NETWORK OPTIMIZATION
CONSULTING SERVICES

Service Description

Juniper Networks® Network Optimization Consulting Services ("Services Offerings") is a pre-packaged prescriptive set of services that are delivered remotely based on the End User’s specific networking needs. The offerings are proactive services designed to maximize the effectiveness of your specific network while reducing operating costs and minimizing network issues.

The Services Offerings can be purchased by the End User using any of the following methods:

- Using the service specific SKU and corresponding list price on the Juniper published price list; or
- Using Flexible Services Credits with value equivalent to the list price of the Services specific SKU on Juniper’s published price list; or
- By redeeming required number of Advanced Services Credits (ASC)

Below is the list of available pre-packaged Services Offerings and corresponding number of ASC’s required (if redeemed using ASC):

<table>
<thead>
<tr>
<th>Service Name</th>
<th># of ASC required</th>
<th># of FLEX Credits required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Issue Impact Review Service (PIIR) – One time/Quarterly</td>
<td>4/16</td>
<td>11/43</td>
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<tr>
<td>Software Upgrade Recommendation and Review Service (SURR)</td>
<td>5</td>
<td>14</td>
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<td>Product Health Check Service (PHC) – One time/Quarterly</td>
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<td>Configuration Analysis and Change Review (CACR)</td>
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<td>Implementation Support Service</td>
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<tr>
<td>Remote Technical Consultation Service (QnA)</td>
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<td>3</td>
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<tr>
<td>SIRT Analysis</td>
<td>2/4</td>
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<tr>
<td>Security Policy Optimization</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Software Lifecycle Management Service</td>
<td>15</td>
<td>39</td>
</tr>
</tbody>
</table>

Service Eligibility and Ordering

The Services Offerings may be purchased directly through Juniper Networks or an authorized Juniper reseller. The Services Offerings is available for purchase only (i) by the End User who holds a valid Juniper Care contract or valid Advanced Partner Support contract or Advanced End User Support contract and (ii) by Juniper Networks authorized resellers solely for resale to the End User identified by name and address in Juniper authorized reseller’s PO.

The Services Offerings can be purchased by End User by using any of the methods mentioned in “Services Description” section above.
Software Lifecycle Management Service

Juniper Networks Software Lifecycle Management Service is an annual subscription for software release management that delivers a software selection methodology. The key deliverables are a named, designated, remote consulting engineer, a software selection process for the target software release, and ongoing monitoring of all new major and critical bugs that are impacting service during the subscription period. The service includes a virtual kick-off meeting and a final review meeting.

Service Deliverables

• Virtual kick-off meeting and virtual final review meeting.
• Named, designated, remote consulting engineer.
• Software selection process that identifies software fixes for critical problem reports and expert review of the upgrade path and procedure.
• Ongoing monitoring of all new major and critical bugs.

Service Specifications

The scope of the service is for one (1) target software release and one (1) network function during the contracted subscription term. For additional details such as scope, deliverables, eligibility, and exclusions, please refer to the corresponding Service Description Document: https://www.juniper.net/content/dam/www/assets/service-descriptions/us/en/juniper-software-lifecycle-management-service.pdf.

Security Policy Optimization

Juniper Networks Security Policy Optimization provides a comprehensive in-depth analysis of the customer’s security policy database to search for optimization opportunities. The key deliverables are a custom report that identifies duplicate database entries and overlapping address objects, and an optimization process with firewall commands. The service includes a virtual kick-off meeting and a final review meeting.

Service Deliverables

• Virtual kick-off meeting, in-depth analysis, custom report, migration process, and final review meeting.
• Comprehensive in-depth analysis of the customer’s security policy database using custom tools to search for optimization opportunities such as duplicate policies, shadow polices, and overlapping security policy objects.

Service Specifications

The scope of the service includes delivery per configuration every quarter over a twelve (12) month term.

For additional details such as scope, deliverables, eligibility, and exclusions, please refer to the corresponding Service Description Document: https://www.juniper.net/content/dam/www/assets/service-descriptions/us/en/juniper-security-policy-optimization.pdf.

Security Incident Response Team Analysis

Juniper Networks Security Incident Response Team (SIRT) provides a comprehensive in-depth analysis of security exposure based on the customer’s network environment. The key deliverable is a custom report that includes network vulnerabilities, recommendations, and mitigation steps. The service includes a virtual kick-off meeting and a final review meeting.

Service Deliverables

• Virtual kick-off meeting, in-depth analysis, custom report, and final review meeting.
• Comprehensive in-depth analysis of security exposure based on customer hardware, software, installation base, and configuration.
• Custom report includes network vulnerabilities, recommendations, and mitigation steps.

