Digital Log Books

Installation and IT Admin Guide

Contents

Digital Log Books - Regulatory Compliance Checklist

As a minimum you must meet the following requirements to be compliant with the conditions of regulatory approval. Read this manual in full, then action the points on this list.

Vessel Name: _____

IMO Number: _____

	Name/ signature	Date
Infrastructure is suitable The installed infrastructure running the Digital Log Book application is appropriate and sufficiently resilient for usage on board a vessel.		
Password recovery An IT Administrator user account has been created, and the password recorded for password recovery purposes.		
System date and time Client and server (if applicable) PCs have been set to the correct date and time.		
Disaster recovery – short term A backup folder has been specified in the Digital Log Book application. (Use a separate drive unless RAID is used for redundancy.)		
Disaster recovery – longer term The Digital Log Book backup folder has been added to the company IT backup process. The Digital Log Book backup files are copied to a company approved backup location on a regular basis.		
Archive generation A process has been put in place to remind users to create zip archives in the Digital Log Book application on a regular basis.		
Long term storage of archives A process has been put in place to copy and safely preserve Digital Log Book Archive zips for the time period specified by current regulations. (Archives are typically required to be stored for several years.)		

Introduction

This is the Digital Log Books Installation and IT Admin Guide. This guide is intended for use by technical staff such as a company IT department. It covers:

- Supported modes of operation
- Installation – both standalone and client-server modes
- Licensing
- User administration and password recovery
- Backups for disaster recovery
- Backups of archives for regulatory compliance

Most set-up is performed from within the application after installation. It is recommended that this is done by IT staff using remote access software such as TeamViewer.

Important set-up tasks include:

- Creating an administrator user account for password recovery

- Configuring regular backups of the log book data file

IMPORTANT

The log book data file must be backed up regularly for **disaster recovery** purposes.

Log book archives must be created and backed up regularly for **regulatory compliance**.

System Requirements

See the 'Installation' section for further details.

Client PC(s)

- Windows PC with Windows versions 8, 10 or 11
- 4 GB RAM. 10GB hard disk space
- HD and above resolutions 1360x768 (minimum 1024x720)
- .NET Core Desktop Runtime 6.0

Server PC (if using client-server mode)

- Windows PC with Windows versions 8, 10 or 11 or Server 2012, 2016 or 2019
- 4 GB RAM. 10GB hard disk space
- Standard network to connect the clients and server
- .NET Core Runtime 6.0 (x86 version)
- ASP.NET Core Runtime 6.0 (x86 version)

Infrastructure Requirements for Certification

The installed infrastructure running the Digital Log Book application must be appropriate and sufficiently resilient for usage on board a vessel.

The Lloyd's Register software conformity certificate specifies the following:

Installed Infrastructure of the Electronic Record Book, including computers and peripherals to be confirmed compliant with IEC 60092 and IEC 60533. Alternate power supplies are to be provided.

Supported Modes of Operation

The application can be installed and used in two ways:

- In a standalone mode on a single PC
- In a client-server mode, where multiple client applications connect to a central data server

Standalone Mode

In standalone mode the client application is installed on one PC and configured to store log book data on the same PC. A server application is not required in this mode of operation. This mode will typically suit smaller vessels.

Multiple user accounts should still be created and used in the application, but all access should be through the same single PC. The log book data file is stored locally on the PC, and must be regularly backed up to another location for disaster recovery purposes (see the section about backups later in this guide).

Attempting to point multiple client applications directly at a data file located on a shared network location is not supported.

The use of application virtualization software such as Citrix is not supported.

Client-Server Mode

In client-server mode, the log books server application ('AppServer') is installed on a server PC on the vessel. The log books client application can then be installed on several other PCs on the vessel, and configured to connect to the server. This mode will typically suit larger vessels.

The log book data file is stored on the server PC, and all clients connect to this one data source. The data file must be regularly backed up to another location for disaster recovery purposes (see the section about backups later in this guide).

AppServer must be installed on the same local area network as the client applications. Exposing the server to the internet is not supported.

Installation

Decide on a mode of operation before installing any software.

For standalone mode, the client application (***<product name>.Setup.msi)*** should be installed on the PC.

For client-server mode, install the server application (***DigitalLogBooks.AppServer.Setup.msi***) first. Then install one or more client applications (***<product name>.Setup.msi***).

> **NOTE**
>
> Installation of the client and server software requires Administrative permissions on the PC.

Server Installation Procedure

> Skip this section if you are installing the application in standalone mode, where the client application and log book data will be contained on a single PC

In client-server mode, the AppServer should be installed first. This is installed as a Windows Service. (Using a web server such as IIS is not required or supported.)

Perform the following steps on the PC you will use as the server:

Step 1: Install Prerequisites – ASP.NET Core Runtime and .NET Runtime 6.0

Install the following prerequisites if they are not already installed on the PC:

- **ASP.NET Core Runtime 6.0** (Windows **x86**)
- **.NET Runtime 6.0** (Windows **x86**)

The prerequisites are usually supplied along with the Digital Log Books release. However it is recommended that the latest versions available from Microsoft are used, as these may contain security updates.

