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Telecom Industry News

By: Susana Schwartz

OSS/BSS News

VOSS Analytics added new capabilities to its value-added module in the VOSS-4-UC suite of products, which enable organizations to quickly retrieve information about users, devices, services, licenses and transactions through an easy-to-use web-based portal. Customers can evolve out-of-the-box dashboards and reports and leverage customized analysis and reporting that deliver value and greater insight into the business. As well as improving internal processes, these capabilities provide more flexibility in the business value they offer to end users.

Recognizing that the pay-TV market involves a wide range of formats and consumption models, **Alpha Networks** introduced its next-generation platform tucanoRED. Featuring an open CMS/CRM architecture as a service (SaaS) business model,tucanoRED simplifies subscriber management as well as the delivery of different service offerings for live and on-demand content delivered over various networks, while ensuring trouble-free deployment within any new or existing workflow. The back-end platform allows service providers to personalize user experiences through recommendations and to monetize content through targeted advertising. It also leverages player and subscriber analytics to further enhance the customer experience.

Comarch was chosen by Orange Polska as its vendor to support its OSS4TTH project. Comarch will provide Orange Polska with its best-of-suite OSS solution, comprising modules that enable easy management of both network resources (Network Inventory Management) and services (Service Inventory); customer order decomposition (Service Order Management) and dynamic services fulfillment process (Service Fulfillment); seamless management of workforce in the field (Field Service Management); and simplification of the management of reported errors (via the Trouble Ticketing System). Comarch will manage the migration of Orange's physical, logical and service inventory data, and will facilitate the integration of the solution with Orange's BSS domain, network infrastructure and service delivery platforms using TM Forum's Open API recommendations.

NEC Corporation of Malaysia and **Netcracker Technology** announced their collaboration with technology giants Red Hat, Juniper Networks and Dell EMC to offer an end-to-end multivendor 5G-ready virtualization platformfor service providers and enterprises in Malaysia. The partnership, building off its Ecosystem 2.0 Program, will see NEC Corporation of Malaysia/Netcracker positioning itself as a full SDN/NFV solution provider capable of designing and deploying network architecture utilizing IT virtualization technologies for entire classes of network node functions. They are targeting CSPs in the United States, South Korea, Sweden, Estonia, Turkey, Japan and China, and all that are in the process of upgrading network infrastructure in preparation to offer 5G communications services.

Wireless News

Rogers announced it continues to invest in communities across Alberta with expanded LTE wireless service in Lethbridge and between Banff and Calgary. Rogers and Fido customers will have an improved wireless experience and more seamless coverage to make calls, access the Internet, and stream music and video at the new ATB Centre in West Lethbridge, in

residential Lethbridge, and along the Trans-Canada Highway between Banff and Calgary. The improved service also provides HD quality voice services when using a device enabled with VoLTE. In addition, Rogers has turned on 700 MHz spectrum in these areas in order to provid better coverage in hard-to-reach places like basements, elevators and buildings with thick concrete walls. This will give customers stronger LTE signals on their devices.

T-Mobile announced it has begun lighting up its new 600 MHz LTE network — leveraging the large amount of super-premium low-band spectrum won in the government broadcast incentive auction that concluded earlier this year.The announcement comes only two months after T-Mobile received its spectrum licenses from the FCC. T-Mobile's first 600 MHz LTE network sites — the very first in the world — were recently switched on in Cheyenne, Wyoming using Nokia equipment. T-Mobile plans to deploy the new super-spectrum in a six-month period. In addition, **T-Mobile** announced it will carry the LG V30 – the world's first smartphone to support 600 MHz LTE. The company is simultaneously laying a foundation for true nationwide 5G with breakthrough new equipment from **Ericsson** that supports *both* LTE and 5G.

Bell Mobility announced the launch of Advanced Messaging, Canada's first integrated Rich Communications Services (RCS) messaging experience. Available first on **Samsung's** latest-generation smartphones, Bell Advanced Messaging offers a suite of mobile messaging features previously available through specialized third-party applications.

One of Mexico's largest mobile operators, **Telefónica Mexico** and **ItsOn** announced the launch of a new fully digital renovated experience in Mexico under the Movistar On brand. The enhanced on-device experience enables Movistar On users to customize their service with bundled plans, OTT subscriptions and Value Added Services that better suit their individual needs. The new Movistar On service has attracted more than 700,000 new customers and is continuing to grow daily.

Nokia has formally launched the 5G MoNArch (5G Mobile Network Architecture) research project. Supported and financed as part of Phase II of the 5G Infrastructure Public Private Partnership (5G-PPP) — under the auspices of the European Union's Horizon 2020 Framework Programme — 5G MoNArch will put fifth-generation mobile network architecture into practice. The project consortium, consisting of 14 leading industrial and academic partners and coordinated by Nokia, will focus on the implementation of a set of 5G use cases in real-world testbeds.

