

**JMR-7200/9200 Series**  
**JAN-7201/9201**  
**JAN-5203**

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# **Marine Radar Equipment ECDIS Route Planning System**

**Additional Manual for  
Chart Installation**



# Preface

**This book is the additional manual that describes the usage of the chart of JMR-7200/9200 series Multi Function Display, JAN-7201/9201 ECDIS, JAN-5203 Route Planning System (RPS). To maintain the performance of the equipment, please operate it after having understood this manual thoroughly.**

# Before Operation

## Pictorial Indication

Various pictorial indications are included in this manual and are shown on the equipment so that you can operate it safely and correctly and prevent any danger to you and / or to other persons and any damage to your property during operation. Such indications and their meanings are as follows. Please understand them before you read this manual.

	<b>DANGER</b>	This indication is shown where incorrect equipment operation due to negligence may cause death or serious injuries.
	<b>WARNING</b>	This indication is shown where any person is supposed to be in danger of being killed or seriously injured if the equipment is not operated correctly by neglecting this indication.
	<b>CAUTION</b>	This indication is shown where any person is supposed to be injured or any proper damage is supposed to occur if the equipment is not operated correctly by neglecting this indication.

## Examples of Pictorial Indication



Electric shock

The  $\Delta$  mark represents CAUTION (including DANGER and WARNING). Detailed content of CAUTION ("Electric Shock" in the example on the left) is shown in the mark.



Disassembling  
Prohibited



Prohibited

The  $\textcircled{\text{X}}$  mark represents prohibition. Detailed content of the prohibited action ("Disassembling Prohibited" in the example on the left) is shown in the mark.



Instruction



Instruction

The  $\bullet$  mark represents instruction. Detailed content of the instruction ("Disconnect the power plug" in the example on the left) is shown in the mark.

## Warning label

There are warning labels on the equipment.

Do not try to remove, break or modify the labels.

# Precautions on Operation

## **WARNING**



Before reading and writing of the file by using the USB memory, confirm that there is not a computer virus in the USB memory.

Otherwise they may affect other devices and may cause a malfunction.

# **CAUTION**



Do not insert the disk in the CD/DVD-ROM drive for long time.  
Doing so will cause damage to drive.



Do not leave the USB memory in the USB port after use.  
Malfunctions may result.

# Glossary

AIO	: (Admiralty Information Overlay). AIO is a digital dataset that is designed to be displayed over ENC's in ECDIS to provide additional information to the navigation published by United Kingdom Hydrographic Office (UKHO).
ARCS	: (Admiralty Raster Chart Service). A raster chart published by United Kingdom Hydrographic Office (UKHO).
AVCS	: (Admiralty Vector Chart Service). A vector chart published by United Kingdom Hydrographic Office (UKHO).
Base CD	: Chart CD containing a complete chart data.
Cell permit	: A file containing an encryption key for S-63 chart. Supplied by UKHO (AVCS), PRIMAR, and Hydrographic and Oceanographic Department of Japan Coast Guard.
ChartCo	: Chart Data providing service by ChartCo Company. System for updating the chart data via LAN.
Chart permit	: A license file for ARCS.
Chart Maintenance	: Software to manage charts. Imports and updates the charts.
C-MAP Ed.3	: (C-MAP Edition 3). A digital chart format by C-MAP.
Data Server	: Organization providing S-63 chart.
ENC	: (Electronic Navigation Chart). Meaning S-57 and S-63.
eToken Device	: USB dongle needed to import C-MAP Ed.3 Chart.
RPS	: (Route Planning System). Option equipment of ECDIS.
PRIMAR	: A Norwegian company supplying charts. Publisher of encrypted charts, S-63.

RTU	: (Real Time Updating). C-MAP provides a service that can update CM-93/3 chart database via an E-mail.
S-57	: IHO Transfer Standard for Digital Hydrographic Data.
S-63	: IHO Data Protection Scheme.
SA Certificate file	: An electronic file certifying the supplier of S-63 chart. Required for import/update of S-63 chart.
SENC Sync	: The functions that chart data synchronise with other unit via LAN.
UKHO	: United Kingdom Hydrographic Office.
Update CD	: Chart CD containing only updated content from Base CD. Can be used with Base CD imported.
User permit	: A user-specific code assigned by JRC. Required in using ARCS and S-63 charts.
Import	: A procedure of enabling the chart supplied by Base CD to be displayed on ECDIS.
Update	: A procedure of reflecting the update data supplied by Update CD on the imported chart.
Hydrographic and Oceanographic Department	: Hydrographic and Oceanographic Department of Japan Coast Guard. Publisher of ENC.

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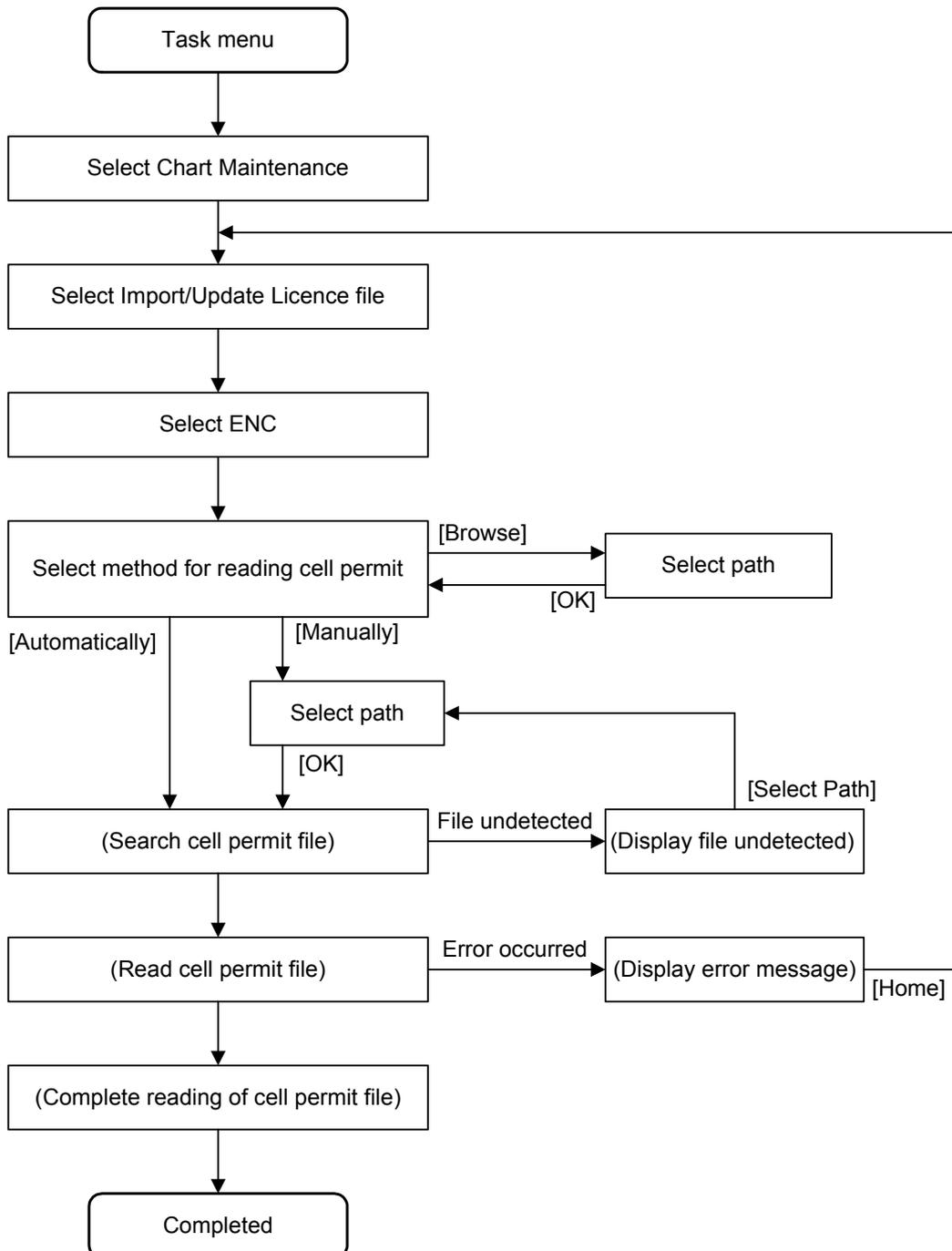
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# Overview Flowcharts

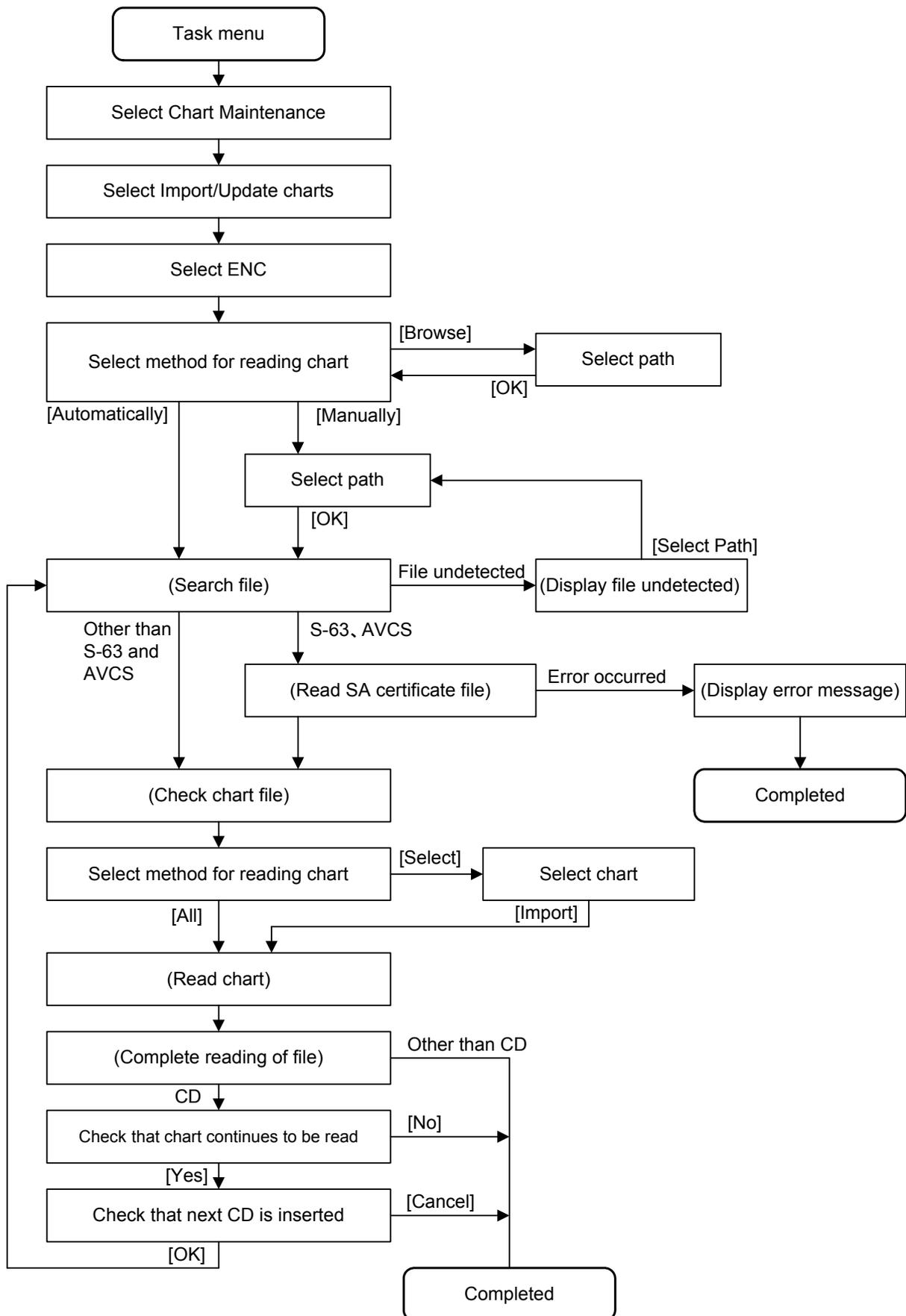
## 1. Importing/Updating ENC Cell Permit

For more information, please see "2.1.1 Importing Cell Permit Files (S-63, AVCS and AIO)" or "2.3 Updating Cell Permit Files".



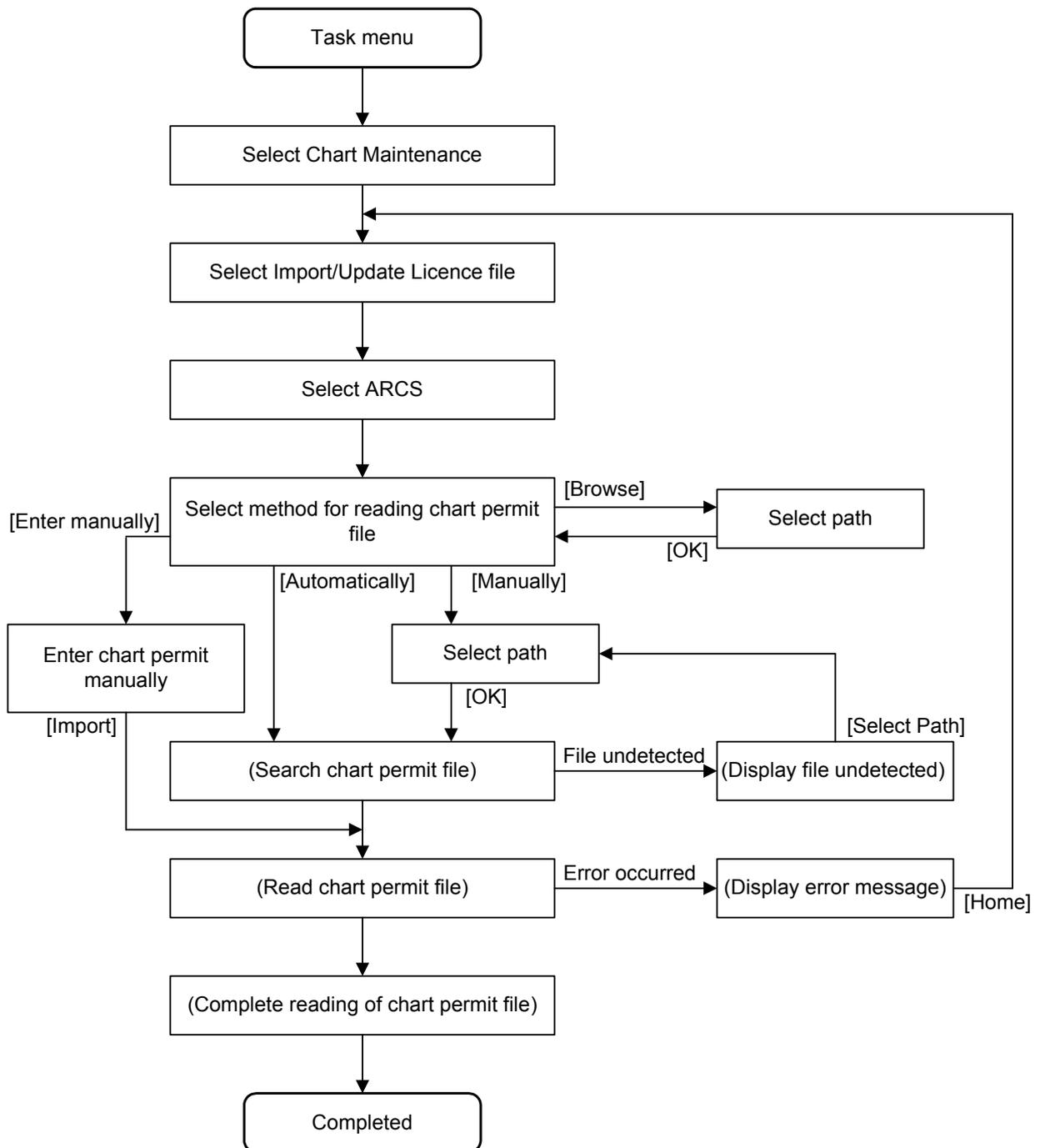
## 2. Importing/Updating ENC Chart

For more information, please see "2.1.2 Importing Charts" or "2.2 Updating Charts".



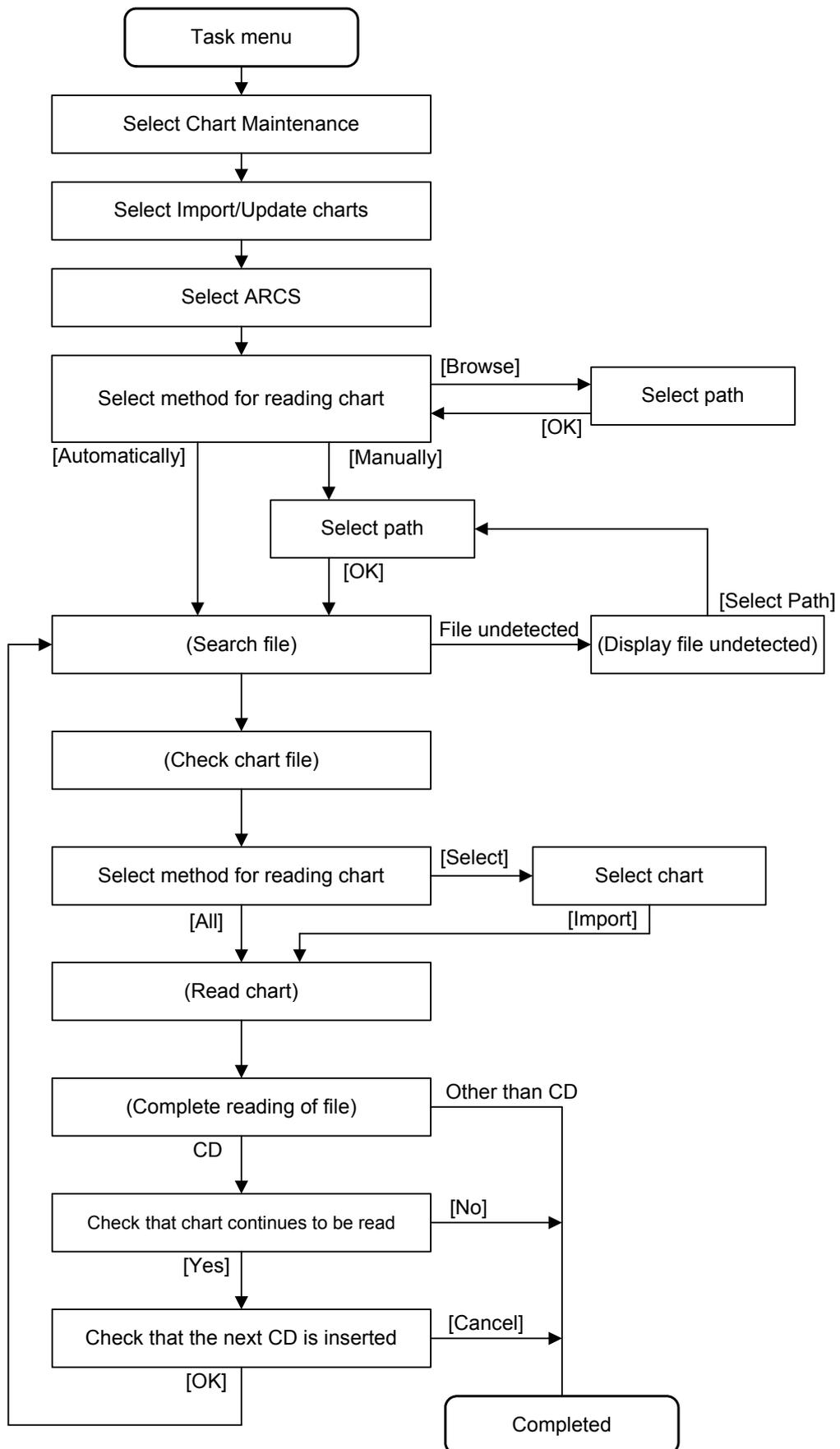
### 3. Importing/Updating ARCS Chart Permit

For more information, please see "3.2.1 Importing Chart Permit Files" or "3.4 Updating Chart Permits".



#### 4. Importing/Updating ARCS Chart

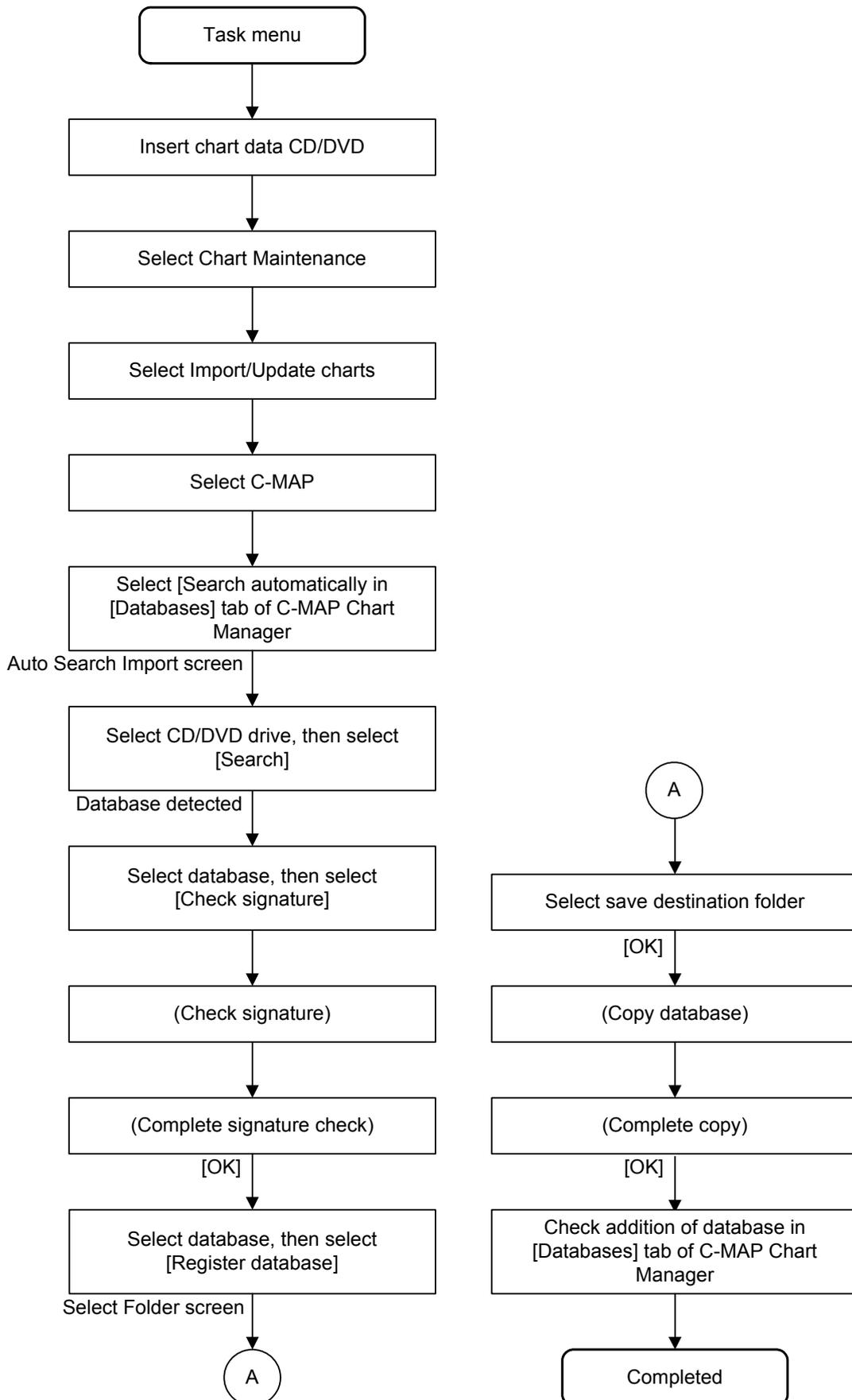
For more information, please see "3.2.2 Importing Charts" or "3.3 Updating Charts".



## 5. Importing C-MAP Ed.3 Chart

For more information, please see “4.3.1 Importing C-MAP Ed.3 Charts”.

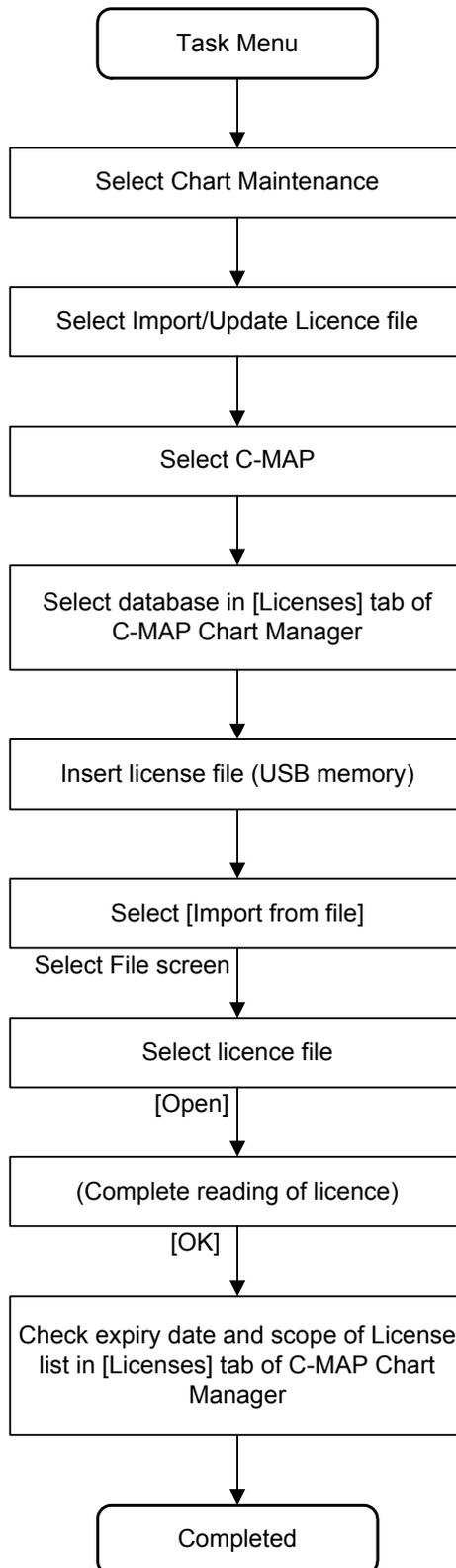
eToken (Option) is required to use C-map.



## 6. Importing C-MAP Ed.3 License (Static License)

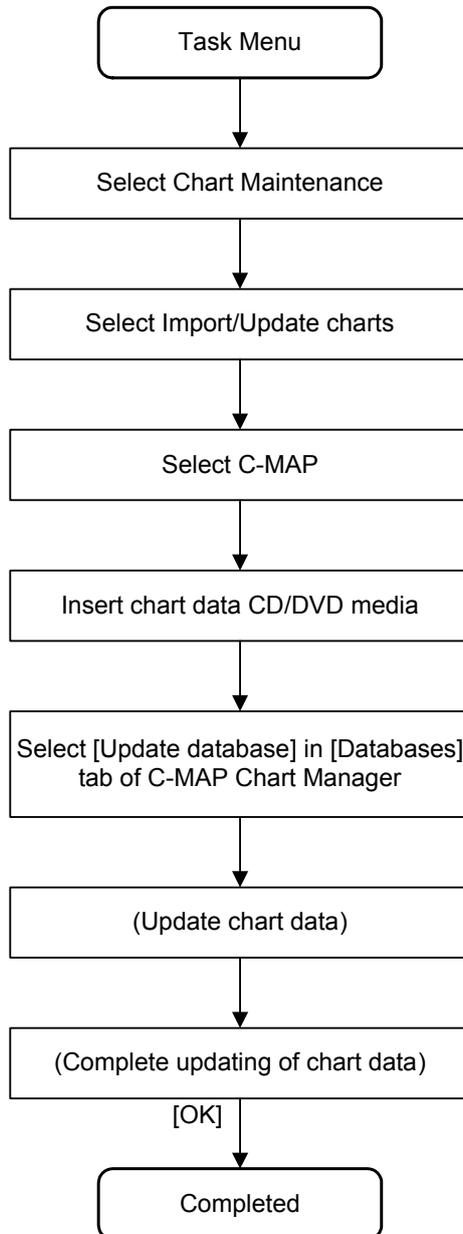
For more information, please see “4.3.2.1 In the Case of Static Licence”.

eToken (Option) is required to use C-map.



## 7. Updating C-MAP Ed.3 Chart (Using CD/DVD Media)

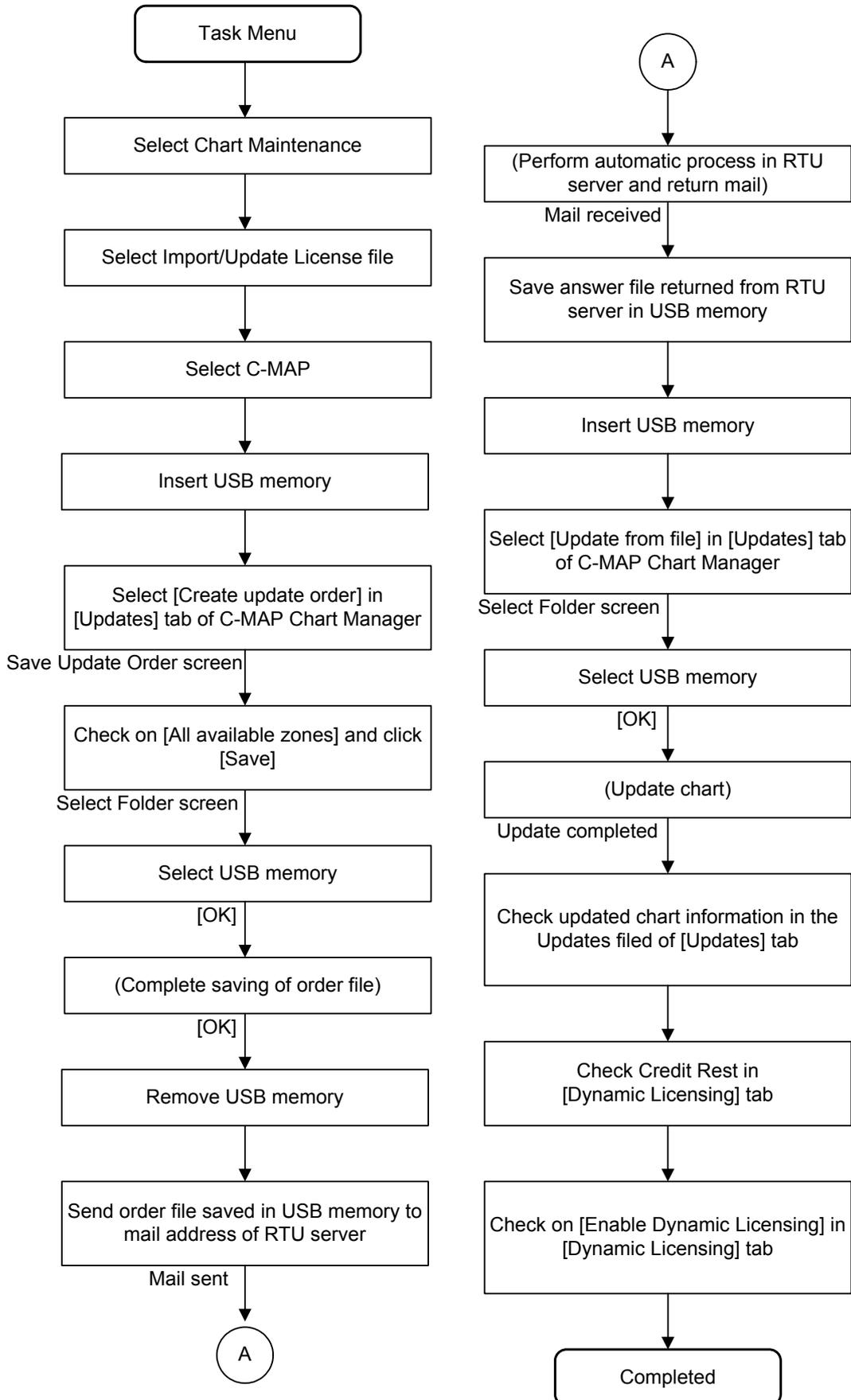
For more information, please see “4.4.1 Updating C-MAP Ed.3 Charts by Using CD (or DVD)”.  
eToken (Option) is required to use C-map.



## 8. Importing C-MAP Ed.3 License and Reporting for License (Dynamic License)

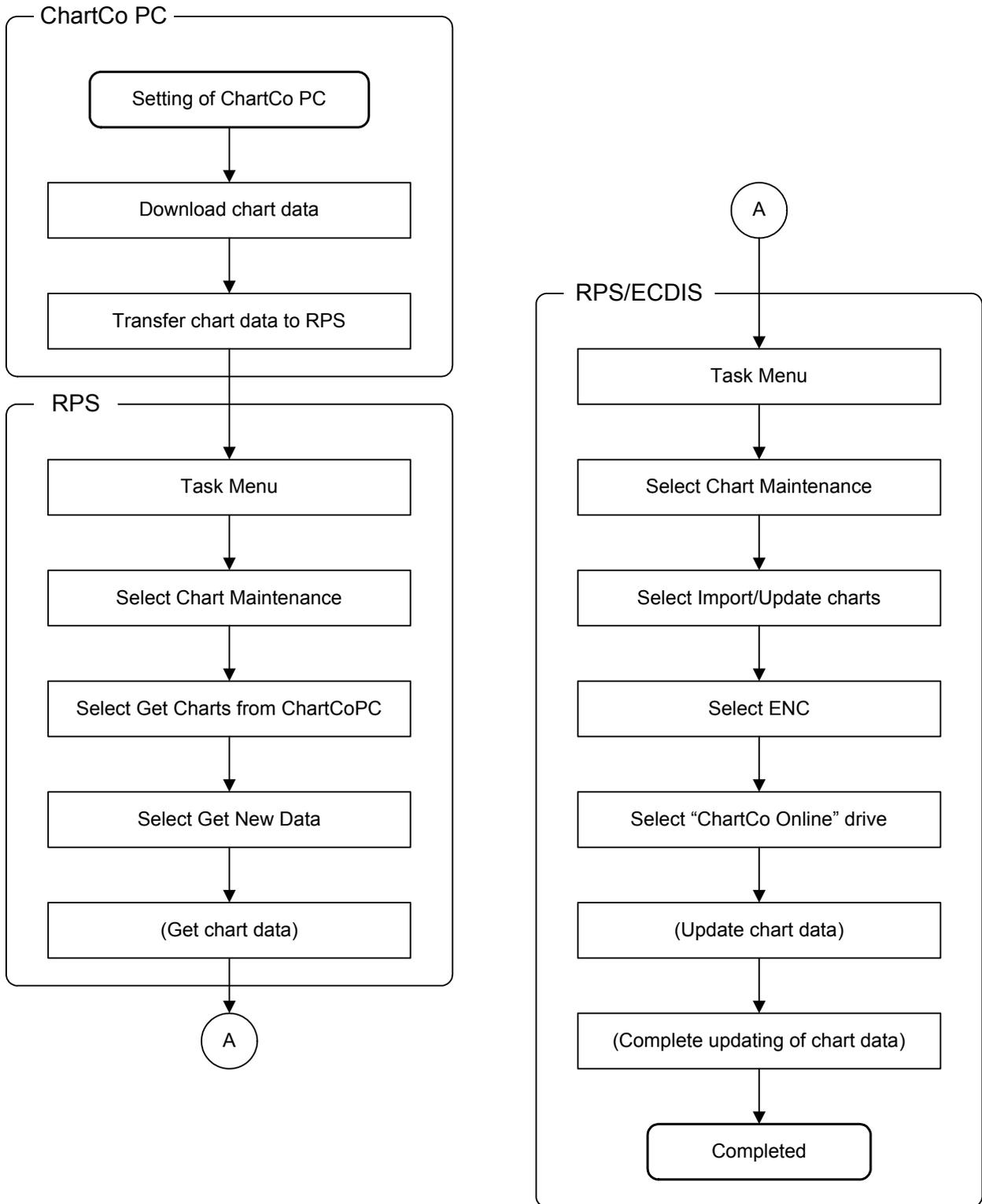
For more information, please see “4.3.2.2 In the Case of Dynamic Licence”, “4.4.2 Updating C-MAP Ed.3Charts with RTU” or “4.5 Reporting the Use of Dynamic License”.

eToken (Option) is required to use C-map.



## 9. Updating chart by ChartCo

For more information, please see “Senction5 Using ChartCo”, “Reference document 7: Transfer Chart Data from ChartCo PC to RPS” in this manual or Instruction manual of ChartCo.



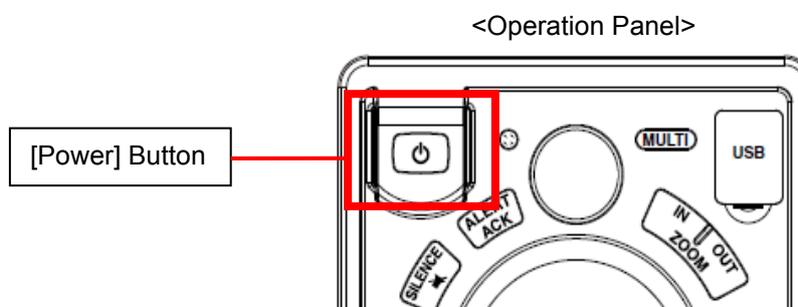
# Section 1 Procedures for Starting and Exiting Chart Maintenance

## 1.1 Starting Chart Maintenance

### 1.1.1 Starting from Task Menu

On Task Menu, start Chart Maintenance according to the following procedure.

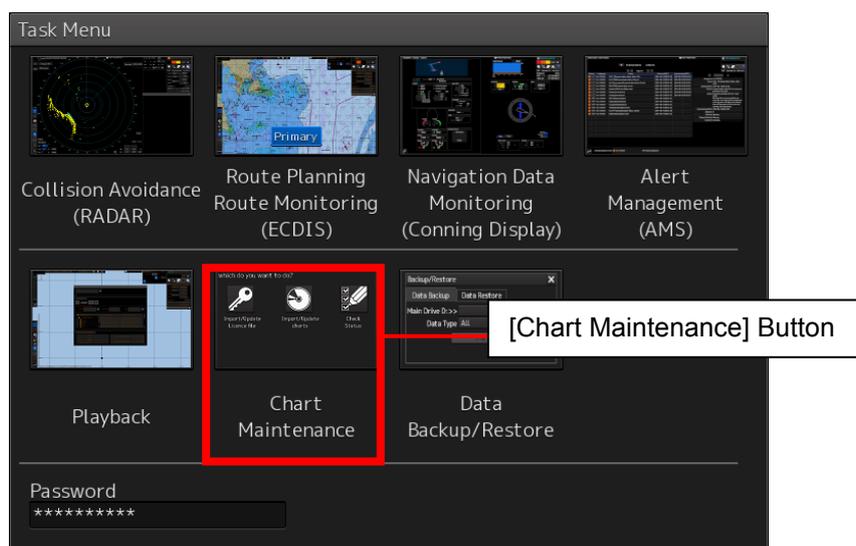
- 1) Turn on the power by pressing the [Power] button on the operation panel.



Task Menu appears after a while.

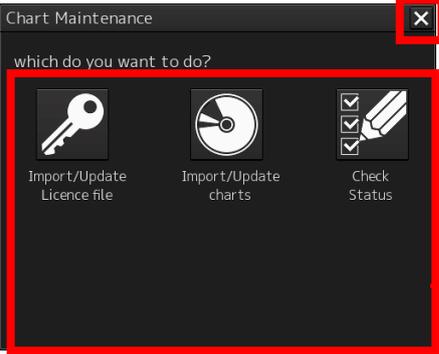
- 2) Move the cursor and click the [Chart Maintenance] button on Task Menu.

<Task Menu>



The Chart Maintenance screen appears.

<Chart Maintenance Screen>



which do you want to do?

- Import/Update Licence file
- Import/Update charts
- Check Status

Click the [x] (Close) button to return to the Task Menu.

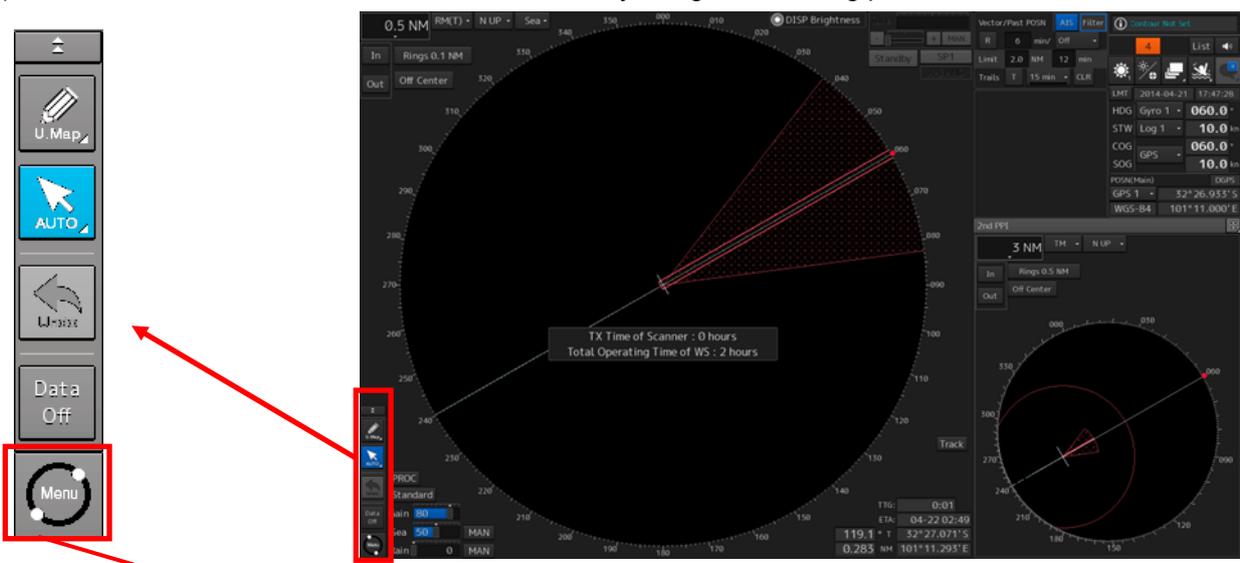
For how to start with these buttons, refer to "1.3 Chart Maintenance Screen Configuration".

**Caution:**  
The displayed Task Menu differs dependent on the machine model you use.

## 1.1.2 Starting from the RADAR Screen

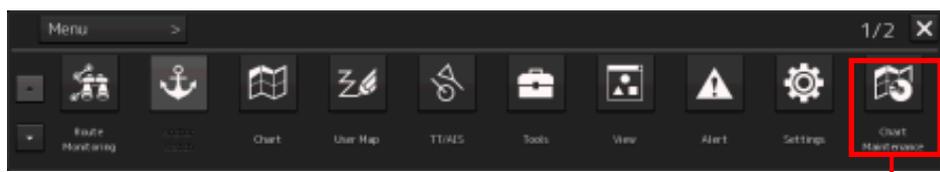
In the RADAR screen, start Chart Maintenance according to the following procedure.

- 1) Start Chart Maintenance on the RADAR screen by using the following procedure.



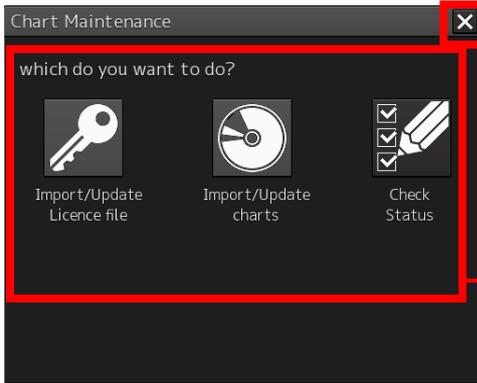
[Menu] Button

- 2) Click on the [Chart Maintenance] button on the Menu screen.



[Chart Maintenance] Button

The Chart Maintenance screen is displayed.



When the [x] button is clicked, the RADAR screen is displayed.

For how to start with these buttons, refer to "1.3 Chart Maintenance Screen Configuration".

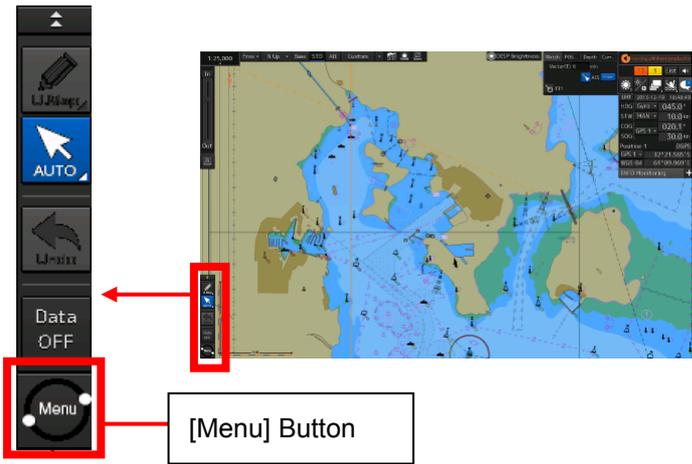
When Chart Maintenance is started from the RADAR screen, neither Import/Update Licence file nor Import/Update charts can be executed.

Caution:  
When display the chart on RADAR screen, the licence needs to attach chart display option or ECDIS licence.

### 1.1.3 Procedure for Starting from the ECDIS Screen

In the ECDIS screen, start Chart Maintenance according to the following procedure.

- 1) Click the [Menu] button on the ECDIS screen.

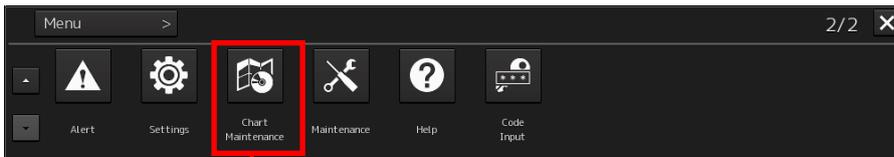


2) Change the page to the 2nd page by clicking on the page change button on the Menu screen.



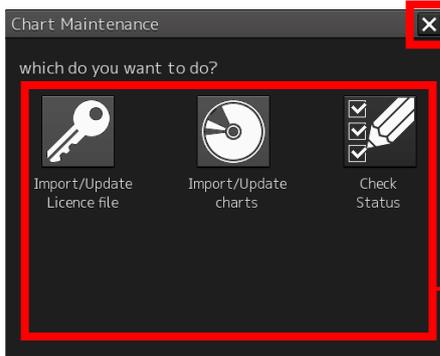
Page change button

3) Click the [Chart Maintenance] button in the 2nd page of the Menu screen.



[Chart Maintenance] Button

The Chart Maintenance screen appears.



Click the [x] button to return to the ECDIS screen.

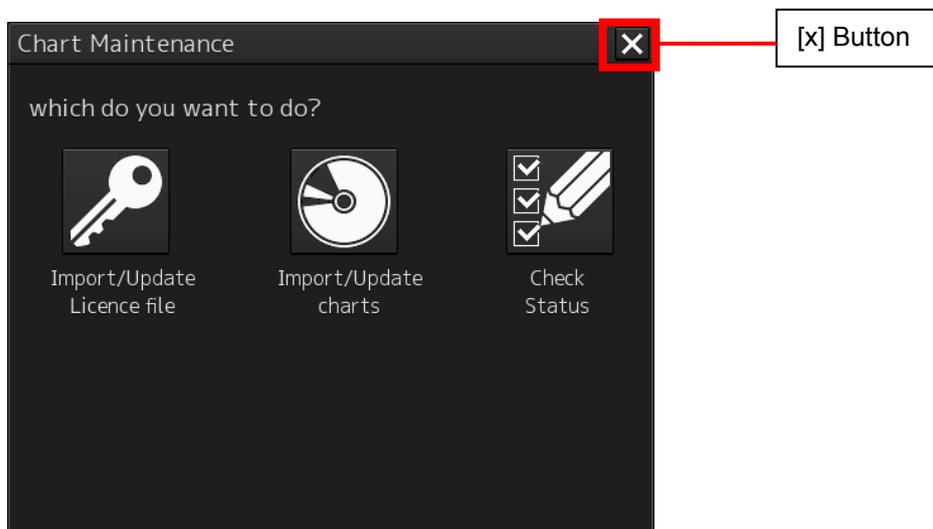
For how to start with these buttons, refer to "1.3 Chart Maintenance Screen Configuration".

When Chart Maintenance is started from the ECDIS screen, neither Import/Update Licence file nor Import/Update charts can be executed.

## 1.2 Exiting Chart Maintenance

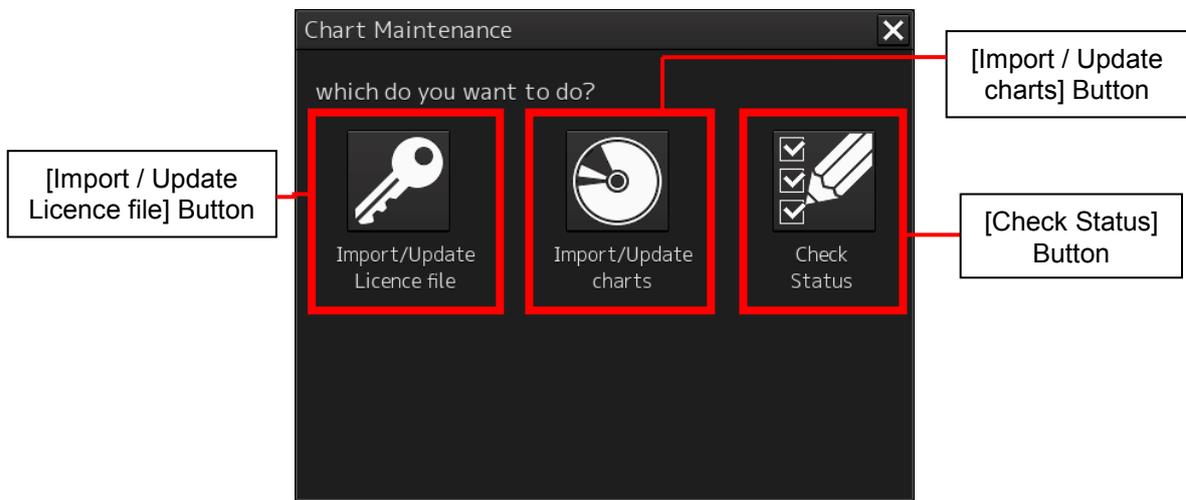
Exit Chart Maintenance according to the following procedure. The procedure for exiting Chart Maintenance is the same for Task Menu, ECDIS screen and RADAR screen.

- 1) Click the [x] button on the Chart Maintenance screen.



# 1.3 Chart Maintenance Screen Configuration

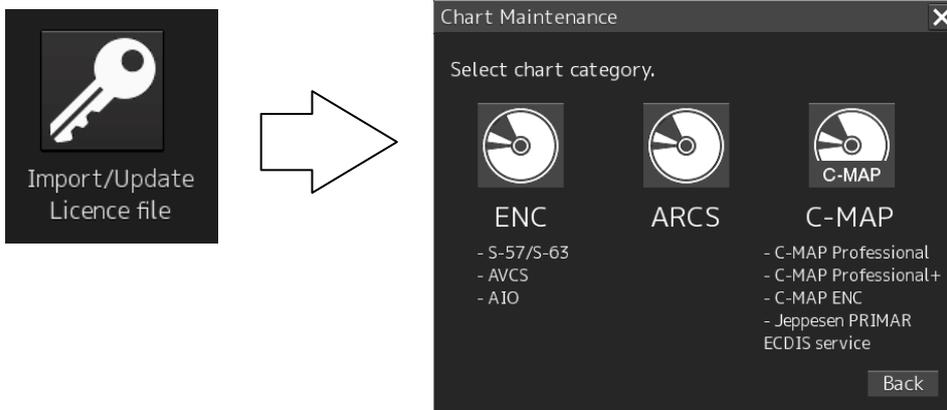
<Chart Maintenance Screen>



## [Import / Update Licence file]

Pressing this button moves to the Import/Update screen for the chart licence file.

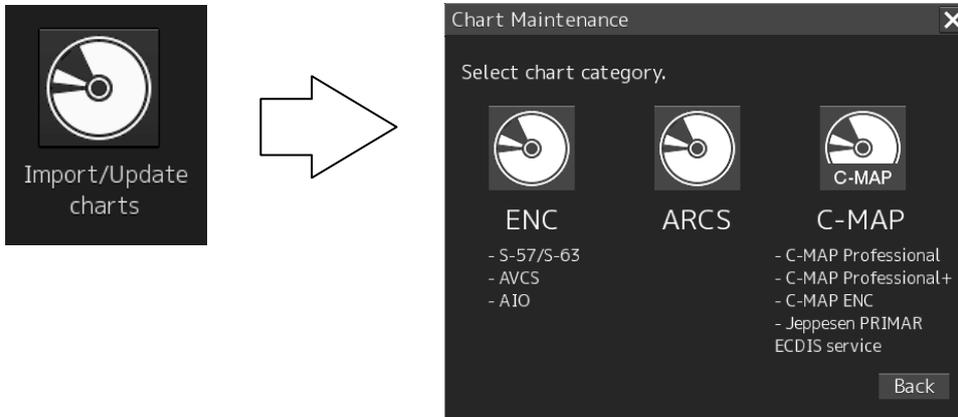
- Import/update ENC S-63 cell permit files, AVCS cell permit files and AIO cell permit files.
- Import/update ARCS chart permit files.
- Import/update C-MAP Ed.3 licenses.



## [Import / Update charts]

Pressing this button moves to the Import/Update screen for charts.

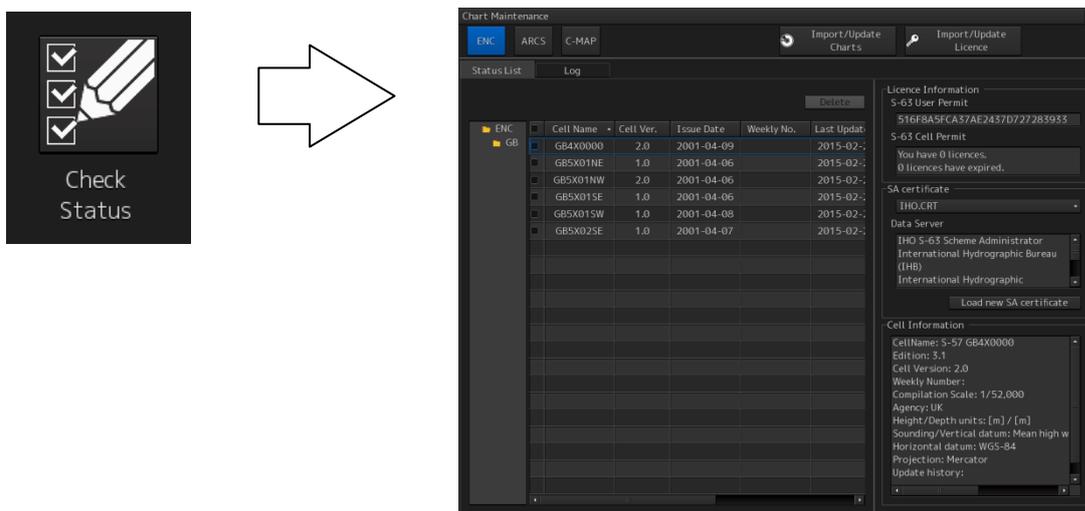
- Import/Update ENC S-57/S-63 charts, AVCS charts and AIO data.
- Import/update ARCS charts.
- Import/update C-MAP Ed.3 charts.



## [Check Status]

Pressing this button moves to the Status screen.

- Displays license information.
- Displays a list of imported charts.
- Deletes charts.
- Displays a log recorded when importing/updating licenses and charts.



## Section 2 Using ENC Charts

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### 2.1 Importing ENC S-57/S-63 Charts, AVCS Charts and AIO Data

S-63 chart, AVCS chart, AIO data in the case of use, import them after importing a cell permit file. (Perform the operations described in "2.1.1 Importing Cell Permit Files (S-63, AVCS and AIO)" and then "2.1.2 Importing Charts" in this order.)

S-57 chart in the case of use, not necessary to import a cell permit.

Perform the operation only of "2.1.2 Import chart".

#### **WARNING**



When importing/exporting files using USB memory, be sure to check for viruses on USB memory in advance. If the ECDIS is infected with a virus, it will affect other devices, leading to failures.

#### **CAUTION**



Never leave USB memory in the USB port.  
Doing so may cause device failure.

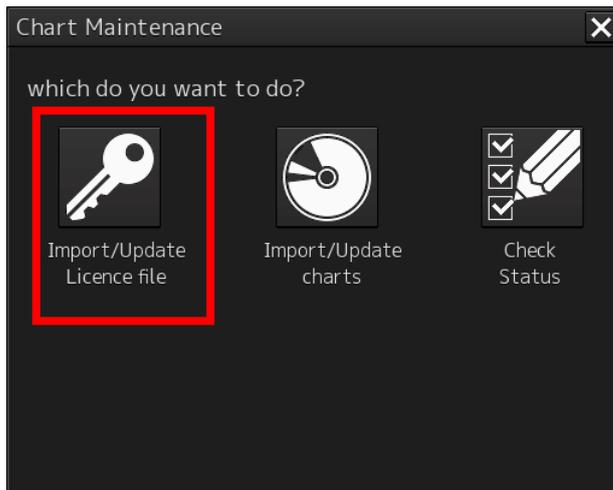
## 2.1.1 Importing Cell Permit Files (S-63, AVCS and AIO)

### 2.1.1.1 Importing Cell Permit Files from CD/DVD Media (Automatic Import)

The following example describes the procedure for importing cell permit files from CD/DVD media.

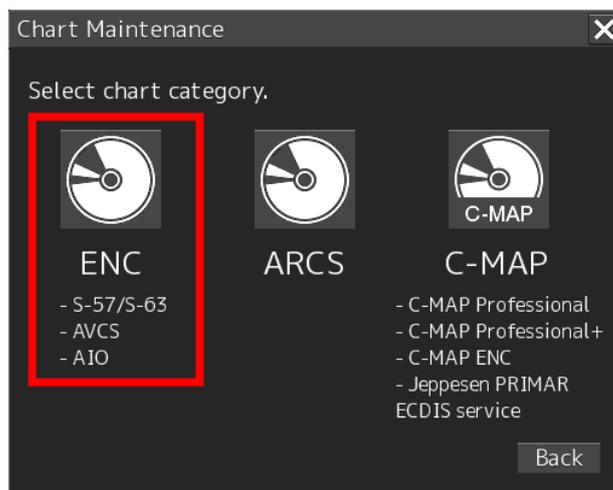
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.

<Home Window>



- 3) In the Chart Category Selection window, click the [ENC] button.

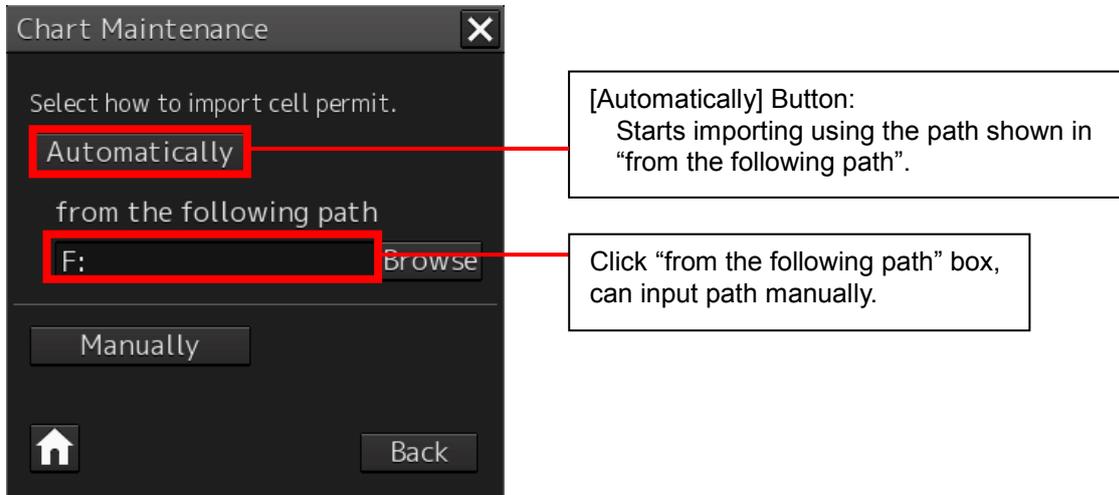
<Chart Category Selection Window>



- 4) Insert CD/DVD medium on which the cell permit file is stored and wait until import becomes ready.

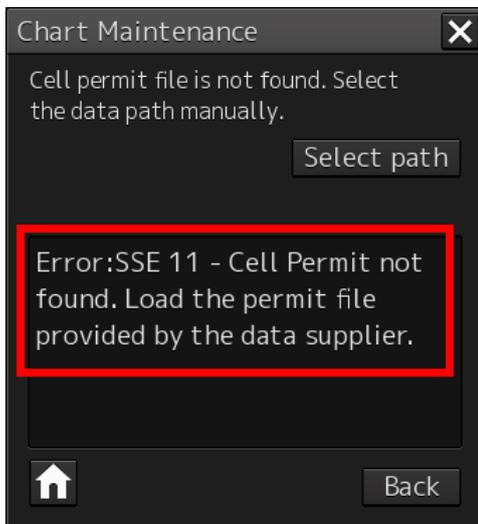
- 5) In the Cell Permit File Import Selection Window, click the [Automatically] button. Search a cell permit file from the path shown in “from the following path” and start importing it.

<Cell Permit File Import Selection Window>



If a cell permit file cannot be found, a file not found error message appears in the text box. By referring to "2.1.1.3 If a Cell Permit File Cannot Be Found (Resume by Specifying a Path)", respecify a path.

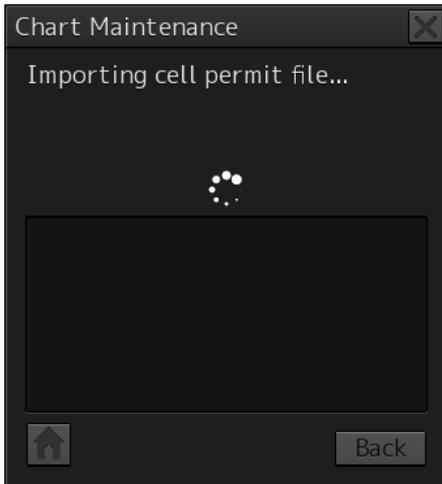
<Cell Permit File Not Found Window>



- Cell Permit File Importing Window

Import the detected cell permit file to the system.

<Cell Permit File Importing Window>

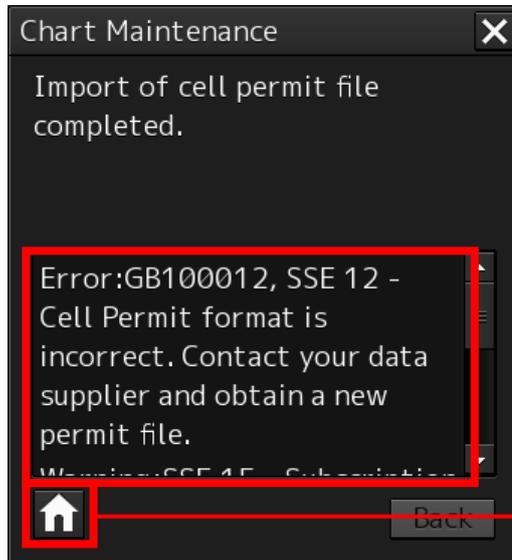


**If the cell permit file is incorrect:**

If a cell permit file is incorrect, an error message appears in the text box.

Stop importing with the [Home] button and redo import operation using a correct cell permit file.

<File Import Error Window>



[Home] Button:  
Returns to the Home window.

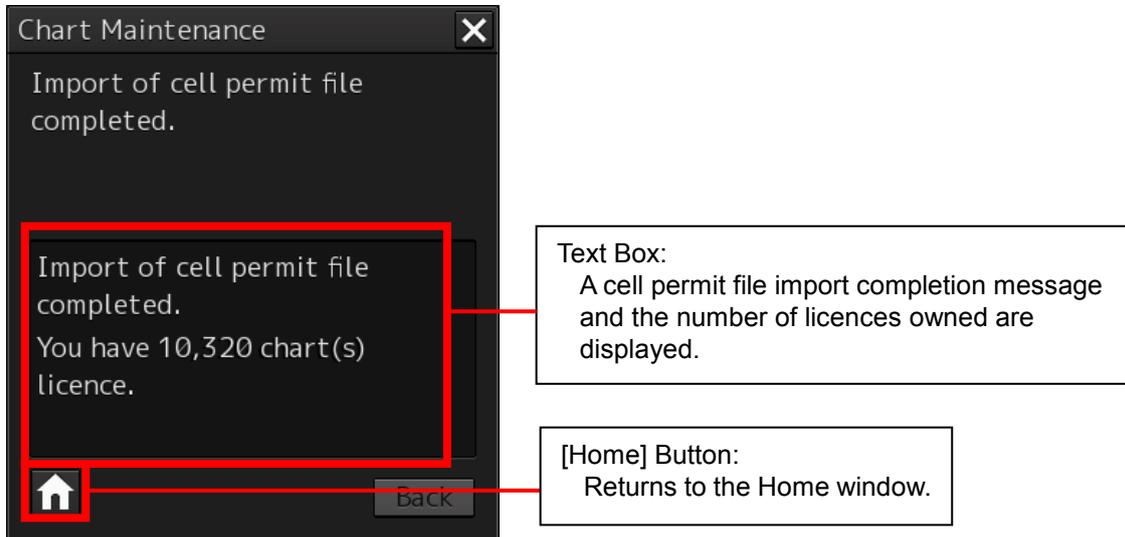
- Examples of error messages if a cell permit file is incorrect

"SSE 12 - Cell Permit format is incorrect. Contact your data supplier and obtain a new permit file."...The format of the cell permit file is incorrect.

"SSE 13 - Cell Permit is invalid (checksum is incorrect) or the Cell Permit is for a different system. Contact your data supplier and obtain a new or valid permit file."...The CRC of the cell permit does not match.

- 6) When the import of a cell permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.

<Cell Permit File Import Completion Window>



- 7) Click the [Home] button to finish importing.

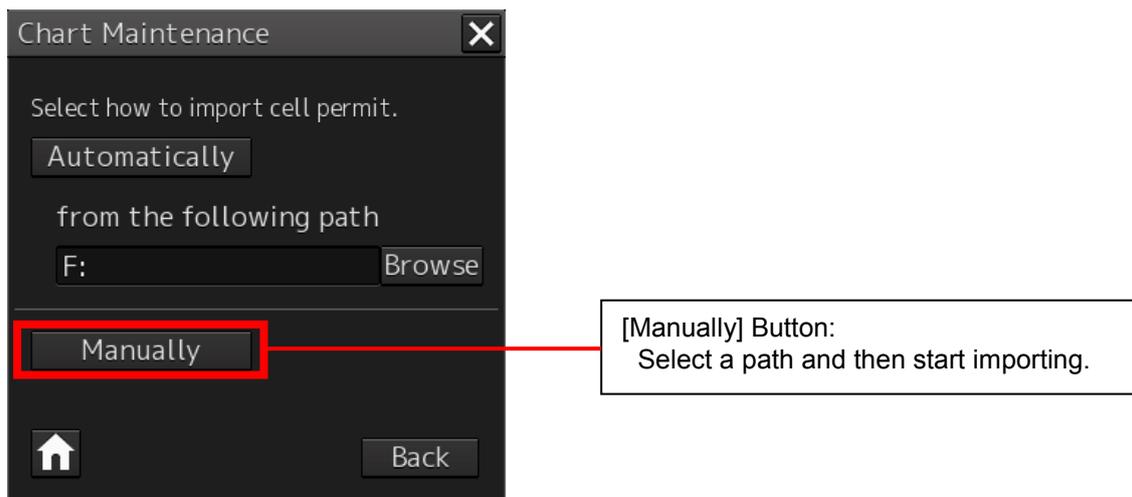
## 2.1.1.2 Importing Cell Permit Files from USB Memory (Manual Import)

When importing cell permit files from devices other than the DVD drive, such as USB memory and a hard disk, set up the import path first and then import them.

The following example describes the procedure for importing cell permit files from USB memory (F drive).

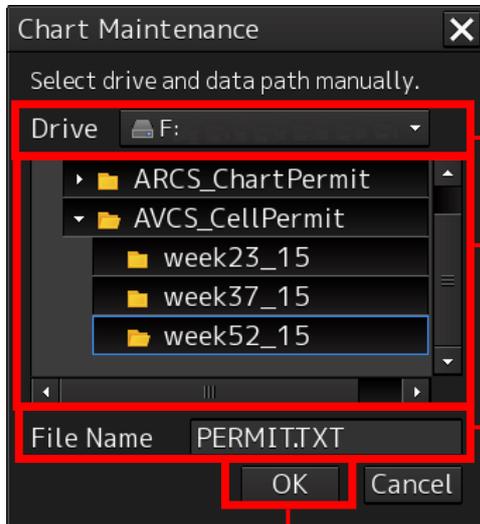
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.
- 3) In the Chart Category Selection window, click the [ENC] button.  
(The operation is the same as described in "2.1.1.1 Importing Cell Permit Files from CD/DVD Media (Automatic Import) " up to here.)
- 4) Insert USB memory on which the cell permit file is stored and wait until import becomes ready.
- 5) In the Cell Permit File Import Selection window, click the [Manually] button. The Cell Permit File Path Selection window appears.

<Cell Permit File Import Selection Window>



- Specify USB memory (F drive) in Drive. Also, specify a folder containing a cell permit file. When a folder containing a cell permit file is selected, the cell permit file name is displayed in the text box.

<Path Selection Window>



Drive Name:  
Select a drive.  
Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
When a cell permit file is stored in the selected folder, the cell permit file name is displayed.

[OK] Button:  
Pressing this button starts importing the cell permit file using the selected path.

- Click the [OK] button. The import of the cell permit file starts using the selected path.

<Cell Permit File Import Window>



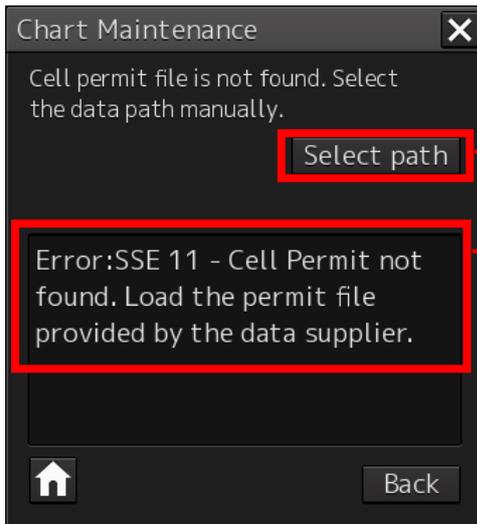
- When the import of a cell permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.
- Click the [Home] button to finish importing.

### 2.1.1.3 If a Cell Permit File Cannot Be Found (Resume by Specifying a Path)

If a cell permit file cannot be found in the Cell Permit File Search window, a file not found error message appears in the text box. Click the [Select path] button to respecify a path.

The following example describes the procedure from how to specify a path to how to resume importing a cell permit file by changing to USB memory (F drive).

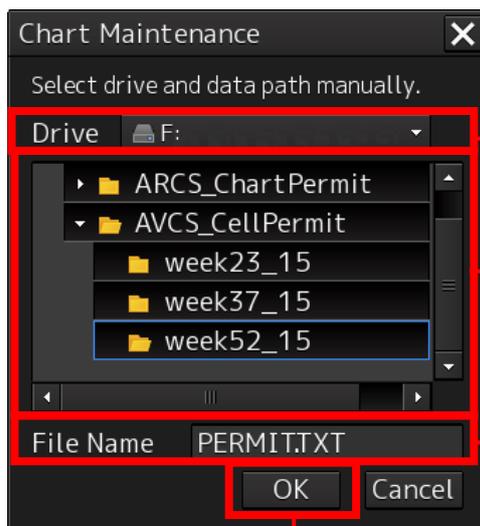
<Cell Permit File Not Found Window>



[Select path] Button:  
Displays the Path Selection window.  
Text Box:  
Displays a file not found error message.

