



LISTENING TO BUSINESS, APPLYING TECHNOLOGY



TechTalk

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HP Launches Cisco-like SDN Switch

HP launched a software-defined networking switch and application that add bulk to the company's 50-switch SDN arsenal and should enable it to compete more directly with Cisco and Arista on this front.

The switch is called the FlexFabric datacenter 7900 series. It is a nonblocking Layer 2/3 Clos switch with 40G interfaces and support for OpenFlow, and VXLAN and NVGRE tunneling for network virtualization. It is designed to integrate the virtual overlay with the physical underlay networks to create a unified fabric for network visibility, availability and response time, and for supporting rapid workload mobility for VMware vSphere

The HP 7900 also supports OSPF, BGP, and IS-IS routing protocols, the Virtual Router Redundancy Protocol, and the Device Link Detection Protocol for monitoring link connectivity and preventing loops in Spanning Tree networks.

HP's SDN application is Virtual Cloud Networking, network virtualization software designed to work with HP's recently announced Helion OpenStack distribution to automate network service and speed application deployment in private and hybrid clouds. VCN is designed to enhance the Neutron networking capability in OpenStack and help cloud providers and enterprises build a multitenant network infrastructure that is able to deliver compute, storage, and networking-as-a-service, on demand.

Cisco To Launch Mini-UCS Servers

Cisco Systems appears getting ready to launch a more entry-level version of its UCS server line, giving the vendor a new tool for expanding its server business and possibly for entering the fast-growing hyper-converged infrastructure market.

Beyond just expanding its business into the entry-level server market, Cisco also has a number of options where a mini-UCS server line could help the company grab market share.

One obvious move would be to build a hyper-converged infrastructure solution combining the mini-UCS server, Cisco's networking technology and its Invicta storage technology that would let it compete with such companies as Nutanix or SimpliVity, a solution provider said.

If so, Cisco would likely either be teaming up or competing against its long-term converged infrastructure partners EMC and VMware, as VMware appears poised in August to unveil its own hyper-converged infrastructure solution code-named Project Marvin.

A Cisco mini-UCS also could help Cisco grab business from original device manufacturers (ODMs) in the fast-growing hyper-scale data center environments, solution providers said.

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The Future is Now

Thought Controlled Planes are in our future

Why pilot a plane with your hands and feet when you can do it with your brain? Thought-controlled flight could be arriving soon, according to the EU-funded "BrainFlight" project.

A team of scientists from the Institute for Flight System Dynamics and the Berlin Institute of Technology says it has translated brain impulses into control commands, enabling pilots in a plane simulator to achieve a range of remarkably precise maneuvers without touching the controls or pedals.

Wearing a cap with lots of cables attached, pilots in the simulator were able to land a plane simply by looking at the screen and moving the control stick with their thoughts, correcting the plane's position repeatedly until it landed.

To achieve the breakthrough, the researchers connected electroencephalography (EEG) electrodes to a cap to measure the pilot's brain waves. An algorithm created by Berlin Institute of Technology scientists enabled a program to decipher the brain waves and convert them into commands fed into the plane's control system.

Once it's perfected, brain-controlled flight could reduce pilot workload and increase safety. Freeing up pilots' hands would give them freedom of movement to manage other manual tasks in the cockpit.

The German team conducted its experiment using seven test subjects with a range of flight experience, including one who had no experience whatsoever.

The team reported that all seven, flying the plane only with their thoughts, managed to achieve accuracy that would meet some flying license requirements. Astonishingly, even the participants with little or no prior training succeeded in landing the planes.

One participant was able to follow eight out of 10 target headings with only an incredibly small 10-degree deviation. Another was able to land within only a few meters of the runway's center line.

Some even managed their approach in poor visibility conditions.

Imagine what trained military pilots might be able to do with this technology.

In 2010, British researchers revealed that fighter pilots, despite being more sensitive to irrelevant and distracting information, have significantly greater accuracy on cognitive tasks. When scientists looked at MRI scans, they found that pilots have a white matter microstructure in the right hemisphere of their brains that is different from non-pilots'.

