

# SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers

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RCI Build Procedure



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# Contents

|  |            |
|--|------------|
| <b>CHAPTER 1 RCI Build Procedure</b> .....   | <b>1-1</b> |
| 1.1 RCI Overview .....   | 1-1        |
| 1.1.1 Overview of RCI Connection .....   | 1-1        |
| 1.2 RCI Commands .....   | 1-5        |
| 1.2.1 Command List .....   | 1-5        |
| 1.3 RCI Setup .....  | 1-6        |
| 1.3.1 New Setup for a Single RCI Host and Two RCI I/O Units .....  | 1-6        |
| 1.3.2 New Setup of Two RCI Hosts .....   | 1-8        |
| 1.3.3 Addition of an RCI I/O Unit .....  | 1-10       |
| 1.3.4 Addition of an RCI I/O Host .....  | 1-12       |
| 1.3.5 Connection of RCI .....  | 1-14       |
| <b>Appendix A Troubleshooting</b> .....  | <b>A-1</b> |
| A.1 In the Case Where setrci Command Ended Abnormally and Displayed<br>"Operation Failed Error Status: XX" ..... | A-1        |
| A.2 In the Case Where RCI Status of RCI Host Changes from ACTIVE to<br>INACTIVE .....                            | A-4        |



# Preface

This manual describes the Remote Cabinet Interface (RCI) build. This manual is intended for authorized service personnel who perform maintenance work of the server or field engineers.

In this manual, the verification of the standalone operation of the server is assumed to have been completed. Read this manual together with the reference manuals cited in it.

Some references to server names and document names are abbreviated for readability. For example, if you see a reference to the M9000 server, note that the full product name is the SPARC Enterprise M9000 server. And if you see a reference to the *RCI User's Guide*, note that the full document name is the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide*.

This manual explains the following:

- [Support Conditions](#)
- [Audience](#)
- [Related Documentation](#)
- [Text Conventions](#)
- [Syntax of the Command-Line Interface \(CLI\)](#)
- [Documentation Feedback](#)

## Support Conditions

The RCI function is supported on any of the following servers.

- The server which you purchased in Japan from Fujitsu
- The server which is bearing the Fujitsu logo on the front surface, regardless of area of purchase (Note)

Note: This refers to the server which has the black-colored chassis and is exclusively bearing the Fujitsu logo on the front surface.

## Audience

This manual is intended for authorized service personnel who perform maintenance work of the server or field engineers.

## Related Documentation

All documents for your sever are available online at the following locations:

| Documentation  | Link  |
|--|---|
| Sun Oracle software-related manuals (Oracle Solaris OS, and so on) | <a href="http://www.oracle.com/documentation">http://www.oracle.com/documentation</a>                       |
| Fujitsu documents  | <a href="http://www.fujitsu.com/sparcenterprise/manual/">http://www.fujitsu.com/sparcenterprise/manual/</a> |

The following table lists titles of related documents.

| Related SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Documents                           |
|--|
| SPARC Enterprise M3000 Server Site Planning Guide  |
| SPARC Enterprise M4000/M5000 Servers Site Planning Guide   |
| SPARC Enterprise M8000/M9000 Servers Site Planning Guide   |
| SPARC Enterprise Equipment Rack Mounting Guide   |
| SPARC Enterprise M3000 Server Getting Started Guide(*1)  |
| SPARC Enterprise M4000/M5000 Servers Getting Started Guide (*1)                                    |
| SPARC Enterprise M8000/M9000 Servers Getting Started Guide (*1)                                    |
| SPARC Enterprise M3000 Server Overview Guide   |
| SPARC Enterprise M4000/M5000 Servers Overview Guide  |
| SPARC Enterprise M8000/M9000 Servers Overview Guide  |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Important Legal and Safety Information (*1) |
| SPARC Enterprise M3000 Server Safety and Compliance Guide  |
| SPARC Enterprise M4000/M5000 Servers Safety and Compliance Guide                                   |
| SPARC Enterprise M8000/M9000 Servers Safety and Compliance Guide                                   |
| External I/O Expansion Unit Safety and Compliance Guide  |
| SPARC Enterprise M4000 Server Unpacking Guide(*1)  |
| SPARC Enterprise M5000 Server Unpacking Guide(*1)  |
| SPARC Enterprise M8000/M9000 Servers Unpacking Guide(*1)   |
| SPARC Enterprise M3000 Server Installation Guide   |
| SPARC Enterprise M4000/M5000 Servers Installation Guide  |
| SPARC Enterprise M8000/M9000 Servers Installation Guide  |
| SPARC Enterprise M3000 Server Service Manual   |
| SPARC Enterprise M4000/M5000 Servers Service Manual  |
| SPARC Enterprise M8000/M9000 Servers Service Manual  |
| External I/O Expansion Unit Installation and Service Manual  |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure                         |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Administration Guide                        |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide                           |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual                       |
| SPARC Enterprise M4000/M5000/M8000/M9000 Servers Dynamic Reconfiguration (DR) User's Guide         |

| Related SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Documents               |
|--|
| SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide                |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Product Notes(*2)               |
| SPARC Enterprise M3000 Server Product Notes  |
| SPARC Enterprise M4000/M5000 Servers Product Notes                                     |
| SPARC Enterprise M8000/M9000 Servers Product Notes                                     |
| External I/O Expansion Unit Product Notes  |
| SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Glossary                        |
| SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual                        |

- \*1: This is a printed document.
- \*2: Beginning with the XCP 1100 release.

