

# Network Object Manager

## Trusted Network Objects Repository for IT Design and Automation

### Highlights:

- Construct a Network Source of Truth (SOT) repository of network objects and their metadata
- Model and Visualize any network topology, find each network object easily from the map
- Manage the entire lifecycle of your network objects for improved capacity planning
- Integrate with other applications for fast, error-free provisioning and infrastructure life-cycle management automation, saving time and increasing operational efficiency
- Compare your planned topology with the actual network to identify differences and accelerate decision to remedy as need be
- Improve security, risk management, and compliance with exhaustive and trusted information

Today, in an ever-complex IT infrastructure with multiple devices, applications, and hybrid and multi-cloud architectures driven by the increase of digitalization and work-from-anywhere initiatives, network automation has become critical. But challenges reside in siloed, inaccurate, and fragmented data across organizations. To resolve this issue and reap the benefits of network automation, any IT team needs a comprehensive, trusted, and shared repository of network objects and their metadata.

Network Object Manager (NOM) by EfficientiP tackles these challenges and offers the NetSecOps, CloudOps, DevOps, or AIOps teams the ability to construct a Network Source of Truth (SOT) repository to manage the entire lifecycle of network objects. NOM provides a comprehensive, reliable, and open inventory of network objects to plan, build and automate your networks. Any information is presented via a central, and unified network management interface and through open APIs.

## Network Object Manager at a Glance

Network Object Manager permits to model and visualize any network topology facilitating the process of resource capacity planning and provisioning. From its intuitive interface, you can create, check, modify, delete or graphically view any network objects, physical or virtual, already deployed or not, enabling your IT teams to control and manage their end-to-end lifecycle.

As an open data repository, the solution can aggregate and consolidate additional information coming from other IT repositories, databases or from the NetChange and Cloud Observer discovery tools into a single Source of Truth. IT teams can securely build and maintain a trusted, shared and exhaustive inventory anytime to streamline their processes while improving risk management and compliance.

Leveraging NOM's secure and open APIs, you can jump-start your automation journey, and truly benefit from zero-touch operations. You can easily integrate the solution within your IT ecosystem to feed network automation, reducing human errors, saving time and increasing operational efficiency.

## Key Benefits

- Build a comprehensive, trusted and open network objects' repository to share with your DevOps, NetSecOps and ITOps teams and serve as a Network Source of Truth
- Increase operational efficiency by using open APIs to streamline your automation process enabling fast, error-free provisioning and deployment of network objects
- Simplify network objects' lifecycle management and stay in control of your IT infrastructure to control costs
- Improve risk management and compliance based on exhaustive, trusted information and the ability to faster detect and remediate threats
- Ease network capacity planning by defining and visualizing any network topology leading to better sizing

## Key Features

### Network Source of Truth Repository

Network Object Manager offers a centralized repository of virtual and physical devices, connected or not to the network. Any type of network object can be inventoried including switches, routers, servers, PC, printers, IP phones, Internet of Things (IoT), Virtual Machines (VM), containers, Virtual Private Clouds (VPC), with their number and types of interfaces and attributes such as OS, Cloud ID, CPU, RAM, Disk size, status, cloud provider, instance types, tags/labels, and more.

The screenshot displays the Network Object Manager interface. On the left, a detailed view of a network object named 'Adine-Akim' is shown. The 'MAIN PROPERTIES' section includes:

- Name: Adine-Akim
- Description: Republic-of-Korea
- Folder: generator/Republic-of-Korea
- Type: desktop
- State: up
- Nb. of interfaces: 2
- Nb. of connected ports: 1
- Main IPv4: 10.202.124.89
- Main IPv6: f0c8:d923:7ab0:fdff:d576:4854:6a36:5...
- Connected objects (list): MSCI-network

The 'CONNECTED NETWORK OBJECTS' section shows:

