SIMRAD

Master Bridge Assistant
Installation Manual

ENGLISH



http://www.navico-commercial.com/

Preface

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Internet usage

Some features in this software use an internet connection to perform data downloads and uploads. Internet usage via FleetBroadband, VSAT, Inmarsat or Mobile Broadband can be used but may require large data usage. Your service provider may charge you based on the amount of data you transfer. If you are unsure, contact your service provider to confirm rates and restrictions.

About this manual

This manual is a reference guide for installing the MBA software.
Important text that requires special attention from the reader is emphasized as follows:

➔ ***Note:*** Used to draw the reader's attention to a comment or some important information.

⚠ Warning: Used when it is necessary to warn personnel that they should proceed carefully to prevent risk of injury and/or damage to equipment/ personnel.

Software version

This manual is written for the software version in effect at the date of release for this manual. The manual is continually updated to match new software releases.

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1 Master Bridge Assistant Overview

The Master Bridge Assistant (MBA) is the ultimate all-in-one solution for ship owners and mariners, offering a cost-effective and easy-to-use solution. MBA is designed to cover the needs of the navigator to maintain electronic charts and paper chart portfolio, publications and the need of the ship owner to monitor and control the costs.

As MBA is a module-based software, it can be tailor-made through the activation of different modules available to fit the mariner and ship owner needs and requirements. The ECDIS independent status means MBA can be used with any approved ECDIS and existing communication systems (Https, Email).

System connections overview

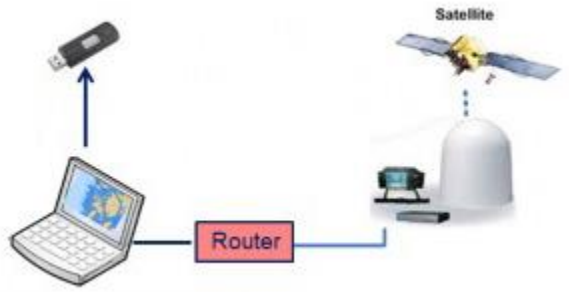
MBA installed on a standalone workstation

This configuration uses a separate computer for the MBA application. The MBA workstation must be connected to the ECDIS LAN to order permits and updates like weekly ENC AVCS chart updates. The MBA workstation must also be connected to the ship's LAN to be able to send these order requests to Navico.



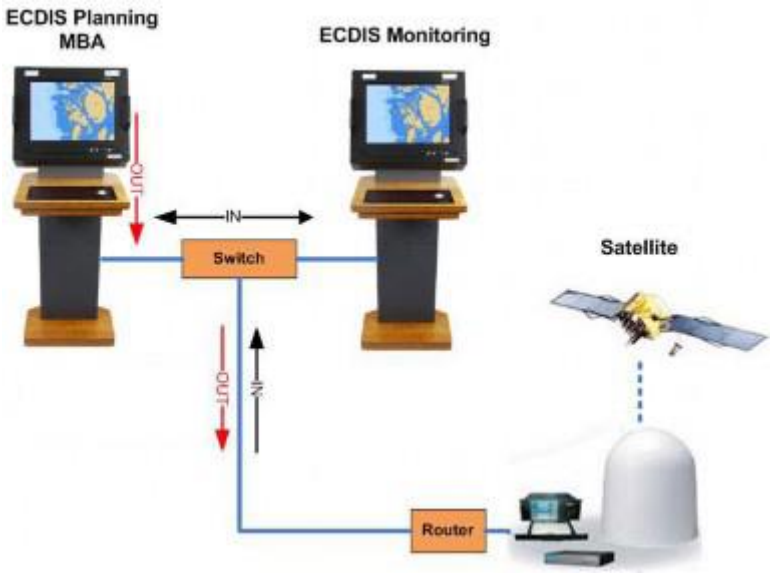
MBA installed on a workstation not connected to the ECDIS LAN

A USB device is used to download the permits and updates from the MBA workstation. The copied permits and updates are then transferred to the ECDIS workstations.



MBA installed on ECDIS900 Planning workstation

ECDIS900 users can enjoy the benefit of automatic data synchronization. This integration gives even the most experienced navigator great advantages in management of chart handling and updates.



2 Getting ready to install the system

Obtaining the software

You can download MBA software in several ways. Use the method that best fits your needs and is available for you.

Downloading from the Internet

The software can be downloaded from the Maris Customer Portal (MCP) using your MBA username and password: http://chartservice.maris.no/Login

You can also contact Simrad Digital Services at chartservice@maris.no.

Verifying system requirements

Ensure that your computer system conforms to the following requirements to successfully install the MBA software:

- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
- 25 GB available hard disk space (32-bit) or 20 GB (64-bit)
- At least 2 Ethernet ports
- Optical Drive: CD/DVD-ROM (required if installing MBA from a disc)
- Removable drive or memory stick to be used as a backup in case PC will be disconnected from ship's LAN
- Colored printer (optional)

Operating system (OS)

You can install MBA on the following OS:

- Microsoft Windows XP, 32 bit, Service Pack 3
- Microsoft Windows 7, 32 bit or 64 bit

Compatible Third-Party Software

- SIMRAD Maris ECDIS900 System
- Trend Micro OfficeScan Anti-Virus

➔ ***Note:*** Trend Micro OfficeScan anti-virus is confirmed to work with MBA. To setup other types of antivirus, contact your IT department.

