

The Cisco Lifecycle Services Approach

Your company may have its own concept of the Lifecycle Services approach. The Cisco model is a *Prepare, Plan, Design, Implement, Operate, And Optimize* (PPDIOO) life cycle approach. Cisco wants to share this valuable information with you to help your company conduct successful and profitable customer engagements.

The *Cisco Lifecycle Services Approach* defines the minimum set of activities needed, as determined by technology and network complexity, to help customers successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of the network.

There are six phases in the Cisco Lifecycle Services approach and each phase is comprised of service components. Service components are a set of deliverables and activities that are used to manage delivery of a service.

The Cisco Lifecycle Services approach can help you to gain opportunities to increase profitability, improve productivity, improve your customer satisfaction ratings and loyalty, and reduce risk in deploying and supporting complex technologies.

The Cisco Lifecycle Services approach provides customer value in a variety of ways.

- Help increase the network's value and return on investment
- Help increase network staff productivity
- Help improve network availability, resiliency, security, and scalability

The *Account Team* and *Project Team* are essential in the Cisco Lifecycle Services approach.

The *Account Team* utilizes sales, consulting, engineering, and project management resources in a presales capacity to execute the prepare, plan, and design phases. The account manager (AM), systems engineer (SE), and project manager (PM) help establish credibility with your customers and help build customer confidence in your ability to successfully implement the solution.

The *Project Team* is comprised of consulting, engineering, and project management resources needed to execute the prepare, plan, design, implement, operate and optimize service components.

Typical roles include account managers (AMs), system engineers (SEs), field engineers (FEs), and project managers (PMs). The project team provides a step-by-step approach to successfully sell and deploy technology solutions and a methodology to help effectively guide and support customers regarding technical aspects of the new technology.

Prepare Phase

During the ***Prepare*** phase of Cisco Lifecycle Services, you will, at a high level, analyze and evaluate the business and technical requirements to identify the products or solutions that are most appropriate to meet the customer's needs.

During ***Account Qualification***, you will gather high-level solution requirements and understand the customer's business needs and the opportunity. You will also identify key players and issues, timelines, and the scope of the opportunity.

During ***Account Planning***, you will research unique challenges and conduct a competitive analysis to determine a vertical approach and strategy. You will also identify sales activities, roles, and responsibilities.

During ***Business Requirements Development***, you will assess and document the business requirements for end-user service delivery that support your investment in a Unified Communications solution. You will also develop a formal business requirements document (BRD) to document identified requirements.

There are two activities associated with the business requirements development service component.

- Prepare for business requirements workshop
- Conduct business requirements workshop

During ***Technology Strategy Development***, you will conduct a preliminary analysis of the customer's existing voice and data networks to gain a better understanding of the architecture. You will also define and document the customer's technical requirements in the technical requirements document (TRD) and map Unified Communications to the customer's business and technical requirements.

There are four activities associated with the ***Technology Strategy Development Service Component***.

- Preliminary technical discovery
- Technology Strategy meeting
- Develop a technology strategy
- Present the proposed technology strategy

During ***Customer Education***, you will educate the potential customer, present an overview of the applicable solutions, and conduct demonstrations of the capabilities.

During ***High-Level Design Development*** you will create a high-level design document that identifies preliminary Unified Communications products, software, and services. The high-level design document will also address the business and technical needs of the customer, and support the subsequent phases of a deployment. In part, the high-level design is a reflection of the required specifications for availability, capacity, and security that will meet the defined service requirements.

During **Business Case Development**, you will determine the initial pricing of products and services and justify return on investment of the proposed Unified Communications solution.

During **Proof of Concept**, you will test the proposed solution in a lab environment and then illustrate how the potential solution would work in the customer's environment. You will also design, implement, and test a proof of concept to validate the customer's Unified Communications system high-level design and identify any potential design enhancements.

During **Proposal Development**, you will draft a proposal aligned with the customer's needs, accurately describing the system specifications and product capabilities, to reflect the customer's business and technical requirements.

During **Proposal Delivery**, you will deliver the final proposal to the customer via an executive presentation and receive formal agreement from the customer on the proposed solution.

