

## Cisco IPICS Services

### Streamline Migration, Accelerate Deployment and Lower Operating Costs for Integrated IP-Based Communications Systems

#### CHALLENGE

##### The Cisco Lifecycle Services Approach



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The Cisco® IP Interoperability and Collaboration System (IPICS) provides a systems approach to communications interoperability, operations, and emergency management that delivers the right information to the right person in the right format at the right time. Based upon proven IP standards and technology, Cisco IPICS transparently integrates disparate PTT networks, providing advanced features without requiring a change in existing operating procedures. It offers a flexible, dynamic, and secure platform that facilitates immediate sharing of information, improves daily organization operations, and provides a robust framework for real-time event management, while protecting investments in traditional PTT and Land Mobile Radio (LMR) systems

However, to gain the full advantages of this solution, your organization need to make sure Cisco IPICS is properly deployed and the critical elements of the solution are functioning optimally at all times. You need experience with PTT, LMR, IP-based communications, multicast and quality of services as well as familiarity with issues related to IP communications design and implementation, and awareness of future advancements that need to be anticipated in the current deployment. Without properly assessing and addressing critical organizational and technical requirements prior to implementation, you could experience a failure of the interoperability system that would limit you to traditional PTT and LMR technology.

#### SOLUTION

With Cisco IPICS Services your organization can more fully achieve the true value of the Cisco Interoperability Systems solution by identifying your solution requirements, building flexibility into the design, and addressing critical gaps in the technical and operational aspects of the deployments of an integrated communication system.

Cisco IPICS Services provide comprehensive service offerings to help organizations prepare, plan, and design their networks for the successful implementation of IP-based IPICS and maintain essential ongoing maintenance and support. These services play a critical role in the successful deployment and ongoing operation of Cisco IPICS technology, protect organizations' existing and future communications investment, and help organizations achieve the full benefits of the solution.

Cisco Services for IPICS encompass a comprehensive suite of services designed specifically for Cisco IPICS solutions, based on the Cisco Lifecycle Services framework. These services are available directly from Cisco.

### **The Cisco IPICS Prepare Service**

Cisco IPICS technology has a profound effect on an organization's ability to protect customer's existing investments in analog equipment while enabling these devices to operate as part of an IP network-centric deployment.

However, to provide the flexible platform to enable a Cisco IPICS solution to adapt to changing needs, the technology strategy must be aligned with current and future organizational requirements. Based on those organizational requirements the Cisco team will develop a high-level, conceptual architecture of the proposed system.

By defining organizational requirements as a basis for developing a technology solution, this service helps you achieve and prepare for future organizational goals. This enables the development of an IPICS Solution high-level design reflecting the required specifications around availability, capacity, and security to meet the defined service requirements. This service helps minimize the need for rework during the design phase through early identification and validation of required technologies and features.

The Cisco IPICS Prepare Service consists of the following service components:

- Business Requirements Gathering
- High Level Design Development

#### **Business Requirements Gathering**

Cisco will work with the customer to:

- identify and assess organizational requirements
- document and categorize the organizational requirements in terms of the end user service(s) requirements and the associated availability, capacity and security.
- present and validate documented organizational requirements.

#### **High Level Design Development**

Cisco will identify appropriate IPICS Solution products, features and functionalities to address and meet the customer's organizational and technical requirements then produce and present a documented high-level design.

### **The Cisco IPICS Plan Service**

Your Cisco IPICS Solution needs to meet your operational process requirements for change management and configuration management. The stronger your operational process capabilities, the more effective your Cisco IPICS Solution can be.

The Cisco IPICS Solution Plan Service provides a holistic, accurate approach to capturing requirements, assessing capabilities, validating architecture, understanding impact on organizational operations, and ensuring organizational readiness.

The project engineers then develop and execute a project management plan that manages resources, the flow of information, and change control.

The Cisco IPICS Plan Service consists of the following service components:

- Feature and Functionality Requirements Validation
- Architecture Validation
- Network Readiness Assessment
- Operations Readiness Assessment
- Site Requirements Specification
- Project Management

#### Feature and Functionality Requirements Validation

Your migration to Cisco IPICS starts with a validation of the features and functionality you use to run your organization today. The Feature and Functionality Requirements Validation service provides a full understanding of these requirements and helps to avoid design surprises by verifying the selected components in your IPICS Solution will meet your organization's needs and design objectives.

#### Architecture Validation

The Architecture Validation service reduces technical risks and helps to avoid costly redesigns by assessing your high-level design to help ensure it will scale to meet your network growth requirements and is in conformance with proven IPICS leading practices. This service provides validation your network architecture meets your solutions requirements, design objectives, and future growth plans.

#### Network Readiness Assessment

The Network Readiness Assessment service is critical to your network migration to Cisco IPICS. This service gauges the readiness of your existing network infrastructure to support Cisco IPICS, recommending network configuration and design improvements, and develops a plan to execute the recommendations. This all-encompassing network assessment addresses hardware, software, traffic, capacity, network design, IP addressing, quality of service, availability, scalability, security, cabling, power, and existing network services.

