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# REMCS Agent Operator's Guide 1.5

## About This Guide

#### [Purpose of This Guide]

This guide explains the different setup procedures to use the REMote Customer Support system (REMCS) agent functions in a machine of the PRIMEPOWER, GP7000F series in which the Solaris(TM) Operating Environment(abbreviated at the following as Solaris OE) operating system is installed.

#### [Intended Reader of This Guide]

This guide is intended for system administrators and users, the persons who are in charge of operation and maintenance of this system.

#### [Structure of This Guide]

This guide consists of the following information.

- $\cdot$  Outline
- $\cdot\,$  Use of the Services
- $\cdot\,$  Operation Guide for Collecting Software Investigation Information.

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## Chapter 1 Overview of REMCS Agent

This chapter gives an overview of REMCS Agent.

REMCS, REMote Customer Support system, Agent is software, which spares customer's effort and time in order to maintain customer's system. REMCS Agent works with help of the REMCS center system. A customer's machines are monitored by REMCS Agent instead of the customer, and REMCS Agent supports the customer's operations by communicating with the support center via networks.

REMCS provides the following advanced means of support.

· Quick and accurate support

More accurate support can be provided than that provided by telephone or fax because the latest information on a customer's machines is automatically sent to the REMCS Center. Especially if a failure occurs, the necessary failure information is sent to the REMCS Center, thereby eliminating the inconvenience to the customer of explaining the failure, and the accurate measures are then given.

 $\cdot \,$  Prevention of failure.

Because the information of the machine's status is periodically sent to the REMCS Center, a failure can be prevent beforehand by implementing preventive maintenance if the occurrence of failure is foreseeable. At the same time, if the firmware management function is used, the newest firmware is automatically downloaded and can be installed on the machines.

This chapter is an overview of the entire system (REMCS), and it explains the REMCS Agent functions providing the above support at the customer site.

## 1.1 Outline of Entire REMCS

The REMote Customer Support system (REMCS) is a system that supports customers' operations 24 hours a day and 365 days a year by connecting the customers' machines to the REMCS Center via networks. The entire REMCS consists of the REMCS Center and customers' machines, as shown below.



REMCS Agent in the customer site collects the necessary information from machines that are supported, and it sends the data to REMCS Center via a network. And it has a function to receive firmware and other information from the center. The data transmitted from a customer machine to the center is compressed and encrypted by REMCS Agent to ensure data security and safety.

The REMCS Center has databases where it manages the information that is supplied from customers' machines. It uses the data for preventive backup of data before any event of failure, and uses the data for swift remedial action if a failure occurs.

### 1.2 Connection Type to REMCS Center

The connection type between customer machine and REMCS Center has five types as follows, when REMCS service is used. If you don't know which type you select, and you want to know about the detail service in each connection type, Please contact our support member.

#### [Internet Connection]

In this type of connection, the customer machine will be connected to REMCS Center via Internet, directly. SMTP is used to send to the REMCS Center. And, HTTP is used to receive from the REMCS Center



#### [Internet Connection (MAIL Only)]

In this type of connection, the customer machine will be connected to REMCS Center via Internet, directly. However, only SMTP is used to send to the REMCS Center. Therefore, the firmware reception function is not available.



#### [Point-to-Point Connection (ISDN)]

In this type of connection, the customer machine will be connected to REMCS Center via ISDN line, directly.



#### [Point-to-Point Connection (VPN)]

In this type of connection, the customer machine will be connected to REMCS Center via broadband line, such as ADSL etc., with using VPN router.



#### [Management Server Connection]

In this type of connection, the customer machine will be connected to Management Server, and Management Server will be directly connected to REMCS Center. Management Server Connection has following merit:

- · Extend service using Management Server
- $\cdot\,$  Mitigation of the load by the intensive operation by Management Server



### 1.3 Functions of REMCS Agent

This section explains the functions of REMCS Agent.

#### 1.3.1 Registration

This function sends customers' machine information (software configuration, hardware configuration) and registers it to the center. REMCS Agent automatically collects the machine information and sends it to the center. If the system configuration of a machine is changed, the change is automatically detected. Information on the change is sent to the center so that the REMCS Center manages the latest machine information.



#### 1.3.2 Remote notification

REMCS Agent constantly monitors the status of machines. If a hardware failureoccurs, it is automatically detected and the REMCS Center is immediately notified of the abnormal event. Information (such as that in a log and memory dump) required for incident analysis is sent to the center. The temperature of the machine cabinet is continuously monitored and is periodically sent to the center as statistical information. The center analyzes the received information to investigate the cause of the failure and monitors for foreseeable signs of another failure. The remote notification function does not require any special operation by customers.



#### 1.3.3 Investigation information collection

If a problem occurs (such as faulty operation of software) and it cannot be automatically detected, investigation Information can be collected in a simple operation, and the information can be sent to the REMCS Center. In the conventional procedure after the occurrence of a failure, a Fujitsu engineer is dispatched to collect the investigation information or investigation Information is collected by a customer, depending on the decision of the customer. With use of this function, the time required for troubleshooting can be reduced significantly.



#### 1.3.4 Reception of firmware (microprogram)

At the time of periodic connectionspecified by a customer, REMCS Agent is connected to the REMCS Center. If new firmware (microprogram) is available but not installed on the machines, it is automatically received.

The firmware can also be downloaded manually. (\* Only in the models that support manual reception.)

Using this function, customers can maintain their firmware at the latest version.



### 1.4 Flow until Start of Service

This section explains the procedure after a customer's machines are connected and until the REMCS services are started.

Follow the procedures below before starting service.



#### 1.4.1 Preparing environment

The environment and conditions required to start service when the machines are connected to the REMCS Center are explained.

#### [Conditions for connecting with the REMCS Center]

To connect a customer's machines to the REMCS Center, the following conditions must be met.

1)In the case of Internet Connection

- 1. The customer's machines must be operated in an environment enabling connection to the Internet. An environment where connection to the Internet is available requires an Internet service provider (ISP) contract and installation and setup of connection machines (e.g., router).
- 2. The capabilities of sending e-mail through the Internet and accessing the Internet using HTTP must be provided. (\*1)

\*1) in the network environments of some customers, approval must be obtained to send e-mail through the Internet and to access the Internet using HTTP. Contact the network administrator of the respective customers for details. Contact the network administrator of the respective customers for details. Note) Security systems such as firewalls must be prepared as requested by a customer. 2)In the case of Point-to-Point Connection

Installation of apparatus etc. is needed separately. Please contact our support member.

3)In the case of Management Server Connection

Management Server etc. is needed separately. Please contact our support member.

#### [Preparation of settings]

1)In the case of Internet Connection

To set up a customer's machines and REMCS Agent, the network-related information listed below is required. Each setting is different depending on the network environment used by the customer.

Item		Contents		
System (machine) settings				
		IP address of the machine		
1	IP address	Sub-net mask		
		Default gateway		
	Domain name			
2	system (DNS)	Hostname and domain name of the machine itself		
		IP address of DNS server		
REMCS Agent settings	REMCS Agent settings			
3	Mail server (SMTP)	Server used by REMCS Agent to send mail Hostname and domain name of the mail server (or IP address)		
4	Communication mail address	Mail address used by REMCS Agent to send mail.		
5	Administrator mail address	Mail address for sending information from the center to customers.		
6	HTTP PROXY server (as required)	Server used by REMCS Agent for HTTP communication. Hostname and domain name (or IP address) of PROXY server		

2)In the case of Point-to-Point Connection

Please contact our support member.

3)In the case of Management Server Connection

Please contact our support member.

#### [Software Investigation Information Collection]

SIRMS uses 3 semaphores during the Software Investigation Information Collection, in order to control its program resources.

It is recommended that the value of system parameter "Semmni" is increases about 10.

Note) Semmni

Max number of semaphore identifiers, which is referred by using "sysdef (1M)" command.

For example, you insert the record shown as below in /etc/system file, in order to set the value of system parameter Semmni to 20.

set semsys:seminfo semmni = 20

It is necessary to reboot the system after changing the system parameter.

#### 1.4.2 Installation

Install REMCS Agent on the machine. For instructions, see the Installation Manual of the respective machine.

#### 1.4.3 Registration

Execute registration from REMCS Agent. Client information (customer information) and machine information are sent to the center and registered.

For more information, see Chapter 2 Chapter 2, "Use of the Services."

When you register more than one system to REMCS Center, you may have to enter the same information in each registration. To reduce such efforts, you can save registration information and use this saved information as a template for other registration. By using this "template", you don't have to re-enter several fields. You can save not only registration information but also configuration information of REMCS agent, and use it as a template.

#### 1.4.4 Setting up REMCS environment

Set up the environment to run REMCS Agent. The settings define the environment required for connection to the center and the environment for specifying the operating modes and schedules.

For the setup procedure, see Chapter 2 Chapter 2, "Use of the Services."

#### 1.4.5 Connection check

Check the connection to the center to confirm operation under the environment that has been set up.

The REMCS service starts when the connection check has completed.

## Chapter 2 Use of the Services

This chapter explains each setting for using the REMCS Agent functions.

## 2.1 Menu Flow used to set up REMCS

Perform the following setup from the machine administration menu in order to start the REMCS services.

1. Reuse of registration data

If you have a system, which is already registered at REMCS Center, to spare your effort and time, you can use the previous registration information of the registered machine by copying information with ftp etc.

- 2. Selection of connection type
- Select the connection method for connecting a customer's machine with the REMCS center.
- 3. Registration

Register customer information and the configuration information (hardware and software) of customer machines to the REMCS Center. If you have copied the registration data, you can read them at registration.

4. Setup of REMCS environment

Set up the REMCS connection and check the connection to the REMCS Center.

- 5. Setup of PRIMEPOWER SMC's REMCS service
- Setup the PRIMEPOWER SMC's REMCS service, and check the connection to the REMCS Center.
  6. Setup of the REMCS environmentvia eXtended System Control Facility(XSCF)
  eXtended System Control Facility, hereafter XSCF, can inform several events to the REMCS Center
  without use of the REMCS Agent when the OS is not available. Set up the REMCS connection

environment via XSCF, and then check whether XSCF can inform events to the REMCS Center.

#### 7. Start of service

Perform registration, and set up the REMCS environment. The service starts when the connection check with the REMCS Center has completed.

For information on collecting the software investigation information, see Chapter 3 Chapter 3, "Collection of Software Investigation Material."



 $^{\cdot}$  The following REMCS agents can reuse existing registration data

Machine type and software version of Enhanced Support Facility or System Console Software containing the Agent.

The following models use System Console Software 2.2 or later.

PRIMEPOWER800/1000/2000

PRIMEPOWER900/1500/2500/HPC2500

PRIMEPOWER 100/200 SMC

The following model needs System Console Software  $2.3\ {\rm or}\ {\rm later.}$ 

PRIMEPOWER250 SMC

The following models use Enhanced Support Facility 2.3 or later.

For using Enhanced Support Facility 2.3, following patch is required.

Model	Patch
PRIMEPOWER1/200/400/600	912188-02 or above
PRIMEPOWER650/850	912537-02 or above
PRIMEPOWER250/450	912474-03 or above

· The systems can connect REMCS Center via the XSCF feature

To enable this functionality on the following models, you need to install Enhanced Support Facility 2.3 or later.

In addition to that, following patch and Hardware Control Program, hereafter HCP, is required.

Model	Patch	base HCP version(Total Revision)
PRIMEPOWER250/450	912474-07 (or above)	04.01(or above)

Following models can connect REMCS Center via XSCF, in case OS, and REMCS agent on OS, cannot work due to failure.

Refer to "HCP file operation" in "Machine Administration Guide" for base HCP version. To enable this functionality on the following model, you need to install System Console Software 2.3 or

In addition to that, following patch and Hardware Control Program, hereafter HCP, is required.

Model	base HCP version(Total Revision)
PRIMEPOWER250 SMC	04.01(or above)

Refer to "HCP file operation" in "Machine Administration Guide" for base HCP version.

The machine administration menusare different depending on the model of the main machine.

Two distinct models exist. One makes use of a System Management Console running the System Control Software (SCS), hereafter this system will be referred as "System Console". The other models make use of menus available in their own /opt directories. Both models are addressed in the following material.

System Console is a machine which connects to the System Control Facility (SCF) of a main machine, or frame, with a LAN. It monitors the machine status, saves the log information, performs the various kinds of setup, and sends notices to the REMCS Center.

Setup procedures by models are listed below.

later.

- $\cdot\,$  The setup procedure is explained for the following model which uses System Console. PRIMEPOWER800/1000/2000
- PRIMEPOWER900/1500/2500/HPC2500
- The setup procedure is explained for the following model which not uses System Console.
   PRIMEPOWER1/200/400/600/650/850
   PRIMEPOWER250/450
   PRIMERPOWER 100/200/250 SMC (hereafter PRIMEPOWER SMC)

#### 2.1.1 REMCS services on a PRIMEPOWER SMC

PRIMEPOWER SMC(hereafter SMC) is a system that is configured to be used as a System Console. Following two kinds of REMCS services are available on SMC.

- 1. the service for host machine monitored by System Console
- 2. the service for System Console itself

When an error occurs on the SMC that is monitoring the host machines, the error can be notified to the REMCS Center with help of REMCS service. And, we can fix the problem in a sppedy manner. Therefore, you can enjoy more reliable monitoring features for host machines.

Please refer to the following sections for setup of the REMCS service of the SMC.

2.2.2.3 2.2.2.3 Setup for REMCS service of PRIMEPOWER SMC(for Internet Connection)

2.2.3.3 2.2.3.3 Setup for REMCS service of PRIMEPOWER SMC(for Internet Connection (Mail Only))

2.2.4.3 2.2.4.3 Setup for REMCS service of PRIMEPOWER SMC(for Point-to-Point connection)

2.2.5.3 2.2.5.3 Setup for REMCS service of PRIMEPOWER SMC(for Management Server Connection)

Please refer to the following section for setup on the SMC configured as Hot Space SMC.

 $2.2.6\ 2.2.6$ 

Please refer to "System Console Software User's Guide" for more detail regarding Hot Space SMC Configuration.

#### 2.1.2 eXtended System Control Facility(XSCF) notification

XSCF (eXtended System Control Facility) can send failure information to REMCS Center without use of the REMCS Agent.

XSCF is a system monitor/control facility that consists of processors independent of the CPU on a server. Even though a system failure or serious failure that prevents normal operation of OS occurs, this function is still able to send notification. The REMCS Agent is usually communicating with the REMCS Center. If the REMCS Agent is not available, XSCF communicates with the center in its' place. As a result, errors can be detected more completely and earlier, thereby providing improved remote customer support. Refer to "eXtended System Control Facility User's Guide" for XSCF.



#### [Support functions]

Connection type to REMCS center	REMCS agent	XSCF
Internet Connection	Supported	Supported
Internet Connection(Mail only)	Supported	Supported
Point-to-Point Connection(ISDN)	Supported	Supported
Point-to-Point Connection(VPN)	Supported	Supported
Management Server Connection	Supported	Not supported

Functions of REMCS Agent		<b>REMCS</b> agent	XSCF
Registration		Necessary	Unnecessary (*1)
Remote	Failure information	Supported	Supported
Notification	Periodical connection	Supported	Not Supported
Investigation information collection		Supported	Not supported
Reception of firmware		Supported	Not supported



\*1 XSCF uses the REMCS Agent's registration information. If registration is not done in the REMCS Agent, this function will not be enabled.

\*2 Setting of XSCF network environment is required before XSCF notification function is enabled

\*3 XSCF communicates with REMCS Center, using E-mail. Mail (SMTP) server is required.

#### [Setting up XSCF network environment]

XSCF has a special LAN port. This LAN must be connected to a Mail Server. Please refer to "1.4.1 Preparing environment" for the connection with Center. Refer to "eXtended System Control Facility User's Guide" for the setting of XSCF network.



Please confirm the setting of XSCF network environment has been completed before XSCF notification function is set. Refer to "eXtended System Control Facility User's Guide" for the setting method.

The parameter of XSCF network environment is as follows.

- $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.
- The items that have the asterisk "\*" in the "Required Item" column are needed for a setup when SMTP server or POP server are specified by name instead of IP-address.

Required item	Item	Contents
0	IP Address	IP Address of XSCF.
0	Subnet mask	Subnet mask of XSCF.
0	Gateway address	Default gateway.
0	XSCF Host Name	Host name of XSCF. The host name has to be FQDN(Fully Qualified Domain Name) format.
*	Name server	The name server is used by the name resolution of the SMTP server or POP server. IP-address. When both of them are specified by IP-address, the name server is unnecessary.

### 2.2 Setup for PRIMEPOWER models 800/900/1000/1500/250 0/HCP2500

The machine administration menuincluded in System Console Softwareand SMC REMCS Agent(installed in the System Console) are used for the following machines:

- · PRIMEPOWER800/1000/2000
- · PRIMEPOWER900/1500/2500/HPC2500

Open the machine administration menu provided by System Console Software by using the following procedure.

- 1. Log on to the system console.
- 2. Click on "Machine Administration Menu" in the tool menu window.
- 3. The Machine Administration Menu window opens.

The REMCS Agent menu can be displayed as follows.

1. Select "System-Specific Administration" from the main menu.

2. Select a machine from the System-Specific Administration menu to register it to the REMCS center. Select a machine that uses the REMCS services.



