Cisco RISC/UNIX Migration and Support Services

Maintain High Availability While Reducing Costs

Customers are increasingly faced with a contradictory set of business priorities. While the pressure to reduce costs mounts, the requirement to maintain availability and uptime remains constant. This leads customers to choose between proprietary closed platform architecture and a flexible open architecture that allows them to meet these contradictory demands.

Increasingly, customers are choosing the Cisco Unified Computing System™ (Cisco UCS™) as the premier x86 open architectural offering. They are migrating critical and noncritical RISC-based applications onto the Cisco UCS in order to realize cost savings, performance improvements, and cloud enablement - all while being able to maintain stringent service-level agreements and high availability requirements.

> Cisco RISC/UNIX Migration is a comprehensive portfolio of services enabling customers to reduce their TCO (CapEx and OpEx) by deploying applications that currently run on RISC/UNIX platforms to the Cisco Unified Computing System, built on industry-standard x86 chipsets and operating systems.

Services Overview

Cisco® RISC/UNIX Migration Services provide a proven process for migrating RISC/UNIX environments onto Cisco's industry-leading x86-based Cisco UCS platform. With the help of best-in-class migration methodologies, in-depth analysis tools, a robust planning process, and world-class implementation, Cisco delivers a comprehensive cost-effective approach to migration initiatives.

Challenges in migrating RISC/UNIX applications vary from application to application. Proper planning, combined with a sound migration methodology is required to ensure a successful mitigation and deployment of migrated applications on the Cisco Unified Computing System solution. Cisco has forged strong relationships with many independent software vendors, including Oracle and SAP. Cisco Services has performed numerous migrations of many name-brand commercial-off-the-shelf (COTS) applications, as well as the migration of custom-developed applications.

> Cisco has a well-defined set of templates to migrate commercial-off-the-shelf applications. These make for rapid migrations from legacy RISC/UNIX to the Cisco Unified Computing System.

Cisco's RISC Migration Services capabilities are structured to address each customer's specific needs.

- RISC/UNIX Migration Acceleration
- RISC/UNIX Migration
    ◦ Migration strategy
    ◦ Migration planning and roadmap
    ◦ Migration execution
    ◦ Knowledge transfer and day-2 support

RISC/UNIX Migration Acceleration

This 4-5 week on-site engagement is designed for a customer who has decided to migrate their RISC environment to an x86-based platform, but wants confirmation that their applications can be successfully deployed on the Cisco UCS platform and would like to understand the business benefits of such migration.

Cisco Services consultants will assess the data center application environment by running a series of tools to accurately map application dependencies and categorize these applications into migration candidates for potential migration to the Cisco UCS. Cisco will gather the following types of information:

- Primary business factors and compelling circumstances that motivate the RISC migration
- Installed base of RISC servers and the applications hosted on them
- Criticality of applications
- Resource utilization
- Current cost structure

Cisco Services consultants will also demonstrate technical feasibility of running your RISC applications on the Cisco UCS. One of your COTS applications and a few use cases of a custom-developed application will be migrated onto the Cisco UCS to validate technical feasibility.

In addition to confirming the technical feasibility of running your RISC/UNIX applications on the Cisco UCS, the deliverables from this service will include:

- An in-depth total cost of ownership (TCO) analysis that will take into account all pertinent aspects of your hardware and software environment to yield an accurate ROI/TCO
- Candidate list of your COTS and custom-developed applications that have been identified for migration to Cisco UCS
- A migration complexity index assigned to each of those candidates
- Physical to virtual transformation analysis summary, including sizing estimates based on your current workload characteristics, showing an analysis of your environment's virtualization potential

Table 1 lists acceleration activities and deliverables.

