

VMware vFabric Data Director

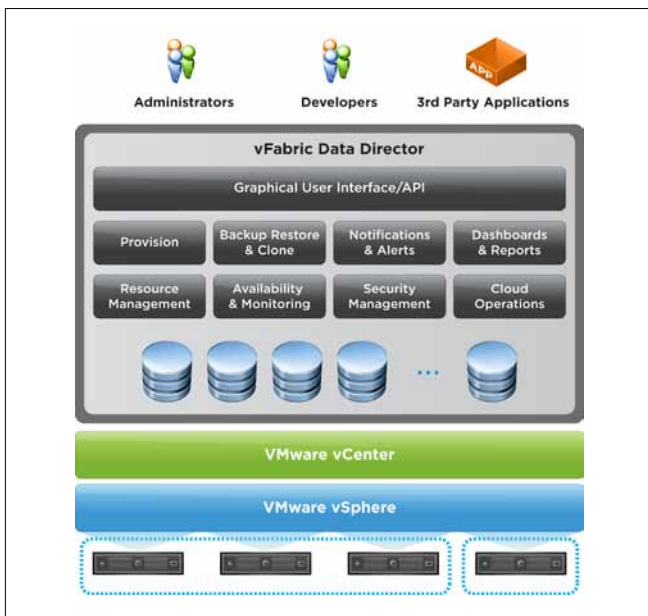
Powering Database-as-a-Service for Your Cloud

AT A GLANCE

VMware vFabric Data Director powers Database-as-a-Service for your cloud and drastically accelerates application development cycles. Built for private and hybrid clouds, vFabric Data Director empowers administrators to securely automate and delegate routine tasks, including database provisioning, backup, cloning, and more. vFabric Postgres 9.0, the vSphere-optimized ACID and ANSI-SQL relational database, delivers the elasticity and performance required for the cloud. vFabric Data Director offers the agility of public cloud database services with enterprise-grade security, flexibility, control and compliance.

KEY BENEFITS

- **Dramatically reduce database operating and capital expenses** by extending virtualization benefits to the database.
- **Accelerate the application development cycle** with self-service database management.
- **Gain greater control and enforcement over enterprise database policy**, with policy-based management.



VMware vFabric Data Director powers Database-as-a-Service for Your Cloud.

What is VMware vFabric Data Director?

IDC predicts that private clouds will mature and dominate the enterprise infrastructure software agenda in 2011. One of the key building blocks of the private cloud is Database-as-a-Service (DBaaS). VMware, as the global leader in virtualization and cloud infrastructure, has developed advanced technologies and products to fundamentally simplify how the database is managed, consumed and virtualized in the cloud.

VMware vFabric Data Director is a software solution that enables you to provide DBaaS for your cloud. It is designed for the cloud environment and is capable of managing thousands of databases while offering application developers self-service database management. vFabric Data Director combines the convenience and ease-of-use of public cloud database services with enterprise-grade security, flexibility, control and compliance.

What are the key capabilities of vFabric Data Director?

vFabric Data Director has three pillars of data management capability:

- Self-service
- IT Control
- VMware vSphere™-optimized

Self-service

vFabric Data Director automates common database operations and presents these capabilities to application developers and DBAs through an intuitive self-service user interface. Key features include:

- **Powerful Web-based Management Console** – IT operators can manage thousands of databases through a single “pane of glass”, significantly reducing management overhead and drastically increasing developer agility.
- **Self-service Database Management** – Self-service database provisioning and cloning provides database access to developers in a matter of minutes, while reducing IT management overhead and operational complexity.
- **Innovative Database Cloning** – The average production database has six clones for development and test purposes. Each clone often takes several days or weeks to create. The linked database clone capability of vFabric Data Director reduces cloning time to minutes regardless of the source database size.

IT Control

For administrators, vFabric Data Director provides policy-based management capabilities to operate DBaaS easily and securely. Key features include:

- **Fine-Grained Resource Management and Isolation** – A major concern for moving databases to the cloud is the interference caused by multiple databases sharing the same pool of resources: the so-called “noisy neighbor” problem. vFabric Data Director offers flexible resource management and isolation at the tenant and database level, thus eliminating “noisy neighbor” concerns.
- **Convenient Database Templates** – Administrator-controlled database configuration and backup templates guarantee corporate compliance, increase resource utilization, and guide non-expert users during database provisioning and cloning.
- **Robust Role-Based Access Control (RBAC)** – RBAC restricts system access to authorized users. Granular privileges enable IT administrators to control which users can take what actions at a fine-grain level. Customizable roles that can be delegated to users make RBAC easy to administer and maintain.
- **Easy Upgrade and Patching** – Streamlined database upgrade allows database upgrade at the individual database level with a few clicks.

VMware vSphere-Optimized

vFabric Postgres 9.0 is a vSphere-optimized PostgreSQL database designed for virtualized environments. Key features include:

- **Elastic Database Memory** – Patent-pending technology integrates the database memory structures with vSphere to finally enable databases to fully leverage vSphere’s virtual resource capabilities, while maintaining consistent database performance even with unexpected workload spikes.
- **Database Aware High Availability** – Offers high availability capability comparable to Microsoft Cluster Server (MCSC) but without the deployment complexity.
- **100% PostgreSQL Compatible** – vFabric Postgres 9.0 is based on the award winning, industry proven PostgreSQL database. It is a fully ACID and ANSI-SQL-compliant transactional relational database
- **Smart Database Configuration** – vFabric Postgres 9.0’s smart database configuration algorithm automatically derives optimized database configurations without involving DBAs.

Key Features

DBaaS architecture

- Scalable, elastic, multi-tenant
- Full security and resource isolation among different tenants and databases
- Policy-driven CPU, memory and storage resource management

Powerful management console

- Intuitive Web-based GUI ideal for self-service
- Single view for managing thousands of databases

User management

- Robust role-based access control
- Flexible customizable roles

Dashboards and reports

- Comprehensive view of resource usage for capacity planning
- Centralized view to highlight potential problem areas
- Proactive alerts to support management by exception

Upgrade and patching

- Flexible patching / upgrade at individual database level
- Integration with VMware vCenter™ Update Manager

Self-service database provisioning

- Template-guided rapid provisioning
- Override template values for power users
- Database-aware High Availability in a click

Backup and recovery

- Database-consistent snapshots provide instant backups regardless of database size
- Online hot backups
- Smart scheduling of backup jobs
- Point-in-time recovery
- External backups provide durable backups

Innovative self-service database cloning

- Linked database clone for instantaneous access
- Full database cloning for complete storage isolation

vFabric Postgres 9.0

- Compatibility with PostgreSQL 9.0
- Elastic Database Memory optimized for vSphere
- Adaptive buffer pool sizing and checkpointing

Find Out More

For information or to purchase VMware products, call 877-4-VMWARE, visit www.vmware.com.

