



Intelligent Optical Switching at the DISA Network Core

The Global Information Grid-Bandwidth Expansion (GIG-BE) Project

Some Communications Really Are Mission-Critical

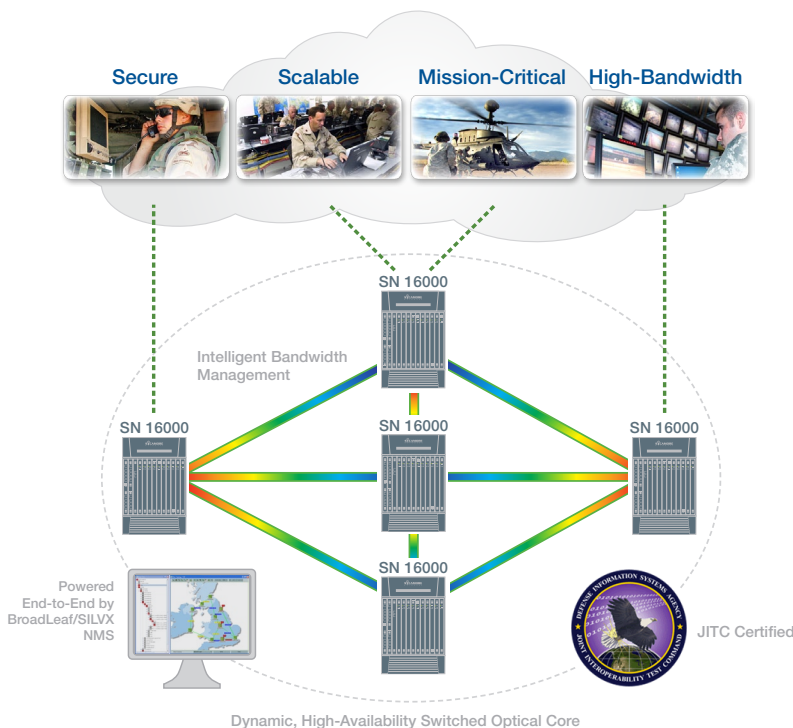
When the US Department of Defense (DoD) decided they needed a super-high-speed network, they soon realized the best course of action was to build their own. The result – the Global Information Grid-Bandwidth Expansion (GIG-BE) project – formed a state-of-the-art network foundation for DoD communications, under the jurisdiction of their Defense Information Systems Agency (DISA).

GIG-BE created a robust, IP-based network where bandwidth is no longer a constraint and vast quantities of information can be distributed, analyzed, and shared in a more efficient and effective manner. The new network ensures secure, high bandwidth capability over a physically diverse, optical mesh architecture that interconnects key intelligence, command, and operational locations throughout the continental United States (CONUS), Pacific, and European Theaters.

We're proud to say that Sycamore intelligent optical switching technology plays a pivotal role in providing connectivity for one of the world's most advanced and technically innovative networks.

“The GIG-BE program creates an optimized backbone similar to an interstate system where data traveling great distances can be moved at high speeds without bottlenecks.” GIG-BE complements the DoD’s existing network, known as the Defense Information System Network (DISN). “You can think of the DISN as the interconnecting highways that let data flow efficiently to and from major paths. Together, the DISN and GIG-BE form a single integrated network that allows information to flow quickly and efficiently across DoD.”

- Lt. Gen. Charles E. Croom Jr.
Director, DISA



About DISA

The GIG-BE project is a highly strategic initiative of the Defense Information Systems Agency (DISA) within the US Department of Defense (DoD). DISA is a combat support agency responsible for planning, engineering, acquiring, fielding, and supporting global net-centric solutions and operating the Global Information Grid to serve the needs of the President, Vice President, Secretary of Defense, Joint Chiefs of Staff, Combatant Commanders, and other DoD Components under all conditions of peace and war.

DISA is the preferred provider of Global Net-Centric Solutions for the Nation's warfighters and all those who support them in defense of the Nation. For more information, visit www.disa.mil.

Why the World's Best Consistently Choose Sycamore

After rigorous testing of the leading optical switch products, DISA and SAIC concluded that the Sycamore switch represented the best technical solution, based on their evaluation criteria:

- Operationally proven product reliability
- Advanced networking software intelligence
- Industry-leading switch capacity and system scalability
- Support for diverse protection schemes
- Advanced network emulation and design tools

GIG-BE was operational by year-end 2005 and, after follow-on evaluation, accredited to support very high-speed traffic classified up to and including Top Secret. Achieving DISA's vision of "a color to every base" entailed physically diverse network access and substantial upgrades to the optical backbone. GIG-BE met this objective in a state-of-the-art switched optical network with 10 Gbps OC-192 or faster connections serving 85 sites throughout the world.

The ultimate goal is to bring the efforts of the military, the intelligence community, and other coalition forces together to ensure US forces get the information they need to complete a mission in as near real-time as possible. Taking the next step in that direction, the GIG-BE team is planning for the transformation and optimization of DISN subsystems (voice, data, video). They intend to provide converged services by the end of the decade. It's a safe bet they will.

For more information about our intelligent networking products and solutions, please contact your Sycamore Sales Representative.

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Sycamore Networks, Inc. (NASDAQ: SCMR) is a leading provider of intelligent bandwidth management solutions for fixed line and mobile network operators worldwide. From multiservice access networks to the optical core, Sycamore products enable network operators to lower overall network costs, increase operational efficiencies, and rapidly deploy new revenue-generating services.

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NEXT-GENERATION NETWORKING IN ACTION

THE NEED

Ubiquitous, High-Speed Bandwidth

DISA wanted to create a new, bandwidth-available environment to improve national security intelligence, surveillance, and reconnaissance; information assurance; and command and control in support of the DoD's warfighting, intelligence, and business missions. The GIG-BE project would complement the DoD's existing network, known as the Defense Information Systems Network (DISN), while expanding capacity and reliability to select locations worldwide.

THE SOLUTION

Best Value Intelligent Optical Switching

The final GIG-BE system solution accepted by DISA was determined by Science Applications International Corp. (SAIC) and included subcontracts for 4 specific equipment types. SAIC chose Sprint Communications/Sycamore Networks as the best value technical solution in the Optical Digital Cross-Connect category. The Sprint/Sycamore solution includes the SN 16000 Intelligent Optical Switch, SILVX NMS, and SILVX InSight Network Design and Analysis Tools.

THE RESULT

Bandwidth Marching to a New Beat

The GIG-BE project reached initial operational capacity in just one year. This involved immense coordination between DISA employees and contractors, engineers, electricians – and an entire military detachment devoted to GIG-BE implementation. Consistent with DISA's original vision for the program, the network supports critical command and control and intelligence organizations worldwide, while simultaneously supporting optimization of existing DoD communications infrastructure.