3. The menu of the selected machine is displayed.

Server0 System Specific Administration 1. Hardware Configuration Displays 2. Hardware Life-Cycle Administration 3. System Log Displays 4. Maintenance/Swapping Administration 5. Hardware Control Program (HCP) Update Administration 6. Partition System Board Administration 7. System Board Maintenance Administration 8. System/Partition Power Administration 9. System Notific ation Administration. 10. Remote Customer Support System (REMCS) Setup 11. Auto Power Control System (APCS) Administration 12. Console Connection Unit (CCU) Setup qQuit b:Back to previous menu t:Go to top menu h:Help Select(n,q,b,t,h):10

[When you selected a "High Speed Optical Interconnection"]

TN00 System-Specific Administration
<ol> <li>Hardware Configuration Displays</li> <li>System Log Displays</li> <li>Maintenance/Swapping Administration</li> <li>Hardware Control Program (HCP) Update Administration</li> <li>TN Setup</li> <li>System/Partition Power Administration</li> <li>System Notification Administration</li> <li>Remote Customer Support System (REMCS) Setup</li> </ol>
q:Quit b:Back to previous menu t:Go to top menu h:Help
Select.(1-8,q,b,t,h):8

4. Select "Remote Customer Support System (REMCS) Setup."

#### 2.2.1 Selection of connection type

First, select the desired connection type using the following procedure.

- 1. Display the "Remote Customer Support System (REMCS) Setup" menu.
- 2. If any connection type is not specified yet and the machine can be connected to the administration server, the following menu is displayed.



The following selection items are displayed.

Menu item	Outline
1. Internet Connection	Connects to the REMCS Center via the Internet with mail and HTTP.
2. Internet Connection Mail Only)	Connects to the REMCS Center via the Internet with mail only.
	Connects to the REMCS Center via the administration server.
3. Management Server Connection	In this case, the following operation is necessary.
	<ul> <li>Construction of "Management Server"</li> <li>Setting of "Advanced Agent"</li> </ul>
	Refer to "Service Center Start Guide" for detail.
4. Point-to-Point Connection (ISDN)	ISDN connection to the REMCS Center with ISDN-router.
5. Point-to-Point Connection (VPN)	Connects to the REMCS Center via broadband line such as the ADSL etc., with using VPN router.

#### 2.2.2 Internet Connection

#### 2.2.2.1 Registration

When the selection of connection type is complete, execute registration to register customer information to the REMCS Center.

· The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be

used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file ?(y,n,q):yEnter the directory. :  $\hbar mp$ The registration data were read from /tmp. Press any key.

Enter the following information from the registration menu. For items that have the white circle "o" in the required item column, the information requested is mandatory.

The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).

POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for e-mail the fields are mandatory.

When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.

The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually. This value is able to specify in a ms unit. The default value is 1000ms.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.
	Building	If the address contains the name of a building, enter the name using 40 characters or less.
0	Administrator Name	Enter the name of the administrator name of a machine using 40 characters or less. Separate the family name and given name with a blank.
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines. Enter a name that is convenient for the customer using 32 characters or less.
0	Mail server (SMTP)	Specify the name of the mail server.
0	Sender E-mail Address	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail). The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the User authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name using 64 characters or less.
*	POP Port No	Enter the POP3 Server PORT No. using 5 characters or less.

Required Item	Item	Description
*	POP User ID	Enter the user ID for POP3 Server using 64 characters or less.
*	POP Password	Enter the password of the user ID for POP3 Server using 64 characters or less.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.

When registration is complete, a confirmation message is displayed. Confirm the entry, and select "On-line registration."



- The "Creating the Upload File" option is NOT currently supported. Customers should select "On-line registration" or the installation/set-up will not be completed.
- $\cdot\,$  To register information in English, be sure to use only alphanumeric characters.

As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1.	Select	"Registration"	from	$_{\rm the}$	REMCS	Agent	menu.
----	--------	----------------	------	--------------	-------	-------	-------

Server0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name *Mail (SMTP) server *Sender E-mail Address *User authentication of SMTP An asterisk (*) indicates an in				
1. Resend 2. Update 3. Save to the directory				
q:Quit b:Back to previous men	q:Quit b:Back to previous menu t:Go to top menu h:Help			
Select one.(1-3,q,b,t,h):				

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

#### 2.2.2.2 REMCS environment settings

Afterward, use the REMCS environment setting menu of the machine administration menu. From this menu, the environment for Internet connections can be set up, including the HTTP setup and periodic connection.

Display the REMCS environment setting menu as follows.

1. "Remote Customer Support System (REMCS) Setup" is displayed.

Server0 Remote Customer Support System (REMCS) Setup menu Series name:GP7F#K###, Model name:012345678901 Check code:NM, Serial No:012345678901

1. Registration 2. REMCS Environment Setting 3. REMCS Operation 4. Change Connection Type

q:Quit b:Back to previous menu t:Go to top menu h:Help .....

Select one.(1-4, q, b, t, h):

2. Select "REMCS Environment Setting" from the menu.

Server 0 REMCS Environment Setting

MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
Connection type	Internet Connection			
Connection environment by m	ail			
*SMTP Server	XXXXXXXXXXXXXXXX			
*Sender E-mail Address	XXXXXXXXXXXXXXX			
User authentic ation of SMTP	method :POP before SMTP			
*POP Server name	XXXXXXXXXXXXXXX			
*POP Port No	:0			
*POP UserID	XXXXXX			
*POP P assword	·******			
*POP Waiting time (ms)	:1000			
Connection Environment by H	ITTP			
PROXY Server	:			
PROXY Port No	:8080			
PROXY UserID	:			
PROXY Password	:			
Periodical Connection Inform	ation			
*Schedule	:No setting			
An asterisk (*) indicates an indispensable item.				
Do you want to change the settings? (y,n,q,h):y				

Enter the needed information in the "REMCS Environment Setting" menu.

- · For the items that have the white circle "o" in the "Required Item" column, it is mandatory to enter the information requested.
- The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).
- POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for e-mail the fields are mandatory.

When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.

The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually.

This value is able to specify in a ms unit.	. The default value is 1000ms.
---	--------------------------------

Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of the mail server used for communication with REMCS.
0	Connection Environment by e-mail Sender E-mail Address	Enter the e-mail address used for communication with REMCS Center. This address is specified in the "From" line (sender address) column of the mail header to be sent from the server to the REMCS Center. The sender's e-mail address must have the qualification to send e-mail outside your domain.

Required Item	Item	Description
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name.
*	POP Port No	Enter the POP3 Server PORT No
*	POP User ID	Enter the user ID for POP3 Server.
*	POP Password	Enter the password of the user ID for POP3 Server.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
	Connection Environment by HTTP PROXY Server	Enter the host name of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY Port No.	Enter the port No. of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY User ID	Enter a user name to log onto the Proxy server.
	Connection Environment by HTTP PROXY Password	Enter the correct password to log onto the Proxy server.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specifya day of the week. And specify the operation start time and end time. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection to the REMCS Center."

After the environment is updated, perform "Checking Connection to the REMCS Center."

#### 2.2.2.3 Setup for REMCS service of PRIMEPOWER SMC

Setup the REMCS service for all "host machines". Here, "host machine" means PW800, PW900, PW1000, PW1500, PW2000, PW2500 or PW HPC2500.

You may need to setup additional configuration items of REMCS service for "High Speed Optical Interconnection" function on PRIMEPOWER HPC2500.

After completing the setup for all "host machines", start the setup of REMCS service on PRIMEPOWER SMC.

SMC itself is categorized into a system, which is not monitored by System Console.

Please refer to the section 2.4 setup for PRIMEPOWER models 1/200/250/400/450/600/650/850/SMC for details of setting.

Please read through following notes in prior to starting setup of REMCS service on SMC.

The same connection type must be specified on both SMC and "host machine".

In different connection type was specified, the REMCS Agent would provide unexpected results.

SMC and "host machine" shares some of configuration items of REMCS service. Please use the same value.

When you specify new value, the new value will be used.

Following table shows you which item is shared, and which item is independent.

For	registration
-----	--------------

Menu item	Shared	Independent
Company Name		0
Department/Division		0
Country		0
Address		0
Building		0
Administrator Name		0
E-mail Address		0
Zip/Postal Code		0
Phone Number		0
Fax Number		0
Machine Unique Name		0
Mail server (SMTP)	0	
Sender E-mail Address		0
User authentication of SMTP method	0	
POP Server name	0	
POP Port No	0	
POP User ID	0	
POP Password	0	
POP Waiting time	0	

For setup of REMCS environment

Menu item	Common in main machine	Independent main machine
Connection Environment by e-mailSMTP Server		0
Connection Environment by e-mailSender E-mail Address		0
User authentication of SMTP method		0
POP Server name	0	
POP Port No	0	
POP User ID	0	
POP Password	0	
POP Waiting time	0	
Connection Environment by HTTPPROXY Server	0	
Connection Environment by HTTPPROXY Port No.	0	

Connection Environment by HTTPPROXY User ID	0	
Connection Environment by HTTPPROXY Password	0	
Periodical Connection Information Schedule		0

#### 2.2.3 Internet Connection(MAIL Only)

#### 2.2.3.1 Registration

When the selection of connection type is complete, execute registration to register customer information to the REMCS Center.

• The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file?(y,n,q):y Enter the directory.: *h*mp The registration data were read from *h*mp. Press any key.

When a connection to the administration server is established, registration can be performed from the administration server side concurrently.

Enter the following information from the registration menu.

For items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

- $\cdot$  The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).
- · POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for e-mail the fields are mandatory.

When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.

The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually.

This value is able to specify in a ms unit. The default value is 1000ms.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.
	Building	If the address contains the name of a building, enter the name using 40 characters or less.
0	Administrator Name	Enter the name of the administrator name of a machine using 40 characters or less. Separate the family name and given name with a blank.
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines.

Required Item	Item	Description
		Enter a name that is convenient for the customer using 32 characters or less.
0	Mail server (SMTP)	Specify the name of the mail server.
0	Sender E-mail Address	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail). The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name using 64 characters or less.
*	POP Port No	Enter the POP3 Server PORT No. using 5 characters or less.
*	POP User ID	Enter the user ID for POP3 Server using 64 characters or less.
*	POP Password	Enter the password of the user ID for POP3 Server using 64 characters or less.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.

When registration is complete, a confirmation message is displayed. Confirm the entry, and select "On-line registration."



- The "Creating the Upload File" option is NOT currently supported. Customers should select "On-line registration" or the installation/set-up will not be completed.
- · To register information in English, be sure to use only alphanumeric characters.

As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1. Select "Registration" from the REMCS Agent menu.

	0		
Server 0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
*User authentication of SMTP m An asterisk (*) indicates an ind	*Department/Division:XXXXXXXXCountry:XX*Address:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
1. Resend 2. Update 3. Save to the directory			
q:Quit b:Back to previous menu t:Go to top menu h:Help			
Select one.(1-3,q,b,t,h):			

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

#### 2.2.3.2 REMCS environment settings

Afterward, use the REMCS environment setting menu of the machine administration menu. From this menu, the environment for Internet connections can be set up, including the HTTP setup and periodic connection.

Display the REMCS environment setting menu as follows.

1. "Remote Customer Support System (REMCS) Setup" is displayed.

Server0 Remote Customer Support System (REMCS) Setup menu Series name:GP7F#K###, Model name:012345678901 Check code:NM, Serial No:012345678901
1. Registration 2. REMCS Environment Setting 3. REMCS Operation 4. Change Connection Type
q:Quit b:Back to previous menu t:Go to top menu h:Help 
Select "REMCS Environment Setting" from the menu.
Server0 REMCS Environment Setting

MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Connection type	:Internet Connection(MAIL Only)
Connection environment by n	nail
*SMTP Server	XXXXXXXXXXXXXXXX
*Sender E-mail Address	XXXXXXXXX
User authentication of SMTP	method :POP before SMTP
*POP Server name	XXXXXXXXX
*POP Port No	:0
*POP UærID	XXXXXX
*POP Password	******
*POP Waiting time (ms)	:1000
Periodical Connection Inform	ation
*Schedule	:No setting
An asterisk (*) indicates and	indispensable item.
Do you want to change the set	tings? (y,n,q,h):

Enter the needed information in the "REMCS Environment Setting" menu.

- $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, it is mandatory to enter the information requested.
- The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).
- POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for e-mail the fields are mandatory.
- When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.
- The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually.

This v	alue is able	to specify in a	a ms unit.	The default va	lue is 1000ms.

Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of the mail server used for communication with REMCS.

2.

Required Item	Item	Description
0	Connection Environment by e-mail Sender E-mail Address	Enter the e-mail address used for communication with REMCS Center. This address is specified in the "From" line (sender address) column of the mail header to be sent from the server to the REMCS Center. The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name.
*	POP Port No	Enter the POP3 Server PORT No
*	POP User ID	Enter the user ID for POP3 Server.
*	POP Password	Enter the password of the user ID for POP3 Server.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. The periodic connection is established once every week within operating hours on the specified day. Specify a day of the week, and the operation start time and end time of the specified day of the week. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection to the REMCS Center."

#### 2.2.3.3 Setup for REMCS service of PRIMEPOWER SMC

Setup the REMCS service of all machines.

Using PRIMEPOWER HPC2500, in addition to setup main machine's service, setup the REMCS service of High Speed Optical Interconnection.

After completing the setup for all "host machines", start the setup of REMCS service on PRIMEPOWER SMC.

SMC itself is categorized into a system, which is not monitored by System Console.

Please refer to the section 2.4 setup for PRIMEPOWER models 1/200/250/400/450/600/650/850/SMC for details of setting.

Please read through following notes in prior to starting setup of REMCS service on SMC.

The same connection type must be specified on both SMC and "host machine".

If different connection type was specified, the REMCS Agent would provide unexpected results.

SMC and "host machine" shares some of configuration items of REMCS service. Please use the same value.

When you specify new value, the new value will be used.

Following table shows you which item is shared, and which item is independent.

For registration

Menu item	Shared	Independent
Company Name		0
Department/Division		0
Country		0
Address		0

Building		0
Administrator Name		0
E-mail Address		0
Zip/Postal Code		0
Phone Number		0
Fax Number		0
Machine Unique Name		0
Mail server (SMTP)	0	
Sender E-mail Address		0
User authentication of SMTP method	0	
POP Server name	0	
POP Port No	0	
POP User ID	0	
POP Password	0	
POP Waiting time	0	

For setup REMCS environment

Menu item	Common in main machine	Independent main machine
Connection Environment by e-mail SMTP Server	0	
Connection Environment by e-mail Sender E-mail Address		0
User authentication of SMTP method	0	
POP Server name	0	
POP Port No	0	
POP User ID	0	
POP Password	0	
POP Waiting time	0	
Periodical Connection Information Schedule		0

#### 2.2.4 Point-to-Point(ISDN/VPN) Connection

#### 2.2.4.1 Registration

When the selection of connection type is complete, execute registration to register customer information to the REMCS Center.

• The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file ?(y,n,q):y Enter the directory. : Amp The registration data were read from /tmp. Press any key.

Enter the following information from the registration menu.

· For items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.
	Building	If the address contains the name of a building, enter the name using 40 characters or less.
0	Administrator Name	Enter the name of the administrator name of a machine using 40 characters or less. Separate the family name and given name with a blank.
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines. Enter a name that is convenient for the customer using 32 characters or less.
0	Mail server (SMTP)	Specify the name of the mail server.
0	Sender E-mail	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail).
U	Address	Sender e-mail address must have the qualification to send e-mail outside your domain.

When registration is complete, a confirmation message is displayed. Confirm the entry, and select "On-line registration."



- · The "Creating the Upload File" option is NOT currently supported. Customers should select "On-line registration" or the installation/set-up will not be completed.
- $\cdot$  To register information in English, be sure to use only alphanumeric characters.

As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

1. Select "Registration" from the REMCS Agent menu.

Server 0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name *Mail (SMTP) server *Sender E-mail Address An asterisk (*) indicates an 1. Resend 2. Update 3. Save to the directory	XXXXXXX XX XX XXXXXXXXXXXXXXXXXXXXXXXX
q:Quit b:Back to previous menu t:Go to top menu h:Help	
Select one.(1-3,q,b,t,h):	

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

#### 2.2.4.2 REMCS environment settings

Afterward, use the REMCS environment setting menu of the machine administration menu. From this menu, the environment for Point-to-Point connections can be set up, including the HTTP setup and periodic connection.

Display the REMCS environment setting menu as follows.



2. Select "REMCS Environment Setting" from the menu.
| Server 0 REMCS Environment Setting              |   |  |  |
|---|---|--|--|
| MachineID (cannot renew)<br>Connection type     | :00PRIMEPWR#################################### |  |  |
| Connection environment by mail<br>*SMTP Server  | ****  |  |  |
| *Sender E-mail Address                          | XXXXXXX@XXXXXXXXXXXXX                           |  |  |
| *User authentication of SMTP me                 | thod :XXXX                                      |  |  |
| Connection Environment by HTTP                  |   |  |  |
| PROXY Server                                    | :XXXXXXXXXXXXXXXXXX                             |  |  |
| PROXY Port No                                   | XXXX  |  |  |
| PROXY UserID                                    | XXXXXXXX  |  |  |
| PROXY Password                                  | XXXXXXXX  |  |  |
| Periodical Connection Information               | Periodical Connection Information               |  |  |
| *Schedule                                       | XXXXXXXXXX                                      |  |  |
| An asterisk (*) indicates an indisp             | ensable item.                                   |  |  |
|   |   |  |  |
|   |   |  |  |
| Do you want to change the setting s? (y,n,q,h): |   |  |  |

Enter the needed information in the "REMCS Environment Setting" menu.

