IBM Fabric Manager for IBM BladeCenter enables fast deployment and high availability through dynamic provisioning of IT resources in a production environment

Overview

Fabric Manager software for BladeCenter is designed to easily manage I/O and network interconnects by virtualizing network parameters such as the World Wide Name (WWN) and Media Access Control (MAC) addresses. When a compute node is replaced or failover occurs from one compute node to another, the LAN and SAN configurations are not affected. This application replaces both BladeCenter Open Fabric Manager Basic and BladeCenter Open Fabric Manager Advanced, which were previously used on BladeCenter servers.

After the Fabric Manager for BladeCenter is installed, you can preconfigure LAN and SAN connections; I/O connections are made automatically when compute nodes are plugged into the chassis slots. No special tools or training are required; you just manage the program with an easy-to-use web-based user interface.

Fabric Manager offers these benefits:

• Save time: Preconfigure more than 1,400 LAN and SAN connections once for each blade server.
• Simplified management: Manage growth and complexity from a single Fabric Manager user interface.
• Flexibility: Fabric Manager works with Ethernet, Fibre Channel, and SAS switch modules.
• Ease of use: Profile-based user interface enables easy setup, deployment, and management.
• Reduce risk: Manage risk to keep business operations running with available I/O failover to standby compute nodes and redundant Fabric Manager servers.
• Convenient packaging: Purchase both BladeCenter Open Fabric Manager Basic and Advanced functions in one easy-to-use package.
• New Enterprise Licensing offering provides time-saving benefits in deploying multiple chassis.
• Ability to upgrade from Basic or Advanced via single part number.

With the exception of the IBM Fabric Manager Enterprise Key offering, licenses for offerings in this announcement include Software Subscription and Support. Software Subscription and Support contracts are managed in Passport Advantage®. Refer to the Additional information section of this announcement for further details.

Key prerequisites

Refer to the Hardware requirements section.

Planned availability date

August 28, 2012

Description

Fabric Manager for BladeCenter enables your IT staff to:

• Quickly replace and recover compute nodes in the datacenter. It does this by assigning Ethernet MAC, Fibre Channel WWN, and SAS WWN addresses so that any compute nodes plugged into those slots take on the assigned addresses. Ethernet and Fibre Channel infrastructure are configured just once -- before any compute nodes are connected to the chassis.
• Monitor the health of compute nodes, and automatically without user intervention, replace a failed compute node from a designated pool of spare compute nodes. After receiving a failure alert, Fabric Manager attempts to do the following:
  – Power off the failing compute node.
  – Read the Fabric Manager virtualized addresses and boot target parameters.
  – Apply these parameters to the next compute node in the standby pool.
  – Power on the standby compute node.
  – Preassign MAC and WWN addresses, as well as storage boot targets, for up to 256 chassis or 3584 compute nodes.

Using an enhanced GUI, you can create addresses for compute nodes, save the address profiles, and deploy the addresses to the slots in the same chassis or in up to 256 different chassis. This can be done without any compute nodes installed in the chassis.

Additionally, you can create profiles for chassis that have not been installed in the environment by simply associating an IP address to the future chassis.
Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


Product positioning

IBM’s flexible and dynamic infrastructure offers a broad set of virtualization technologies to help improve service and management, mask complexities, reduce operational costs, and maximize asset utilization.

Product number

Software options:

The following part numbers are for single chassis entitlement for the type of chassis with the Subscription and Support (maintenance) term listed.

After receipt of your order, you will be requested to register through Passport Advantage Express® to allow for entitlement of support and subscription. Upon registration completion you will be provided with a pdf document with instructions to receive updates.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
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<tbody>
<tr>
<td>00Y6198</td>
<td>IBM Fabric Manager for BladeCenter Per Managed Chassis with 1 Year SW S&amp;S</td>
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<tr>
<td>00Y6202</td>
<td>IBM Fabric Manager for BladeCenter Upgrade from BOFM Per Managed Chassis with 1 Year SW S&amp;S</td>
</tr>
<tr>
<td>00Y6200</td>
<td>IBM Fabric Manager for BCS Per Managed Chassis with 1 Year SW S&amp;S</td>
</tr>
<tr>
<td>00Y6203</td>
<td>IBM Fabric Manager for BCS Upgrade from BOFM Per Managed Chassis with 1 Year SW S&amp;S</td>
</tr>
<tr>
<td>00Y6199</td>
<td>IBM Fabric Manager for BladeCenter Per Managed Chassis with 3 Year SW S&amp;S</td>
</tr>
<tr>
<td>00Y6201</td>
<td>IBM Fabric Manager for BCS Per Managed Chassis with 3 Year SW S&amp;S</td>
</tr>
</tbody>
</table>

The following part number is for an enterprise key managing chassis through an IBM Fabric Manager server.

