

AVCS

ADMIRALTY
Vector Chart Service

Using the ADMIRALTY Vector Chart Service with the JRC ECDIS – JAN-7201/9201

This guide is based on JRC ECDIS – JAN-7201/9201 Version 01.20.026

The guide should be used in conjunction with the AVCS User Guide, as well as the ECDIS Operators Manual or other documentations as supplied by the equipment manufacturer



United Kingdom
Hydrographic Office

Version 1

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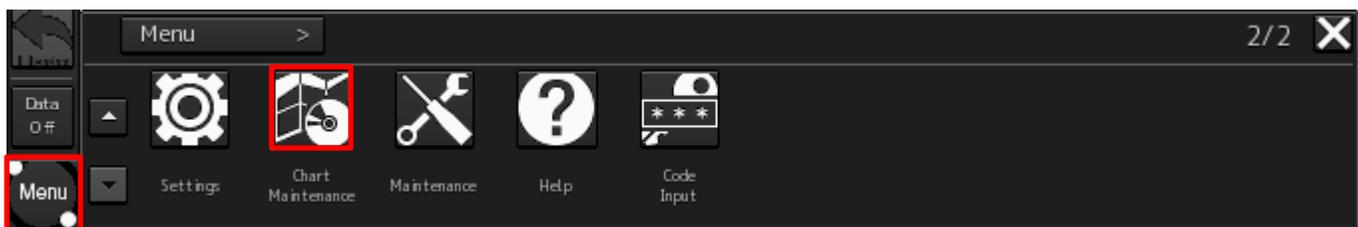
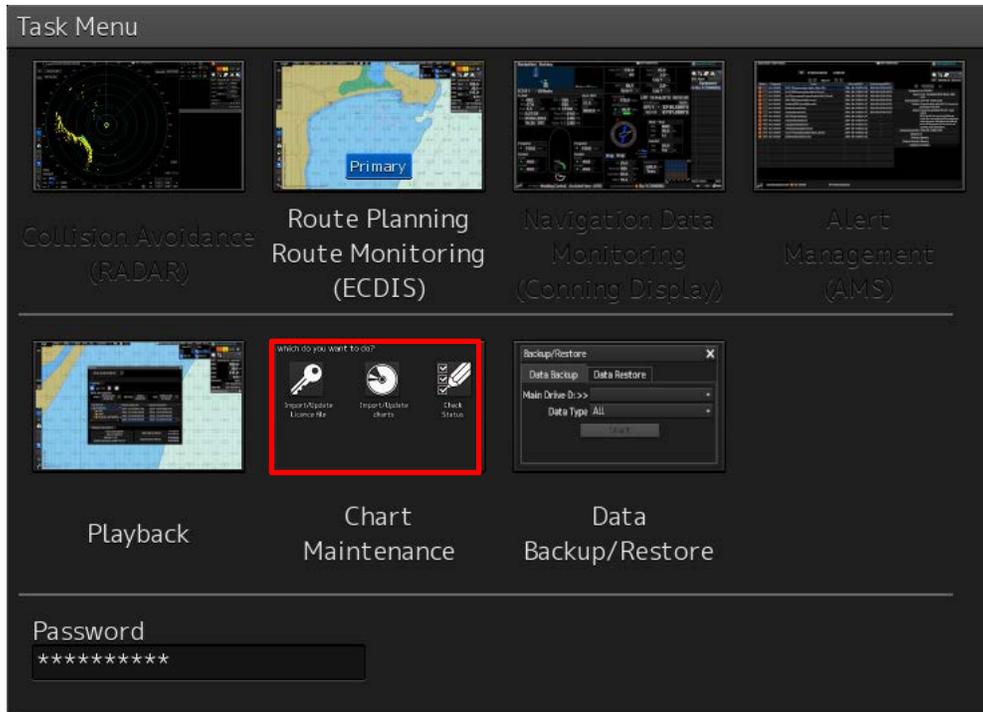
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1 Data Management

All electronic navigational charts (ENCs) licensing and data management operations are carried out through the **Chart Maintenance** window.

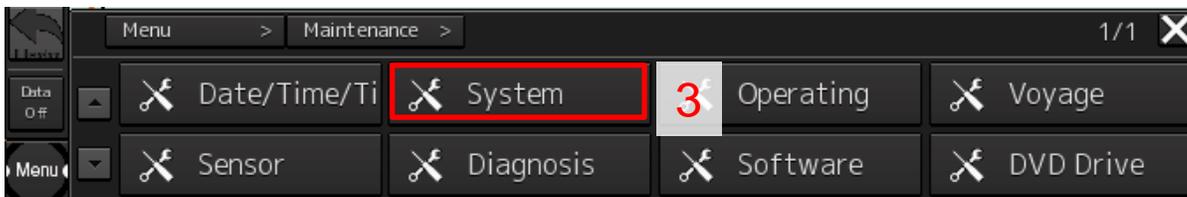
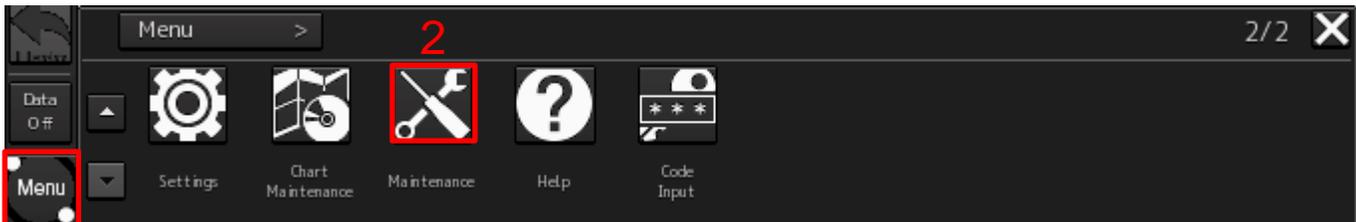
To access to Chart Maintenance:

- Go to **Task Menu** and click **Chart Maintenance**.
- Go to **Menu** then click down button to page 2 and click **Chart Maintenance**.



To check ECDIS Software Version and Presentation Library (PL) Edition:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click down button to page 2 and click **Maintenance**.
3. Click **System**.
4. Go to **Software** tab and check the **Maintenance No.** (ECDIS Software) and **Presentation Library** version. Click **Save to USB Device** to save the information into USB media.

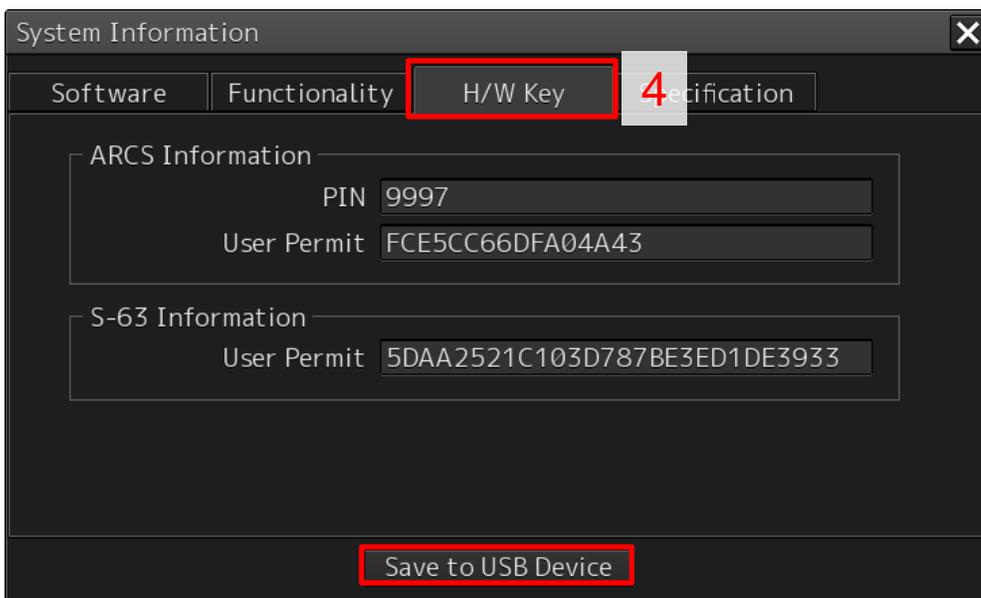
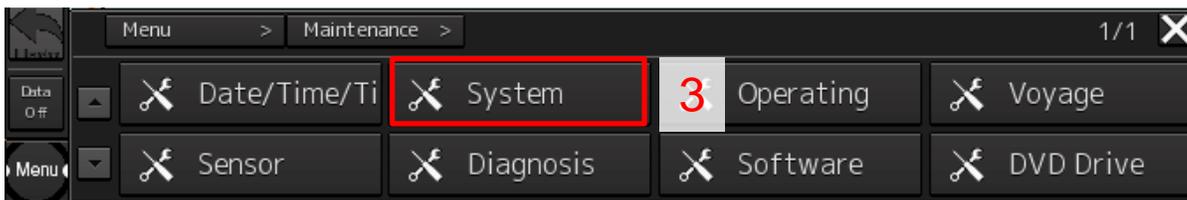
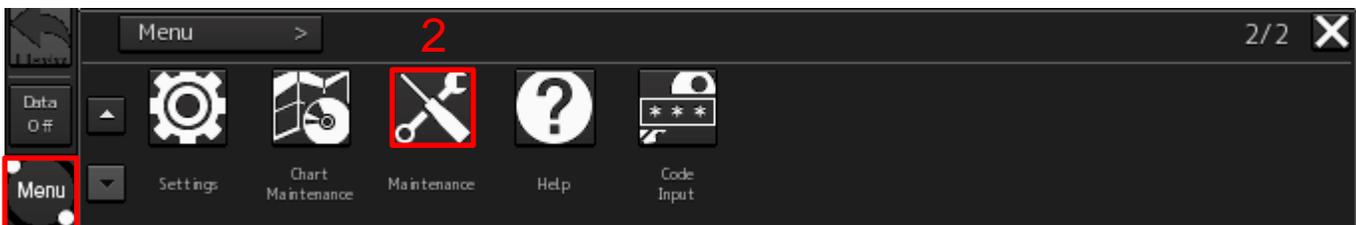


2 The User Permit Number

The 'User Permit Number' is a 28 character alphanumeric string that is unique to each ECDIS installation or group of ECDIS, e.g. multiple bridge installations. The 'User Permit Number' should have been supplied at the time of delivery and must be used when ordering an AVCS licence.

To check the User Permit Number:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click down button to page 2 and click **Maintenance**.
3. Click **System**.
4. Go to **H/W Key** tab and check the **S-63 Information User Permit**. Click **Save to USB Device** to save the information into USB media.

