

BLAST[®]

Professional UNIX Installation Guide



The File Transfer Authority

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Introduction

Welcome to BLAST Professional UNIX. This manual contains instructions for using `blastinstall`, the BLAST installation program that copies files from your distribution media and customizes them for your system. BLAST offers many advanced options, including automatic port searching, support for links, and command line switches. *Please see Chapter 2 of the User's Manual for detailed information on controlling all facets of the BLAST environment.*

What You Need To Know

Before you begin the installation process, be sure to verify the device name of your tape or diskette drive and the device name of your modem communications port.

If you are not certain about one of these values, refer to the user's manual for your system or check with your system administrator before you begin installing BLAST. Some of the typical device names are:

System	3.5" Drive	Tape drive	Serial Port
AViiON		/dev/rmt/0	/dev/tty0
DEC Alpha	/dev/fd0	/dev/rmt/0a	/dev/tty00
HP9000		/dev/rmt/0m	/dev/tty00
Linux	/dev/fd0		/dev/ttyS1
RS/6000	/dev/rfd0	/dev/rmt0.1	/dev/tty1
SCO	/dev/rfd0135ds18		/dev/tty1A
Solaris 2	/dev/fd0	/dev/rmt/0	/dev/ttya

Verifying the Device Name for Solaris with Volume Manager Enabled

If you are running Solaris 2.6 or later with Volume Manager (Automounter) enabled, Volume Manager will try unsuccessfully to mount the BLAST diskette. If this is the case, type the following command to determine the alias Volume Manager has assigned to the BLAST media:

```
eject -n
```

You should see a mapping of available devices. As your device name, use the alias given to the right of either `floppy0` or `floppy1`, depending upon the drive into which the BLAST disk was inserted. For example, if the following entry were in your list,

```
floppy0 -> /vol/dev/rdiskette0/unlabeled
```

you would use the device name `"/vol/dev/rdiskette0/unlabeled."`

If no device shows up after typing `eject -n`, type the following command:

```
eject -d
```

to set the floppy to the default device. You should see output similar to the following:

```
Default device is: /vol/dev/rdiskette0/unlabeled
```

Use the default device name—for example, “/vol/dev/rdiskette0/unlabeled” in the output shown above.

Running blastinstall

Loading and Starting blastinstall

If possible, log onto the computer from the console. Log in as `root`. *Do not* `su` to `root`. After logging on, change to the `/tmp` directory by typing:

```
cd /tmp
```

Place the BLAST media in the drive. To load `blastinstall`, find the install command appropriate for your operating system below and enter it at the prompt.

AIX	<code>cpio -icvB blastinstall < drive_device_name</code>
DG-UX	<code>cpio -icvB blastinstall < drive_device_name</code>
HP/UX 10.x	<code>cpio -icvB blastinstall < drive_device_name</code>
HP/UX 11.x	<code>cpio -icv blastinstall < drive_device_name</code>
IRIX	<code>cpio -icvB blastinstall < drive_device_name</code>
Linux	<code>cpio -iv blastinstall < drive_device_name</code>
SCO	<code>cpio -icvB blastinstall < drive_device_name</code>
Solaris	<code>cpio -icvB blastinstall < drive_device_name</code>
Tru64 Unix	<code>cpio -icvB blastinstall < drive_device_name</code>

where *drive_device_name* is the name of the drive containing the BLAST media. Note that the “<” character is required on the command line to signify that `cpio` is to use *drive_device_name* as the source of the file input.

NOTE: If you are installing from a hard drive, you may have to omit the `B` switch in order to load `blastinstall` successfully.

When blastinstall has been copied from the distribution media, type:

```
./blastinstall drive_device_name
```

using the same *drive_device_name* as specified in the `cpio` statement. The blastinstall program will then prompt you with instructions.

Linux Note

The blastinstall program was written for the Korn shell. If run under Bash you may see the octal code for some characters in the installation instructions. You can load blastinstall under a Korn shell and view the installation instructions normally by typing:

```
ksh ./blastinstall drive_device_name
```

using the same *drive_device_name* as specified in the `cpio` statement.

Copying the BLAST Professional Files

By default, blastinstall will copy the BLAST files to the directory `/usr/blast`. You may choose to store these files in another directory; if that directory does not exist, blastinstall will create the directory.

If you are not sure where to put the BLAST files, choose the default setting—you can easily move these files later.

IMPORTANT: To run BLAST, you must add the BLAST directory to your path and set the `BLASTDIR` environment variable. See “Environment Variables” below for more information.

Setting User and Group ID

By default, blastinstall assigns the BLAST files to group and userid number 0 (zero). You may choose different group and userid numbers. If you are not sure which group and userid numbers to use, choose the default settings.

Loading and Starting BLAST with MAC OSX

Insert the BLAST CD into computer’s CD reader and open with Finder. Click on the `blast.pkg` icon. When the MAC installer finishes, use Finder to open the `blast` folder. Run the `blast.command` terminal script and enter the serial number when prompted. At this point, blast will be launched - **do not close this window**. To complete the installation, hit the `ESC` key and then type `y` to exit. Upon completion of installation, a Blast icon will appear in your Applications Folder.

When You Are Finished

After successfully installing BLAST Professional UNIX, put your distribution media in a safe place. If your system uses a device name other than the default to identify the communications port where the modem is connected, you must configure BLAST for your communications port (see “Setting Your Communications Port” on page 7).