The German team's achievement isn't the first of its kind. Last year, a team from the University of Minnesota announced that it had flown a model helicopter through an obstacle course using thought alone. As in the German system, electrodes were attached to the pilot's scalp, and his brain waves were used to guide the aircraft.

Creating a mental image altered brain activity in the motor cortex, which was recorded by the electrodes. A computer program deciphered the signals and translated the pilot's intent.

To move the helicopter in a particular direction, a user imagined clenching his or her hands. To go left, for example, the pilot pictured clenching the left hand. To go up, he clenched both hands.



Ultimately, the developers of the mind-controlled helicopter hope to adapt their technology to direct artificial limbs and other medical devices.

In another example, in 2010, a team at the University of Illinois at Urbana-Champaign announced it had flown an unmanned aircraft at a fixed altitude with the ability to adjust headings in response to the pilot's thoughts.

What's next? The TU München scientists are now researching how control systems and flight dynamics must be altered to accommodate brain control.

For example, pilots flying with their hands feel resistance in steering. But this sort of feedback doesn't happen in brain-controlled flying.

The next step is to find ways to provide this sort of critical feedback without physical contact.

Other News

IT firms like SAP, Oracle helped BJP mount successful election campaign

BJP found an invisible hand in technology even as Narendra Modi spearheaded the campaign to help the right-wing party win a historic mandate in the just concluded federal elections.



BJP engaged global information technology firms, including SAP and Oracle for keeping up with real time analysis on social media and partnered InMobi under which the Indian start-up "carpet bombed" the mobile users with profiles of the party candidates. German

software firm SAP enabled the BJP social media team to stay digitally connected through multiple social networking platforms, including Facebook and Twitter.

Interestingly, the three companies said both national and regional parties looked at mobile advertising as a medium. Using mobile advertising technology maker, InMobi's database, political parties, including BJP, were able to target the right user for the right content and influence opinions. "We achieved our Mission 272+ and your team played a very important role in executing our social media plans," wrote Arvind Gupta, National Head Information and Technology BJP. BJP maintains that it "engaged with technology leaders in respective fields to keep up with trends in real time" and it helped the party reach a decisive mandate.

Tech News

HP Launches High Performance Computing for Enterprises

HP hopes to broaden the use of high-performance computing (HPC) from science and academia to businesses with its new range of 'Apollo' supercomputers. HP launched the 'Apollo 6000' and 'Apollo 8000' systems, plus HP Helion Self-Service, a private cloud solution that provides customers with pay-as-you-go access to HPC.



Supercomputers have traditionally been used by scientists and researchers, for example for weather forecasting, code breaking and nuclear test simulations. However it is increasingly being

used in the commercial sector, notably by EDF, Airbus and Renault's Formula One racing division.

Air-cooled Apollo 6000 is aimed at enterprise customers and uses approximately 46 percent less energy than standard data centres, according to HP, Apollo 6000 is currently being piloted by Intel and the US National Renewable Energy Laboratory (NREL) is testing Apollo 8000. According to NREL's Computational Science Centre director Steve Hammond, the laboratory expects to save \$1 million in operating expenses per year thanks to the system's heat-capturing capabilities.

Microsoft and SAP Team Up in the Azure Cloud

Tech titans Microsoft and SAP are expanding to the cloud their decades-old relationship. The companies announced that various SAP applications are being certified for Microsoft's Azure cloud platform.

The applications include SAP's Business Suite, Business All-in-One, Adaptive Server Enterprise database, SAP Mobile Platform, SAP Adaptive Server Enterprise, and the developer edition of its Hana in-memory computing platform. Through SAP's Cloud Appliance Library, the companies said that preconfigured software packages will launch quickly.

Retail and Banking-Specific Apps

The two companies have also agreed on a technical support and service arrangement where Microsoft handles infrastructure problems, SAP takes application ones, and they both work together if the problem still remains unsolved.

Additionally, the companies said that an integrated version of SAP Business Objects and Microsoft Power BI will be available through Excel, and an improved SAP Gateway is being launched by Microsoft. The gateway, available by the end of this year, is designed to give customers access to SAP data and processes through Office 365 and Azure.

