



Service Description: Data Center Unified Computing System Planning and Design Service

This document describes Data Center Unified Computing Planning and Design Service.

Related Documents: This document should be read in conjunction with the following documents also posted at www.cisco.com/go/servicesdescriptions/: (1) Glossary of Terms; (2) List of Services Not Covered; and (3) Severity and Escalation Guidelines. All capitalized terms in this description have the meaning ascribed to them in the Glossary of Terms.

Direct Sale from Cisco. If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA) or equivalent services agreement executed between you and Cisco. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

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Cisco shall provide the Data Center Unified Computing Planning and Design Service described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee. Cisco shall provide a Quote for Services ("Quote") setting out the extent of the Services and duration that Cisco shall provide such Services. Cisco shall receive a Purchase Order that references the Quote agreed between the parties and that, additionally, acknowledges and agrees to the terms contained therein.

Data Center Unified Computing System Planning and Design Service

Service Summary

The Data Center Unified Computing System Planning and Design Service provides various service elements in the form of assessments, design support and implementation support.

Under this Service, Cisco shall provide the Data Center ("DC") Unified Computing Planning and Design Service selected by

Customer during Standard Business Hours, unless stated otherwise.

Unified Computing Architecture Assessment

Cisco will provide Unified Computing Architecture Assessment review and readiness assessment to assist in deploying Unified Computing System. The Unified Computing Architecture Assessment includes:

Assessment Services

- Conduct interactive sessions to understand Customer's business and strategic information technology ("IT") objectives and potential challenges.
- Work with Subject Matter Experts ("SMEs") and IT teams (Server, Storage, Network, Applications, etc.) to understand process, operational and technical details of the Environment.
- Review current and future compute, storage and network resource requirements.
- Align Unified Computing System best practice deployment methodologies and use cases to minimize Customer challenges.
- Identify the expected business and technical outcome based on a Unified Computing System ("UCS") deployment.
- Provide report which includes recommended architecture and/or plan of action based on specific opportunities within Customer data center.

Pre-Production Pilot Service

Cisco will deploy a production ready UCS in Customer Environment. Cisco will provide assessment, analysis and recommendations to deliver an optimized Customer deployment of UCS over the course of three weeks. The intent of this effort is to validate whether Customer's application environment can operate within new environment. Under the Pre-Production Pilot Service, Cisco will perform the following:

Assessment Services

- Clearly define business, strategic and technical objectives, based on Customer requirements.

Determine which use cases will showcase UCS benefits and their alignment to the Customer requirements.

- Define critical success factors for UCS Environment.
- Review current utilization of data center resources based on data gathered by Customer.
- Align deployment use cases with Cisco UCS use cases.
- Document challenges, critical success factors.

Design Support Services

- Develop recommended UCS systems Architecture.
- Align deployment architecture to first wave of applications (physical and virtual servers)

Implementation Support Services

- Verify physical installation of UCS.
 - Verify installation of UCS management software, including firmware and updates (Specific to B Series)
- Perform initial deployment of UCS.
- Configure UCS virtual networking configuration.
- Present storage to UCS Environment (disk, NAS, SAN)
- Deploy physical and virtual servers
 - Service Profiles (physical) (Specific to B Series)
 - Virtual Machines via third party (virtual)
- Assist in the deployment of applications onto servers.
- Lead server migration effort (physical to virtual (“P2V”) and/or virtual to virtual (“V2V”).
- Perform stability and availability testing.
- Verify Customer Environment is stable and optimized.
- Showcase deployment ease through UCS manager Graphical User Interface (“GUI”). (Specific to B Series)
- Illustrate operational aspects of the UCS Environment.

Accelerated Deployment Service

Cisco will deploy UCS Environment that is capable for production cutover. Cisco will provide assessment, analysis and recommendations to deliver an optimized Customer deployment of UCS over the course of four weeks. The intent of this Accelerated Deployment Service is to align specific use cases and showcase business, strategic and technical aspects of UCS within a Customer data center. Under the Accelerated Deployment Service, Cisco will perform the following:

Assessment Services

- Clearly define business, strategic and technical objectives, based on Customer requirements. Determine which use cases will showcase UCS benefits and their alignment to the Customer requirements.
- Define critical success factors for UCS Environment.
- Review current utilization of data center resources based on data gathered by Customer.
- Align deployment use cases with Cisco UCS use cases.
- Document challenges, critical success factors.

Design Support Services

- Develop recommended UCS systems Architecture.
 - Including server, network and storage presentation
- Align deployment architecture to first wave of applications (physical and virtual servers)

Implementation Support Services

- Verify physical installation of UCS.
 - Verify installation of UCS management software, including firmware and updates. (Specific to B Series)
- Perform initial deployment of UCS.
- Configure UCS virtual networking configuration. (Specific to B Series)
- Present storage to UCS Environment (disk, NAS, SAN)
- Deploy physical and virtual servers
 - Service Profiles (physical) (Specific to B Series)
 - Virtual Machines via third party (virtual)
- Assist in the deployment of applications onto servers.
- Lead server migration effort (P2V and/or V2V).
- Perform stability and availability testing.
- Verify Customer Environment is stable and optimized.
 - Showcase deployment ease through UCS manager GUI. (Specific to B Series)
- Illustrate operational aspects of the UCS Environment.

