

FEATURE GUIDE: TECDIS 4.8.3.9

The release of TECDIS 4.8.3.9 adds Route Library, FURUNO FAP-3000 track control and a range of other smaller features to TECDIS. For a complete list of changes, see the release history on <https://telko.no>. Here you will also find Feature Guides for previous releases.

Get access to all new features with TELCARE

TELCARE is our Software as a Service solution for TECDIS. With a subscription to TELCARE, you get access to all new software functions developed for TECDIS.



In TECDIS 4.8.3.3, 4.8.3.4 and 4.8.3.6 we added great features such as TotalTide integration, Rendezvous and drag'n'drop editing of route lane and turn radius, Curved EBL, EMRI autopilot interface to Curved EBL, Speed To Go (STG) Calculator, Improved route monitoring and support for Scandinavian Micro Systems Optical Bearing Device (OBD) to the list of TELCARE features.

In TECDIS 4.8.3.7 we are adding Bow Crossing calculation to TELCARE as well as other smaller features.

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New TELCARE feature: Route library with alternate route segment support

It is now possible to configure a library of fixed routes in TECDIS that provides flexible options for route organization and filtering. Furthermore, alternative segments for parts of the routes may be included in the route library, for selection at any time to adjust the route or for presentation to the navigator when approaching a waypoint where alternate route segments exist.

Route Library preparation

Making use of this feature requires some preparation:

Step 1: Create routes for inclusion in the route library and export them to Telko LST or RTZ format. Organize the exported routes in a folder structure.

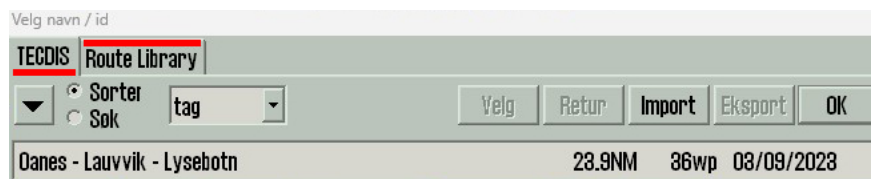
Step 2: Create alternative route segments (as separate routes) where needed. The alternative route segments should start and end in the same location as waypoints on the route(s) they will be used as alternatives for. Export the alternative route segments to Telko LST or RTZ format and place them in subfolders named 'alt' where the "parent" route(s) reside in the folder structure.

Step 3: Place the LST/RTZ route collection in an appropriate location on the TECDIS unit(s). The default location is 'C:\Program Files (x86)\TECDIS\Routes', but another location may be configured.

Step 4: Run the Route Library configuration tool, located at 'C:\Program Files (x86)\TECDIS\ConfigRouteLibrary'. Here, the location of the route library folder structure is configured, the route library and alternative routes facilities may be enabled, and additional options for the route library feature may be configured.

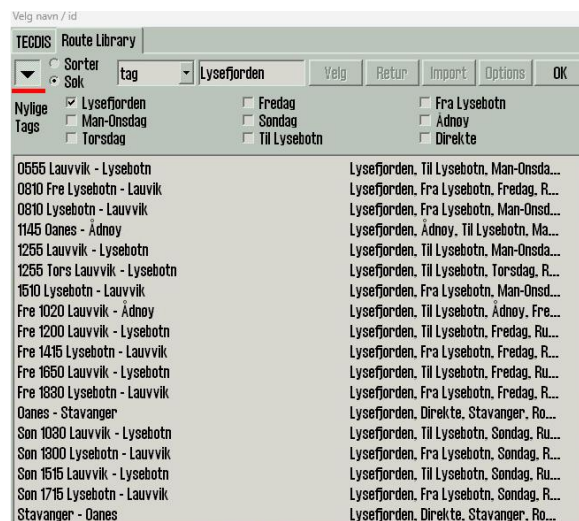
Route Library usage

When the preparations have been completed, the route selection dialog in TECDIS now includes the two sections 'TECDIS' and 'Route Library'.



The 'TECDIS' section presents the traditional route selection dialog where routes present in the TECDIS database are available as previously. These routes may be edited and otherwise used as normal. These routes do not include the alternative route segment facilities available via the route library.

The 'Route Library' section presents all routes present in the route library folder structure, but does not present alternative route segments present in 'alt' subfolders. The routes are organized by tags, and the routes in the library have automatically been assigned tags corresponding to the folder structure of the route library.



The down arrow button in the upper left corner of the dialog may be used to toggle the size of the route list between two sizes.