The latest 6.0.x versions can be downloaded from this web page:

https://dotnet.microsoft.com/download/dotnet/6.0

See the image below – the correct links are highlighted.

Run apps - Runtime ⓘ

ASP.NET Core Runtime 6.0.20

The ASP.NET Core Runtime enables you to run existing web/server applications. **On Windows, we recommend installing the Hosting Bundle, which includes the .NET Runtime and IIS support.**

IIS runtime support (ASP.NET Core Module v2)
16.0.23172.20

OS	Installers	Binaries
Linux	Package manager instructions	Arm32 | Arm32 Alpine | Arm64 | Arm64 Alpine | x64 | x64 Alpine
macOS		Arm64 | x64
Windows	Hosting Bundle | x64 | x86 | winget instructions	Arm64 | x64 | x86

.NET Runtime 6.0.20

The .NET Runtime contains just the components needed to run a console app. Typically, you'd also install either the ASP.NET Core Runtime or .NET Desktop Runtime.

OS	Installers	Binaries
Linux	Package manager instructions	Arm32 | Arm32 Alpine | Arm64 | Arm64 Alpine | x64 | x64 Alpine
macOS	Arm64 | x64	Arm64 | x64
Windows	Arm64 | x64 | x86 | winget instructions	Arm64 | x64 | x86
All	dotnet-install scripts	

Do not download the x64 version even if the PC is 64 bit, as this will not work – the software is an x86 application.

The latest available versions of the ASP.NET Core Runtime and .NET Runtime 6.0 should be used. At the time of writing this is 6.0.20

Step 2: Install the AppServer

Double-click the installer file **DigitalLogBooks.AppServer.Setup.msi** to begin the installation, then wait for it to finish.

Install Time Configuration

Alternatively, you can install the App Server and supply a licence file – this removes the need for a user of the application to import the licence later. To specify a licence, run the installer from the command line with the licence file as a parameter like this:

```
msiexec /i DigitalLogBooks.AppServer.Setup.msi LICENCE="Path-
to-licence.lic"
```

You can also specify the following configuration options in the same way:

Setting Name	Type	Description
BACKUPFULLINTERVAL	A number between 30 and 10080.	The time in minutes between full backups.
BACKUPPARTIALINTERVAL	A number between 5 and 1440.	The time in minutes between partial backups.
BACKUPRETENTIONPERIOD	A number between 31 and 365.	The minimum number of days before a backup will be deleted.
BACKUPRETENTIONMINIMUM	A number between 10 and 500.	The minimum number of backups which will always be kept.
BACKUPFILENAMEFORMAT	Text (containing only characters valid in file names).	A template which specifies the format of backup file names. Do not include the file extension.
SHIPTOSHORESYNC	A Boolean value of true/false	Whether ship-to-shore sync should be enabled.
SHIPTOSHOREWEBSITE	URI	Override for the Ship-to-shore sync system. **This should only be changed when advised to by Chersoft support.**
SHIPTOSHOREBUS	URI	Override for the Ship-to-shore sync system. **This should only be changed when advised to by Chersoft support.**

NOTE ABOUT PARAMETERS

Please note that when you provide parameters to the App Server at install time, these become **default values** and they will be **reapplied whenever the service is restarted**. This is default Windows Service behaviour. If you wish to change these default values, a complete reinstall will be needed.

Backup File Name Format

You can use the following placeholders to substitute values in to the backup's file name:

{time}	The date and time that the backup was created. This is required in order to ensure unique backup names.
{vesselname}	The name of the vessel as it appears in the licence.
{vesselimo}	The IMO Number of the vessel as it appears in the licence.
{machinename}	The name of the computer where the backup was created.

Starting, Stopping and Restarting the App Server

The AppServer runs as a Windows service. Type **Services** in the Windows start menu, then run the resulting program, to view the list of installed services. '**Digital Log Books AppServer**' will be displayed in the list when successfully installed:

The service runs automatically after install. Confirm it is running by looking at the 'status' column.

Right-clicking on the service in this window will give the options to stop, start or restart the application server. This may be required in certain support scenarios.

AppServer stores data and application logging files at the location **C:\ProgramData\Chersoft\LogBooksAppServer** (assuming 'C:' is the main drive letter). This includes the log book data file. These files will not be removed automatically when the application is uninstalled.

The log book data file should not be directly backed up from this location, as copying it when the application is running could result in a corrupt copy. See the log book data backup section for details.

