SD-WAN DEPLOYMENT SERVICES DATASHEET

Service Overview

The cloud fundamentally reshapes traffic flows, introducing performance, security, and service quality challenges for network planners. Legacy WANs, designed to support traditional applications and services, aren't well suited for a cloud-centric world. The modern enterprise requires a modern network—one that is adaptable, application-aware, and designed to handle today's diverse workloads and dynamic data flows.

Juniper SD-WAN Deployment Service is designed to streamline the deployment of the Juniper Session Smart™ Router and its unique Secure Vector Routing architecture. The services provide access to Juniper Professional Services technology experts and industry best practices.

Service Description

Session Smart™ SD-WAN is an advanced, service-centric solution that takes software-defined routing to a new level. Ideal for today's digital businesses, it delivers a flexible, application-aware network fabric that meets stringent enterprise performance, security, and availability requirements.

Juniper® SD-WAN Deployment Service is a set of capabilities designed specifically to support enterprises and service providers that are deploying Session Smart SD-WAN networks. The goal of these services is to help organizations realize the benefits of our service-centric SD-WAN architecture in the fastest time frame possible with a smooth and predictable deployment.

These services provide access to SD-WAN deployment experts with extensive knowledge of Juniper products and technologies. The services employ proven best-practice implementation methodologies and tools that provide a high degree of assurance, faster completion speed, and reduced deployment risks.

To ensure a smooth transition to Session Smart SD-WAN, Juniper offers three types of packages: Basic package, Advance package, and Custom package. The Basic and Advance packages are primarily for greenfield SD-WAN deployments, while the versatile Custom package addresses multiple needs.

Reference Implementation Design

Juniper streamlines deployment of the Session Smart SD-WAN solution by following best practices and reference implementation models. The reference implementation design consists of commonly used key features and can serve multiple environments. The reference implementation is based on a hub-and-spoke topology where the Session Smart Routers in the headquarters or data center serve as the central point for all traffic from the Session Smart Routers in branch sites. The design also assumes up to two varieties of spoke sites or branch sites, such as a retail branch site and a factory or a warehouse branch site. Figure 1 summarizes this topology and connectivity.

The reference design also includes installation of the Session Smart Conductor in a public cloud environment, a virtual machine, or on a bare-metal server in the customer premises. The Session Smart Conductor and the Session Smart Router can be installed with dual-node redundancy to provide high availability (HA) on critical sites. Additionally, the Session Smart Router in the data center location can be configured with dynamic routing protocol along with other layer 3 routers in the data center. A local Internet breakout configuration is supported for data center and branch sites.

The reference design implementation also provides application policy configurations for a given set of application traffic running across the WAN.

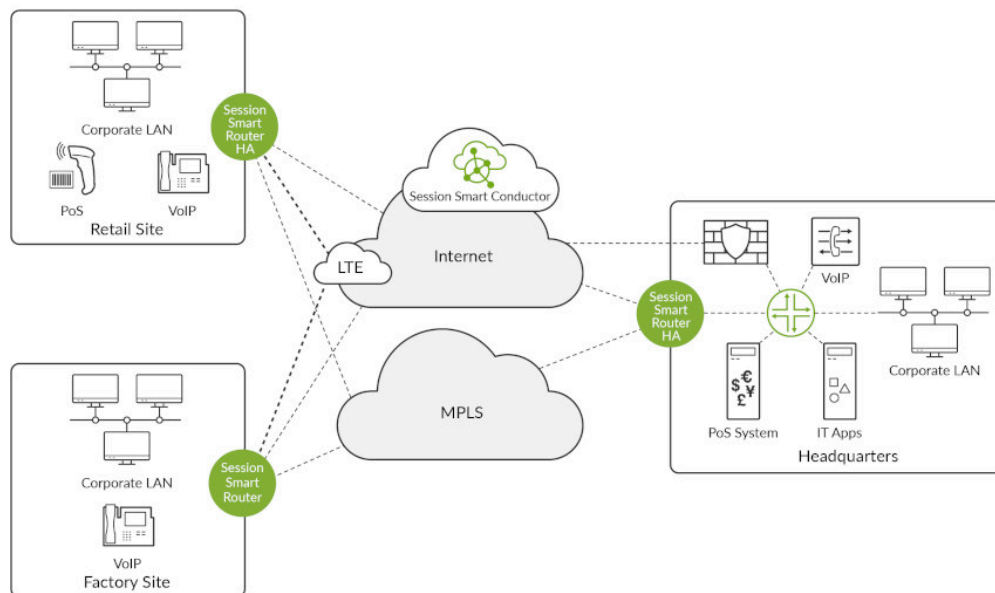*Figure 1: Reference implementation topology*

