Software Defined Networking

Practice Offers

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Future-Proofed Networking Solutions

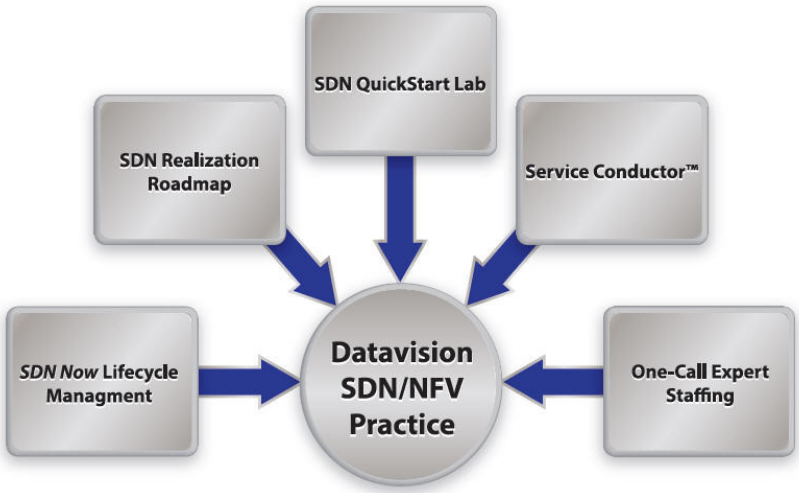
With Datavision's Software Defined Networking practice offers, we help you navigate the complexities of implementing SDN into your network infrastructure. Our end-to-end approach ensures that you reduce your capital and operational expenses while enhancing your network with agility, scalability and speed. It covers every stage of the process, from defining your business objectives to post-implementation support.

SDN provides unprecedented programmability, automation and network control. By evolving beyond conventional hierarchical network structure, users get faster access, and network support teams are free to make changes in significantly less time than current approaches.

SDN also provides network agility, ensuring maximum throughput and the ability to centrally make changes to network elements to more quickly meet user demands. Network agility enables faster configuration changes without the need to manage on a device level, while providing the ability to quickly and easily adjust security protocols and enforce universal policy guidelines.

Datavision's SDN Practice Portfolio revolves around the following service offers, each of which is customized to address our client's specific business, networking infrastructure needs, budget and timeline:

- *SDN Now* Lifecycle Management
- SDN Realization Roadmap
- SDN Quickstart Lab
- Service Conductor™
- One-Call Expert Staffing



***SDN Now* Lifecycle Management**

Assessment/ROI Analysis

With *SDN Now* Lifecycle Management, we start by identifying all Use Cases that present a valid reason to apply SDN and Network Functions Virtualization (NFV) to your existing infrastructure. A Proof-of-Concept (POC) is developed along with smaller initial projects to prove out the technology and methodically introduce it into the network. This can be followed by an SDN roadmap to help develop and implement a migration plan for a portion, or all of the network.

SDN Roadmap
Once the Use Cases are identified, the next step is designing a network solution architecture that addresses each relevant Use Case. And constructing a Proof-of-Concept scenario to validate and test the Use Case(s).
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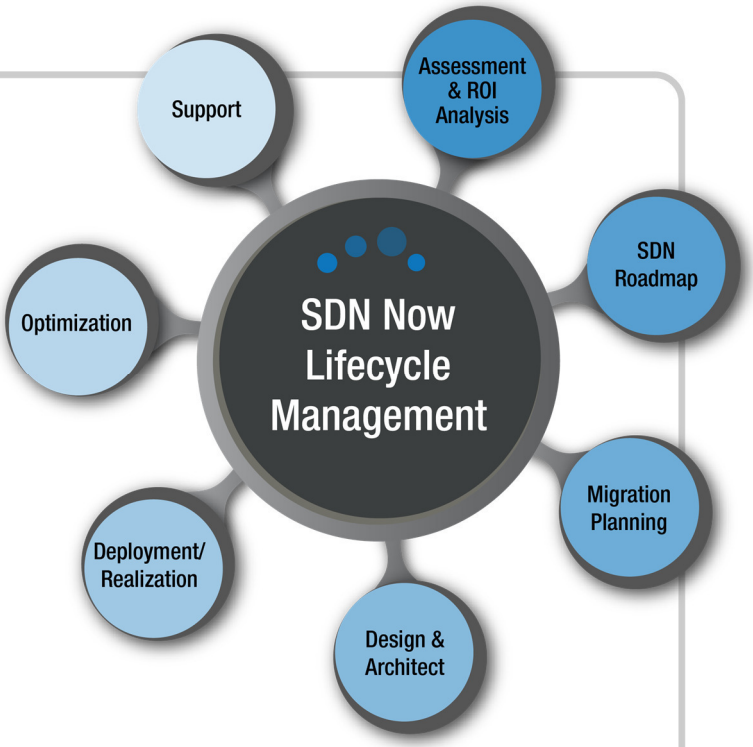
SDN PRACTICE



