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## Why Choose Cisco for U.S. Defense IT?





The Department of Defense (DoD) has ever-expanding needs for technology, for the networks, computers, cloud systems and security that allow them to carry out their missions effectively.

If you oversee the technological strategies and operations within the DoD, you don't need us to tell you how hard the job can be. But while it presents a daily challenge, it's also a job that is vitally important. You safeguard our nation's information and its citizens, with a strong presence around the globe. The DoD can do what it does only because your work enables it to do so.

Fortunately, you're not alone in this battle. For more than 30 years, Cisco has been committed to changing the way the world works, and our partnership with the DoD enables and empowers some of its most difficult mission needs. Over our three decades we have helped the world connect to the Internet, harness the benefits of voice, video, and data communications—and blend technology and business together in ways that many thought were impossible.



#### Trust the track record

Today Cisco stands at the center of the drive to digital transformation, offering innovative hardware and software, and top-flight professional services to help you solve your most vexing challenges.

Just as Cisco led the first wave of the Internet, so will we lead the next—creating a digitized world where the networked connections of people, process, data and things are brought together to unlock unprecedented value. The power of the connections unlocks new types of data and insight, and physical and virtual environments are blended seamlessly.

"Digital" is the key term in nearly every conversation about the future of war and defense. The DoD's digital transformation is a push to provide garrison and warfighting personnel with seamless and secure access to the resources they need, when and where they need them. Running on intelligent, software defined networks, today's digital advancements act as force enablers and even multipliers, helping the DoD achieve its ever-evolving mission objectives with more efficiency and effectiveness.

It is fairly easy to define what it means to be digital, but how does the DoD become digital? Cisco and our partners have been working with innovators around the world to help them digitize. We are building and implementing digital roadmaps and transformations in industries and government organizations alike.



#### What we do

Cisco was built on the foundation of connecting the unconnected by providing multi-protocol network routers and other network technologies. We still do that - our global reputation as a leading Internet Protocol-based network company grows directly from this core piece of our business-but our palette of offerings has grown far beyond switches and routers. Cisco brings robust tools, software and professional services in cybersecurity, cloud, the Internet of Things and mobility, among others.

We look at your mission objectives holistically, taking a platform-centric approach to ensure that everything we deliver fits your overarching plan. The secured network that Cisco enables is the foundation of a successful digital transformation initiative. We build applications on top of the network architecture, so that everything is tied together and interacts smoothly.

#### The foundation: Routers & switches

Cisco has always excelled at the core technology necessary to provide a secure and reliable foundation for your operations. Today's routers and switches provide a digital-ready network foundation that is simple, secure and automated, with tremendous versatility to allow you to shape your network exactly as you need it to be to meet your present and future needs.

These routers and switches create the basis for our Digital Network Architecture (DNA), the heart of our digital transformation offering. DNA, a set of technologies and services to address every aspect of the digital transformation, can be tailored to your needs. With DNA, you can innovate faster, reduce cost and complexity, protect your critical information, and optimize your mission objectives. Cisco also provides a set of services including strategy and analysis, network optimization network migration and software support.

#### The infrastructure: Servers and the data center

The Cisco Unified Computing System (UCS) offers a wide range of blade, rack and storage servers, along with management software and related products to enable the development of a highly customizable data center. Our fabric-based architecture offers advanced virtualization capabilities to minimize footprint and power consumption while maintaining high levels of compute power.

A secure and customizable data center is essential to an integrated end-to-end architecture.

#### Information flow: Big data and analytics

To make sense of the data your network collects, Cisco offers a versatile range of analytics solutions, including data virtualization and analytics at the network edge, which are especially important for the Internet of Things, where remote sensors are continuously adding data to the mountain.

Edge analytics allow you to use data as its collected, or hold it for later application. Our well-tested and validated system is ideal for the IoT.

However, big data and data analytics are bigger than just this piece. Tetration Analytics, another powerful application in Cisco's portfolio, analyzes application behavior and accurately maps application dependencies. It allows customers to enforce consistent policy across data centers no matter where they are - on-premises or in a public or private cloud. It also enables application segmentation and constantly looks for non-compliant behavior, alerting you within minutes.



#### Fleshing it out: Collaboration

Next Generation collaboration brings voice, video, messaging and collaboration together into a single user identity and workforce experience. In the thick of the fight, a commander should be able to escalate a quick text conversation to a voice call and straight into a group conference, where users could collaborate over a video feed from a UAV or a critical piece of analysis, while looking at each other — eye to eye to gauge in understanding, no matter how many miles separate them. This Next Generation of Collaboration is here and it's all on one platform unifying the capabilities you need to succeed.

