Bull MCA 1Port & 4Port Multi-Protocol

Serial I/O Adapters
Installation and Service Guide

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Hardware

Suggestions and criticisms concerning the form, content, and presentation of this book are invited. A form is provided at the end of this book for this purpose.

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Trademarks and Acknowledgements

About This Book

This book provides information on how to install and configure a **1Port Multi-protocol Serial I/O Adapter** or a **4Port Multi-protocol Serial I/O Adapter**, on a platform equipped with MCA slots such as ESCALA, and running AIX Version 4.2 and AIX 4.1.5, and subsequent versions. It also provides information about trouble shooting on the adapter.

Who Should Use This Book

This book is intended for the administrator in charge of the installation, configuration and trouble shooting of a1Port or 4Port Multi-protocol Serial I/O Board. He should be familiar with the AIX installation procedures. See *AIX Installation Guide* for more information.

How to Use This Book

Overview of Contents

This book contains the following chapters and appendixes:

Chapter 1 **Installing and Configuring the Multi-protocol Serial I/O Adapter**
Provides the characteristics of the 1Port Multi-protocol Serial I/O adapter and the 4Port Multi-protocol Serial I/O adapter together with the tasks to perform in order to install and configure them. It also explains how to de-install and de-configure the adapters.

Chapter 2 **Trouble Shooting on the Multi-protocol Serial I/O Adapter**
Describes what the administrator can do to get information (statistics, status) on the adapter, either for management purposes or in case of hardware problem detected on the adapter.

Index General Index.

Highlighting

The following highlighting conventions are used in this book:

Bold Identifies commands, subroutines, keywords, files, structures, directories, and other items whose names are predefined by the system. Also identifies simple words to which particular attention must be paid.

`Monospace` Identifies examples of specific data values, examples of text similar to what you might see displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you should actually type.

Related Publications

- *Power Stream X.25 Installation and Service Guide* 86 A2 95AT.

- *AIX and Related Products Documentation Overview*, 86 A2 71WE.

- *AIX Topic Index and Glossary*, Order Number 86 A2 57AP.

- *Hypertext Information Base Library*, Order Number 86 A2 93AQ.

All of publications cited above are available in softcopy format.

- *Cabling Guide for MCA Systems*, Order Number 86 A1 87AQ.

Ordering Publications

To order additional copies of this book, use CEDOC Order Ref. Number 86 A1 62HX 01.

If you received a printed copy of Documentation Overview with your system, use that book for information on related pubications and for instructions on ordering them.

Communication Statements

The following statement applies to this product. The statement for other products intended for use with this product appears in their accompanying manuals.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult an authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from authorized dealers. Neither the provider nor the manufacturer are responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

European Union (EU) Statement:

This product is in conformity with the protection requirements of EC Council Directives 89/336/EEC relating to electromagnetic compatibility, 91/263/EEC relating to telecommunications terminal equipements and with 73/23/EEC (Low Voltage Directive).

Label:

$$CE_{NNN} \; X$$

Neither the provider nor the manufacturer can accept responsibility for any failure to satisfy the protection requirements resulting from a non–recommended modification of the product, including the fitting of option cards not supplied by the manufacturer.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

International Electrotechnical Commission (IEC) Statement

This product has been designed and built to comply with IEC Standard 950.

United Kindom Telecommunications Safety Requirements

This equipment is manufactured to the International Safety Standard EN60950 and as such is approved in the UK under the General Approval Number NS/G/1234/J/100003 for indirect connection to the public telecommunication network.

The network adapter interfaces housed within this equipment are approved separately, each one having its own independent approval number. These interface adapters, supplied by the manufacturer, do not use or contain excessive voltages. An excessive voltage is one which exceeds 70.7 V peak ac or 120 V dc. They interface with this equipment using Safe Extra Low Voltages only. In order to maintain the separate (independent) approval of the manufacturer's adapters, it is essential that other optional cards, not supplied by the manufacturer, do not use main voltages or any other excessive voltages. Seek advice from a competent engineer before installing other adapters not supplied by the manufacturer.

Avis de conformité aux normes du ministère des Commmunications du Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

Canadian Department of Communications Compliance Statement

This Class B digital apparatus meets the requirements of the Canadian Interference–Causing Equipment Regulations.