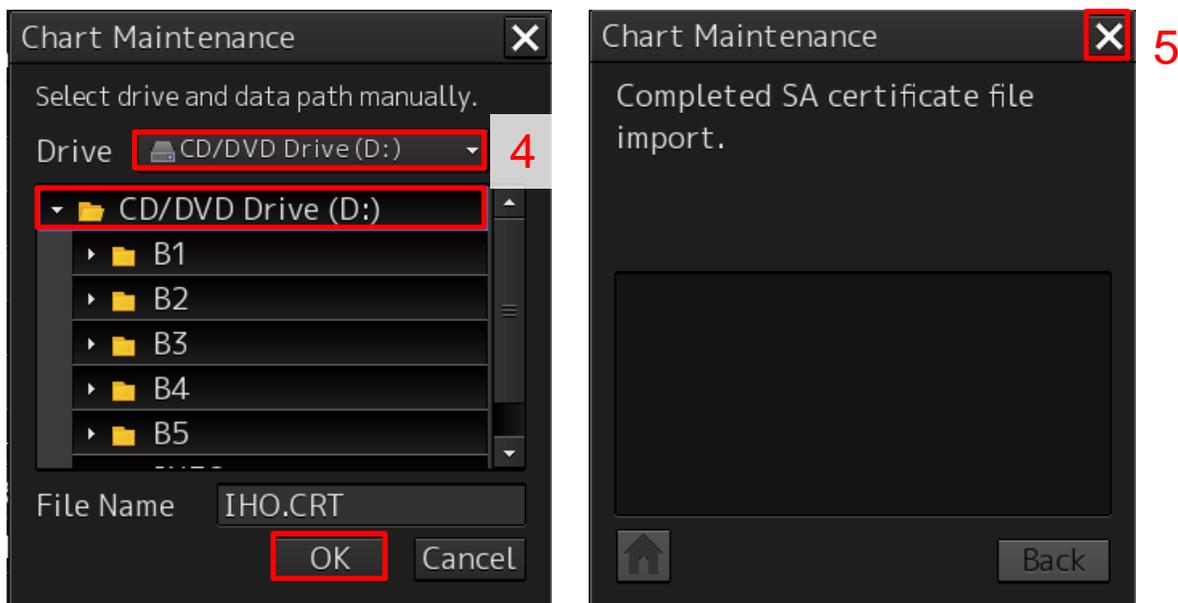
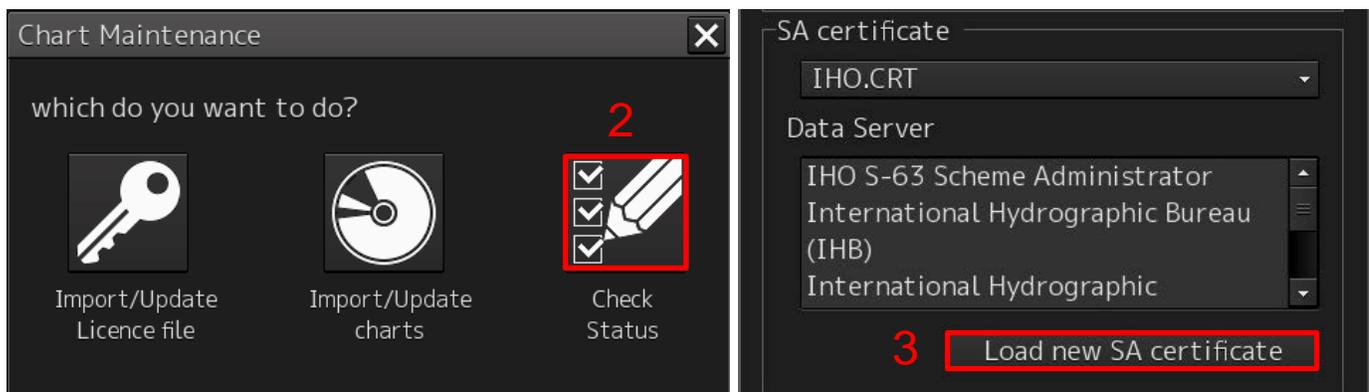


3 The Public Key

The Admiralty Vector Chart Service currently uses the IHO.CRT, issued by the International Hydrographic Organization, to authenticate its AVCS ENC's. The IHO Public Key is included in all AVCS media.

To install the IHO Public Key:

1. Insert AVCS CD or DVD media then go to Task Menu and click **Chart Maintenance**.
2. Click **Check Status**.
3. At SA Certificate section, click **Load new SA certificate**.
4. Select the CD/DVD media drive and ensure **IHO.CRT** file name appear then click **OK**.
5. Once it is installed, system will display '**Completed SA certificate file import**'. Close the window to end. View the log details at **Log** tab.



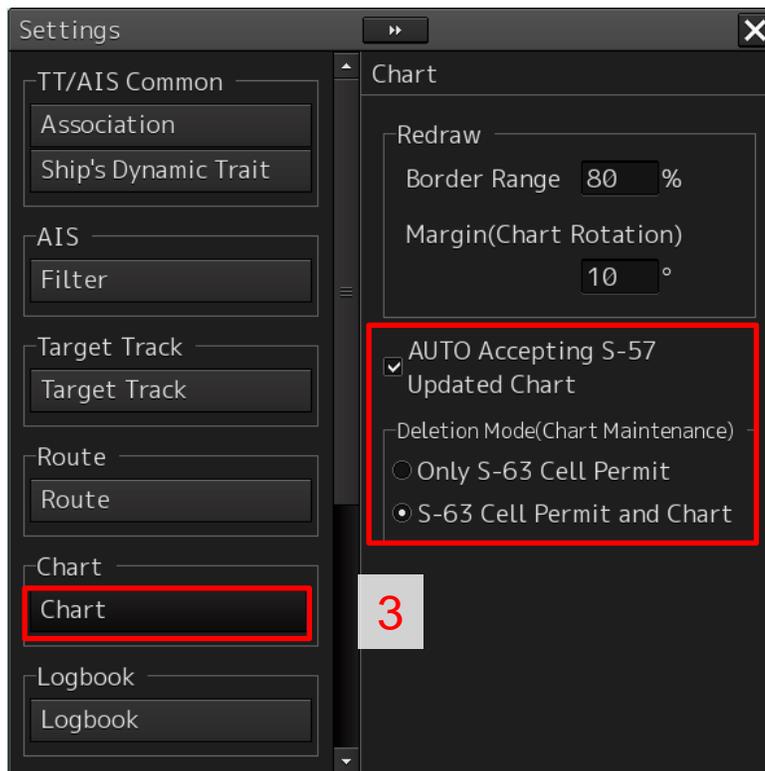
4 Deleting ENC Permits and Data

New AVCS customers who had previously subscribed to other ENC services are required to remove (purge) all ENC Permits and data from the system before installing AVCS.

Note: Do not delete AA Cells

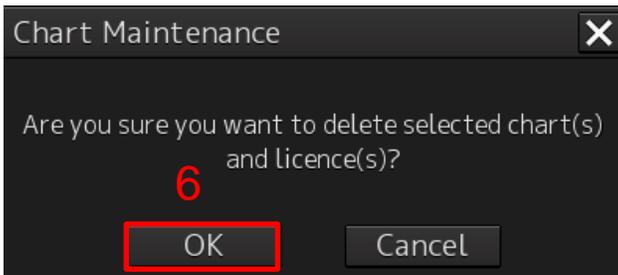
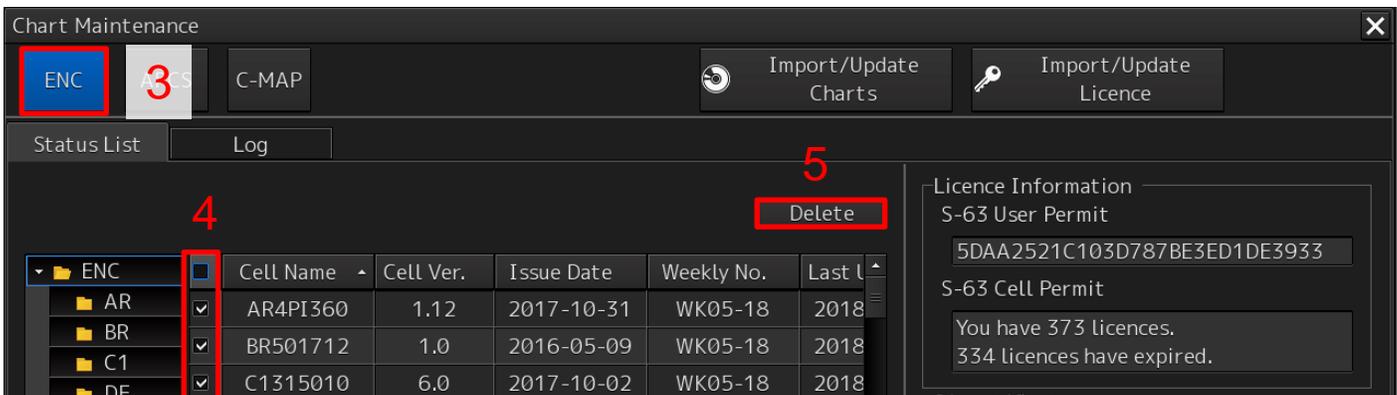
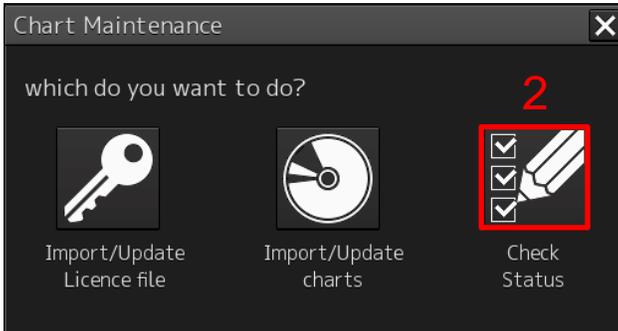
To check settings before deleting ENC Permits and Data.

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click down button to page 2 and click **Settings**.
3. Click **Chart** then select **AUTO Accepting S-57 Updated Chart** and **S-63 Cell Permit and Chart** option.



To delete all or required ENC's Permit and data from the system:

1. Go to **Task Menu** and click **Chart Maintenance**.
2. Click **Check Status**.
3. Select **ENC** and view the installed ENC's at Status List tab.
4. Select all or individual ENC's by ticking the selection box beside the Cell Name.
5. Click **Delete** to remove selected ENC's.
6. System will prompt 'Are you sure you want to delete selected chart(s) and licence(s)?'. Click **OK** to remove them.
7. Once the deletion is completed, view the log details at **Log** tab.

