

AMAZON WEB SERVICES

NETWORKING

Traditional networking engineers entering the world of Amazon Web Services for the first time often feel like Alice in Wonderland. Everything looks and sounds familiar, and yet it all feels a bit different – ACLs sit in front of servers instead of on a router, there is no router, NAT happens somewhere behind the scenes, each subnet has its own routing table...

This ½ day workshop will help demystify the networking aspects of Amazon Web Services. We'll start with the high-level concepts, cover security aspects, and conclude with inter-VPC routing and hybrid cloud implementations.

TOPICS COVERED

High-level concepts:

- Private and public addressing
- VPC and subnets
- Packet forwarding in AWS
- Internet access and elastic load balancing
- Related AWS services
- Provisioning and orchestration

Addressing

- Internal and external addresses
- Multiple IP addresses per VM instance
- Elastic (floating) IP addresses
- Using IPv6 in AWS

Security

- Security groups
- Network ACLs

Beyond a single VPC

- VPC peering
- Building hybrid clouds

TAKEAWAYS

After attending this workshop you'll be able to:

- Map network infrastructure requirements into AWS concepts and objects;
- Design complex AWS networking infrastructure;
- Design security, Internet access and inbound load balancing for AWS workloads;
- Build hybrid clouds by connecting AWS workloads with external networks.

AVAILABILITY

Amazon Web Service Networking is a half-day on-site workshop. The workshop can be extended by in-depth technical details or discussions of customer's specific design challenges.

WHO SHOULD ATTEND

This workshop targets architects and designers who are planning, designing or building networking infrastructure within Amazon Web Services, or connecting AWS workloads with on-premises data centers.

It will also help server, virtualization, security and networking engineers understand the advantages and limitations of AWS Virtual Private Cloud and Elastic Load Balancing.

ABOUT THE AUTHOR

Ivan Pepelnjak, CCIE#1354 Emeritus, is an independent network architect, book author, blogger and regular speaker at industry events and conferences. He has been designing and implementing large-scale service provider and enterprise networks since 1990, and is currently using his expertise to help multinational enterprises and large cloud- and service providers design next-generation data center and cloud infrastructure using Software-Defined Networking (SDN) and network automation approaches and technologies.

Ivan is the author of [several books covering data center technologies](#), highly praised [webinars](#), and dozens of [data center](#) and [cloud-related](#) technical articles published on [his blog](#).