Cloud IPAM Sync for Google Cloud Platform

Global network and IP visibility in the IPAM

Highlights

- Avoid losing control when deploying infrastructure in GCP

- SOLIDserver IPAM provides total visibility of networking infrastructure deployed in GCP Cloud

- Through synchronization, IPAM information is always up-to-date

- Security is fully controlled from Google Cloud Platform service

- Network automation can be triggered by objects synchronized from GCP

- Ecosystem fully aware of GCP resources, using IPAM open APIs

Any workload deployed in a renowned and integrated environment is de facto well managed and provides a controlled service level. For workloads deployed in Public Clouds such as GCP, it is more difficult to ensure all processes and enforcement are fully controlled. 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 GCPProject and Virtual Private Cloud (VPC) network resources. This offers complete IP topology visibility of any networks deployed in the GCP public cloud, alongside the ones hosted on-premise. All the computing servers hosted in GCP 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 GCP cloud networks are automatically created, modified or removed during their lifetime. IPAM still remains the central repository even with GCP 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 Mapping

The IPAM cloud network synchronization is based on all these properties in order to be able to apply specific parameters to each, like frequency or space in which network topology will be found. If required, some networks can be filtered out from the synchronization process, for confidentiality or regulatory reasons for example. The VPC entity can be used to separate applications or business environments or be able to apply specific security patterns like segmentation and zoning.

SOLIDserver IPAM has a very clever way to present IP network information to the network administrator. The object hierarchy is presented on overlapping views, from the entire VLSM topology down to the single IP address. All subnets within a VPC can be kept in sync with the network topology in the IPAM view.

From GPC topology, the Cloud IPAM Sync maps VPC address range, subnets and endpoints into the IPAM topology based on blocks, networks and IP addresses.
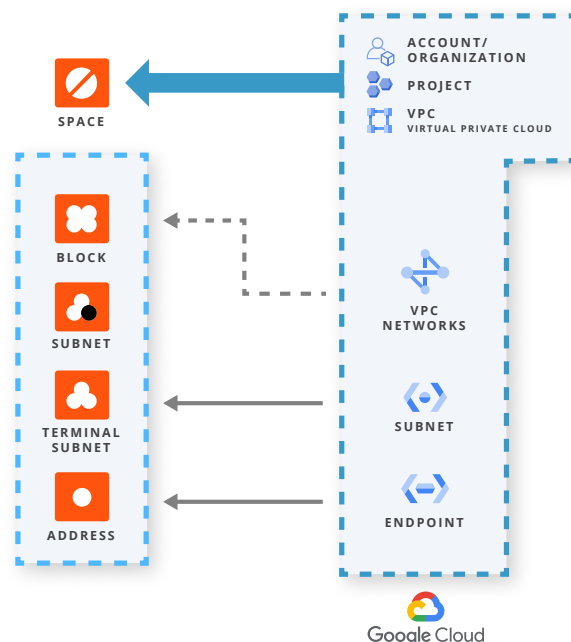
Push Cloud Limits with Seamless Integration

SOLIDserver Cloud IPAM Sync is based on GCP API and requires no additional tools or solutions to be set up. Security of access is controlled directly in the GCP through the application permissions. All communications use an encrypted channel in order to guarantee confidentiality and integrity of the data exchanges.

Provisioning of the link between GCP Cloud Services and the SOLIDserver is a very simple task, requiring an identity on GCP 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 GCP 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 GCP networking information and extend their coverage, without requiring any major change.