

Itential Adapters

Consolidate functionality and data from existing tools to enable Network Intelligent Workflows to automate modern networks.

Overview of Itential's out-of-the box adapters and custom integrations based on specific use cases for use within the Itential platform.

The Modern Network

In today's rapidly evolving IT landscape, organizations are tasked with maintaining existing infrastructure while simultaneously adopting and integrating new cloud-based technology. However, network technologies have evolved at a slower pace and traditional methods of managing the network, through manual command line interfaces (CLI), are unable to scale and keep up with the pace of emerging technologies coming to fruition. We are entering a new era of network innovation where a modern network is needed to support and enable digital transformation.

The modern network is not only designed to enable automation but requires it to be effective. The key traits of the Modern Network are:



Programmable First



Cloud Native



Embraces Physical



Application & Service Focused



Open & Standardized

As technology domains shift to support agile-based methodologies, DevOps processes, and programmability, it is imperative that the network undergoes this same transformative shift, utilizing the right tool for the right job.

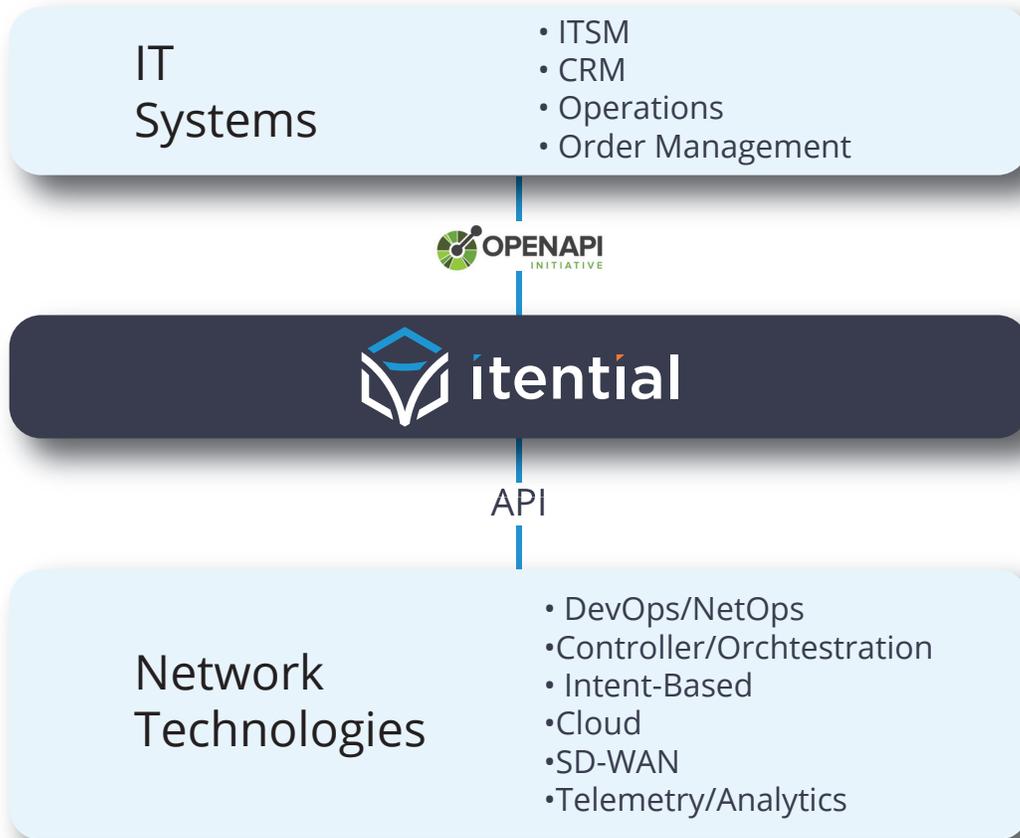
Intelligent Automation for the Modern Network

Itential is purpose-built for today's complex, heterogeneous networks. From cloud-based networks to data center networks and from NFV to distributed WANs – Itential includes the features needed for the most difficult, large enterprise and service provider class network automation projects.

Serving as an API aggregator that easily integrates with solutions across multiple domains by providing a common interface for all systems, Itential federates functionality and data from existing tools to enable modern network automation. With Itential, network operators are able to leverage their existing technology investments, with no disruptions to their business. With Itential's Network Intelligent Workflows, users can enable true turnkey, closed-loop network automation by connecting all their orchestrators and controllers with their IT Service Management applications and configuration tools.

The Modern Network Ecosystem

Intential's low-code environment provides the ability to consolidate functionality and data from existing tools to enable Network Intelligent Workflows to automate modern networks.



Intential Adapters

Adapters consume APIs from other systems, possibly using the brokers layer to normalize and unify the data in combination with other systems, in order to augment application and network intelligent workflow capabilities.

