

SAGA DataLink



SAGA DataLink is a data-bridge that seamlessly transfers data between fleet and shore.

Collected vessel data is automatically transferred between databases when an internet connection is established while data validation ensures no data is lost. If no connection is available, the vessel database will just save the data locally, until the connection is reestablished. The SAGA platform collects a minimum of data which can be transferred on even the most challenging satellite internet connection.

Faster Decision Making

Whenever you install new instrumentation on board you increase the ability to make performance improvements, but

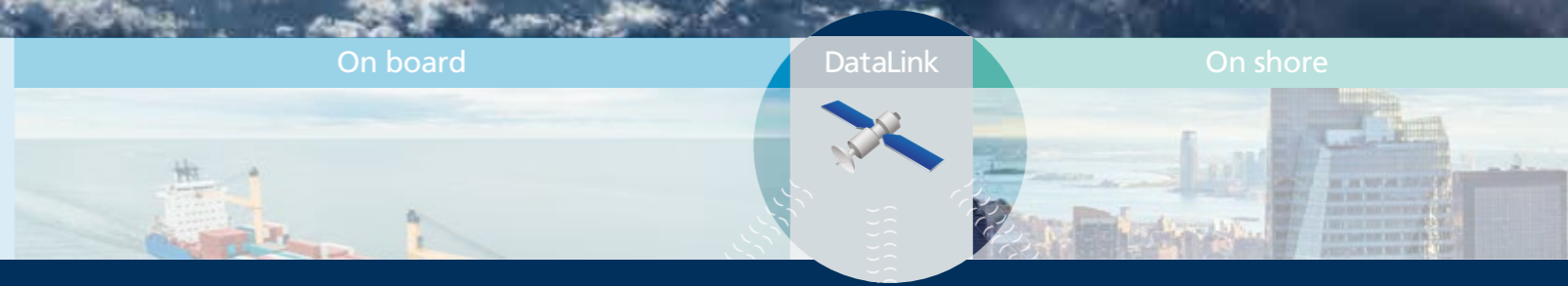
if you only use that data to send a noon report once a day it will lose a lot of its potential. Even if headquarters can analyze the data, the manual and inconsistent reporting will make it hard to make definitive conclusions and the delay of the reporting will mean missed opportunities to save money. DataLink lets you share high resolution, up-to-date vessel data with headquarters and will make it instantly accessible for analysis, which will make it much easier to start improving performance and increasing profitability.

Secure Data Transfer and Backup

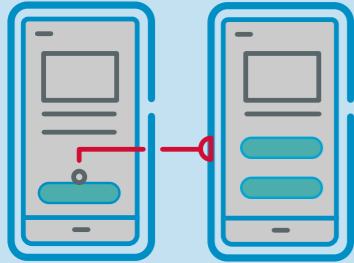
DataLink transfers data between two databases, one on your vessel and one on shore. Before data is sent the system checks the latest data available on the shore database and then only transfers any new data, this minimizes the amount of data that needs transfer. The system also uses a protocol that ensures no data is lost during transfer.

Even though the system uses the vessel's internet connection it is isolated from the vessel network making it a secure solution. DataLink can both send and receive data between the databases. This means, that if the data on board the vessel

is lost, you can use the shore database as a backup. You can even resume collecting data and then recover the lost data when it is possible.

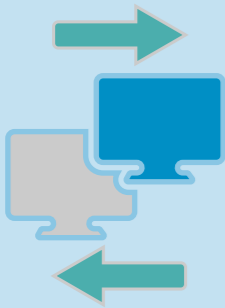


SAGA DataLink



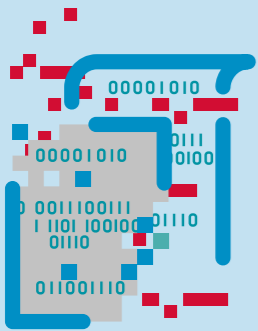
Utilize Your Existing Connection

DataLink will utilize your existing internet and connect via VPN through the vessel's own firewall. The setup allows replication of data from the master database on board to the slave database on shore for AutoLog and VslLog data as well as replication from the shore master database to the vessel slave database for vessel model data, KPI targets, port information, 3rd party data, etc. It does all this with minimal load on your bandwidth, transmitting tiny data packages amounting to a total of about 2 MB per day.



Remote Access

The DataLink connection also allows our Technicians to trouble shoot the installation on board without the need to travel to the vessel. We can also deploy software updates, backup and restore an installation as well as implement new features that you have decided to add to the system. This of course greatly reduces the cost associated with such tasks and greatly improves the speed with which these tasks can be completed.



No Data Loss

The setup is very robust and will automatically generate data packages ready for transmission and replicate these between ship and shore when there is a connection available. Only when a package has been successfully replicated to the slave database and its integrity has been confirmed, the master database will move on to the next data package or stop replicating if all is up to date. This ensures that no data is lost, even if the vessel is without connection for a month.



Automated Recovery

Should an uncontrolled shut down occur on board the vessel, such as in the case of a blackout, the system will automatically verify with the shore server what the status of replication is and resume from the latest intact data point. In case of catastrophic failure on the vessel, all data replicated to shore can be used to recreate an image of the database just before failure.