Table 1.   RISC/UNIX Migration Acceleration Activities and Deliverables

Activities	Benefits
• Four to five week intensive on-site engagement. • Using agent-less tools, collect relevant information about the RISC application environment. • Understand business factors and compelling events, application criticality, current cost structure, and other relevant data points. • Categorize applications based on various metrics (e.g. COTS vs. custom, degree of difficulty in migration, etc.). • Select one COTS and a few use cases of custom applications to validate technical feasibility. • Demonstrate technical feasibility by migrating selected applications onto the Cisco UCS. Cisco and partners will implement necessary changes to the source code of the custom-developed application. • TCO and ROI analysis based on actual data from your environment. This TCO analysis will involve all aspects of the migration. Deliverables • Migration Acceleration Service report. ◦ List of applications that can be migrated to the Cisco UCS ◦ Migration complexity index rating ◦ High-level migration roadmap ◦ Physical to Virtual migration transformation analysis report • Technical validation that your RISC applications will function on the Cisco UCS. • TCO/ROI analysis report.	• Technical validation in a contained environment before you make significant investments. • Accurate depiction of your current application environment and how it would look once migrated to the Cisco UCS. • In-depth TCO analysis you can use and analyze to confirm your business case for migrating from the current RISC-based platforms. Most importantly, this service will generate necessary momentum in realizing your goal of reducing the overall TCO of managing your application environment.

RISC/UNIX Migration Service

For customers who have already committed to move their current RISC environment to the Cisco UCS, the RISC/UNIX Migration Service is designed to migrate that RISC-based application environment to the Cisco UCS using a proven methodology implemented by a highly scalable, repeatable process.

Cisco will evaluate your RISC application environment and prioritize your applications for migration to the Cisco UCS. COTS applications will be migrated using predefined templates customized to your business requirements.

Custom-developed applications will be migrated using an iterative methodology in our migration factory. Appropriate governance processes will be followed to ensure the quality of the migration process.

- **Migration strategy:** Cisco will develop a RISC/UNIX migration strategy that will qualify and prioritize your applications into a high-level migration plan. The strategy will determine whether or not the target environment will be a virtualized or bare-metal deployment, if the scaling aspects will be vertical or horizontal, and determine the management effects associated with the target environment. Cisco will deploy application information collection tools, as necessary, to help accurately map your application environment and to arrive at target environment sizing estimates. This strategy forms the foundation for a detailed migration plan.
- **Migration planning and roadmap:** With the detailed understanding of your application environment, Cisco Services will help create a detailed migration plan, which establishes actionable migration steps. It takes into account your application service-level requirements (SLRs), interdependencies, and other compelling events (e.g. hardware/software refresh cycles) to form a comprehensive migration plan for the production environment. Appropriate target environment architecture will also be developed as part of the migration planning process.
- **Migration execution:**
    - Design and implementation of the target application environment
    - Migration of COTS applications
    - Migration of custom-developed applications
    - Integration of your system management framework to manage the Cisco UCS architecture

Design and implementation: Cisco Services will design your target application environment that will meet applications SLRs (e.g. availability, performance, scalability, security, and so on) and implement it. Cisco Services consultants will utilize the wealth of knowledge gathered from many customer engagements and the in-depth understanding of the Cisco UCS architectural features to build the most optimized environment that meets your business requirements.

COTS application migration: Cisco has developed a template-based best-practices approach to migrate most popular COTS application packages (e.g. SAP, Oracle E-Business, PeopleSoft, Siebel, and so on) on the market. The goal of this approach is to make sure you realize ROI benefits in a short period of time.

Custom-developed applications migration: Cisco Services consultants, along with our partners, will use a proven iterative methodology to migrate your custom-developed applications on RISC/UNIX platforms to the Cisco UCS.

Custom-developed applications that are developed for Java/J2EE platforms (often referred to as packaged applications) will be migrated using our template-based approach. Cisco can help you migrate to the same J2EE application server or to an open source-based alternative on the target platform.

Custom-developed applications that are developed in C and C++ are migrated using an iterative methodology in our migration factories. Sophisticated automated code-parsing tools will be employed to precisely determine potential migration issues. This process accelerates the migration process.

