Centrin Data Systems: Data Valley emerges in Wuhan

"In the upcoming two or three years, the Data Valley will emerge in this area, attracting the world's attention, together with the Optics Valley," said Wang Xusheng, Vice President of Centrin Data Systems, gazing out of his third-floor office windows at the interim computer rooms of Wuhan Supercomputer & Cloud Computing (Data) Center (Phase I). "It's the result of our preliminary try," he added, pointing at the container-shaped glass houses.

▸Interim computer rooms completed and in operation within 120 days

Wuhan municipal government signed an agreement with Centrin Data System to construct a smart city, and to build the Wuhan Supercomputer & Cloud Computing (Data) Center (SCCC) on August 2, 2016.

As a pilot project in the National Cybersecurity Talent and Innovation Base (NCTIB), the interim computer rooms of the SCCC (Phase I) were soon completed. It took only 120 days to finish the whole process from designing, approval, construction, and production of containers, to the installation, testing and operation of equipment. The project covers a ground area of 2,000 square meters, with an overall planned installation of 1,200 servers, making it the largest container based data center ever built in China.

Currently, the interim computer rooms project of the SCCC (Phase I) boasts an installation capacity of 500 servers. A city-wide cloud platform with 30,000 VCPU, 60TB memory and 10PB of storage, and a super-computing cluster of 200 computational nodes and 10PB of storage are in operation. However, this is only 1/20 of the planned SCCC. The various indicators and functions of the center are now operational. Some of the municipal and district government departments have started using the platforms to provide service.

According to Wang Xusheng, the interim computer rooms unveil what will be the future SCCC, and also clearly manifest the regional advantages and developing potential of the Wuhan Airport Economic Development Zone (AEDZ). The final choice of the Centrin to settle in AEDZ agrees perfectly with the site selection of the NCTIB to be set up subsequently.

Guo Xuechao, who is in charge of the operation and management of the SCCC (Phase I), said that he is optimistic about the completion and official operation of the center. According to the plan, Phase I will be completed by November, 2018, and the entire project by October 2019. Once completed, the SCCC will become a supercomputer room which comprises an onshore data center, an offshore data center and a big data application center, with a total of over 20,000 server racks, and an installed capacity of over 200,000 servers. The platform can achieve up to one petaFLOPS of computation and 10,000 petabytes of storage. When the designed capacity is reached, the center will generate an annual output value of RMB 8 billion.

▸Shaping highest-level data center in Central China

The Wuhan Supercomputer & Cloud Computing (Data) Center is also the starting point of the long-planned Wuhan Data Valley, as conceived by Wang. Situated to the north of Taxi Road and west of the Linkonggang Avenue in Dongxihu District, the project boasts a total investment of RMB 10.5 billion. Covering an area of about 20.67 hectares, it will become the largest and highest-level data center in Central China.

It is reported that, based on the Wuhan Supercomputer & Cloud Computing (Data) Center, Centrin will continue to introduce a number of big data application projects (such as National Youth Credit Platform, Green Building Materials Trading Platform, China Copyright Protection and Trading Platform, China Women and Children Big Data Platform, and National Internet Finance Big Data Service Platform). It aims at constructing the Wuhan Data Valley, and making special efforts to establish the Big Data Application Industrial Park, the Targeted Medical Care and Health Industrial Park, and the Intelligent Manufacturing Industrial Park.

It will also introduce such industries as CT imagery, genetic diagnosis, biological chips, and intelligent manufacturing industries (intelligent robots, unmanned aerial vehicles and 3D printing). It will further develop the industrial chains of cloud computing, big data, e-commerce, and intelligent manufacturing, so as to achieve industrial agglomeration, to promote the development of cloud computing, big data and "Internet +" industries, and to cultivate a new growth pole and an industrial core for Wuhan's IT economy.