- 1) In the Cell Permit File Not Found window, click [Select path]. Display the Path Selection window.
- 2) Specify USB memory (F drive) in Drive. Also, specify a folder containing a cell permit file. When a folder containing a cell permit file is selected, the cell permit file name is displayed in the text box.

<Path Selection Window>

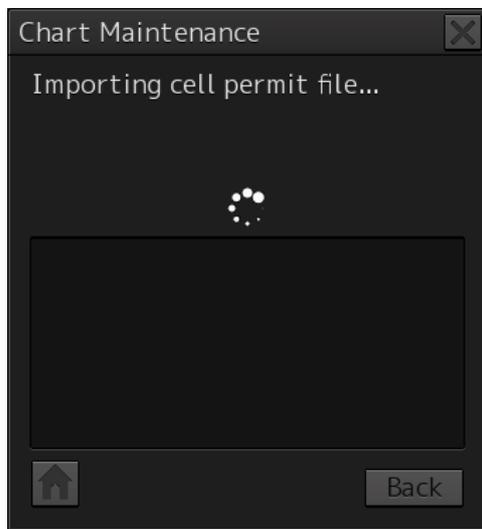


Drive Name:  
Select a drive.  
Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
When a cell permit file is stored in the selected folder, the cell permit file name is displayed.

[OK] Button:  
Pressing this button starts importing the cell permit file using the selected path.

- 3) Click the [OK] button. The import of the cell permit file resumes using the selected path.

<Cell Permit File Import Window>



- 4) When the import of a cell permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.
- 5) Click the [Home] button to finish importing.

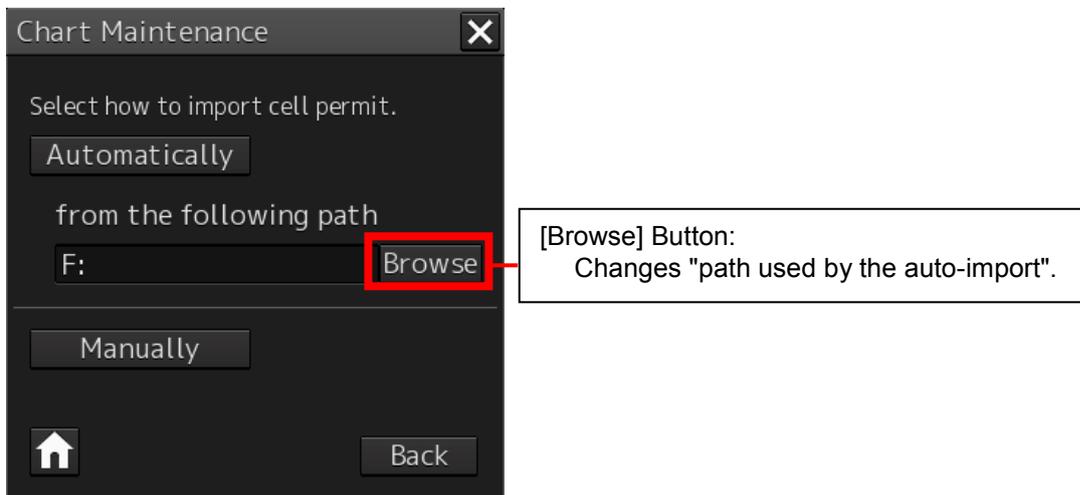
## 2.1.1.4 Changing a Path to Use for Automatic Import

If a path is selected with the [Browse] button when always using USB memory to import cell permit files, the selected path will be saved as a path used by the auto-import. Cell permit files can then be imported with the [Automatically] button from the saved path thereafter.

The following example describes how to change "path used by the auto-import" by changing to USB memory (F drive).

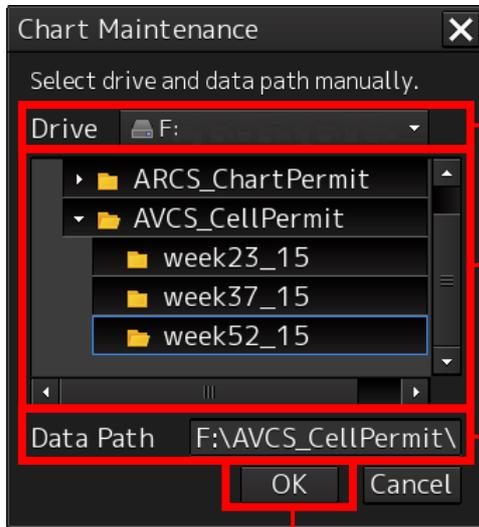
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.
- 3) In the Chart Category Selection window, click the [ENC] button.  
(The operation is the same as described in "2.1.1.1 Importing Cell Permit Files from CD/DVD Media (Automatic Import)" up to here.)
- 4) Insert USB memory on which the cell permit file is stored and wait until import becomes ready.
- 5) In the Cell Permit File Import Selection window, click the [Browse] button. The Cell Permit File Path Selection window appears.

<Cell Permit File Import Selection Window>



- 6) Specify USB memory (drive F) as the drive name and select the path to be used by auto-import. If a folder is selected, data path is displayed in the text box.

<Path Selection Window>



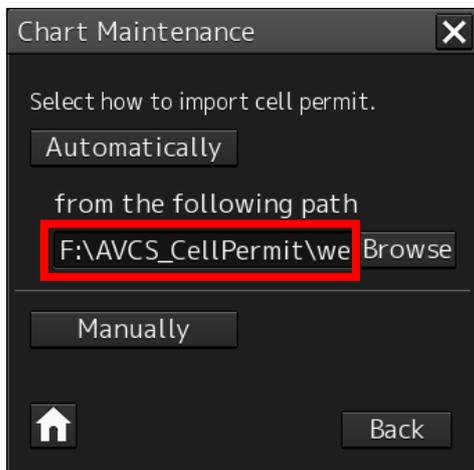
Drive Name:  
Select a drive.

Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.

Text Box:  
Select a folder, data path is displayed.

[OK] Button:  
Changes "path used by the auto-import" with the path by which the cell permit file was selected.

- 7) Click the [OK] button. Set the path selected as the path to be used in auto-import.



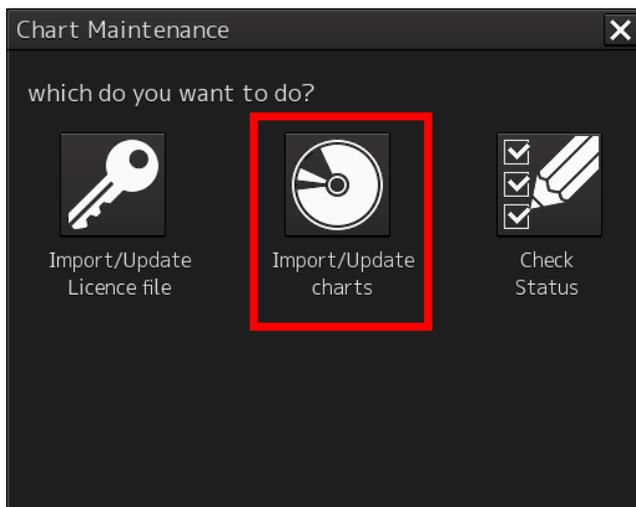
## 2.1.2 Importing Charts

### 2.1.2.1 Importing Charts from CD/DVD Media (Automatic Import)

The following example describes the procedure for importing S-57/S-63 charts, AVCS charts and AIO data from CD/DVD media.

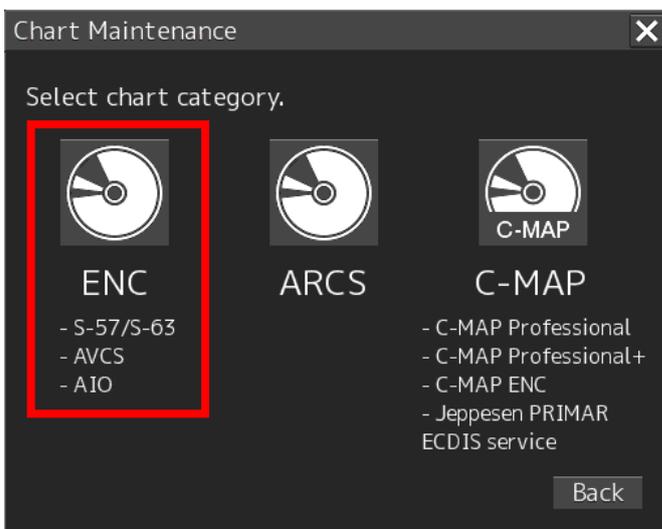
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.

<Home Window>



- 3) In the Chart Category Selection window, click the [ENC] button.

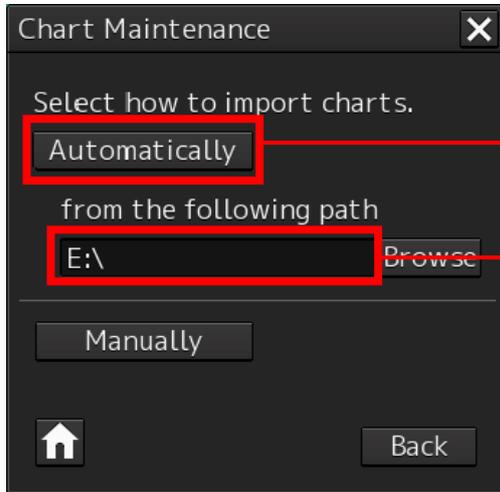
<Chart Category Selection Window>



- 4) Insert CD/DVD medium on which chart data (or AIO data) is stored and wait until import becomes ready.

- 5) In the Chart Import Selection window, click the [Automatically] button. Search chart data from the path shown in “from the following path” and start importing it.

<Chart Import Selection Window>



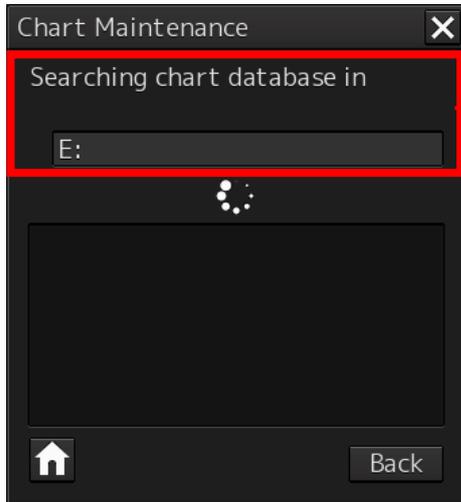
[Automatically] Button:  
Starts importing using the path shown in  
“from the following path”.

Click “from the following path” box,  
can input path manually.

● Chart Search Window

Search chart data.

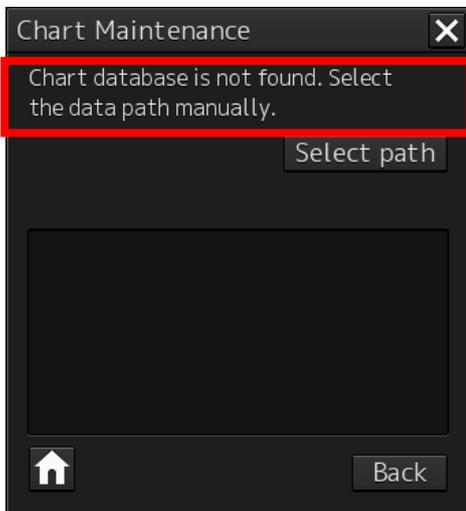
<Chart Search Window>



Searches chart data using the path shown in "Searching chart database in".

If chart data cannot be found, a data not found error message appears. By referring to "2.1.2.3 If Chart Data Cannot Be Found (Resume by Specifying a Path)", respecify a path.

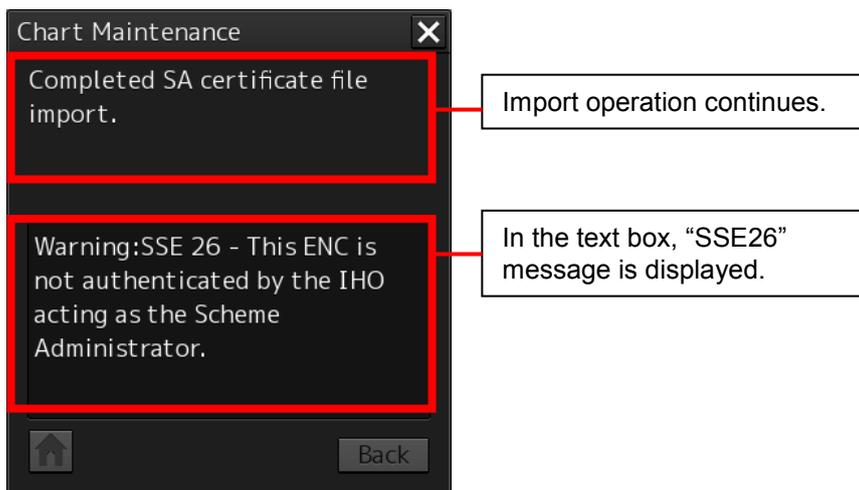
<Chart Not Found Window>



In the case of S-63 charts or AVCS charts, Check the SA certificate file.  
(In the case of S-57 charts and AIO data, skip and check chart data.>

When an SA certificate file is other than IHO.CRT, "SSE26" error message appears; however, it is not an error, so import operation continues.

<When an SA Certificate File Is Other than IHO.CRT>



**If SA certificate files cannot be imported normally:**

If SA certificate files cannot be imported normally such as when SA certificate files cannot be found, an error message appears and import operation stops.

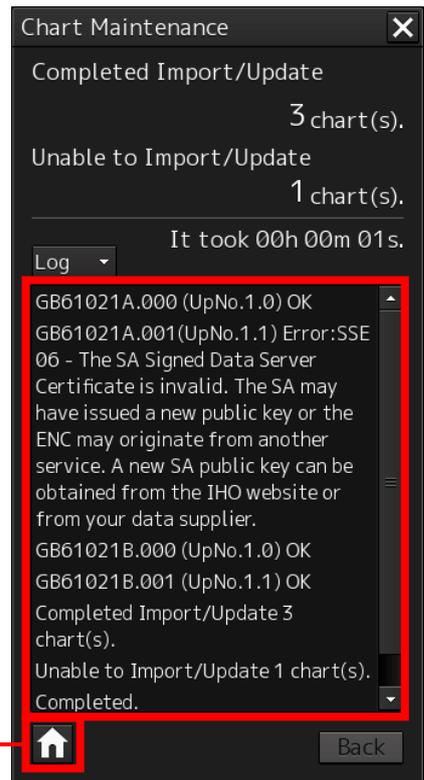
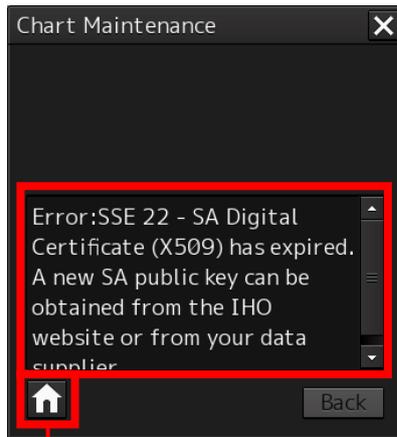
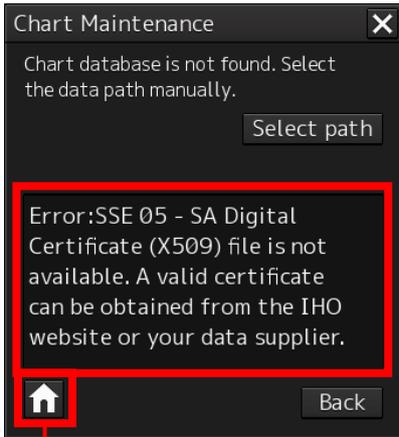
Close the Import window using the [Home] button, prepare a medium containing a normal SA certificate file first, and then import charts from the beginning.

■ **Examples of Error Message Generations**

<When a file cannot be found>

<Expiry data has been reached>

<A file is incorrect>

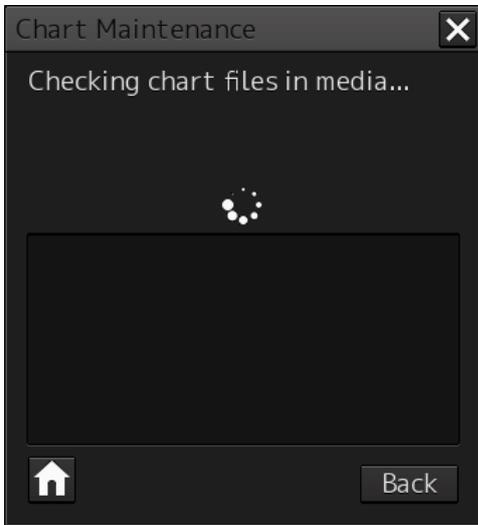


[Home] Button:  
Returns to the Home window.

- Chart Data Check Window

Check chart data.

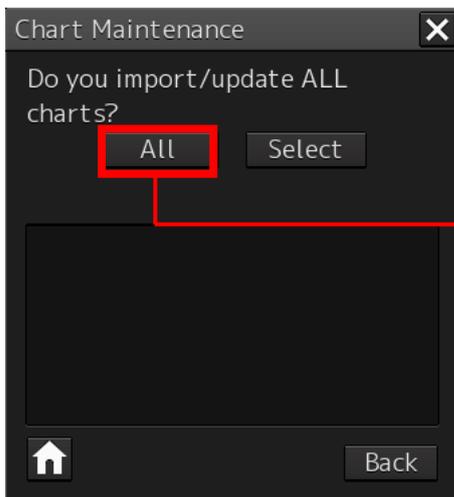
<Chart Data Check Window>



- 6) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button. The import of chart data with chart licence starts.

In the case of chart update, all the charts newer than already imported charts will be imported from charts with chart licence.

<Chart Import Method Selection Window>

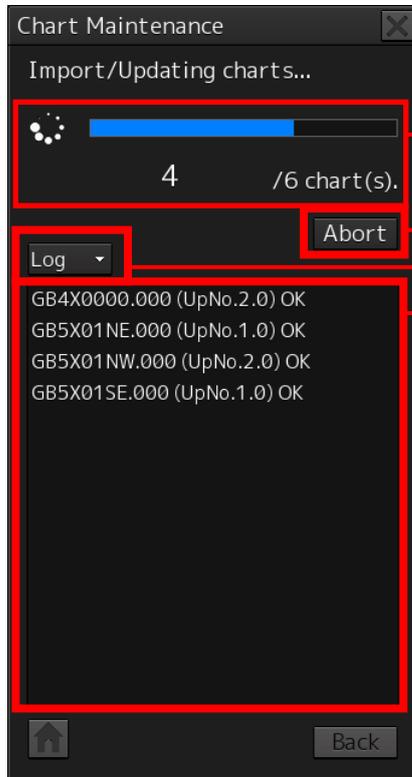


[All] Button:  
Imports all charts that require update.

When the [Select] button is pressed, charts to be imported can be selected individually for import. For more information about operation, see "2.1.2.5 Importing Charts by Selecting".

When chart import is started, the number of imported charts is displayed and progress is shown by a progress bar.

<Chart Import Progress Window (When Displaying Import Log)>



**Progress Bar:**  
Displays the progress of import.

**[Log Display Switch] Button:**  
Switches between show/hide of import log.

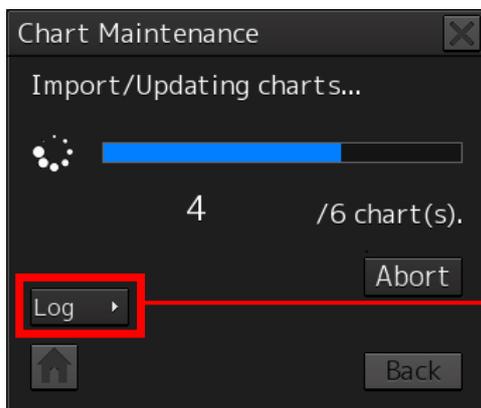
**Import Log:**  
Displays a log during import.

**[Abort] Button**  
Import stopping confirmation message is displayed.  
Stops the import click the [OK] button.

**When the [Log Display Switch] button is selected:**

When the [Log Display Switch] button is clicked, the log text box is hidden.

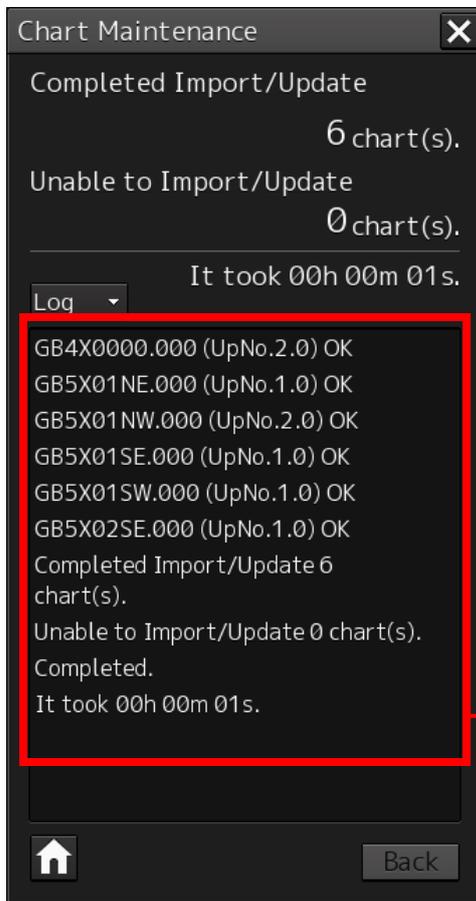
<Chart Import Progress Window (When Hiding Import Log)>



**[Log Display Switch] Button:**  
Switches between show/hide of import log.

- 7) When the import of chart data is finished, the number of imported charts is displayed  
List of messages for each chart appears in the log text box.

<Chart Import Completion Window>

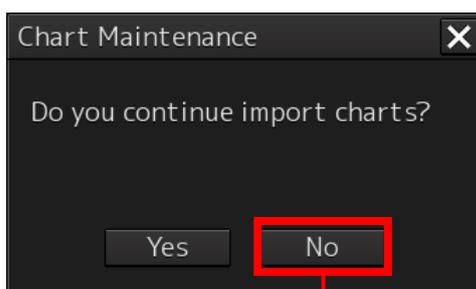


Log Text Box:  
Import log and import completion messages are displayed.

- 8) In the case of CD/DVD media, the chart import continuation confirmation dialog appears after import is completed.

If charts have been imported from all CD/DVD media, click the [No] button.  
Finish chart import and close the window.

<Chart Import Continuation Confirmation Dialog Box>

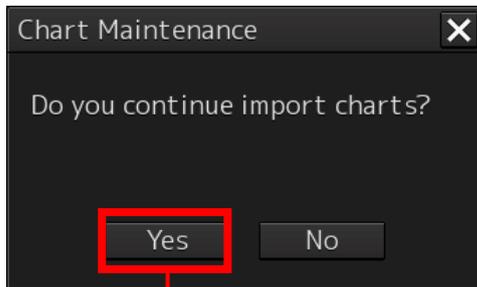


[No] Button:  
Finish chart import and close the dialog box.

**If there are still charts to be imported:**

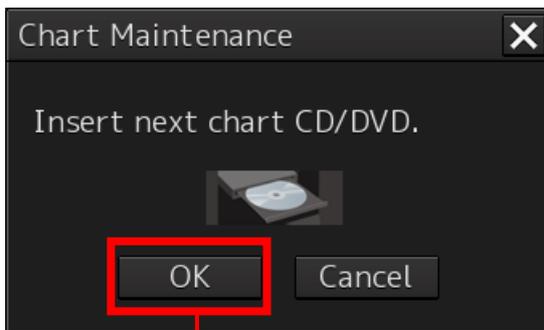
If there are still charts that need to be imported, click the [Yes] button in the Chart Import Continuation dialog box. The Chart CD/DVD Media Insertion Window appears, so change CD/DVD medium and click the [OK] button.

<Chart Import Continuation Confirmation Dialog Box>



[Yes] Button:  
Continues chart import. The Chart CD/DVD Media Insertion Confirmation dialog box appears.

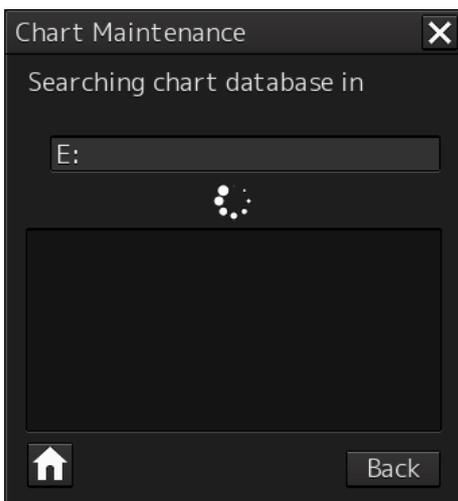
<Chart CD/DVD Media Insertion Confirmation Dialog Box>



[OK] Button:  
Starts searching charts on CD/DVD medium.

Chart data search is performed. For the succeeding operation, see page 2-14 "<Chart Search Window>

<Chart Search Window>



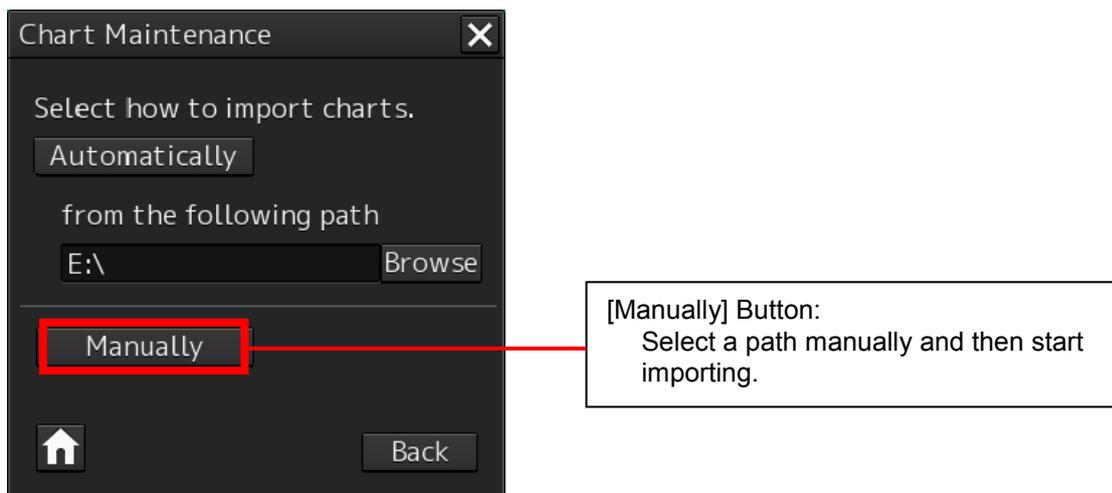
## 2.1.2.2 Importing Charts from USB Memory (Manual Import)

When importing chart data from devices other than the DVD drive, such as USB memory and a hard disk, set up the import path first and then import them.

The following example describes the procedure for importing charts from USB memory (F drive).

- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.
- 3) In the Chart Category Selection window, click the [ENC] button.  
(The operation is the same as described in "2.1.2.1 Importing Charts from CD/DVD Media (Automatic Import)" up to here.)
- 4) Insert USB memory on which chart data is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Manually] button. The Chart Data Path Selection window appears.

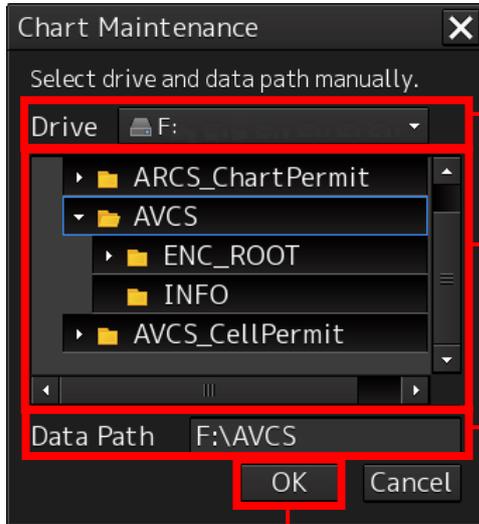
<Chart Import Selection Window>



6) Specify USB memory (F drive) in Drive.

Select the folder higher by one layer than the folder (ENC\_ROOT) in which the chart data is stored.

<Path Selection Window>

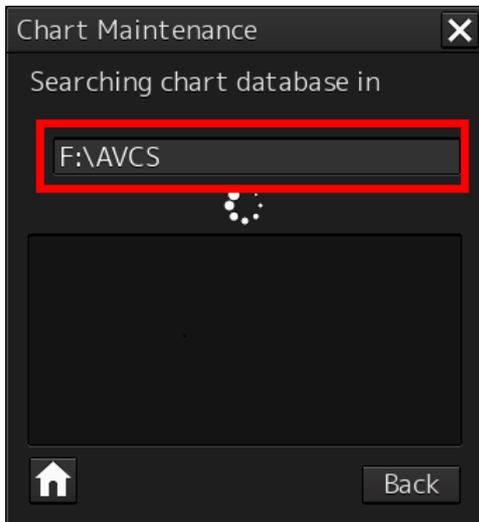


Drive Name:  
Select a drive.  
Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
Select a folder, data path is displayed.

[OK] Button:  
Start the import of the chart.

7) Click the [OK] button. The import of charts starts.

<Chart Search Window>



8) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button. The import of chart data with chart licence starts.

9) When the import of chart data is finished, the number of imported charts is displayed. Import results are displayed in the chart to log text box.

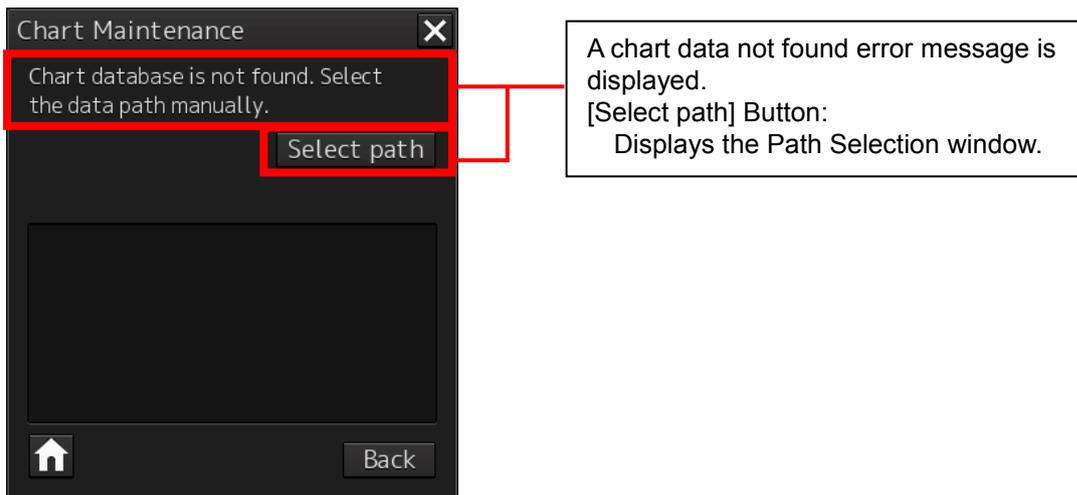
10) Click the [Home] button to finish importing.

### 2.1.2.3 If Chart Data Cannot Be Found (Resume by Specifying a Path)

If chart data cannot be found, a data not found error message appears. Click [Select path] to display the Path Selection window and then select a chart path.

The following example describes the procedure from how to specify a path to how to resume importing charts by changing to USB memory (F drive).

<Chart Not Found Window>



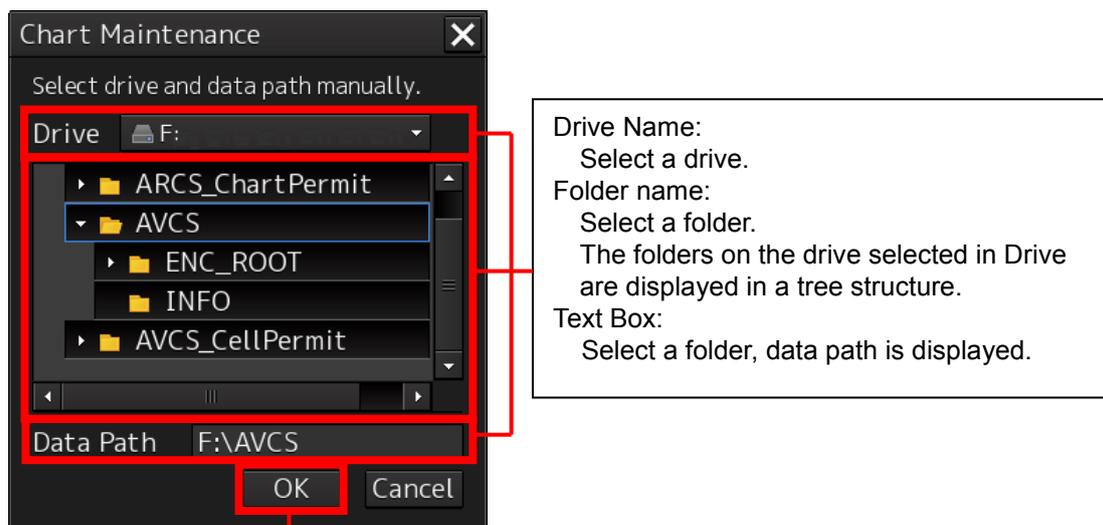
- 1) In the Chart Not Found window, click [Select path]. The Path Selection window is displayed.
- 2) Specify USB memory (F drive) in Drive. Also, select a folder containing chart data.

Select the folder higher by one layer than the folder (ENC\_ROOT) in which the chart data is stored.

#### Memo

Be sure to select the folder in the hierarchy above the folder where the chart data is saved.

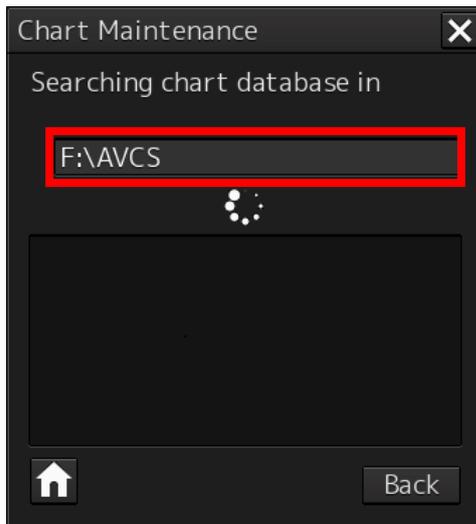
<Path Selection Window>



[OK] Button:  
Resume the import of chart.

- 3) Click the [OK] button. The import of chart data resumes using the selected path.

<Chart Search Window>



- 4) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button. The import of chart data with chart licence starts.
- 5) When the import of chart data is finished, the number of imported charts is displayed. Import results are displayed in the chart to log text box.
- 6) Click the [Home] button to finish importing.

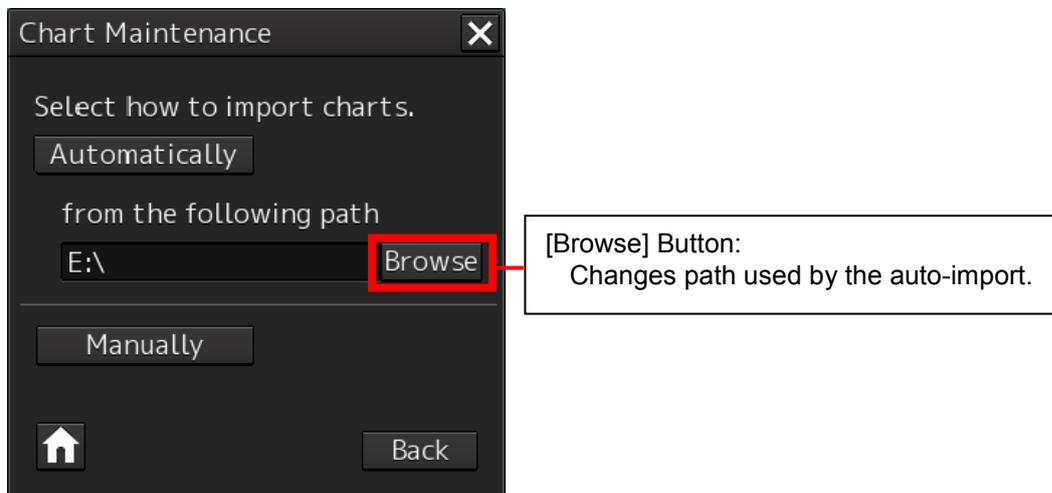
## 2.1.2.4 Changing a Path to Use for Automatic Import

If a path is selected with the [Browse] button when always using USB memory to import chart data, the selected path will be saved as a path used by the auto-import.. Chart data can then be imported with the [Automatically] button from the saved path thereafter.

The following example describes how to change path used by the auto-import. by changing to USB memory (F drive).

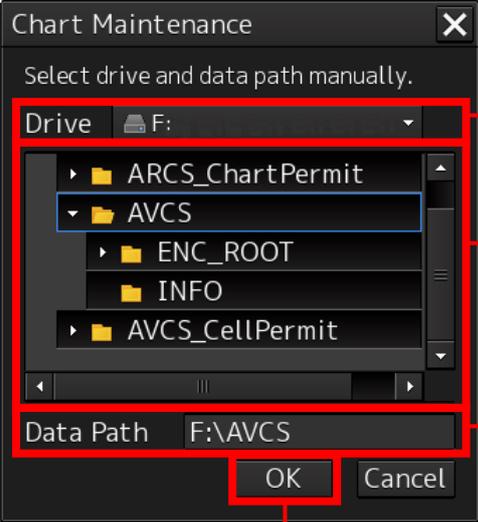
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.
- 3) In the Chart Category Selection window, click the [ENC] button.  
(The operation is the same as described in "2.1.2.1 Importing Charts from CD/DVD Media (Automatic Import)" up to here.)
- 4) Insert USB memory on which chart data is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Browse] button. The Chart Data Path Selection window appears.

<Chart Import Selection Window>



- 6) Specify USB memory (drive F) as the drive name, and then select the path to be used by auto-import. When a folder is selected, the data path is displayed in the text box.

<Path Selection Window>



The screenshot shows the 'Chart Maintenance' dialog box with the following elements highlighted in red:

- The 'Drive' dropdown menu showing 'F:'.
- The folder tree structure showing 'ARCS\_ChartPermit', 'AVCS', 'ENC\_ROOT', 'INFO', and 'AVCS\_CellPermit'.
- The 'Data Path' text box containing 'F:\AVCS'.
- The 'OK' button.

Annotations for the Path Selection Window:

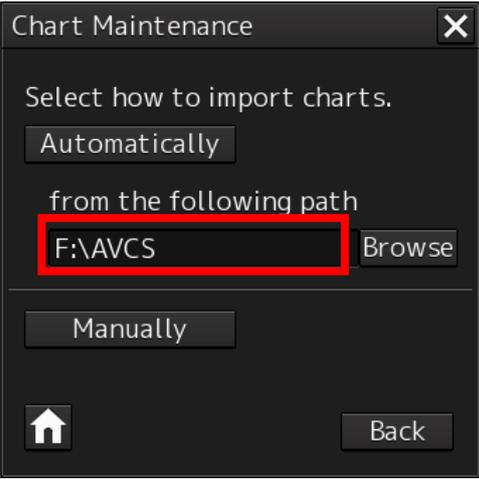
- Drive Name:** Select a drive.
- Folder name:** Select a folder. The folders on the drive selected in Drive are displayed in a tree structure.
- Text Box:** Select a folder, data path is displayed.

Annotation for the [OK] Button:

- [OK] Button:** Set the pass which chose as a pass to use in auto-import.

- 7) Click the [OK] button. changed to the selected path is the path to be used in automatic import.

<Chart Import Selection Window>



The screenshot shows the 'Chart Maintenance' dialog box with the following elements highlighted in red:

- The 'Automatically' button.
- The text 'from the following path'.
- The text box containing 'F:\AVCS'.
- The 'Browse' button.

Other visible elements include the 'Manually' button, a home icon, and a 'Back' button.

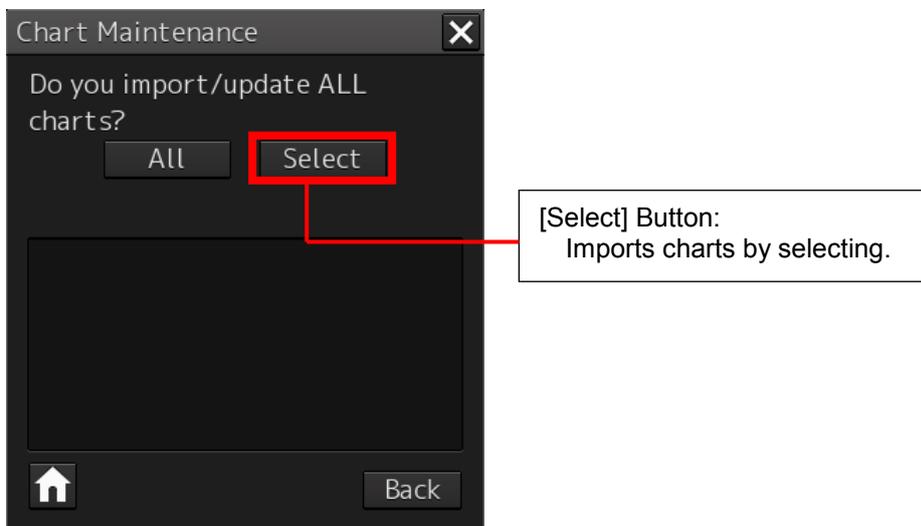
## 2.1.2.5 Importing Charts by Selecting

Charts to be imported can be selected individually for import.

The following example describes the procedure for importing charts from CD/DVD media.

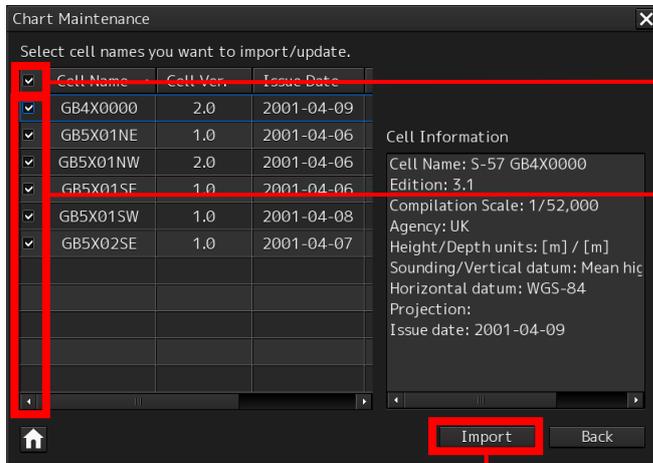
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.
- 3) In the Chart Category Selection window, click the [ENC] button.
- 4) Insert CD/DVD medium on which chart data (or AIO data) is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Automatically] button. Search chart data from the path shown in path used by the auto-import and start importing it.  
(The operation is the same as described in "2.1.2.1 Importing Charts from CD/DVD Media (Automatic Import)" up to here.)
- 6) When chart data check is completed, the Chart Import Method Selection window appears. Click the [Select] button. A window for selecting charts to be imported appears.

<Chart Import Method Selection Window>



7) Select charts to be imported by checking their checkboxes.

<Chart Selection Window>



**Checkboxes:**  
Select charts to be imported. The checkboxes of the charts that need to be updated are checked when the Chart Selection window is displayed.

**Checkbox (Title Bar):**  
Select (deselect) all selectable charts.

- : Unselected chart
- : Chart to be imported
- : Unselectable

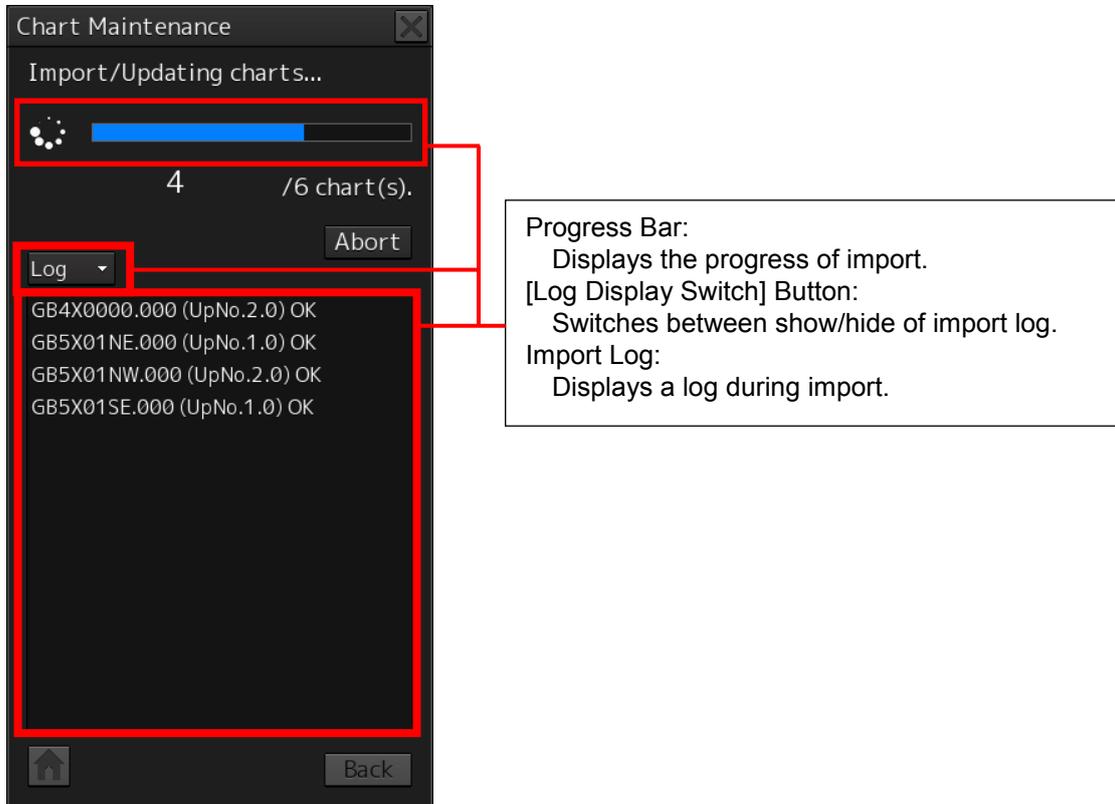
**[Import] Button:**  
Starts importing the selected charts.

**Caution:**  
If there are no cell permits for charts or charts have already been expired, the corresponding checkboxes will be disabled.

- 8) Click the [Import] button after selecting charts to start importing them.

When chart import is started, the number of imported charts is displayed and progress is shown by a progress bar.

<Chart Import Progress Window (When Displaying Import Log)>



- 9) When the import of chart data is finished, the number of imported charts is displayed

Import results are displayed in the chart to log each text box.

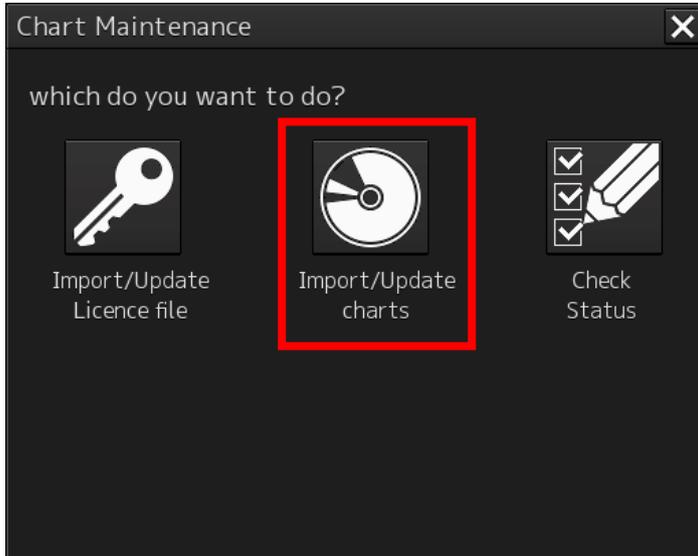
- 10) In the case of CD/DVD media, the chart import continuation confirmation dialog appears after import is completed.

- If charts have been imported from all CD/DVD media, click the [No] button. Finish chart import and close the window.
- If there are still charts that need to be imported, click the [Yes] button in the Chart Import Continuation dialog box. The Chart CD/DVD Media Insertion Window appears, so change CD/DVD media and click the [OK] button. Chart data will then be searched. For the succeeding operation, please see the operation described from page 2-15.

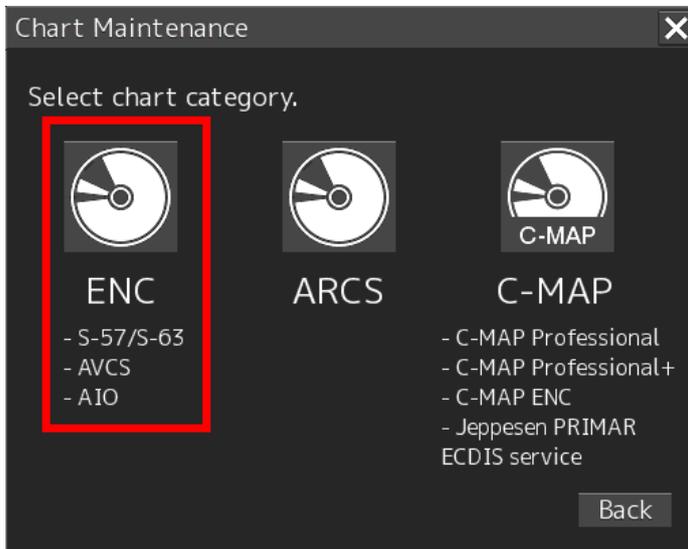
## 2.2 Updating Charts

To update charts, perform the same operation as import.

- 1) Start Chart Maintenance.
- 2) In the Home window, click the [Import / Update charts] button.



- 3) Go to the Chart Category Selection window and click the [ENC] button.

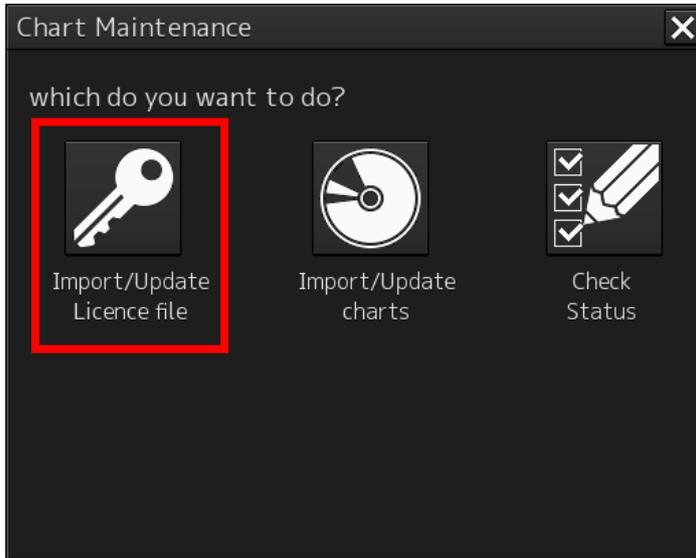


For the succeeding operation, see "[2.1.2 Importing Charts](#)".

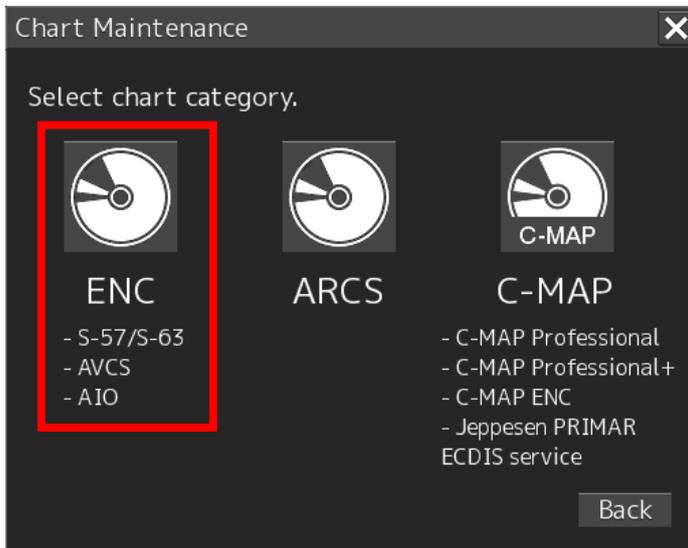
## 2.3 Updating Cell Permit Files

To update cell permit files, perform the same operation as import.

- 1) Start Chart Maintenance.
- 2) In the Home window, click the [Import / Update Licence file] button.



- 3) Go to the Chart Category Selection window and click the [ENC] button.



For the succeeding operation, see "[2.1.1 Importing Cell Permit Files \(S-63, AVCS and AIO\)](#)"

## 2.4 Using Check Status

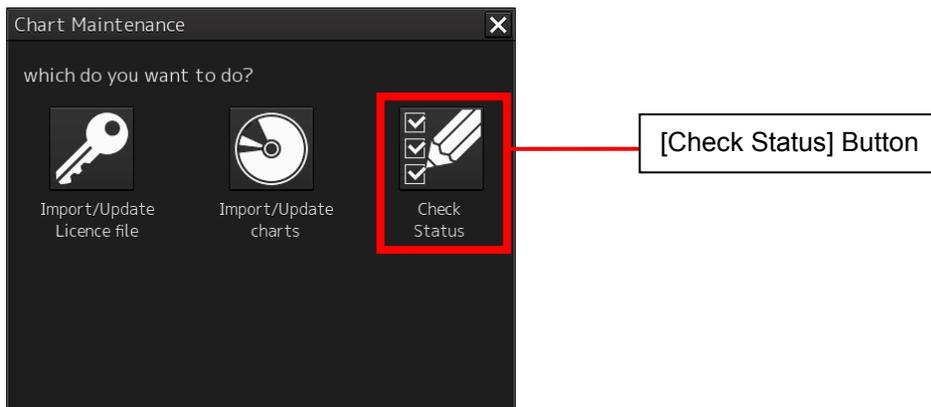
Check Status provides the following functions.

- Display a list of imported charts and chart license information.
- Display the log when importing/updating cell permits and charts permits.
- Display the log when importing/updating charts.
- Delete already imported charts.

### 2.4.1 How to Start Check Status

On Task Menu, start Check Status according to the following procedure.

- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Chart Maintenance window, click the [Check Status] button. The Check Status window appears.



## 2.4.2 Configuration of the Check Status Window

The Check Status window consists of the Status List window and the Log window.

- Status List Window: Displays a list of imported charts and chart license information.  
You can also delete already imported charts by selecting them.
- Log Window: Displays the log when importing/updating charts.  
Also displays the log when importing/updating cell permits and charts permits.

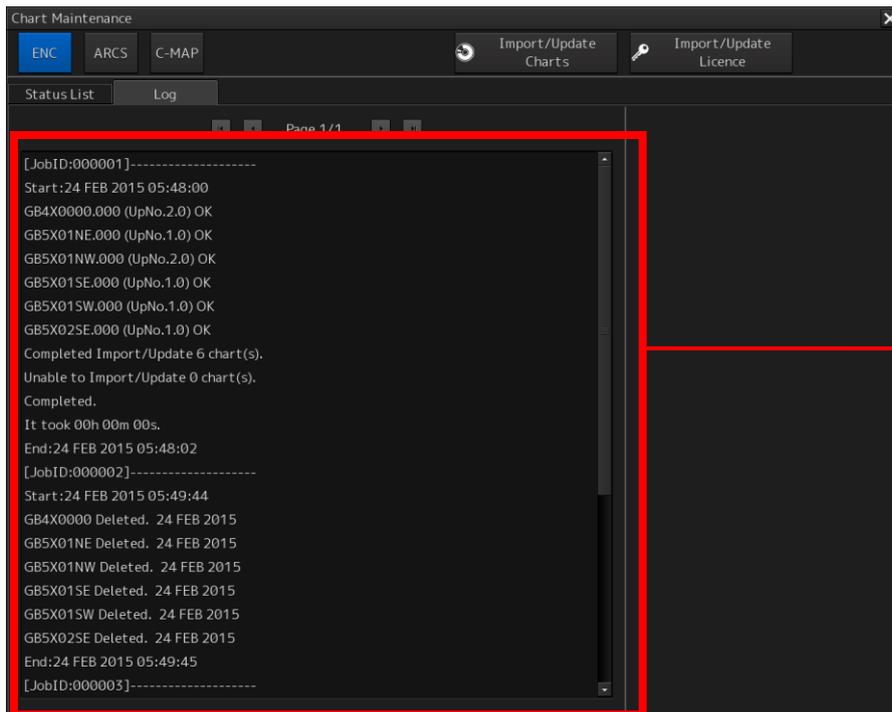
### 2.4.2.1 Status List Window

The screenshot shows the 'Chart Maintenance' window with the following components and callouts:

- Window Switching Tabs:** Switch between the Status List window and the Log window.
- Chart Type Buttons:** Change the chart type (ENC, ARCS, C-MAP).
- [Import/Update Licence] button:** Executes import/update.
- [Delete] Button:** Deletes charts.
- Licence Information:** Displays licence information of charts. SA certificate Information: Displays SA certificate Information. Cell Information: Displays cell information of charts.
- Folder List Display:** Displays folders containing imported charts.
- Chart List Display:** Displays a list of imported charts.

Cell Name	Cell Ver.	Issue Date	Weekly No.	Last l
AR201130	3.0	2014-12-23	WK07-15	2015
AR201140	1.15	2015-01-30	WK07-15	2015
AR202100	1.7	2014-07-28	WK07-15	2015
AR203100	1.8	2014-04-29	WK07-15	2015
AR204130	1.0	2014-04-15	WK07-15	2015
AR204160	1.3	2015-01-28	WK07-15	2015
AR301150	1.5	2014-08-26	WK07-15	2015
AR302120	3.1	2014-10-30	WK07-15	2015
AR302130	1.0	2011-04-11	WK07-15	2015
AR302160	1.0	2011-03-29	WK07-15	2015
AR302170	1.1	2013-04-30	WK07-15	2015
AR302180	1.4	2014-07-29	WK07-15	2015
AR303110	1.1	2011-10-31	WK07-15	2015
AR303120	1.0	2011-10-12	WK07-15	2015
AR304180	1.2	2013-12-02	WK07-15	2015
AR30419A	1.1	2014-08-05	WK07-15	2015
AR401570	2.2	2014-12-29	WK07-15	2015
AR401590	1.0	2010-06-14	WK07-15	2015
AR402490	1.8	2014-06-30	WK07-15	2015
AR402500	1.12	2015-01-30	WK07-15	2015
AR402520	1.3	2013-10-29	WK07-15	2015

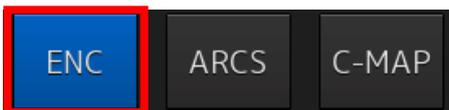
## 2.4.2.2 Log Window



Log Window:  
Displays a log recorded when importing/updating licences and charts.

<Functions of Each Button>

### Chart Type Buttons:



[ENC] Button:  
Displays the Chart information and ENC log.

### Import/Update Buttons:



[Import/Update Licence] Button:  
Imports/updates licences. Goes to the Licence Import window for the type of charts being displayed. Please see "2.1.1 Importing Cell Permit Files".

[Import/Update Charts] Button:  
Imports/updates charts. Goes to the Chart Import window for the type of charts being displayed. Please see "2.1.2 Importing Charts".

## Window Switching Tabs



The window for the selected tab appears.

[Status List] Tab:

Display information about the licences on a chart and a list of imported chart.

[Log] Tab:

Displays a log recorded when importing/updating licences and charts.

## [Delete] Button:



[Delete] Button:

Deletes the items whose checkboxes are marked in the Chart List. Please see "2.7 Deleting ENC Charts"

## <Folder List Display>

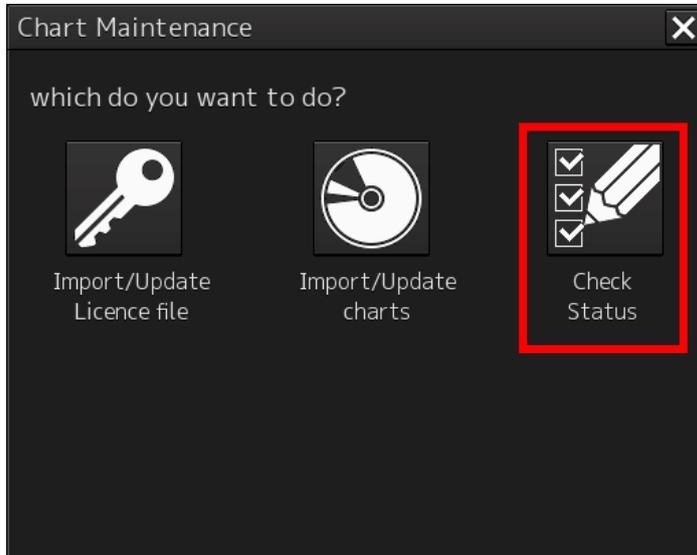


Displays a list of folders containing imported charts. Charts contained in the selected folder are displayed in the Chart List window.

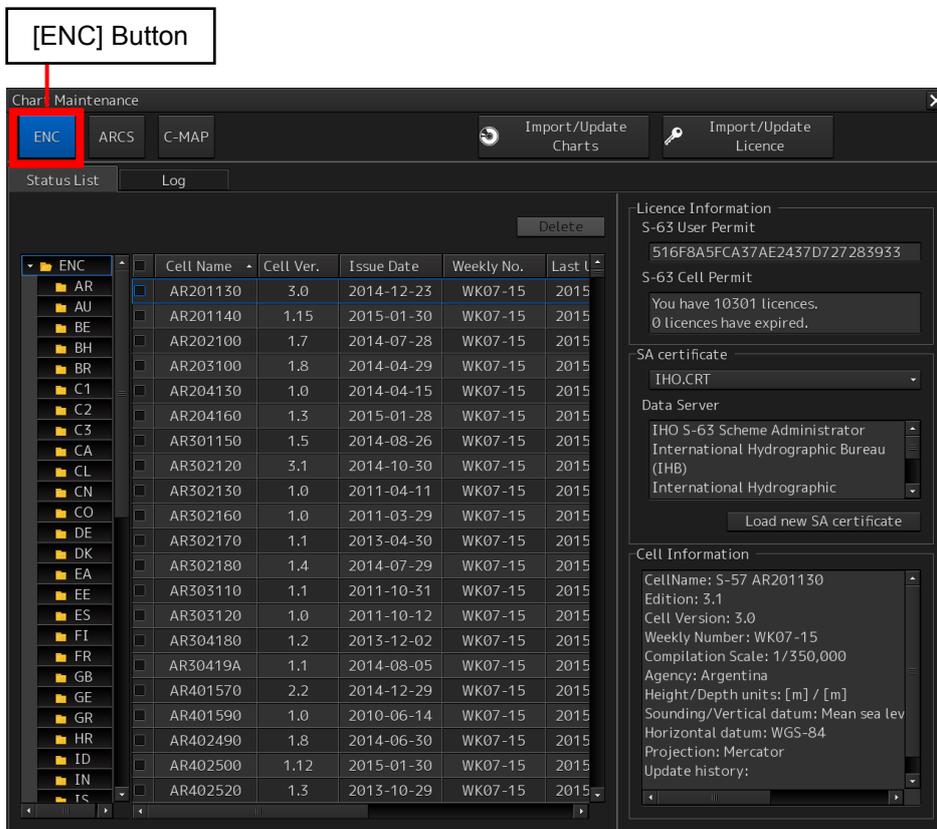
## 2.5 Checking Chart Update History

### 2.5.1 Checking from Chart Maintenance

- 1) Start Chart Maintenance from Task Menu.
- 2) Click the [Check Status] button in the Home window.



- 3) Click the [ENC] button in the Check Status window.



4) Check the update history in the Last Update column of the Chart List window.

The screenshot shows the 'Chart Maintenance' application window. On the left, a tree view shows folders for various countries (ENC, AR, AU, BE, BR, C1, C2, C3, CA, CL, CN, CO, DE, DK, EA, EE, ES, FI, FR, GB, GE, GR, HR, ID, IN, IS). The main area is a table with columns: Cell Name, Cell Ver., Issue Date, Weekly No., and Last Update. A red box highlights the last four columns for several rows. A red line connects this box to a larger table below.

Cell Ver.	Issue Date	Weekly No.	Last Update
3.0	2014-12-23	WK07-15	2015-04-10
1.15	2015-01-30	WK07-15	2015-04-10
1.7	2014-07-28	WK07-15	2015-04-10
1.8	2014-04-29	WK07-15	2015-04-10
1.0	2014-04-15	WK07-15	2015-04-10
1.3	2015-01-28	WK07-15	2015-04-10

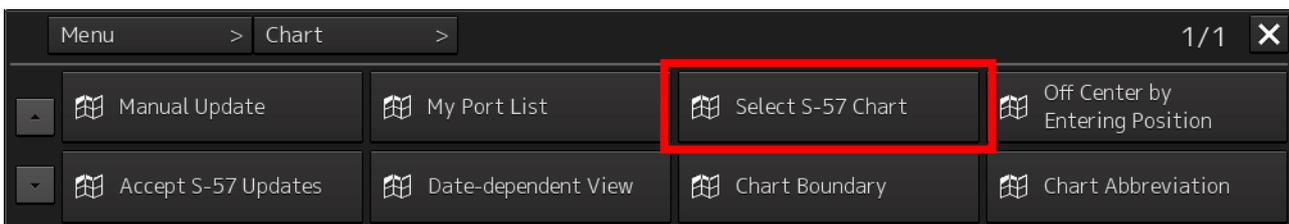
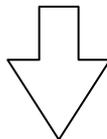
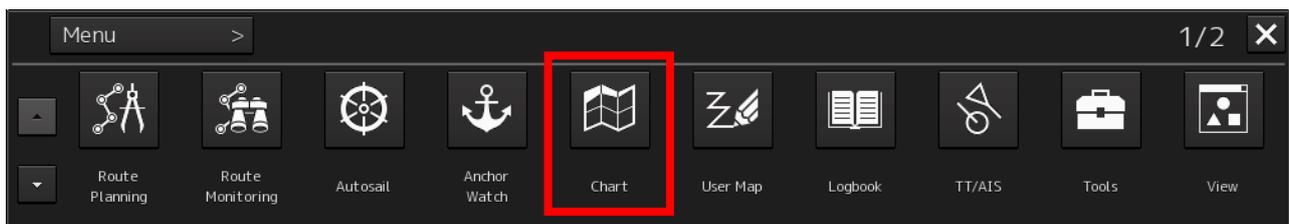
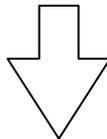
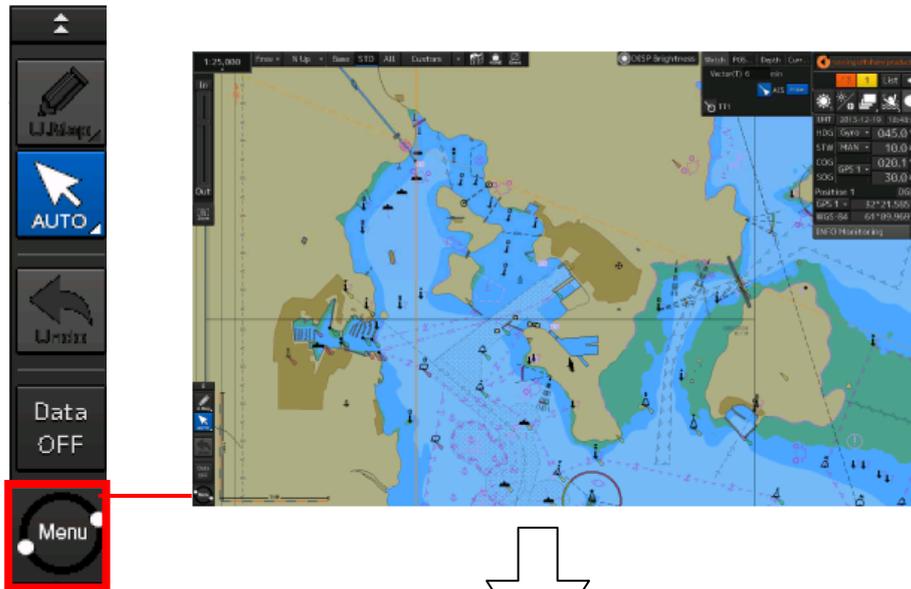
**Cell Ver.:**  
The chart editions are displayed.

**Issue Date:**  
The chart issue dates are displayed.

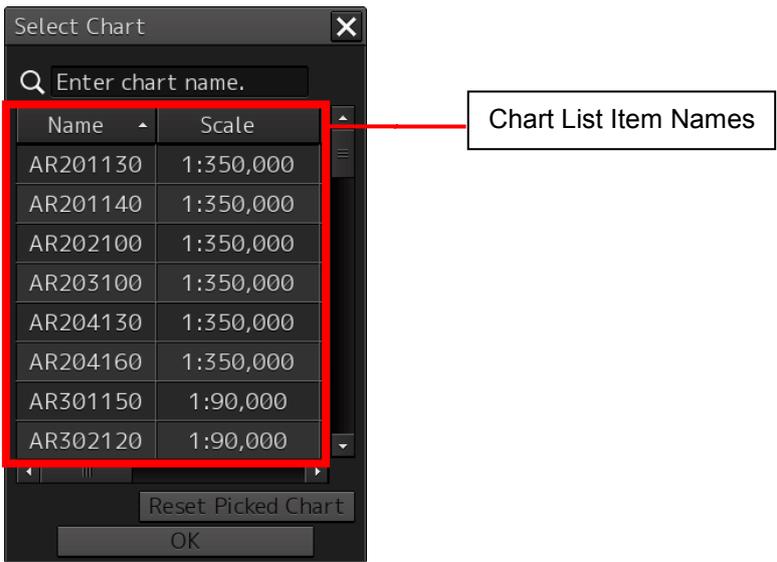
**Last Update:**  
The last date when charts were imported to the system are displayed.

## 2.5.2 Checking from ECDIS screen

- 1) Start ECDIS.
- 2) Select [Menu] - [Chart] - [Select S-57 Chart] in this order.



A Chart List is displayed.



3) Scrolling the Last Update column on Chart List to the right will display the update history.

Chart List Items (All Items)

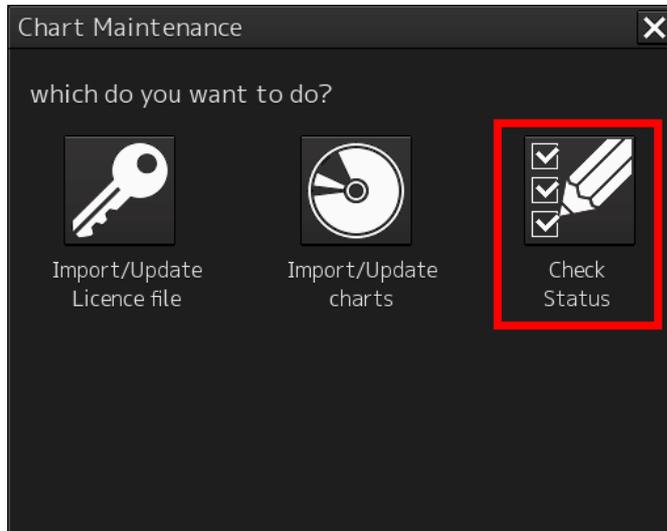
Name	Scale	Up No.	Issue Date	Last Update	Accepted
AR201130	1:350,000	3.0	2014-12-23	2015-04-10	Yes
AR201140	1:350,000	1.15	2015-01-30	2015-04-10	Yes
AR202100	1:350,000	1.7	2014-07-28	2015-04-10	Yes
AR203100	1:350,000	1.8	2014-04-29	2015-04-10	Yes
AR204130	1:350,000	1.0	2014-04-15	2015-04-10	Yes
AR204160	1:350,000	1.3	2015-01-28	2015-04-10	Yes
AR301150	1:90,000	1.5	2014-08-26	2015-04-10	Yes
AR302120	1:90,000	3.1	2014-10-30	2015-04-10	Yes

Up No.:  
The chart update numbers are displayed.  
Issue Date:  
The chart issue dates are displayed.  
Last Update:  
The last chart update dates are displayed.

