



Cisco Safety & Security Solutions Definition: Realize the Full Value of Convergence

“In an environment of increasing threats, organizations must empower employees with tools to deliver the right information, quickly at the point of need to protect people and critical assets. Cisco’s Open Platform for Safety and Security breaks down technology barriers enabling a common operational view across multiple solutions. This improves decision and response times and increases the effectiveness of emergency operations teams without furthering the load on current personnel.”

—Bruce Klein, SVP, Cisco

The reality for many organizations today is siloed, proprietary incident management systems, which put people, property, and profitability at risk. A growing number of organizations are converging these fragmented systems onto an open, IP platform to enable seamless collaboration across previously isolated radio, IP and non-IP networks. The benefits of convergence are many:

- Enhanced situational awareness
- Accelerated response time
- Improved situation resolution
- Consolidated operations
- Reduced total cost of ownership (TCO)

As the world’s foremost IP security expert, Cisco can help you realize the full value of convergence. Our Safety and Security Solutions Definition Service puts Cisco’s industry expertise to work for you, so you can better protect your organization while managing costs.

Eliminating the Barriers Between People and Information

Whether you are securing a city or a global enterprise, when you use the network to unite people with information, you can increase the quality and efficiency of incident management. Cisco and its business partners are already helping private and public sector organizations around the world transform the way they prepare, prevent, detect, assess, and respond to incidents. For example:

- **Cities and Regions**—The San Diego Sheriff Department in California uses a networked emergency response vehicle equipped with video surveillance, videoconferencing, and wireless IP phones. The department uses this mobile command center to collaborate with local, state, and national agencies. The enhanced collaboration enables them to better allocate resources, deploy more quickly, and conduct missions in a safer manner. It also helps save more lives by providing real-time information during events like fires where response time and accurate information are essential.
- **Mass Venues and Events**—When 1.8 million people showed up for the Inauguration of President Obama, Cisco helped event coordinators successfully address the many environmental, jurisdictional and coordination challenges by integrating disparate surveillance systems into a single coordinated solution. The interoperable video surveillance system supported a diverse array of cameras, encoders, servers, and video analytics software.
- **Public Transport**—Austrian road administrator, ASFINAG, uses the network as the platform to improve road safety and services while increasing toll income and lowering costs by EUR 2 million. Its network-centric system permits ASFINAG to connect analog and digital networks, including landlines, mobile phones and the radio networks used by the fire and ambulance service and the police. These services all use different networks, which are not compatible with each other. In the event of an emergency, the system facilitates rapid and reliable communication with all the emergency services.
- **Border Control**—To improve collaboration with police, fire service, hospitals, and border agencies, the Auckland International Airport in New Zealand unified all forms of communications in its emergency operation center. As a result, safety and security personnel now collaborate in real-time, making the airport a safer, more secure environment while enhancing the efficiency and effectiveness of people working across multiple safety and security channels.
- **Education**—ELON University in North Carolina enabled campus police to more quickly gather video evidence with IP-based video surveillance. With its previous system, if campus security requested a week's worth of video, IT would have to spend hours to download seven million snapshots, digitally master the evidence, and burn a DVD. Now officers just click an image to watch the video and burn the DVD themselves. It's an effective and efficient tool that improves the likelihood of catching and convicting perpetrators.
- **Enterprise Facilities**—Using network-centric safety and security solutions, Cisco protects people and assets in over 600 sites spread across 75 countries with a small staff that resides in just five global security operation centers. These virtual command centers are fully redundant and allow safety and security staff to view video feeds from almost 5000 cameras via web-based dashboards. The staff can identify and prioritize incidents and collaborate with other safety and security personnel, with employees, and with local emergency responders using nearly any medium including radio, phone, emails, text, and video. Access to over 8000 doors is centrally managed. Over 120,000 employees with badges can go anywhere in the world and access is controlled from this highly efficient network-centric system.

