SMAP Taiwan Smart Manufacturing Acceleration Project – Seminar for Next Generation Smart Manufacturing Solutions full of Technology Sharing and Business Opportunities

In order to welcome the next generation of smart manufacturing development trend, in March 2016 the Cloud Computing Association in Taiwan has especially established Taiwan Smart Manufacturing Acceleration Project (SMAP), with the expectation of linking the local's industry energy from Taiwan's ICT industry, through the integration of cloud computing services (including IaaS, PaaS, SaaS), Internet of Things (IoT), Big Data and smart machinery, display the advantages of Taiwan's manufacturing industry, build the next generation industry supply chain, and help Taiwan industry to move from a manufacturing-oriented business model toward creating value through product service levels.

Based on the above objectives, on Thursday, September 29th, 2016, for 13:30-17:00, the Association will hold "**Seminar for Next Generation Smart Manufacturing Solutions**" at the Seminar Room of the Cloud Computing Industry Association in Taiwan (YFY Hsin-Yi Building, 8F., No. 51, Sec. 2, Chongqing S. Rd., Zhongzheng Dist., Taipei City); in the event design, in addition to arrange for **Intel, Dell, Chunghwa Telecom, SUSE, ITRI,** to share technology processes and application in topics such as smart manufacturing reference design, Big Data, providing cloud service (IaaS) for cloud service infrastructures, IoT Big Data service platform (IoT PaaS), and also provide case analysis for the vertical integration and application of smart manufacturing, the event features **exhibition booths**, **hoping to promote win-win business opportunities through the face-to-face interaction between each exhibiting company and the participants**, to bring together the energy of the industry's success stories, stimulate enterprises to develop innovation business models, moving together toward promoting the relevant integration of emerging software and systems deriving from start-ups.

During the first SMAP seminar and business exchange opportunities with exhibition booths organized by CCAT, attracted the registration and participation of 51 enterprises, although a typhoon upset the event, still more than half of the enterprises that came to the event were able to interact with lecturers and agencies present. During registration and intermission time, you could feel the enthusiastic communication between enterprises and participants; and during the seminar, attendants were keen to take notes and learn the

technical experiences from domestic and foreign manufacturers. Although there is still room for improvement in the number of participants, this has been really a seminar full of technology and business sharing.

Agenda:

Time	Speaker agency/Speaker	Topic
13:00~13:30	Registration/Exhibition booth	
13:30~14:10	**Intel** Speaker: Dr. Chin-Lung CHUANG, IoT Solutions Architect	Software-defined factory reference design for smart manufacturing
14:10~14:50	**Dell** Speaker: Cheyu HUNG, Dell Statistical senior consultant Pieno Lee Dell IoT & Embedded Computing Solutions, Business Development Manager.	The Key Value brought by the Internet of Things to the Manufacturing Industry - Predictive Maintenance
14:50~15:30	**Chungwa Telecom** Speaker: Chun-Hsien, CHENG, Division Chief	Industrial upgrading and transformation accelerated through information and communications technology (ICT)
15:30~15:40	Break Time / Exhibition booth	
15:40~16:20	**SUSE** Speaker: Jack Lai – SUSE Technical consultant	SUSE OpenStack Cloud – The best cloud platform choice for smart manufacturing
16:20~17:00	**ITRI** Speaker: Yu-Lun, CHENG, Assistant Director, Information and Communication Research Laboratories, ITRI	Smart manufacturing IoT: To PaaS or to Pass

Intel

Topic: Software-defined factory reference design for smart manufacturing

Content abstract:

Most of IoT devices are not yet penetrated in your house or living environment, but they are in factories. As the IoT market is ramping up rapidly, many manufacturers are starting to leverage the capabilities of smart devices to unleash vital manufacturing data to major industries. These systems provides a scalable and secure platform to track inventories, manage machines, increase equipment efficiency, boost productivity of the manufacturing lines, and to save costs. By 2025, the manufacturing contribution to IoT global worth will be trillion dollars. To do that, we need to use the IoT and SDx technology to address the real pain points in manufacturing environments, and to identify high ROI solutions. These are the topics that we want to address in this session.

