VIOS Version 2.2.1.0

Release Notes



VIOS Version 2.2.1.0

Release Notes



Note Before using this information and the p	roduct it supports, read	the information in "N	Notices" on page 11.	

© Copyright IBM Corporation 2008, 2012. US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

About this document v	VIOS
Highlighting v	
Case-sensitivity in AIX v	IBM Systems Director Common Agent 5
Read this before installation	Software license agreements 7
VIOS Version 2.2.1.0 installation changes	Online documentation for VIOS 9
ROOTVG requirements	Notices
VIOS Version 2.2.1.0 enhancements 3	

About this document

The release notes include late technical information that is not included in other topics and highlights new functions for the Virtual I/O Server release.

Highlighting

The following highlighting conventions are used in this document:

Bold Identifies commands, subroutines, keywords, files, structures, directories, and other items

whose names are predefined by the system. Also identifies graphical objects such as buttons,

labels, and icons that the user selects.

Italics Identifies parameters whose actual names or values are to be supplied by the user.

Monospace Identifies examples of specific data values, examples of text similar to what you might see

displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you should actually type.

Case-sensitivity in AIX

Everything in the AIX® operating system is case-sensitive, which means that it distinguishes between uppercase and lowercase letters. For example, you can use the **Is** command to list files. If you type LS, the system responds that the command is not found. Likewise, **FILEA**, **FiLea**, and **filea** are three distinct file names, even if they reside in the same directory. To avoid causing undesirable actions to be performed, always ensure that you use the correct case.

ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

Read this before installation

Note: This software might contain errors that could result in critical business impact. Install the latest available fixes prior to using this software.

The method of obtaining Virtual I/O Server (VIOS) updates has moved from the VIOS web site at http://www14.software.ibm.com/webapp/set2/sas/f/vios/download to the IBM® Fix Central site. For a period of time during this transition, updates will be available on both sites. When the transition is complete, the VIOS web site will direct you to the IBM Fix Central web site for downloads. To get VIOS 2.2.1.0 updates from IBM Fix Central, see http://www.ibm.com/support/fixcentral/vios/selectFixes?parent=Virtualization+software&product=ibm/vios/5765G34&release=2.2.1.0&platform=All &function=all.

To view the most current version of the VIOS release notes, go to the online version of the Virtual I/O Server release notes.

All users of the VIOS must subscribe to the VIOS subscription service. Subscribing to this service enables users to stay current on VIOS news and critical product updates. Under **Notifications**, select **Sign in to create**, **manage or view your subscriptions** tab:

http://www.ibm.com/support/entry/portal/Overview/

VIOS Version 2.2.1.0 installation changes

The VIOS software is distributed on two DVDs. When you boot from DVD 1, you are prompted to insert DVD 2.

If you want to install another language fileset after the initial installation is complete, insert the second DVD into the DVD drive and refer to the **CLI chlang** command.

Beginning with VIOS Version 2.2.1.0, the media no longer ships on a single DVD disc. Therefore, installing using the **installios** or **OS_install** commands now prompts the user to switch the media. The **installios** and **OS_install** commands on the following products have been updated to reflect this change and are now required to install VIOS Version 2.2.1.0 and later:

- HMC Version 7 Release 7.4.0, or later
- AIX Version 6.1 Technology Level 7, or later
- AIX Version 7.1 Technology Level 1, or later

Memory requirements

The minimum memory requirement for VIOS Version 2.2.1.0 varies based on the configuration.

A general rule for a minimum current memory requirement for VIOS Version 2.2.1.0 is 512 MB. A smaller minimum current memory requirement might support a configuration with a very small number of devices or a small maximum memory configuration.

VIOS Version 2.2.1.0 requires the minimum current memory requirement to increase as the maximum memory configuration or the number of devices scales upward, or both. Larger maximum memory configurations or additional devices scale up the minimum current memory requirement. If the minimum memory requirement is not increased along with the maximum memory configuration, the partition freezes during the initial program load (IPL).

ROOTVG requirements

VIOS now requires a minimum of 30 GB disk space for installation. Ensure that the disk allocated for the VIOS installation contains at least 30 GB of available space before you attempt to install VIOS.

Host Ethernet Adapter memory requirements

Configurations that contain one or more Host Ethernet Adapter (HEA) require more memory than the 512 MB minimum. Each logical HEA port that is configured requires an additional 102 MB of memory. The minimum memory requirement for configurations with one or more HEA ports, where n is the number of HEA ports, is $512 \text{ MB} + \text{n} \times 102 \text{ MB}$.

VIOS Version 2.2.1.0 enhancements

This release of VIOS contains several enhancements. These enhancements are in the area of POWER® virtualization. The following list provides the features of each element by product area.

Tivoli TSM version 6.2.2

The Tivoli TSM file sets are shipped on the VIOS Expansion Pack that require the GSKit8 libraries.

A sample of the installation instructions for the new Tivoli TSM file sets is as follows:

- 1. Insert the VIOS Expansion DVD into the DVD drive, that is assigned to the VIOS partition.
- 2. List Contents of the VIOS Expansion DVD.

```
$ updateios -list -dev /dev/cd0
Fileset Name
GSKit8.gskcrypt32.ppc.rte 8.0.14.7 GSKit8.gskcrypt64.ppc.rte 8.0.14.7 GSKit8.gskssl32.ppc.rte 8.0.14.7
GSKit8.gskssl64.ppc.rte 8.0.14.7
...
tivoli.tsm.client.api.32bit 6.2.2.0 tivoli.tsm.client.api.64bit 6.2.2.0
...
```

3. Install Tivoli TSM file sets

```
$ updateios -fs tivoli.tsm.client.api.32bit -dev /dev/cd0
```

Note: Any prerequisite file sets will be pulled in from the Expansion DVD.

4. If needed, install additional TSM file sets.

```
$ updateios -fs tivoli.tsm.client.ba.32bit -dev /dev/cd0
```

5. Verify the TSM installed by listing the installed software.

```
$ lssw
SAMPLE OUTPUT:
..
tivoli.tsm.client.api.32bit 6.2.2.0 C F TSM Client - Application Programming Interface
```

VIOS

- 8 GB quad port PCIe generation 2 Fibre Channel (Feature code 5729)
- Support for IBM Power® 770 with P7 IOC I/O hub.
- Support for IBM Power 720 Express[®] with P7 IOC I/O hub.
- Support for new 2.5 inch SAS SSD drives in 200 GB and 400 GB capacities (models 1775 and 1793)

IBM Systems Director Common Agent

VIOS 2.2.1.0 includes the IBM Systems Director Common Agent 6.2.1. For details about how to start and stop the agent, see the Starting and stopping Common Agent on IVM and VIOS topic.

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 website:

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

Online documentation for VIOS

For online documentation, see Virtual I/O Server overview at the following web site:

Virtual I/O Server

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan, Ltd. 1623-14, Shimotsuruma, Yamato-shi Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this

one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation Dept. LRAS/Bldg. 903 11501 Burnet Road Austin, TX 78758-3400 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. _enter the year or years_.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at Copyright and trademark information at www.ibm.com/legal/copytrade.shtml.

IBM

Printed in USA