Service Specifications

The scope of the service offers two options: delivered once for all announced SIRT vulnerabilities per Junos version per product family or delivered for each quarterly SIRT announcement per Junos version per product family over a twelve (12) month term.

For additional details such as scope, deliverables, eligibility, and exclusions, please refer to the corresponding Service Description Document: https://www.juniper.net/content/dam/www/assets/service-descriptions/us/en/juniper-security-incident-response-team-analysis.pdf.

Configuration Analysis and Change Review

Juniper Networks Configuration Analysis and Change Review Service provides a consultative review and analysis optimizing End User’s network configuration based on a detailed understanding of an End User’s network. The Juniper Network engineer will discuss End User’s requirements in detail and apply their expertise and best practices on Juniper products, including Juniper methodology, to analyze the configuration and features.
Service Deliverables

- Product configuration review and analysis
- Meeting to discuss, understand, and validate the overall goals and requirements of your network
- Review of your network device configurations, which may include hardware inventory analysis, software configurations, and dependencies with respect to new features, configuration scaling, interface configuration, management setup for the system, and your configuration methodology
- Analysis of current configurations based on suggested Juniper Networks product configuration best practices; areas of focus may include configuration practices currently employed, Error logging configuration, dependencies with respect to target features, and End User’s network configuration templates

Service Specifications
The scope of this service is limited to up to two (2) configuration templates and to one (1) Juniper Networks products family.


Product Issue Impact Review Service
Juniper Networks Product Issue Impact Review Service provides a detailed analysis of hardware and software defects found in the field that match your network profile to help you determine the potential impact and risk for your network.

Service Deliverables

- Analysis of the defects identified in the Product Issue Impact Report that matches your deployed network profile and the potential level of exposure to the network based on your specific business and networking requirements
- Assessment of the probability that you may encounter the reported defects on your network
- Proactive recommendations on the course of action you should take regarding the reported defects to avoid potential problems

Juniper will also provide a consolidated report on product issues and impact analysis.

Service Specifications
The scope of this service is limited to one (1) report and is determined by unique combination of hardware platform, configuration technology functions (e.g., BNG, Core and Edge or Others) and target software version.


Software Upgrade Recommendation and Review Service
Juniper Networks Software Upgrade Recommendation and Review Service provides an expert review of your software requirements, assessment of software upgrade risk, analysis of potential impact on your network, and recommendations on a target software release that can best meet your requirements.

Service Deliverables

Software upgrade requirements assessment:

Review of current conditions, problem history, and feature requirements for your network infrastructure to provide a target software release assessment. This assessment may include existing hardware and software inventory, existing feature use and future feature requirements, performance and high availability requirements, previous cases and problems reported, and latest network infrastructure design or services changes.

Software release analysis:

- Review of target software release with information about any additional software features included in the target release such as operating features, redundancy features, configuration features, other features, and any default behavior and syntax changes in the target release.
- Provide information about software bugs found in the field that match the target release and your network profile. This information includes a description of the problem, impact, known trigger for the problem, and a proposed solution or any known workarounds that may alleviate or help to prevent the problem.
- In-depth analysis of the identified software bugs in the target release and of the potential level of exposure on the network based on your specific business and networking requirements.
- Assessment of the probability that you may encounter the reported bugs on your network and recommendations regarding the course of action to avoid potential problems.

Software upgrade recommendations:

Consolidated report containing the software upgrade requirements assessment, target software analysis, and any recommended changes and improvements.

Service Specifications
The scope of this service is limited to one (1) report and is determined by unique combination of hardware platform, configuration technology functions (e.g., BNG, Core and Edge or Others) and target software version.
Product Health Check Service

Juniper Networks Product Health Check Service uses sampling data from targeted Juniper devices on your network to check key Juniper Networks Product Health Check Service uses sampling data identifying dormant problems, any potential abnormalities in the trend data for potential improvement, and any other performance related issues. Juniper engineers will analyze your data and provide recommended actions to help identify potential risks and issues with your Juniper products before they impact your network, and to proactively improve network performance.

Service Deliverables

Data device collection and analysis:

Analyze the findings to determine areas of improvement. The collected key device health indicators will be analyzed to identify potential problem areas. Examples of the collected data include CPU and memory utilization, task memory, chassis and system alarms, packet forward engine traffic, error check and Routing and Switching Table check. Provide information on critical issues that are found along with recommended available workaround solutions and assist Juniper Networks Technical Assistance Center (JTAC) on issue resolution.

Optimization recommendation:

Juniper will recommend solutions based on recognized best practices to resolve the identified problem areas and optimize your network’s health and utilization. Performance trends will be identified along with recommendations on the respective areas for improvement. A written report will be submitted, and Juniper engineers will review the findings with you in a conference call.