Dell

Topic: The Key Value brought by the Internet of Things to the Manufacturing Industry - Predictive Maintenance

Content abstract:

The technology of the Internet of Things technology is booming right now, and the impact brought to all walks of life is not only about hardware and software upgrades, more importantly, it is a revolutionary innovation for business models.

Predictive maintenance is a very important value-added service bought by the Internet of Things to the manufacturing industry. Through the structure of the IoT, the data collected from sensors on production equipments is gathered on gateways to conduct first step screening process, then is uploaded to either back-end, cloud or data center, and find the relevance between all kind of data from production equipments and their health status through analysis software, build a model to send back to the front-end gateway, so that the gateway can correct the model step by step in the place nearest to the equipment and respond to abnormal messages right away.

Introduce IoT technology, so that production equipment can actively notify its health status, so that users and maintenance service providers can perform maintenance before equipment failure, significantly reducing service manpower and costs, creating an innovative service model.

Dell partners with the IoT strategic partners, and collaborates in providing a complete and implementable Internet of Things solution, to help you grasp business opportunities brought by the Internet of Things, and create brand new business models and values.

Chungwa Telecom

Topic: Industrial upgrading and transformation accelerated through information and communications technology (ICT)

Content abstract:

With the global wave of ICT technology, leading to new application and services such as smart lifestyle, Internet of Things, Big Data and others, need for massive calculation have emerged.

Looking at the international scene, global industry is developing smart applications through the cloud, the Internet of Things and Big Data analysis, each country is competing in providing practices and plans for the manufacturing industry to move into Industry 4.0, the ultimate goal is to lead industrial upgrading, from the machine interfaces at the bottom, terminal data capture, and thus provide high-end forecast production, parameter optimization and feedback, all can achieve operational optimization and reduce costs through ICT solutions; therefore, the Taiwan industry is not only facing competition from regional supply chains, but also a global economic climate change and market competition battle.

In the face of the trending wave of Industry 4.0, Taiwan's industrial transformation is imperative, business models and market strategies must be rethought, and take advantage of this opportunity to break through this predicament. Chunghwa Telecom's has been deeply involved in the ICT sector for many years, and possesses the technological advantages from its leading position whether it is cloud services, Internet of Things, Big Data analysis and information security, and has been the only top choice for companies looking for cooperation; Chunghwa Telecom's solutions for the manufacturing industry can integrate and link the customer system's ICT, achieve smart application, create service advantages, in addition to applications on the manufacturing site, they can also be applied in the surrounding EHS, factory facilities and other extents, to achieve smart control, enhance performance and avoid consumption and wastes, and exert Green Energy efficiency. With Chunghwa Telecom's professionalism, in combination with the experience and value from various industries, choosing Chunghwa Telecom will accompany our customers move towards another milestone in industrial upgrading.

台灣雲端運算產業協會
Cloud Computing Association in Taiwan

SUSE Taiwan Branch

Topic: SUSE OpenStack Cloud – The best cloud platform choice for smart manufacturing

Content abstract:

SUSE has always provided products with good quality, stable performance and ease to use, which have been well received in the market

The focus of this seminar is to show how the SUSE OpenStack Cloud platform and IoT are interlinked to achieve the industrial upgrading to Industry 4.0 and improve manufacturing process and direction of the manufacturing industry

Finally, the concept of smart linked factory can make use of SUSE OpenStack Cloud to achieve the goal of being fully automated.

ITRI
To PaaS or to Pass

Content abstract:

Many manufacturing companies would like to achieve Industry 4.0's CPS; however, they often unsure where to start or how to proceed. Many jargons have been throwing around the block: OpenStack, PaaS, SaaS, SVM, DNN, HA, NewSQL, RESTFul, MQTT, CoAP, Spark, Pig, Zoo, OPC-UA, bootstrap, PGP, etc. For people from non-ICT background, they can be overwhelming and scary. In this talk we'll dive into Platform-as-a-Service (PaaS) and related areas and attempt to answer most (if not all) of them. At the conclusion, everyone should understand if they should "pass" CPS or adopt "PaaS".