



INFRASTRUCTURE

MINING & METALS

NUCLEAR, SECURITY & ENVIRONMENTAL

OIL, GAS & CHEMICALS



Delivering Asset Performance Management (APM) solutions through Cybersecurity

Overview

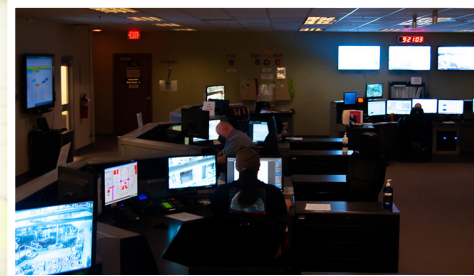
Our vision is to deliver Asset Performance Management solutions encompassing cybersecurity engineering, systems and process engineering optimization and predictive analytics to improve asset use and availability. We leverage our design, construction, and operations expertise and through these deliveries our customers will increase their performance efficiency while increasing their cyber resiliency for operational technology (OT). This will enable enterprise resiliency, business continuity, and improve digital-physical safety from design through operations.

Why Partner with Bechtel?

- **Lifecycle partner from initial design to facility closure** – We provide cradle-to-grave services to ensure our customers are supported throughout the entire asset lifecycle
- **Deep EPC expertise;** our Colleagues perform and solve problems in 9 of the 16 Department of Homeland Security Critical Infrastructure Sectors
- **APM Environment** for testing and modeling digital-physical integration (formerly the Cyber Lab)
- **Support modeling and predictive analytics** – in conjunction with Big Data Analytics Center (BDAC) – by providing test data that can be used to rapidly deploy operational predictive models
- **Technology integrator** – We understand how to ensure that IT and OT systems interface effectively on assets of all kinds, sizes and complexity; in the last 10 years, Bechtel has connected millions of devices
- **Cybersecurity engineering** – We are not tied to one technology solution, enabling us to find the best solution for our customers
- **Engineering and construction company** – Drawing on our experience engineering and constructing 31,000 assets, we approach our work from an OT perspective and are able to manage IT/OT convergence
- **Global supply chain** – With more than 72,000 subcontractors registered in Bechtel and \$16.6 billion in annual procurement and follow on activities, we are connected to partners and suppliers in all industries who can support the specific needs of our customers



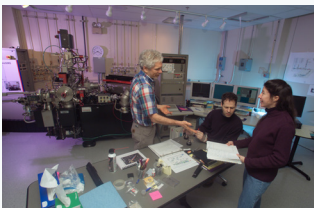
Hardening IT/OT convergence vulnerabilities to keep your critical infrastructure safe



Bechtel hardens critical infrastructure through integrated technology positions and innovative EPC capabilities that improve performance, value, and sustainability.

How We Do It

- Provide comprehensive cybersecurity solutions for OT by working with our customers to develop unique programs that are tailored to support each stage of the asset lifecycle.
- Deliver control systems that are safer and more resilient, identify vulnerabilities earlier, and recover faster for business continuity.
- Collaborate with customers to implement solutions that harden control systems against threats.
- Partner with our customers to achieve and maintain operational and performance excellence, strengthen critical infrastructure, and contribute to a lasting positive legacy by remaining by their side to continuously improve our world-class cybersecurity solutions.



Leveraging Our Capabilities to Strengthen Cybersecurity

- **Ability to incorporate Bechtel SMEs who specialize in design-build and operations of classified systems,** including system administration and cybersecurity areas that augment our mature ICS and engineering automation capabilities.
- **Experience operating an integrated technology cyber range,** testing technologies from vendors against real world scenarios while operating under the strictest NIST RMF accreditation requirements.
- **Industry knowledge and capability in telecommunications technology,** specifically Next Generation Wireless systems engineering and integration, while contributing directly to the future Wireless evolution that drives next generation communication requirements in the ICS domain.
- **Access to a global supply chain** with cohesive technical support capabilities that improve cyber resilience and vulnerability mitigations available for their suite of technologies.
- **Robust Procurement and Security teams,** capable of delivering facility modification and upgrades for some of the most complex and secure assets in the world, including those with SCIF and other unique OPSEC requirements, meeting the most demanding security standards for our customers.

Business Services

Bechtel has vast experience providing a wide range of cybersecurity solutions for operational technology (OT) across many of the 16 Critical Infrastructure Sectors—including Defense Industrial Base (DIB), Water & Wastewater, Energy, Nuclear, Chemical, Communications, Dams, Government Facilities, and Transportation sectors—on numerous projects at sites with multiple facilities.



Bechtel invests in experimentation centers that develop and test innovative solutions. This enables us to provide cohesive cybersecurity solutions to our customers through best in class integrated R&D, EPC, & CSU project execution, across all industries.



Bechtel has the unique ability to leverage its commercial and government cyber experience in order to enable business continuity and enterprise resilience.