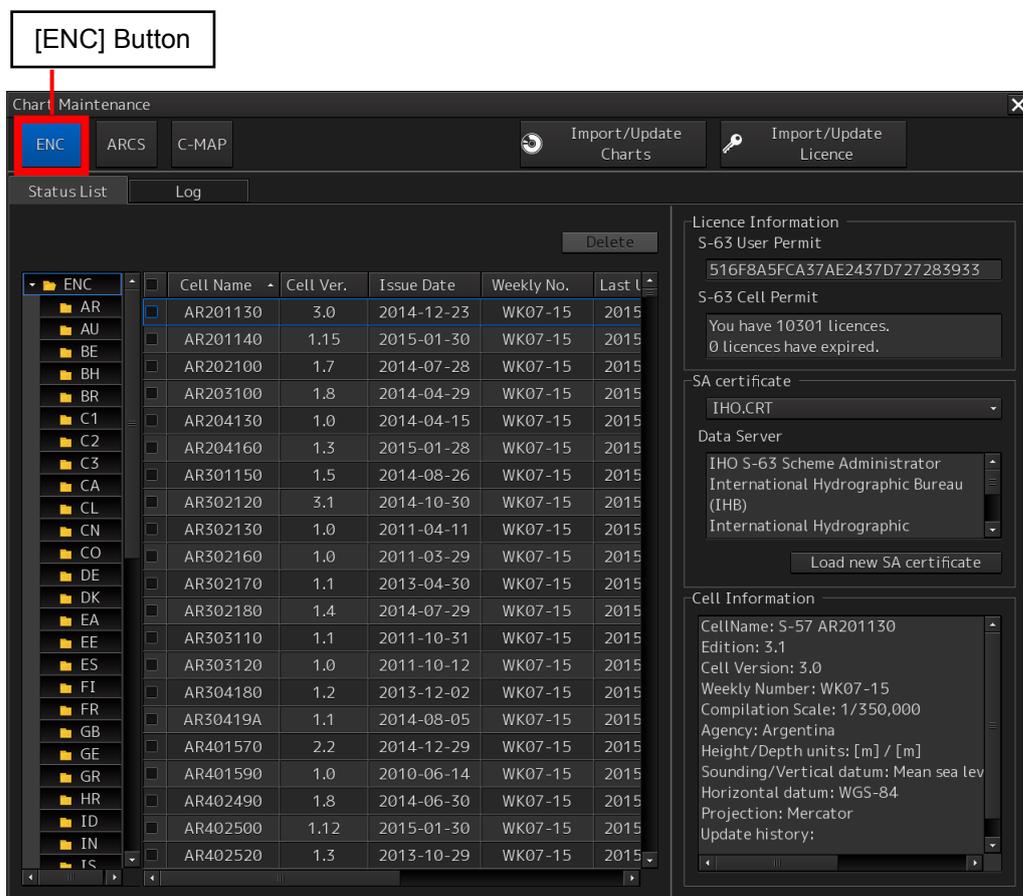
## 2.6 Checking the Contents of Contracts

The contents of contracts can be checked from Check Status.

- 1) Start Chart Maintenance from Task Menu.
- 2) Click the [Check Status] button in the Home window.



- 3) Click the [ENC] button in the Check Status window. The ENC chart information is displayed.



## 2.6.1 Checking the Expiry Dates of Cell Permits Having Contract

Check the expiration dates in the Expiry Date column of the Chart List window.

Last Update	Expiry Date	Accepted	DS_ID
2015-04-10	2015-12-31	Yes	GB
2015-04-10	2015-12-31	Yes	GB
2015-04-10	2015-12-31	Yes	GB
2015-04-10	2015-12-31	Yes	GB

Expiry Date: Expiration date of permit  
Expires within 30 days → Yellow  
Already expired → Orange

If the chart expiry data has been reached, please check the contents of the contract and contact your chart distributor.

## 2.6.2 Checking Licence information

The screenshot shows the 'Chart Maintenance' window with a 'Status List' table and a 'Log' section. The table lists various cell permits with columns for Cell Name, Cell Ver., Issue Date, Weekly No., and Last Update. The 'S-63 User Permit' and 'S-63 Cell Permit' sections are highlighted with red boxes.

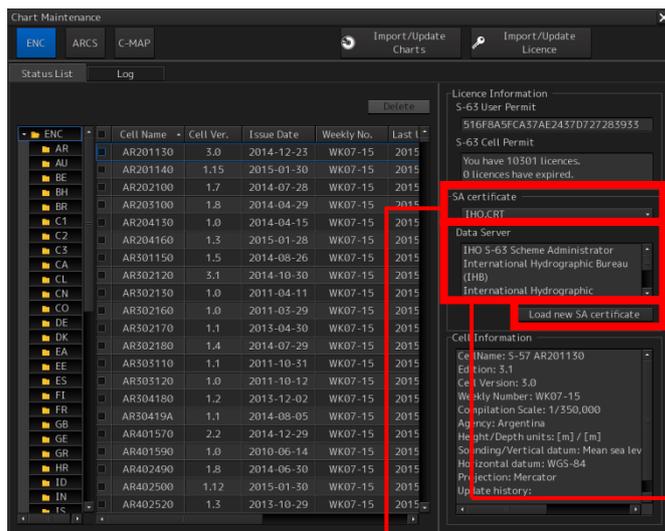
S-63 User Permit:  
Displays the S-63 user permit.

S-63 User Permit  
516F8A5FCA37AE2437D727283933

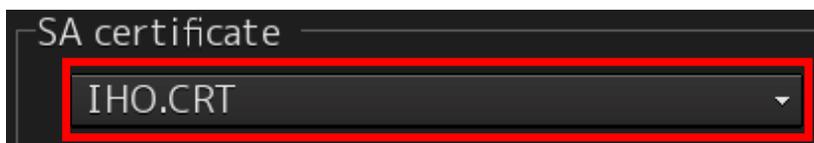
S-63 Cell Permit:  
Displays the number of S-63 chart licences owned and the number of expired chart licences.

S-63 Cell Permit  
You have 10301 licences.  
0 licences have expired.

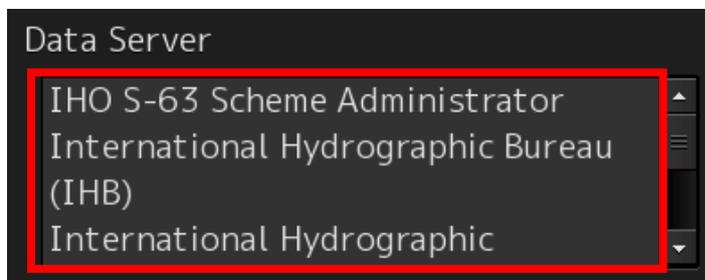
## 2.6.3 Checking SA Certificate Files



SA certificate:  
Displays the SA certificate file names.



Data Server:  
Displays the data server information of the SA certificate files.



Load new SA certificate:  
Clicking the [Load new SA certificate file] button in the SA certificate column will import a new SA certificate file.



### Caution:

It is necessary to select and import an SA certificate file into the system for each of the data servers (PRIMAR, UKHO (AVCS), Hydrographic and Oceanographic Department of Japan Coast Guard, etc.).

ECDIS provides a function for enabling to use charts issued from multiple data servers. When importing charts, it is necessary to import and select an SA certificate file on chart CD-ROM issued by a data server for ENC certification and assurance.

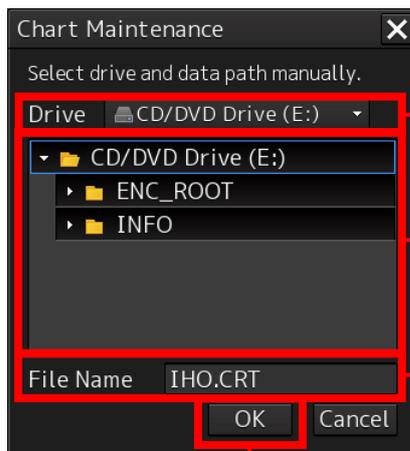
## 2.6.4 Reimporting SA Certificate Files

- 1) Insert media (CD/DVD, USB memory) on which an SA certificate file has been stored and wait until import becomes ready.
- 2) Click the [Load new SA certificate] button.



- 3) When the Path Selection window appears in a separate window, specify the drive and folder in which the SA certificate file is stored.

<Path Selection Window>



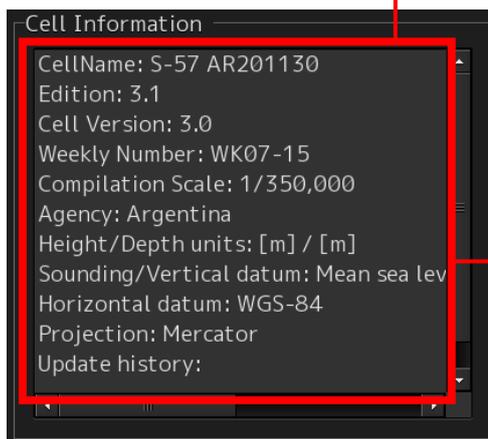
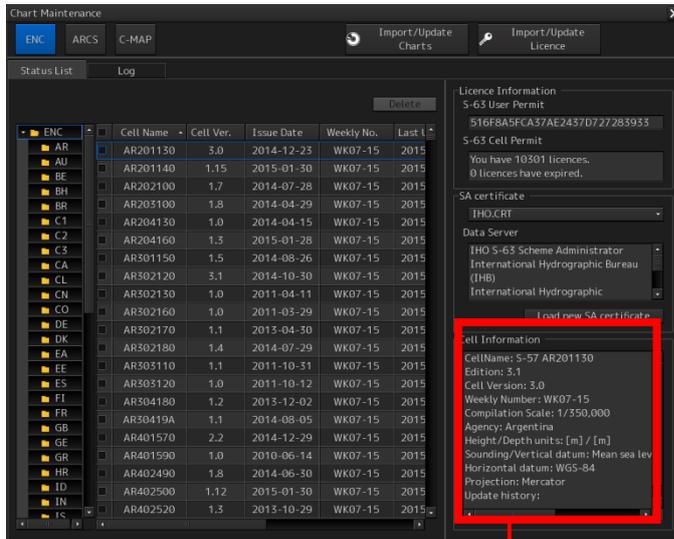
Drive Name:  
Select a drive.  
Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
When an SA certificate file is stored in the selected folder, the file name is displayed.

[OK] Button:  
Import the SA certificate file and closes this window. (If a file name is not displayed in the text box, the [OK] button is disabled.)

For following operations, refer to page 2-15 and subsequent pages.

## 2.6.5 Checking Chart Cell Information

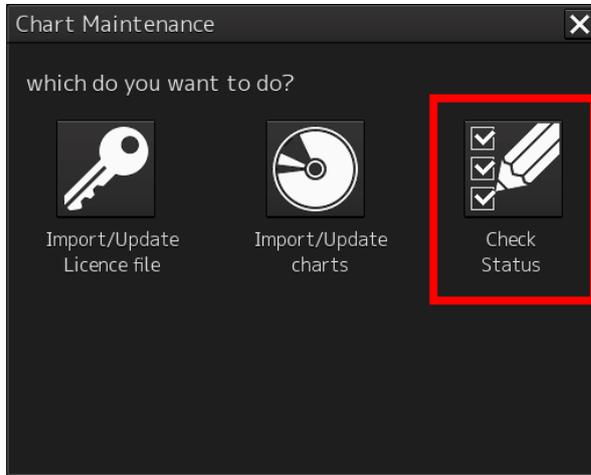
Check Cell Information in the Check Status window.



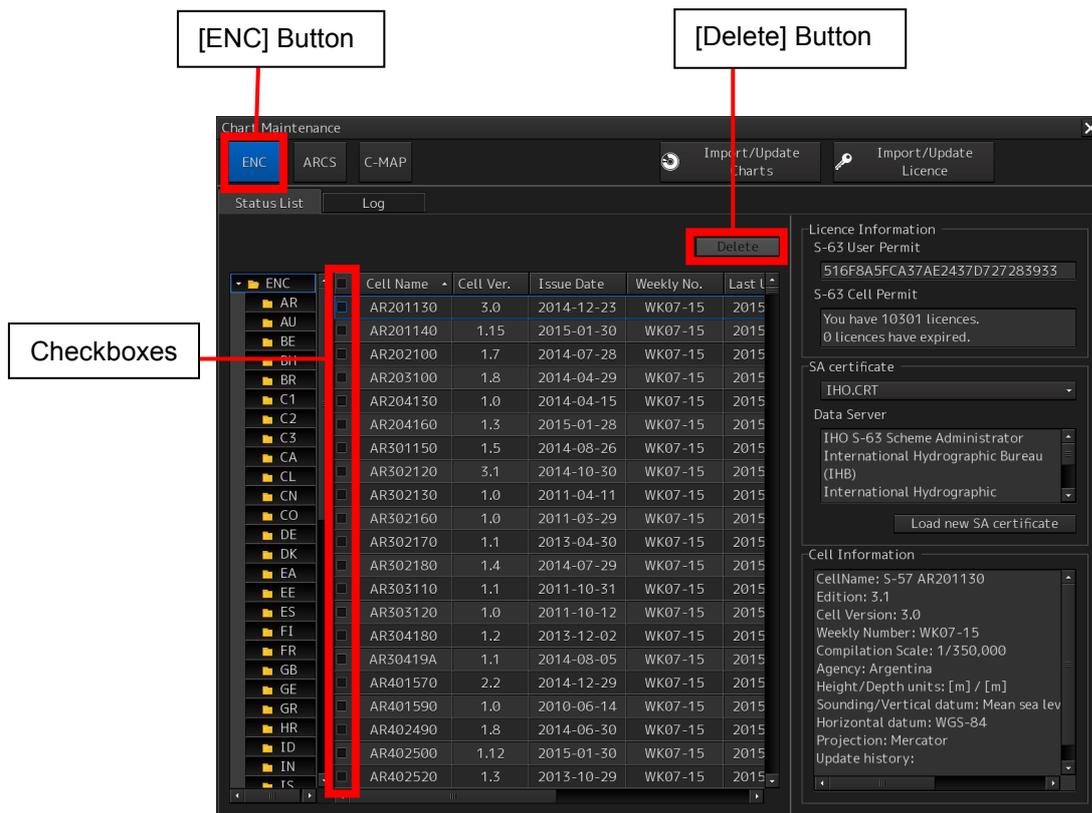
Cell Information:  
Displays the information of the selected chart in the chart list.

## 2.7 Deleting ENC Charts/S-63 Cell Permits

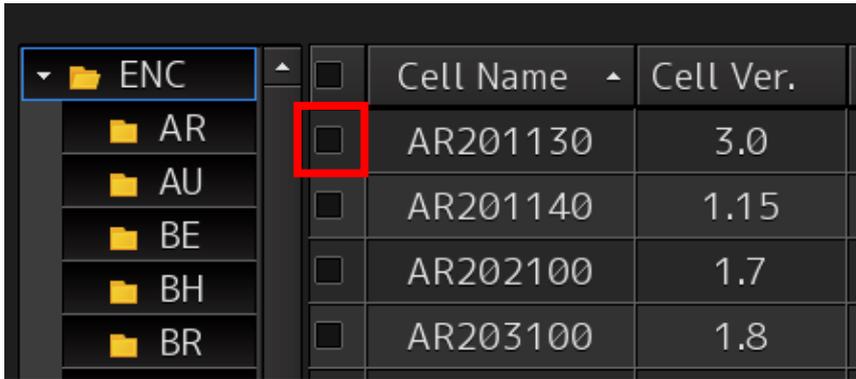
- 1) Start Chart Maintenance from Task Menu.
- 2) Click the [Check Status] button in the Home window.



- 3) Click the [ENC] button in the Check Status window.



- 4) Check the checkboxes of charts that need to be deleted in the Chart List window.

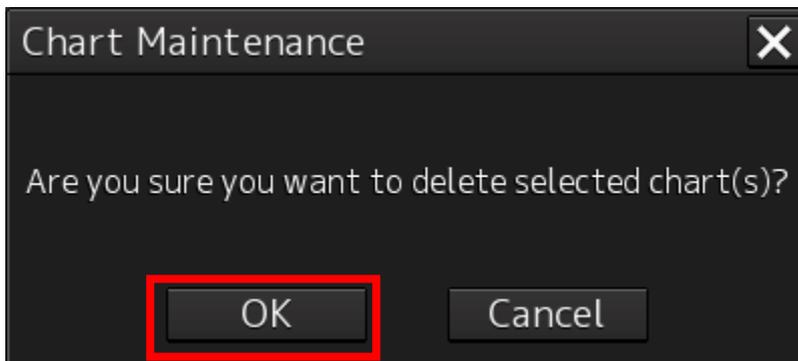


	Cell Name	Cell Ver.
<input type="checkbox"/>	AR201130	3.0
<input type="checkbox"/>	AR201140	1.15
<input type="checkbox"/>	AR202100	1.7
<input type="checkbox"/>	AR203100	1.8

- 5) Click the [Delete] button in the Chart List window.



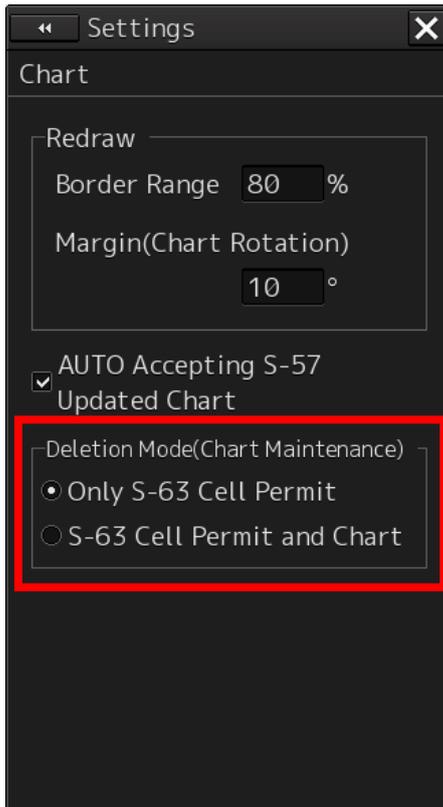
- 6) The Delete dialog box appears. Clicking the [OK] button will delete the checked charts in the Chart List.



If deleted ENC chart on Check StatusWindow, select either

- Delete the license only, or
- Delete the license and the chart.

- 1) Start ECDIS screen or RADAR screen (chart display option) from Task Menu.
- 2) Select [Menu] – [Settings] – [Chart].  
Display the setting dialog about chart operation.
- 3) Select the Deletion Mode on Deletion Mode (Chart Maintenance).



Deletion Mode (Chart Maintenance):

Set the Deletion Mode on Check Status Window.

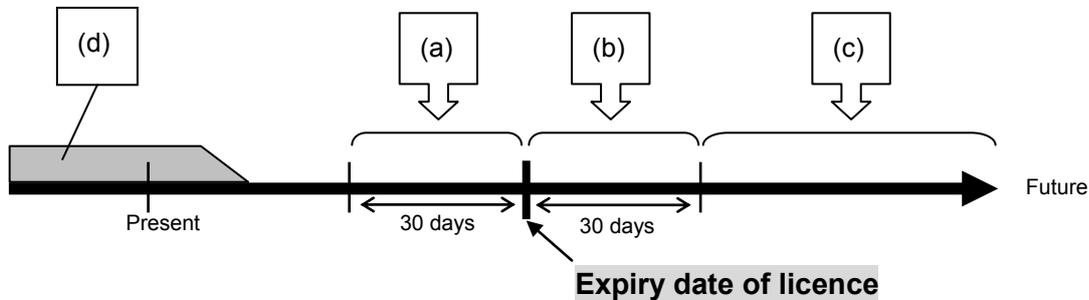
- Only S-63 Cell Permit  
Delete the license only.
- S-63 Cell Permit and Chart  
Delete the license and the chart.

The setting of Deletion Mode (Chart Maintenance) is valid only under S-63 (ENC that requires the permit). Under S-57 (ENC that does not require the permit), the chart is also deleted regardless of this setting.

# Section 3 Using ARCS Charts

## 3.1 About ARCS Charts

Licences (Chart Permits) have an expiry date.



- (a) For 30 days before expiry date of licence  
A warning message is displayed. Please refer to "Notice regarding Alert Information of ARCS Charts" provided as a reference document at the end of this document.
- (b) For 30 days after expiry date of licence  
An error message is displayed. Please refer to "Notice regarding Alert Information of ARCS Charts" provided as a reference document at the end of this document.  
Although the licence has been disabled, ARCS charts can be displayed continuously.
- (c) From 30 days after expiry date of licence  
A warning message is displayed. Chart permits are disabled and no ARCS charts are displayed. Please refer to "Notice Regarding Alert Information of ARCS Charts" provided as a reference document at the end of this document.
- (d) If charts that have been displayed so far can no longer be displayed, the following causes may be considered.
  - ARCS charts are of trial version (free for 3 months).
  - The details of the contract were changed.

**Caution:**

- **Regarding the contents of the contract, please check with the chart contractor or chart dealer.**

## 3.2 Importing ARCS Charts

### 3.2.1 Importing Chart Permit Files

Import ARCS chart permit files according to the following procedure.

#### **WARNING**



When importing/exporting files using USB memory, be sure to check for viruses on USB memory in advance. If the ECDIS is infected with a virus, it will affect other devices, leading to failures.

#### **CAUTION**



Never leave USB memory in the USB port.  
It may cause malfunction.

#### **Caution:**

If the received chart permit files are “Backup gb.lcn” and “Backup gb.ncp”, rename them to “gb.lcn” and “gb.ncp”. With chart permit file names other than “gb.lcn” and “gb.ncp”, ARCS charts cannot be imported correctly.

Do not alter the contents of chart permit files. If the contents of chart permit files were altered,

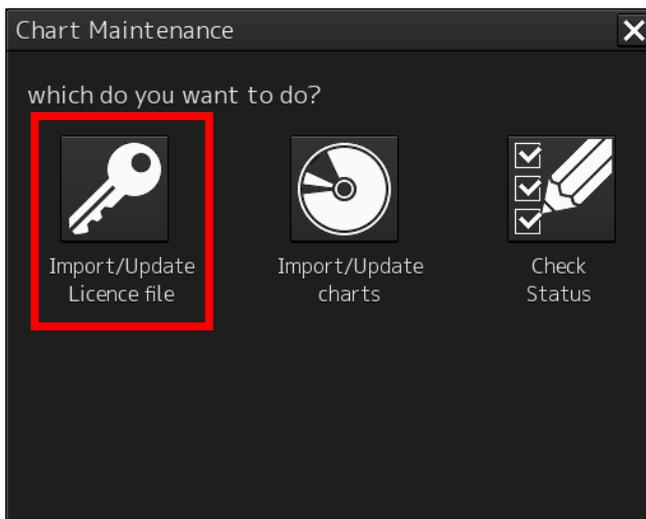
ARCS charts cannot be imported correctly.

### 3.2.1.1 Importing Chart Permit Files from CD/DVD Media (Automatic Import)

The following example describes the procedure for importing chart permit files from CD/DVD media.

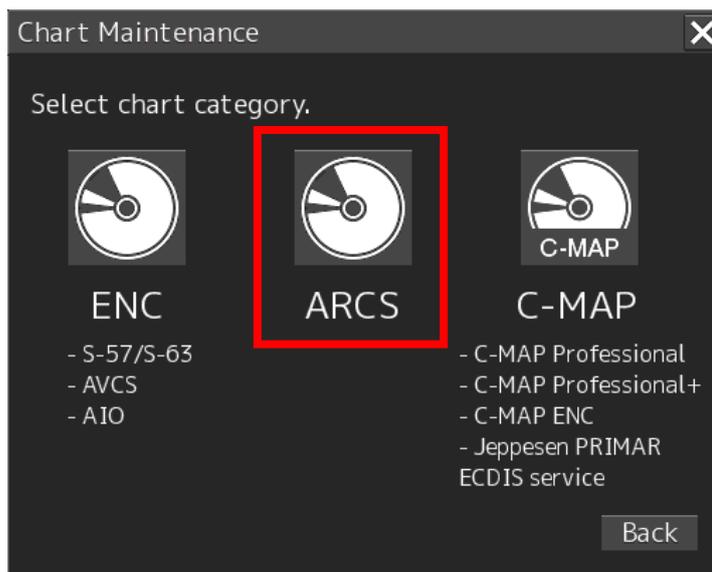
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.

<Home Window>



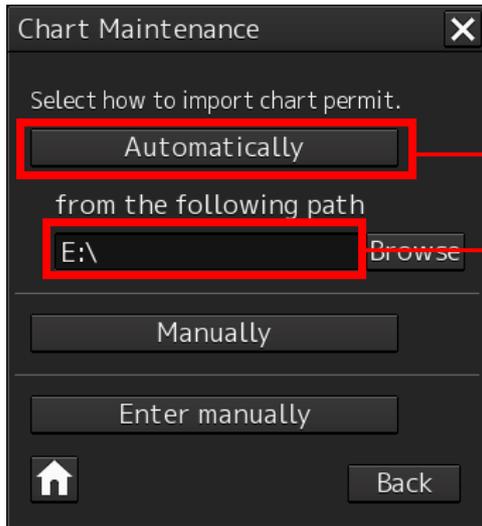
- 3) In the Chart Category Selection window, click the [ARCS] button.

<Chart Category Selection Window>



- 4) Insert CD/DVD medium on which the ARCS chart permit files are stored and wait until import becomes ready.
- 5) In the Chart Permit Import Selection window, click the [Automatically] button. Search a chart permit file from the path (CD/DVD drive) shown in "from the following path" and start importing it.

<Chart Permit Import Selection Window>

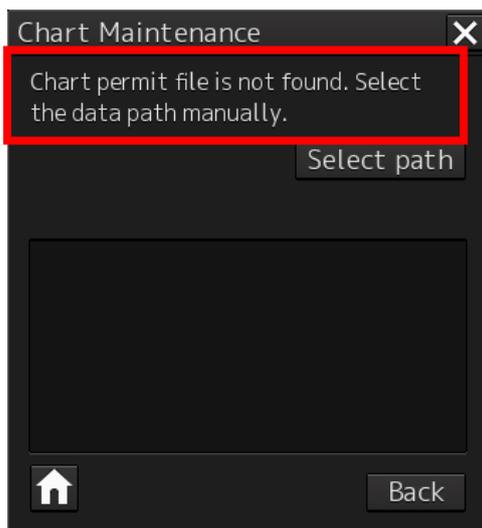


[Automatically] Button:  
Starts importing using the path shown in "from the following path".

Click "from the following path" box, can input path manually.

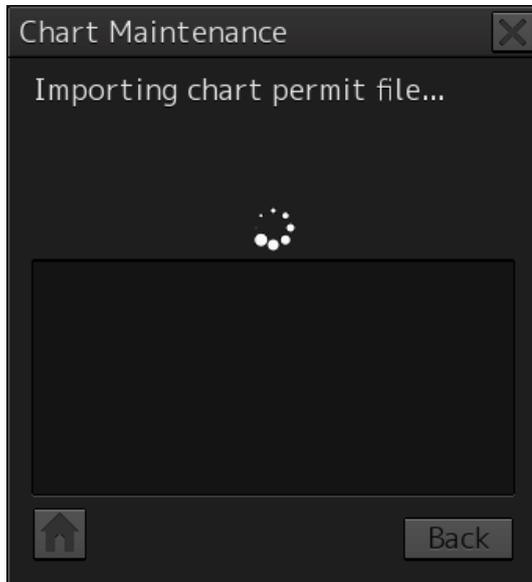
If a chart permit file cannot be found, a file not found error message appears in the text box. By referring to "3.2.1.3 If a Chart Permit File Cannot Be Detected", respecify a path.

<Chart Permit File Not Found Window>



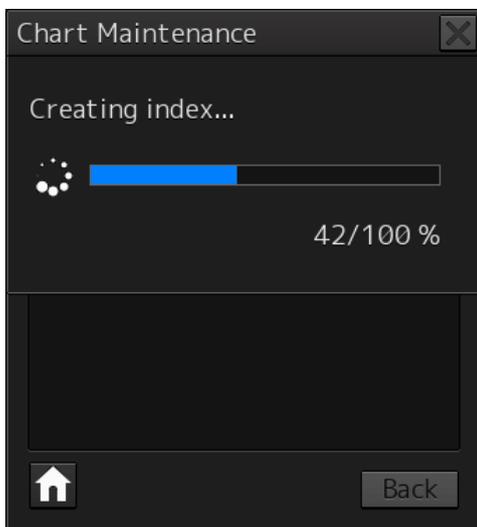
- <Chart Permit File Import Search Window>  
Search a chart permit file.

<Chart Permit File Search Window>



- <Chart Permit File Import Window>  
Import the detected chart permit file to the system.

<Chart Permit File Import Window>

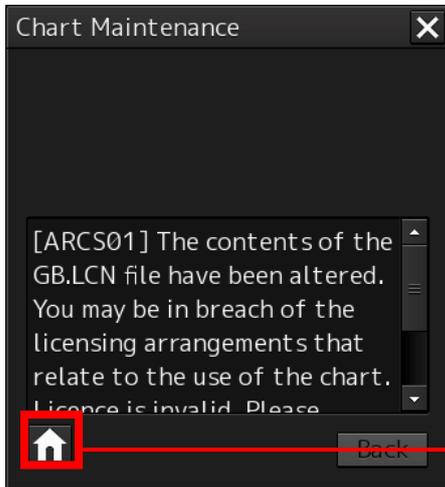


**If the chart permit file is incorrect:**

If a chart permit file is incorrect, an error message appears in the text box.

Return to the Home window by pressing the [Home] button, prepare a normal chart permit file and then redo import operation.

<File Import Error Window>



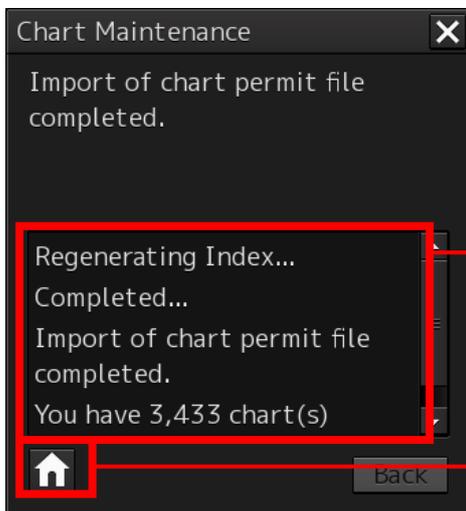
[Home] Button:  
Returns to the Home window.

■ Examples of error messages if a chart permit file is incorrect

- ARCS01 - The contents of the GB.LCN file have been altered. You may be in breach of the licensing arrangements that relate to the use of the charts. Licence is invalid. Please contact your ARCS agent/distributor to correct this error.
- ARCS02 - Chart Permit corrupted. Please re-load from the original media.

6) When the import of the chart permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.

<Chart Permit File Import Completion Window>



Text Box:  
A chart permit file import completion message and the number of licences owned are displayed.  
[Home] Button:  
Returns to the Home window.

7) Click the [Home] button to finish importing.

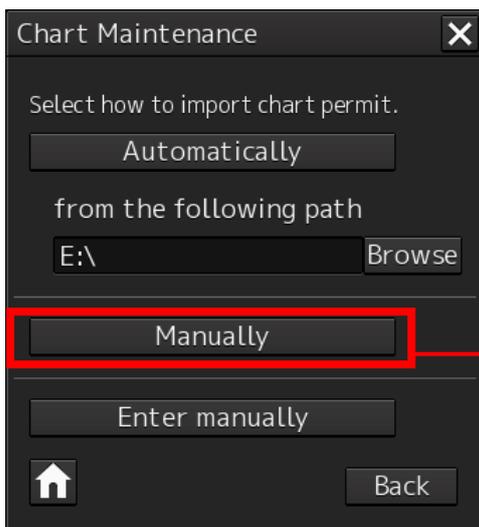
### 3.2.1.2 Importing Chart Permit Files from USB Memory (Manual Import)

When importing chart permit files from devices other than the CD/DVD drive, such as USB memory and a hard disk, set up the import path first and then import them.

The following example describes the procedure for importing chart permit files from USB memory (F drive).

- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.
- 3) In the Chart Category Selection window, click the [ARCS] button.  
(The operation is the same as described in "3.2.1.1 Importing Chart Permit Files from CD/DVD Media (Automatic Import) up to here.)
- 4) Insert USB memory on which the chart permit files are stored and wait until import becomes ready.
- 5) In the Chart Permit Import Selection window, click the [Manually] button. The Chart Permit File Path Selection window appears.

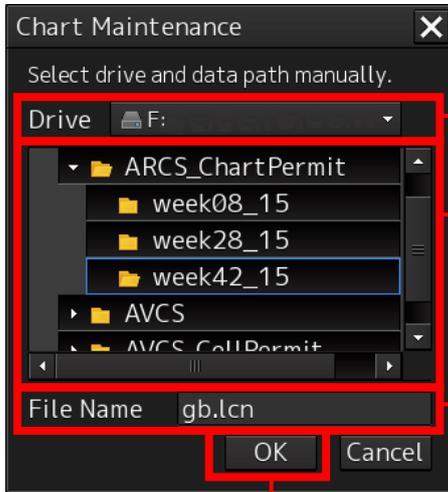
<Chart Permit Import Selection Window>



[Manually] Button:  
Select a path and then start importing.

- 6) Specify USB memory (F drive) in Drive. Also, specify a folder containing a chart permit file. When a folder containing a chart permit file is selected, the chart permit file name is displayed in the text box.

<Path Selection Window>



Drive Name:  
Select a drive.

Folder name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.

Text Box:  
When a chart permit file is stored in the selected folder, the chart permit file name is displayed.

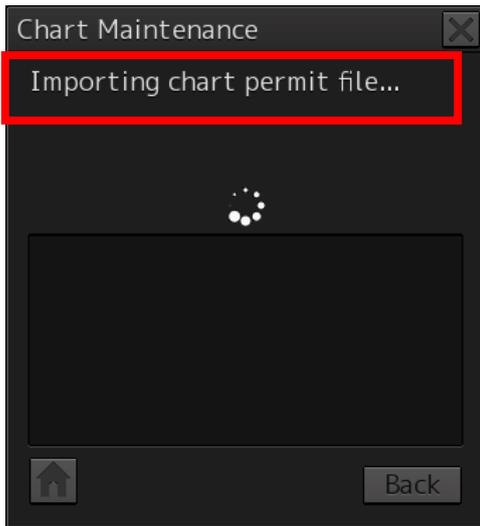
[OK] Button:  
Starts importing the chart permit file using the selected path.

**Caution:**

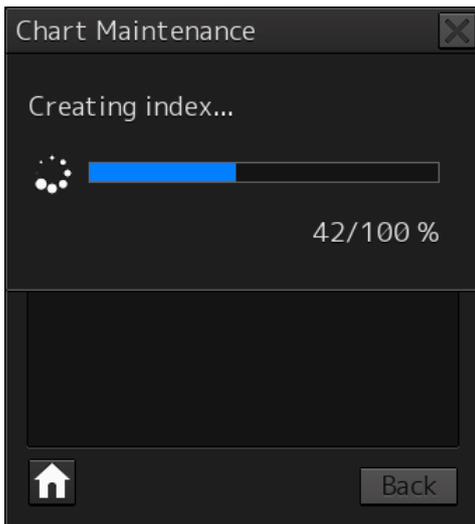
- When ARCS Chart Permits are supplied by E-mail, save the two files, gb.lcn and gb.ncp files (ARCS Chart Permit), attached to E-mail to the USB memory. Insert USB memory and select [F:] (F drive).
- Save only the gb.lcn and gb.ncp files to USB memory without saving the entire E-mail.
- If the gb.lcn files are compressed, decompress them first and then save them to USB memory.

- 7) Click the [OK] button. The import of the chart permit files start using the selected path.

<Chart Permit File Import Start Window>



<Chart Permit Import Window>



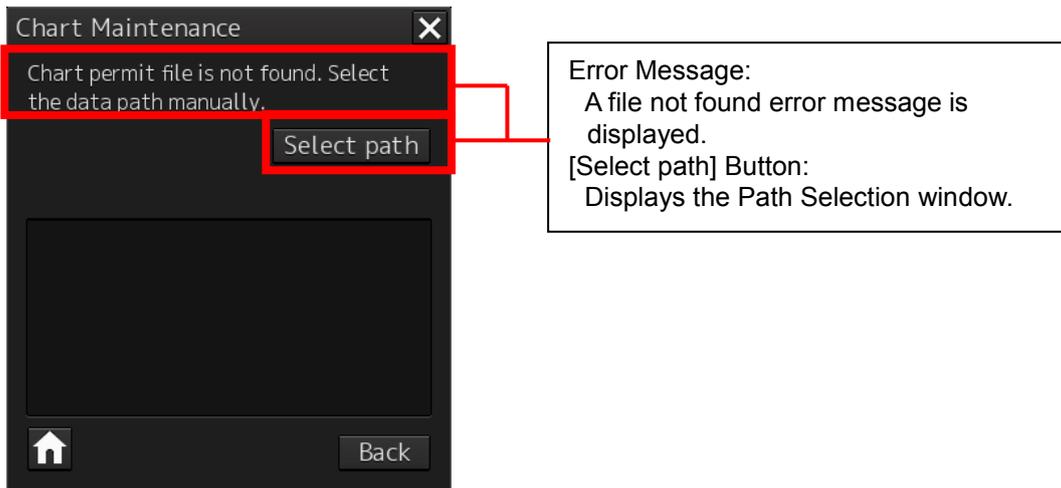
- 8) When the import of the chart permit files are completed, a completion message and the number of licences owned appear in the text box, so check the result.
- 9) Click the [Home] button to finish importing.

### 3.2.1.3 If a Chart Permit File Cannot Be Found (Resume by Specifying a Path)

If a chart permit file cannot be found in the Chart Permit File Search window, a file not found error message appears in the text box. Click the [Select path] button to respecify a path.

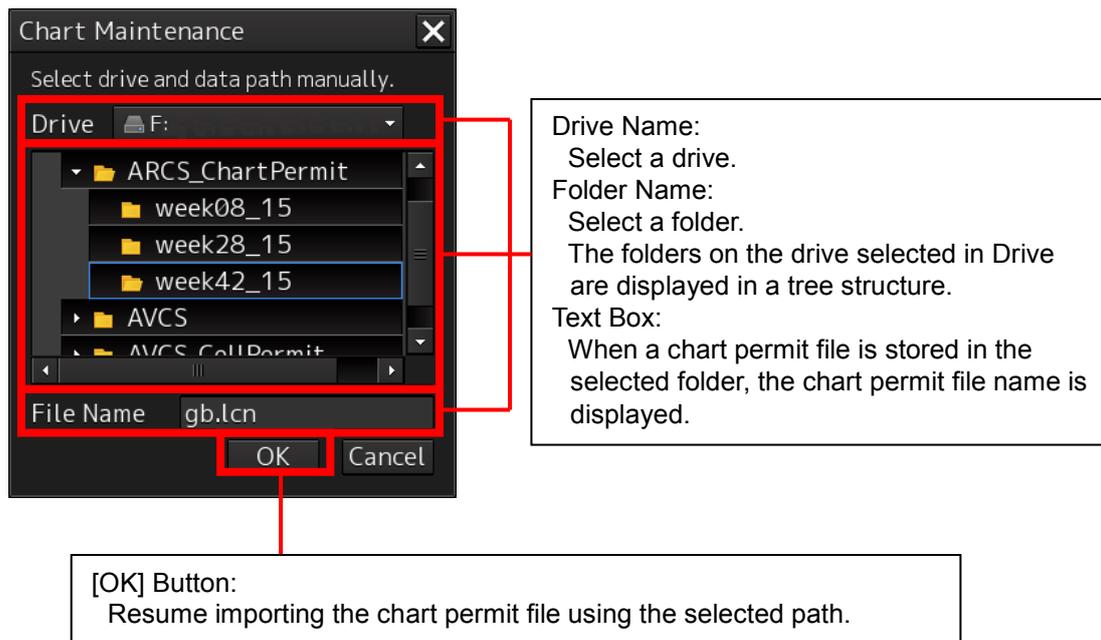
The following example describes the procedure from how to specify a path to how to resume importing a chart permit file by changing to USB memory (F drive).

<Chart Permit File Not Found Window>



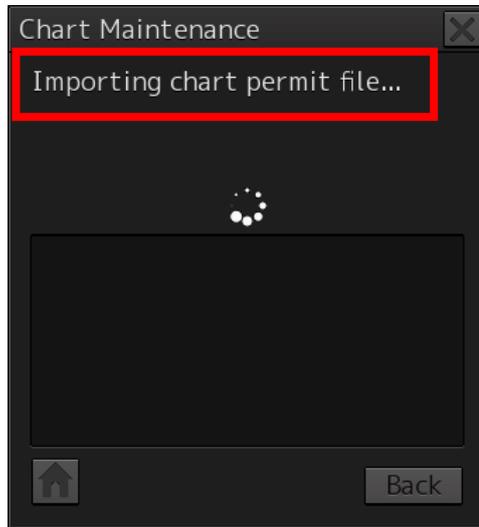
- 1) In the Chart Permit File Not Found window, click [Select path]. The Path Selection window appears.
- 2) Specify USB memory (F drive) in Drive. Also, specify a folder containing a chart permit file. When a folder containing a chart permit file is selected, the chart permit file name is displayed in the text box.

<Path Selection Window>



- 3) Click the [OK] button. The import of the chart permit file start using the selected path.

<Chart Permit File Search Window>



- 4) When the import of the chart permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.
- 5) Click the [Home] button to finish importing.

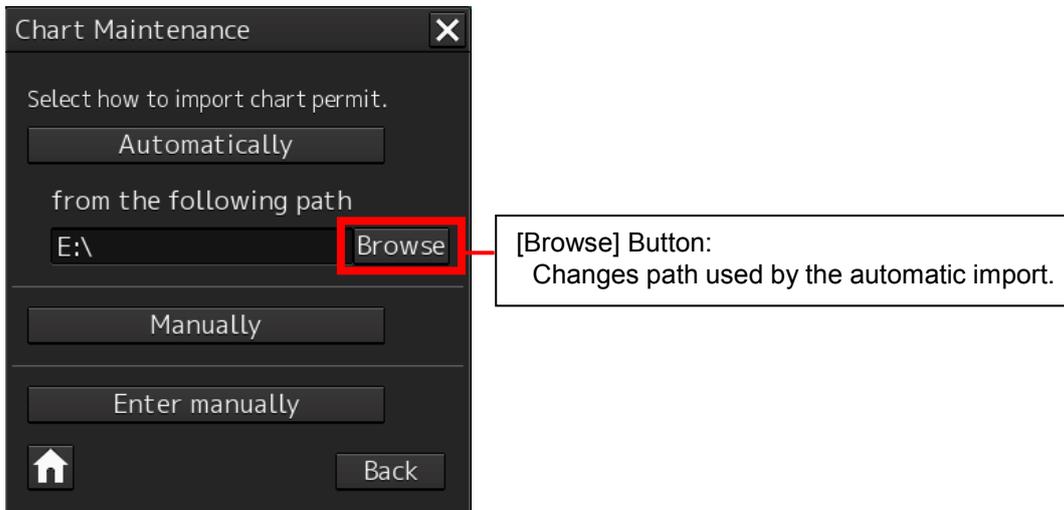
### 3.2.1.4 Changing a Path to Use for Automatic Import

If a path is selected with the [Browse] button when always using USB memory to import Chart Permit data, the selected path will be saved as a path used by the automatic import Chart Permit data can then be imported with the [Automatically] button from the saved path thereafter.

The following example describes how to change path used by the automatic import by changing to USB memory (F drive).

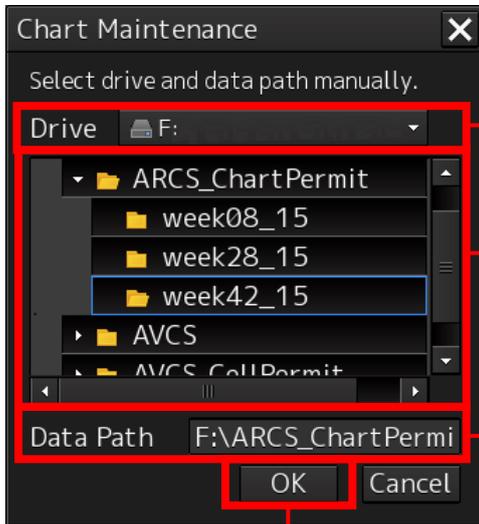
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.
- 3) In the Chart Category Selection window, click the [ARCS] button.  
(The operation is the same as described in "3.2.1.1 Importing Chart Permit Files from CD/DVD Media (Automatic Import) up to here.)
- 4) Insert USB memory on which the chart permit files are stored and wait until import becomes ready.
- 5) In the Chart Permit Import Selection window, click the [Browse] button. The Chart Permit File Path Selection window appears.

<Chart Permit Import Selection Window>



- 6) Specify USB memory (F drive) in Drive. Also, specify a folder containing a chart permit file. When a folder containing a chart permit file is selected, the chart permit file name is displayed in the text box.

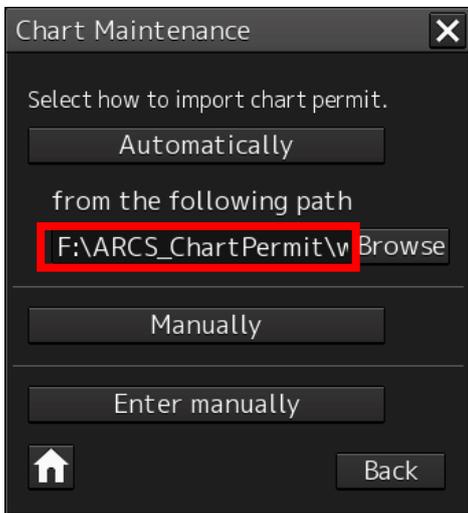
<Path Selection Window>



Drive Name:  
Select a drive.  
Folder Name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
Select a folder, data path is displayed.

[OK] Button:  
Set the path selected as the path to be used in automatic import.

- 7) Click the [OK] button. Set the path selected as the path to be used in automatic import.

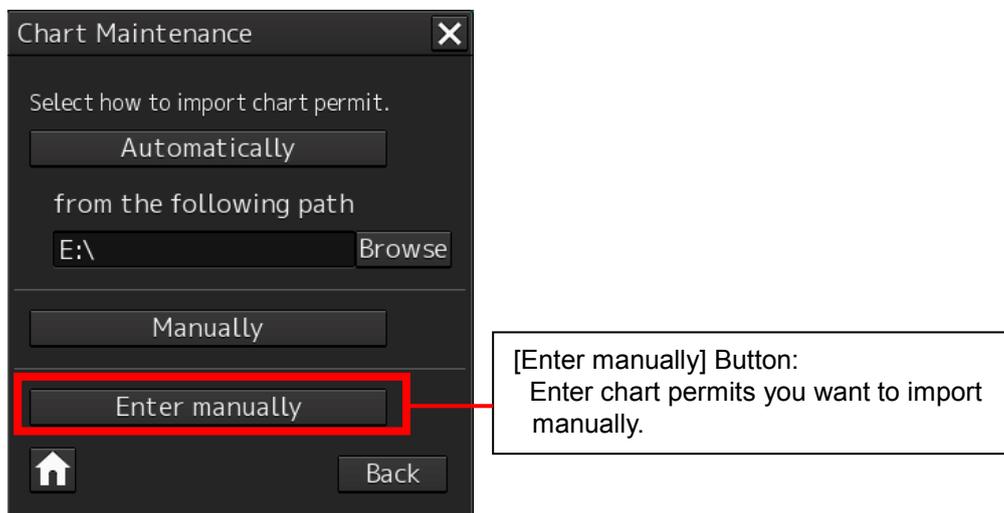


### 3.2.1.5 Manually Entering a Chart Permit

If chart permits cannot be imported from a chart permit file, they can be manually entered with the [Enter manually] button.

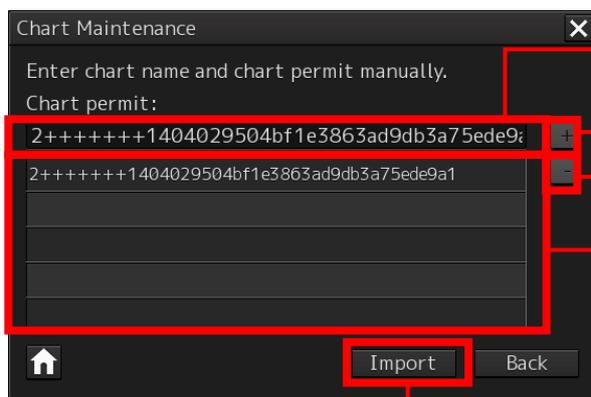
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.
- 3) In the Chart Category Selection window, click the [ARCS] button.  
(The operation is the same as described in "3.2.1.1 Importing Chart Permit Files from CD/DVD Media (Automatic Import) up to here.)
- 4) In the Chart Permit Import Selection window, click the [Enter manually] button. The Chart Permit Manual Entry window appears.

<Chart Permit Import Selection Window>



- 5) Click the Chart Permit Entry Box. Using the software keyboard that appears, enter a chart permit.

<Chart Permit Manual Entry Window>



**Chart Permit Entry Box:**  
Click to enter a chart permit from the software keyboard that appears.

**Chart Permit List:**  
Displays the added chart permits in a list.  
**[+] Button:**  
Adds the contents entered into the Chart Permit Entry Box to the Chart Permit List.  
**[-] Button:**  
Deletes the selected chart permit to the Chart Permit List.

**[Import] Button:**  
Imports the chart permits in the Chart Permit List.

- 6) Click the [+] button. The entered chart permit is added to the Chart Permit List.
- 7) Click the [Import] button. The import of the chart permits being displayed in the list starts.
- 8) When the import of the chart permit file is completed, a completion message and the number of licences owned appear in the text box, so check the result.
- 9) Click the [Home] button to finish importing.

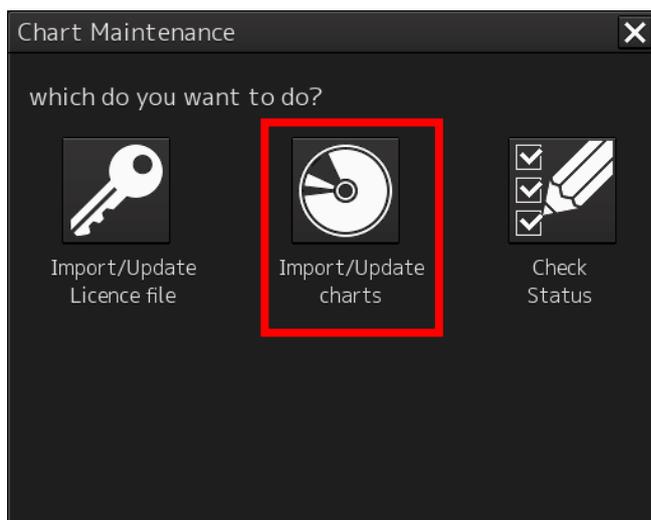
## 3.2.2 Importing Charts

### 3.2.2.1 Importing Charts from CD/DVD (Automatic Import)

The following example describes the procedure for importing ARCS charts from CD/DVD media.

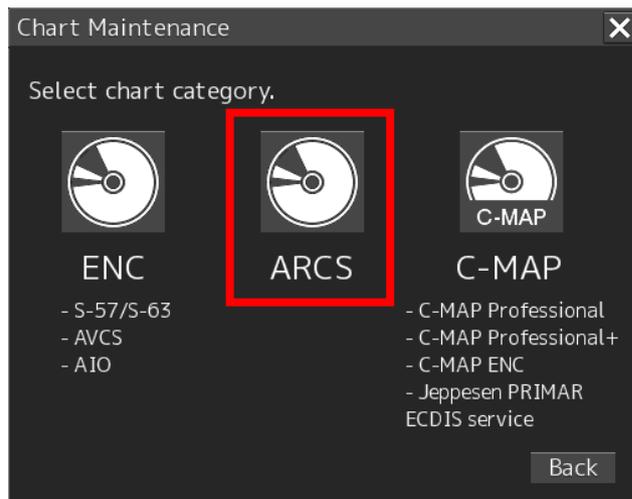
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.

<Home Window>



- 3) In the Chart Category Selection window, click the [ARCS] button.

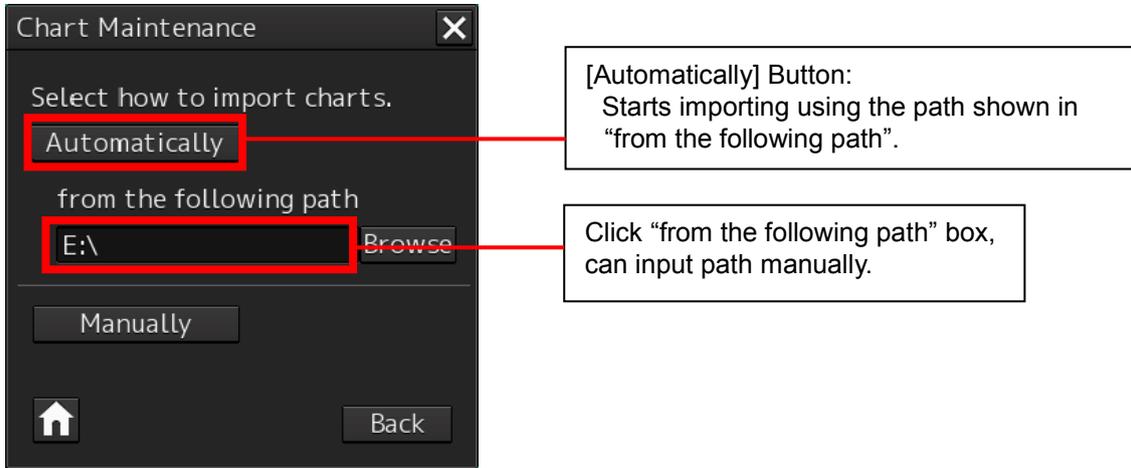
<Chart Category Selection Window>



- 4) Insert CD/DVD medium on which chart data is stored and wait until import becomes ready.

- 5) In the Chart Import Selection window, click the [Automatically] button. Search chart data from the path shown in “from the following path” and start importing it.

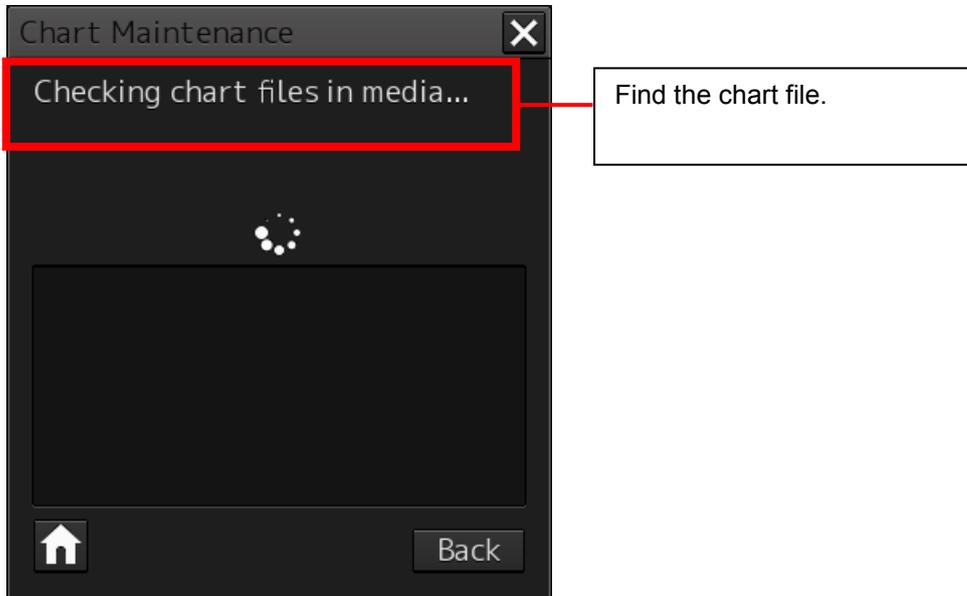
<Chart Import Selection Window>



- Chart Search Window

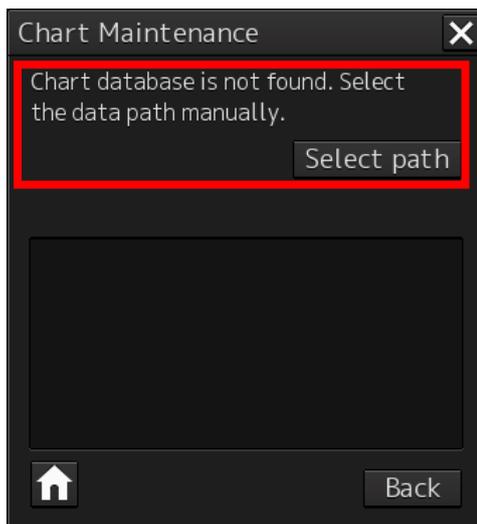
Search chart file.

<Chart Search Window>



If chart data cannot be found, a data not found error message appears. By referring to "3.2.2.3 If Chart Data Cannot Be Found (Resume by Specifying a Path)", respecify a path.

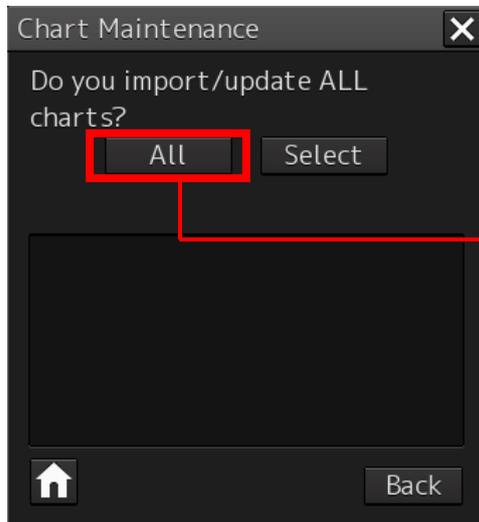
<Chart Not Found Window>



6) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button. The import of all chart data starts.

In the case of chart update, all the charts newer than already imported charts will be imported from charts with chart licence.

<Chart Import Method Selection Window>



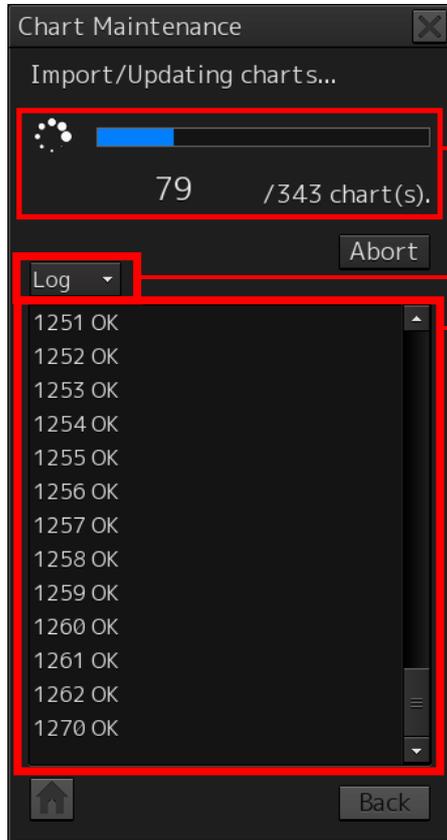
[All] Button:  
Imports all charts that require update.

When the [Select] button is selected, individual charts can be selected for import. For detailed operation, please refer to “3.2.2.5 Importing Charts by Selecting”.

- Chart Import Progress Window

When chart import is started, the number of imported charts is displayed. Also, the progress is shown by a progress bar.

<Chart Import Progress Window (When Displaying Import Log)>



Progress Bar:  
Displays the progress of import.  
[Log Display Switch] Button:  
Switches between show/hide of import log.  
Import Log:  
Displays a log during import.

**When the [Log Display Switch] button is selected:**

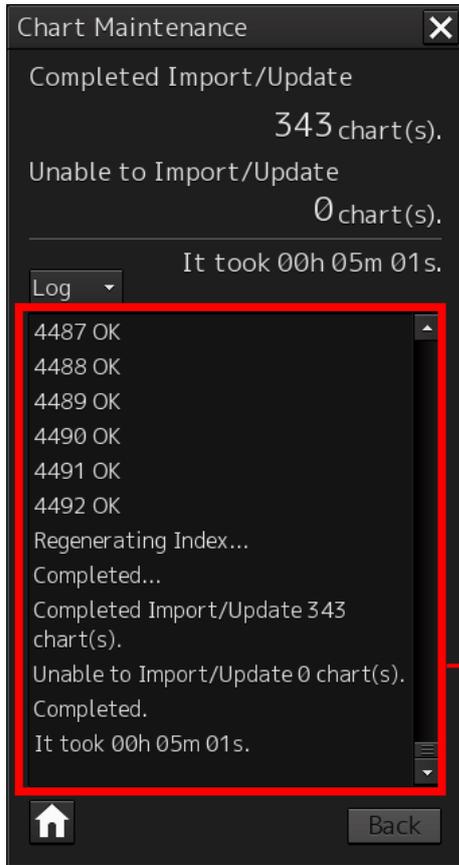
When the [Log Display Switch] button is clicked while importing, the log text box is hidden.

<Chart Import Progress Window (When Hiding Import Log)>

[Log Display Switch] Button:  
Switches between show/hide of import log.

- 7) When the import of chart data is finished, the number of imported charts is displayed.  
List of messages for each chart appears in the log text box.

<Chart Import Completion Window>

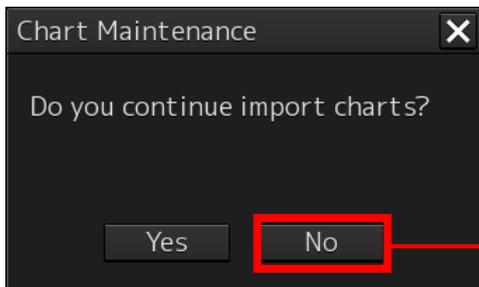


Log Text Box:  
Import log and import completion messages are displayed.

- 8) In the case of CD/DVD media, the following chart import continuation confirmation dialog appears after import is completed.

If there are no more CD/DVD media from which to import charts, click the [No] button.  
Finish chart import and close the window.

<Chart Import Continuation Confirmation Dialog Box>

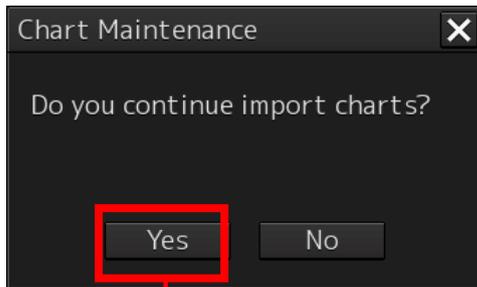


[No] Button:  
Finish chart import and close the window.

**If there are still charts to be imported:**

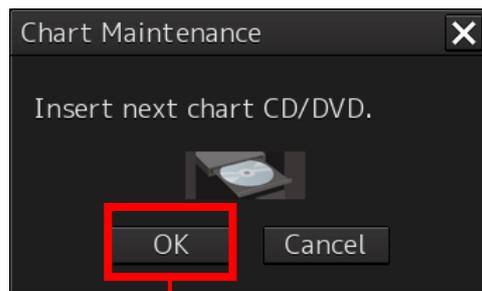
If there are still charts that need to be imported, click the [Yes] button in the Chart Import Continuation dialog box. The Chart CD/DVD Media Insertion window appears, so change CD/DVD medium and click the [OK] button.

<Chart Import Continuation Confirmation Dialog Box>



[Yes] Button:  
Continues chart import. The Chart CD/DVD Media Insertion Confirmation dialog box appears.

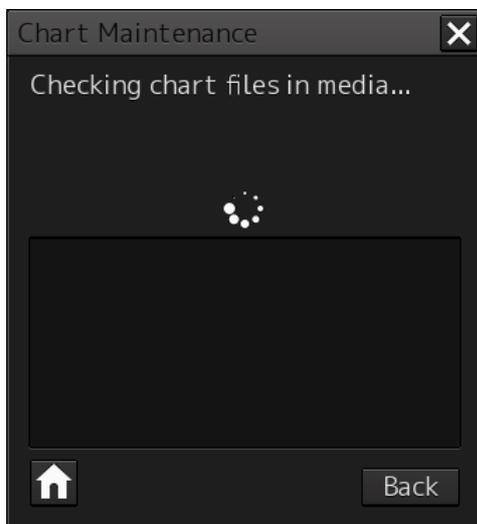
<Chart CD/DVD Media Insertion Confirmation Dialog Box>



[OK] Button:  
Starts searching charts on CD/DVD medium.

Chart data search is performed. For succeeding operation, please see the operation from the Chart Search Window (page 3-18).

<Chart Search Window>



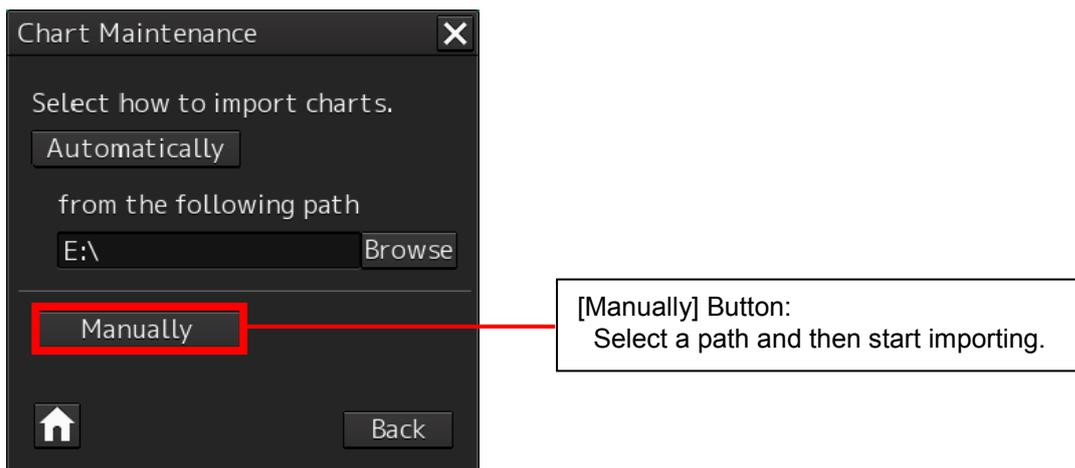
### 3.2.2.2 Importing Charts from USB Memory (Manual Import)

When importing chart data from devices other than the DVD drive, such as USB memory and a hard disk, set up the import path first and then import them.

The following example describes the procedure for importing charts from USB memory (F drive).

- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.
- 3) In the Chart Category Selection window, click the [ARCS] button.  
(The operation is the same as described in "3.2.2.1 Importing Charts from CD/DVD (Automatic Import)" up to here.)
- 4) Insert USB memory on which chart data is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Manually] button. The Chart Data Path Selection window appears.

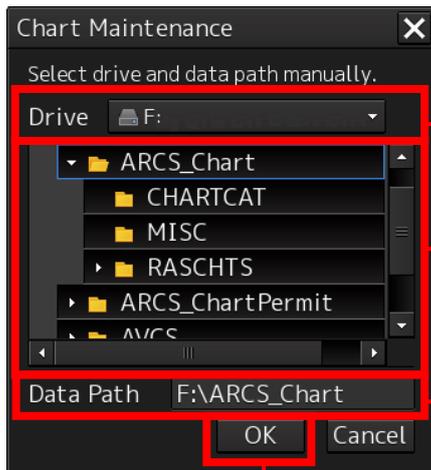
<Chart Import Selection Window>



- 6) Specify USB memory (F drive) in Drive.

Select the folder higher by one layer than the folder (RASCHTS) in which the chart data is stored.

<Path Selection Window>

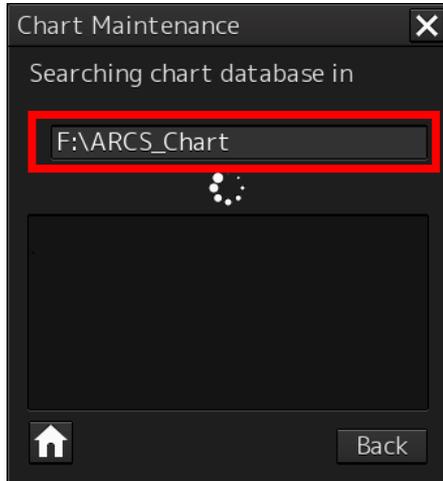


Drive Name:  
Select a drive.  
Folder Name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
Select a folder, data path is displayed.

[OK] Button:  
Starts importing using the path selected by confirming the chart path. At this time, close the window.

- 7) Click the [OK] button. The import of charts starts using the selected path.

<Chart Search Window>



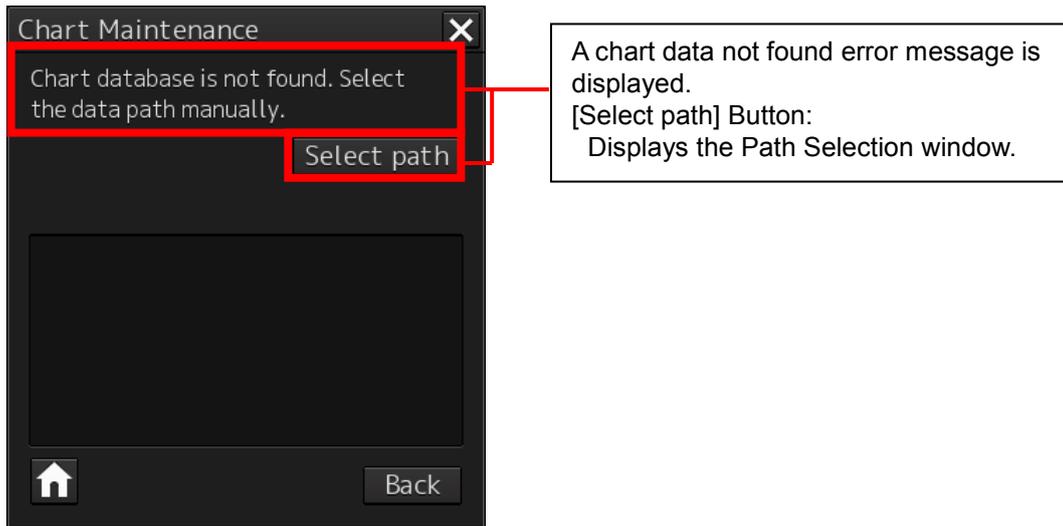
- 8) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button.
- 9) The import of all chart data starts. When the import of chart data is finished, the number of imported charts is displayed. Import results are displayed in the chart to log text box.
- 10) Click the [Home] button to finish importing.

### 3.2.2.3 If Chart Data Cannot Be Found (Resume by Specifying a Path)

If chart data cannot be found, a data not found error message appears. Click [Select path] to display the Path Selection window and then select a chart path.

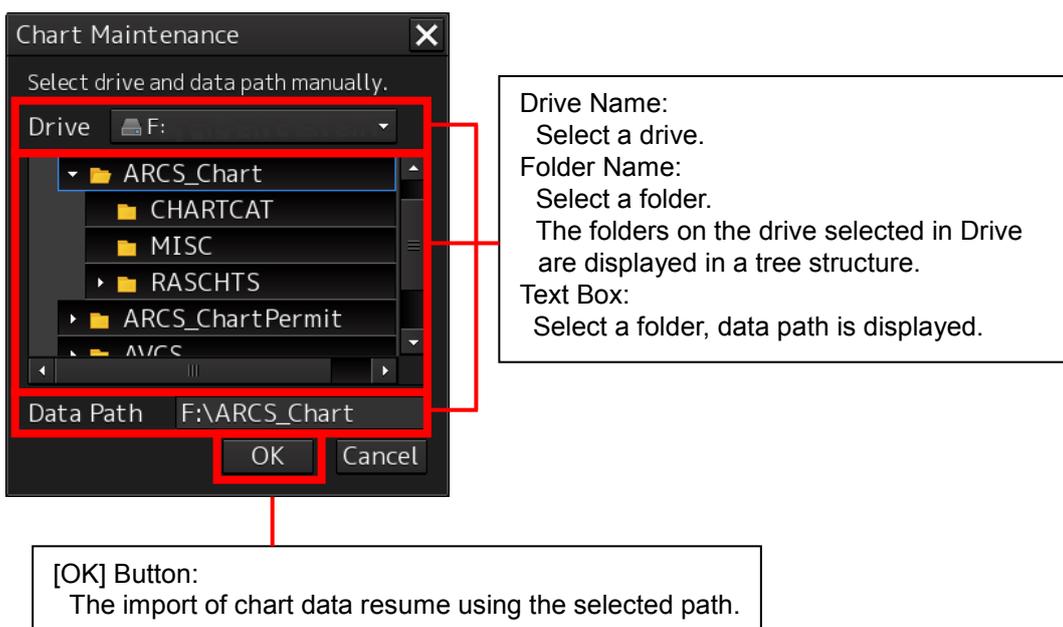
The following example describes the procedure from how to specify a path to how to resume importing charts by changing to USB memory (F drive).