 $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of the mail server used for communication with REMCS.
0	Connection Environment by e-mail Sender E-mail Address	Enter the e-mail address used for communication with REMCS Center. This address is specified in the "From" line (sender address) column of the mail header to be sent from the server to the REMCS Center. The sender's e-mail address must have the qualification to send e-mail outside your domain.
0	Connection Environment by HTTP PROXY Server	Enter the name of the HTTP-Proxy server.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the start time for the periodic connection.

When registration is complete, a confirmation message is displayed. Check the entry and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection to the REMCS Center."

### 2.2.4.3 Setup for REMCS service of PRIMEPOWER SMC

Setup the REMCS service of all machines.

Using PRIMEPOWER HPC2500, in addition to setup main machine's service, setup the REMCS service of High Speed Optical Interconnection.

After completing the setup for all "host machines", start the setup of REMCS service on PRIMEPOWER SMC.

SMC itself is categorized into a system, which is not monitored by System Console.

Please refer to the section 2.4 setup for PRIMEPOWER models 1/200/250/400/450/600/650/850/SMC for details of setting.

Please read through following notes in prior to starting setup of REMCS service on SMC.

The same connection type must be specified on both SMC and "host machine".

If different connection type was specified, the REMCS Agent would provide unexpected results.

SMC and "host machine" shares some of configuration items of REMCS service. Please use the same value.

When you specify new value, the new value will be used.

Following table shows you which item is shared, and which item is independent.

#### For registration

Menu item	Shared	Independent
Company Name		0
Department/Division		0
Country		0
Address		0
Building		0
Administrator Name		0
E-mail Address		0
Zip/Postal Code		0
Phone Number		0
Fax Number		0
Machine Unique Name		
Mail server (SMTP)	0	
Sender E-mail Address		0

For setup of REMCS environment

Menu item	Common in main machine	Common in main machine
Connection Environment by e-mail SMTP Server		0
Connection Environment by e-mail Sender E-mail Address		0
Connection Environment by HTTPPROXY Server	0	
Periodical Connection Information Schedule		0

### 2.2.5 Management Server Connection

### 2.2.5.1 REMCS environment settings

After selecting the Management Server Connection from the connection type menu,

set up the Management Server environment using the REMCS environment setting menu of the machine administration menu.

1. Select the "4. Management Server Connection" from the connection type menu.

Server0 Remote Customer Support System (REMCS) Setup menu Series name: PRIMEPOWER#X, Model name: XXXXXXXXXXXX Check code: XX, Serial No: XXXXXXXXXXXXX
Setting of Connection Type Present connection type : XXXXXXX
<ol> <li>Internet Connection</li> <li>Internet Connection (MAIL Only)</li> <li>Point-to-Point Connection</li> <li>Management Server Connection</li> </ol>
q:Quit b:Back to previous menu t:Go to top menu h:Help
Select one.(1-4, q, b,t,h):4

The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for environment data. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read environment data from file?(y,n,q):y
Enter the directory. : Amp
Wait for a while
The environment data were read from <i>I</i> tmp.
Press any key.

2. Select "2. REMCS Environment Setting" from the menu.

server0 REMCS Environment Setting

	-		
MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
Connection type	:Management Server Connection		
Connection Environment by HT	TP		
PROXY Server			
PROXY Port No	:8080		
PROXY UserID	:		
PROXY Password	:		
*Management Server information (indispensable in case of Management Server Connection)			
Management Server	;		
Periodical Connection Information			
*Schedule	:No settiong		
An asterisk (*) indicates an indi	spensable item.		
Update -> REMCS Environment			

Enter the needed information in the "REMCS Environment Setting" menu.

 $\cdot$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

Required Item	Item	Description
	Connection Environment by HTTP PROXY Server	Enter the host name of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY Port No.	Enter the port No. of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY User ID	Enter a user name to log onto the Proxy server.
	Connection Environment by HTTP	Enter the correct password to log onto the Proxy server.

Required Item	Item	Description
	PROXY Password	
0	Management Server Name	Enter the Management Server name.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the start time for the periodic connection. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry and select "Updating the REMCS Environment."

After the environment is updated, perform "registration to the Management Server."

### 2.2.5.2 Registration

After completion of the registration to the Management Server, registration to the REMCS Center with the customer's information is needed.

Please select in the "Registration from the Management Server".

```
Registration

1. Registration from Management Server

2. Registration from the Current Machine

Select one.(1-2):

Please execute Customer Registration from Management Server.

Press any key.
```



- · To register information in English, be sure to use only alphanumeric characters.
- If you select "Registration from the Current Machine", REMCS agent of specific version as described before asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, in prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file?(y,n,q):y Enter the directory. :*I*tmp The registration data were read from *I*tmp. Press any key.

As described before, REMCS agent of specific revision can reuse registration data and environment data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1. Select "Registration" from the REMCS Agent menu.

Server0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name An asterisk (*) indicates an in	XXXXXXX XXXXXXXXXXX XX XXXXXXXXXXXXXXX	
1. Resend 2. Update 3. Save to the directory		
q:Quit b:Back to previous mer	nu t:Go to top menu h:Help	
Select one.(1-3,q,b,t,h):		

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

### 2.2.5.3 Setup for REMCS service of PRIMEPOWER SMC

Setup the REMCS service of all machines.

Using PRIMEPOWER HPC2500, in addition to setup main machine's service, setup the REMCS service of High Speed Optical Interconnection.

After completing the setup for all "host machines", start the setup of REMCS service on PRIMEPOWER SMC.

SMC itself is categorized into a system, which is not monitored by System Console.

Please refer to the section 2.4 setup for PRIMEPOWER models 1/200/250/400/450/600/650/850/SMC for details of setting.

Please read through following notes in prior to starting setup of REMCS service on SMC.

The same connection type must be specified on both SMC and "host machine".

If different connection type was specified, the REMCS Agent would provide unexpected results.

SMC and "host machine" shares some of configuration items of REMCS service. Please use the same value.

When you specify new value, the new value will be used.

Following table shows you which item is shared, and which item is independent.

For registration

Menu item	Shared	Independent
Company Name		0
Department/Division		0
Country		0
Address		0
Building		0
Administrator Name		0
E-mail Address		0
Zip/Postal Code		0
Phone Number		0

Fax Number	0
Machine Unique Name	0

For setup of REMCS environment

Menu item	Common in main machine	Independent main machine
Connection Environment by e-mail SMTP Server	0	
Connection Environment by HTTPPROXY Port No.	0	
Connection Environment by HTTPPROXY User ID	0	
Connection Environment by HTTPPROXY Password	0	
Management Server Name	0	
Periodical Connection Information Schedule		0

### 2.2.6 REMCS service for Hot Spare SMC Configuration

When you are using the Hot Spare SMC Configuration, please setup the REMCS service in the following procedures.

- 1. Setup the REMCS service for the monitored "host machine" by side of Service SMC.
- 2. Setup the REMCS service for Service SMC by side of itself.
- 3. Setup the REMCS service for Standby SMC by side of itself.

It is necessary to set the same value to Service SMC and Standby SMC in common item.

Please perform connection check by Standby SMC.

When a setup is changed by the Service SMC, the Standby side should change a setup similarly.

Please refer to the System Console Software User's Guide for Hot Spare SMC Configuration.

### 2.3 Operation of PRIMEPOWER models 800/900/1000/1500/ 2500/HCP2500

### 2.3.1 Operation

The connection to the REMCS Center can be checked by the operation menu in the machine administration menu.

The machine operation menu can be displayed as follows.

- 1. Display "Remote Customer Support System (REMCS) Setup."
- 2. Select "REMCS Operation Setting" from the REMCS Agent menu.

Server0 REMCS Operation Setting menu Present state (The system is operating normally:)	
<ol> <li>Connection check with REMCS Center</li> <li>Tentative stop of connection with REMCS Center</li> <li>Resume connection with REMCS Center</li> <li>Manual reception of Hardware Control Program(HCP)</li> </ol>	
q:Quit b:Back to previous menu 1:Go to top menu h:Help	
Select one.(1-4g.b,t.h):	

The following operations can be performed by using the machine operation menu.

Menu item	Outline
1. Connection check with REMCS Center	Checks a connection to the REMCS Center.
2. Tentative stop of connection with REMCS Center	Suspends a connection to the REMCS Center tentatively.
3. Resume connection with REMCS Center	Releases the tentative stop of communication,
4. Manual reception of Hardware Control Program(HCP)	Downloads the Hardware Control Program(HCP) in a manual operation. In the case of the Internet Connection (MAIL Only), this operation is unavailable.

# 2.3.2 Display and modification of different kinds of information after start of o peration

Information that is defined during installation of this machine can be displayed and updated by using the machine administration menu.

After the registration has completed, the following menus can be displayed in the "Remote Customer Support System (REMCS) Setup " menu.

Menu item	Outline
1. Registration	Registers customer information and machine configuration information to REMCS Center.
2. REMCS environment setting	Sets up an environment for connection.
3. Operation	Checks a connection to the REMCS Center.
4. Change of Connection Type	Changes connection type with the REMCS Center.

If you want to change the REMCS environment, please change the setup on "host machine", first. And then, change the setup on SMC. It is the same procedure, which is done For initial setup. It is not necessary to setup shared items on SMC because value changed on "host machine" will be used.

When you are using a Hot Spare SMC Configuration, please apply same change on Standby SMC.

Following table shows you which item is shared, and which item is independent.

Menu item	Shared	Independent
Connection Environment by e-mail		0
Sender E-mail Address		0
User authentication of SMTP method		0
POP Server name		0
POP Port No		0
POP User ID		0
POP Password		0
POP Waiting time		0
Connection Environment by HTTPPROXY Server	0	
Connection Environment by HTTPPROXY Port No.	0	
Connection Environment by HTTPPROXY User ID	0	
Connection Environment by HTTPPROXY Password	0	
Periodical Connection		0

Information Schedule		
----------------------	--	--

When you change the connection type, please perform according to the following procedures.

- 1. Change the connection type of "host machines", which are monitored by SMC.
- 2. Setup REMCS environment on "host machine".
- 3. If more than one "host machine" are monitored by one SMC, and if it's not first time for modification on "host machine", select "registration" instead of changing of connection type. And then, choose "resend".
- 4. Perform registration on SMC,. And, select "update".
- 5. When the SMC is in a hot spare configuration, set up the REMCS service on the service SMC first, and then set up the standby SMC next.

If you change the settings above, except the connection type, you do not need to change them on the PRIMEPOWER SMC.

When you change the connection type, you also need to change it on the PRIMEPOWER SMC.

When the connection type is different between the Service and Standby, the REMCS Agent will provide unexpected results.

### 2.3.3 Collecting software investigation information

Software investigation information can be collected by using the operation menu of machine administration.

The software investigation information collection menu is included in Enhanced Support Facility in the machine OS. Use the machine administration menu. For details, refer to "2.4 Setup for PRIMEPOWER models 1/200/250/400/450/600/650/850/SMC".

- 1. Display "Remote Setup."
- 2. Select "Software Investigation Information Collection."

For a detailed explanation of using software investigation information collection, see Chapter 3 Chapter 3, "Collection of Software Investigation Material."

### 2.4 Setup for PRIMEPOWER models 1/200/250/400/450/600/ 650/850/SMC

The machine administration menuincluded in Enhanced Support Facility is used for the following models used as a machine.

- · PRIMEPOWER1/200/400/600/650/850
- · PRIMEPOWER250/450
- · PRIMERPOWER SMC

The machine administration menu provided by the Enhanced Support Facility can be opened as follows.

1. Enter the following command.

/usr/sbin/FJSV machn/machnin

2. For PRIMEPOWER 200/400/600 models, the machine administration menu is displayed as follows.

Machine Achainistration Manu
1. Hardware Configuration
2. Hardware Monitoring Information
3. RCI-related Settings
4. Log Data
5. Hot Swapping Guide
6. Diagnostic Program
7. Remote Setup
<ol><li>Option Menu</li></ol>
9. Version Information
10. Exit
q:Quit b:Back to previous menu t:Go to topmenu hHelp
Select(1-10,q):7

For PRIMEPOWER 650/850 models, the following menus are displayed as follows.

Machine Administration Menu
<ol> <li>Hardware Configuration Displays</li> <li>Hardware Monitoring Information</li> <li>Remote Cabinet Interface (RCI) Administration</li> <li>UPS Administration</li> <li>System Log Administration</li> <li>Maintenance/Swapping Administration</li> <li>System Specific Administration</li> <li>FJVTS Diagnostic Program</li> <li>Remote Setup</li> <li>Auto Power Control System (APCS) Administration</li> <li>Option Menu</li> <li>Machine Administration Version/Patch Information</li> </ol>
<ul> <li>raining Administration version Fatch Information</li> <li>13. Exit</li> <li>q:Quit b:Back to previous menu t:Go to top menu h:Help</li> </ul>
Select(1-13,q):

For PRIMEPOWER 250/450 models, the following menus are displayed as follows.



The REMCS Agent menu can be displayed as follows.

1. Select "Remote Setup" from the machine administration menu.

### 2.4.1 Selection of connection type

First, select the connection type as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. If registration is not executed, the following menu is displayed.



The following selection items are on the menu.

Menu item	Outline
1. Internet Connection	Connects to the REMCS Center via the Internet with mail and HTTP.
2. Internet Connection (Mail Only)	Connects to the REMCS Center via the Internet with mail only.
	Connects to the REMCS Center via the administration server.
3. Management Server Connection	In this case, the following operation is necessary.
	<ul> <li>Construction of "Management Server"</li> <li>Setting of "Advanced Agent"</li> </ul>
	Refer to "Service Center Start Guide" for detail.
4. Point-to-Point Connection (ISDN)	ISDN connection to the REMCS Center with ISDN-router.
5. Point-to-Point Connection (VPN)	Connects to the REMCS Center via broadband line such as the ADSL etc., with using VPN router.

### 2.4.2 Internet Connection

### 2.4.2.1 Registration

If Internet Connection is selected from the above menu, register customer information to the REMCS Center.

• The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file ?(y,n,q):yEnter the directory. : Atmp The registration data were read from Atmp. Press any key.

Enter the following information in the Registration menu.

- $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.
- $\cdot$  For items that have the asterisk "\*" in the "Required Item" column, are needed for a setup with user authentication of SMTP (POP before SMTP).

POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for e-mail the fields are mandatory.

When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.

The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.
	Building	If the address contains the name of a building, enter the name using 40 characters or less.
0	Administrator Name	Enter the name of the administrator name of a machine using 40 characters or less. Separate the family name and given name with a blank.

This value is able to specify in a ms unit. The default value is 1000ms.

Required Item	Item	Description
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines. Enter a name that is convenient for the customer using 32 characters or less.
0	Mail server (SMTP)	Specify the name of the mail server.
0	Sender E-mail Address	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail). The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name using 64 characters or less.
*	POP Port No	Enter the POP3 Server PORT No. using 5 characters or less.
*	POP User ID	Enter the user ID for POP3 Server using 64 characters or less.
*	POP Password	Enter the password of the user ID for POP3 Server using 64 characters or less.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
	Address for the machine	Enter an address where the machine is placed, using 60 characters or less.
	Building for the machine	If the address contains the name of a building where the machine is placed, enter the name using 40 characters or less.

When registration is complete, a confirmation message is displayed. Confirm the entry and select "On-line registration."



- The "Creating the Upload File" is NOT currently supported. Customers should select "On-line registration" or the installation/Set-up will not be completed.
- · To register information in English, be sure to use only alphanumeric characters.
- Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished. When following models use Enhanced Support Facility 2.4 or later.
  - PRIMEPOWER250/450/650/850

As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1. Select "Registration" from the REMCS Agent menu.

machine0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name *Mail (SMTP) ærver *Sender E-mail Address Uær authentication of SMTP Address for the machine Building for the machine An asterisk (*) indicates an i	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
1. Resend 2. Update 3. Save to the directory q:Quit b:Back to previous met	nu t:Go to top menu h:Help	
Select one.(1-3, q, b, t, h):		

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

### 2.4.2.2 REMCS environment settings

Specify the HTTP setup and the periodic connection schedule by using the REMCS environment setting menu of the machine administration menu.

The REMCS environment setting menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu.



3. Select "REMCS Environment Setting."

Server 0 REMCS Environment	: Setting
MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Connection type	Internet Connection
Connection environment by m	nail
*SMTP Server	XXXXXXXXXXXXXXXX
*Sender E-mail Address	XXXXXXXXXXXXXXX
User authentic ation of SMTP	method :POP before SMTP
*POP Server name	XXXXXXXXXXXXXX
*POP Port No	:0
*POP UserID	XXXXXX
*POP P assword	.******
*POP Waiting time (ms)	:1000
Connection Environment by H	HTTP
PROXY Server	:
PROXY Port No	:8080
PROXY UserID	:
PROXY Password	:
Periodical Connection Inform	ation
*Schedule	:No setting
An asterisk (*) indicates an in	dispensable item.
Do you want to change the set	tang s? (y,n,q,h):y

Enter the needed information in the "REMCS Environment Setting" menu.

- $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.
- Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished.
- When following models use Enhanced Support Facility 2.4 or later. PRIMEPOWER250/450/650/850

Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of the mail server used for communication with REMCS.
0	Connection Environment by e-mail Sender E-mail Address	Enter the e-mail address used for communication with REMCS Center. This address is specified in the "From" line (sender address) column of the mail header to be sent from the server to the REMCS Center. The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name.
*	POP Port No	Enter the POP3 Server PORT No
*	POP User ID	Enter the user ID for POP3 Server.
*	POP Password	Enter the password of the user ID for POP3 Server.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
	Connection Environment by HTTP PROXY Server	Enter the host name of the HTTP-Proxy server.
	Connection Environment by HTTP	Enter the port No. of the HTTP-Proxy server.