In the **Prepare Phase**, the typical job roles include AMs, SEs, FEs, and PMs. The SE will work closely with the AM to provide sales support and technical expertise and guidance. Your organization may have different job roles or titles, but the individuals who participate in the prepare phase should possess certain recommended skills.

The recommended background and skills include experience in account management and activities, the ability to recognize and qualify opportunities, and the knowledge to position and sell a network solution.

Knowledge of market conditions, sales methodologies, and features and functionalities of the Unified Communications technologies and applications is also important.

Identification of technical and business requirements and experience in mapping to Unified Communications technologies and applications, and an understanding of how to access and document a private branch exchange (PBX) network architecture, is also recommended.

These skills are needed to fulfill the defined activities for each service component in the prepare phase when addressing a customer opportunity.

Plan Phase

During the **Plan Phase**, the customer's current network, staff, and processes are assessed and tested to determine if they are able to support the proposed new technology solution.

During **Planning Project Kickoff**, you will provide a resource or resources to manage the planning, design, and implementation phases of a Unified Communications deployment project. The plan includes developing and executing a project management program and managing information, resources, and change control.

During **Systems Requirements Validation**, you will define the detailed business and technical requirements for lines of business, sites, and end users affected by the Unified Communications migration. You will also compare the solution requirements with the list of ordered equipment and high-level design.

There are three activities associated with the **Systems Requirements Validation** service component.

- Validation Preparation
- Collect and verify requirements
- Present systems requirements report

During **Site Readiness Assessment**, you will prepare for your Unified Communications deployment with a comprehensive site assessment that evaluates the readiness of your current facilities infrastructure to support the new technology. You will identify physical, environmental, and electrical modifications that should be made prior to implementation.

There are three activities associated with the site readiness assessment service component.

- Prepare for a site readiness assessment
- Conduct a facility site(s) survey
- Perform a site assessment gap analysis

During **Network Readiness Assessment: Existing Voice and Data Infrastructure Readiness**, you will prepare for your Unified Communications solution deployment by assessing the readiness of your existing network infrastructure and determining any modifications that should be made prior to implementation. The modifications could include physical and logical configurations, solution capacity, quality of service (QoS), and solution resiliency, security, and integration with existing legacy platforms.

During **Network Readiness Assessment: Circuit and Wan Readiness**, you will prepare for your Unified Communications solution deployment by assessing the readiness of your existing network infrastructure and determining any modifications that should be made prior to implementation. You will include physical and logical configurations, solution and solution capacity, quality of service (QoS), solution resiliency, security, and integration with existing legacy platforms.

During **Network Readiness Assessment: Security Architecture Assessment**, you will prepare for your Unified Communications solution deployment by assessing the readiness of your existing network infrastructure and determining any modifications that should be made prior to implementation. Modifications would include physical and logical configurations, solution and solution capacity, quality of service, solution resiliency, security, and integration with existing legacy platforms.

During **Application Readiness Assessment**, you will prepare for your Unified Communications contact center solution by assessing the readiness of your existing network and voice infrastructures to support the proposed Unified Communications contact center application. You will also determine any modifications that should be made prior to implementation and develop an application readiness assessment report.

During **Unified Communications WLAN Assessment**, you will assess the readiness of your existing WLAN to support the proposed Unified Communications applications. You will appraise the potential effects of migration on the interoperability between the proposed Unified Communications application and the existing WLAN and LAN. You will also review building blueprints and coverage requirements, potential interference sources, noise floor, signal strength, and more.

There are three activities associated with the **Unified Communications WLAN Assessment** service component.

- Prepare for the wireless assessment
- Conduct the wireless assessment
- Document the wireless assessment findings

During **Operations Readiness Assessment**, you will prepare for your technology solution deployment with a comprehensive assessment that evaluates the readiness of the people, processes, and tools in your current operations and network management infrastructure for both voice and data to support the new Unified Communications solution.

In the plan phase, the typical job roles include: account manager (AM), systems engineer (SE), field engineer (FE), and project manager (PM). Your organization may have different job roles or titles, but the individuals who participate in the plan phase should possess certain recommended skills.

The recommended background and skills include the ability to assess and analyze the customer's existing voice environment, conduct interviews with all levels of end users to determine Unified Communications feature, functionality, and service requirements, and to survey and document a voice network.