<Chart Not Found Window>



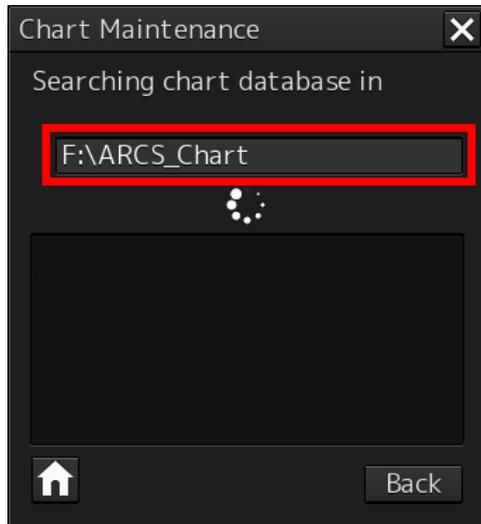
- 1) In the Chart Not Found window, click [Select path]. The Path Selection window is displayed.
- 2) Specify USB memory (F drive) in Drive. Select the folder higher by one layer than the folder (RASCHTS) in which the chart data is stored.

<Path Selection Window>



- 3) Click the [OK] button. The import of chart data resumes using the selected path.

<Chart Search Window>



- 4) When chart data check is completed, the Chart Import Method Selection window appears. Click the [All] button.
- 5) The import of all chart data starts. When the import of chart data is finished, the number of imported charts is displayed.  
Import results are displayed in the chart to log text box.
- 6) Click the [Home] button to finish importing.

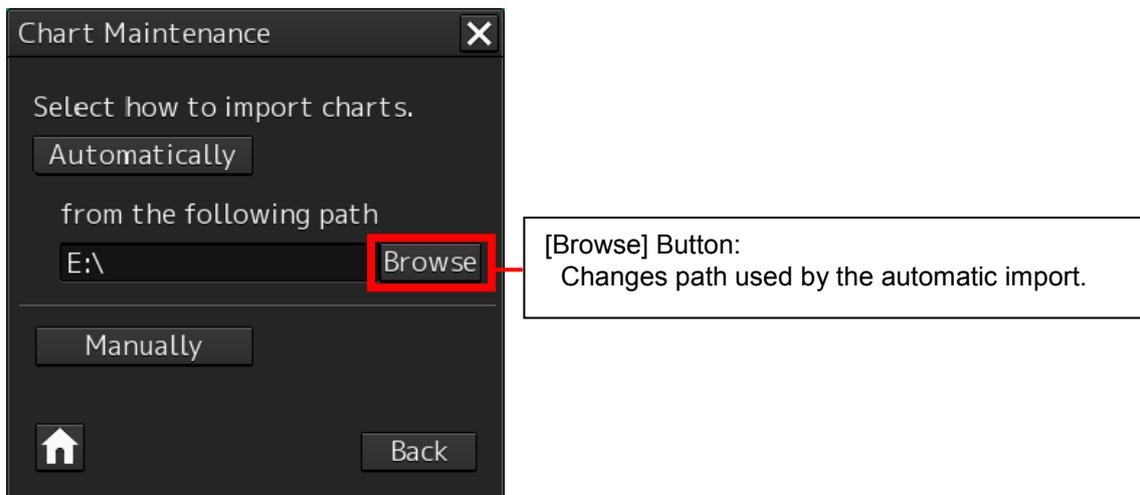
### 3.2.2.4 Changing a Path to Use for Automatic Import

If a path is selected with the [Browse] button when always using USB memory to import chart data, the selected path will be saved as a path used by the automatic import. Chart data can then be imported with the [Automatically] button from the saved path thereafter.

The following example describes how to change path used by the automatic import by changing to USB memory (F drive).

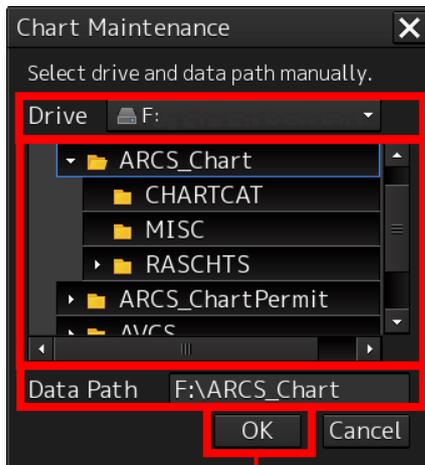
- 1) Start Chart Maintenance from Task Menu in the Home window.
- 2) Click the [Import / Update charts] button.
- 3) In the Chart Category Selection window, click the [ARCS] button.  
(The operation is the same as described in "3.2.2.1 Importing Charts from CD/DVD (Automatic Import)" up to here.)
- 4) Insert USB memory on which chart data is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Browse] button. The Chart Data Path Selection window appears.

<Chart Import Selection Window>



- 6) Specify USB memory (drive F) as the drive name and then select the path to be used by the automatic import. When a folder is selected, the data path is displayed in the text box.

<Path Selection Window>

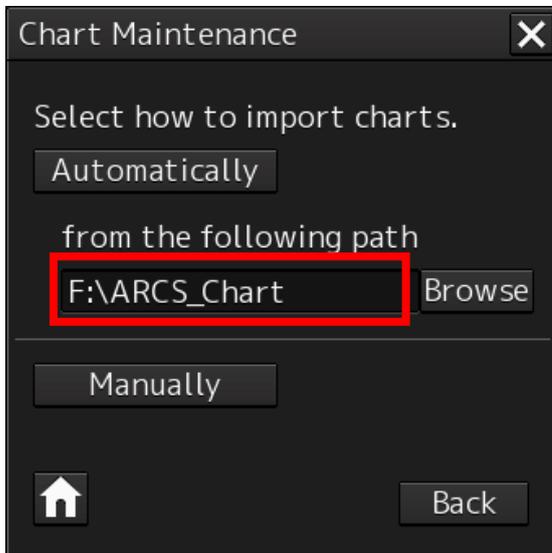


Drive Name:  
Select a drive.  
Folder Name:  
Select a folder.  
The folders on the drive selected in Drive are displayed in a tree structure.  
Text Box:  
When a folder is selected, the data path is displayed in the text box.

[OK] Button:  
Set the path that has been selected as the path to be used by automatic import.

- 7) Click the [OK] button. The path that is used by automatic import is changed to the selected path.

<Chart Import Selection Window>



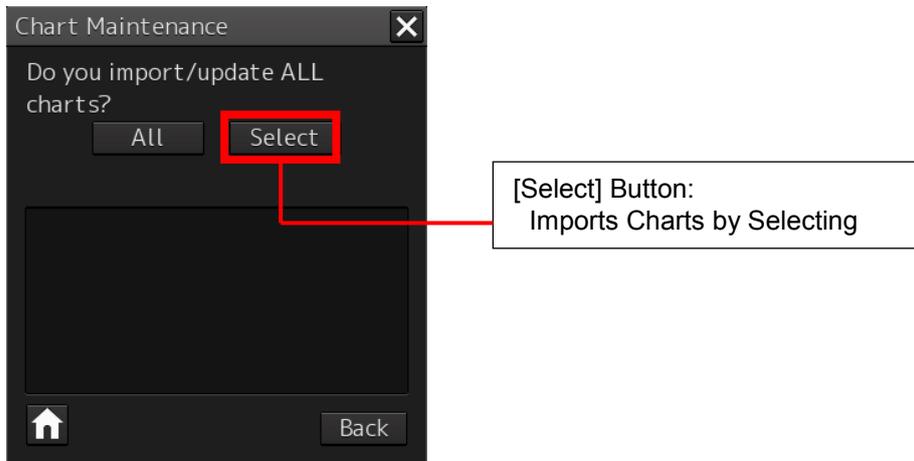
### 3.2.2.5 Importing Charts by Selecting

Charts to be imported can be selected individually for import.

Regarding the chart import method selection, the following example describes the procedure for importing charts from CD/DVD media.

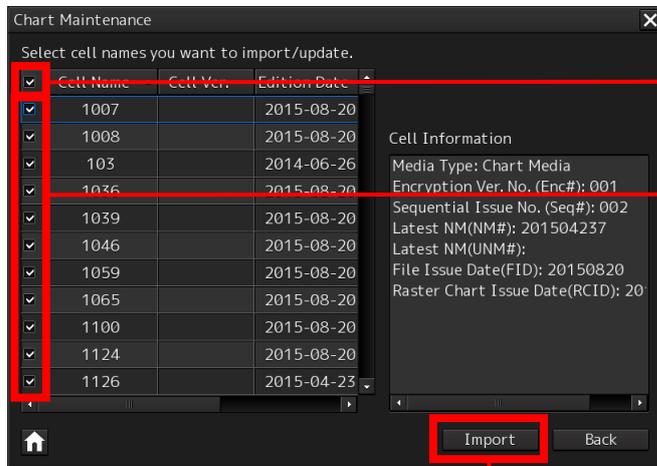
- 1) Start Chart Maintenance from Task Menu.
- 2) Click the [Import / Update charts] button from Home window.
- 3) In the Chart Category Selection window, click the [ARCS] button.
- 4) Insert CD/DVD medium on which chart data is stored and wait until import becomes ready.
- 5) In the Chart Import Selection window, click the [Automatically] button. Search chart data from the path shown in path used by the automatic import and start importing it.  
(The operation is the same as described in "3.2.2.1 Importing Charts from CD/DVD (Automatic Import)" up to here.)
- 6) When chart data check is completed, the Chart Import Method Selection window appears. Click the [Select] button. A window for selecting charts to be imported appears.

<Chart Import Method Selection Window>



7) Select charts you want to import and check the checkboxes of the charts you want to import.

<Chart Selection Window>



Checkboxes:  
Select charts to be imported.  
The checkboxes of the charts that need to be updated are displayed with a check mark when the Chart Selection window is displayed.

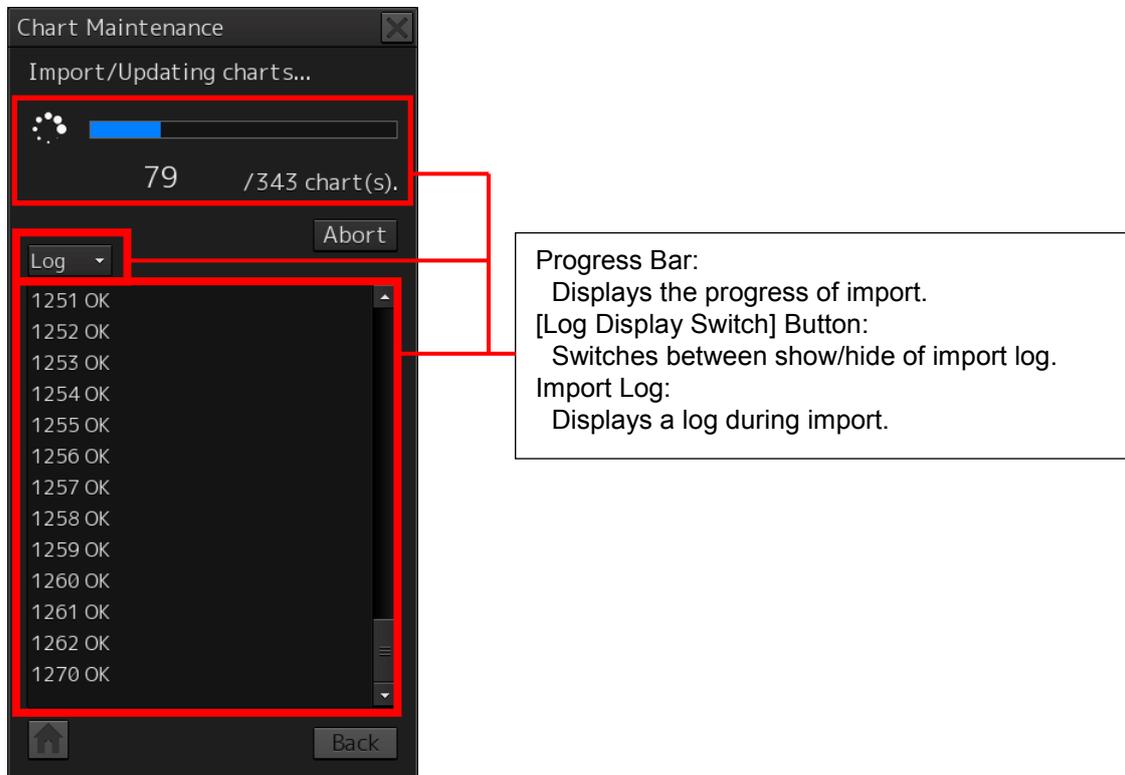
Checkbox (Title Bar):  
Select (deselect) all selectable charts.

: Unselected chart  
 : Chart to be imported

[Import] Button:  
Starts importing the selected charts.

- 8) Click the [Import] button after selecting charts to start importing them. The number of imported charts is displayed and progress is shown by a progress bar.

<Chart Import Progress Window (When Displaying Import Log)>

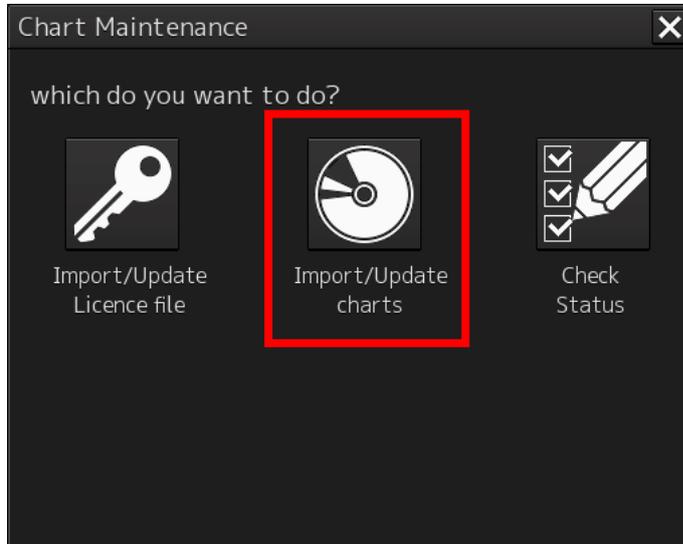


- 9) When the import of chart data is finished, the number of imported charts is displayed. Import results are displayed in the chart to log each text box.
- 10) In the case of CD/DVD media, the chart import continuation confirmation dialog appears after import is completed.
- If there are no more CD/DVD media from which to import charts, click the [No] button. Finish chart import and close the window.
  - If there are still charts that need to be imported, click the [Yes] button in the Chart Import Continuation dialog box. The Chart CD/DVD Media Insertion window appears, so change CD/DVD medium and click the [OK] button. Chart data search is performed. For succeeding operation, please see the operation from the Chart Search Window (page 3-19).

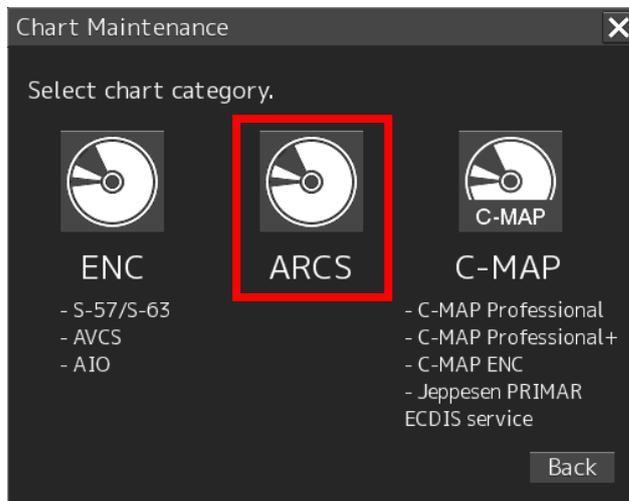
## 3.3 Updating Charts

The update operation of ARCS charts is the same as the import operation.

- 1) Start Chart Maintenance from Task Menu.
- 2) Click [Import / Update charts] in the Home window.



- 3) Click the [ARCS] button.

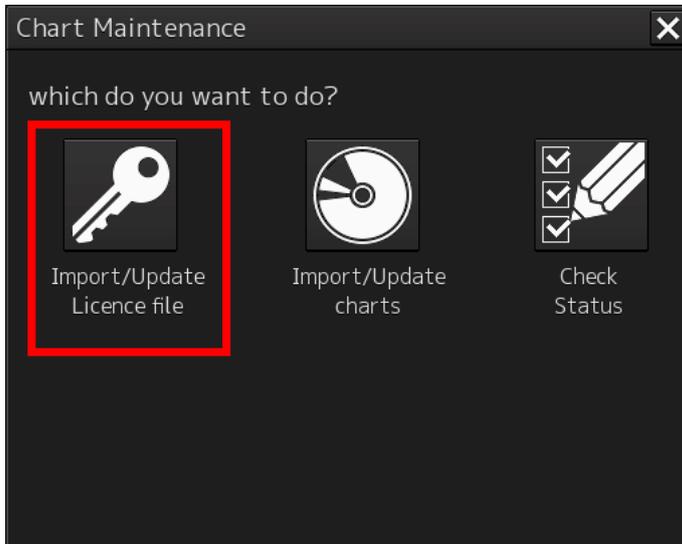


For the succeeding operation, please see **"3.2.2 Importing Charts"**.

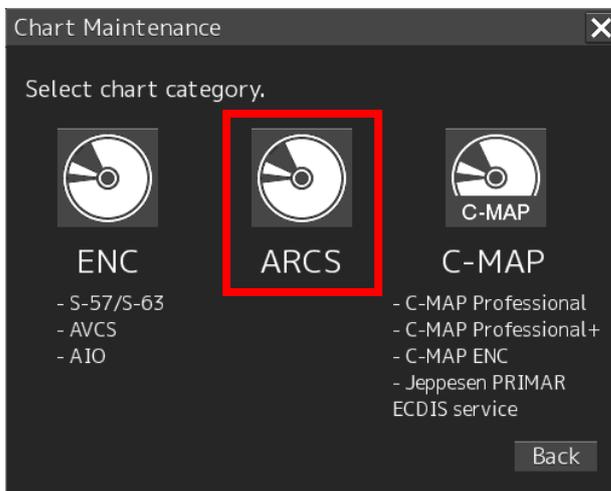
## 3.4 Updating Chart Permits

The update operation of chart permits is the same as the import operation.

- 1) Start Chart Maintenance from Task Menu.
- 2) Click [Import / Update Licence file] in the Home window.



- 3) Click the [ARCS] button.



For the succeeding operation, please see **"3.2.1 Importing Chart Permit Files"**.

## 3.5 Using Check Status

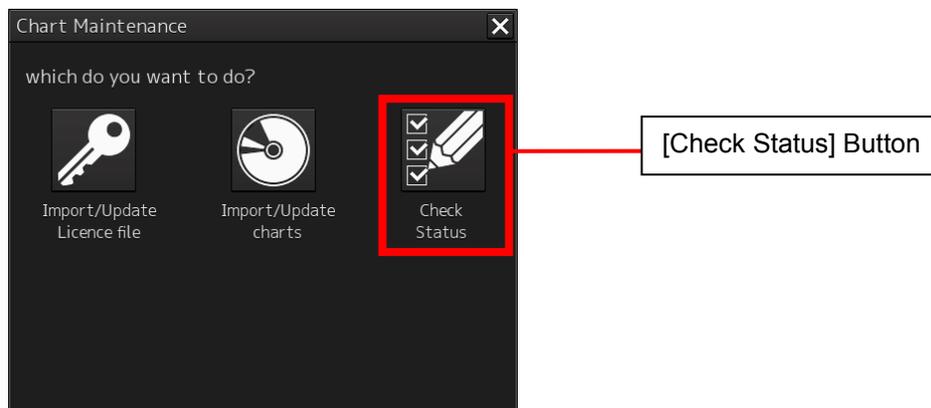
Check Status provides the following functions.

- Display a list of imported charts and chart licence information.
- Display the log when importing/updating Chart permits and charts.
- Display the log when importing/updating charts.
- Delete already imported charts.

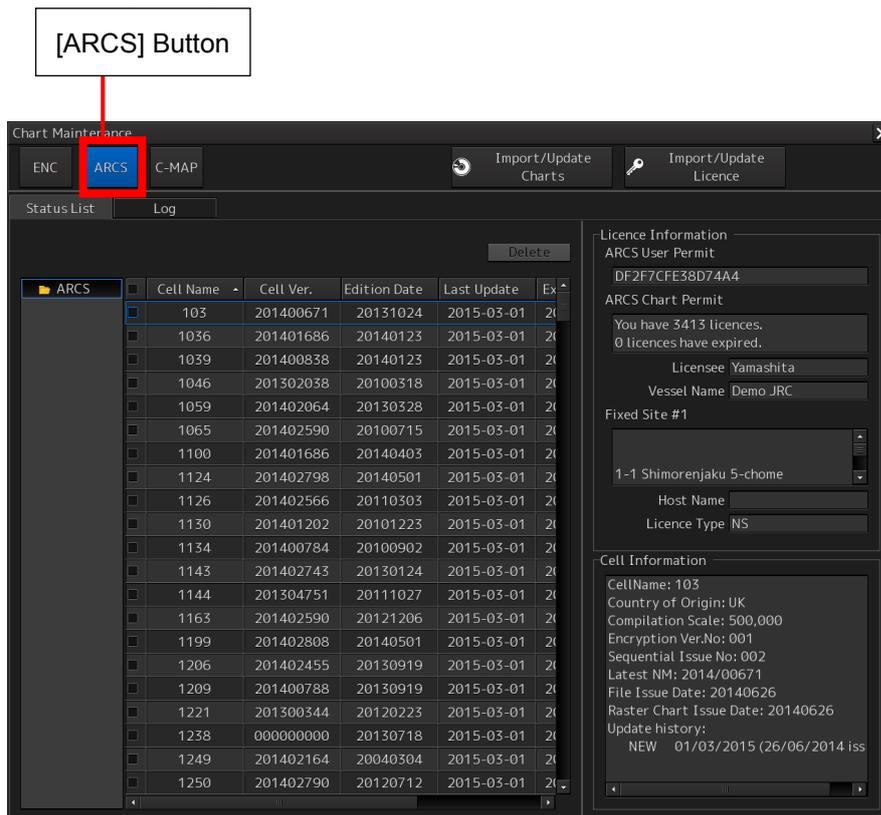
### 3.5.1 How to Start Check Status

On Task Menu, start Check Status according to the following procedure.

- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Check Status] button. The Check Status window appears.



- 3) Click the [ARCS] button in the Check Status window.



## 3.5.2 Configuration of the Check Status Window

The Check Status window consists of the Status List window and the Log window.

- Status List Window: Displays a list of imported charts and chart licence information.  
You can also delete already imported charts by selecting them.
- Log Window: Displays the log when importing/updating charts.  
Also displays the log when importing/updating chart permits and chart.

### 3.5.2.1 Status List Window

The screenshot shows the 'Chart Maintenance' window with the following components and callouts:

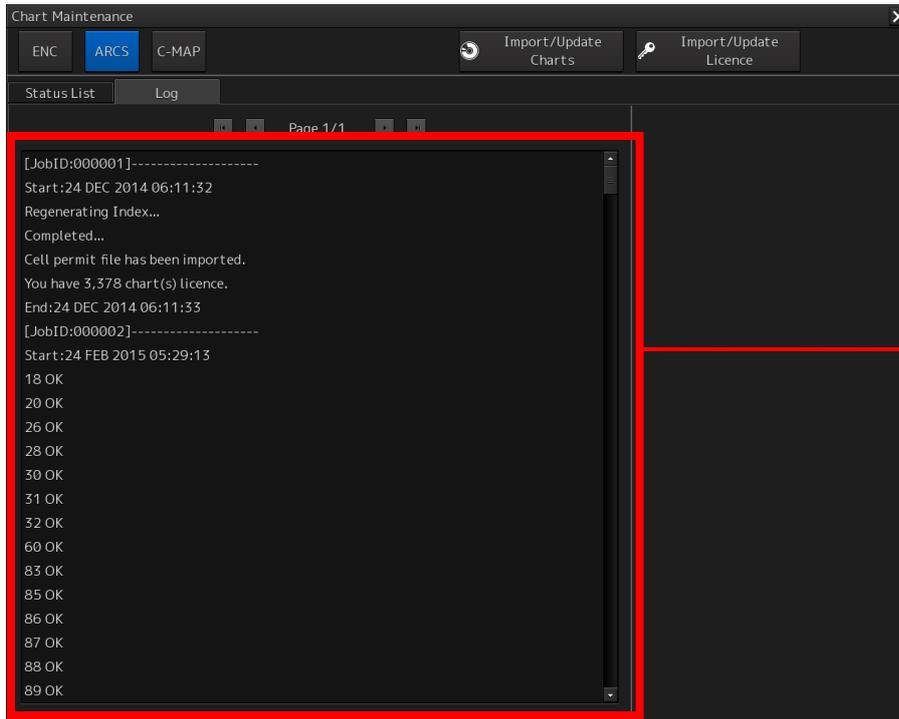
- Window Switching Tabs:** Located at the top left, containing 'ENC', 'ARCS', and 'C-MAP' tabs. A callout explains: 'Switch between the Status List window'.
- Chart Type Buttons:** Located below the tabs, containing 'Import/Update Charts' and 'Import/Update Licence' buttons. A callout explains: 'Change the chart type.'
- [Import/Update Licence] button:** A callout pointing to the 'Import/Update Licence' button explains: 'Executes import/update.'
- [Delete] Button:** A callout pointing to the 'Delete' button explains: 'Deletes charts.'
- Folder List Display:** A callout pointing to the left sidebar explains: 'Displays folders containing imported charts.'
- Chart List Display:** A callout pointing to the main table explains: 'Displays a list of imported charts.'
- Licence Information:** A callout pointing to the right panel explains: 'Displays licence information of charts.'
- Cell Information:** A callout pointing to the bottom section of the right panel explains: 'Displays cell information of charts.'

Cell Name	Cell Ver.	Edition Date	Last Update	Ex
103	201400671	20131024	2015-03-01	2i
1036	201401686	20140123	2015-03-01	2i
1039	201400838	20140123	2015-03-01	2i
1046	201302038	20100318	2015-03-01	2i
1059	201402064	20130328	2015-03-01	2i
1065	201402590	20100715	2015-03-01	2i
1100	201401686	20140403	2015-03-01	2i
1124	201402798	20140501	2015-03-01	2i
1126	201402566	20110303	2015-03-01	2i
1130	201401202	20101223	2015-03-01	2i
1134	201400784	20100902	2015-03-01	2i
1143	201402743	20130124	2015-03-01	2i
1144	201304751	20111027	2015-03-01	2i
1163	201402590	20121206	2015-03-01	2i
1199	201402808	20140501	2015-03-01	2i
1206	201402455	20130919	2015-03-01	2i
1209	201400788	20130919	2015-03-01	2i
1221	201300344	20120223	2015-03-01	2i
1238	000000000	20130718	2015-03-01	2i
1249	201402164	20040304	2015-03-01	2i
1250	201402790	20120712	2015-03-01	2i

**Licence Information:**  
 ARCS User Permit: DF2F7CFE38D74A4  
 ARCS Chart Permit: You have 3413 licences. 0 licences have expired.  
 Licensee: Yamashita  
 Vessel Name: Demo JRC  
 Fixed Site #1: 1-1 Shimorenjaku 5-chome  
 Host Name:  
 Licence Type: NS

**Cell Information:**  
 CellName: 103  
 Country of Origin: UK  
 Compilation Scale: 500,000  
 Encryption Ver.No: 001  
 Sequential Issue No: 002  
 Latest NM: 2014/00671  
 File Issue Date: 20140626  
 Raster Chart Issue Date: 20140626  
 Update history: NEW 01/03/2015 (26/06/2014 iss)

### 3.5.2.2 Log Window



Log Window:  
Displays a log recorded when importing/updating licences and charts.

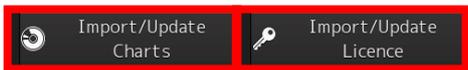
<Functions of Each Button>

#### Chart Type Buttons:



[ARCS] Button:  
Displays the Chart information and ARCS log.

#### Import/Update Buttons:



[Import/Update Licence] Button:  
Imports/updates licences. Goes to the Licence Import window for the type of charts being displayed. Please see "3.2.1 Importing Chart Permit Files".

[Import/Update Charts] Button:  
Imports/updates charts. Goes to the Chart Import window for the type of charts being displayed. Please see "3.2.2 Importing Charts".

**[Delete] Button:**



**[Delete] Button:**

Deletes the items whose checkboxes are marked in the Chart List. Clicking the [Delete] button displays the following chart deletion confirmation dialog. Please see "3.8 Deleting ARCS Charts".

**Window Switching Tabs**



The window for the selected tab appears.

**[Status List] Tab:**

Display information about the licences on a chart and a list of imported chart.

**[Log] Tab:**

Displays a log recorded when importing/updating licences and charts.

**<Folder List Display>**

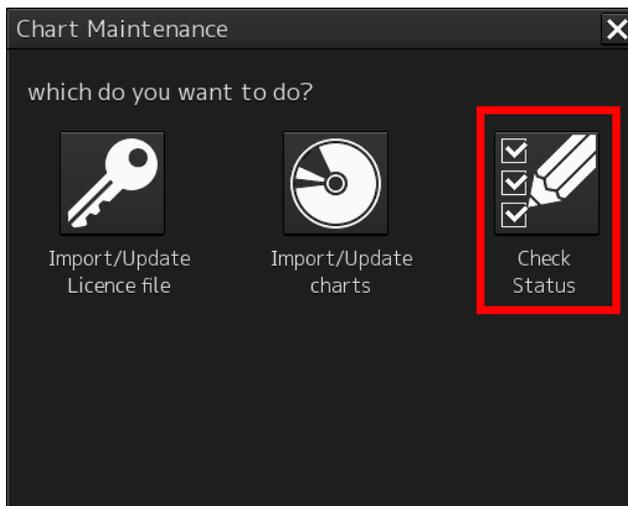


Displays a list of folders containing imported charts. Charts contained in the selected folder are displayed in the Chart List window.

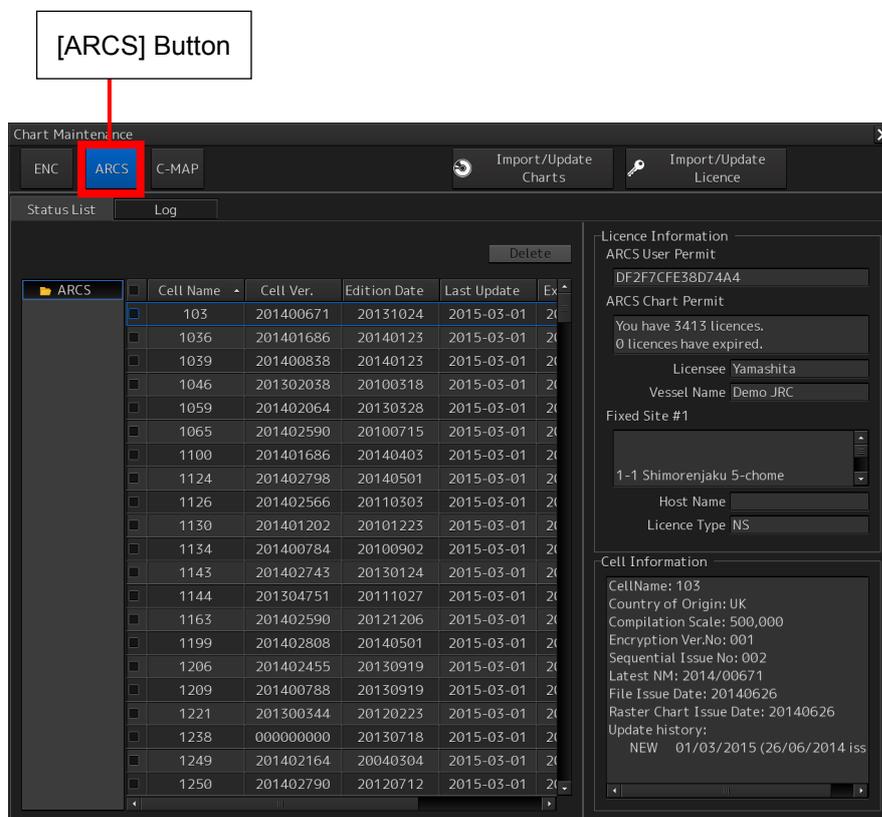
## 3.6 Checking Chart Update History

### 3.6.1 Checking from Chart Maintenance

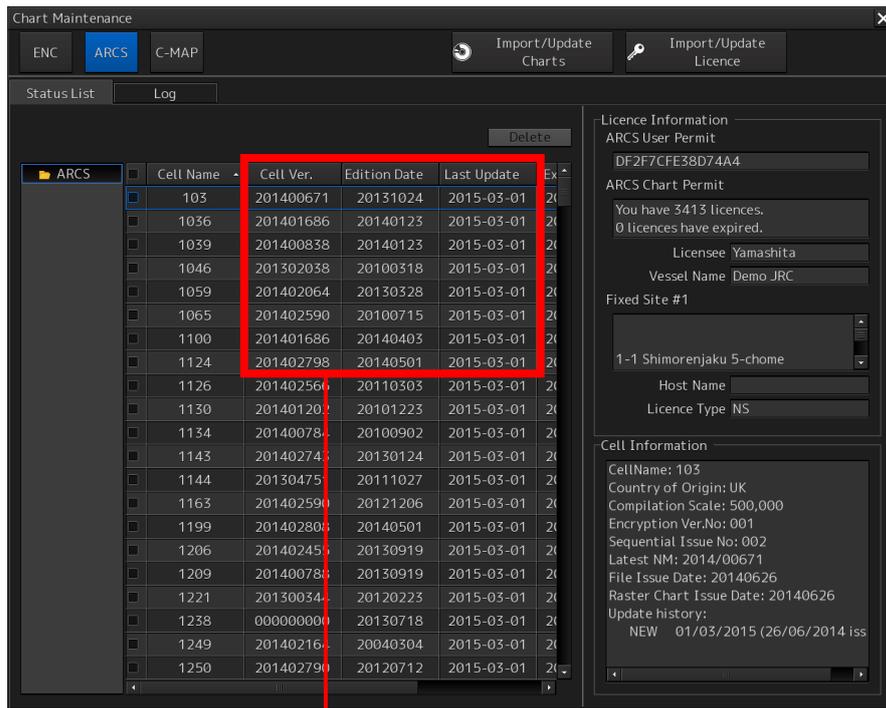
- 1) Start Chart Maintenance from Task Menu.
- 2) Click [Check Status] button in the Home window.



- 3) Click the [ARCS] button in the Check Status window.



4) Check the update history in the Last Update column of the Chart List window.



Cell Ver.	Edition Date	Last Update	Expiry Date
201400671	20131024	2015-03-01	2015-04-30
201401686	20140123	2015-03-01	2015-04-30
201400838	20140123	2015-03-01	2015-04-30
201302038	20100318	2015-03-01	2015-04-30
201402064	20130328	2015-03-01	2015-04-30
201402590	20100715	2015-03-01	2015-04-30
201401686	20140403	2015-03-01	2015-04-30
201402798	20140501	2015-03-01	2015-04-30

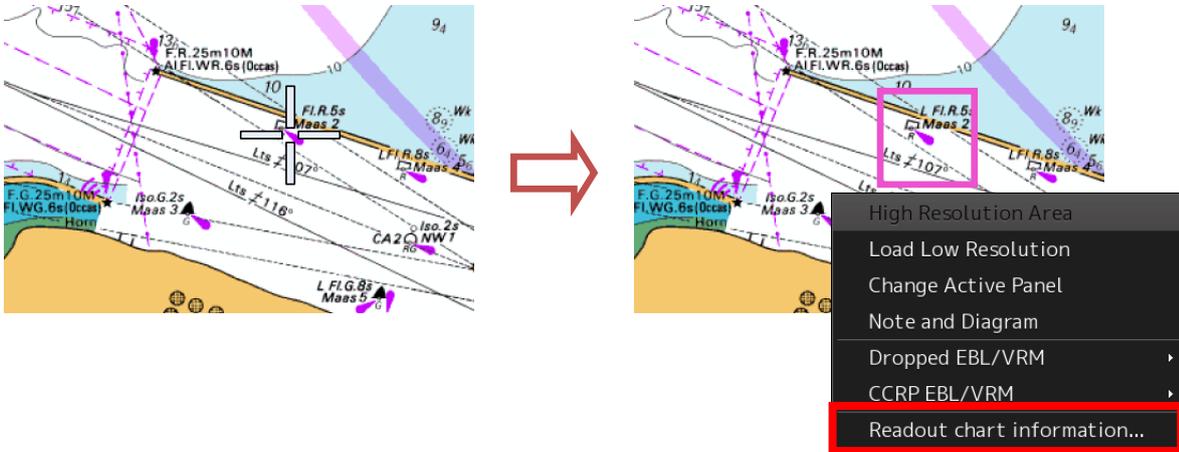
Cell Ver.:  
The chart editions are displayed.

Edition Date:  
The chart issue dates are displayed.

Last Update:  
The last date when charts were updated in the system are displayed.

### 3.6.2 Checking from ECDIS screen

- 1) Start ECDIS.
- 2) Right-click on a chart and select "Readout chart Information" on the Context menu.



- 3) The ARCS Information screen is displayed. Check the chart update history.

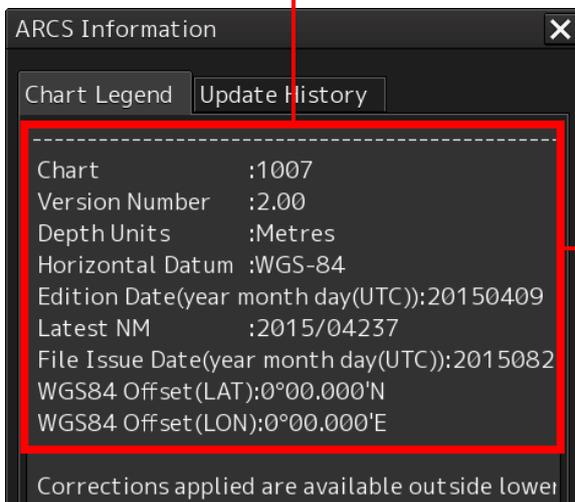
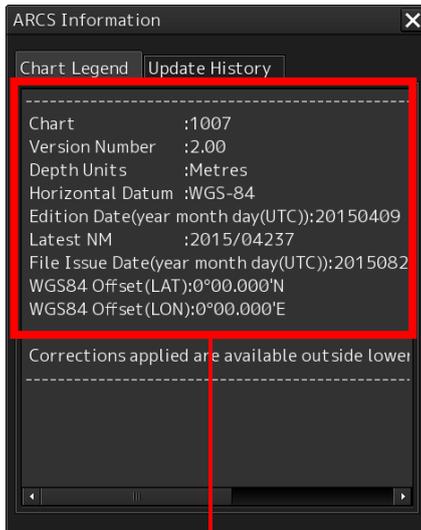


Chart:  
 Displays the chart name.  
 Version Number:  
 Displays the HCRF version.  
 Edition Date:  
 Displays the editing date.  
 Latest NM:  
 Displays the latest NM.  
 File Issue Date:  
 Displays the issue date.

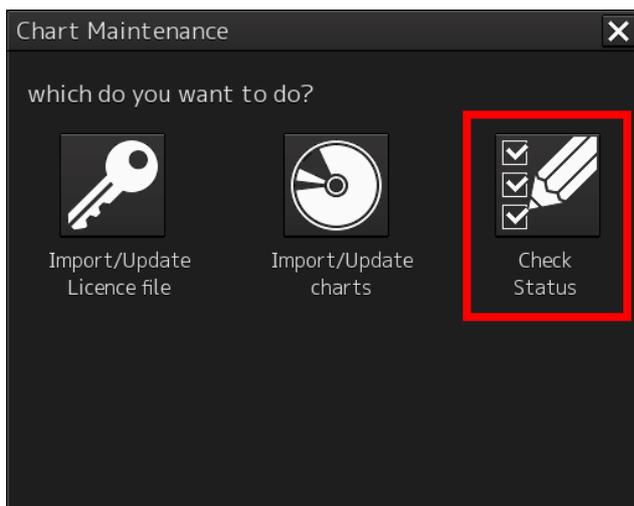
- 4) To close the ARCS Information window, click [x] button.

## 3.7 Checking the Contents of Contracts

The contents of contracts can be checked from Check Status.

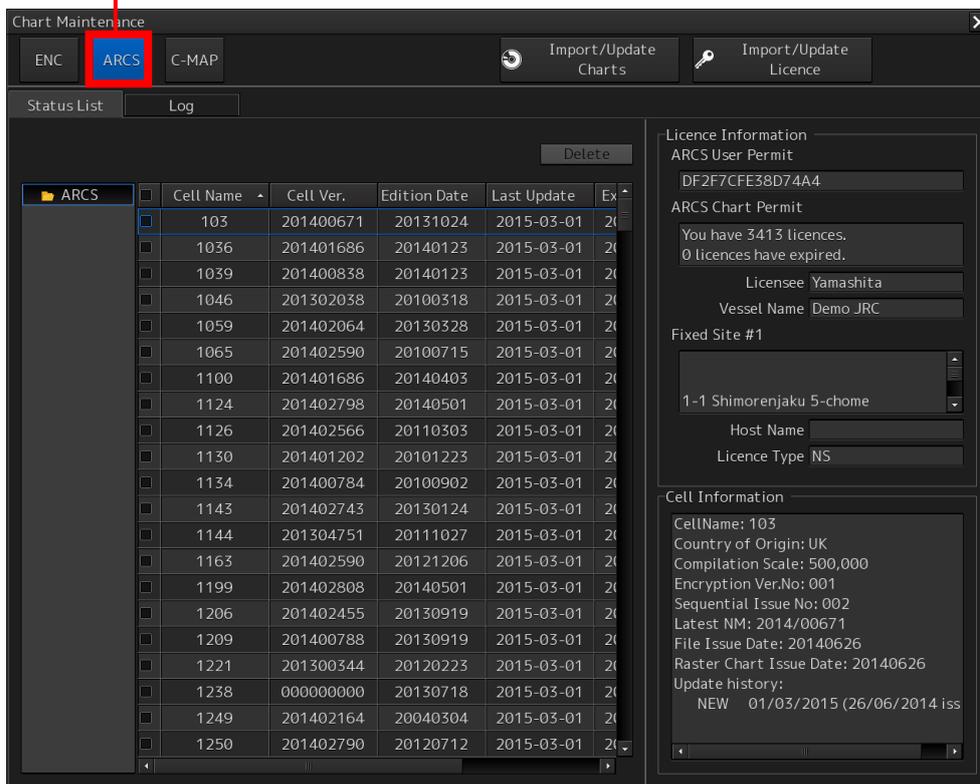
### 3.7.1 Displaying Check Status

- 1) Start Chart Maintenance from Task Menu.
- 2) Click [Check Status] button in the Home window.



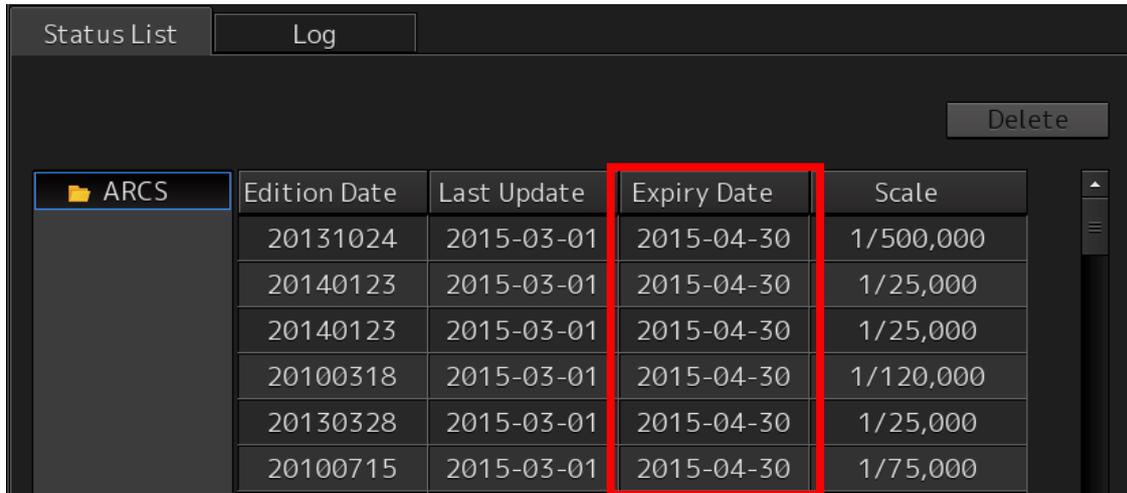
- 3) Click the [ARCS] button in the Check Status window.

[ARCS] Button



## 3.7.2 Checking the Expiry Dates of Chart Permits Having Contract

Check the expiration dates in the Expiry Date column of the Chart List window.



ARCS	Edition Date	Last Update	Expiry Date	Scale
	20131024	2015-03-01	2015-04-30	1/500,000
	20140123	2015-03-01	2015-04-30	1/25,000
	20140123	2015-03-01	2015-04-30	1/25,000
	20100318	2015-03-01	2015-04-30	1/120,000
	20130328	2015-03-01	2015-04-30	1/25,000
	20100715	2015-03-01	2015-04-30	1/75,000

Expiry Date:  
Expiration date of permit  
Expires within 30 days → Yellow  
Already expired → Orange

If the chart expiry data has been reached, please check the contents of the contract and contact your chart distributor.

## 3.7.3 Checking ARCS User Permit

### 3.7.3.1 Checking the Check Status

Check the ARCS User Permit. in the Licence Information column of the Check Status window.

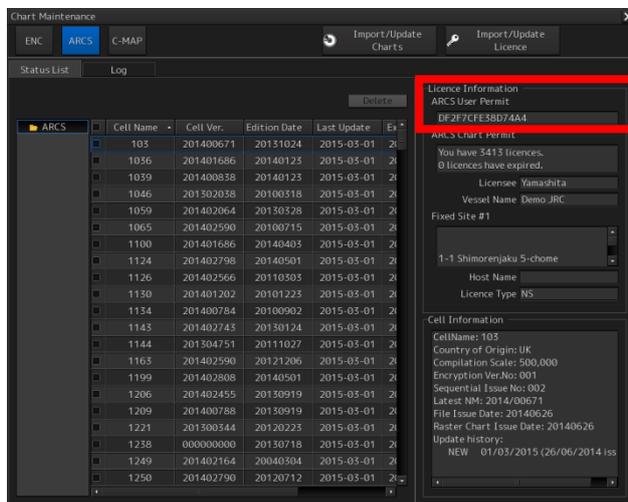


Chart Maintenance

ENC ARCS C-MAP Import/Update Charts Import/Update Licence

Status List Log

Cell Name	Cell Ver.	Edition Date	Last Update	Ex
103	201400671	20131024	2015-03-01	2
1036	201401686	20140123	2015-03-01	2
1039	201400838	20140123	2015-03-01	2
1046	201302038	20100318	2015-03-01	2
1059	201402064	20130328	2015-03-01	2
1065	201402590	20100715	2015-03-01	2
1100	201401686	20140403	2015-03-01	2
1124	201402798	20140501	2015-03-01	2
1126	201402566	20110303	2015-03-01	2
1130	201401202	20101223	2015-03-01	2
1134	201400784	20100902	2015-03-01	2
1145	201402745	20130124	2015-03-01	2
1144	201304751	20111027	2015-03-01	2
1165	201402590	20121206	2015-03-01	2
1199	201402808	20140501	2015-03-01	2
1206	201402455	20130919	2015-03-01	2
1209	201400788	20130919	2015-03-01	2
1221	201300344	20120223	2015-03-01	2
1238	000000000	20130718	2015-03-01	2
1249	201402164	20040304	2015-03-01	2
1250	201402790	20120712	2015-03-01	2

License Information

ARCS User Permit

DF2F7CFE38D74A4

ARCS Chart Permit

You have 5415 licences.  
0 licences have expired.

Licensee Yamashita

Vessel Name Demo JRC

Fixed Site #1

1-1 Shimorenjaku 5-chome

Host Name

License Type NS

Cell Information

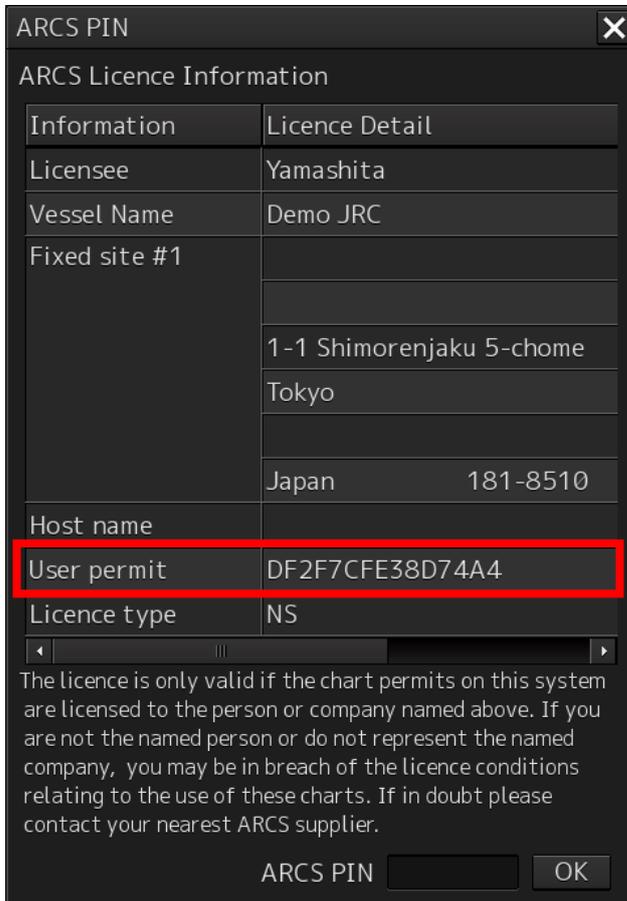
CellName: 103  
Country of Origin: UK  
Compilation Scale: 500,000  
Encryption Ver: No: 001  
Sequential Issue No: 002  
Latest NM: 2014/00671  
File Issue Date: 20140626  
Raster Chart Issue Date: 20140626  
Update History:  
NEW 01/03/2015 (26/06/2014 iss

ARCS User Permit:  
Displays the ARCS user permit.

License Information  
ARCS User Permit  
DF2F7CFE38D74A4

### 3.7.3.2 Checking in the ARCS Path Entry Window

- 1) Click the [Route Planning / Route Monitoring (ECDIS)] button on Task Menu.
- 2) The window display changes and, after a while, the [ARCS PIN] panel appears. Check [User Permit].



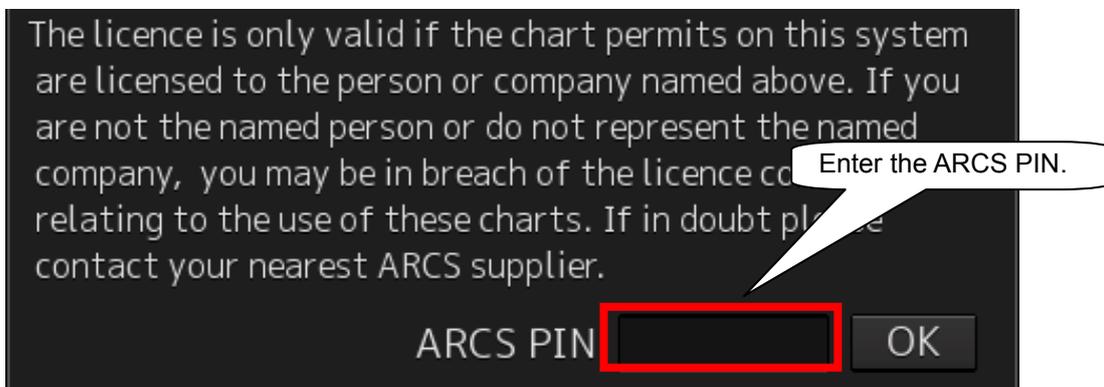
The screenshot shows a window titled "ARCS PIN" with a close button (X) in the top right corner. Below the title bar is the section "ARCS Licence Information". It contains a table with two columns: "Information" and "Licence Detail".

Information	Licence Detail
Licensee	Yamashita
Vessel Name	Demo JRC
Fixed site #1	
	1-1 Shimorenjaku 5-chome
	Tokyo
	Japan 181-8510
Host name	
User permit	DF2F7CFE38D74A4
Licence type	NS

Below the table is a scrollable area containing the following text: "The licence is only valid if the chart permits on this system are licensed to the person or company named above. If you are not the named person or do not represent the named company, you may be in breach of the licence conditions relating to the use of these charts. If in doubt please contact your nearest ARCS supplier." At the bottom of the window, there is a text input field labeled "ARCS PIN" and an "OK" button. The "User permit" row in the table is highlighted with a red border.

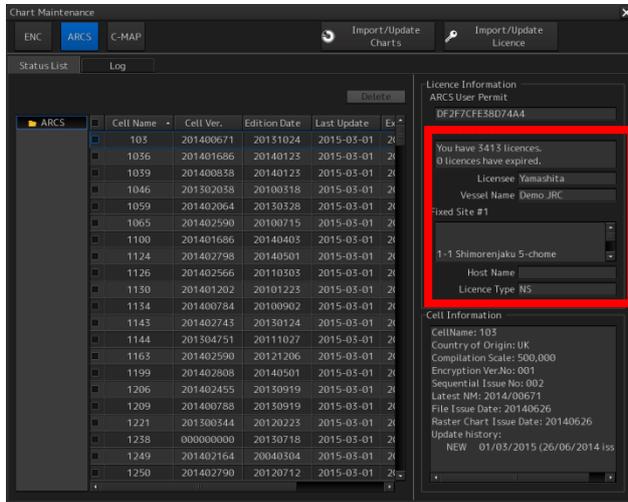
**Caution:**

If [X] button was selected on the [ARCS PIN] panel without entering the ARCS PIN, the ARCS items of Chart View (ECDIS) are disabled and thus unselectable. To display ARCS charts, be sure to enter the ARCS PIN on the [ARCS PIN] panel.

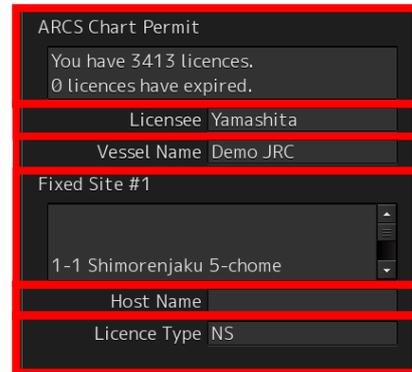


### 3.7.4 Checking the Detailed Information of Chart Permits Having Contract

Check the detailed information in the Licence Information column of the Check Status window.

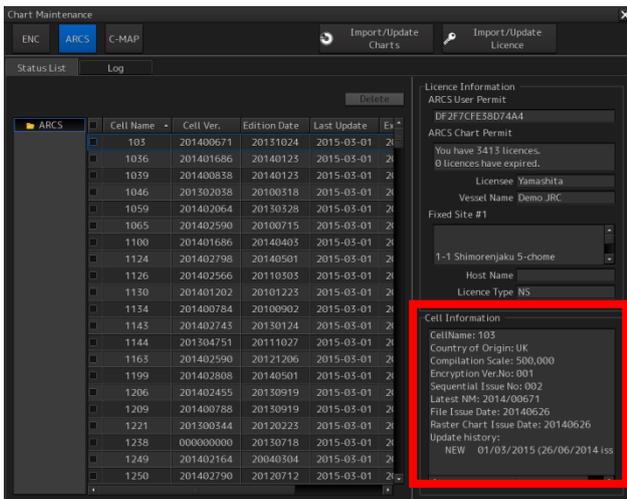


- ARCS Chart Permit:**  
Displays the number of ARCS chart licences owned and the number of expired chart licences.
- Licensee:**  
Display the name of the licence owner.
- Vessel Name:**  
Displays the vessel name.
- Fixed Site #1:**  
Displays Fixed Site #1.
- Host Name:**  
Displays the host name.
- Licence Type:**  
Display the licence type.

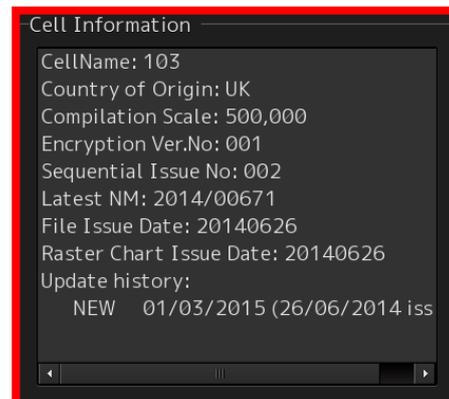


### 3.7.5 Checking Chart Cell Information

Check Cell Information in the Check Status window.

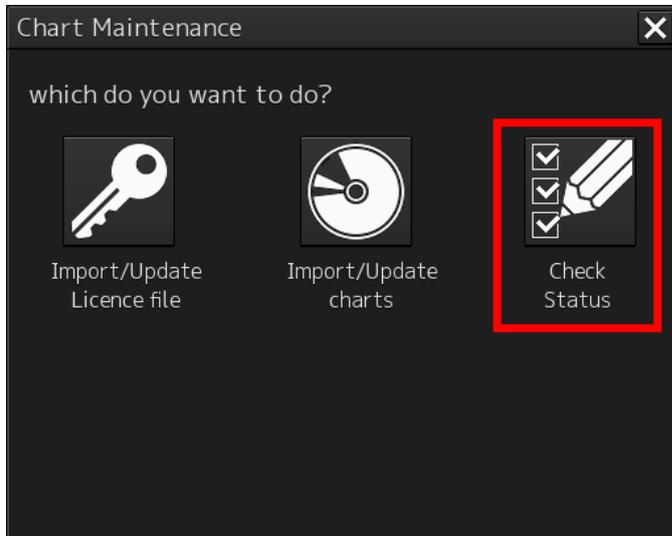


- Cell Information:**  
Displays the information of charts selected in the Chart List.

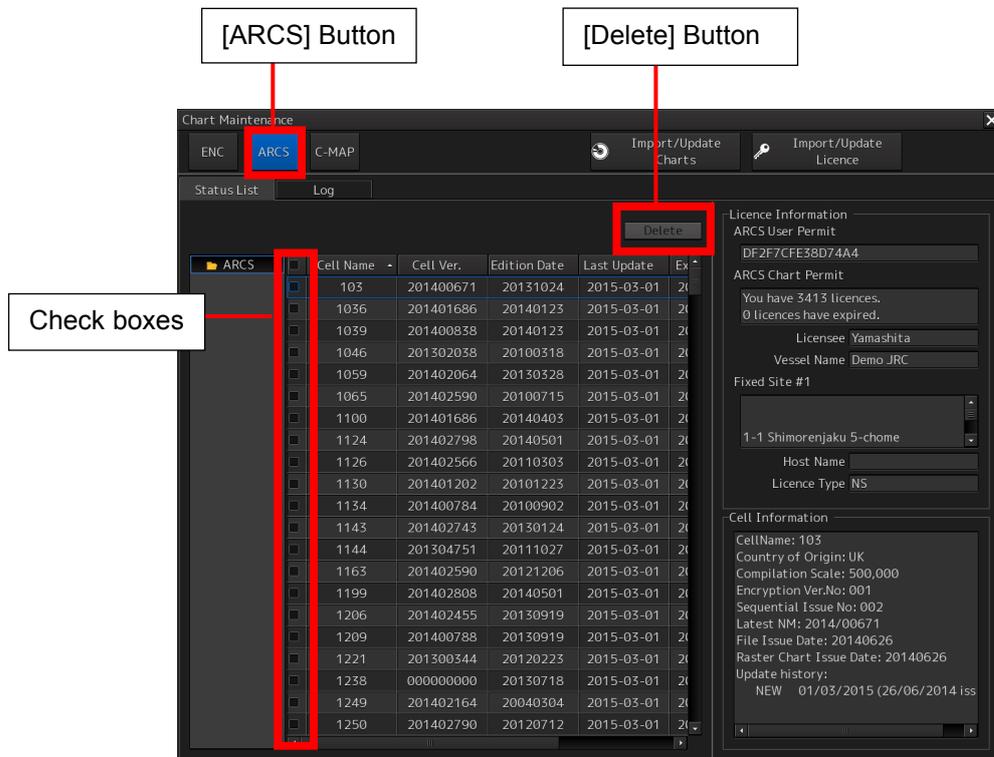


## 3.8 Deleting ARCS Charts

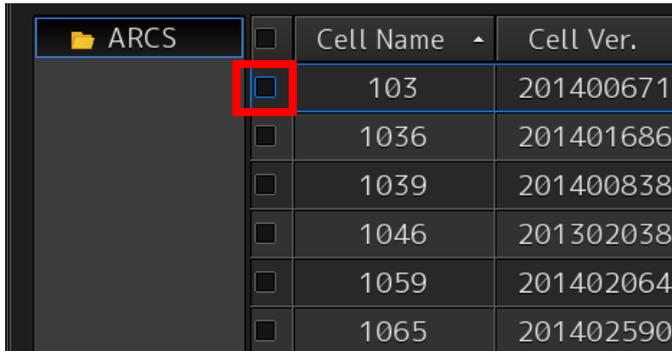
- 1) Start Chart Maintenance.
- 2) Click [Check Status] button in the Home window.



- 3) Click [ARCS] button in the Check Status window.



- 4) Check the checkboxes of charts that need to be deleted in the Chart List window.

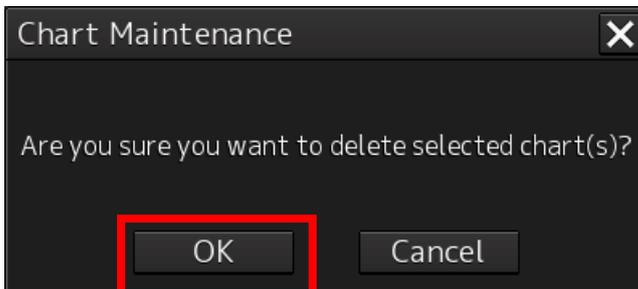


 ARCS	<input type="checkbox"/>	Cell Name ^	Cell Ver.
	<input checked="" type="checkbox"/>	103	201400671
	<input type="checkbox"/>	1036	201401686
	<input type="checkbox"/>	1039	201400838
	<input type="checkbox"/>	1046	201302038
	<input type="checkbox"/>	1059	201402064
	<input type="checkbox"/>	1065	201402590

- 5) Click the [Delete] button in the Check status window. The Delete dialog box appears.



- 6) Click the [OK] button. The charts that have been checked in the Chart List are deleted.



# Section 4 Using C-MAP Ed.3 Charts

## Note

eToken (Option) is required to use C-map. Refer to 4.3 Checking eToken Device and confirm that eToken is installed in the equipment.

If eToken is not installed in the equipment, please request arrangement of eToken to our sales department or our branch office, sales office, or agent near your premises.

## 4.1 Dynamic Licensing Service

### 4.1.1 Introduction

Up to now, the ENC licensing requires mostly manual operation of determining charts needed for the coming voyage and placing an order for such chart licenses on a cell-by-cell or unit-by-unit basis. The ENC coverage is constantly changing with increasing availability of data as well as cell replacements and termination of existing cells.

Dynamic Licensing is a subscription service agreement that provides an effective and user-friendly way to give immediate access to ENCs. To utilize Dynamic Licensing, the user needs to do the following.

- Inform C-MAP that Dynamic Licensing is active, and agree to the terms and conditions of using the service (no fees are incurred at this stage )
- Define a geographical limitation in one or more zones and areas
- Designate the maximum amount of money that can be spent on a yearly basis (the vessels credit limit)

The Dynamic Licensing system will grant user access to ENCs up to the defined credit limit without the need to obtain and enter any license codes. ENCs are recorded as "used" when they have been loaded. This is the record of two applications: visual display of charts and non-visual display such as route check. ENCs are normally licensed for 3 months depending on what is allowed by the Hydrographic Office that has issued the ENCs.

Licenses will expire after the allowed subscription period, which is normally 3 months. To continuously use ENCs, it is necessary to get license again. There is no fee for unused charts.

Reporting of the cells that have been used must be carried out on a regular basis (at least once every two weeks). Otherwise, the credit balance will be used up and access to ENC will be automatically blocked by the navigation system. Since most modern day vessels are already equipped with Online Update Service for updating the charts, Internet and e-mail can be used for easy reporting.

C-MAP is responsible for ensuring that all customers are reporting on a regular basis. Access to the Dynamic Licensing Service is controlled by C-MAP on the server side. If the customer does not comply with the terms and conditions of the service, C-MAP shall terminate the contract, resulting in blocked access.

## 4.1.2 Activating Dynamic Licensing

The Dynamic Licensing service is activated when the customer contacts his/her local C-MAP distributor and signs up for Dynamic Licensing. The customer must designate the following items:

- Name of vessel, delivery address, invoicing address and other general information
- System ID on the bridge that will use Dynamic Licensing
- Geographical limitation (zones and/or areas)
- Credit limit (can be checked by C-MAP)

When the customer receives a permission confirmation from C-MAP via e-mail or fax, it becomes possible to start using Dynamic Licensing.

The service can then be activated by creating an Online Update request on the ECDIS and sending it to C-MAP ([updates@c-map.no](mailto:updates@c-map.no)). The response from the automated server contains initialization instructions that are processed internally within the ECDIS. Dynamic Licensing can be used as soon as the Online Update response is installed correctly.

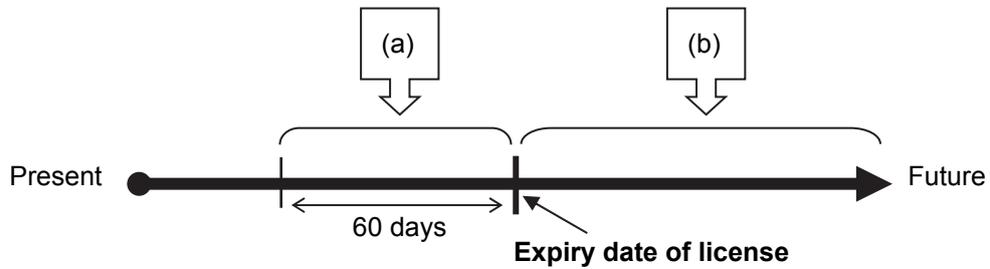
On and Off of Dynamic Licensing can be switched any time.

## 4.2 About C-MAP Ed.3 Charts

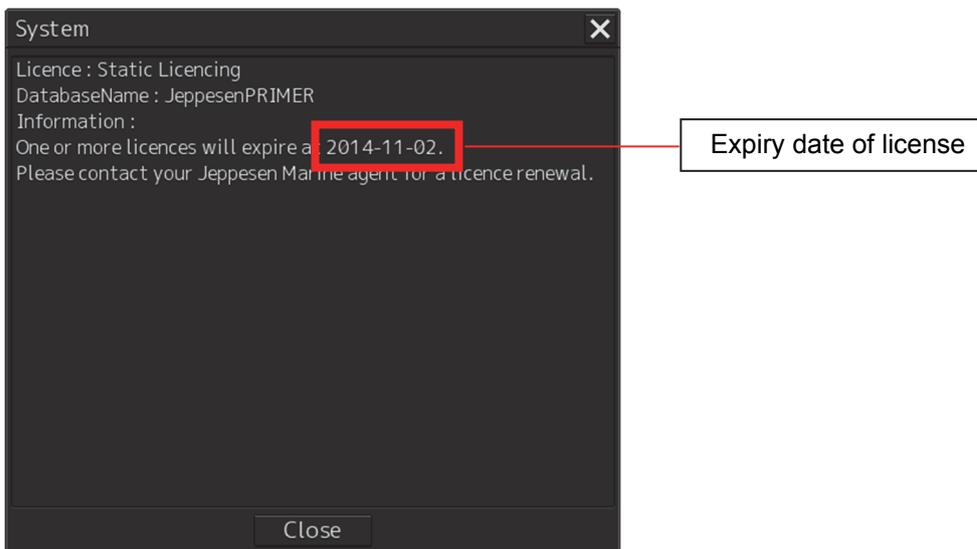
### 4.2.1 C-MAP Ed.3 Checkout (Static Licence)

#### Expiry date of license (eToken)

Licenses have an expiry date.

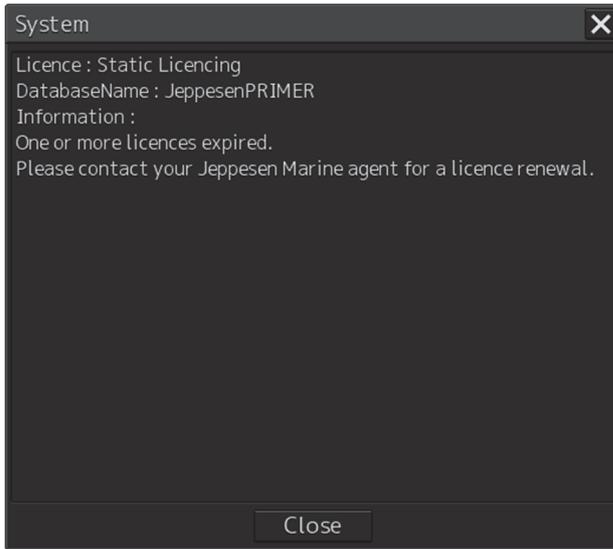


- a) For 60 days before expiry date of license  
A warning message as shown below is displayed.



b) After expiry date of license

An error message as shown below is displayed. The chart is displayed only for 15 minutes after it is started.



For how to confirm license information, refer to "4.6 Checking the License".

**Caution:**

**If the message (a) or (b) above is displayed, it is necessary to update the license(s).  
Contact your C-MAP distributor**

## 4.2.2 C-MAP Ed.3Checkout (Dynamic Licence)

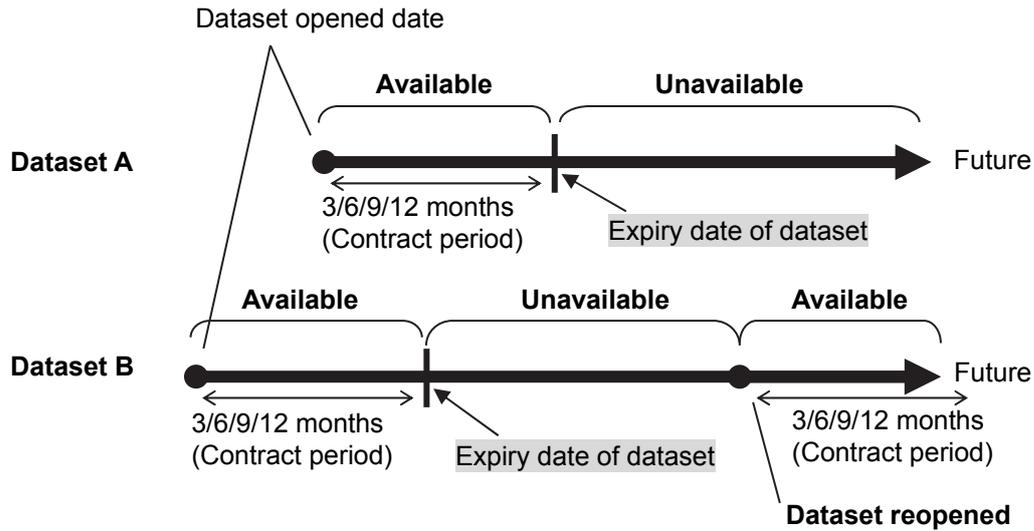
### Expiry date of license (eToken)

Each dataset has an expiry date.

a) Licensing by Credit

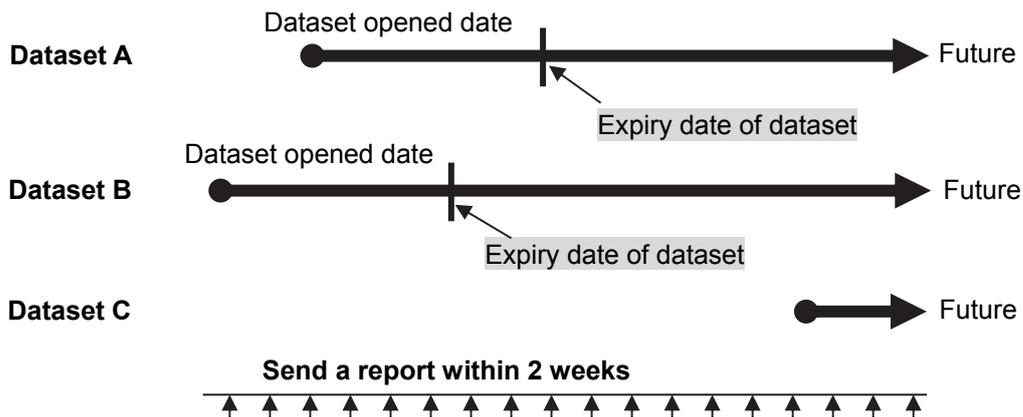
When credit is used (paid), the license of all datasets can take effect.

