

Meeting Database Deployment and Management Challenges with VMware vCloud Air SQL

AT A GLANCE

Organizations invest considerable infrastructure and IT personnel resources to provision and maintain databases. To ensure business continuity and compliance, databases are deployed in highly complex environments that require considerable 'up-front' capital investment.

After deployment, many new databases are oversized and under utilized leading to excessive infrastructure and software licensing costs.

Provisioning and Managing databases are huge overheads for organizations that increase expenses, reduce agility, and distract focus away from core business functions.

VMware vCloud® Air™ SQL provides managed database services that dramatically reduce the provisioning time and maintenance costs for relational databases.

KEY BENEFITS

- Lower CapEx costs with flexible payment options
- Flexible time and scale of usage
- Reduced IT complexity
- Faster time to develop and deploy
- Database Protection (backup and snapshots)
- Unified and easy to use management console for Hybrid environments
- Skilled DB professionals can focus on driving business critical applications
- Organizations can focus on core business functions

vCloud Air SQL

vCloud Air SQL provides customers with easy access to scalable, cloud hosted relational databases. Delivered via vCloud Air's on-demand, self-service platform, vCloud Air SQL provides a complete managed database-as-a-service that automates the provisioning and administration of relational databases. System administrators, developers and non-technical personnel can deploy databases within minutes on vCloud Air and can seamlessly access them from other hosts on vCloud Air or on-premises.

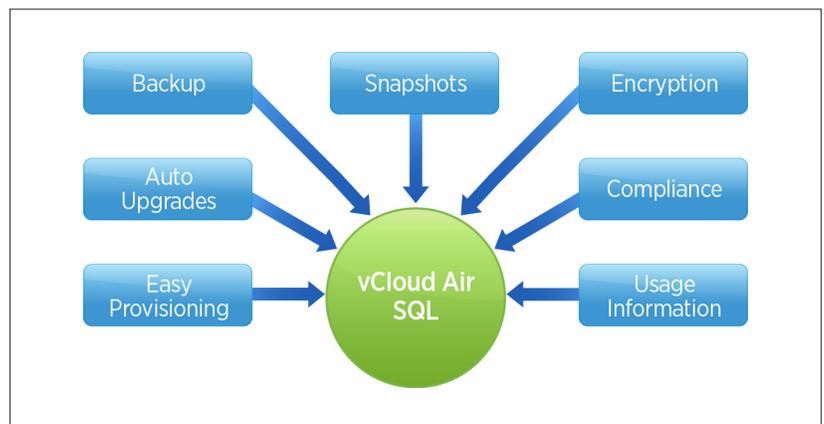
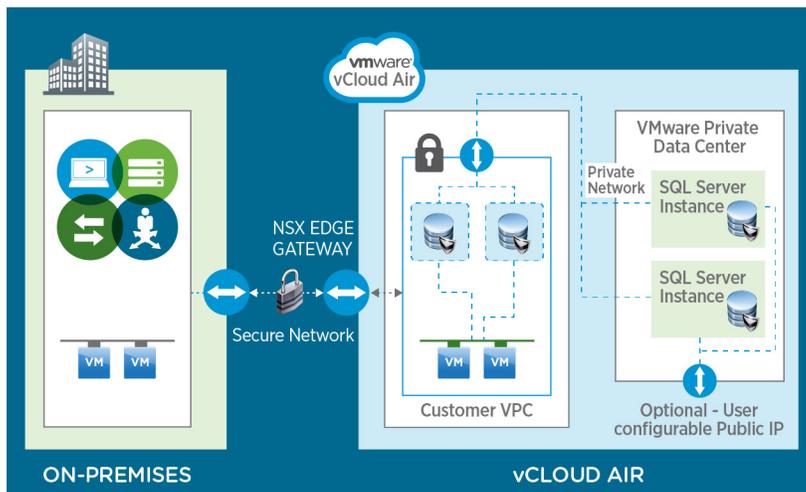


Figure 1 vCloud Air SQL

vCloud Air SQL simplifies application development processes and facilitates faster development cycles, providing quick time to value to businesses. It also streamlines business processes and meets enterprise security and compliance requirements. vCloud Air provides cost effective and flexible payment options that suit most business needs. **The initial version of Air SQL will support MS SQL Server versions 2012 and 2008 R2, Enterprise and Standard.** The first version of the product will be available in US data centers.