Full knowledge of the proposed Unified Communications system, and knowledge of industry Unified Communications network, system, operations, security, wireless, and services leading practices are also recommended. Also needed is an understanding of how to assess and document a private branch exchange (PBX) network architecture. These skills are needed to fulfill the defined activities for each service component in the plan phase when addressing a customer opportunity.

Design Phase

During the **Design Phase** of Cisco Lifecycle Services, you will develop a detailed design of the network system to meet business requirements, while attempting to foresee and prevent potential network bottlenecks.

During **Design Project Kickoff**, you will host a design workshop with the customer to confirm that dates, roles and responsibilities, and all planning information is available and complete, and to discuss and document the progress for the remediation plan.

During **Applications Development**, you will use technical requirements documents and high-level documents to identify and configure all UC component software and third-party applications, develop test cases and integration requirements, and create a detailed applications development document. You will also plan and develop custom specifications and applications for your Unified Communications contact center that meet the requirements for integration with your existing solution components.

During **Detailed Design Development**, you will develop a comprehensive, implementation-ready, detailed design for your UC solution. You will develop these designs during the physical design workshop, feature and functionality design workshop, system design workshop, device level design, and operations design.

The purpose of the **Physical Design Workshop** is to develop a comprehensive, implementation-ready, detailed design for the installation of physical components of for your Unified Communications solution.

- There is one activity associated with the physical design workshop. The purpose of this workshop is to focus on the identification and configuration of the actual network components, including routers, servers, LAN and more that will be incorporated to run and support the Unified Communications system.

The purpose of the **Feature and Functionality Design Workshop** is to develop a comprehensive, implementation-ready, detailed design focusing on the features and functionalities of the UC solution.

- The one activity associated with the feature and functionality design workshop is to host the workshop. The purpose of the feature and functionality design workshop is to validate the Unified Communications solution including features and functionality with the customer.

The purpose of the **System Design Workshop** is to develop a comprehensive; implementation-ready, detailed design focusing on the UC call control, messaging, and application integration.

There are four activities associated with the system design workshop service component.

- Design call control system
- Design messaging system
- Design rich media system
- Design database integration

The purpose of **Device-Level Design** is to develop a comprehensive; implementation-ready, detailed design focusing on the UC station implementation and verification.

There are two activities associated with the **Device-Level Design** service component.

- Prepare for station reviews – complete feature template, standardize user group templates for phone layout
- Conduct station reviews – by division or department, executive assistant, contact center agents

The purpose of **Operations Design** is to develop a comprehensive; implementation-ready, detailed design focusing on the Unified Communications operation management infrastructure.

- The one activity associated with the operations design service component is to design network management and operations infrastructure. You will design a network management and operations infrastructure to ensure that the proposed operational capabilities apply to the new UC system.

During **Detailed Design Customer Signoff**, you will obtain customer signoff on the low-level design document and develop a letter of understanding.

There are two activities associated with the detailed design customer signoff component.

- Prepare for a low level design presentation
- Present a low-level design

During **Implementation Plan Development**, you will provide a site-specific implementation plan for your Unified Communications solution components and software. You will also develop and document a network implementation plan, which includes a project timeline, project tasks and checklists, installation and commissioning tasks, and cut sheets based on the technology strategy document.

There are two activities associated with the **Implementation Plan Development** service component.

- Create a site specific network implementation plan
- Present network implementation plan

During **Operations Plan Development**, you will identify the customer's operational processes and procedures. You will then develop an implementation-ready UC solution operations and network management plan, which will include operational processes and a process readiness test plan.

There are five activities associated with the operations plan development component.

- Review existing processes and flows
- Develop methods and procedures
- Develop a plan to implement operations
- Develop a test plan for operational procedures
- Present the operations plan

During *Migration Plan Development*, you will develop a step-by-step plan for migrating the Unified Communications solution, which will include processes, schedules, budgets, and roles and responsibilities required to migrate all sites, lines of business, end users and network services. You will also align the migration plan with the implementation plan.

During *Staging Plan Development*, you will use the network implementation plan to configure and test the implementation of the proposed Unified Communications system in a controlled environment. You will also provide a step-by-step plan detailing the installation and service commission requirements tasks to be staged in a controlled implementation environment emulating a customer's network.

There are two activities associated with the *Staging Plan Development Component*.

