

# Project Photon

## Q. What is Project Photon?

- A. Project Photon is an open source, Linux container host runtime optimized for VMware vSphere®. Project Photon is extensible, lightweight, and supports the most common container formats including Docker, Rocket and Garden.

Project Photon includes a small footprint, yum-compatible, package-based lifecycle management system, and can support an rpm-ostree image-based system versioning.

When used with development tools and environments such as VMware Fusion®, VMware Workstation™, HashiCorp (Vagrant and Atlas) and a production runtime environment (vSphere, VMware vCloud® Air™), Project Photon allows seamless migration of containers-based Apps from development to production.

## Q. Why is VMware creating Project Photon?

- A. For vSphere customers, Project Photon can extend the capabilities of the software-defined data center such as security, identity and resource management to containerized workloads. Organizations can then leverage a single infrastructure architecture for both traditional and cloud-native Apps, and leverage existing investments in tools, skills and technologies. This converged environment will simplify operation and troubleshooting, and ease the adoption of Cloud-Native Apps.

Project Photon can provide a reference implementation for optimizing containers on VMware platforms across compute, network, storage and management. For example, Project Photon can deliver performance through kernel tuning to remove redundant caching between the Linux kernel and the vSphere hypervisor, and advanced security services through network micro-segmentation delivered by VMware NSX™, and more.

## Q. Why is VMware open-sourcing Project Photon?

- A. Open-sourcing Project Photon encourages discussion, innovation, and collaboration with others in the container ecosystem. In particular, we want to make sure the innovations we introduce to Photon to run containers effectively on VMware are also available to any other container runtime OS. Additionally, VMware is committed to supporting industry and de facto standards, as doing so also supports stronger security, interoperability, and choice for our customers.

## Q. How do I get started with Project Photon?

- A. You can download the latest Project Photon binaries and documentation including a Getting Started Guide on this link <https://vmware.github.io/photon>

Project Photon has been validated on vSphere 5.5, vSphere 6.0, vCloud Air, VMware Fusion, and VMware Workstation.

## Q. What kind of support comes with Project Photon?

- A. Project Photon is a technology preview and it is supported through community efforts and direct developer engagement in the communities. Potential users of Project Photon should start with the Photon microsite at <http://vmware.com/Photon>. Developers who might want the source code, including those interested in making contributions, should visit the Project Photon GitHub repository.

## Q. How can I contribute to Project Photon?

- A. We welcome community participation in the development of Project Photon and look forward to broad ecosystem engagement around the project. Getting your idea into Project Photon is just a pull request away, so reach out to us on GitHub on this link <https://vmware.github.io/photon>.

## Q. How does Project Photon relate to VMware's announcement of Project Lightwave?

- A. Project Lightwave is an open-sourced project that provides enterprise-grade identity and access management services, and can be used to solve key security, governance, and compliance challenges for a variety of use cases within the enterprise.

Through integration between Project Photon and Project Lightwave, organizations can enforce security and governance on container workloads, for example, by ensuring only authorized containers are run on authorized hosts, by authorized users.

## Q. Will VMware continue to support other container host runtime offerings on vSphere?

- A. YES, VMware is committed to delivering an infrastructure for all workloads, and for vSphere to have the largest guest OS support in the industry and support customer choice. Toward those goals, VMware will continue to work with our technology partners to support new Guest Operating Systems and container host runtimes as they come to the market.

Open-sourcing Project Photon will enable optimizations and enhancements for container host runtimes on VMware Platform are available as reference implementation for other container host runtimes as well.

