GALAXY

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Microsoft Buys Linkedin for $26.2 Billion

Microsoft Corp. (Nasdaq: MSFT) and LinkedIn Corporation (NYSE: LNKD) recently announced they have entered into a definitive agreement under which Microsoft will acquire LinkedIn for $196 per share in an all-cash transaction valued at $26.2 billion, inclusive of LinkedIn's net cash. LinkedIn will retain its distinct brand, culture and independence. Jeff Weiner will remain CEO of LinkedIn, reporting to Satya Nadella, CEO of Microsoft. Reid Hoffman, chairman of the board, co-founder and controlling shareholder of LinkedIn, and Weiner both fully support this transaction. The transaction is expected to close this calendar year.

LinkedIn is the world's largest and most valuable professional network and continues to build a strong and growing business. Over the past year, the company has launched a new version of its mobile app that has led to increased member engagement; enhanced the LinkedIn Newsfeed to deliver better business insights; acquired a leading online learning platform called Lynda.com to enter a new market; and rolled out a new version of its Recruiter product to its enterprise customers. These innovations have resulted in increased membership, engagement and financial results.

The transaction has been unanimously approved by the Boards of Directors of both LinkedIn and Microsoft. The deal is expected to close this calendar year and is subject to approval by LinkedIn's shareholders, the satisfaction of certain regulatory approvals and other customary closing conditions.

Microsoft will finance the transaction primarily through the issuance of new indebtedness. Upon closing, Microsoft expects LinkedIn's financials to be reported as part of Microsoft's Productivity and Business Processes segment. Microsoft expects the acquisition to have minimal dilution of ~1 percent to non-GAAP earnings per share for the remainder of fiscal year 2017 post-closing and for fiscal year 2018 based on the expected close date, and become accretive to Microsoft's non-GAAP earnings per share in Microsoft's fiscal year 2019 or less than two years post-closing.

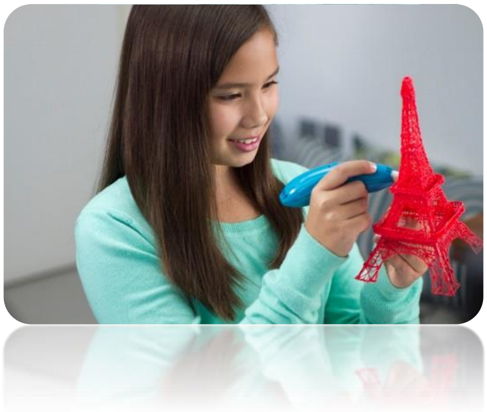
Amazon Web Services launches data centers in Mumbai

Amazon Web Services said that it has launched its data centers in Mumbai, its sixth in Asia Pacific (APAC) region, which will allow global and Indian-based developers, start-ups, enterprises, government organizations, and non-profits to leverage the AWS Cloud to run their technology applications from infrastructure in India. The India data center will also provide these players even lower latencies to India-based end users. The new AWS Mumbai Region consists of two separate Availability Zones at launch. Availability Zones refer to datacenters in separate, distinct locations within a single region that are engineered to be operationally independent of other Availability Zones, with independent power, cooling, and physical security, and are connected via a low latency network. AWS customers focused on high availability can architect their applications to run in multiple Availability Zones to achieve even higher fault-tolerance.

With this launch, AWS now provides 35 Availability Zones (AZs) across 13 technology infrastructure regions globally. More than 75,000 India-based customers are already using other AWS Regions to save costs, accelerate innovation, speed time-to-market, and expand their geographic reach in minutes. With more than a million active customers worldwide, and more than 70 services across compute, storage, databases, analytics, networking, messaging, machine learning, mobile, IoT, and application services, AWS said that it has become the new normal for companies of all sizes and across all industries to deploy their business-critical applications. The launch of the AWS Mumbai data center is a part of the $5 billion overall investment that Amazon announced is part of its commitment to India.

The Future is Now

3Doodler' Pen Lets You Draw 3D-Printed Creations in Midair



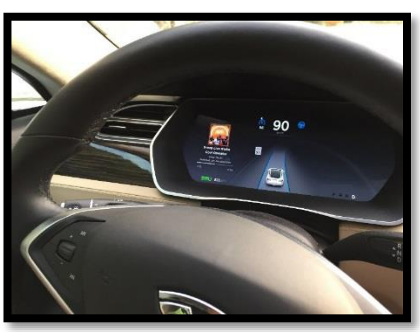
It wasn't long ago that the idea of printing something in three dimensions sounded like science fiction. But over the past decade, 3D printers have become widespread and are now used to create everything from decorative baubles to robot parts to medical devices. Still, using a 3D printer isn't always simple: The machine is frequently housed within a box the size of a microwave, and it requires technical software and, in some cases, a detailed knowledge of design. But now, a company called 3Doodler has transformed the standard 3D printer into a pen, allowing people to draw 3D creations freely in the air — without the need for a computer or any software.