- generator/Republic-of-Korea
  - MSCI-network
    - port\_1050

On the right, a table lists all network objects. The table has columns for Name, Folder, Type, State, Nb. of interfaces, Nb. of connected ports, and Ma. The table contains 30 rows of data, including objects like Abate-Krystie, Abdella-Blesko, Abram-McDevitt, Action-Jovia, Adaiha-Loralyn, Adalaj-Tej, Adamsien-Helen, Ade-Lusster, Adest-Huntley, Adham-Rickel, Adine-Akim, Adkins-Chud, Adna-Mano, Aanneea-Hoferek, Afra-Lamohete, Agamermon-Auna, Aeretha-Lindley, Ahi-McEllistrem, Ahmad-Locken, Ahmar-Sayres, Aiken-Luric, Airet-Mobers, Akanke-Cirilla, and Akela-Abernon.

From the web interface, you can easily create, modify, check, delete and graphically view any network objects. Even connections between different network objects can be defined and visualized.

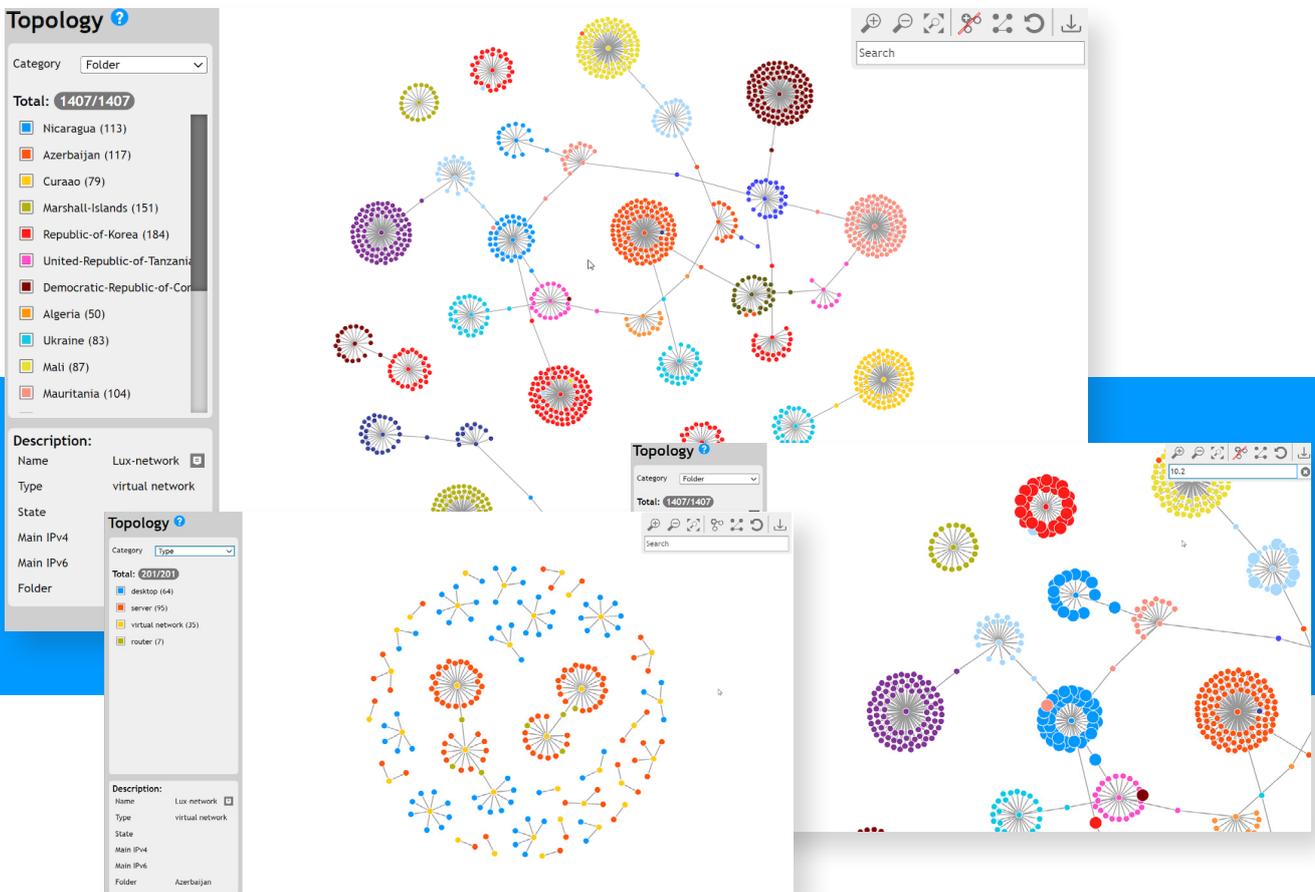
For easy setup, Network Object Manager can also be populated with the data discovered by NetChange and Cloud Observer for on-prem networks, and any cloud instances thanks to open APIs. Manual additions and bulk device imports are also supported. Network Object Manager is designed to dynamically interoperate with existing IT asset management solutions (ITAM) to unify IT repositories and processes as well as with IT Service Management (ITSM) and Cloud/Network Orchestrators to be used as a Single Source of Truth repository for Network Automation.

