Enable Zero Trust with Less Effort

Simplify Your Team’s Transition to Zero Trust

The number of cyber-attacks against governments increased 95% in the second half of 2022, once again highlighting the critical importance of cybersecurity for the U.S. Department of Defense (DoD) and other government agencies. The U.S. Government has already mandated the adoption of zero trust cybersecurity to address the increasing threat environment, and the DoD released its Zero Trust Strategy and Roadmap, describing how it will comply with this mandate.

However, incorporating zero trust security—without interfering with or compromising mission goals—remains a daunting challenge. Proliferating endpoints, a wide range of connected devices, and the distributed and mobile nature of DoD operations complicates the path to zero trust. Many teams remain uncertain where to begin.

Introducing The Zero Trust Access Platform from Flywheel Data

Initially developed for the DoD, the Zero Trust Access Platform (ZTAP) from Flywheel Data is a purpose-built reference architecture designed to help federal agencies accelerate implementation of zero trust security. ZTAP provides secure connectivity from any device at any location to protected infrastructure and applications utilizing best-of-breed components from trusted vendors. Each component has been carefully vetted to meet stringent DoD security guidelines, and the architecture has been successfully implemented within the DoD.

Grounded in the principles of zero trust, ZTAP is highly performant and resilient. It utilizes a highly adaptive platform capable of supporting complex missions and diverse use cases.

ZTAP benefits include:

• **Simplified procurement.** All components are pre-defined. Flywheel offers multiple GWACs for procurement and can provide a single SKU.

• **Rapid deployment.** Because it eliminates the need for component selection, integration, and testing, ZTAP can be deployed in far less time.

• **Resilient access.** Secure access from anywhere over any communication medium.

• **Reduced sustainment costs.** Well-integrated, highly elastic, and highly automated architecture reduces management and maintenance.

• **Session-aware and data-centric.**

• **Proven interoperability.** Extend zero trust security to mission partners.

What is Zero Trust Security?

Traditional perimeter security is no longer adequate, especially for complex missions where the perimeter is constantly changing or impossible to define. Zero trust security avoids the limitations of perimeter security, never assuming that a user or device is trustworthy. Every request must be authenticated and authorized, with least privilege access so that only explicitly authorized resources are visible. Strict segmentation contains the potential impact should a resource be penetrated.
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How ZTAP Works

The Zero Trust Access Platform combines secure and resilient connectivity and rigorous authentication and authorization with next-generation firewall capabilities, micro-segmentation, and anomaly detection.

Secure Access from Anywhere

Secure access from diverse locations is critical for many DoD missions. To deliver it, ZTAP utilizes advanced SD-WAN capabilities with Secure Vector Routing (SVR). A service-centric fabric delivers simpler operations, agility, security, scalability, and performance while reducing cost. SVR is based on three elements:

- **Service centric data model.** Associates services with the tenants that access them.
- **Service and topology exchange protocol.** Control plane protocol for service-based routing.
- **Session aware data plane.** Unique session attributes and policies enable end-to-end route vectors that are deterministic, secure, dynamic, and multitenant.

Bulletproof Authentication and Authorization

Single Packet Authorization (SPA) reduces the attack surface for adversarial reconnaissance. Proven cryptographic techniques make internet-facing servers invisible to unauthorized users. Entitlements grant access only to specific protocols and port numbers. Resources excluded from entitlements are invisible, preventing unsanctioned lateral movement.
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ZTAP Technology

Flywheel Data has carefully selected and vetted the following best-of-breed vendors to deliver critical ZTAP capabilities. Flywheel works closely with the vendors shown to ensure specific mission requirements are addressed.

**Juniper Networks SD-WAN** provides secure access from anywhere, over any communication medium. AI-based insights and automation simplify deployment and reduce troubleshooting.

**Appgate SDP (Software Defined Perimeter)** enables zero trust network access, providing authentication and authorization that enforce unified zero trust policies for all users, devices, and workloads

**Palo Alto Networks Panorama** simplifies network security oversight with centralized firewall management

**Illumio** zero trust segmentation contains the spread of breaches and ransomware.

**Nutanix** is the leading provider of fast, flexible, and easy-to-manage hyperconverged infrastructure (HCI) solutions, providing a secure infrastructure foundation for the Zero Trust Access Platform. A variety of hardware options makes the solution suitable for datacenter, mobile, and tactical deployments.

Getting Started with ZTAP

With zero trust designed in, ZTAP is your quickest, easiest route to increase security and satisfy zero trust mandates. If you are ready to jumpstart your Zero Trust journey, Flywheel Data can help you stand up a ZTAP-based solution and have you operational and compliant in the shortest time possible.

If you’re ready to learn more, contact Flywheel Data about a customized ZTAP workshop to gain hands on familiarity. ZTAP customer references are available upon request.

About Flywheel Data

Flywheel Data provides elite solution design, system integration, software development, and product resale for data-driven-organizations.

Based on our experiences with the US Government and top commercial companies; Flywheel Data recognizes that data and people are at the center of a successful, data-driven organization.

Our goal is to arm our clients with the right tools, platforms, and culture to accelerate data-driven insights.

If you’d like to learn more about the Zero Trust Access Platform, you can contact Flywheel Data by phone or email.