

Cisco and Red Hat: Modernize Your Data Center for Hybrid Cloud and Big Data

Solution Brief
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Highlights

Modernize Your Data Center

- Standardizing and consolidating your data center with Cisco® and Red Hat solutions can help you modernize today and create an infrastructure foundation for tomorrow.

Journey to the Open Hybrid Cloud

- Cisco and Red Hat offer a winning strategy for increasing your IT flexibility so you can improve your business outcomes.

Make Better Decisions with Big Data

- The capability to accelerate data loading and access and run big data and analysis faster gives you insight in less time for greater profit.

Navigate Forward with Cisco and Red Hat

- Cisco and Red Hat can help you reduce costs with a modern data center, take incremental steps to the cloud, and gain competitive insights with big data.

Achieve Business Benefits

- Protecting your investments with a modern, open, and dynamic architecture can help you improve efficiency and cost control.

Take the First Step

- Modernizing your datacenter with Cisco Unified Computing System™ (Cisco UCS®) and Red Hat solutions is the first step in the journey to IT and business acceleration.

Cisco® and Red Hat® solutions can help you build a modern data center that empowers IT and accelerates your business.

Savvy business and IT executives recognize that tapping into big data and hybrid clouds is the next stage in IT and business innovation. Imagine if your management teams, users, and IT staff could easily access the applications, resources, and competitive insights they need to create an agile business. With Cisco Unified Computing System™ (Cisco UCS®) and Red Hat® solutions, your organization can create a modern infrastructure foundation that supports strategic projects today and can flex and adapt to future initiatives.

Technology Transitions Empower IT and the Business

The pace of change continues to accelerate, with technology advances creating opportunities for many aspects of the business. From mobile and cloud computing to a new breed of applications and data gathering and analysis capabilities, these and other technology transitions are opening the door to new possibilities like the Internet of Everything. The business implications are clear. Companies that use technology to their advantage can accelerate innovation and create new business models that easily adapt to dynamic market conditions.

Move Forward with Cisco and Red Hat Solutions

Cisco and Red Hat offer solutions that work together and allow IT to accelerate your business. Whether you need to increase infrastructure performance, reduce capital expenditures and operating costs, journey to the cloud, or tap into big data—or any combination of these—Cisco and Red Hat solutions can help. Our products and technologies put you on the path forward, delivering the choice, efficiency, and innovation you need to transform your data center and your business.

Modernize Today to Create a Foundation for Tomorrow

Accelerating your business requires IT infrastructure that can respond on a moment's notice. Unfortunately, legacy IT infrastructure keeps you standing still. Aging systems and a lack of architectural consistency can keep your IT infrastructure from responding to your changing business needs. Replacing systems is an important step, but a piecemeal approach can perpetuate the silos of systems that already impact agility. Without a cohesive strategy, your IT staff can spend a lot of time upgrading an environment without breaking down the barriers that are holding your business back.

Modernizing your data center with Cisco and Red Hat solutions can help you create an agile IT environment that supports business priorities at low cost. Cisco UCS x86-architecture-based blade and rack servers, fabric infrastructure, and embedded model-based management capabilities combine with powerful Red Hat software to deliver open self-integrating IT infrastructure.

Cisco UCS does for physical infrastructure what hypervisors do for virtual machines: it allows physical infrastructure to be built and configured automatically through software rather than through the tedious, manual, error-prone configuration of individual components using separate element managers.

By standardizing on this modern infrastructure, your IT organization can consolidate applications and accelerate infrastructure performance, while reducing capital expenditures and operational costs.

Unleash the Open Hybrid Cloud

According to a report in [GCN](#), nearly 75 percent of all enterprises will adopt a hybrid cloud computing strategy by 2015. Cisco UCS with Red Hat software can help you adopt a winning strategy and take the incremental steps to the cloud that work best for your business.

