Running Status of IMPAC-T Server System

Aug.5th, 2011

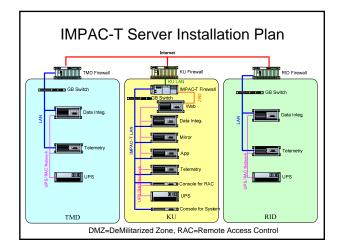Eiji Ikoma, Masaru Kitsuregawa

Earth observation Data Integration and Fusion Research Initiative
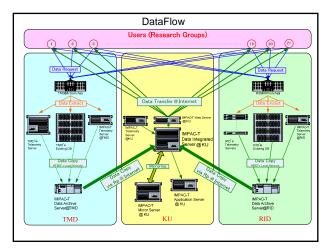(EDITORIA), The University of Tokyo

Supported by Dr.Chaiporn@KU, Dr.Komori@UT, Dr.Mongkol@KU, Dr.Nontawat@KU

Purpose of IMPAC-T Server Systems

- For Data collection
- For Data archive
- For Application
- For Data publication

We are proceeding to install
>10 servers@KU,TMD,RID

IMPAC-T Server Installation Plan

DMZ=DeMilitarized Zone, RAC=Remote Access Control

DataFlow

Fetures of IMPAC-T Servers

- Safe
  - KU/TMD/RID Firewall and IMPAC-T Firewall
  - Only Web server can access from public
  - Each server has own software firewall
- Stable
  - All system disk of servers are composed redundantly = Mirroring(RAID1).
  - All data disk are composed dual controller and RAID6(spare and parity)
  - All system has 2 or 3 redundant power supply and Dual UPS protect servers

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For Data Collection

- We are planning to prepare 4 telemetry servers(KUx2,TMD,RID)
- KU's server will start to run soon for Dr.Chaiporn and Komori's system.
- My data crawling application will be installed to KU Server, which can collect data from outside (ex.Web site) to send to Data Integration Server.

For Data Archive

- We are installing Data Integration Server at KU, TMD, RID.
- KU server has >20TB high-speed stable (redundant) storage, TMD and RID has also >8TB same storage with high performance server.
- Data Archive server receive data from telemetry server and other resources, and can provide data to application server with 10GB network.
- This server is protected by IMPAC-T Firewall strongly.
- We are strongly welcome to archive lots of data.
- We also need to discuss about the interface for downloading.

For Application

- IBM server@KU is ready to run as application server in this year.
- Application server is connected to Data Integration server with high-speed network.
- WE ARE WELCOME TO USE.
- Requests about environment (library, compiler, application..) are also welcome.
- After taking into consideration of the status of usage, we will define the specification of next generation application server.
- Accounting policy should be discussed.

For Data Publication

- We have already installed Web server@KU, just waiting for data.
- This server is installed outside of IMPAC-T Firewall with enough storage→ Each researchers can publish data or research result safety.
- Contents, Interface, Design, …. Any Comments are welcome.

Status of installation

- KU

7/8 of servers(1st.generation) are installed today and start the test running.

1 will be installed by the end of 2011

- TMD

1/2 of servers(1st)are installed yesterday and 1 will be installed soon.

- RID

We have almost finished to define the specification of servers and start the process of installation.

KU

TMD

Dr. Chaiporn,
Dr.Komori

Ikoma

Thank you for your attention.

Server installation @KU and TMD(2011.Aug.5-6)