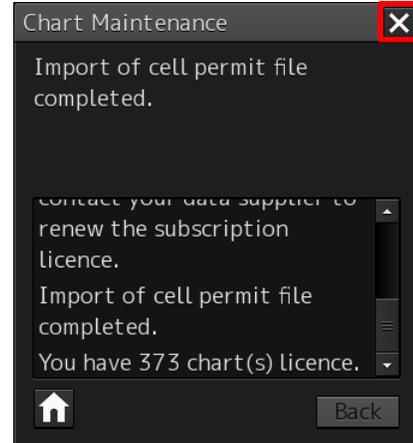
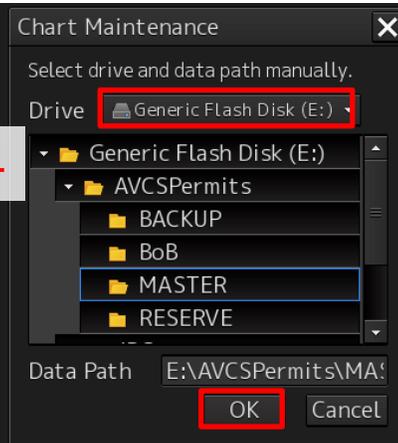
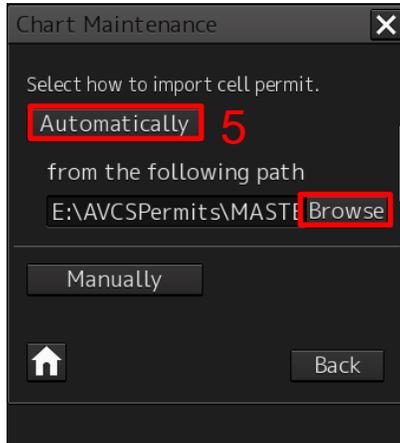
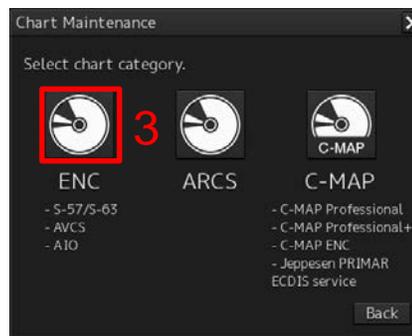
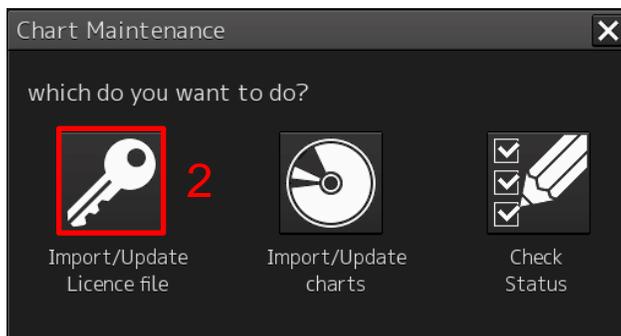


5 Installing ENC Permits

Note: Ensure the correct Permit is installed into the ECDIS workstation.

To install AVCS ENC Permits including AIO PERMIT:

1. Insert the CD/USB Stick Media containing **PERMIT.TXT** and go to **Task Menu** and click **Chart Maintenance**.
2. Click **Import/Update License file**.
3. Click **ENC** option.
4. Click **Browse** to the folder that stored the PERMIT.TXT then click **OK**.
5. Click **Automatically** to install permit. Check the log details and close the window to end.



6 Installing AVCS DVDs

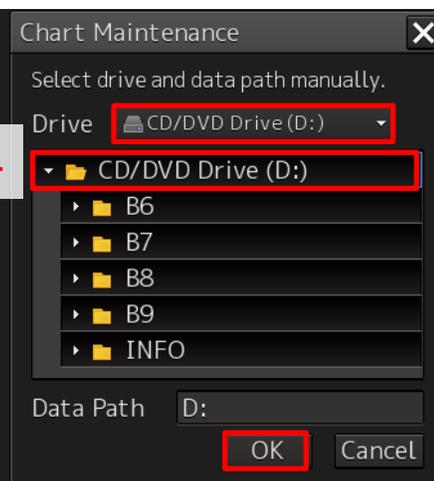
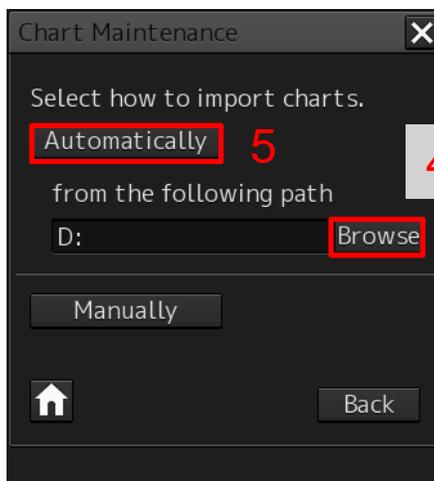
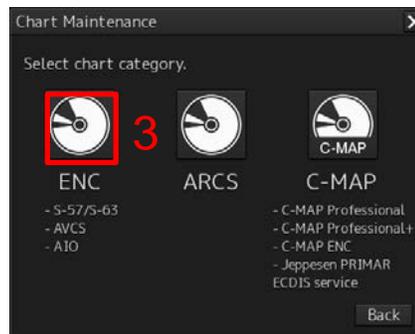
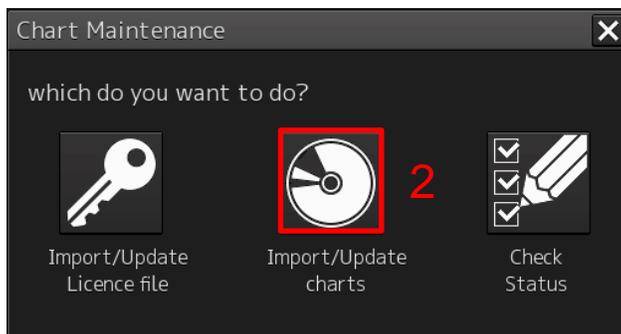
There are currently 2 AVCS DVD Media. AVCS DVD Media contain all the latest Base and Update data. It is likely that users will need to install both DVDs in order to load all licensed ENC's. Reference to the Schedule A can avoid the unnecessary loading of both DVDs and save the user time.

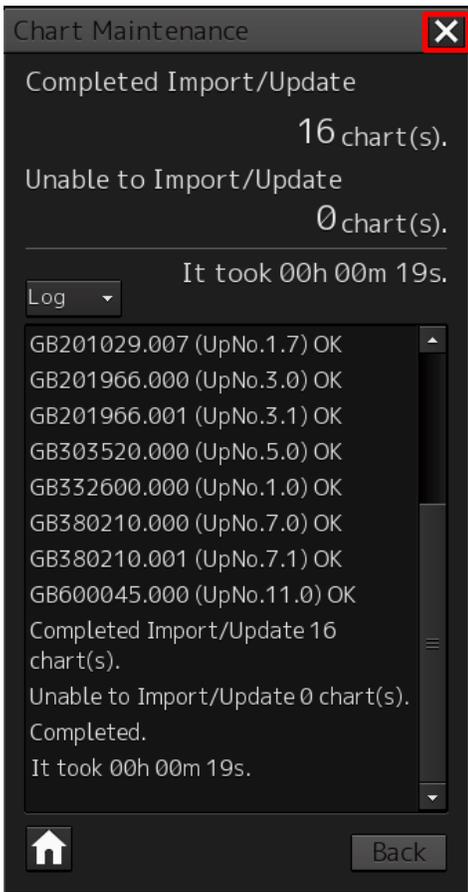
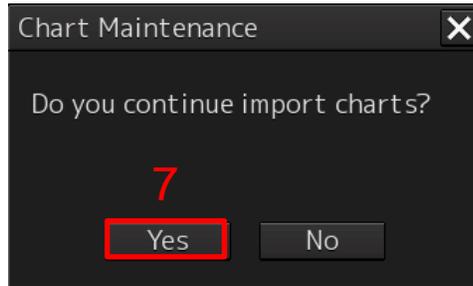
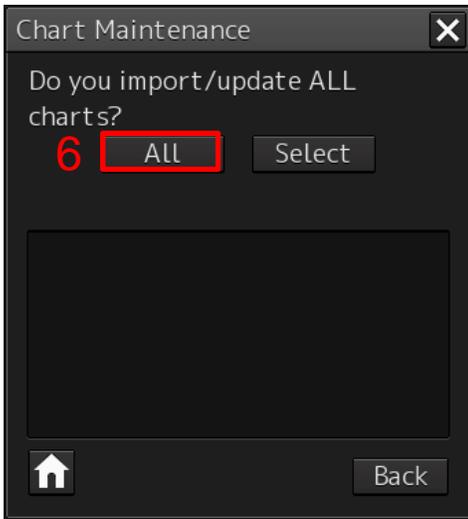
The process described here should be used in almost all circumstances as it will automatically select data to be loaded according to the permit file installed by the user.

Note: Ensure the latest permits have been installed before attempting to install any data.

To install AVCS DVD Media:

1. Insert the latest AVCS DVD Media and go to **Task Menu** then click **Chart Maintenance**.
2. Click **Import/Update charts**.
3. Click **ENC** option.
4. Click **Browse** to **CD/DVD Drive** then click **OK**.
5. Click **Automatically** to start the chart installation.
6. System will prompt 'Do you import/update ALL charts?'. Click **ALL** to load all updates.
7. Once the chart installation is completed, system will prompt 'Do you continue import charts?'. Click **Yes** to install the next AVCS DVD media or **No** to end the installation. View the log details.