In 2012, Maxwell Bogue and Peter Dilworth, co-founders of 3Doodler along with Daniel Cowen, were trying to come up with the next great kids' toy. They said they frequently used 3D printers to craft prototypes of their designs, and one night, they spent 14 hours printing a dinosaur leg, only to find that the printer had missed a section, leaving a gap in the model. The two wished they "could just take the nozzle off the 3D printer and fill in the missing gap," Bogue, now CEO of the company, told in an interview.

So, the inventors set out to design a product that could do just that. Bogue and Dilworth took apart a 3D printer and added a computer chip to the nozzle so that they could control the device. When that rudimentary model worked as a proof of concept, the team sets out to streamline the design to create a more user-friendly pen, they said. The first prototypes came straight from a standard 3D printer. "We printed the shells and the casings and everything that's held together," Bogue said. When it was done, they pulled the hot nozzle off the printer and used it in their pen. Over about eight months, they refined the design, finally producing the first version of the product, Bogue said. In a lot of ways, the 3Doodler works like a sophisticated hot-glue gun: A heating element melts plastic, and it is extruded out through a nozzle. But glue guns use a hand pump to push the plastic out of the tip, which can make it clump. The challenge with the 3Doodler was to find a way to make the plastic flow steadily and smoothly, so the inventors designed the pen with a motor to propel the plastic filament, they said. The heater inside the 3Doodler runs about 355 degrees to 460 degrees Fahrenheit (180 to 240 degrees Celsius) to effectively melt the most common plastic filaments (known as PLA and ABS). But at that temperature, the plastic would take a long time to cool, making it impossible to draw in the air, Bogue said. As a result, Bogue and Dilworth added a cooling fan to the 3Doodler, which brings the temperature of the plastic down to about 280 degrees to 300 degrees F (140 to 150 degrees C) when it leaves the pen, and the plastic hardens within seconds, Bogue said. The inventors ran a wildly successful Kickstarter campaign to raise money for the project, collecting more than $2.3 million from more than 26,000 backers. The pen is now in its third version, known as the 3Doodler Create, and it has been used for a variety of creations, including artwork, clothing and wallets.

The new pen, known as the 3Doodler Start, is designed for kids ages 8 and older. The rechargeable battery and 16 different colors of filaments make the pen ideal for not just recreational use but also classroom use, the inventors said. In particular, the company is hoping that the new pen will significantly enhance STEM education, Bogue added. The full line of 3Doodler products can be purchased on the company's website. The 3Doodler Start is available for preorder starting at $49.99, and start shipping in this July.

What the First Driverless Car Fatality Means for Self-Driving Tech



A crash that killed a driver in a Tesla Model S electric car in self-driving mode has called into question the safety of driverless vehicle technology. This week, federal officials announced the launch of a formal investigation into the accident. The crash occurred on May 7 in Williston, Florida, when a tractor-trailer made a left turn in front of the Tesla, and the car failed to apply the brakes, the New York Times reported. It is the first known fatal accident involving a self-driving vehicle. In a statement from Tesla that was posted on the company's blog Thursday (June 30), the automaker noted that the fatality was the first "in just over 130 million miles where Autopilot was activated."

"It is important to note that the Tesla disables Autopilot by default and requires explicit acknowledgement that the system is new technology and still in a public beta phase before it can be enabled," Tesla officials wrote.

The Model S is not a self-driving car, but Tesla's Autopilot feature is an assistive technology and a first step in bringing truly driverless cars to market. By means of computer software, sensors, cameras and radar, the car's Autopilot feature can complete tasks like merging onto a highway. Drivers are instructed to keep their hands on the wheel while in Autopilot mode. Tesla did not specify in their statement how engaged the driver was at the time of the crash, but did note that: "Neither autopilot nor the driver noticed the white side of the tractor-trailer against a brightly lit sky, so the brake was not applied."

Other companies, like General Motors and Google, have invested in the development of driverless car technology. In February one of Google's self-driving cars crashed into a bus, though there were no reported injuries. As tests on autonomous vehicles continue, the question is whether the technology has progressed to the point that the government would approve cars that can drive themselves. In fact, a study published in October 2015 found that self-driving cars are more likely to be in an accident. The study, conducted by the University of Michigan's Transportation Research Institute, found that per million miles traveled, self-driving cars had a higher crash rate than traditional cars. At the time of the study, no self-driving cars had been found at fault for the crashes they were involved in.