Service Specifications

The scope of this service is limited to one (1) maintenance window (max continuous up to five (5) hours) during any 24-hour period. For additional details such as scope, deliverables, eligibility and exclusions, please refer to corresponding Service Description Document: https://www.juniper.net/content/dam/www/assets/service-descriptions/us/en/software-upgrade-recommendation-and-review.pdf

Implementation Support Service

Service Deliverables

Juniper Networks Product Issue Impact Review Service provides remote engineering assistance for critical network changes such as migration, software upgrades, and feature rollout. The Juniper Networks engineer will work with the End User to identify the information about the network change implementation via knowledge transfer and will be able to assist by analyzing events experienced during the change and providing recommendations.

Network change implementation

Juniper Networks’ engineers are available during the network change implementation process to assist you with any questions, concerns, or problems during the migration.

Post network change review

Juniper Networks’ engineers will discuss the network change with you to assess the success and, if appropriate, possible areas of improvement following changes.

Service Specifications

The scope of the service is limited to one (1) maintenance window (max continuous up to five (5) hours) during any 24-hour period. For additional details such as scope, deliverables, eligibility and exclusions, please refer to corresponding Service Description Document: https://www.juniper.net/content/dam/www/assets/service-descriptions/us/en/implementation-support-service.pdf

Remote Technical Consultation Service (QnA)

Service Deliverables

This service provides End User with access to Juniper engineer who will provide technical advice or help address any in-depth questions relating to the reports or recommendations delivered to the End User as a result of the delivery of any standard pre-packed Services Offerings.

Service Specifications

The scope of the service is limited up to five (5) hours of consulting time relating to any of the pre-packaged Standard Services Offering already delivered to the End User.
### Features and Benefits