- Staging plan development – create a development plan for staging to ensure appropriate hardware, software, and configurations are loaded and operating properly.
- Present staging plan – present the staging plan to the partner team.

During *Systems Acceptance Test Plan Development*, you will develop a test plan that can be used to verify that your Unified Communications solution meets your business and technical requirements, and that the features and functionalities are working properly and are ready for migration into the production environment.

There are two activities associated with the *Systems Acceptance Test Plan Development Component*.

- Acceptance test plan development – develop the acceptance test plan to ensure that the UC solution performs according to the network ready for use and acceptance test plan
- Present Acceptance Test Plan – present the acceptance test plan to the partner account team

During the *Staff Plan Development*, you will assess the skills and knowledge required to support the customer's proposed Unified Communications solution, verify the customer's Unified Communications feature and functional knowledge requirements, and perform a series of analyses to define the training and development requirements for each support role, including system operators, system administrators, executive administrators, and end users.

In the *Design Phase*, the typical job roles include account managers (AMs), systems engineers (SEs), field engineers (FEs), and project managers (PMs). Your organization may have different job roles or titles, but the individuals who participate in the design phase should possess certain recommended skills.

The recommended background and skills include excellent project management skills, knowledge of the proposed Unified Communications solution including core Layer 2 and 3 infrastructure, applications, equipment, and services, with a Cisco Certified Network Professional (CCNP) or equivalent level of knowledge, and the ability to design a Unified Communications solution at the logical, system, device, and operations levels.

An understanding of the Unified Communications implementation and operational requirements and leading practices and the ability to validate the Unified Communications design based on leading practices are also important. These skills are needed to fulfill the defined activities for each service component in the design phase when addressing a customer opportunity.

Other recommended background and skills include the capability to define training curriculum requirements for both Unified Communications end users and administrators or help desk staff and a strong understanding of the features and functionalities of Unified Communications technologies and applications. The capability to integrate Unified Communications solution with legacy voice systems and applications, understanding of how to migrate legacy PBX networks to a Unified Communications solution, and an ability to put together solution pricing based on proposed solution components including products and services are also important. These skills are needed to fulfill the defined activities for each service component in the design phase when addressing a customer opportunity.

Implement Phase

During the *Implement Phase* of Cisco Lifecycle Services, you will install the new technology into the customer's network, ensuring it is integrated without disrupting the network or creating points of vulnerability.

During *Project Planning*, you will develop the project management, escalation, and communication plans, and conduct an internal kickoff meeting.

There are four activities associated with the project planning service component.

- Develop a project management plan
- Develop an escalation plan
- Develop a communication plan
- Conduct an internal kickoff meeting

During *Implementation Project Kickoff*, you will conduct the kickoff meeting with the customer and all parties involved in the deployment of the Unified Communications system. At the meeting, you will review and confirm implementation milestones, roles, and responsibilities using the Unified Communications project plan, as well as review the escalation and communication plans to ensure everyone is on the same page, and share the plan for leading the project to a successful completion.

During *Staging*, you will use the staging plan to stage the Unified Communications hardware and software being installed in the customer's network. You will install and test your Unified Communications solution components in a non-production lab environment. After the successful completion of staging, the Unified Communications hardware is shipped to the customer site.

The *Staging Of The Hardware And Software* includes the execution of activities such as, reviewing the hardware and software configuration staging plan, confirming the order is complete, setting up the equipment, document serial numbers, image software, load configurations and pack and ship the hardware to the installation site.

During *Core Product Implementation*, you will install, configure, integrate, and test the Unified Communication solution components, providing an implemented production ready solution, making it ready for the migration of your existing users and services, from your existing infrastructure to the new Unified Communications solution.

There are two activities associated with the core product implementation service component.

- Install core products
- Provisioning

During **Call Control Implementation**, you will install, configure, integrate, and test the UC call processing components, providing an implemented production ready solution, making it ready for the migration of your existing users and services, from your existing infrastructure to the new Unified Communications solution.

There are two activities associated with the call control implementation service component.

- Install and configure CUCM
- Install and configure CUCME

During **Messaging Implementation**, you will Install, configure, integrate, and test the UC, Cisco Unity or Unity Express components, providing an implemented production ready solution, making it ready for the migration of your existing users and services, from your existing infrastructure to the new UC solution.