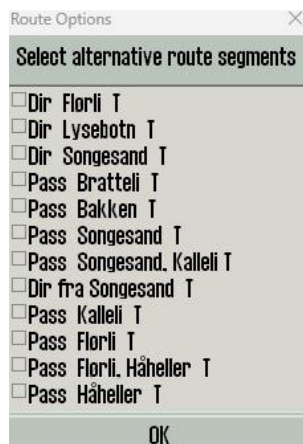


By selecting 'Search' in Route Library, the list of routes may be filtered according to one or a combination of tags. Tag lists are shown for each route in the list. Tags may be selected among the 9 most recent tags used by clicking the corresponding checkboxes, or new tag names may be specified in the search field.

To select a route, choose a route from the list and press 'OK' or 'Select'. If 'Select' is pressed, it is possible to press 'Options' to show the 'Route Options' dialog for use of alternative route segments (see below).



After the route has been selected and the route selection dialog has been closed, route options are available at any time by pressing the 'Add a route' button on the route toolbar.



The Route Options dialog allows selection of any of the preconfigured alternative route segments that are available for the route.

To select an alternative segment, click the corresponding checkbox. The route is immediately updated including the selected alternative.

Note that in advanced alternative route configurations, the availability of alternatives may change as the selection of alternatives is changed, both showing new alternatives or removing others, based on the current path of the route. The Route Options dialog is continually updated to reflect this.



If configured, a 'Next WP Options' popup may be shown in the upper left corner of the chart display when the vessel is approaching a waypoint where one or more alternative route segments may apply. The currently selected option is always listed first.

To select an alternative, select it in the list and press 'Select'.

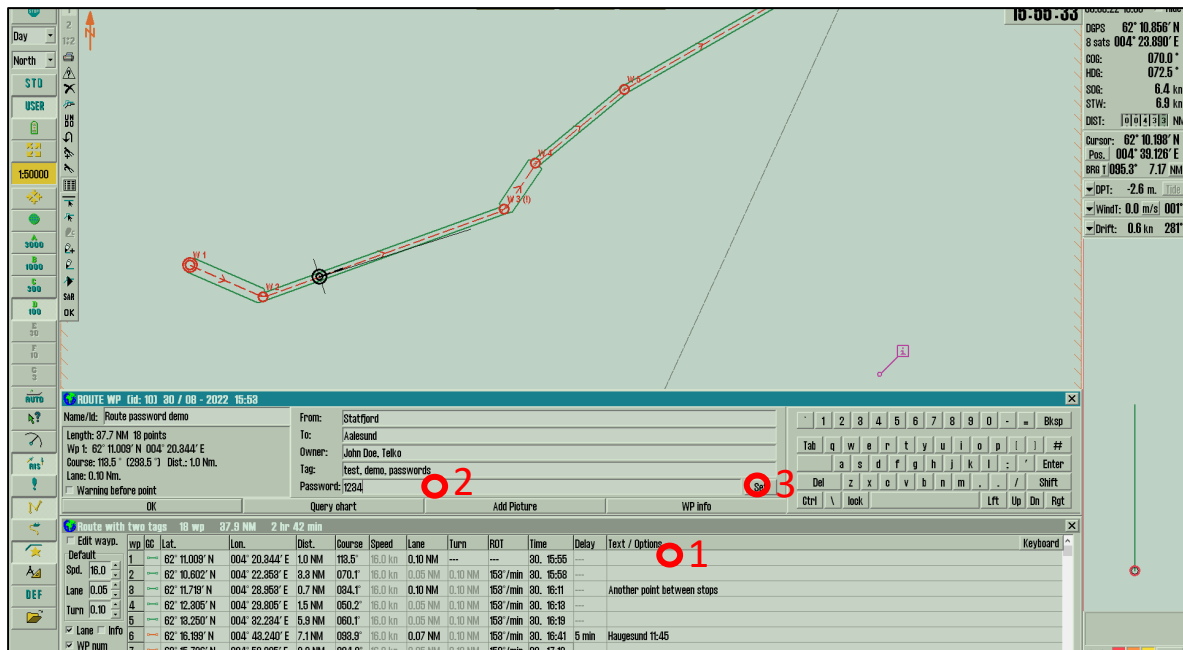
Note that this feature has been optimized for use with the Telko keypads FK2020 and FK2024, allowing operation of this feature without using the cursor.

New feature: Track control with FURUNO FAP-3000

TECDIS is now type approved for category C track control with the FURUNO FAP-3000 autopilot. Contact Furuno Norway or Telko AS support for installation details and user guides.