IoT News

Kerlink and **YEAP!** announced their collaboration to roll out Argentina's first LoRaWAN network. YEAP! was recently launched by Inversiones Condor (ICondor), a strong player in telecommunications and technology in Argentina and South America, to operate the new network. Continuing its international expansion, Kerlink will provide several hundred gateways for the deployment, which begins immediately in Buenos Aires and Rosario and will provide nationwide coverage by July 2018. The deployment follows a successful pilot project early this year. The fast-growing company will supply its Wirnet^{TM} iBTS Compact stations in local ISM bands (923 MHz). Kerlink already has installed more than 8,500 of these versatile, long-range, two-way and geolocation-ready gateways for IoT network operators in Europe and South Asia.

Gartner, Inc. forecasts that 310.4 million wearable devices will be sold worldwide in 2017, an increase of 16.7 percent from 2016. Sales of wearable devices will generate revenue of $30.5 billion in 2017. Of that, $9.3 billion will be from smartwatches. In 2017, 41.5 million smartwatches will be sold. They are on pace to account for the highest unit sales of all wearable device form factors from 2019 to 2021, aside from Bluetooth headsets. By 2021, sales of smartwatches are estimated to total nearly 81 million units, representing 16 percent of total wearable device sales.

mPrest announced a collaboration with **Bezeq**, Israel's largest telecom provider, to deliver a Smart City / Smart Campus software-as-a-service (SaaS) offering. The collaboration will bring mPrest's system-of-systems expertise to smart cities, integrating all of their IoT systems, from video cameras to waste and water management to environmental and parking monitoring. Bezeq' Smart City Application will use mPrest's software, renowned for powering the Iron Dome missile defense system, to connect sensors and smart systems across smart cities. The solution leverages

advanced analytics, monitoring and control capabilities, including Video Management Systems, Smart Parking, Environmental Monitoring and Waste Management.

A recent **Juniper** report looks at Virtual Reality, and forecasts that wireless VR headsets (smartphone-based and standalone) data consumption will grow by more than 650 percent over the next 4 years. The new research, *Virtual Reality Markets: Hardware, Content & Accessories 2017-2022*, found that data consumption will reach over 28,000PB when combined with traffic generated by VR headsets tethered to PCs and consoles, placing significant additional strain on both wired and wireless networks.

InMobi announced the launch of a mobile media platform for premium in-app video advertising. Through partnerships with top publishers in the country such as **Viu, Detik, Path, BBM, Baca, LINE** and others, InMobi now has become the largest mobile media platform in the country with a reach of more than 60 million video viewers. InMobi's advanced mobile media platform for video comes with industry leading viewability, interactivity and buffer-free ad experience that delivers the best performance for marketers. The platform also comes with an advanced creative authoring tool that helps marketers create more interactive and shoppable mobile video ads at scale using pre-existing video assets and make them mobile ready for driving higher engagement.

LitePoint announced the LitePoint IQcell™ multi-device cellular signaling test solution which enables user experience testing of LTE cellular devices.The IQcell is designed for mobile device original equipment manufacturers (OEMs) to test performance of popular device uses such as mobile hotspot functionality, voice-over-LTE (VoLTE) calling, internet browsing and streaming videos. Testing for each of these applications is done via an over-the-air connection that mimics true user experience scenarios. IQcell provides a fast, efficient method to pinpoint the root cause of failures reported by a user so device repair service centers can use IQcell and IQservice software to perform RF parametric testing on phones returned by customers. This enables device makers and carriers to repair faulty phones and reduce the cost of replacing easily repaired phones with new ones.

Sprint customers are having a better network experience than ever with national average download speeds up 28 percent in seven months, according to Ookla Speedtest Intelligence data.Ookla data also shows Sprint now ranks number one for the fastest average download speed in 15 cities such as Atlanta, Denver, Indianapolis, Salt Lake City and Seattle. The new data comes on the heels of another recent independent report stating that in the past six months Sprint's 4G LTE availability had improved to nearly rival AT&T, and Sprint's average speeds had also improved. Separately, the report also stated that Verizon and AT&T's average speeds slowed due to their introduction of unlimited data plans.

PCTEL announced its new multi-band LTE/Wi-Fi/GNSS antenna with a sub-inch profile. The antenna combines PCTEL's high rejection multi-GNSS (Global Navigation Satellite System) technology for precision timing and location tracking with high performance multi-band data connectivity. The antenna is also rugged and easy to install, making it ideal for covert public safety operations, precision agriculture, and the Industrial IoT.

Calix, Inc. announced the first mesh-enhanced Carrier Class Wi-Fi solution designed specifically for communications service providers. With this announcement, Calix is delivering mesh-enabling software upgrades to its GigaCenter solutions and adding the new 804Mesh satellites. These enhancements will transform home Wi-Fi coverage and enable GigaCenter solutions to intelligently adapt to today's increasingly complex home Wi-Fi environments. Now, service providers can exploit the burgeoning mesh Wi-Fi opportunity by delivering a mesh-enhanced Carrier Class Wi-Fi experience unmatched in performance or value by any consumer class mesh solution. Service providers, armed with mesh-enhanced GigaCenters, can now offer a superior Carrier Class mesh Wi-Fi solution at a fraction of the cost of these consumer products.