The six building blocks of Cisco Open Platform for Safety and Security incident management

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|  <p>Command and Control</p> <p>Coordinate incident response</p> |  <p>Mission-Critical Network</p> <p>Optimize emergency operations</p> |  <p>Incident Collaboration</p> <p>Enable any-to-any communications</p> |  <p>Mobile Force</p> <p>Extend essential services to the field</p> |  <p>Sensing and Actuation</p> <p>Enable swift, automated responses</p> |  <p>External Communications</p> <p>Provide effective two-way communications</p> |
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Keep your Options Open

Safety and security technologies continuously evolve as new threats emerge. This complexity is compounded by the fact that every organization has specific incident management requirements, different legacy systems, and different communications technologies. Breaking down barriers to enable ubiquitous collaboration and rich information sharing requires:

- New levels of openness and adherence to standards
- New requirements for interoperability and scalability
- New business processes and new service delivery models

Cisco can guide you in transforming the way your organization performs its core mission with comprehensive, integrated solutions that enable you to more effectively prepare, prevent, detect, assess, and respond to incidents. Through our own safety and security transformation and the transformations of thousands of organizations in every major sector, we have developed the Cisco Open Platform for Safety and Security (OPSS). The Cisco OPSS framework provides service-oriented building blocks that can be flexibly combined to fulfill functional incident management requirements and to take advantage of previous development efforts. Because this platform is based on open standards, instead of siloed applications, you get an integrated system that is designed to deliver value in a synergistic way. The more the underlying network is utilized, the more value it brings.



Our safety and security experts use the OPSS framework to guide customers through the solution definition process. There are six service-oriented building blocks in the framework that enable a systematic approach for linking organizational goals to technology implementations.

- **Command and Control** provides safety and security teams with real-time situational awareness, actionable intelligence, and decision support tools.
- **Mission Critical Network** consolidates multiple wired and wireless networks into a single, IP network that is optimized for safety and security solutions.
- **Incident Collaboration** enables incident command, first responders, and other relevant organizations to share video, audio, and data over radio, phones, laptops, and handheld devices. It provides the interoperability and collaboration tools needed to improve the speed and quality of responses.
- **Mobile Force** ensures that remote responders can access voice, video, and data services in the field over wireless networks.
- **Sensing and Actuation** acts as a force multiplier by turning raw data into actionable intelligence through the automated collection and analysis of video and sensor data. It provides the means for swift and automated remote responses to predefined alarm conditions.
- **External Communications** allows third parties to easily report incidents. It also enables safety and security organizations to send mass notifications and effectively inform people via phone, email, SMS, digital signs, and loud speakers.

Vision-Driven vs. Vendor-Driven

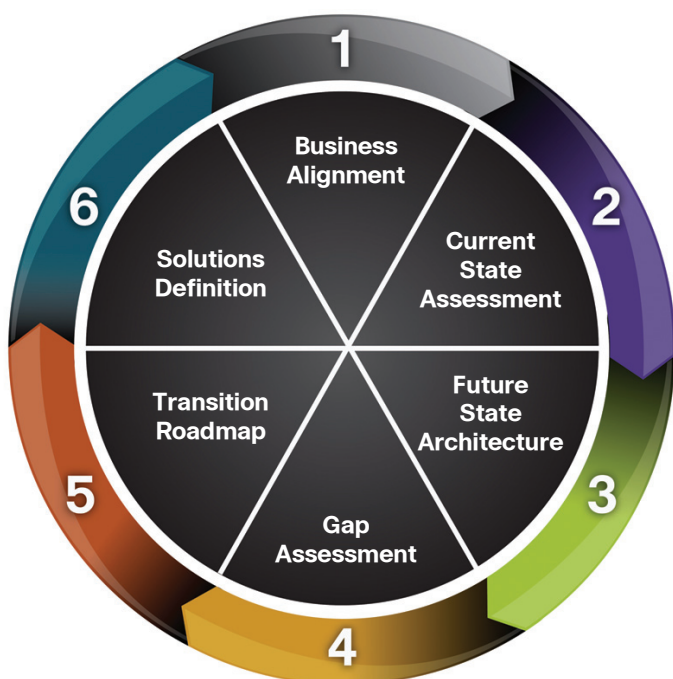
Cisco's safety and security experts can guide you from evaluation to incident management transformation with a structured, iterative methodology and a robust set of supporting resources. It's a process that has been finely honed over the past decade; one that takes full advantage of our extensive work with every major sector and with cities and countries around the world. More importantly, it's a process that decouples capabilities from solutions. It's vision-driven versus vendor-driven.