Configuring Local Area Network (LAN)

Router

A router is required if MBA is installed into an ECDIS900 system. A firewall should be setup before connecting to the ship LAN.

The router may be in place as part of the ship's LAN architecture.

If a router is to be installed, two (2) types of router may be delivered:

- Router IEC 61945 approved such as Westerno DSS L3 4 eth 1 RS232
- Non approved router such as Router DIR-300/600

➔ ***Note:*** If the router is not IEC approved, it must be installed outside the bridge.

Router default configuration

The router DIR-300/600 is factory configured with standard settings.

For router configurations, refer to the Technical Note 18 file named **2013.11.05 - Techn note 18 MDS-ROUTER IP CONFIG-L.pdf**

➔ ***Note:*** The technical note file can be downloaded from the MCP portal.

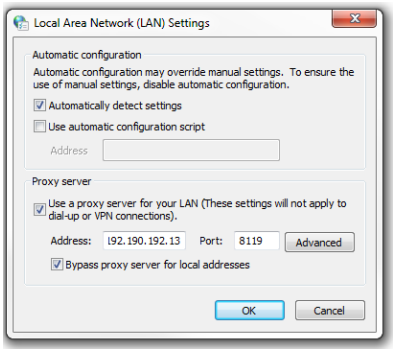
The factory configuration file is also available for the WESTERMO (TYPE L205-S1) router. The file can be downloaded from the MCP portal or from the ECDIS computer local drive: C:\MarisSoftwares\RouterConfig.

Setting up Proxy server

Configure a proxy server IP address on your MBA workstation to limit the network traffic.

To configure the proxy server in Windows XP/7, follow the steps below:

1. From the **Control Panel**, open **Network and Internet** and select Internet Options. You can also click the Tools menu in **Internet Explorer** and select Internet Options to open it.
2. Click **Connections** tab at the top of the **Internet Options** window.
3. Click **LAN settings** button at the bottom of the window. A dialog similar below will be displayed:



The **Automatically detect settings** option is enabled by default. When this option is enabled, Windows will attempt to automatically discover a proxy assigned to your computer.

4. The **Use a proxy server for your LAN** checkbox will allow you to manually enable and configure a proxy. Check it and enter the network address and port of the proxy.

➔ ***Note:*** **Your IT department or proxy service provider will provide you with the network address and port number the proxy requires.**

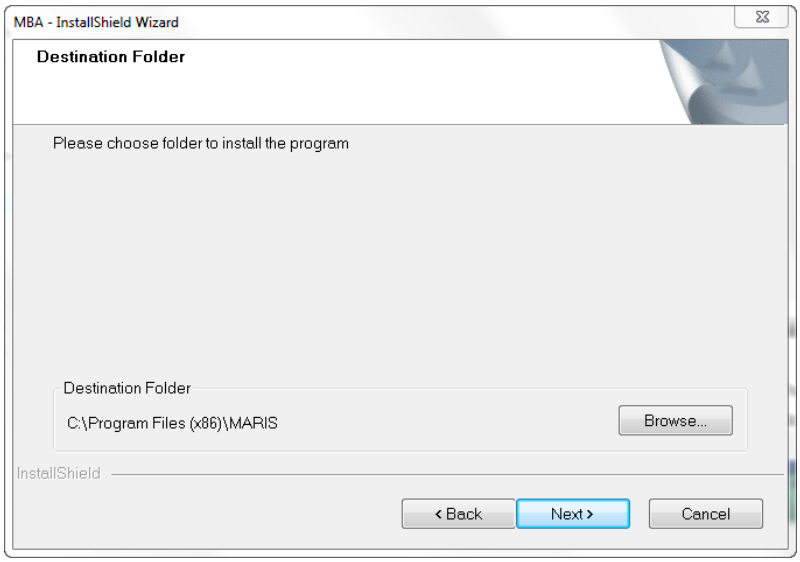
By default, Windows will automatically send all traffic through the proxy, including traffic to addresses on your local network, or intranet. To always bypass the proxy server when connecting to these local addresses, enable the **Bypass proxy server for local addresses** checkbox. Applications will bypass the proxy and connect directly to resources on your local network, but not Internet addresses.