Cisco and Red Hat solutions make it easy to virtualize and automate deployment while securing applications and data, and achieve cloud scale for dynamic business applications. With an open hybrid cloud solution, you can manage your applications and data easily as they move across private and public cloud infrastructure. This increased flexibility means you can scale your infrastructure and workloads—up, out, or both—across private and public resources to deliver new and innovative services more rapidly, support a growing user community, and increase workload mobility. Orchestration capabilities let your IT staff use the right cloud resources for the task at hand. This not only optimizes your use of bare-metal, virtual, and cloud platforms; it also improves business outcomes through increased agility, efficiency, and simplicity at the IT and business level.

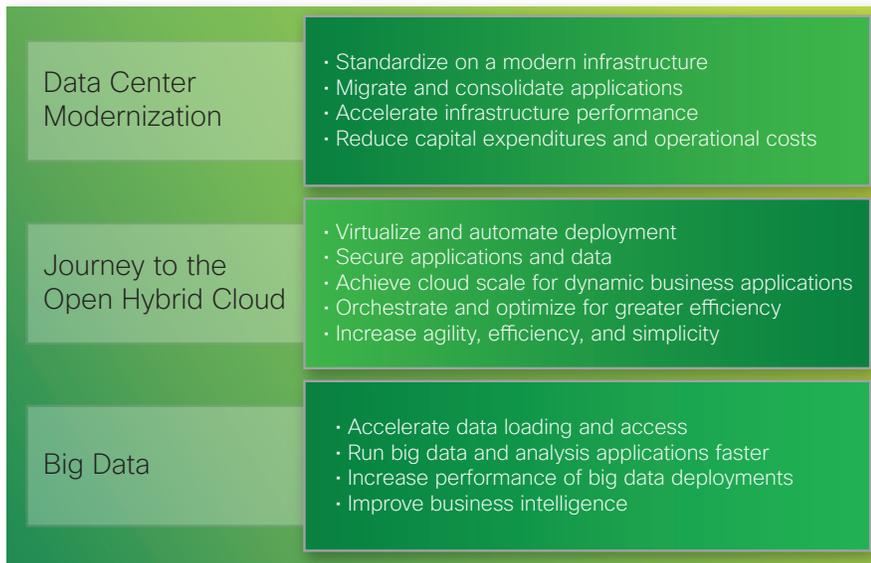


Figure 1. Cisco and Red Hat Can Help You Transform Your Business

Get Better Outcomes Using Big Data

Big data is driving major business decisions. Every minute of every day, massive amounts of data are being generated, stored, accessed, and analyzed. Capitalizing on this information can make a difference in an increasingly competitive and time-sensitive world. That's why many companies are turning to Cisco and Red Hat solutions to create big data environments that can help them make better decisions in less time. Our solutions work together to provide the exceptional scalability your business needs to quickly mine a large amount of data and turn it into actionable intelligence for strategic advantage.

Innovation Leads to Insight

With Cisco and Red Hat solutions, you get a balanced platform that delivers the high-performance processing, impressive I/O bandwidth, and large memory configurations your analysis applications need. This optimized environment has captured [many world performance records](#) and first-to-market results on a wide range of benchmarks that demonstrate how Cisco and Red Hat technology can help your organization accelerate your big data deployments.

You can distribute data loading and analysis tasks across multiple physical or virtual servers to take advantage of massively parallel processing and large memory configurations. These innovations can help you run big data

and analytic applications faster and improve the flow of information to your decision-making processes so your business can respond in real time.

Trust Cisco and Red Hat to Help You Navigate

Cisco and Red Hat are industry-leading technology providers that work together to help your company evolve. Customers around the world choose our solutions because they deliver the performance, choice, and efficiency that companies have come to expect. These open solutions run highly safe, secure, open source software to offer the foundation for an agile business.

Many executives recognize the importance that trust plays in product selection. With Cisco and Red Hat, you know that you are buying innovative technology from trusted vendors. Our joint customers have helped us achieve industry-leading status in many areas. For example, Cisco ships more blade servers with Intel Xeon processors in the Americas than any vendor, and Cisco is the number-two x86 blade server vendor worldwide (Source: IDC Server Tracker 2014, Q3).

