



SDN IS A GAME-CHANGER

Simplify your networks while gaining more control

The changes going on in the networking world are impossible to ignore: the move toward new technologies like cloud computing and virtualization has great potential for IT as a whole, but has also exposed traditional slow-moving networks as a major bottleneck standing in the way of getting the best results from these new technologies.

Trying to enable tomorrow's technology using yesterday's networking infrastructure has created a lot of stress for IT administrators, who are finding it increasingly difficult to keep up with the high costs and inherent complexity found in traditional network environments. Clearly, there has to be a better way to move forward.

There is, and it's called software defined networking (SDN). With SDN, IT teams get a smarter way to manage their networks, helping them address the issues of cost, complexity and performance that are so pressing today. In this document, we'll provide a brief overview of software defined networking, why you need it, and how WEI can help to get you started.

WHAT IS SOFTWARE DEFINED NETWORKING?

Like many of the newer IT terms out there, software defined networking has a somewhat nebulous definition: exactly what it means may vary based on who you ask. However, the key characteristic that seems to unite all definitions of SDN is that it represents a move away from traditional networking, where control of the network happens at the individual device



BENEFITS OF SOFTWARE DEFINED NETWORKING

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Greater visibility and control:

Centralizing your network under one controller helps you treat the whole network as a single unified whole, rather than a grouping of various parts.

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Cost savings: Using commodity hardware can drive down capital expenses, while automation and greater efficiency can cut operating costs.

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Agility and innovation: Slow-moving networks are frequently a bottleneck for IT organizations that want to deploy new apps and respond to customers quickly. With SDN, it doesn't have to be so.

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Analytics capabilities: When you know what's happening across your entire network, it becomes much easier to analyze that information and use it to support informed decision-making.

level, replacing it with a centralized model, where control of the entire network rests with a single server, which is appropriately known as a "controller."

Think of traditional networking as a chain. Each individual device only understands what's going on in the adjacent links in the chain, making it nearly impossible to make decisions that require visibility of the entire network. On the other hand, SDN is more like a web, with control of the entire network emanating out from the controller at the center. Clearly, this model provides a much higher level of visibility, making it much easier to make big-picture decisions about your network.

WHAT ARE THE BENEFITS OF SOFTWARE DEFINED NETWORKING?

In addition to the most obvious benefits of SDN—increased visibility and control, due to its centralized nature—the technology also has cost benefits. The cost savings can be found both in capital expenses, by allowing companies to achieve the same or better results with more affordable hardware, and in operating expenses, by automating key tasks and allowing network administrators to do more with fewer resources.

Another important benefit of SDN is increased agility. In an era defined by fast-moving technologies and on-demand applications, the ability to innovate and deploy new applications quickly without the network slowing things down is key to keeping both internal business users and customers happy. In addition, when the need for changes to the network arises, it's much quicker and easier to make those changes across the entire network.

Finally, by maintaining clear visibility across the entire network, organizations have the ability to make decisions based on advanced analytics, ensuring that they're running their network in the most efficient and effective manner possible.



AN INTRODUCTION TO SOFTWARE DEFINED NETWORKING VENDORS

WEI has partnerships with the leading SDN providers and can work with you to determine which vendor is the best choice for your needs. Below is a brief introduction to the SDN leaders.

Cisco SD-LAN

Cisco® Application Centric Infrastructure (ACI) is an innovative Data Center architecture that simplifies optimizes and accelerates the entire application lifecycle through a common policy management framework. Network, security, virtualization, and applications teams can now work in a common management architecture, enabling the disconnected management processes that have burdened most data centers to finally come together.

Cisco SD-WAN

Cisco® Intelligent WAN (IWAN) is a comprehensive set of traffic control and security features for the wide-area network that have been integrated into Cisco branch-office routers. With the Cisco Application Policy Infrastructure Controller Enterprise Module, Intelligent WAN delivers all the benefits and automation of a software-defined WAN (SD-WAN).

VMware

VMware NSX network virtualization is a transformative architecture from VMware that enables the full potential of a Software-Defined Data Center, making it possible to create and run entire networks in parallel on top of existing network hardware.

HPE Openflow

HPE OpenFlow facilitates access and communication between application, control and infrastructure layers of SDN. Now, you can simplify management and programming of network devices. Enable dynamic change in your traffic flow and create a network more responsive to business needs, from edge to core. The result is end-to-end SDN architectures ready to apply business logic and unified management to network behavior.

Moving Forward with WEI

Making the move to SDN is a big deal for your organization, and it should be treated as such. It's not just another IT investment; it's a strategic change in the way you approach your networking strategy. As a result, consider partnering with an expert who can help you evaluate your options. WEI has the expertise you need to develop the best path forward for you.

ABOUT WEI

**WEI is an innovative,
full service, customer centric
IT solutions provider.**


**Why WEI? Because we care.
Because we go further.**

At WEI, we're passionate about solving your technology problems and helping you drive your desired business outcomes. We believe in challenging the status quo and thinking differently. There are a lot of companies that can take today's technology and create a great IT solution for you. But we do more. We go further. And we have the customer, vendor and industry awards to prove it. WEI is a premier technology partner, who always puts our customers first while providing the most innovative solutions for over 25 years.

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