How Manpages Work: Troubleshooting Tips

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About This Document

This document contains common questions surrounding how to set up man pages and is applicable to AIX versions 3.2 and 4.1.

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A bibliography of how to setup man pages

The following documents on man pages are available from 4FAX. Within the U.S., call 1-800-IBM-4FAX from a touch-tone phone. Outside the U.S., call (415) 855-4FAX from your fax machine phone. Internal to IBM, call T/L 465-4FAX.

- man.pages.32.cmd (for aix 3.2) 4Fax # 2443
- man.pages.41.cmd (for aix 4.1) 4FAX # 4619
- techlib.install.cmd (for aix 3.2 and 4.1) 4FAX #5103

How do man pages work under AIX

If the MANPATH environment variable is not set, the man command will search the following directories in this order to find data files:

```
/usr/share/man/man   (NROFF format files)
/usr/share/man/cat   (ASCII format files)
/usr/lpp/info/data/ispaths file (pointer file for info explorer)
```

To change the directories man should search, you can specify the path order with the MANPATH environment variable, such as (in ksh):

```
export MANPATH=/usr/local/man:/usr/man
```

This would cause man to first search /usr/local/man for man type subdirectories.

If the man command finds a file matching the request in any of the /usr/share/man/man# directories, it will pass the file through the nroff text formatter and place the plain text version in one of the /usr/share/man/cat# directories (if the user has write permission to the cat directories). Then it will display the file.

If nothing is found in the man# directories, man looks in the cat# directories and if it finds a file of the proper name, it will display it.

AIX ships all of its operating system documentation in hypertext, for use with InfoExplorer. This information is stored in the /usr/lpp/info/lib directory structure in the aix.rom and aix.key files. After searching the man# or cat# directories, the man command looks in the /usr/lpp/info/data/ispaths file for stanzas similar to:

```
      ##############################################
      #         info Using & Managing Database       #
      ##############################################

      id              1
      glossary        TRUE
      name            aix
      title           Using, Managing and Commands: AIX and Extensions
      sys             /usr/lpp/info/lib/%L/sys.sys
->    key             /usr/lpp/info/lib/%L/aix/aix.key
->    rom             /usr/lpp/info/lib/%L/aix/aix.rom
```

In order for man to work, the files aix.rom and .key must exist where the key and rom entries are pointed. This can be a CDROM, a hard disk or a nfs mount. The %L variable stands for whatever language the LANG environment variable is set to. This file is set up correctly upon installation of the info databases and **Does not need to be manually configured**.

Common questions and problems

Don't want InfoExplorer, only man pages

I only have ascii terminals, and I don't want the ascii version of InfoExplorer.

Solution:

If you only want man pages, you must first install InfoExplorer on the system, because the AIX man pages are a part of the InfoExplorer product. This does not mean you have to use InfoExplorer (ascii, or graphics); but it does enable you to access the man pages.

Man pages don't work

Solution:

- First ensure that the InfoExplorer databases are installed for the manual pages you are trying to access.
- Check the ispaths file, and make sure that it points to where the files actually exist.
- If a CDROM is used make sure that you can cd to the path shown in the ispaths filed.
- Make sure that the LANG variable matches the directory name.

Just upgraded from 3.2.x to 3.2.5 but man pages quit working

Solution:

The upgrade instructions for 3.2.5 and later say to save the /usr/lpp/info/data/ispaths file as it will be overwritten during the upgrade.

- If you saved the file, you need to rename it back to ispaths.
- If you didn't save the file, copy the ispaths.full file over the ispaths file then check that it points to where the files really exist.
- If you just installed AIX, refer to the fax (listed above) on installing man pages.

  Note: If ALL was selected during the install, ALL does not include the man pages. This is because the system doesn't know which language you are going to use.

The man command takes forever to display

How do I speed it up?

Solution:

It can sometimes take many seconds to display a manual page, particularly if the /usr/lpp/info is remotely mounted or is accessed from a CDROM drive. It

has to go to the slow CDROM drive, find the correct *.rom file and translate it. This is normal.

If you install the documentation to your hard disk (space permitting), it will operate somewhat faster. The bulk of the time is in parsing the large *.rom files for correct entries.

Since the man command checks the /usr/share/man/cat# directories before looking in the .rom file, you could place commonly accessed man pages in one of the appropriate cat# directories, and man will find it very fast. You can manually do this for a single command like tar.

EXAMPLE FOR tar:

```
man tar > /usr/man/cat2/tar.out
mv /usr/man/cat2/tar.out /usr/man/cat2/tar
chmod 444 /usr/man/cat2/tar
```

The next time you use the man command to display the tar command, it will display in just a few seconds.

You could automate this by creating a script that does this each time you do the man command on a new file. However, by default, only the root user has permissions to write to the man# and cat# directories.

The man -k <pattern> or man -f <pattern> does not work

Solution:

The /usr/share/man/whatis file must exist before the -k or -f will work. To create the file, do: catman -w.

Since the whatis file indexes all of the articles the man command can find, you could use this as the basis for the
man script described in the previous section.

InfoExplorer finds articles that man doesn't find

Solution:

There are at least 12 InfoExplorer databases, though the man command will only search in 4 or 5 of them. This is working as designed. The primary use of man is to conveniently access common articles that you may want to reference, such as commands, subroutines, and files of the AIX operating system. Additional databases are available for other products (such as DCE), but man does not search these.

Man uses "more" to page files can I use something else?

Solution:

by default man will use "more" to display items one page at a time. However, you can view man pages using other editors if you set your PAGER environment variable to the editor or pager desired. For example, in ksh, to use the "page" command:

```
export PAGER=/usr/bin/page
```

Reader's Comments

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Name: Fax Number:

02/06/96, 4FAX# 5102

END OF DOCUMENT (how.manpages.work.cmd, 4FAX# 5102)

+++EDF073W Revision for REFID=NEW already active - REV tag ignored. (Page 1 File: MNPGSSU
B)
DSMMOM397I '.EDFRVBR' WAS IMBEDDED AT LINE 30 OF 'MNPGSSUB'
DSMMOM397I 'MNPGSSUB' WAS IMBEDDED AT LINE 12 OF 'MNPGS'
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