Required Item	Item	Description
	PROXY Port No.	
	Connection Environment by HTTP PROXY User ID	Enter a user name to log onto the Proxy server.
	Connection Environment by HTTP PROXY Password	Enter the correct password to log onto the Proxy server.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the operation start time and end time. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry, and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection with REMCS Center."

### 2.4.2.3 REMCS environment settings via XSCF (applies to PRIMEPOWER mod els 250/450 only)

If you want to connect to the REMCS Center via XSCF, set REMCS environmentvia XSCF after the setting of REMCS environment. Even in case OS, and REMCS agent on the OS, cannot work due to failure, systems, which are described in "2.1 Using the Services", can inform several events to REMCS Center with using XSCF. If you do not need to connect to the REMCS Center via XSCF, skip "REMCS Environment Setting via XSCF". In this case, only the REMCS agent on the OS will connect to the REMCS Center.

Please confirm that the setting of the XSCF network environment is completed before the XSCF notification function is set. Refer to "eXtended System Control Facility User's Guide" for the setting instructions.

The REMCS environment setting via XSCF menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu.



3. Select "REMCS Environment Setting via XSCF".

Server0 REMCS Environment	Setting
---------------------------	---------

MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Connection type	:Internet Connection(MAIL Only)
Connection environment by r	nail
*SMTP Server	XXXXXXXXXXXXXXXXX
*Sender E-mail Address	XXXXXXXXX
User authentication of SMTP	method : POP before SMTP
*POP Server name	XXXXXXXXXX
*POP Port No	:0
*POP UserID	XXXXXX
*POP Password	*******
*POP Waiting time (ms)	:1000
Periodical Connection Inform	ation
*Schedule	:No setting
An asterisk (*) indicates an :	indispensable item.
Do you want to change the set	tings? (y,n,q,h):

Enter the following information in the REMCS environment setting via XSCF menu. - For the items that have the white circle "o" in the "Required item" column, the information requested is mandatory.

- The items that have the asterisk "\*" in the "Required Item" column, are need for a setup with user authentication of SMTP (POP before SMTP).

Required Item	Item	Description
	REMCS via XSCF	Select enable/disable REMCS via XSCF
o REMCS via XSCF	0: Disable ,1:Enable	
0	SMTP Server1 name	Enter the name of the mail server (SMTP Server1) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication	Select the user authentication of SMTP method for SMTP Server1,
	of SMTP method1	0: none ,1:POP before SMTP
*	POP Server name for SMTP Server1	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP User ID for SMTP Server1	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP Password for SMTP Server1	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
	SMTP Server2 name	Enter the name of the mail server (SMTP Server2) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method2	Select the user authentication of SMTP method for SMTP Server2, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server2	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP User ID for SMTP Server2	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP Password for SMTP Server2	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.

4. Select " Write Environment Setting to XSCF".

After input of all required items, check the entry, and select "Write Environment Setting to XSCF".

5. Check the mail from the REMCS Center

After the environment is updated, checking connection with REMCS Center is performed. After the REMCS Center makes a confirmation, mail is returned to the administrator. Check the mail from the REMCS Center.

### 2.4.3 Internet Connection (MAIL Only)

#### 2.4.3.1 Registration

If Internet Connection is selected from the above menu to select the connection type, register customer information to the REMCS Center.

The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file ?(y,n,q):yEnter the directory. : *I*tmp The registration data were read from *I*tmp. Press any key.

Enter the following information in the Registration menu.

- $\cdot\,$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.
- $\cdot$  The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).
- $\cdot\,$  POP Server name, POP User ID, and POP password are supplied without a default value. If using "POP" for a e-mail the fields are mandatory.

When the POP Port No 0 is set up, the Port is referenced from the /etc/inet/services file of the machine. When a port is not able to be acquired from a /etc/inet/services file, 110 (standard Port No of POP3) is used.

The item "POP waiting time" is the waiting time which it takes after the authentication by the POP3 server before starting the mail transmission to the SMTP server actually.

This value is able to s	pecify in a ms	unit. The default value is 1000ms.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.
	Building	If the address contains the name of a building, enter the name using 40 characters or less.
0	Administrator Name	Enter the name of the administrator name of a machine using 40 characters or less. Separate the family name and given name with a blank.
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines. Enter a name that is convenient for the customer using 32 characters or less.
0	Mail server (SMTP)	Specify the name of the mail server.
0	Sender E-mail Address	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail).

Required Item	Item	Description
		The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of	Select the user authentication of SMTP method,
	SMTP method	0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name using 64 characters or less.
*	POP Port No	Enter the POP3 Server PORT No. using 5 characters or less.
*	POP User ID	Enter the user ID for POP3 Server using 64 characters or less.
*	POP Password	Enter the password of the user ID for POP3 Server using 64 characters or less.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
	Address for the machine	Enter an address where the machine is placed, using 60 characters or less.
	Building for the machine	If the address contains the name of a building where the machine is placed, enter the name using 40 characters or less.

When registration is complete, a confirmation message is displayed. Confirm the entry and select "On-line registration."



- The "Creating the Upload File" option is NOT currently supported. Customers should select "On-line registration" or the installation/set-up will not completed.
- $\cdot\,$  To register information in English, be sure to use only alphanumeric characters.
- Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished.
   When following models use Enhanced Support Facility 2.4 or later.

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As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1. Select "Registration" from the REMCS Agent menu.

machine0 Customer registrati MachineID (00PRIMEPWR#X	ion data: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name *Mail (SMTP) ærver *Sender E-mail Address Uær authentication of SMTP Address for the machine Building for the machine An asterisk (*) indicates an i	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1. Resend 2. Update 3. Save to the directory q:Quit b:Back to previous met	nu t:Go to top menu h:Help
Select one.(1-3, q, b, t, h):	

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

### 2.4.3.2 REMCS environment settings

Specify the HTTP setup and the periodic connection schedule by using the REMCS environment setting menu of the machine administration menu.

The REMCS environment setting menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu.



3. Select "REMCS Environment Setting."

Server0 REMCS Environment	Setting
MachineID (cannot renew) Connection type	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Connection environment by m	
*SMTP Server	XXXXXXXXXXXXXXXX
*Sender E-mail Address	
	method :POP before SMTP
*POP Server name	XXXXXXXXXX
*POP Port No	:0
*POP UserID	XXXXXX
*POP Password	.******
· · · · · · · · · · · · · · ·	:1000
Periodical Connection Informa	
*Schedule	:No setting
An asterisk (*) indicates an i	ndispensable item.

Do you want to change the settings? (y,n,q,h):

Enter the needed information in the "REMCS Environment Setting" menu.

- For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.
- · Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished. When following models use Enhanced Support Facility 2.4 or later.

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Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of the mail server used for communication with REMCS.
	Connection	Enter the e-mail address used for communication with REMCS Center.
0	Environment by e-mail	This address is specified in the "From" line (sender address) column of the mail header to be sent from the server to the REMCS Center.
	Sender E-mail Address	The sender's e-mail address must have the qualification to send e-mail outside your domain.
	User authentication of SMTP method	Select the user authentication of SMTP method, 0: none ,1:POP before SMTP
*	POP Server name	Enter the POP3 Server name.
*	POP Port No	Enter the POP3 Server PORT No
*	POP User ID	Enter the user ID for POP3 Server.
*	POP Password	Enter the password of the user ID for POP3 Server.
*	POP Waiting time	Enter the waiting time before starting mail transmission after POP3 attestation using 5 characters or less.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the operation start time and end time. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry, and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection with REMCS Center."

# 2.4.3.3 REMCS environment settings via XSCF(applies to PRIMEPOWER model s 250/450 only)

If you want to connect to the REMCS Center via XSCF, set REMCS environmentvia XSCF after the setting of REMCS environment. Even in case OS, and REMCS agent on the OS, cannot work due to failure, systems, which are described in "2.1 Using the Services", can inform several events to REMCS Center with using XSCF. If you do not need to connect to the REMCS Center via XSCF, skip "REMCS Environment Setting via XSCF". In this case, only the REMCS agent on the OS will connect to the REMCS Center.

Please confirm that the setting of the XSCF network environment is completed before the XSCF notification function is set. Refer to "eXtended System Control Facility User's Guide" for the setting instruction.

The REMCS environment setting via XSCF menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu. Remote Setup Menu 1. Registration 2. REMCS Environment Setting 3. REMCS Operation 4. Change Connection Type 5. Software Investigation Information Collection q:Quit b:Back to previous menu -t:Go to top menu -h:Help-Select one.(1-5,q,b,t,h): 3. Select "REMCS Environment Setting via XSCF" Server0 REMCS Environment Setting MachineID (cannot renew) Connection type :Internet Connection(MAIL Only) Connection environment by mail \*SMTP Server :XXXXXXXXXXXXXXXXXXXX \*Sender E-mail Address XXXXXXXXXXX :POP before SMTP User authentication of SMTP method \*POP Server name XXXXXXXXXXX \*POP Port No :0 \*POP UserID :XXXXXX \*\*\*\*\* \*POP Password \*POP Waiting time (ms) :1000 Periodical Connection Information \*Schedule :No setting An asterisk (\*) indicates an indispensable item. Do you want to change the settings? (y,n,q,h):

Enter the following information in the REMCS environment setting menu.

- For the items that have the white circle "o" in the "Required item" column, the information requested is mandatory.

- The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).

Required Item	Item	Description
0	REMCS via XSCF	Select enable/disable REMCS via XSCF 0: Disable .1:Enable
0	SMTP Server1 name	Enter the name of the mail server (SMTP Server1) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication	Select the user authentication of SMTP method for SMTP Server1,

Required Item	Item	Description
	of SMTP method1	0: none ,1:POP before SMTP
*	POP Server name for SMTP Server1	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP User ID for SMTP Server1	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP Password for SMTP Server1	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
	SMTP Server2 name	Enter the name of the mail server (SMTP Server2) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method2	Select the user authentication of SMTP method for SMTP Server2, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server2	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP User ID for SMTP Server2	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP Password for SMTP Server2	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.

4. Select "Write Environment Setting to XSCF".

After input of all required items, check the entry, and select " Write Environment Setting to XSCF" 5. Check the mail from the REMCS Center

After the environment is updated, checking connection with REMCS Center is performed. After the REMCS Center makes a confirmation, mail is returned to the administrator. Check the mail from the REMCS Center

#### 2.4.4 Point-to-Point(ISDN/VPN) Connection

### 2.4.4.1 Registration

If Internet Connection is selected from the above menu to select the connection type, register customer information to the REMCS Center.

• The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file ?(y,n,q):y		
Enter the directory. : Amp		
The registration data were read from /tmp.		
Press any key.		

Enter the following information in the Registration menu.

• For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

Required Item	Item	Description
0	Company Name	Enter a company name using 60 characters or less.
0	Department/ Division	Enter the name of a department/division using 40 characters or less.
	Country	Enter a country name using 2 characters or less.
0	Address	Enter an address using 60 characters or less.

Required Item	Item	Description
	Building	If the address contains the name of a building, enter it using 40 characters or less.
0	Administrator Name	Enter the name of the administrator of a machine using 40 characters or less. Separate the family name and given name with a blank.
0	E-mail Address	Enter the e-mail address of the administrator using 60 characters or less.
	Zip/Postal Code	Enter the zip/postal code of the address using 10 characters or less.
0	Phone Number	Enter a phone number using 20 characters or less.
	Fax Number	Enter a fax number using 20 characters or less.
	Machine Unique Name	This is a name used by a customer and our engineer to specify one of the customer's machines. Enter a name that is convenient for the customer using 32 characters or less.
0	SMTP server	Enter the name of the mail server.
0	Sender E-mail Address	Enter the sender's e-mail address (equivalent to "from" of ordinary e-mail). Sender e-mail address must have the qualification to send e-mail outside your domain.
	Address for the machine	Enter an address where the machine is placed, using 60 characters or less.
	Building for the machine	If the address contains the name of a building where the machine is placed, enter the name using 40 characters or less.

When registration is complete, a confirmation message is displayed. Confirm the entry and select "On-line registration."



- The "Creating the Upload File" option is NOT currently supported. Customers should select "On-line registration" or the installation/set-up will not be completed.
- To register information in English, be sure to use only alphanumeric characters.
- Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished.
- When following models use Enhanced Support Facility 2.4 or later.

 $\mathbf{PRIMEPOWER250}/450/650/850$ 

As described before, REMCS agent of specific revision can reuse registration data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

1. Select "Registration" from the REMCS Agent menu.

machine0 Customer registrat MachineID (00PRIMEPWR#2	ion data: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
*Company Name *Department/Division Country *Address Building *Administrator Name *E-mail address Zip/Postal Code *Phone Number Fax Number Machine Unique Name *Mail (SMTP) ærver *Sender E-mail Address Uær authentication of SMTF Address for the machine Building for the machine An asterisk (*) indicates an i	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1. Resend 2. Update 3. Save to the directory q.Quit b:Back to previous me	nu t:Go to top menu h:Help

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

### 2.4.4.2 REMCS environment settings

 $Specify \ the \ HTTP \ setup \ and \ the \ periodic \ connection \ schedule \ by \ using \ the \ REMCS \ environment \ setting \ menu \ of \ the \ machine \ administration \ menu.$ 

The REMCS environment setting menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu.

Server0 Remote Customer Support System (REMCS) Setup menu Series name:GP7F#K###, Model name:012345678901 Check code:NM, Serial No:012345678901
<ol> <li>Registration</li> <li>REMCS Environment Setting</li> <li>REMCS Operation</li> <li>Change Connection Type</li> </ol>
q:Quit b:Back to previous menu t:Go to top menu h:Help
Select one.(1-4, q, b, t, h):

3. Select "REMCS Environment Setting."

Server 0 REMCS Environment Setting			
MachineID (cannot renew) Connection type Connection environ ment by mail	:00PRIMEPWR####################################		
*SIMTP Server	:XXXXXXX.XXXXXXXXX		
*Sender E-mail Address	:XXXXXX@XXXX.XXXX.XXX		
*User authentication of SMTP me	thod :XXXX		
Connection Environment by HTTP			
PROXY Server	:XXXXXXXXXXXXXXXXXX		
PROXY Port No	XXXX		
PROXY UserID	PROXY UserID :XXXXXXXX		
PROXY Password :XXXXXXXX			
Periodical Connection Information			
*Schedule :XXXXXXXXX			
An asterisk (*) indicates an indisp	ensable item.		
Do you want to change the setting s? (y,n,q,h):			

Enter the needed information in the "REMCS Environment Setting" menu.

 $\cdot$  For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

· Under the following conditions, when setup menu noticed needs of setup, setup menu of "REMCS Environment Setting" is automatically started after registration is finished. When following models use Enhanced Support Facility 2.4 or later.

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Required Item	Item	Description
0	Connection Environment by e-mail SMTP Server	Enter the name of mail server used for communication with REMCS.
0	Connection Environment by e-mail Sender e-mail Address	Enter the e-mail address used for communication with the REMCS Center. This address is specified in the "From" line (sender address) column of the mail header sent from server to REMCS Center. The sender's e-mail address must have the qualification to send e-mail outside your domain.
0	Connection Environment by HTTP PROXY Server	Enter the name of the HTTP-Proxy server.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the start time for the periodic connection.

When registration is complete, a confirmation message is displayed. Check the entry, and select "Updating the REMCS Environment."

After the environment is updated, perform "Checking Connection with REMCS Center."

## 2.4.4.3 REMCS environment settings via XSCF(applies to PRIMEPOWER model s 250/450 only)

If you want to connect to the REMCS Center via XSCF, set REMCS environmentvia XSCF after the setting of REMCS environment. Even in case OS, and REMCS agent on the OS, cannot work due to failure, systems, which are described in "2.1 Using the Services", can inform several events to REMCS Center with using XSCF. If you do not need to connect to the REMCS Center via XSCF, skip "REMCS Environment Setting via XSCF". In this case, only the REMCS agent on the OS will connect to the REMCS Center.

Please confirm that the setting of the XSCF network environment is completed before the XSCF notification

function is set. Refer to "eXtended System Control Facility User's Guide" for the setting instruction.

The REMCS environment setting menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu. Remote Setup Menu Series Name PRIMEPOWER#T, Model Name XXXXXXXXXXXXXXX 1. Registration 2. REMCS Environment Setting 3. REMCS Operation 4. Change Connection Type 5. Software Investigation Information Collection q:Quit b:Back to previous menu t:Go to top menu h:Help Selectone.(1-5.q.h,t.h): 3. Select "REMCS Environment Setting via XSCF". Server0 REMCS Environment Setting MachineID (cannot renew) Connection type Internet Connection(MAIL Only) Connection environment by mail \*SMTP Server XXXXXXXXXXXXXXXXXX \*Sender E-mail Address :XXXXXXXXXXX User authentication of SMTP method :POP before SMTP \*POP Server name XXXXXXXXXXXX \*POP Port No ٠û \*POP UserID XXXXXX \*POP Password .\*\*\*\*\*\*\* \*POP Waiting time (ms) :1000 Periodical Connection Information \*Schedule :No setting An asterisk (\*) indicates an indispensable item. Do you want to change the settings? (y,n,q,h):

Enter the following information in the REMCS environment setting menu.

- For the items that have the white circle "o" in the "Required item" column, the information requested is mandatory.

- The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).

Required Item	Item	Description
_	DEMOS VSCE	Select enable/disable REMCS via XSCF
0	REMCS via XSCF	0: Disable ,1:Enable
0	SMTP Server1 name	Enter the name of the mail server (SMTP Server1) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method1	Select the user authentication of SMTP method for SMTP Server1, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server1	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP User ID for SMTP Server1	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP Password for SMTP Server1	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.

