



**Hitachi Freedom Storage™
Thunder 9200™
Password Protection 9200
User's Guide**

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Document Revision Level

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MK-91DF555-0	June 2001	Initial Release.

Source Document Revision Level

The following source document was used to produce this 9200 user guide:

DF-F500-WSPS Password Protection User's Guide, Second Edition.

Preface

Password Protection 9200 is installed on your Thunder 9200 disk array unit. Before using Password Protection 9200, read the operating procedures and notices included in this guide. Carefully follow the safety precautions and instructions.

The *Hitachi Freedom Storage™ Thunder 9200™ Password Protection 9200 User's Guide* assumes that:

- The user has a background in data processing and understands direct-access storage device subsystems and their basic functions.
- The user is familiar with the Hitachi Freedom Storage™ Thunder 9200™ array subsystem.

For further information on Hitachi Data Systems products and services, please contact your Hitachi Data Systems account team, or visit the Hitachi Data Systems worldwide web site at <http://www.hds.com>. For specific information on the supported host systems and platforms for the 9200, please refer to the user documentation for the product, or contact the vendor's customer support service.

Note: The term “9200” refers to the Hitachi Thunder 9200™ subsystem, unless otherwise noted. Please refer to the *Hitachi Thunder 9200™ User and Reference Guide* (MK-90DF504) for further information on the 9200 disk array subsystem.

Note: The use of Password Protection 9200 and all other Hitachi Data Systems products is governed by the terms of your license agreement(s) with Hitachi Data Systems.

Safety Precautions

Note the following when using Password Protection 9200:

- Only administrators, system engineers, and field engineers who are familiar with Hitachi Data Systems disk array units are allowed to run the Password Protection 9200 function.
- Make certain you read and fully understand this guide before you operate the Password Protection 9200 function.
- Carefully follow instructions included with the “CAUTION” label.



Failure to follow these instructions can result in serious system damage and/or the loss of system data.

COMMENTS

Please send us your comments on this document: doc.comments@hds.com.

Make sure to include the document title, number, and revision.

Please refer to specific page(s) and paragraph(s) whenever possible.

(All comments become the property of Hitachi Data Systems Corporation.)

Thank you!

Contents

Chapter 1	Introducing Password Protection 9200	1
1.1	Specifications	2
Chapter 2	Installing and Uninstalling Password Protection 9200.....	3
2.1	Installation.....	3
2.2	Uninstallation	7
Chapter 3	Enabling/Disabling Password Protection 9200	11
Chapter 4	Setting Security Information	15
Chapter 5	Logging In and Logging Out	19
5.1	Logging In.....	19
5.2	Logging Out	20
5.3	Logging In Forcibly	21

List of Tables

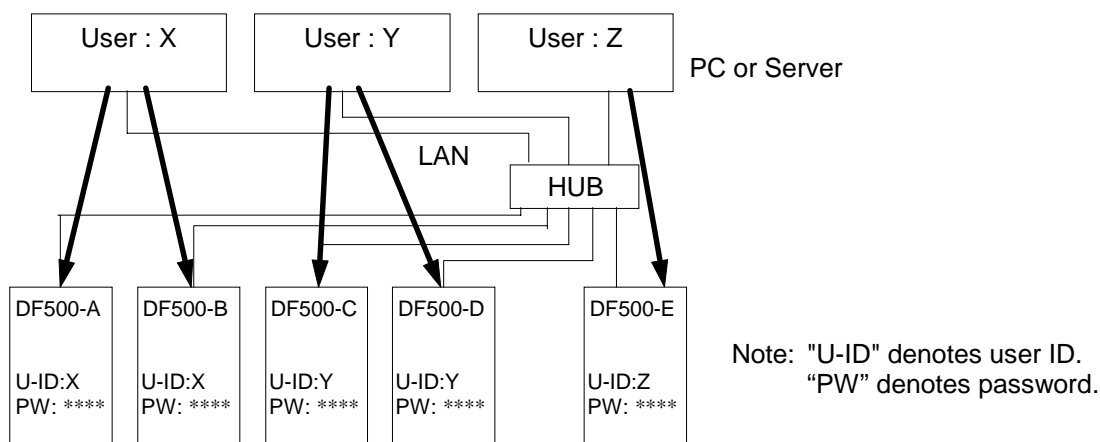
Table 1.1	Outline of Password Protection 9200	1
Table 1.2	Specifications of Password Protection 9200.....	2

Chapter 1 Introducing Password Protection 9200

By using Password Protection 9200, you can limit the number of Resource Manager 9200 users that are permitted to access the optional 9200. Users can also be prevented from accessing it at the same time. This can deter 9200 information from being offered to users who have no right to access and can prevent concurrent updates to 9200 configuration information by exclusively controlling the users.

To register the user, specify a user ID and a password using the Resource Manager 9200. The 9200 refers to the registered user IDs and passwords when a login is made from the Resource Manager 9200 and rejects a login made by an unregistered user. The 9200 which has been logged in by a certified user rejects another login attempted by another user.

The following is an outline of the Password Protection 9200 control feature.