Although Cisco products may be utilized in the end solution, your Cisco consultants act as independent advisors whose sole goal is to help you achieve your goals. Cisco safety and security experts work with you to understand your vision, challenges, and capability requirements. Once we have a deep understanding of your incident management requirements, we assess your current state. We then use the OPSS building blocks to define a future state architecture that will deliver the required capabilities. Finally, we lay out a roadmap with concrete first steps to bridge the gap between where you are today and where you want to be tomorrow.

The benefits of this open, vision-driven approach are many:

- **Enhanced interoperability and flexibility:** With an open Service Delivery Platform, you can build upon your existing technology and integrate new incident management technologies. This open platform protects your legacy infrastructure investments, speeds time-to-benefits, and allows you to take advantage of proven solutions from Cisco and other industry leaders. You're not locked in. You have choices today and tomorrow.
- **Lower TCO and rapid ROI:** When the ubiquitous network is the platform for transformation, many of your incident management resources can be shared, including the infrastructure, network services, and personnel. Even premises can be shared, allowing you to do more with less.
- **Phased deployment:** With Cisco, it's not "all or nothing." Your Cisco safety and security experts will work with you to determine which incident management solutions should be deployed first, where they should be deployed and when, based on your specific circumstances and priorities.
- **Reduced risk:** No other company understands the IP infrastructure like Cisco does. IP is in our DNA. We pioneered the Internet revolution. Today, we're pioneering the next wave of Internet-fueled transformation and we're doing it on an unprecedented scale. Your Cisco safety and security experts are uniquely capable of helping you fully realize the value of incident management transformation through IP innovation.
- **Future-proof:** You can take advantage of new technologies today and tomorrow as long as they're based on open standards. Cisco has an enormous pool of solution partners to choose from, so you can be confident you'll have industry-leading capabilities now and in the future.

A Vision-Driven Discovery Process



- 1. Business Alignment:** Cisco safety and security experts work with key stakeholders to determine which capabilities are required instead of which products are needed.
- 2. Current State Assessment:** A thorough evaluation of your people, processes, and technology are performed.
- 3. Future State Architecture:** Cisco defines the architectural framework, the business, fiscal, and operational models as well as the metrics needed to gain consensus and support for the project.
- 4. Gap Assessment:** Cisco identifies, documents, and prioritizes operational and infrastructure gaps.
- 5. Transition Roadmap:** Cisco presents a phased, prioritized deployment plan for transitioning to the desired state.
- 6. Solutions Definition:** Cisco presents a detailed proposal for the delivery of the first phase of your transformation.

From Evaluation to Transformation

Cisco safety and security experts can help you do more than improve the status quo. They can help you fundamentally change the way things are done to enable new capabilities and new levels of productivity and operational efficiency. Each Cisco Solutions Definition engagement is radically different because every organization has different incident management needs and challenges. Our proven, six-step process helps you align goals for current and future operations to ensure that you have the right architecture and the right financial, business, and operational models, so you can derive maximum value from your safety and security transformation.

1. Getting the Big Picture: Business Alignment

During this phase, we conduct sessions with key stakeholders from different safety and security constituents. These needs-driven sessions are designed to clarify your vision, your goals and challenges, and the capabilities required to meet those challenges. This process also helps you discover not just what technology can do, but what it can do for your safety and security organization. During the sessions, your advisory team will provide:

- **Insights:** Drawing from 25 years of experience in helping companies, communities, and countries deploy network-centric solutions, we guide you in articulating a clear set of goals and capability requirements. We help you think beyond near-term constraints by identifying your challenges, your long-term vision, and your transformation opportunities.
- **Illustrations:** We use operational scenarios of organizations with similar challenges to generate in-depth discussions that expand and further clarify the future state. We work with you to identify root cause issues and key capabilities to ensure that the end-solution meets all your needs.
- **Innovations:** We share innovative business processes, best practices, and service delivery models developed by Cisco, our partners, and our customers to help you understand the true potential of network-centric solutions in addressing your unique incident management needs. We also help you avoid potential financial, deployment, operational, and management pitfalls.

