

## **Experience on site operation in WLCG from Tokyo Tier-2 center**

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Tokyo Tier-2 center, which is located at International Center for Elementary Particle Physics (ICEPP) in the University of Tokyo, was established as a regional analysis center for ATLAS experiment. The official operation with Worldwide LHC Computing Grid (WLCG) was started in 2007 after the several years developments from 2002. In January 2010, whole-scale replacement was made as the hardware level upgrade, and the computing power was increased twofold or threefold. In this configuration, we kept almost 98% availability for one year operation. Indeed, Tokyo Tier-2 center is the most active site to run user analysis jobs in France-cloud. One of the keys of the user analysis is the data transfer rate via WAN. It already reached to 10Gbps as a sustained rate which corresponds to the full band-width between Tokyo Tier-2 center and IN2P3-CC. Recently, the data transfer among the multi-site over the cloud have been growth according to the policy change in ATLAS computing model. Therefore, bidirectional network connectivity becomes further important. Thus the main task of Tokyo Tire-2 center is also gradually changed. In this talk, the recent activities and status of Tokyo Tire-2 center will be reported, and possible requirements in the near future ATLAS experiment will be discussed.