#### Operations Readiness Assessment

The Operations Readiness Assessment service identifies opportunities to improve your operations staff's ability to support Cisco IPICS by assessing the current state of your support infrastructure, including people, processes, and tools. The service compares and contrasts your current processes relative to industry-leading processes and makes recommendations for improvement. It collects information using the standards-based frameworks that cover voice and data operations groups and processes and reviews current support roles. These frameworks include Enhanced Telecom Operations Map (eTOM); fault, configuration, accounting, performance, and security (FCAPS); and Information Technology Infrastructure Library (ITIL). The service provides an operations report including a remediation plan based on industry and early-adopter leading practices.

### Site Requirements Specification

The Site Requirements Specification service component identifies the ability of the existing site facilities to accommodate Cisco IPICS Solution. This service defines site environmental, power, and physical requirements based on the high-level design and solution components. Customized site survey templates for onsite analysis are developed so remediation plans are identified to prepare the site for implementation.

### Project Management

The Project Management service develops a comprehensive project management plan, manages the deployment project throughout its lifecycle, and creates the plan's deliverables. Cisco project managers are trained to manage converged network migrations using our IPICS methodology. Our project managers help ensure delivery of an accurate set of deliverables by bringing their experience and understanding of the importance of each process to every migration project and efficiently managing the people and activities within the methodology.

### The Cisco IPICS Design Service

Your Cisco IPICS design needs to take into consideration technical and organizational requirements, including integration of legacy components as well as required changes to support IPICS and to ensure a secure network.

The Cisco IPICS Solution Design Service builds upon the high level design created in the Prepare phase and the plans established in Plan phase. It ensures that the implementation team has comprehensive design, appropriate information for resource planning and employee migration, sufficient time to execute the implementation and assurance the system can be validated prior to final deployment.

The Cisco IPICS Design Service consists of the following service components:

- Detailed Design Development
- Implementation Schedule Development
- System Ready for Use Test Plan Development

### Detailed Design Development

The Detailed Design Development service provides a comprehensive, implementation-ready system design for a secure network that will scale to take advantage of IPICS innovations. The detailed design development process integrates technical and network remediation requirements to help improve the performance, resiliency, and availability of the network, through the following activities:

- Examine and evaluate customer network documentation and existing network designs.
- Assess and integrate network readiness recommendations.
- Develop an IPICS design that integrates with the existing IPICS infrastructure.
- Develop an integration strategy for existing infrastructure.
- Incorporate scalability, redundancy, and security requirements.

### Implementation Schedule Development

The Implementation Schedule Development service component provides a project plan and outline of the processes required to carry out the implementation of network equipment and applications that make up a Cisco IPICS Solution. Comprehensive planning and scheduling of resources are required for controlling events in a structured manner to ensure the implementation process is carried out in such a way to minimize risk and reduce costly delays. The service component helps ensure your network implementation scheduling requirements are identified, containing the critical timeline criteria required for a more predictable deployment.

### System Ready for Use Test Plan Development

The System Ready for Use Test Plan Development service develops an acceptance test plan containing processes, test cases, and schedules. The acceptance test plan will be used to verify the deployed solution meets operational, feature, functionality, network infrastructure, and interface requirements from the solution requirements document and detailed system design.

### The Cisco IPICS Implementation Service

Your Cisco IPICS Solution will perform to its highest potential when it is deployed in a manner that supports your organizational objectives while avoiding disruption of existing services and costly delays. You can increase your deployment success by preparing your site and staff to support the solution and then smoothly integrating your existing system into your new Cisco IPICS Solution.

The Cisco IPICS Implementation Service supports your deployment with a methodical approach that assesses your current environment, deploys the Cisco IPICS Solution with basic configuration settings, prepares your staff with the necessary knowledge and best practices, ensures the system is ready for use and assists in integration of existing technologies.

The Cisco IPICS Solution Design Service builds upon the high level design created in the Prepare phase and the plans established in Plan phase. It ensures the implementation team has comprehensive design, appropriate information for resource planning and employee migration, sufficient time to execute the implementation and assurance the system can be validated prior to final deployment.

The Cisco IPICS Implementation Service consists of the following service components:

- Pilot or Production Implementation
- System Migration
- System Ready for Use Validation
- Knowledge Transfer
- As Built Documentation

### Pilot or Product Implementation

Cisco engineers begin the Cisco IPICS Solution Implementation Service by ensuring they have a complete understanding of your requirements. The engineers use this information, the Staffing Plan developed during the Design Phase, Cisco leading practices, and their own skills and expertise to create an implementation project plan and test plan, and then execute the tests to help verify the implementation meets expectations. Implementation Services include:

- Project Management
- Project Planning
- Installation
- Configuration and Testing

### System Migration

Upon completion of the initial IPICS system implementation, work will begin to migrate and/or integrate existing systems to the new IPICS system. The existing systems to be migrated may include databases, radio interfaces, network interfaces, and user profiles.

