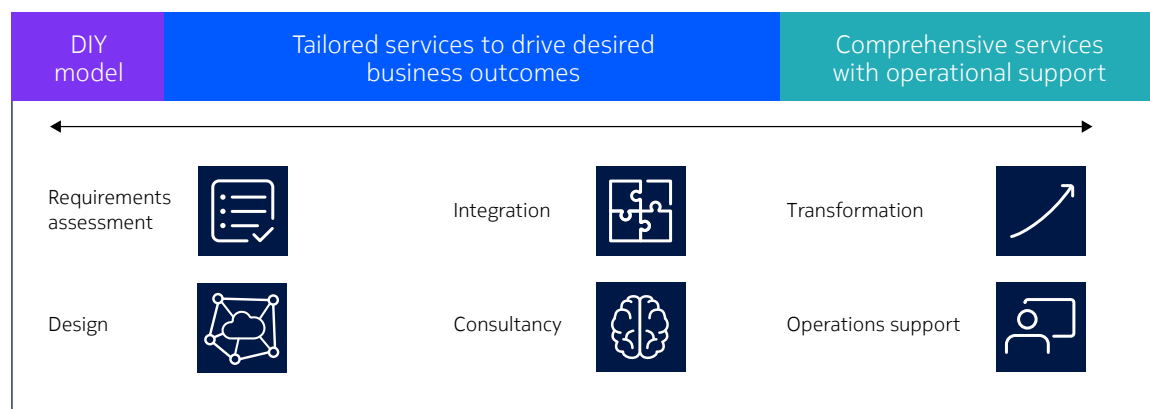# Nokia professional services for data center networks

Data center networks must be rapidly and efficiently architected and put into service, ready to evolve with agility to accommodate workloads of unprecedented scale and variety. Nokia professional services bring a suite of expertise, tools and best practices to drive optimal outcomes in data center network operations.

Figure 1: Nokia professional services provide the support you need for your data center

DIY model	Tailored services to drive desired business outcomes		Comprehensive services with operational support
Requirements assessment		Integration	Transformation
Design		Consultancy	Operations support

A range of granular and flexible service offerings

Nokia professional services for data center networks are founded on a strong focus on business and engineering outcomes and incorporate a flexible, modular and collaborative approach to best complement, support and upskill staff engaged in architecture, design and operations.

Outcome focus

The outcome is defined as a fully operational, cost-effective network capability at a specific point in time. Beyond this static definition the outcome represents an inbuilt agility and readiness to efficiently adapt, in scale and function, to support emerging workloads and evolving fabric architectures and to leverage the most advanced operational toolsuites as they become available.

Collaborative approach

In establishing modern and efficient network designs, Nokia works as a collaborative partner bringing wide and deep experience in design and project management best practices. Nokia can provide a range of collaborative services from a temporary short-term boost for the team to a comprehensive design engagement. The goal is to work closely to the common outcome goal and also for Nokia to transfer product and systems knowledge to strengthen the core team going forward.

Nokia has deployed data center networks in many environments worldwide, ranging from small edge installations to large, multi-country data centers, for service providers, enterprises, webscale network operators, critical infrastructure providers

and research and education networks. Through consistent use of Nokia Validated Designs, we address unique challenges that arise from a wide range of networking and security requirements, migration scenarios and automation use cases.

Nokia professional services complement the Nokia Data Center Fabric platforms and the Nokia Service Router Linux (SR Linux) network operating system (NOS) and automation software to help you address your primary business and operational challenges. Our experts work with you to understand your needs, design the right architecture and integrate networking nodes in your existing or new data centers. We meet your requirements by following Nokia best practices and using the optimal delivery models.

Our services offer full flexibility to ensure that you get the support you need for your data center. For example, we can provide light consulting services if you prefer a do-it-yourself approach. We can help you gain confidence by watching our team deliver the initial implementation or migration so you can then take over for the rest of the network deployment. Or we can execute and manage every part of your data center network deployment for you, as well as providing options to support post-live network operations.