<table>
<thead>
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<tbody>
<tr>
<td>00Y6213</td>
<td>IBM Fabric Manager Enterprise Key</td>
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</table>

The following part numbers are for Subscription and Support (maintenance) registration purposes and are intended to be ordered by those customers that purchase an IBM Fabric Manager Enterprise Key. There is no authorization code associated with these part numbers.

<table>
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<tr>
<th>Part number</th>
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<tbody>
<tr>
<td>00Y6219</td>
<td>IBM Fabric Manager for Flex Chassis Per Managed Chassis w/1 Yr S&amp;S</td>
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<tr>
<td>00Y6220</td>
<td>IBM Fabric Mgr for BladeCenter Per Managed Chassis w/1 Yr SW S&amp;S</td>
</tr>
<tr>
<td>00Y6222</td>
<td>IBM Fab Mgr Upgr from BOFM for BladeCtnr Per Managed Chassis</td>
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</table>
Pseudo options:

Note: The following pseudo part numbers cannot be ordered as stand-alone parts and can only be ordered by configurator.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>00Y6204</td>
<td>IBM Fabric Mgr for BladeCenter Per Mgd Chassis w/1 Yr S&amp;S</td>
</tr>
<tr>
<td>00Y6206</td>
<td>IBM Fabric Mgr for BCS Per Managed Chassis w/1 Yr S&amp;S</td>
</tr>
<tr>
<td>00Y6205</td>
<td>IBM Fabric Mgr for BladeCenter Per Mgd Chassis w/3 Yr S&amp;S</td>
</tr>
<tr>
<td>00Y6207</td>
<td>IBM Fabric Mgr for BCS Per Managed Chassis w/3 Yr S&amp;S</td>
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</tbody>
</table>

For all parts in this announcement, the software is entitled for one managed chassis.

Note: Managed Chassis: Managed Chassis is a unit of measure by which the program can be licensed. A chassis is a physical enclosure structure that provides services such as power, cooling, networking, various interconnects, and management to IT elements which dock inside the enclosure. Licensee must obtain Managed Chassis entitlements for each chassis managed by the program.

Additional information

Order handling

To allow for ease of order submission, the offerings in this announcement can be configured in conjunction with eligible System x® hardware, software, and license-only configurations that can be created for this product based on existing supported System x hardware system units in a given business environment.

With the exception of the IBM Fabric Manager Enterprise Key offering, licenses for offerings in this announcement include one year or three years of Software Subscription and Support. Software Subscription and Support renewals for all features are aligned through Passport Advantage Express or Passport Advantage, reducing the administrative burden of keeping your Subscription and Support up to date.

If a new release of a given offering in this announcement is made generally available in Passport Advantage after the announcement of the offering in System x ordering systems, you may elect to take delivery of any release generally available for that offering during the product registration process.

Eligible software products, offered and selected during the ordering process with each hardware system, are enabled for electronic download for the system unit for which the product was ordered. Optionally, software and license-only orders can be created for these products based on existing supported hardware system units in the business environment. Offerings included in this announcement are available exclusively by electronic download.

With the exception of the IBM Fabric Manager Enterprise Key offering, orders placed for the eligible offerings in this announcement will be routed and fulfilled through Passport Advantage Express. Invoicing for the initial license orders will occur through the System x order management systems. Subscription and Support renewals will be managed through Passport Advantage.

Passport Advantage allows you to have a common anniversary date for Software Subscription and Support renewals. The anniversary date, established at the order ship date for the initial product acquisition, will remain unchanged while your Passport Advantage Agreement remains in effect. New software purchases initially include 12 or 36 full months of Subscription and Support coverage. Subscription and Support in the second year (the first year of renewal) can be prorated to be coterminous with your common anniversary date but managed and invoiced through
Passport Advantage. Thereafter, all Software Subscription and Support will renew at the common anniversary date and include 12 full months of Subscription and Support.