The following table shows whether access by each user of Resource Manager 9200 from the example above is accepted or rejected.

Table 1.1 Outline of Password Protection 9200

9200 User	A	B	C	D	E
X	Accepted	Accepted	Rejected	Rejected	Rejected
Y	Rejected	Rejected	Accepted	Accepted	Rejected
Z	Rejected	Rejected	Rejected	Rejected	Accepted

1.1 Specifications

Specifications of the Password Protection 9200 control feature are shown below.

Table 1.2 Specifications of Password Protection 9200

Item	Specifications
Devices which can set the feature	<ul style="list-style-type: none">• SCSI and Fibre Channel interface devices can set the feature.• Only devices in which the Password Protection 9200 control feature (DF-F500-WSPS), which is a software option, is installed can set this feature.
Registration of the user ID and password and guard against access	<ul style="list-style-type: none">• Up to 20 sets of a user ID and a password can be registered for one 9200 from the Resource Manager 9200.• Future login attempts by a user of Resource Manager 9200 whose user ID and password are not registered are rejected. (Note 1)
Rejection of concurrent logins attempted by users of Resource Manager 9200	<ul style="list-style-type: none">• The 9200 which has been logged in by a user of Resource Manager 9200 whose user ID and password have been registered will reject another login attempted by another user even if its user ID and password have been registered, until the former user logs out.• An error message issued by Resource Manager 9200 will clarify whether the login is rejected due to non-registration or a result of a concurrent login attempt.

Note 1: Service personnel use the Resource Manager 9200 for maintenance of array units as well. When registering user IDs, register the user ID for service personnel.

Chapter 2 Installing and Uninstalling Password Protection 9200



The User ID and Password must be configured immediately after the software key has been installed. Please contact Hitachi Data Systems Customer Support if you lose your password and are unable to access the system.

The Password Protection 9200 option is usually unselectable (closed), to make it available, you must install Password Protection 9200 (DF-F500-WSPS) and make its functions selectable (open). **To install this function, an option FD provided with the optional feature or the key code is required.**

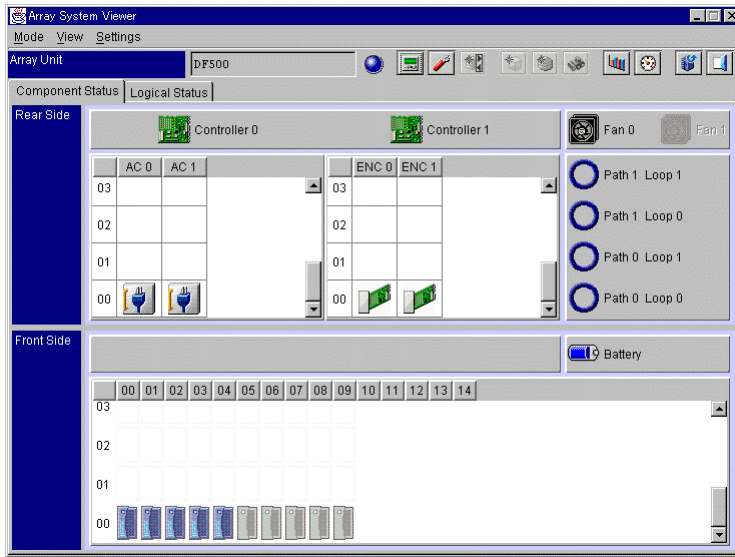
Follow the instructions below to install Password Protection 9200 (DF-F500-WSPS). Password Protection 9200 is installed and uninstalled using Resource Manager 9200. For operating procedures of the Resource Manager 9200, refer to the *Resource Manager 9200 User's Guide (Part 1: Graphical User Interface)*.


Note: Before installing and uninstalling, make sure that the array unit is in normal operating condition. If a failure such as a controller blockade has occurred, installation and uninstallation operations cannot be performed.

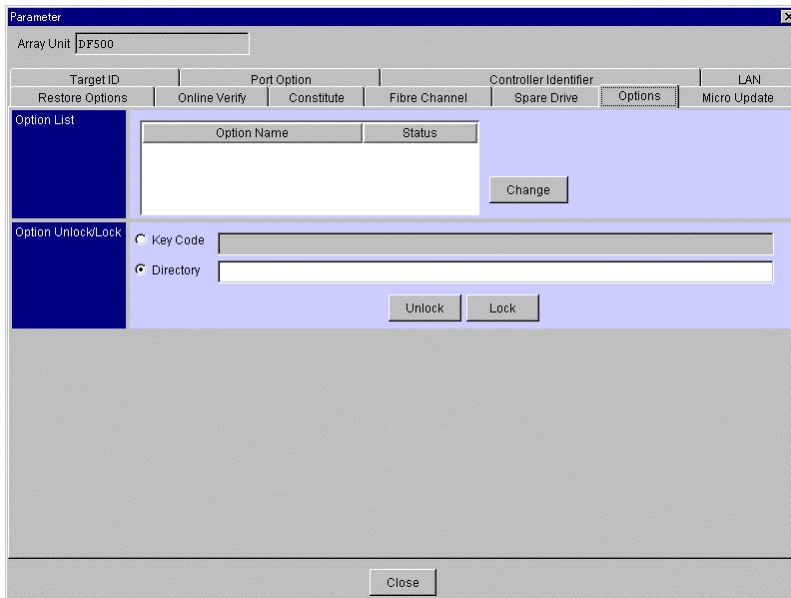
2.1 Installation

The following paragraphs describe installation procedures performed by using the GUI version of Resource Manager 9200.