Required Item	Item	Description
	SMTP Server2 name	Enter the name of the mail server (SMTP Server2) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method2	Select the user authentication of SMTP method for SMTP Server2, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server2	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP User ID for SMTP Server2	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP Password for SMTP Server2	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.

- 4. Select " Write Environment Setting to XSCF".
- After input of all required items, check the entry, and select "Write Environment Setting to XSCF"5. Check the mail from the REMCS Center After the environment is updated, checking connection with REMCS Center is performed. After the
- After the environment is updated, checking connection with REMCS Center is performed. After the REMCS Center makes a confirmation, mail is returned to the administrator. Check the mail from the REMCS Center

### 2.4.5 Management Server Connection

### 2.4.5.1 REMCS environment settings

After selecting the Management Server Connection from the connection type menu,

set up the Management Server environment using the REMCS environment setting menu of the machine administration menu.

1. Select the "Management Server Connection" from the connection type menu.

Server0 Remote Customer Support System (REMCS) Setup menu Series name:PRIMEPWR#XXX, Model name:XXXXXXXXXXXX Check code:XX, Serial No:XXXXXXXXXXXXX
Setting of Connection Type
<ol> <li>Internet Connection</li> <li>Internet Connection(Mail Only)</li> <li>Management Server Connection</li> <li>Point-to-Point Connection(ISDN)</li> <li>Point-to-Point Connection(VPN)</li> </ol>
q:Quit b:Back to previous menu t:Go to top menu h:Help
Select one.(1-5,q,b,t,h):

The REMCS agent which is described in "2.1 Using the Services", asks whether stored data should be used for environment data. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read environment data from file ?(y,n,q):yEnter the directory. : tmpWait for a while..... The environment data were read from tmp. Press any key.

2. Select "2. REMCS Environment Setting" from the menu.

server0 REMCS Environment Setting		
MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Connection type	:Management Server Connection	
Connection Environment by HT	TP	
PROXY Server	:	
PROXY Port No	:8080	
PROXY UserID	:	
PROXY Password	:	
*Management Server information (indispensable in case of Management Server Connection)		
Management Server	:	
Periodical Connection Information		
*Schedule	:No settiong	
An asterisk (*) indicates an indi	spensable item.	
Update -> REMCS Environment		

Enter the needed information from the "REMCS Environment Setting" menu.

• For the items that have the white circle "o" in the "Required Item" column, the information requested is mandatory.

Required Item	Item	Description
	Connection Environment by HTTP PROXY Server	Enter the host name of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY Port No.	Enter the port No. of the HTTP-Proxy server.
	Connection Environment by HTTP PROXY User ID	Enter a user name to log onto the Proxy server.
	Connection Environment by HTTP PROXY Password	Enter the correct password to log onto the Proxy server.
0	Management Server Name	Enter the Management Server name.
0	Periodical Connection Information Schedule	Specify the schedule of periodic connection to the REMCS Center. Select the connection interval from everyday, everyday (except Sunday), everyday (except Saturday and Sunday) and every week. When the connection interval is every week, specify a day of the week. And specify the start time for the periodic connection. The time of periodic connection is automatically determined within the operating hours.

When registration is complete, a confirmation message is displayed. Check the entry and select "Updating the REMCS Environment."

After the environment is updated, perform "registration to the Management Server."

#### 2.4.5.2 Registration

After completion of the registration to the Management Server, registration to the REMCS Center with the customer's information is needed.

Please select "Registration from the Management Server".

Registration



- $\cdot\,$  To register information in English, be sure to use only alphanumeric characters.
- If you select "Registration from the Current Machine", REMCS agent of specific version as described before asks whether stored data should be used for registration. If any other system has registration data, you can save them to a file and transfer it to any working directory on a system, which you are going to register, in prior to start registration. You can instruct to read this transferred information to use it as template.

Do you want to read registration data from file?(y,n,q):y Enter the directory. :*h*tmp The registration data were read from *h*tmp. Press any key.

As described before, REMCS agent of specific revision can reuse registration data and environment data. In this case, you can choose "Save to the directory" in registration menu. With using this menu point, you can save registration data as template for registration data of other machine.

After the registration, please choose following menu item:

1. Select "Registration" from the REMCS Agent menu.

	ing data.	
machine0 Customer registration data: MachineID (00PRIMEPWR#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
MachinelD (OUPRIMEPWR#2		
*Company Name	XXXXXXX	
*Department/Division	XXXXXXXXXXXXXXX	
Country	:XX:	
*Address	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Building	XXXX	
*Administrator Name	XXXXXX	
*E-mail address	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Zip/Postal Code	:XXX-XXX	
*Phone Number	:XXXX-XXXX	
FaxNumber	XXXX-XXXX	
Machine Unique Name	XXXXXXX	
*Mail (SMTP) server	:XXXX.XXXX.XXX	
	:XXXXXX@XXXXXXXXXXXXXX	
User authentication of SIMTE		
Address for the machine	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
B	XXXXX	
An asterisk (*) indicates an	indi <i>s</i> pensable item.	
1. Resend		
2. Update		
3. Save to the directory		
q:Quit b:Back to previous me	nu t'Go to ton menu h'Heln	
q.q.a.s b.bass to providus inc	na soo so pop mona minorp	
Select one.(1-3, q, b, t, h):		

If you want to use registered information on any other system, select "Save to the directory" and enter path to any temporary directory. Two files, "rm\_bkcus.def" and "rm\_bkenv.def" are created to the directory. Copy these files to any directory on a system, which you would like to register at REMCS Center.

## 2.4.5.3 REMCS environment settings via XSCF(applies to PRIMEPOWER model s 250/450 only)

If you want to connect to the REMCS Center via XSCF, set REMCS environmentvia XSCF after the setting of REMCS environment. Even in case OS, and REMCS agent on the OS, cannot work due to failure, systems,

which are described in "2.1 Using the Services", can inform several events to REMCS Center with using XSCF. If you do not need to connect to the REMCS Center via XSCF, skip "REMCS Environment Setting via XSCF". In this case, only the REMCS agent on the OS will connect to the REMCS Center.

Please confirm that the setting of the XSCF network environment has been completed before the XSCF notification function is set. Refer to "eXtended System Control Facility User's Guide" for the setting instruction.

The REMCS environment setting menu via XSCF can be displayed as follows.

- 1. 1.Select "Remote Setup" from the machine administration menu.
- 2. Display the REMCS Agent menu.

Remote Setup Menu Series Name:PRIMEPOWER#T, Model Name:XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
<ol> <li>Registration</li> <li>REIMCS Environment Setting</li> <li>REIMCS Operation</li> <li>Change Connection Type</li> <li>Software Investigation Information Collection</li> </ol>
q Quit b:Back to previous menu t Go to top menu h:Help
Selectone.(1-5gh,th):

3. Select "REMCS Environment Setting via XSCF".

MachineID (cannot renew)	:00PRIMEPOWER#XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Connection type	:Internet Connection(MAIL Only)	
Connection environment by	mail	
*SMTP Server	XXXXXXXXXXXXXXXX	
*Sender E-mail Address	XXXXXXXXXX	
User authentication of SMT	P method :POP before SMTP	
*POP Server name	XXXXXXXXX	
*POP Port No	:0	
*POP UærID	XXXXXX	
*POP Password	******	
*POP Waiting time (ms)	:1000	
Periodical Connection Information		
*Schedule :No setting		
An asterisk (*) indicates an indispensable item.		

Enter the following information in the REMCS environment setting menu.

- For the items that have the white circle "o" in the "Required item" column, the information requested is mandatory.

- The items that have the asterisk "\*" in the "Required Item" column are need for a setup with user authentication of SMTP (POP before SMTP).

Required Item	Item	Description
	REMCS via XSCF	Select enable/disable REMCS via XSCF
0		0: Disable ,1:Enable
0	SMTP Server1 name	Enter the name of the mail server (SMTP Server1) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method1	Select the user authentication of SMTP method for SMTP Server1, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server1	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method1.

Required Item	Item	Description
*	POP User ID for SMTP Server1	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
*	POP Password for SMTP Server1	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method1.
	SMTP Server2 name	Enter the name of the mail server (SMTP Server2) used for communication with REMCS. SMTP Server1 and SMTP Server2 are used from one by which REMCS agent could connect successfully last time, then another.
	User authentication of SMTP method2	Select the user authentication of SMTP method for SMTP Server2, 0: none ,1:POP before SMTP
*	POP Server name for SMTP Server2	Enter the POP3 Server name when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP User ID for SMTP Server2	Enter the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.
*	POP Password for SMTP Server2	Enter the password of the user ID for POP3 Server when "POP before SMTP" is selected for User authentication of SMTP method2.

4. Select "Write Environment Setting to XSCF".

After input of all required items, check the entry, and select " Write Environment Setting to XSCF" 5. Check the mail from the REMCS Center

After the environment is updated, checking connection with REMCS Center is performed. After the REMCS Center makes a confirmation, mail is returned to the administrator. Check the mail from the REMCS Center

# 2.5 Operation of PRIMEPOWER models 1/200/250/400/450/6 50/850

### 2.5.1 Operation

The connection to the REMCS Center can be checked from the operation menu of the machine administration menu.

The machine operation menu can be displayed as follows.

- 1. Select "Remote Setup" from the machine administration menu.
- 2. Select "REMCS Operation" from the REMCS Agent menu.

REMCSOperation Menu Present state:(System on ordinary operation)
<ol> <li>Connection check with REMCS Center</li> <li>Tentative stop of connection with REMCS Center</li> <li>Resume connection with REMCS Center</li> <li>Manual reception of firmware</li> </ol>
q:Quit b:Back to previous menu t:Go to top menu h:Help
Select.(1-4, q, b, t, h):

The following operations can be performed from the machine operation menu

Menu item	Outline
1. Connection check with REMCS Center	Checks a connection to the REMCS Center.
2. Tentative stop of connection with REMCS Center	Suspends a connection with the REMCS Center tentatively.
3. Resume connection with REMCS Center	Releases the tentative stop of communication.
4. Manual reception of firmware	Downloads firmware in a manual operation.

Menu item	Outline
Or Manual reception of Hardware Control Program(HCP)	In the case of the Internet Connection (MAIL Only), this operation is unavailable.

# 2.5.2 Display and modification of different kinds of information after start of o peration

Information defined during installation of this machine can be displayed and updated from the machine administration menu.

After registration has completed, the following menus can be displayed from the "REMCS Agent" menu.

Menu item	Outline
1. Registration	Registers the customer information and the machine configuration information to REMCS Center.
2. REMCS Environment Setting	Sets up an environment for connection.
3. REMCS Operation	Checks a connection to the REMCS Center.
4. Change Connection Type	Changes connection type with the REMCS Center.
5. Software Investigation Information Collection	Collects software investigation information.

### 2.5.3 Collecting software investigation information

Software investigation information can be collected from the operation menu of the machine administration menu.

- 1. Display the "Remote Setup."
- 2. Select "Software Investigation Information Collection."

For an explanation on how to use software investigation information collection, see Chapter 3 Chapter 3, "Collection of Software Investigation Material."

### 2.6 Error message list

### 2.6.1 Message of select connection type

This section explains the messages displayed when connection type is selected from the REMCS Agent window.

Message	Select Connection Type is not installation
Explanation	This message is displayed, when the Management Server Connection is selected and the Advanced Agent is not installed.
Response	<ol> <li>Please set up the "Advanced Agent" with reference to the "Service Center Start Guide" .</li> <li>When you do not solve the trouble, please contact with your local support.</li> </ol>

### 2.6.2 Message of registration

This section explains the messages displayed when registration is performed from the REMCS Agent window.

Message	Failed in Online Registration.("return code ": e-mail)
	Or Failed in Online Registration.("return code ": SS-Agent)
	Or

	Failed in Online Registration.("return code ")
Explanation	Customer registration in the REMCS center or sending of configuration information failed.
	A setting error or e-mail communication problem caused by a communication error is assumed.
Response	1) Cope with it with reference to a return code. For details, refer to "2.6.6 2.6.4 Error return code list." When there is no return code in a code list, please contact with your local support.
	2) When you do not solve the trouble, please contact with your local support.

	Failed in Request Customer Information to Management Server. ("return code ": file transfer)
	Or
Message	Failed in Request Customer Information to Management Server. ("return code ": SS-Agent)
	Or
	Failed in Request Customer Information to Management Server. ("return code ")
	This message is displayed only if a connection has been established with the management server.
Explanation	During an attempt at registration from the machine via the management server, the customer information file could not be downloaded from the management server.
	A setting error or problem caused by a communication error is assumed.
	1) If you have not updated REMCS environment setting after selecting "Management Server Connection", execute the change of environment setting.
Response	2) Cope with it with reference to a return code. For details, refer to "2.6.6 2.6.4 Error return code list." When there is no return code in a code list, please contact with your local support.
	3) If they are correctly defined, check whether the management server is connected.
	4) If the settings are valid, and you do not solve the trouble in spite of coping by referencing to the return code, please contact with your local support.

	Failed Registration to Management Server. ("return code ": file transfer)
	Or
Message	Failed Registration to Management Server. ("return code ": SS-Agent)
	Or
	Failed Registration to Management Server. ("return code ")
	Or

	Failed registration to Management Server. ("return code ": file transfer)
	Or
	Failed registration to Management Server. ("return code ": SS-Agent)
	Or
	Failed registration to Management Server. ("return code ")
Explanation	This message is displayed only if a connection has been established with the management server.
	Machine registration on the management server failed.
	A setting error or problem caused by a communication error is assumed.
Response	1) If you have not updated REMCS environment setting after selecting "Management Server Connection", execute the change of environment setting.
	2) Cope with it with reference to a return code. For details, refer to "2.6.6 2.6.4 Error return code list." When there is no return code in a code list, please contact with your local support.
	3) If they are correctly defined, check whether the management server is connected.
	4) If the settings are valid, and you do not solve the trouble in spite of coping by referencing to the return code, please contact with your local support.

	The registration data file could not be read.
Message	Or
	Failed registration Data file Read.
Explanation	The customer information file to be sent to the REMCS center and used for online registration could not be read.
	The registration data file (regist.txt) probably does not exist.
Response	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough, back up the environmental definition file.
	Re-install the REMCS agent, and restore the environmental definition.
	3) Perform online registration again.
	4) If the message is displayed again, please contact with your local support.
Message	The registration data file could not be read. ("return code ")

Explanation	The customer information file transferred from the other system could not be read.

	The file may be broken.
Response	1) Make sure the registration was in English. If it was in Japanese, use Japanese for the registration.
	2) Make sure the registration of the other system, from which the registration data were transferred, is successfully finished.
	3) Save the registration data and transfer them again. Read them at the registration.
	4) Check a return code. For details, refer to "2.6.4 Error return code list." When you can not find out return code on the code list, please contact with your local support.

	The registration data file could not be written.
Message	Or
	Failed registration Data File Write.
Explanation	The customer information file to be sent to the center and used for online registration could not be updated.
	The free disk space is insufficient, or the registration data file (regist.txt) does not exist.
Response	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough, back up the environmental definition file.
	Re-install the REMCS agent, and restore the environmental definition.
	3) Perform online registration again.
	4) If the message is displayed again, please contact with your local support.

Message	The registration data file could not be written. ("return code ")
Explanation	The customer information file to be transferred to the other system could not be written. The free disk space may be insufficient.
Response	1) Check a return code. For details, refer to "2.6.4 Error return code list." When you can not find out return code on the code list, please contact with your local support.

Message	The registration data contain invalid code.
	The registration data file could not be written.
Explanation	The customer information file to be transferred to the other system could not be written.
	The registration data may contain Japanese code.
Response	1) Make sure the registration was in English. If it was in Japanese, use Japanese for the registration.
	2) Save the registration data.

	3) If the message is displayed again, please contact with your local support.
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### 2.6.3 Message when REMCS environment is set

This section explains the messages and solutions for it displayed during setting up of the REMCS environment from the REMCS Agent window of Machine Administration.

	The REMCS Environment data could not be read.
Message	Or
	Failed Reading REMCS Environment Data.
Explanation	The REMCS environment file (rimomen.dft) probably does not exist.
	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough, back up the environmental definition file.
Response	Re-install the REMCS agent, and restore the environmental definition.
	3) Perform online registration again.
	4) If the message is displayed again, please contact with your local support.

	The REMCS Environment could not be updated.
Message	Or
	Failed Updating REMCS Environment Data.
	The REMCS environment file could not be updated.
Explanation	The free disk space is insufficient, or the REMCS environment file (rimomen.dft) does not exist.
	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough, back up the environmental definition file.
Response	Re-install the REMCS agent, and restore the environmental definition.
	3) Perform online registration again.
	4) If the message is displayed again, please contact with your local support.

	The REMCS Environment file could not be read.
	Or
Message	REMCS Environment file could not be read.
	Or
	Failed Reading REMCS Environment Data.
Explanation	The REMCS environment settings file (remote.conf) probably does not exist.
Response	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough,

back up the environmental definition file.
Re-install the REMCS agent, and restore the environmental definition.
3) Perform online registration again.
4) If the message is displayed again, please contact with your local support.

	The REMCS Environment file could not be written.
Message	Or
	Failed Writing REMCS Environment Data.
	The REMCS environment file could not be updated.
Explanation	The free disk space is insufficient, or the REMCS environment settings file (remote.conf) does not exist.
	1) Check the remaining capacity of the disk under a /opt directory.
	2) If the remaining capacity of the disk is enough, back up the environmental definition file.
Response	Re-install the REMCS agent, and restore the environmental definition.
	3) Perform online registration again.
	4) If the message is displayed again, please contact with your local support.

