

# Modernize Your Application Lifecycle

With Cisco UCS M5 Servers and Docker Enterprise Edition



## Portable

- Create and easily deploy applications anywhere.



## Secure

- Reduce surface area and increase visibility.



## Efficient

- Optimize capital expenditures (CapEx) and operating expenses (OpEx) with more efficient application deployments.



## Comprehensive

- Get the benefits of the most modern infrastructure with radically simplified and automated management.

## Cisco and Docker help you modernize your traditional application lifecycle with Cisco UCS® M5 servers and Docker Enterprise Edition.

The pace of business is getting faster, and IT organizations are struggling to keep up. To modernize traditional applications and processes and improve response times, companies are moving to service-based models such as DevOps practices with containers to increase agility and efficiency. The Modernize Traditional Applications (MTA) Program offered jointly by Cisco and Docker enables you to containerize your traditional applications:

- Without changing any code
- As services on the most modern infrastructure
- On Cisco UCS M5 blade and rack servers
- To best attain your business goals

## Modernize Traditional Applications program

With Docker MTA and Cisco UCS M5 servers, customers have realized:

- 50% reduction in infrastructure
- 99% faster deployments
- 99% faster mean-time-to-resolution (MTTR) patching

### Application portability

Docker packages your application code and dependencies into lightweight, standalone containers. This approach eliminates the “works only on my machine” problem because the containers can run across different environments regardless of differences in configurations and dependencies. And the container can easily be deployed in any environment with a single Docker command. You can quickly enable cloud migration, accelerate technology refresh cycles, or burst to the cloud.

### Increased application security

Simply packaging applications into Docker containers gives them the built-in security capabilities of Docker Enterprise Edition. Docker provides strong isolation properties and robust default settings that can be configured as needed for the application. With these features, IT administrators can greatly reduce the attack surface of applications and reduce the amount of host resources required for operation. The Cisco Unified Computing System™ (Cisco UCS) provides exceptional visibility and protection for both the physical and virtual infrastructure.

### Increased efficiency

Over 90 percent of an application’s total cost of ownership (TCO) is incurred after the initial deployment. The ongoing maintenance, deployment, support, and scaling tasks add up to thousands of hours per year per application. This amount multiplied by hundreds to thousands of applications means huge staffing needs and costs. Modernizing applications with Cisco UCS running Docker allows IT operations teams to dramatically simplify tasks such as provisioning, deployment, and application updating. With Cisco UCS, our customers have reported:

- 83 percent reduction in provisioning times
- 63 percent reduction in ongoing administrative costs
- 78 percent reduction in cabling, with an average cost savings of 68 percent
- 52 percent reduction in power and cooling costs
- 100 percent savings on management software because Cisco UCS Manager is embedded and comes at no additional cost

In addition, businesses have experienced an average of 75 percent savings in time needed to deploy existing applications after they have migrated to Docker.

## Cisco UCS M5 servers

Cisco UCS M5 servers and the latest Intel® Xeon® Scalable processors help protect your investment with computing infrastructure that is ready for future technologies:

- **More cores** to accelerate parallelized virtualized and bare-metal workloads
- **Larger memory capacity** for better performance and larger in-memory databases
- **Higher memory bandwidth** to accelerate the flow of information to and from the CPU
- **Support for Intel 3D XPoint** nonvolatile memory
- **Up to 6 PCIe GPU accelerators** for a smooth user experience in virtual desktop environments
- **Cloud management capability** ready for integration with Cisco Intersight™ services for an intuitive data center

## Comprehensive solutions

Cisco UCS is the right platform for deploying Docker Enterprise Edition along with your applications. With Cisco UCS M5 servers, you'll be modernizing on the most up-to-date infrastructure available. With eight years of leadership in the server market, Cisco is still the only vendor delivering not just servers, but systems. Cisco UCS, Cisco UCS Mini, Cisco HyperFlex™ systems, Cisco HyperFlex Edge, and Cisco® converged infrastructure solutions: these are still the industry's only self-aware, self-integrating systems that can support Cisco UCS blade, rack, dense storage, and hyperconverged servers in a single management domain.

With the latest Cisco UCS M5 server family, we demonstrate our continuing capability to lead the server market in raw CPU power, delivering 86 percent better performance than the prior-generation servers running Java enterprise middleware, core business applications, and high-performance computing workloads. This power enables you to run more application containers in the same footprint as previous versions of Cisco UCS, and in a smaller footprint than that of most other vendor's products.

## Solutions that work for you

Cisco and Docker are partnering to provide a variety of solutions you can choose from to meet your business needs. In just 30 days, the Docker MTA Program can transform your Microsoft Windows and Red Hat Linux applications so that they run in a container. This transformation will make your applications more efficient, portable, and secure. And they will all be running on modern, easily managed Cisco UCS M5 infrastructure.

As shown in Figure 1, the Docker MTA Program includes:

- 1-week on-site engagement
- 3 weeks of remote support
- Environment readiness review
- Docker Enterprise Edition deployment on CentOS or Red Hat Enterprise Linux (RHEL)
- Application discovery and containerization of one application
- Test plan recommendations
- Support for 30 days

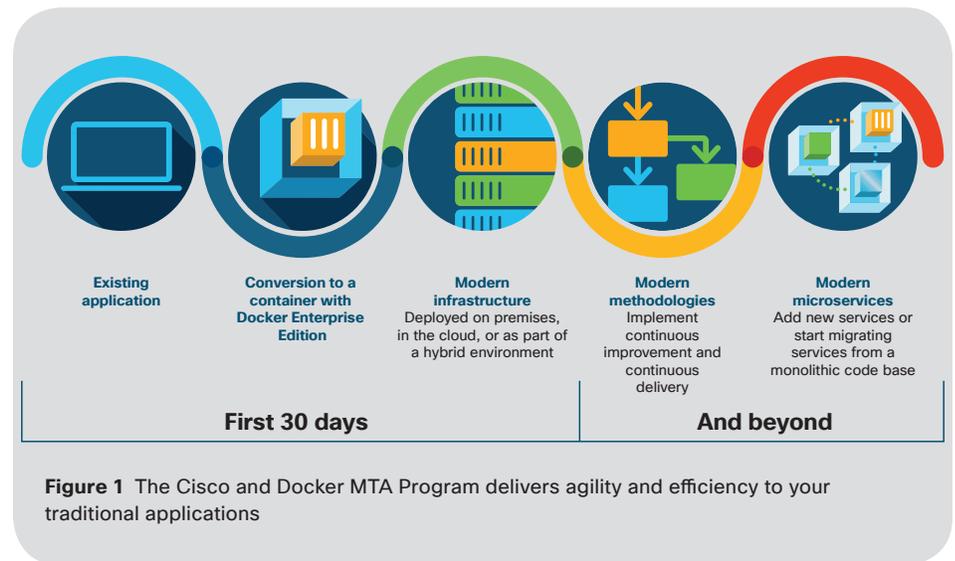
## Accelerate time to value

Updating and modernizing both your traditional and new applications is critical to gaining efficiency and

## For more information

- Learn more about our [container solutions](#).
- [Email us](#) about the Cisco and Docker MTA program.

agility in your business. Cisco and Docker can help you create an application deployment environment that is easy to use and can run securely in the cloud or in your data center on a comprehensive solution.



## Next steps

Get started modernizing your data center today by following the links in the sidebar.