7 Installing AVCS Base CDs

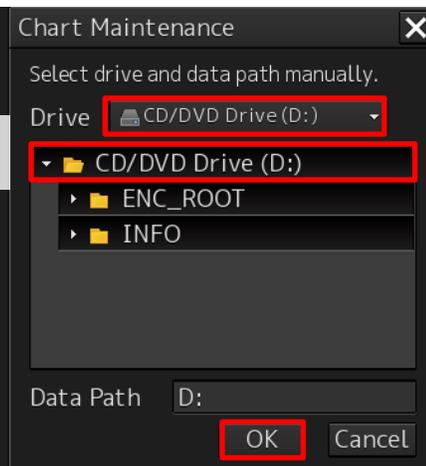
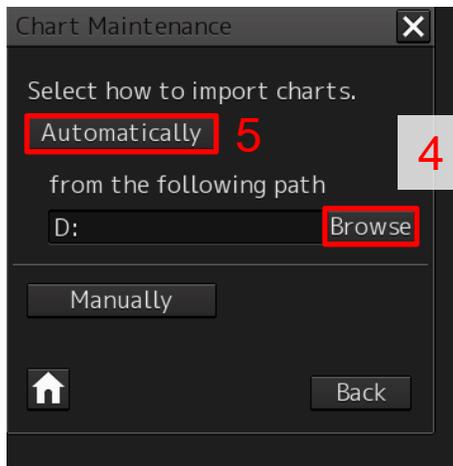
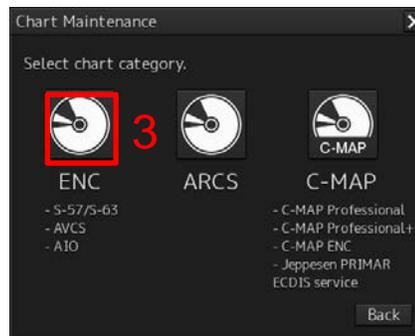
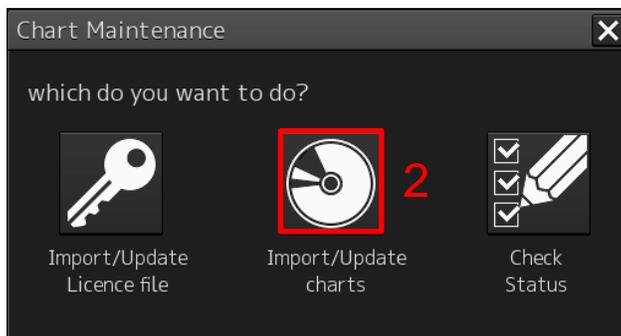
There are currently 9 AVCS Base CDs but this number will grow as more ENC's become available for distribution within AVCS. It is unlikely that users will need to install all of the CDs in order to load all licensed ENC's. Reference to the Schedule A can avoid the unnecessary loading of some CDs and save the user time.

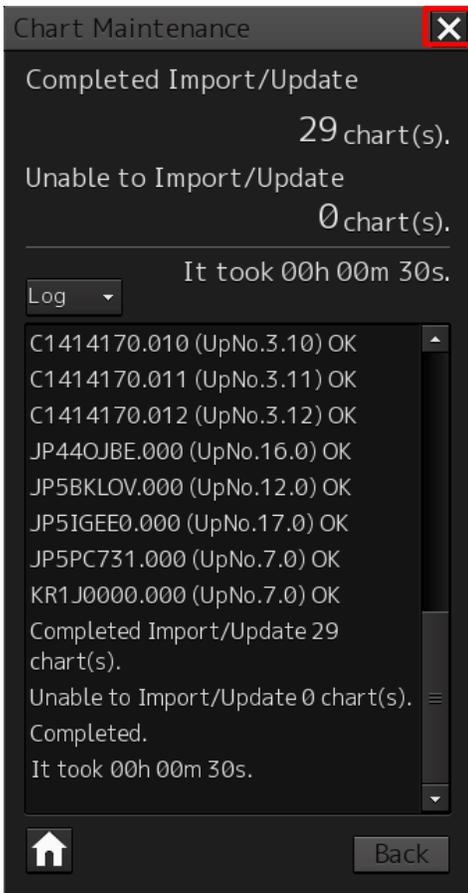
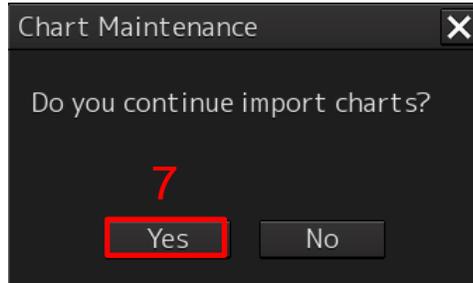
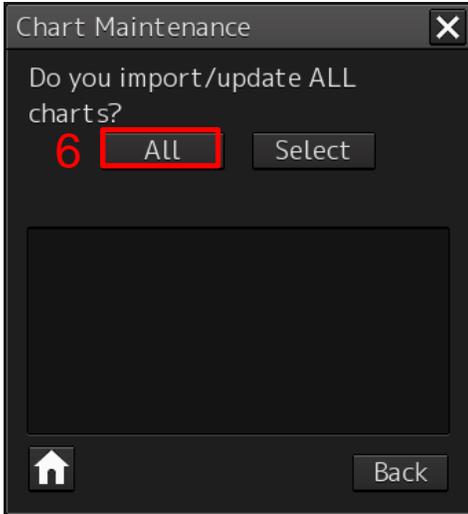
The process described here should be used in almost all circumstances as it will automatically select data to be loaded according to the permit file installed by the user.

Note: Ensure the latest permits have been installed before attempting to install any data.

To install AVCS Base CD(s) Media:

1. Insert the latest AVCS Base CD Media and go to **Task Menu** then click **Chart Maintenance**.
2. Click **Import/Update charts**.
3. Click **ENC** option.
4. Click **Browse** to **CD/DVD Drive** then click **OK**.
5. Click **Automatically** to start the chart installation.
6. System will prompt 'Do you import/update ALL charts?'. Click **ALL** to load all updates.
7. Once the chart installation is completed, system will prompt 'Do you continue import charts?'. Click **Yes** to install the next AVCS Base CD media or **No** to end the installation. View the log details.





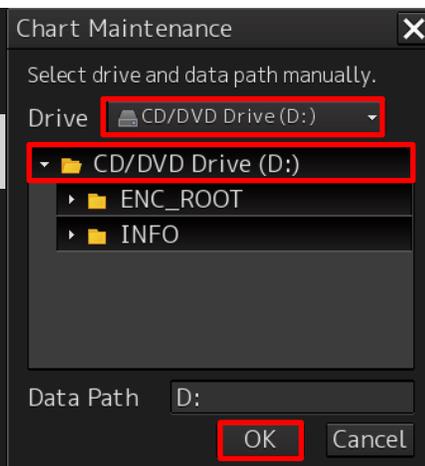
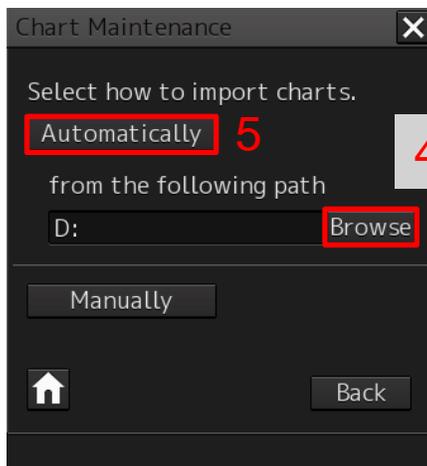
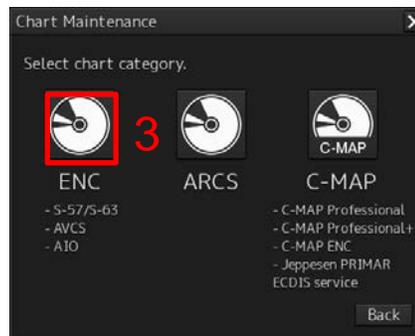
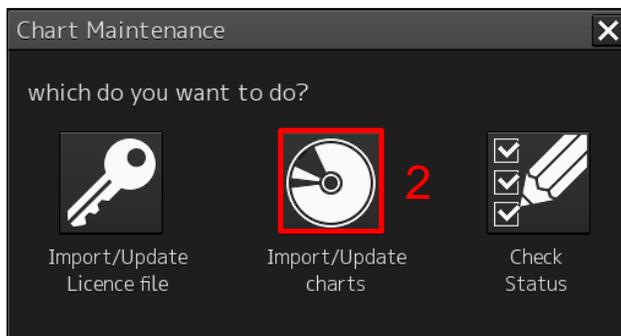
8 Installing AVCS Update CD

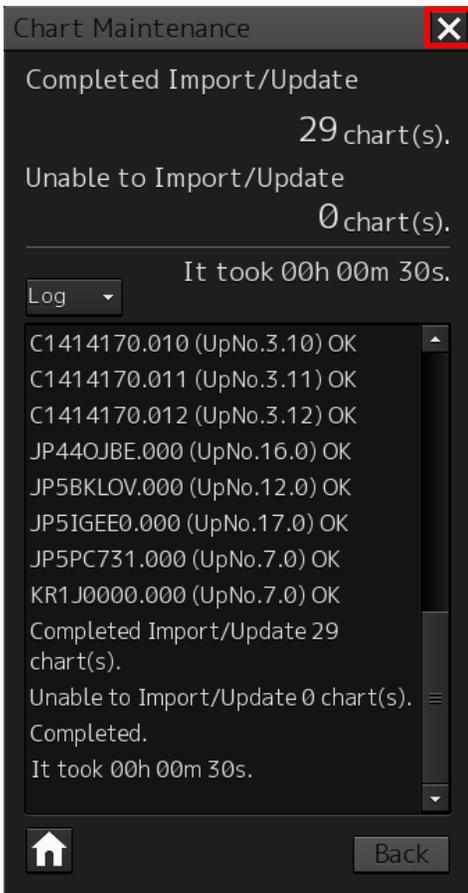
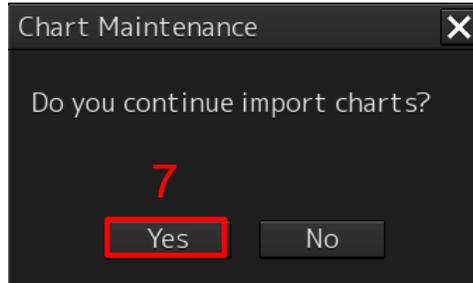
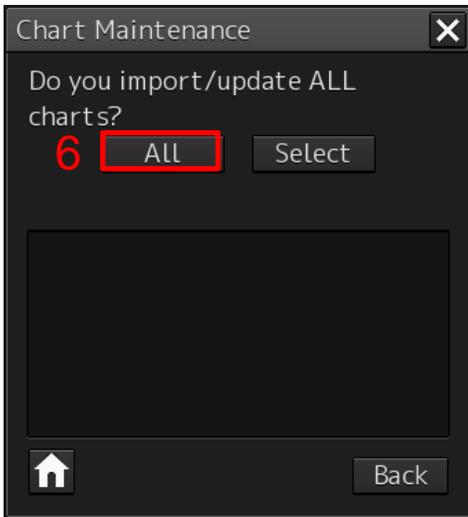
The AVCS update disc will indicate which Base disc week must have been installed. It is important that users do not attempt to load an Update CD that is not consistent with the Base CDs

Note: Check the AVCS Update CD for the required Base CDs to be applied first.