この装置は，第二種情報装置（住宅地域又はその隣接した地域において使用されるべき情報装置）で住宅地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）基準に適合しております。

しかし，本装置をラジオ，テレビジョン受信機に近接してご使用になると，受信障害の原因となることがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI Statement

The following is a summary of the VCCI Japanese statement in the box above.

This equipment is in the Class 2 category (information equipment to be used in a residential area or an adjacent area thereto) and conforms to the standards set by the Voluntary Control Council For Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential area.

When used near a radio or TV receiver, it may become the cause of radio interference.

Read the instructions for correct handling.

Radio Protection for Germany

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG–Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die Bull Germany.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse B.

Table of Contents

Chapter 1. Installing and Configuring 1Port and 4Port Multi-protocol Serial I/O Adapters

Overview

This chapter describes how to install and configure a Multi-protocol Serial I/O adapter on a machine equipped with MCA slots, whatever it is a 1Port or a 4Port adapter. De-installation and de-configuration are also described.

The sequence of the first two sections must be respected.

- How to Prepare Installation, on page 1-2

- How to Install and Configure the Adapter, on page 1-2

  - hardware installation and cable connection

  - system reconfiguration and configuration of the adapter

- How to De-configure and De-install the Adapter, on page 1-7

How to Prepare Installation

1. Check your delivery:

Verify the hardware components:

- **4Port** Multi-protocol Serial I/O adapter, and its distribution box, or the **1Port** Multi-protocol Serial I/O adapter,

- The cable, according to the interface used: **V24**, **V11** and **V35**. The three interfaces are available on the adapter and ready to use.

The adapters are shown in Figure 1 on page 1-3.

If you are not sure of a component type, refer to the following table which gives, for each component, the correspondence between type, MI (Marketing Identifier, that is commercial identification) and the Identification number which is written on the component.

Component	Designation	MI Identification	Identification Number	Label Type
4-Port Adapter	4Port Multi-protocol Serial I/O Board (78F) Distribution Box with 2 m. cable	DCCG107–0000	76729600 90882001	B2-K
1-Port Adapter	1Port Multi-protocol Serial I/O Board (25F)	DCCG106–0000	76729597	B2-J
Cables:				
– V24	10m. cable V24/V28 (25M/25M)	CBLG173–1900	90 725 001	
– V11	10m. cable X24/V11 (25M/15M)	CBLG174–1900	90 726 001	
– V35	10m. cable V24/V35 PTT France (25M/34VTM)	CBLG175–1900	90 728 001	
– V35	10m. cable V24/V35 EIA & ISO 2593 (25M/34VIM)	CBLG176–1900	90 727 001	

Note: The references of the wrap plugs needed for running the loopback tests are described in Figure 2 page 1-4. They are not part of the standard delivery.

2. Define in which slot to install the Multi-protocol Serial I/O adapter. Refer to the hardware documentation of your system.

How to Install and Configure the Adapter

1. Install the LPPs on your system:

Use the **SMIT** interface (or **installp** command) to install the LPPs on your system: Logged as **root** user, type:

```
smit install_latest
```

The software part is composed of three LPPs, delivered on CD–ROM:

- `devices.csii.all`

- `devices.mca.6f8d`   for a **1Port** adapter,
  `devices.mca.6f8e`   for a **4Port** adapter,

- `devices.syn_sio.all`

If you are not familiar with the AIX installation procedure, refer to the *AIX Installation Guide* for more information.

You can check the software installation with the **lslpp** command.

2. Install the Adapter in the System:

- Switch off your machine.

- Remove the front cover, side cover or rear cover, according to your system to access the planar.
  If necessary, refer to the corresponding Installation Guide.

- Remove the rear cover in order to remove the cache, if any, in front of the slot where you choose to install the Multi-protocol Serial I/O board.

- Plug the board in the defined slot and secure it by screwing in the connector at the rear of the planar. Put the cover back in its place.

- Switch on your machine.

  The devices corresponding to the boards (siob0,siob1...) and the ports (siop0, siop1...) are automatically created at the boot time.

