

## **SDN implementation in IHEP**

High energy physics experiments produce huge amounts of raw data, while because of the sharing characteristics of the network resources, there is no guarantee of the available bandwidth for each experiment which may cause link competition problems. On the other side, with the development of cloud computing technologies, IHEP have established a cloud platform based on OpenStack which can ensure the flexibility of the computing and storage resources, and more and more computing applications have been moved to this platform, however, under the traditional network architecture, network capability become the bottleneck of restricting the flexible application of cloud computing.

This report introduces the SDN implementation in IHEP to solve the above problems, we built a dedicated and elastic network platform based on the data center SDN technologies and network virtualization technologies, meanwhile the SDN@WAN solution in IHEP will also be introduced.

In the end, the test results and future works will be shared and analyzed.

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