To install AVCS Update CD Media:

1. Insert the latest AVCS Update CD Media and go to **Task Menu** then click **Chart Maintenance**.
2. Click **Import/Update charts**.
3. Click **ENC** option.
4. Click **Browse** to **CD/DVD Drive** then click **OK**.
5. Click **Automatically** to start the chart installation.
6. System will prompt 'Do you import/update ALL charts?'. Click **ALL** to load all updates.
7. Once the chart installation is completed, system will prompt 'Do you continue import charts?'. Click **Yes** to install the next AVCS Base CD media or **No** to end the installation. View the log details.





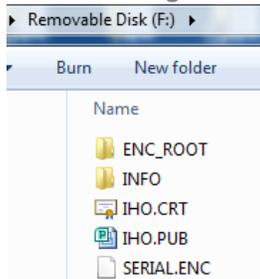
9 Installing Exchange Set Using USB Media

The exchange set contained the latest Notices to Mariners' corrections, New Editions and New Charts issued since the last update for their AVCS holdings. The exchange set can be downloaded using online chart updating software.

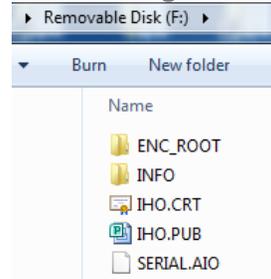
To create AVCS/AIO Exchange Set into Virus Free USB Media:

1. Save **ENC_ROOT**, **INFO** and **SERIAL.ENC** or **SERIAL.AIO** into root directory of an empty USB Stick Media.
2. Optional - Copy **IHO.CRT** and **IHO.PUB** from AVCS DVD/CD Media.
3. Carry out Virus Scan on USB Stick Media after copying the Exchange Set.

ENC Exchange Set

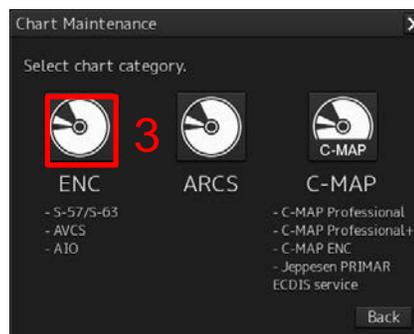
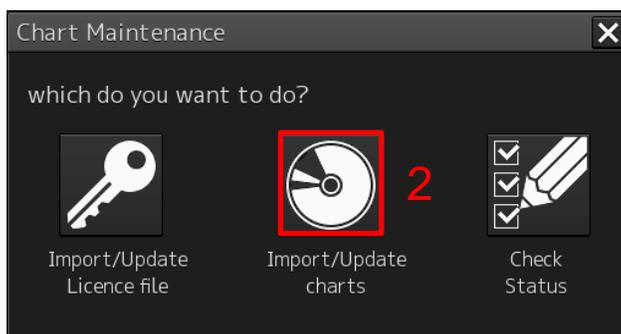


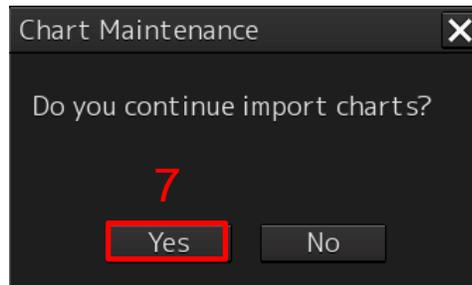
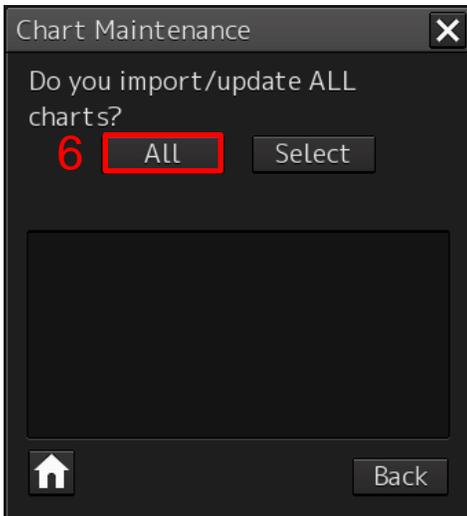
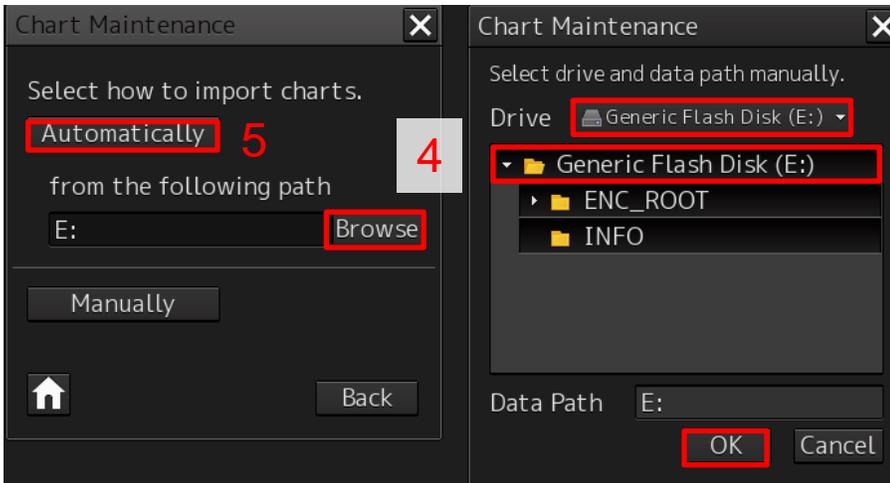
AIO Exchange Set



To install AVCS/AIO Exchange Set using USB Media:

1. Insert the USB Stick Media containing the AVCS/AIO Exchange Set then click **Chart Maintenance**.
2. Click **Import/Update charts**.
3. Click **ENC** option.
4. Click **Browse to Generic Flash Disk** then click **OK**.
5. Click **Automatically** to start the chart installation.
6. System will prompt 'Do you import/update ALL charts?'. Click **ALL** to load all updates.
7. Once the chart installation is completed, system will prompt 'Do you continue import charts?'. Click **Yes** to install the next AVCS Base CD media or **No** to end the installation. View the log details.

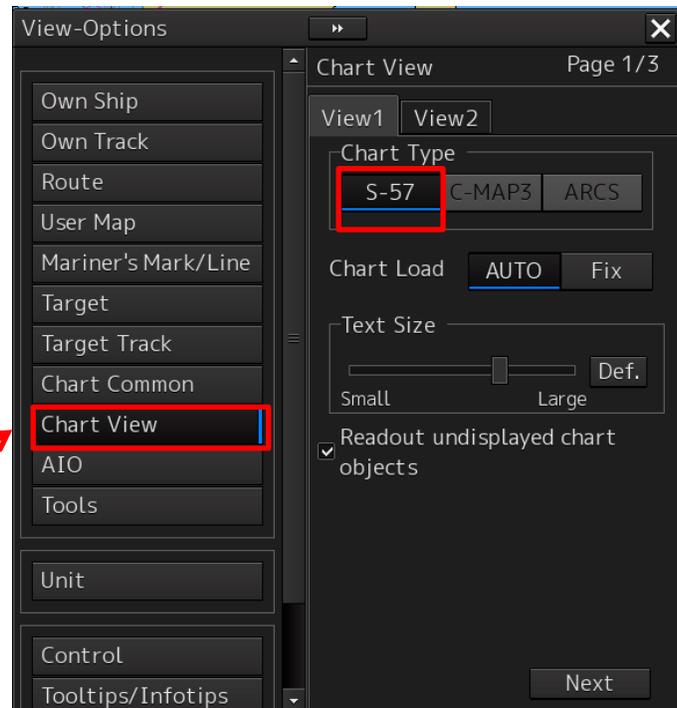
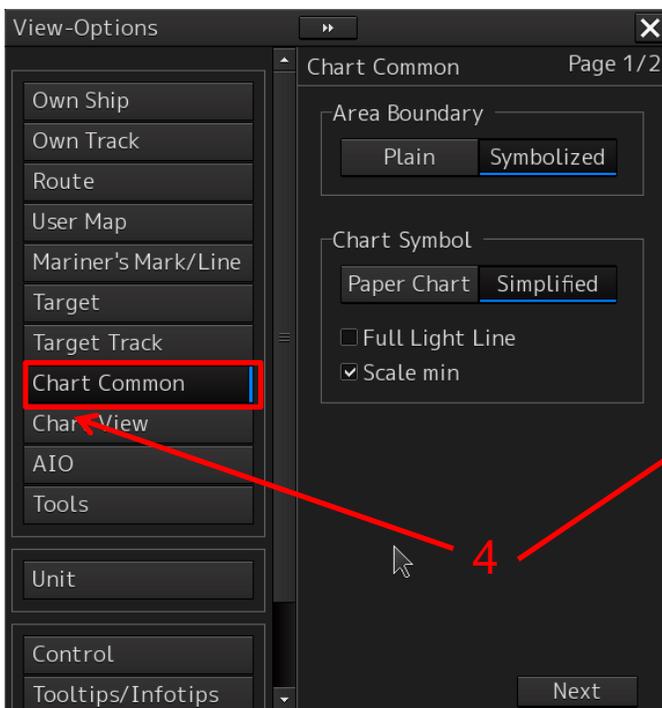
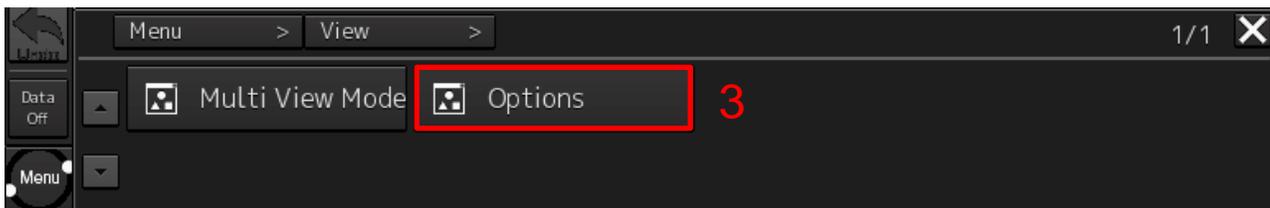
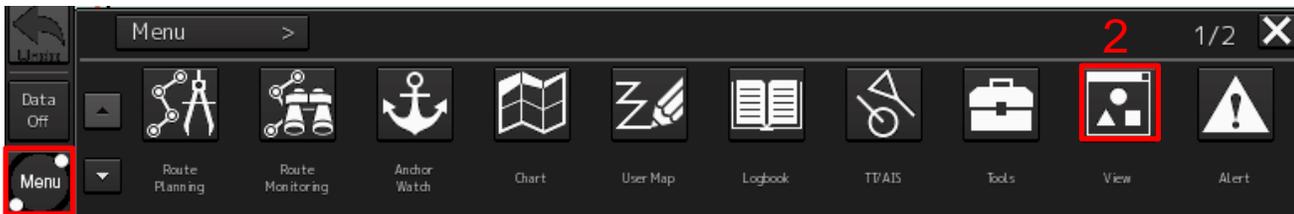