3 Software Installation

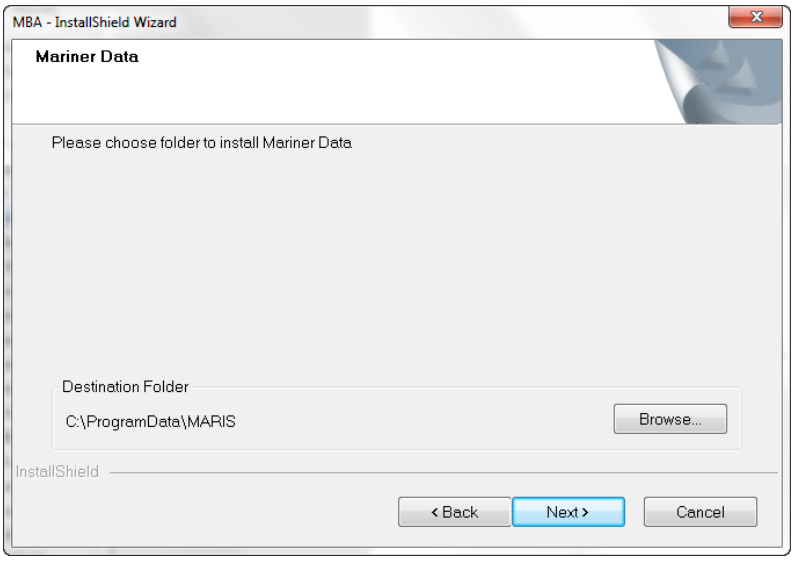
This chapter helps you install the MBA software on the Windows platform using the standard installation.

Installation instructions

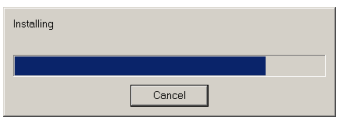
1. Insert the MBA installation disc into the CD/DVD drive of your computer.
2. Locate and run the MBA installation file. A dialog similar below will be displayed:

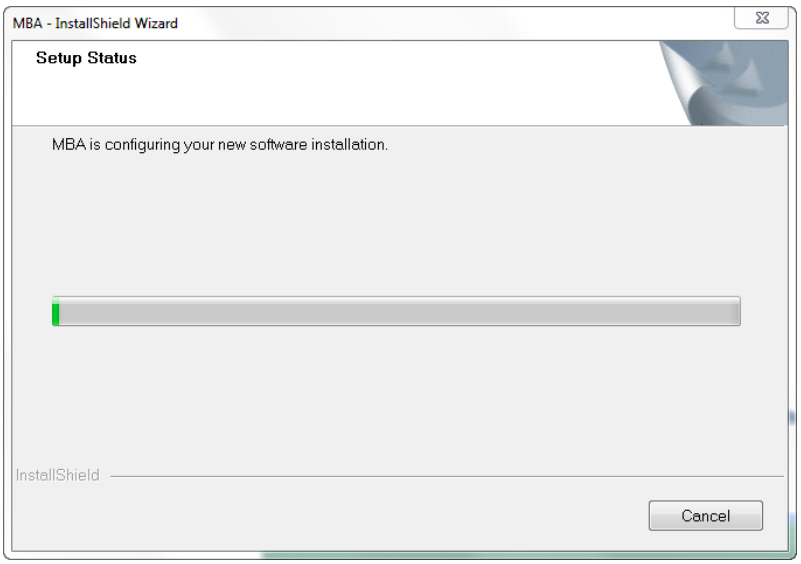


3. Choose the location of the folder where you want to install the software and click the **Next** button. A dialog similar below will be displayed:

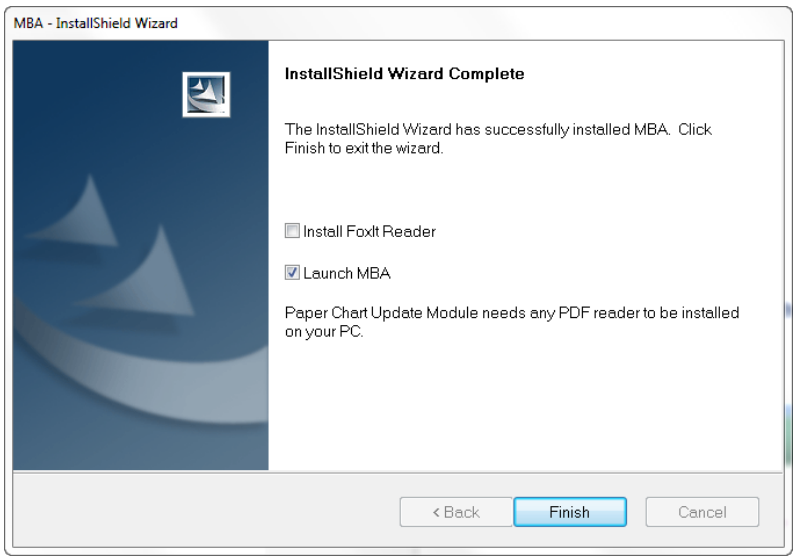


4. Choose the location of the folder where you want to save the **Mariner Data** and click the **Next** button. A progress bar similar below will be displayed:





Once the installation has been completed, select **Launch MBA** checkbox **and click the Finish button to open the MBA software.**



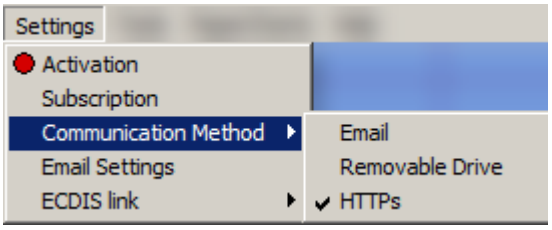
Installing the software from a removable drive (USB)

To install the MBA software from a USB device, insert the USB device into the USB port. Open and run the MBA installer file and follow the instructions.