1. Start Resource Manager 9200 and change the mode of operating to **Management Mode**.
2. Register the array unit in which you will install Password Protection 9200. Connect to this registered array unit; the corresponding window will be displayed.



3. From the **Settings** menu, select **Configuration Settings**.
Alternatively, from the tool bar, select the **Configuration Settings**  button.
The Parameter dialog box is displayed.
4. Click the **Option** tab.

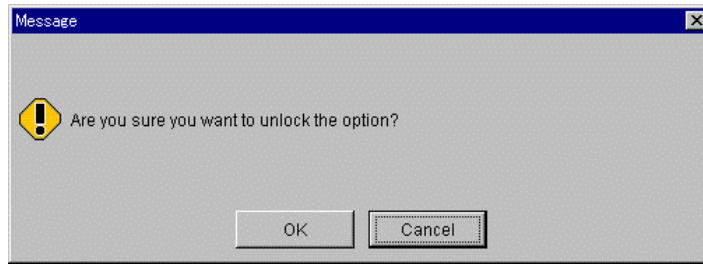


5. Unlock the optional feature by using either of the following:
 - Password Protection 9200 Key FD
 - Key Code

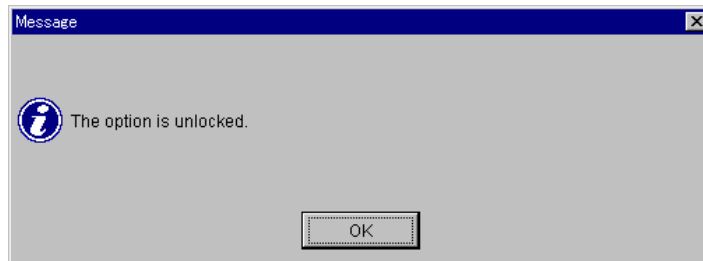
Password Protection 9200 Key FD

 - a) Insert the key FD into the FDD of the system where Resource Manager 9200 is installed.
 - b) Click the **Directory** radio button to enter a path to the FD.
 - c) Click the **Unlock** button.

- d) A screen appears, requesting confirmation to unlock Password Protection 9200. Click the **OK** button.

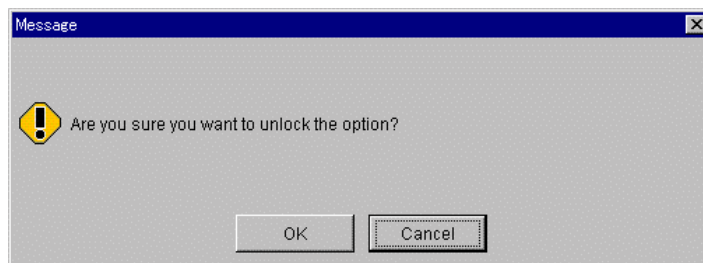


- e) A message appears, confirming that this feature is unlocked. Click the **OK** button.

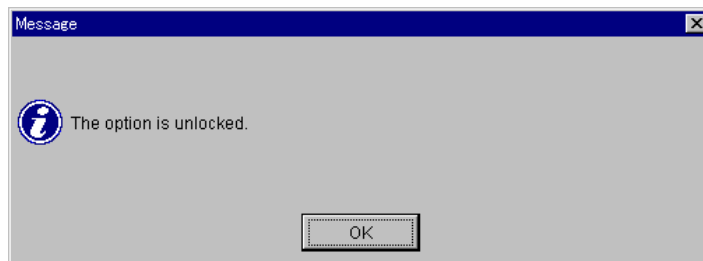


Key Code

- a) Click the **Key Code** radio button to enter a key code in the text box.
- b) Click the **Unlock** button.
- c) A screen appears, requesting a confirmation to unlock the Password Protection 9200 option. Click the **OK** button.



- d) A message appears, confirming that this feature is unlocked. Click the **OK** button.



6. The window is updated and then displayed.

The screenshot shows a software window titled "Parameter" with a close button in the top right corner. Below the title bar, there is a text field labeled "Array Unit" containing the value "DF500". A horizontal menu bar contains several options: "Target ID", "Port Option", "Controller Identifier", and "LAN". Below this menu bar, there are sub-menus: "Restore Options", "Online Verify", "Constitute", "Fibre Channel", "Spare Drive", "Options", and "Micro Update". The "Options" sub-menu is currently selected, displaying a table with two columns: "Option Name" and "Status". The table contains one entry: "PSW-PROTECT" with a status of "Enable". To the right of the table is a "Change" button. Below the table, there is a section labeled "Option UnlockLock" with two radio buttons: "Key Code" (unselected) and "Directory" (selected). Below the "Directory" radio button is a text input field. At the bottom of this section are "Unlock" and "Lock" buttons. A large grey rectangular area occupies the bottom half of the window. At the very bottom, centered, is a "Close" button.