There are three activities associated with the messaging implementation service component.

- Install and configure Unity
- Install and configure Unity Express with Communications Manager
- Install and configure Unity Express with CallManager Express

During **Rich Media Implementation**, you will install, configure, integrate, and test the Unified Communication rich media solution which fully integrates voice, video, and Web conferencing capabilities to give remote meetings a natural and effective, face-to-face quality.

There are three activities associated with the rich media implementation service component.

- Install and configure conference connection
- Install and configure MeetingPlace
- Install and configure IP Video conferencing

During **IPCC Express Implementation**, you will install, configure, integrate, and test the UC IP Contact Center (IPCC) Express solution that is designed for midmarket, enterprise branch, or corporate departments requiring a sophisticated customer interaction management solution for 10 to 300 agents.

There is one activity associated with the IPCC express implementation service component. During the installation and configuration of IPCC Express, the server for an integrated contact center is installed.

During **Third-Party Application Implementation**, you will install, configure, integrate, and test the integration of third-party applications with the UC components.

There are three activities associated with the third-party application implementation service component.

- Install and configure application appliance
- Install and configure call accounting
- Install and configure call recording

The *Legacy Integration Of The Unified Communication Solution* components with a legacy private branch exchange (PBX) solution requires the validation of integration options that are compatible with the Unified Communications solution.

There are two activities associated with the legacy integration service component.

- Legacy PBX integration – completing the legacy PBX integration requires the configuring and testing of the legacy PBX components with the Cisco Communications Manager
- Voice Mail Integration – Completing the voice mail integration requires the configuration and testing of the existing voice mail system, and the new Cisco Unity messaging components

During *Emergency Responder Implementation*, you will install, configure, integrate, and test the integration of the Cisco Emergency Responder that will enhance the existing emergency 9-1-1 functionality offered by Cisco Communications Manager.

There is one activity associated with the emergency responder implementation service component. During PBX integration, you will configure and test the legacy PBX emergency response components with the Cisco Communications Manager.

During *Personal Assistant Implementation*, you will install, configure, integrate, and test the integration of the Cisco Personal Assistant that will support voice mail, media manger, and other functionalities offered by Cisco Unified Communications solution.

There is one activity associated with the personal assistant implementation service component. During install and configure personal assistant, the personal assistant requires the configuring and testing of the route points and other subsystems.

During *Auto Attendant Implementation*, you will install, configure, integrate, and test the integration of the Auto Attendant and the integration with the Cisco Communications Manager.

There is one activity associated with the personal assistant implementation service component. During install and configure auto attendant, the auto attendant requires the configuring and testing of the route points and other subsystems.

Now that all the devices have been implemented, you will prepare for **device deployment**. You will use a customized phone deployment kit and cut sheet to deploy the Unified Communications phones to all customer locations.

There are two activities associated with the device deployment service component.

- Prepare for phone deployment
- Deploy phones

During **Systems Migration**, you will migrate the voice system from the legacy private branch exchange (PBX) to the new Unified Communications system, according to the migration plan. The migration could be done all at once, but more often is staggered at different locations and times to help ease the transition. Additionally, you will migrate all sites, end users, and network services to your Unified Communications solution as specified in the system migration plan.

During **Staff Training** (end-user training), you will prepare and conduct end-user training. You will give customized training to each user group according to the staff training plan and train end users only on those features they are allowed to use according to business policy.

During **Implementation Support** (day one), you will provide support on the day of cutover to the customer's help desk staff, receptionists, executive assistants, and those who will most frequently be using and supporting the system.

During **Acceptance Testing**, you will verify the execution of the systems acceptance test plan, including a series of trials to check that all of the promised features, functionalities, and applications are working properly. You will also verify that the Unified Communications solution meets the business and technical requirements and is ready for production.

There are three activities associated with the acceptance testing service component.

- Prepare for acceptance testing
- Manual acceptance testing
- Automated acceptance testing

During **Operations Implementation**, you will install and configure the tools used to manage the Unified Communications system according to the operations implementation plan. You will also develop and document the operational processes and procedures according to the operations implementation plan and implement and test operational processes and procedures in accordance with the Unified Communications Operations Plan.

