

POWER Systems Client Care Electronic Tools

Firmware Level Recommendation Tool (FLRT)

Reporting & Inventory

Firmware & HMC Version Update

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What is FLRT

- FLRT (Fix Level Recommendation Tool) is designed for System p servers running AIX on POWER6, POWER5/5+ and BLADE systems.
- FLRT is a health check tool used by customers to compare current system fix levels against recommendations from IBM.
- Product data is maintained in an XML database running on a Websphere based solution.
- Located at www14.software.ibm.com/webapp/set2/flrt

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Products currently supported

- System firmware for p6, p5+, p5
 & Blade
- **HMC** 7.3, 6.1, 5.2, 5.1, 4.5
- **AIX** 6.1, 5.3, 5.2
- Virtual I/O Server 1.4, 1.3, 1.2, 1.1

- HACMP 5.4, 5.3, 5.2, 5.1
- GPFS 3.1, 2.3
- **CSM** 1.6, 1.5, 1.4

IBM

Recommendation types and Features

- Recommendation types
 - "A OK" System is at or above recommendations
 - "Take action" IBM recommends an update to one or more products
 - Could not recommend. Read why and try another configuration

- Features
 - Single product or multiple product recommendations
 - Guidance on which product update to apply first
 - Help on how to determine current levels
 - Supports scripting for recommended updates
 - What If What if I were to update my firmware? Will I need to update my HMC too?

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FLRT Website - Current Release v2 (launched 12/4)

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Processor speed Enter the following command to confirm the model number and processor speed of the system: prtconf Example output: System Model: IBM, 9117-570 Machine Serial Number: 104CAEC **Order and Discovery** Processor Type: PowerPC POWER5 Number Of Processors: 3 Processor Clock Speed: 1502 MHz Make a note of the System Model and the Processor Clock Speed. AIX Use the oslevel command to display the highest recommended technology level installed on your system. For example: # oslevel Example output: FLRT usage Fix level determination Installation order Scripting help Firmware Enter the following command: The FLRT assists AIX system administrators in formulating a maintenance plan for IBM System lsmcode -c Example output: p servers. If a FLRT report makes update recommendations, apply any updates in the The current permanent system firmware image is SF240 219 The current temporary system firmware image is SF240 219 recommended order. The system is currently booted from the temporary firmware image. FLRT usage Fix level determination HMC Ins HMC version and release information can be viewed locally at an HMC console by bringing up the Help menu and clicking on About Hardware Managment Console. You can also view this information, either locally or from a remote WebSM client, by going to Recommended installation order The FLRT assists AIX system administrators in for Licensed Internal Code Maintenance -> HMC Code Update and then reading the status section. From the command line, you can display the current code p servers. It uses various code and fix levels to pro level by running the following command: # lshmc -V Following is the recommended order for updatir Example output: incompatibilities on your system. version= Version 6 Release 1 0 HMC Build level 20060801.1 HMC MH00781: Required fixes for V6R1.0 (08-03-2006) "."base version=V6.1.0 Firmware How to determine processor speed and firmwar 3 VIOS Virtual I/O Server The VIOS command line user interface provides the ioslevel command that display the VIOS AIX 5L version information. Use these instructions to determine the processo # ioslevel Example output: and the level of products installed on that system. After AIX 5L has been updated, HACMP, CSM, ar 1.3.0.0 depends on CSM; therefore, it should be update High Availability Cluster Multi-processing To determine the level installed on your server, enter the following command Processor speed # lslpp -h cluster* AIX Cluster Systems Management Enter the following command to display the version of CSM installed on your server. Note that version displayed does not necessarily indicate that CSM is configured or operational. Firmware # csmconfig -V Use lslpp -h csm* to list all the filesets installed for CSM *, which may be at different levels (in a PTF configuration). For example, CSM 1.5.1.3 may have csm.core 1.5.1.3 and HMC csm.server 1.5.1.2, but the overall level is considered 1.5.1.3. Virtual I/O Server CSM Highly Available Systems Management Enter the following command to determine the level of CSM-HA installed on your server: # lslpp -h csm.ha* OR # lslpp -1 | grep csm.hams 6 General Parallel File System Processor speed Enter the following command to determine the level of GPFS installed on your server # lslpp -h gpfs* Example output: Enter the following command to confirm the mode Translate my page system: Translate

getflrt.stdout -O getflrt.rpt cat getflrt.rpt

../wget-1.9/src/wget "http://www14.software.ibm.com/webapp/set2/flrt/query?format=text\$MTMVALUE\$MHZVALUE\$AIXVALUE\$SFIRMWAREVALUE\$HMCVALUE\$VIOSVALUE\$HACMPVALUE\$GPFSVALUE\$CSMVALUE\$CSMHAVALUE" -o

echo \$REPORTNAME

#CSMVALUE=\&csm=`/opt/csm/bin/csmconfig -V` #CSMHAVALUE=\&csmha=`lslpp -Lc csm.hams | grep csm.hams | cut -f3 -d":"`

#GPFS version #GPFSVALUE=\&gpfs=`lslpp -Lc csm.gpfs | grep csm.gpfs | cut -f3 -d":"`

#HACMP version #HACMPVALUE=\&hacmp=`lslpp -L cluster.es.server.rte | grep cluster.es.server.rte | cut -f3 -d":"

#VIOSVALUE=\&vios=`ioslevel`

HMC version requires a call to the HMC box. Using ssh is one way to do this. # This requires setup of ssh which is not discussed here. #HMC_OUTPUT=`ssh -I userid hostname.domain.com lshmc -V > hmc.out` #HMC_VERSION=`grep -i version hmc.out | cut -f 3 -d " "` #HMC_RELEASE=`grep -i release hmc.out | cut -f 3 -d " "` #HMCVALUE=\&hmc=\$HMC VERSION.\$HMC RELEASE

System firmware (booted) version SFIRMWAREVALUE=\&sfirmware=`lsmcode -r system | cut -f1 -d " " | cut -f2 -d":"`

AIX service pack level. AIXVALUE=\&aix=`oslevel -s`

MHZ - processor speed. MHZVALUE=\&mhz=`prtconf | grep "Processor Clock Speed" | cut -f4 -d " "`

#Uncomment relevant product sections . # Determine the System Model MTMVALUE=\&mtm=`prtconf | grep "System Model" | cut -f 2 -d ,`

#Set all the values to empty, please do not modify this section: MTMVALUE="" GHZVALUE="" AIXVALUE="" SFIRMWAREVALUE="" HMCVALUE="" VIOSVALUE="" HACMPVALUE="" GPFSVALUE="" CSMVALUE="" CSMHAVALUE=""

REPORTNAME=`hostname`

...........

#/bin/ksh Sample script using wget to gather product versions and query FLRT. # This current sample script provides commands for gathering MTM/AIX version/System Firmware. The rest of the product queries are samples which are commented out. Please provide additional samples through the feedback button at: http://www14.software.ibm.com/webapp/set2/sas/f/flrt/scripting.html





Demo



http://www14.software.ibm.com/webapp/set2/flrt/home



Futures





HILL BURN

IBM

Next Release - Version 3

- Support for more cluster products
 - Tivoli Workload Scheduler (LoadLeveler)
 - Deep Computing Visualization
 - Parallel Environment
 - Engineering & Scientific Subroutine Library

- Multi-system reports
 - Consolidated reporting
- Usability improvements
 - Highlight FLRTs many uses by driving customers to a task.
 - Do you want to verify your current system?
 - Do you want to run what-if scenarios?

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Questions????