Installing the AppServer with your own SSL Certificate

The AppServer includes its own SSL certificate. However, you can supply your own at installation time if you wish using the "Choose a Certificate" dialog as shown below:
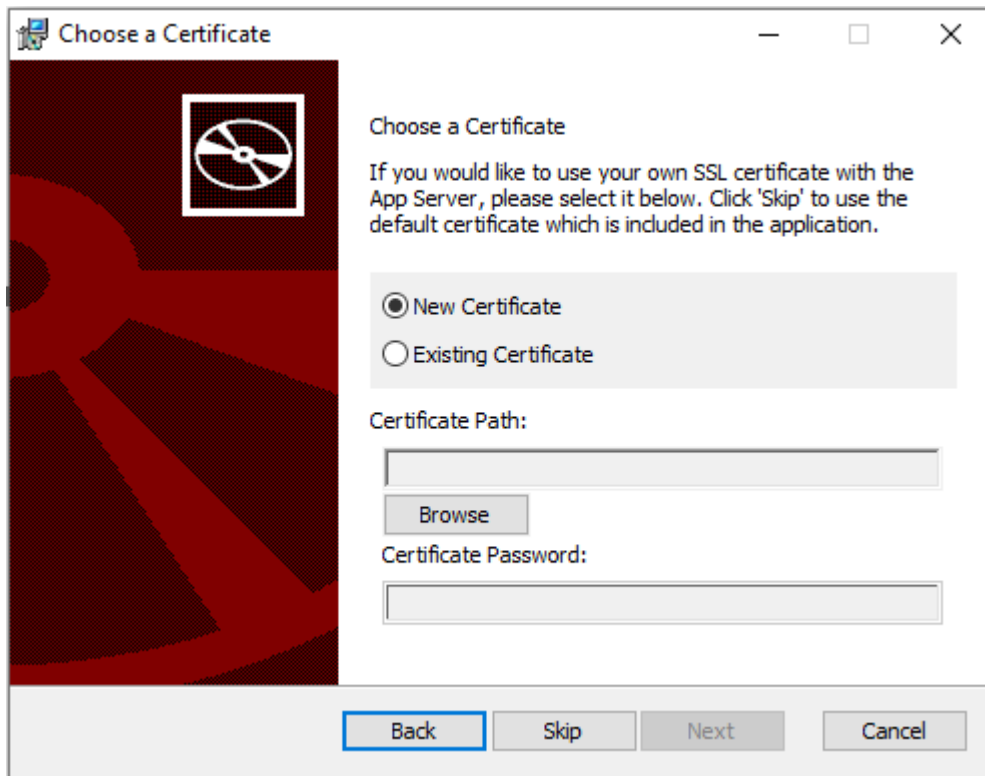
- Choose the "New Certificate" option to browse for and select a .PFX file from the local machine. This will also require the password to be entered. The certificate will be imported in to the Local Machine, Trusted Publishers store.

- Choose the "Existing Certificate" option to select an existing certificate from the Local Machine, Trusted Publishers store.

- Click "Skip" to use the default certificate included with the AppServer.

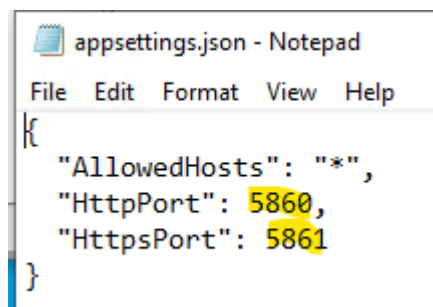Step 3: Review server ports and configure firewall rules

By default the AppServer listens on ports **5858** and **5859**.

Any firewalls should be adjusted to allow connections to these ports over the local network.

If you need to change the port numbers due to conflicts or IT policy, this can be done by editing a configuration file. First stop the '**Digital Log Books AppServer**' Windows service. Then open the following file in a text editor:

```
C:\Program Files (x86)\Chersoft\Digital Log Books AppServer\
appsettings.json
```

Edit the highlighted values as required:

Save the file and restart the AppServer.

The "AllowedHosts" setting can be used to limit the host names which can be used to access the app server, e.g.:

```
"AllowedHosts": "example.com"
```

Limiting this to a known name may in some cases be more secure.

Step 4: Note the server address

Take note of the name of the server PC. Also note the HTTPS port number if it was changed from the default. This address information must be entered when configuring client applications to connect to the server.

To obtain the PC name, click the Windows Start button and type "PC name", then click on "View your PC name":
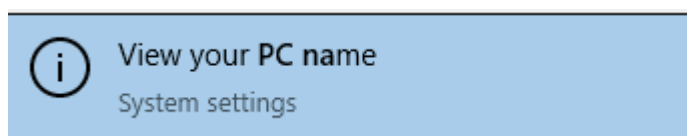
The name will be listed under "Device name".

Client Application Installation procedure

The client application is required in both modes of operation. In client-server mode, client applications can be installed on several PCs.

Step 1: Install Prerequisite - .NET Core Desktop Runtime 6.0

Install the Windows **x86** version of the latest **.NET Desktop Runtime 6.0**, if it is not already installed on the PC.

The prerequisites are usually supplied along with the Digital Log Books release. However it is recommended that the latest versions available from Microsoft are used, as these may contain security updates.

The latest 6.0.x version can be downloaded from this web page:

https://dotnet.microsoft.com/download/dotnet/6.0

See the image below – the correct link is highlighted.

.NET Desktop Runtime 6.0.20

The .NET Desktop Runtime enables you to run existing Windows desktop applications. **This release includes the .NET Runtime; you don't need to install it separately.**

OS	Installers	Binaries
Windows	Arm64 | x64 | x86 | winget instructions	

Do not download the x64 version even if the PC is 64 bit, as this will not work – the software is an x86 application.

The latest available version of the .NET Desktop Runtime 6.0 should be used. At the time of writing this is 6.0.20.