The fees for date sets are different depending on the type.

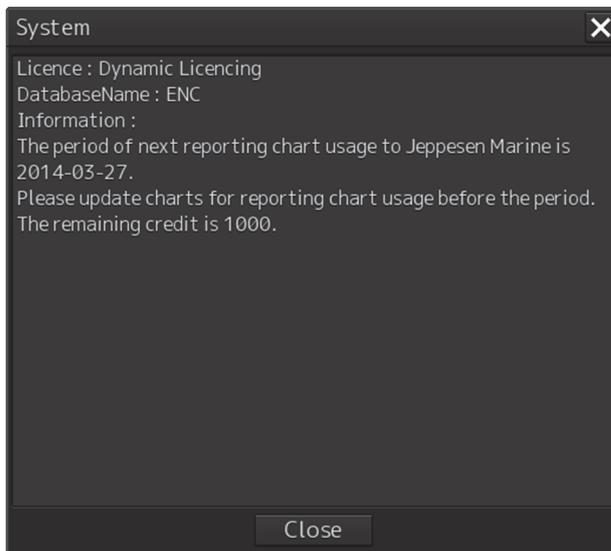


b) Reporting

The customer using Dynamic Licensing must send a report to Real Time Updating (RTU) Service. The reporting interval is set to maximum 2 weeks. If no report is sent after 2 weeks, C-Map Ed.3 charts will no longer be displayed.



- c) During the time when Dynamic License is being used, the following caution is displayed daily in ECDIS screen.

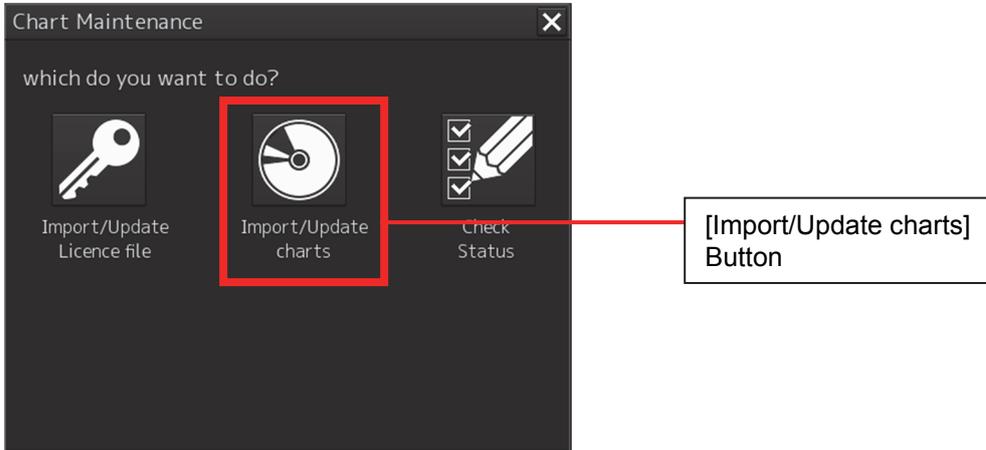


For how to confirm license information, refer to "4.6 Checking the License".

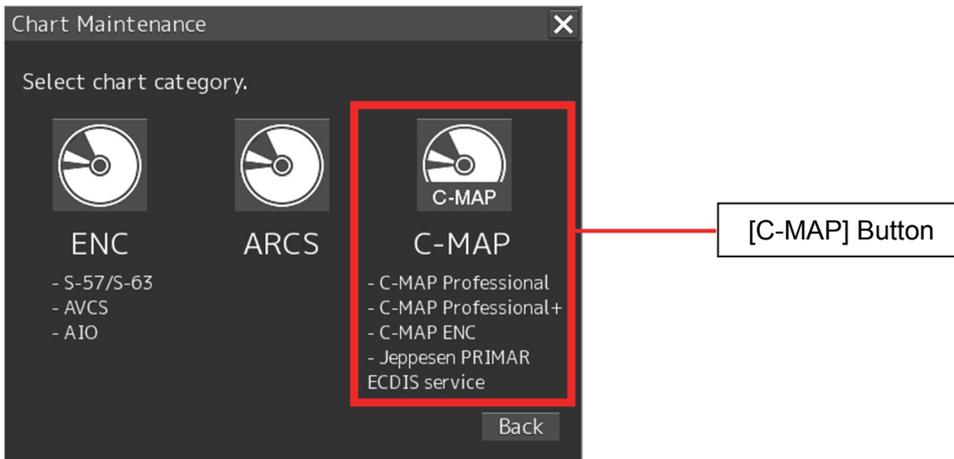
## 4.3 Checking eToken Devices

### 4.3.1 Checking the System ID of Chart Manager

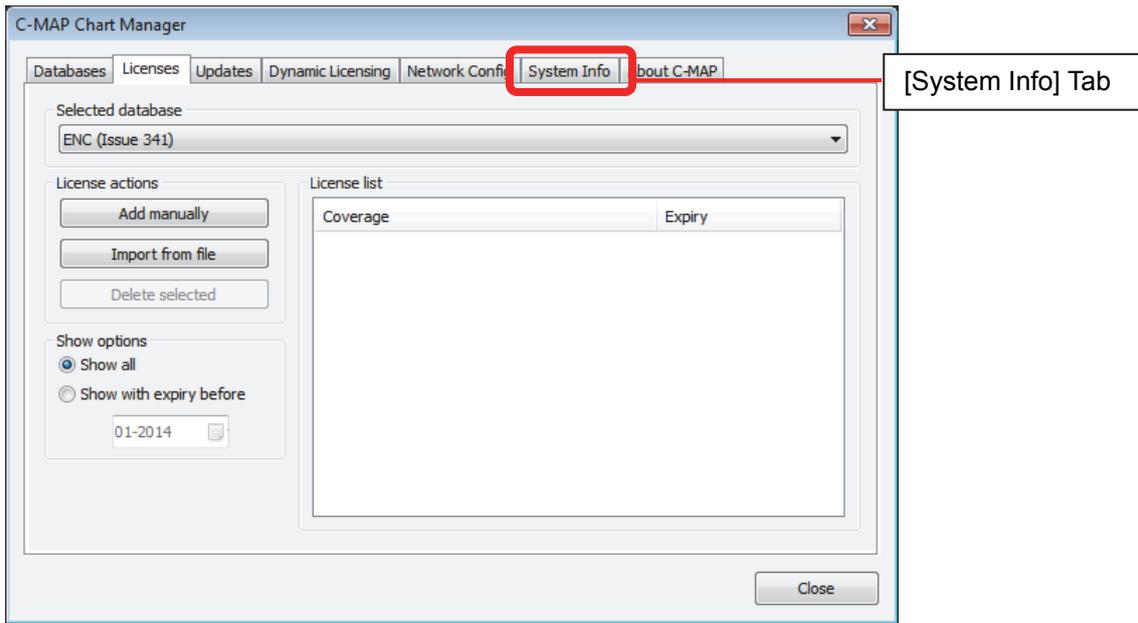
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update charts] button.



- 3) In the Chart Category Selection window, click the [C-MAP] button.

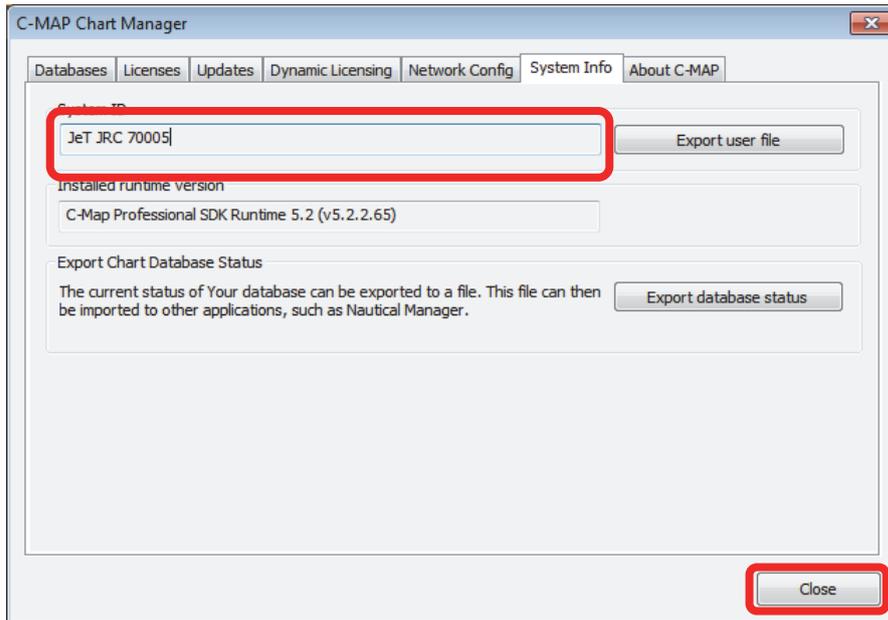


4) In the C-MAP Chart Manager window, click the [System Info] tab.

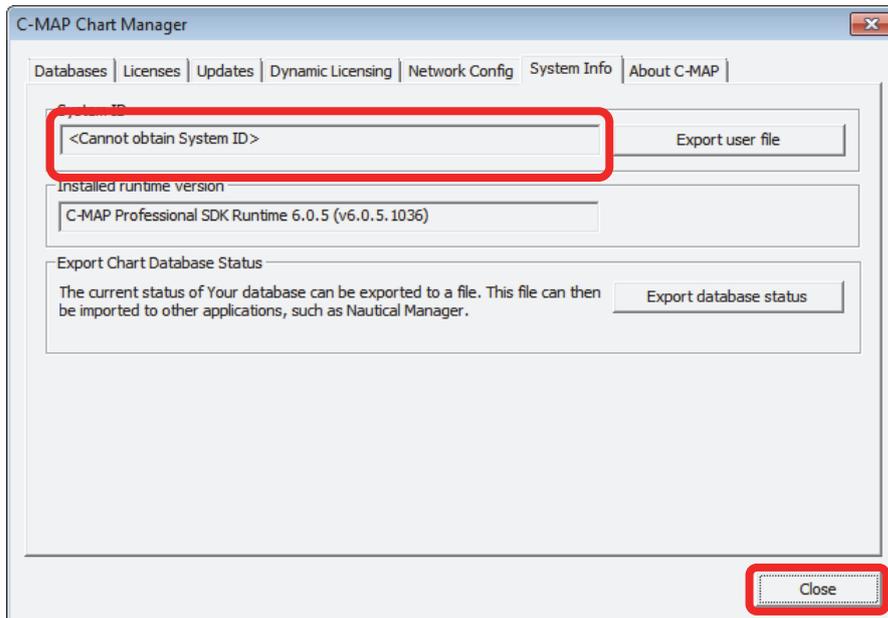


5) Check [System ID].

If some value is contained like as "JeT JRC 70005", eToken is mounted on the equipment. Import charts and license to use it.



If "Cannot obtain System ID" is shown, eToken is not mounted on the equipment. For using C-Map, please request arrangement of eToken to our sales department or our branch office, sales office, or agent near your premises.



6) After checking, click the [Close] button.

\*) Clicking [Export user file] will export the [USER.USR] file.

The [USER.USR] file contains the following information.

```
[User]
System ID=JeT JRC 70005
User Key=eToken
```

\*This is sample data.

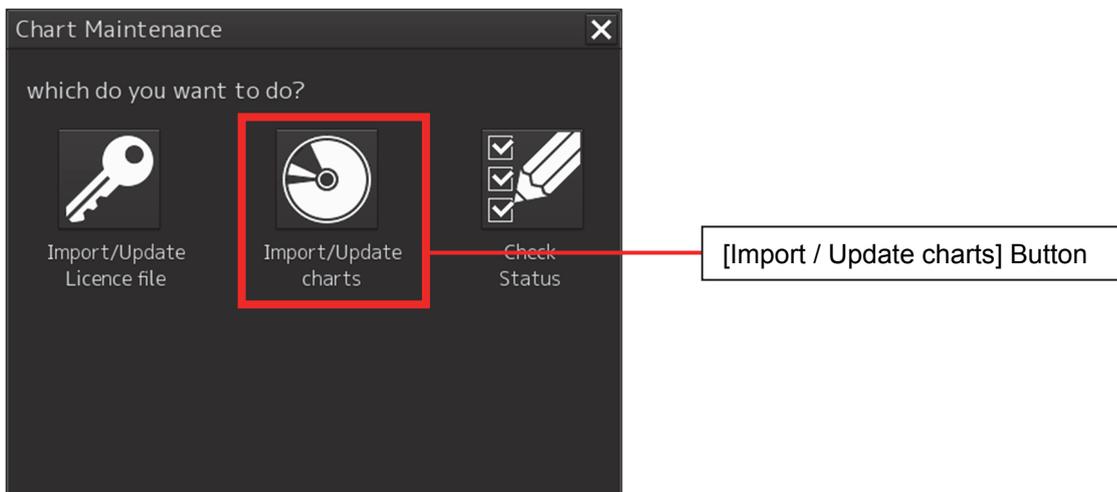
## 4.4 Importing C-MAP Ed.3

### Caution:

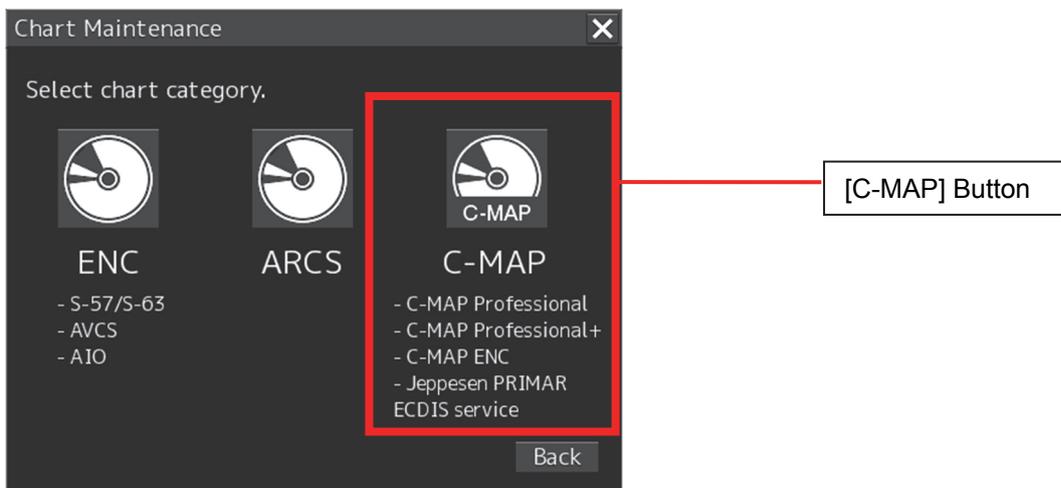
There are several types of CM-93/3 Electronic Chart Database, including World, ENC and Professional+. The following example of implementation method shows an import operation using ENC. Import operation can be performed in the same manner for other databases.

### 4.4.1 Importing C-MAP Ed.3 Charts

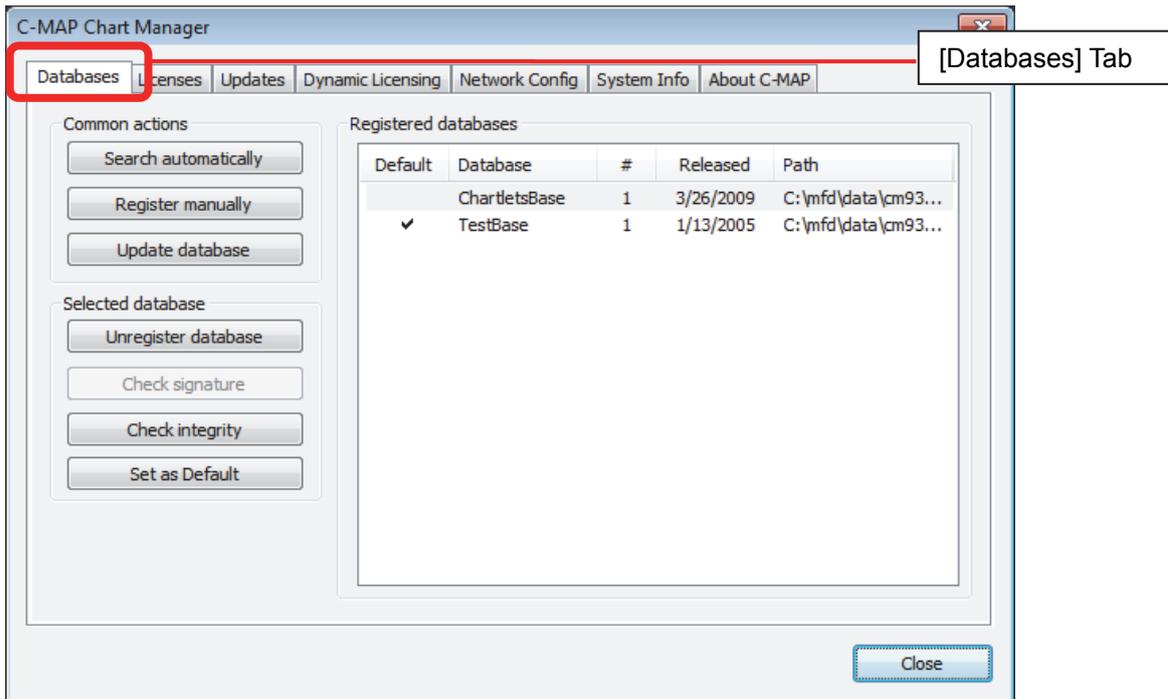
- 1) Insert the chart database disc into the CD/DVD drive in advance. 
- 2) Click the [Chart Maintenance] button on Task Menu.
- 3) In the Home window, click the [Import / Update charts] button.



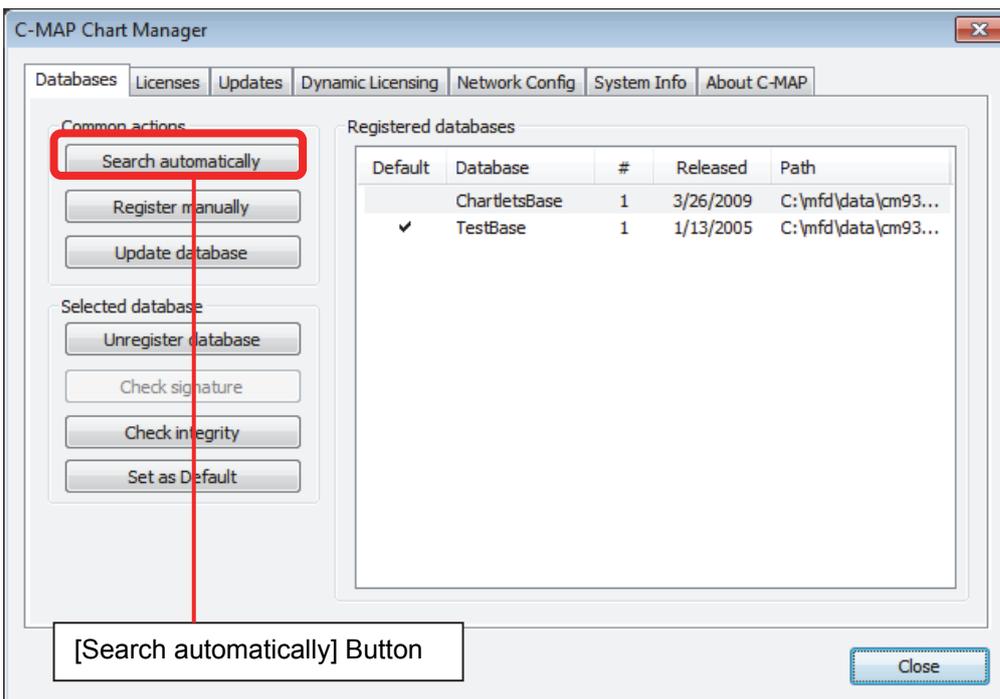
- 4) In the Chart Category Selection window, click the [C-MAP] button.



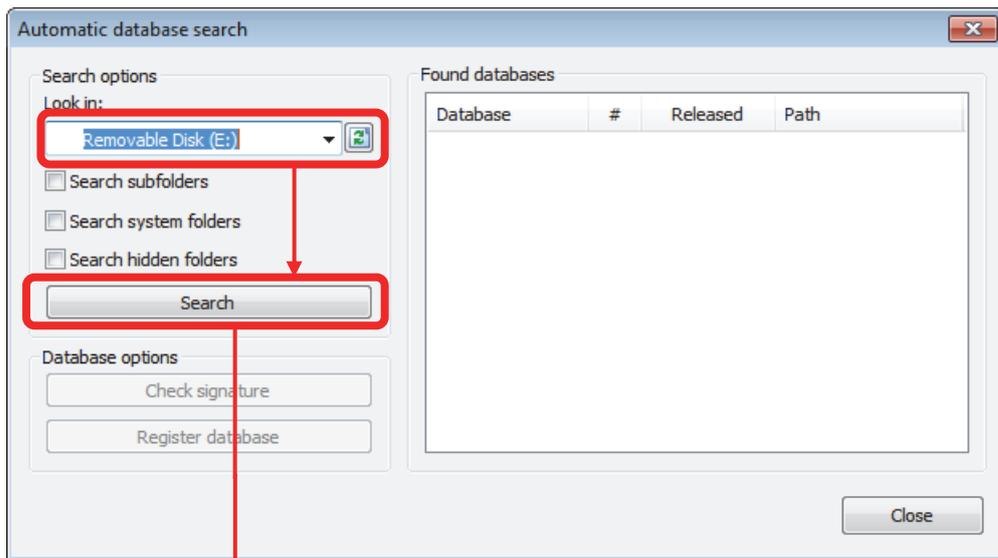
5) The C-MAP Chart Manager window appears while the [Databases] tab is being selected.



6) Click the [Search automatically] button.

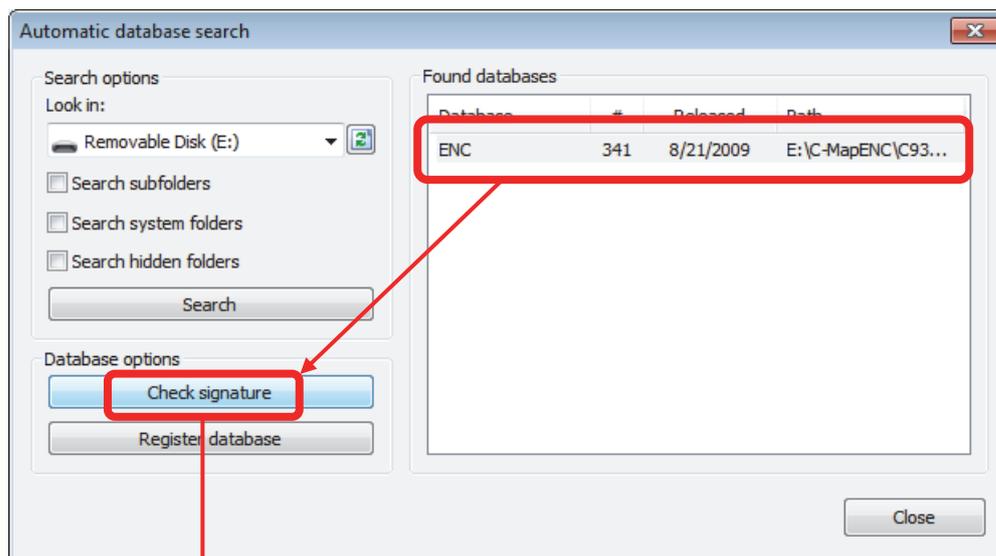


- 7) The Automatic database search window appears, so select the data drive browse destination and then click the [Search] button.



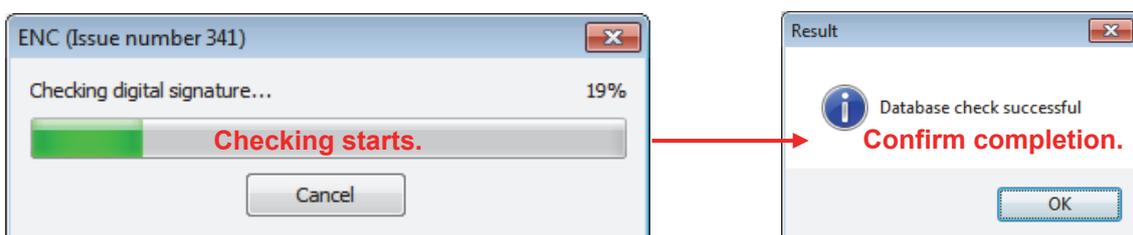
[Search] Button

- 8) A database is displayed in the right pane of the window, so click the [Check signature] button after checking it.

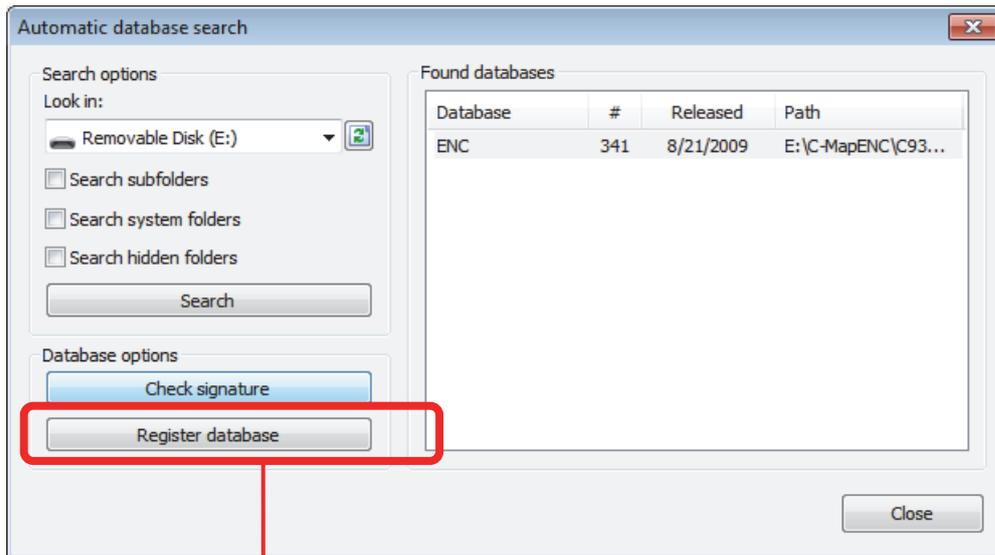


[Check signature] Button

- 9) Signature check is executed. Click the [OK] button after checking is completed.

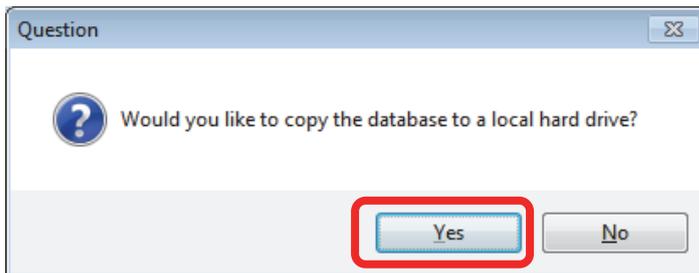


10) Click the [Register database] button.



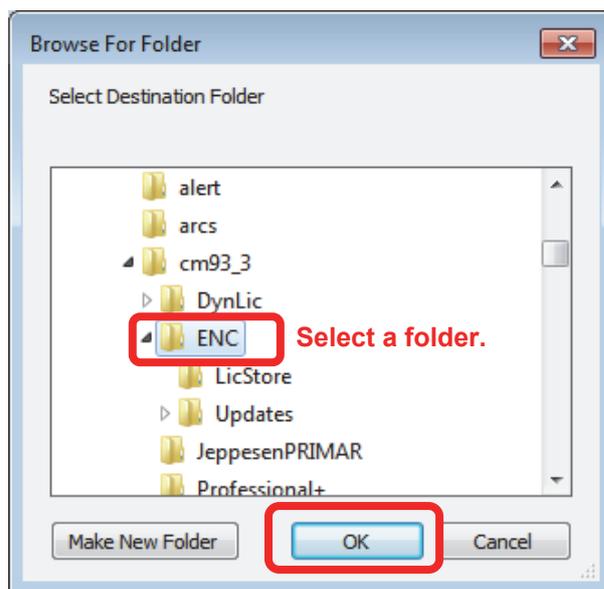
[Register database] Button

11) A confirmation dialog appears, so click the [Yes] button.

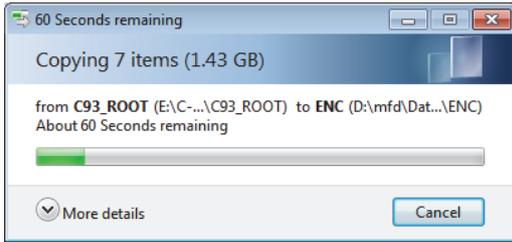


12) Select a save destination folder, Click the [OK] button.

D:\MFD\Data\cm93\_3\ENC

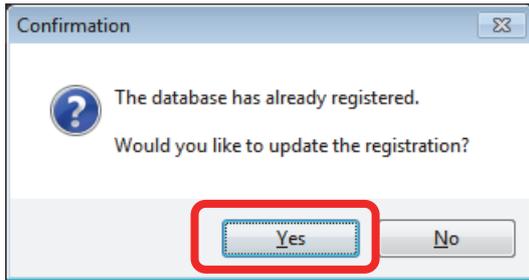


Copying starts.

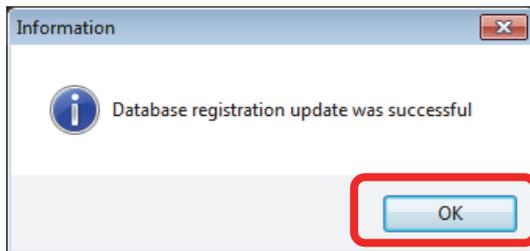


Copying takes about 20 min.

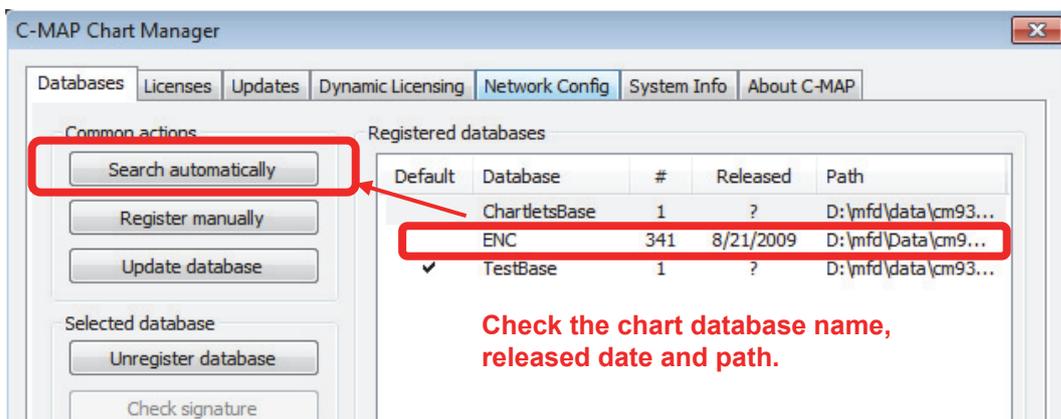
※If the overwrite confirmation pop-up is displayed, click on the [Yes] button.



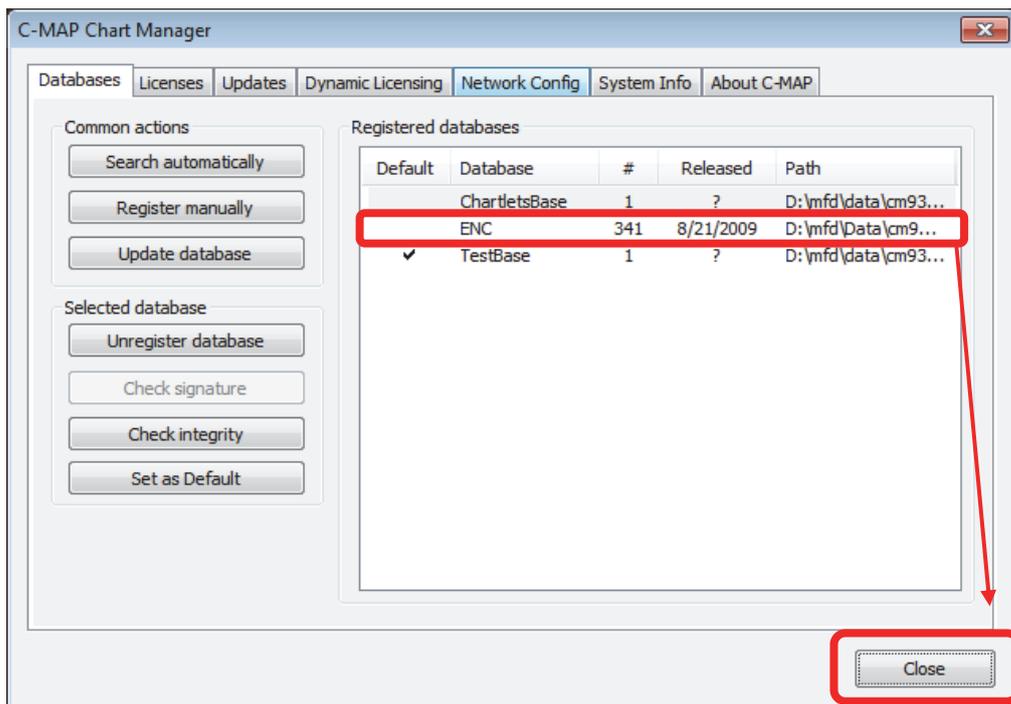
13) Click the [OK] button after copying is completed.



14) To import continuously, repeat the same procedure from the beginning.



15) Click the [Close] button after importing is completed.



## 4.4.2 Importing Licences

### **WARNING**



When importing/exporting files using USB memory, be sure to check for viruses on USB memory in advance. If the ECDIS is infected with a virus, it will affect other devices, leading to failures.

### **CAUTION**

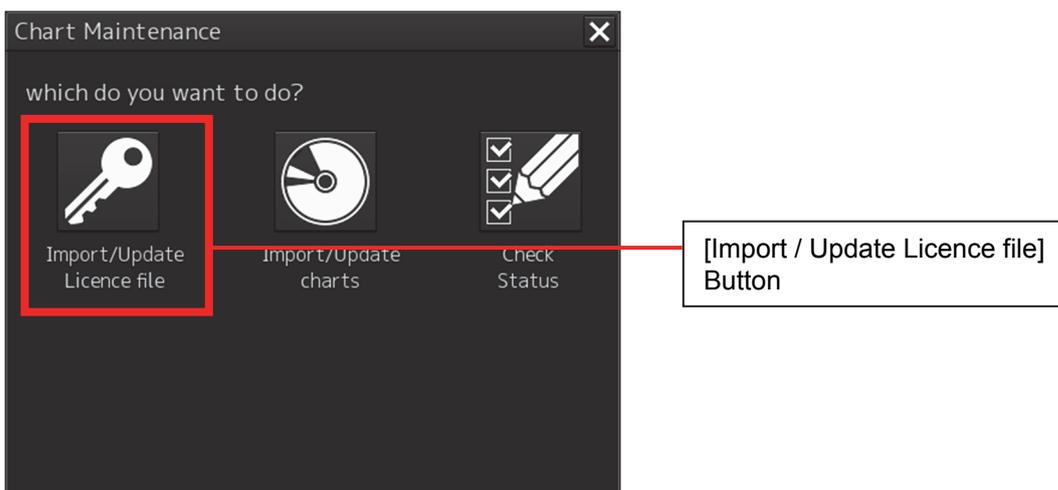


Never leave USB memory in the USB port.  
It may cause malfunction.

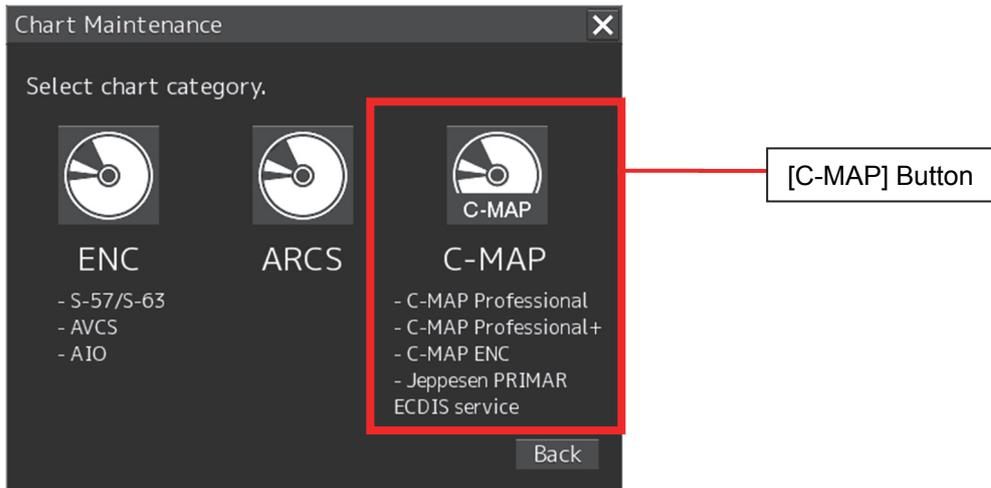
Copy the licence file (password.usr) sent by C-MAP in advance to USB memory and insert it into the USB port of the main body of the ECDIS.

### 4.4.2.1 In the Case of Static Licence

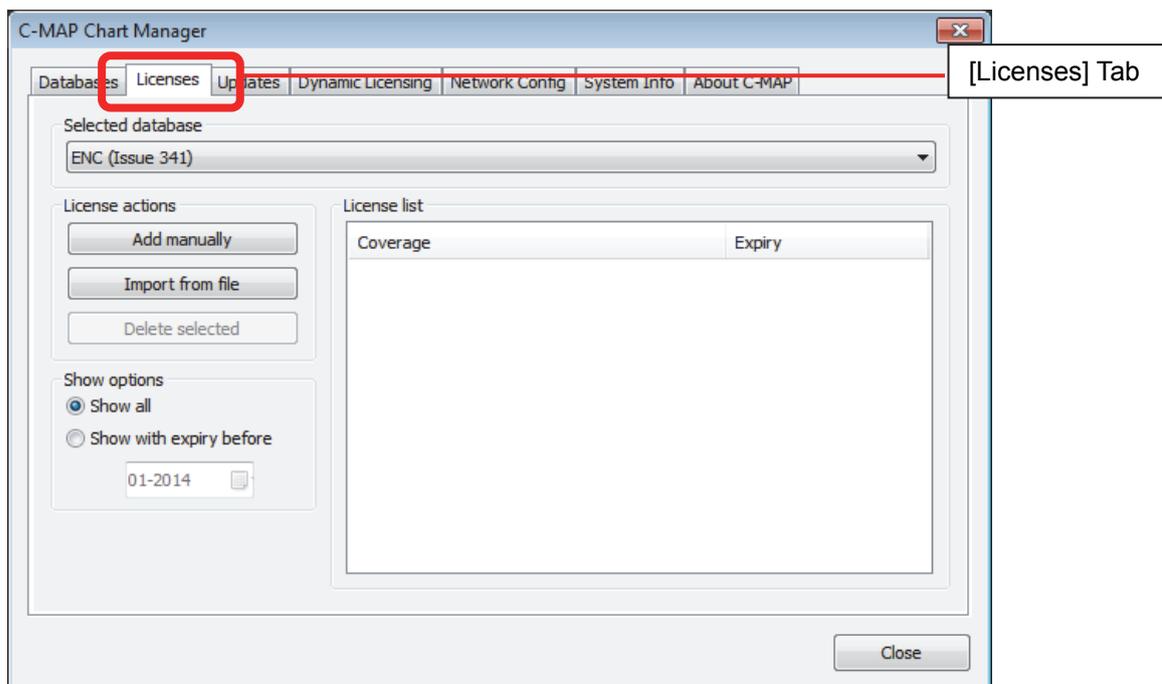
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.



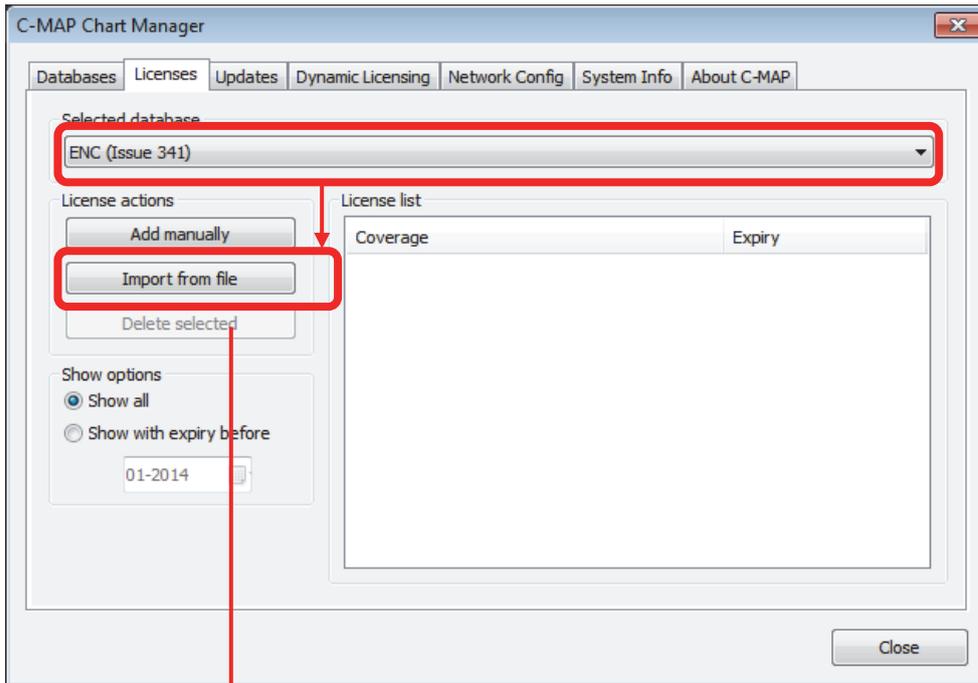
3) In the Chart Category Selection window, click the [C-MAP] button.



4) Click the [Licenses] tab in the C-MAP Chart Manager window.

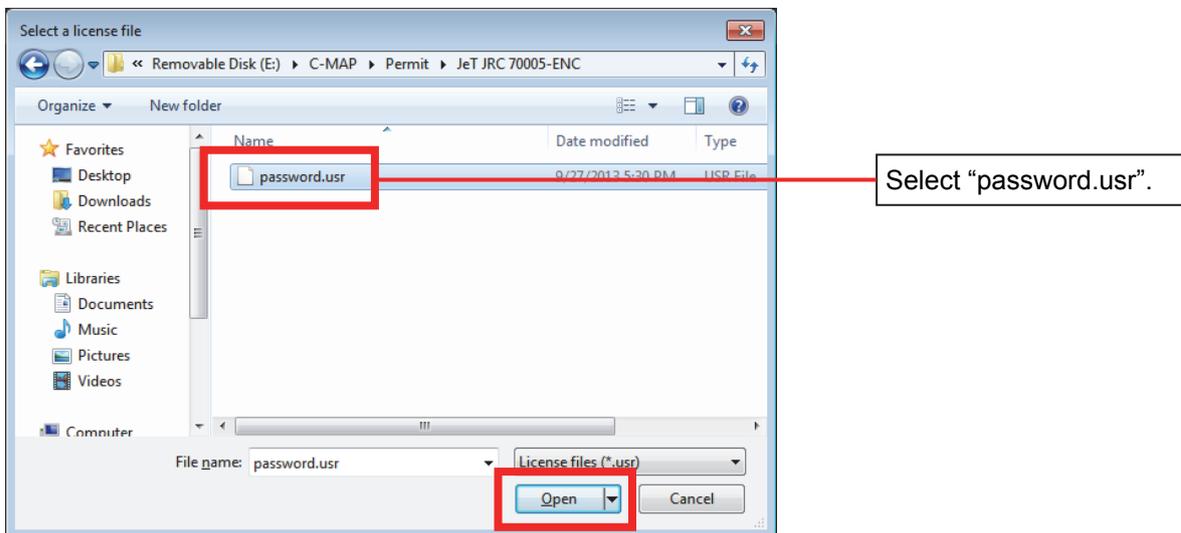


5) Select a database and then click the [Import from file] button.



[Import from file] Button

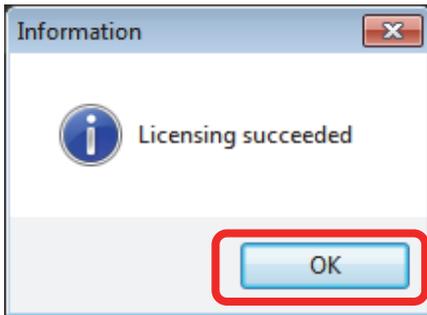
6) Select [password.usr] and then click the [Open] button.



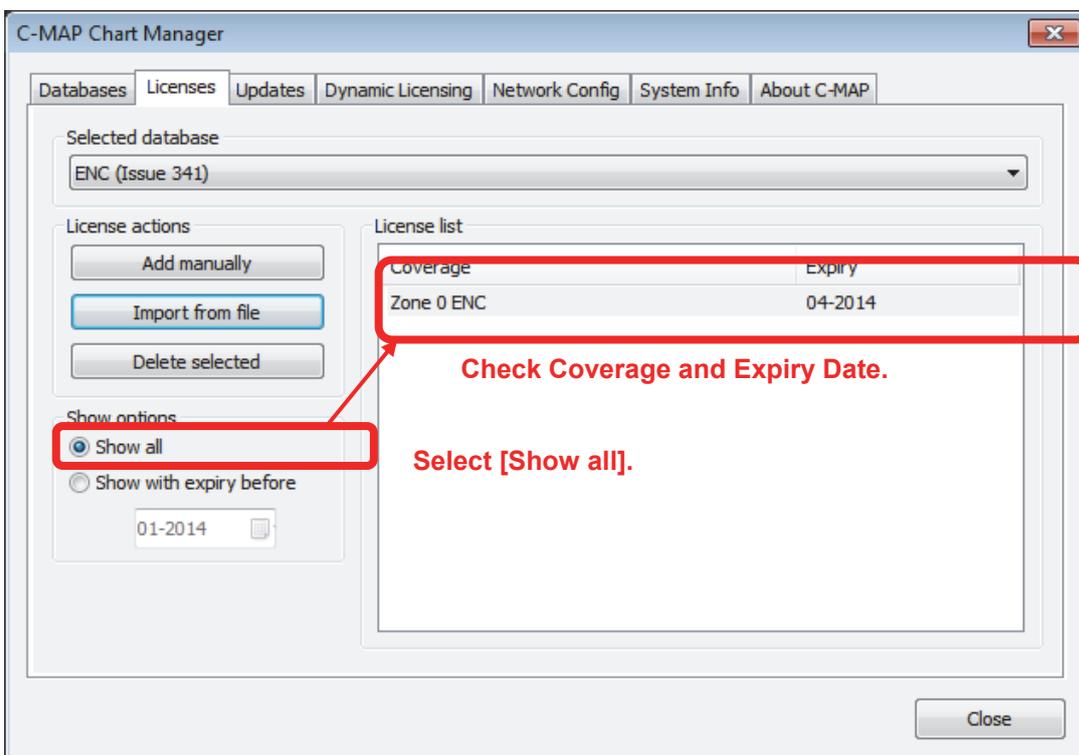
Select "password.usr".

**Caution:**  
When a license is provided by e-mail, save the password.usr file (License) attached to e-mail into USB memory. Insert USB memory and select the USB drive.  
- Save only the password.usr file into USB memory.  
- If the password.usr file is compressed, decompress it and then save it to USB memory.

7) When the following dialog box appears, click the [OK] button.



8) Check the installation result as shown below.

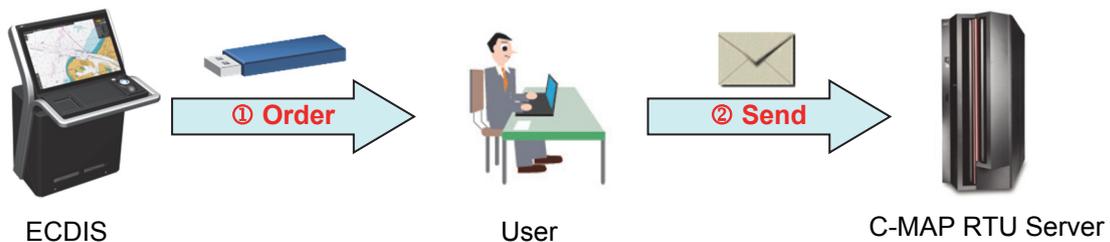


## 4.4.2.2 In the Case of Dynamic Licence

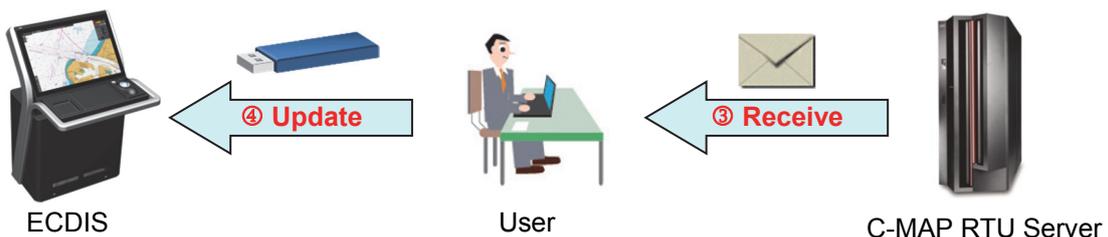
Dynamic License must be activated by importing the answer file acquired from Real Time Updating (RTU) Service.

### Via Real Time Updating (RTU) Service

#### Importing the answer file for the activation of Dynamic Licensing by e-mail



- ① Create an order file (e.g. JRC eT 30001.ord) with C-MAP Chart Manager and save it into USB memory.
- ② Attach the order file to e-mail and send it to the RTU server (e-mail:updates@c-map.no).

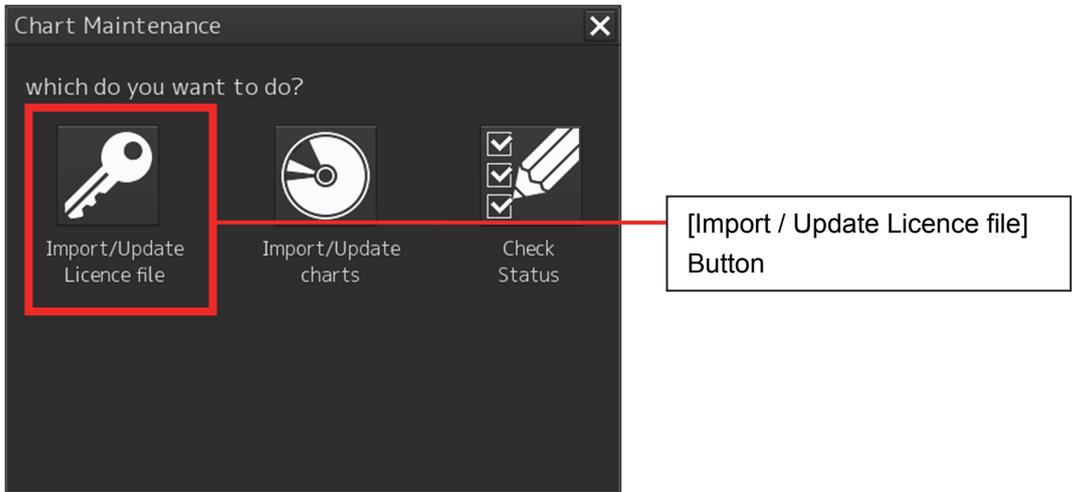


- ③ e-mail is automatically processed by the RTUserver and an answer file is returned. (Example: u001x002.ans)
- ④ Save the answer file into USB memory and then import the answer file with C-MAP Chart Manager.

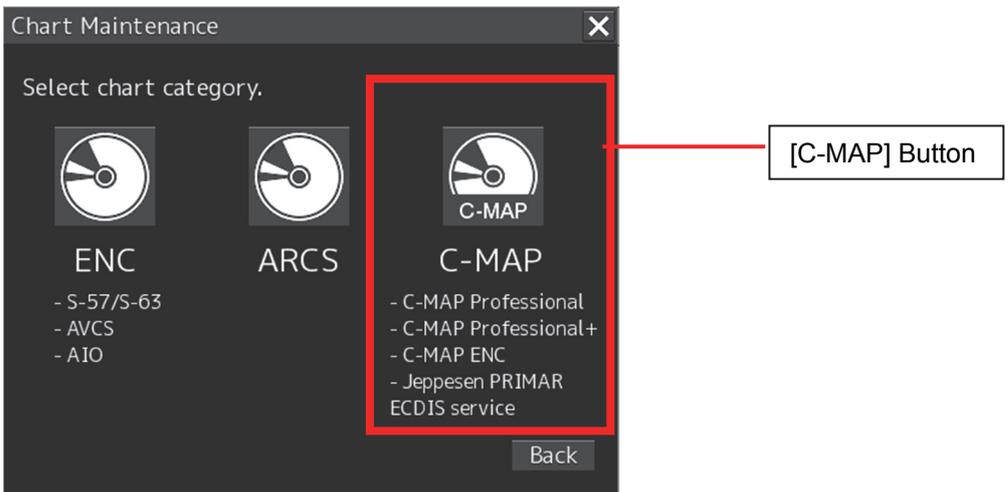
#### C-MAP RTU server e-mail address

**e-mail: updates@c-map.no**

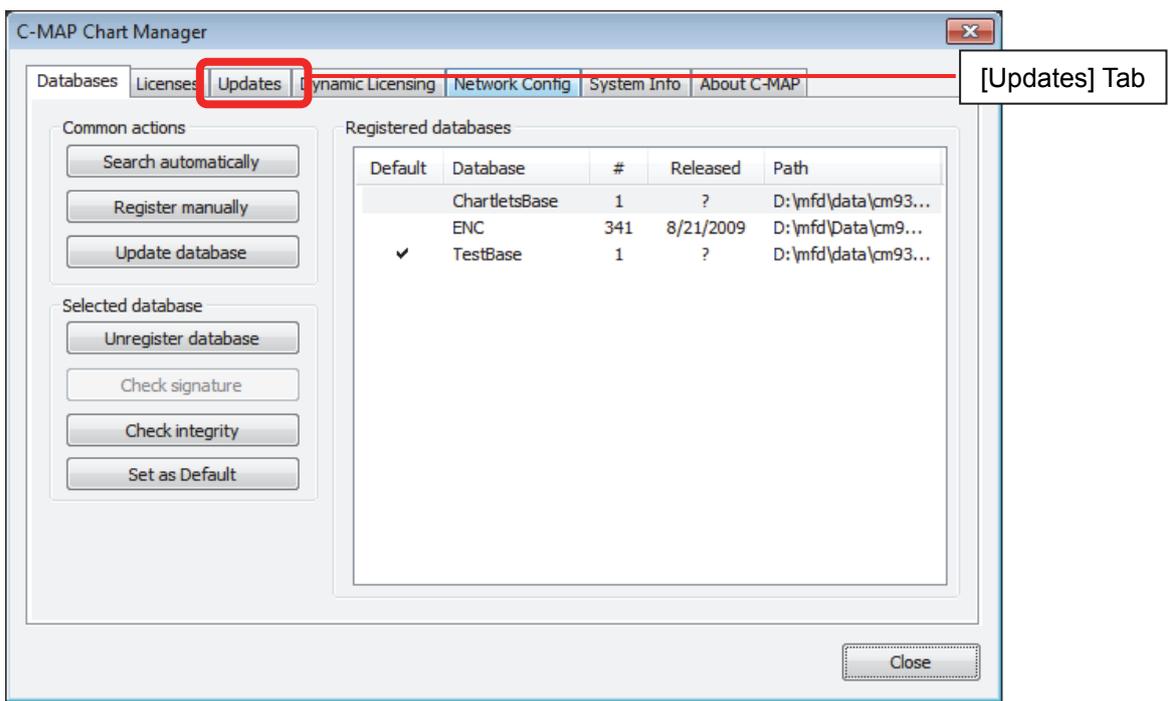
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import / Update Licence file] button.



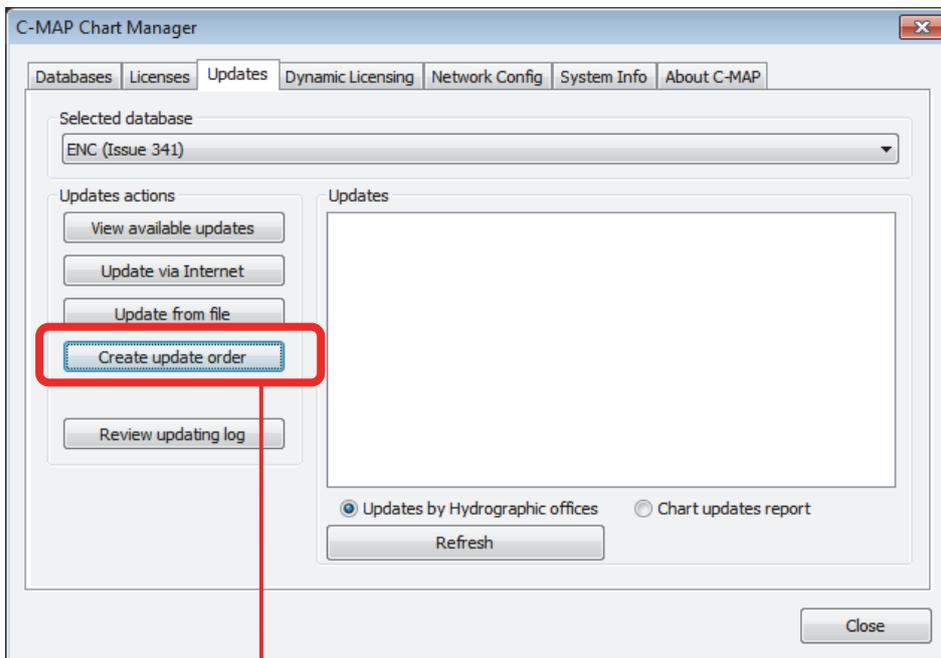
- 3) In the Chart Category Selection window, click the [C-MAP] button.



- 4) Click the [Updates] tab in the C-MAP Chart Manager window.

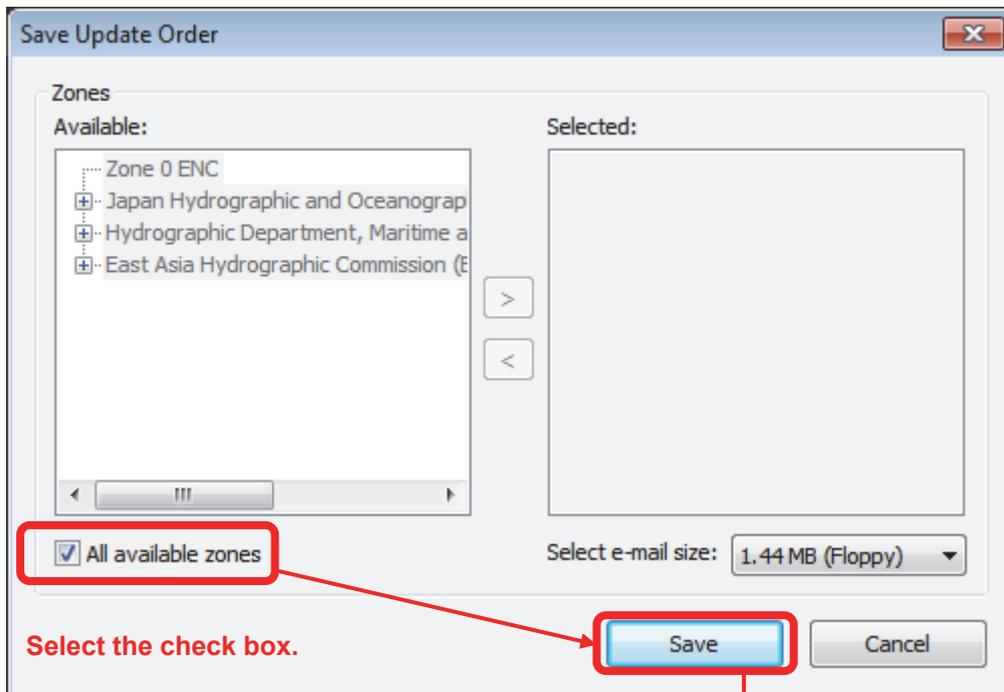


- 5) Insert USB memory into the USB port.
- 6) Click the [Create update order] button.



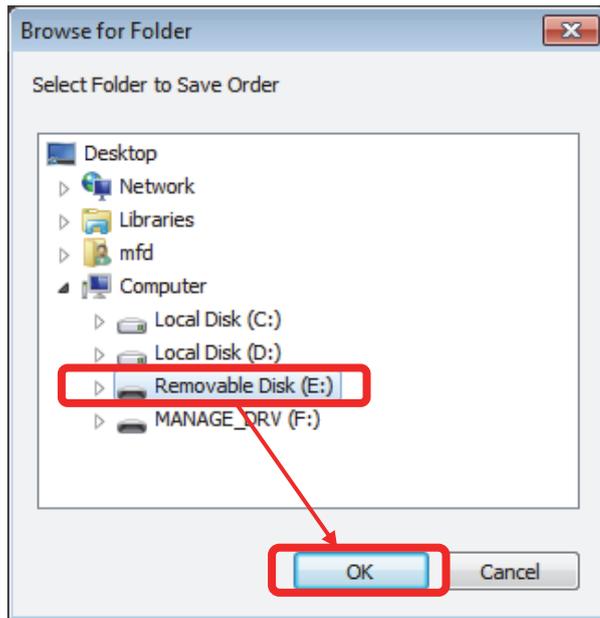
[Create update order] Button

- 7) Check [All available zones] and click the [Save] button.

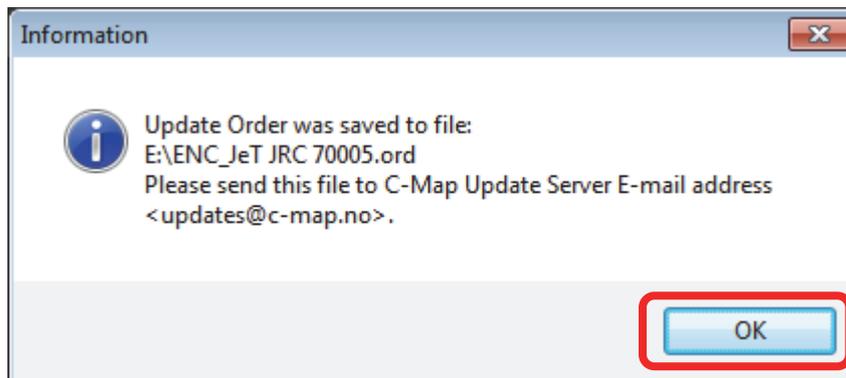


[Save] Button

8) Select [Removable Disk] you inserted and Click [OK] button.

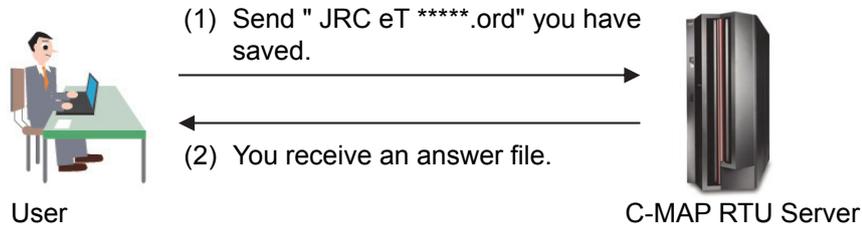


9) The order file is saved to USB memory. Click the [OK] button.



10) Attach the saved order file (JRC eT \*\*\*\*\*.ord) to e-mail and send it to the RTU server (e-mail: updates@c-map.no).

e-mail is automatically processed by the RTU server and an answer file is returned. (Example: u001x002.ans)



**RTU server e-mail address: updates@c-map.no**

**Caution:**

- Check your number in e-mail from C-MAP (updates@c-map.no) . One "\*.ans" file is attached to each e-mail.
- File name convention

uXXXxYYY.ans

\_\_\_\_\_YYY: Number of files  
\_\_\_\_\_XXX: File number

Example: 4 divisions

u001x004.ans  
u002x004.ans  
u003x004.ans  
u004x004.ans

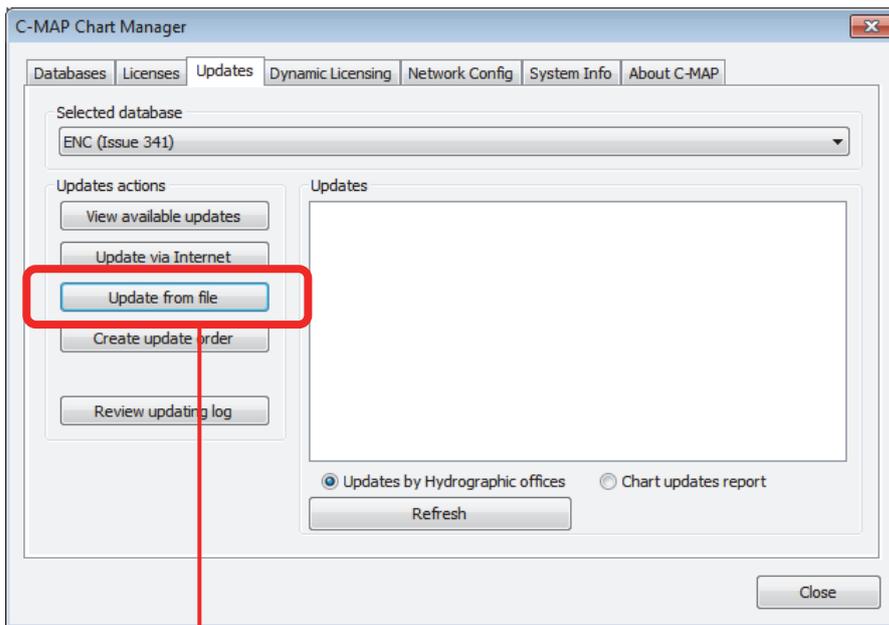
11) Save the received answer file to USB memory.

**Caution:**

- Save answer files in the root directory of USB memory.

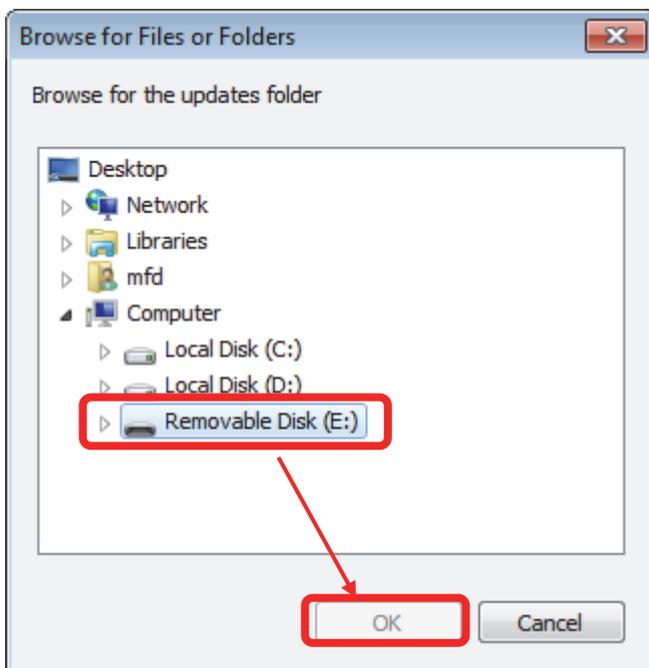
12) Insert USB memory containing the answer file you saved into the USB port.

13) Click the [Update from file] button.



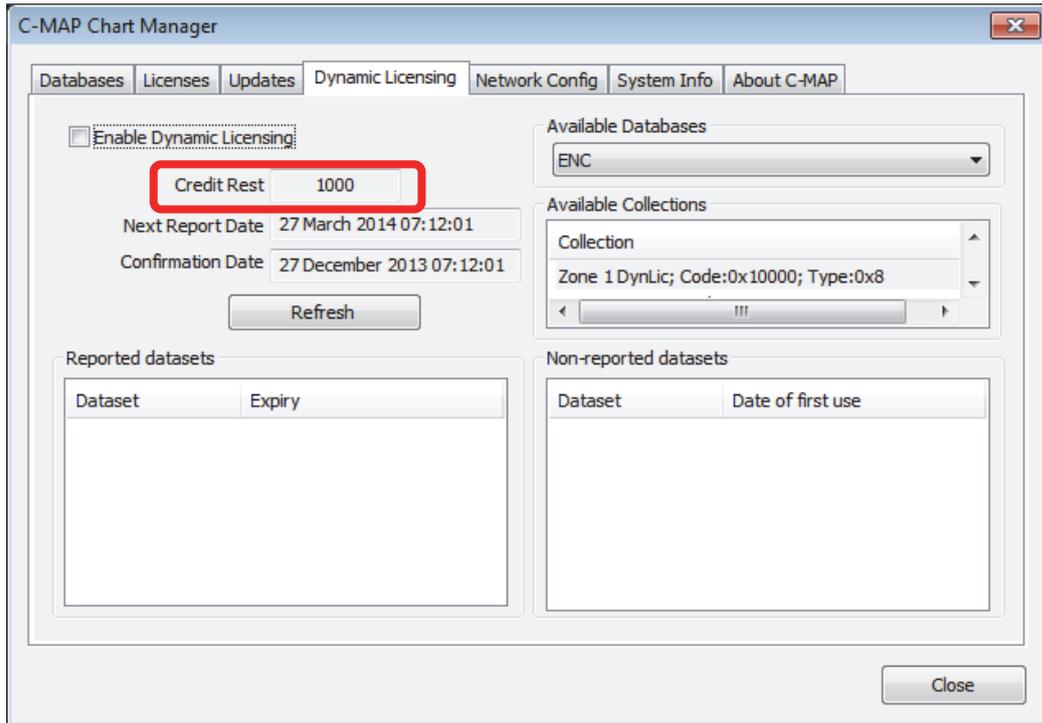
[Update from file] Button

14) Select [Removable Disk] you inserted and then click the [OK] button.

