
SteelConnect Director

Rich visibility and agile policy-based control of SD-WAN infrastructure assures your ability to meet or exceed network service level agreements.

Challenges to Visibility and Management

The level of complexity and rate of change in networks is steadily increasing. It's hard to keep up when using legacy tools and processes that require considerable effort and expertise to configure, modify, monitor, and troubleshoot networks. IT may struggle to meet business timelines for network expansion, application deployment, and even routine configuration changes.

"The network is slow." If you're like most netops managers, you probably hear this complaint too often. To really understand what's occurring on your network, you need an end-to-end view of the hybrid network into performance and security issues.

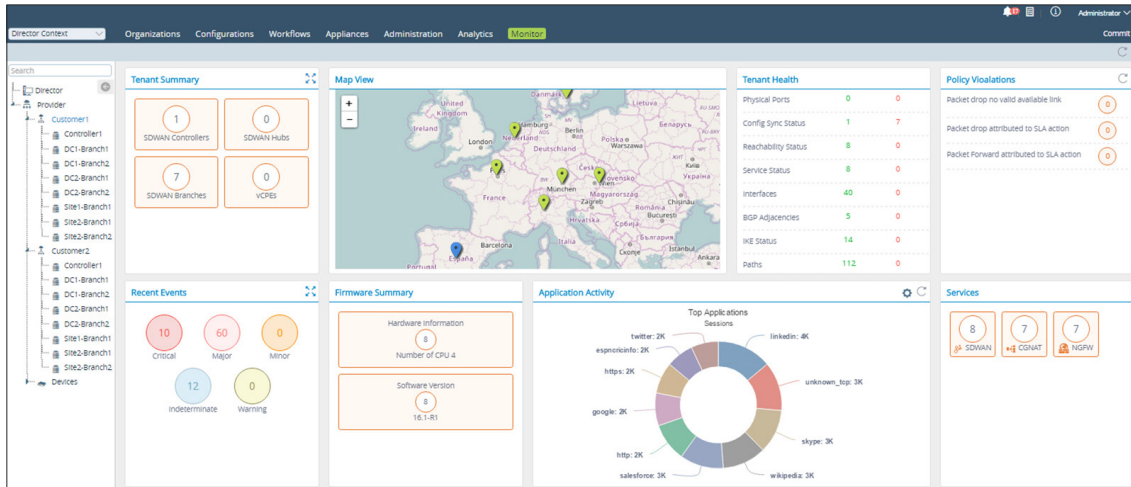
Riverbed Solution for Policy Based Centralized Management

Riverbed® SteelConnect™ Director is Riverbed's virtualization and service creation platform that simplifies the creation, automation and delivery of services using SteelConnect EX SD-WAN platform. SteelConnect Director provides the essential management, monitoring and orchestration capabilities for distributed SD-WAN deployments.

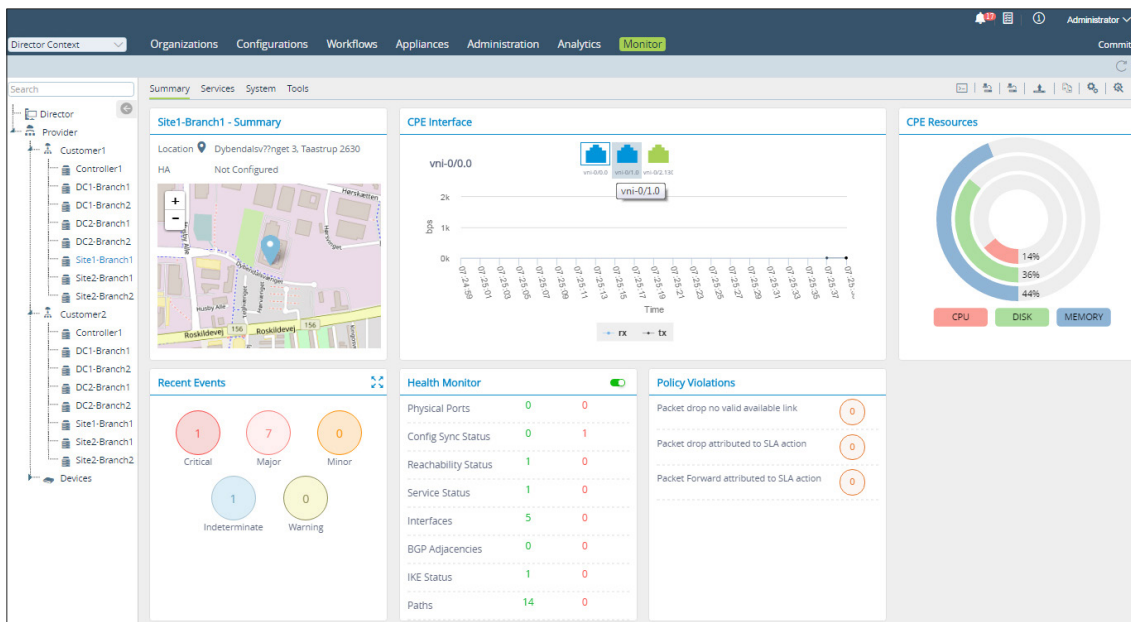
Services supported by SteelConnect Director include routing and advanced connectivity to direct traffic across multi-link WAN access and simplified control for SD-WAN with embedded advanced security.