## Text Conventions

This manual uses the following fonts and symbols to express specific types of information.

| Fonts/symbols    | Meaning  | Examples  |
|------------------|--|---|
| <b>AaBbCc123</b> | What you type, when contrasted with on-screen computer output. This font represents the example of command input in the frame.             | XSCF> <b>adduser jsmith</b>   |
| AaBbCc123        | The names of commands, files, and directories; on-screen computer output. This font represents the example of command output in the frame. | XSCF> <b>showuser -p</b><br>User Name: jsmith<br>Privileges: useradm<br>auditadm          |
| <i>Italic</i>    | Indicates the name of a reference manual, a variable, or user-replaceable text.  | See the <i>SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i> . |
| " "              | Indicates names of chapters, sections, items, buttons, or menus.   | See <a href="#">Chapter 1, "RCI Build Procedure"</a>                                      |

## Syntax of the Command-Line Interface (CLI)

The command syntax is as follows:

- A variable that requires input of a value must be put in Italics.
- An optional element must be enclosed in [ ].
- A group of options for an optional keyword must be enclosed in [ ] and delimited by |.

## Documentation Feedback

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# CHAPTER 1 RCI Build Procedure

This chapter explains the following items regarding the initial build procedure of the Remote Cabinet Interface (RCI) in the installation work.

- [RCI Overview](#)
- [RCI Commands](#)
- [RCI Setup](#)

## 1.1 RCI Overview

RCI is an interface to connect RCI Host (general name for main units supporting RCI and for RCI I/O units).

In this manual, a base cabinet and an I/O unit that support the RCI are referred to as an RCI Host and an RCI I/O unit, respectively. Furthermore, RCI Hosts and RCI I/O units are generally referred to as RCI device.

To connect RCI I/O units or to use the RCI asynchronous monitoring functions in a cluster environment, a setup using the RCI setup commands is required in addition to the connection with RCI cables.

### 1.1.1 Overview of RCI Connection

There are two types of main unit: An M3000, M4000 or M5000 server equipped with one RCI, and an M8000 or M9000 server equipped with two RCIs.

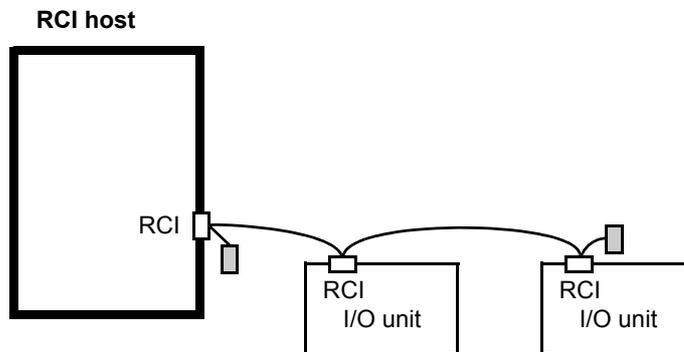
I/O units include units equipped with one RCI and units equipped with two RCIs.

This section explains the possible RCI connection patterns:

- Basic configuration

[Figure 1.1](#) shows a connection pattern with an RCI host and RCI I/O units.

Figure 1.1 Connections to RCI I/O units



RCI cables are connected in sequence to respective units using T-branch connectors.

RCI terminating resistors must be connected to the T-branch connectors at both ends of a set of RCI connections.

Up to 32 RCIs including the RCI main unit can be connected.

Note that the maximum RCI cable length is 150 meters.

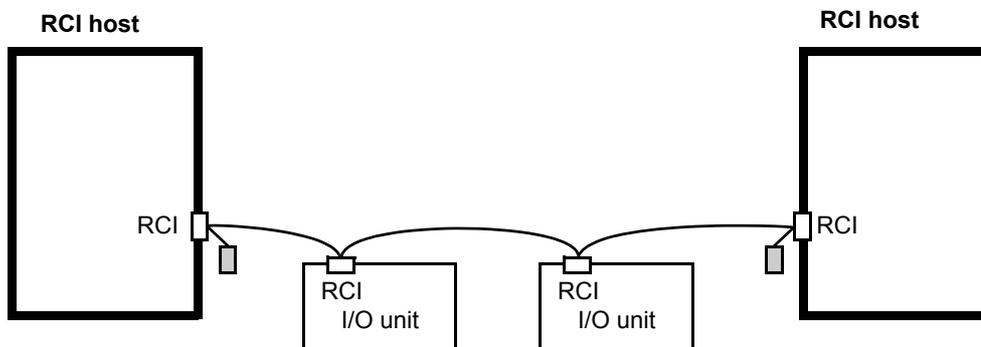
Use the repeater function of the external power controller to extend the cable length used and to increase the number of connected RCI units. If two repeaters are used, the maximum number of the connected RCI units and length of the cable are 92 nodes and 450m.