Step 2: Install the client application

Double-click the installer file ***<product name>*.Setup.msi** to begin the installation.

Follow the on-screen instructions. You will be required to accept the licence agreement and choose an installation location.

Click Install to run the installation.

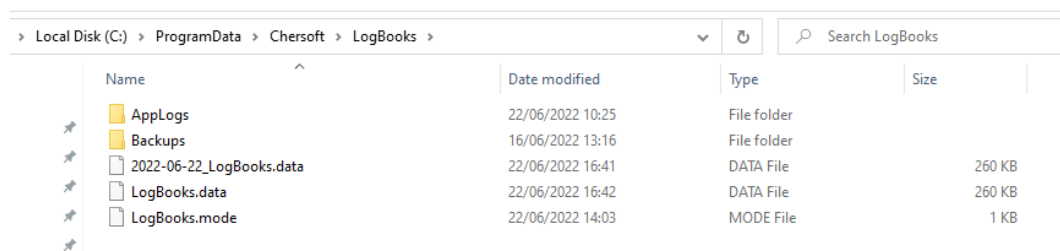Shortcuts will be created in the **Start Menu** and on the **Desktop**.

The application stores local data and application error log files at the location **C:\ProgramData\Chersoft\Logbooks** (assuming 'C:' is the main drive letter). These files will not be removed automatically when the application is uninstalled.

In standalone mode, this is where the log book data file is stored. The log book data file should not be directly backed up from this location, as copying it when the application is running could result in a corrupt copy. See the backup section for details.

Rolling Back to a Previous Version

Upgrading the client application to a newer version will upgrade the data file, making it incompatible with older versions of the software. If, for any reason, a user needs to revert back to an older version of the client application, the previous data file must be restored. **This is highly discouraged except in cases where the newer version is unusable, as it may result in data loss.**

The upgrade process automatically backs up the data file. See this example:

Here, the file '2022-06-22_LogBooks.data' is a copy of the pre-upgrade data. To rollback to an older version:

- Uninstall the later software.
- Reinstall the older software.
- Delete "LogBooks.data".
- Rename the copy e.g. "2022-06-22_LogBooks.data" back to "LogBooks.data".

System Date and Time

The system clock of all computers – both clients and server - must be set to the correct date and time. The specific time zone is not important as long as the correct UTC time can be obtained.

This is particularly important for the log books application because the date/time of actions such as creating or approving a log entry are recorded by the system, and this is taken from the system clock.

In standalone mode, all dates and times are taken from the system clock of the PC where the client application is installed.

In client-server mode, all dates and times are taken from the AppServer PC, providing consistent timestamps across all clients. It is recommended that Network Time Protocol is used on the AppServer PC to ensure a correct time.

Network Configuration

In order to make use of the Ship-to-Shore Synchronisation feature, it may be necessary to configure your firewall to allow the following outbound traffic:

- HTTPS traffic to:
  - digital-logbooks-web.azurewebsites.net
  - digital-logbooks.chersoft.com
- AMQP traffic to:
 - digital-logbooks.servicebus.windows.net

Setting Up the Application

After installation, the client application must be run to complete the set up process. All client applications must first be configured with the required mode of operation – standalone or client-server.

The set-up relating to licencing and adding log book user accounts applies to both modes of operation. However in client-server mode this set-up only has to be done once using one client application, since the licence and user accounts are stored on the data server.

Choose the Mode of Operation

The first time you run the client application, you will be prompted to set the log data location. This is choosing the 'mode of operation' of the system. It is important to select the correct mode, as this cannot be easily changed.
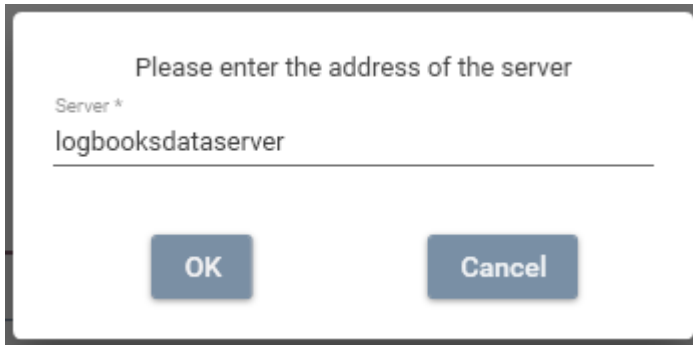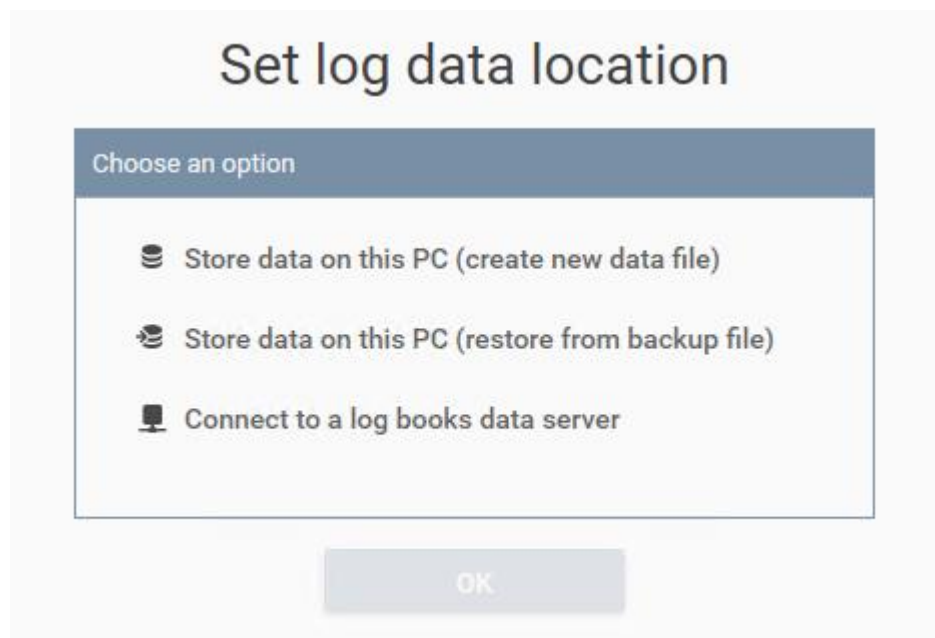