Intential provides out-of-the box adapters and custom integrations based on specific use cases. The list below represents the common networking domains and toolsets Intential has integrated with for customers:

| Name | Description |
|--|---|
|  | Ability to manage security policies across the network including firewall rules and access control lists. |
|  | Ability to create, modify, delete VNF/VPC/VMs, as well as to reserve resources and configure permissions. |
|  | Device and service management, including creation, modification, and deletion as well as dynamic form generation based on YANG service models within NSO. |

Adapters Continued

| Name | Description |
|--|--|
|  PSIRT | Ability to add, update, and retrieves KB articles. |
|  WAE | Querying for link utilization and topologies, as well as modifying capacity on links. |
|  EPN | Retrieves device and chassis information, retrieves and provisions templates, gets job details. queries virtual connections, termination points, & service profiles, checks for status of a device based on alarms present, can add/remove a device from monitoring during the execution of an Intelligent Network Automation. |
|  Cloudify | Create and deploy services from Blueprints and dynamic form generation based on TOSCA models. |
|  Email | Adds the ability to send email notifications. |
|  Ericsson Granite | Querying for availability of resources (e.g. ports, IPs, etc.), reservation of resources, and updating of network inventory. |
|  GitLab | Querying for availability of resources (e.g. ports, IPs, etc.), reservation of resources, and updating of network inventory. |
|  Google Cloud Platform | Ability to create, modify, delete virtual components, as well as to reserve resources and configure permissions. |
|  Infoblox | Ability to add, change, delete, and request available resources. |
|  Jira | Ability to add, modify, and track source code changes. |
|  kafka | Ability to subscribe to and trigger actions based on a message stream, as well as insert messages into a stream(s). |
|  kubernetes | Ability to create, modify, delete container based elements, as well as to reserve resources and configure permissions. |
| LDAP | Definition of user access permissions, including group-based permissions. |
|  LiveAction™ | Checks for status of a device based on alarms present in LiveAction during the execution of an Intelligent Network Automation. |
|  Azure | Ability to create, modify, delete VNF/VPC/VMs, as well as to reserve resources and configure permissions. |

Adapters Continued

| Name | Description |
|--|--|
|  Microsoft Teams | Ability to post notifications to a group from Microsoft Teams. |
|  mongoDB | Storage of configuration data and data required by custom applications developed on the Itential platform. |
|  Moogsoft® | Checks for status of a device based on alarms present and can add/remove a device from monitoring during the execution of an Intelligent Network Automation. |
|  MySQL | Querying, adding, modifying, and deleting of data. |
|  NAPALM | Device management, including device turn up, decommission, and configuration management. |
|  netbox | Querying for availability of resources (e.g. ports, IPs, etc.), reservation of resources, and updating of network inventory. |
|  Netcracker | Querying for availability of resources (e.g. ports, IPs, etc.), reservation of resources, and updating of network inventory. |
|  openstack. | Ability to create, modify, delete VNF/VPC/VMs, as well as to reserve resources and configure permissions. |
|  {php} IPAM | Querying for availability of IP addresses, reservation of IP addresses, and updating of network inventory. |
|  puppet | Device management, including device turn up, decommission, and configuration management. |
| RADIUS | Definition of user access permissions, including group-based permissions. |
|  ANSIBLE | Centralized management of Ansible Playbooks and Modules, exposure of those modules' functionality for use in Network Intelligent Workflows, and device management. |
|  RED HAT ANSIBLE Tower | Device management, including device turn up, decommission, and configuration management. |
|  SALTSTACK | Device management, including device turn up, decommission, and configuration management. |

Adapters Continued

| Name | Description |
|--|--|
|  | Change management and ticketing functionality, including triggering a Network Intelligent Workflow from ServiceNow and checking for approval to execute from within an automation in progress. |
|  | Checks for status of a device based on alarms present in SevOne during the execution of an Intelligent Network Automation. |
|  | Ability to post notifications and complete tasks from Slack. |
|  | Ability to automate testing after a new device/service has been provisioned, as well as after configuration changes have been made. |
|  | Ability to manage security policies across the network including firewall rules and access control lists. |
|  | Querying for availability of resources (e.g. ports, IPs, etc.), reservation of resources, and updating of network inventory. |

Get Started on Your Journey to Network Automation

The days of network teams being the bottleneck to IT change are now over. Organizations that realize the advantages of software-driven network automation technologies with closed-loop automation capabilities have a tremendous market advantage during this age of Digital Transformation and IoT expansion.

Let Itential show you how their Intelligent Network Automation solution can enhance and accelerate your network automation projects and enable your next-generation, agile network engineering and operations teams to lead you toward your digital future.



Itential simplifies and automates the journey toward the Modern Network and bridges the gap between IT and networking teams by enabling users to easily build, execute and visualize Network Intelligent Workflows. Itential's low-code environment provides a vendor agnostic, turnkey solution, connecting network orchestrators and controllers with IT Service Management applications and configuration tools to accomplish closed-loop network automation. Itential's products are in use today within some of the world's largest networks, including many of the top service provider and financial services companies throughout the U.S. and abroad.

 www.itential.com

 info@itential.com

 +1.800.404.5617