Message	The environment data could not be read. ("return code ")
Explanation	The environment date may be broken.
Response	1) Check a return code. For details, refer to "2.6.4 Error return code list." When you can not find out return code on the code list, please contact with your local support.

Message	The environment data are not for Management Server. The environment data could not be read.
Explanation	Stored environment data may be broken, or, connection type in the environment data is not "Management Server Connection".
Response	<ol> <li>Make sure the connection type of the other system, from which the environment data were transferred, is Management Server Connection.</li> <li>Save the environment data and transfer them again. Read them at the environment setting.</li> </ol>

### 2.6.4 Message on operation

This section explains the messages displayed during operation from the REMCS Agent window of Machine Administration.

Message failed in the center connection restart.("return code
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-------------
Explanation
Response

	failed in the center connection tentative stop. ("return code ": HTTP)
	Or
	failed in the center connection tentative stop. ("return code ": e-mail)
Message	Or
	failed in the center connection tentative stop. ("return code ": file transfer)
	Or
	failed in the center connection tentative stop. ("return code ": SS-Agent)

	Or
	failed in the center connection tentative stop. ("return code ")
	Or
	Failed tentative stop of connection with REMCS Center. ("return code ": HTTP)
	Or
	Failed tentative stop of connection with REMCS Center. ("return code ": e-mail)
	Or
	Failed tentative stop of connection with REMCS Center. ("return code ": file transfer)
	Or
	Failed tentative stop of connection with REMCS Center. ("return code ": SS-Agent)
	Or
	Failed tentative stop of connection with REMCS Center. ("return code ")
Explanation	A setting error or communication error (e-mail or HTTP communication problem) is assumed.
Response	1) Cope with it with reference to a return code. For details, refer to "2.6.6 2.6.4 Error return code list." When there is no return code in a code list, please contact with your local support.
	2) When you do not solve the trouble, please contact with your local support.

	1
	Failed in the Hardware Control Program (HCP) reception. ("return code ": HTTP)
	Or
	Failed in the Hardware Control Program (HCP) reception. ("return code ": e-mail)
	Or
	Failed in the Hardware Control Program (HCP) reception. ("return code ": file transfer)
	Or
Message	Failed in the Hardware Control Program (HCP) reception. ("return code ": SS-Agent)
	Or
	Failed in the Hardware Control Program (HCP) reception. ("return code ")
	Or
	Failed in firmware download reception. ("return code ": HTTP)
	Or
	Failed in firmware download reception. ("return code ": e-mail)
	Or

	Failed in firmware download reception. ("return code ":
	file transfer)
	Or
	Failed in firmware download reception. ("return code ": SS-Agent)
	Or
	Failed in firmware download reception. ("return code ")
	Firmware could not be received from the REMCS center.
	Possible causes of the problem are as follows:
Explanation	1) The disk capacity is insufficient.
	2) The directory for storing received firmware was not found.
	3) A communication error occurred.
	1) Check the free disk space remaining for the /opt and /var/opt directories.
	PRIMEPOWER800/1000/2000
	GP7000F model 1000/2000:
	/opt
	PRIMEPOWER250/450/650/850/900/1500/2500/HPC2500
	/var/opt
Response	2) If the free disk space is sufficient, the problem is caused by a communication error or firmware expansion failure.
	Cope with it with reference to a return code. For details, refer to "2.6.6 2.6.4 Error return code list." When there is no return code in a code list, please contact with your local support.
	3) If the settings are normal, please contact with your local support.

	The connection could not be confirmed.
	Or
	Failed connection confirmation.
	Or
	The connection could not be confirmed.("return code ":HTTP)
	Or
Message	The connection could not be confirmed.("return code ":mail)
	Or
	The connection could not be confirmed.("return code ":file transfer)
	Or
	The connection could not be confirmed.("return code ":SS-Agent)
	Or

	The connection could not be confirmed.("return code")
Explanation	A setting error or communication error (e-mail or HTTP communication problem) is assumed.
	1) If the return code is displayed[except-500],response by return code is performed.
	See detail in [error return code list].
	If no corresponding return code is in [2.6.6 2.6.4 Error return code list], please contact with your local support.
Response	2) If response by return code is not effective, please contact with your local support.
- -	3) Check whether the REMCS environment is set up normally.
	Check whether the "e-mail connection environment" is set up normally.
	Check whether the "HTTP connection environment" is set up normally.
	4) If the settings are normal, please contact with your local support.

# 2.6.5 Message when REMCS environment via XSCF is set

This section explains the messages and solutions for it displayed during setting up of the REMCS environment via XSCF from the REMCS Agent window of Machine Administration.

	IP Address is not set to XSCF.
	Or
	Subnet Mask is not set to XSCF.
Message	Or
	Gateway Address is not set to XSCF.
	Or
	Host Name is not set to XSCF.
Explanation	A setting error is assumed.
Response	1) Check the setting of XSCF. For details, refer to "Machine Administration guide".

	Failed to connect SMTP Server1.
Message	Or
	Failed to connect SMTP Server2.
Explanation	A setting error or communication error (e-mail or HTTP communication problem) is assumed.
Response	1) Check the setting of SMTP Server1 or SMTP Server2.
	2) Check the setting of XSCF. For details, refer to "Machine Administration guide".

Message	Failed to connect POP Server for SMTP Server1.
INICSSAGE	Or

	Failed to connect POP Server for SMTP Server2.
Explanation	A setting error or communication error (e-mail or HTTP communication problem) is assumed.
Response	<ol> <li>Check the setting of POP Server for SMTP Server1 or POP Server for SMTP Server2.</li> <li>heck the setting of XSCF. For details, refer to "Machine Administration guide".</li> </ol>

Message	UserID for SMTP Server1 was not authenticated by POP Server.
	Or
	UserID for SMTP Server1 was not authenticated by POP Server.
Explanation	A setting error or communication error (e-mail or HTTP communication problem) is assumed.
Response	1) Check the setting of POP Server for SMTP Server1 or POP Server for SMTP Server2.
	2) Check the setting of XSCF. For details, refer to "Machine Administration guide".

## 2.6.6 Error return code list

Return code	Explanation	Possible cause	Corrective action
-2	Network error	HTTP API error	Check the network settings.
-7	Communication timeout	A timeout was detected during communication processing (HTTP, mail, etc.)	Check whether the SMTP server is running.
-10	Another task or process is carrying out communication.	Communication processing is busy.	Re-send after several minutes.
-12	The user ID is invalid.	The user ID is invalid.	Check the PROXY UserID.
-13	The password is invalid.	The password is invalid.	Check the PROXY Password.
-14	Memory allocation failure	HTTP API error Mail API error Insufficient memory	<ul> <li>Quit unnecessary applications and services.</li> <li>Check whether the physical memory and the disk containing swap files have enough free space.</li> </ul>
-15	Communication is disabled because there is no connection to the center.	The center is not connected.	Establish a connection to the center again.
-16	Insufficient disk capacity	HTTP API error Insufficient disk capacity Desk capacity is insufficient.	Increase the size of free space on the disk containing the installation directory (/opt/FJSVrlib), temporary directory

Return code	Explanation	Possible cause	Corrective action
			(/tmp), and system directory.
-17	Communication is disabled during maintenance.	Maintenance in progress	Finish maintenance.
-18	The configuration information ID is inconsistent.	Configuration information sent from the machine has not reached the center, or configuration information that has reached the center has not been processed.	Wait for about 10 minutes. If this error then occurs again, re-send the configuration information.
-19	Parameter error	A required item is not included in environment settings such as HTTP and mail settings, or a setting is invalid.	Specify the required items correctly.
-20	The latest firmware is not registered in the center.	Firmware that can be received is not found.	None
-21	The machine ID is not registered in the center.	Registration has failed, or an attempt has been made to receive firmware immediately after registration.	<ol> <li>Registration to a center could take a few minutes, so an error will occur if you try some operations immediately after a registration. Wait for more than 10 minutes, and retry.</li> <li>If it still failed, the registration mail probably failed to be send to the REMCS center. Check whether there is a problem with the communication environment, and retry registration.</li> </ol>
-22	The SS-Agent service is not active.	_	Check whether
-23	Restarting of the SS-Agent service has failed.	SS-Agent command activation has failed.	FJSVrmaos is installed. The developer investigates the cause.
25	Event transmission failed.		
-26	Shared pipe creation or reading has failed.	Resource shortage	Quit unnecessary applications and services, or restart the OS.
-27	File access error	HTTP API error Mail API error File creation error	Check whether disk capacity is sufficient.
-28	Temporary file access error	File creation error	Check whether the disk capacity is sufficient.
-29	SS-Agent is not installed.	SS-Agent is not installed,	Reinstall FJSVrmaos.

Return code	Explanation	Possible cause	Corrective action
		or the installation settings are invalid.	
-30	The function level of the management server is too low.		Upgrade the management server version.
-52	HTTP server error	HTTP server (center) error	1) Confirm whether there are mistakes In, HTTP
-54	The HTTP server cannot be accessed.	HTTP API error	connection environment (Proxy Server (host name/IP address), Proxy
			Port No, Proxy UserID, Proxy password) set up by "REMCS Environment Setting" menu.
-55	The line has been disconnected. (HTTP)	HTTP API error	<ul> <li>2) Confirm whether there</li> <li>is a problem in</li> <li>communication</li> <li>environment (DNS</li> <li>server, Proxy Server,</li> <li>default gateway etc.).</li> <li>(Confirm It with the</li> <li>network manager.)</li> </ul>
-56	HTTP error other than the above	HTTP API error HTTP server (center) error	<ol> <li>Confirm whether there are mistakes In, HTTP connection environment (Proxy Server (host name/IP address), Proxy Port No, Proxy UserID, Proxy password) set up by "REMCS Environment Setting" menu.</li> <li>Confirm whether there is a problem in communication environment (DNS server, Proxy Server, default gateway etc.). (Confirm It with the network manager.)</li> </ol>
-57	HTTP client connection timeout	HTTP API error	The server is busy. Wait for a while and retry.
-58	HTTP proxy server authentication error	HTTP API error	<ol> <li>Confirm whether there are mistakes In, HTTP connection environment (Proxy Server (host name/IP address), Proxy Port No, Proxy UserID, Proxy password) set up by "REMCS Environment Setting" menu.</li> <li>Confirm whether there is a problem in communication environment (DNS server, Proxy Server, default gateway etc.). (Confirm It with the network manager.)</li> </ol>

Return code	Explanation	Possible cause	Corrective action
-62	Transfer server. An error is made on a file	HTTPI (file transfer) error	
-64	Connectable with a file transfer server.	HTTPI (file transfer) error	Check the management
-65	It circuit-cuts during a file transfer	HTTPI (file transfer) error	server name./Check the proxy server setting.
-66		HTTPI (file transfer) error	
-67	Over Client connection timeout (file transfer)	HTTPI (file transfer) error	The server is busy. Wait for a while and retry.
-68	HTTP proxy server authentication error	HTTPI (file transfer) error	<ol> <li>Confirm whether there are mistakes In, Management server name (host name/IP address) set up by "REMCS Environment Setting" menu.</li> <li>Confirm whether there is a problem in communication environment (DNS server, Proxy Server, default gateway etc.). (Confirm It with the network manager.)</li> </ol>
-72	SMTP server error	Mail API error	<ol> <li>1) Confirm whether there are mistakes in, mail connection environment (SMTP Server, Sender E-mail Address) set up by "REMCS Environment Setting" menu.</li> <li>2) Confirm whether there is outside transmission permission, or the Sender E-mail Address is permitted with provider etc.</li> <li>3) Confirm whether there are problem in communication environment (DNS server, mail server, default gateway etc.). (Confirm It with the</li> </ol>
-73	The SMTP server name is not found.	Mail API error	1) Confirm whether there are mistakes in, mail
-74	No connection can be established with the SMTP server.	Mail API error	connection environment (SMTP Server, Sender E-mail Address) set up by "REMCS Environment Setting" menu.
			2) Confirm whether there is outside transmission permission, or the Sender

Return code	Explanation	Possible cause	Corrective action
			E-mail Address is permitted with provider etc.
			<ul> <li>3) Confirm whether there are problem in communication environment (DNS server, mail server, default gateway etc.).</li> <li>(Confirm It with the network manager.)</li> </ul>
-76	MAIL send error	Mail API error	Please contact with your local support.
			1) Confirm whether there are mistakes in, mail connection environment (SMTP Server, Sender E-mail Address) set up by "REMCS Environment Setting" menu.
-77	An error occurred after acceptance of mail send processing. SS-Agent has probably retried sending.	Mail API error	2) Confirm whether there is outside transmission permission, or the Sender E-mail Address is permitted with provider etc.
			<ul> <li>3) Confirm whether there are problem in communication environment (DNS server, mail server, default gateway etc.).</li> <li>(Confirm It with the network manager.)</li> </ul>
			1) Confirm whether there are mistakes in, mail connection environment ( SMTP Server, Sender E-mail Address) set up by "REMCS Environment Setting" menu.
-78	Mail send error	Mail API error	2) Confirm whether there is outside transmission permission, or the Sender E-mail Address is permitted with provider etc.
			Confirm whether there are problem in communication environment (DNS server, mail server, default gateway etc.). (Confirm It with the network manager.)
-79	user authentication of SMTP error (POP before	Mail API error	1) Confirm whether there are mistakes in the user SMTP authentication set

Return code	Explanation	Possible cause	Corrective action
	SMTP)		up by "REMCS Environment Setting" menu.
			2) Confirm whether there are problem in communication environment (POP server, DNS server, default gateway etc.). (Confirm It with the network manager.)
-86	SS-Agent call error	Calling SS-Agent API error	Check the FJSVrmaos installation conditions.
-91			1) Confirm whether there are mistakes in, mail connection environment (SMTP Server, Sender E-mail Address) set up by "REMCS Environment Setting" menu.
	Valid Mail-address is not found	Mail API error	2) Confirm whether there is outside transmission permission, or the Sender E-mail Address is permitted with provider etc.
			<ul> <li>3) Confirm whether there are problem in communication environment (DNS server, mail server, default gateway etc.).</li> <li>(Confirm It with the network manager.)</li> </ul>

# Chapter 3 Collection of Software Investigation I nformation

This chapter explains the function and operations of software investigation information collection.

# 3.1 Overview of Software Investigation Information Collecti on

The software investigation information(hereafter called software investigation information, or simply investigation information) is a general name for the information required for troubleshooting software that is operating on the system of a customer. The software investigation information collection function supports investigations of software problems and is provided as a function of REMCS Agent. The investigation information collection function can be used to collect the investigation information in simple operations. The collected investigation information can be sent to the REMCS Center or saved on tape.

## [Collecting and Sending Investigation Information]

- 1. If When a software problem occurs, please notify one of our engineers is notified of the problem.
- 2. If investigation is required of software that is being used, our engineer informs the customer of the incident number, the investigation information to be collected, and the method for sending the investigation information.
- 3. "Software Investigation Information Collection" is started in the system in which the problem occurred.
- 4. The required investigation information is collected. The collected information can be sent to our engineer by the following method.

#### The first information

The one called the first information is the thing which is necessary for investigating the first running about the trouble, and the size of the investigation information is small (note). The first information can be transmitted to the REMCS center through the network. By transmitting the first information to the REMCS center, it can be sent to one of our engineer immediately.

Note) It is smaller than the SmallLimit value of an environment definition file.

#### The second information

Among the collected information, the one other than the first information are called second information. Because the size of the investigation information is large, the second information is saved in the tape. Send the tape media with the saved investigation information to the address specified by our engineer.

## [Automatic collection of investigation information]

When the system is restarted after the panic of the system, the crash dump is generated. At this time, the investigation information of the software product can be automatically collected. Usually it doesn't set the automatic collection. When our engineers request an automatic collection for a special purpose of the trouble investigation, it should be set.

# 3.2 Opening and Closing the Investigation Information Coll ection Menu

Opening and Closing the Investigation Information Collection Menu are explained.

## [Opening the Investigation Information Collection Menu]

#### UNIX Server model which uses System Console

The software investigation information collection menu is included in Enhanced Support Facility in the machine OS. Select "Software Information Collection" from the operation menu of the machine administration menu. For more information, see Section 2.3.3 2.3.3, "Collecting software investigation information"

## UNIX Server model which not uses System Console

Select "Software Information Collection" from the operation menu of the machine administration menu. For more information, see Section 2.5.3 2.5.3, "Collecting software investigation information"

## [Closing the Investigation Information Collection Menu]

Follow either of the procedures below to terminate the investigation information collection function.

- · Select "t" from the respective menu. The system returns to the top menu of the machine administration menu.
- $\cdot\,$  Select "q" from the respective menu. The system returns to the REMCS Agent menu.

## 3.3 Operating the Investigation Information Collection

## 3.3.1 Menu structure of investigation information collection

An outline of the menu structure of the software investigation information collection is shown below.



3.3.2 Main menu of investigation information collection

## [Selection Item]

- 1. Software information collection: To collect investigation information, select [1]. The required investigation information can be collected using a series of subsequent menus.
- 2. Information Management in Saving Area: To administer the save area in which the collected investigation information is saved, select [2]. The investigation information stored in the save area can be deleted, saved to a tape device, and sent to the REMCS Center by using the "Save Area Administration" menu.
- Selection of auto-collecting investigation informations: To select the investigation information which should be collected automatically, select [3].

## [Note]

The RCCollect value of an environment definition file When it is "no", "Selection of auto-collecting investigation information" is not displayed.

