# CLIO/S and Related Software Maintenance

June 1, 1998

Joe Casey
Phone: 914-433-7796
Tie line: 8-293-7796
VNET: joecasey@vnet.ibm.com
This document is available from the CLIO/S Worldwide Web page:
http://www.rs6000.ibm.com/software/sp_products/clio.html

## General Information

There are three different software components necessary for CLIO/S to use channel-to-channel connections: the adapter microcode, the adapter device driver, and the CLIO/S code itself. It is important to keep the latest levels of these on your system. The level you have installed can be verified by the lslpp command:

```
lslpp -h <target>
```

where <target> is described in the tables below.

The command results should look something like the following (ignore the date and time fields):

```
Fileset         Level     Action       Status       Date         Time
-------------------------------------------------------------------------
Path: /usr/lib/objrepos
  <target>
                <level>   COMMIT       COMPLETE     03/12/97     12:31:16
```

where <target> and <level> are described in the tables below. On AIX 3.2 systems the PTF number is also displayed.

## Channel Adapter Microcode

The same microcode is used for AIX 3.2 and 4.x.

The latest levels of microcode are available within IBM from the AIXTOOLS disk. From a VM system, enter the command:

```
EXEC TOOLS SENDTO RALVM8 TOOLMGR3 AIXTOOLS GET ESCON PACKAGE
```

or:

```
EXEC TOOLS SENDTO RALVM8 TOOLMGR3 AIXTOOLS GET BLKMUX PACKAGE
```

The packages contain complete instructions.

In the near future the latest microcode will be available on the Worldwide Web.

*Table 1. Verifying Microcode Levels*

| Software | lslpp -h target | Level | Latest maintenance |
|---|---|---|---|
| ESCON microcode | escon.cuu | 3.2.0.6 | Version 7203, March 6, 1997 |
| Block Mux microcode | blkmuxmc.mc | 3.2.0.11 | Version 7203, March 6, 1997 |

## Channel Adapter Device Drivers

The latest device driver maintenance can be obtained from the IBM AIX Support Line. Call 1-800-CALL-AIX, and have your customer number ready.

*Table 2. Verifying AIX 4.x device driver levels*

| Software | Product id | lslpp -h target | Level | Latest maintenance |
|---|---|---|---|---|
| ESCON | 5765-603 | devices.mca.8fc3* | 1.1.0.6 | U452262 |
| Block Mux | 5765-604 | devices.mca.fe92* | 4.2.0.5 | U449690 |

## CLIO/S Levels

CLIO/S maintenance is delivered as MVS SMPE installable PTFs, with the AIX portions included as MVS datasets to be downloaded as installp images.

The latest CLIO/S maintenance is only available for AIX 4.1, 4.2, and 4.3. There will be no new maintenance for AIX 3.2. The same code runs on all AIX 4.x systems.

'Fast transfer' is the base product that contains the clftp and clplink interfaces as well as the communication APIs. 'Tape feature' is an extra-cost feature that includes the tape pseudo device driver for AIX as well as the tape API.

To obtain the latest CLIO/S maintenance, call IBM MVS service, and have your customer number ready.

*Table 3. CLIO/S levels*

| Software | Detail | Product id | lslpp -h target | Level | Latest maintenance | APAR number |
|---|---|---|---|---|---|---|
| CLIO/S V2R2 | Fast transfer (base product) | 5648-129 | fcf | 2.2.0.3 | UQ14204 (prereqs UQ05644 and UN96987) | PQ12822 |
| CLIO/S V2R2 | Tape feature | 5648-129 | fcf | 2.2.0.2 | UQ05643 (prereqs UN96988) | PN91724 |

**Special note for TCP/IP 3.1 users.**

PTF 3 was compiled with TCP/IP 3.2 and will not link properly on an MVS system with TCP/IP 3.1. PTF 4, UQ17727, fixes this problem. It provides no new function.

So PTF 4 is required for TCP/IP 3.1 customers but provides no benefit for TCP/IP 3.2 customers.

PTF 4 leaves CLIO/S at 2.2.0.3.

## Installing the AIX components

A normal MVS SMP/E install creates a SFCFAIX4 partitioned dataset. With Version 2.2.0.0, it should contain FCF41 and FCFCL41.

With Version 2.2.0.1, (PTF 1, UN96987) it should also contain FCF4101 and FCF41C01.

With Version 2.2.0.2, (PTF 2, UQ05644) it should also contain FCF4102 and FCF41C02.

With Version 2.2.0.3, (PTF 3, UQ14204) it should also contain FCF4103 and FCF41C03.

PTF 4 does not have an AIX component.

To complete the AIX install of a PTF, download, uncompress, and install FCF410x and FCF41C0x using `installp`.

**Important note!**

Make backup copies of your `parconf` and `parctc` files (which are probably in `/etc`) before installing any maintenance, since the installp process will overwrite them. Replace the default files with your customized versions after the install.