Note: The external power controller is included in the number of RCI units.

- Cluster configuration

Figure 1.2 shows a cluster connection pattern.

Figure 1.2 Cluster connections



Up to 32 RCI hosts can be connected.

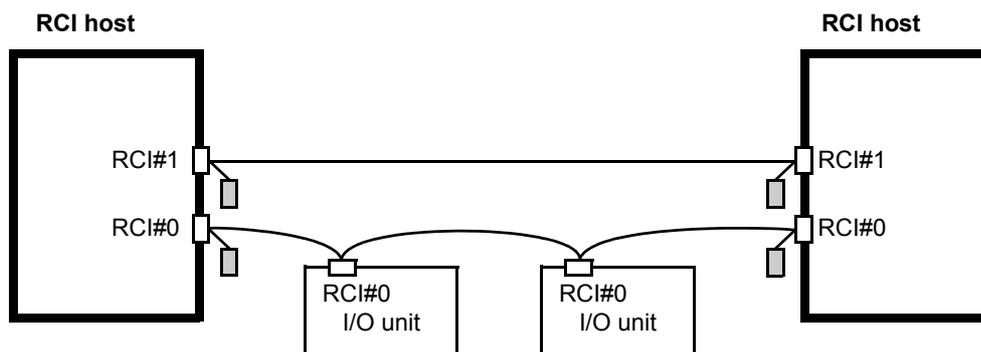
The cluster connection requirements, such as the maximum cable length and the number of connectable RCI I/O units, are the same as the basic configuration requirements.

Note: The repeater function of the external power controller cannot be used to increase the number of RCI base cabinets.

- Duplicated configuration

Figure 1.3 shows the connection pattern of a duplicated configuration.

Figure 1.3 Duplicated configuration

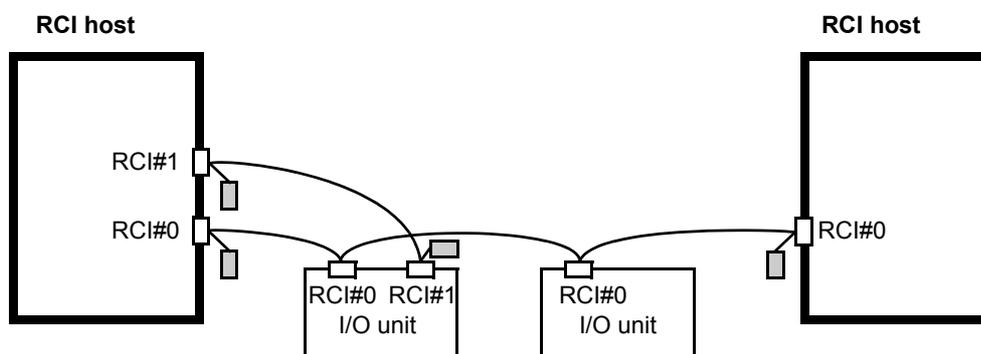


RCI hosts can be constructed in a duplicated configuration only if their XSCF units are in a redundant configuration (duplicated configuration).

Note: In case the XSCF unit is duplicated, connect RCI hosts or RCI I/O units to the same RCI network system. That is, connect the #0 system to the #0 one, and connect the #1 system to #1 one.

Figure 1.4 shows a connection pattern that connects both duplicated and unduplicated configurations.

Figure 1.4 Mixture of duplicated and unduplicated configurations



The pattern can contain RCI I/O units and RCI hosts that do not support a duplicated configuration.

Connect them to the duplicate system. Connect RCI hosts that do not support a duplicated configuration to the #0 system.

If an RCI host that does not support a duplicated configuration were already connected, RCI I/O units would be connected to the #0 system.

Note: When an RCI host of the duplicated configuration is connected with RCI hosts or RCI I/O units that do not support a duplicated configuration, it may fail to control the RCI host or the RCI I/O unit on the #0 system in the following case:

- When an XSCFU#0 failure generated an XSCF failover and the active XSCF Unit switched to XSCFU#1.

In this case, maintenance work of XSCFU#0 becomes necessary.

## 1.2 RCI Commands

RCI commands are used to display RCI configuration information and set node addresses.

To connect I/O units equipped with RCI ports, a setup using RCI commands is required in addition to the connection with RCI cables.

Note: When you use the terminal function of the External power controller, perform the `setrci` command and confirm setting or connection of the External power controller. For details of the `setrci` command, see the *RCI User's Guide* or `man` page.

### 1.2.1 Command List

The RCI commands are explained below.