MCA 1-Port Multi-protocol Serial I/O Adapter

MCA 4-Port Multi-protocol Serial I/O Adapter
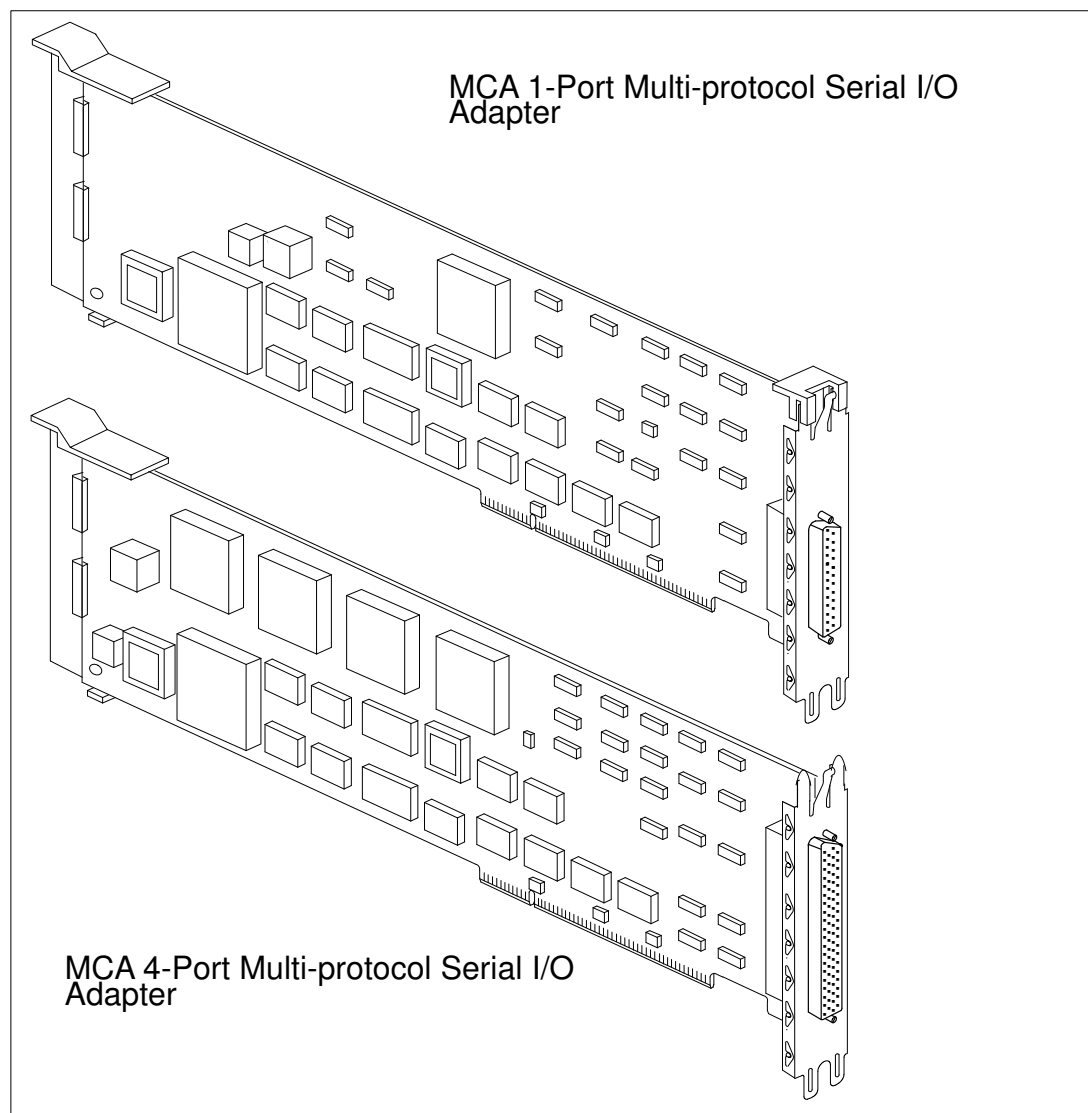
Figure 1.   MCA 1-Port and MCA 4-Port Multi-protocol Serial I/O Adapters: What they look like.