Migration Planning
SDN implementation is an ongoing process, requiring a determination of how to integrate the technology while still leveraging your existing network investment. Datavision works with you to create a migration plan that allows you to seamlessly integrate SDN without disrupting your existing network.

Design And Architect
Datavision helps design and architect an SDN configured for your unique network requirements, using industry best practices developed by our experienced engineering team.

Deployment And Realization
As with any infrastructure build or upgrade, the deployment of SDN requires a detailed implementation plan with a timeline for specific phases of the deployment. The timeline should allow for the development of any new software applications in advance and plan for configuration and optimization of these applications with the deployment of the network.

Optimization
Cost reductions can vary across businesses, but the first goal should be to capture measurable savings on operational and infrastructure costs. Optimization of virtualized appliances is the key in lowering CapEx and OpEx. Datavision helps establish a clear set of metrics to measure cost savings. Ongoing measurement and analysis of these metrics helps guide the ongoing network optimization process.

Support
Training and support are key elements in adopting SDN-centric infrastructure, and we offer several avenues to deliver. Whether supplementing an existing IT team or providing full end-to-end staffing solutions, Datavision has the resources to be a valuable partner in helping to optimize your network and helping you realize the operational and financial benefits of

SDN Quickstart Lab
The POC stage is critical for the deployment of any new network technology. The POC is based on an identified Use Case that is highly controllable and is tightly bound. Datavision's *SDN QuickStart Lab* helps you develop a test environment that provides a place for you to test your uses cases and vendor selections in a real-life situation. The POC is executed over a short time frame, typically 30 days, with the key objective to test and verify the functionality of the software and hardware components, and to prove out the Use Case.

We work with a variety of equipment and software partners to get a better view into SDN deployments in the service provider, data center and enterprise markets. This allows us to create a customized SDN solution for you and thoroughly test it with you before it ever goes live.

Service Conductor ™
Datavision's Service Conductor™ helps automate the delivery of network services. No more taking weeks and months to launch complex network services. Service Conductor™ offers transform services delivery through the use of a model-based approach to element management and services orchestration.

Service Conductor™ provides multiple solutions for Network Operators and enterprise environments to enable Service Orchestration solutions in their networks. These end-to-end solutions make it easy to modify or expand a network while providing better scalability and bandwidth management.

One-Call Expert Staffing
Datavision One-Call Expert Staffing means just that — network professionals that are readily available to provide quick turnaround on your resource needs with a single call. Our One-Call Expert Staffing solutions help clients realize optimal network infrastructure design and performance while maintaining a competitive advantage through effective strategy, design and realization.

Who We Are

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Datavision is a technology consulting and staffing firm focused on helping our clients realize optimal network infrastructure performance and to maintain a competitive advantage through effective infrsatructurestrategy, design and realization. We've been successfully providing solutions to Fortune 100 companies for over 20 years and our client base includes both Tier 1 Service providers and large enterprise clients. We help our clients reduce operational expenditures and to make the most out of valuable capital resources.

Datavision works with our clients to offer a full range of professional services including: fixed-price projects, executive consultation, staff augmentation and project/program management. We specialize in crucial technology support services that drive key business processes and help our clients focus on their overall business objectives with confidence.