SteelConnect Director provides centralized management for connectivity and services. It scales to thousands of end customers or organizations through hierarchical multi-tenancy and role-based access control (RBAC) administrative capabilities. Combined with SteelConnect EX software, SteelConnect Director provides complete virtual network function (VNF) infrastructure lifecycle management for appliance, virtual machine and cloud environments, from deployment and configuration to ongoing monitoring and change management of SteelConnect EX with automatic actions such as auto-healing and auto-scaling.

SteelConnect Director also provides a rich set of interfaces for effective integration with third party products and services. SteelConnect Director supports service definitions enabling flexible service chain creation and deployment. In addition, utilizing open and widely available protocol and API formats allows for tight integration with operations and business systems. The result is rapid delivery and simplified ongoing management of SteelConnect EX services, from basic connectivity to advanced SD-WAN and branch security.



Global Network Level Monitoring Dashboard



Device Level Monitoring Dashboard

Deployment Flexibility

SteelConnect Director is available in virtual and physical appliance form factors enabling flexible and turn-key deployment of policy-based orchestration and management of SteelConnect EX.

Feature Details

Policy	Administration	Service Chaining Support
Centralized policy management – policy locking, versioning CRUD operations on users, roles, capabilities	Inventory management Software management/upgrades	Service chaining of VNFs and third party VNFs
VNF placement support using resource pools	Client and secure API management for third party integration	Deployment Options Appliance
Operations	User-management and AAA integration – Radius/LDAP/TACACS+	Virtual machine
VNF life cycle management	Role-based access control	Public Cloud (AWS and Azure)
Hierarchical template-based provisioning	High availability (Active/Standby only) and disaster recovery	Cloud Management Systems
uCPE cloudinit support for VNF instantiation	Configuration audit logs	VMware vCloudDirector, vCenter
VNF configuration management, backup, restore, archive, rollback	Licensing and usage reporting	OpenStack, VMware Integrated OpenStack
Hierarchical multi-tenancy support and tenant management	SSO (Single-Sign-On) support via SAML	Amazon Web Services cloud API Integration
Service catalogs, subscription plans for tenants – Specify flavors, policies	Licensing and Entitlement management	Microsoft Azure cloud API Integration
Service orchestration	Monitoring	Third Party Overlay Integration
Rest APIs for all operations	VNF service fabric monitoring – System, Cluster, Interface, Alarms	VMware NSX, Nokia Nuage, Open Contrail, OpenDaylight (ODL)
VNF management using industry standard NetConf (RFC 6241)	Service monitoring – SNMP MIBs, counters, statistics	OSS/BSS and Orchestration Integration
Web-based graphical user interface (GUI)	Auto-healing AMQP based notifications	Ciena BluePlanet, Ubiquite, Cisco NSO, Ericsson ECM, Amdocs NCSO, NEC NetCracker

Recommended Virtual Appliance Requirements for SteelConnect Director

Number of Branches	Number of Tenants	Deployment Option	OS	Processor	Servers	Cores	Storage Capacity	Storage (HDD) Type	DRAM	Network Ports Per CPU
2,500	500	Application on Ubuntu (Ubuntu Package)	Ubuntu 14.04	Intel Xeon 64 bit	2x 1 socket servers	16 cores per socket	512 GB	SSD preferred	64 GB per socket	2
1,000	200									
500	100	Virtual machine				8 cores per socket	256 GB		16 GB per socket	

Virtual appliance resources per SteelConnect Director node.

Requires two SDEX-DIRECTOR-080 hardware appliances to support up to 2500 CPEs.

Riverbed® SteelConnect™ Director Appliance Specification

SteelConnect Director

Product Specifications

Model	SDEX-DIRECTOR-080
Profile	Rack mount: 1U
Solid State Drives	1x 480 GB
Memory	96 GB (6 x 16)
CPU Cores	20
Interfaces	2x 10 GbE RJ-45
Management Ports	2x 1 GbE 2x USB 3.0 Type A 1x DB9 console

SteelConnect Director

Power and Physical Specifications

Model	SDEX-DIRECTOR-080
Power Supply	2x 650 W
Power [Watts] (typical)	208 - 218 W
BTU (typical)	708 - 743 W
Operating Acoustic (typical)	56 dB
Temperature	10° to 35°C / 50° to 95°F (Operating) -40° to 70°C / -40° to 158° F (Storage)
Relative Humidity	90%, non-condensing at 35°C
System Dimensions (LxWxH)	25.4 x 17.2 x 1.72 in 645 x 436 x 43.6 mm
Weight (without packaging)	47 lbs 21.32 kg
Rail Information	Mounting rails included

SteelConnect Director Software Licensing SKUs

Ordering Guide

SDEX-DIRECTOR-080-B010	SteelConnect Director appliance to manage SteelConnect EX based enterprise SD-WAN
SEC-SDW-DIRECTOR	SteelConnect Director virtual appliance to manage SteelConnect EX based enterprise SD-WAN

About Riverbed

Riverbed enables organizations to maximize performance and visibility for networks and applications, so they can overcome complexity and fully capitalize on their digital and cloud investments. The Riverbed Network and Application Performance Platform enables organizations to visualize, optimize, remediate and accelerate the performance of any network for any application. The platform addresses performance and visibility holistically with best-in-class WAN optimization, network performance management (NPM), application acceleration (including Office 365, SaaS, client and cloud acceleration), and enterprise-grade SD-WAN. Riverbed's 30,000+ customers include 99% of the *Fortune* 100. Learn more at riverbed.com.

