HACMP 3.1: Information Needed For Problem Resolution

Special Notices

Information in this document is correct to the best of our knowledge at the time of this writing. Please send feedback by fax to "AIXServ Information" at (512) 823-4009.

Please use this information with care. IBM will not be responsible for damages of any kind resulting from its use. The use of this information is the sole responsibility of the customer and depends on the customer's ability to evaluate and integrate this information into the customer's operational environment.

Note: The information in this document has **not** been verified for AIX 4.1.

About This Document

This document describes how to determine and collect High Availability Cluster Multiprocessing (hacmp) problem information for version 3.1 and send it to AIX support.

This document assumes that you are working with AIX Support under one of the service options. For information on the AIX Support Family and Program Services (IBM's base support for code-related problems), request these faxes from 1-800-IBM-4FAX:

1537 Overview of AIX Support
1760 Using Program Services
2464 The AIX Support Family

Non U.S. Customers can requests documents by dialing (from a fax machine) 514-855-4FAX.

Reproducing The Problem

Verify that the Cluster Manager run time parameter "debug level" is set to "high" before collecting the information below. Reproduce the reported problem only after setting this to "high" on all nodes.

Basic HACMP Information

The log files, error reports, and SCSI adapters in this section are **Needed for all hacmp problems** and should be obtained from **All cluster nodes**.

- Output from "/usr/sbin/cluster/utilities/clshowres"
- Output from "/usr/sbin/cluster/utilities/cllsif"
- Output from "/usr/sbin/cluster/diag/clconfig -v '-tr'"
- Contents of "/tmp/hacmp.out" (for relevant cluster events)
- Contents of "/usr/adm/cluster.log" (for relevant cluster events)
- Output from "errpt"
- Output from "errpt -a -N clstrmgr" (for relevant time period)

  If using shared SCSI devices, what are the SCSI Adapter IDs set to? (This can be determined by entering "smit devices" and then choosing SCSI Adapter / Change/Show Characteristics of a SCSI Adapter.)

Checking Status of Disk/Volume Group Configuration

The information in this section is **Required when a problem with the shared volume group, shared logical volume, or shared file system is suspected** (i.e., the log files indicate a problem accessing one of these). Submit this information only if specifically requested or if you suspect a problem in this area. Be sure to get the information from **Both** cluster nodes.

- Output from "lsdev -Cc disk"
- Output from "lspv"
- Output from "lsvg sharedvg", where sharedvg is the name of the shared volume group
- Output from "lslv -l lvXX", where lvXX is the name of the shared logical volume
- Output from "lsfs"

  If you are using NFS with the shared file system, also include output from:

  "ls -l /dev/lvXX", where lvXX is the name of the shared logical volume

  "ls -l /dev/sharedvg", where sharedvg is the name of the shared volume group

Checking Status of Network and Adapters

Output from the commands below is **Required when a communication problem is suspected**. Submit this information only if specifically requested or if you suspect a communication problem. Be sure to get the information from **Both** cluster nodes.

- Output from "lsdev -Cc tty"
- Output from "lsdev -Cc adapter"
- Output from "netstat -i"
- Output from "netstat -in"
- Output from "netstat -r"
- Output from "netstat -rn"
- Output from "ifconfig enX" (for each network interface)
- Output from "lsattr -E -l enX" (for each network inter- face)

Sending Information to AIX Support

Testcases may be sent by any of the methods listed below. Be sure to include the following information:

```
customer name
problem or item #, customer or branch office #
exact command used to copy to media
block size used, density setting used
```

Determine block size by typing:

```
lsattr -E -1 rmt# | grep block_size
(the block size is listed after "block_size".)
```

Important If the person sending the testcase is not the person who reported the problem, be sure to include the name of the person who reported it. If the proper information is not on the package, then it will take additional time to process the testcase and will delay solving the problem.

Standard Mail or Overnight Delivery

Send mail to:

Note: Look at the "file Naming Convention" section of this document and name testcases accordingly.

IBM Corp. / Zip 2900 / Bldg 42
Attn: AIX Testcase Dept. J66S
11400 Burnet Road
Austin, TX 78758-3493
Extension 3-4050

Note: NO overnight delivery service delivers directly to bldg. 42, instead they are delivered to IBM Receiving. Please keep this in mind when choosing a delivery time.

