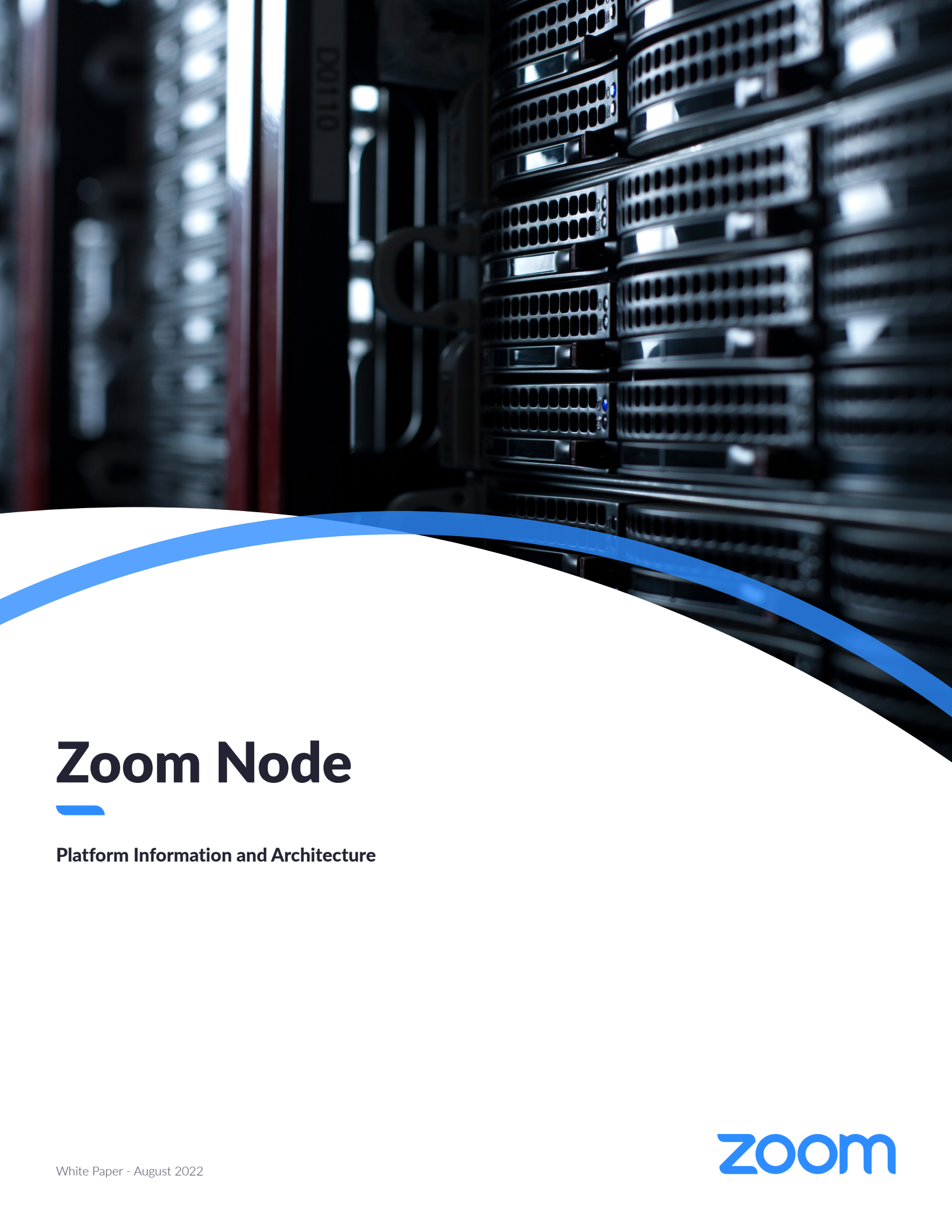




Zoom Node

Platform Information and Architecture

Zoom Node: Platform Information and Architecture

Introducing Zoom Node, a platform designed for hybrid deployment. Zoom Node is a central hub for hosting a variety of workloads — or modules — that provide functionalities, such as cloud phone survivability, designed to address certain customer deployment requirements like loss of internet connectivity or bandwidth optimization. Managed and controlled from the Zoom cloud, Zoom Node is designed to virtually connect the Zoom cloud to customer data centers.

