



NEWS RELEASE

Cisco Tetration Analytics: The Most Comprehensive Data Center Visibility and Analysis in Real Time, at Scale

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Cisco Delivers a "Time Machine for the Data Center"

SAN JOSE, CA -- (Marketwired) -- 06/15/16 -- Cisco (NASDAQ: CSCO) today announced Cisco Tetration Analytics™, a platform designed to help customers gain complete visibility across everything in the data center in real time -- every packet, every flow, every speed. [Cisco Tetration Analytics](#) gathers telemetry from hardware and software sensors, and then analyzes the information using advanced machine learning techniques. Tetration addresses critical data center operations such as policy compliance, application forensics, and the move to a whitelist security model. Through continuous monitoring, analysis, and reporting, the Tetration Analytics platform provides IT managers with a deep understanding of the data center that will dramatically simplify operational reliability, zero-trust operations and application migrations to SDN solutions and the cloud.

With Cisco Tetration Analytics, organizations can:

- Understand what applications are dependent on each other throughout their data center and into the cloud
- Move from reactive to proactive: make informed operational decisions and validate the effect of policy changes before they are implemented
- Search across billions of flows in less than a second using Tetration's forensics search engine and user interface
- Continuously monitor application behavior to quickly identify any deviation in communication patterns

The Challenge

There is currently no single tool designed to collect consistent telemetry across the entire data center and analyze large volumes of data in real time, at scale. Up till now, organizations have performed fragmented tasks without the correlation necessary to address operational issues comprehensively. As a result, these complex, slow and disjointed tools are costly in terms of time, money and lost

opportunity. IT managers today are hampered by a lack of visibility and knowledge.

- They lack pervasive visibility into data center infrastructure and how applications are interacting, which results in operational challenges.
- They are unable to migrate applications to the cloud or set up a Disaster Recovery site effectively with precision and speed.
- They're unable to adopt a zero trust model because they lack the critical information and resources to implement or maintain it.

The Solution: Cisco Tetration Analytics Platform

Tetration is designed to help enable pervasive and complete visibility across the data center using either server software sensors that require very low overhead, network hardware sensors that monitor packet-by-packet meta data, or both combined for the most complete solution. Tetration executes [advanced data center analytics](#) in real time and presents actionable analysis with easy to understand visuals. Tetration delivers information critical for data center operations, such as: application insights, automated white list policy recommendations, policy simulation and impact analysis, compliance management, and network flow forensics.

Tetration is like a time machine for the data center, enabling organizations to rewind what has happened in the past, view what is happening in the present in real time, and model what could happen:

- Model a change before it's executed to understand the impact on applications to enable informed operational decisions;
- Validate that policy changes have actually been applied and taken full effect;
- Do real-time and historical policy simulation -- replay what happened in the network at any time, with long term data storage capabilities.

Early Field Trial: Cerner Corporation

"We were delighted to engage with Cisco to gain experience with Tetration as an early field trial participant," said Brett Jones, director of infrastructure technology for Cerner. "With the Tetration Analytics trial, we better understand application behavior and dependencies across our data center." Cerner is a global leader in health care technology. [Cerner's](#) health information technologies connect people, information and systems at more than 20,000 facilities worldwide.

How it works

Software sensors are installed on end hosts: either virtual machine or bare metal servers. In the first Tetration release, software sensors support Linux and Windows server hosts, while hardware sensors are embedded in the ASICs of Cisco Nexus 9200-X and Nexus 9300-EX network switches to collect flow data at line rate from all the ports. A single Tetration appliance will monitor up to one million unique flows per second. Both software and hardware sensors communicate the flow information in real time to the Tetration Analytics platform. The platform can be installed in any data center with any servers and any network switches.

The Tetration platform is a "one-touch" appliance: the servers and switches are prewired and the software is pre-installed. Setting up Tetration is easy: answering a few questions regarding the data center environment allows the Cluster to be configured. The big data complexity is hidden -- no special big data expertise is needed to deploy or operate Tetration. Available in July 2016, the first Tetration platform will be a full rack appliance that is deployed on-premise at the customer's data center.

Cisco Advanced Services

Although Tetration Analytics is easy to deploy in just hours to start gaining immediate benefits, some organizations may wish to engage Cisco Tetration Advanced Services expertise to gain even faster time

to value through guidance on optimizing policies and application performance, and support for comprehensive adoption of the solution in their data centers. In addition, Cisco Solution Support for Tetration provides 24/7 global solution expertise for centralized issue management and resolution for Cisco Tetration Analytics and Tetration ecosystem partner products, with hardware, software and solution-wide support in a single service.

Supporting Quotes

"Real-time analytics -- based on recent advances in unsupervised machine learning, behavior analysis, and visualization -- facilitate the pervasive visibility required to gain insight into and control over application mobility, security, and datacenter-wide infrastructure," said Brad Casemore, Research Director, Data Center Networks, IDC. "In announcing the Tetration Analytics Platform, Cisco is delivering on the rich promise of real-time analytics, with application-behavior insights, policy simulation and impact analysis, automated whitelist policy generation, long-term data retention for forensics and analysis, and the capacity to detect policy deviations within minutes."

"You can't manage or secure what you can't see," said Zeus Kerravala, Principal Analyst, ZK Research. "The problem today is that customers do not have adequate visibility into application behaviors, traffic flows or dependencies, resulting in operational problems and security challenges. Tetration provides unprecedented visibility, enabling customers to search billions of flows to get actionable insight in less than a second, gaining insight into the past (with forensics), present (with real-time analysis) and future (with impact analysis)."

"Gaining much deeper visibility into the data center and automating actionable analysis across a company's infrastructure marks a critical technology advancement in building secure digital business models like cloud, mobile and IoT," said David Goekeler, senior vice president and general manager of Cisco's Networking and Security Business Group. "We believe the insights we gain from applications and the data center overall will enhance existing software solutions and drive the future development of new advanced software that will improve business operations, efficiency and customer experiences."

Additional Resources

Read: [Cisco CEO Chuck Robbins blog](#)

Watch video: [Your Data Center and Tetration Analytics](#)

Watch animated video: [Tetration Analytics](#)

Learn more: [IDC Business Value Brief - Cisco Tetration Analytics](#)

View: [Tetration Infographic](#)

Read: [Tetration Analytics "At a Glance"](#)

Read: [Tetration Analytics Data Sheet](#)

Read: [IDC Technology Spotlight](#)

Learn more about: [Cisco Data Center and Virtualization](#)

Learn more about: [Application Centric Infrastructure \(ACI\)](#)

Learn [How Cisco ACI delivers business outcomes](#)

Learn more: [Cisco Solution Support for Tetration Analytics](#)

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