

Junos Space Service Now

Product Overview

Junos Space Service Now frees network operators from time-consuming support tasks. Service Now will automatically detect events on Junos-based devices and automatically initiate the support process. By using Service Now, operators will benefit from faster repair time, a support simplified experience, and decreased downtime.

Junos Space Service Now is part of Juniper Networks Automated Support and Prevention solution.

Automated Support and Prevention Overview

Juniper's Automated Support and Prevention (ASAP) solution is a collection of applications, tools, and processes that utilize Juniper's expertise to automatically resolve product issues, prevent outages, provide insights, and increase productivity for customers. The ASAP solution includes Junos Space Service Now, Junos Space Service Insight, Juniper Case attachmentment Tool Suite and Juniper Support Services.

ASAP instills customer confidence by ensuring that if Juniper's products do encounter a problem, it will be detected quickly and presented as an incident in Service Now without operator intervention. Customers can use Service Now to submit the incident as a new support case, or configure a "zero touch" Auto-Submit Policy that will do so automatically. ASAP establishes Juniper as the premier trusted support provider for networking equipment.

Product Description

Junos Space Service Now is a critical component of Juniper's Automated Support and Prevention solution. It leverages already running process within Junos-based devices to monitor the customer's equipment, detect problems and other conditions requiring attention. Space Service Now automates incident detection, data collection, case creation, and case attachmentment functions.

When Junos Space Service Now detects an issue, it immediately collects necessary data, and opens a Juniper Technical Assistance Center (JTAC) ticket – completely automatically and without impacting performance. This automation minimizes the need for customers to be involved with problem analysis and correction. As a result, average mean time to resolution (MTTR) and time for a permanent fix are significantly reduced.

Junos Space Service Now utilizes Advanced Insight Scripts (AI-Scripts) to automate event detection and initiate support responses. The AI-scripts are installed on Junos devices are based on the vast knowledge and expertise of Juniper Customer Service analysts and engineers and designed to replicate established responses to specific events. The AI-Scripts can detect well-over 400 events on Junos products. AI-Scripts scripts automatically detect events based on their signatures and trigger Service Now to initiate support responses such as case creation. Within Service Now customers can create an event profile to select which events Service Now should act on and the desired response.

In addition to detecting operational issues, Junos Space Service Now collects data related to device health and configuration. This data is collected regularly and sent to Juniper Support Systems (JSS), which then delivers actionable insights and recommended actions provided in the form of targeted proactive bug notification along with EOL/EOS analysis. This analysis is delivered to customers using the Juniper Space Service Insight – another component of Juniper's Automated Support and Prevention solution.

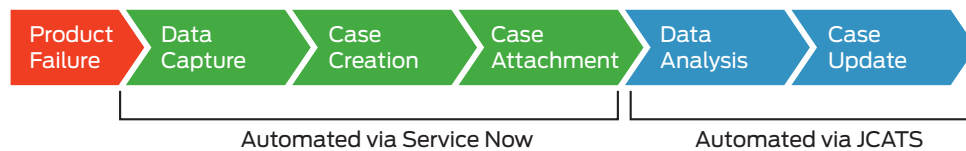


Figure 1: Automated Troubleshooting and Support Capabilities

Junos Space Service Now Features and Benefits

Automation Capabilities

Junos Space Service Now and Juniper Case attachmentment Tool Suite (JCATS) automate many essential support tasks required to resolve system issues: See figure 1

Figure 1: Automated Troubleshooting and Support Capabilities

Junos Space Service Now automates these following functions:

- **Event detection** – Common product event detection processes within the Junos OS are used by Service Now to initiate its automation actions
- **Data capture** – Data needed for troubleshooting the incident is gathered from affected products.
- **Case creation** – Once an incident is detected, Service Now with signal Juniper's trouble ticketing system to create a case for incident tracking
- **Case attachmentment** – Relevant product data specific to the incident is gathered and attached to the case file

Juniper Case attachmentment Tool Suite (JCATS) automates these functions:

- **Data analysis** – extensive analysis is performed of data captured to determine root cause.
- **Case update** – Service Now will update the case with new information as obtained.