Features

- Nokia Validated Designs with a use-case library that includes a design framework and templates, all of which are tested and validated
- An efficient, automated, first-time-right approach to fabric deployment, validation and management
- Nokia experts that bring deep capabilities and know-how relating to data center network deployment

Benefits

- Guaranteed outcomes aligned with your requirements and expectations
- Reduced risk of re-work and delays, which results in faster time to market and revenue
- Deterministic and controlled costs enabled by a refined delivery model and experienced staff

Service description

Nokia professional services can help you deploy Nokia Data Center Fabric networks in a wide range of environments that vary in size and scale.

Whether you need help with design, integration, consultancy, transformation or a tailored combination of these capabilities, you get services delivered by engineering experts utilizing thoroughly validated designs underpinned by an automation toolchain.

Requirements and assessment

Our engineering experts assess your current network features and capabilities and solicit the requirements for the network you want to build. These steps are usually performed through workshops and written communications. Our team provides the output in a Requirements Definition Document (RDD).

Design

Our experts translate the RDD into a High-Level Design (HLD), which is then used to generate a Low-Level Design (LLD) that contains the site-specific data required to deploy the network elements. They ensure that you approve and accept the designs before proceeding to the integration of the network elements.

Integration

For this part of the service, our team will utilize the approved HLD and LLD to develop per-node element configurations and bring each network element to an operational state. We then test and verify the configurations in conformance with the network design.

Consultancy

We provide a consultancy service for the data center through an architecture consultant who is a subject matter expert on architecture, integration and design using Nokia SR Linux products. The consultant will work with your team, providing support and consultancy at the direction of your personnel. Typical areas of practice include support for design and golden configurations, knowledge transfer, Nokia Validated Designs usage, and test strategy and methodology.

Transformation

Our transformation service focuses on using migration planning and customized automation tools to ensure that you make a smooth migration to a new data center.

Operations support engineer

For this post-deployment service, we assign a trained and knowledgeable SR Linux operations support engineer to work in coordination with your engineering team. The assigned engineer will support and assist you with network configuration, service provisioning, troubleshooting and operational aspects of Nokia SR Linux products.

Associated networking products and solutions

We use our deep and broad hardware and software portfolio and extensive partner ecosystem to provide a holistic data center transition capability that focuses on meeting all your business, operational and strategic goals. Our experience in architecting and deploying robust, comprehensive, high-scale and secure networks informs and refines our global professional services practices.

Nokia professional services for the data center augment the Nokia Data Center Fabric solution, which includes, but is not limited to, the following components.

Event-Driven Automation (EDA)

Nokia EDA is a Kubernetes-based cloud-native infrastructure automation platform that delivers reliable, simplified and adaptable management to all key phases of the data center fabric life cycle, including design, deployment and ongoing operations.

High-performance hardware platforms

The Data Center Fabric solution features the Nokia 7220 Interconnect Router (IXR) series, which provides fixed-configuration platforms, and the Nokia 7250 Interconnect Router (IXR) series, which provides modular and fixed-configuration platforms. These platforms enable you to implement modern, massively scalable and reliable data center switching architectures for leaf, spine, super-spine and management top-of-rack (TOR) applications.

Nokia SR Linux

SR Linux is a uniquely open, extensible and resilient NOS designed for modern IP and data center networks. It uses an unmodified Linux® kernel as the foundation for a suite of network applications.

SR Linux opens the NOS infrastructure with an architecture built from the ground up around model-driven management and modern interfaces. This approach simplifies your operations and integrations while giving you the ultimate in visibility and flexibility.

Data Center Gateway

The Nokia Data Center Gateway enables you to provide high-performance connectivity between data centers, public clouds, the wide area network (WAN) and the internet. It supports a comprehensive set of use cases, including data center interconnect (DCI), data center gateway for internet peering and multi-cloud interconnect.