Available services:

- Design, engineer, procure and construct/install solutions that integrate all types of OT
- Provide direct startup, operations, maintenance, and cyber assessment and analysis experience gained from engagement in critical infrastructure facilities worldwide
- Provide supply chain protection by evaluating critical components for malicious behavior, and through development of protocols contain, manage, and mitigate risks
- Leverage existing vendor partnerships, or create new ones
- Penetration testing
- Design, develop, install and test a suite of tools to support situational awareness (e.g., SIEM)
- Vulnerability and applicability assessments for all aspects of digital control systems that drive critical infrastructure
- NIST-RMF standardization & best practices
- Incident detection & response and disaster recovery
- OT vendor equipment analysis
- Self-perform specialty work or identify and manage niche subcontractors
- Wireless integration and Big Data & Analytics Center (BDAC) services

Conducting Cybersecurity at the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP)

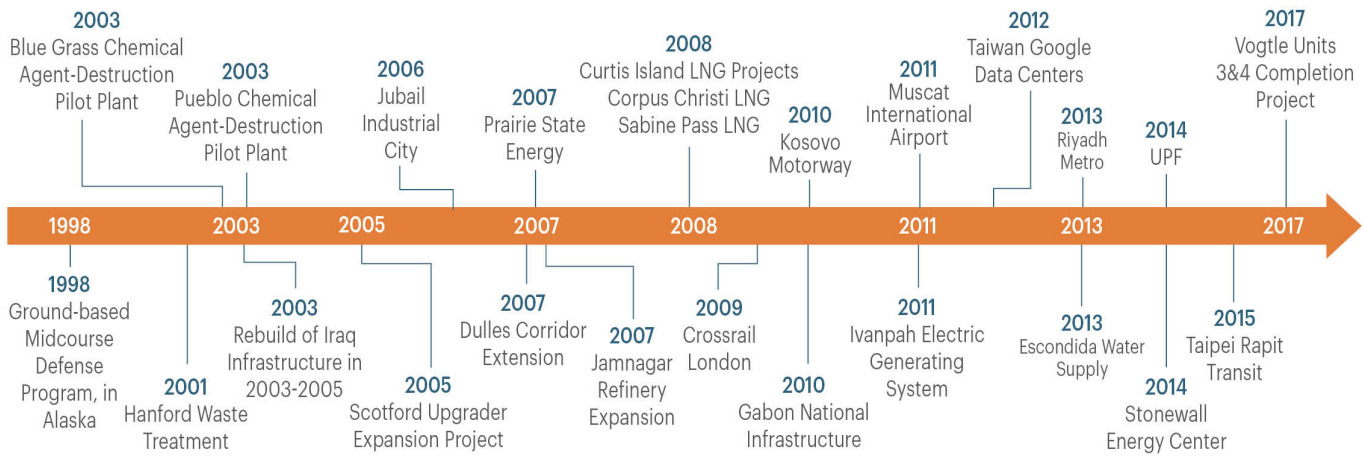
Bechtel leads a team that designed, built, and operates a DoD facility that is destroying 2,611 tons of mustard agent at the Army's Pueblo Chemical Depot in Colorado.

- Responsible for all facility communications, networking, and computing infrastructures and services, including engineering, logistics, equipment modification, configuration management, risk identification, and mitigation plans
- Assessed and implemented network connectivity decisions for operational technology and lab systems
- Provided tailored recommendations on program attributes to meet unique mission requirements
- Responsible for developing and administering the PCAPP cybersecurity program and sustaining the level of security necessary to achieve and maintain authority to operate (ATO) on the Laboratory Information System and the Facility Control System in accordance with NIST RMF
- Performed Gap Analysis on technical controls required for NIST RMF application
- Provide ongoing continuous monitoring (CM) support
- Currently support the pursuit of a third ATO on an additional control system
- Continuously update the OT network and associated computing infrastructure and manage all aspects of the facility



Industrial Control Safety Systems Project Experience

Bechtel has decades of experience delivering design, implementation, startup, commissioning, and operations for industrial control systems to help our customers meet their mission requirements. This experience has provided us with unique knowledge of these systems, enabling us to deliver comprehensive cybersecurity solutions and harden critical infrastructure against evolving threats.



- 1 Riyadh Metro – Riyadh, Saudi Arabia
- 2 Escondida Water Supply – Escondida, Chile
- 3 Jubail – Al Jubail, Saudi Arabia
- 4 Muscat International Airport – Muscat, Oman
- 5 Ivanpah Electric Generating System – Nipton, CA, USA
- 6 Dulles Corridor Extension – Vienna, VA, USA
- 7 Crossrail London – London, UK
- 8 Curtis Island LNG – Queensland, Australia
- 9 Corpus Christi LNG – Corpus Christi, TX, USA
- 10 Sabine Pass LNG – Cameron Parish, LA, USA
- 11 Prairie State Energy – Lively Grove Township, IL, USA
- 12 Stonewall Energy Center – Leesburg, VA, USA
- 13 Vogtle Units 3 & 4 – Waynesboro, GA
- 14 Pueblo Chemical Agent-Destruction Plant – Pueblo, CO, USA
- 15 Blue Grass Chemical Agent-Destruction Plant – Richmond, KY, USA
- 16 Uranium Processing Facility – Oak Ridge, TN, USA
- 17 Hanford Waste Treatment – Hanford Site, WA, USA
- 18 Jamnagar Refinery Expansion – Jamnagar, Gujarat, India
- 19 Rebuild of Iraq Infrastructure in 2003-2005 – Iraq
- 20 Ground-based Midcourse Defense Program – Ft. Greely, AK, USA
- 21 Kosovo Motorway – Kosovo
- 22 Gabon National Infrastructure – Gabon
- 23 Scotford Upgrader Expansion Project – Alberta, Canada
- 24 Taipei Rapid Transit – Taipei, Taiwan
- 25 Taiwan Google Data Centers – Changhua County, Taiwan