IBM GPFS Native RAID for GPFS Storage Server provides extreme data integrity for the Intelligent Cluster

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At a glance

IBM® General Parallel File System (GPFS™) Native RAID for GPFS Storage Server provides:

- Extreme data integrity
- Reduced latency with faster rebuild times
- Enhanced data protection
- Unique, innovative capability

Overview

GPFS Native RAID for GPFS Storage Server, V3.5 is required for licensing the software needed to complete the GPFS Storage Server solution on the Intelligent Cluster™.

The GPFS Native RAID software is preinstalled on the Intelligent Cluster™. This offering replaces the PRPQ license software previously announced as a required part of the IBM System x® GPFS Storage Server.

IBM System x GPFS Storage Server:

GPFS Storage Server is a single, integrated, fully supported IBM solution, built to leverage a strong GPFS software market. It offers high performance on a scalable building-block approach -- performance and capacity increase as you add multiple building blocks. The GPFS Storage Server is very cost competitive, with extreme data integrity and reduced latency with faster rebuild times. This new storage solution is an entirely IBM-provided solution, built on standard System x components with GPFS software tuned to support this configuration. There are two models: Model 24 and Model 26. Each model has two x3650 M4 servers twintailed with either four or six JBODs, with up to 348 disk drives. This solution leverages the high demand for GPFS software and couples it with a System x hardware solution; and is provided exclusively through the Intelligent Cluster portfolio. The IBM System x GPFS Storage Server is designed to be easy to configure and buy. With no storage controllers, the data resides closer to the compute nodes for faster rebuild times. The hardware for this solution can be ordered through x-config. The solution is currently password protected in x-config so a password will need to be acquired. Additional software licensing is also needed for the GPFS Native RAID for GPFS Storage Server, V3.5.
Licenses for GPFS Native RAID for GPFS Storage Server, V3.5 cannot be ordered independent of the selected hardware on which it can be preinstalled.

Refer to the Reference information section of this announcement for announcement information related to the IBM System x GPFS Storage Server hardware offerings that offer GPFS Native RAID for GPFS Storage Server, V3.5 preinstalled.

Licenses for offerings in this announcement include three or five years of Software Subscription and Support. Software Subscription and Support contracts are managed in Passport Advantage®. Refer to the Order handling section of this announcement for further details.

If a new release or version of the offering in this announcement is made generally available in Passport Advantage after the announcement of the offering in System x ordering systems, clients with valid Software and Subscription contracts may elect to take electronic delivery of the latest release or version.

Type Model Feature (TMF) code ordering may not be available in every country. Refer to the Reference information section in this announcement for hardware announcement letters that provide part number ordering detail for select hardware on which this offering can be preinstalled.

Key prerequisites

• Intelligent Cluster hardware solution
• GPFS Storage Server

Planned availability date

October 29, 2013

Description

GPFS Storage Server, fulfilled through Intelligent Cluster, combines the performance of System x servers with industry-leading GPFS to offer a high-performance, scalable building-block approach to modern storage needs. GPFS Storage Server allows organizations to start small and build using incremental additions, providing expanded capacity and bandwidth with each additional GPFS Storage Server building block.

GPFS Storage Server features IBM System x servers, storage enclosures and drives, software, and networking components that allow for a wide choice of technology within an integrated, delivered solution. With GPFS Storage Server, you gain all the reliability, integration, and interoperability of an Intelligent Cluster solution, all within a high-capacity, GPFS-based architecture.

GPFS Storage Server is a single, integrated, fully supported IBM solution. It offers high performance on a scalable building-block approach; performance and capacity increase as you add multiple building blocks. The GPFS Storage Server is very cost competitive, with extreme data integrity and reduced latency with faster rebuild times.

This storage solution is built on standard System x components with GPFS software tuned to support this configuration. There are two models: Model 24 and Model 26. Each model has two x3650 M4 servers twintailed with either four or six JBODs, with up to 348 disk drives. The IBM System x GPFS Storage Server is designed to be easy to configure and buy. With no storage controllers, the data resides closer to the compute nodes for faster rebuild times.

GPFS Native RAID is required to complete this solution.
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

This GPFS Native RAID and GPFS Storage Server solution leverages the high demand for GPFS software and couples it with a System x hardware solution; it is provided exclusively through the Intelligent Cluster portfolio.

Reference information

Refer to Hardware Announcement ZG13-0269, dated September 11, 2013.

Refer to Hardware Announcement ZG13-0290, dated October 29, 2013.

Program number

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<td>3.5.0</td>
<td>GPFS Native RAID for GPFS Storage Server with 5 Yr SW S&amp;S</td>
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Order handling

Orders for the offerings in this announcement are allowed during configuration with eligible hardware orders. Refer to the Reference information section of this announcement for announcement information related to the hardware offerings that may be configured with IBM GPFS Native RAID for GPFS Storage Server, V3.x.

Orders for licenses including Subscription and Support for IBM GPFS Native RAID for GPFS Storage Server, V3.x will be routed through Passport Advantage Express® or Passport Advantage for Subscription and Support entitlement registration. Subscription and Support renewals will be managed through Passport Advantage.

If a new release or version 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 as long as you have a valid Subscription and Support contract.

