

Project Lightwave

Q. What is Project Lightwave?

- A. Project Lightwave™ is an open source project comprised of enterprise-grade, identity and access management services targeting critical security, governance, and compliance challenges for Cloud-Native Apps within the enterprise.

Through integration with Project Photon, Project Lightwave can provide security and governance for container workloads. Project Lightwave can also serve a variety of use cases such as single sign-on, authentication, authorization and certificate authority, as well as certificate key management services across the entire infrastructure and application stack.

Project Lightwave is based on a production quality code and an enterprise-grade architecture that is multi-tenant, scalable, and highly available multi master replication topology.

Q. Why is VMware creating Project Lightwave?

- A. One of the largest hurdles for adopting Cloud-Native Apps within the enterprise is managing security challenges and complexity associated with the shift toward microservices and container-based Apps.

The code being open-sourced as Project Lightwave already ships to thousands of VMware customers today as part of the core VMware vSphere® virtualization offering. Lightwave provides authentication and authorization across different services in the VMware software stack and has been proven reliable in demanding and large-scale enterprise environments. VMware realized the same technology used internally (Project Lightwave) could be leveraged to address the new challenges associated with Cloud-Native Application.

Project Lightwave will play a central role in making containers ready for our enterprise customers, by providing critical security services and simplifying governance and compliance challenges for Cloud-Native Apps.

Q. Why is VMware open-sourcing Project Lightwave?

- A. VMware has decided to open-source Project Lightwave to enable VMware's container management solutions to be open and interoperable with the rest of the container ecosystem. Open-sourcing this technology also encourages a forum through which we can collaborate with other members of the container ecosystem, and collectively innovate in identity and access management. Open-sourcing Project Lightwave also guarantees that the resulting innovation is ubiquitously available to end-users regardless of where they decide to deploy containers.

Project Lightwave will support multiple open standards such as OAuth, OpenID, SAML, LDAP v3, Kerberos, X.509, SASL, and WS-Trust.

Q. How do I get started with Project Lightwave?

- A. You can download the latest Project Lightwave binaries and documentation including a Getting Started Guide at vmware.github.io/lightwave

Q. What kind of support comes with Project Lightwave?

- A. Project Lightwave is a technology preview and it is supported through community efforts and direct developer engagement in the communities. Potential users of Project Lightwave should start by visiting the Project Lightwave GitHub repository when the project becomes available.

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

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

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. Photon will serve as a reference implementation for much of the innovation VMware will bring to the container space, including identity and security innovations related to Project Lightwave.

However, benefits of Project Lightwave do not require the use of Project Photon. We expect Lightwave to be adopted as an identity and access management technology for container management solutions regardless of the particular container-runtime OS being used.

Q. How can I contribute to Project Lightwave?

- A. We welcome community participation in the development of Project Lightwave and look forward to broad ecosystem engagement to help fill the gap around identity and access management constructs for containers. Getting your idea into Project Lightwave is just a pull request away, so reach out to us on [GitHub](https://github.com).