Datavision provides expertise in all major areas of networking infrastructure, from WAN architecture, design and implementation, to data center technologies such as Openstack and virtualization. Additionally, we offer our clients a hands-on approach to traditional networking implementation, Software Defined Networking (SDN) based on Openstack and other open networking standards, Network Function Virtualization, and cloud-based "XaaS" services.

Our Services

Design & Planning

Whether you are adding a new vendor's technology or implementing a new network solution, our experts have the experience to help. Our consultants provide network design assistance to build a new network or redesign an existing one.

We collaborate with your team to recommend industry best practices and assist in creating specific software configurations that support an infrastructure that is flexible, scalable, reliable, and secure.

- Network Architecture
- Network Detailed Design
- Security Design
- Design Review and Verification
- Migration Planning
- Test Planning
- Integration Planning
- Migration Workshops/Training

Our proven methodologies use industry recognized standards and best practice to ensure solid, reproducible results that define best-of-breed frameworks or optimize existing client approaches.

Our Services (continued)

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Integration & Migration

From cutovers to major network migrations, conversions, and implementations, we can plan and execute an entire deployment strategy from start to finish: identify the goals, define the migration process, develop schedules and checklists, and manage the implementation.

Our experts also utilize state-of-the-art tools to assist you in translating existing software configurations and routing policies to software configurations.

- Project Management
- Implementation
- Testing and Pilot Support
- Router Turn-up and Configuration
- Protocol and Service Migration
- Firewall Migration
- Network Integration
- Routing Policy Translation
- Consulting and Integration

Operations Support

As a dedicated, onsite resource, our technical consultants integrate with your engineering operations staff to act as a direct resource for all technical aspects related to your network infrastructure. Our engagements are flexible in how we can structure operational, design, and planning assistance.

- Network troubleshooting and operations support
- Network and configuration analysis
- Technical liaison for multi vendor support
- Test product features and functionality
- Manage/track trouble tickets, RMAs, and bug reports
- Informal technical and product training
- Network design, planning, and implementation

Network Optimization

Datavision provides several options to ensure your network is operating securely and at peak efficiency. Our security experts can analyze the security of your organization network infrastructure, identify current vulnerabilities, and provide software configuration recommendations to better secure your network from common vulnerabilities.
Our Professional Services consultants are also available to identify potential bottlenecks or hot-spots in your network, benchmark the current health and utilization of the router infrastructure, peering points and routing policies, and provide trending data that can be used for future capacity planning and analysis. These activities improve the efficiency of your network and help reduce operational costs.

- Network Health Check
- Security Assessment & Risk Mitigation
- Routing Policy Optimization
- Class of Service/QoS Design
- BGP Peering Analysis
- MPLS Implementations
- WAN Optimization & Acceleration
- Managed LAN/WAN, VoIP/IPT Solutions

At DataVision, your success is our business.