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 36 or 60 full months of Subscription and Support coverage. Subscription and Support in 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.
Offering Information

Product information is available via the Offering Information website

http://www.ibm.com/common/ssi

Publications

No publications are shipped with this program.

IBM Publications Center

http://www.ibm.com/shop/publications/order

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 50 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.

Technical information

Specified operating environment

Hardware requirements

- IBM Intelligent Cluster
- GPFS Storage Server (GSS24 and GSS26)
- One of these GSS servers:
  - 0796-011 / -HC1
  - 0796-012 / -HC2
  - 0796-013 / -HC3
  - 0796-014 / -HC4
  - 0796-015 / -HC5
  - 0796-016 / -HC6

Software requirements

Refer to Hardware Announcement ZG13-0269, dated September 11, 2013.

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.

Companion products

IBM System x GPFS Storage Server

Limitations

Refer to Hardware Announcement ZG13-0269, dated September 11, 2013 for information regarding IBM System x GPFS Storage Server.
For additional information, refer to Usage restriction in the Terms and conditions section of this announcement, or to the license information document that is available on the IBM Software License Agreement website


**IBM Electronic Support**

The IBM Support Portal is your gateway to technical support. This includes IBM Electronic Support tools and resources, for software and hardware, to help save time and simplify support. The Electronic Support tools can help you find answers to questions, download fixes, troubleshoot, automate data collection, submit and track problems through the Service Request online tool, and build skills. All these tools are made available through your IBM support agreement, at no additional charge.

- Read about the Electronic Support portfolio of tools
  http://ibm.com/electronicsupport
- Access the IBM Support Portal
  http://ibm.com/support
- Access the online Service Request tool
  http://ibm.com/support/servicerequest

**Planning information**

**Installability**

Software Subscription and Support (also referred to as Software Maintenance) is included with licenses purchased through Passport Advantage and Passport Advantage Express. Product upgrades and technical support are provided by the Software Subscription and Support (Software Maintenance) offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software, and technical support provides voice and electronic access to IBM support organizations, worldwide.

IBM includes three years or five years of Software Subscription and Support (also referred to as Software Maintenance) with each program license acquired. The initial period of Software Subscription and Support (Software Maintenance) can be extended by the purchase of a renewal option, if available.

**Packaging**

For software products in this announcement, physical media and hardcopy documentation are not included in the deliverable package. The software code is preinstalled on the hardware.

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 website for the electronic download. The product includes the license and three or five years of Software Subscription and Support.

Your Proof of Entitlement (PoE) 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 programs, when downloaded from a website or preinstalled on the system for which it is ordered, contains the applicable IBM license agreement and License Information, if appropriate, which 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.
Security, auditability, and control

GPFS Native RAID for GPFS Storage Server uses the security and auditability features of the system on 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 communication 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, or integration of this product.

Ordering information

Consult your IBM representative.

Program delivery

The System x and Cluster Solution Configurator (XCONFIG) tool must be used for creation of valid software and hardware orders for the offerings in this announcement.

New license

Orders for new licenses will be accepted as part of eligible hardware orders.

Basic license

The license offerings below are preinstalled on eligible hardware.

When orders are placed for eligible hardware that includes IBM GPFS Native RAID for GPFS Storage Server V3.x, the following internal orders will be generated containing the type model number, one-time charge (OTC) feature, and serialization features as indicated in the table below.

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<th>Serial-billingization</th>
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</tr>
</tbody>
</table>

License metric definitions

Managed Server

Managed Server is a unit of measure by which the program can be licensed. A server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate server. Licensee must obtain Managed Server entitlements for each IBM server managed by the program.

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage Agreement, and International Passport Advantage Express Agreement.

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

This software license includes Software Subscription and Support (also referred to as Software Maintenance).

Agreement for Acquisition of Software Maintenance

These programs are licensed under the IBM Program License Agreement (IPLA). IBM includes three or five years of Software Subscription and Support (also referred to as Software Maintenance) with the initial license acquisition of each program acquired.

License Information form number

L-LMUY-99NRJ6

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


Limited warranty applies

Yes
**Limited warranty**

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the *IBM Software Support Handbook* found at


IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

**Volume orders (IVO)**

No

**Passport Advantage applies**

Yes, and through the Passport Advantage website at


**Usage restriction**

Yes

Refer to Hardware Announcement ZG13-0269, dated September 11, 2013, for information regarding IBM System x GPFS Storage Server.

For additional information, refer to the License Information document that is available on the IBM Software License Agreement website


**Software Subscription and Support applies**

Yes. The offerings in this announcement include Software Subscription and Support (also referred to as Software Maintenance) for a period of three years or five years from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses.

**Program technical support**

Technical support of a program product will be available for a minimum of five years from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect. This technical support allows you to obtain assistance (via telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Subscription and Support (Software Maintenance) also provides you with access to updates, releases, and versions of the program. You will be notified, via announcement letter, of discontinuance of support with 12 months' notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative or IBM Business Partner. This extension may be available for a fee.

**System i® Software Maintenance applies**

No
Variable charges apply

No

Educational allowance available

Yes. When ordering through the program number process, a 15% education allowance applies to qualified education institution customers.

Education Software Allowance Program applies when ordering through the program number process.

ESAP available

No

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated, or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

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.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

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

For all local charges, contact your IBM representative.

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Announcement countries

All European, Middle Eastern, and African countries.

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