

APSCO Information Service System—

Preliminary Study

Secretariat of APSCO Feb. 9, 2010



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Background



According to the development plan of APSCO, the tasks need to be concerned as follows:

- Comprehensive application of space resources
- cooperation development in terms of space technologies
- establishment of basic capabilities
- research of space science



Data sharing and service capacitybuilding



Background

Data sharing and service



- Establishment of standardized system of technical Specifications, Information Standards, and Data Policies
- Centralized and distributed database
- Service platform and mechanism of data sharing

- To assist APSCO members to establish an interchangeable archive network system.
- To guide the development of APSCO's central database oriented to share the resources.
- To construct a well designed system that will consist of the functions of databank, network porter and administration.
- To promote data sharing consistency among members complying with principles of equality and mutual benefits.
- To realize efficient management and rapid retrieval of data and information.
- To provide corresponding support environment of software and hardware.



Objectives

Data sharing and service System R&D

Improve the spatial data sharing capabilities

✓ Support internal daily business operations

Increase international cooperation in space technology

✓ Information Data Service System Web site

✓ Information database for data management and storage

✓ System development should satisfy the requirements of information and data service functions, performance and its basic operating environment



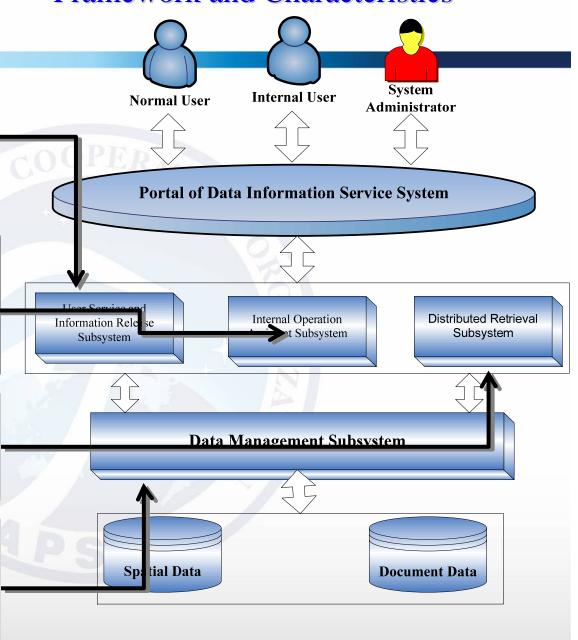
Framework and Characteristics

Integrate APSCO multimedia information (text, pictures, video information) to be released

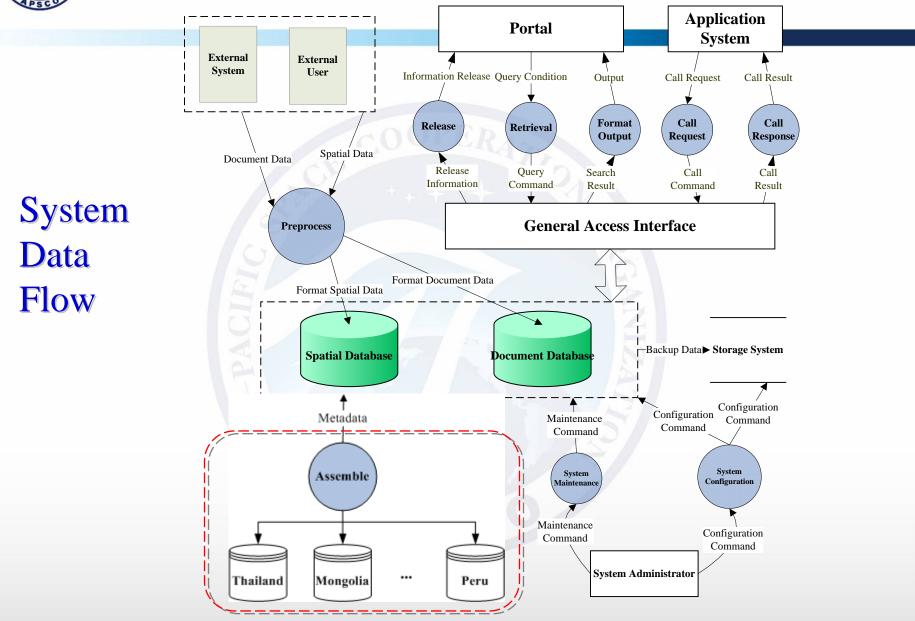
Manage various types of APSCO daily business **operations** unitedly and efficiently

Follow the OGC standards to support interoperability of spatial query

Support analysis, management and releasing of the prevailing remote sensing products