Network Object Manager is the ideal solution beyond the DDI to design, plan and store information related to network objects of all types. As long as the network object uses a network interface or is managed as part of a Cloud Orchestrator, a Hypervisor, or a Network Controller, Network Object Manager is the best place to store its metadata, interfaces, IP addresses, and any other attributes. The automatic topology link between network objects and IPAM entries based on the IP address identifier brings a wider visibility.

### Model and Visualize Your Network Topology

Network Object Manager's web-based intuitive User Interface enables IT administrators to design and visualize network topology, mapping the connections between different network objects for any possible network attachment (direct, using VLAN, interface bonding, multi-interface per port...), thus dramatically speeding up the process of resource planning, provisioning, and quality assurance.

- Organize network objects with classes and metadata like to-order, in-stock, backup, live-production, admin and more, and naming conventions, streamlining planning, usage, allocation, and enforcing company policies
- Define and visualize all connections between network objects. Examples include server-switch or VM-VPC to model your network architecture and visualize it using filters based on metadata
- Unify the management of VLAN within VLAN Manager directly while creating network object interfaces attached to VLANs
- Control and leverage infrastructure investment and recurring costs by anticipating and planning your connectivity and capacity requirements
- Delegate network objects' lifecycle through role-based access control, wizard-driven workflow processes



### Compare Your Network Source of Truth Repository with the Actual Network

Network Object Manager comes fully integrated into SOLIDserver Solutions. NetChange and Cloud Observer discovery tools are essential complementary solutions to EfficientIP's Network Object Manager. The following key information can then be created or updated: public Cloud provider, instance name, VPC, CPU, RAM, instance type, OS, storage capacity, status, tags/labels, Public IP addresses, first seen, last updated to name a few.

NetChange and Cloud Observer enable you to compare the network topology defined in the Network Object Manager repository with discovered information and allows you to identify differences. Thanks to SOLIDserver's intelligent technology, the network is truly visible, easily analyzed, and compared with the unified DDI repository.

### Enable Your Network Automation

As a Network Source of Truth, it brings an unparalleled ability to accelerate network automation processes and manage the complete end-to-end network objects' lifecycle. Thanks to the use of open APIs, you can complete

- Network objects creation, change or removal with their related connections via automation with third parties orchestrators, hypervisors, and network controllers
- Event-driven automation triggered by changes performed in Network Object Manager thanks to Event Forwarder
- End-to-end network deployment consistency control either on-premise or in public/private clouds
- Trusted and exhaustive information delivery to help AIOps and SecOps teams ensure security, forensics, and manage risk and compliance
- Best practices enforcement through policy-driven deployment



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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.

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