Technology Focus

The Myths and Misconceptions of Software Defined Networks

In the last 12-18 months, Software Defined Networks (SDN) technology has been much touted as a data center savior – one that can transform the network, unlock critical intelligence, and help deliver the new services and powerful analytics needed to run on-demand applications for today's businesses and consumers. IDC has even gone so far as to predict that the SDN market in Asia Pacific will surpass the $1 billion mark by 2018.Amid all of the hype and excitement, it can be difficult for IT leaders to tell fact from fiction. This is a closer look at what SDN is, why it matters, and examine some of the myths and fears that have built up around the technology.

By definition, SDN refers to the separation of the control plane from the data plane within a network. This will be critical to the development of a New IP since it allows an IT department to deploy programmatic controls and orchestration across the whole network, rather than having to provision, configure and manage specific devices on a case-by-case basis. While there are a number of benefits to this approach, there are three critical ones that really make SDN significant for businesses: automation, rapid application deployment and ease of network management. SDN brings greater automation to an otherwise complicated world. Organizations that want to run an application within a public cloud environment would normally use a self-service portal to manually provision the required resources. This is not only time consuming, and therefore costly, it can also leave a business vulnerable to misconfigurations due to human error. With SDN, customers only need to select the application they want to run in the cloud and the resources required. The intelligence of the control plane, through orchestration, will then intuitively deploy the service using the optimal configuration of compute, storage and network resources. Being able to deploy and scale applications rapidly can make or break a business. If an employee does not have to manually provision the compute, storage and network resources needed to deliver an application, businesses are able to get new services up and running much quicker. In addition to easing employee access, SDN can boost a company's competitive advantage, as it is able to respond to the ever-changing business landscape and limit time-to-market on any new offerings.

While greater automation, rapid application deployment and ease of network management have the ability to transform businesses, this is still early days for SDN. New solutions and approaches are being developed all the time, but a fully software defined world is unlikely to become a reality for some time to come.

The Myths and Misconceptions:

As with any new technology, SDN has not existed without its naysayers. Before any business looks to implement an SDN solution, it is important to understand the truth behind some of the biggest misconceptions:

1. **SDN does not work for small data centers:** SDN is often talked about as being only suitable for large-scale data centers — those that provide cloud services that are public, private or hybrid. While these larger providers are naturally among the early adopters, the truth is that SDN can be hugely beneficial for all levels of data centers. Not least because it can make configuration, management and monitoring a much simpler task, which can greatly reduce the burden on the IT department– perfect for small firms with lean teams.

2. **SDN will mean the end for many IT jobs**: The notion that SDN-enabled environments will require less hands-on effort to keep them up and running compared to traditional networking environments is true, but it does not mean that the traditional network manager role will disappear. As businesses transition to SDN models, the demand for network skills will only increase and remain as it continues to evolve. What is true is that the type of skills needed in the New IP era will change – businesses and IT professionals should be aware of this and should be tailoring their training and development plans accordingly.

3. **SDN is not required if servers are already virtualized:** This is simply not true. It is the case that extending the principals of server virtualization to the network by swapping out traditional hardware with a more agile virtualized network infrastructure will bring more of the same important benefits. However, SDN can also do a great deal more, in particular, it can allow the network to extend into the server and provide efficient management and visibility of inter-server traffic.

4. **The entire data center network needs to be replaced in order to implement SDN:** The 'rip and replace' method is not a requirement of a successful SDN. With several ways to migrate from traditional networking infrastructure to SDN, it can be as simple as making SDN devices the default choice for networking components as part of the existing hardware refresh plan or deploying SDN whenever new equipment is added for new projects or expansion.

Misconceptions aside, it is clear that SDN has the potential to radically change the face of the data center. It's ushering in a new way of networking that is, reducing costs, creating scalable businesses and equipping organizations for the greater demands of tomorrow. However, SDN's future is closely linked to the establishment of clear and genuinely open industry standards. The creation of open standards is the only way to guarantee that network products will be interoperable regardless of the manufacturer, something which is vital to avoiding vendor lock-in and enabling an all-important holistic approach to network management. Thankfully, the shift to open standards in already underway with leading organizations, such as Open Daylight, Open Flow and OpenStack, putting pressure on the industry to take openness seriously.

Tech News

Huawei Building Own OS to Reign Over Android OS

Chinese telecom and electronics giant Huawei is secretly building its new operating system (OS) for smartphones to reduce its dependency on Google's Android OS, a new report claims. According to the sources, Huawei has also planned to launch its latest flagship smartphone P9 in the Indian market soon. In response to the question on offline markets, the company officials said that the P9 series will be targeting the Indian markets as soon as possible, likely next month.