Option Name	Status
PSW-PROTECT	Enable

CAUTION The User ID and Password must be configured immediately after the software key has been installed (see Chapter 4). Please contact Hitachi Data Systems Customer Support if you lose your password and are unable to access the system.

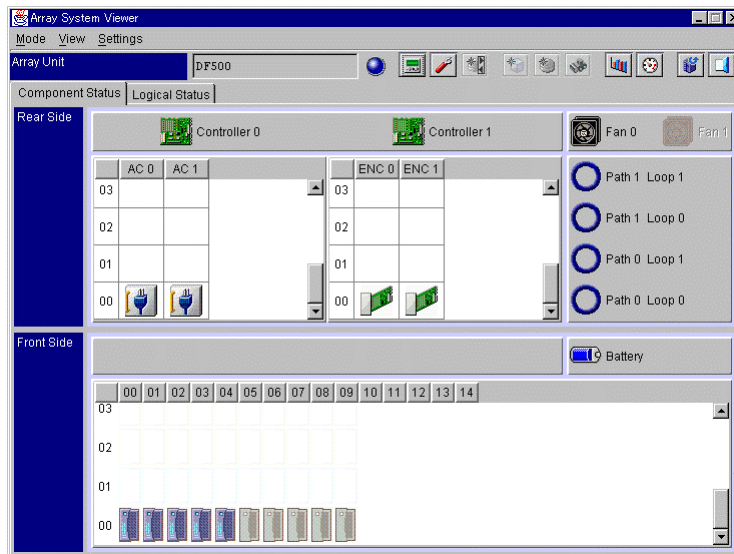
2.2 Uninstallation


Follow the instructions below to uninstall Password Protection 9200. When it is uninstalled, the Password Protection 9200 is not available (locked) until it is opened by the Option floppy disk or the key code.

To uninstall Password Protection 9200, the key FD provided with the Password Protection 9200 feature or the key code described in the key FD is required.

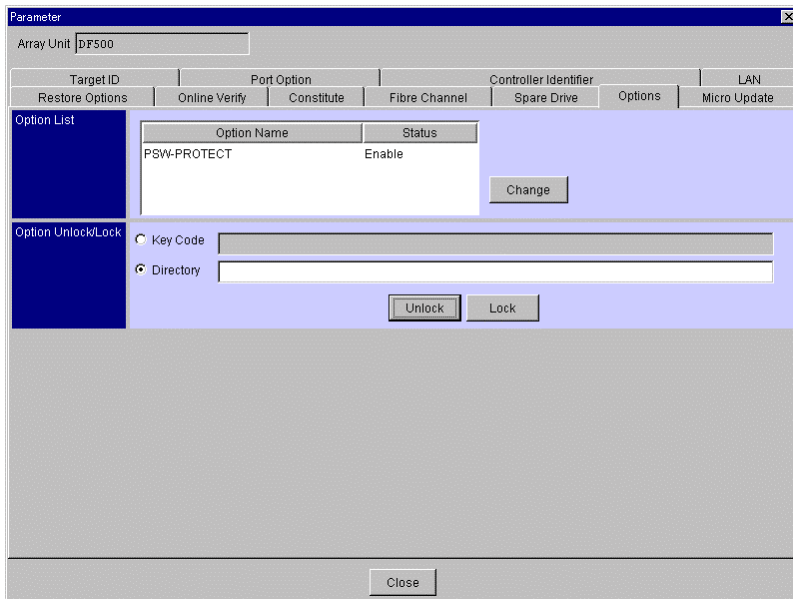
Follow the instructions below to uninstall Password Protection 9200 (DF-F500-WSPS).

1. Start Resource Manager 9200 and change the mode of operating to **Management Mode**.
2. Register the array unit in which you will install Password Protection 9200. Connect to this registered array unit; the corresponding window will be displayed.



3. From the **Settings** menu, select **Configuration Settings**.
Alternatively, from the tool bar, select the **Configuration Settings**  button.
The Parameter dialog box is displayed.
4. Click the **Parameters** button.

5. Click the **Option** tab.

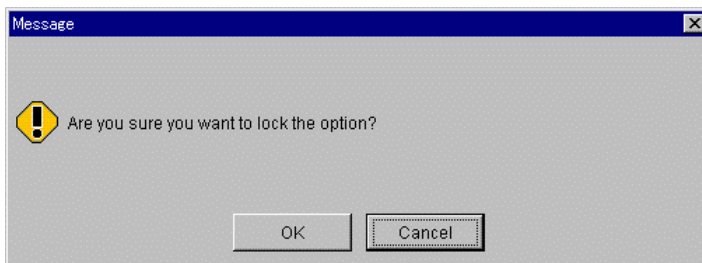


6. Close (lock) the optional feature by using either of the following:

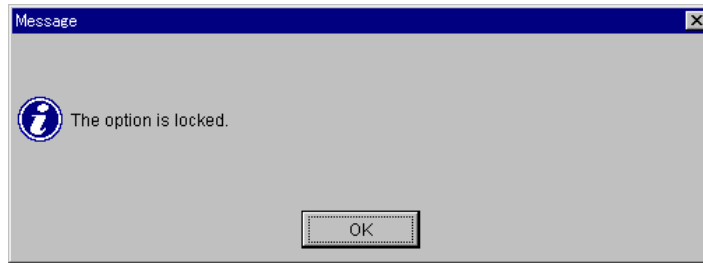
- Password Protection 9200 Key FD
- Key Code