Table 1.1 Command list

| Command                              | Function   |
|--------------------------------------|--|
| <code>setrci -c stat</code>          | Displays RCI configuration information. This command is used after the RCI setup to verify that the settings of the host and I/O units have been made correctly.   |
| <code>setrci -c init</code>          | Initializes the RCI configuration information. If other host units are connected through the RCI, the RCI settings must be initialized on each host unit. You can use this command if the system is powered off. |
| <code>setrci -c set [host_no]</code> | Sets up an RCI Host node. Before this command can be executed, the RCI settings must already have been initialized.<br>host_no: Integer numbers from 1 to 32 are assigned in this order.                         |
| <code>setrci -c initconfig</code>    | Assigns an RCI address to an I/O unit connected via RCI. Before this command can be executed, the RCI Host node settings must already have been made.  |
| <code>setrci -c addconfig</code>     | Makes the RCI settings for the case that a host unit or an I/O unit is added.  |

## 1.3 RCI Setup

This section explains the RCI setup for the following cases:

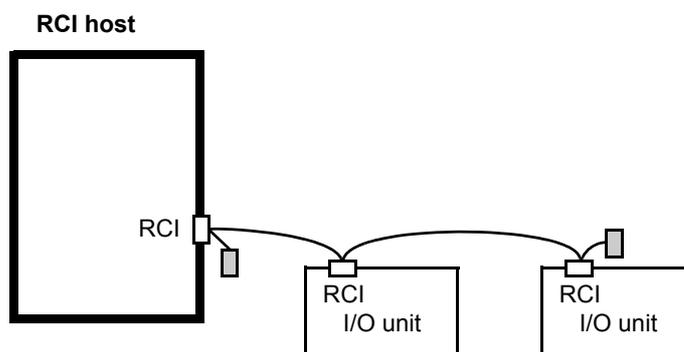
- [New Setup for a Single RCI Host and Two RCI I/O Units](#)
- [New Setup of Two RCI Hosts](#)
- [Addition of an RCI I/O Unit](#)
- [Addition of an RCI I/O Host](#)

Note: For the RCI device replacement and the RCI device deletion, see the *RCI User's Guide*.

Note: See [Appendix A, "Troubleshooting."](#) when there is a problem at RCI setup.

### 1.3.1 New Setup for a Single RCI Host and Two RCI I/O Units

Figure 1.5 New setup for a single RCI host and two RCI I/O units



1. Log in to the XSCF Shell.
2. Execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
  address 000f7fff
  Inactive
The command completed successfully
```

**3.** Verify that the RCI address is 000f7fff.

Note: 000f7fff is the default value of the RCI address. If the default value is not set, execute the `setrci -c init` command to initialize the value.

If the system is powered off, you can use the `setrci -c init` command.

```
XSCF> setrci -c init
The command completed successfully
```

**4.** Connect the main unit and I/O units with RCI cables (see [Figure 1.5](#)).

- a. Connect an RCI branching connector to each of the RCI ports, and connect them with RCI cables in a daisy chain connection.
- b. Connect an RCI terminator to the RCI branching connectors at both ends of the daisy chain.

Note: See [Section 1.3.5, "Connection of RCI."](#)

**5.** Turn on the AC input to all the RCI device which are in the RCI connection.

**6.** Execute the `setrci -c set` command to make the settings of the host node.

Since the main unit is the first unit, `host_no` is 1.

```
XSCF> setrci -c set 1
The command completed successfully
```

**7.** Execute the `setrci -c initconfig` command to configure the RCI.

```
XSCF> setrci -c initconfig
.....
The command completed successfully
```

**8.** Execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
address 000101ff
Active
LIST
address  pwr  alm  I/F  sys-phase  ctgry  dev-cls  sub-cls  tm-out
000101ff OFF  -   ACT  power-off  host   0001    0b      -
003001ff OFF  -   ACT  --         disk   0400    04      -
003002ff OFF  -   ACT  --         disk   0400    04      -
The command completed successfully
```

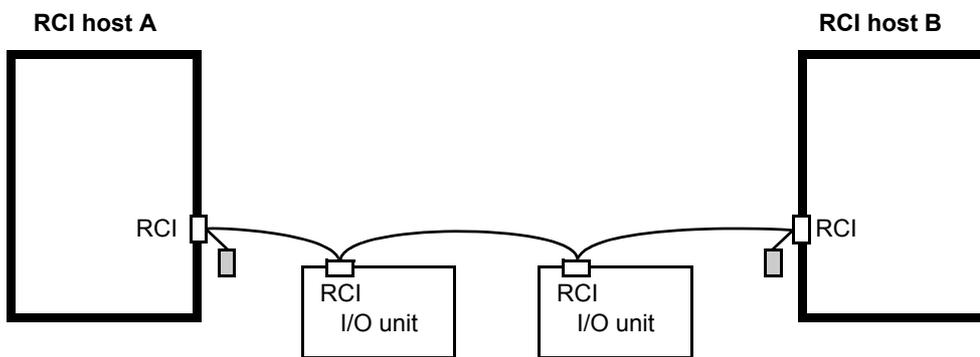
**9.** Verify that all the RCI device in the RCI connection are incorporated.