System management framework integration: To make sure you are able to manage the application environment based on Cisco UCS using your existing operational processes, Cisco consultants will work with your

operations team to integrate the Cisco UCS management framework to your choice of system management framework.

The target application environment will be thoroughly tested to make sure it meets the application's SLRs.

Knowledge transfer and day-2 support: Throughout the project, Cisco consultants will mentor your system administrators and architects to make sure you can manage the target environment and are able to get the best value out of it. If you desire, Cisco can assist you in managing the new application environment for an extended period. Cisco, along with our partners, can also provide ongoing application management and maintenance support for an extended period of time.

This support is in addition to Cisco's Technical Support services and high-touch customized support services. Cisco Advanced Services can provide both consultative and design services on an ongoing basis to help optimize and expand your environment.

Benefits

Customers can logically step through their RISC migration decision process using Cisco's structured approach and industry-leading methodologies:

- Lower the TCO of your data center: Cisco can provide a comprehensive analysis before the actual migration
- Implement the high-availability x86-based solution on fewer components, fewer cables, and minimal points of failure
- Improve responsiveness by up to 800%
- Customize complete end-to-end services package to meet your specific needs
- Implement cloud-based services using innovative virtualization technologies
- Reduce dependency on specialized UNIX skill sets

Cisco Technical Support Services

Customers using the Cisco UCS have access to a global team of experts cross-trained in the Cisco UCS solution. Customers also have the option for high-touch support services for their most critical applications. Cisco provides triage support for solution partners' products and an extensive range of technical resources. Customers with support contracts from Cisco, RedHat, and storage partners benefit from a cooperative support experience to rapidly resolve solution issues and increase uptime.

> Cisco and our strategic offshore partners utilize our cost-optimized iterative migration methodology.
>
> Cisco can provide optional high-touch services for your critical applications.

Cisco Unified Computing Support and Warranty Services

The more benefits you realize from the Cisco UCS, the more important the technology becomes to your business. If an issue arises, you want support from dedicated specialists who have in-depth expertise in virtualized data center environments, server hardware and software, and unified computing technology. You can be confident that you are covered with the Cisco UCS and Warranty Services.

The Cisco UCS B-Series Blade Servers and C-Series Rack-Mount Servers are backed by a warranty that includes three-year parts coverage and next business day parts replacement, eight hours a day, five days a week. The Cisco UCS warranty includes a 90-day software warranty on media. Ongoing downloads of BIOS, firmware,

drivers, and Cisco Unified Computing System Manager (UCSM) updates are also included. The Cisco UCSM updates include minor enhancements and bug fixes that are designed to maintain the compliance of Cisco UCSM with published specifications, release notes, and industry standards.

Augmenting the Cisco UCS warranty, Cisco's award-winning support and warranty services help you increase uptime, quickly resolve issues, and get the most from your unified computing investment. Cisco Unified Computing Support and Warranty Services include:

- Unified Computing Warranty Plus
- Unified Computing Support Service
- Unified Computing Mission-Critical Support Service

Why Cisco Data Center Services?

Today, the data center is a strategic asset in a world that demands better integration among people, information, and ideas. Your business and your data center work better when technology products and services are aligned with your business needs and opportunities. Using a unique network-based perspective and a unified view of data center assets, Cisco and our industry-leading partners deliver services that accelerate and optimize your data center transformation. Cisco takes an architectural approach to help you efficiently integrate and manage data center resources and improve the performance and availability of your vital business applications. Cisco Data Center Services help you reduce costs, operate more efficiently, and better meet your service-level agreements.

Availability

Cisco RISC Migration Services are available on a global basis. Contact your local Cisco account manager about availability in your area. Cisco technical support services are available globally.

For More Information

For more information on the broad array of Cisco Services available, visit http://www.cisco.com/go/unifiedcomputingservices.

To learn more about our comprehensive portfolio of Cisco Data Center Services, visit http://www.cisco.com/go/dcservices or contact your Cisco service account manager.