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<tr>
<th>Feature</th>
<th>Feature Description</th>
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<tr>
<td><strong>Software Lifecycle Management Service</strong></td>
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<tr>
<td><strong>Assigned resource</strong></td>
<td>A named remote consulting engineer is designated to assist with the entire software selection process, end-to-end.</td>
<td>Provides collaboration, guidance, and confidence that the project will be delivered on time and within budget.</td>
</tr>
<tr>
<td><strong>Software selection methodology</strong></td>
<td>Juniper consultant leads comprehensive software selection process, identifies software fixes for critical problem reports that need to be included in the target release, and reviews the upgrade path and procedure.</td>
<td>Simplifies the release management process. Makes upgrades easier to implement. Enables faster time to market and more accurate rollout planning. Reduces risk and exposure to bugs.</td>
</tr>
<tr>
<td><strong>In-depth product issue impact</strong></td>
<td>Juniper engineers evaluate the defects that match your deployed network profile and provide assessment and recommendations regarding the potential network impact and risk based on your specific business and networking requirements.</td>
<td>Minimizes the risk of deploying suboptimal configurations that could negatively impact your network performance.</td>
</tr>
<tr>
<td><strong>Ongoing monitoring</strong></td>
<td>Juniper monitors all new major and critical bugs that impact service during the contracted subscription period.</td>
<td>Provides ongoing assurance that the target release is valid and accurate.</td>
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<tr>
<td><strong>SIRT Analysis Service</strong></td>
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<tr>
<td><strong>In-depth analysis</strong></td>
<td>Using a proprietary tool, Juniper engineers conduct a comprehensive analysis of security exposure based on the customer’s hardware, software installation base, and configuration.</td>
<td>Minimize risk and downtime to keep the network running in a steady operating state.</td>
</tr>
<tr>
<td><strong>Custom report</strong></td>
<td>Juniper engineers report on vulnerabilities that may impact the network environment. The report includes mitigation strategies, recommends ways to work around the vulnerabilities, and suggests Junos code versions to address the vulnerabilities.</td>
<td>Frees up valuable time for network engineers by focusing only on vulnerabilities that are specific to the customer’s network.</td>
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<tr>
<td><strong>Security Policy Optimization Service</strong></td>
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<tr>
<td><strong>In-depth analysis</strong></td>
<td>Juniper engineers perform an in-depth analysis of the customer’s existing security policy configuration(s). Analysis covers global address book, applications, and security policies.</td>
<td>Increase the effectiveness of security policies to ensure healthy firewall performance.</td>
</tr>
<tr>
<td><strong>Custom report</strong></td>
<td>Juniper engineers identify duplicate database entries and overlapping address objects, share best practices for policy enforcement, and offer advice to improve overall security levels. Customers learn how to improve device performance and reduce administration.</td>
<td>Document advice and guidance to ensure firewall performance and keep the networking operating in a steady, reliable state.</td>
</tr>
<tr>
<td><strong>Optimization process</strong></td>
<td>Juniper engineers add new firewall commands to the new policy database, along with justifications for each recommended change.</td>
<td>Reduce risk to ensure a smooth migration to the new database.</td>
</tr>
<tr>
<td><strong>Configuration Analysis and Change Review Service</strong></td>
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</tr>
<tr>
<td><strong>Product configuration review and analysis</strong></td>
<td>Juniper engineers review and analyze the configuration based on your specified overall requirements to determine whether the current configuration is consistent with best practices for configuring and deploying a specific Juniper Networks product.</td>
<td>Leverage Juniper’s unique network expertise to avoid the time and expense of implementing configuration changes that are not optimal for your network and business requirements.</td>
</tr>
<tr>
<td><strong>Recommendations on product configuration changes and optimization</strong></td>
<td>Juniper engineers provide tailored recommendations in the form of configuration changes, methodologies, and best practices.</td>
<td>Minimize the OpEx opportunity cost normally incurred with configuration changes by properly implementing configurations recommended by Juniper experts who not only understand Juniper’s products better than anyone, but who have taken the time to carefully understand your unique business requirements and network infrastructure.</td>
</tr>
<tr>
<td><strong>Implementation Support Service</strong></td>
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</tr>
<tr>
<td><strong>Network change implementation technical consultation</strong></td>
<td>Juniper engineers are available during the network change implementation process to assist you with any questions, concerns, or problems during the migration.</td>
<td>Leverage Juniper’s award-winning network support expertise to avoid the time and expense of migration implementation that is not optimal for your network and business requirements.</td>
</tr>
<tr>
<td><strong>Post network change review</strong></td>
<td>Juniper engineers discuss the network change with you to assess the success and, if appropriate, possible areas of improvement following changes.</td>
<td>Minimize the OpEx opportunity cost normally incurred with a suboptimal migration implementation by taking advantage of the award-winning support expertise and best practices from Juniper engineers. Juniper’s networking experts understand Juniper’s products better than anyone and have taken the time to carefully understand your unique business requirements and network infrastructure.</td>
</tr>
<tr>
<td><strong>Product Issue Impact Review Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In-depth product issue impact review and recommendations</strong></td>
<td>Juniper engineers evaluate the defects that match your deployed network profile and provide assessment and recommendations regarding the potential network impact and risk based on your specific business and networking requirements.</td>
<td>Accurately assess both the risk and probability of your network’s exposure to known defects, and proactively make recommendation to avoid potential issues or minimize the impact. Allows for careful and informed preemptive operation of your network infrastructure.</td>
</tr>
<tr>
<td><strong>Software Upgrade Recommendation and Review Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Software upgrade requirements assessment</strong></td>
<td>Juniper engineers review your network change methods and procedures and your acceptance test plan to identify areas of improvement.</td>
<td>Leverage Juniper’s industry recognized network expertise and best practices to avoid the time and expense of creating a migration plan that is not optimal for your network and business requirements.</td>
</tr>
<tr>
<td><strong>Software release analysis</strong></td>
<td>Juniper engineers analyze the targeted software release to determine the potential impact on your network.</td>
<td>Leverage Juniper’s unparalleled network expertise to avoid the time and expense of implementing a software release that isn’t optimal for your network and business requirements.</td>
</tr>
<tr>
<td><strong>Software upgrade recommendations</strong></td>
<td>Juniper engineers provide software upgrade recommendations based on the target software release analysis.</td>
<td>Minimize the OpEx opportunity cost normally incurred with software upgrades by implementing the optimal software release recommended by Juniper experts who not only understand Juniper’s products better than anyone, but who have taken the time to carefully understand your unique business requirements and network infrastructure.</td>
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</tbody>
</table>
Network Optimization Consulting Services

<table>
<thead>
<tr>
<th>Feature</th>
<th>Feature Description</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Product Health Check Service</td>
<td>Juniper engineers work with you to collect sample device data and analyze that data to determine areas of improvement.</td>
<td>Provides advance notification of identified critical issues that may impact your network and workaround resolution.</td>
</tr>
<tr>
<td>Device data collection and analysis</td>
<td>Juniper engineers provide recommendations to optimize your network’s health and utilization based on known best practices.</td>
<td>Leverage Juniper’s unparalleled network expertise to identify solutions that will focus on product improvements that are optimal for your network and business requirements.</td>
</tr>
<tr>
<td>Optimization recommendation</td>
<td></td>
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<tr>
<td>Remote Technical Consultation</td>
<td>Juniper engineers provide recommendations to optimize your network’s health and utilization based on known best practices.</td>
<td>Leverage Juniper’s unparalleled network expertise to identify solutions that will focus on product improvements that are optimal for your network and business requirements.</td>
</tr>
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</table>

**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 [https://www.juniper.net/us/en/products.html](https://www.juniper.net/us/en/products.html).

**About Juniper Networks**

At Juniper Networks, we are dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world’s greatest challenges of well-being, sustainability and equality.