Note: In the list displayed under LIST in the RCI status display, verify that the RCI main unit and the RCI I/O unit are incorporated.

For details of the contents displayed under LIST, see the *RCI User's Guide*.

### 1.3.2 New Setup of Two RCI Hosts

Figure 1.6 New setup of two RCI hosts



- 1.** Log in to the XSCF Shell.
- 2.** On main unit A, execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
  address 000f7fff
  Inactive
The command completed successfully
```

- 3.** Verify that the RCI address is 000f7fff.

Note: 000f7fff is the default value of the RCI address. If the default value is not set, execute the `setrci -c init` command to initialize the value.

If the system is powered off, you can use the `setrci -c init` command.

```
XSCF> setrci -c init
The command completed successfully
```

- 4.** In a similar manner, display the RCI status of main unit B to verify that the RCI address is 000f7fff.
- 5.** Connect the main unit and I/O units with RCI cables (see [Figure 1.6](#)).
  - a.** Connect an RCI branching connector to each of the RCI ports, and connect them with RCI cables in a daisy chain connection.

- b. Connect an RCI terminator to the RCI branching connectors at both ends of the daisy chain.

Note: See [Section 1.3.5, "Connection of RCI."](#)

- 6.** Turn on the AC input to all the RCI device which are in the RCI connection.
- 7.** On main unit A, execute the `setrci -c set` command to make the settings of the host node.

Since main unit A is the first unit, `host_no` is 1.

```
XSCF> setrci -c set 1
The command completed successfully
```

- 8.** On main unit B, execute the `setrci -c set` command to make the settings of the host node.

Since main unit B is the second unit, `host_no` is 2.

```
XSCF> setrci -c set 2
The command completed successfully
```

- 9.** On main unit A, execute the `setrci -c initconfig` command to configure the RCI.

```
XSCF> setrci -c initconfig
.....
The command completed successfully
```

- 10.** On main unit B, execute the `setrci -c addconfig` command to make the RCI addition setting.

```
XSCF> setrci -c addconfig
.....
The command completed successfully
```

- 11.** On main unit A, execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
address 000101ff
Active
LIST
address pwr alm I/F sys-phase ctgry dev-cls sub-cls tm-out
000101ff OFF - ACT power-off host 0001 0b -
000102ff OFF - ACT power-off host 0001 0b -
003001ff OFF - ACT -- disk 0400 04 -
003002ff OFF - ACT -- disk 0400 04 -
The command completed successfully
```

**12.** Verify that all the RCI device in the RCI connection are incorporated.

Note: In the list displayed under LIST in the RCI status display, verify that the RCI main unit and the RCI I/O unit are incorporated.

For details of the contents displayed under LIST, see the *RCI User's Guide*.

**13.** On main unit B, execute the `setrci -c stat` command to display the RCI status again.

```
XSCF> setrci -c stat
HOST
  address 000102ff
  Active
LIST
  address  pwr  alm  I/F  sys-phase  ctgry  dev-cls  sub-cls  tm-out
  000101ff OFF  -   ACT  power-off  host   0001    0b      -
  000102ff OFF  -   ACT  power-off  host   0001    0b      -
  003001ff OFF  -   ACT  --         disk   0400    04      -
  003002ff OFF  -   ACT  --         disk   0400    04      -
The command completed successfully
```

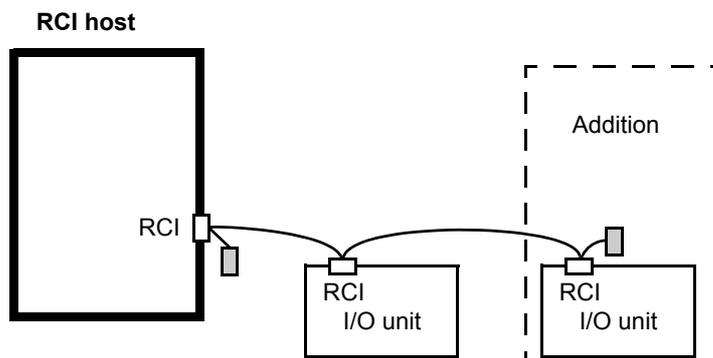
**14.** Verify that all the RCI devices in the RCI connection are incorporated.

Note: In the list displayed under LIST in the RCI status display, verify that the RCI main unit and the RCI I/O unit are incorporated.

For details of the contents displayed under LIST, see the *RCI User's Guide*.

**1.3.3 Addition of an RCI I/O Unit**

Figure 1.7 Addition of an RCI I/O unit

**1.** Connect the I/O unit to be added with an RCI cable by using a daisy-chain connection (see [Figure 1.7](#)).

Note: Turn off the AC power to the I/O unit to be added before connecting the RCI cable.

- a. Connect an RCI branching connector to each of the RCI ports, and connect them with RCI cables in a daisy chain connection.
- b. Connect an RCI terminator to the RCI branching connectors at both ends of the daisy chain.