2. You Are Here: Current State Assessment

Next, our team of experts perform a thorough evaluation of your people, your processes, and your technology. Your Cisco safety and security experts will assess each area to obtain the information needed to identify core capabilities and how technology can be applied to provide these capabilities. During the current state assessment, we meet with the different groups that manage and operate your infrastructure and incident management systems in order to:

- **Thoroughly document your “as-is” environment:** We assess the systems you have in place today and analyze each to determine their effectiveness in delivering on the required capabilities.
- **Evaluate the security architecture for its ability to support your long-term vision:** We analyze the state of your existing infrastructure to determine network readiness. Specifically, we look at network performance, bandwidth, security, and wireless capabilities.
- **Review your current organizational structure, policies, and processes, as well as roles and responsibilities in each area:** We look at the individuals who are operating the systems today to determine what training they’ve had and what technologies they’re comfortable with.

- Identify functional infrastructure and operational challenges: We meet with IT managers to determine how well their current staff can absorb new IT requirements. This is more than a qualitative analysis that documents who's doing what. It's a quantitative assessment of the people you have in play today and their ability to manage the new safety and security systems.

3. Designing the Blueprint for Tomorrow: Future State Architecture

Based on the information collected, your Cisco safety and security experts will prepare a Solution Concept Proposal that communicates our understanding of your incident management challenges and solution requirements. We also present our high-level recommendations on the overall scope and functional capabilities of the solution.

- We describe the structure (components) and behavior (processes) and link them to your specific requirements to ensure that you have the right architecture to realize your vision.
- We present the high-level architectural framework, which contains four distinct viewpoints: business, operations, systems, and technology. We make sure the right architectural building blocks are specified before any products or vendors are recommended. Safety and security building blocks include: Command and Control, Mission-Critical Network, Incident Collaboration, Mobile Force, Sensing and Actuation, and External Communications.
- We define the business, fiscal, and operational service models to make sure you have the right criteria, so you can select the right vendors.

4. Identifying the Holes in the Whole: Gap Assessment

At this point, your Cisco safety and security experts identify, document, and prioritize the infrastructure and operational gaps in detail, in order to give you a clear understanding of the scope of changes that will be made to your organization and your infrastructure. The gap assessment will include:

- A comparison of the solution *end* state to the *current* infrastructure, operations, and organization states
- Detailed, actionable recommendations to remediate high-priority gaps between the baseline architecture and the target, service-oriented architecture
- A list of reusable assets that will protect your legacy investments
- A business case that clearly articulates everything needed to gain consensus and support for the project—this value proposition justifies the expenses, determines Total Cost of Ownership (TCO), and Return on Investment (ROI) based on CAPEX, OPEX, depreciation, options for ownership, and potential network service revenues that could offset costs

5. Getting from Here to There: Transition Roadmap

Your Cisco safety and security experts will present a phased, prioritized deployment plan for transitioning to the desired state. We address the principles, qualities and guidelines essential to the evolution of the solution over time. This Transition Roadmap will include:

- A high-level schedule that includes key milestones for changes to the underlying infrastructure
- New solution components
- Organizational, operational, and business process changes
- Training requirements
- New contractual relationship requirements

6. Transformation Phase One: Solutions Definition

Cisco will provide the high-level design based on the transition roadmap and a detailed proposal for the delivery of the first phase of your transformation. Deliverables will include:

- Phase One High-Level Solution Designs
- Bill of Materials for all the products that need to be purchased
- A Phase One Services Proposal for detailed design, deployment, and operation of the solutions



Why Cisco Services?

Cisco Services operates on a simple philosophy—customers first. We measure your satisfaction one service experience at a time. We strive to ensure quality and excellence in service design and delivery and to provide unique value in every action we take. We have a “no fail” philosophy and we will do everything we can to ensure your success.

