Overview
The United States Department of Defense (DoD) is charged with coordinating and supervising all agencies and functions of the government concerned directly with national security of the country and the United States Armed Forces. The DoD is the world's largest employer with more than 1 million active duty servicemen and women; and more than 800,000 National Guardsmen and Reservists; and more than 700,000 civilians, bringing the total employees to more than 2.5 million.

The DoD operates one of the most advanced, secure communications network in the world, and now Ribbon's industry-leading Joint-Interoperability Test Command (JITC)-certified Application Server is part of this infrastructure. Ribbon and Verizon recently announced that along with their partners, Black Box and Visioneering, they have completed one of the largest Voice over IP (VoIP) deployments in DoD's history. Leveraging Ribbon's Application Server, the finished deployment is part of the DoD's "Everything over IP" initiative.

The deployment, which migrated more than 60,000 users to Ribbon technology in one weekend, allows the DoD's command and control organization to significantly upgrade its communications capabilities with the latest in secure real-time unified communications (UC) technology, including the ability to seamlessly integrate voice, video, instant messaging, presence and conferencing into the end-user experience.

This massive technology migration provided the DoD with the ability to replace the core of its communications infrastructure while leveraging its existing endpoints and using standards-based technology going forward. The migration included collapsing multiple legacy PBXs requiring reuse of existing endpoints and gateways from multiple voice systems, further protecting the Department of Defense's current investments. The cost and time required were significantly less than implementing an entirely new solution.

Why Ribbon?
In addition to the significant operational cost savings offered by Ribbon's Application Server, the new solution significantly upgraded the user experience without requiring massive retraining of end users. Another key factor was Ribbon's long history of providing tier one service providers with carrier-grade reliability and the company's ability to improve DoD's network reliability and uptime.

Already supporting more than 27 million SIP endpoints globally, the Ribbon Application Server's carrier-grade heritage provides a unique upgrade option for the legacy communications systems deployed by the US Department of Defense. The Application Server is ideally suited for secure private cloud deployments that can support millions of endpoints per node and operate in an organization-wide, geographically diverse environment. The platform is field-proven with deployments in some of the country's largest commercial enterprises, and more than 100 service providers worldwide. The Ribbon Application Server also serves as the core of the Kandy Business Solutions (KBS) cloud. The DoD's solution includes both standards-based SIP and ASSIP endpoints, so there is no proprietary endpoint lock-in. The Ribbon Application Server shares it heritage with the Nortel AS 5300, so it is uniquely capable of migrating legacy Nortel deployments.
The Execution

Successful execution of this project required the tightly integrated coordination of Verizon, Ribbon, Black Box and Visioneering. Following a very compressed schedule, the team built the virtualized server infrastructure, installed the Ribbon Application Server platform and performed the integration work with the existing ancillary systems. A complete System Acceptance Test was conducted confirming readiness to place the system into production. Using an innovative technique the team performed a single cutover moving all 60,000+ active lines off the legacy server and onto the Ribbon platform in a single weekend.

Following the initial cutover, the remaining 2,700-plus VIP subscribers were given “white glove” migration treatment off the legacy system. The development of the “white glove” treatment included providing each group with personalized service to include flexible scheduling, explaining the migration process, and dedicated direct contact with support engineers and desk side conversion service. On site reconfigurations or reengineering were made available per the customer’s request.

Project Highlights

- 12-month completion – from Procurement to Decommission, consolidated two city-scale PBXs (AS5300 & CS2100) into one non-proprietary Enterprise Session Controller
- Single Day Cut-Over of 60,000-plus active lines, 48,000 sets – Largest VoIP migration in DoD history
- Multi-million-dollars in savings – Compared to traditional labor intensive voice modernization methods
- Industry standard, non-proprietary secure protocols – Enables re-utilization and integration of existing infrastructure
- “White Glove” migration of 2,700-plus VIP Lines
- 180-plus Trunks moved in a single weekend
- Remotely reprogrammed and reused 48,000 legacy end points