CENGN

SOLANA'S SMARTHAWK SOLUTION PROVIDES NETWORK MAPPING CAPABILITIES

Solana's SmartHawk provides auto discovery and network mapping capabilities for both Layer-2 and Layer-3 IP networks. Its patented approach to network discovery results in an industry leading fast, scalable and accurate topology map. SmartHawk provides unprecedented network visibility for operators of Datacenters and Service providers.

SCALABLE NETWORK DISCOVERY MAPPING

CHALLENGE

When operating complex data centers and provider networks, it is imperative to have reliable state updates on a wide range of network functions. Today's large networks are both complex and dynamic, necessitating sophisticated monitoring capabilities, including real-time updates on performance and status.

Most monitoring tools are capable of standard oversight and updates, however there is a strong need for the ability to identify and alert operators on critical performance or security issues that arise in a network.

Solana partnered with CENGN to deploy and test its SmartHawk solution designed to provide automated network discovery and mapping insight for both Layer-2 and Layer-3 networks. The SmartHawk topology discovery solution provides a unique vantage point for enhanced network monitoring, including automated security and network performance updates.

SOLUTION

CENGN was able to implement SmartHawk in its data center in order to successfully monitor its environment for network and security performance issues.

SmartHawk's implementation provided many operational benefits, and made it easier to troubleshoot and diagnose network issues.

In addition, SmartHawk's approach to the network discovery resulted in an accurate switch topology map, including end systems. As an outcome, CENGN can now utilize the auto-discovery and network monitoring capabilities.

Company	Device/Network
SOLANA NETWORKS	SmartHawk VA SmartHawk Management Client
CENGN	Data Center environment

SMARTHAWK TOPOLOGY – SOA-DRIVEN PLATFORM

SmartHawk delivers powerful features beyond a standard network monitoring tool. The key difference with SmartHawk is its highly accurate, scalable and vendor agnostic approach to network auto discovery and mapping.
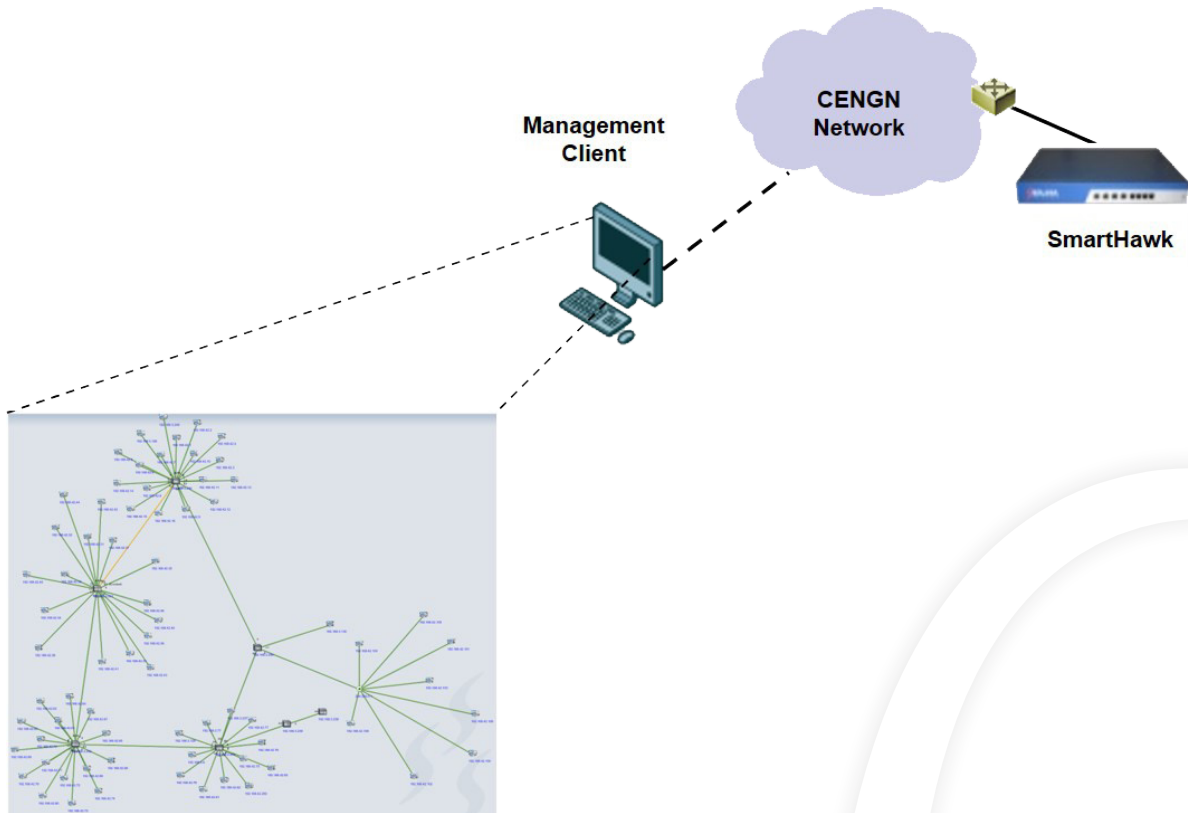
COMPONENTS OF DEPLOYMENT DIAGRAM

SmartHawk
Available as hardware or virtual appliance. It needs to be connected to the network physically or over a GRE tunnel.

Management Client
Provides user interface and it can be deployed on any host computer in the network.

Installation
Management client can be installed on any windows or linux system. SmartHawk can be installed on a hardware or virtual appliance. A single instance of SmartHawk can discover and monitor the network.

Configuration
Need to assign an IP address to ensure reachability to the Layer-2 subnet to be discovered. Need to create routing adjacency in case of layer-3 discovery.

Discovery
SmartHawk utilizes a combination of routing and SNMP data to automatically discover network inventory and topology.

Monitoring
Once topology is discovered, a set of attributes can be monitored. This includes, traffic utilization, up-time, class of service, routing posture, end-to-end paths, VLANs etc.

Export
SmartHawk data can be exported and integrated with 3rd. party tools e.g., Zabbix.

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