Additional Features

Junos Space Service Now also provides:

- The ability to initiate troubleshooting responses to only those events specified.
- SDK for operational integration and customization
- Fast access to knowledge resources detailing the cause, symptoms and corrective action for each fault detected
- The ability to open technical support cases on-demand for all devices managed including devices without AI-Scripts installed
- Instant detection of hardware failures for RMA with streamlined RMA ticket creation
- Options to configure BIOS validation on a device running Junos
- A dampening mechanism to reduce noise from events for which a case is already opened
- Asset management that provide clear understanding of Juniper product deployed and important related information

Flexibility in Configuration and Operation

With an easy to use Web-based GUI interface, Junos Space Service Now is designed to simplify how information is received from users and displayed. This intuitive user interface allows for easy configuration and operation, enabling users to quickly ramp up and enable these applications and receive benefits from Automated Support and Prevention.

Many users have devices that serve multiple needs in different parts of the network, with each device operating at a different priority level. Service Now's event profiles and notification features allow users to specify how to implement the automation of problem detection, responses, and information events. The event profile maps a set of AI-Scripts that will run in respond to a specified event. Thus, Junos Space Service Now has a tremendous amount of control available to users so it can be tailored to meet unique customer requirements.

Scalable Solution

Junos Space Service Now and Junos Space Service Insight are essential applications that run on the Junos Space Network Management Platform. Junos Space is implemented as a scalable fabric of physical or virtual appliances that work collaboratively. With this architecture, customers can expand or contract their fabric by simply adding or deleting nodes as needed. Each node is fully utilized as they work together to provide a scalable and resilient platform.

Security Built-in

Junos Space Service Now has been engineered to provide secure connectivity, integrity, and availability for all data collected, stored, and transported. Junos Space Service Now uses accepted industry security standards and techniques such as SSH and HTTPS for authentication and encryption of all communications.

Customers also have the option to control the extent of information shared with Juniper by adjusting the level of information sent to JSS through four levels of filtering. Using this shared information, Juniper is uniquely positioned to determine the potential risks to the customer's network, perform detailed troubleshooting, and provide a superior customer experience. Refer to the Junos Space Service Now User Guide for more information.

OSS/J Integration

OSS/J delivers standards-based interface implementations (OSS/J APIs) and design guidelines for the development of component-based OSS systems. OSS/J technologies provide the foundation for unifying legacy systems and new applications quickly and

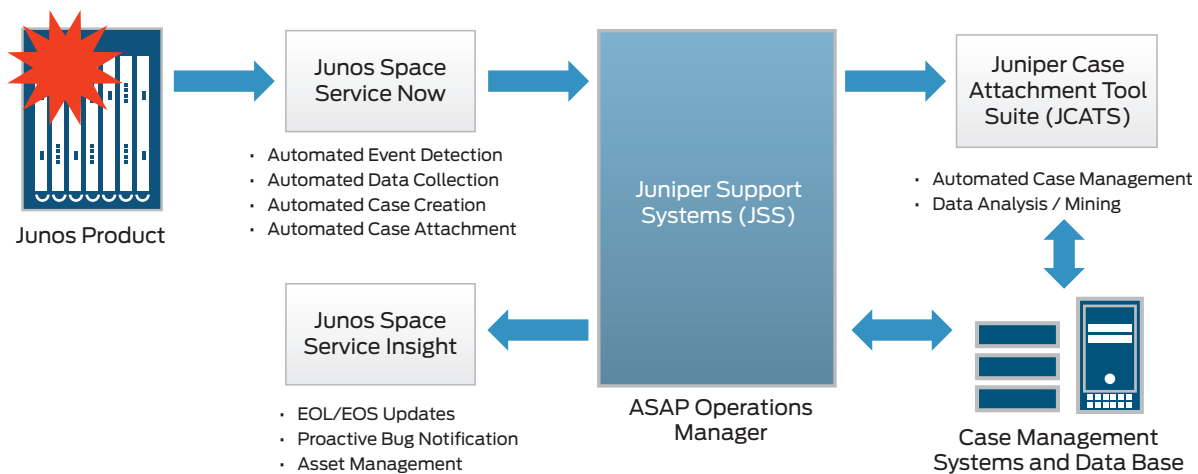


Figure 2: Juniper ASAP Architecture

at low cost. The OSS/J APIs support multiple technologies and include Java, XML, and Web Services integration profiles.

Juniper's eBonding Solution allows trouble tickets and updates system to be exchanged with Juniper's trouble ticket system. This enable the customer to benefit from of the automation features with Space Service Now.

