	
Database growth rate and info	Collects detailed growth rate information.
Log size statistics	Checks the size of the log file.
Schema growth and information	Collects detailed schema growth rate information.
Session load	Gathers session load statistics.
Tablespace growth and information	Shows an overview of tablespace growth and statistics.
Test DML performance	Runs performance test. Procedure executes SELECT, INSERT, UPDATE, DELETE and TRUNCATE statements on schema test tables.
Vacuum check	Checks if vacuum has been performed recently.
Cluster	
BDR Replication Lag	Checks for BDR replication lag
Replication delay alert	Checking the slave instance for replication delay
Maintenance	
Analyze job	Run analyze of the database.
Backup job – pg_dump_all (ssh)	Runs a backup of all the PostgreSQL databases on an instance using pg_dumpall through an ssh connection.
Vacuum job	Run vacuum of the database.
Performance	
Analyze check	Checks if analyze has been performed recently.
Commit ratio	Checks for database commit ratio
Disk block hit rate	Checks the hit rate for disk block requests.
Index block hit rate	Checks the hit rate for index disk block requests.
Locks held and statistics	Shows locks held statistics.
Table and index bloat	Checks for table and index bloat
Table and index scan statistics	This task gathers scan statistics on tables and indexes from pg_stat_all_tables view.
Table and index statistics	Gathers information on table and index usage in the database and generates statistics.
Transaction statistics	Gathers information on commits and rollbacks in the databases and generates statistics.

dbWatch Control Center PostgreSQL

Available license types for dbWatch Control Center for PostgreSQL:

- Regular license for a single node (production)
- Test or Development license without any maintenance jobs

How do I license my PostgreSQL databases?

dbWatch offers 2 types of licenses available, your PostgreSQL servers would go under either regular license for a single node (production) or Test or Development license without any maintenance jobs.

PostgreSQL Versions Supported

Here are the following PostgreSQL versions currently supported by *Control Center*:

- PostgreSQL 9
- PostgreSQL 10
- PostgreSQL 11
- PostgreSQL 12
- PostgreSQL 13
- PostgreSQL 14

Software and Hardware Requirements

	Recommended Minimum Requirements	
Architecture Components	dbWatch Server	<ul style="list-style-type: none">• Supported Operating Systems: Windows and Linux Server (VMWare virtual server supported)• Needs at 8 GB of RAM• Needs 4 CPU cores• Needs 1 GB HD space available
	dbWatch Engine (Per instance)	<ul style="list-style-type: none">• 500 Mb free space in each database instance• Bulk install for large database environments SA, SYS, or other superuser password required for each engine installation
	dbWatch Client	<ul style="list-style-type: none">• Windows and Linux operating system for use with graphical interface• 2Gb Memory• 500 Mb hard drive space• Java support• Client-Server communication requires a single port only