The new OS project is claimed to be its early days and involves ex-staffers from Nokia. The Information also reached out to Abigail Brody, former Apple creative director who was hired by Huawei last year as the chief user experience designer. Although she has declined to comment on the new OS, she said that is scheduled to meet the team in August. Till now, the information regarding the new OS is restricted. Abigail Brody will make several modifications to the company owned Emotion UI that is said to be developed on top of the Android OS. Brody without telling the modifications suggested that the new Emotion UI version introducing this fall will deal with "pain points" and "glaring cosmetic issues".

One of the important tasks of her is to develop the upcoming version of the Emotion UI more likely based on the material design of the Android and remove the elements that present it like iOS. The new EMUI is expected to support fresh colors, new icons and additional features like an app drawer. Moving to the new flagship smartphone Huawei P9, which is launching in India soon, is featured with a 5.2-inch full HD IPS display and runs on Android 6.0 Marshmallow with its company owned EMUI 4.1 on the top. Huawei P9 also boasts a dual 12MP camera at the back, built in collaboration with the popular camera manufacturer Leica. The company is focusing on upgrading the P9 photography to the next level. The smartphone supports octa-core Kirin 955 processor paired with 3GB RAM and 32GB inbuilt storage or 4GB RAM and 64GB internal storage. It is backed by a 3000mAh battery and includes the 4G connectivity, USB Type C connectivity and fingerprint scanner.

The report also claims that the new UI will look more like the iOS UI. Samsung is also working on its Tizen OS to reduce its dependence on Android and also make the OS good enough to push a differentiated status in the overcrowded smartphone market.

Ransomware: Hackers Infiltrating Secured Systems

First things first! Today, ransomware is a sophisticated threat affecting users across many countries worldwide, particularly those living in developed and high-tech economies. Not to say, developing economies are any less a threat prone. The ransomware world is like any real life ecosystem. Threats that can adapt and evolve to their surroundings, can survive and even thrive, while those that can't or won't adapt may eventually disappear. The ransomware world is a good example of where Darwinian-style evolution is at work.

CIOs and security-software providers are in a constant chasing game with ransomware makers who can find ways to penetrate even well-guarded potentially secure systems. Here is an account of a real case scenario: The employees of a highly cyber-security conscious company received invoices in their mail inboxes that suggest they have racked up huge fees on a well-known car service. One employee opens the mail and clicks the link - "download this invoice." Though the company has adequate security protocols and technologies in place, still this employee's curiosity led the firm to fall prey to a phishing ransomware attack. The company had already detected and blocked this ransomware long before, but since this is a new variant of the same ransomware, it started installing as firewalls and other security systems did not recognize the oncoming threat. There were only two options: Pay or lose your files, data and information. Turning off your computer, unplugging it from the Internet - none of that will work. The files on the PC are continuing to be encrypted real fast. The company chanced upon a lucky break as this TeslaCrypt ransomware was designed to immediately look for shared folders, connected servers and any data-backup systems that the PC might connect to. In this case, the infection stayed on a single PC. The machine was located, separated from the network and some files were restored, but most of that which was locally saved by the user were gone.

Internet users in India are burgeoning by the day. The ever-growing number of people accessing the internet has given rise to hundreds of cybercrime incidences as well, such as – Data breaches, Identity theft, and fraud through the misuse of highly unethical invasive software's, viz. Viruses and malware's. In recent times, one such malware that is gaining notoriety and prominence is Ransomware. Ransomware had undergone several modifications over the last couple of years – with each new one even more malicious than its predecessor. Initially, the malware was developed along the lines of Fake AV framework – malicious Trojan horse programs that deliberately manipulate the security system in computers. Users of such computers were targeted by being approached to purchase a software that could remove non-existing malware or security threats from the system. The moment users clicked on infected links or mails, the ransomware changed its model to extract money by locking the PC screen. Aptly named 'Locker' ransomware, these malwares force users to pay up in contemplation of unlocking the computer screen, usually with a false promise of retrieving data that has already been jeopardized. Seldom does ransomware makers provides the key to unlock after receiving the money.

Another form of ransomware that is quite prominent is 'CryptoLocker', which freezes affected systems and conceals relevant data found in the system's hard drive. Dispersed as infected E-mail attachments, this particular malware, mainly targets systems running on Microsoft Windows.