New TELCARE feature: Option for password protection of routes

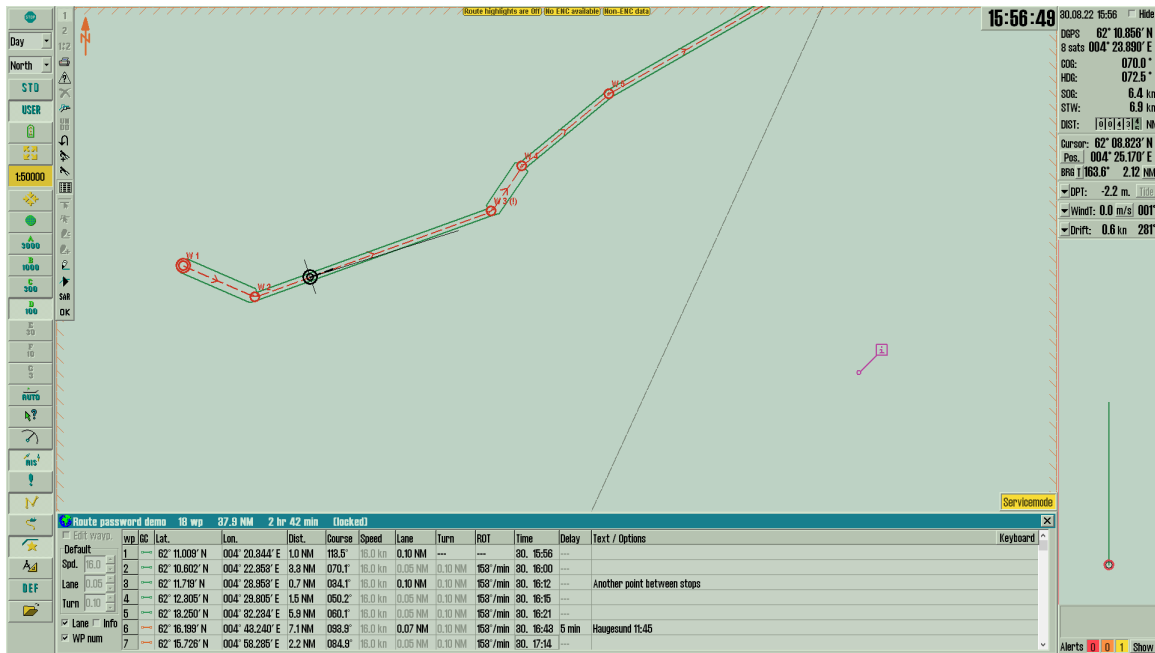
TECDIS routes may now be individually password protected. To password protect a route, go to text/options for the first route waypoint, enter a password and press the 'Set' button.



When a route has been password protected, the following route actions are unavailable unless the route is unlocked:

- Delete route
- Edit route
- Continue route drawing
- Undo latest route change
- Change route waypoint properties
- Change standard route waypoint properties
- Change waypoint texts or route options
- Change warnings before waypoints

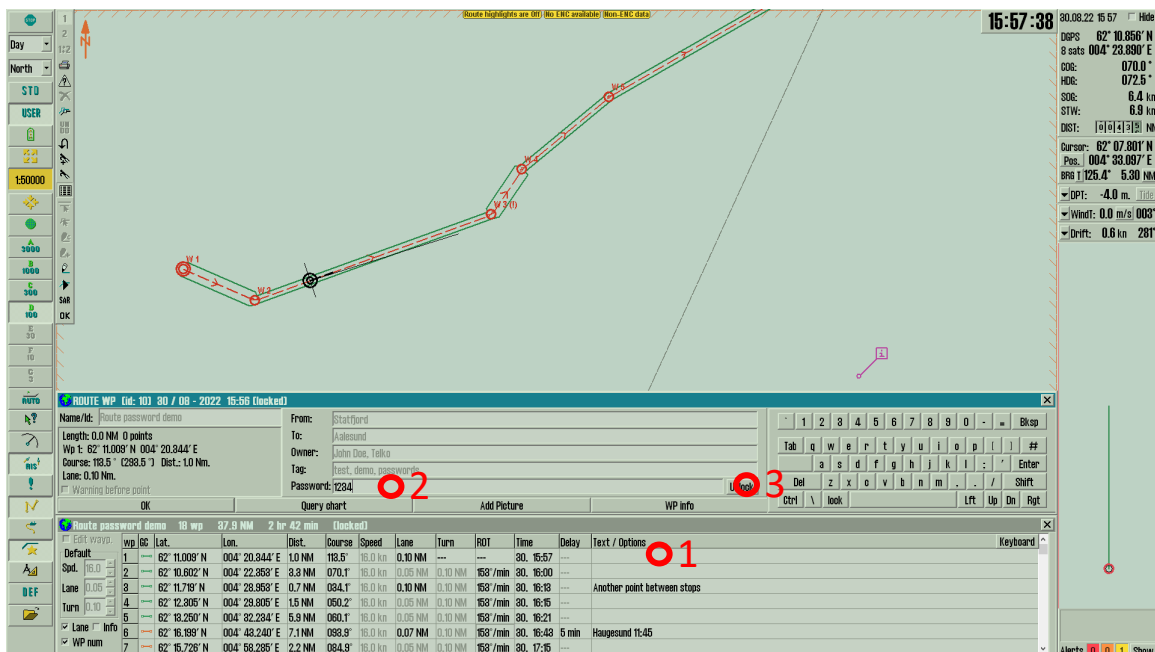
A password protected route may be selected and used for route monitoring, and it may be combined with other routes.