If you specify Saturday delivery you must first make special arrangements with an AIX Support specialist (1-800-225-5249 or 1-800-call-aix), otherwise there could be a delay of several days.

Internet Access & Service Agreement

Service Use Agreement

International Business Machines Corporation
Internet Testcase Delivery Service
Service Use Agreement

This is a legal agreement to which you are consenting to be bound. If you do not agree to all of the terms of this license, do not use the service.

- International Business Machines Corporation (IBM) grants you a non-exclusive access to the Testcase Delivery Service via the Internet.
- IBM makes no representations about the suitability of this service or about any content or information made accessible by the service, for any purpose. The service is provided "as is" without express or implied warranties, including warranties of merchantability and fitness for a particular purpose or noninfringement. This service is provided gratuitously and, accordingly, IBM shall not be liable for any damages suffered by you or any user of the service.
- While IBM intends to maintain this Service, IBM reserves the right at any time to alter access, features, capabilities and functions of this Service. IBM may terminate this Service at any time without notice to you.
- You may not download or upload or otherwise export or reexport images or files from or to systems providing this Service except in full compliance with all United States and other applicable laws and regulations. In particular, but without limitation, none of the images or files provided or received by this Service may be downloaded or uploaded or otherwise exported or reexported (i) into or received from (or to a national or resident of) Cuba, Haiti, Iraq, Libya, Yugoslavia, North Korea, Iran, or Syria or (ii) to anyone on the US Treasury Department's list of Specially Designated Nationals or the US Commerce Department's Table of Deny Orders. By downloading or uploading images or files from or to systems providing this Service, you are agreeing to the foregoing and you are representing and warranting that you are not located in, under control of, or a national or resident of any such country on any such list.

Email via Internet

Relatively small testcases can be sent via e-mail to aasc@austin.ibm.com. The allowable size of the testcase depends mostly on intermediate mail gateways. It is generally not advisable to send tescases larger than approximately 4MB via e-mail. Testcases sent via e-mail in the correct format are automatically processed, making them almost immediately available for analysis. See the "File Naming Convention" section of this document for more details.

FTP via Internet

Sample file names for the tarred and compressed files:

```
ad1000.tar.Z          (item number.tar.Z)
1x234.001.tar.Z       (problem_report_#.branch_office_#.tar.Z)
1x234.1234567.tar.Z   (problem_report_#.customer_#.tar.Z)
```

FTP it to our testcase repository:

```
ftp 198.17.57.67       (or "ftp testcase.boulder.ibm.com")
login:  anonymous
password:  <your complete email address>
          (e.g., "customer@wallyworld.com")
bin                     (change to binary transfer mode)
cd aix
put 1x234.001.tar.Z   (for example)
ls -l
quit
```

For binary-format testcases or testcases over 55 KB, tar and compress the testcase file(s) into a file with a name identifying your problem record.

The testcase should be combined into a single compressed tar archive and uploaded in **Binary** format. Please name the file PPPPPBBB TARZBIN, where PPPPP is the PMR number and BBB is the branch office number.

Reader's Comments

Please fax this form to (512) 823-4009, attention "AIXServ Information". You may also e-mail comments to: elizabet@austin.ibm.com. These comments should include the same customer information requested below.

Use this form to tell us what you think about this document. If you have found errors in it, or if you want to express your opinion about it (such as organization, subject matter, appearance) or make suggestions for improvement, this is the form to use.

If you need technical assistance, contact your local branch office, point of sale, or 1-800-CALL-AIX (for information about support offerings). These services may be billable. Faxes on a variety of subjects may be ordered free of charge from 1-800-IBM-4FAX. Outside the U.S. call 415-855-4329 using a fax machine phone.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

Note: If you have a problem report or item number, supplying that number may help us determine why a procedure did or did not work in your specific situation.

Problem Report or Item #: Branch Office or Customer #:

Be sure to print your name and fax number below if you would like a reply:

Name: Fax Number:

END OF DOCUMENT (hacmp.31.snd.info.ha_, 4FAX# 3913)