4 Getting ready to use the software

Configuring the communication method

MBA software application communicates with the server by sending and receiving requests like data updates.



Communication method via Email

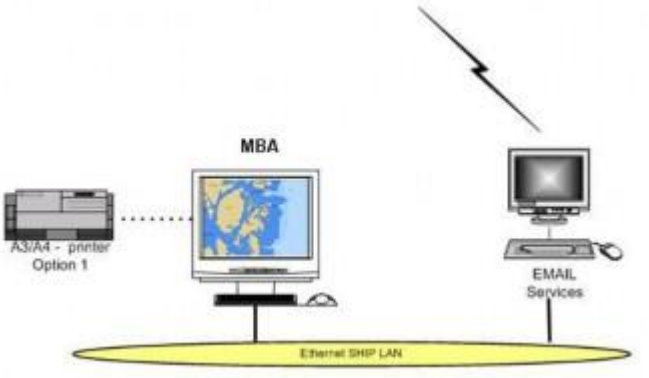
MBA can be setup as an email client, listening for specific MBA emails as described below:

- Incoming emails are collected from mail server via POP3(s) protocol with standard port numbers 110/tcp for POP3 and 995/tcp for POP3s.
- Outgoing mail is being sent over SMTPs protocol with standard port numbers 25/tcp for SMTP and 465/tcp for SMTPs.

➔ ***Note:*** Your IT department must provide the following information for email usage:

- Email username and password (Pop & SMTP servers)
- Email account limitations for incoming/outgoing mail size.

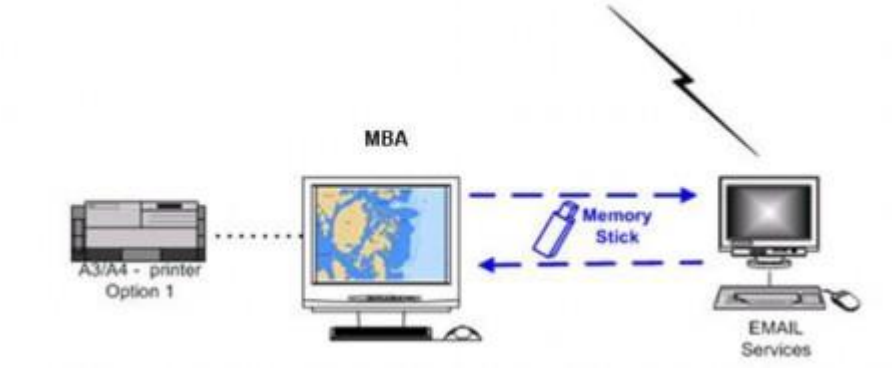
➔ ***Note:*** Ensure that the MBA workstation is connected to the ship LAN and the ship's email server is available. Refer to *"Setting up the email account"* on page 14.



➔ ***Note:*** **Email must be setup when MBA is installed on a PC workstation that is connected to the LAN and to the email Server application.**

Communication method via Removable drive

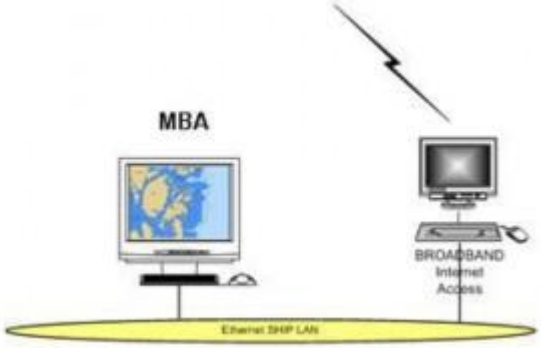
This configuration uses a memory stick or a USB device to transfer data between the MBA workstation and the communications PC on board.



The same file requests (send/receive) are broadcasted to or from the MBA server using any type of email client (e.g. MSOutlook, Thunderbird) running on the communication PC.

Communication method via HTTPs

This type of communication enables MBA application to directly access the Internet using broadband. When the Internet is available on board, MBA sends and receives data to the server using HTTP.



Your IT department must configure the LAN, firewall and DNS as described below:

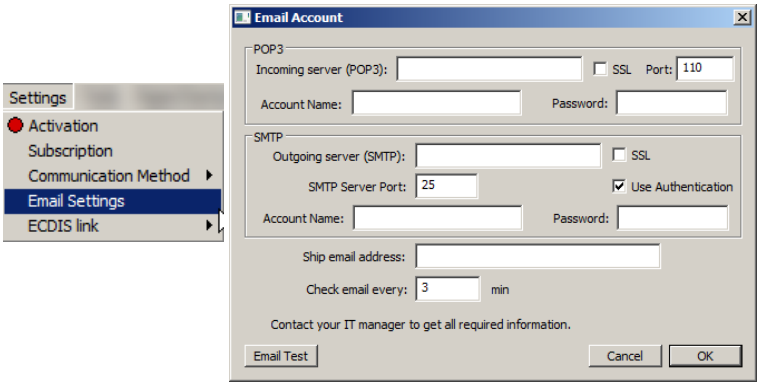
- Windows firewall on MBA workstation must be disabled.
- MBA server must be added in the ship's firewall White list.