3. Connect the Attachment Cables

Connect the cables corresponding to the X25 interfaces you want to use on the 1-Port or 4-Port Adapter. Refer to the Figure 2 to have the cables characteristics. The attachment cables and their wrap plugs are identical for both 1-Port and 4-Port adapters.
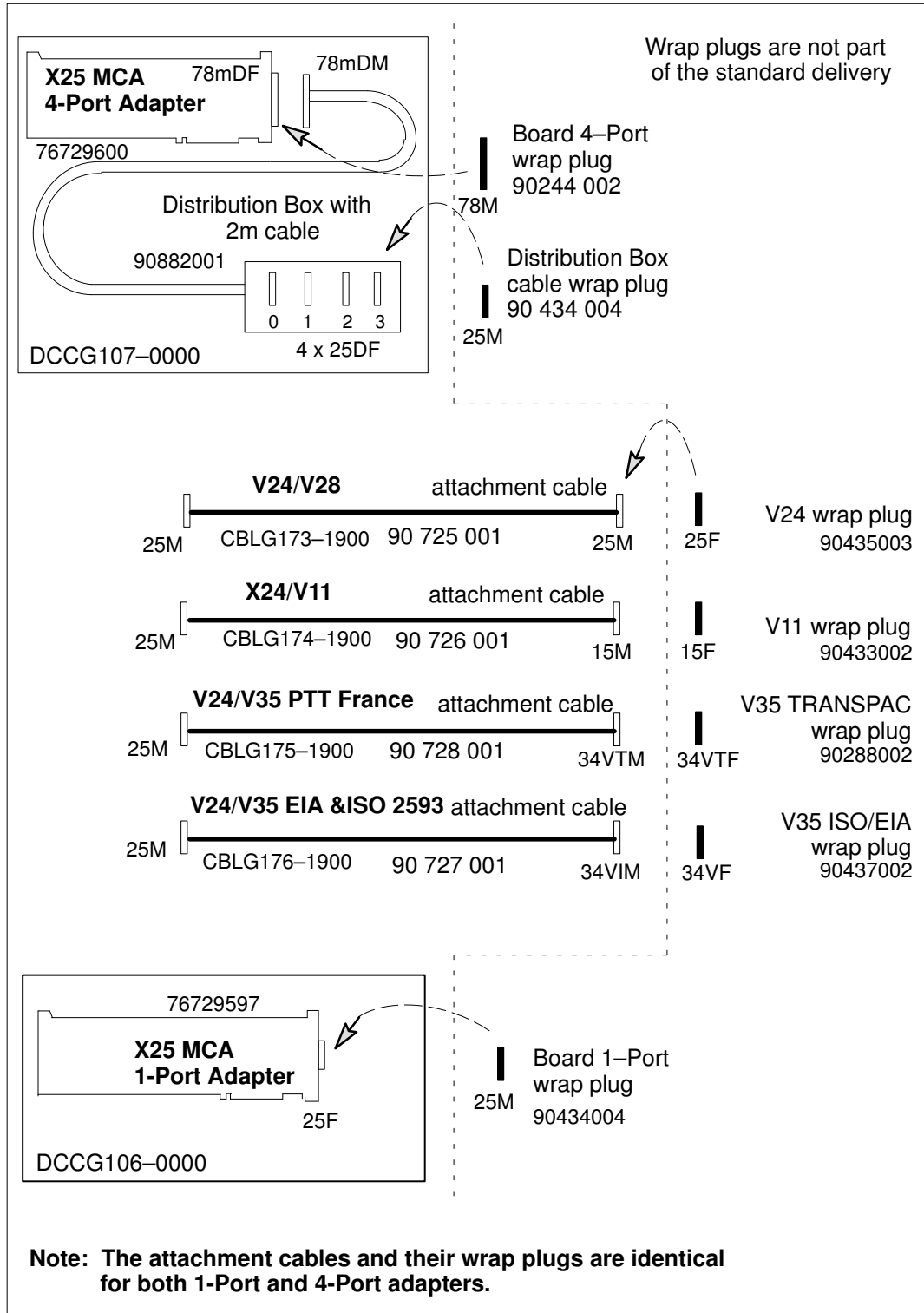
Figure 2.   MCA 1-Port and 4-Port Adapters connectics.

4. List the Adapters and Ports

Before configuring the adapter, you can check that the devices corresponding to the ports and the board you have just installed were automatically created when you switched on your machine (respectively **siop<i>** and **siob<i>**). They should be in the 'Available' state.

