

No network? No problem



iOra's Geo-Replicator technology provides the bandwidth optimization that makes updating the Distance Support portal possible across the entire fleet via satellite, enabling the Navy to run an up-to-date portal on all of its ships and substantially reducing demand on the Navy's satellite network, as well as the cost of transporting experts to ships.

Background

The United States Navy performs the bulk of its vessel maintenance at its naval bases. Between those scheduled overhauls however, there remains periodic maintenance that must be performed at sea to keep the ships and equipment ready for deployment.

While the Navy trains its on-board technicians to handle most of these maintenance scenarios, there are inevitably some tasks that are beyond what the onboard technicians can manage. They would typically complete these more complex tasks with the advice of a land based expert or, in some more complex cases, an expert will be flown to the ship to complete the work required.

These maintenance issues and the delays they can cause are a significant burden on Navy resources. Ferrying experts to ships is expensive and the downtime is detrimental to fleet operations.

Client: United States Navy

Location: USA

Industry: Defense

Profile: The world's largest naval force, founded in 1775 and operating around the world

Key Drivers: Improving on-board engineers' access to the Navy's "Distance Support" SharePoint portal while at sea



The Challenge

To enhance the efficiency of its on board technicians, the Navy has created the “Distance Support” web portal, which gives personnel on ships instant access to full and up-to-date maintenance documentation. Through the Naval Surface Warfare Center’s (NSWC) “Sailor to Engineer” initiative, this portal also gives Sailors instant access to engineering and logistics experts at the NSWC in Port Hueneme.

The Sailor to Engineer page of the portal enables sailors to get expert answers to questions regarding the maintenance of weapons, hull, mechanical, and electrical systems by putting fleet technicians in contact with knowledgeable experts at any time, anywhere.

The effectiveness of the portal was, however, limited by bandwidth availability over the Navy’s satellite network. With enormous fleet demand for bandwidth, it was impossible to update the portal effectively over the network. Therefore updates to maintenance documentation had to be sent out to the ships on CDs and then manually uploaded into the portal. This process was cumbersome and unreliable.

The Geo-Replicator® Solution

iOra’s Geo-Replicator technology provides the bandwidth optimization that makes the updating of the “Distance Support” portal possible across the entire fleet via satellite, enabling the Navy to run an up-to-date portal on all of its ships and substantially reducing demand on the Navy’s satellite network, as well as the cost of transporting experts to ships.

Having the ability to contact an expert immediately when the need arises, allows the fleet to remedy problems rapidly and keep their operations running smoothly.

Only iOra Geo-Replicator offered the efficient server to server replication that the Navy required to provide a LAN speed portal experience to its on-ship users. iOra’s unique software allows the Navy to efficiently provide data to its users, wherever they are in the world

and delivers efficient replication of content both ways between ship and shore by dramatically reducing the size of the data being sent.

The Result

The Navy’s objective was to provide up-to-date portal information on-board each of its vessels. Through using iOra’s unique Epsilon differencing technology, the maintenance manuals in the Navy’s “Distance Support” portal are now updated every few hours instead of every few months.

Geo-Replicator® Benefits

Faster access to SharePoint in very remote areas of the world can result in a dramatic reduction in the cost of data transmission, as well as ensuring satellite bandwidth is left available for other mission critical purposes.

This enables improved at-sea access to maintenance manuals and documentation, more effective and efficient collaboration between on-ship technicians and land based experts, and the availability of more up-to-date portal content.

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