Production Operating Services

- Develop and implement UCS test plan.
- Verify stability and availability of system.
- Transfer knowledge of alerts and reporting capabilities.

- Configure system to send information to third party reporting tools.

Virtualization Assessment Service

Cisco will provide a Virtualization Assessment Service to provide a clear view of server consolidation opportunities within Customer's physical IT infrastructure. Under this service, Cisco shall provide the following Virtualization Assessment Service:

Assessment Services

- Engagement split between automated collection of data from Customer compute Environment and interactive facilitated design session.
- Clearly define business and technical objectives for Customer unified computing initiative and provide overview of virtualization assessment to Customer.
- Provide Customer a checklist to facilitate the installation and configuration of the collection tool.
- Install collection tool, validate Inventory, and attempt to gather performance data for up to 200 existing Microsoft Windows-based servers.
- Prepare draft report of a limited number of servers in the current compute Environment including:
 - Name of server
 - Server application inventory
 - Type of hardware (if available)
 - Hardware form factor (if available)
 - Utilization audit
- Analyze the data collected to determine suitable candidate servers for virtualization.
- Develop a financial cost model comparing the savings received by implementing virtualization including the financial impact associated with consolidation to a UCS platform.

Design Support Services - Architecture Design

- Validate Customer's understanding of the current server Environment.
- Facilitate a design session with Customer key stakeholders.
- Assist in rationalization of hardware requirements.
- "Whiteboard" straw man design alternatives, including logical and physical consolidations.
- Rationalize design alternatives.
- Establish consensus on the design.
- Develop and illustrate the virtualization design alternatives.

- Articulate the benefits and drawbacks of each alternative.
- Prepare a high-level bill of materials.
- Provide high level roadmap and next steps.
- Provide executive summary of all information.

Virtualization Accelerator Service

Cisco will guide Customer through the implementation and deployment of a virtual server Environment on the UCS. This service assumes that an operational UCS Environment has been configured and is available at project inception. Under the Virtualization Accelerator Service, Cisco will perform the following:

Design Support Services

- Review existing server resource requirements information.
- Develop sizing of virtual machines.
- Provide initial mapping and layout for virtual machines to physical hosts.
- Review Network and storage access requirements and configuration.

Implementation Support Services - Implementation Plan

- Verify physical infrastructure and hardware installation for deployment.
- vSphere virtualization overview and features.
- Review vSphere architecture and components.
- Deploy and verify required systems components (VMware ESX/ESXi, vCenter).
- Provide knowledge transfer on operating vSphere.
- Deploy virtual machines based on resource requirements and mapping from design phase. Showcase Nexus 1000V and VN-Link capabilities
- Configure networking and storage resources required.
- Develop and implement test plan to address resiliency and flexibility of a unified architecture.

Project Management

- Provide project management support to assist with the overall delivery of the UCS Service for incremental changes to the existing UCS deployment or architecture.

Service Responsibilities of Customer

Customer shall comply with the following obligations:

- Customer shall designate a person to whom all Cisco communications may be addressed and who has the authority to act on all aspects of the Services.
- Customer shall provide reasonable access to computer equipment, facilities, work space and telephone for Cisco's use during the Service.
- Unless otherwise agreed to by the parties, Customer shall respond within two (2) business days of Cisco's request for documentation or information needed for the Service.
- Customer shall ensure that contracts with its own vendors and third parties are fully executed and reflect the correct terms to enable Customer's business requirements to be met in full. In Addition, Customer shall be responsible for all payments to, and the work performance of, all non-Cisco entities assigned to, or working on this Service under this Service Description.
- Customer acknowledges that Cisco's obligation is to only provide assistance to Customer with respect to the tasks detailed in this Service Description, and that such assistance may not result in some or all of the tasks being completed.
- Customer acknowledges that Cisco is providing Services to assist Customer in support of the initiatives and activities described herein and shall not assume any cost or schedule liability. Customer is the governing authority of all activities and project directives and retains full responsibility for the leadership, review, and approval of actions taken and deliverables completed by Cisco in support of Customer.
- Customer must qualify the storage area network ("SAN") configuration prior to Cisco's verification of compliance of Customer's link to the configuration. Customer or the replication application vendor, as applicable, must set the parameters under which the replication application is certified.
- Customer acknowledges that Cisco does not contain a service under this Service Description whereby Cisco provides a traffic generator and analyzer, collects information, and produces an assessment.