➔ ***Note:*** **MBA server (chartservice.maris.no) uses the standard port number 443/TCP for HTTPs.**

Setting up the email account

To setup an email account, run the MBA application and follow the steps below:

1. From the **Settings** tab, select **Email settings.** A dialog similar below will be displayed:

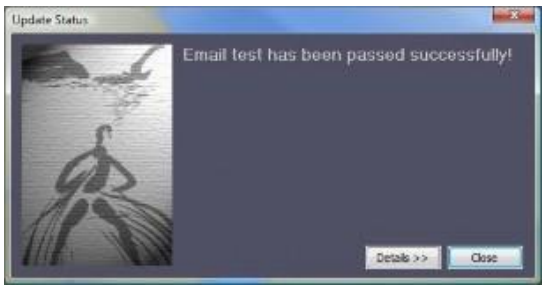


Input the email account credentials and click the **OK** button to finish.

➔ ***Note:*** **Contact your IT department to get all the required information.**

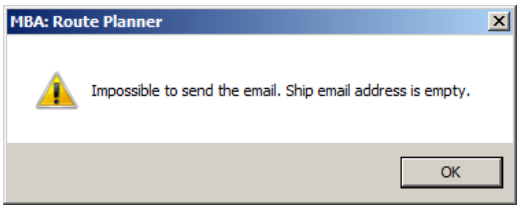
Sending email tests

Send an email test to verify if the email account is valid.
To send an email test, click the **Email Test** button. A dialog similar below will be displayed confirming that the email test has been sent.



Wait for the email test to be received on board. It can take several minutes depending on your internet service provider.

➔ ***Note:*** **The email test cannot be sent if the SMTP server parameters are incorrect or empty and a dialog similar below will be displayed:**

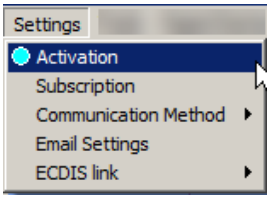


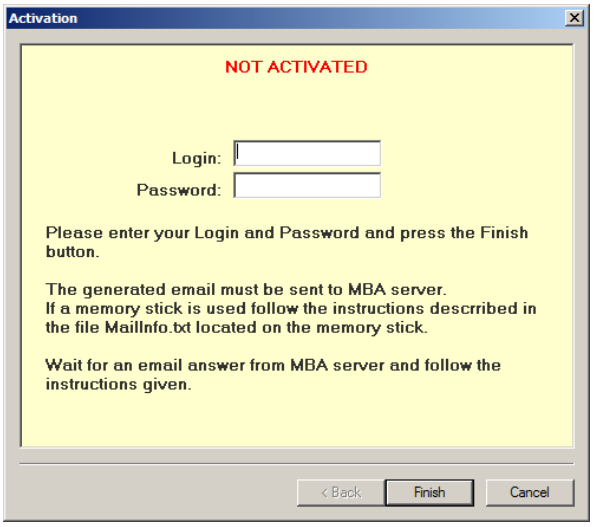
➔ ***Note:*** **The email test cannot be sent if the SMTP server parameters are incorrect or empty. A dialog similar below will be displayed**

Activating the MBA application

To activate the MBA application, select the desired **Communication method** in the **Settings** tab and follow the steps below:

1. From the **Settings** tab, select **Activation**.





2. Enter your username and password and click the **Finish** button.

➔ ***Note:*** **If the communication method is through a Removable drive, follow the instructions in file called MailInfoxxx.txt.**

➔ ***Note:*** Usernames and passwords are provided by MARIS chart service team.

Configuring MBA and ECDIS900 synchronization

Creating Network Shared folders

All ECDIS900 workstations connected to the ECDIS LAN must have two (2) network shared folders:

- C:\Charts
- C:\ECDIS_UserData

➔ ***Note:*** **The MBA workstation must have a network shared folder called C:\ECDIS_UserData.**

LAN adaptors and IP addresses

IP Addresses are defined according to the ECDIS Scheme defined for your ECDIS workstation.

If two (2) separate adaptors are used, use the IP address below:

- ECDIS LAN adaptor : 192.168.3.15x
- Ship LAN adaptor : 192.168.123.15x
  Gateway: 192.168.123.1
  Primary: DNS 192.168.123.1

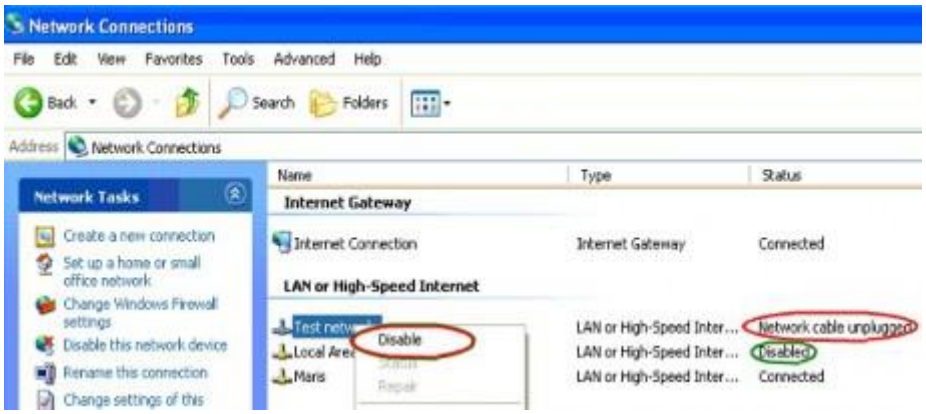
If one (1) adaptor is used (ECDIS LAN), two (2) IP addresses must be defined on the adaptor:

