

New ONR technology will enable ship systems to share information seamlessly

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With Sailors and Marines increasingly relying upon networked data and apps, the Office of Naval Research (ONR) demonstrated to Department of the Navy officials how a new suite of information technology tools could improve fleet operations during experiments Dec. 14 in Dahlgren, Va.

"We're trying to take our [prototypes](#) and have them work in the actual environment they'll have to operate in aboard a ship," said Wayne Perras, the ONR project officer overseeing the two-week experiment at Naval Special Warfare Center Dahlgren. The technology tools are being tested in a special laboratory containing shipboard combat systems and networks.

The centerpiece of the effort is a so-called "universal gateway" system designed to pass data securely and swiftly between a ship's combat system network and its command-and-control (C2) network. The combat system network consists of the weapons and sensors found on a ship. The C2 [network](#) connects to warfighting systems located beyond the ship, bringing in external [sensor data](#) and information used to help [Sailors](#) conduct their missions.

"We're building a single, universal gateway so all data can move through it, to increase performance, flexibility, transparency of data and information assurance between the two networks," said Perras.

The technology experiment, which began Dec. 5, is demonstrating the

system's capabilities in terms of security and performance when data is moved back and forth between the networks. Any bugs that are discovered will be fixed in the next few months.

"That's the objective of the experiment—trying to reduce risk for program managers and program executive officers in transitioning the science and technology-developed prototypes as much as possible to get them to the fleet as fast as possible," Perras said.

The experiments will continue through Dec. 16 in support of an expected transition of the technologies to the fleet in 2013.

Provided by Office of Naval Research

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