

Connect, Protect, and Transform Operational Technology for Mission Success

Operational Technology (OT)—the hardware and software controlling physical processes like grid control, building automation, SCADA systems, and PLCs powers the vital systems that keep government infrastructure operational. Unlike traditional IT, OT’s purpose is deeply embedded in physical outcomes and systems which demand ultra-high reliability, real-time responsiveness, and safety-first uptime.

Federal agencies rely on OT across diverse, high-stakes domains, including energy grids, air traffic control, border surveillance, port operations, munitions manufacturing, logistics and other critical infrastructure and building systems. Each environment brings unique mission constraints, legacy vulnerabilities, and disparate technology stacks.

For nearly two decades, Swish has helped government agencies navigate this complexity, enabling them to connect, protect, and transform fragmented OT architectures into secure, integrated, and mission-aligned solutions.

Connect: Weaving Cohesion into Disparate OT Environments

Government OT ecosystems are often a mosaic of legacy SCADA systems, proprietary OEM hardware, IIoT sensors, fiber networks, wireless links, and cloud services. These piecemeal components rarely integrate seamlessly, hindering visibility, control, and operational efficiency.

Swish’s **Connect** framework bridges these divides by helping agencies to:

- **Comprehensively assess** and model OT environments
- **Identify** mission-driven priorities and environmental gaps
- **Plan & design** tailored architectures and roadmaps that unify heterogeneous systems
- **Implement and onboard** with expert integration and user adoption support
- **Manage operations** through continuous assistance and enhancement

This mission-focused approach ensures OT ecosystems operate cohesively, unlocking greater connectivity, interoperability, and operational value.

Protect: Shielding OT from Escalating Cyber-Physical Threats

As OT systems become more connected, the attack surface grows and so does the risk of cyber threats. A 2024 MeriTalk survey found that 68% of federal OT administrators reported incidents in the previous year. While 90% have made OT security a priority, only 55% felt confident in their ability to detect or mitigate threats today.



Unlike IT systems, OT controls physical processes. Breaches can cause not only data loss but also physical harm and disruption to critical infrastructure. Securing these systems requires specialized strategies and tactics tailored to unique operational demands.

Swish's **Protect** methodology delivers:

- **Air-gapped OT file scanning and transfer** for the most secure OT situations
- **Vulnerability and posture management** of OT environments
- **OT-centric zero-trust**, NERC CIP remote access and micro-segmentation for robust isolation
- **Advanced threat detection** tailored for OT environments and protocols, directly integrated into SIEM systems for unified security operations
- **Specialized threat intelligence** to identify and address vulnerabilities before they impact operations

By aligning with NIST, CISA, DOD, and other industry-based guidance for OT systems, Swish ensures OT assets stay resilient, safe, and focused on the mission.

Transform: Turning OT Data into Strategic Action

OT systems, especially those at the edge supporting Defense, National Security and other critical missions, generate vast streams of operational data. Yet many agency systems lack the infrastructure to extract, integrate, and activate that data effectively.

Swish ensures OT data becomes a strategic asset by feeding it into modern architectures such as data lakes, data meshes, or edge compute, keeping it accessible, reusable, and out of silos.

Swish's **Transform OT** capability empowers agencies to:

- **Harvest trustworthy, high-fidelity data** from OT devices and control systems using standards-based frameworks and brokers
- **Feed it into advanced architectures** like data lakes, data meshes, or data fabrics
- **Surface actionable insights** to enable faster and better-informed mission decisions

Swish helps agencies move from simply collecting operational data to leveraging it as a trusted, mission-shaping resource.

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of federal OT administrators reported cyber incidents in previous years.
2024 MeriTalk Survey

