Next Polar Science Computer System

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Polar Science Computer System（PSCS）is a dedicated computer system for computer simulation, modeling as well as data analysis and data accumulaton of the polar science. This system is going to be replaced to the new system by the next Februrary, 2020. PSCS originally started its service at 1980 and the next system is the 6th generation as NIPR main computational resources for cooperation study. As the observatonal sensors and instruments are digitalized, the data obtained by the observation increase drastically. Ths PSCS is required greater performance not only computational resources but also data storage capacity.

New PSCS consists of 3 major systems (Figure .1).　One is front-end system, which serves as a login-node for the system. The second is computation system, which include 18 nodes of Intel Xeon computational nodes. The third is a file system, which supports 1.18 Peta Byte of disk strorage capacity. These system are connected by the Infiniband network whose speed is 100 Gb/s. The whole system is opened to the cooperation users via the science network, SINET5.
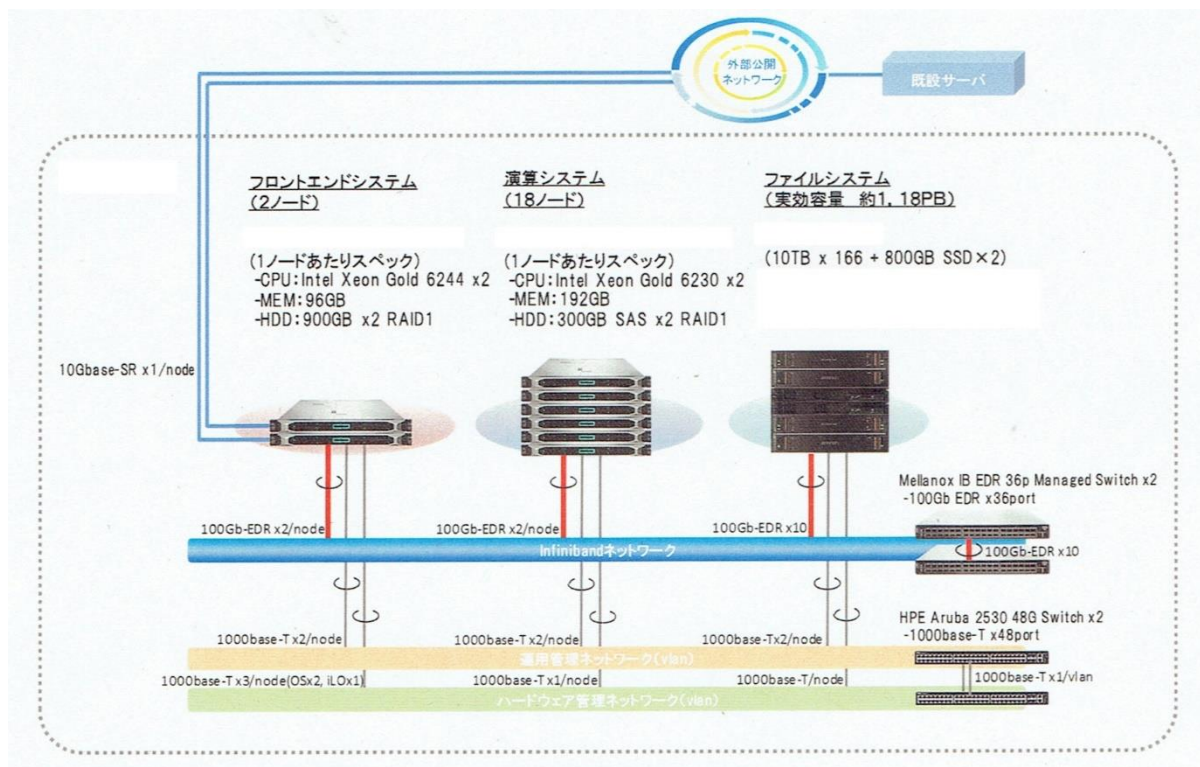
http://polaris.nipr.ac.jp/

Figure 1. System configuration of the next PSCS..