As modernization initiatives continue, companies like yours are turning to Linux® environments. Red Hat offers the number-one commercial enterprise Linux distribution: Red Hat Enterprise Linux.

In fact, more than 90 percent of Fortune 500 companies choose Red Hat

Expanding Services with a Virtualization-Powered Cloud

Colosseum, an Internet provider, experienced significant gains in its co-location business. Unfortunately, their existing data center methodology required customers to buy their own hardware and plug it into the Colosseum data center. This lengthened provisioning times and placed strain on data center resources, including floor space, power, and cooling.

Recognizing the need for a more dynamic solution, Colosseum decided to migrate from HP servers, and expanded its data center by moving to a cloud architecture based on Cisco UCS and Red Hat solutions.

The solution—Cisco UCS B-Series Blade Servers, Cisco Nexus® switches, Red Hat Enterprise Linux and Red Hat Enterprise Virtualization—allowed Colosseum to remain in its original data center and increase capacity by an order of magnitude. The company now has a full-service cloud-based data center, allowing them to offer virtualized resources to their customers.

The result: tasks that used to take days now take minutes or hours. With the capability to be flexible, Colosseum is poised for growth.

<http://my.redhat.com/rhecm/rest-rhecm/jcr/repository/collaboration/jcr:system/jcr:versionStorage/9f85ab3b0a052602695b5958f0504ca6/3/jcr:frozenNode/rh:pdfFile.pdf>

Enterprise Linux. Why? It is a Linux platform with unparalleled stability and flexibility, available from the number-one contributor to Linux open source development projects.

Working Together for Your Business

Cisco and Red Hat work together toward a common goal. We collaborate to help ensure our technologies and solutions provide choice in how your business evolves. We strive to deliver the foundation for an efficient and agile business that helps you use technology to innovate without breaking budgets.

Delivering Innovation with Low Risk

Cisco and Red Hat have joined forces to co-develop solutions that deliver better value to customers. One of the ways we help is by making it easy for your IT organization to deploy new systems with expert guidance.

[Cisco Validated Designs](#) can help you accelerate deployment and reduce risk. Working together, Cisco and Red Hat experts design, test, and document solutions targeted at common business challenges and IT priorities. Each validated design explains how to use Cisco and Red Hat solutions to help ensure a faster, more reliable, and predictable deployment.

Get Business Value

The combination of Cisco and Red Hat solutions delivers a wide range of benefits to your organization.

Choice

With Cisco and Red Hat, you can protect your investments with an open architecture and access to the largest open partner ecosystem. You can take advantage of easy interoperability and portability across private, public, and hybrid clouds and put the right workloads on the right infrastructure at the right price point.

Efficiency

Cisco and Red Hat have worked hard to deliver the most comprehensive, enterprise-class solutions. Experience shows that our highly virtualized and automated approach can significantly reduce your deployment times, allowing your business to get workloads up and running quickly. Transitioning to this innovative platform does not have to be risky or cause business delays. Our standardized and proven methodology for migrating infrastructures and applications, combined with a collaborative support model, reduces the risk along the way.

Innovation

In today's competitive environment, companies that stand still are easily forgotten. With Cisco and Red Hat

solutions, your business can take advantage of dynamic development and delivery capabilities to improve time to market for new applications and services. Optimized automation and the capability to easily expand and contract resources increase business agility with improved IT productivity.

Conclusion

If your company is looking for a trusted source for IT solutions, then consider Cisco and Red Hat. Our solutions and service offerings can help you bridge the gap between your legacy IT environment and what your business needs to get and stay ahead.

Learn More

To learn more about the Cisco and Red Hat partnership, visit <http://www.cisco.com/go/redhat>.

To learn more about Cisco UCS, visit <http://www.cisco.com/go/ucs>.

To learn more about Red Hat Enterprise Linux, visit <http://www.redhat.com/rhel>.

To learn more about Cisco and Red Hat validated design, visit <http://www.cisco.com/go/cvd>.

To read the hybrid cloud report in GCN, visit <http://gcn.com/Articles/2014/05/12/Insight-hybrid-cloud>.



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