A password protected route may also be copied as a new route. The new copy of the route will not be password-protected and may be freely modified.

The route password protection will be included when the route is exported as .LST or .RTZ and imported to another TECDIS system.

To unlock a route, go to text/options for the first route waypoint, enter the password and press the 'Unlock' button.



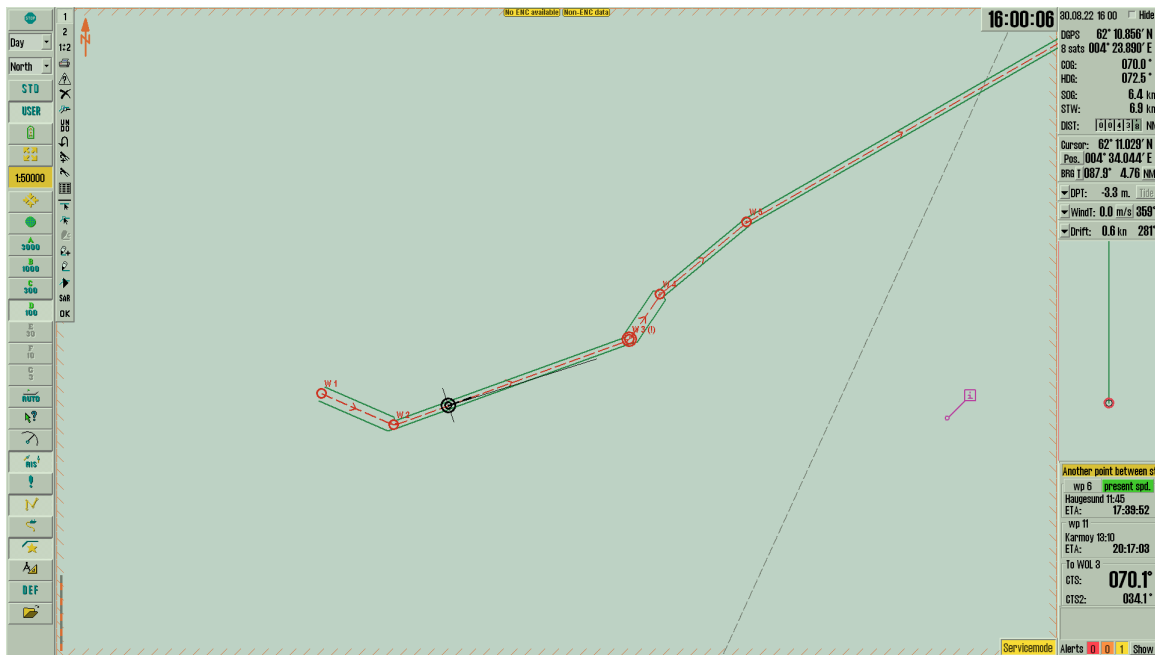
Once unlocked, the route may be modified (or deleted) freely, in the same manner as a non-password protected route.

The route will remain unlocked until the route is deselected, another route is selected, or drawing of a new route is initiated.

To remove the password protection, unlock the route, go to text/options for the first route waypoint, clear the password field and press the 'Set' button.

New TELCARE feature: Route monitoring with 2 ETA times including ETA waypoint names

A new fourth alternative route monitoring view has been added to TECDIS. This view includes Course To Steer (CTS) for the current and next leg, and display of ETA for an additional waypoint.



