

Mitigate Risk for Data Center Network Migration



Optimize Your Architecture and IT Investment While Reducing Complexity and Risk

Cisco Data Center Migration Services help enterprises and service providers improve business agility and end-user experience with minimal risk, complexity, and resource consumption.

Migration initiatives can help enterprises and service providers maintain market leadership, increase business agility, and reduce total cost of ownership (TCO) while meeting regulatory requirements and plans for future growth.

Because the data center is the mission-critical delivery platform for business, migrating your data center or any of its IT assets – applications, data, compute, network, servers, and/or facilities – can be a complex, large-scale change management effort with significant investment and risk unless carefully planned and managed.

Successful data center migration initiatives need to address architectural, business, and operational challenges within and across the entire IT stack (Figure 1). Challenges include maintaining business continuity, migrating legacy and packaged applications, preserving mission-critical data during migration, and preventing security breaches.

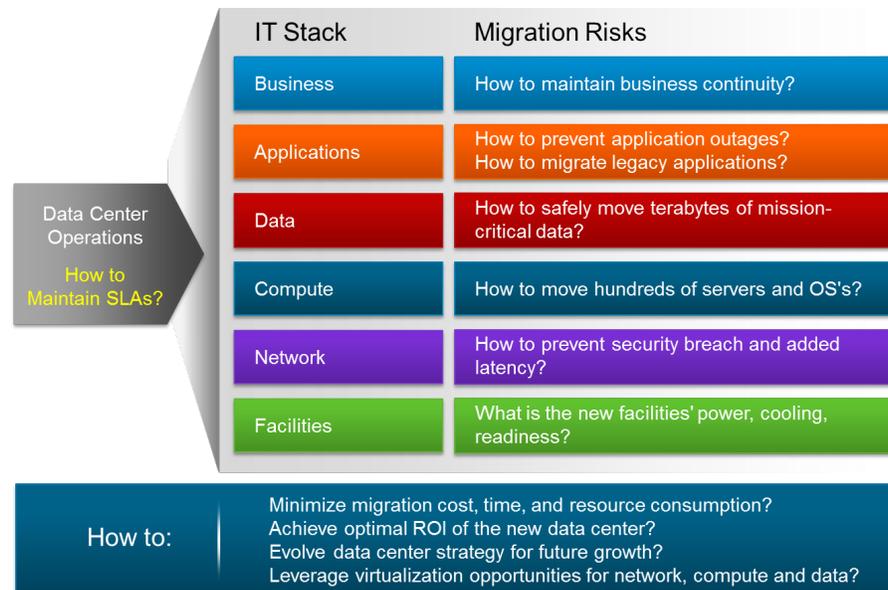
On the up side, migration initiatives also provide you with opportunities to address architecture updates, enact virtualization procedures, and realize green opportunities around power and cooling reductions to get more from your data center investments.

Your successful data center migration strategy should involve:

- Meticulously orchestrating the complex move of mission-critical data center assets from one site and/or one platform to another.
- Making sure of business continuity by maintaining application performance and availability while delivering operational service levels throughout the physical and/or platform moves. With little or no margin for error, it is essential to prevent costly, unplanned service outages or performance degradation that can affect user experience.

Mitigating these risks requires a broad array of expertise across architecture, business, operations, technology, and strategy arenas, which can create steep learning curves for enterprises and service providers.

Figure 1. Data Center Migration Challenges and Approach



With Cisco® Data Center Migration Services, enterprises and services providers can improve business agility and end-user experience with less risk, complexity, and resource consumption. The service offers are based on state-of-the-art data center architecture and strategy using industry-proven migration methodologies that use Cisco capabilities and best-in-class partnerships. Our services are focused to mitigate large-scale change risks and avoid schedule delays and cost overruns. With Cisco Services, your migration initiative will be dependable and reliable.

Not only do we focus on risk mitigation, we help you grow the investment value of your data center by working with you and your project team to assess and evolve your data center strategy to meet the business objectives for your organization, whether it is speed to data access, time to revenue, or other goals. Keeping up with emerging data center technologies, assessing the architectural value of these technologies for your organization, and then establishing a multiyear deployment strategy will help ensure that your migrated data center elements continue to demonstrate high performance and remain agile well into the future.