Password Protection 9200 Key FD

- Insert the key FD into the FDD of the system where Resource Manager 9200 is installed.
- Click the **Directory** radio button to enter a path to the FD.
- Click the **Lock** button.
- A screen appears, requesting a confirmation to lock the Password Protection 9200 option. Click the **OK** button.

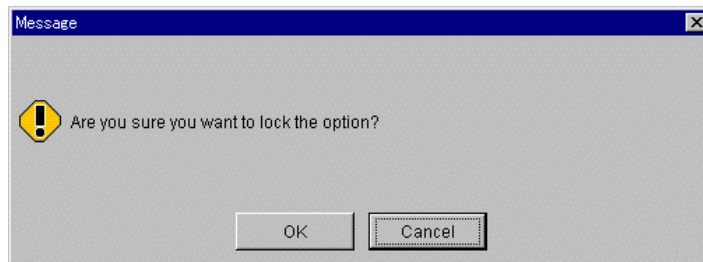


- e) A message appears, confirming that this feature is locked. Click the **OK** button.

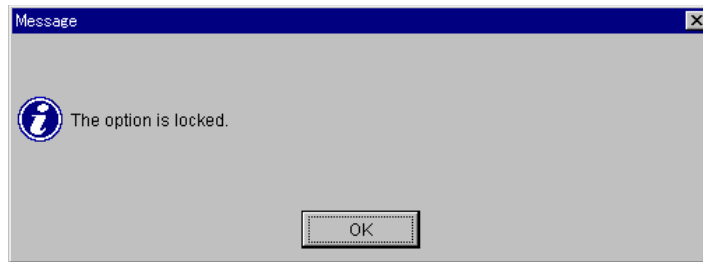


Key Code

- a) Click the **Key Code** radio button to enter a key code in the text box.
- b) Click the **Lock** button.
- c) A screen appears, requesting a confirmation to lock the Password Protection 9200 option. Click the **OK** button.



- d) A message appears, confirming that this feature has been locked. Click the **OK** button.



7. The window is updated and then displayed.

The screenshot shows a software window titled "Parameter" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the window, at the top, is a text field labeled "Array Unit" containing the text "DF500". Below this is a horizontal menu bar with several tabs: "Target ID", "Port Option", "Controller Identifier", and "LAN". Underneath these tabs is a row of sub-tabs: "Restore Options", "Online Verify", "Constitute", "Fibre Channel", "Spare Drive", "Options" (which is currently selected), and "Micro Update". The main content area is divided into two sections. The top section, labeled "Option List" on the left, contains a table with two columns: "Option Name" and "Status". The table is currently empty. To the right of the table is a "Change" button. The bottom section, labeled "Option UnlockLock" on the left, contains two radio buttons: "Key Code" (unselected) and "Directory" (selected). Below the radio buttons are two text input fields. At the bottom of this section are "Unlock" and "Lock" buttons. At the very bottom of the window is a "Close" button.

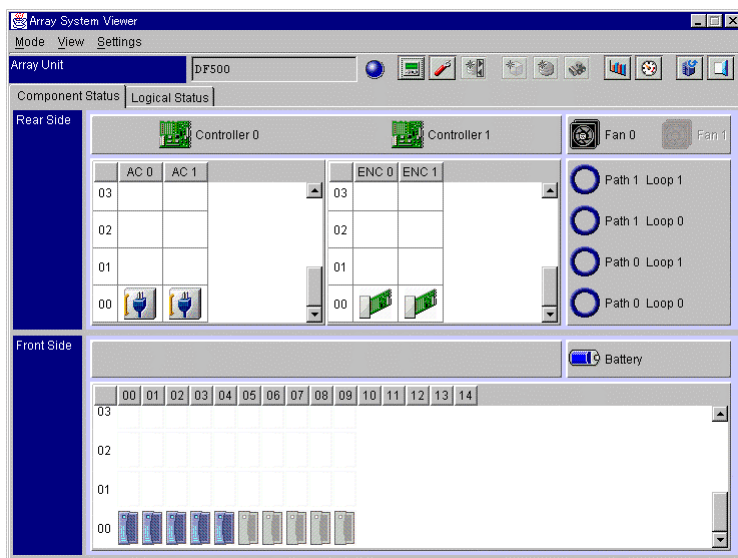
Chapter 3 Enabling/Disabling Password Protection 9200


The Password Protection 9200 function can be set to Disable or Enable depending on the conditions in which the feature has been installed.

The following paragraphs describe a procedure for setting the function to Disable or Enable while the Password Protection 9200 Control feature stays in an unlocked state.