While this route monitoring view is selected, ETA waypoint texts are shown instead of Distance To Go (DTG). ETA times are also displayed with seconds as long as the time to go to the waypoint is under 24 hours.

The second ETA waypoint is automatically selected based on the current ETA waypoint and waypoint filtering selected in the ETA List. The second ETA waypoint will be the next waypoint shown in the ETA list that is further along the route than the first ETA waypoint. Depending on the filtering selected, the second ETA waypoint will be

WP ETAs	
present spd.	ETA
8:Another	30. 16:25
4	30. 16:31
5	30. 16:45
6:Haugesund	30. 17:41
7	30. 18:53

WP ETAs	
present spd.	ETA
8:Another	30. 16:25
6:Haugesund	30. 17:41
8:Text in	30. 19:13
11:Karmøy	30. 20:19
14:Point h	30. 20:59

WP ETAs	
present spd.	ETA
6:Haugesund	30. 17:40
11:Karmøy	30. 20:18
16:Bergen	30. 21:24
18:Stop 4	30. 21:51

- the waypoint immediately following the ETA waypoint ('All'),
- the next waypoint with a name ('Texts'),
- or the next waypoint with a stop time ('Stops').

The use of 'Stops' ETA List filtering with this route monitoring view may be particularly useful; When a route with stops is selected for monitoring, the first stop is automatically selected as the ETA waypoint. The second ETA will show the following stop.

When the first stop is reached, the next stop is automatically selected as the new ETA waypoint, and the second ETA will be updated to show the stop following that. This sequence will continue until the route has been traversed in full.

Changes for compliance to updated standards

A number of changes have been made in TECDIS for compliance to the latest edition of the standard IEC 61162. These changes include:

- Toolbar icons have been updated to use standardized symbols.
- Target (TGT) menu has been updated with separate range settings for filtering of sleeping class A and class B targets, optional alert for lost AtoN locating devices and expanded options for filtering of AIS targets.
- Minor adjustments have been made to the AIS target popup window.
- Transmission of AIS safety related messages has been removed
- Presentation and handling of AIS safety related messages has been updated.
- Support for AIS helicopter targets, AIS base stations and mobile AtoN targets have been added.
- Handling of AtoN status has been updated.
- AtoN dimension outline display support has been added.
- A new notice is shown when current AIS filtering results in targets within the displayed chart area being filtered.
- The default settings and user settings storage features have been updated with new settings in TGT menu and AIS filtering.

Other fixes and improvements

TECDIS 4.8.3.9 also contains several other fixes and improvements.

- **Integration and visualization for Brunvoll autocrossing solutions**
TECDIS may now present status for Brunvoll autocrossing solutions, and may visualize present planned vessel movement and programmed changes.
- **Improved handling of duplicate NavTex messages**
When duplicate NavTex messages are received, now only one copy of the message will be retained and the timestamp will be updated to reflect the latest time of reception.
- **COG vector length 60 minutes option added**
COG vector length may now be configured to 60 minutes.
- **Seconds added to larger clock display panel (TELCARE)**
When the date/time display in the upper right corner of the display, the time is now presented with seconds.
- **Improvements to Curved EBL (TELCARE)**
An option has been added to show Curved EBL with autopilot current settings instead of programmed, by setting configuration option 'cebl_use_active' to 1.
- **EBL/VRM tool text entry**
EBL/VRM tool now accepts text entry with decimal degrees when used in combination with the bearing list.
- **Route monitoring and ETA list mode retention**
Route monitoring and ETA information display modes are now retained on restart.
- **RTZ route import improvements**
RTZ route import has been improved with better handling of turn radius and/or XTD of 0.
- **Minor improvements to combining routes**
The route combination feature has been improved with improved handling of additional edge cases.

- **Improvements to Parallel index lines**
Accuracy of parallel index lines when used at the start of very long route legs has been improved.
- **Monitor forwarding address filtering**
When the monitor forward facility is used, a new configuration option 'monitor_forward_filter' has been added to limit this facility to a single monitor identifier.
- **Improvements to head up mode**
Improvements have been made to display update interval for own ship and targets while using head up mode.
- **Support for Orca seismic streamers new sentence format**
Display of seismic streamers using the new format used for the Orca system may now be activated by setting the configuration option 'new_orca_format' to 1.
- **Support for Telko keypad FK2024 added**
TECDIS has been updated for full support of the FK2024 keypad. Set configuration option 'enable_keypad' to 2 for full functionality.
- **Support for Schottel EcoVoy added**
TECDIS may now provide output to the Schottel EcoVoy solution via the 'Voyage Data' option.