10 Viewing an ENC

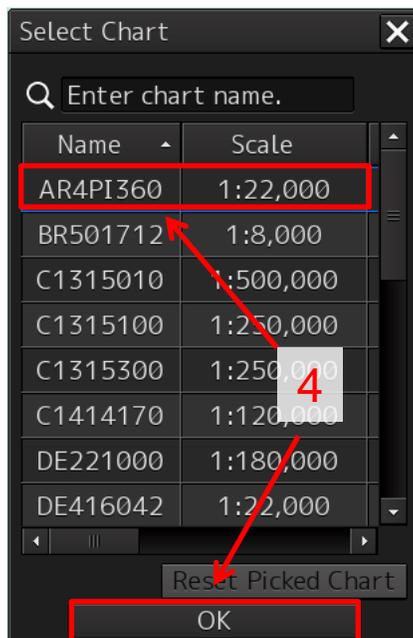
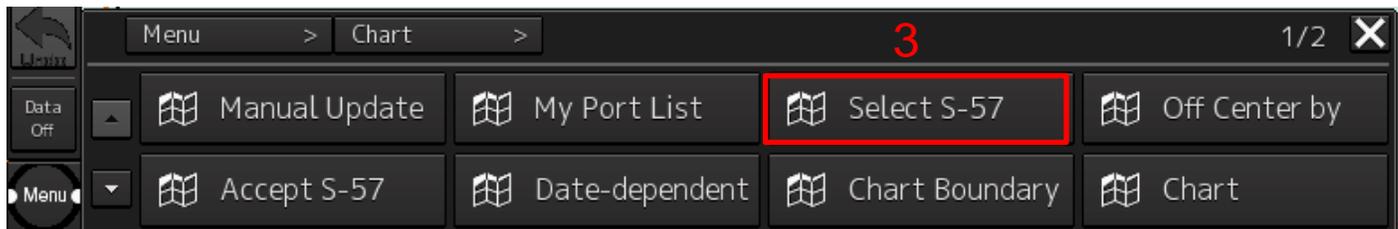
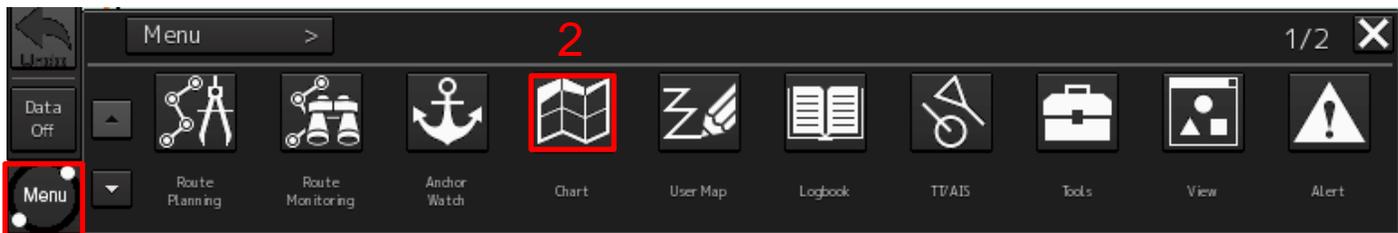
To setup Chart Display Settings:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click **View**.
3. Click **Options**.
4. Change the **Chart Display Settings** at **Chart Common (2 pages of options)** and **Chart View (3 pages of options)** – Select Chart Type **S-57** option.



To view ENC data:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click **Chart**.
3. Click **Select S-57** to view installed ENCs.
4. At Select Chart window, select **ENC name** to view and click **OK**.
5. Once the ENC is open, right click the mouse on the ENC object to view and click on **Readout chart information...** to view chart information.
6. At **Chart Information** window, view the ENC information at **Object** and **Chart Legend** tab.



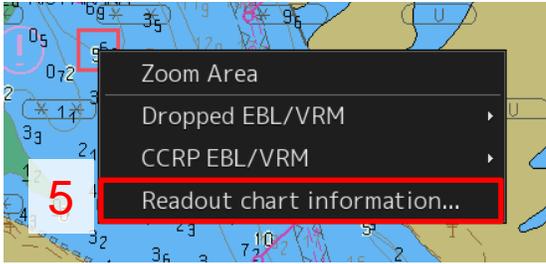


Chart Information

Object Chart Legend 6 Date History

Name All

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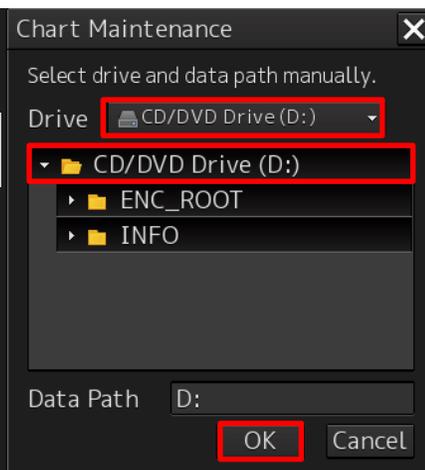
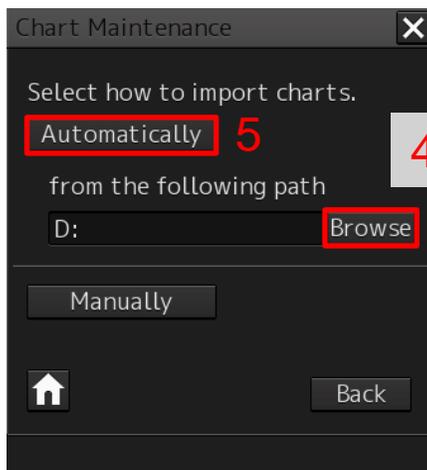
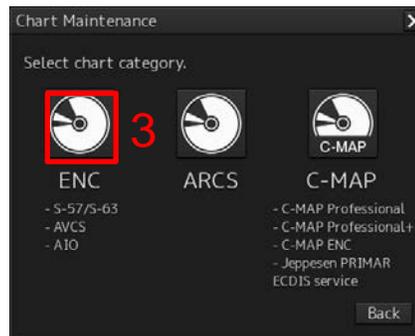
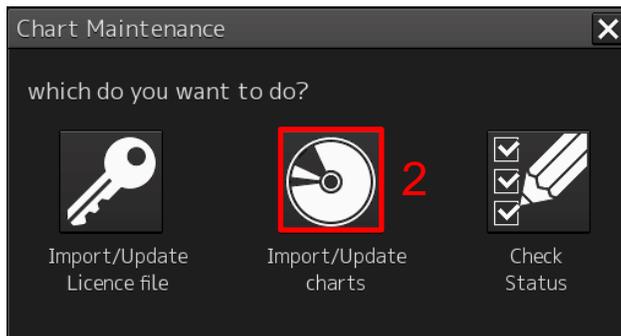
Information	
Chart Type	S-57
Name	AR4PI360
Agency Code	1 (Argentina)
PL Version	4.0
Edition. Update Number	1.12
Format Number	3.1
Issue Date	02 Sep, 2014
Navigation Purpose	APPROACH
Compilation Scale1	1/22,000
Horizontal Datum	0 (WGS-84)
Vertical Datum	3 (Mean sea level)
Sounding Datum	24 (Local datum)

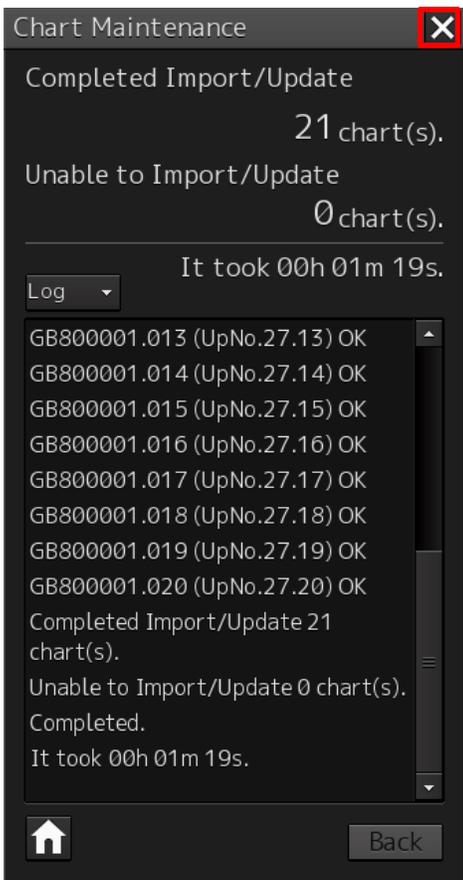
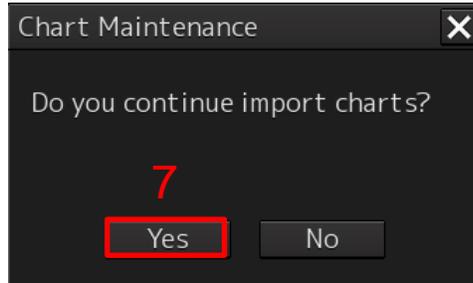
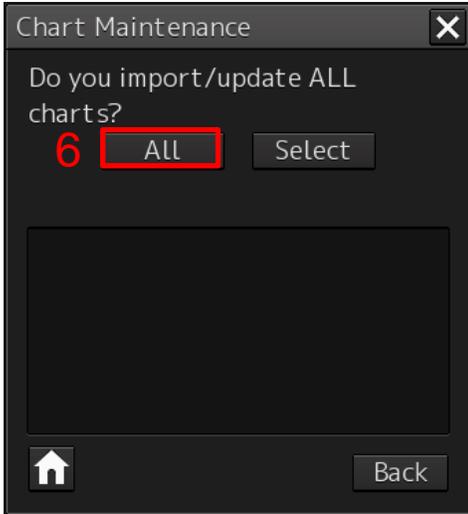
11 Installing AIO CD

Note: Ensure the latest AVCS Permit including AIO have been installed before attempting to install any data

To install AIO CD Media:

1. Insert the latest AIO CD Media and go to **Task Menu** then click **Chart Maintenance**.
2. Click **Import/Update charts**.
3. Click **ENC** option.
4. Click **Browse** to **CD/DVD Drive** then click **OK**.
5. Click **Automatically** to start the chart installation.
6. System will prompt 'Do you import/update ALL charts?'. Click **ALL** to load all updates.
7. Once the chart installation is completed, system will prompt 'Do you continue import charts?'. Click **Yes** to install the next AVCS Base CD media or **No** to end the installation. View the log details.