During **As Built Documentation**, you will compile documentation of the current Unified Communications system in an as built solution binder. In the binder, you will include logical and physical topology maps, dial plans, serial numbers, application configurations, and legacy migration or integration configurations. Additionally, you will finalize network documentation that reflects as built information for the customer, including specific design requirements and configurations.

During **Staff Training (It Admin And Help Desk)**, you will manage and execute the staff plan for system operators, system administrators, executive administrators, and end users. Training may include instructor-led training classes in a hands-on lab, custom workshops, mentoring, e-learning, and materials for self-paced study.

During the *Post Implementation Support Handoff* meeting, you will conduct a meeting to discuss the customer's ongoing support entitlements. You will ensure that the customer thoroughly understands what they can do if incidents or problems occur and how to address them.

There are five activities associated with the post implementation support handoff meeting service component.

- Prepare for handoff meeting
- Handoff meeting for support exclusively provided by Cisco
- SMARTnet/Shared Support and Partner Value Added Support handoff meeting
- Verify customer understands operational processes and responsibilities

During *Project Close Out*, you will conduct customer satisfaction surveys to determine how the implementation went from the customer's perspective, as well as the profitability of the implementation engagement. You will also hold a lessons learned meeting to identify things that may not have gone well and discuss potential improvements.

There are four activities associated with the project close out service component.

- Obtain customer satisfaction
- Determine engagement profitability
- Conduct a lessons learned meeting
- Update partner knowledge systems

In the *Implement Phase*, the typical job roles include systems engineers (SEs), field engineers (FEs), and project managers (PMs). Your organization may have different job roles or titles, but the individuals who participate in the implement phase should possess certain recommended skills.

The recommended background and skills include excellent project management skills and full knowledge of the proposed Unified Communications system, including core Layer 2 and 3 infrastructure, applications, equipment, and services, with Cisco Certified Network Professional (CCNP) or equivalent knowledge. The ability to install and configure Unified Communications core infrastructure, including routers, gateways, switches, Unified Communications phones, and more, according to the system design; validate the implementation as defined in the acceptance test; and coordinate and deliver training curriculum for both Unified Communication end users and administrators or help desk staff are also important skills. These skills are needed to fulfill the defined activities for each service component in the implement phase when addressing a customer opportunity.

Operate Phase

During the **Operate Phase**, you will justify customer network investment protection by ensuring that the newly implemented solution is operating efficiently and is highly available.

During **Operations Setup**, you will set up the customer to provide operational support to the Unified Communications network, including development of an operational support plan and an Ongoing Support Handoff Kit. Assisting the customer in developing processes to manage the system in ongoing operations mode, including system administration and backup, assessment management, and scheduled maintenance is another aspect of the operations setup.

During **Systems Monitoring**, you will monitor the system performance using a server agent or network probe, a network management system, and an alarm monitoring service and identify, track, and log any issues or incidents that occur in the case management system. You will also monitor, manage, and report on service-level metrics and abnormal events or trends that may adversely affect the availability, capacity, performance, and security of the Unified Communications system. Customers may do this themselves, or outsource systems monitoring.

There are three activities associated with the systems monitoring component.

- Monitor the UC systems
- Track event and report on the system
- Notify and escalate incidents

During **Incident Management**, you will classify, prioritize, isolate, and resolve incidents and track and monitor incidents. Any required changes to the Unified Communications system are submitted to the formal change management process, and incidents are tracked and managed in a case management system. It is also important to manage real-time incidents with the Unified Communications system components via the incident-management process, which includes multiple levels of support that create and maintain the status of an incident through resolution and closure.

There are eight activities associated with the incident management component.

- Identify Incident
- Classify and prioritize the incident
- Isolate the incident
- Resolve the incident
- Recover from incident outage
- Validate resolution
- Track and monitor progress
- Close the incident

During **Problem Management**, you will identify and solve recurring incidents via the problem management process by analyzing incident trends to identify patterns and systemic conditions.

There are two activities associated with the problem management component.

- Identify the problem
- Manage the problem

During **Change Management**, you will plan structured moves, adds, or changes (MACs) to the Unified Communications network and develop a formal process and schedule to help minimize issues resulting from the incorporation of changes. The team also standardizes methods and procedures for authorizing, documenting, and performing changes to a Unified Communications system.