Run '**smit synx25sio**' and select one (or both) of the following functions:

–> 'List All Boards' or 'List All Boards/Ports'

```
                      Multi-Protocol Serial I/O board

Move Cursor to desired item and press Enter.

List all boards     <------------
List all boards/ports <---------
Port configuration
Problem Determination
Data collection for problem reporting




F1=Help          F2=Refresh      F3=Cancel        F8=Image
F9=Shell         F10=Exit        Enter=Do
```

Examples:

a. When the '**List All Boards**' function is selected, the SMIT screen is:

```
                            COMMAND  STATUS

Before command completion, additional instructions may appear below.



siob0   Available      00-01      4-Port Serial I/O Board



F1=Help          F2=Refresh      F3=Cancel        F6=Command
F8=Image         F9=Shell        F10=Exit         /=Find
n=Find Next
```

b. When the '**List all boards/ports**' function is selected, the SMIT screen is:

```
                            COMMAND  STATUS

Before command completion, additional instructions may appear below.



siob0   Available   00-01      4-Port Serial I/O Board
siop0   Available   00-01-00   Serial I/O Port0 of Board siob0
siop1   Available   00-01-01   Serial I/O Port1 of Board siob0
siop2   Available   00-01-02   Serial I/O Port2 of Board siob0
siop3   Available   00-01-03   Serial I/O Port3 of Board siob0


F1=Help          F2=Refresh      F3=Cancel        F6=Command
F8=Image         F9=Shell        F10=Exit         /=Find
n=Find Next
```

5. Configure the Adapter

You must now select and configure each port of the adapter, from the list displayed, by filling in the physical interface and the protocol adapter type you want to use on it.

Run 'smit synx25sio' and select: –> 'Port Configuration'

Mode (Protocol Adapter Type)   The unique protocol adapter type which you want to be attached to the port. You can chose at present between `hdlc` (X25 communication stack) and `sdlc` (SNA communication stack). Select 'any' to disable the attach control.
The default value is `hdlc`.

Physical Interface   The physical interface to be used: V11, V24 or V35. The default value is `V24`.

Example: Configuration of the port 0 of the board `'siob0'`:

```
                   Multi-Protocol Serial I/O ports

Move Cursor to desired item and press Enter.


siop0    Available    00-01-00   Serial I/O Port0 of Board siob0
siop1    Available    00-01-01   Serial I/O Port1 of Board siob0
siop2    Available    00-01-02   Serial I/O Port2 of Board siob0
siop3    Available    00-01-03   Serial I/O Port3 of Board siob0


F1=Help                  F2=Refresh                F3=Cancel
F8=Image                 F10=Exit                  Enter=Do
/=Find                   n=Find Next
```

```
                    Port Configuration
Serial I/O Port                                    siop0
Mode (Protocol Adapter Type)                       [hdlc]
Physical Interface                                 [V24]
```

6. Check the availability of the Adapter

To check that **siop<i>** and **siob<i>** are available, use the **sio_list** command. Example:

```
#sio_list
siob0    Available     00-01     1-Port Serial I/O Board
siop0    Available     00-01-00  Serial I/O Port0 of Board siob0
```

If they are not displayed as 'Available', verify that you have performed the tasks as described above. If they remain 'Defined', please refer to 'Trouble Shooting on the Adapter' on page 2-1.

From that point, you can configure the communication stack you want to use (X.25 stack, SDLC...). Refer to the documentation cited in Related Publications.

Two different stacks on two ports of the same board may be used, for instance X.25 on the port 1 and SNA on the port 2. Once the stack configuration is done, if you get problems to connect, check the consistency between configuration and connectics and read what is reported in the errorlogs.

How to De-configure and De-install the Adapter

How to De-configure the Adapter

If you want to remove your adapter, for instance to re-use the slot for another adapter, you must de-configure it in order to have no trouble with device numbering when configuring the new one. There is no SMIT submenu specific to this operation.

Logged as root, without any process using the adapter, type:

```
rmdev -l siob0 -dR
```

How to De-install Software

If you do not need any more to manage a multi-protocol serial I/O adapter, you can de-install the corresponding software by using the **SMIT i**nterface.

Logged as **root** user, type:

```
smit install_remove
```

and select the 'Software names' from the list corresponding to the LPPs you had installed on your system. See How to Install and Configure the Adapter, page 1-2 to have the names of LPPs.

If you are not familiar with the AIX installation and de-installation procedures, refer to *AIX Installation Guide*.