SERVICE CONDUCTOR™

Network Services Orchestration Solution

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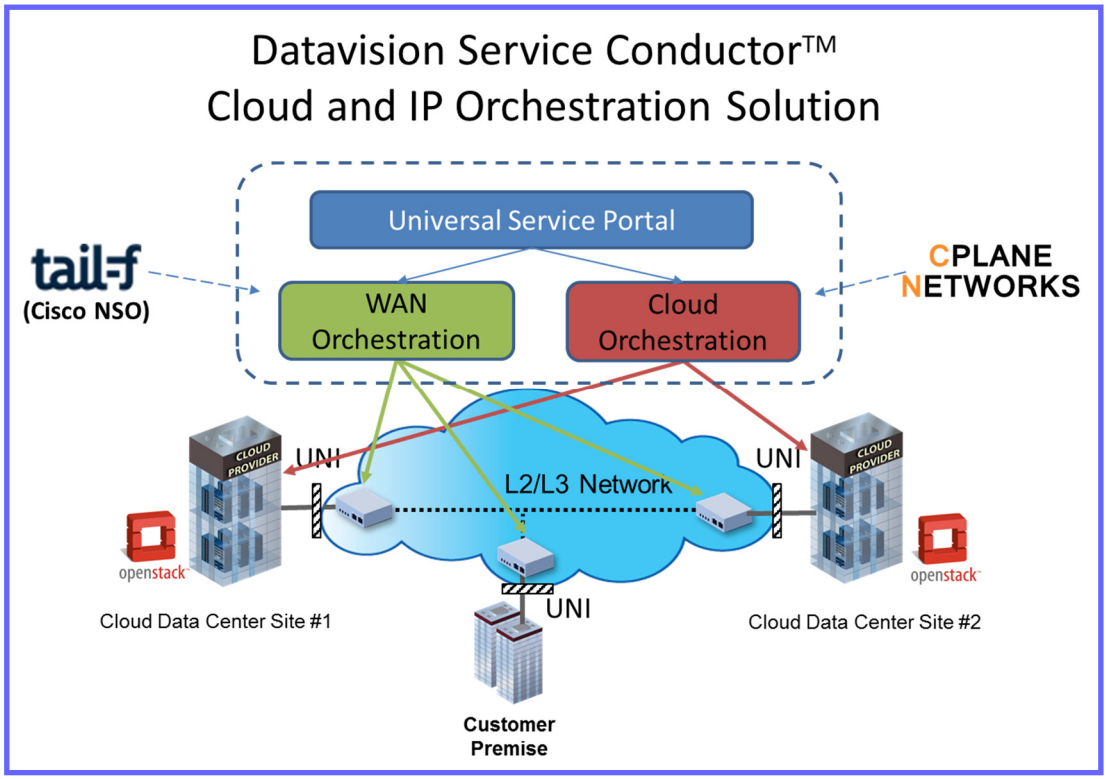
Transformation is occurring in many facets of the Communication Service Provider's (CSP's) network, product offerings, service definitions and business operations. Software Defined Networking (SDN) and Network Function Virtualization (NFV) has been at the forefront as a catalyst for such transformation.

However, many parallel moving pieces are at work simultaneously bringing about such transformation. A change requires a catalyst, something to alter the current course. Today, we are seeing many catalysts driving the transformation in how CSP's operate, including the movement from hardware to software, the growing complexity of the back office, and software innovation based on open interfaces at every level.

From a software implementation perspective, services currently modeled in UML can be transformed into protocol specific modeling languages such as JSON, XML Schema (XSD), YANG, Structure of Management Information (SMI), Web Services Description Language **(**WSDL), etc. Once the entire service is modeled into a protocol specific data modeling language, there is significant power and efficiencies realized in what can be done with the service model.

Datavision's *Service Conductor™* family of solutions leverage open-interface software innovation to help service providers transform their back office provisioning operations and improve their agility, through the use of a standards and models-based approach to element management and services orchestration.

Service Conductor™ provides **multiple solutions** for Network Operators or Enterprises to help reduce their operational expenditures. Through the application of NetConf and YANG modeling, services and devices are instantiated into an orchestration solution that enables operators to gain significant advantages in reducing OpEx and the time it takes to roll out new or updated services to customers, shrinking time to revenue (TTR) in configuring and provisioning network services.



Service Conductor™ also provides facility to interface with OpenStack implementations to aid in the activation and control of virtual compute, storage AND network resources.

Service Conductor™ provides multiple solutions for Network Operators and Enterprise environments to enable Service Orchestration in their networks:

- Carrier Ethernet Management Solutions
- Network Services Catalog
- Discovery & Configuration Management
- Service Chaining
- Cloud-Cloud Orchestration
- Data Center Automation
- Software Defined WAN
- Dynamic Network Segmentation
- Virtual Network Overlays
- Network Service Virtualization

Why ***Service Conductor***™?

- Faster Development and deployment of new services with a model-based approach
  - Approach allows integration of multi-vendor environment in fractions of the time versus traditional methods
  - Services, device configurations, open flow apps defined in YANG, a standards-based modeling language.
- Industry standard MEF CE2.0 Services are modeled and can be introduced to the network more quickly
- No disparate Element Management Systems
- Real time, dynamic capacity allocation
- Transition to, and management of, mixed environment of traditional hardware and software defined virtual devices and services.