The value of hybrid deployment

Zoom Node offers today's businesses a strategic environment for utilizing cloud-controlled applications and services. With hybrid deployment, key Zoom resources live within an enterprise's existing infrastructure, creating a few key benefits for IT:

- Limited number of ingress and egress points for external traffic
- Optimized internet bandwidth by keeping most media traffic local
- Helps provide more control over solution security
- Provides some of the essential phone calling services to mitigate the loss of connectivity to the cloud

Zoom Node features

Designed to help unify existing and future Zoom hybrid solutions for standardized deployment and management, Zoom Node comes with a robust set of features for customers looking to tailor a hybrid cloud strategy to their organization's unique needs. These features include:

- **Cloud-driven control:** The unified, hybrid cloud platform includes a cloud registration and management framework designed for easy environment and service provisioning, onboarding, status monitoring and control, as well as granular logging.
- **Real-time insights:** Leverage the Zoom cloud management and analytics interface for Zoom Node and all supported modules, with granular logging as well as an alerting and notification service enabling frictionless troubleshooting.
- **Security:** When used in conjunction with a web proxy, Zoom Node has the ability to keep all workstation traffic local inside the network and does not require any direct internet access for the workstations. Zoom Node also reduces the number of data ingress and egress points by keeping media local.
- **Module visibility:** With a registration service enabling the authorization and enrollment of components in customer data centers to the cloud and a debugging console displaying logs, stay on top of what's happening across all your modules.
- **Customizable capacity:** Zoom Node's structure allows users to tailor their hybrid strategy according to their organization's unique needs — adding on nodes and modules as required. The current Zoom Node has capacity for up to four modules.

Platform requirements

Below are the components required to run Zoom Node:

Host machine:

- Intel(R) Xeon(R) CPU E5-2630 v4+
- VMware ESXI 6.5+
- CPU: six vcores
- Memory: 16 GB
- Disk: 50 GB
- 10Gbps NIC

Network:

- Two Gbps
- Three private IPv4 addresses
- Two public IPv4 addresses
- One-to-one NAT mapping between private IP and the public IP

Zoom Node Modules

Modules are service-specific software that run on Zoom Nodes, providing hybrid services. Each Zoom Node is capable of supporting up to four service modules.

The Zoom Phone Local Survivability (ZPLS) module is designed for businesses that need to maintain certain levels of telephony service and business continuity in the event the IP connectivity is lost to the cloud.

Zoom Phone, a cloud-based service, is normally dependent on reliable IP connectivity to Zoom's data centers. However, in the event of an unforeseen loss of connectivity, Zoom can offer a survivability solution of basic telephony services in order to provide an additional layer of protection. An outage can be the result of an internet service failure at a business location or a failure in multiple Zoom data centers that prevent client devices from reaching Zoom Phone components.

The platform and OS provided by Zoom Node are distributed as a Linux-based appliance that is spun up on an on-premises VMware ESXi host. The ZPLS module does not affect the phone service during normal operations. Phone clients and devices in survivable phone sites register to the corresponding ZPLS module and are able to maintain a subset of phone features when connectivity to Zoom Phone is lost. When connectivity to the Zoom Phone cloud returns, clients and devices re-register back to the cloud. During the outage, neither the administrator nor end user is required to take any action to enable survivability — the failover and fallback process is seamless and automatic.

The current Zoom Phone Local Survivability module capacity limits are as follows (dependent on hardware configuration):

- 2,000 users per module
- 5,000 users per module

At launch, customers will supply their own server and install VMWare on it, and then install the Zoom Node and Zoom Phone Local Survivability module on it. While this is certified by Zoom, customers will need to handle the hardware deployment.

For future releases, Zoom plans to enable the ability for customers to leverage certified session border controller (SBC) vendors for a single box solution with Zoom Node and corresponding Zoom Phone Local Survivability modules. This can help streamline the deployment and procurement process.

Conclusion

At Zoom, we are continually working to improve our offerings to meet the needs of our users. With Zoom Node, we hope to enable a seamless hybrid experience for our customers and support their business' unique needs.



Zoom is for you. We help you express ideas, connect to others, and build toward a future limited only by your imagination. Our frictionless communications platform is the only one that started with video as its foundation, and we have set the standard for innovation ever since. That is why we are an intuitive, scalable, and secure choice for individuals, small businesses, and large enterprises alike. Founded in 2011, Zoom is publicly traded (NASDAQ:ZM) and headquartered in San Jose, California. Visit zoom.com and follow @zoom.