Architecture – MS SQL Database as a Service

Organizations can provision MS SQL Server Instances on vCloud Air within minutes, on a per hour usage basis, from their on demand account. Organizations can choose from different virtual machine instance sizes and specify storage and backup options based on their database size, performance and availability requirements. VMware hosts the Air SQL Instance on a separate virtual machine in a secure environment and performs most database management functions. Once the Air SQL Instance is provisioned, users can connect to it from another Virtual Machine running on a Virtual Private Cloud (VPC) on vCloud Air and can start using the database. Users can also connect to the database from their on-premise machines over a secure channel and extend their on-premises environment. VMware manages the database including upgrades, security patches, backups, user driven as well as automatic snapshots and troubleshooting. Users have access to instantaneous and continuous database usage information to better help manage usage and budget.



Key Features

Self-Provisioning:

Users can easily provision an Air SQL Instance by logging into their VMware vCloud Air account and selecting a MS SQL database version. Small, medium or large instance sizes can be selected based on the performance requirements. Users can provision high performance storage based on their database storage requirements. This storage will be used for storing all the database files including data files, log files and temporary files. Maximum 2TB storage can be provisioned.

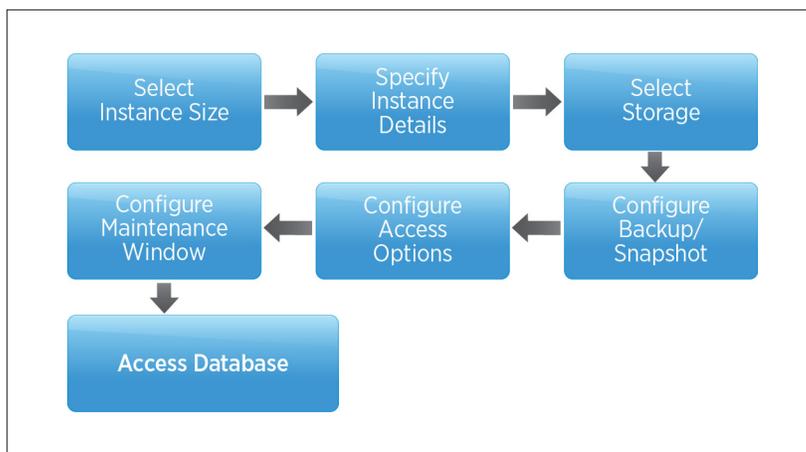


Figure 2 Database Creation

With these few easy steps users can customize their database and start using it within minutes. Once the Air SQL Instance is provisioned, users can get the connection information from the vCloud Air SQL Instance details page. Using this information a user can start accessing the MS SQL server from another virtual machine within their VPC or from an on-premise machine over a secure channel. Users can then create one or more database instances and start running SQL queries.

Databases are upgraded whenever new patches are available so that user applications have access to the most updated database version at all times. VMware will update mandatory database and OS security patches. Optionally database major and minor versions will be upgraded based on user preference.

Backup:

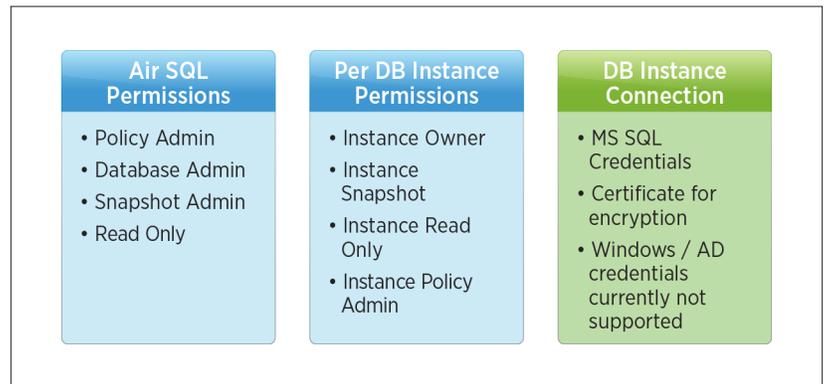
Organizations need to backup their critical data to protect against data corruption and data loss or for compliance reasons. vCloud Air automatically backs up Air SQL Instances to provide access to data from a previous point in time within the retention window. Users can configure the backup retention window based on their data protection requirements.

Snapshots:

Snapshots can be used to retain data from a specific point in time image for a period that can be much longer than the backup retention window. vCloud Air supports automatic and on demand database snapshots. When users need to access a point in time image, new instances with the restored data can be made available in seconds.

Secure Access:

Secure controls protect instances and provide granular control of users, database and snapshot configurations. Access control policies can be configured for all Air SQL Instances or for an individual instance. Separate database permissions can be configured for managing Air SQL Instances and Snapshot Instances.



Additionally, allowing users to configure the VPCs from which the Air SQL Instance can be accessed restricts database access. If users want to access the Air SQL Instance from an on premise machine, they will have to associate a public IP to the Instance. To connect to the Air SQL Instance, MS SQL Server credentials need to be used.

Learn More

For information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit <http://www.vmware.com/products> or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the VMware vCloud Air documentation.