### End User and Staff Training

The Cisco project manager coordinates sessions dedicated to training staff; these sessions may include:

- System Administrator Training
- Operator Training
- Dispatcher Training
- User Training
- Radio Expert Training
- Linux Administrator Training

(Note: Cisco provides a soft copy of the training material in advance of the training.)

### System Ready for Use Validation

This service performs system-level acceptance testing at the end of the implementation. It helps you achieve your IPICS Solution architectural and design goals by taking a structured approach to validating the installation of the IPICS Solution components. Activities include:

- Prepare for acceptance test plan execution
- Execute test cases as defined in the Systems Acceptance Test Plan.
- Present and review test results with customer.

Cisco IPICS Solution support training for the designated system manager on your staff includes review of:

- Hardware configuration
- Network and system configuration
- Utilities and basic troubleshooting

### As Built Documentation

After the implementation and testing of the IPICS system is complete, the final production-deployed network designs and configuration of devices will be documented in soft/electronic and hard copy formats for the ongoing use by the customer.

## Cisco Operate Services

### SMARTnet and SMARTnet Onsite

Even if your IPICS solution is well designed, and even if you use reliable Cisco solutions, unexpected problems can sometimes arise. If a problem does arise in your communications system, you cannot afford to leave your organization exposed. Cisco SMARTnet® service provides fast answers when you need them and helps you protect your assets and preserve access to critical applications. Cisco SMARTnet includes registered access to Cisco.com for online tools and technical assistance, access to the Cisco Technical Assistance Center (TAC), Cisco OS software updates, and advance replacement of failed hardware. Together, these resources help you address any immediate issues, while extending and enhancing the operational lifetime of your Cisco networking devices and Cisco OS software.

### Cisco Software Application Support (SAS)

Emergency communications are a dynamic undertaking. To best ensure unified communications interoperability, real-time information sharing, and effective operations management, you need to maintain the most up-to-date, optimized software and applications, as well as secure network hardware. Cisco Software Application Support strengthens the availability, reliability, and functionality of your Cisco software applications. Designed specifically for Cisco software applications, this service goes beyond basic operating system software support by providing access to expert technical assistance, current software releases, and a wealth of technical information with registered access to Cisco.com. These services help you optimize and enhance the Cisco solutions you use to centrally manage and defend your network and protect your Cisco software investment.

## The Cisco IPICS Optimization Service

The uses and applications of the Cisco IPICS system can be customized to the specific requirements of a particular organization. As the organization's needs change over time, Cisco IPICS can adapt with them. These adaptations can be applied throughout the lifecycle of the Cisco IPICS Solution, most importantly during its implementation or after the system is operation.

The Cisco IPICS Optimization Service provides the necessary technical resources to enable these adaptations, whether they be to address changes in business requirements or to minimize the occurrence of user affecting problems related to the operations, administration, configuration and maintenance of the IPICS Solution. This comprehensive program focuses on optimizing performance and increasing operational efficiency to help maximize organizational effectiveness.

The foundation of the Cisco IPICS Implementation Service is based on the following service components, with other customized components added as business needs require:

- Optimization Analysis & Recommendations
- Optimization Support Services
- Continuous Learning

## BENEFITS

Cisco IPICS Services, part of the Cisco Lifecycle Services framework, help align technology with your organizational requirements, accelerate your successful deployment and improve your integrated IPICS solution's organizational value and return on investment.

Cisco engineers with years of experience designing and deploying IP and IPICS systems will assess your needs and work with you to help you get the most out of your migration.

The Cisco Services for the Cisco IPICS Solution:

- Creates a Cisco IPICS Solutions design that meets your deployment requirements today and will enable you to extend well beyond voice interoperability to provide complete information-based interoperability and collaboration, with the contextual integration of voice, video, and data resources in the future.
- Enables you to identify and deploy necessary infrastructure changes to support the Cisco IPICS Solution.
- Prepares your System Administrators, Operators, Dispatchers, Users, Radio Experts and Linux Administrator to support current and planned network technologies and services by defining your operations requirements (people, processes, and tools) needed to support the Cisco IPICS Solution.
- Reduces the duration and technical risk of Cisco IPICS deployment projects by proactively identifying potential gaps and risks.
- Accelerates the successful implementation of your converged communications system by using Cisco methodology for deploying the Cisco IPICS Solution.
- Helps lower operating costs and improves staff productivity by increasing the knowledge base of your operations staff to support the Cisco IPICS Solution.

## WHY CISCO SERVICES

Cisco Services make networks, applications, and the people who use them work better together.

Today, the network is a strategic platform in a world demanding better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with organizational needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.

## FOR MORE INFORMATION

For more in-depth information on the Cisco Services for Cisco IPICS contact your local account manager.





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