JGN Ⅱ

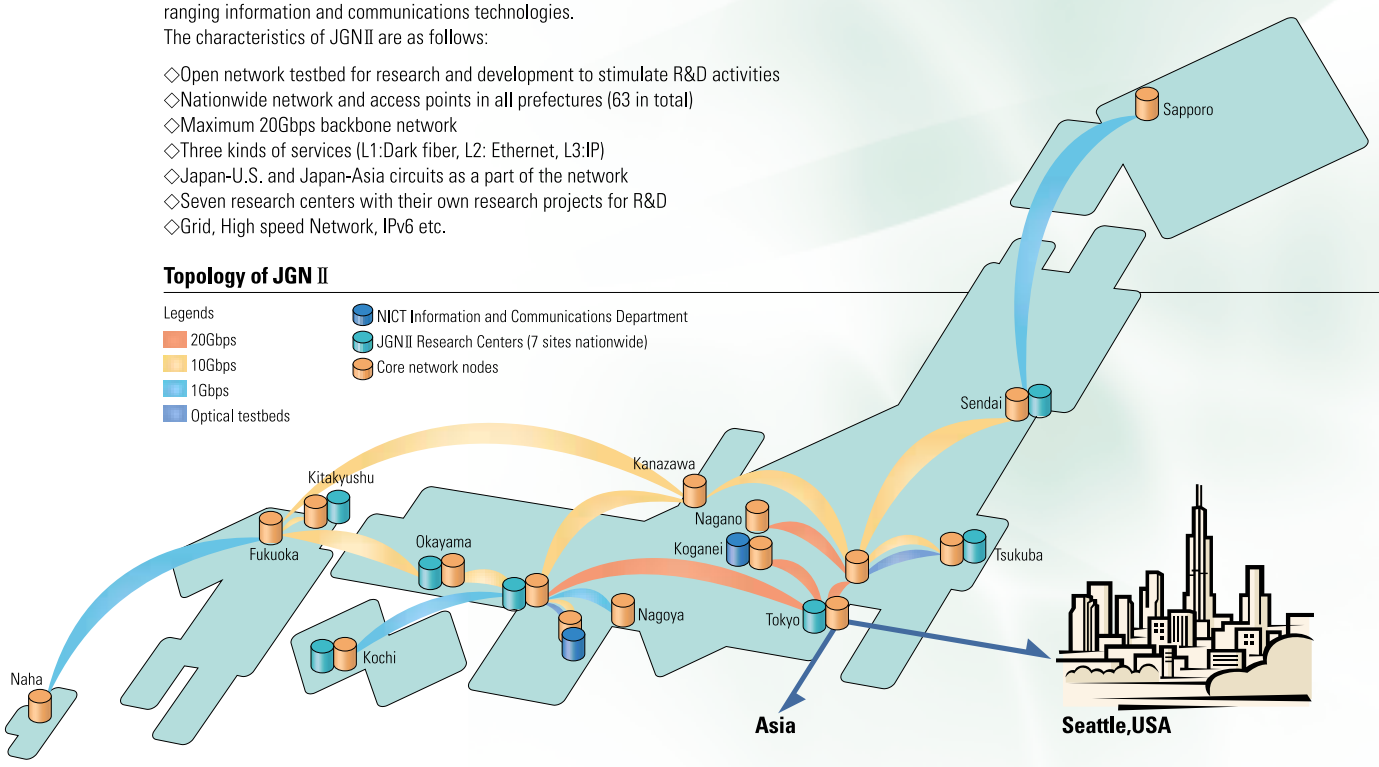
Advanced Network Testbed for R&D

About JGN Ⅱ

The objective of JGNⅡ is to promote fundamental Research and Development (R&D), applied R&D, and demonstration on wide-ranging information and communications technologies.
The characteristics of JGNⅡ are as follows:

◇Open network testbed for research and development to stimulate R&D activities
◇Nationwide network and access points in all prefectures (63 in total)
◇Maximum 20Gbps backbone network
◇Three kinds of services (L1:Dark fiber, L2: Ethernet, L3:IP)
◇Japan-U.S. and Japan-Asia circuits as a part of the network
◇Seven research centers with their own research projects for R&D
◇Grid, High speed Network, IPv6 etc.

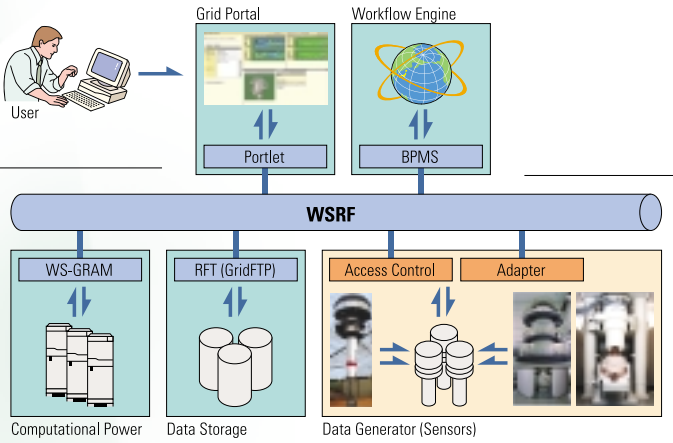
Topology of JGN Ⅱ



JGN Ⅱ and Super Computing

Osaka JGNⅡ Research Center focuses on the resource management technology of Grid computing using:

◇Security technology to support dynamic VO (Virtual Organization) construction
◇Network QoS technology to improve the efficiency of computing resources

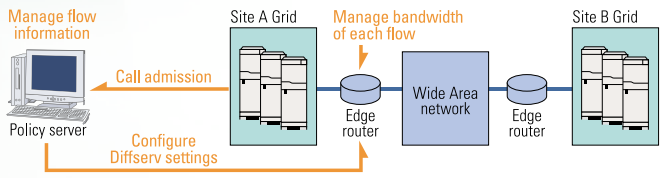


Dynamic Control of VO Security

WSRF-based Interface and access controlling functionality to integrate sensors flexibly into the Grid flexibly

QoS Method for Data Transfer in Grid Applications

Dynamic controlling reservation for bandwidth to minimize failure of bandwidth reservation



NiCT National Institute of Information and Communications Technology