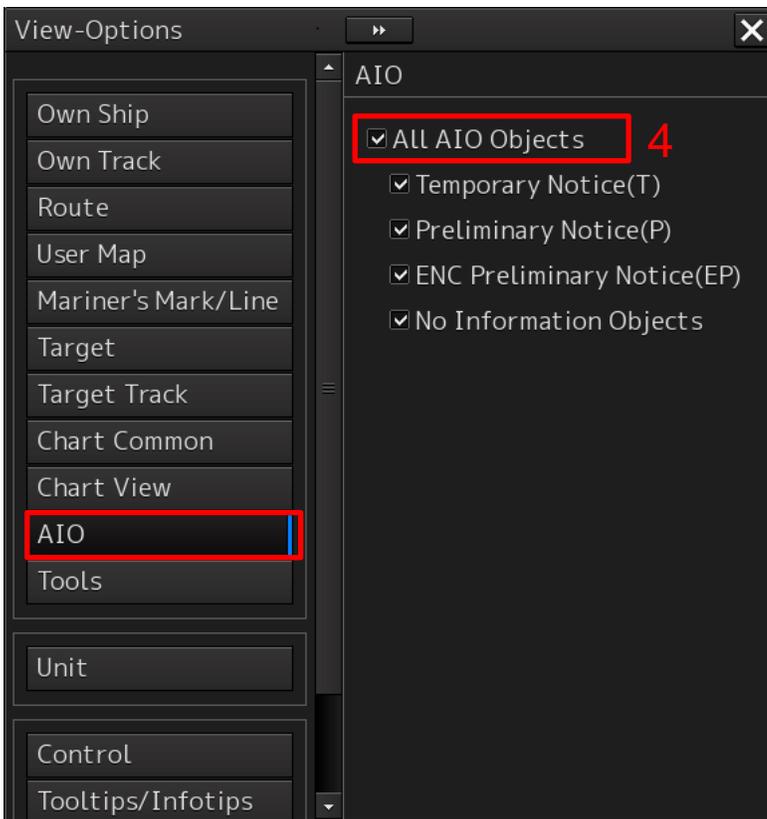
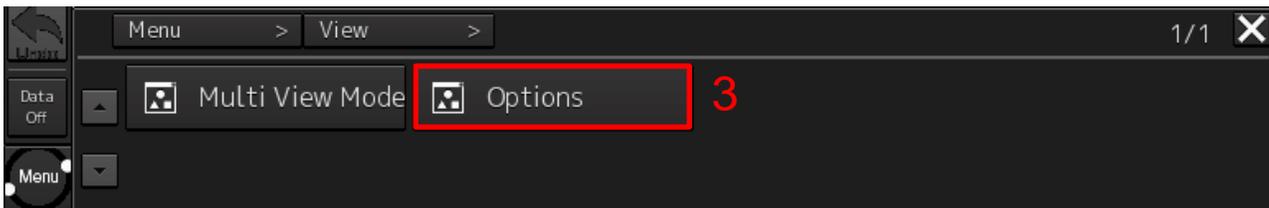
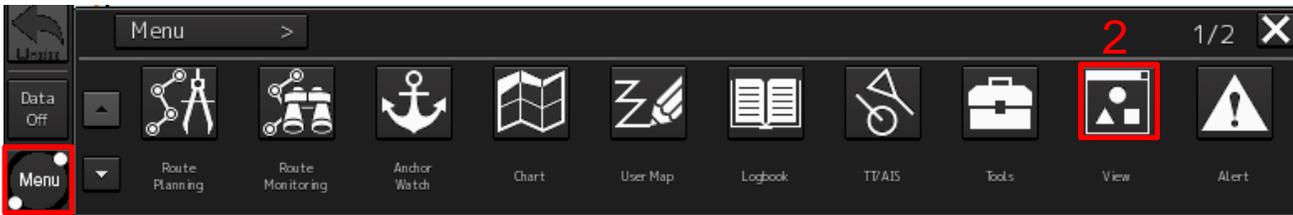




12 Using the AIO

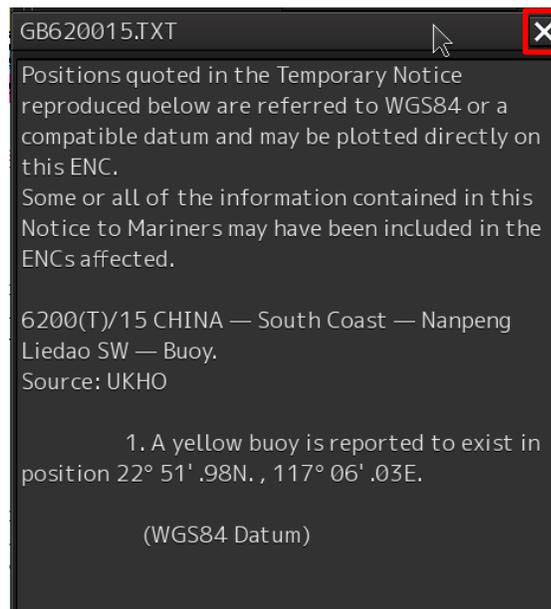
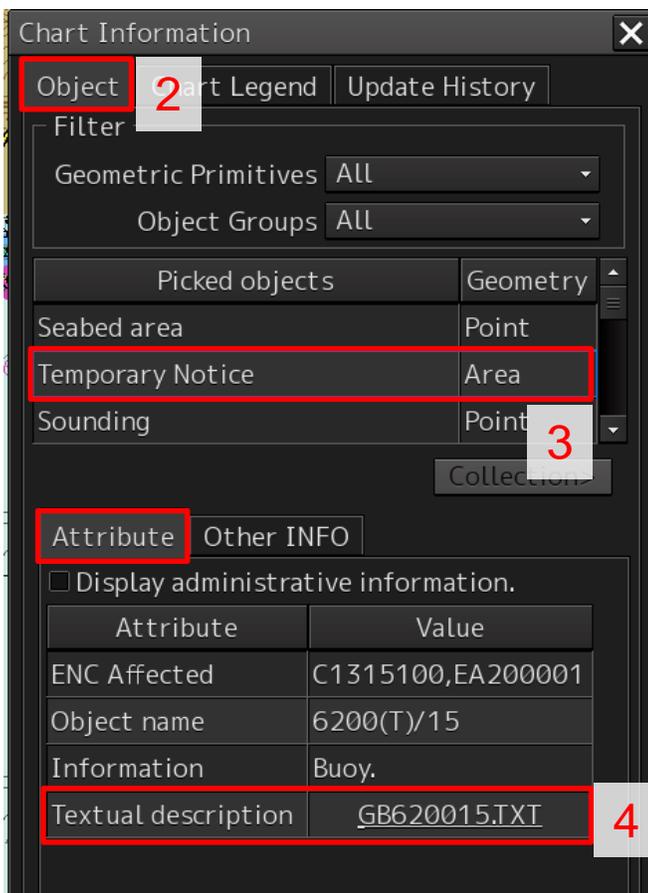
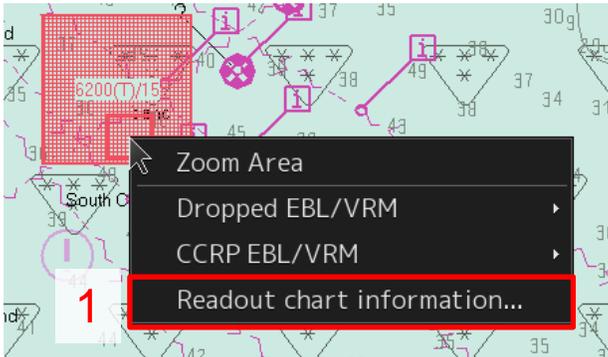
To enable AIO data:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click **View**.
3. Click **Options**.
4. Click **AIO** then select **All AIO Objects** option to enable all types of AIO objects.



To view AIO data:

1. At Main display, right **click the mouse** on the **AIO Object** then click **Readout chart information...**
2. At **Chart Information** window, view the **Object** tab.
3. Click on **Preliminary Notice or Temporary Notice** where UKHO has published an AIO Notice.
4. At **Attribute** window, view AIO information such as ENC Affected, Supporting Textual information and attached Text or Picture File Reference.

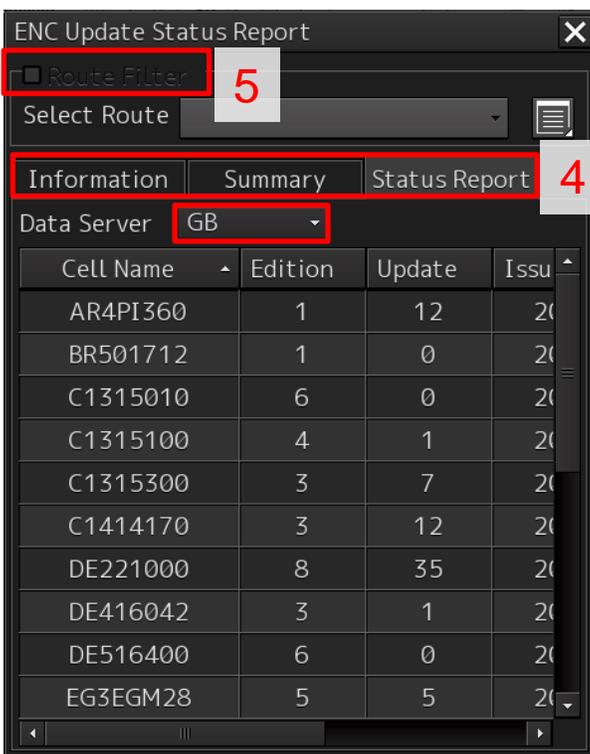
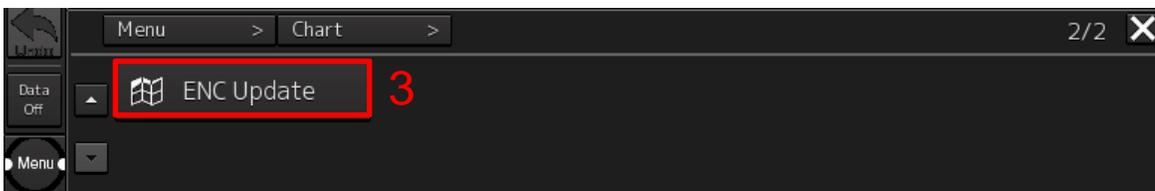
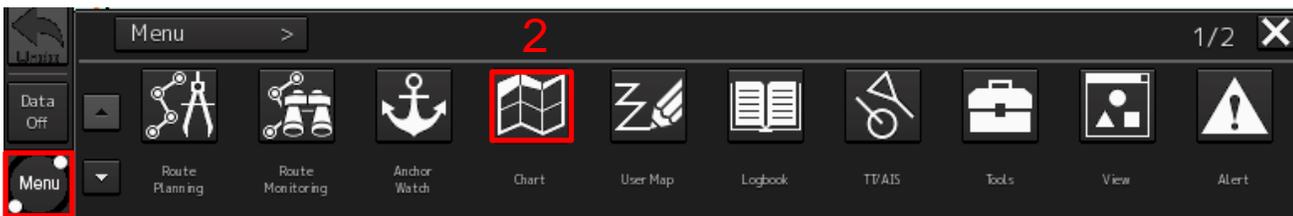