New standalone installation

For a new standalone installation, choose *"Store data on this PC (create new data file)"*. A new log book data file will be created on the PC.

Connect to a server (client-server mode)

To connect to a log books server, choose *"Connect to a log books data server"*.

You will be prompted to enter the address of the AppServer when choosing this option. If you did not change the default ports, just enter the server PC name, for example: `logbooksdataserver`

If you did change the default ports, enter the PC name and HTTP**S** port number (not HTTP port number), separated by a colon. For example: `logbooksdataserver:5859`

Disaster recovery for standalone mode

"Store data on this PC (restore from backup file)", is for use in disaster recovery scenarios, where a new client PC needs to be set up in standalone mode from an existing data backup. You will be prompted to select a backup file to restore. See the sections on backup and disaster recovery for more details.

> **NOTE**
>
> A backup file should only be restored on one PC, to continue running in standalone mode.
>
> Do not restore from a backup file to multiple client PCs, as this is not a supported configuration. There would be multiple log book data files that contain duplication and cannot be recombined into a single data source.

Activate Using a Licence File

After choosing the mode of operation you will be prompted to activate the application if a licence is not already present.

A licence file (with file extension '.lic') is required. This should have been provided when the system was purchased. There will be one licence file per vessel.

For a new standalone install, or for the first client to connect to a new server install, activation will be necessary. In client-server mode the licence is stored on the server, so a licence only needs to be added using one client application. The other client applications will then pick up this licence.

If activation is necessary, you will see the screen shown below:
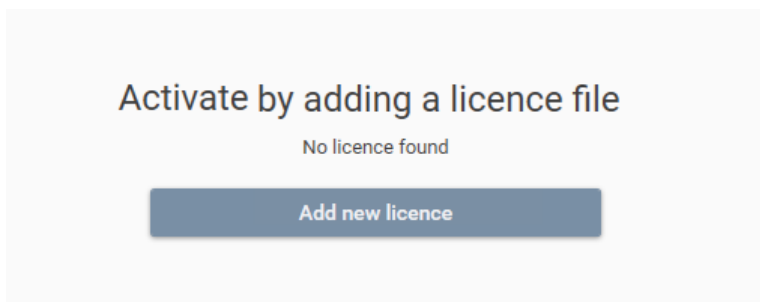
Click the "Add new licence" button, then browse to and select the '.lic' file to activate. Details of your licence should be displayed on screen. Click 'Continue' when complete.

Activate AppServer Licence File from Command Line

Alternatively when running in client-server mode the AppServer's licence can be configured from the command line.

1. Stop the '**Digital Log Books AppServer**' service (as this is automatically started at the end of the install process)
    - Click the Windows 'Start' button, type 'Services' to launch the Services application
    - Locate '**Digital Log Books AppServer**' in the list. Right click and click 'Stop' from the context menu
2. Locate the AppServer's installation directory. By default this will be 'C:\Program Files (x86)\Chersoft\Digital Log Books AppServer'.
3. Open a command prompt in the installation directory
4. Run the command:
    `LogBooks.AppServer.exe --licence "<path to licence file>"`
    - Replace *<path to licence file>* with the file path to the .lic file
5. A confirmation message will be shown if the operation is successful
6. Start the '**Digital Log Books AppServer**' windows service
    - In the 'Services' window, locate '**Digital Log Books AppServer**' in the list. Right click and click 'Start' from the context menu

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IMPORTANT

This operation must be performed with the service stopped otherwise the application will warn that there is an already running instance.

Create an Administrator User for Recovery Purposes

For a new standalone install, or for the first client to connect to a new server install, the system will not contain any user accounts. You must create a user with the 'Administrator' role at this point.

> **IMPORTANT**
>
> The IT department should create this first Administrator user account, and then keep this password safe. This enables access to be restored if the Administrator users on the vessel forget their password.