#### Paring it down: Virtualization

Cisco Unified Computing System is an ideal platform for server virtualization, featuring a single unified system integrating a fabric, management and powerful servers. Virtualization with Cisco UCS simplifies physical and virtual networks, reducing costs while increasing manageability.

UCS scales better and faster than other systems, and brings the infrastructure cost per server down dramatically. It balances resources expertly to deliver the best possible performance, and it increases flexibility to make your organization more responsive.

The ability to dynamically load applications on also provide a more agile and cost effective environment for operations.

Cisco also offers desktop virtualization design services. In conjunction with partners, we can help you find a Validated Design or reference architecture that meets your requirements.

#### At the far edge: The Internet of Things

Cisco is famous for connecting everything, and as the Internet of Things moves from an idea to reality, Cisco continues to lead the way.

Cisco Fog Computing extends IoT applications to the network edge, enabling data to be analyzed and managed where it's generated, while our ruggedized routers and switches harden the network against the harsh conditions under which the IoT must often operate. Our IoT-specific Application Programming Interfaces let you run mission-specific software analytics packages throughout the network architecture, and allows you to feed IoT data intelligently into analytics.

Cisco IoT enables quick integration of your IT and Operational Technology (OT) environments, builds analytics and cybersecurity right into the network, and lets you customize and design your network to meet your mission needs.

#### Keeping it safe: Security

Cisco can turn your entire network into a cybersecurity sensor system, providing deep visibility and control. Our end-to-end security protects your network from its very edge all the way to its core, with products and services covering malware protection, cloud security, network visibility, next-generation firewalls and router security, among much more.

Cisco's approach to security is built on a "before, during and after" strategy. Before an attack, our software provides comprehensive visibility and awareness of what's on your extended network so you can implement policies and controls to defend it. With Cisco, your cyber security is context-aware — a necessity to beat today's context-aware attackers.

We provide continuous monitoring of your extended network, across all of the possible attack vectors, so that during an attack, Cisco can both thwart the attack and gather information about it. We also enforce policies automatically, so that if a file that seemed safe at first turns out to be malicious, our automation takes care of it without manual intervention.

After an attack, you need to know what and who hit you, and you need to repair the damage it did. With Cisco's retrospective security you can, in essence, travel back in time with the tools you need to determine the scope of the attack, figure out which systems were affected, and remediate the damage. Then, using the data gathered, you can figure out how to modify your outer defenses to prevent a similar attack

#### Cisco trust principles

Cybersecurity is our top priority. From product development to operations to data protection, we are embedding security everywhere. This pervasive security mindset gives us the power to identify and pivot on issues faster and with greater confidence than ever before. Within our own company, we're protecting 122,000 people, 40,000 routers, 26,000 remote office connections, 2,500 applications, 1,350 engineering labs, and 500 cloud applications.



## A commitment to progress and social responsibility

Cisco invests more than \$6 billion a year in research and development, so that we may continue to drive innovative solutions as well as ensure the existing portfolio continues to evolve in support of customer requirements. Our industry is subject to rapid technological developments, evolving standards, changes in customer requirements, and new product

introductions and enhancements. Our ability to enable the the DoD's digital transformation, therefore, depends on our ability to continually advance our own offerings.

As Cisco technologies evolve, ensuring that our customers have access to current training programs is critical. In order to support those demands, Cisco's Corporate Social Responsibility program ensures the Cisco Networking Academy® curriculum is up to date and accessible. More than 9,500 educational institutions use our curriculum to enhance their academic and career development programs, including the US Department of Defense. The program reached more than 1 million students in 170 countries in 2016, teaching them the IT skills they will need to thrive in the digital economy. We also put students and employers together.

As a global company, Cisco is committed to maintaining strong protections for our customers, products and company.





#### If it's mission critical, it's Cisco

In today's digital landscape, wars are not just physical. It's not enough to just keep pace. Your technology and security are essential to out-innovating your adversaries and out-maneuvering opponents.

At Cisco, we believe in the mission of the DoD and stand ready to help you carry it out.

### Expand your capabilities with Cisco Services

Protect data and meet security compliance requirements with custom technical support and cloud-based managed services for public sector customers. Learn more

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