CISCO NETWORK SERVICE ORCHESTRATOR

cisco.com/go/nso

VENDOR SNAPSHOT

PRODUCTS AND SERVICES

NSO is the part of the Cisco Crosswork Network Automation suite that automates provisioning of multi-vendor communications resources for CSPs and enterprises. It abstracts network resources using data models and provides both user interfaces and northbound APIs to OSS and BSS systems for automating end-to-end business processes. It consists of:

- The NSO platform, an automation and orchestration toolbox that includes an abstracted inventory of network resources.
- A model-based programmable interface for configuring role-based user instances and interfaces to OSS & BSS systems.
- A set of service packs (offered as a service) that extend its functionality to specific tasks such as OS upgrades, device port turn-up, zero-touch provisioning, VNF orchestration, SD-WAN networking, and cloud collaboration.
- NSO can be used on its own for provisioning in transport domains is included as an essential module in domain-specific automation solutions Cisco supplies, including MSX and Ultra
- Add-on software solutions from third-party ISVs.

KEY STRATEGIES

- Use a standards-based, YANG model-driven approach that abstracts the specifics of the network resources for users and northbound systems
- Embed NSO in domain-specific solutions to create an NSO-driven automation 'fabric' across multiple domains + groups
- Position NSO as a key element in the Crosswork suite, usable on its own or with other Crosswork applications as the customer requires
- Proactively support customer & 3rd party developers with an NSP developers program to allow extensions to NSO for specific use cases & integration into those environments
- Align network operations with business intent

Key Customers

- Orange Business Services
- Jio
- Telstra
- T1-3 CSPs & large enterprises

Founded
1984

Cisco Network Service Orchestrator (NSO) is a part of the Crosswork Network Automation suite of software products. It orchestrates the cross-domain provisioning of multi-vendor network resources.

Ecosystem

- *Cisco Elastic Services Controller (ESC) for VNFM functions.*
- *Other Cisco Crosswork suite components.*
- *Cisco & over 150 other-vendor physical and virtual network devices.*

San Jose, CA

Worldwide

ANALYSIS

- NSO, and the other Crosswork applications, are more productized than many offerings in this space, but still are better described as richly-featured platforms with extensive libraries of adapters, extensions + common functions that can be implemented by Cisco, SIs, or CSPs to fit the situation.
- NSO's versatility is a competitive advantage, being usable in single, multi- & cross-domain deployments. Supporting service assurance as well, though, requires additional components and flows to automate modifications in the network using NSO as the 'engine' that automatically closes those loops.