Chapter 2. Trouble Shooting on the 1Port or 4Port Multi-protocol Serial I/O Adapters

Overview

This chapter describes how to use the diagnostic tools provided through the SMIT interface to the administrator. They display information on the Multi-protocol Serial I/O adapters present in the machine, and enable to easily report a hardware problem occurred on the adapter. They are accessed via SMIT.

You will find:

- A Generic SMIT Interface, on page 2-2
- How to Display VPD, on page 2-3
- How to Manage Problem Logging, on page 2-4
- How to Manage System traces, on page 2-6
- How to Run Hardware Diagnostic Tests, on page 2-7
- How to Get Current Board/Port Status, on page 2-9
- How to Get a Data Collection for Problem Reporting, on page 2-10
- Error Identifiers, on page 2-10

A Generic SMIT Interface

A generic SMIT menu tree is accessed by a unique entry point concerning all the available Multi-protocol Serial I/O boards.

After each menu choice, a device list is provided and a selection from the ports and/or boards displayed is asked.

START SMIT : `'smit commodev'`

```
|– Ethernet Adapter
|– 3270 Connection Adapter
|– 5085/86/88 Attachment Adapter
|– Serial Optical Link
|– Hispeed WAN Comm Adapter
|– Multi-Protocol Serial I/O Board
|   |
|   |– List all boards
|   |
|   |– List all boards/ports
|   |
|   |– Port Configuration
|   |
|   |– Problem Determination
|   |         |
|   |         |---- Vital Product Data (VPD)....... see page 2-3
|   |         |---- Problem Logging................ see page 2-4
|   |         |       |--- Generate an error report
|   |         |       |--- Clear an error log
|   |         |---- System Traces.................. see page 2-6
|   |         |       |--- Start traces
|   |         |       |--- Stop traces
|   |         |       |--- Generate a trace report
|   |         |---- Hardware Diagnostics........... see page 2-7
|   |         |       |--- Internal tests
|   |         |       |--- Loopback tests
|   |         |---- Current board/port status...... see page 2-9
|   |
|   |– Data Collection for Problem Reporting...... see page 2-10
|
|
|– Power Stream X.25
```

'List all boards' and 'List all boards/ports' menu functions are described on page 1-5.

'Port Configuration' menu function is described on page 1-6.

How to Display VPD

Access

Run: 'smit commodev'

Select: —> 'Multi-Protocol Serial I/O Board'

—> 'Problem Determination'

—> 'Vital Product Data (VPD)'

Description

Displays the Vital Product Data (VPD) of the board selected from the list displayed. This VPD can be useful to Support team in case of problem.

Example

```
                        Hardware Diagnostics


Move cursor to desired item and press Enter.


Vital Product Data (VPD)
Problem Logging
System Traces
Hardware Diagnostics
Current board/port status
```

```
                Multi-Protocol serial I/O Board

Move cursor to desired item and press Enter.


siob0    Available      00-01      1-Port Serial I/O Board
siob1    Available      00-02      1-Port Serial I/O Board


F1=Help               F2=Refresh              F3=Cancel
F8=Image              F10=Exit                Enter=Do
/=Find                n=Find Next
```

```
                        COMMAND STATUS

Command:OK               stdout: yes            stderr: no


Before command completion, additional instructions may appear below.
   DEVICE        LOCATION                 DESCRIPTION
    siob0         00-01                     n/a

Manufacturer :          BULL
FRU NUmber:             SYN1 MCA
EC LEVEL:               001
Part Number             76729597
Processor Component Id: B0
Displayable Message;    1-Port MCA Serial I/O Board



F1=Help         F2=Refresh      F3=Cancel       F6=Command
F8=Image        F9=Shell        F10=Exit        /=Find
n=Find Next
```

How to Manage Problem Logging

To Generate an Error Report

Access

Run: 'commodev'

Select: ——> 'Multi-Protocol Serial I/O Board'

   ——> 'Problem Determination'

      ——> 'Problem Logging'

         ——> 'Generate an error report'

Select a port from the list displayed.

Description

Provides the network administrator with information about trouble occurred on the port selected by the user. An Error Log message is generated each time the port driver detects a hardware problem or a problem in software configuration.

