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CISCO TESTING CENTER OF EXCELLENCE USES ITRINEGY NETWORK EMULATORS TO DELIVER REALISTIC SD-WAN PROOF OF CONCEPT TESTING

As a leading provider of SD-WAN solutions Cisco was eager to assure prospective customers that its technology would deliver the anticipated benefits and felt that the best way to achieve this was to demonstrate the capability of its products in a test environment that realistically reflected the customer's intended network set-up. In order to achieve this objective the team at the Cisco Testing Center of Excellence (TCoE) made the decision to introduce a Software Defined Virtual Test Network, which could create different network topologies, into their set-up.

PROOF OF CONCEPT AND IMPARTIAL ASSESSMENT

Kris Sekula, Manager of the Testing Center of Excellence explains, "One of the jobs my department has is to deliver proof of concept demonstrations of Cisco SD-WAN solutions to prospective customers and there is nothing better than showing the product being used in a realistic scenario where you encounter a problem with the network, for example if it starts becoming unreliable, in order to show how our solution deals with that situation. This is the main reason I was interested in deploying a commercial network emulator".

As an experienced Proof of Concept Engineer Kris was already aware of numerous potential products including open source options and Cisco has its own internal traffic generation tools. However, as a head of a customer facing department, Kris was reluctant to use one set of Cisco tools to confirm the effectiveness of another Cisco product, preferring instead, to use proven professional third-party technology to help deliver a genuinely impartial SD-WAN capability assessment for prospective customers.

While Kris had knowledge of possible solutions, he was actually made aware of the iTrinegy product range through a colleague who had previously visited iTrinegy's booth at a Cisco Live conference. Introductions were made and online demonstrations arranged.

THE OPTIONS OF BOTH EASE OF USE AND DEEP DIVE EVALUATION

Kris's team has to address the needs of two prospect audiences, C-Level executives who need a high level overview of the proposed Cisco SD-WAN solution in order to be assured that it will deliver the anticipated business benefits and technical specialists, who frequently demand a more comprehensive demonstration to "put the product through its paces" in order to validate its capabilities.

iTrinegy's product range is able to accommodate both audience requirements. Its NE-ONE range has been designed for users who need to rapidly set up point-to-point application testing over networks or who do not have deep knowledge of networks. By contrast, the INE range requires a greater network knowledge, but enables users to create more sophisticated, multi-path, multi-mode network topologies. The INE products are ideal for the comprehensive testing the more technical audience wished to see as part of a deep dive evaluation.

The online demonstrations validated the different philosophies applied to the two product ranges and with regards the NE-ONE range Kris commented, "What I really liked was its ease-of-use. Some emulation products can be complex to set up and use and if you don't use them on a regular basis you have to go through a learning curve every time to familiarize yourself with it again. By comparison, the NE-ONE was super simple. Even junior engineers can "figure out" the GUI in minutes without much training or reading the manual! For basic scenarios that is all you want, you don't want to have to go through lots of different menu options or dial lots of knobs to get the basics working. From what I have seen with the NE-ONE it only requires a few simple controls. I can imagine using it infrequently and not getting frustrated. The Network Scenario Builder also looks a very useful feature."



"What I really liked was the NE-ONE's ease of use"

Referencing the INE network emulator demonstration, Kris observed that, "Sometimes when I am presenting to people who are deeply technical, I know that they love seeing GUIs where there are lots of different options to adjust network parameters and for these super technical people the INE is going to be perfect when it is installed in our Testing Center of Excellence".



The INE Enterprise will enable Deep Dive Evaluation of the Cisco SD-WAN solution

SD-WAN PROOF-OF-CONCEPT

Currently, the focus is on delivering proof-of-concept demonstrations of Cisco's SD-WAN solutions in situations that are appropriate to the prospective customer need as Kris explains, "We want to adjust the parameters to the types of scenarios our customers have, for example, you could have a banking customer that has multiple branches around the world. Their financial data, together with non-critical data will be traversing the network and the client will want to apply impairments to their different transport paths to see how the Cisco SD-WAN solution deals with this and guarantees the delivery of the traffic. Other customers use collaboration platforms - video conferencing and audio conferencing over the network – and now we can show very visually what happens with the quality of the video or voice calls as you start impairing the connections. These are typical scenarios we want to show."

Longer term, Kris can envisage iTrinegy network emulators being used in the TCoE to create the real-world networks needed to address other scenarios such as multi-center testing where you want to introduce a variety of different delays and network impairments in order to make the testing more realistic but for now, they are concentrating on delivering realistic impartial proof-of-concept testing that demonstrates the quality of the Cisco SD-WAN solutions.