Do not rely on the first end-user running the application to create the initial admin user. It may be that they should not have admin privileges. Also **if that user forgets their password there is no way to recover the encrypted log book data on board the ship.**

The IT department can then create further user accounts in the system for the ship's crew; at a minimum one other administrator level account for the master.

Step 1: Create the initial Administrator user

You will be prompted to create the initial admin user after licence activation is complete. You should see the screen below:

There is currently no administrator in the system. Please create one below.

First Name

Surname

Position on vessel

Password

Confirm Password

Save System Admin

Fill in the fields as appropriate and click the save button.

Step 2: Record the admin password

Record the password in an appropriate password management tool for future use by the IT department. The main use of this will be to reset the ship master's password if they forget it.

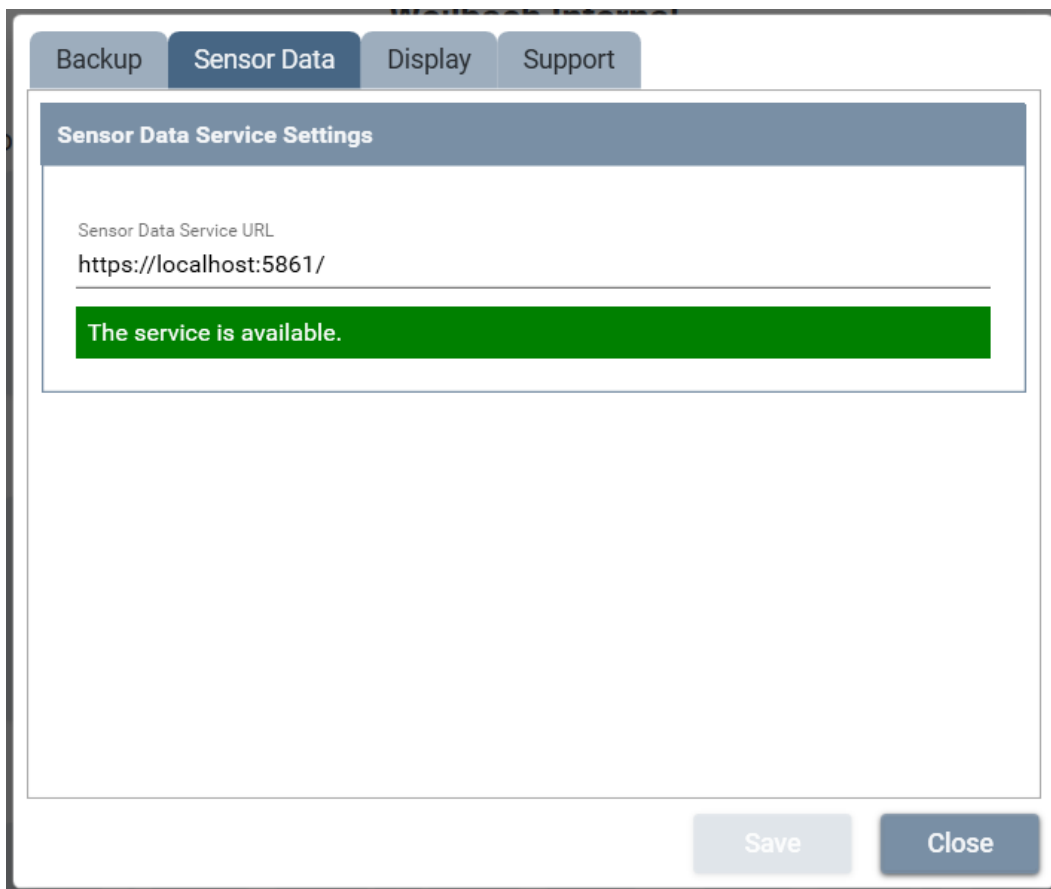## Step 3: Create at least one admin user for the ship's crew

Log in to the application as the newly created admin user, and go to the 'User Management' section to create further users. Create at least one admin user, typically for the ship's master. See the **'Log Books – User Manual'** document for more details on creating users and the roles that are available.

A user should be specific to one person; do not reuse the same user account for different people, as it is important to record a specific person against each log entry. Upon a crew change, new user accounts should be created for the new crew. Any user with the Administrator role can create and manage user accounts. This could be the IT department through remote access software, or the master or other Admin on board the vessel.

Configuring Connection to the NMEA Service

In order to automatically fill position fields with readings from GPS instruments, a connection to the NMEA Service must be configured. Installation of the NMEA Service is covered in the accompanying document "Nmea Service- Installation and IT Admin Guide.docx".

Click the "Options and Settings" button (cog icon), and then open the "Sensor Data Service" tab. Enter the URL of the NMEA Service in the "Sensor Data Service URL" field, then click Save. A message will be shown indicating if the service can be successfully reached:

Backups for Disaster Recovery

The log book data file must be backed up regularly for disaster recovery purposes.

Data backups should be set up using the client application. **Do not directly copy the live log book data file** from below the 'ProgramData' folder. Doing so while the application is running may result in a corrupted copy.

In standalone mode, the log book data file is located on the same PC as the client application. In client-server mode, the log book data file is stored on the server PC. In both cases, backups are configured using the client.

