VMware vFabric Hyperic

Manage Application Performance Across Physical,
Virtual and Cloud Infrastructures

- Install, setup and start managing your application infrastructure in minutes.

- Auto-discovery gives you a continuously updated inventory of all hardware, software and services in your infrastructure.

- Realtime performance visibility into your entire software stack, from VMware vSphere™ and virtual machine, through the operating system, to application payload.

- Correlate performance metrics with configuration changes, log data and security events for fast root-cause diagnosis.

- Define intelligent alerts, acknowledgements and response actions to anticipate and address problems before they cause outages.

- Run cross-platform diagnostics and execute control operations across your entire infrastructure centrally.

- Accurately model and display the relationships between hardware, virtual machines, applications and services.

- Analyze real-time and historical metrics across hardware, network and application layers.

- Baseline performance trends to formulate SLAs and measure compliance.

- Role-based dashboards, metrics, charts & alerts let you customize Hyperic for the needs of each team member.

- Proven scalability to thousands of servers.

"vFabric Hyperic has given us the clarity and context to keep applications running optimally, and it has done so economically. vFabric Hyperic's extensibility allows us to correlate the performance of our customer-facing applications with metrics collected throughout our infrastructure – visibility that enables us to better understand today's challenges and plan for future change. With vFabric Hyperic, we never need to guess about the experience of our end users. We know exactly what it is."

— Jason DeHaan, Deputy CIO City of Chicago, July 2009

Overview

VMware vFabric™ Hyperic® is the application monitoring component of the VMware vFabric Cloud Application Platform, enabling IT professionals to manage the performance and availability of custom Web applications in physical, virtual and cloud environments. Its unique ability to automatically discover, inventory, and monitor servers, regardless of type or location, enables application operations teams to ensure that business-critical apps run without fail. Hyperic collects a vast range of performance data—50,000 metrics across 75 application technologies—and is easily extended to monitor any component in your application stack.

With fast deployment, a fully extensible framework and user interface, and support for both virtualized and physical infrastructure at scale, Hyperic is the standard for Web operations teams of all sizes.

Market Leading Virtualization Support

As part of the VMware family of products, vFabric Hyperic provides best-in-class performance monitoring of applications running in virtualized environments. With its deep VMware vCenter™ integration, Hyperic monitors your entire application infrastructure inventory, from code components down to VMware ESX®, and continually updates this inventory as virtual machines are started, stopped and vMotioned. This eliminates reliance on chronically out-of-date configuration management databases, and enables system administrators to more rapidly pinpoint, correct and prevent application performance problems wherever they occur across physical, virtual and cloud infrastructures. Hyperic's virtualization-aware alerting distinguishes between when a guest operating system has shut down unintentionally, and when it has been intentionally powered down or suspended. This prevents false alarms and enables system administrators to scale down application infrastructure without triggering alert storms.

Deep Functionality for Managing Complex Web Applications

VMware vFabric Hyperic provides the automation and built-in intelligence necessary for Web operations teams to manage applications at scale. Designed to power scalable, secure Web applications, Hyperic saves time and ensures comprehensive management of business-critical services. vFabric Hyperic features include:

- Complete deployment automation, including the ability to copy and reuse monitoring configurations and global alert templates, to bring resources under management in under a minute.

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- Automated problem resolution, enabling administrators to define automatic responses to performance problems, such as a server or virtual machine restart, letting you fix problems before customers notice.

- Enterprise alerting includes multi-conditional and recovery alerts, role-based notifications, server group alerting, escalations, planned downtime, and follow-the-sun notifications.

- Extended security options including support for role-based access control, dashboards, and alerts, external authentication for LDAP and Kerberos directories and uni-directional agent communication to track resources beyond the firewall.

- Extended analysis tools include advanced dashboard charting, capacity planning, baselining and built-in reporting.

- Enterprise-level scalability and high availability deployment options.

Open Source Extensibility for your Unique Environment

Hyperic HQ is an open source subset of VMware vFabric Hyperic that provides Web application performance monitoring to help pinpoint, correct and prevent problems at every infrastructure layer, including hardware, networks, virtualization and applications. Designed for smaller-scale production deployments, developers and testing teams, Hyperic HQ can:

- Auto-discover software resources across physical, virtual and cloud-based infrastructure.

- Monitor performance, configuration and security changes.

- Alert team of performance problems, errors or inventory changes.

- Diagnose errors, correct problems and report performance centrally.

- View resources by logical groupings—for instance, all Java servers or all components for an application—to best manage your unique environment

Comprehensive Technology Support

Hyperic manages a broad range of products including application servers, Web servers, databases, operating systems, hypervisors, messaging servers and directory servers. Hyperic uses the native management capabilities of the managed products, and can be easily extended to cover more products through our Plugin Development Kit (PDK)–usually with only a few lines of XML.

Operating Systems	Linux, Windows, Solaris, HP/UX, AIX, Free BSD, NetBSD, OpenBSD, Mac OS X, Cisco IOS & PIXOS
Virtualization	VMware vSphere, vCenter, vCloud Director, VI3, GSX; Xen VM
Application Platforms	Spring, JEE, J2EE, LAMP, .NET, JMX, MX4J, Sun JVM
Application Servers	Tomcat , WebLogic, WebSphere, .NET, tc server, Geronimo, Caucho Resin, Glassfish, JBoss, Jetty, JOnAS, JRun, ColdFusion, Oracle Application Server, Zope
Databases	MySQL, Oracle, IBM DB2, Microsoft SQL Server, PostgreSQL, Informix, Sybase Adaptive Server, CouchDB, GemFire, iAnywhere
Web & Proxy Servers	Apache, IIS, Memcached, GemFire, lighttpd, Nginx, Squid, SunONE/iPlanet
Messaging Middleware	ActiveMQ, IBM MQ Series, MSMQ, RabbitMQ, Hadoop
Network Management	NetScaler, Samba, Vyatta, WxGoos, ZXTM
Directory Services	Microsoft Active Directory, OpenLDAP
Email Servers	Microsoft Exchange, Zimbra, Sendmail, Postfix, qmail, IBM Lotus Domino
Agentless Monitoring	SNMP, HTTP, DHCP, DNS, FTP, IMAP, LDAP, NTP, Ping, POP3, RPC, SMTP, SSH, TCP, SQL Queries, Selenium synthetic transactions
Other Software	Bugzilla, Wordpress, Alfresco, Bind, Mule ESB, Asterisk, Sensatronics, Microsoft Terminal Services
Monitoring Tool Integrations	Nagios, OpenNMS, SNMP to OpenView, Tivoli, Patrol, and Unicenter

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