Ericsson has launched three new scalable small cell solutions designed to help expand the small cell market and meet the growing demand for better mobile coverage and capacity while preparing networks for 5G and the Internet of Things (IoT) applications: the Multi-Operator Dot and the Multi-Dot Enclosure for indoor deployments; and the Strand-Mount Unit for outdoor micro radios. The Multi-Operator Dot solution delivers a set of Radio Dots that can be shared between multiple

operators, with one operator managing the system while others provide radio frequency signals – similar to an active distributed antenna system (DAS). This new architecture allows up to four operators to broadcast over a single Dot solution; combining the multi-operator benefits of an active DAS solution with the performance, agility and cost-effective design of the Radio Dot System. As its name suggests, the Multi-Dot Enclosure combines multiple Dots in a single enclosure. The enclosure has a minimal impact on building aesthetics, is useful for multi-operator deployments, and presents a cost-savings option in buildings that charge per box deployed.

In order to minimize disruption for current residents, **AT&T** is offering another option for apartments and condominiums ("MDUs") in 22 major metro areas.Each of these metros is located outside of AT&T's traditional 21-state home internet service-area. G.fast provides internet access to apartment and condo units over existing coaxial cables. AT&T will offer internet speeds of up to 500 megabits per second, but G.fast provides the capability to allow AT&T to offer greater speeds over time. Residents of these properties can also enjoy the availability of DIRECTV without installing a dish at their individual units.G.fast adds another innovative solution to existing fiber and millimeter-wave wireless access solutions for MDU property owners to provide their residents high speed internet and TV services.

Epsilon announced its partnership with Hudson Fiber Network (HFN) following its acquisition of Metcom Network Services (MNS). HFN, a legacy MNS customer, confirmed its commitment to expand its service offerings across Epsilon's strategic connections across Europe, Asia and the Middle East, stitched with core backhaul connectivity to New York. With growing global infrastructure requirements, HFN will colocate in interconnections hubs operated by Epsilon in London and Hong Kong. In addition, HFN will use Epsilon's local access services in Europe and Asia via its Enterprise Connect product line. The agreement includes a joint project to help HFN further the delivery of its exceptional network performance and quality of service across all markets. By partnering with Epsilon, HFN eliminates the need for distributed procurement teams to manage local service provider relationships and network operations.

NetComm Wireless Limited and **Openreach** (a wholly owned and independently governed division of the BT Group) have successfully completed a world first Fibre-to-the-Distribution-Point (FTTdp) based Gfast demonstration that achieved Gigabit speeds using a reverse power fed Gfast Distribution Point Unit (DPU) engineered by NetComm Wireless. The Gfast DPU demonstration was conducted at BT Innovation Week 2017 from 12-16 June in Ipswich, UK, and reached 1.66 Gbps aggregate broadband speeds. The DPU was reverse powered over 40 metres of copper lead-in cable, and used spectrum frequency of up to 212MHz.

Novatel Wireless, Inc. has announced the launch of its new Global Mobile Hotspot, MiFi 7000, a next generation MiFi with advanced features and LTE bands that support the requirements of domestic and international service providers. Available now in Canada from Bell Mobility and Sasktel, it is the first MiFi branded mobile hotspot to include a 2.4-inch color touchscreen, real simultaneous dual-band Wi-Fi and hacking prevention, among other high-performance features such as QuickCharge® technology and MiFi Share, a file-sharing feature accessed via a USB thumb drive. With a more powerful battery supporting up to 24 hours of use on a single charge, the MiFi 7000 securely connects up to 15 devices on the most advanced LTE networks as well as falls back to HSPA+/UMTS and GPRS/EDGE networks. The MiFi 7000 also offers a built-in universal charging feature for external devices such as smartphones and tablets needing a battery boost, without compromising performance and connectivity.

Legislative News

Legislators were notified about the emissions risks from 4G/5G wireless antennae. Martin Pall, Ph.D., Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University, has notified California state legislators of the risks involved in the 4G/5G Cellular Base Stations and antennas envisioned in SB.649. Dr. Pall, an expert in how wireless radiation impacts the electrical systems in the human body, explains wireless emissions disrupt the electromagnetics of each cell, impacting one aspect of the cell, the voltage sensor, with a force over 7 million times compared other parts of the same cell. The FCC guidelines for microwave radiation consider only

potential heating effects from the radiation, but not the electromagnetic effects. Pall contends that thousands of published studies show biological and health effects from electromagnetic fields.

The FCC released the 2015 U.S. International Circuit Capacity Report. The report presents circuit capacity data submitted by U.S. facilities-based common carriers, non-common carrier satellite operators, cable landing licensees, and U.S. international carriers that owned or leased capacity on a submarine cable between the United States and any foreign point, as of December 31, 2015. The report shows that the total available capacity of U.S. international cables grew in 2015 to approximately 120,000 gigabit per second (Gbps) circuits, up from 91,000 Gbps circuits in 2014. Submarine cable capacity grew 35 percent per year from 2007 to 2015 and, based on data submitted for this report, is projected to grow 17 percent per year from year-end 2015 to year-end 2017.