Vectrus’ Internet-of-Everything (IoE) capability supports integration of disparate sensors, devices, and systems to protect critical infrastructure and promote operational readiness. Whether combining force protection and chemical, biological, radiological, and nuclear information to enhance battlespace awareness, or deconflicting electromagnetic spectrum usage to mitigate interference across communications and weapons systems, Vectrus delivers mission-critical solutions to complex problems.
ELECTROMAGNETIC INTEROPERABILITY
Vectrus brings over 30 years’ of electromagnetic spectrum engineering experience to manage and promote the efficient use of radio frequencies through research, development, testing, and evaluation for federal, commercial, and international clients. We provide a full suite of electromagnetic maneuver engineering support:

- Electromagnetic Environmental Effects (E3) Analysis
- Electromagnetic Spectrum Operations (EMSO)
- Spectrum Supportability Risk Assessment (SSRA)
- Real Time/Cognitive Spectrum Operations
- Spectrum Certification
- Frequency Management

Vectrus provides engineering support for the following key programs, among others:

- Real-Time Spectrum Operations (RTSO) to resolve afloat electromagnetic interference issues across the entire Naval Fleet, whether shipboard, ship-to-ship, or ship-to-shore systems, for the Naval Surface Warfare Center Dahlgren Division (NSWC-DD)
- E3 support to the Naval Air Systems (NAVAIR) Air Systems EMI Corrective Action Program (ASEMICAP)
- Engineering support for spectrum management, frequency assignment, spectrum supportability risk assessment, spectrum relocation, and Presidential Broadband Initiative analysis to the Navy Marine Corps Spectrum Center (NMSC)

SYSTEMS INTEGRATION
Vectrus leverages emerging cyber technologies and a system engineering approach to integrate varied technologies to deliver IoE solutions. As a leader in sensor and systems integration, Vectrus provides enhanced situational awareness for the following programs by creating cyber-physical systems and by linking sensors, devices, and disparate data sources with analytic and visualization solutions:

- CENTAUR, chemical/biological layered defense for the Joint Program Executive Office (JPEO) for Chemical, Biological, Radiological, and Nuclear (CBRN); and ARGUS for the Pentagon Force Protection Agency (PFPA)
- Mobile Surveillance Systems (MSS) and Cerberus sensor integration systems for border and perimeter surveillance for the Department of Homeland Security (DHS) and U.S. Army
- Rapid Reaction Tunnel Detection (R2TD) for the U.S. Army’s Program Executive Office (PEO) for Intelligence, Electronic Warfare and Sensors (IEWS) to detect underground tunneling activity