Using iptrace to Track Remote Print Jobs

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About this Document

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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.

When you are losing remote print jobs, you can use the following procedure to trace the flow of jobs from system to system. This procedure applies to AIX 3.1 and 3.2 on the RISC System/6000.

Steps

Notes:

1. To run the following procedure, you will need a place to save a large file.
2. It is best to run this procedure when there is very little activity on the network.

1. Start the iptrace daemon with the following command. The iptrace daemon will track Internet packets that are sent to and from the specified source and destination computers.

```
iptrace -a -b -s {src} -d {dest} {path&filename}
```

where "src" and "dest" are the source and destination computers and "path&filename" is where you want the data placed (for example, `/tmp/095x8.iptrace`).

2. Send a job from the client to the host printer.
3. Run the following "ipstop" script to stop the iptrace daemon: (Make sure "`" is a grave (back tic); this may not print correctly on all printers.)

```
#!/bin/sh
NUM=`ps -e | awk ' /iptrace/ { print $1 } '`
[ "$NUM" ] && { kill $NUM ; } || { echo "ipstop: iptrace not running" ; }
```

4. Format the trace into readable text by running the following:

```
ipreport {path&filename} > {path&filename}
```

(where the first "path&filename" is the same as in step 1 and the second "path&filename" is a different file to contain the output).

The output of ipreport is now readable and can be faxed to:

- AIX support - Austin (512) 823-7634
- AIX support - Dallas (817) 961-7213

(See the next section for alternative methods of sending the testcase information to AIX support.)

Be sure to include the item/PMR number and the name of the support person you are working with on the header sheet.

Alternative Methods of Sending Information

Internet

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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 proc-

essed, 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
```

File Naming Convention:

Note: Testcases should be archived into a compressed tar archive using relative path names. If FTPing, Do not create a separate directory on the testcase server.

Use of the following naming convention will allow our tools to automatically move the testcase to the proper directories and update the PMR to indicate that the testcase is available. Failure to use this naming convention could cause delays in processing the testcase.

If the testcase files cannot be associated with an existing PMR or XMENU item, they will be tagged as lost and eventually deleted.

Testcases associated with PMRs

```
 ppppp.bbb.ccc.tar.Z
     |   |   |   | |
     |   |   |   | Indicates that the archive is compressed.
     |   |   |   | If you have the gzip command available,
     |   |   |   | this will be .gz rather than .Z.
     |   |   |   |
     |   |   |   Indicates a tar archive.
     |   |   |
     |   |   The 3 character country code.
     |   |   (May be omitted if the country code is 000.)
     |   |
     |   The 3 character branch office number.
     |
    The 5 character PMR number.
```

Testcases associated with XMENU items

```
xxxxxx.tar.Z
     |   | |
     |   | Indicates that archive is compressed.
     |   | If you have the gzip command available,
     |   | this will be .gz rather than .Z.
     |   |
     |   Indicates a tar archive.
     |
    The XMENU item number.
```

Creating a Compressed tar Archive

Testcases should be archived into a compressed tar archive using relative path names. The following is an example of how to create a compressed tar archive.

- Place the testcase files into a separate directory using commands similar to those in the following example. In this example, we'll use a directory named /tmp/testcase.

```
cd /tmp
mkdir testcase
cp file1 file2 file3 testcase
```

- Execute one of the following commands to create the compressed tar archive. Using the gzip command (if available), will generally produce a significantly smaller file.

```
With the gzip command:
tar -cf- testcase | gzip -9 >9x999.999.999.tar.gz
Without the gzip command:
tar -cf- testcase | compress >9x999.999.999.tar.Z
```

Testcases should be archived into a compressed tar archive using relative path names. The following example will uuencode and send the compressed tar archive created in the previous section. You should substitute the correct filename when sending your testcase.

```
uuencode 9x999.999.999.tar.gz 9x999.999.999.tar.gz | \
mail -s "AIX_Testcase:9x999.999.999.tar.gz" aasc@austin.ibm.com
```

IBM Internal — VM

Reminder: If you have absolutely no other available electronic method of sending a testcase, you can send it through VNET. This method only works for IBM internal customers. It is not automated, which could cause delays in testcase processing. **FTP is the preferred method for sending testcases**.

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 (without the "b").

node = AUSVMR userid = V3DEFECT

01/12/96, 4FAX# 1845

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.

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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.

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

Name: Fax Number:

END OF DOCUMENT (iptrace.zap, 4FAX# 1845)