

# Cloud IPAM Sync for Amazon Web Services

## Global network and IP visibility in the IPAM

### Highlights

- Avoid losing control when deploying infrastructure in AWS
- SOLIDserver IPAM provides total visibility of networking infrastructure deployed in AWS Cloud
- Through synchronization, IPAM information is always up-to-date
- Security is fully controlled from AWS IAM service
- Network automation can be triggered by objects synchronized from EC2 & VPC
- Ecosystem fully aware of AWS resources, using IPAM open APIs

Whereas deployment in known datacenters is straightforward to manage and troubleshoot, it is a bit more complex when multiple clouds are used. This is even worse when autonomy is provided to teams which are distant from I&O teams and build infrastructure on their own.

The DDI ecosystem needs to be fully interfaced with all the cloud environments used by the corporation in order to guarantee central visibility and offer the ability to automate all processes.

### Global Visibility Using Single Pane of Glass

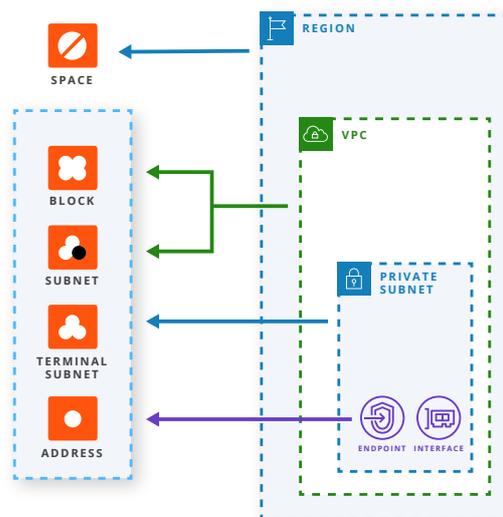
SOLIDserver IPAM integrates a global view over AWS Virtual Private Cloud (VPC) network resources. This offers complete IP topology visibility of any networks deployed in the AWS public cloud, alongside the ones hosted on-premise. All the computing servers hosted in AWS EC2 and using an IP address on a subnet are also visible directly in the central IPAM, allowing unification of the administration process.

Once synchronization information is provided to the central IPAM, all the AWS cloud networks are automatically created, modified or removed during their lifetime. IPAM still remains the central repository even with EC2 cloud hosted workloads. This enables visibility for I&O teams for processes like policy control, audit or accounting, in addition to standard management and troubleshooting.

## Synchronization and Filtering

AWS hosting is organized by region and virtual private cloud resources. A region is large enough and generally composed of enough distant datacenters to provide overall redundancy for any application. Resources can be spread across different availability zones (AZ) to provide geographical distancing and redundancy. The VPC entity can be used to separate applications or businesses environments or be able to apply specific security patterns like segmentation and zoning.

The IPAM cloud network synchronization is mainly based on region as the linchpin to an IPAM space. All subnets within a region VPC can be kept in sync with the network topology in the IPAM view. Filtering by VPC is an option to limit which networks will be synchronized, for confidentiality, performance or regulatory reasons.



SOLIDserver IPAM has a very clever way to present IP network information to the network administrator. The object hierarchy is presented on nested views, from the entire VLSM topology down to the single IP address associated with an endpoint.

From AWS topology, the Cloud IPAM Sync maps VPC address range, subnets and endpoints into the IPAM topology based on blocks, networks and IP addresses. As region and AZ (availability zones) are also synchronized in metadata, any network can easily be positioned in the AWS topology. If the name tag is positioned on resources in AWS, the name of each object is used on the IPAM in preference to its ID, easing navigation and network automation tasks.

## Push Cloud Limits with Seamless Integration

SOLIDserver Cloud IPAM Sync is based on AWS API and requires no additional tools or solutions to be set up. Security of access is controlled directly in the Identity and Access Management service (IAM) via a dedicated API token. All communications use an encrypted channel in order to guarantee confidentiality and integrity of the data exchanges.

Revisiting of the link between AWS Cloud Services and the SOLIDserver is a very simple task, requiring an IAM API key to be associated with an identity and some parameters to be set in the IPAM. It only takes 5 minutes to perform all actions on both sides and directly see the blocks, subnets and endpoints created in the space during synchronization.

## Network and Security Automation

With every IP networking object synchronized from AWS VPC, the flexible APIs and automation process available by default in the SOLIDserver can be used for richer orchestration, control and security automation with the whole ecosystem. All existing tools and solutions already connected to the SOLIDserver DDI solution can directly benefit from AWS networking information and extend their coverage, without requiring any major change.



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As one of the world's fastest growing DDI vendors, EfficientIP helps organizations drive business efficiency through agile, secure and reliable network infrastructures. Our unified management framework for DNS-DHCP-IPAM (DDI) and network configurations ensures end-to-end visibility, consistency control and advanced automation. Additionally, our unique 360° DNS security solution protects data confidentiality and application access from anywhere at any time. Companies rely on us to help control the risks and reduce the complexity of challenges they face with modern key IT initiatives such as cloud applications, virtualization, and mobility. Institutions across a variety of industries and government sectors worldwide rely on our offerings to assure business continuity, reduce operating costs and increase the management efficiency of their network and security teams. Copyright © 2022 EfficientIP, SAS. All rights reserved. EfficientIP and SOLIDserver logo are trademarks or registered trademarks of EfficientIP SAS. All registered trademarks are property of their respective owners. EfficientIP assumes no responsibility for any inaccuracies in this document or for any obligation to update information in this document.