

ADARA announces the enhanced Constellation Series; a new SDN Technological and Industry First; a Virtualized Layer 1-7 Stack (OSI Standards Model); a Full Stack Engine for Virtual Application/Service, Compute and Network Infrastructure

ADARA Constellation expands the definition and scope and value of Virtual Network Infrastructure (VNI) utilizing virtual abstracted software



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SAN JOSE, CA--(07/16/2012) - [ADARA Networks](#), the leading provider of advanced Computing and Networking products, has announced ADARA's enhanced Constellation Series *Virtual Network Infrastructure* Platform.

Constellation is the industry first; a fully virtualized Layer 1-7 stack. Constellation implements both Control and Data Abstraction, allowing Constellation to operate in both the Control Plane and the Data Plane.

Constellation's first generation featured a fully distributed abstraction of functionalities from Layer 2 through 7, including:

- Virtual
 - switching
 - routing
 - multipath routing
- Dynamic MPLS
- Firewalling
- Routed DNS and Dynamic UDDI
- Access control
- Network address translation
- Data and protocol transformation and normalization
- File transfer
- Message routing
- Caching
- Multi-layer QoS
- Content delivery and multicasting
- Encryption, compression and data de-duplication
- SSL offload
- TCP acceleration
- Global and local load balancing
- SLA device and service monitoring, active management and dynamic re-configuration, and much more; all managed and viewed from a web based GUI.

2012 Open Networking Summit

Based upon the experience gained with our partners, the largest technology companies in the industry, in achievements announced and demonstrated at the 2012 Open Networking Summit, ADARA Constellation has been enhanced with multiple capabilities to satisfy gaps in the Software Defined Networking (SDN) market. Constellation has been improved to deliver Vertical and Horizontal Virtualization and Abstraction for end-to-end Software Defined Networking.

Constellation implements multiple new technologies; full Domestic and International Patent Protections have been granted for the technologies.

Constellation Enhancements

ADARA Constellation features the industry's most advanced:

- Novel Virtual Networking
 - Novel Admission Control
 - Transmission Control Protocol (TCP) Optimization
 - Deep Packet Inspection (DPI)
- Management
 - User Interfaces
- SDN Orchestration and Choreography
- Novel Virtual Computing
 - Full Virtualization
 - Virtual Machining
 - On demand computing via migration of
 - Virtual Machines (VM)
 - Applications and Services
 - Stateful Executables
 - Stateless Executables
 - State

These are featured in a vendor neutral, hypervisor, and cloud computing software neutral implementation, are exponentially higher performing than whole VM migration and remove the limitations of relying solely upon VM migration.

Enhanced Virtual Networking

Constellation features enhanced ADARA Sirius, featuring network hypervisor, and network operating system functionality, operating in response to network state - not just static metrics. Constellation is extensible to support any Northbound API and any Southbound API and supports both Controller and Controller-less implementations.

Full Virtualization

Constellation has been enhanced with Full Virtualization capabilities, via multiple levels of abstraction over the compute environments, network environments and whole physical IT infrastructure including HVAC and ROADMs. Constellation abstracts details of state (at the application, session and transport layers), configuration, forwarding, and other levels, even bare metal, are of significant import to a value added production system. ADARA Constellation enables complete SDN; Full Virtualization with capability to make available privileged operations for abstraction and management.

Complete Solution for Unified Data Center/Network

ADARA Constellation coupled with ADARA Echo and Hercules enables a Unified Data Center/Network; complete, production ready, Software Defined Networking. This unification is simply a high level statement of the factual results of SDN, whereby the abstractions of Control and Data Planes in the Compute and Network environment must be seamlessly integrated.

ADARA SDN extends past the level of the Virtual Machine, it extends to the Service. ADARA SDN Orchestration System provides the customers a single plane of glass manageability of the entire IT infrastructure, automated situation based Service Level Agreement (SLA) enforcement through scalable workflow engines. ADARA's Orchestration system provides fully decoupled modules that allow the components to scale out to support any number of devices instead of scaling up on a single server.

ADARA's DPI engine provides the visibility of the specific micro flow's application header and content fields through which ADARA SDN Meta-Controller selects the complete path for that micro flow and supports value added processing, such as TCP optimization, Data Deduplication, QoS, Content Transformation and other services.

A New Definition of Layer 1-7 Virtualized Abstracted Stack

ADARA SDN extends the traditional/common SDN implementation capabilities to true Layer 1-7/true End- to-End SDN. ADARA Constellation Series are able to operate both in the Control Plane and the Data Plane. ADARA's Layer 1-7 Virtualization is not limited solely to services that are traditionally performed in-line, but all services, even those that traditionally require interaction via another system across a virtual/physical interface.

Why ADARA Constellation is right for you

ADARA has responded to the market, enabling customers to have the simple flexibility they need to easily deploy solutions in a fully virtualized distributed architecture or in a simple soft appliance.

ADARA - Simple to Select, Simple to Implement

Customers struggle with understanding how to size their investments in virtual solutions. Customers are experienced in sizing based upon tangibles, such as port density or interface throughput. Vendors confuse customers by referring to concepts such as the "number of rules changes able to be pushed to a switch per second". This does not enable customers to adequately size their investments, and shows these vendors offerings not to be "production-ready."

ADARA's re-introduction of the Constellation Series has made this industry leading platform available to the United States Commercial Market through Tech Data and its channel of over 60,000 US Resellers.

Constellation is offered in two form factors:

- Software only, for a Fully Virtualized Software Solution
- Software on either Purpose- built or 3rd Party COTS Appliances (x86 or MIPS)

Constellation enables right-sizing for every customer and enables Enterprises of all sizes, in all industries, and Service Providers, to achieve their corporate financial and operational goals.

- Constellation implemented as a soft appliance offers the capabilities of every major appliance and middleware box, and software, without the performance and scalability limitations typical

of virtual machines; and Constellation as a soft appliance allows customers to select any size interface, and any port density.

- Constellation as a Fully Virtualized Software solution does not suffer from the limitations of over-processing, high overhead which limits scalability, and features “best of breed” with superior performance to open source.

ADARA Constellation incorporates every product in the ADARA platform, and Constellation utilizes Open Standards.

Constellation Series are critical solutions for Data Centers and Networks. The increasing utilization of Virtual Machining and Virtual Networking for High Performance Computing requires the state of the art in *Virtual Network Infrastructure (VNI)*.

ADARA Constellation; the State of the Art in *Virtual Network Infrastructure (VNI)*.

For more information, please visit: <http://www.adaranetworks.com>.