VIOS Version 2.2.1.0

*Release Notes*

IBM

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# Contents

# 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 **ls** 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 MB + n x 102 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

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