



SOFTWARE-DEFINED NETWORKING & SECURITY

SOFTWARE-DEFINED NETWORKING (SDN) & SECURITY

Software defined networking delivers a paradigm shift in the manner in which applications and services are deployed in the Enterprise by controlling their placement and security through software policy rather than hardware topology.

Words like “flexible” and “secure” are not terms typically used together to describe any IT network. Since the dawn of networking we’ve architected applications around preexisting network implementations, ones that focused on enforcing security by physical barriers and rules. We might spend weeks or months to adapt an enterprise class network to the specific needs of a large application due to these rigid, physically-defined topologies.

SDN is completely changing how we think about how we deploy applications and the networks that support them. As the term implies, SDN moves network configuration out from the individual, discreet pieces of network hardware devices spread throughout the enterprise and into a single software control plane that allows management of all those connection points into an intelligent pool of devices working together. This enables us to programmatically configure and adapt the network, across the enterprise, to the needs of each application or service based on their specific needs.

When we think of the network we tend to focus on connectivity and security but with the advent of SDN we can give equal attention to performance, availability, and compliance all contained in policies intended to address the needs of the application holistically. The infrastructure services teams can develop the desired fine-grained policies, attach it to the application, and the network will conform to its needs and not the other way around. Moving to software-based policies for end-to-end control, security enforcement, and management dramatically reduces the time required to deploy new services in the enterprise while delivering unparalleled flexibility, agility, and visibility into the overall configuration of the network.

KEY BENEFITS

- Dramatically reduce service provisioning time
- Holistic centralized data center management with topology flexibility
- Centralized security policy enforcement and micro segmentation
- Reduced OPEX through simplified management
- Increased application visibility
- Automation-capable infrastructure
- Security policy mobility



THE KOVARUS APPROACH

SDN Design

A completely new approach is required when planning and designing for a software defined network. Traditional network design focused on static physical connections and security rules at ingress/egress points. These are still applicable in the SDN-enabled environment, especially when integrating into existing infrastructures, but now we need to look at the network as a dynamic, adjustable, adaptable fabric controlled centrally by policies written in software, applied instantly.

The Kovarus design methodology starts with an assessment of your existing environment to determine its readiness for SDN technology. Through collaborative workshops we discover, assess, and design based on existing people, processes, and architectures as well as the requirements of applications the SDN-enabled environment is intended to serve. The result is a blueprint representing the ideal design for the identified use cases which in turn serves as the reference from which the SDN architecture and policies can be installed and configured.

SDN Deployment

With the proper design in hand, Kovarus will help drive the deployment of the SDN solution. As with any well-run project, we start with an implementation plan that outlines the specific tasks, dependencies, owners, and timelines to drive success. Components can be installed in production or non-production environments with policies developed that perfectly align to each application, service, and use case they are intended to support. Test and validation procedures are developed that align with the use cases to ensure the environment that is deployed meets the needs of the business and is tuned until such capability has been achieved.

The deployment project would not be complete without proper transfer of knowledge and understanding of the newly installed environment. The customer is encouraged to participate throughout the deployment, which closes with final knowledge sharing workshops where the architecture, use cases, and policies are covered but also the ongoing operational elements to ensure seamless SDN policy development, application deployment, and smooth adoption of the new SDN-enabled infrastructure.

THE KOVARUS ADVANTAGE

- Experts in modernizing and automating IT
- Premier partner of leading technology companies
- Extensive array of certified specialists
- Broad industry experience
- Multi-vendor technology expertise
- Proven methodologies to help accelerate business through IT

TAKE THE NEXT STEP

For more information, please contact Kovarus at (800) 454-1585 or email us at sales@kovarus.com

About Kovarus

Kovarus is a systems integrator that helps companies modernize and automate IT. We enable businesses to transform their IT service delivery to help them accelerate innovation and deliver cost-effective business outcomes. Kovarus has helped some of the greatest companies in the world by leveraging the Kovarus Solutions Portfolio of best-in-class technologies and services to deliver business services faster, at scale and more effectively to provide them a competitive advantage. With an extensive array of elite technical certifications and credentials, leading technology partners continually recognize Kovarus for its commitment to excellence and its focus on delivering exceptional customer service. To learn more, please visit www.kovarus.com.