Environment Variables

When BLAST is installed, by default all BLAST files are placed in the same directory, but you may choose to move the files to separate directories. Within BLAST, there are three different types of files and a separate environment variable pointing to the directory containing each type:

- ◇ *executable files* – program files with execute permission; the `PATH` environment variable points to the directory containing these files.
- ◇ *support files* – files required for normal operation of the software, including access to online help and the modem control library; the `BLASTDIR` environment variable points to the directory containing these files. *BLASTDIR must exist in order for BLAST to execute.*
- ◇ *auxiliary files* – setup files; the `SETUPDIR` environment variable points to the directory containing these files. If no `SETUPDIR` exists, BLAST will look to the `BLASTDIR` for setup files. Other files, such as script files, may reside in any directory of your file system.

Each user must have these environment variables set correctly. Typically you would edit each user’s `.profile`, `.login`, or `.cshrc` to reflect this information.

Setting `PATH`, `BLASTDIR`, and `SETUPDIR`

To update your path temporarily and set the `BLASTDIR` environment variable, log in as a regular user and type the following at the shell prompt:

C Shell

```
set path=( $path executable_dirname )
setenv BLASTDIR support_file_dirname
setenv SETUPDIR auxiliary_dirname
```

Bourne Shell and Korn Shell

```
PATH=$PATH:executable_dirname
BLASTDIR=support_file_dirname
SETUPDIR=auxiliary_dirname
export BLASTDIR SETUPDIR
```

where *executable_dirname* is the full path of the directory in which the BLAST files are stored, *support_file_dirname* is the full path of the directory in which the support files are stored, and *auxiliary_dirname* is the full path of the directory in which the auxiliary files are stored.

For example, if the executable and support files are in `/usr/blast` and the auxiliary files are in `/usr/john`, under the Bourne/Korn shells you would type:

```
PATH=$PATH:/usr/blast
BLASTDIR=/usr/blast
SETUPDIR=/usr/john
export BLASTDIR SETUPDIR
```

NOTE: This is only a temporary change. To set these values permanently, add the above commands to your system login procedure.

Environment Variables

BLAST recognizes a number of additional environment variables for customizing its operation. The information in bold and brackets indicates the default value. Examples use the Bourne shell syntax. As with `BLASTDIR` and `SETUPDIR`, these environment variables must be exported.

BANNERTIME=*delay* **0 – 99 [5]**

where *delay* is the time in seconds that the initial screen is displayed.

EXAMPLE:

```
BANNERTIME=2
```

BLASTDIR=*dirname* **[/usr/blast]**

where *dirname* is the directory that contains the BLAST support files such as `systems.scr`, `modems.scr`, `blast.tdf`, and `blast.hlp`. *BLASTDIR must exist in order for BLAST to execute!*

EXAMPLE:

```
BLASTDIR=/usr/blast
```

BPRINTER=*drivename* **[/dev/lp]**

where *drivename* is the target for printer output; `BPRINTER` can be set to a device or a print spooler.

EXAMPLE:

```
BPRINTER="lp -c %s >/dev/null"
```

This will cause BLAST to issue the `lp` command, substituting the print filename for `%s`.

EDITOR=*filename* **[vi]**

where *filename* is the name of the editor program that will be invoked by the Edit command from the Local menu. The default is the program `vi`, which must be located in your path.

EXAMPLE:

```
EDITOR=vi
```

SETUPDIR=*dirname* **[\$BLASTDIR]**

where *dirname* is the directory in which the BLAST setup files are stored. The default SETUPDIR is the same directory as BLASTDIR. If many different users need to access BLAST, you may wish to point SETUPDIR to the \$HOME directory of each user. Users can then maintain individual libraries of setup files. This technique permits the BLAST administrator to restrict access to the BLAST directory without limiting the ability of other users to run the software and create their own setups.

EXAMPLE:

```
SETUPDIR=$HOME
```

TERM=*terminal_name* no default

where *term_name* is the entry in the terminfo library that BLAST will use to control the terminal from which BLAST is being run.

EXAMPLE:

```
TERM=vt100
```

TMP=*dirname* **[/usr/tmp]**

where *dirname* is the directory in which temporary files will be stored.

EXAMPLE:

```
TMP=/usr/tmp
```

Setting Your Communications Port

To specify a communications port other than the default port, you can edit the default setup by following these steps:

- ◇ At the shell command prompt, start BLAST by typing:

```
blast
```

and then press ENTER. Because this is your first time running BLAST, you will see the Online Help welcome screen.

- ◇ After reading the message, press ESC to go to the Offline menu, and then press M to modify the default setup.
- ◇ Using the control keys listed at the top portion of the BLAST screen, position the cursor on the Connection field of the default setup. Type the name of the device driver for your modem's communications port *exactly as it is defined for your system—this field is case-sensitive*.
- ◇ Press ESC to return to the Offline menu, and then press ENTER to write your changes to disk. When prompted, press Y to overwrite the existing default setup.

You can also use links and automatic port searching. For a detailed discussion of setups, see Chapter 5 of the User's Manual; for details on the use of links and port searching, see Chapter 2.

International Keyboard Support for 10.7x

BLAST Professional UNIX 10.7x provides support for international keyboards through the -k command line switch. During the installation process, the following international keyboard driver files were copied to your system:

```
french.kbd      italian.kbd      german.kbd      spanish.kbd      uk.kbd
```

To load an international keyboard driver, add the following switch to the command line:

```
-kcountry.kbd
```

where *country.kbd* is one of files listed above. For information on the format of an international keyboard file, see page 29 of the User's Manual.