There are seven activities associated with the change management component.

- Originate change
- Evaluate change
- Accept and schedule a change
- Execute a change
- Communicate a change
- Conduct post-change evaluation
- Accept and close a change

During **Configuration Management**, you will maintain current information about the Unified Communications system hardware, software, and applications pertinent to the system's individual components and attributes, and how the components interrelate. The service also checks whether changes in the Unified Communications system infrastructure have been recorded correctly, including changes to the component interrelationships. It monitors the status of the components to help ensure that it has an accurate picture of the versions of Unified Communications components the system is running.

During **Security Administration**, processes and principles to address and manage the Unified Communications system's security-related issues are defined. It provides ongoing management processes to protect the confidentiality, integrity, and availability of information on the network.

During **Supplier Management**, you will manage fulfillment, assurance, and financial processes when procuring products and services from hardware and software suppliers. You will help customers align their processes, organizations, and tools with suppliers' processes, organizations, and tools to facilitate the efficient delivery of products and services. This helps customers manage suppliers so they deliver in accordance with qualitative performance standards or Service Level Agreements (SLAs).

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During **Service Review**, you will conduct a quarterly account review (QAR) meeting, document potential new Unified Communications system requirements, and send customer satisfaction surveys to internal customer stakeholders. You will also assist the customer in identifying leading practices to monitor system performance and respond to trouble reports.

In the **Operate Phase**, the typical job role includes field engineers (FEs). Your organization may have different job roles or titles, but the individuals who participate in the operate phase should possess certain recommended skills.

The recommended background and skills include full knowledge of the implemented Unified Communications Manager solution including Layer 2 and 3 core infrastructure, applications, equipment and services.

The ability to support the solution per the operational guidelines, provide change management activities, validate the implementation as defined in the acceptance test, and troubleshoot Unified Communications Manager core infrastructure including routers, gateways, switches, and Unified Communication phones and applications such as Cisco Unified Communications Call Manager, Unity, AutoAttendant, and third-party applications is also important.

Understanding how to use server agents and network probes, network management systems, alarm monitoring systems, case management systems, and alarm receivers and event browsers, along with interpersonal skills and understanding of local languages are also important.

These skills are needed to fulfill the defined activities for each service component in the operate phase when addressing a customer opportunity.

Optimize Phase

During the **Optimize Phase** of Cisco Lifecycle Services, you will help ensure that the customer's networks are operating at peak performance, resolve problems quickly as they arise, and adapt the architecture, operation, and performance of the network to changing business goals.

During **Business Case Alignment**, you will assess the realization of Return on Investment (ROI) and other business benefits of the UC system, relative to those defined in the original business case. You will also determine potential new business or technical requirements during an optimization workshop, and document new requirements in the optimization report.

During **Technology Assessment**, you will conduct and produce a detailed analysis of the Unified Communications system and document your findings in an optimization report. This service also drives continuous improvements by recommending remediation measures including optimizing device configurations, capacity planning, traffic analysis, security assessment, and resolving quality issues.

There are six activities associated with the technology assessment component.

- Prepare for technology assessment
- Call processing assessment
- Messaging assessment
- Router and switch assessment
- Network assessment
- Analyze data

During **Operations Assessment**, you will assess the current state of the customer's operations and network management infrastructure, including people, processes, and tools, to identify issues and opportunities that lead to recommendations for improving their ability to manage their UC systems.

During **Security Assessment**, you will analyze security policies and procedures to mitigate network security threats and obtain, review, determine, and document security procedures, policies, and upgrade requirements.

In the **Optimize Phase**, the typical job roles include Account Manager (AM), Systems Engineer (SE), and Field Engineer (FE). Your organization may have different job roles or titles, but the individuals who participate in the optimize phase should possess certain recommended skills.

The recommended background and skills include demonstrating an understanding of the existing UC network infrastructure, applications, equipment and services, a background in account management, and knowledge of services available for support of Prepare, Plan, Design, Implement, Operate, Optimize (PPDIOO) services. The ability to assess the customer's evolving business requirements and to identify trends in operational processes and workflows are also important. These skills are needed to fulfill the defined activities for each service component in the optimize phase when addressing a customer opportunity.