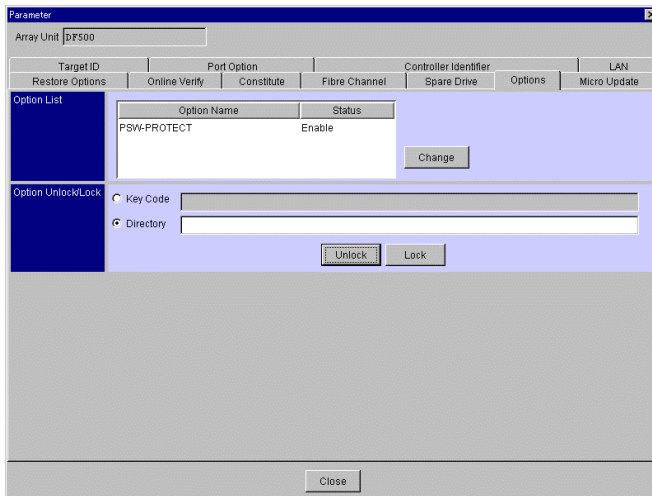
These procedures can be performed by using the GUI version of Resource Manager 9200.

1. Start Resource Manager 9200 and change the mode of operating to **Management Mode**.
2. Register the array unit in which you will install Password Protection 9200. Connect to this registered array unit; the corresponding window will be displayed.

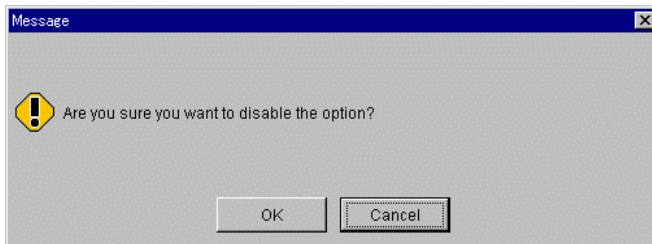


3. From the **Settings** menu, select **Configuration Settings**.
Alternatively, from the tool bar, select the **Configuration Settings**  button.
The Parameter dialog box is displayed.

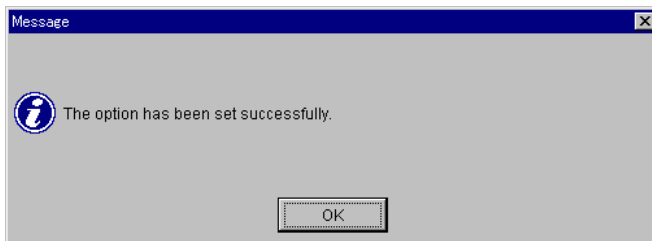
4. Click the **Option** tab.



5. Click on **PSW-PROTECT** in the **Option List** text box, then click the **Change** button.



6. A message appears, confirming that this option is set. Click the **OK** button.



7. The window is updated and then displayed.

Parameter

Array Unit DFS00

Target ID	Port Option	Controller Identifier	LAN	Restore Options
Online Verify	Constitute	Fibre Channel	Password Protection	Spare Drive
Options	Micro Update			

Option List

Option Name	Status
PSW-PROTECT	Disable

Change

Option Unlock/Lock

☐ Key Code

☒ Directory

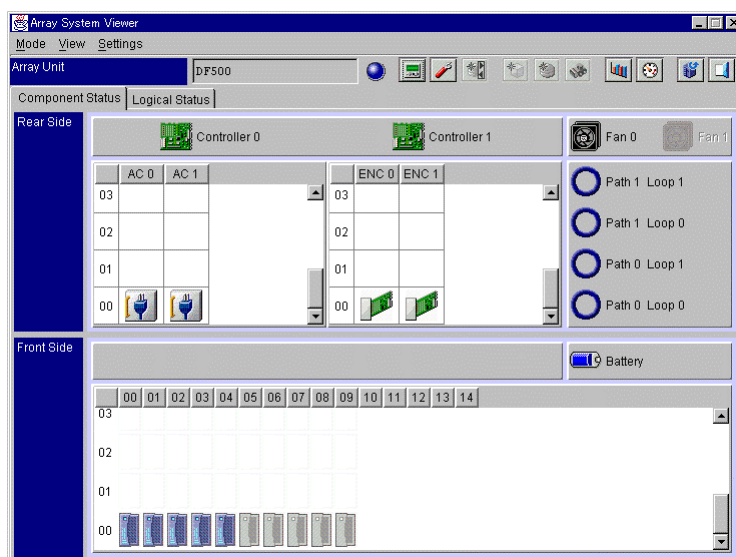
Unlock Lock

Close


Chapter 4 Setting Security Information

The operation to set the User ID and Password with Resource Manager 9200 is as follows.

1. Start Resource Manager 9200 and change the mode of operating to **Management Mode**.
2. Register the array unit in which you will install Password Protection 9200. Connect to this registered array unit; the corresponding window will be displayed.