Equivalent Command

```
# errpt –a –N sio*
```

Example

Selection of the suspected port:

```
                    Hardware Diagnostics

Move cursor to desired item and press Enter.

Generate an error report
Clear an error log
```

```
           Multi-Protocol serial I/O boards/ports

Move cursor to desired item and press Enter.


siob0   Available   00-01      1-Port Serial I/O Board
siop0   Available   00-01-00   Serial I/O Port0 of Board siob0



F1=Help              F2=Refresh              F3=Cancel
F8=Image             F10=Exit                Enter=Do
/=Find               n=Find Next
```

An example of the generated report asked for `siop0` is provided next page.

Running of the report generation:

```
                        COMMAND STATUS

Command:OK              stdout: yes              stderr: no

Before command completion, additional instructions may appear below.


LABEL:          SIODD_CABLE_ERROR
IDENTIFIER      BFC93A86

Date/Time:      Thu Nov 14 17:13:57
Sequence Number 23516
Machine Id:     00001D581234
Node Id:        Machine1
Class:          H
Type:           PERM
Resource Name:  siop0
Resource Class: sioport
Resource Type:  sioport
Location:       00-01-00
Description
PROGRAM PARAMETER IS INCORRECT

Probable Causes
CABLES AND CONNECTIONS

Failure Causes
COMMUNICATIONS INTERFACE

                Recommended Actions
                CHECK PHYSICAL INSTALLATION
                CHECK CABLE AND ITS CONNECTIONS

Detail Data
DIAGNOSTIC EXPLANATION
file: ./z16c32.c line: 1003
-------------------------------------------------------------

[MORE...54]

F1=Help         F2=Refresh      F3=Cancel       F6=Command
F8=Image        F9=Shell        F10=Exit        /=Find
n=Find Next
```

To Clear an Error Log

Access

Run: 'commodev'

Select: ——> 'Multi-Protocol Serial I/O Board'

      ——> 'Problem Determination'

         ——> 'Problem Logging'

           ——> 'Clear an error log'

Description

Clears the error log relating to the board selected from the list.

How to Manage System traces

Access

For the three possible actions 'Start', 'Stop' and 'Generate' traces:

Run: 'commodev'

Select: —> 'Multi-Protocol Serial I/O Board'

—> 'Problem Determination'

—> 'System traces'

—> 'Start', 'Stop ' traces or 'Generate a trace report'

Description

The system trace provided for trouble shooting on Multi-protocol Serial I/O boards uses the standard AIX trace mechanism. It is essentially intended for reporting to the Support team. Once you are sure that the problem is due to the adapter, you must:

- start the trace,

- run the application you suspect to cause the problem,

- stop the trace once the problem has occurred,

- generate a trace report into a file.

This file can then be sent to your Support team, together with a defect report.

Selection of the action on the suspected port

```
                    System traces

Move cursor to desired item and press Enter.

Start traces
Stop traces
Generate a trace report

```

```
             Multi-Protocol serial I/O board

Move cursor to desired item and press Enter.

siob0    Available    00-01     1-Port Serial I/O Board
siob1    Available    00-02     1-Port Serial I/O Board




F1=Help                  F2=Refresh              F3=Cancel
F8=Image                 F10=Exit                Enter=Do
/=Find                   n=Find Next
```

How to Run Hardware Diagnostic Tests

Access

Run: 'commodev'

Select: —> 'Multi-Protocol Serial I/O Board'

—> 'Problem Determination'

—> 'Hardware diagnostics'

either —> 'Internal tests'

or —> 'Loopback tests'

Description

This SMIT submenu gives you access to two types of tests that you can run on the board or port you select from the list displayed.

- Internal tests
  They consist in a complete check up of the board and its port. They should be run punctually, when a problem is suspected, without any stack or X25 access running on the port. You must select the **board** you want to run the internal tests on. They verify the hardware availability and provide a precise diagnostics of the trouble. The result is a succession of test names displayed with 'OK' or ' NOT OK' mention. The duration time is less than 5 seconds.

- Loopback tests
  They are an extension of the internal tests. They consist in a verification of the hardware link and cables. Input/output signals are verified by the use of wrap plugs. These wrap plugs can be obtained from your Support Team. They can be placed at the extremity either of the board output, or of the cable output, or else of the distribution box if the adapter is a 4Port adapter. The tests are to be launched by your Support Team. Their duration time is less than 5 seconds.
  The wrap plugs are described in Figure 2 page 1-4.