- IP Address1 : 192.168.3.15x
- IP Address2: 192.168.123.15x (must be in second position)
  Gateway 192.168.123.1
  Primary DNS 192.168.123.1

➔ ***Note:*** **The router can be connected directly into the ECDIS Switch using a LAN port.**

Configuring LAN Adaptors

1. All unused LAN ports must be disabled when several LAN adaptors (including Ethernet, Wireless or other adaptors) are available on ECDIS900 or MBA workstations. To disable the unused LAN ports, open **Control Panel** and follow the steps below:
   a. Select **Network Connections** option, right click the unused LAN port and select **Disable** option.



2. Binding configuration must be set up. To modify the binding configuration, follow the steps below:

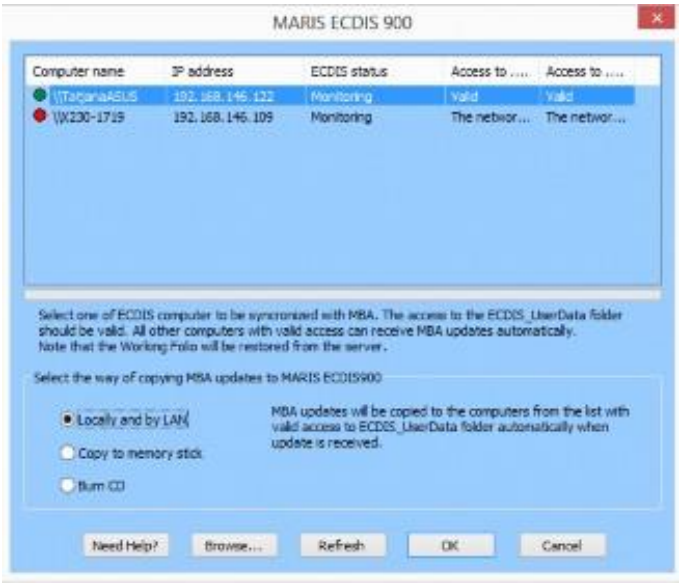
a. From the **Control Panel**, open **Network Connection** option and click on the Advanced tab.
b. Select **Advanced Settings** option.



➔ ***Note:*** **MARIS LAN port must be on top of the list. Use the green arrow to move the connection name up/down.**

Linking MBA with ECDIS900

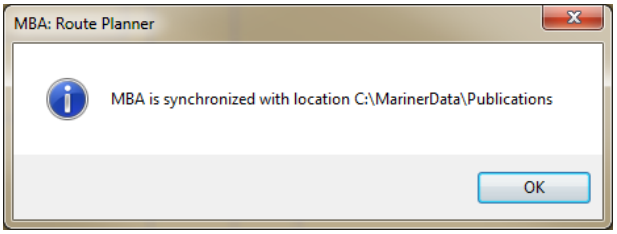
1. To link MBA with ECDIS900, select Settings, ECDIS Link and choose MARIS ECDIS900 from the option. A dialog similar below will be displayed.



2. Select the ECDIS900 workstation you want the MBA application to be synchronized with and click the **OK** button.

Linking MBA with other ECDIS

If MBA is linked to another type of ECDIS, a dialog similar below is displayed:



5 Pay As You Sail (PAYS) services

Activating PAYS

To activate PAYS in your MBA, ensure the following requirements are met:

- Valid license activated in MARIS Customer portal (MCP).
  - ➔ ***Note:*** **To set up user accounts and licenses in MCP, contact Navico Marine Digital Services (MDS) at chartservice@navico.com**

- ENC/AVCS charts installed in all ECDIS workstations
- Sensor monitor application installed in the MBA workstation
- Application Manager configured in ECDIS900 workstations.

Adding MBA in AUTO task list (ECDIS900 only)

When PAYS mode is activated, MBA application should not be stopped to guarantee the accuracy of the tracking.