Pivotal Extends Lead In Enterprise PAAS With New Pivotal CF Services And New Customers

New application development and data services narrow the gap between business expectations, IT operations and application development

Pivotal announced new enterprise-grade capabilities for Pivotal CF®, the world's leading enterprise PaaS powered by Cloud Foundry®. These capabilities support the speed and flexibility needed by application development teams, and the scalability, reliability, and control required by IT operations teams to deliver a new class of modern applications.

New capabilities include:

- Ability to automatically deploy applications into dual availability zones to build in redundancy across clouds;
- Enhanced dashboards for real time application status, events, and logs;
- Ability for operations to create service plans for binding apps to existing enterprise data lakes;
- Developer data services for building next-gen apps.

Pivotal CF breaks new ground to meet the needs of modern IT organizations:

Enterprise IT operations teams get control, visibility, and portability with applications that can be rapidly scaled, moved, and added to popular infrastructure environments.

Enterprise application development teams get choice and speed to build applications with a best-fit framework that avoids cloud lock-in.

CIOs get cost and infrastructure flexibility to run applications in a variety of cloud deployments that easily integrate with blended legacy and next-gen application portfolios.

The Case for Enterprise PaaS

An enterprise-grade PaaS will enable companies large and small alike to take advantage of cloud computing, and to create fast, agile software-driven businesses. Pivotal CF has become the de-facto enterprise PaaS standard by addressing organizations' operational concerns, security policies, and providing the capability across hybrid cloud environments. Pivotal CF frees up enterprises to rapidly develop, run, and manage their apps across any public or private cloud. It delivers on the needs of all IT application stakeholders to create business value and stay competitive.

Special Focus

Business Discovery: the next generation of BI

The promise of business intelligence (BI) software is to enable decision makers at all levels in an organization to leverage data for business advantage—to explore data, draw insights and meaningful conclusions, and make better decisions. Traditional BI solutions have delivered reliable, operational data tied to pre-defined, static reports—but haven't provided the self-service, on-the-fly, user-driven source of insight people crave for addressing daily business challenges.

IT organizations tend to favor report-based BI solutions from stack vendors like IBM, Microsoft, Oracle, and SAP. But business users are becoming more vocal, demanding, and influential than ever. They are going out and purchasing BI software on their own—and they're not buying traditional BI solutions.

Given the current market assumptions regarding the global economy and demand drivers in the BI tools software market, IDC forecasts this market to grow at a compound annual growth rate of 6.9% through 2014 to \$11.3 billion," says Dan Vesset, program vice president for IDC's Business Analytics Solutions research service. In this research, IDC found that smaller vendors such as Qlik are outpacing the overall market growth.

Business Discovery platforms drive Insight creation

Business Discovery platforms deliver rich interactivity, an associative experience, access to relevant data — from anywhere, speed-of-thought analysis, and rapid time to value. The role of IT organizations in Business Discovery is enabling self-service by assembling and preparing relevant data, helping to validate data, and ensuring security and scalability. It is user-driven business intelligence that helps people make decisions based on multiple sources of insight: data, people, and the environment. With Business Discovery platforms, users can create and share knowledge and analysis in groups and across organizations. Business Discovery helps users ask and answer their own questions and follow their own path to insight. It enables teams of people to reach decisions collaboratively. It delivers:

- **Insight everywhere-** Instead of just a few people involved in creating insights, Business Discovery enables everyone to participate. It's analogous to open source computing, peer creation, or open innovation. Business Discovery is about intelligence creation — rather than just information consumption. It is not about a big set of centrally-controlled, prepackaged, and tightly-distributed data delivered to passive end users. Rather, it's about providing data access and analysis to individuals and groups, and letting them get what they need more rapidly and precisely than ever before.
- **An App Model-** No one needs the headache of deploying and managing monolithic business applications. Business Discovery platforms empower users of varying skill levels to contribute to the creation and deployment of straightforward, purpose-built, intuitive apps that can be easily reused — and discarded when no longer needed. Apps are easy to modify, mash up, and share, and enable innovation to flourish at the edges of the organization and spread inward. The new opportunity in BI is leveraging a model that lets any user quickly develop and deploy task-specific Business Discovery apps.
- **Remixability and reassembly-** Nobody can predict what questions business users will have when they start exploring data —not even the users themselves. Traditional BI solutions require IT pros to get and stay involved, creating new queries and reports whenever users come up with new questions. In contrast, Business Discovery platforms make it easy for business users themselves to remix and reassemble data in new views on their own and in groups, and to easily create new visualizations for deeper understanding.
- **A Social and Collaborative experience-** Discoveries are one thing — sharing them is another. Often the real value of a discovery is unlocked when a minor breakthrough in one part of the company leads to a major one elsewhere. Business Discovery is about nurturing communities of people who engage in active decision-making to drive knowledge that can cascade across an organization. Business Discovery enables users to collaborate on insights and move toward decisions either directly within their Business Discovery apps or through integration with enterprise collaboration tools like Microsoft SharePoint or Salesforce Chatter.
- **Mobility-** Business decision makers at all levels in an organization need data at their fingertips, wherever they are. Tablets and other large form factor mobile devices promise to make business data ubiquitous. Unlike traditional BI solutions, which address the need for mobile solutions by delivering static reports and dashboards to mobile devices, mobile Business Discovery platforms provide an intuitive interface and an application infrastructure that is tailor-made for users to explore data and draw associations and insights wherever they happen to be working.



Galaxy offers Solutions and Services for your Dashboarding, Reporting and Analytics needs using Qlikview Business Discovery Platforms

About Galaxy

- ✦ One of the most respected Information Technology integrator of the best of breed products and solutions for Enterprise Computing, Storage, Networking, Security, Automation, Application Delivery, ERP and Business Intelligence.
- ✦ An ISO 9001:2008 organization, founded in 1987
- ✦ Committed team of over 200 skilled professionals
- ✦ PAN India presence
- ✦ Trusted IT services provider to more than a 1000 companies
- ✦ Experienced consultants certified on a wide spectrum of technologies
- ✦ The Galaxy Technology Innovation Centre, a state-of-the-art integrated hardware and software laboratory, allows customers a hands-on look at the latest storage, backup, security, application delivery and virtualization technologies.
- ✦ Customer list includes many of India's leading corporations, banks and government agencies
- ✦ Four business units collaborate to provide a full spectrum of services and ensure smooth projects. Together, they provide our customers with truly end to end professional IT Services.

Galaxy Business Solutions

System integrators of best of breed technologies to deliver solutions to the problems and challenges that confront enterprises

Galaxy Technology Services

Skilled pool of resources consistently maintains and delivers enterprise class service levels

Galaxy Network Solutions

One of India's most trusted active and passive networking specialists

Galaxy BI Consulting Services

Helps organizations to deliver and leverage business intelligence to create substantial business impact

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VISION

"To become the most preferred technology solution partner by listening to our customers, anticipating their needs and providing reliability, flexibility, responsiveness and innovative products and services. Achieving market leadership and operating excellence in every segment of our company."

MISSION

"Total customer satisfaction; through innovative insights, quality service and excellence in technology deployment."

VALUE PROPOSITION

"We understand the need of a common vendor for all your IT needs. Hence, we are committed to long-term partnerships by delivering on our commitments."

MD Speaks

"With the Indian Budget 2014 round the corner, all our hopes are on the Finance Minister to deliver something radically better and different from his predecessors. We really need a budget that sets the path for industrial growth and improves the job market. Health and education should not only be priorities in the budget, but active follow up on the ground level is also required. It has been 10 years since the education cess on practically all forms of taxes was introduced but the state of education at both the primary and the university level has not changed for the better. All that money collected seems to have flown into the giant cesspool of corruption. The food security bill is another potential sink of the taxpayers money. I hope that this budget makes attempts to plug all such sources of corruption.

I am hopeful that this budget will have a lot of benefits for technology companies. In fact, as mentioned in an article in this issue, the BJP engaged the services of a lot of technologies to help them win the elections. I am sure, that they will carry this faith in technology to help the country fast track its growth.

The Football World Cup is well under way and a few goal-line decisions have been made by technology. It warms my heart that in the very first issue of TechTalk we covered goal-line technology and its importance to major tournaments like the World Cup."