13 Systems Checks

The user has the option to review the status of all installed ENC's from within the Chart Maintenance dialog as follows:

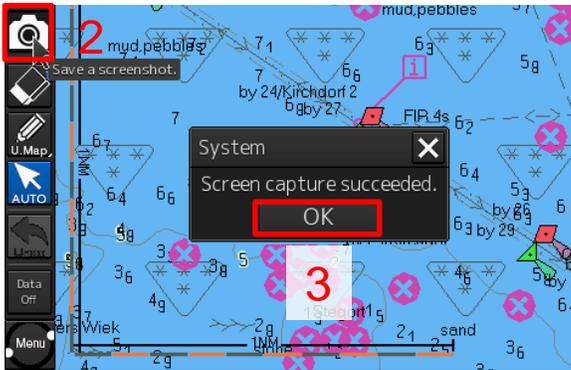
To generate the installed charts status report:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click **Chart**
3. Click down button to page 2 and click **ENC Update**.
4. User can view ENC Status at **Information, Summary and Status Report** tab.
5. User can click **Route Filter** option and select **Route file** to filter the required ENC's status for their intended voyage on ENC update report



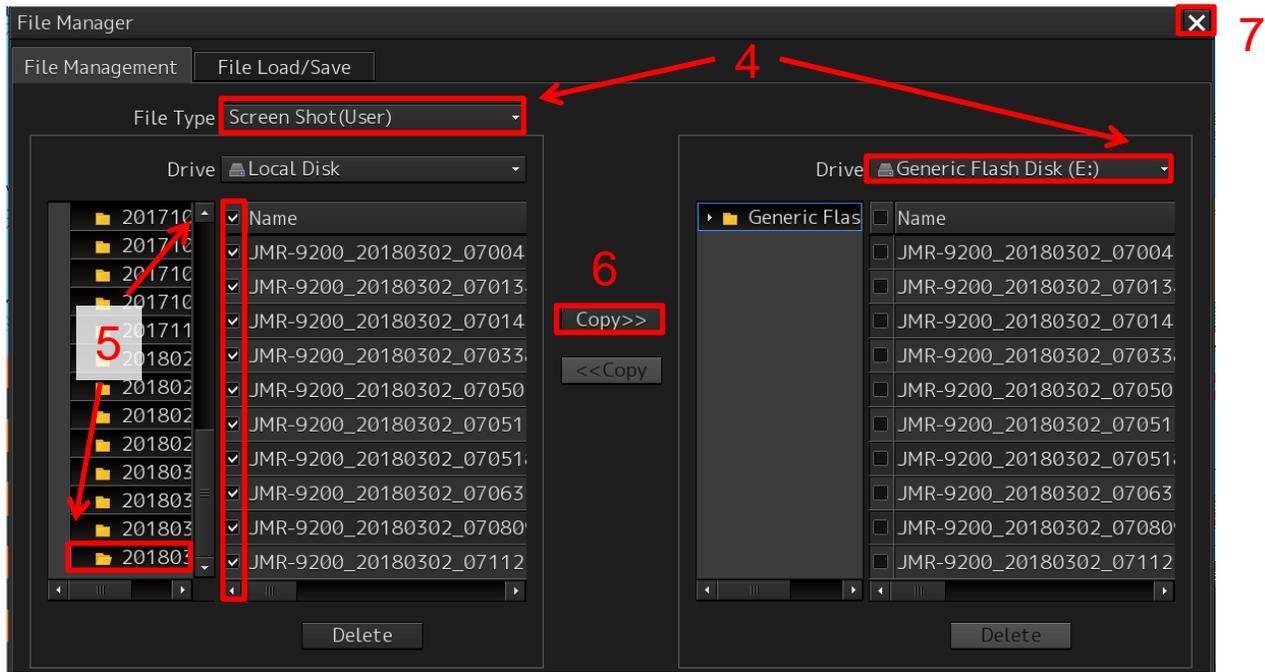
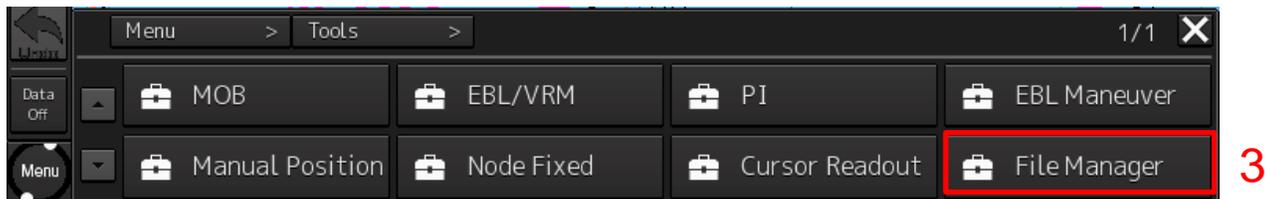
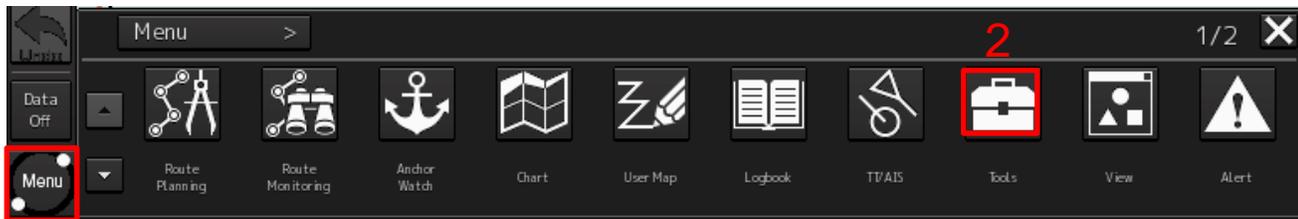
To capture the ECDIS Main Display:

1. Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Click **Camera** icon at left side Toolbar.
3. At System window, click **OK** to end.



To export the Capture Screen into USB Media:

1. Insert the virus free USB Media and Go to **Task Menu** and click **Route Planning Route Monitoring (ECDIS)**.
2. Go to **Menu** then click **Tools**.
3. Click **File Manager**.
4. At **File Manager** window, select Type: **Screen Shot (User)** then browse to **USB media drive** at right column.
5. Select **Folder name** (YYMMDDxxxxx) and select the screenshots.
6. Click **Copy >>** to copy image into USB Media.
7. Click **Close** to end and take out the USB Media.



14 Troubleshooting

Many of the difficulties that could be experienced when using the Admiralty Vector Chart Service with this system can be avoided by carefully following the instructions in this guide. However, issues that are known to have caused confusion in the past are detailed in the Frequently Asked Questions (FAQ) section which can be found at:

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

If you encounter problems that are not solved by referring to the FAQs, you may wish to seek Technical Support. Please see the section below for contact details.

Who should you contact?

You will receive the most effective support if you address your initial query to either the Manufacturer of your ECDIS equipment or the Chart Agent you obtain your AVCS charts from, but in certain circumstances you may need to contact the UKHO Customer Services.

Problem	Contact
Hardware problems: difficulties with the keyboard, mouse, display or main system console, failure of a floppy disk or CD drive.	ECDIS Manufacturer
Software problems: difficulties with configuring or using the ECDIS system software, interfacing problems.	
Chart installation problems: problems with installing certificates, permits and AVCS ENC's, standard error codes displayed (see AVCS User Guide).	Admiralty Chart Agent
Chart content problems: display anomalies or mismatched data displays.	
Problems that have not been resolved by your Admiralty Chart Agent.	UKHO Customer Services

When reporting a chart related problem it is useful if you can provide the following details :

- > Licence number
- > Vessel name
- > IMO
- > ECDIS/Software Manufacturer
- > ECDIS software version
- > Details of error message – Including 'SSE' error code
- > Screen shot(s) of error
- > Details of Base CD or DVD Discs used (week)
- > Details of Update CD used (week)
- > Details of Permits used (week)
- > Details of Cell number(s) errors apply to
- > Have there been any configuration changes to system(s)
- > Details of User Permit(s) and PIN Number(s)

Emergency Chart Permit Generation

In certain circumstances it may be necessary for a vessel to get access to an AVCS chart at very short notice, for instance if a route needs to be **diverted due to a medical or safety emergency**.

In these emergency circumstances only, individual AVCS ENC Permits can be obtained from the UKHO **24 hours a day, 365 days a year**.

To obtain an AVCS emergency permit please quote:

- Vessel Name
- ECDIS User Permit Number
- Required ENC(s)

These permits can be transmitted direct to the vessel by email wherever possible or by simply reading the characters out over the telephone or radio.

Support Hours: 0600-2200 Monday -Friday

Telephone: +44 (0)1823 484444

Email: customerservices@ukho.gov.uk

Contact: UKHO Customer Services

Web: <https://www.admiralty.co.uk/>

Feedback

We hope this User Guide assists you in using the ADMIRALTY Vector Chart Service with this system. If you have any feedback on the content of this particular guide, or the online FAQs, please forward your comments to your ADMIRALTY Chart Agent or directly to UKHO Customer Services.

About us

The United Kingdom Hydrographic Office is a leading provider of global marine geospatial data. We help to inform maritime decision-making for navigation, infrastructure development and the management of marine resources.

Serving users worldwide

Our world-leading location based information is available through ADMIRALTY Maritime Data Solutions to users worldwide.

For more information, contact our global network of ADMIRALTY Chart Agents. Alternatively, contact our customer service team.



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Find out more about our market-leading
ADMIRALTY Maritime Products & Services:

admiralty.co.uk    