# 3.4 Investigation Information Collection Menu

## 3.4.1 Incident number entry menu

```
Software Information Collection Incident No. Input
Note)
Please enter the incident number correctly which was told by
our engineer, when you enter an incident number.
please enter the incident no. : <u>001-2222-3333</u>
current incident no : 001-2222-3333
is it right? (y, n or b to previous menu ) :y
```

## [Input Item]

The incident number is a character string consisting of 13 or fewer alphanumeric characters. Small letters are distinguished from capitals letters. Our engineers notify customers of the incident number.

3.4.2 Basic software information selection menu

## [Selection Item]

## 0. Do not collect Basic information:

If basic information is not going to be collected, select [0].

## 1. Basic information (fjsnap):

If basic information as of the current time is to be collected, select [1]. Basic information is system information used to support each software product. In practice, basic information is collected by executing the fjsnap command provided by the Enhanced Support Facility (ESF).

## 2. Basic information (fjsnap) and Crash dump:

To collect a crash dumpand the basic information that is automatically collected when crash dumpis generated (note), select [2].

The crash dumpis a dump file that is generated at system panic states.

Note: Basic information is not automatically collected depending on the version number of the Enhanced Support Facility (ESF). In this case, basic information as of the current time is collected.

## 3.4.3 Crash dump selection menu

```
Software information collection Crash Dump List Selection
   Crash dump
                        Basic Info Date
                                                               Size
                                   2000/01/11 13:10:21
   vmcore.1
                        fjsnap.1
                                                         99, 999, 999KB
1.
              unix.1
                                   2000/01/20 16:03:43
                                                         99, 999, 999KB
2
   vmcore.2
              unix.2
                        fjsnap.2
                                   2000/02/01 10:10:58
              unix.3
                        fjsnap.3
                                                         99, 999, 999KB
З.
   vmcore.3
                                   2000/02/06 13:33:42
4
   vmcore.4
              unix.4
                        fjsnap.4
                                                         99, 999, 999KB
5.
   vmcore.5
              unix.5
                        fjsnap.5
                                   2000/02/22 21:00:09
                                                         99, 999, 999KB
q:Quit b:previous menu t:Top Memu
Select (1-1, q, b, t) :
```

## [Display Item]

The crash dump list is displayed. Its contents are as follows.

## (1) Crash dump:

vmcore.N and unix.N are the filenames of a crash dump (note). N indicates the generation number. The crash dump is assumed to be saved in the following location.

/var/crash/`uname -n`/

If a system is designed so that crash dump is generated in any location other than the above location, change the value of the SaveCore variable in the definition file. See Section 3.10 3.10, "Environment Definition File"for details.

## (2) Basic Info:

fjsnap.N is the filename of basic information that is automatically collected when a crash dump is output. N indicates the generation number.

Because fjsnap.N is created (after a period of about 10 minutes) during booting after system panic, it might not be displayed on the menu immediately after booting. In such an event, wait for about 10 minutes, and then reopen the investigation information collection menu.

## (3) Date:

Date and time when the crash dump and basic information are generated.

## (4) Size:

Total size of vmcore.N, unix.N, and fjsnap.N.

## [Selection Item]

Select the item number of the line in which the crash dump and basic information of the generation to be collected are displayed.

## 3.4.4 Software information selection menu



## [Selection Item]

#### 0. Do not collect Software information:

If software investigation information is not to be collected, select [0].

## 1. Specify File Name Directly:

If you want to specify directly the path of the investigation information that you want to collect, select [1].

## 2. TeamWARE Office :

Among the software installed in the system of a customer, names of the software that can be collected from this menu are displayed. Select the software name that you want to collect.

Note) A unique name can be added to "Software Information Selection" menu by creating a script for investigation information collection. For details, see Section 3.9 3.9, "Simplification of Collection Work."

## [Selection of Jasmine Information]

"Jasmine" might not be displayed in the selection item of the "Software Information Selection" menu though Jasmine is already installed. In such an event, reopen the investigation information collection menu as follows.

- 1. Enter "echo \$JAS\_SYSTEM" under the environment in which the jasstart command can be executed. Write down the output value.
- 2. Log on again with system administrator qualification (root).
- 3. Enter the value that was written down as environment variable JAS\_SYSTEM as follows. Example: JAS\_SYSTEM=Value export JAS\_SYSTEM
- 4. Open the investigation information collection menu. If Jasmine is installed, "Jasmine" is displayed as a

selection item on the "Software Information Selection" menu.

## 3.4.5 Filename direct specifying menu

```
Software Information Collection File Name Specification

Please enter the file name (full path or null , b to previous menu)

:/etc/release

Please specify how to send the file. (0:E-mail, 1:save to tape)

(default:0) :0

Current file name : /etc/release

Sending method : E-mail

Is it right?(y,n or b to previous menu) :y

Please enter the file name (full path or null , b to previous menu)

:
```

## [Input Item:]

Please enter the filename (...) :

Specify the filename that you want to collect in its full pathname. Other filenames can be specified until the return key is pressed. When only the return key is pressed, the "Filename Direct Specifying Menu" closes.

## Please specify how to send the file. (...) :

0. E-mail:

The specified investigation information is treated as the first information. The collected investigation information can be sent to the REMCS Center or saved on tape.

#### 1. save to tape:

The specified investigation information is treated as the second information. The collected investigation information can be saved on tape.

## [Note:]

If the filename is specified with wild card (e.g., /etc/opt/FJSVsirms/\*), the total size of the applicable files is up to the BigLimit value (value defined by the environment definition file). If this size is exceeded, the following message is displayed.

Total size of the files that are collected with the wild card specification is too large.

If this occurs, reduce the number of applicable files, and specify the files again. Or, increase the BigLimit value of the environment definition file.

## 3.4.6 Executing investigation information collection

```
Software Information Collection Specified Software Information
You have specified one software : TeamWARE Office
The information will be automatically collected.
Is it right?(y,n or b to previous menu) :y
```

If "y" is entered after a check of the product name has completed, the following messages are displayed. In the above example, the product name "TeamWARE Office" is used.

```
Software Information Management Execution
Do you want to collect specified information?(y, n): y \leftarrow (1)
software information collecting...
Checking SaveArea..
Loading product information...
Begin collection.
     0000000000......
End collection.
File information collected successfully.
size of collected information: 249 KB
There are some investigation informations to send the center.
Size of the information which will send is 249 KB.
Do you want to send the information as E-mail? (y, n): y \leftarrow (2)
Information sending...
Information send successfully.
Do you want to save the information to tape? (y, n): y \leftarrow (3)
enter device filename (full path or null)
:/dev/rmt/0 \leftarrow (4)
Information archiveing...
Information archive successfully.
enter RETURN key to return main menu:
```

## [Input Item]

## (1) Do you want to collect specified information? (y,n):

If you want to collect the investigation information specified by Sections 3.4.2 to 3.4.5, select [y]. Then, collection of investigation information is in progress, the degree of progress of collection is displayed as shown below.

Example: Progress display

oo..... 10% complete

Collected investigation information is compressed and saved in the save area. For details, see Section 3.5 3.5, "Save Area Administration Menu," and Section 3.7 3.7, "Save Area of Investigation Information."

When collection has completed, the size (after compression) of the collected information is displayed.

#### (2) Do you want to send the information as E-mail? (y,n):

If the collected investigation information includes primary information that is required in an initial investigation, a prompt message is displayed. Selecting "y" sends the information that is required for the initial investigation to the REMCS Center.

The maximum amount of data that can be sent is the value of MaxSendTotal of the environment definition file.

#### (3) Do you want to save the information to tape? (y,n):

If the customer system is in the environment where a tape device can be used, you can save the investigation information on tape. If "y" is selected, a message is displayed prompting entry of a name for the output file.

#### (4) enter device filename (full path or null)

Enter the name of the file in which the information is going to be saved on the tape device. After it has been entered, the tape starts saving the information. If the return key is pressed, (3) is displayed again.

Example:/dev/rmt/0

## [Note]

If basic information is selected during selection of the information on the basic software, saving can take 50 minutes at the maximum depending on the size of the system. Because the progress display is updated at the

time that several items of investigation information are collected, it is not updated at specific intervals.

Note that collection of basic information can hang up the system because it refers to system information. If this occurs, forcibly close the investigation information collection menu by using the following procedure.

- 1. Write down the PGID displayed at the top line by executing the ps(1) command from another process. ps -eo 'pgid args' | grep madmin
- 2. Terminate the process by executing the kill(1) command. In the following example, PGID = 12345. kill -TERM -12345
- 3. Monitor the state of the process by executing the command that was input in step 1. If the status remains the same, terminate the process by executing the kill(1) command as shown below. In the following example, PGID = 12345. kill -KILL -12345

# 3.5 Save Area Administration Menu

## 3.5.1 Information selection menu

The collected investigation information is saved in the save area. The following operations can be performed on the investigation information in the save area.

- $\cdot\,$  Deleting investigation information
- $\cdot$  Transmitting investigation information
- $\cdot\,$  Saving investigation information on tape media
- · Changing incident number

```
Save Area Management Information Selection
(1)Saving area: /var/crash/sirms_server/FJSVsirms_sa
(2)max: 102400KB (3)used: 24551KB
(4)Status: "Saved"=Already saved to tape
                                               "Sent"=Already sent
(5) Incident No.
                    (6) Date-Time
                                    (7) Number of Kind (8) Size
                                                                   (4) Status
 1. 123-4567-8901 2000/03/01 16:56
                                                                 Saved/Sent
                                            1
                                                       249 KB
    123-4567-8902
                    2000/03/05 16:56
                                            2
                                                      3883KB
                                                                      Saved
 2
 3. 123-4567-8903 2000/03/13 16:56
                                                      3864KB
                                            1
  q:Quit b:previous menu t:Top Menu
 Select (1-38, n, q, b, t) :
```

## [Display Item]

Contents of the save area are shown by the items below. If no investigation information is saved in the save area, nothing is displayed under the display line of the display item name.

## (1) Saving area:

Locations of the save areas are displayed.

#### (2) max:

The available capacity as the save area is displayed.

#### (3) used:

The total size of investigation information that is saved in the save area is displayed.

#### (4) Status:

Saved : Indicates that it is saved on tape media.

Sent : Indicates that it was sent to the REMCS Center.

Saved/Sent : Indicates that both "Saved" and "Sent" are executed.

Blank : Indicates that transmission and saving of data to tape media are not executed.

## (5) Incident No:

This is the number specified from the "Incident number entry" menu.

## (6) Date-Time:

This is the date and time when the investigation information was collected.

## (7) Number of Kind:

This is the number of kind that identifies the collected investigation information.

## (8) Size:

Total size of the collected information.

## [Selection Item ]

The investigation information that you want to use can be selected by entering the number on the far left.

## [Note]

· For UNIX Server model that uses System Console, two or more investigation information cannot be transmitted to the REMCS Center even though they are selected.

## 3.5.2 Operations selection menu

## [Selection Item]

## d. Delete specified information:

If you want to delete investigation information from the save area, select [d]. Then the following entry is prompted. In the following example, [1] is selected in the "Selection of Save Area Administration Information" menu.

```
Save Area Management Delete the specified information
The selected product 1 is 123-4567-8901 : TeamWARE Office.
Do you want to delete ?(y, n):y
Information deleting...
Information deleted successfully
enter RETURN key to continue:
```

## s. Send the information as E-mail:

If a investigation information is to be sent to the REMCS Center, select [s]. Then, the entry shown below is prompted. In the example shown below, [1] is selected in the "Selection of Save Area Administration Information" menu.

Note that the maximum amount of sending information is defined by MaxSendTotal of the environment definition file. This is the same as that in Section 3.4.6 3.4.6, "Executing the investigation material collection."

Save Area Management Selection of investigation information					
Incident No: 123-4567-8901 Status: Sent=Already sent					
Kind	Date	Size	Status		
1. TeamWARE Office	2000/03/01 16:56	249KB	Sent		
2. Basic	2000/03/01 16:56	4122KB			
q:Quit b:previous menu t:Top Menu					

The selected information is transmitted.

```
Save Area Management Send the specified information
The selected product 1 is 123-4567-8901 : TeamWARE Office.
size of collected information: 249 KB
There are some investigation informations to send the center.
Size of the information which will send is 249 KB.
Do you want to send ? (y, n) :y
Information sending...
Information send successfully.
enter RETURN key to continue:
```

## a. Archive (save) the information to tape:

If the system in use is operating under an environment in which a tape device can be used, investigation information can be saved on a tape device. To save it on tape, select [a] and then the entry shown below is prompted. In the following example, [1] is selected in the "Selection of Save Area Administration Information" menu.

```
Save Area Management Archive (save) the specified information to tape

The selected product 1 is 123-4567-8901 : TeamWARE Office.

Basic.

Do you want to archive ?(y, n):y

enter device filename(full path or null)

:/dev/rmt/0

Information archiveing...

executing of 123-4567-8901 ...

Information archive successfully.

enter RETURN key to continue:
```

#### c. Change the incident number of the specified information.

If you want to change the incident number of the collected investigation information, select [c].

```
Save Area Management Change the incident number of the specified information.

please enter the incident no.

(RETURN=incident no. that used 012-3456-9999) :<u>123-4567-0000</u>

current incident no : 123-4567-0000

is it right? (y, n or b to previous menu ) :y
```

# 3.6 Automatic collection information selection menu

Select the investigation information that wants to be collected automatically. The investigation information to which "\*" is adhered will be collected automatically.

An automatic collection will be done according to the following timing.

· immediately after crash dump's being generated

Select the investigation information that wants to be collected automatically. The investigation information to which "\*" is adhered will be collected automatically.

Selection will be canceled if it specifies again.

The menu will be ended if the return key is pushed. Investigation information are automatically collected at the time of generation of crash dump.

A temporary incident number is assigned to the automatically collected information and is stored in a save area. Form of a temporary incident number : Snnnn (nnnn is a generation number)

When you transmit automatically collected information to REMCS center, change the temporary incident number of it into a formal incident number before transmission.

Our engineers notify customers of the incident number.

## [Note]

The system console is not supporting automatic collection.

# 3.7 Save Area of Investigation Information

## 3.7.1 Location of save area

The collected investigation information is saved in the following save area.

/var/crash/`uname -n`/FJSVsirms\_sa

Locations of the save area can be modified by changing the SaveArea value of the environment definition file.

## 3.7.2 Checking the free disk space

If the free disk space required for collecting investigation information is not available on hard disk, collection cannot be performed correctly. The free disk space is checked before and after collecting investigation information. If the free disk space is less than the 300 MB (note) that is the standard value (AvailableSize value) for safe operation, a warning message is displayed.

Also, if unnecessary investigation information remains in the save area, it occupies the disk capacity. Therefore, a warning message is displayed if the amount of the space used in the save area exceeds the 200 MB (note) that is the upper limit of the standard value (SaveAreaSize value). A warning message and the action to be taken for it are shown below.

· Checking the free disk space	
Message	The remaining capacity of the file system in which the save area is allocated is less than 300 MB. Secure free disk space.
MeasureAction	The following measures actions can be taken. • Delete the unnecessary files. • If a disk does not haves not a free space, change the locations of the save area. (note)
· Checking the used area in the sa	ve area
Message	The size of information saved in the save area has exceeded the upper limit. Delete unnecessary information from the Save Area Administration Menu. Alternately, increase the value of SaveAreaSize of the environment definition file.
MeasureAction	The following measures actions can be taken. • Delete the unnecessary information with the use offrom the "Save Area Administration" menu. • Increase the standard upper limit of the standard value of the save area that can be used. (note)

Note) The standard value of the free disk space of the file system, the upper limit of the standard value of the save area, and the locations of the save area can be modified by changing the variables in the environment definition file. For details, see Section 3.10 3.10, "Environment Definition File."

## 3.7.3 Structure of save area

The investigation information is stored in the directory that has the incident number and the date of being collected..



Product name : The package name of a product

## [Note]

."

If the amount of investigation information is large, such as the size of a crash dump, the information is not saved in the save area. The file path is recorded in the file of "collection number.huge.txt file under the corresponding directory in the save area. If you want to save information from the investigation information collection menu onto tape media, such file is automatically saved on tape media.

# 3.8 Notes on Use

## 3.8.1 System without tape device

In a system in which a tape device is not allocated, information cannot be saved from the investigation information collection menu onto a tape device. In this event, transfer the investigation information to a system that has a tape device as explained below.

- 1. If investigation information is collected from the investigation information collection menu, a message asking whether or not to save it on tape is displayed. Enter [n].
- Find out the directory of the save area in which the collected investigation information was saved. The incident number and data about collection are added to the directory name. For details, see Section 3.7 3.7, "Save Area of Investigation Information."
- 3. Transfer the directory to a system that has a tape device or use another method to establish the state that can save the directory to a tape device.
- 4. If the amount of investigation information is large, such as the size of a dump, the information is not saved in the save area. The full path location is saved in the file "collection number.huge.list" under the corresponding directory in the save area. To set up an environment to save to a tape device the investigation information that could not be saved in a save area, refer to the file whose full path location was saved.

## [Note]

Note the following to transfer investigation information to another system (e.g., using FTP).

- $\cdot\,$  Investigation information in the crash dump save area.
- Do not transfer the investigation information (vmcore.N, unix.N, and fjsnap.N) located in the crash dump save area to the crash dump area (e.g., using FTP transfer) of other machines. This is because the full paths of vmcore.N and unix.N are stored in fjsnap.N, normal saving on tape cannot be performed.
- Investigation information in the save area
   Do not transfer (e.g., using FTP transfer) the investigation information saved in the save area to the save
   area of another system because, for investigation information that is too large to be saved in the save
   area, its full path is saved. Saving it on tape might not be possible.

