

## INTRODUCTION

Software-Defined Wide Area Networking (SD-WAN) has become a viable and cost-effective solution for enterprises needing to connect multiple sites whilst maintaining control & transparency over the quality of the WAN circuit, in order to optimise application performance and end-user experience.

An SD-WAN solution can optimize performance across several alternative network providers and save about a third of the cost of connecting branches and data centers compared to MPLS.

With more than twenty SD-WAN vendors offering varying levels of features and sophistication customers can frequently find they are drowning in information when researching appropriate solutions. Conversely Vendors find it challenging to demonstrate their differentiation to their prospects.

## ISSUES IN TESTING SD-WAN

For customers, the ability to evaluate the vendor solutions that appear to meet their operational requirements is, at best, challenging and may actually be impossible where new WAN circuits will be required as part of the SD-WAN implementation.

For vendors wishing to demonstrate their solutions in the most appropriate manor, which is typically customer-specific WAN configurations, the same headaches exist.

PORTS 0 & 1 > Setup & Control > Standard > SD-WAN: SD-WAN (Modified) Back to Scenario Save

PLEASE SELECT THE EMULATION TYPE FOR PORTS 0 & 1

Point to Point (Single or Multi Link)      Dual Hop (Single or Multi Link)

EMULATION TYPE ? ⌵

▶ Start ■ Stop ⬇ Update ⌵ Load Similar

London DC (SD-WAN)      New York Office (SD-WAN)

DSL Configured (1)      Mobile Configured (2)      MPLS Configured (3)

*In this example, NE-ONE has been configured to provision (emulate) three Networks Circuits - DSL, Mobile and MPLS circuit. NE-ONE allows each circuit to independently have it's properties (quality & availability) updated dynamically.*

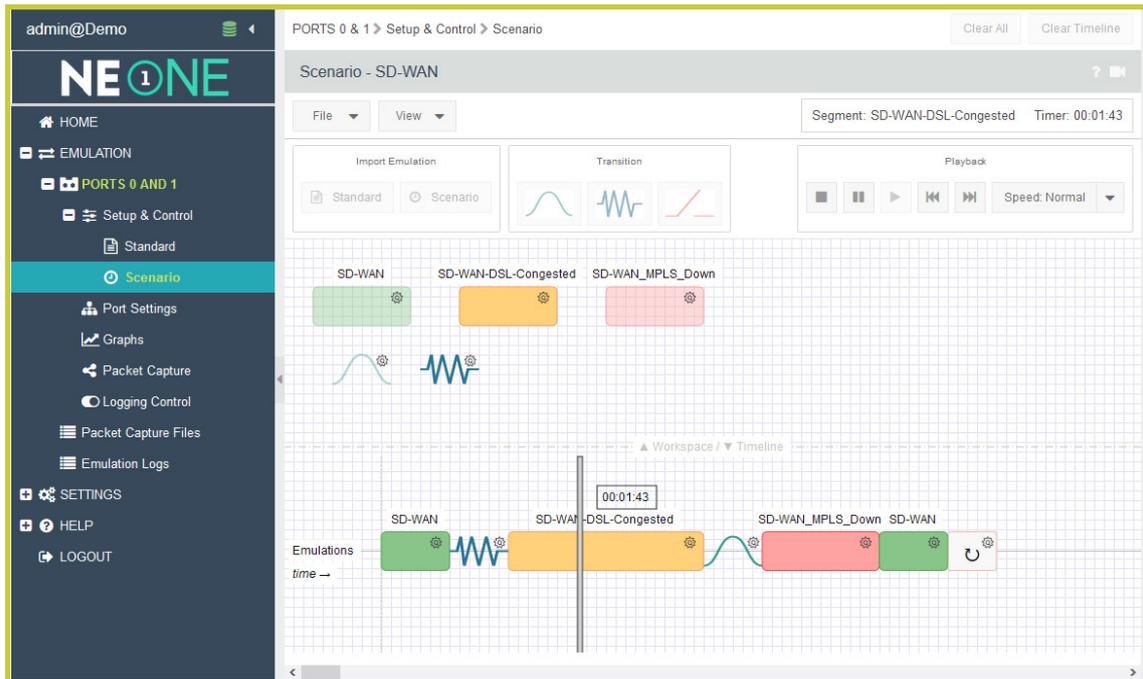
Even where an organization or vendor has the required WAN circuits, the ability to manipulate the quality of these circuits to create realistic and variable conditions in which to “exercise” the SD-WAN solution is nearly impossible.

## HOW TO TEST SD-WAN

Customers and Vendors therefore need a method to validate SD-WAN in a controllable environment that accurately mimics the real WAN circuits, so that tests can be performed and repeated under both normal and challenging network conditions.

iTrinegy's NE-ONE Network Emulation solutions provide exactly this capability so that numerous "What-if" scenarios can be played out to validate the features and authenticate the effectiveness of the SD-WAN solution.

Using NE-ONE's unique and highly intuitive graphical Web Scenario Builder, multiple different types of WAN circuits (MPLS, DSL, Internet, Mobile, etc.) can be provisioned and their quality and availability manipulated dynamically in order to create the ideal SD-WAN test or training environment.



## NE-ONE MODELS AND FEATURES

iTrinegy's NE-ONE Network Emulators are available as either Virtual (VMware's ESXi Server) or physical Appliances (both desktop and half-rack appliances) with 100Mbps to 10Gbps network connectivity. There is a wide range of model options available to best suit your needs.

### Desktop Appliance



Up to 1 Gbps

### Half-Rack Appliance



Up to 10 Gbps

### Virtual Appliance



Up to 200 Mbps

## ABOUT ITRINEGY

iTrinegy is an established world leader in Network Emulation and is trusted by governments, military organizations and enterprises across the globe.