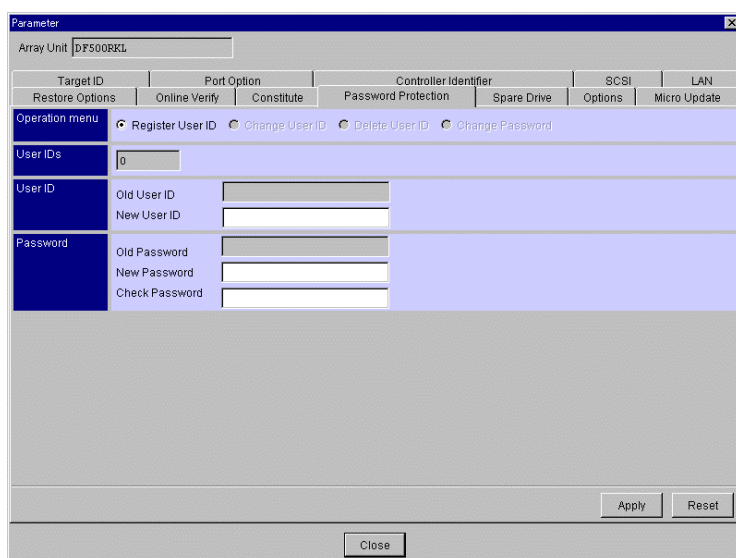


8. From the **Settings** menu, select **Configuration Settings**.

Alternatively, from the tool bar, select the **Configuration Settings**  button.

The Parameter dialog box is displayed.

3. Click the **Password Protection** tab.



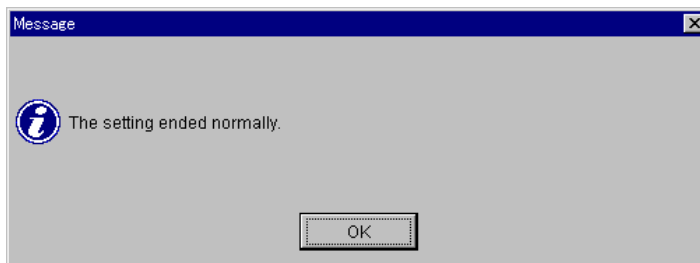
4. From the **Operation menu**, click the **Register User ID** option button. In the **New User ID**, **New Password** and **Check Password** fields, enter their respective data. Click the **Apply** button.

This menu contains the following:

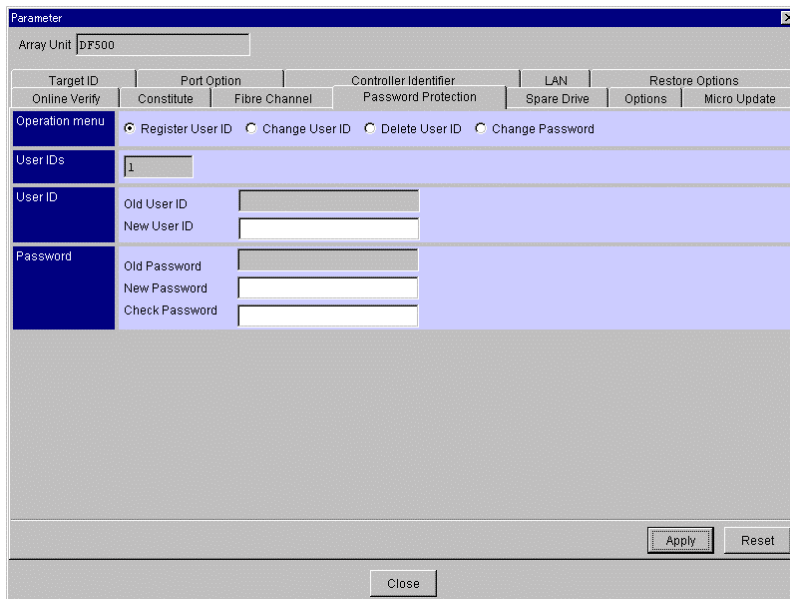
- **New User ID:** Specifies a user ID to register. Specified with one-byte coded alphanumerics and special symbols - (**minus**) and _ (**underline**) of 4 to 12 characters long.
- **New Password:** Specifies the password of a user ID to register. Specified with one-byte coded alphanumerics and special symbols - (**minus**) and _ (**underline**) of 4 to 12 characters long.
- **Check Password:** Specifies the same password as that of a user ID to register. Specified with one-byte coded alphanumerics and special symbols - (**minus**) and _ (**underline**) of 4 to 12 characters long.

Check the settings for complete User ID and Password.

A message appears, confirming that the registration is complete. Click the **OK** button.



The number of registered user IDs is updated, then displayed.





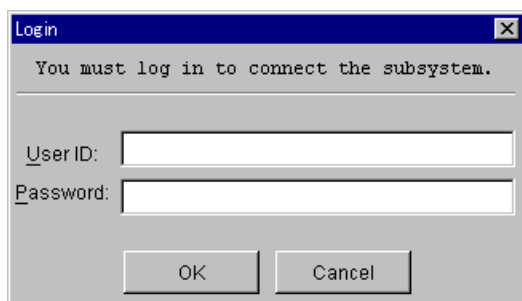
The User ID and Password must be configured immediately after the software key has been installed. Please contact Hitachi Data Systems Customer Support if you lose your password and are unable to access the system.