Customer “Connect” Snapshot - Modernizing Defense ICS Systems

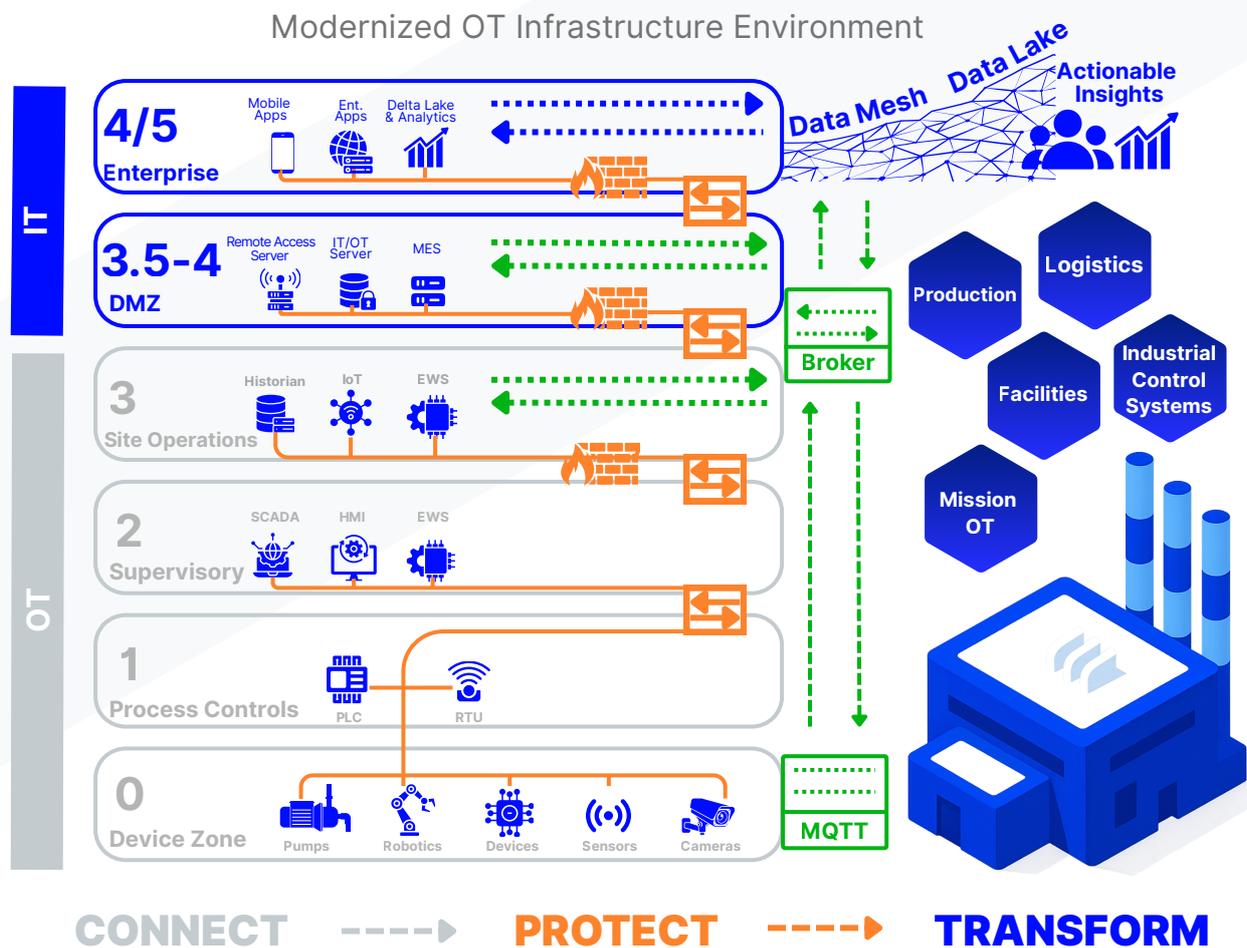
Swish is leading a major modernization initiative for a key U.S. military support services branch, transforming Industrial Control Systems (ICS) and OT networks across 23 mission-critical sites. Starting with conceptual IT and OT network maps, Swish developed a fully realized digital twin, validated the design in a controlled lab environment, and delivered a validated architecture ready for deployment.

With the new OT network in place, the agency can now monitor, troubleshoot, and maintain these environments with confidence. By standardizing network architecture across the enterprise, the agency gains consistent, fortified security, real-time visibility into operational assets, and a stronger defense against cyber threats. This unified foundation streamlines operations, enhances interoperability, and enables faster, more informed decisions—keeping the agency’s infrastructure resilient, agile, and mission-ready.

An End-to-End Approach

Swish isn’t just another vendor, but a mission-aligned partner delivering an end-to-end systems engineering approach to connect, protect and transform OT environments.

Together, these pillars help agencies modernize OT responsibly and strategically. Partnering with best-in-class OEM providers and agency teams, Swish ensures a continuous roadmap alignment, dedicated support, and iterative improvement so that every OT investment aligns with mission imperatives and future-readiness.



Ready to modernize your OT for mission success? Contact Swish today to see how our Connect-Protect-Transform framework can strengthen your agency's OT environment, bolster operational resilience and deliver strategic insights that drive mission outcomes.

Swish OT Modernization Partners

CONNECT



PROTECT



TRANSFORM



The Swish Difference

Swish's knowledge of Operational Technology solutions allows us to deliver real-time insights, optimize operational efficiency, and guarantee exceptional performance and user experience within your environment. Additionally, our solutions adhere to strict federal IT system controls, providing peace of mind by meeting the most stringent security and compliance requirements. Contact Swish today at info@swishdata.com.



Swish is a provider of technology solutions and engineering services to the U.S. Federal Government with a focus on high-quality outcomes for customers. Since 2006, Swish has delivered high-performance solutions and services to the Federal Government market ensuring that customer's digital service capabilities, performance, and security exceed expectations and requirements. Swish is a Service-Disabled, Veteran-Owned and HUBZone certified Small Business.