

## Construction of next generation national earthquake data exchange and distribution system over the SINET3 nation wide L2 network

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In the scientific information network SINET3 operated by the National Institute of Informatics(NII), VPLS(virtual private LAN service) which was the wide L2 network service was started from December, 2007. Then, we the participation organizations of then national seismic observation data exchange and distribution network (JDXnet) have started the earthquake data exchange using this service.

By this, the much organization which exchange data only by JGN2 or flets group network became to use even in SINET3, and the data exchange route was able to be dualized. Though JGN2 and SINET3 also have the high reliability, it is expected with that reliability and availability are improved by dualizing in addition.

The WIN system has been utilized until now in order to carry out the data exchange by the connection to SINET3 in each universities. At this time, we have developed the data collection and distribution equipment that is a specialized equipment connected with the network in each university. This is a kind of the application gateway equipment, and the data processing system of each university will exchange data with this equipment only. We hope that maintenance and operation of the software of this equipment are saved, and the network function enhancement becomes easy, and the trouble correspondence will become also easy.

It is considered as 2 points as future development. One is the utilization of earthquake data distribution except for the seismic waveform data. For example real-time hypocenter information and ground shaking information of the observation point are considered. And also, we want to exchange the CIMS data which is the channel information management system of the WIN system. In another, we want to promote the earthquake data utilization in many universities and research institutes in Japan. Because the data on this system are already utilized in Hiroshima university and Kanazawa university by using SINET3 and flets group network, it is expected that the similar utilization would be well adopted in other universities.