Chapter 5 Logging In and Logging Out

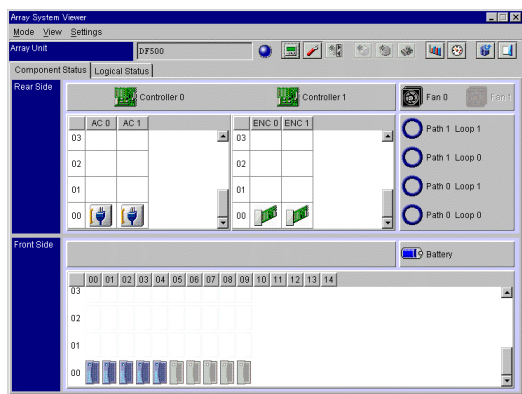
This chapter explains how to log in and log out using Resource Manager 9200. Management of operators by user ID is effective when operating Resource Manager 9200 in Management mode. When operating Resource Manager 9200 in Monitor mode, Resource Manager 9200 may be operated regardless of whether a user ID has been registered or not.

5.1 Logging In

1. Set the mode of operation to **Management Mode**.
2. In the main window, double-click the icon for the array unit to be connected, then click the **OK** button.
3. Enter a registered user ID and its password, then click the **OK** button.



4. Log in with the registered user ID. The unit window is displayed.



5. Double-click the icon of an array unit to which a user has already logged in. A message appears, confirming that a user has already logged in.


The message indicates the user ID of the logged-in user and connection information.

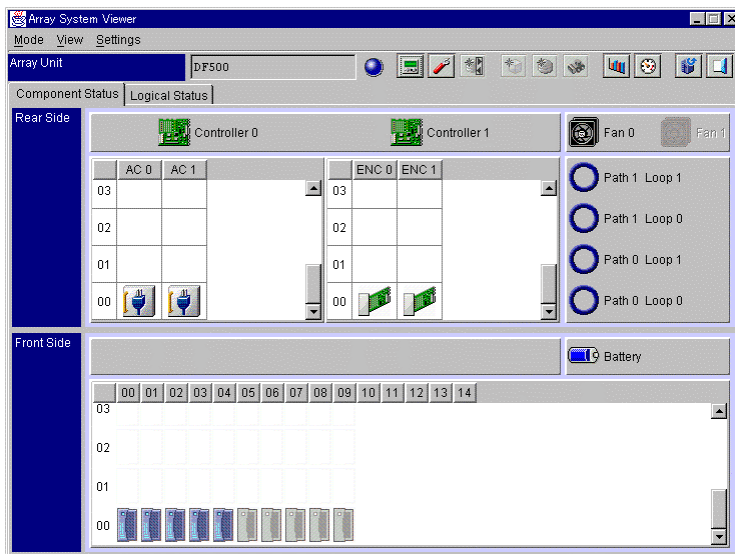
6. Click the **OK** button; retry login again. The following message appears.



5.2 Logging Out

From the **Mode** menu, select **Exit**.

Alternatively, from the tool bar, select the **Exit**  button on the unit window.



5.3 Logging In Forcibly

This section describes how to log out a user ID forcibly from an array unit to which a user has already logged in with the user ID, then forcibly log in with another registered user ID.

1. Double-click the icon of an array unit to which a user has already logged in. A message appears, confirming that a user has already logged in.

The message indicates the user ID of the logged-in user and connection information.



Message while operating in the unit window.



A user ID with which a user has logged in and connection information are not displayed.

2. Close the unit window, then open it again. Check the user ID of the user who has logged in.
3. Terminate Resource Manager 9200, and restart Resource Manager 9200 by appending the **-discon** option of the Forcibly Logging In command.
4. *When using Windows:* Edit the description contents of **startmgr.bat2** (a batch file used to start the manager). Add the **-discon** option.

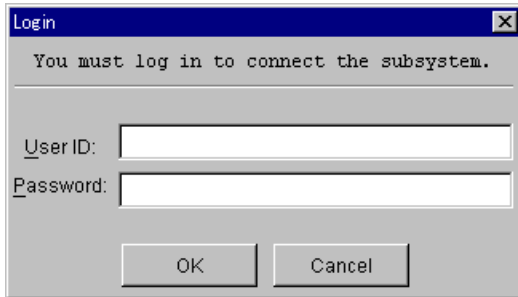
Example: `java -classpath .\CONFMNG2.JAR
jp.co.hitachi.str.diskarray.gui.ConmanFrame -discon`

When using Solaris: Start the Manager by appending the **-discon** option when starting.

Example: `./startmgr2 -discon`

Next, log in by the following procedure.

1. Restart the Resource Manager 9200, and set the mode of operation to **Management Mode**.
2. Double-click the icon of the array unit to be connected on the main window. Then click the **OK** button.
3. Enter a registered user ID and its password. Then click the **OK** button.



4. A user ID with which a user has logged in and its password are displayed. When logging in forcibly, click the **OK** button.



Logging in with the entered user ID is completed. The unit window is displayed.