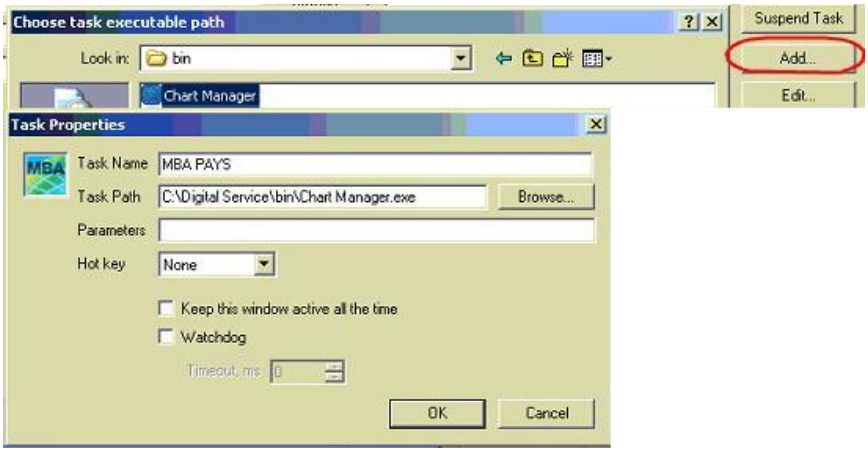
➔ ***Note:*** **PAYS tracking is performed by an external tracker. If MBA is used as a tracker and the GPS input must be setup in ECDIS.**

Communication settings is the same as a standard MBA (with HTTPs or Email). **Removable drive** type of communication method is not recommended as **Track report** must be updated regularly.
MBA must be added in the **Auto** tasks list in the **Application Manager** to ensure that MBA will run 24 hours a day.



To add MBA into the **Auto** tasks list, follow the steps below:

1. Run the **Application Manager** and select **Administrative settings** button.
2. Choose **AUTO task list**, click the **Add** button and update the fields as follows:
   - **Task Name:** MBA PAYS



   - **Task path for Windows 7:** C:\Program Files (x86)\MARIS\Digital Service\bin\Chart Manager.exe
   - **Task path for Windows XP:** C:\Program Files\MARIS\Digital Service\bin\Chart Manager.exe

➔ ***Note:*** **You must also add the Sensor Monitor in the AUTO tasks list.**
   - **Task Name:** Sensor Monitor
   - **Task path:** C:\Program Files (x86)\MARIS\SMonitor\SMonitor.exe

3. Click the **OK** button to save.

➔ ***Note:*** **When the MBA workstation is unintentionally shut off, the MBA and the Sensor Monitor applications will be automatically restarted.**

6 Sensor Monitor (SM)

Sensor Monitor must be installed and configured in the MBA workstation to acquire GPS position either by serial connection or by LAN. There are three (3) types of installation:

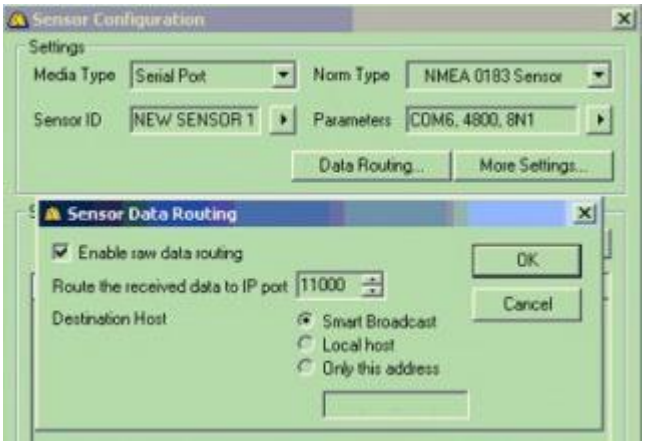
1. MBA application is installed in an ECDIS900 workstation.
2. MBA is installed in a standalone PC that is connected to the ECDIS900 by LAN. For installation, refer to "Configuring SM in MBA/ECDIS workstation" on page 20.
3. MBA is installed in a standalone PC but another ECDIS brand is used.

For more details, refer to the **SIMRAD-MBA Operator manual**.

Configuring SM in MBA/ECDIS workstation

It is required to configure the SM on ECDIS900 workstation as follows:

1. Select GPS sensor
2. Activate the **Raw data routing**
3. Enter the network port: 11000

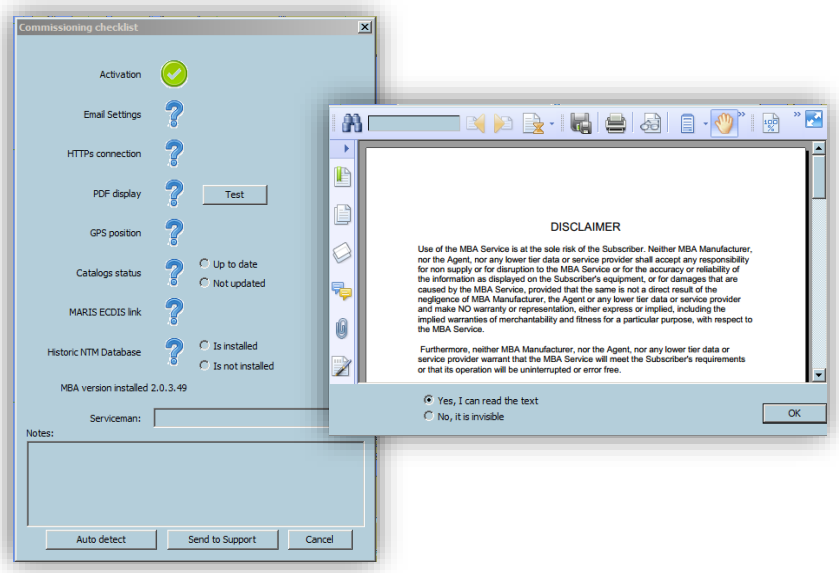


Configure SM on an MBA workstation as follows:

