Virtual I/O Server Version 1.5

Release Notes

GI10-0758-07

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Note

Before using this information and the product it supports, read the information in “Notices,” on page 11.

Eighth Edition (November 2007)

Contents

Chapter 1. Version 1.5 enhancements

There are a number of enhancements in this release of the Virtual I/O Server (VIOS).

Virtual I/O Server enhancements

Several enhancements have been made in the area of POWER™ Virtualization. The following sections describe the features of each element by product area.

Virtual I/O Server (VIOS)

The following enhancements have been made to VIOS:

- File-backed virtual SCSI devices: Provides additional flexibility for virtual SCSI device provisioning and management. In addition to backing a Virtual SCSI device (disk or optical) by physical storage, a virtual SCSI device can now be backed by a file. All virtual SCSI devices, including file-backed virtual SCSI devices, are accessed as standard SCSI-compliant LUNs.
- Virtual I/O Server Expansion Pack: Virtual I/O Server installation media includes an expansion pack that delivers additional VIOS Security functionality. These include Kerberos (Network Authentication Service for users and Client and Server Applications), LDAP (Lightweight Directory Access Protocol client and server functionality) and SNMP V3 (Simple Network Management Protocol Version 3).
- New storage subsystems: DS3400 IBM® Total Storage device.

Tivoli Identity Manager (TIM)

Continuing the collaboration between System p™ and IBM Tivoli®, this tool now supports the VIOS.

- VIOS is enabled for user administration from the TIM.
- TIM provides centralized user management and the ability to apply enterprise specific security policies to VIOS administrators and users. For more information about TIM, see the TIM documentation at the following Web site: http://www.ibm.com/software/sysmgmt/products/support/IBMTivoliIdentityManager.html

Partition Mobility

The Partition Mobility support enables System p users to move partitions easily from one POWER6™ server to another.

- Live Partition Mobility:
  - Move a running LPAR and all of its running applications from one server to another server without disrupting operation of the LPAR. The operating system and applications are moved with only a slight network delay or pause (in seconds).
  - Avoid application and partition downtime by moving running AIX® and Linux® partitions to other systems prior to upgrades or maintenance.
  - Balance resource utilization on servers.
  - Limit the impact of planned server outages.
  - Inactive Partition Mobility.
  - Move a powered-off LPAR from one system to another.
  - Move a partition and all virtual devices to the destination server, ready for activation.
- Partition Mobility requirements:
  - POWER6 servers with Advanced POWER Virtualization (APV) enabled.
  - VIOS for virtualizing resources and providing mobility infrastructure on source and destination servers.
  - AIX and Linux partitions with operating system levels supporting Partition Mobility.
  - HMC managing both source servers and destination servers.

  - Integrated Virtualization Manager (IVM)-managed to IVM-managed server migrations supported.
  - Partitions can be diskless and dataless, or can use SAN-attached storage through the VIOS. Any virtual disks must be SAN-attached and accessed through VIOS.
- Partition Mobility minimum requirements:
  - HMC V7R3.2.0 or greater
  - Cec FW EM320_XXX or greater
  - AIX 5.3 TL7 or greater, 6.*x* or greater
  - VIOS 1.5 or greater
  - Red Hat RHEL 5.*x* or greater
  - SUSE SLES 10 SP1

Integrated Virtualization Manager

The IVM adds support for new POWER6 functions and provides significant enhancements to existing functions.

- POWER6 hardware support:
  - IVM is optionally supported on the p550 platforms.
  - APV Starter Edition offered exclusively on the p550.
  - IVM provides the virtualization capabilities for the IBM BladeCenter® JS22. All of the virtualization capabilities available through IVM on non-blade systems are now available in the blade environment.
  - IVM now supports system plan create and deploy on POWER6 hardware and JS22 blades.
- POWER6 feature support:
  - Live Partition Mobility supports IVM for migrating an active partition between two physical IVM-managed systems with no application downtime.

    The partition must be using shared SAN storage, or be running in diskless and dataless mode.
  - Integrated Virtual Ethernet (also known as Host Ethernet Adapters), allows multiple partitions to share a single physical Ethernet port without the need for the Shared Ethernet Adapter bridge.
  - Support for Dedicated I/O: IVM now offers support for both shared and dedicated I/O by offering clients a choice when configuring their system.
  - Shared Dedicated Capacity allows for the donation of unused dedicated CPU cycles to the shared processor pool by increasing overall system performance.
  - Partition recovery priorities manages a processor failure, assuring that the partitions with the highest priority will continue running.
  - Processor compatibility mode allows the operating system to run in POWER5™, POWER6, or POWER6 enhanced mode.
- Existing feature enhancements:
  - IVM now supports the assigning of any number of virtual Ethernet adapters to partitions, the assigning of virtual Ethernet IDs, and full support for IEEE 802.1Q adapters.
  - The Virtual optical support is extended to support the loading and unloading of optical media files to a virtual optical device in the partition. Read-only support is provided to enable multiple partitions to access the same ISO image simultaneously. Read-write support is provided to allow partitions to treat the device as a DVD-RAM drive. In addition to the optical support, files can now be used for virtual disk in addition to physical and logical volumes.
  - The terminal or console of a partition can now be accessed through a secure encrypted (SSH) connection directly from the Web browser.

Chapter 2. Installation, Migration, Upgrade, and Configuration Information

The following information applies to Virtual I/O Server.

Note: This software might contain errors that could result in critical business impact. Install the latest available update packages prior to using this software. Update packages can be obtained from the following Web site:

http://www14.software.ibm.com/webapp/set2/sas/f/vios/download

To view the most current version of the Virtual I/O Server release notes, go to the online release notes at the following Web site:

http://publib.boulder.ibm.com/infocenter/pseries/v5r3/index.jsp?topic=/com.ibm.aix.resources/53relnotes.htm

All users of the Virtual I/O Server should subscribe to the Virtual I/O Server subscription service. Subscribing to this service allows users to stay current on Virtual I/O Server news and critical product updates. To subscribe, go to the following Web site:

http://www14.software.ibm.com/webapp/set2/subscriptions/pqvcmjd

and click the **Subscribe/Setup** tab.

Chapter 3. Software License Agreements

There are instances where the software license agreements might not be displayed correctly. In this event, the License Agreements can be viewed in all languages at the following Web site:

http://www.ibm.com/software/sla/sladb.nsf

Chapter 4. Online documentation for Virtual I/O Server

For online documentation, see *Using the Virtual I/O Server* at the following Web site:

http://publib.boulder.ibm.com/infocenter/eserver/v1r3s/topic/iphb1/iphb1kickoff.htm

For additional documentation, including Redbooks®, refer to this Web site:

http://www14.software.ibm.com/webapp/set2/sas/f/vios/documentation/home.html

Chapter 5. Update to chlang command for Customers in Japanese Locales

Customers in Japanese locales should use the **chlang** command to force messages on the left to appear in English. Without this option, messages during the boot sequence are corrupted.

To change the Virtual I/O Server's locale to Japanese, the user needs to issue the following command:

```
chlang -msg C@lft -lang ja_JP
```

Appendix. Notices

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