Display the settings window by clicking the 'cog' icon in the top right corner of the application. The 'Backup' tab will be displayed:

Enter the backup folder path then click the 'Save' button.

It is important that the location specified is on a different drive to the main data file. **Another folder on the same drive is not a safe location for backups**.

When running in server mode, this path refers to a location on the server, not the local PC.

Backup file names are prefixed with the date and time of the backup, and have file extension '.logbak'. For example:

```
2021-05-13T16_10_07-LogDataBackup.logbak
```

By default, a backup file is created every day. You can use the **"Backup Interval In Minutes"** setting to change this value. The valid range is between 30 and 10080 minutes (one week).

You can also use the **"Create Backup Now"** button to immediately create a backup without having to wait for the schedule.

If the application is running in standalone mode then backups can only be created when the application is running. If a backup is overdue it will be created on start up.

Backup files are deleted in a rolling manner to preserve disk space. At least one month of backups are kept.

IMPORTANT

The backup folder provides a basic disaster recovery solution. This should be integrated with the existing, enterprise backup system to provide more robust protection.

This enables the retention of more backup files in a centrally managed manner fashion that is compliant with organisational policies.

The enterprise backup system should be pointed to the backup folder configured in the log books application. It must take copies of the backup files created in that folder. Attempting to back up the live data file may lead to data corruption.

Partial Backups

Creating a full backup every time can take up a lot of disk space. In scenarios where you want to conserve space, **partial backups** can be configured. A partial backup is a smaller file which contains only the data which has changed since the last full backup. **To restore a partial backup, you will require two .logbak files: the partial backup, and the full backup on which it is based.**

The name of a partial backup is the same as its full backup base, plus a number. This example shows a full backup alongside several partial backups.

HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.logbak	28/06/2023 15:30	LOGBAK File	1,064 KB
HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.5.logbak	28/06/2023 16:19	LOGBAK File	91 KB
HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.4.logbak	28/06/2023 16:16	LOGBAK File	91 KB
HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.3.logbak	28/06/2023 16:11	LOGBAK File	62 KB
HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.2.logbak	28/06/2023 16:00	LOGBAK File	62 KB
HMS Belfast-IMO1234567-2023-06-28T14_30_14-LogDataBackup.1.logbak	28/06/2023 15:30	LOGBAK File	54 KB

The partial with the highest number is the most recent. In most disaster recovery situations, the most recent partial would be the one you use to restore. This naming convention helps you keep full and partial backups together.

Use the "**Partial Backup Interval in Minutes**" setting in the Backup Settings window to configure how often partial backups are created. This value is in relation to the last full backup. Leave the setting blank if you do not want partial backups.

Partial backups are deleted at the same time as their related full backup during the rolling delete process.

Restoring Partial Backups

To restore a partial backup, you will require exactly two .logbak files: the partial backup, and the full backup on which it is based. Any additional backup processes should keep these files together. If you rename your backup files, ensure that you will know which partial belongs to which full backup.

Use the "Ctrl" button to select multiple files in the Open File dialog in standalone mode.

In server mode, supply two file paths as arguments to the `--restore` command.

Backups of Archives for Regulatory Compliance

Log book 'archives' are the long-term official store of log book records. As such they must be backed up for regulatory purposes. This is different to backing up the data file for disaster recovery. Both types of backups are required.

> **IMPORTANT**
>
> There may be legal requirements to preserve log book archives for long periods of time. It is the responsibility of the users of the system to create archives, and preserve them as appropriate.

An archive contains log book records for a specified period of time, in a file format that is independent of the digital log books system. This format is a zip file of PDF files and file attachments. This means that the archived data can be viewed even if the log books system is no longer accessible.

It is important that archives are regularly created and backed up. They are the digital equivalent of storing/archiving a paper log book.

A log book archive is a zip file created manually by an Administrator user in the client application. Once a log book entry has been included in an archive, it can no longer be modified in the application.

Disaster Recovery

If the PC storing the live log book data file fails, it is necessary to install the application on a different PC and restore data from a log book backup file.

The restore process is different depending on the mode of operation of the system (standalone or client-server).

Standalone Mode

1. Install the log book client application on another PC
2. Run the application
3. On the Setup screen, choose the option "**Store data on this PC (restore from backup file)**"
4. Select the desired backup file(s) (with extension '.logbak') and confirm
5. The application will restore the log book data file and start