Tech News

Adobe Introduces Cloud Based Digital Signature

Adobe announced the Cloud Signature Consortium - a group comprised of industry and academic organizations committed to building a new open standard for cloud-based digital signatures across mobile and the web with an aim to take digital signatures mainstream, Adobe believes that the world's most secure form of signing is the electronic signature. Around 7 billion mobile devices around the globe can digitally sign documents from anywhere.

"With more than six billion digital and electronic signature transactions processed each year through Adobe Sign and Adobe Document Cloud, we are focused on moving the signature industry forward," Bryan Lamkin, Executive Vice President and General Manager of Digital Media, Adobe, said in a statement.

This was announced on July 1 when a new European Union signature regulation (eIDAS) which will go into effect - paving the way for global adoption of secure digital signatures. The new standard created by the consortium will give everyone access to secure digital signature solutions across a full range of cloud applications and mobile devices. Once implemented, the standard will benefit processes where signer identification is critical, such as applying for a business license, social security benefits or signing for a large loan.

The Cloud Signature Consortium aims to build a global network of industry contributors and intends to release new standard specifications by the end of this year. Thus the first cloud-based implementations would follow shortly thereafter.

Special Focus

HPE Partners with Docker, Steals DropBox from AWS

It's been a big fortnight for Hewlett Packard Enterprise, as the company announced new partnerships with Docker and DropBox, donated its OpenSwitch network operating system to the Linux foundation, and announced some new permutations of its OpenStack-related products.

The Docker partnership centers around HPE's Docker Ready Server program, which purports to enable workloads to be portable across all the company's servers. As part of the strategic alliance, HPE and Docker will deliver:

- **Docker ready HPE Servers – Pre-configured server platforms ready for Docker Engine and Docker containers.**
- **Docker ready Converged and Composable HPE Systems – HPE Synergy, HPE Blade System and HPE Converged System come ready for Docker deployments across compute and are integrated for storage and interconnect for simplified deployment and scalability.**
- **Joint go-to-market for Docker Datacenter – Organizations looking to build, ship and run Docker at scale in multiple different environments will be able to do so using Docker Datacenter, and HPE and Docker will work together on joint sales and support programs.**
- **Docker support and consulting services**
- **HPE Reference Architectures and Configurations for Docker Datacenter**
- **Docker-integrations such as a Native Volume Plugin for HPE 3PAR StoreServ all-flash arrays, networking, SiteScope, and OneView.**
- **HPE Linux Docker support**
- **API support in HPE apps such as AppDevender, Operations Bridge Monitoring, and the HPE Helion Cloud Suite.**

The company also announced that as part of DropBox's move to drop AWS and move to HPE servers, HPE would begin to offer DropBox to its customers. Meanwhile, HPE's open source network operating system, OpenSwitch, has been contributed to the Linux Foundation, which already oversees OpenDaylight and ONOS. OpenSwitch includes contributors such as chipmakers Barefoot Networks, Broadcom, Cavium, Marvell, Mellanox, and LinkedIn. SDX Central writes, "HPE announced OpenSwitch in October, listing a handful of big names as community members. But any time a company starts its own open source project, there's going to be suspicion that the project is being steered toward that company's benefit. That's why HPE handed governance to the Linux Foundation. 'We were aware of that criticism, so we made this step a priority,' says Mark Atwood, HPE's OpenSwitch community director."

Finally, HPE announced the release of three "new" products: HPE Helion Cloud Suite 1.0, which bundles IT operations management software with OpenStack and Cloud Foundry, HPE Helion Stackato 4.0, their container-based, hardened version of Cloud Foundry, and HPE Helion CloudSystem 10, which combines the two.

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MD Speaks

"Dear Readers,

After a relative lull, last month saw a revival of action in the acquisition space. Microsoft, under the leadership of Satya Nadella, acquired LinkedIn, Symantec agreed to buy Blue Coat and Thoma Bravo, a private equity investment firm, acquired Qlik. Though all these have happened in the same month and all are in the IT space, the reasons for acquisitions seem to be vastly different.

Microsoft Chief Executive Satya Nadella told The Wall Street Journal, "It's really the coming together of the professional cloud and the professional network." With Microsoft's thrust on the Office Productivity Suite & CRM, a lot of their target users are already on LinkedIn. This gives them something that they always wanted but never really had - A social/ professional network that their users could identify with. So, to my mind, this acquisition is to gain access to new markets for existing products. On the other hand, Symantec's acquisition of Blue Coat is for product augmentation and Qlik's sale seems to be more of a financial investment than anything else. Each of these reasons, is good enough to believe that this trend of mergers and acquisitions will continue. As long as the customers are benefitted, no one is complaining!

Happy Reading."