Note: See [Section 1.3.5, "Connection of RCI."](#)

2. Turn on the AC input to all the units which are in the RCI connection.
3. Log in to the XSCF Shell.
4. Execute the `setrci -c addconfig` command to configure the RCI.

```
XSCF> setrci -c addconfig
.....
The command completed successfully
```

5. Execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
  address 000101ff
  Active
LIST
  address  pwr  alm  I/F  sys-phase  ctgry  dev-cls  sub-cls  tm-out
  000101ff OFF  -   ACT  power-off  host   0001     0b       -
  003001ff OFF  -   ACT  --         disk   0400     04       -
  003002ff OFF  -   ACT  --         disk   0400     04       -
The command completed successfully
```

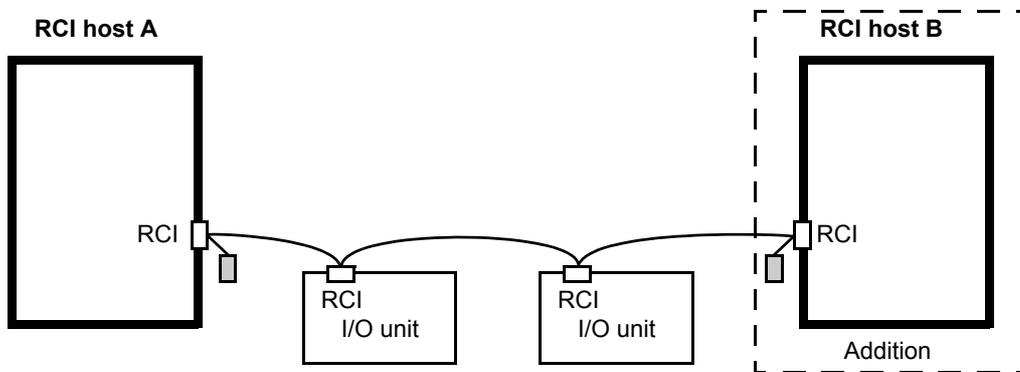
6. Verify that the added I/O unit is incorporated.

Note: In the list displayed under LIST in the RCI status display, verify that the RCI I/O unit is incorporated.

For details of the contents displayed under LIST, see the *RCI User's Guide*.

### 1.3.4 Addition of an RCI I/O Host

Figure 1.8 Addition of an RCI I/O host



1. Log in to the XSCF Shell.
2. On main unit B, which is to be added, execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
address 000f7fff
Inactive
The command completed successfully
```

3. Verify that the RCI address is 000f7fff.

Note: 000f7fff is the default value of the RCI address. If the default value is not set, execute the `setrci -c init` command to initialize the value.

If the system is powered off, you can use the `setrci -c init` command.

```
XSCF> setrci -c init
The command completed successfully
```

4. Connect main unit B, which is to be added, with an RCI cable (see [Figure 1.8](#)).
  - a. Connect an RCI branching connector to each of the RCI ports, and connect them with RCI cables in a daisy chain connection.
  - b. Connect an RCI terminator to the RCI branching connectors at both ends of the daisy chain.

Note: See [Section 1.3.5, "Connection of RCI."](#)

5. Turn on the AC input to all the RCI devices which are in the RCI connection, if the AC input to any of these devices is turned off.

- 6.** On main unit B, execute the `setrci -c set 2` command to make the settings of the host node.

Since the main unit is the second unit, `host_no` is 2.

```
XSCF> setrci -c set 2
The command completed successfully
```

- 7.** On main unit B, execute the `setrci -c addconfig` command to make the RCI addition setting.

```
XSCF> setrci -c addconfig
.....
The command completed successfully
```

- 8.** On main unit A, Execute the `setrci -c stat` command to display the RCI status.

```
XSCF> setrci -c stat
HOST
  address 000101ff
  Active
LIST
  address  pwr  alm  I/F  sys-phase  ctgry  dev-cls  sub-cls  tm-out
  000101ff OFF  -   ACT  power-off  host   0001    0b      -
  000102ff OFF  -   ACT  power-off  host   0001    0b      -
  003001ff OFF  -   ACT  --         disk   0400    04      -
  003002ff OFF  -   ACT  --         disk   0400    04      -
The command completed successfully
```

- 9.** Verify that the added main unit is incorporated.

Note: In the list displayed under `LIST` in the RCI status display, verify that the RCI main unit and the RCI I/O unit are incorporated.

For details of the contents displayed under `LIST`, see the *RCI User's Guide*.

- 10.** On main unit B, execute the `setrci -c stat` command to display the RCI status again.

```
XSCF> setrci -c stat
HOST
  address 000102ff
  Active
LIST
  address  pwr  alm  I/F  sys-phase  ctgry  dev-cls  sub-cls  tm-out
  000101ff OFF  -   ACT  power-off  host   0001    0b      -
  000102ff OFF  -   ACT  power-off  host   0001    0b      -
  003001ff OFF  -   ACT  --         disk   0400    04      -
  003002ff OFF  -   ACT  --         disk   0400    04      -
The command completed successfully
```

**11.** Verify that all the RCI devices in the RCI connection are incorporated.

Note: In the list displayed under LIST in the RCI status display, verify that the RCI main unit and the RCI I/O unit are incorporated.