## 3.8.2 Sending investigation information to REMCS Center

The following notes are on sending the investigation information to the REMCS Center.

## [Checking the connection status]

To send investigation information to the REMCS Center, confirm that a connection to REMCS Center is already established. It can be checked by selecting [REMCS Operation] from the "Remote Setup" menu.

## [Note]

For the UNIX Server model that uses System Console, a message indicating the non-connection state with the REMCS Center is not displayed even if you are going to send a investigation information. To send investigation information, confirm that a connection with the REMCS Center is established by using the [REMCS Operation Setting] menu on the console side.

## [Number of investigation information to be sent]

When investigation information is sent, the following three kinds of data are sent, at a minimum.

- · Investigation information actually selected
- · Collection results log
- $\cdot\,$  Software configuration information
- $\cdot\,$  Save area information

# 3.9 Simplification of Collection Work

## 3.9.1 Scheme of simplification

Investigation information that cannot be collected automatically can be collected by entering the full path location from the [Specify the filename directly] menu. However, the work of entering the full path location every time and repeating the same entry is can be troublesome.

Therefore, a scheme is used where the full path location of the investigation information that is to be collected is defined beforehand in a script for investigation information collection. The defined full path can be installed in the investigation information collection function.

By installing the script for investigation information collection beforehand, the investigation information can be easily collected from the "Software Information Selection" menu.



## 3.9.2 Script for collecting the investigation information

A method for creating the investigation information collection script and a method for collecting the investigation information using the investigation information collection script are explained below.

## [Filename]

Name the script file of the investigation information collection in the following format.

@software name\_mainte\_iil

@software name: Character string of alphanumeric characters starting with asterisk @ (nine characters or less including asterisk @).

## [Destination of storage]

Save the script for collecting the investigation information in the following directory.

/etc/opt/FJSVsirms/mainte/

## [Method of creation]

Create it using the following script as a reference. Sample script is stored in /etc/opt/FJSVsirms/sample\_mainte\_iil.

```
#/bin/sh
      "$1"
case
           in
    -mì
        echo ProductName
                                    (1)
        exit
               0
        echo
              MODE=AUTO
                                    (2)
              FILE=/var/sadm/pkg/FJSVsirms/pkginfo
        echo
                                                             (3)
              FILE=/etc/opt/FJSVsirms/*
                                                             (3)
        echo
              Û
        exit
esac
```

The method of creation is explained based on the change points.

## (1) ProductName:

This is the software name of the target of collection. Replace "ProductName" with any name. The name is displayed on the "Software Information Selection" menu.

## (2) MODE:

This specifies whether the investigation information to be sent is selected automatically or not.

- · MODE=AUTO
- This means investigation information is evaluated based on its size to determine whether can be sent. The following can be specified in addition to MODE = AUTO.
- $\cdot$  MODE = MANU
- Investigation information that is specified as TYPE=SMALL when the full path location is specified is the target of transmission.

## (3) Full path:

Specify the full path location of investigation information that you want to collect. Any number of locations can be specified after the full path location is defined, the following can be specified.

· TYPE=SMALL

This can be specified only if MODE is MANU. If the amount of investigation information is small enough for sending, the information is sent.

· DEL=YES

The file specified by the FILE parameter, is deleted after collection. If investigation information is saved as a tentative working file, it can be deleted by the DEL parameter.

## Example of description:

```
echo FILE=/tmp/trace.log,TYPE=SMALL,DEL=YES
```

## [Method for collecting the investigation information]

The name that is specified in the script by using the "Software Information Selection" menu is displayed automatically. Collect the investigation information by following the procedure explained in this chapter, and save it in the save area. It can be sent to the REMCS Center, and it can be saved on tape.

## [Note]

To specify MODE, FILE, TYPE and DEL that can be specified in a script, it must be specified entirely in uppercase letters. A blank cannot be placed in the middle of a parameter.

# 3.10 Environment Definition File

The operation of collecting investigation information can be changed by modifying the default value inside the environment definition file (sirms.conf). Use of the system without modification is recommended.

## [Filename]

/etc/opt/FJSVsirms/sirms.conf

## [Contents of the file]

Name of definition	Use and unit	Modification
FORMAT_VER=1.0	Version number of software configuration information	Prohibited
CCLevel=2	Specify which kind of Software related information should be collected.	
	no: No information is collected.	Permitted
	1: Package information is collected.	rermitted
	2: Package information and Oracle related information are collected.	
SmallLimit=700KB	Unit: KB or MB. The default is byte. When the size of the collected information is below the	Permitted

Name of definition	Use and unit	Modification
	SmallLimit value, the information can be sent by "E-mail".	
BigLimit=30MB	<ul><li>Unit: KB or MB. The default is byte.</li><li>Maximum size of one item of information that can be saved in save area.</li><li>The information that exceeds the maximum size, can be saved only of its full path location in the save area.</li></ul>	Permitted
SaveArea=/var/crash/ \$HOSTNAME\$/ FJSVsirms_sa	Destination of storage in the save area of investigation information that is collected. \$HOSTNAME\$ is the field that is replaced by the hostname during execution. A maximum of 256 characters can be specified as the path. If the specified directory does not exist, it is created automatically.	Permitted
SaveAreaSize=200MB	Unit: KB or MB. The default is byte. Upper limit of the amount of use of the save area	Permitted
AvailableSize=300MB	Unit: KB or MB. The default is byte. Standard value of the free disk space of the file system required for execution.	Permitted
	Destination for saving the crash dump. If the value is left blank, the following is selected.	
	1) Solaris 7 OEand higher: Definition in the dumpadm (1M) command	
SaveCore=	2) Solaris 2.6 OE: Definition in /etc/init.d/sysetup or /etc/rc2.d/S75savecore.	Permitted
	3) If a definition is not defined in the above 1) and 2), the following is defined.	
	SaveCore=/var/crash/\$HOSTNAME\$ \$HOSTNAME\$ is the field that is replaced by the hostname during execution.	
MaxSendTotal=5MB	Unit: KB or MB. The default is byte. Maximum amount of information that can be sent. Specification is possible to 10MB. If total amount of the information to be sent exceeds this value, transmission is suppressed.	In Point to Point connection, it Prohibited
AllowSendAllInfo=no	Yes: Information will be transmitted even if the size exceeds the SmallLimit value No: Information will not be transmitted when its size exceeds the SmallLimit value.	Permitted
SaveLocalHost=yes	The collected investigation information is stored in the Save area in local hosts.	Prohibited
AutoCleaning=yes	Yes: When the space can be used in the Save area reaches the maximum value before collecting, the information with the oldest incident number is deleted. No: Do not delete.	Permitted
RCCollect=no	No: Do not execute the automatic collection of the investigation information. Yes: Execute the automatic collection automatically.	Permitted
RCExtremeTime=24	Unit: Hour Specified the frequencies of the automatic collection. If it will be execute 3 times in 24 hours, it should be specified as follows. RCExtremeTime=24 RCExtremeFrequency=3	Permitted
RCExtremeFrequency=3	Unit: Times	Permitted

Name of definition	Use and unit	Modification
	Specified the frequencies of the automatic collection. If it will be execute 3 times in 24 hours, it should be specified as follows. RCExtremeTime=24 RCExtremeFrequency=3	
RCWaitLimit=180	Unit: Minute The time that automatic collection function waits for completing the crash dumps generation.	Permitted
SysLogFacility=LOG_USER	The log type of outputting to Syslog.	Prohibited
SysLogPriority=LOG_INFO	The log type of outputting to Syslog.	Prohibited
PCWaitLimit=10	The retry frequencies on the occasion of multiple starting. (Collect remotely)	Prohibited
SWRetryCount=0	The retry counts of file transfer API.	Prohibited
SWRetryTime=0	The retry time(interval) of file transfer API.	Prohibited

## [Note]

- $\cdot$  To modify the environment definition file, modify it before opening the investigation information collection menu.
- · If REMCS Agent is re-installed, the environment definition file is returned to the standard value. The modified environment definition file is recommended to be saved with the name shown in the following example.

Example:sirms.conf.cpy

When you re-install REMCS Agent, please also set environment definition file values with referring the back-uped environment definition file.

# 3.11 Message List

The messages that are output during investigation information collection are shown below.

#### SRM10007W

Total size of the software information collected into save area is over the upper limit.

Delete useless information at Save Area Management Menu.

Or increase SaveAreaSize value in Environment Definition File.

[Description]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

[Measure]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

#### SRM10008W

The available size of file system holding the save area is under %dM bytes.

Allocate enough available space for the file system.

Or change SaveArea value in Environment Definition File, to allocate save area in the file system which has space enough.

[Description]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

#### [Measure]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

## SRM10009W

Size of information exceeded %sKB.

Change MaxSendTotal value in Environment Definition File, or save it to tape.

[Description]

The total size of the investigation information that is to be sent exceed the MaxSendTotal value of the environment definition file.

[Measure]

If the total size of the investigation information is large, Fujitsu recommends saving it onto tape and then sending it to the REMCS Center because the load on communication lines can be too heavy. If it has to be sent via e-mail for some reason, change the MaxSendTotal value of the environment definition file to a tentative value that is larger than the value of the information to be sent.

#### SRM10100E

Failed to load the sirms conf file(%s)

#### [Description]

Failed to read the environment definition file itself, or a value that is defined in the environment definition file has an error.

#### [Measure]

 $\label{eq:confirm} \mbox{ that the environment definition file (/etc/opt/FJSVsirms/sirms.conf) and its contents are correct.$ 

#### SRM10101E

Some error detected in Environment Definition File.

/etc/opt/FJSVsirms/sirms.conf(line= %d)

## [Description]

There is an error in the %dth line in the environment definition file.

#### [Measure]

Confirm that the environment definition file (/etc/opt/FJSVsirms/sirms.conf) and its contents are correct.

#### SRM10103E

Please run sirms by Administrator (root)

[Measure]

Start the system with system administrator qualification (root).

#### SRM10106E

cannot create the save area

#### [Description]

Save area for the collected investigation information could not be created.

[Measure]

The location of the save area is defined by SaveArea of the environment definition file. Either increase the disk capacity of the locations or change the destination to a disk that has a sufficient amount of free disk space.

#### **SRM10107E**

Insufficient free space (min <20MB> required) under /tmp directory.

#### [Description]

There is not enough free space. At least, 20MB of free space is required for /tmp.

## [Measure]

Please acquire the free space of 20MB or more in /tmp.

#### SRM10204W

fjsnap is still running and collecting information now.

Please try again later

#### [Description]

fisnap is being used by other process. fisnap might have been executed

automatically by the system in the event of immediate rebooting because of system panic.

#### [Measure]

Perform this operation again after execution of fisnap has completed (wait for about 10 minutes).

#### SRM10709E

The total size specified by wild-card character(s) is too big.

#### [Description]

Number of files to be collected at one time is too great.

## [Measure]

Reduce the number of files to be collected at one time.

## SRM11018E

Some error occurred in collecting information.

#### [Description]

The space of /tmp may be insufficient. When some errors were detected in the information collection script, a description of the error is displayed following the above message.

#### [Measure]

When /tmp is insufficient, please increase an empty space. When an error is in a information collection script, correct the information collection script. For an explanation on how to create script, see Section 3.9 3.9, "Simplification of Collection Work."

[Note]

If the character at the top of a script file is not an at mark@, it is a script that is supplied by a Fujitsu product. If an error occurs in such a script, do not correct the script but contact one of our engineers.

## SRM11207E

Your current status is OFFLINE.

Service request failed.

#### [Description]

The customer system is not currently connected to the REMCS Center. Investigation information cannot be sent to the REMCS Center.

[Measure]

Check the connection status from [Operation] of the REMCS Agent menu.

#### SRM11418E

Some error occurred in sending.

Please check the network environment such mail sever.

[Description]

The REMCS Agent cannot send the investigation information to the center.

[Measure]

Check whether the mail sending environment is normal or not.

For the network environment that uses a dial-up router, investigation information of 1 MB or more sometimes cannot be sent to the REMCS Center because of a time-out problem caused by the data transfer rate. In such an event, save the investigation information on tape, and send the tape to the REMCS Center.

If ordinary e-mail other than REMCS can be sent under the LAN environment, the transmission function of REMCS Agent may be faulty. In such event, contact our engineer.

#### SRM11423E

Failed to save to tape.

Please check the device.

[Description]

An error occurred while saving information to tape after execution of the tar(1) command.

## Measure

Check if the tape device is normal, and confirm that a tape is inserted.

#### $\mathbf{SRM11424E}$

Another process is sending something, so please wait a while and retry.

#### [Description]

The transmission process is being performed by a process other than REMCS Agent.

[Measure]

Wait for about 5 minutes, and send the information again from the Save Area Administration Menu

#### SRM11429W

Failed to confirm whether sending the investigation information had been completed normally or not, because of time-out.

[Description]

The transmission process is executed but completion of transmission cannot be confirmed even after elapse of certain amount of time. Therefore, the confirmation process is disabled. If the communication line is normal, information is sent correctly.

(Reference) Under a dial-up environment, a certain period of time is required until transmission is completed. (If the transfer speed is 50 Kbps, about 3 minutes are required for every 1 MB.)

#### [Measure]

Check with one of our engineers to confirm that information has been sent correctly to the REMCS Center.

#### SRM11902E

Failed to save the investigation information.

[Description]

It is not possible to refer to the investigation information in the Save area.

#### [Measure]

Please confirm whether the Save area is destroyed.

#### SRM11903E

Failed to delete the investigation information.

[Description]

The collected investigation information can't be stored in the Save area.

[Measure]

Please confirm whether the file system where the Save area is destroyed or the Save area is insufficient.

#### SRM11904E

Failed to change the incident number of the investigation information.

[Description]

The incident number of the investigation information cannot be changed to other incident numbers.

#### [Measure]

Please confirm whether the Save area is destroyed.

## SRM12012E

Auto-collection is executing now. Please retry after a while.

#### [Description]

The automatic collection processing is being executed. Information cannot be collected from the investigation information collection menu during the automatic collection function is being executing.

#### [Measure]

Please operate the investigation information collection menu after automatic collection is over (about ten minutes or so).

#### SRM30104E

(line=%d)The first output of script must be 'MODE'.

#### [Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. MODE sentence must be described the head of standard output of the script. [Measure]

Please correct the script for the information collection. As to the making of script, please refer to the 3.9 3.9, "simplification of collection work".

[Note]

When the first character of the script file name is not @, it means the script is offered by the Fujitsu product. When the error occurs by this script, please do not correct the script but report it to our company technological members.

## SRM30105E

(line=%d)'MODE' appeared twice.

[Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The MODE sentence is described in a standard output of the script only once.

[Measure]

It is same as SRM30104E.

[Note]

It is same as SRM30104E.

#### SRM30106E

(line=%d)Syntax error at 'MODE'.

[Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The parameter, which can be specified by the MODE sentence, is "MANU" or "AUTO".

[Measure]

It is same as SRM30104E.

#### [Note]

It is same as SRM30104E.

#### SRM30107E

The script indicated error status=%d

[Description]

The error was detected in the script for the information collection.

[Measure]

It is same as SRM30104E.

## [Note]

It is same as SRM30104E.

#### SRM30109E

(line=%d)Syntax error at output of script.

[Description]

The content of the script for the information collection is not correct.

[Measure] It is same as SRM30104E.

[Note]

It is same as SRM30104E.

#### SRM30110E

(line=%d)Filename not specified at 'FILE'.

#### [Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The FILE option is not specified.

[Measure] It is same as SRM30104E.

[Note]

It is same as SRM30104E.

#### SRM30111E

(line=%d)Filename not specified at 'FILE'.

#### [Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The file path is not specified in the FILE option.

#### [Measure]

It is same as SRM30104E.

[Note]

It is same as SRM30104E.

#### SRM30112E

(line=%d)Syntax error at option value for 'DEL'.

#### [Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The parameter, which can be specified by the DEL sentence, is "YES".

[Measure]

It is same as SRM30104E.

[Note]

It is same as SRM30104E.

## SRM30113E

(line=%d)Syntax error at option value for 'TYPE'.

#### [Description]

The script for the information collection detects description error at No.%d line which outputting to a standard output. The parameter, which can be specified for the TYEP sentence, is "SMALL". [Measure]

Measure

It is same as SRM30104E. [Note]

It is same as SRM30104E.

#### SRM30407E

Failed to execute script(%s)

[Description]

The execution of the script for the information collection failed.

[Measure]

It is same as SRM30104E. Moreover, please confirm whether the execution logic of the script is correct.

[Note]

It is same as SRM30104E.

#### SRM30408E

script(%s) exited and indicated error status=%d

[Description]

The script for the information collection did the error end.

## [Measure]

It is same as SRM30104E. Moreover, please confirm whether the execution logic of the script is correct.

[Note]

It is same as SRM30104E.

## SRM30502E

Failed to initialize 'logging'.

[Description]

Failed in the initialization of the execution log file for the investigation information collection.

[Measure]

Please confirm whether the file system under the control of /var is insufficient.

#### SRM30684E

The available size of file system holding the save area is under %dM bytes.

Allocate enough available space.

Or change SaveArea value in Environment Definition File to allocate save area in the file system which has enough space.

[Description]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space." [Measure]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

#### SRM30685E

Total size of the software information collected into the save area is over the upper limit.

Delete useless information at Save Area Management Menu.

Or increase SaveAreaSize value in Environment Definition File.

[Description]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space." [Measure]

For details, see Section 3.7.2 3.7.2, "Checking the free disk space."

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