SD-WAN Deployment Service: Basic Package

The Basic package provides an easy initial deployment based on the reference implementation design. It includes a simple deployment with two components:

- Creation of an SD-WAN design document that provides details of the design, such as topology and connectivity, Secure Vector Routing design, services design for customer applications, and HA design
- Implementation of the Session Smart Conductor and the Session Smart Router in pilot sites for two data centers (non-redundant) and up to two branch sites

SD-WAN Deployment Service: Advance Package

The Advance package addresses additional common design requirements, which are extensions built on the same reference implementation design included in the Basic package. The Advance package includes deployment with four components:

- Creation of SD-WAN design document that provides design details such as topology and connectivity, Secure Vector Routing design, services design for applications, and HA design
- Verification of the unique design elements by conducting a Design Validation Testing exercise in customer's lab setup
- Implementation of Session Smart Conductor and the Session Smart Router in pilot sites for two data centers (non-redundant) and up to two branch sites
- Knowledge Transfer Workshop

Common Additional Design Requirements

- Design for up to four data centers and four branch site types
- Unified communications design for VoIP
- Ethernet over Secure Vector Routing
- Nonstandard transports, such as satellite links
- Full or partial mesh connectivity for direct branch-to-branch communication
- Traffic engineering for mission-critical applications
- Pod design for high-scale networks
- Dual router HA design in the data center
- Single plug-in installation and configuration

Some common additional design requirements are listed above and the Advance package can address up to two of these additional design requirements.

Service Features and Benefits

Table 1: Service Deliverables—Features and Benefits

Deliverable	Description	Features and Benefits
SD-WAN Design Document	Collaborative workshop to discuss requirements for the project. Juniper Professional Services team documents customer requirements and provides a detailed technical SD-WAN Design document for review and approval.	• Aligns elements and features of design details and project scope, and sets expectations. • Adapts best-practice design to customer environment. • Provides an SD-WAN design based on best practices.
Design Validation Testing	Juniper consultant validates the unique customer design requirements, such as application policies, routing requirements, additional plug-ins, and other design features, in a lab environment.	• Develops configuration.
SD-WAN Implementation	The Session Smart SD-WAN Conductor and Session Smart Router are installed in the customer's environment, and the accuracy and quality of the installation is verified.	• Applies a process-driven approach to ensure that the platform is correctly and efficiently installed and functioning properly.
Knowledge Transfer Workshop	Juniper provides documentation from prior phases and leads a workshop that reviews all design aspects and basic operations of the Session Smart SD-WAN Conductor and Session Smart Routers.	• Accelerates learning curve and employee readiness for improved operational efficiencies.

SD-WAN Deployment Service: Custom Package

Customers with unique requirements can benefit from a Custom package with a choice of deliverables. A tailored package can be created with a combination of deliverables that can extend from design, testing, implementation, software upgrade, application optimization, customized training, and knowledge transfer.

Juniper Service and Support

Juniper 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

To order the SD-WAN Deployment Service, or for additional information, please contact your Juniper account manager.

Exclusion

The scope of this service is for SD-WAN Deployment Service only and does not include separately sold assessment, migration, software upgrade, application optimization, or customized training sessions. If you require additional services from your Juniper Professional Services consultant, please contact your Juniper account manager.

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.

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