Client-Server Mode

1. Install the log book AppServer application on the new server PC
2. Stop the '**Digital Log Books AppServer**' service (as this is automatically started at the end of the install process)
   - Click the Windows 'Start' button, type 'Services' to launch the Services application
   - Locate '**Digital Log Books AppServer**' in the list. Right click and click 'Stop' from the context menu
3. Locate the AppServer's installation directory. By default this will be 'C:\Program Files (x86)\Chersoft\Digital Log Books AppServer'.
4. Open a command prompt in the installation directory
5. Run the command:
   ```
   LogBooks.AppServer.exe --restore "<path to backup file>"
   ```
   - Replace *<path to backup file>* with the file path(s) of the .logbak backup file you wish to restore
6. A confirmation message will be shown when the restore is complete
7. Start the '**Digital Log Books AppServer**' windows service
   - In the 'Services' window, locate '**Digital Log Books AppServer**' in the list. Right click and click 'Start' from the context menu
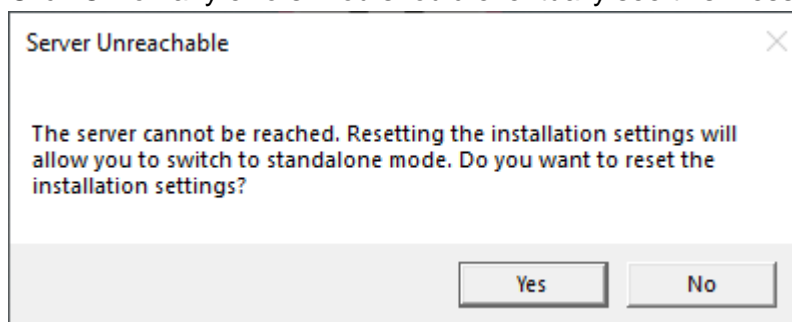
> **IMPORTANT**
>
> This operation must be performed with the service stopped otherwise the application will warn that there is an already running instance.

Temporarily Switching Modes

If, while running in Client-Server mode, the server should crash or become otherwise unavailable, it may be necessary to temporarily switch to standalone mode in order to continue creating log entries until the server is repaired. The procedure described below outlines how this can be achieved.

1. The App Server becomes unavailable.
2. Obtain the most recent backup file made by the App Server.
3. Restart the Digital Log Books client application.
4. Click OK on any errors. You should eventually see this message:

Server Unreachable	×
The server cannot be reached. Resetting the installation settings will allow you to switch to standalone mode. Do you want to reset the installation settings?	
[Yes] [No]	

5. Click 'Yes', then click 'OK' on any other messages. The application should close.
6. Restart the client application. You will be required to run through the setup process again (as described in the "Setting up the Application" section of this document).
7. Choose to "Restore from Backup File". When asked to choose a backup file, choose the latest one that was created by the App Server.
8. The application is now running in standalone mode with the server database. **Depending on when the backup was made, some recent log entries may now be missing.** Any missing entries should be re-entered now. Entries can then continue to be made until the server is repaired.
9. Once the server is available again, open the "Backup" tab of the "Settings" window in the client application, and click "Create Backup Now" to create an up-to-date backup file. (You may need to change the backup path to a local folder).
10. Restore the fresh backup file (created in the previous step) to the App Server (using the instructions in the "Disaster Recovery" section of this document).
11. Restart the App Server.
12. The App Server is now running again, but the client application is still running in standalone mode. **Don't create any more entries**. Instead, open the "Support" tab of the "Settings" window, and click "Reset Installation". Confirm any message boxes.
13. Restart the application. You will once again be prompted with the setup process.

14. Choose "Connect to a Digital Log Books Data Sever" and enter the required configuration information.
15. Once connection is established, remember to change the backup path back to a path on the server if you changed it earlier.
16. Client-server mode should now have been restored.

Support Requests

If you are reporting a software error, please also include the most recent application error log files from the client and server applications.

Include as many other details as you can, such as:

- Build number (listed on the Settings – Support tab in the client application)
- Is the application running in standalone or client-server mode
- Windows operating system version
- Whether the error occurred just once or every time you perform an action
- What action you were performing at the time the error occurred, and just before this
- Whether the error occurs on just one computer or several

Locating Error Logs Files from the Client Application

Error log files created by the client application can be located from the Settings window in the application (click the cog icon in the top right), on the 'Support' tab. Click the "Open Log File Location" link highlighted below:
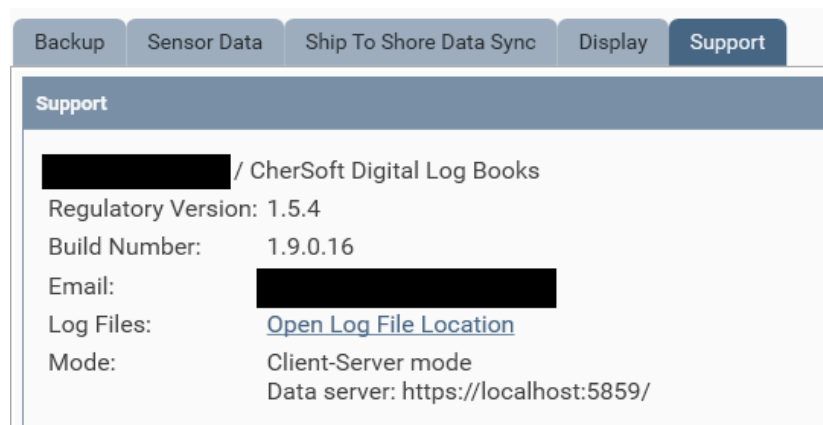
The log file folder will be similar to:
`C:\ProgramData\CherSoft\LogBooks\AppLogs`

Locating Error Log Files from the Server Application

If you are running in client-server mode, log files from the AppServer should also be included. These are located on the server PC in a location similar to:

`C:\ProgramData\CherSoft\LogBooksAppServer\AppServerLogs`

CHERSOFT, 25 August 2023.