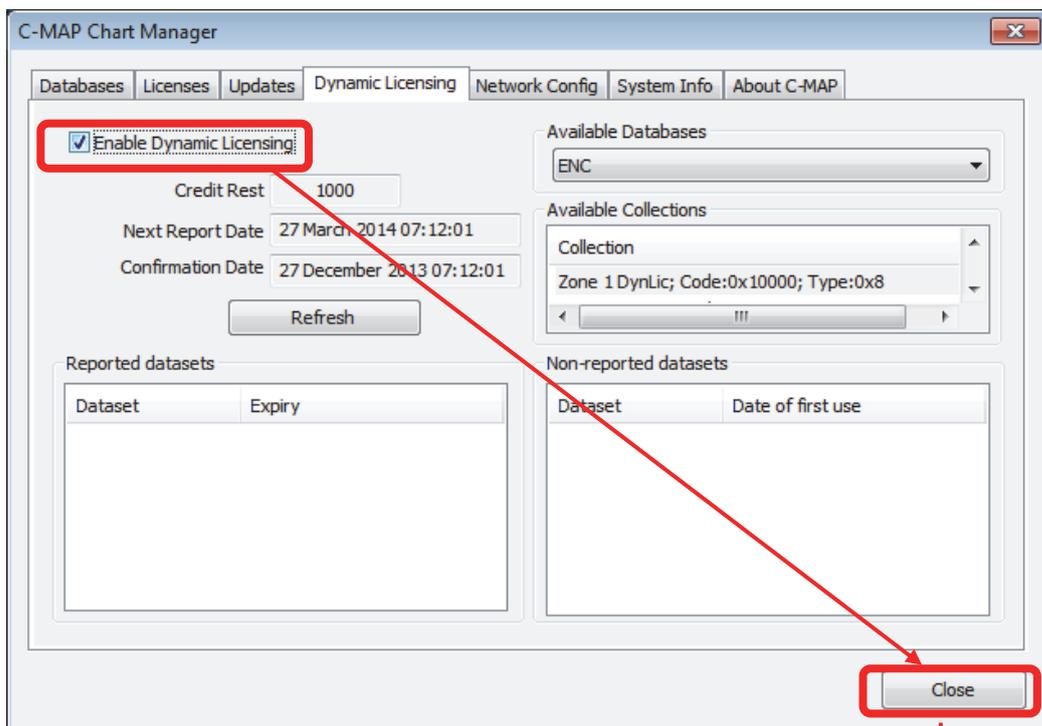


15) The answer file is imported. (Dynamic License takes effect.)

16) Select the [Dynamic Licensing] tab, and confirm increased credit balance.



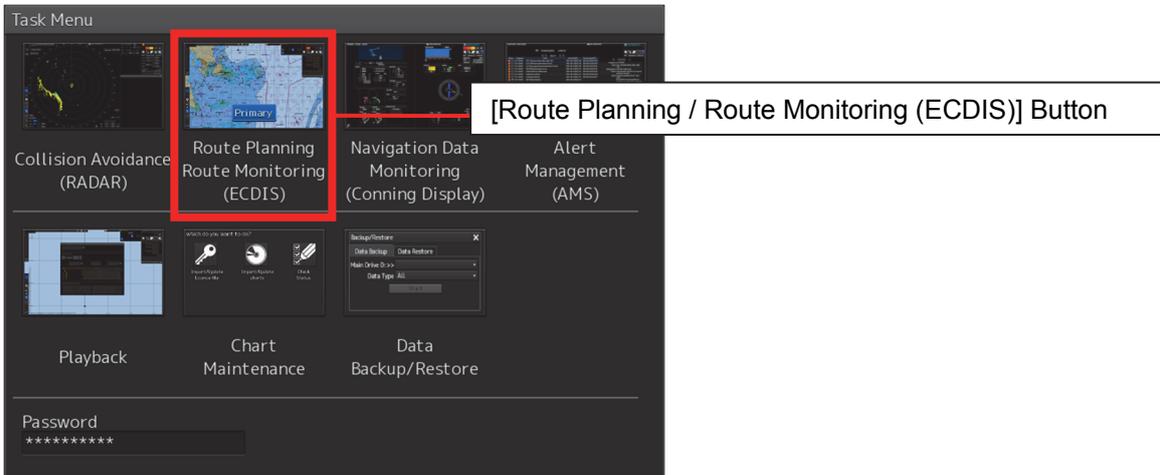
17) Check [Enable Dynamic Licensing] and Click the [Close] button.



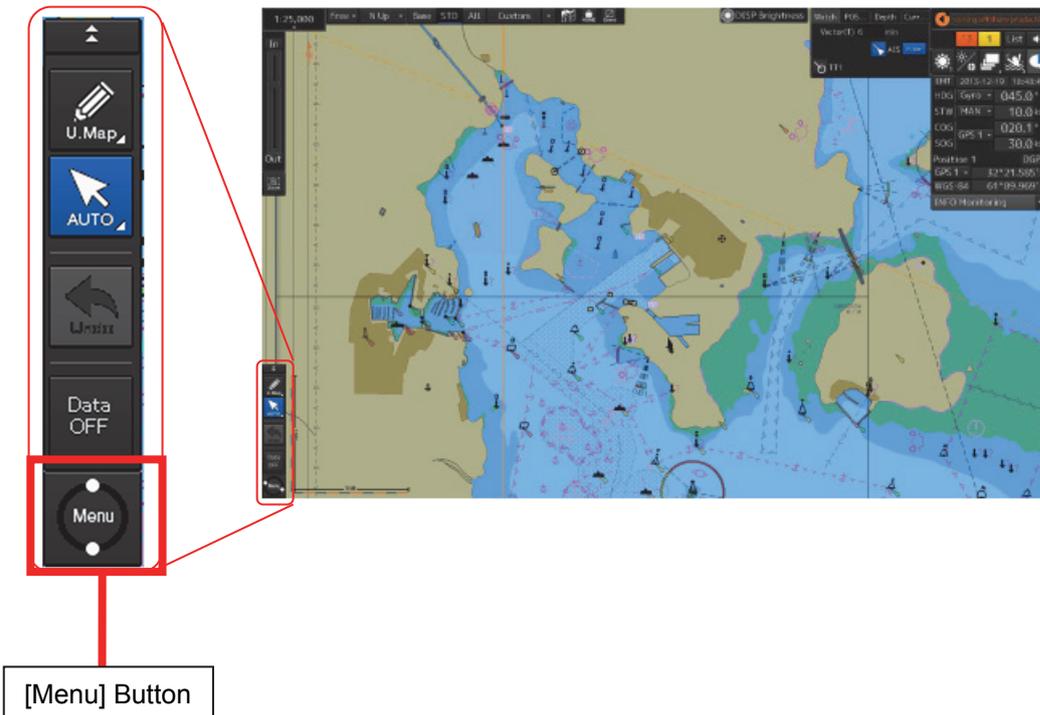
[Close] Button

## 4.4.3 Checking Chart Display

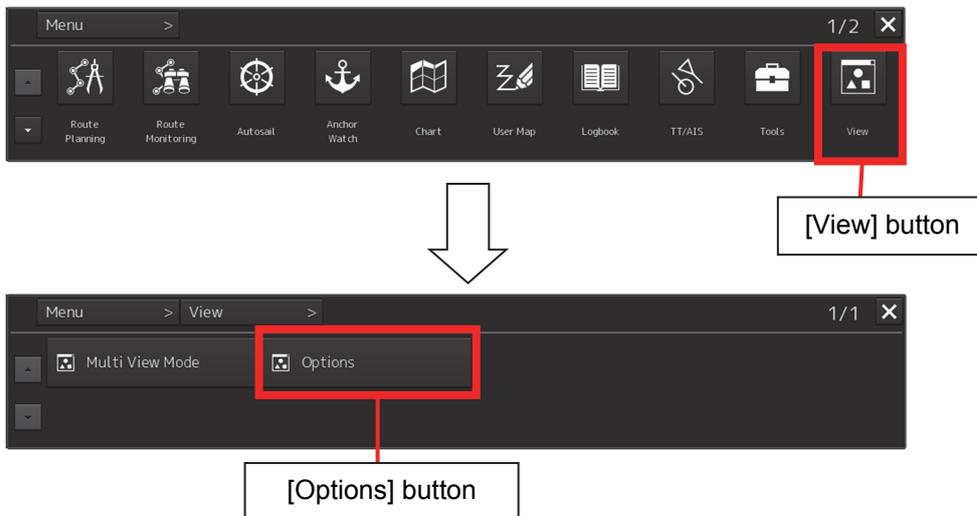
- 1) On Task Menu, click the [Route Planning / Route Monitoring (ECDIS)] button.



- 2) In the ECDIS screen, click the [Menu] button.

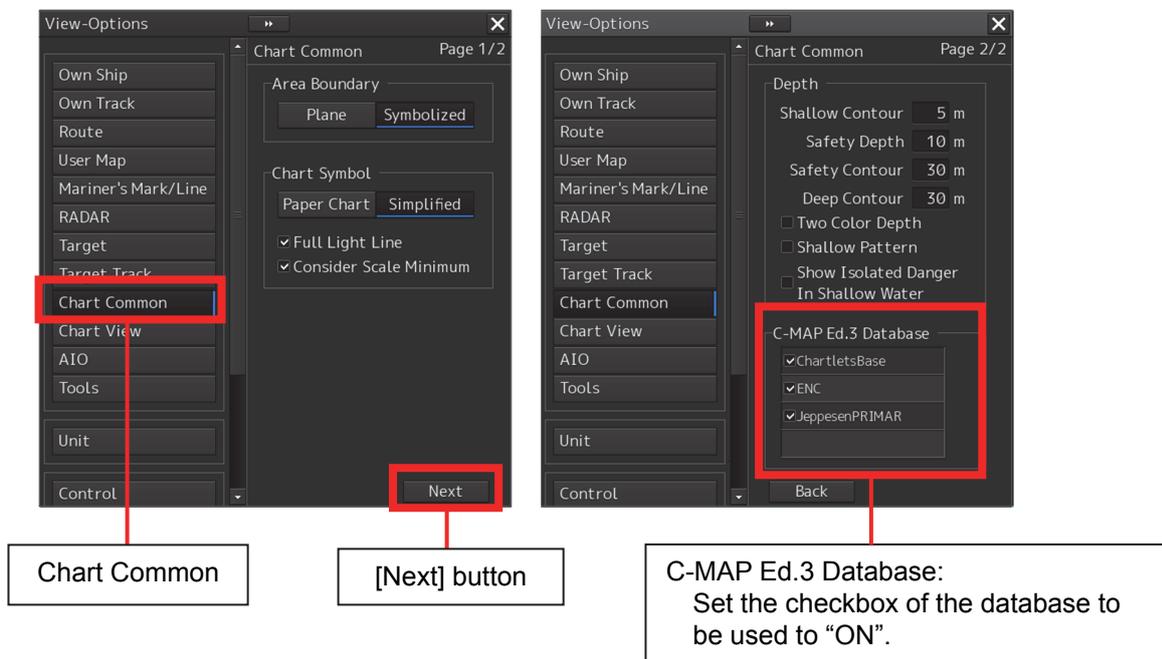


3) In the Menu window, select [View] – [Options] in this order.

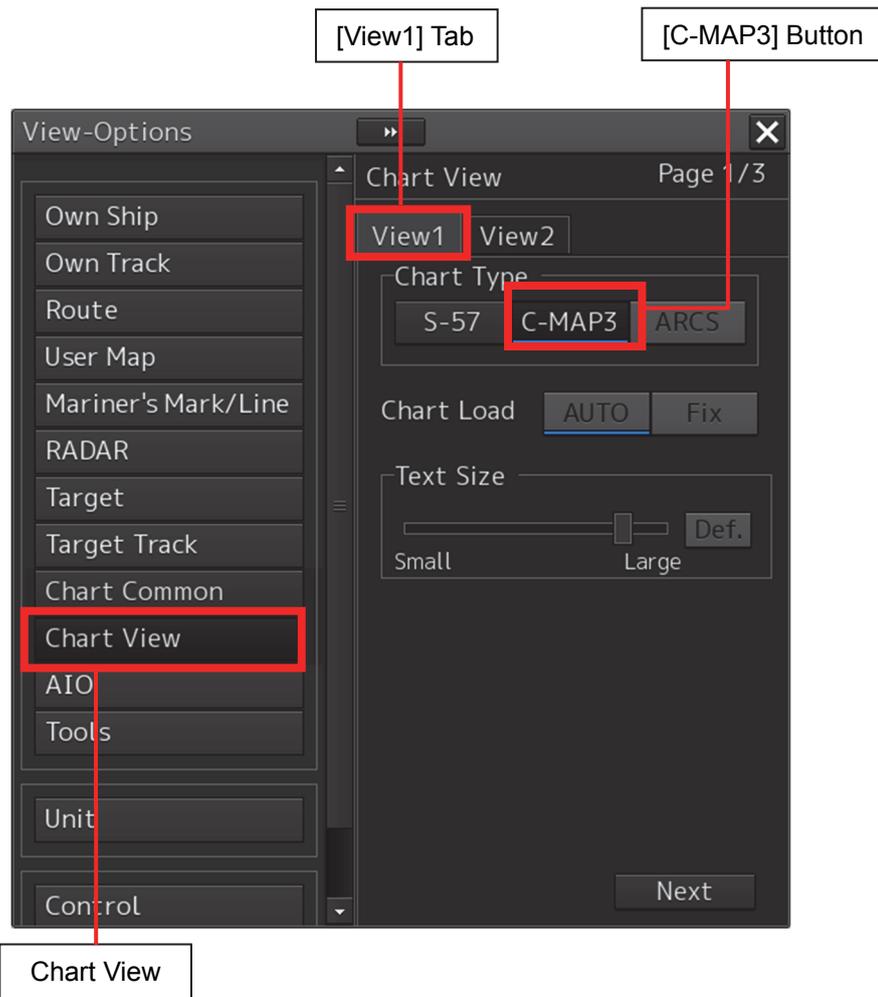


4) Select [Chart Common].

Change the page to page 2 by clicking on the [Next] button and set the checkbox of the database to be used to “ON” in C-MAP Ed.3 Database.



5) Click [Chart View]. In Chart Type on the [View1] tab, click the [C-MAP3] button.



6) Click the [X] button to close the [View] - [Options] window.

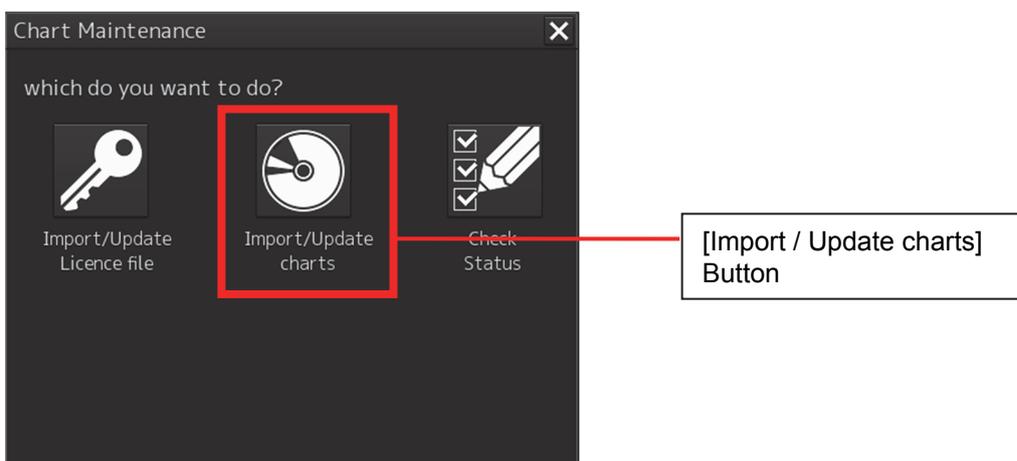
## 4.5 Updating C-MAP Ed.3 Charts

### 4.5.1 Updating C-MAP Ed.3 Charts by Using CD (or DVD)

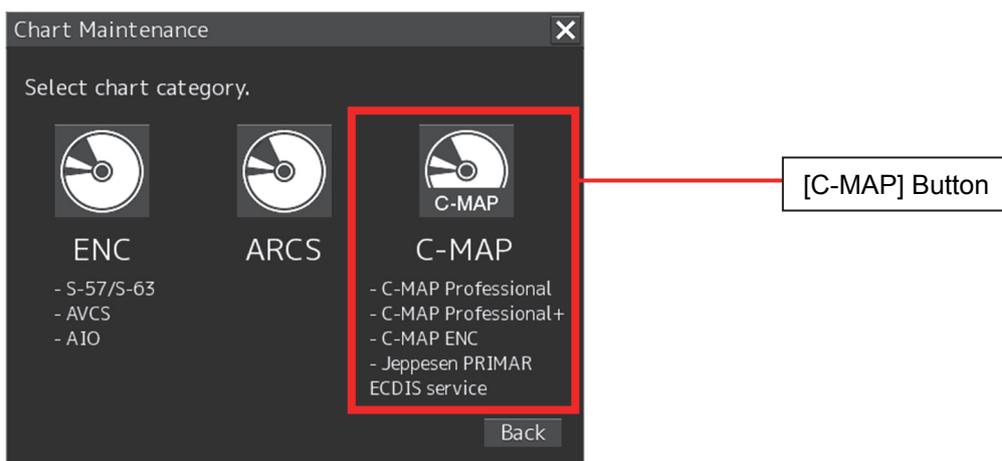
**Caution:**

There are several types of CM-93/3 Electronic Chart Database, including World, ENC and Professional+. The following example of implementation method shows an import operation using Professional+. Import operation can be performed in the same manner for other databases.

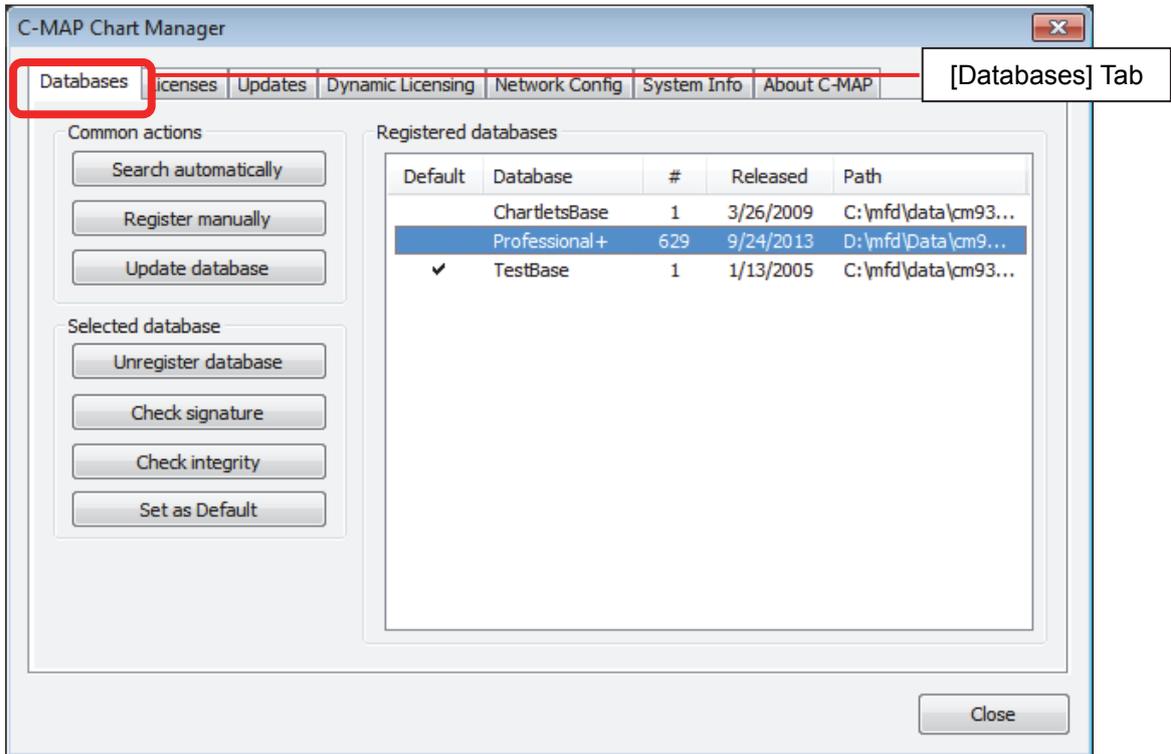
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.



- 3) In the Chart Category Selection window, click the [C-MAP] button.



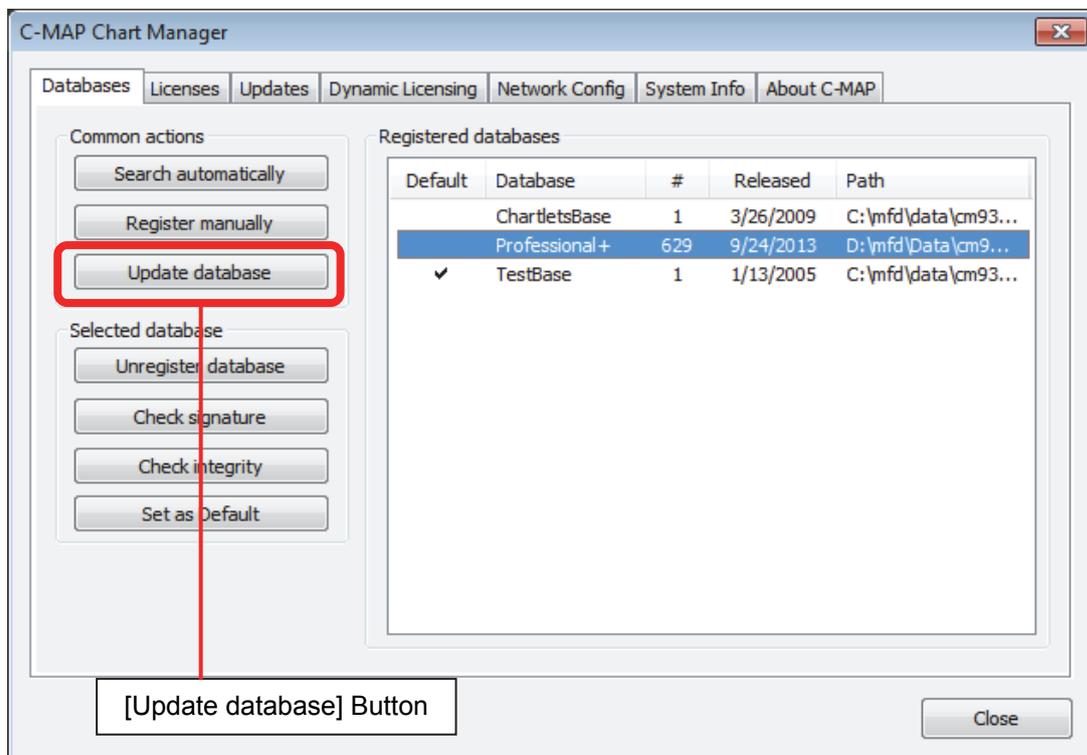
4) The C-MAP Chart Manager window appears while the [Databases] tab is being selected.



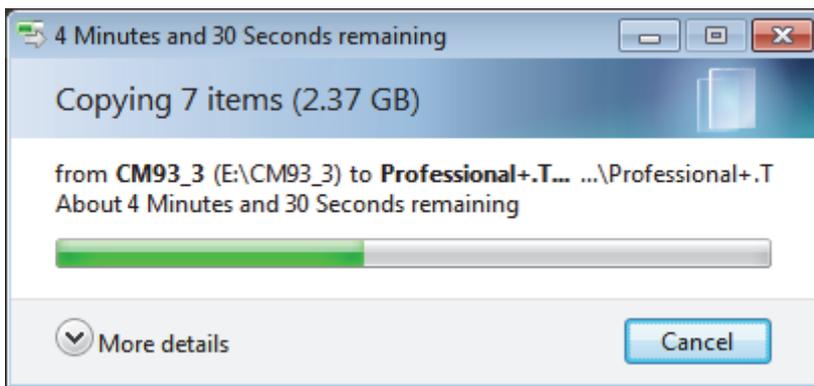
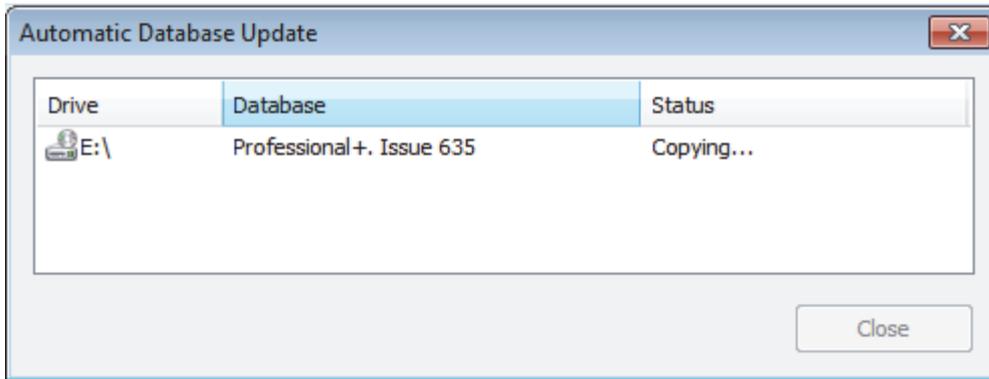
5) Insert the C-MAP Ed.3 DVD-ROM into the DVD drive.



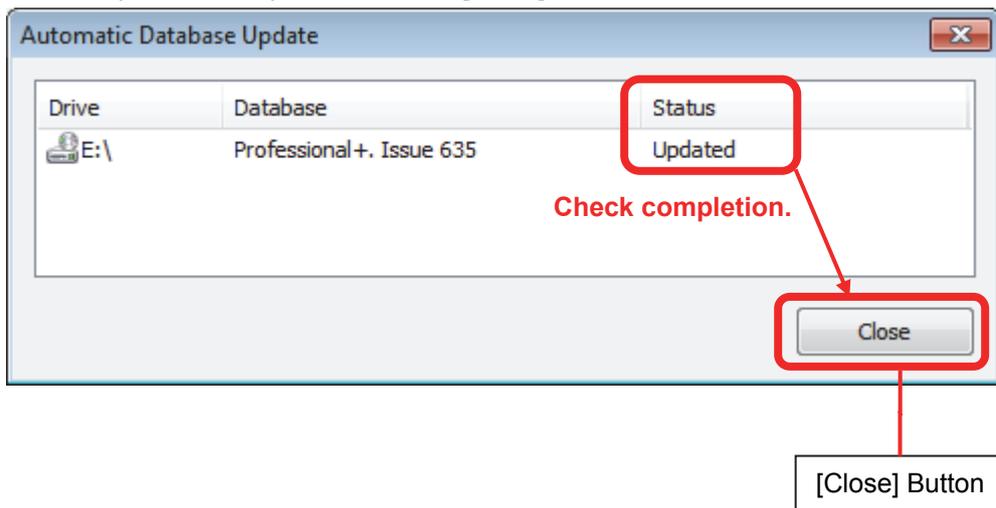
6) Click the [Update database] button.



7) The Automatic Database Update window appears and update starts automatically.



8) When update is completed, click the [Close] button.

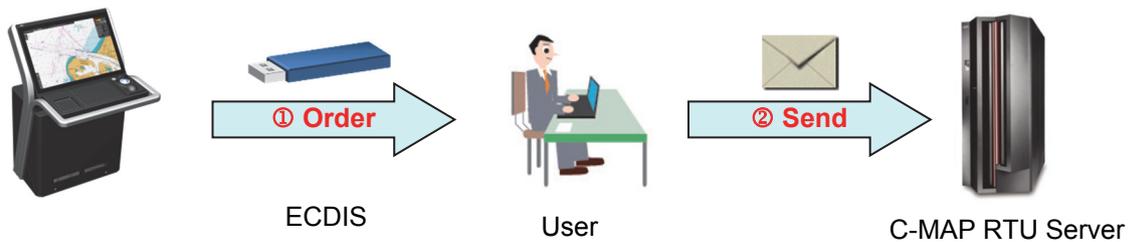


## 4.5.2 Updating C-MAP Ed.3Charts with RTU

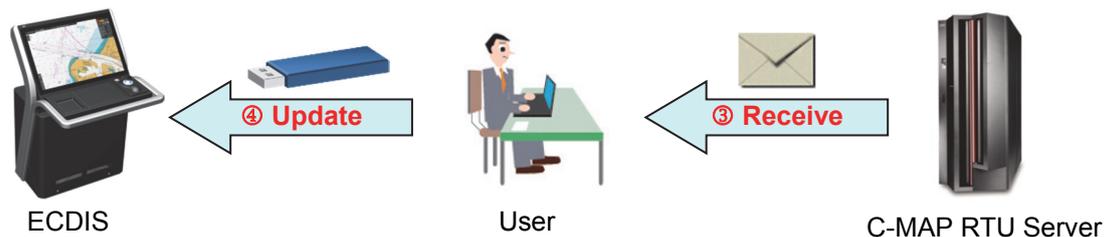
### Real Time Updating (RTU) Service

The Real Time Updating (RTU) Service updates the CM-93/3 chart databases via e-mail using the RTU server.

#### Updating C-MAP Ed. 3 Charts via e-mail



- ① Create an order file (e.g. JRC eT 30001.ord) with C-MAP Chart Manager and save it into USB memory.
- ② Attach the order file to e-mail and send it to the RTU server (e-mail:updates@c-map.no).

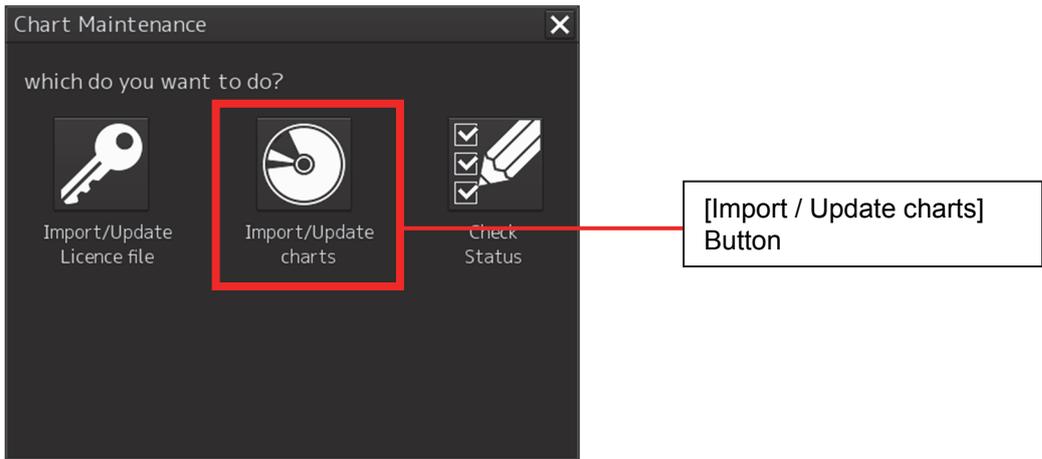


- ③ e-mail is automatically processed by the RTUserver and an answer file is returned. (Example: u001x002.ans)
- ④ Save the answer file into USB memory and then update the CM-93/3 chart database with C-MAP Chart Manager.

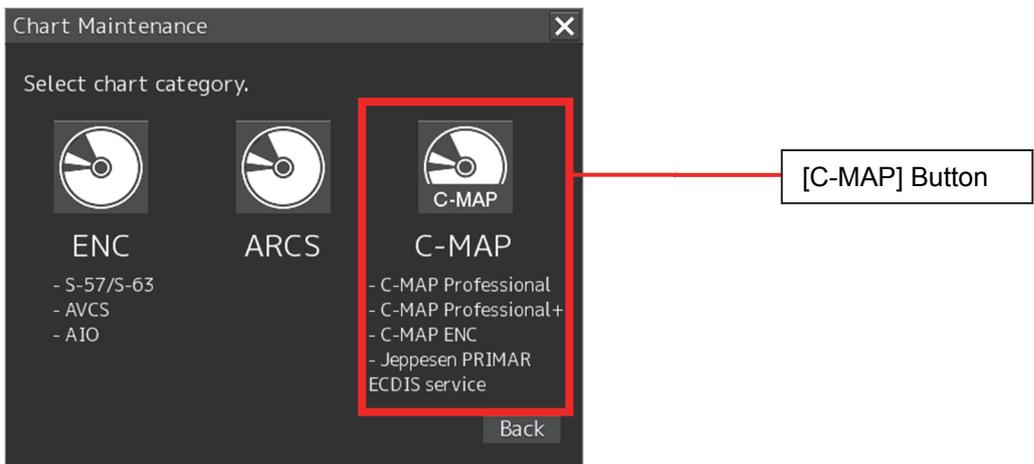
**C-MAP RTU server e-mail address**

**e-mail: updates@c-map.no**

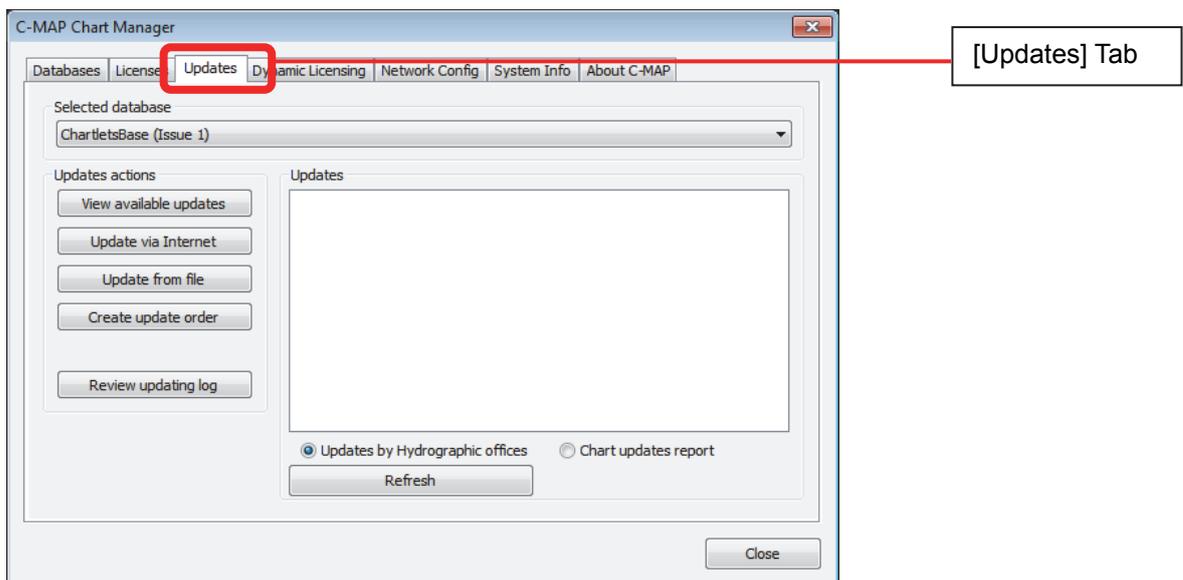
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import / Update charts] button.



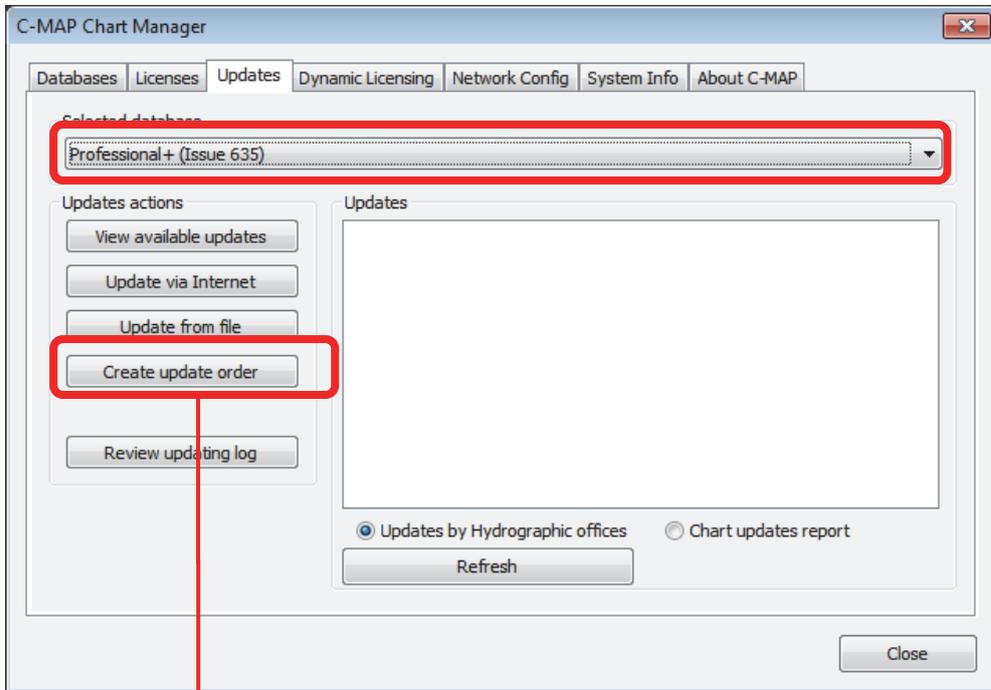
- 3) In the Chart Category Selection window, click the [C-MAP] button.



- 4) Click the [Updates] button in the Home window.

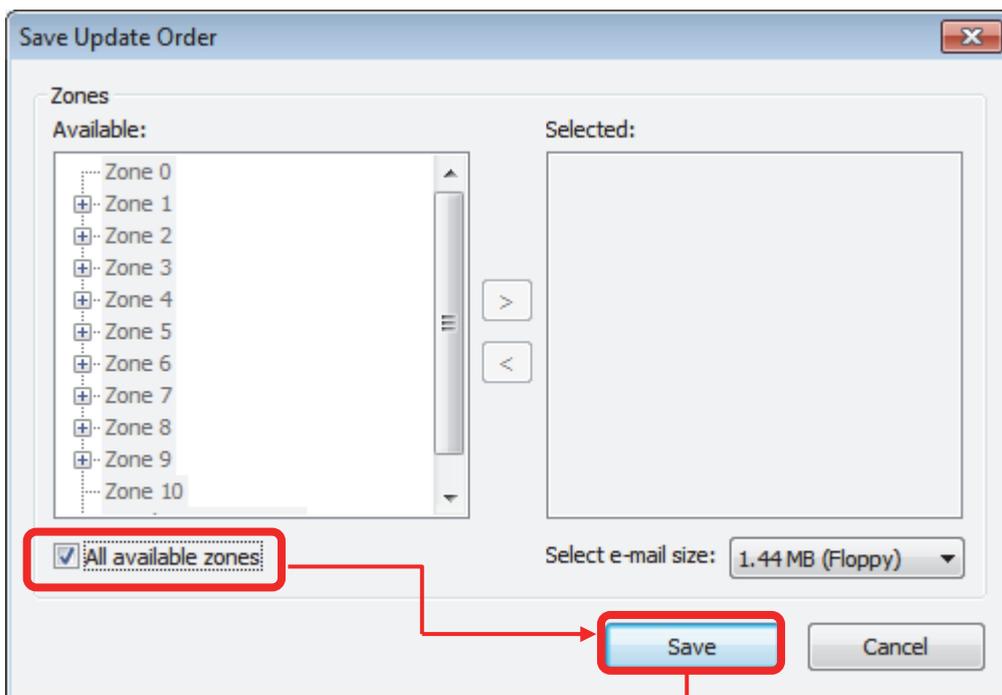


- 5) Insert USB memory into the USB port.
- 6) Select the database from [Select database] tab.
- 7) Click the [Create update order] button.



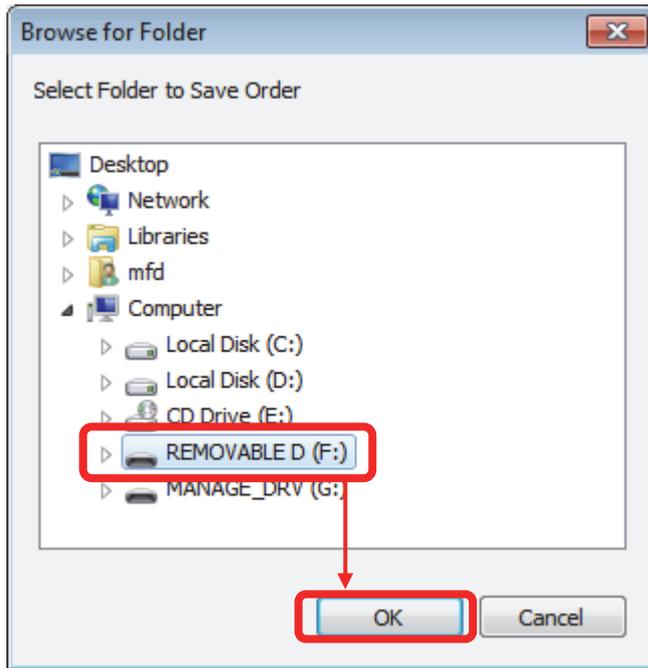
[Create update order] Button

- 8) Check [All available zones] and click the [Save] button.

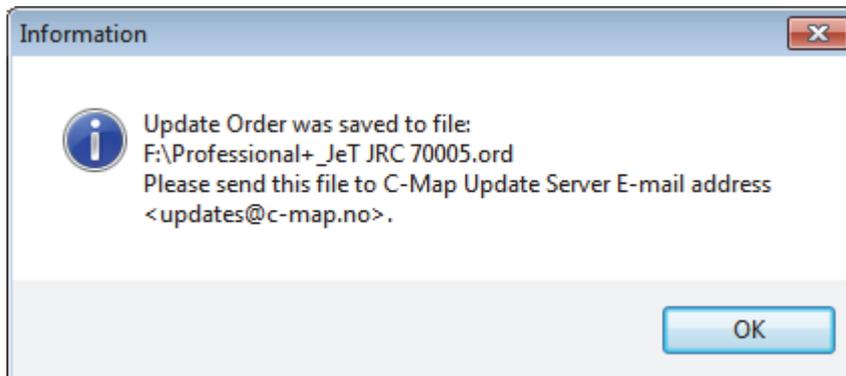


[Save] button

9) Select [Removable Disk] you inserted and then click the [OK] button.

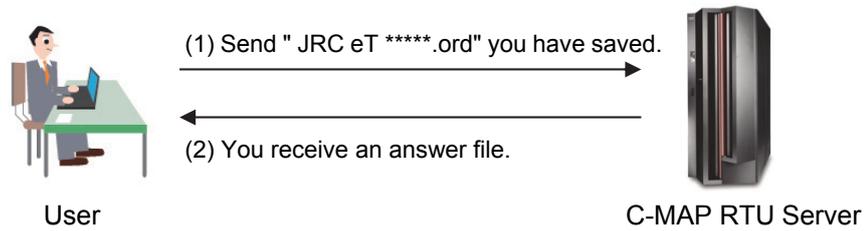


Save complete pop-up is displayed. Click the [OK] button.



10) Attach the saved order file (JRC eT \*\*\*\*\*.ord) to e-mail and send it to the RTU server (e-mail:updates@c-map.no).

e-mail is automatically processed by the RTU server and an answer file is returned. (Example: u001x002.ans)



**RTU server e-mail address: [updates@c-map.no](mailto:updates@c-map.no)**

**Caution:**

- Check your number in e-mail from C-MAP ([updates@c-map.no](mailto:updates@c-map.no)) . One "\*.ans" file is attached to each e-mail.
- File name convention

**uXXXxYYY.ans**

YYY: Number of files  
XXX: File number

Ex: 4 divisions  
u001x004.ans  
u002x004.ans  
u003x004.ans  
u004x004.ans

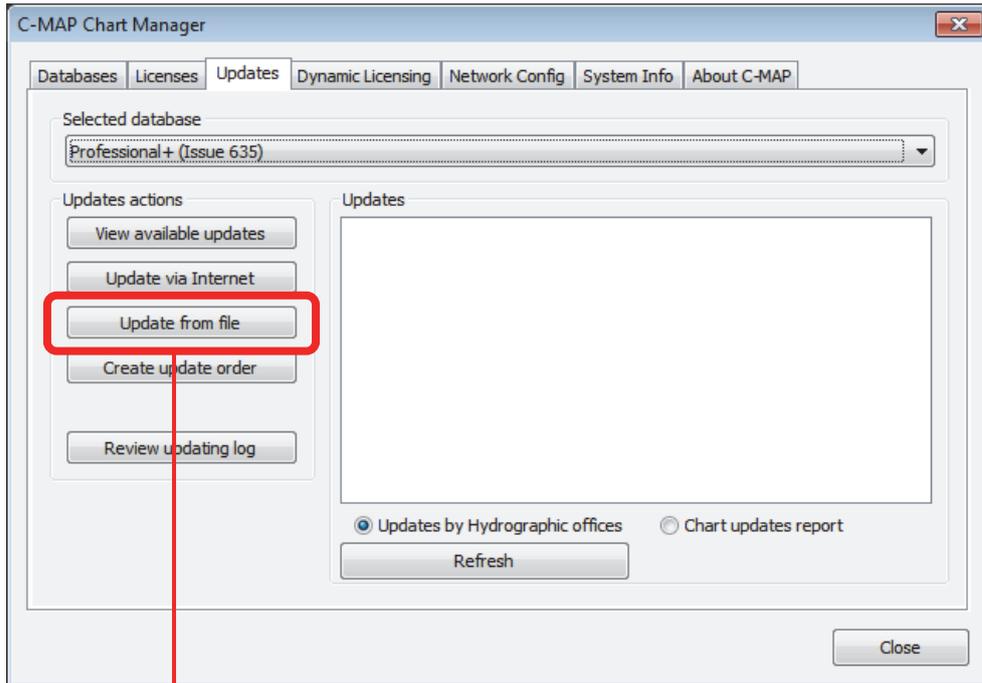
11) Save the received answer file to USB memory.

**Caution:**

- Be sure to save answer files in the root directory of USB memory.

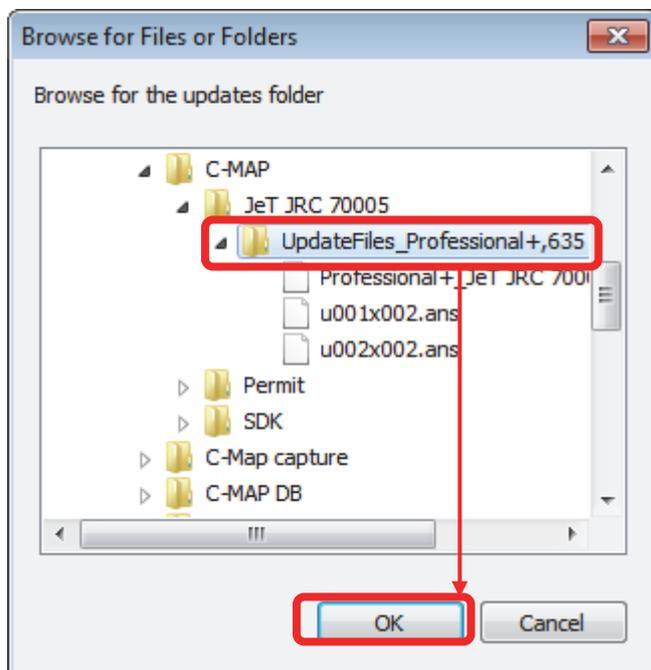
12) Insert a USB memory where you saved the answer file.

13) Click the [Update from file] button.

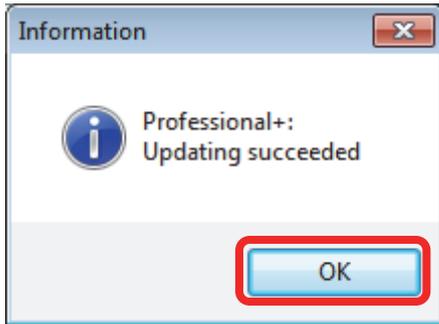


[Update from file] Button

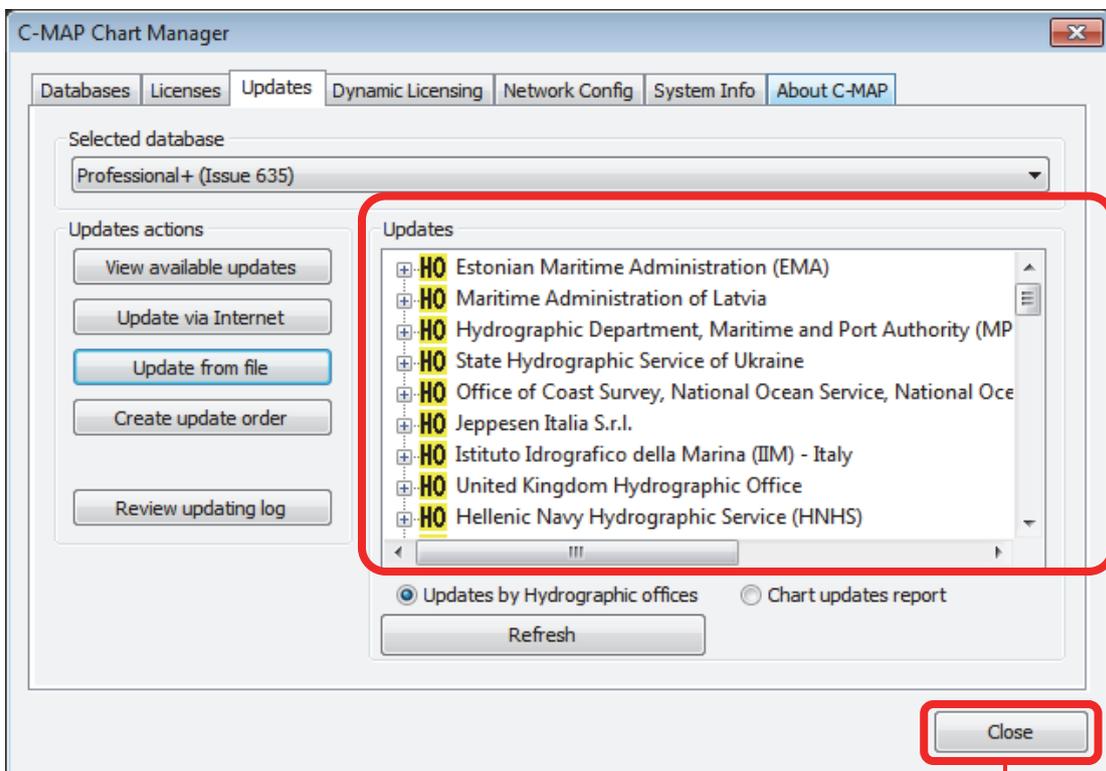
14) Select [Update folder] from the folder of the USB memory that was inserted and click the [OK] button.



15) C-MAP charts are updated. Click the [OK] button.



16) Check the updated charts and then click the [Close] button.



[Close] Button

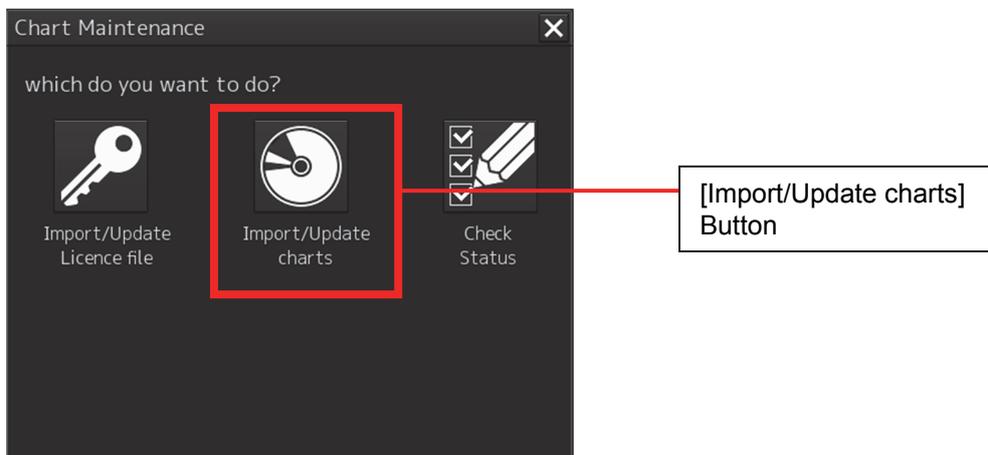
## 4.6 Reporting the Use of Dynamic License

**Caution:**

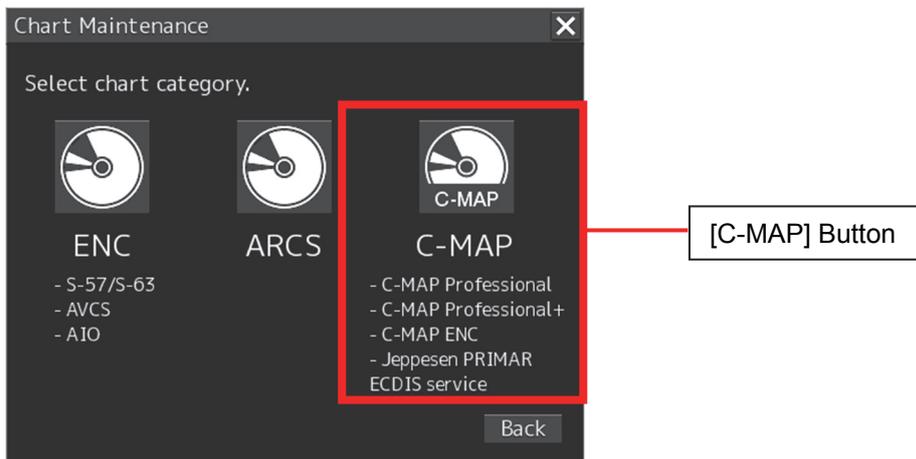
- The customer must send a report to Real Time Updating (RTU) Service. The reporting interval is set to maximum 2 weeks. If no report is sent after 2 weeks, C-Map Ed.3 charts will no longer be displayed.

### 4.6.1 Checking the Next Report Date

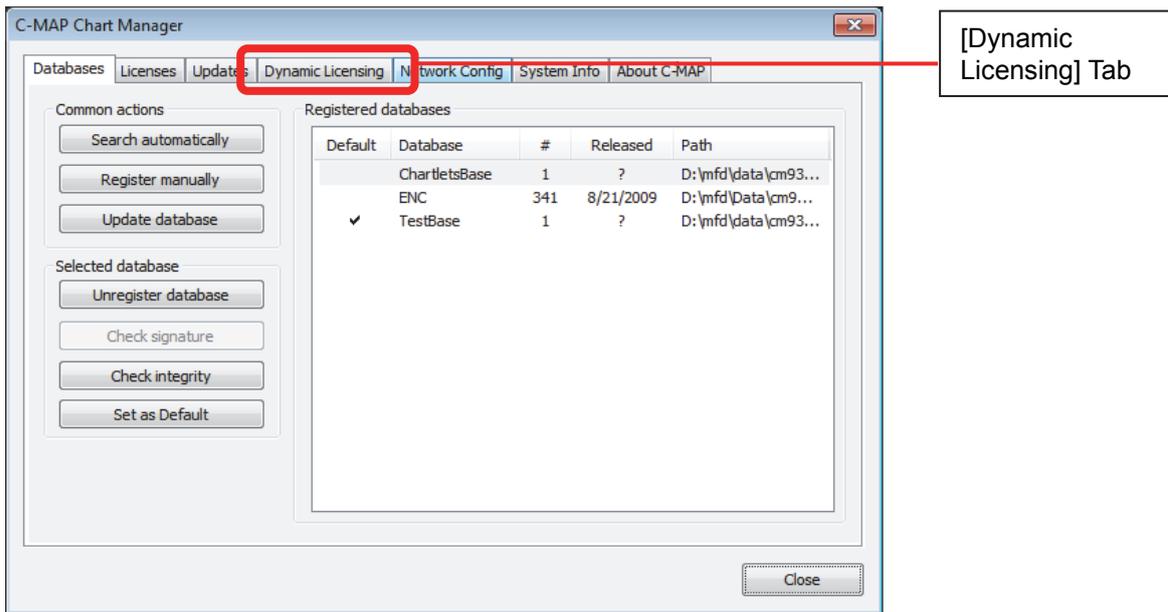
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update charts] button.



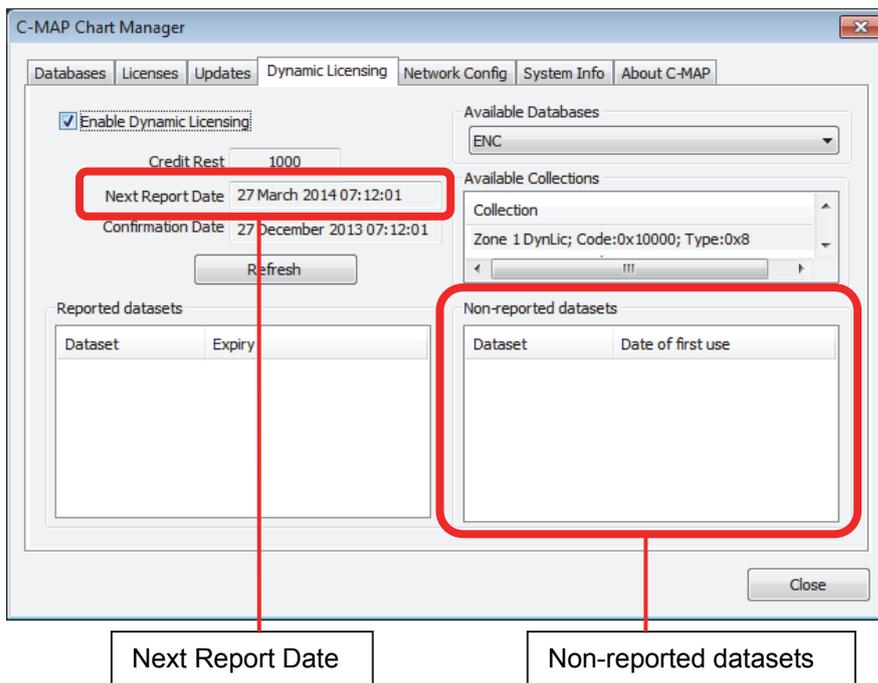
- 3) In the Chart Category Selection window, click the [C-MAP] button.



4) In the C-MAP Chart Manager window, click the [Dynamic Licensing] tab.



5) Check Next Report Date and Non-reported datasets.



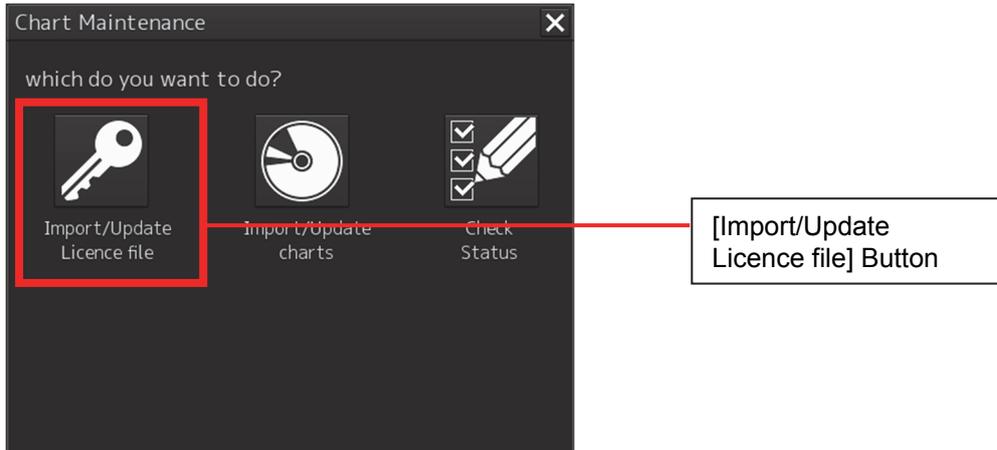
## 4.6.2 Reporting the Use of Dynamic License

The reporting procedure is the same as for the license import, so please see "[4.4.2.2 In the Case of Dynamic Licence](#)".

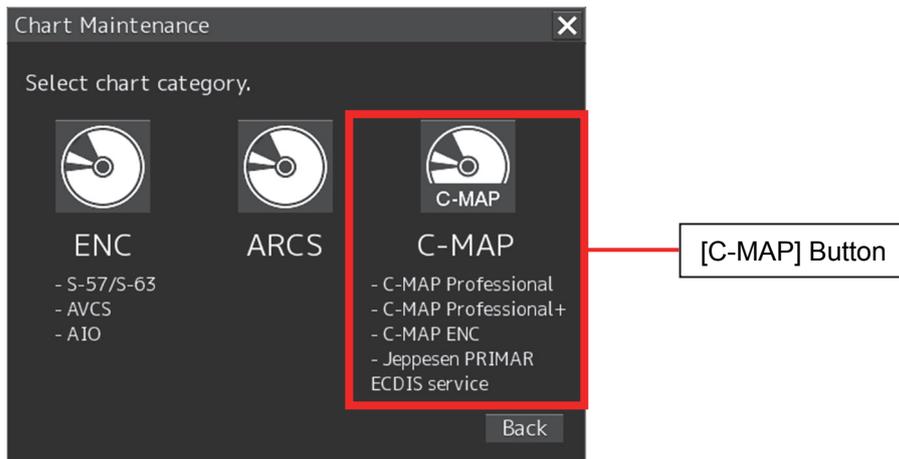
## 4.7 Checking the License

### 4.7.1 In the Case of Static License

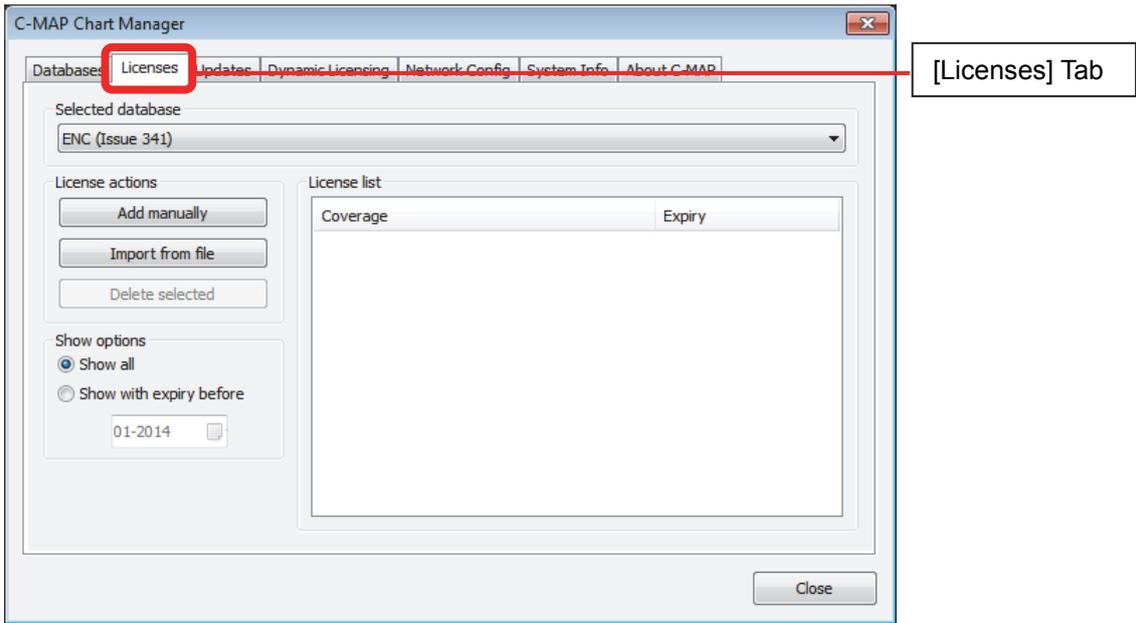
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update Licence file] button.



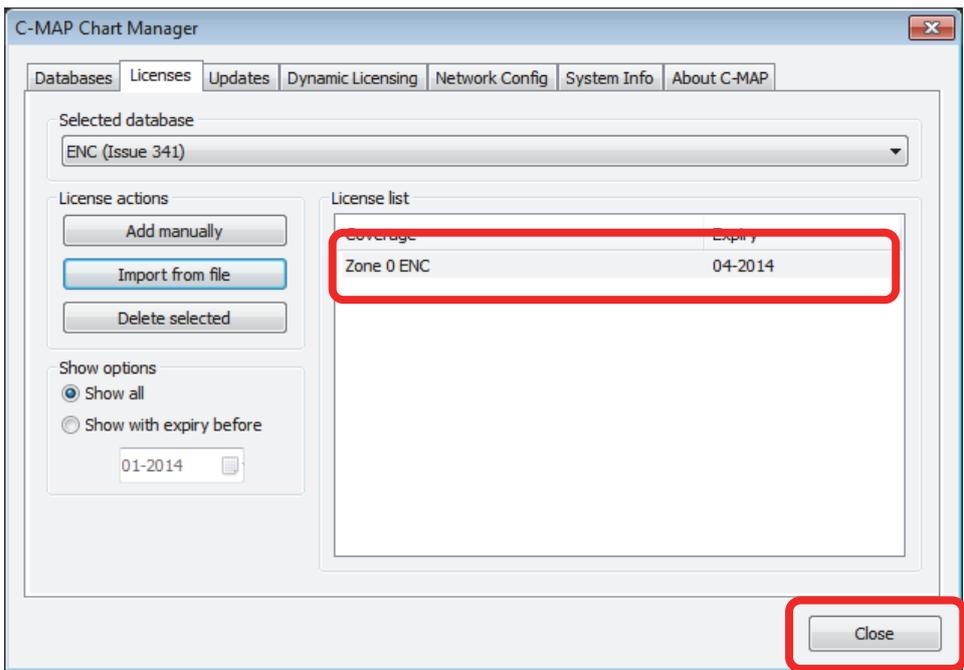
- 3) In the Chart Category Selection window, click the [C-MAP] button.



4) In the C-MAP Chart Manager window, click the [Licenses] tab.



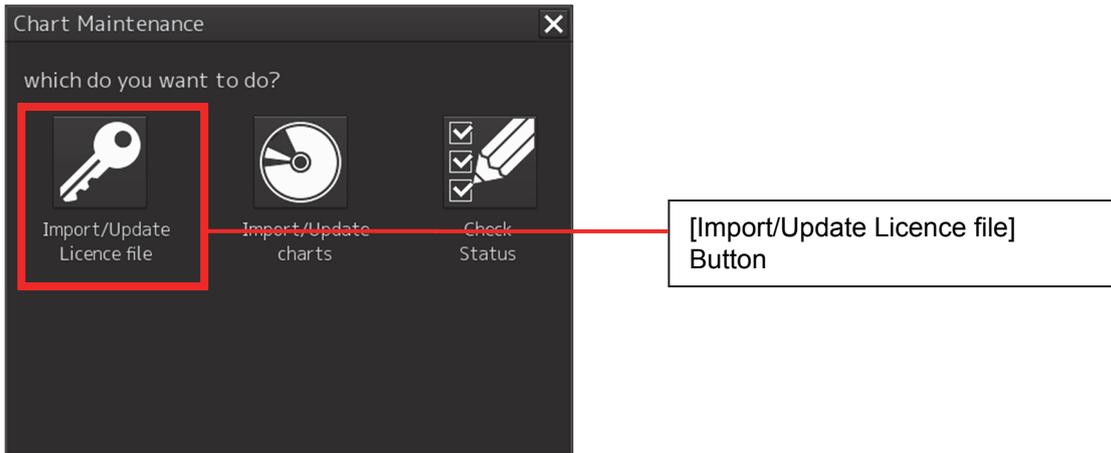
5) Check the installation result as shown below.



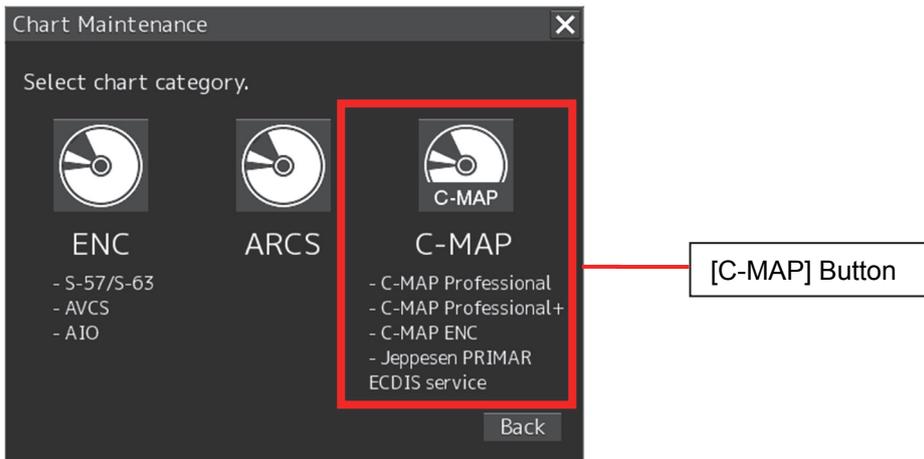
6) After checking, click the [Close] button.

## 4.7.2 In the Case of Dynamic License

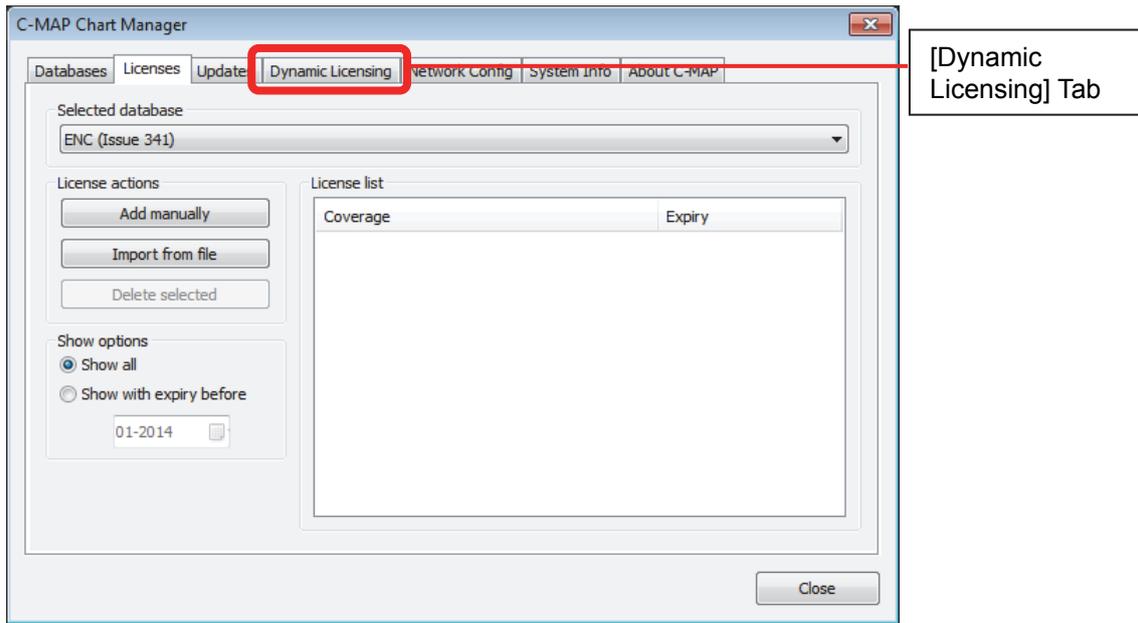
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update Licence file] button.



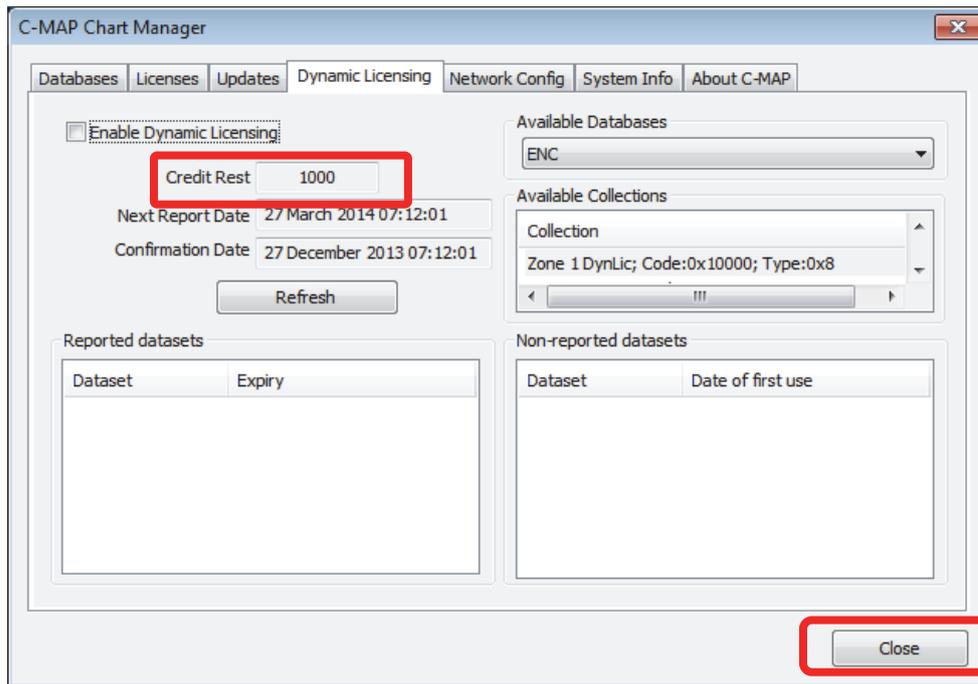
- 3) In the Chart Category Selection window, click the [C-MAP] button.



