Mobile Backhaul Capacity Assessment

Service Overview

Many mobile and transport service providers are planning to add radio access network (RAN) and backhaul capacities to better manage the exploding volume of mobile traffic. Juniper Networks Mobile Backhaul Capacity Assessment service enables you to prepare more effectively, especially in the 4G Long Term Evolution (4G-LTE) rollout of your RAN. It also helps you avoid delivering poor quality services due to congestion and/or problems with timing in your networks.

While new carriers, changing sectorization, and the growth of mobile-in-mobile-out can impact backhaul requirements, backhaul considerations are often forgotten in these cases. This service helps you address that shortfall.

Service Description

The Mobile Backhaul Capacity Assessment service is especially suited for any mobile service providers considering migration of their RAN to all-IP (from TDM). It can help you more effectively prepare for growth in traffic over the next 24 months, and it will highlight architectural considerations, provide recommendations of available options to avoid potential timing issues, as well as uncover implications for backhaul services.

The service takes 3-4 days to complete. During this time, the Juniper consultant will review, for a selected market, your current environment as well as expectations for traffic growth and known plans for additional RAN and backhaul capabilities. The service is a three-step process and involves a mix of onsite and offsite work.
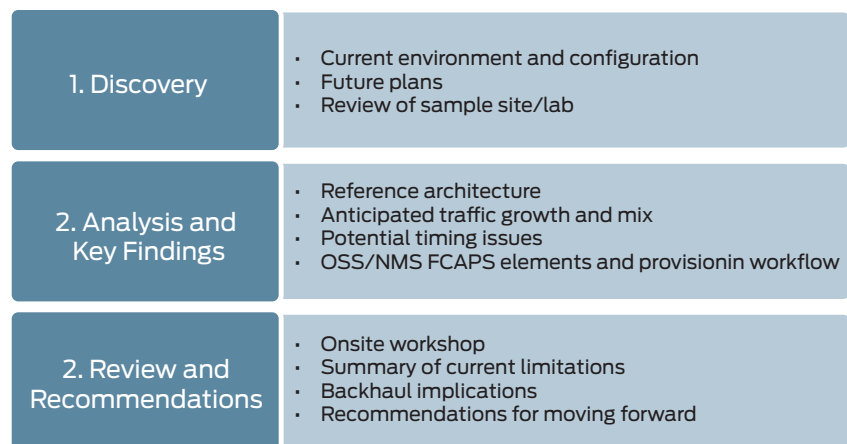
1. Discovery	• Current environment and configuration • Future plans • Review of sample site/lab
2. Analysis and Key Findings	• Reference architecture • Anticipated traffic growth and mix • Potential timing issues • OSS/NMS FCAPS elements and provisionin workflow
2. Review and Recommendations	• Onsite workshop • Summary of current limitations • Backhaul implications • Recommendations for moving forward

Figure 1. Mobile Backhaul Capacity Assessment service process steps

Features and Benefits

The Mobile Backhaul Capacity Assessment service provides you with a written report summarizing the findings and recommendations for improvements in backhaul capacity. It also includes recommendations for addressing any other potential challenges identified during the assessment process.

This enables you to be better prepared to address potential backhaul capacity related issues and to avoid possible quality of service issues that might result from insufficient capacity during your RAN to all-IP transition.

Your ideas. Connected.™

Juniper Networks Professional Services

As leaders in networks and security, Juniper's Professional Services Consultants and engineers are uniquely qualified to assist service providers in designing, implementing, and optimizing network solutions. Our team appreciates the complexities and the subtleties inherent in large-scale internetwork design and can assist, or provide customized and integrated "turn-key" solutions. Juniper Networks mobile network solutions are a subset of the mobility solutions program.

Our process is to apply appropriate efforts and resources to analyze the mobile network from an end-to-end perspective. This allows the Juniper consultants to review the existing network and give advice about solutions or specific fixes to deploy. Once the assessment is complete, our Professional Services team can deliver and implement recommended solutions.

Juniper Networks Professional Services helps accelerate your network's time to value, bringing revenue generating capabilities online faster for bigger productivity gains, faster rollouts of new business models and ventures, greater market reach, and higher levels of customer satisfaction. Your onsite staff will work closely with Juniper specialists, building operational capabilities and reducing your exposure to IT risks. As a result of our previous experience involving hundreds of IP networks around the world, Juniper Networks Professional Services is uniquely qualified to help customers design, implement, and optimize their networks for confident operation and rapid returns on infrastructure investments. These professionals understand today's Internet demands and those that are just around the corner—for bandwidth efficiency, best-in-class security, solid reliability, and cost-effective scaling.

The use of Juniper's consultants also avoids the requirement for you to have the necessary technical and evaluation skills in-house. The evaluation can be completed faster as you are not forced to wait until internal resources become available, nor do you have to address the issue of conflicting project priorities.

Additional Services to Optimize Your Network

Juniper Networks provides additional consulting services to consider along with the Mobile Backhaul Capacity Assessment. Services to consider in the early stages of your network review include:

- **Strategic Network Consulting:** In the planning stage of your project, this service will assist you in determining a strategy for your network architecture and a plan to translate such a strategy into an optimal solution. It is aimed at understanding your business requirements, determining the impact of the changes on your existing network infrastructure, and providing architectural guidance and recommendations to ensure that your network will be enhanced in a controlled manner.

- **High-Level Design:** Implementing a new network or security project starts with an evaluation of the requirements and a detailed rendering of the architecture to be used. The High-Level Design service defines the topology, protocols, and equipment required, mapping the design to your needs.

- **Low-Level Design:** Once the high-level design of a network is determined, the specifics need to be identified. The Low-Level Design service identifies the optimal configuration and equipment necessary to make your network a reality.

- **Implementation Consulting:** Subsequent to lab testing, the Implementation Consulting service offers remote or onsite engineering assistance to support execution of a predefined implementation plan. This service is typically used to help you in implementation, migration, testing, and troubleshooting activities.

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

Juniper Networks Core Network Modernization Assessment service can be ordered using the part number shown in the table below. Before the service begins, a statement of work (SOW) will be established outlining the scope of effort to be performed.

Model Number	Name
PRO-MBH-CAP-ASSESS	Mobile Backhaul Capacity Assessment

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.