For details of the contents displayed under LIST, see the *RCI User's Guide*.

**1.3.5 Connection of RCI**

According to the following procedure, connect different units with RCI cables by using a daisy-chain connection.

- 1.** Prepare RCI branching connectors and RCI terminating resistors.  
All of them are supplied with the main unit.
- 2.** Connect the main unit and I/O units with RCI cables (see [Figure 1.9](#), [Figure 1.10](#), and [Figure 1.11](#)).
  - a. Connect the RCI branching connector (1) to the RCI port on an XSCF unit of the main unit.
  - b. Connect the RCI branching connector and the RCI port of an I/O unit with an RCI cable (2) by using a daisy-chain connection.

When you connect the RCI cables to or remove from the RCI branching connector, hold the RCI branching connector with one hand.

Note: If a large amount of downward force is applied to the RCI branching connector, the device may be damaged.

Figure 1.9 M3000 server connection of RCI branch connector

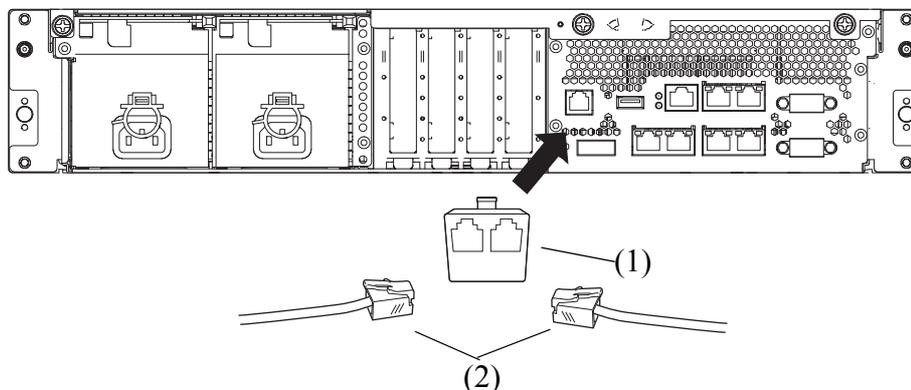


Figure 1.10 M4000/M5000 servers connection of RCI branch connector

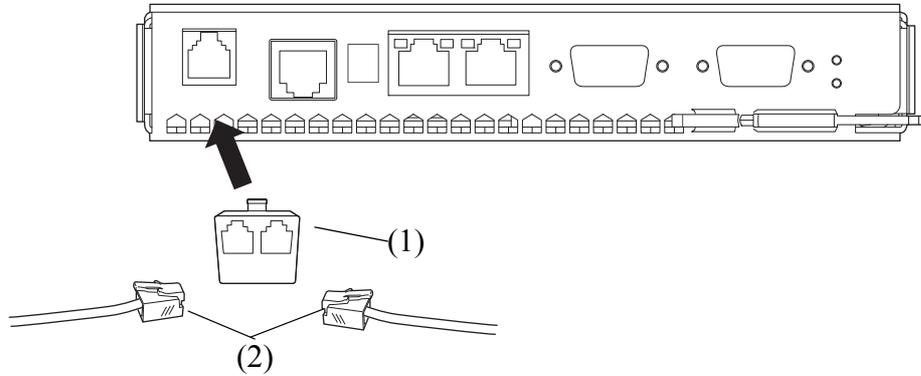
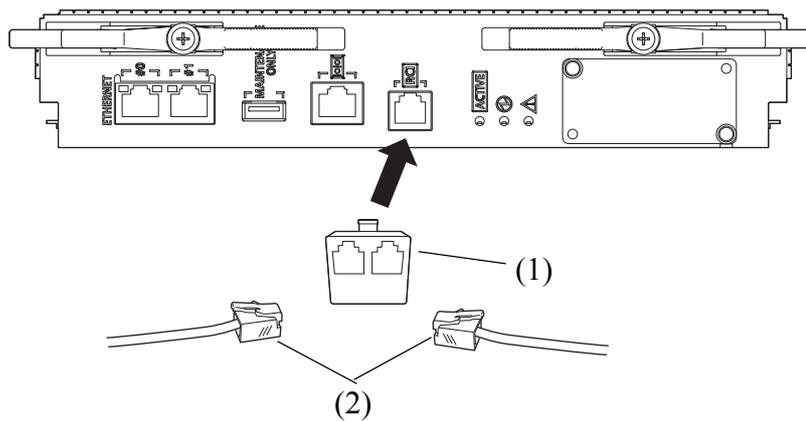


Figure 1.11 M8000/M9000 server connection of RCI branch connector



- c. Connect the RCI terminating resistor to the branching connector that is at the end of the RCI connection.



# Appendix A Troubleshooting

This appendix explains how to deal with possible problems during the RCI setup.