4) In the C-MAP Chart Manager window, click the [Dynamic Licensing] tab.



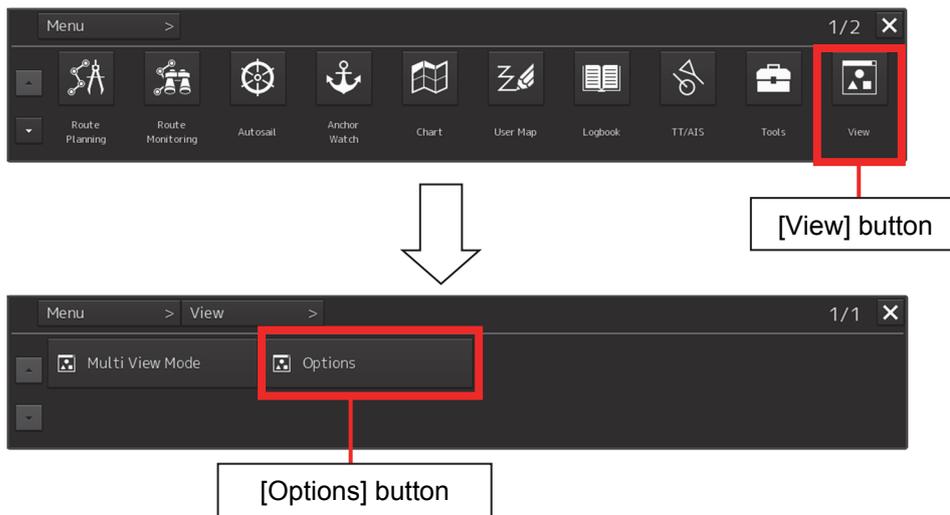
5) Select [Dynamic Licensing] tab and check [Reported datasets] and [Non-reported datasets].



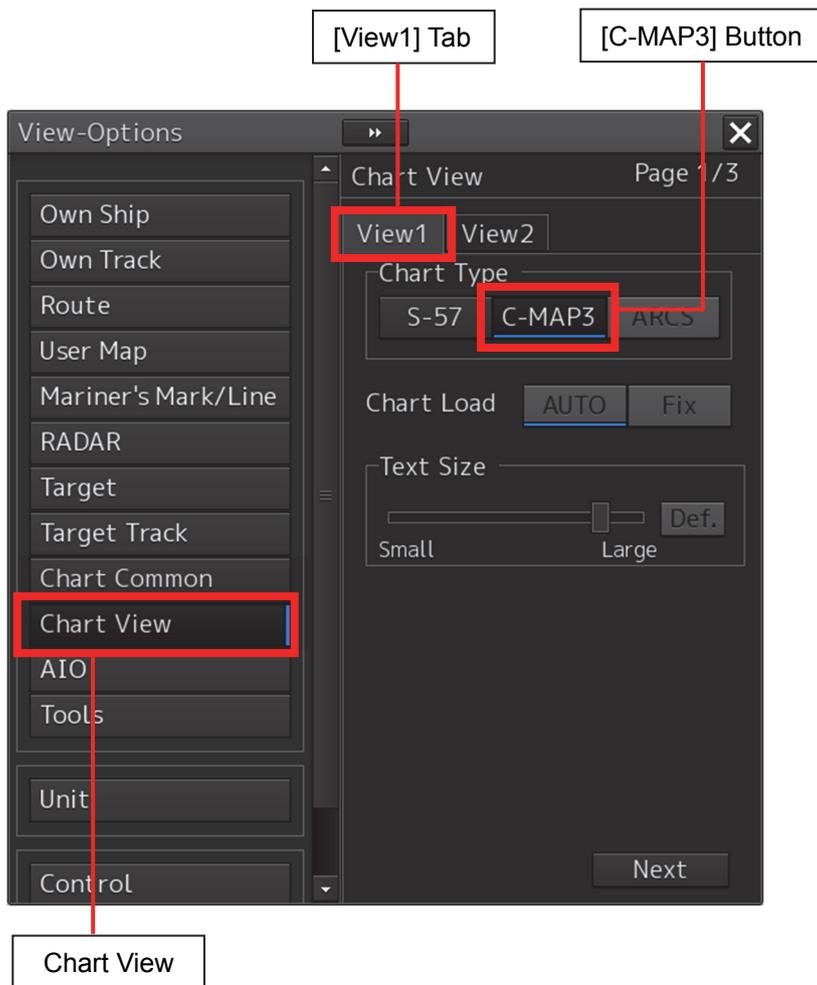
6) After checking, click the [Close] button.

## 4.7.3 In the Case of ECDIS Screen

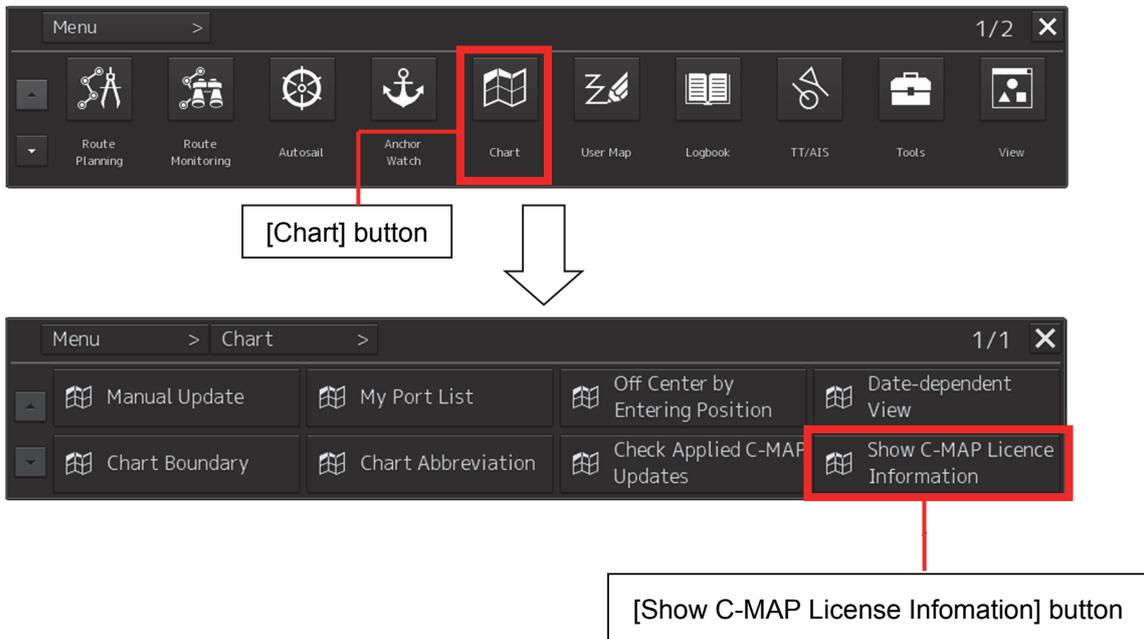
- 1) Click the [Menu] button. In the Menu window, select [View] – [Options] in this order.



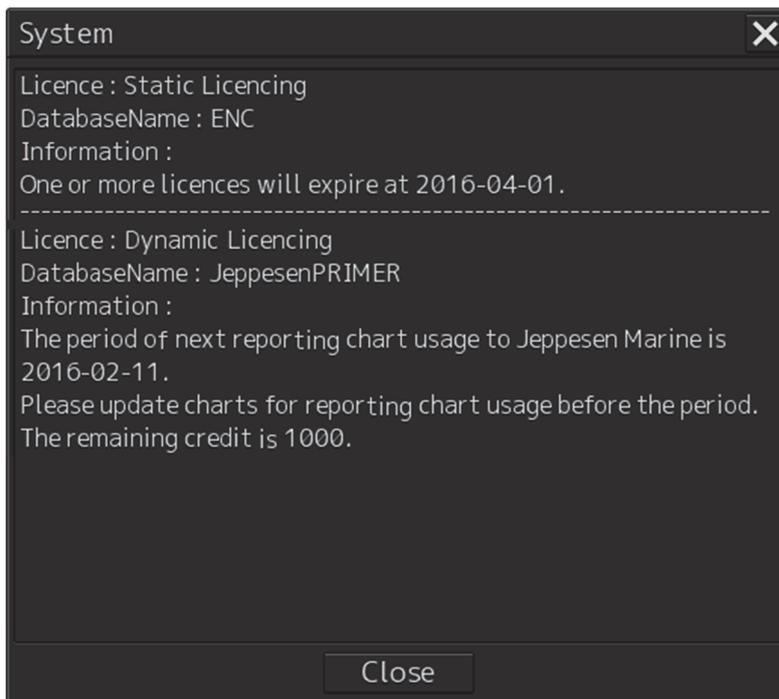
- 2) Click [Chart View]. In Chart Type on the [View1] tab, confirm that the [C-MAP3] button was selected.



- 3) Click the [Menu] button. In the Menu window, select [Chart] – [Show C-MAP License Information] in this order.



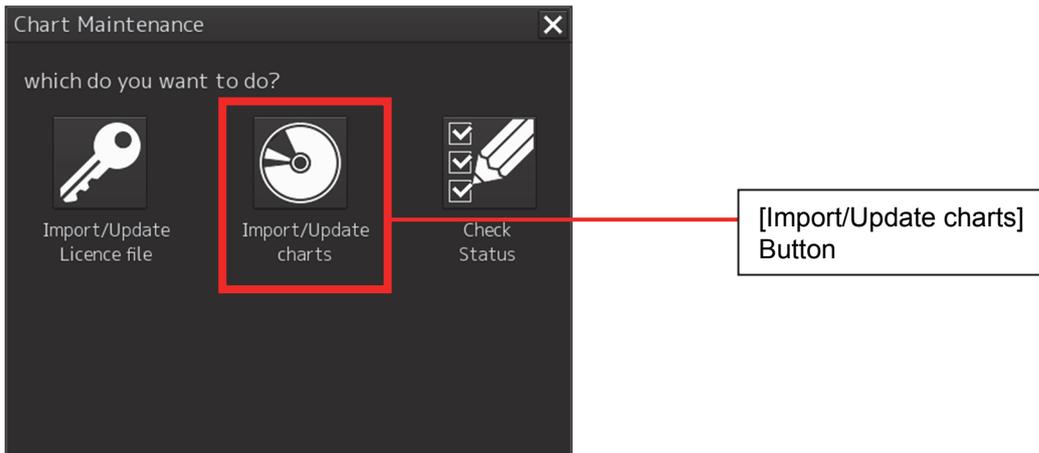
- 4) Confirm that the license information each chart type.



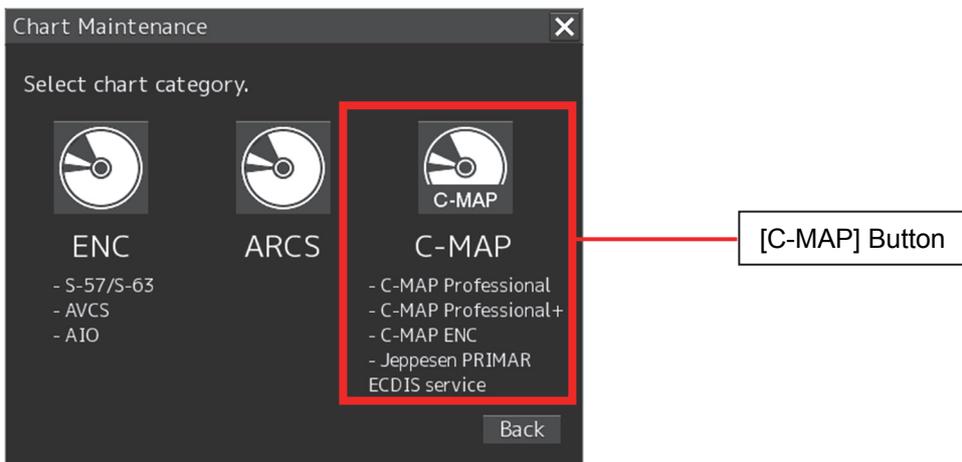
- 5) Click the [x] button or [Close] button to close the window.

## 4.8 Checking the Update List

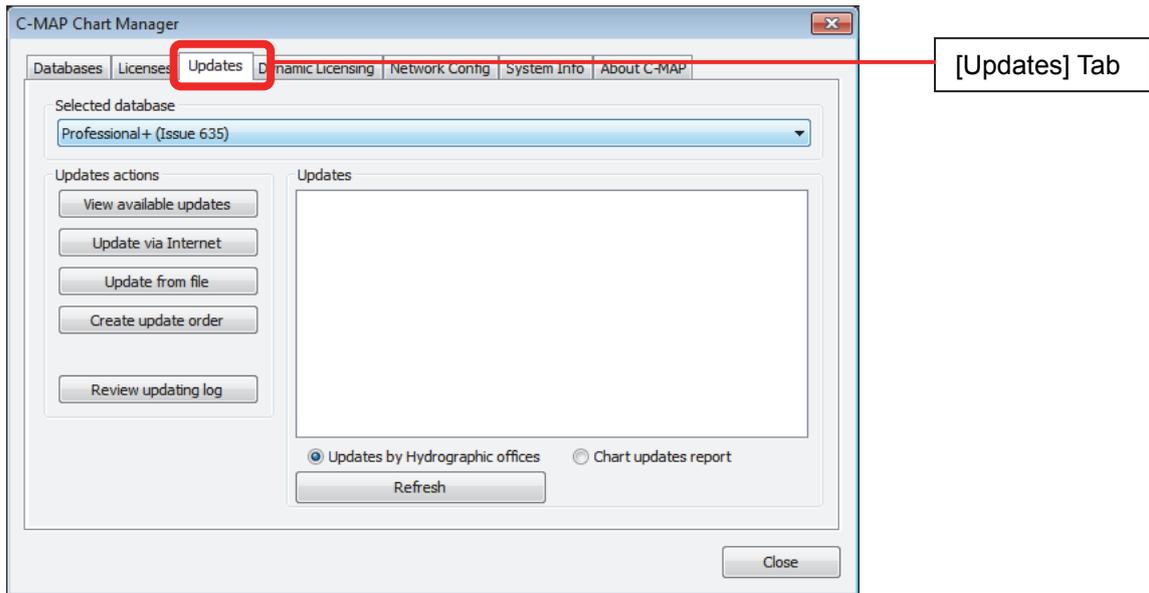
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update charts] button.



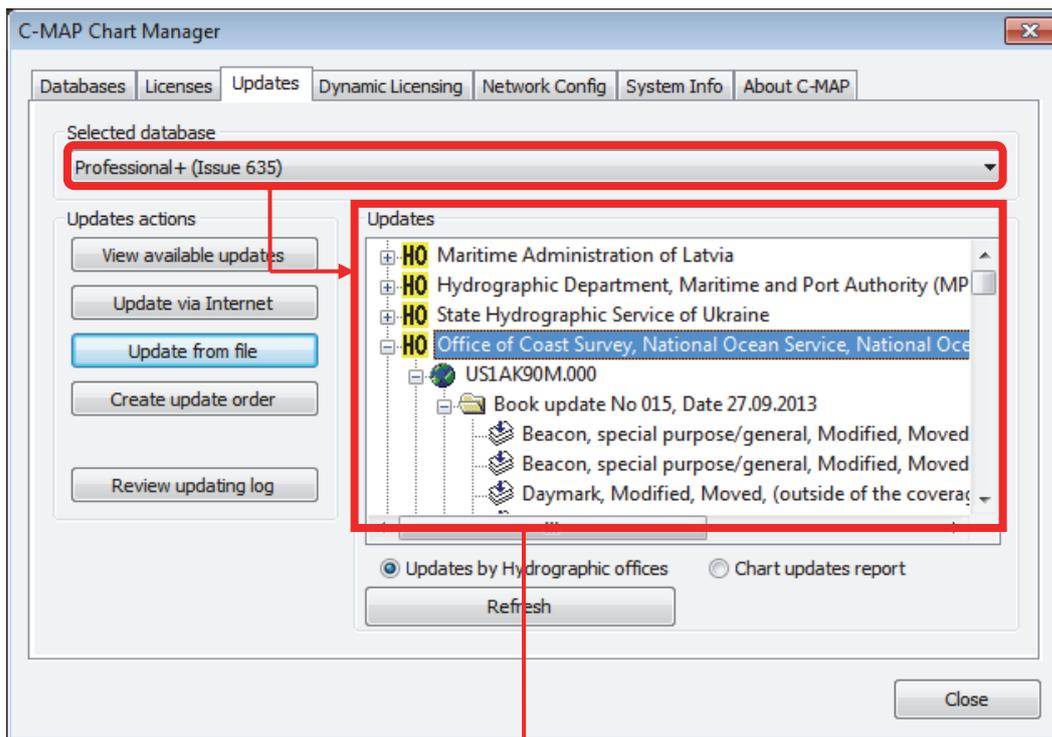
- 3) In the Chart Category Selection window, click the [C-MAP] button.



4) The C-MAP Chart Manager window appears while the [Updates] tab is being selected.

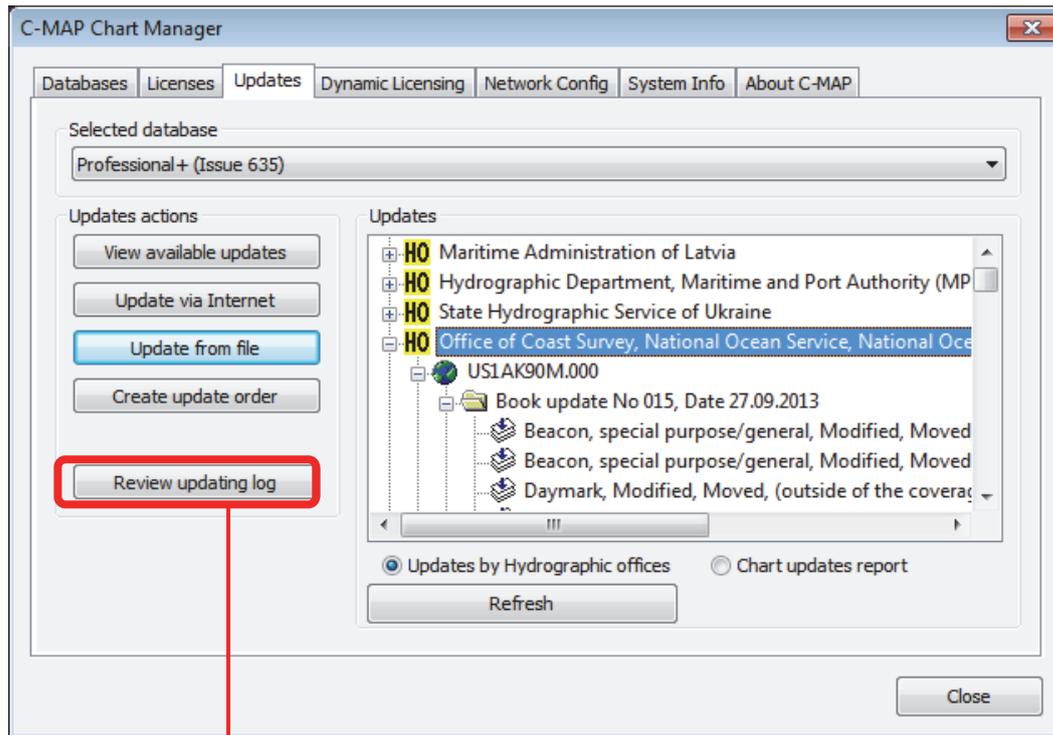


5) From the drop down list of the selected database, check the applied updates.



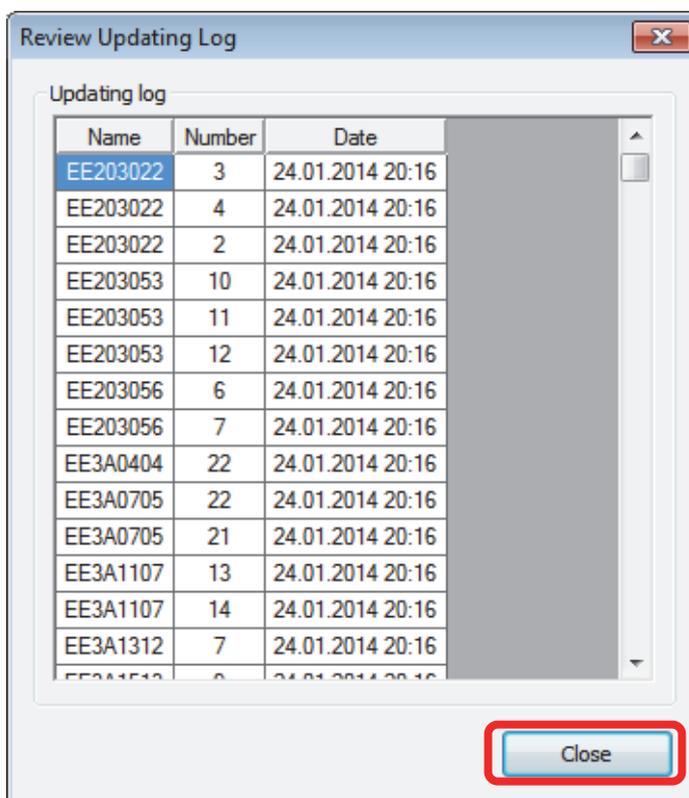
**HO** : Issue source  
 : Chart name  
 : Update unit  
 : Object

6) Click the [Review updating log] button.



[Review updating log] Button

6) Check the Review Updating Log that appears.

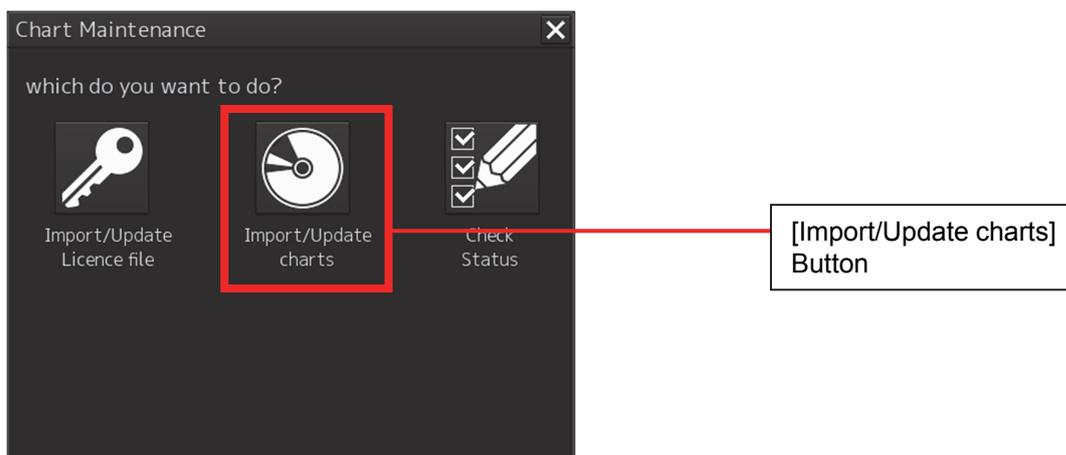


7) After checking, click the [Close] button.

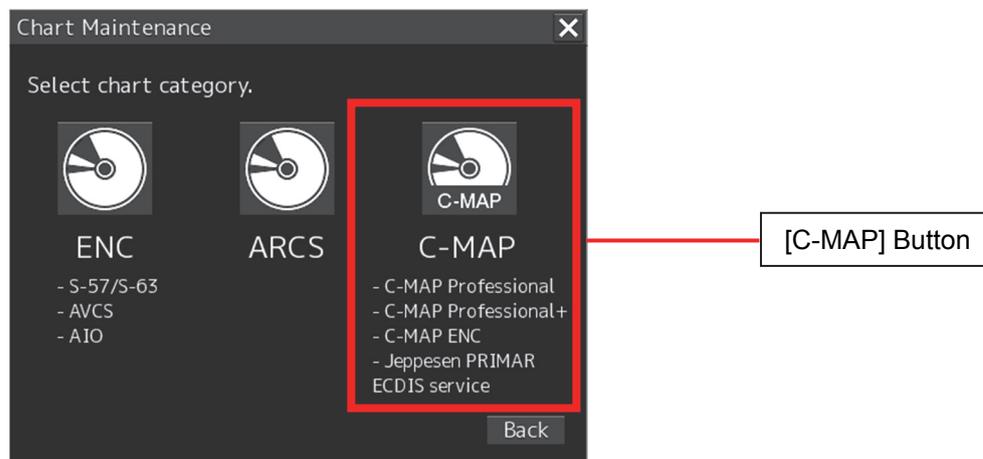
## 4.9 Deleting C-MAP Ed.3 Charts and Licence

If the contents of a contract have changed when the license is update in C-Map Ed.3 (e.g. when updating to register from a trial license to a regular license), the expired license also remains in the data; thus, a license expiration message will be displayed each time ECDIS is started. Using the following procedure, please delete the database and expired license to prevent this message from appearing, and also register only a new license.

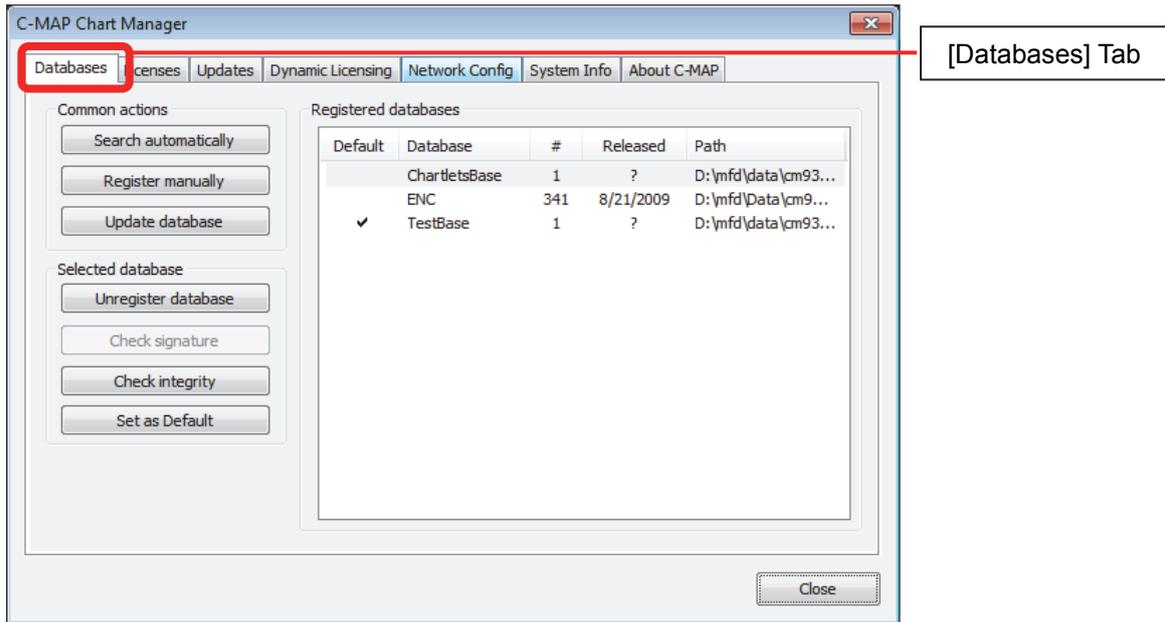
- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Import/Update charts] button.



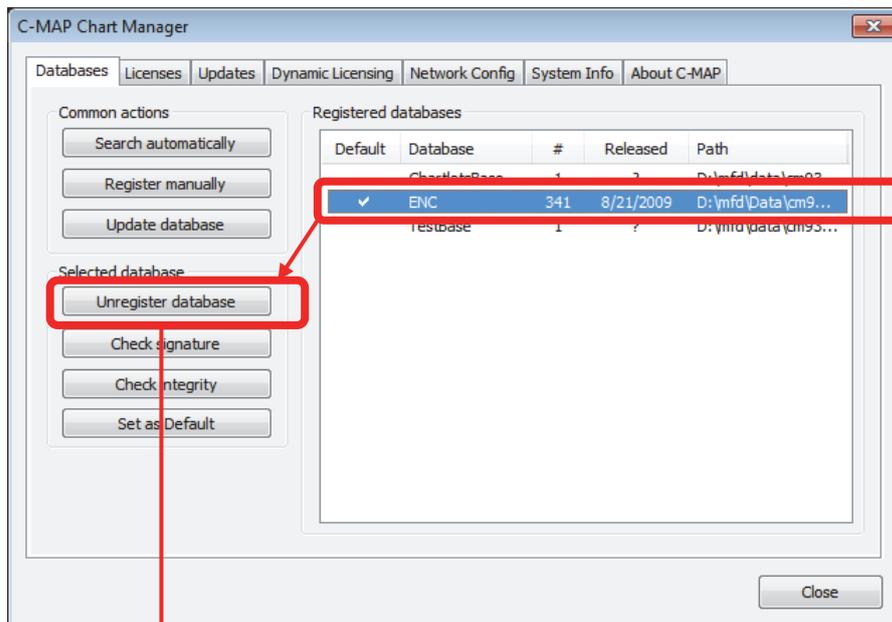
- 3) In the Chart Category Selection window, click the [C-MAP] button.



4) Click the [Databases] tab in the Chart Manager window.

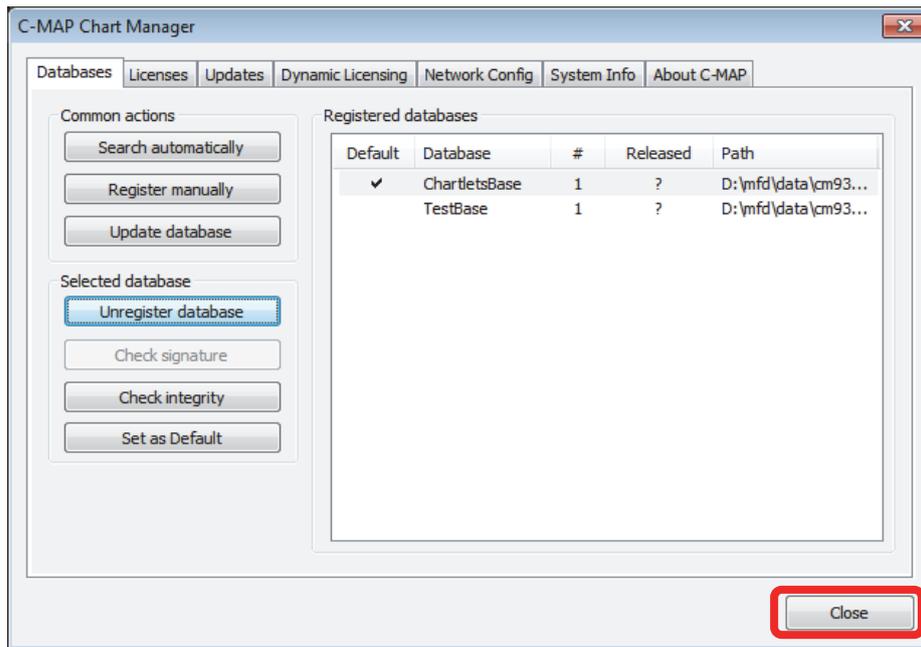


5) Select the database that you want to delete and then click the [Unregister database] button.



[Unregister database] Button

6) Check the deletion of the database.



7) After checking, click the [Close] button.

## 4.10 Using Check Status

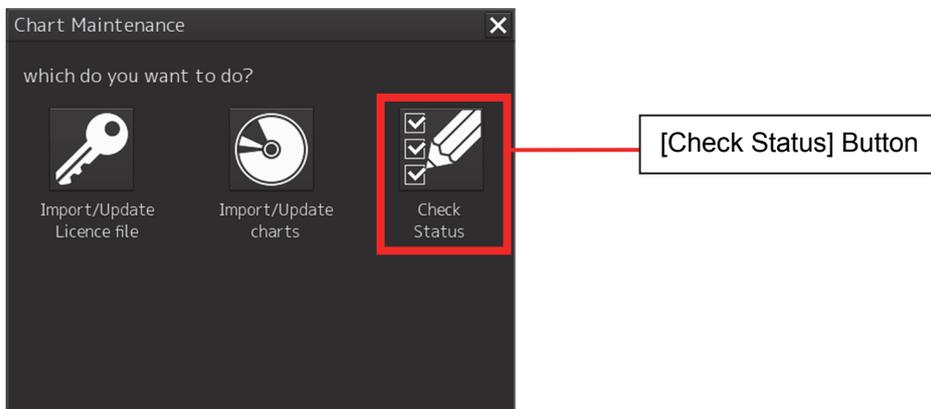
Check Status provides the following functions.

- Display a list of imported charts information.

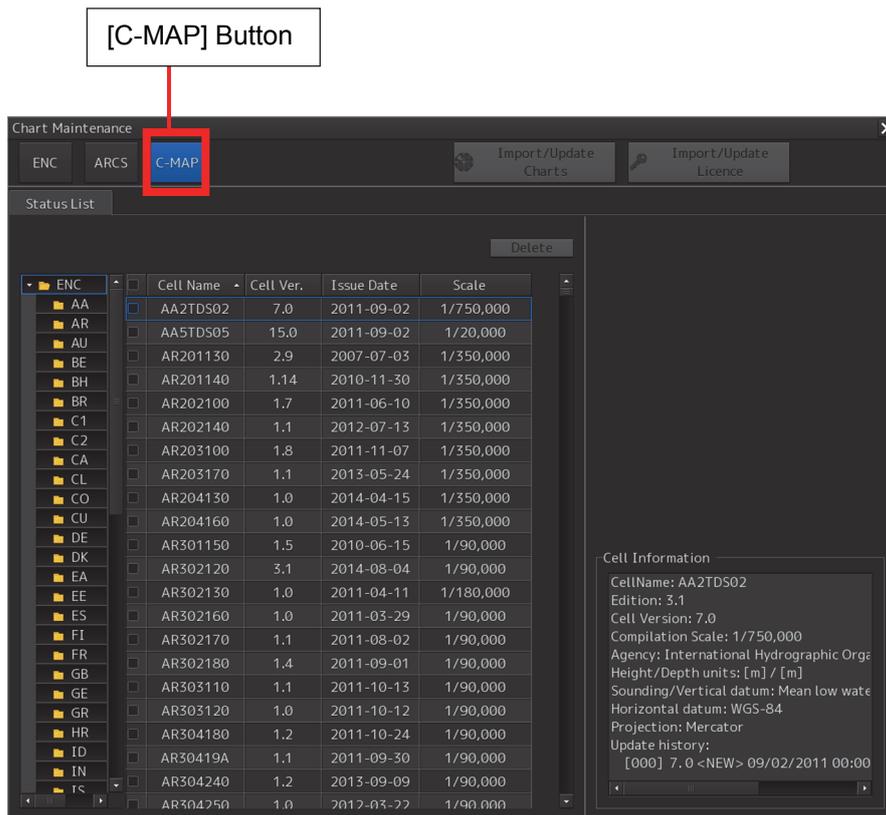
### 4.10.1 How to Start Check Status

On Task Menu, start Check Status according to the following procedure.

- 1) Click the [Chart Maintenance] button on Task Menu.
- 2) In the Home window, click the [Check Status] button. The Check Status window appears.



- 3) Click the [C-MAP] button in the Check Status window.



## 4.10.2 Configuration of the Check Status Window

The Check Status window consists of the Status List window.

- Status List Window: Displays a list of imported charts and chart licence information.

**Chart type button:**  
Used to change chart type

**Import/Update button:**  
When the chart type is C-MAP, these buttons are disabled.  
Import/update the chart and licence on the C-MAP Chart Manager screen.  
For import, refer to “4.3 Importing C-MAP Ed.3” and for update, refer to “4.4 Updating C-MAP Ed.3 Charts”.

**[Delete] button:**  
When the chart type is C-MAP, this button is disabled.  
Delete a chart and a licence on the C-MAP Chart Manager screen.  
Refer to “4.8 Deleting C-MAP Ed.3 Charts and Licence”.

**Cell information:**  
Displays the cell information of the chart.

**Folder list display:**  
Displays the folder containing imported charts.

**Chart list display:**  
Displays a list of imported charts.

ENC	Cell Name	Cell Ver.	Issue Date	Scale
AA	AA2TD502	7.0	2011-09-02	1/750,000
AR	AA5TD505	15.0	2011-09-02	1/20,000
AU	AR201130	2.9	2007-07-03	1/350,000
BH	AR201140	1.14	2010-11-30	1/350,000
BR	AR202100	1.7	2011-06-10	1/350,000
C1	AR202140	1.1	2012-07-13	1/350,000
C2	AR203100	1.8	2011-11-07	1/350,000
CA	AR203170	1.1	2013-05-24	1/350,000
CO	AR204130	1.0	2014-04-15	1/350,000
CU	AR204160	1.0	2014-05-13	1/350,000
DE	AR301150	1.5	2010-06-15	1/90,000
DK	AR302120	3.1	2014-08-04	1/90,000
EA	AR302130	1.0	2011-04-11	1/180,000
EE	AR302160	1.0	2011-03-29	1/90,000
FI	AR302170	1.1	2011-08-02	1/90,000
FR	AR302180	1.4	2011-09-01	1/90,000
GB	AR303110	1.1	2011-10-13	1/90,000
GE	AR303120	1.0	2011-10-12	1/90,000
GR	AR304180	1.2	2011-10-24	1/90,000
HR	AR30419A	1.1	2011-09-30	1/90,000
ID	AR304240	1.2	2013-09-09	1/90,000
IN	AR304250	1.0	2012-03-22	1/90,000



# Section 5 Using ChartCo

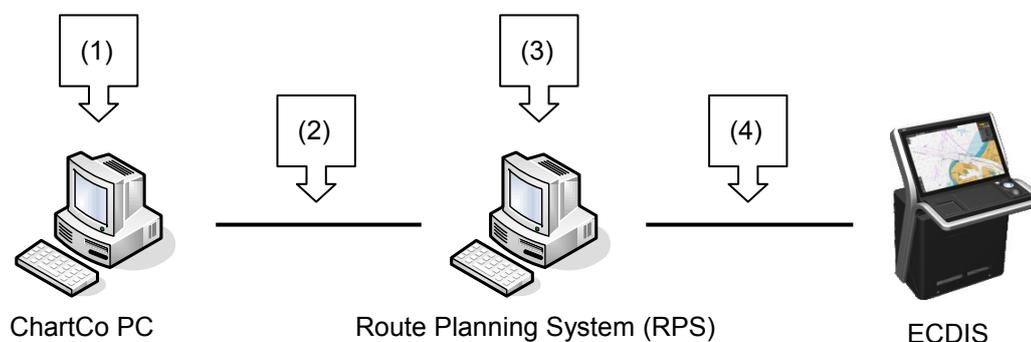
## 5.1 About ChartCo

ChartCo is chart data providing service by ChartCo Company. Update information of chart can download via ChartCo. The chart of Route Planning System (RPS)/ECDIS can update via LAN without using chart CD.

Caution:

ChartCo function can only update the chart data.

When import the Base chart first time, use the Base CD.



How to use ChartCo function;

- 1) Getting the chart data in ChartCo PC, and transferring the chart data from ChartCo PC to RPS.
- 2) Getting the chart data in RPS.
- 3) Updating the chart in RPS.
- 4) Updating the chart in ECDIS.

Caution:

When update the chart data using ChartCo function, need to transferred chart data to RPS from ChartCo PC.

Refer to the instruction manual of ChartCo, or "Reference document 7: Transfer Chart Data from ChartCo PC to RPS" in this manual.

## 5.2 Transfer Chart Data from ChartCo PC to RPS

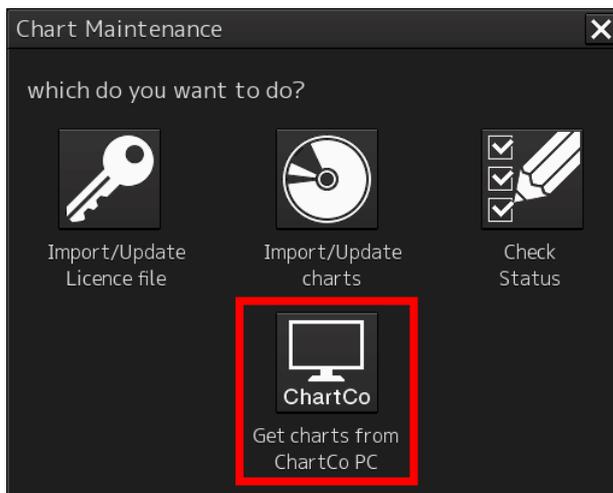
When get the chart data in ChartCo PC, refer to instruction manual of ChartCo.

When transfer the chart data from ChartCo PC to RPS, refer to instruction manual of ChartCo or “Reference document 7: Transfer Chart Data from ChartCo PC to RPS” in this manual.

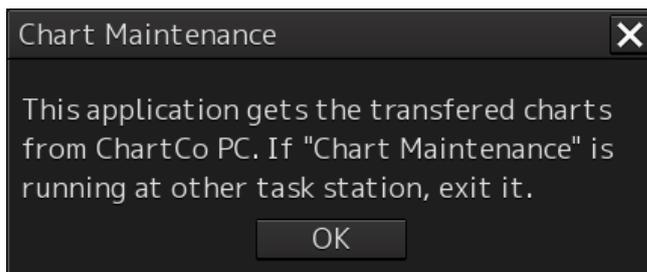
## 5.3 Getting Chart Data in RPS

- 1) Start RPS, and start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Get Charts from ChartCo PC] button.

<Home Window>

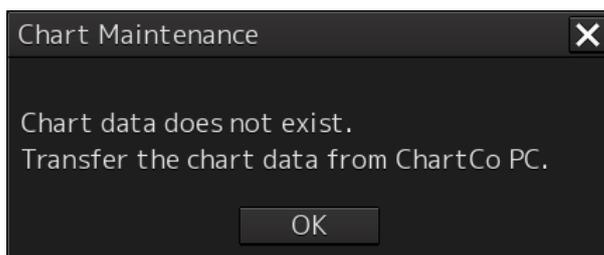


- 3) When display the window as shown below, click the [OK] button.



When not transfer chart data from ChartCo PC to RPS, the window as shown below is displayed.

Click the [OK] button, transfer chart data to RPS.



4) ChartCo window is displayed.

The screenshot shows a window titled "Chart Maintenance" with a close button (X) in the top right corner. Below the title bar is a section labeled "Chart OnLine Data". This section contains a table with three columns: "Chart", "No.", and "Time(YYYY/MM/DD HH:MM:SS)".

Chart	No.	Time(YYYY/MM/DD HH:MM:SS)
ENC	00002	2015/08/20 05:36:41
ARCS	00000	

Below the table is a button labeled "Get New Data".

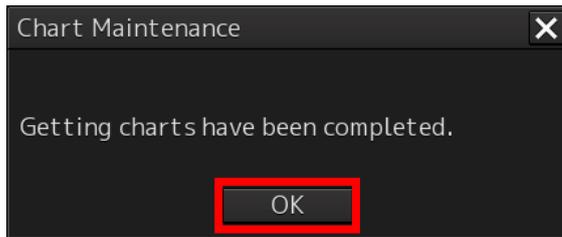
Annotations:

- A red box highlights the "No." and "Time" columns of the table. A callout box points to this area with the text: "Time: Date and time of getting the chart data".
- A red box highlights the "Get New Data" button. A callout box points to it with the text: "[Get New Data] button: Getting the chart data".
- A red line connects the "No." column to a callout box with the text: "No. : Number of getting the chart data".

5) Click the [Get New Data] button, start get the data.

This screenshot is identical to the one above, showing the "Chart Maintenance" window with the "Chart OnLine Data" table and the "Get New Data" button. In this view, a red box highlights the "Get New Data" button, and a callout box points to it with the text: "[Get New Data] button".

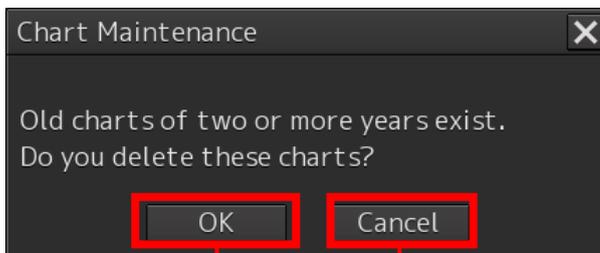
- 6) Getting the charts is completed. Click the [OK] button.



If the chart which passed more than 2 years after getting is present:

If the chart which passed more than 2 years after getting is present, the dialog as shown below is displayed.

When the chart is deleted, click the [OK] button. When the chart is not deleted, click the [Cancel] button.



[OK] button:

The chart which passed more than 2 years after getting is deleted.

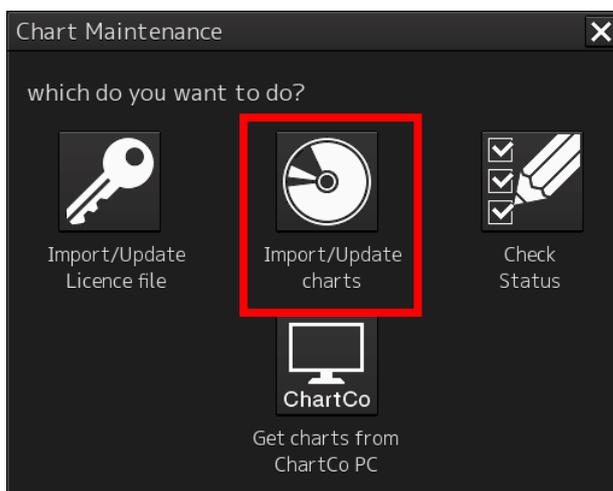
[Cancel] button:

Not delete.

## 5.4 Updating Chart Data in RPS

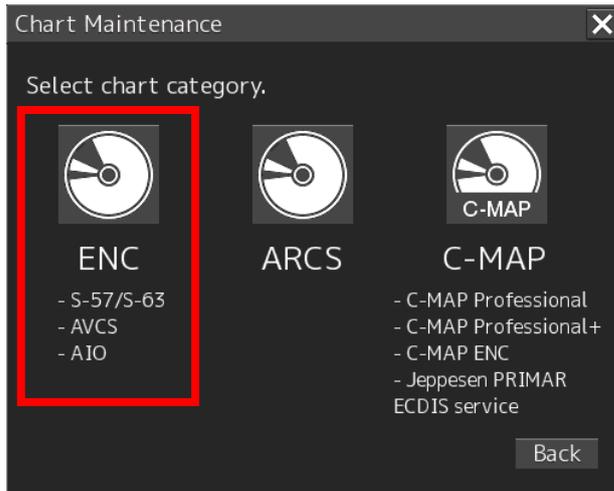
- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [Import / Update Charts] button.

<Home Window>



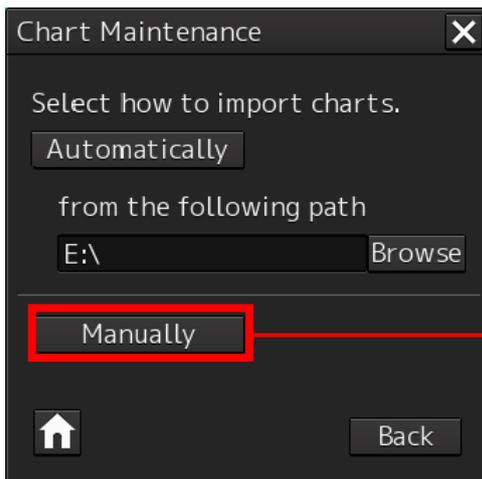
- 3) In the Chart Category Selection window, click the [ENC] button.

<Chart Category Selection window>



- 4) In the Chart Import Selection window, click the [Manually] button. The Chart Data Path Selection Window appears.

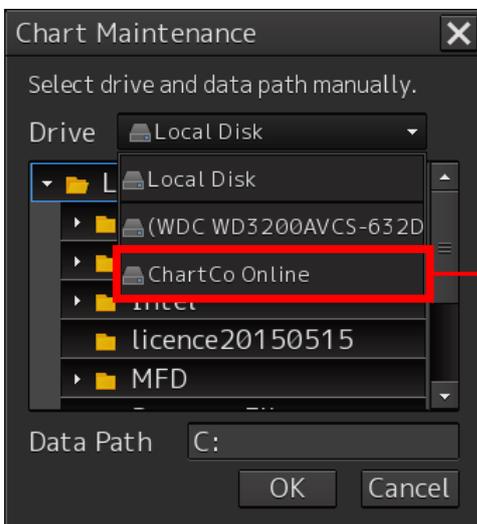
<Chart Import Selection window>



[Manually] button:  
Select a path manually and then start importing.

- 5) Specify "ChartCo Online" in Drive.

< Path Selection Window >



[ChartCo Online] drive

6) Select the folder that you want to import in “ChartCo Online” drive.

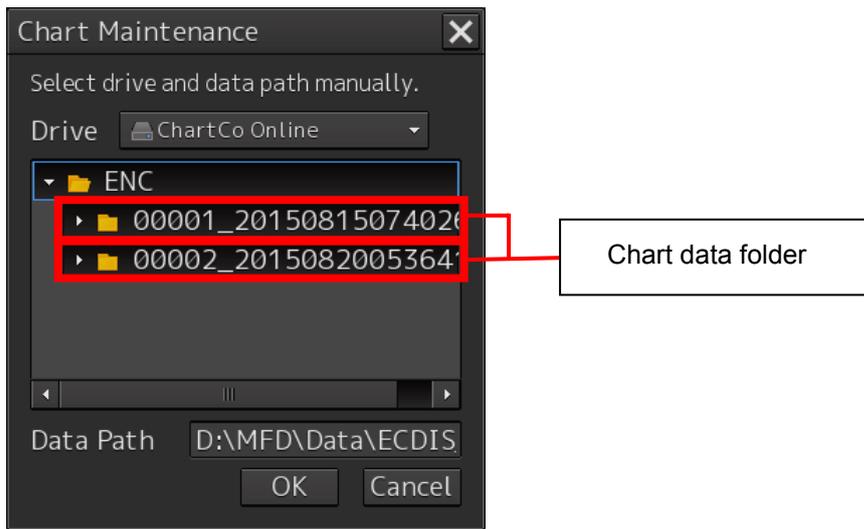
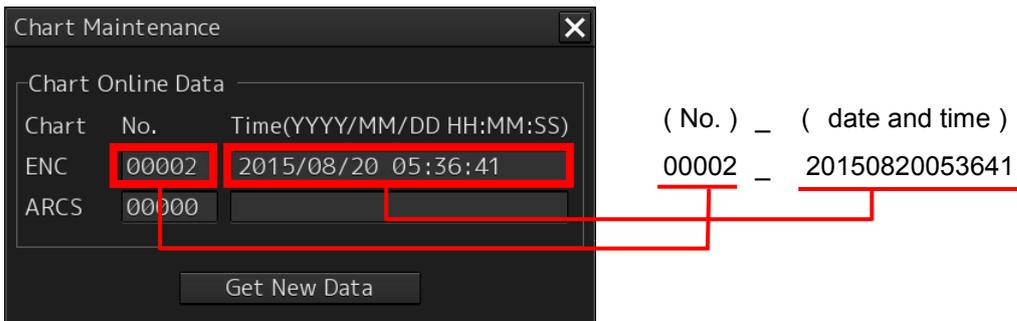


Chart data transferring from RPS is saved folder name as shown below.



7) Click the [OK] button, Searching chart data started.

For the succeeding operation, see “2.1.2 Importing Charts”.

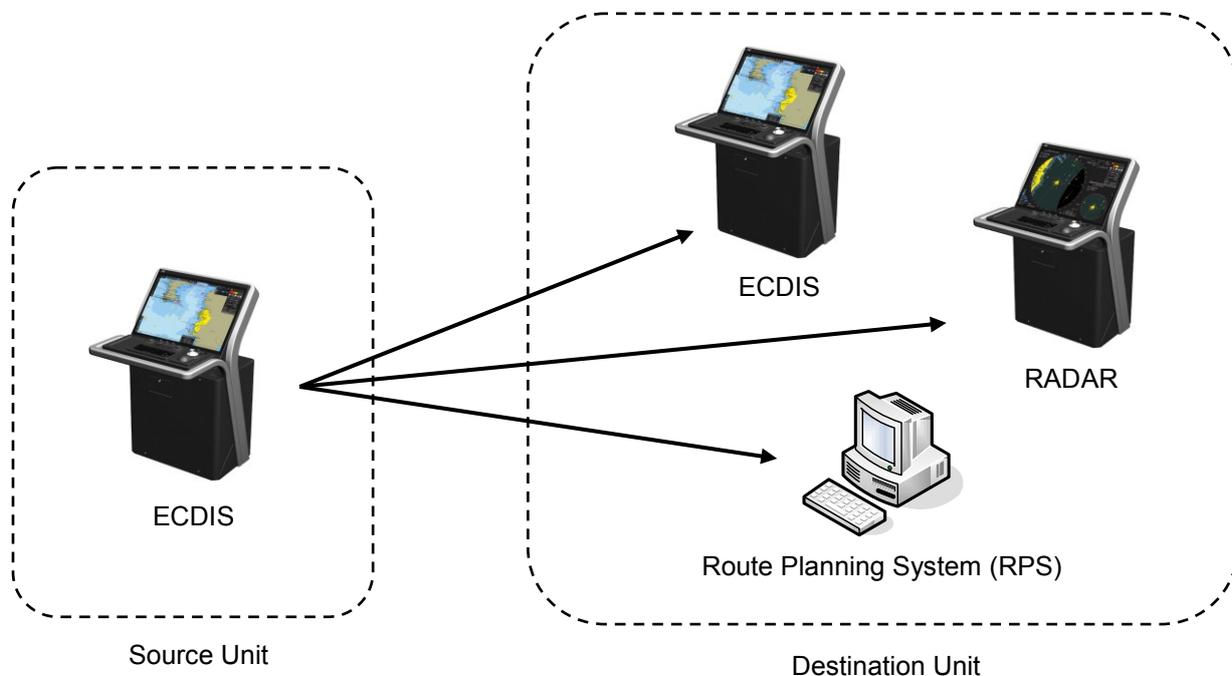
## 5.5 Updating Chart Data in ECDIS

Procedure in ECDIS is same in RPS. See “5.4 Updating Chart Data in RPS”.

# Section 6 Using SENC SYNC

## 6.1 About SENC SYNC

SENC SYNC is the function that synchronise chart data with other ECDIS, or Route Planning System (RPS) via LAN.



“Source Unit” is transmitted the chart data, and “Destination Unit” is received the chart data.

The chart data which is imported in source unit is copied to destination unit.

The data can be synchronised are as follows;

- ENC chart
- Manual Update data
- AIO data

Caution:

ENC chart can only use SENC SYNC function.

ARCS chart and C-MAP Ed.3 chart cannot use.

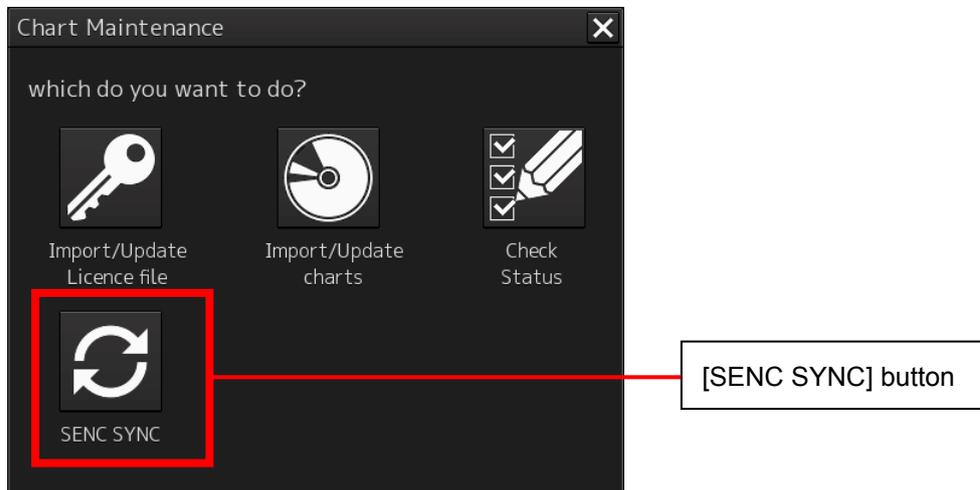
Caution:

When display the chart on RADAR screen, the licence needs to attach chart display option or ECDIS licence.

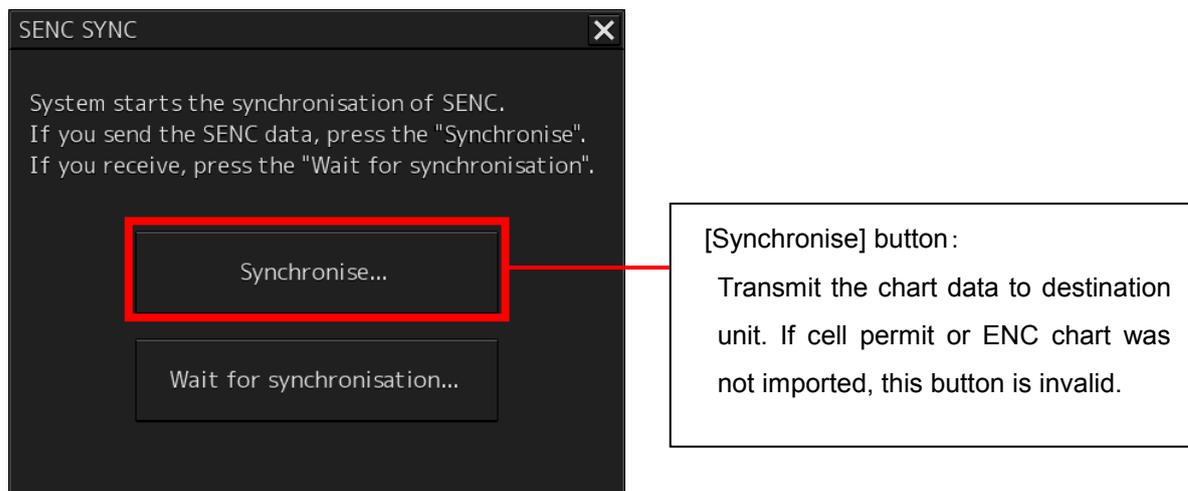
## 6.2 Transmit the Chart Data

- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [SENC SYNC] button.

<Home Window>



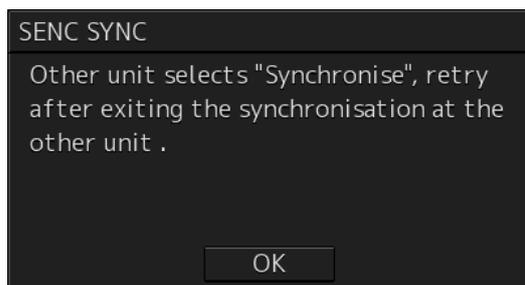
- 3) SENC SYNC window was displayed. Click the [Synchronise] button.



If other unit was selected [Synchronise], the dialog as shown below is displayed.

Only one unit can select [Synchronise].

Click the [OK] button, or close the SENC SYNC window in other unit.



4) Status of destination unit is displayed.

From:  
Source unit name

Last SYNC Result (UTC) :  
Result of last synchronise each unit.

SENC SYNC ✕

From: No.1 ECDIS

To:

Machine Name	Status	Last SYNC Result(UTC)
No.1 RPS	Ready	2015-08-06 11:48:59 Completed
No.2 ECDIS	Not found	2015-08-06 11:49:46 Completed
No.1 RADAR	Communication failed	2015-08-06 11:49:12 Completed

Recheck

SYNC

Cancel

Machine Name :  
Each destination unit name

Status :  
Status of each destination unit

[Recheck] button :  
Recheck status of destination unit.

[SYNC] button :  
Start synchronise.  
When there is one or more unit which status is "Ready", this button is valid.

Status of destination unit is as follows;

Status	Detail
Ready	Destination unit can synchronise.
Searching...	Checking status of destination unit.
Not found	Destination unit is not found.
Communication failed	Destination unit is failed to communication.
Not waiting for synchronisation	Destination unit is not waiting for synchronisation.

5) Click the [SYNC] button, start synchronisation.

Progress bar :  
Progress of synchronisation

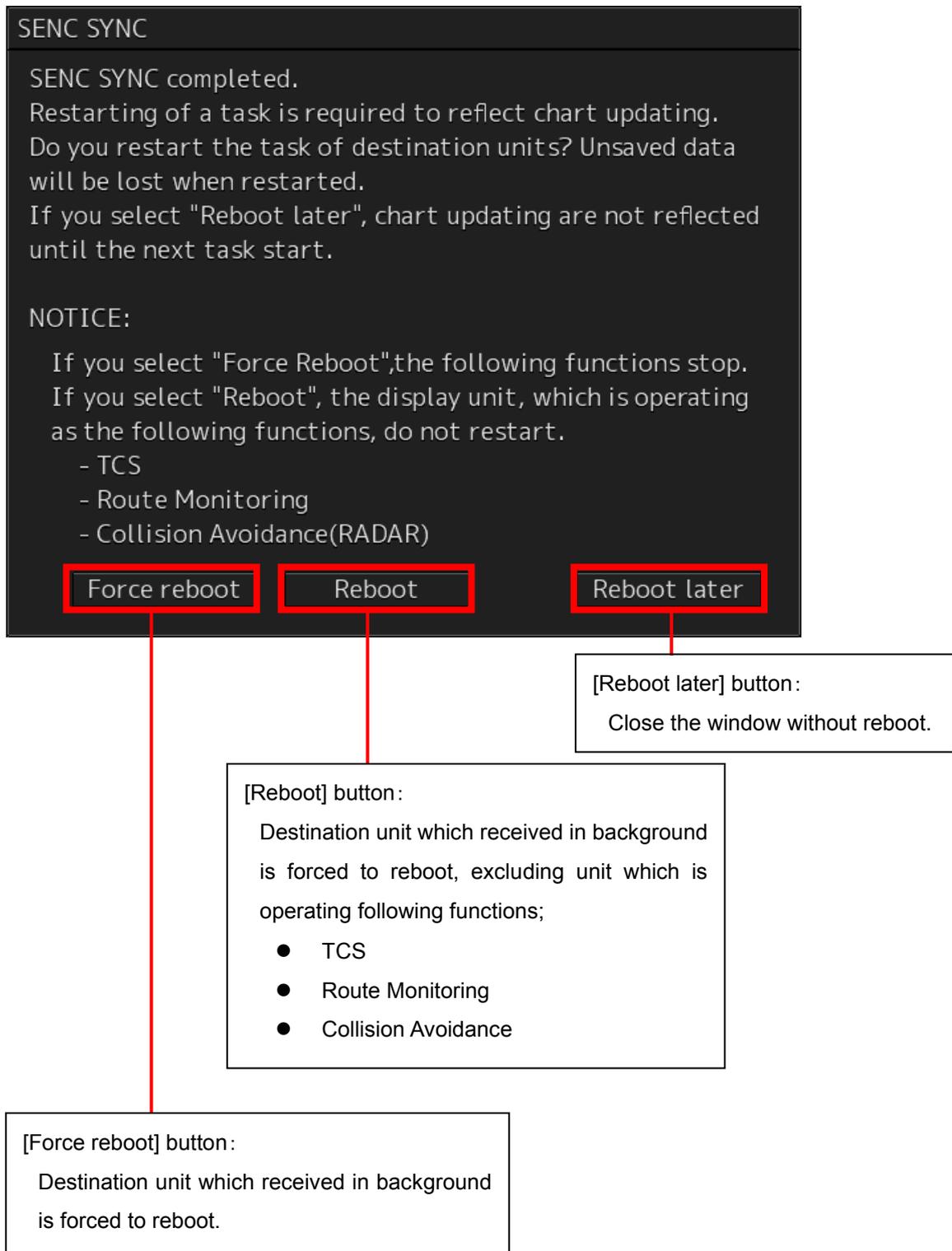
The screenshot shows a dialog box titled "SENC SYNC" with a close button (X) in the top right corner. Below the title bar, it says "From: No.1 ECDIS" and "To:". A table with two columns, "Machine Name" and "Status", lists the following items:

Machine Name	Status
No.1 RPS	Chart synchronising...
No.2 ECDIS	Chart synchronising...
No.1 RADAR	Chart synchronising...

To the right of the table, there are three progress bars, each with a circular loading icon and a numerical value: 200/1277, 150/1277, and 175/1277. A red box highlights the right side of the dialog, including the progress bars and the "Cancel" button at the bottom right. The "Cancel" button is also highlighted with a red box. Other buttons at the bottom are "Recheck" and "SYNC".

[Cancel] button :  
Cancel synchronisation

- 6) When synchronization is complete, window as shown below is displayed.  
Destination unit which received to the chart data in background need to restart the task.  
When click the [Force reboot] or [Reboot] button, be able to restart destination unit. Source unit do not restart.

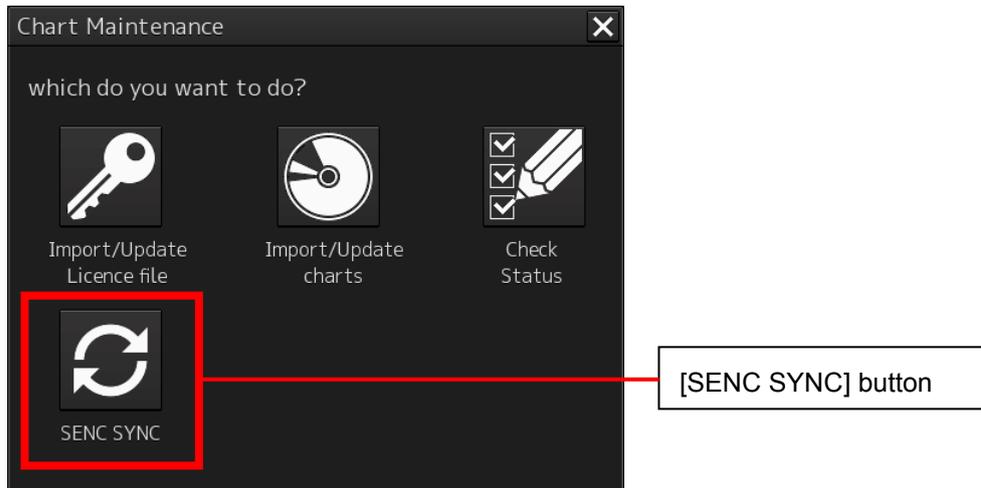


## 6.3 Receive the Chart Data

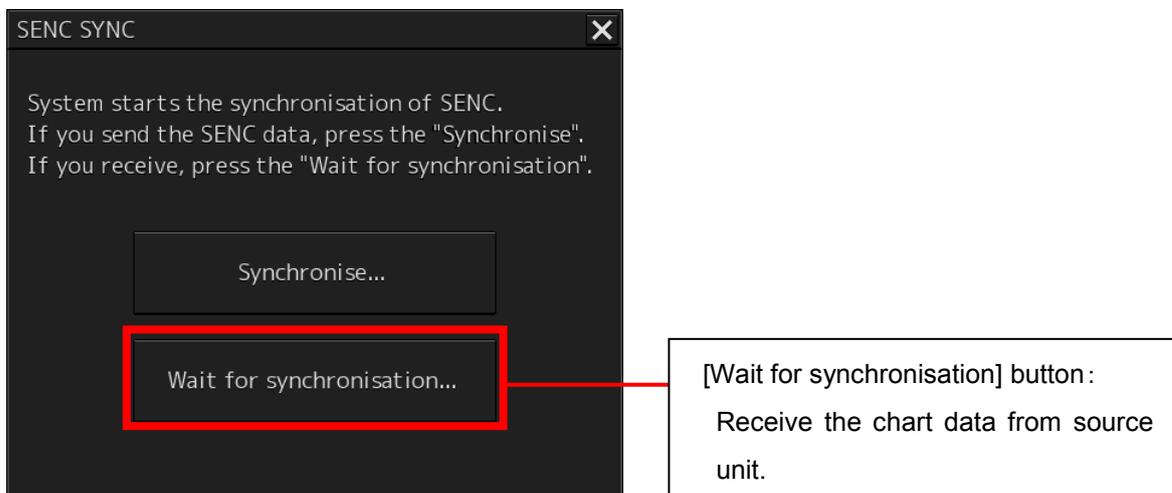
### 6.3.1 Receive in Chart Maintenance

- 1) Start Chart Maintenance from Task Menu.
- 2) In the Home window, click the [SENC SYNC] button.

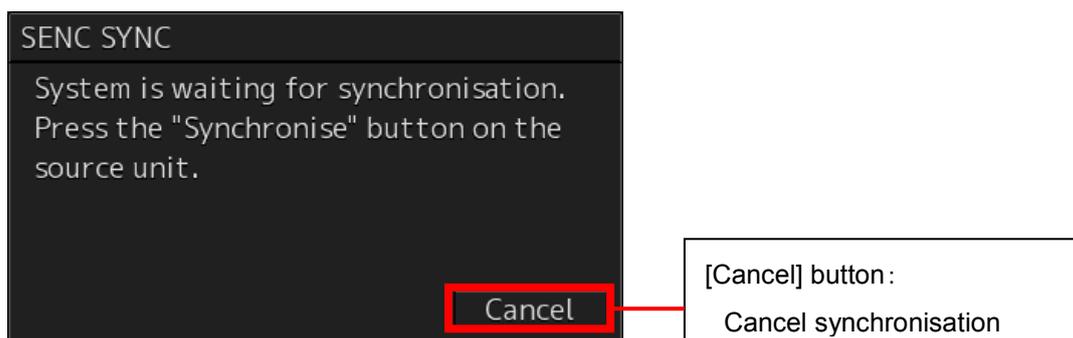
<Home Window>



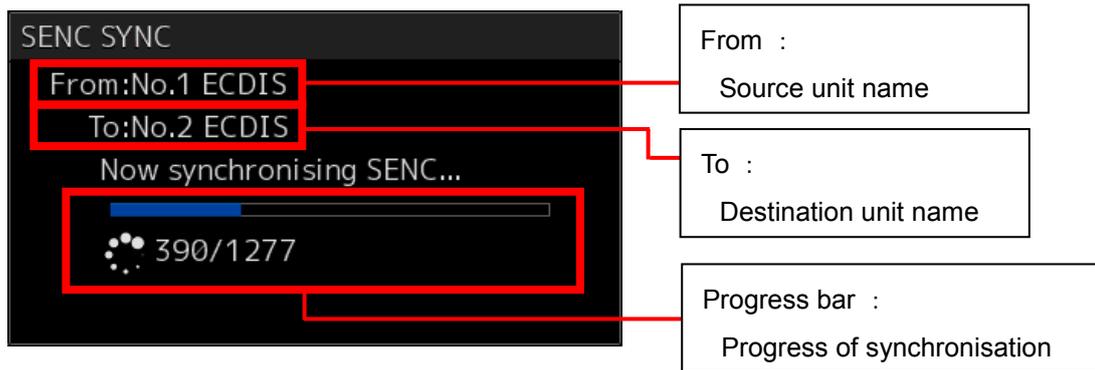
- 3) SENC SYNC window was displayed. Click the [Wait for synchronisation] button.



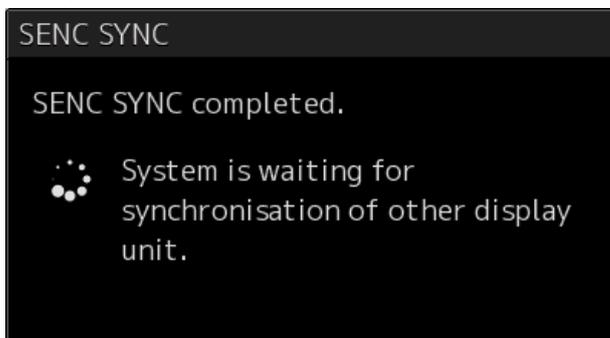
- 4) Waiting window is displayed.



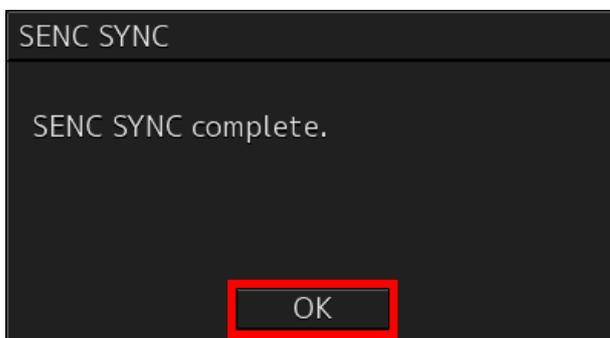
5) When source unit start synchronisation, the dialog as shown below is displayed.