The OSS/J building block for Space Service Now uses a WSI profile for exposing these trouble ticket APIs.

Why Automate with Juniper's ASAP Solution?

Juniper Networks Automated Support and Prevention (ASAP) presents a compelling value proposition for Juniper's customers — even those that already have a Resident Engineering team. ASAP is ushering in a new wave of operational efficiency for network operators. Its components like Junos Space Service Now, Junos Space Service Insight, and Juniper Case attachment Tool Suite (JCATS) work together to automate many essential operational tasks beginning with incident detection and diagnosis, then performing case creation tasks and accumulating the required troubleshooting data and attaching it to the case — without operator involvement. See figure 2 above for a view of the ASAP architecture.

Junos Space Service Now provides a simplified and efficient workflow solution for automated fault diagnosis that is based on the technical expertise from Juniper specialists. It does not require manual intervention when creating support tickets, which enables a dramatically reduced MTTR and operator time. Junos Space Service Now-generated cases lead to a higher quality, more actionable problem report than those initiated through the web or phone, ultimately reducing downtime and cost.

Junipers' Automated Support and Prevention combines embedded functionality within Junos and advanced technologies such as Advanced Insight Scripts and Expert Systems to create a powerful automation solution. ASAP's scripts and expert systems

are derived from support specialists, automating their methods and processes to optimize incident detection and resolution and relieve operators of many tasks. The ASAP solution delivers many benefits to customers, including:

- **Increased Productivity** – Automated processes minimize operator time needed create and manage incident cases.
- **Increased Product Resiliency** – Streamlined incident detection and diagnosis result in reducing MTTR and having equipment operational again.
- **Increased Awareness / Risk Reduction** – Being informed of important product information such as bugs, health, and EOL/EOS dates empowers operators to plan and anticipate upcoming events.
- **Increased Confidence** – Knowing that Juniper products have integrated automated support capabilities will help assure customer to base their more critical networks on Juniper Networks products and technologies.

Operational Specifications

Client Browser Support

Supported browsers include Firefox, Internet Explorer and Chrome. See the Junos Space datasheet for specific details at www.juniper.net/assets/us/en/local/pdf/datasheets/1000297-en.pdf.

VMware Version

Junos Space works with VMware vSphere products. See the Junos Space datasheet for specific detail at www.juniper.net/assets/us/en/local/pdf/datasheets/1000297-en.pdf.

Juniper Platform Support

Juniper Service Now is compatible with Juniper Networks devices running Junos OS 10.4 and later releases.

Juniper Service Now and AI-Scripts will support the set of supported Junos versions, as defined at <http://www.juniper.net/support/eol/junos.html>

Integration with Junos Space Network Management

Junos Space Service Now and Service Insight are part of Junos Space, a comprehensive network management solution that simplifies management of Juniper's switching, routing, and security devices. With Junos Space, customers can simplify and automate the network, improve network agility, and deliver new services quickly – all from a single console. Junos Space is composed of the following three software elements:

- **Junos Space Network Management Platform** – This provides comprehensive FCAPS and element management of Juniper devices. This improves operator efficiencies, providing a programmable interface and exposable API's that enable the development and integration of third-party applications.
- **Junos Space Management Applications** – This series of plug-and-play, domain-specific applications helps customers provision new services and optimize workflow tasks across thousands of Juniper devices.
- **Junos Space SDK (software development kit)** – This is a programmable network solution that empowers customers to leverage the connections and intelligence imbedded in the network to create customized management solutions.

To verify the compatibility of applications with the Junos Space Management platform, check the Junos Space Application Compatibility document at: <http://kb.juniper.net/InfoCenter/index?page=content&id=KB27572>

Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services that are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value for your network. Juniper Networks ensures operational excellence by optimizing the network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services.

Ordering Information

Junos Space Service Now and Junos Space Service Insight application software is available for no charge to all customers with a paid Juniper Care support contract.

Juniper Service Now and Juniper Service Insight are available to all Juniper Support Services Specialist Partners.

Junos Space Service Now and Space Service Insight application along with release documentation can be downloaded at: <https://www.juniper.net/support/downloads/?p=servicenow#docs>.

For More Information

For more information about Junos Space Service Now and other Juniper Operational services, please visit: www.juniper.net/us/en/products-services/services/technical-services/operate/#tab-maintenance.

Please contact your Juniper Networks representative for more information.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

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