Migrate Your Data Center to High Value with Low Risk

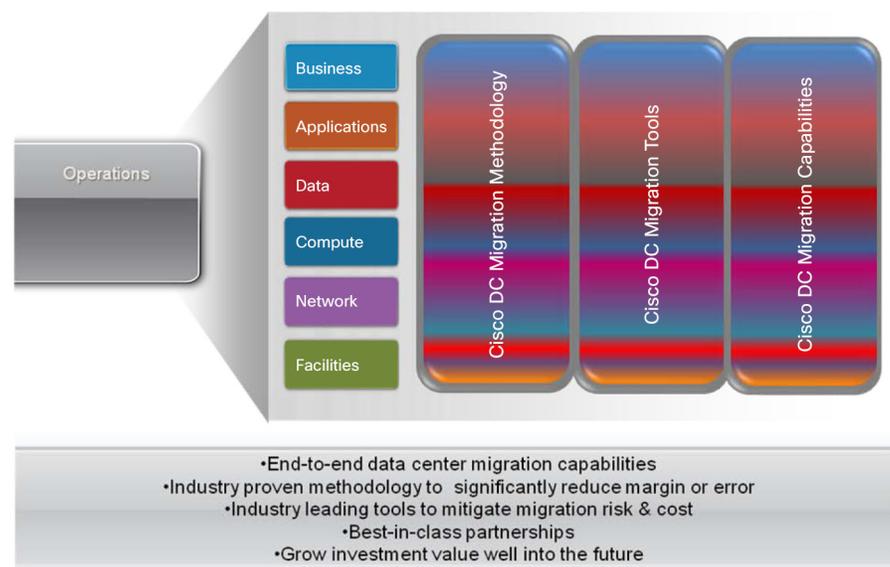
Whether you are migrating all or just a portion of your data center, the Cisco Data Center Migration Services mitigate risks and complexities to enable a successful migration. How do we define a successful migration? It is one that meets your strategic objectives within budget, on time, with maximized value and return on investment. Central to the migration services are the Cisco migration methodologies (Figure 2), which feature several components such as discovery, move groups, migration strategy,

risk analysis and mitigation plan, migration and migration implementation plan, and program management office.

Because data centers have tight interdependencies, our migration methodologies are applied to each area across the entire IT stack, including business, application, server, storage, networks, facilities, and operational resources. (See Table 1 at the end of this document for the service activities, deliverables, and benefits.)

This approach is designed to uncover migration-related risks and mitigate them early in the project lifecycle. By engaging Cisco Services, you are assured of a repeatable level of success on any size data center migration initiative regardless of complexity and scope. This holistic approach significantly reduces the project implementation overhead and provides a confident path to on-time completion. With Cisco Data Center Migration Services, even a large-scale migration effort can be implemented with lower risk, an accelerated time frame, and improved return on investment.

Figure 2. Cisco Data Center Migration Methodologies



Tackle Hidden Risk

Within the data center, business applications depend on various software components running on servers connected to networks and storage. Data center hardware and software components have complex and mission-critical interactions and interdependencies, which might or might not be documented. Based on our more than 28 years of experience with more than 50 million devices and 6 million customer interactions each year, we have seen it is the undocumented interactions and interdependencies that are the riskiest, because they can lead to inadvertent misconnection or disconnection of application-supporting infrastructure, causing major application outages.

To significantly reduce this hidden risk, Cisco Application Dependency Mapping (ADM) establishes a holistic and forensic view of known and hidden interdependencies so customers like you, whether enterprises or service providers, can plan for them. Cisco ADM examines these interdependencies from three different angles: servers, network, and business. The network offers the best vantage point to understand the interserver and interapplication interactions. Cisco ADM is distinguished by its capability to establish the forensic maps of invisible interdependencies that might lead to performance problems, even application and SLA outages.

Benefits

The Cisco Data Center Migration Service helps enterprises and service providers to optimize data center architecture and IT investment while mitigating complexity and risks. The service helps you to:

- Consolidate large number of legacy data centers into fewer large, more efficient, strategic data centers
- Virtualize your data center assets and automate provision processes, which reduces time to deploy new business applications
- Migrate to a more agile private or hybrid cloud environment
- Build a data center architecture that supports big data analytics to harvest business intelligence
- Create an architecture that allows SDN/Openflow programmability

Grow Your Data Center Investment

Cisco and Cisco channel partners provide data center strategy development for the long term. Expert services consultants review your business needs and the IT stack to generate a multiyear strategy for each technology, including suggestions on ways to immediately implement these strategies or others as needed during the migration. In this way, you realize the full value of your migration investment and evolve your data center strategy to stay current and meet future needs.

Cisco Expertise

The Cisco Data Center Migration Service is delivered by Cisco services professionals who hold a wide array of industry certifications and are subject matter experts in data center technologies. These consultants have direct, current experience in planning, designing, and migrating data centers and their constituent assets: applications, data, networks, servers, and storage.