1. Create a GPS sensor type network
2. Enter parameter number 11000 in the parameter field

7 Commissioning checklist

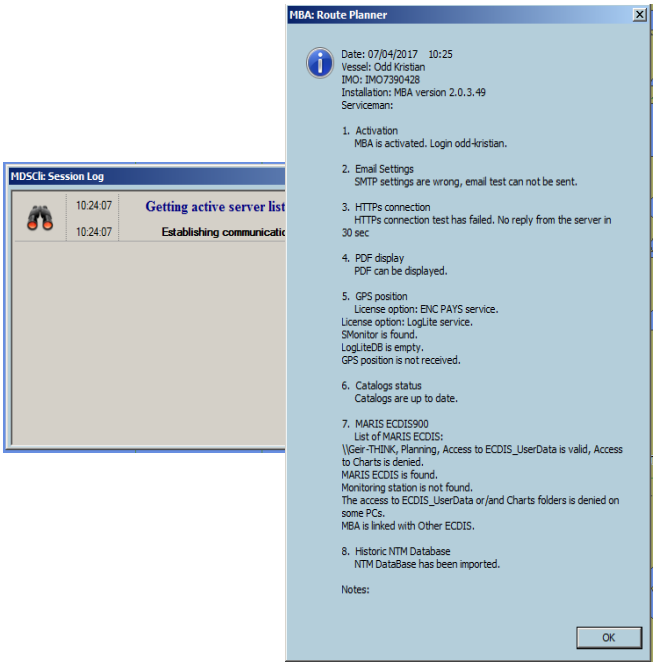
When the installation and configuration of your MBA application has been completed, click **Help** from the menu bar and select **Commissioning Check List**. A dialog similar below will be displayed:



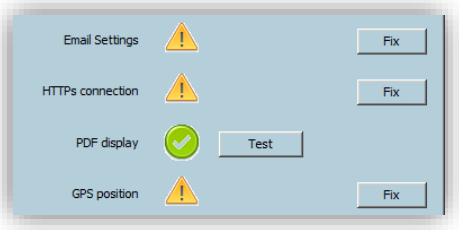
1. Under **PDF display**, click the **Test** button to display the **MBA disclaimer**. Click **Yes, I can read the test** option to confirm receipt. If the MBA disclaimer is not displayed, select the **NO, it is invisible** option.
2. Under Historical NTM Database, select **Is Installed** option if the historical NTM has been installed. Otherwise, select **Is not installed** option.

➔ ***Note:*** **This must be done ONLY when the paper chart update manager is used on board.**

3. Perform an Auto test. Click the **Auto detect** button and follow the instructions. A dialog similar below will be displayed:



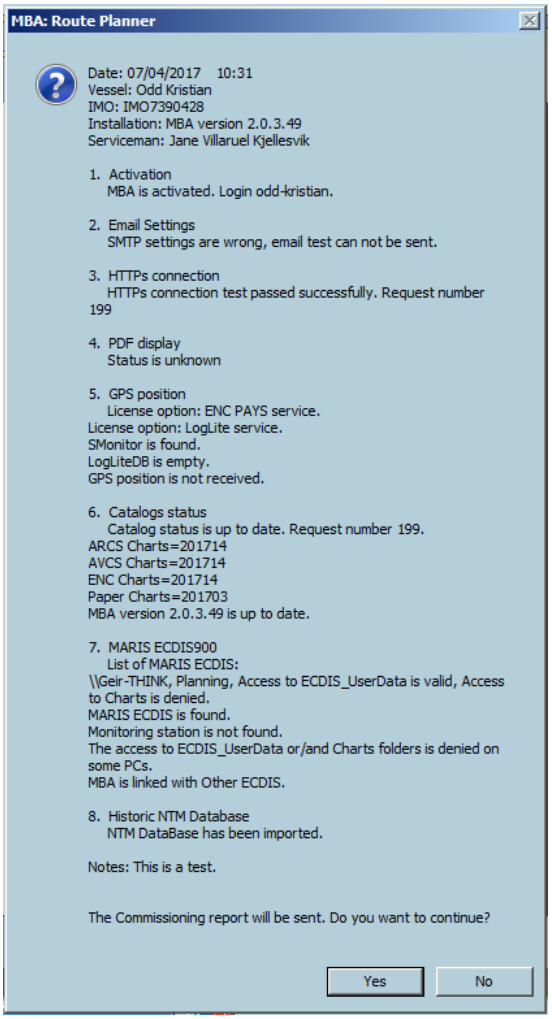
➔ ***Note:*** **If the Auto test is not successful to any of the relevant test, a Fix button is displayed next to it.**



- **Click the Fix button to change the settings.**

Sending Commissioning report to Support team

1. Enter your name in the **Serviceman** field.
2. Add your subsequent comments in the **Notes** filed.
3. Click the **Send to support** button to display the summary of the report. Below is an example:



4. **Click the Yes button complete the process.**

988-11911-001

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