6) When synchronization is complete in own unit, wait for synchronization of other unit.



7) When other unit is completed synchronisation, click the [OK] button.



## 6.3.2 Receive in the background

Chart data can receive in background while task is operating.

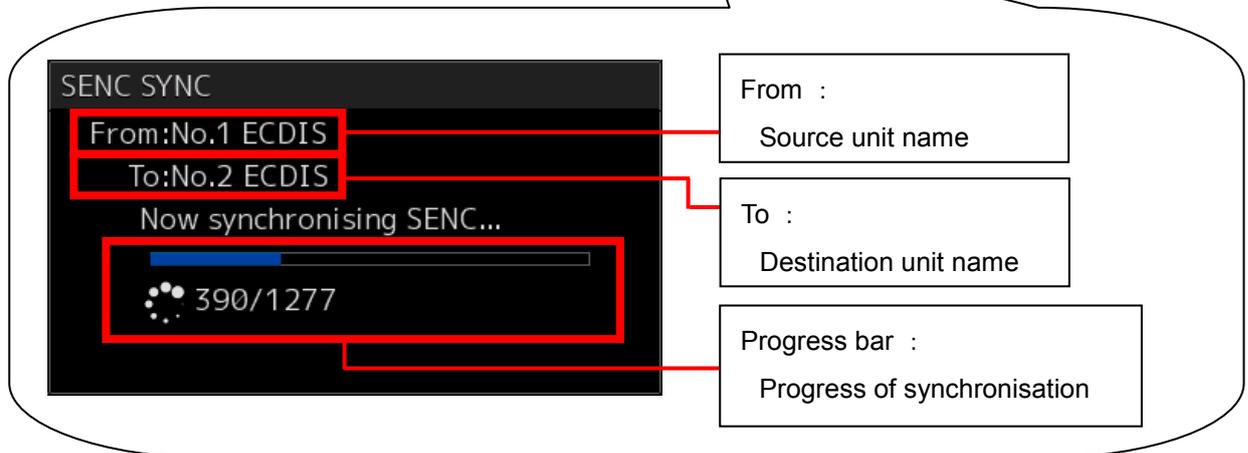
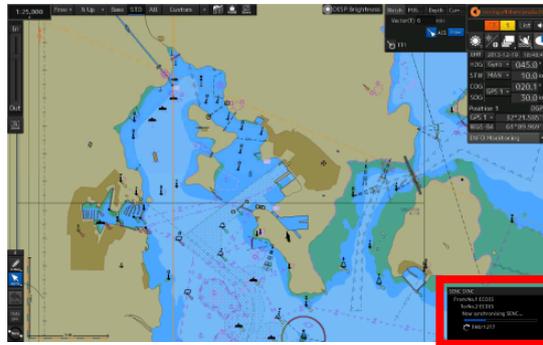
Task which can receive in background is as follows;

- RADAR
- ECDIS
- CONNING
- AMS

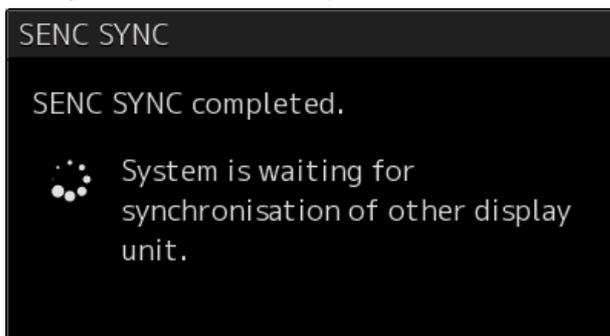
Caution :

It takes about 30 minutes until receiving SENC data is completed in background mode.

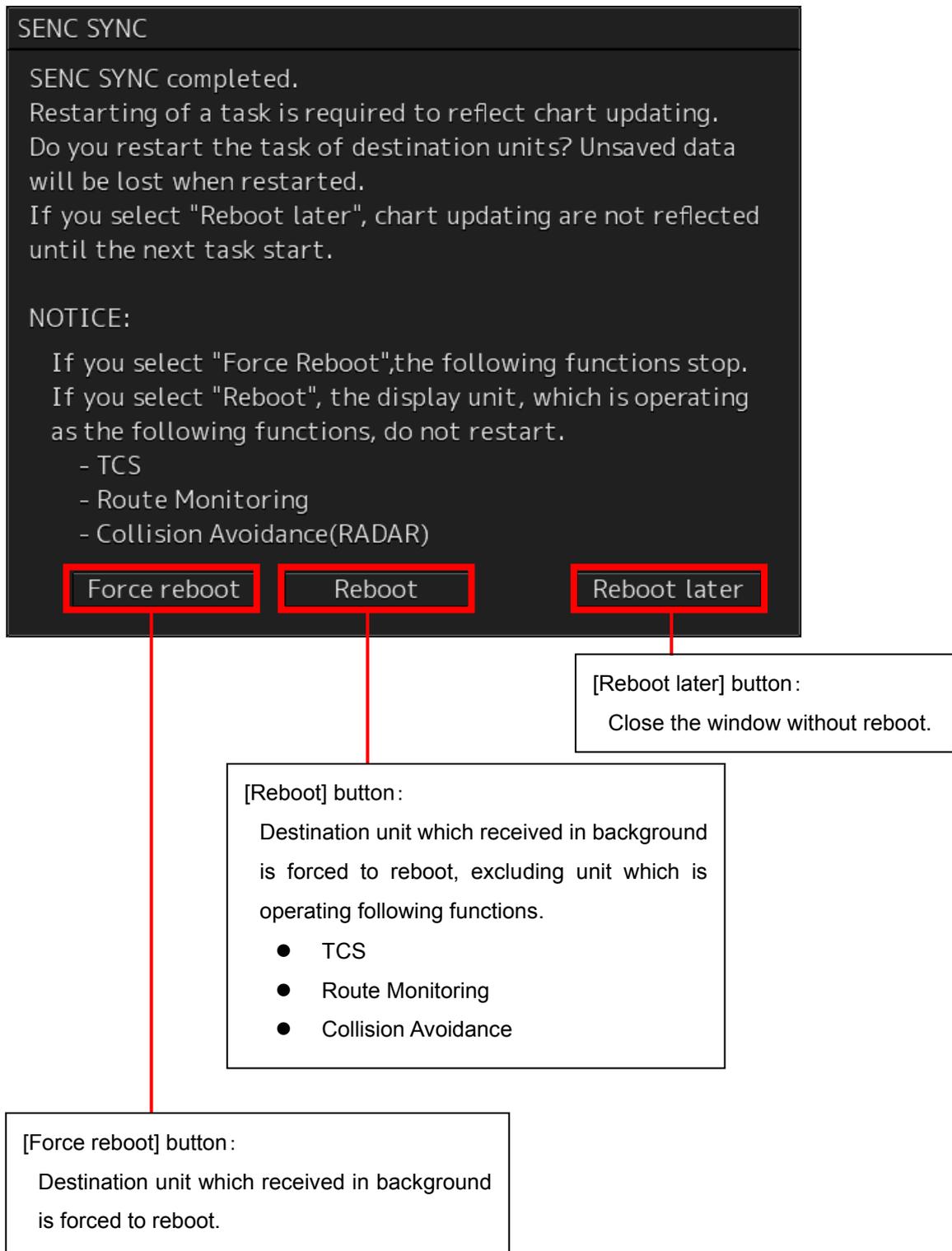
- 1) Start task which can receive in background.
- 2) When source unit start synchronisation, the dialog as shown below is displayed.



- 3) When synchronization is complete in own unit, wait for synchronization of other unit.



- 4) When synchronization is complete, window as shown below is displayed.  
Destination unit which received to the chart data in background need to restart the task.  
When click the [Force reboot] or [Reboot] button, be able to restart destination unit. Source unit do not restart.



# Section 7 Troubleshooting

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**Caution:**

The symptoms mentioned in the section 'Symptom/Cause/Countermeasure' may occur in connection with chart importing/updating. The symptoms are NOT ECDIS malfunctions.

## 1. Symptom/Cause/Countermeasure (common)

Symptom	Cause	Countermeasure
Message "Chart database is not found. Select the data path manually." is displayed in Chart Maintenance.	CD -ROM is not inserted into a CD/DVD-ROM drive.	Insert Chart CD into a CD/DVD-ROM drive.
	CD/DVD-ROM is not Chart CD.	
	Path setting is wrong.	Press [Select path] to set the path as the correct position.
	License has expired.	Import the latest License within the expiration date.
Chart cannot be imported in Chart Maintenance.	An attempt is made to import chart without importing license.	Press [Import / Update Licence file] in Chart Maintenance to import license.

## 2. Symptom/Cause/Countermeasure (S-57/63)

Symptom	Cause	Countermeasure
S-57/S-63 chart is not displayed.	S-57/S-63 chart is not selected.	Select S-57/S-63 chart (Select [Menu] - [View] - [Options] - [Chart View]). Refer to "Reference Document 4: Method for Selecting Chart".
The Error message, Error: xxx, is displayed on the Check Status screen of Chart Maintenance.	Refer to the cause of the attached document "Reference Document 1: Alert Information of S-57/S63 Chart".	Refer to the attached document "Reference Document 1: Alert Information of S-57/S63 Chart".
Chart cannot be imported in Chart Maintenance.	The CD does not contain a chart with license.	Insert the CD containing a chart with license in the CD/DVD-ROM drive.
	Cell permit has not been imported.	Import correct cell permit.
	Cell permit has been deleted.	
Message "Warning: SSE 10 - Permits not available for this data provider." is displayed in Chart Maintenance	Data server ID written in serial.enc that is included in CD is different from Data server ID written in Cell Permit.	Use the correct CD or import correct cell permit.
Message "Warning: SSE 15 - Subscription service has expired. Please contact your data supplier to renew the subscription licence." is displayed in Chart Maintenance.	Cell permits has expired.	Register the latest cell permits.
Message "Warning: SSE 20 - Subscription service will expire in less than 30 days. Please contact your data supplier to renew the subscription license." is displayed in Chart Maintenance.	There are some cell permits that will expire within 30 days.	Register the latest cell permits.
Message "Error: SSE 22 - SA Digital Certificate file has expired. A new SA Public Key (certificate) can be obtained from the IHO website or your data supplier." is displayed in Chart Maintenance.	SA Certificate file has expired.	Import the unexpired SA Certificate file.
Message "SSE 26 - This ENC is not authenticated by the IHO acting as the Scheme Administrator." is displayed in Chart Maintenance.	Selected SA is Certificate supplied from the Non-IHO.	There is no problem in chart importing.
Corrupted chart has been imported.		Re-Import the chart. See "Reference Document 6: Re-Import the ENC chart, ARCS chart".

### 3. Symptom/Cause/Countermeasure (ARCS)

Symptom	Cause	Countermeasure
ARCS chart is not displayed.	Chart is imported when the term of validity of ARCS has expired.	Register the latest Chart Permit within the expiration date, and then import ARCS chart.
	Expired Permit has been registered.	
	PIN input was canceled when ECDIS was started.	Enter PIN number when starting ECDIS and select ARCS chart. (Select [Menu] -[View] - [Options] - [Chart View])
	ARCS chart is not selected.	Select ARCS chart (Select [Menu] - [View] - [Options] - [Chart View]). Refer to "Reference Document 4: Method for Selecting Chart".
ARCS chart will not be displayed, though it has been displayed normally by that time.	Permit has been shifted from trial version to regular version.	Contact the retailer from whom the chart was purchased to check the details of the contract.
Alert occurs frequently while ARCS chart is displayed.	ECDIS has detected the alert information regarding ARCS chart itself and displayed the alert.	Check the details of the alert. See "Reference Document 2: Alert Information of ARCS Chart".
Error code (0xFFFFFFFF73) is displayed while ARCS chart is imported in Chart Maintenance.	Reading from CD-ROM was incorrect.	Clean the CD/DVD-ROM drive. Refer to "Reference Document 3: Method for Cleaning by the lens cleaner for CD/DVD drive" Perform the import procedure again and if the error persists, the CD/DVD-ROM drive may be out of order. Contact the JRC sales representative to request repair of the CD/DVD-ROM drive.
	CD-ROM was incorrect.	Insert CD-ROM into other PC. When CD-ROM is not loaded into other PC, CD-ROM may be out of order. Contact the distributor of the chart to request for replacement of CD-ROM.

Symptom	Cause	Countermeasure
ARCS chart permit cannot be imported.	File name of Chart permit is wrong. E.g. Backup gb.lcn / Backup gb.ncp	Import the Chart permit after renaming to gb.lcn / gb.ncp.
	File contract of Chart permit is wrong. E.g. Renamed Zipped Chart permit (*.zip) to gb.lcn / gb.ncp	Unzip the Chart permit to correct files, gb.lcn / gb.ncp.
	Unnecessary code is added to the permit sent by e-mail when downloading to USB memory.	Download the permit to USB memory without opening other application software. If the symptom is not clear, contact to chart distributor.
ARCS Chart cannot import.	Chart permit is not correct.	Compare the permit with permit number assigned with ECDIS. See “3.7.3 Checking ARCS User Permit” in this manual. If the symptom is not clear, contact to chart distributor.
Corrupted chart has been imported.	/	Re-Import the chart. See “Reference Document 6: Re-Import the ENC chart, ARCS chart”.

#### 4. Symptom/Cause/Countermeasure (C-MAP Ed.3)

Symptom	Cause	Countermeasure
<p>C-MAP Ed.3 chart is not displayed, or gray screen is displayed shown below.</p> 	License has been Expired.	Register the latest license within the expiration date, and then import C-MAP Ed.3 charts.
	C-MAP Ed.3 chart is not selected.	Select C-MAP Ed.3 chart (Select [Menu]-[View] - [Options] - [Chart View(ECDIS)]). Refer to "Reference Document 4: Method for Selecting Chart".
	Not contain a chart with license.	Contact the distributor.
<p>e-Token(communication error) warning is displayed under ECDIS screen.</p>	The eToken device could not be identified.	Restart the device. If the device is not recovered even if restart is attempted three times, turn off the power supply of the device and contact the distributor.
	The eToken device is disconnected.	Contact the distributor.
<p>eToken license is not registered.</p>	Chart is not imported.	Before registering the license, import Chart.
	Media type (DVD or CD) of database and license do not match.	The license depends on the media type (DVD or CD) of chart. Connect chart distributor to request computerized license.
	The license is not correct.	Check the eToken device number. Connect chart distributor to request computerized license.
<p>Message "No license installed." is displayed under ECDIS screen.</p>	License has not yet been installed.	Register the license in C-MAP Chart Manager. Refer to "4.3.2 Importing License".
<p>Message "One or more licenses expired. Please contact your C-MAP agent for a license renewal." is displayed under ECDIS screen.</p>	The license is invalid.	Contact the distributor of C-MAP for updating the license. The chart is displayed only for 15 minutes after it is started.
<p>Message "One or more licenses will expire at YYYY-MM-DD. Please contact your C-MAP agent for a license renewal." is displayed under ECDIS screen.</p>	The license will expire on YYYY/DD/MM. It will expire in less than 2 months.	Contact the distributor of C-MAP for updating the license.

## 5. Symptom/Cause/Countermeasure (ChartCo)

Symptom	Cause	Countermeasure
[Get charts from ChartCo PC] button is inactive in Chart Maintenance of RPS.	Chart data is not transfer from ChartCo PC to RPS.	Transfer chart data from ChartCo PC to RPS. Refer to instruction manual of ChartCo, or "Reference Document 7: Transfer Chart Data from ChartCo PC to RPS" in this manual.

## 6. The reference about a chart

Refer to the following purchase of chart, contract, and service.

### **UKHO (ARCS, S63)**

URL: <http://www.admiralty.co.uk/>

e-mail: [customerservices@ukho.gov.uk](mailto:customerservices@ukho.gov.uk)

### **C-MAP (Ed3)**

URL: <http://commercialmarine.c-map.com/>

e-mail: Info: [info.marine@c-map.com](mailto:info.marine@c-map.com)

Technical: [technical.marine@c-map.com](mailto:technical.marine@c-map.com)

Licensing: [license.marine@c-map.com](mailto:license.marine@c-map.com)

# Reference Document 1: Alert Information of S-57/S63 Chart

This section explains the details of the alarm information that may appear inside the log window of Chart Status while S-57/S-63 chart is imported/updated on ECDIS.

## Errors that are displayed on the log window

No.	Error message	Cause	Countermeasure
1	Error: CRC	CRC value error of the chart file	Fatal error of chart CD. The chart can neither be imported nor updated. Clean CD/DVD-ROM and import the chart again. If the error is displayed again, contact the chart supplier.
2	Error: Exchange	Exchange target data error	
3	Error: Data structure	File structure error	
4	Error: Topology	Chart object topology error	
5	Error: Area Object Link	Chart area object link error	Not a chart CD fatal error.
6	Error: Line Object Link	Line object link error	
7	Error: Object outside range	Outside of the chart object boundary	Chart CD fatal error. The chart can neither be imported nor updated. Clean CD/DVD-ROM and import the chart again. If the error is displayed again, contact the chart supplier.
8	Error: Sequential number error.	Sequential number sequence error	
9	Error: File not found	There is no chart that is defined in the chart CD catalog file.	
10	Error: Data not found	The chart CD does not contain any specified data.	
11	Error: Data error	File data error	
12	Error: Attribute	Attribute value error of the object that is defined in the chart file	Contact the distributor.
13	Error: Instruction Address	Internal memory address (instruction section) error	
14	Error: Instruction Offset	Internal memory offset (instruction section) error	
15	Error: PL Rule Memory	Memory allocation error (PL rule section)	
16	Error: PL Rule Information	Data acquisition error (PL rule section)	
17	Error: Attribute Information	Acquisition error of attribute data of chart object	Contact the distributor.
18	Error: Enc File write	SENC file write error	
19	Error: Object Class get	Chart Object information acquisition error	
20	Error: Directory create	File path error	
21	Error: Memory get	There is no SENC chart object name.	
22	Error: Index get	SENC chart file size acquisition error	

No.	Error message	Cause	Countermeasure
23	Error: Object not found	SENC chart file acquisition error	Fatal error of chart CD. The chart can neither be imported nor updated. Clean CD/DVD-ROM and import the chart again. If the error is displayed again, contact the chart supplier.
24	Error: Chart Cell size	SENC warning file size acquisition error	Contact the distributor.
25	Error: Chart Cell data	SENC warning file acquisition error	
26	Error: Object index	Chart CD data structure (FFPC field change) error	Fatal error of chart CD. The chart can neither be imported nor updated. Clean CD/DVD-ROM and import the chart again. If the error is displayed again, contact the chart supplier.
27	Error: FFPC delete	Chart CD data structure (FSPC field deletion) error	
28	Error: FFPC edit	Chart CD data structure (FSPC field change) error	
29	Error: FSPC delete	Chart CD data structure (VRPC field deletion) error	
30	Error: FSPC edit	Chart CD data structure (VRPC field change) error	
31	Error: VRPC delete	Chart CD data structure (SGCC field deletion) error	
32	Error: VRPC edit	Chart CD data structure (SGCC field change) error	
33	Error: SGCC delete	Chart CD data structure (coordinate type) error	
34	Error: SGCC edit	Chart CD chart point object error	
35	Error: Coordinate Type	Chart CD edition number error	
36	Error: Point	There is no chart object of SENC.	
37	Error: Edition number	SENC chart file size acquisition error	
38	Error: Data Length	Chart CD catalog file structure error	
39	Error: File extention	Chart CD file extension error	
40	Error: File count 0	The chart CD does not contain any chart file.	
41	Error: Object data get	Chart CD object information acquisition error	
42	Error: Field Tag	Chart CD field tag information error	
43	Error: Chart area	Chart CD chart area information error	

No.	Error message	Cause	Countermeasure
44	Non sequential update, previous update missing try reloading from the base media. If the problem persists contact your data supplier.	There is no chart data that can be updated.	Please reinstall from base chart. If the error is displayed again, contact the chart supplier.
45	This update belongs to a new edition of chart. Load new edition.	The edition of update data is different. (new)	Please import from the first Update Number of the corresponding edition using the BASE CD etc.

## Reference Document 2: Alert Information of ARCS Chart

This document provides a notice about alert messages displayed on ECDIS when opening ARCS chart.

When ARCS chart is displayed on ECDIS, chart-related alerts may occur frequently. It is obligated to display these alerts on ECDIS, and such frequent occurrence of the alerts is not the result of a malfunction of ECDIS.

### Alerts that appear when displaying ARCS chart

No.	Error Message	Countermeasure	Timing of occurrence/Display position
1	[ARCS01] The contents of the GB.LCN file have been altered. You may be in breach of the licensing arrangements that relate to the use of the chart. License is invalid. Please contact your ARCS agent/distributor to correct this error	Contact your ARCS agent/distributor to request a valid license. The current license has been altered and is invalid.	Displayed in the Check Status log at chart import.
2	[ARCS02] Chart Permit corrupted. Please reload original media.	Re-register Chart Permit as the data are incorrect. If the re-registration does not restore the status, contact your ARCS agent/distributor to request a valid license.	Displayed in the Check Status log at chart import
3	[ARCS03] Chart Chart#. Update information relates to a newer version of the chart. Please load the chart media that contains Chart# with an issue date of RCID.	Import the latest Chart Media and Update Media. The chart version of Update CD is different from the version of imported chart.	Displayed in the Check Status log at chart import
4	[ARCS04] Chart Chart#. The chart data already incorporates this update information. Please load the latest update media.	Import the latest Chart Media and Update Media. The data contained in the Update Media inserted have already been imported.	Displayed in the Check Status log at chart import
5	[ARCS05] Chart Chart#. License expired – updating is not permitted. Please contact your agent to re-new license.	Contact your agent to renew the license. Chart updating is not permitted because the license has already expired.	Displayed in the Check Status log at chart import

No.	Error Message	Countermeasure	Timing of occurrence/Display position
6	[ARCS08] Warning – License expired in less than one month. Please contact your ARCS agent for a license renewal.	Contact your ARCS agent to renew the license, as it will expire in less than one month.	Displayed in a dialog box when displaying a chart
7	[ARCS09] Chart Chart#. Warning – License expired. The displayed chart may not be up to date. Contact your Agent to arrange for a license renewal.	Contact your ARCS agent to renew the license. The license (Chart Permit) expired within the past month.	Displayed in a dialog box when displaying a chart
8	[ARCS10] Chart Chart#. License expired. ARCS charts can not be displayed. Contact your ARCS agent for a license renewal.	Contact your ARCS agent to renew the license. ARCS charts cannot be displayed because it's been more than one month since the license (Chart Permit) expired.	Displayed in a dialog box when displaying a chart
9	[ARCS11] Chart Chart#. The loaded version of this chart is too old to be used with the license. Please load a more recent version of the chart. Chart version is Enc#, Permit version is Penc#.	Import the latest version of Chart Permit and Chart Media. ARCS charts cannot be displayed because the Encryption Number of chart is different from the Permitted Encryption Number.	Displayed in a dialog box when displaying a chart
10	[ARCS12] Chart Chart#. The license is too old to be used with this version of the chart. Please contact your agent to obtain a new license.	Contact the agent to supply a new chart permit. The chart encoding version number does not match the chart permit encoding version number. The chart is not displayed.	Displayed in a dialog box when displaying a chart
11	Larger scale RNC available for the area of the vessel	For more detailed information on the area, a larger-scale chart can be displayed.	Displayed in the Alert Status area when displaying a chart
12	Chart Shift	Be careful. Positions on the currently displayed chart are shifted based on the user's setting.	Displayed in the Alert Status area when displaying a chart
13	Chart Shift to WGS84	Be careful. Positions on the currently displayed chart are shifted. Position data of the currently displayed chart have been transformed from a geographic coordinate system other than WGS-84 into WGS-84 based on the offset value of chart data.	Displayed in the Alert Status area when displaying a chart

No.	Error Message	Countermeasure	Timing of occurrence/Display position
14	WGS84 position cannot be related accurately to chart Chart#.	Be careful. The geographic coordinate system of currently displayed chart is not WGS-84, and positions on the chart are not shifted to WGS-84 because the chart data have no offset value.	Displayed in a dialog box when displaying a chart
15	Loading Different Datum Chart	Be careful. A chart with a geographic coordinate system other than WGS-84 is currently displayed.	Displayed in the Alert Status area when displaying a chart
16	Loaded unknown datum chart	Be careful. A chart with an unknown geographic coordinate system is currently displayed.	Displayed in the Alert Status area when displaying a chart
17	Illegal PIN	Check your Personal Identification Number (PIN). The number you entered is incorrect.	Displayed in a dialog box upon entering PIN to start ECDIS.

# Reference Document 3: Method for Cleaning by the lens cleaner for CD/DVD drive

When the lens of the CD/DVD-ROM drive is dirty, CD cannot be read correctly. Clean the lens according to the following procedure.

Clean the lens according to the following procedure.

- 1) Insert the attached CD-ROM lens cleaner in the CD/DVD drive.

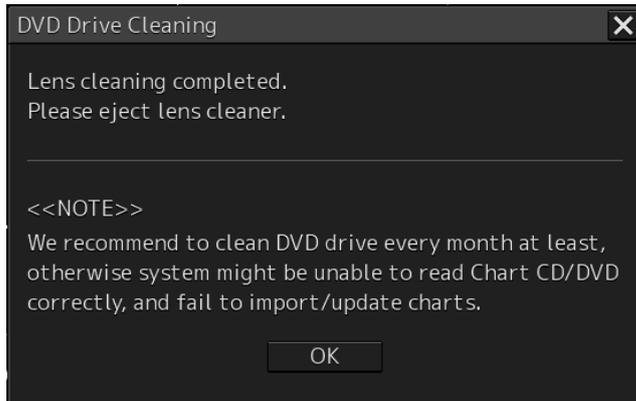
This is a sample.  
Use the attached  
cleaner.



- 2) Select [Menu] – [Maintenance] – [DVD Drive Cleaning].
- 3) The DVD Drive Cleaning dialog appears, then cleaning starts.  
Execute cleaning for several minutes.



- 4) When the termination announcement is issued, terminate cleaning by clicking the [OK] button or [x] button.

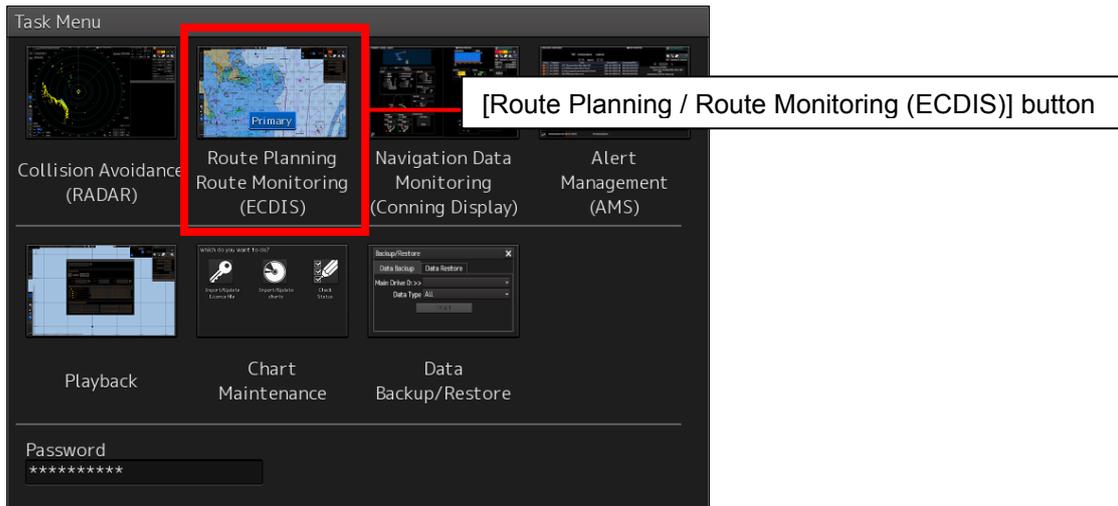


- 5) Remove the CD-ROM lens cleaner from the CD/DVD drive.

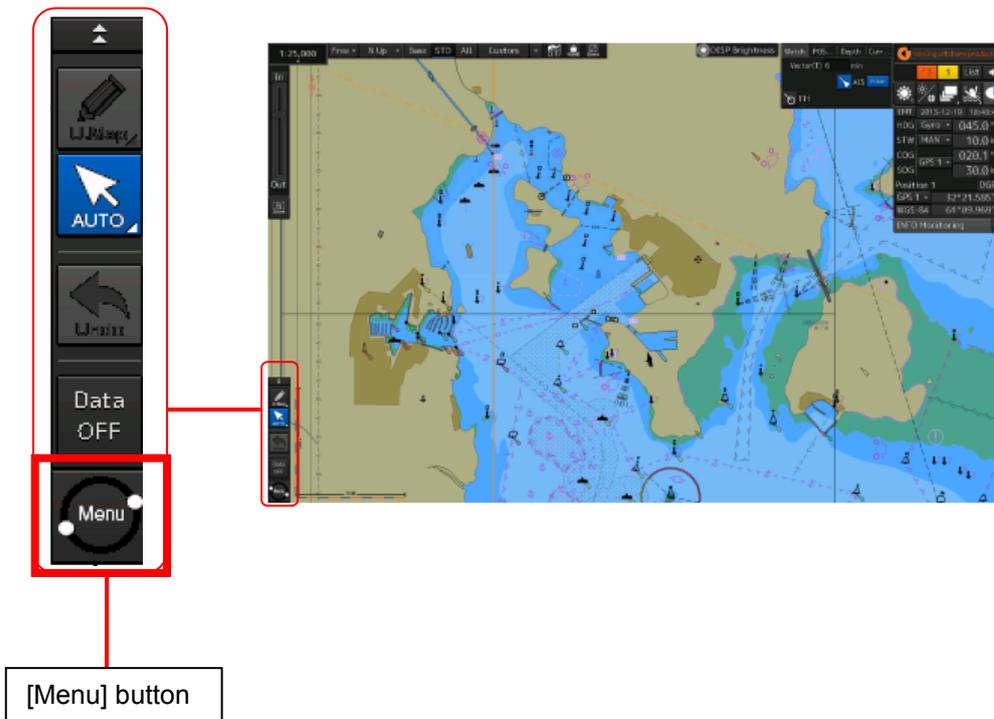
# Reference Document 4: Method for Selecting Chart

Select the type of the chart to be displayed in ECDIS screen.

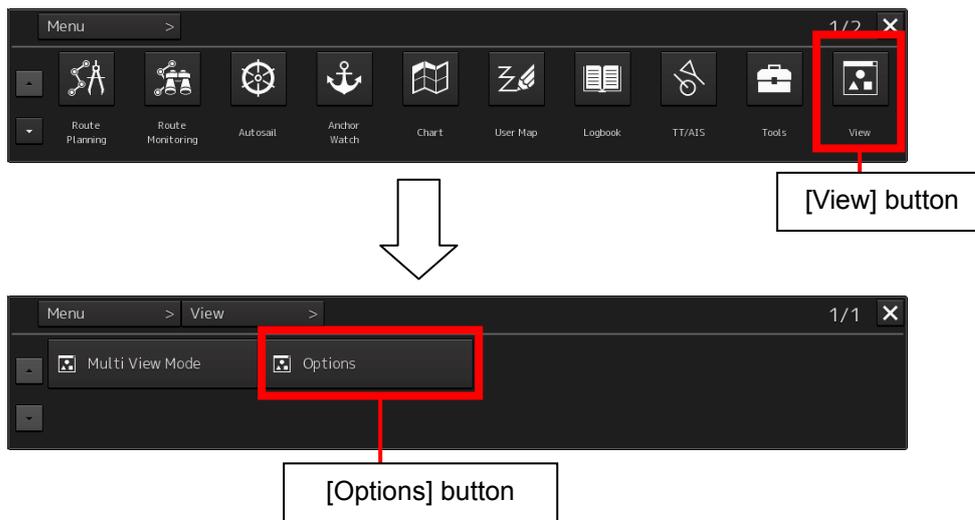
- 1) Start the equipment by pressing the Power button.
- 2) Click the [Route Planning / Route Monitoring (ECDIS)] button from the task menu.



- 3) On the ECDIS screen, click the [Menu] button.



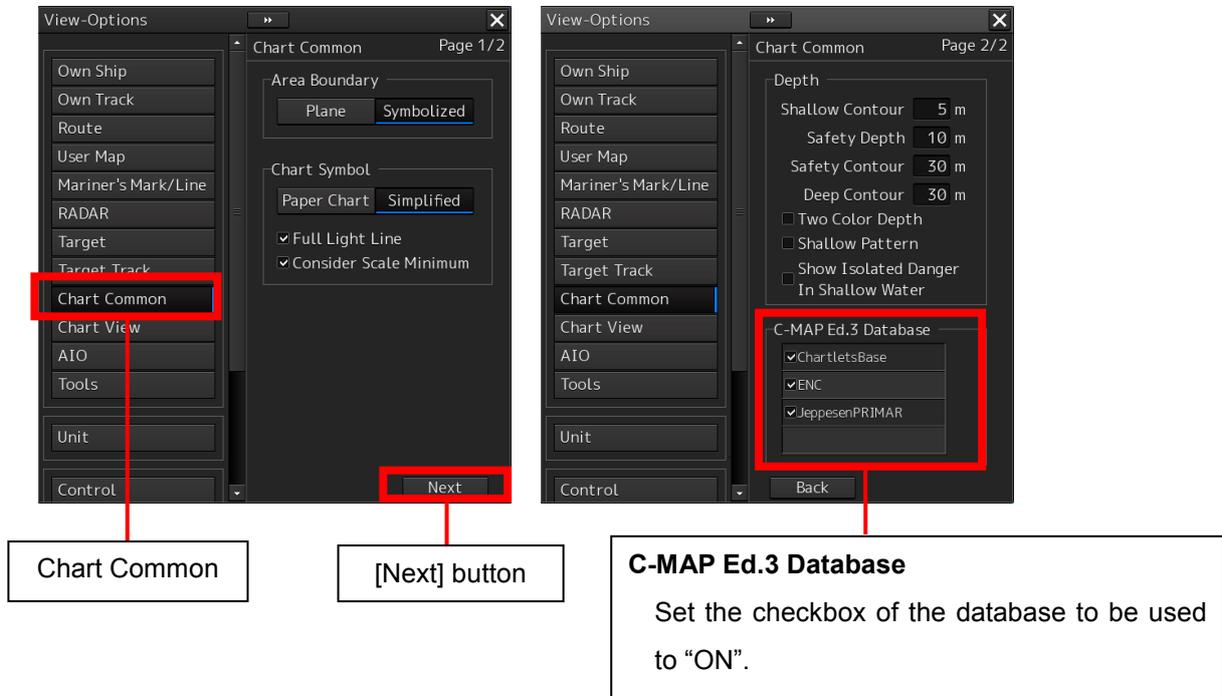
4) Select [View] – [Options] on the Menu screen in that order.



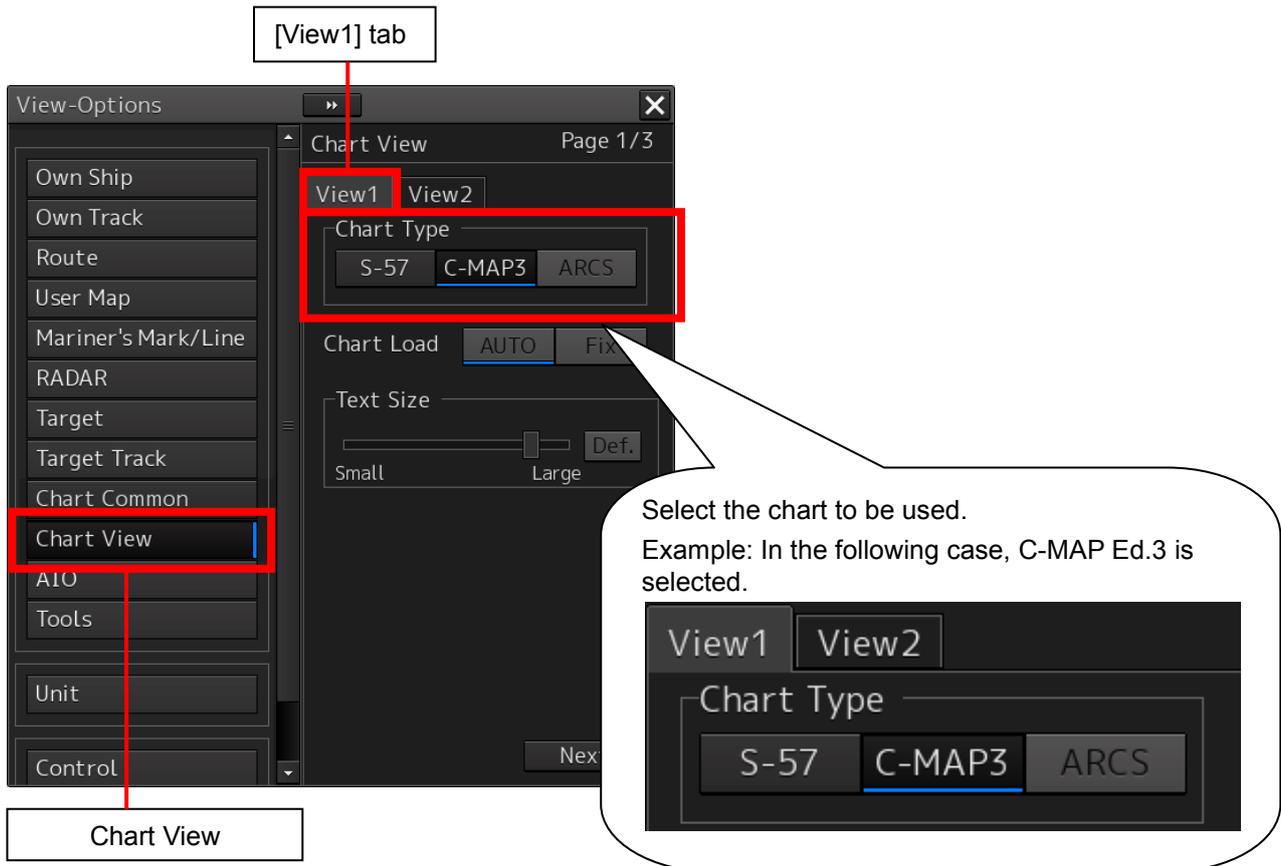
\*Use the following procedure 5) when using the C-MAP Ed.3 chart.

When using a chart other than the C-MAP Ed.3 chart, proceed with the next procedure 6).

5) Select Chart Common. Then click the [Next] button to switch to Page 2/2. After that, set the checkbox of the database to be used to “ON” in C-MAP Ed.3 Database.



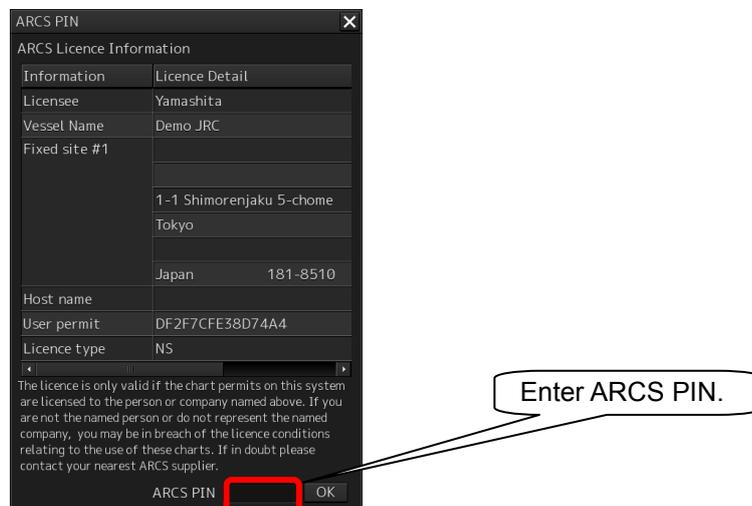
6) Select Chart View. Select the chart to be used by using Chart Type of the [View1] tab.



7) Click the [X] button to close the [View] – [Options] screen.

**Caution:**

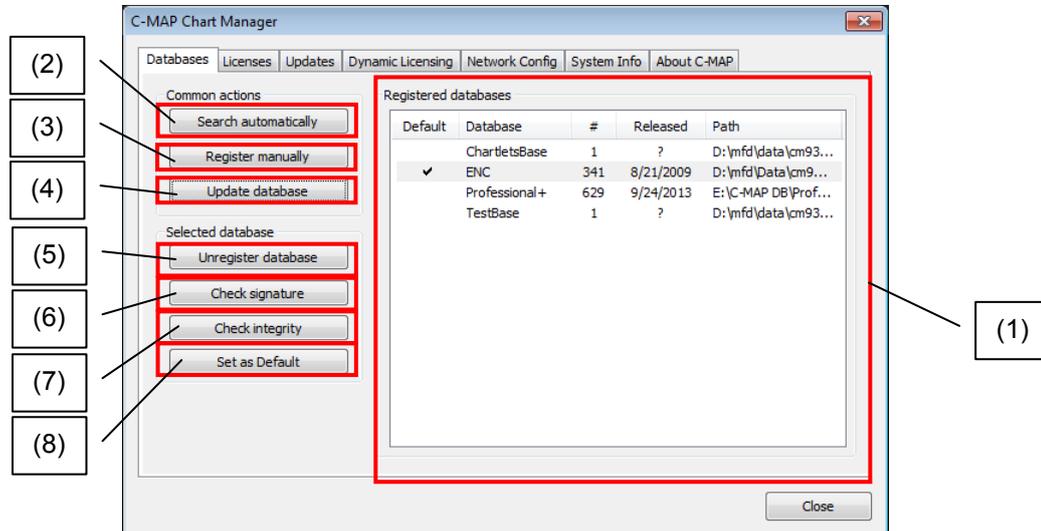
When [X] is selected (clicked) from the [ARCS PIN] panel without inputting ARCS PIN, the ARCS item of Chart View is disabled, so that the item cannot be selected. When displaying the ARCS chart, be sure to enter ARCS PIN from the [ARCS PIN] panel.



# Reference Document 5: C-MAP Chart Manager

This document describes functions included in C-MAP Chart Manager for C-Map.

## Databases Tab



(1) All registered databases are displayed in the **Registered databases** list. Columns in the list are:

- **Default** –
- **Database** – The database name
- **#** – The database issue number. The large the database issue number, the later is its release date and more up-to-date data it contains.
- **Released** – Release date of the database
- **Path** – Path to the database location

Besides changing a database priority and adding databases to the view or deleting them from the view, the following operations with databases are possible:

(2) Search automatically

Register New CM93/3 Database from DVD-ROM drive.

(3) Register manually

Do not use this function.

(4) Update database

Renew CM93/3 Database.

(5) Unregister database

Unregisters a specified database. The database will not be displayed until it is registered again.

Destroys the license applied for the database. If you register this database later, you will need to apply the license for it again.

(6) Check signature

This operation checks the consistency of the selected database. (whether all data are correct.)

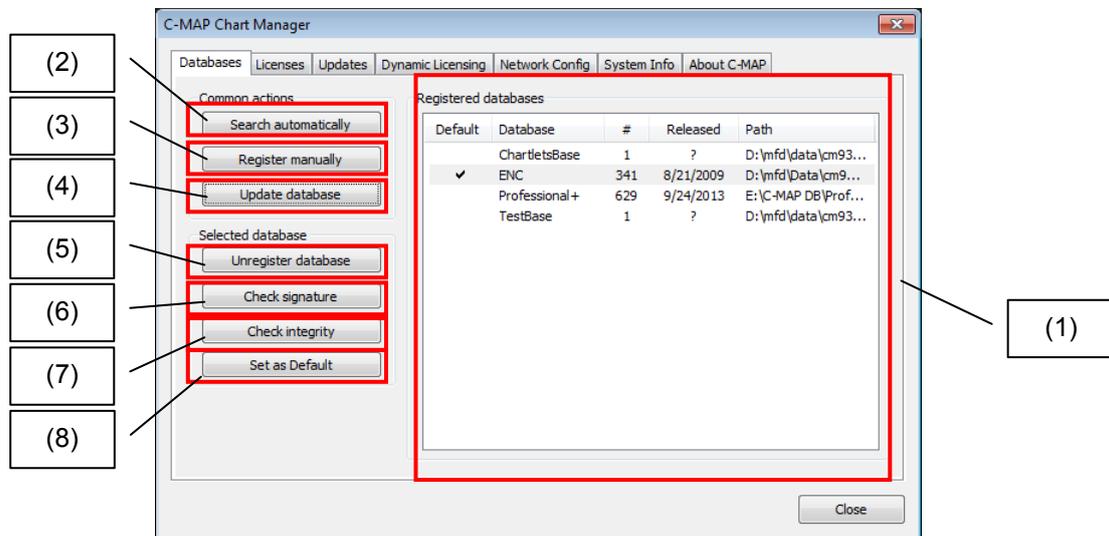
(7) Check integrity

This operation checks the consistency of the update of the selected database. (whether all data are correct.)

(8) Set as Default

Do not use this function

## Licenses Tab



(1) Selected database

Import license data or select the database to be displayed.

(2) License list

**Coverage** – Contracted zone

**Expiry** – The expire date

(3) Add manually

Do not use this function.

(4) Import from file

Use to apply License file (static license).

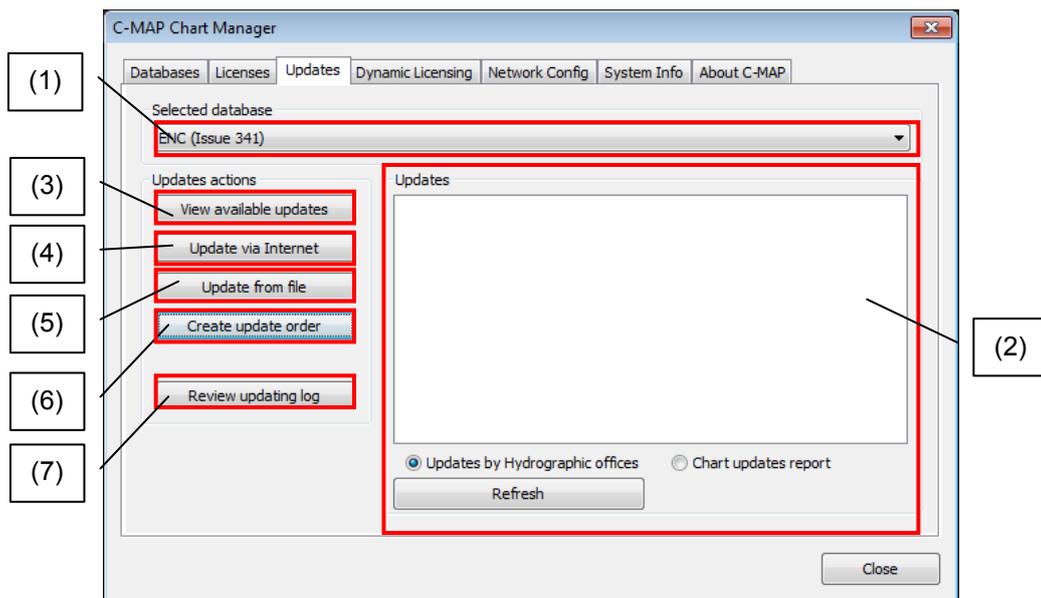
(5) Delete selected

Delete specified license.

(6) Show options

Always select "Show all".

## Updates Tab



### (1) Selected database

Select database to be updated.

### (2) Updates

The list on the right part of the panel displays a four level directory tree.

- The first level of the directory tree is the list of hydrographic offices that have issued the received updates.
- The second level is the list of chart numbers or corresponding datasets to which the updates have been applied.
- The third level is the list of update files containing the updates (the third level entry consists of the update file number, update file issue date, and system ID of the update dataset).
- The fourth level is the list of updated objects.



- Updates by Hydrographic offices– Shown tree by each HO.
- Chart updates report– Displays tree of each chart.

### (3) View available updates

Do not use this function.

### (4) Update via Internet

Do not use this function.

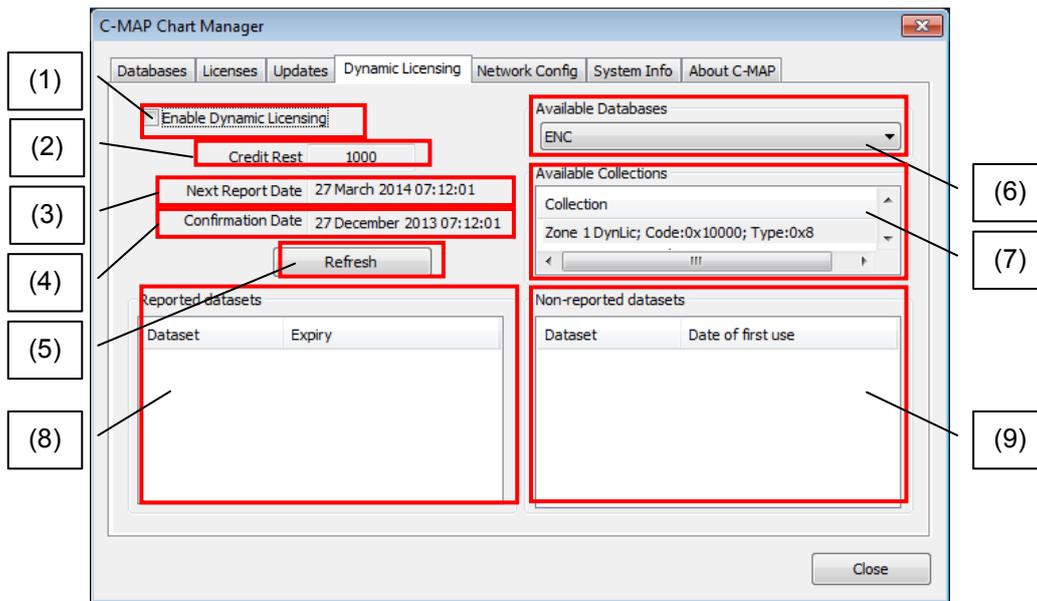
### (5) Update from file

Imports update file that was received via e-mail.

Imports Dynamic license that was received via e-mail.

- (6) Create update order.  
Creates order file for request updating.  
Creates report file for Dynamic license.
- (7) Review updating log  
Displays update history.

### Dynamic Licensing Tab

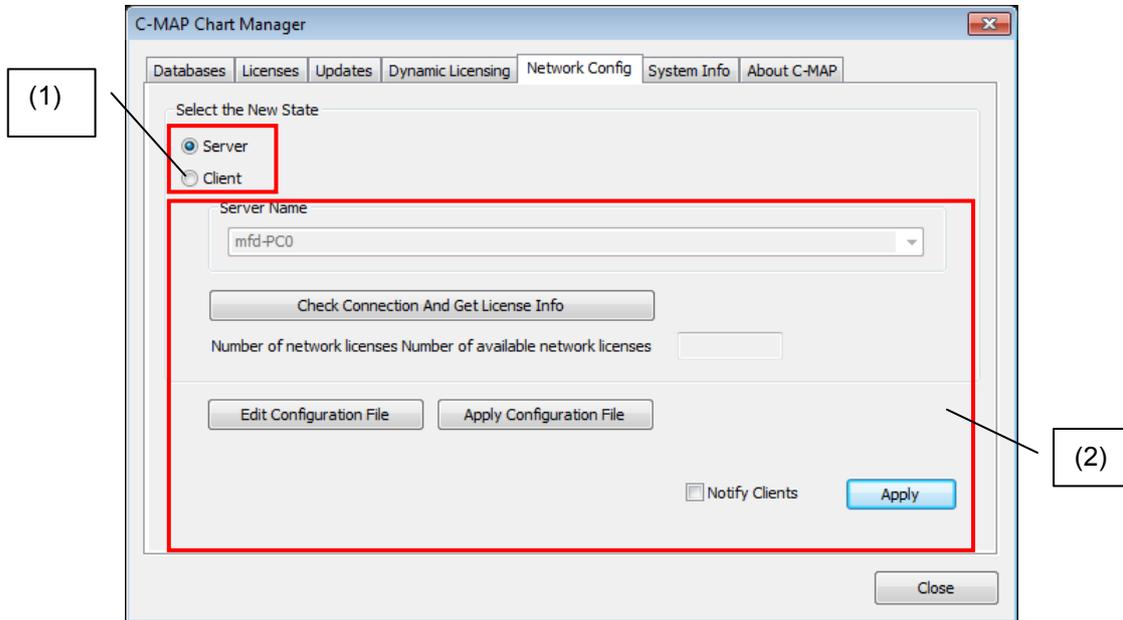


- (1) Enable Dynamic Licensing  
Do not use this function.
- (2) Credit Rest  
The rest of credit in the dongle, this value is sent to you each time you receive updates in a confirmation answer.
- (3) Next Report Date  
The date when the next report should be sent to C-Map.
- (4) Confirmation Date  
The date when the last confirmation answer was received.
- (5) Refresh  
Refresh Next Report / Confirmation Date.
- (6) Available Databases  
The list of databases that can be dynamically licensed.
- (7) Available Collections  
The list of chart collections of a specified database which were indicated in the dynamic licensing agreement with C-Map.
- (8) Reported datasets  
The list of reported datasets (names and access expiry dates).

(9) Non-reported datasets

The list of datasets that were viewed but are not reported yet (names and date of first use).

### Network Config Tab

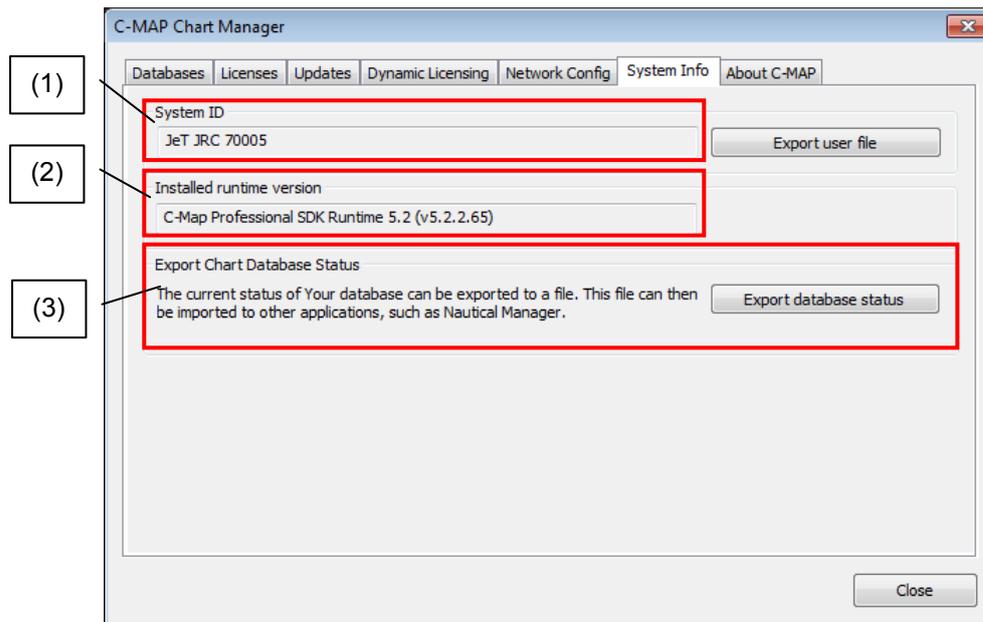


(1) Select the New State

Always select **Server**, do not change to Client.

(2) Do not change any other setting.

## System Info Tab



(1) System ID

Show eToken ID.

(2) Installed runtime version

Show version of draw engine. (for engineer)

(3) Export Chart Database Status

Do not use this function.

# Reference Document 6: Re-Import the ENC chart, ARCS chart

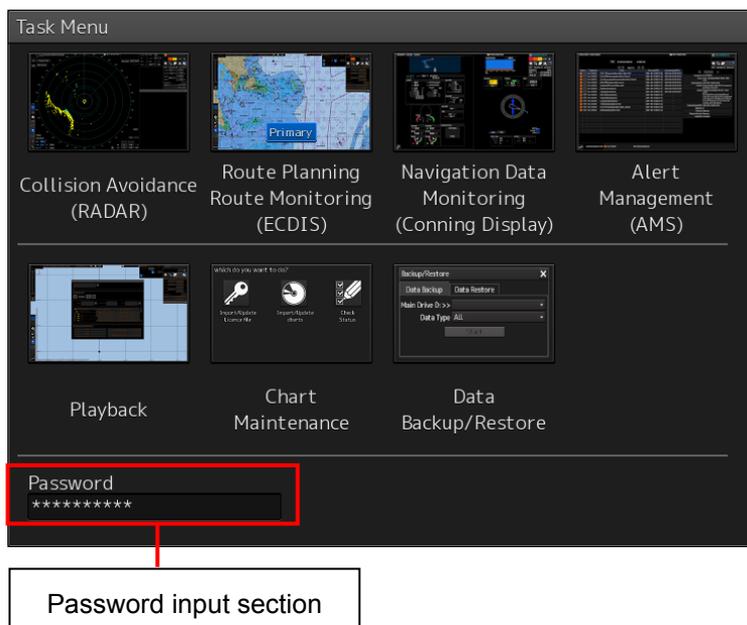
This section describes method of re-importing the ENC chart and ARCS chart.

**caution :**

All ENC chart and ARCS chart imported already are deleted by the operation. In the case of emergency (e.g. when corrupted chart has been imported), the operation should be done. License and chart data of C-MAP Ed.3 Charts not delete.

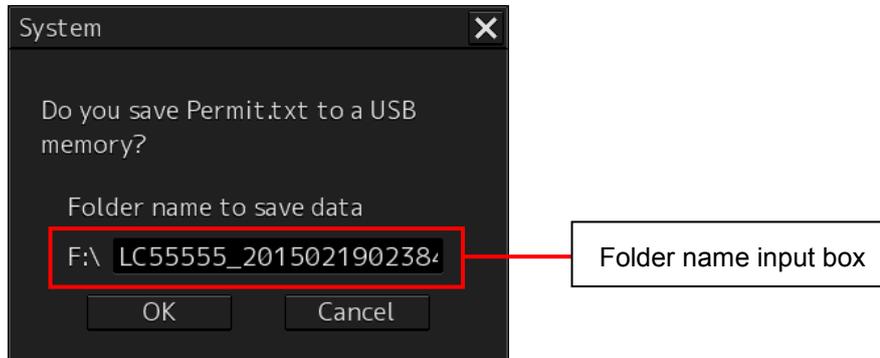
## Re-import ENC chart

- 1) Click on the password input section on Task Menu.  
A password input dialog is displayed.



- 2) ENC cell permit is exported to USB flash memory.  
Enter the password, 2222.

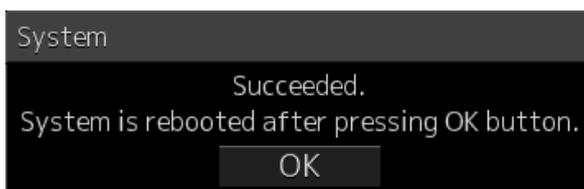
- 3) Confirmation dialog box appears, folder name for exporting is displayed.  
Default setting for the folder name is "(serial number)\_(YYYYMMDD)(current time)".  
Folder name can change by clicking folder name input box.



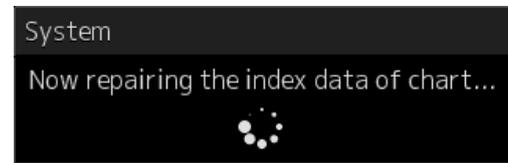
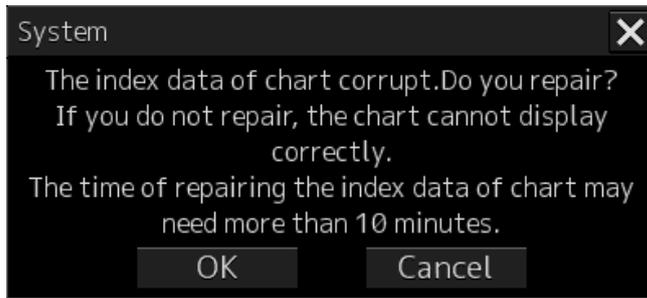
- 4) Click on the [OK] button, then cell permit file is exported to above folder in USB flash memory.  
When completed, Task Menu is displayed.
- 5) Click on the password input section. A password input dialog is displayed.
- 6) Enter the password, 5739. Then, a confirmation dialog box appears.



- 7) When click on the [OK] button, deleting start.
- 8) When delete is completed, a confirmation dialog box appears.  
Click on the [OK] button. Then, the software restarts and displays Task Menu automatically.



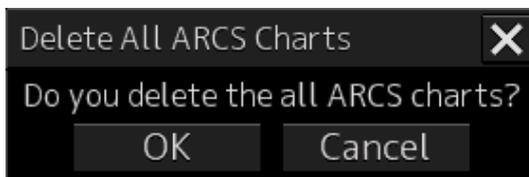
- 9) After restart, the dialog shown below appears on Task Menu.  
All chart data is deleted, so repair the index of chart data.  
Click on the [OK] button. When repair completed, Task Menu is display.



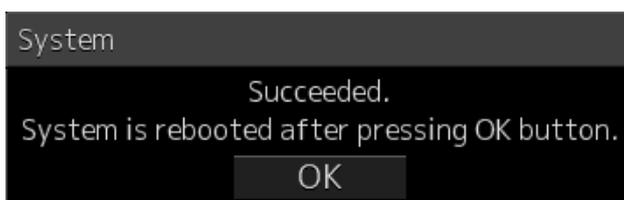
- 10) Import the ENC cell permit and ENC chart.

### Re-import ARCS chart

- 1) Click on the password input section on Task Menu.  
A password input dialog is displayed.
- 2) Enter the password, 0939. Then, a confirmation dialog box appears.



- 3) When click on the [OK] button, deleting start.
- 4) When delete is completed, a confirmation dialog box appears.  
Click on the [OK] button. Then, the software restarts and displays Task Menu automatically.



- 5) Import the ARCS chart permit and ARCS chart.

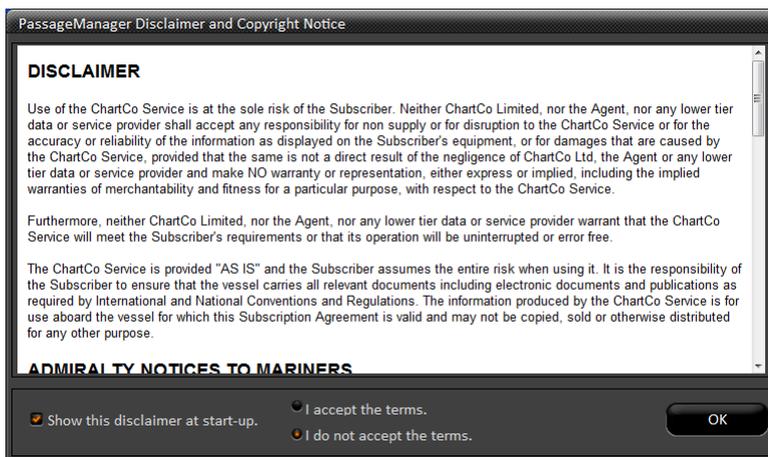
# Reference Document 7: Transfer Chart Data from ChartCo PC to RPS

This section describes method of transferring chart data from ChartCo PC to RPS.

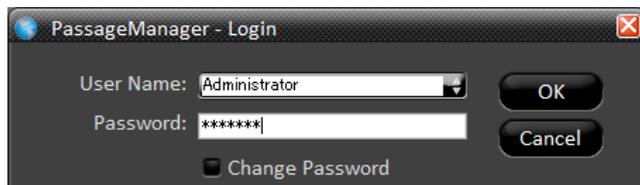
**caution:**

**For more detail about ChartCo and PassageManager, refer to instruction manual of ChartCo.**

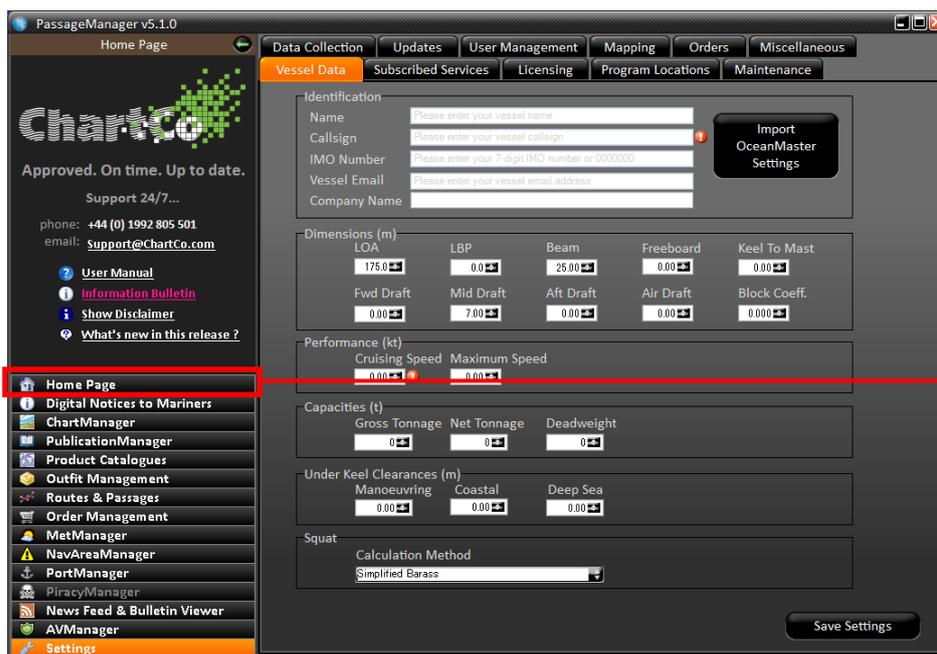
- 1) Starting the PassageManager. Then,select "I accept the terms."



- 2) Input "Administrator" in User Name, "chartco" in Password.



- 3) Click on the [Home Page] button at Navigation Panel on the left side.

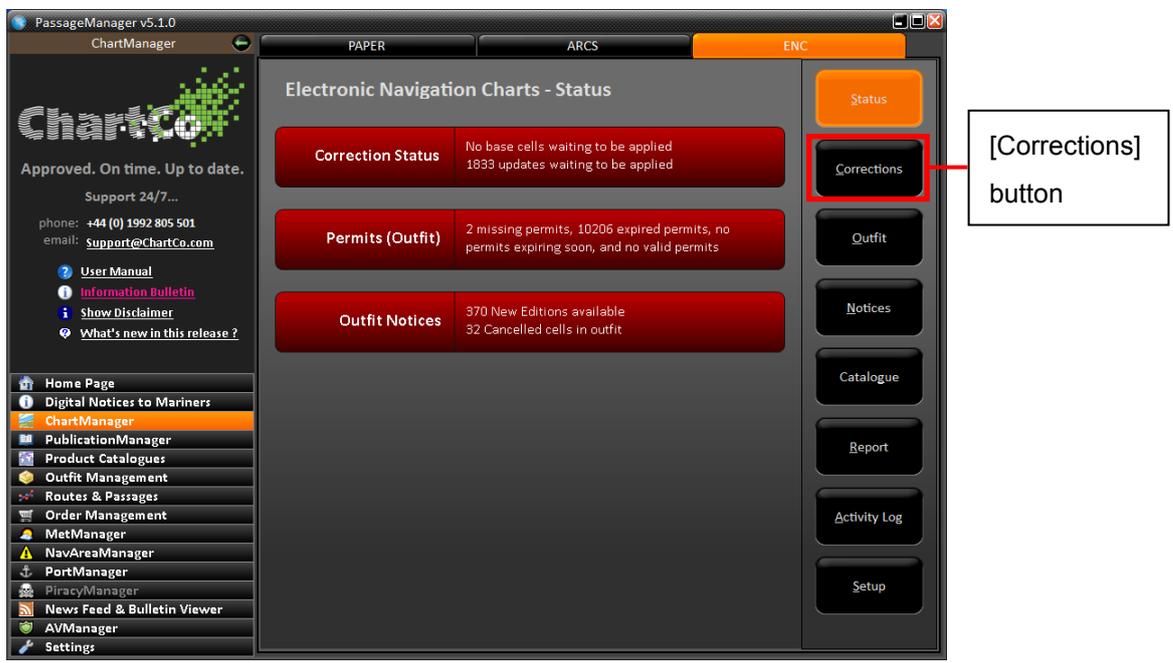


[Home Page]  
button

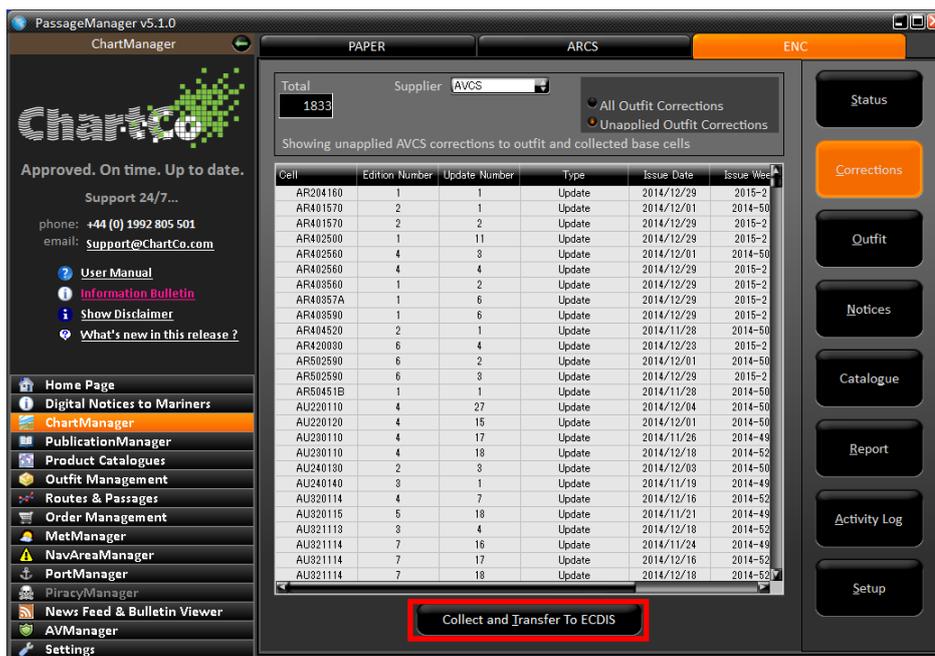
4) Click on the [ENC] button.



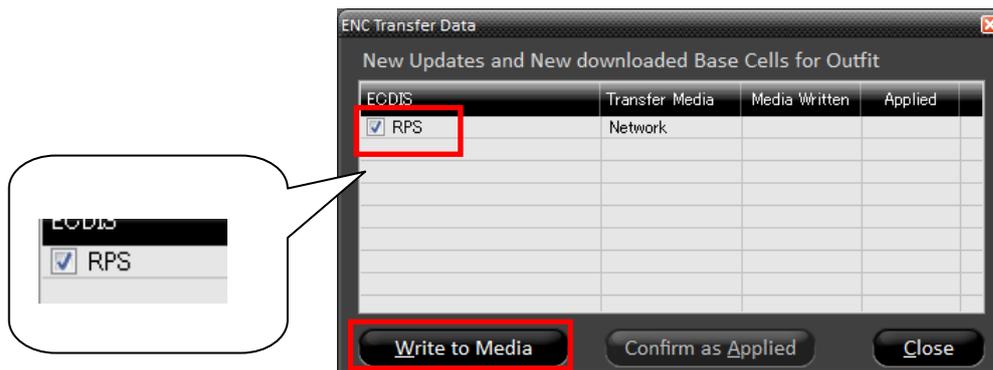
5) Click on the [Corrections] button.



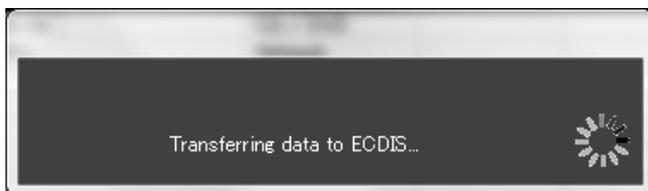
6) Click on the [Collect and Transfer To ECDIS] button.



7) Make sure that check off the box for "RPS", click the [Write to Media] button.



8) Transferring chart data to RPS.







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