As we’ve built the industry’s broadest portfolio of network-centric safety and security solutions, we’ve built expertise in every major sector. We’ve also built partnerships with like-minded leaders who follow the principles of open standards. With these partners, we are your one source for essential expertise that can help you more quickly realize the full value of your technology investments. We also bring the added value of Cisco Business Consulting and Systems Integration Partners, Channel Partners, and Advanced Technology Partners to your engagement. The result is world-class service from our globally integrated, seamlessly executed “One Cisco” capabilities.

When it comes to defining your safety and security incident management solution:

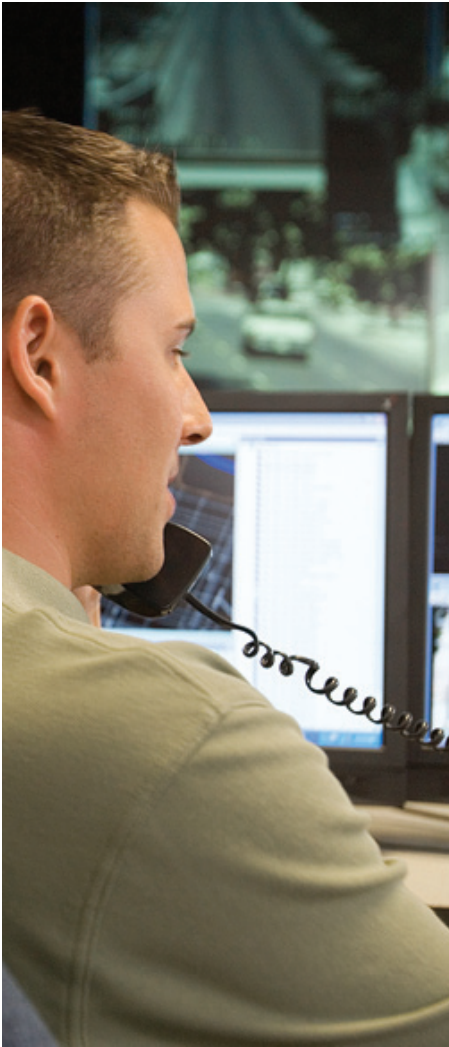
- Cisco’s open platform approach decouples capabilities from solutions, providing more options and more investment protection for the future. We’ll make sure you select the right architecture and the right financial, business, and operational models to ensure you derive maximum value for your safety and security transformation.



- Cisco doesn't just stay at the theoretical level when we recommend an architecture framework. We know from experience what our products and our partners' products can do, and we build Cisco validated designs in our lab to make sure everything works together. Our experts will work with you from evaluation to execution.
- With Cisco, you get more than a strategic consultant. You get a partner who is committed to business transformation through network-centric solutions. To realize our vision and yours and to meet market demands, we will enhance products, modify solutions, seek out new partners, and work with OEMs to raise their level of integration.
- Cisco safety and security experts can assist you with all the components of transformation. We know from experience that successful transformation requires equal parts process, culture, and technology. Only by creating a culture of leveraging technology and integrating innovative capabilities into service delivery processes can you truly transform safety and security.

As you move beyond Safety and Security Solutions Definition, consider this:

- Cisco has a robust lifecycle service offering—With a comprehensive portfolio of services that span the entire lifecycle, from Discovery to Building and Operating, *Cisco is the only independent advisor that has the experience to take you from evaluation to fully realized and optimized safety and security transformation.*
- Cisco has extensive IP knowledge—As a pioneer of the Internet, we understand our increasingly IP-based world. We helped build this world, and we're ready to put our expertise to work for you. *No one knows more about leveraging the power of the network than Cisco.*
- Cisco has global capabilities and vertical expertise—We can help you establish and administer standards on a local, national and global level. Because of our IP and IT expertise, Cisco is well versed in the specific challenges in state and local government, public sector safety and security agencies, and large global enterprises. We know how best to mitigate your unique risks. *Our safety and security experts will work with you to ensure success by sharing best practices used in our own transformation and in the transformations of thousands of organizations in every major sector.*



For More Information

Please contact your Cisco account team or pss-support@cisco.com to learn more or to engage Cisco to help you with your Safety and Security challenges.



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