Flexible Support for Your Solution

Good technical support is vital, whether you migrate all of your data center or only certain elements of it. Cisco Data Center Solution Support Service for Critical Infrastructure is designed to supplement product support from both Cisco and our

technology partners to more quickly and accurately resolve complex data center infrastructure issues. With Solution Support, you have priority access to a single point of contact – our team of data center infrastructure technology experts – to manage, troubleshoot, and speed issue resolution across your entire design, including working with third-party product support teams.

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 strategic business objectives and opportunities. Cisco and our Cisco channel partners deliver intelligent, personalized services that accelerate the transformation of your data center. Using a unique, network-based perspective and a unified view of data center assets, Cisco takes an architectural approach to help you efficiently consolidate, virtualize, and manage data center resources. Cisco Data Center Services help transform, optimize, and protect your data center to reduce costs, deliver high availability, and improve application performance.

Availability

Cisco Data Center Migration Services are widely available through Cisco and Cisco channel partners. Contact your local client services manager about availability in your area.

For More Information

For more information about Cisco Data Center Migration Services, as well as other Cisco Services for the data center, visit www.cisco.com/go/dcservices.

Table 1. Cisco Migration Service Activities/Deliverables/Benefits

Activities and Deliverables	Benefits
<p>Activity: Discovery</p> <ul style="list-style-type: none"> • Understand the primary business factors and objectives of the migration • Discover end-to-end IT infrastructure assets within the data center, including business, application, server, networks, storage, facilities, and operation • Discover critical asset interdependencies with industry-leading Cisco application dependency mapping • Identify core business processes and critical applications • Understand backup/restore, disaster recovery, and operation management capabilities • Understand service-level agreement (SLA) obligations and downtime windows • Understand facilities and the target data center requirements • Understand the change management processes <p>Deliverable: IT infrastructure asset report</p>	<ul style="list-style-type: none"> • Helps align business objectives to the technical objectives of the migration • Helps discover both physical and logical infrastructures to be migrated • Helps establish holistic and forensic interdependencies between the various applications, servers, storage, and networks • Helps understand migration requirements and constraints • Helps establish service-level expectations so the data center migration planning, design, and implementation are delivered to the required levels

Activities and Deliverables	Benefits
<p>Activity: Determine move groups</p> <ul style="list-style-type: none"> Assess application and infrastructure interdependencies Assess time zone dependencies Create move groups and components within each move group 	<ul style="list-style-type: none"> Helps optimize the number of moves to provide business continuity and application availability
<p>Activity: Migration strategy</p> <ul style="list-style-type: none"> For each asset type, conduct workshop with customer to gather and review business and technical requirement for the asset migration strategy Select the right migration strategy for the move <p>Deliverable: Data center migration strategy report</p>	<ul style="list-style-type: none"> Helps select a migration strategy, to simplify infrastructure and operational environments and anticipate what could go wrong, and creating a plan to mitigate the risk of that occurring
<p>Activity: Risk analysis and mitigation plan</p> <ul style="list-style-type: none"> Identify risks that will likely impede your ability to meet the migration timelines Create a risk mitigation plan <p>Deliverable: Migration risk analysis report</p>	<ul style="list-style-type: none"> Helps develop handling plans and trigger events to take advantage of opportunities, avoid or mitigate risks during migration by providing a detailed analysis of risks
<p>Activity: Detailed migration plan:</p> <ul style="list-style-type: none"> Develop premove planning, unstacking, and loading plan, transportation plan, unloading, and racking plan Perform test and validation plan for precutover and postcutover Plan for point in time for restore based on recovery time objective/recovery point objective (RTO/RPO) <p>Deliverable: Migration project plan</p>	<ul style="list-style-type: none"> Helps create a migration plan that minimizes cost, risk, and time Helps define a risk-mitigating migration process
<p>Activity: Implement migration plan</p> <ul style="list-style-type: none"> Premove plan readiness validation Track physical migration plan Communicate status updates 	<ul style="list-style-type: none"> Helps prepare and coordinate people, assets, transportation, and migration partners for the move Helps coordinate the data center staff and migration partners by providing a comprehensive communication plan Helps make sure that the data migration plan works as expected prior to moving the entire production data store of an application
<p>Activity: Program management office</p> <ul style="list-style-type: none"> Develops and controls the relationship and interdependencies between the individual project activities in the program to successfully meet the program objectives Provides for planning and obtaining of the program's funding and governance and for tracking and controlling component-level project expenditures Provides for the establishment of specific quality standards and oversight so the program achieves its benefits and objectives and helps make sure of cross-project application of the quality standard <p>Deliverable: Project plan</p>	<ul style="list-style-type: none"> Helps reduce overall project management costs Helps encourage efficient use of resources Helps improve cost control and budget management Helps improve communications, thereby reducing conflicts and risks



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