**Publications**

No hardcopy publications are shipped with this program.

The IBM Publications Center


The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the US) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

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**Global Technology Services**

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For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit


For details on education offerings related to specific products, visit


Select your country, and then select the product as the category.

**Technical information**

**Specified operating environment**

**Hardware requirements**

IBM System x and BladeCenter servers are listed on the IBM ServerProven® website


**Software requirements**

**Operating systems:**

- Intel™ 32- or 64-bit system
• Microsoft Windows 2003 (SP1, SP2) (32- or 64-bit)
• Windows Server 2008 (SP1, SP2) (32- or 64-bit)
• Windows Server 2008 R2 (64-bit)
• Red Hat Enterprise Linux (RHEL) 4 (up to SP8) (32- or 64-bit)
• RHEL 5 (up to SP5)
• SUSE Linux Enterprise Server (SLES) 9 (up to SP4)
• SLES 10 (up to SP2)
• SLES 11

**Note:** Minimum 1 GB RAM and 300 MB free disk space during installation Sun Java SE 1.6, or later, is required

The program’s specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a README file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

For information on additional support, certification, version information, or network operating systems, visit

http://www-03.ibm.com/servers/eserver/serverproven/compat/us/

**Compatibility**

The following IBM platforms with supported operating system:

• x86 systems
• BladeCenter

**Note:** For a list of supported systems, refer to the Hardware requirements section.

**Limitations**

For operating system limitations, refer to Software requirements section.

**Planning information**

**Packaging**

For software products in this announcement, physical media and hardcopy documentation are not included in the deliverable package. The software code is delivered only via electronic download.

After receipt of an order, the Business Partner or end customer will be required to register and accept Passport Advantage or Passport Express terms and conditions. Upon registration, the end customer will be provided with a Web site for the electronic download. The product includes the license and one year or three years of Software Subscription and Support, unless noted.

Your Proof of Entitlement for these programs is a copy of a paid sales receipt, purchase order, invoice, or other sales record from IBM or its authorized reseller from whom you acquired the program, provided that it states the license charge unit (the characteristics of intended use of the program; for example, number of processors, number of users) and quantity acquired.

The program(s), when downloaded from a Web site, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

**Supplies**

None
Security, auditability, and control

This product uses the security and auditability features of the system in which it is installed.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Global Technology Services

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, and/or integration of this product.

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

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http://www.ibm.com/support/electronic

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IBM Direct terms and conditions

Fabric Manager

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IBM Global Financing

Yes

Field installable features

Yes

Customer setup

Yes

Model conversions

No
IBM warrants that the program will conform at the date of shipment to the current specifications, provided that the program is properly used in the specified operating environment.

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**Features and options only**

<table>
<thead>
<tr>
<th>Feature</th>
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<tbody>
<tr>
<td>Field installable</td>
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<tr>
<td>Customer setup</td>
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</tr>
<tr>
<td>Support period</td>
<td>Program Services will be available for a minimum of three years. A formal withdrawal will be issued one year prior to end of Program Services.</td>
</tr>
<tr>
<td>Optional upgrade</td>
<td>No</td>
</tr>
<tr>
<td>Licensed programs</td>
<td>Yes</td>
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**License Information form number**

- LC23-5133

The program’s License Information will be available for review on the IBM Software License Agreement website


Access to IBM System fix downloads will be granted upon entitlement validation. The terms and conditions for fixes will be covered under the License Agreement for Machine Code, International Program License Agreement, International License Agreement for Non-Warranted Programs and/or other terms provided with the fix, as applicable.

**Development/Demo Discount:** Up to 100%, contact your local IBM Business Partner Office for details on participation (local limitations, if any, prevail).

**Usage restrictions**

None

**Hardware warranty period**

IBM Europe, Middle East, and Africa Hardware
Announcement ZG12-0229
Optional features - One year

Warranty service upgrades

Field-installable features
Yes

Model conversions
No

Machine installation
Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

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Prices

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