- [In the Case Where setrci Command Ended Abnormally and Displayed “Operation Failed Error Status: XX”](#)
- [In the Case Where RCI Status of RCI Host Changes from ACTIVE to INACTIVE](#)

## A.1 In the Case Where setrci Command Ended Abnormally and Displayed “Operation Failed Error Status: XX”

When the RCI build by the setrci command ended abnormally and "Operation failed error status: XX" is displayed, the displayed error status code, explanation, and remedy pattern are described to the following table.

Table A.1 Error status code and explanation

| Code | Explanation  | Remedy                    |
|------|--|---------------------------|
| 00   | Detected the duplicate RCI address.  | <a href="#">Pattern A</a> |
| 01   | RCI address of current unit is not configured or false.                                | <a href="#">Pattern B</a> |
| 02   | Detected the duplicate RCI address of RCI host, or detected the undefined RCI address. | <a href="#">Pattern C</a> |
| 03   | RCI address of current unit is not configured.   | <a href="#">Pattern B</a> |
| 04   | Over maximum entry of RCI table.   | <a href="#">Pattern D</a> |
| 05   | Detected anomaly in RCI table receiving.   | <a href="#">Pattern C</a> |
| 06   | Detected anomaly in RCI table sending.   | <a href="#">Pattern C</a> |
| 07   | Receiving status check from undefined RCI device.                                      | <a href="#">Pattern C</a> |
| 08   | Detected the loss of RCI master.   | <a href="#">Pattern C</a> |
| 09   | Detected anomaly of RCI table.   | <a href="#">Pattern C</a> |
| 0a   | Synchronous time out of RCI table.   | <a href="#">Pattern C</a> |
| 0b   | Synchronous retry out of RCI table.  | <a href="#">Pattern C</a> |
| 0c   | Detected anomaly of RCI table.   | <a href="#">Pattern C</a> |
| 0d   | Failed the version check of RCI table.   | <a href="#">Pattern C</a> |
| 0e   | Detected anomaly of RCI table.   | <a href="#">Pattern C</a> |
| 0f   | Detected anomaly in synchronous with RCI Neuron chip.                                  | <a href="#">Pattern E</a> |

Table A.1 Error status code and explanation

| Code | Explanation  | Remedy                    |
|------|--|---------------------------|
| 20   | Detected the duplicate RCI address in RCI I/O unit (Expansion file unit, External power controller). | <a href="#">Pattern C</a> |
| 30   | Detected the duplicate RCI address in RCI I/O unit (Line selector switch).                           | <a href="#">Pattern F</a> |
| fd   | RCI cannot be constructed, or it was cancelled.  | <a href="#">Pattern G</a> |
| fe   | Other RCI unit is constructing the RCI network.  | <a href="#">Pattern A</a> |
| ff   | RCI setup procedure is false.  | <a href="#">Pattern A</a> |

- Remedy

- Pattern A

- 1 Check the RCI setup procedure, the RCI address value and the connection.
  - 1 Check the setting of the RCI address and the duplicate of the RCI address by setrci -c stat command.
  - 2 Check whether the other RCI host that doesn't execute the RCI initialization is connected.
- 2 In the case of anomaly, retry RCI setup in correct procedure.

- Pattern B

- 1 Check the RCI address value of current unit by setrci -c stat command.
- 2 In the case of anomaly, retry RCI setup in correct procedure.

- Pattern C

- 1 Check the RCI address value of current unit and other unit by setrci -c stat command.
- 2 In the case of anomaly, retry RCI setup in correct procedure.

- Pattern D

- 1 Check whether 95 and more units of RCI I/O unit (include the External power controller) are not connected.
- 2 When 95 and more units are connected, change the connection configuration to 94 and less units (include the External power controller), and retry RCI setup.

- Pattern E

- 1 Replace the XSCF board.
- 2 After the replacement of the XSCF unit, retry RCI setup.

- Pattern F

- 1 Check whether RCI address value of the Line selector switch is not duplicated.
- 2 If the duplicate, change the RCI address of the Line selector switch, and retry RCI setup. To change the RCI address of the Line selector switch, see its manuals.

- Pattern G

Check the state of XSCF, and execute either of the following operations.

When XSCF reboot or redundancy are working, execute the setrci command after these are completed.

If the above-mentioned doesn't correspond, retry the setrci command.

## A.2 In the Case Where RCI Status of RCI Host Changes from ACTIVE to INACTIVE

**Caution:** When this problem has occurred, do not replace the XSCF unit because it is not a failure of the XSCF unit.

This problem is occurred by the mistake of the RCI build procedure and the RCI connection.

It occurs when the same RCI address is set and constructed, or, when connecting with the RCI network of the construction of the RCI host that has not been initialized.

Confirm whether to correspond to this problem. The procedure is the following:

- 1.** Execute showlogs command, and check whether "RCI configuration conflict" is generated in error log.
- 2.** When that message was generated, check the RCI build procedure, the RCI address value and the connection.
- 3.** In the case of anomaly, correct the RCI address or the connection of relevant device according to the change procedure of each device.
- 4.** See [Section 1.3.4, "Addition of an RCI I/O Host."](#) and retry RCI setup.