Example

Selection of the action on the suspected port

```
                     Hardware Diagnostics


Move cursor to desired item and press Enter.

Internal tests
Loopback tests

```

```
            Multi-Protocol serial I/O Board

Move cursor to desired item and press Enter.

siob0    Available     00-01     1-Port Serial I/O Board
siob1    Available     00-02     1-Port Serial I/O Board


F1=Help                 F2=Refresh               F3=Cancel
F8=Image                F10=Exit                 Enter=Do
/=Find                  n=Find Next
```

'Internal Tests' Report Format

The Internal Tests launched on the board1 display the following results:

```
                          Internal Tests

Move cursor to desired item and press Enter.



Internal test board siob1 running...
PLX access test running..
PLX access test OK
SCC access test running..
SCC access test OK
RAM access test running..
RAM access test OK

F1=Help          F2=Refresh    F3=Cancel          F6=Command
F8=Image         F9=Shell      F10=Exit           /=Find
n=Find Next
```

How to Get Current Board/Port Status

Access

Run: 'commodev'. Select: —> 'Multi-Protocol Serial I/O Board'
—> 'Problem Determination'
—> 'Current board/port Status'

Description

This menu displays the current state of the port or board selected from the list, i.e
information on the init parameter values, the status of the port (emissions, receptions,
signals...), and statistics on the exchanged frames.

Example

```
       Current State on : Serial I/O Port0 of Board siob0

Init Parameters
===============

Line Mode:                   hdlc
Input Signals management     CTS not forced,
                             DCD not forced,
                             DSR not forced
Transmission Clock           19200 bauds
Frame check sequence         CRC Divisor (x16+x12+x2+1),
                             dividend preset to zeros
Idle mode:                   Idle sending FLAGs
Data encoding                NRZ
Signal qualification:        always considered
Max. pending value (rx):     1 message(s)
Min. anticipation value (rx): 1 message(s)
Max. pending value (tx):     1 message(s)

Status information
==================
Emission clock status:       present
Reception clock status:      present
Emission state:              not ready
Reception state:             not ready
Emission queue:              0 message(s)
Reception queue:             0 message(s)
Anticipation queue:          7 message(s)
Signals state:               DTR is passive,
                             DSR is active,
                             RTS is passive,
                             CTS is passive,
                             DCD is active,
                             RI is passive

Statistics
==========
Line mode:                   hdlc
Received frames:             1534816
Sent frames:                 1988763
Lost frames:                 0
Too long frames:             0
Aborted frames:              248
Overrun:                     0
Uderrun:                     0
Invalid checksums:           0
Signal dropped:              32

F1=Help         F2=Refresh      F3=Cancel        F6=Command
F8=Image        F9=Shell        F10=Exit         /=Find
n=Find Next
```

How to Get a Data Collection for Problem Reporting

Access

Run: 'smit commodev'

Select: —> 'Multi-Protocol Serial I/O Board'

—> 'Problem Determination'

—> 'Data Collection for Problem Reporting'

Description

This menu should be run by the network administrator when he needs help from the Support team and wants to report a problem. It can also be used by experts who would like to get a complete set of information concerning a Multi-protocol Serial I/O board.

It dumps in *stdout*, or in a file the name of which is chosen by the administrator, a lot of information that are useful to Support team, i.e: the context of the device driver, of the board and the port. This file can be sent to the Support team, together with a defect report.

Error Identifiers

For the following error identifiers, refer to the recommended action described in the error log.

Error identifier	Description
CSII_CSII_FATAL	CSII module fatal error.
SIODD_PORT_ACCESS	Port access refused.
SIODD_BOARD_ACCESS	Adapter access refused.
SIODD_INVALID_PARAM	Invalid parameter.
SIODD_RX_ERROR	Reception error.
SIODD_SIODD_FATAL	SIODD driver fatal error.
SIODD_PORT_CFG_METH	Port configuration method error.
SIODD_PORT_UCFG_METH	Unconfiguration method error on multi-protocol Serial I/O adapter.
SIODD_BOARD_CFG_METH	Adapter configuration method error.
SIODD_INTERNAL_TEST	Internal test error.
SIODD_LOOPBACK_TEST	Loopback test error.
SIODD_CABLE_ERROR	Physical interface error.

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