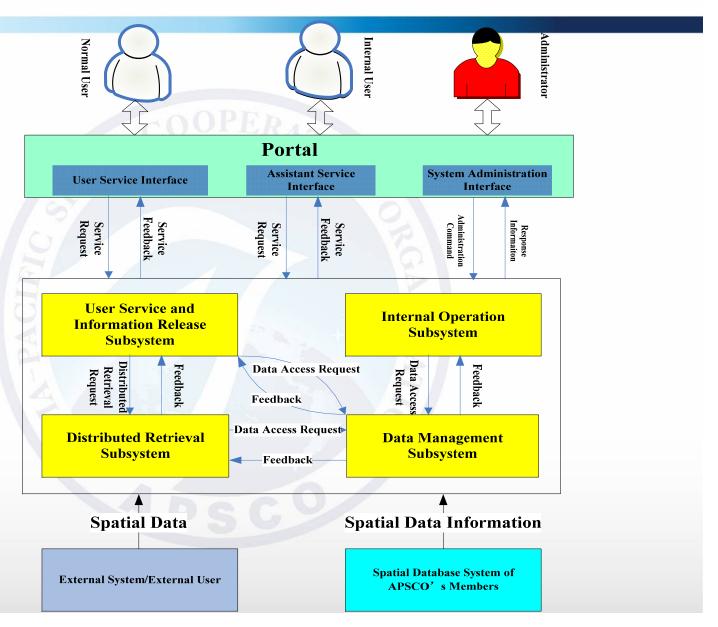






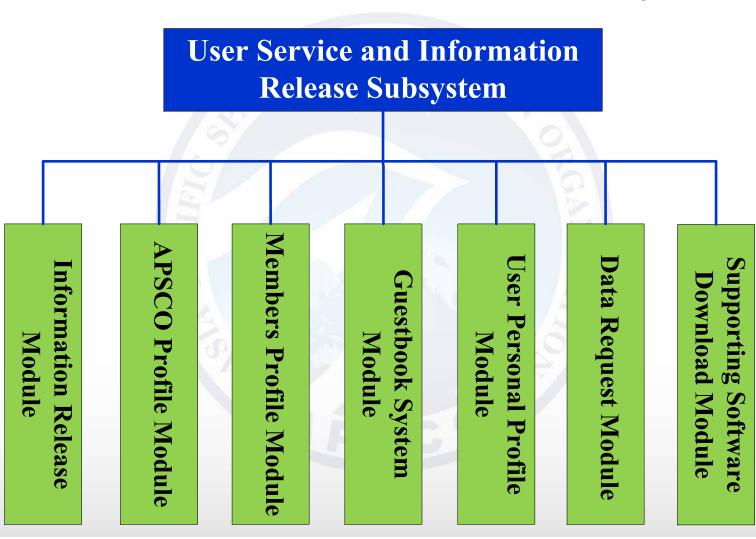


System
Interface
Relation



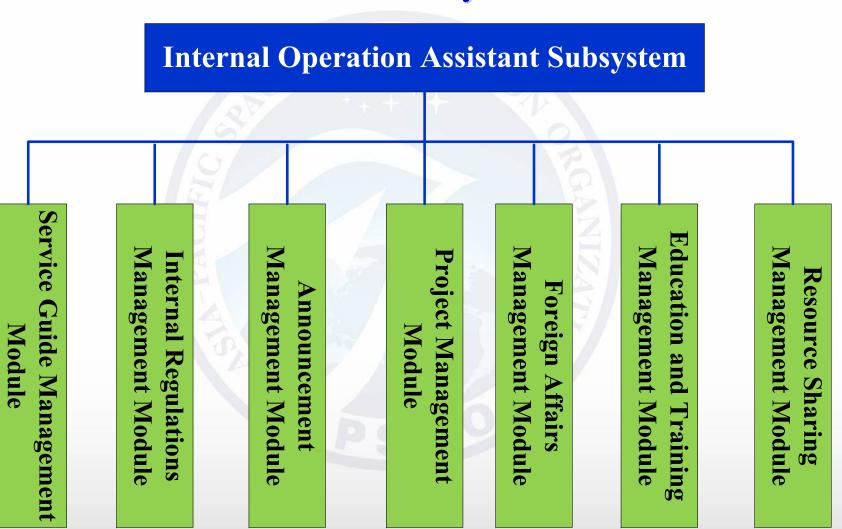


User Service and Information Release Subsystem





Internal Assistant Service Subsystem





Module

Remote

Distributed Retrieval Subsystem

Distributed Retrieval Subsystem

Service Module

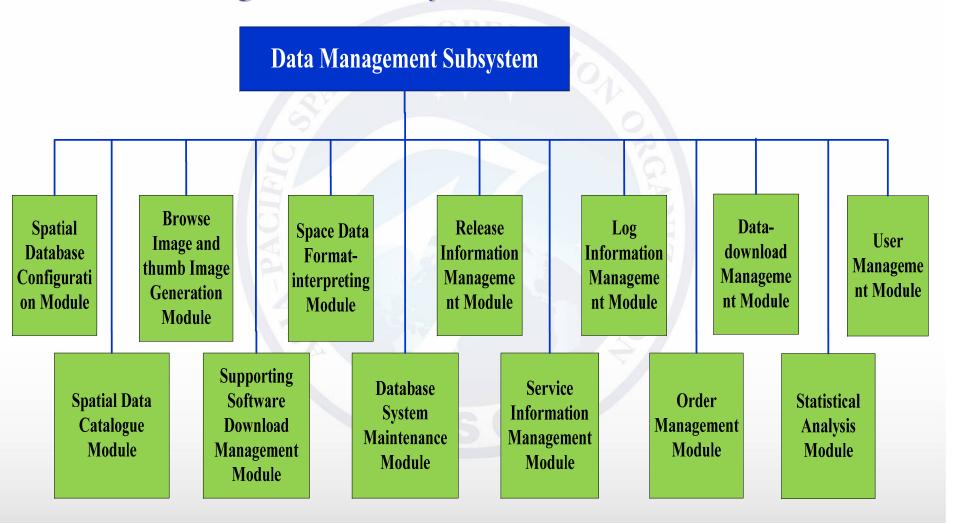
Multi-satellite Data

Retrieval Module

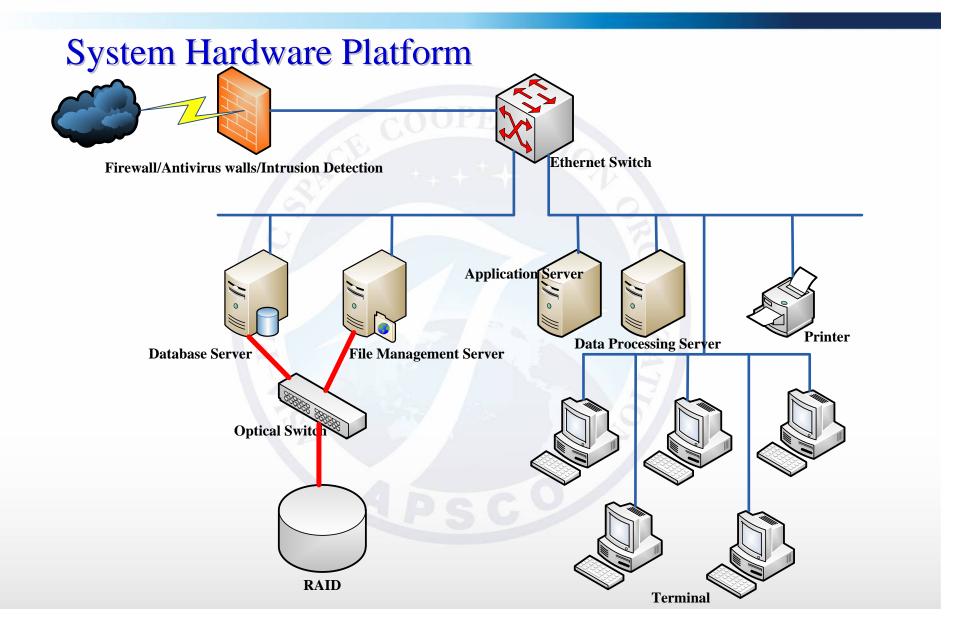
Display Module



Data Management Subsystem







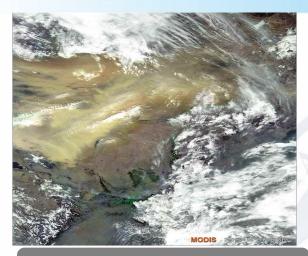


Service Capabilities

- Support web releasing of APSCO multimedia information (text, pictures, video information)
- Able to interpret, archive and share the format of the prevailing remote sensing products includes: CEOS/ASAR/CAP/DIMAP/FASTB/ FASTC/ FAST-L7/HDF, and so on.
- Support various types of APSCO daily business operations
- Spatial data storage volume is not less than 30TB.



Service Capabilities



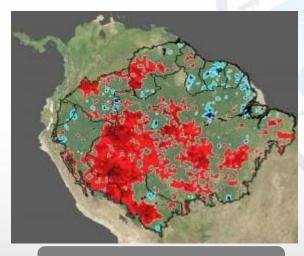
Sandstorm Monitoring



Water Pollution Monitoring



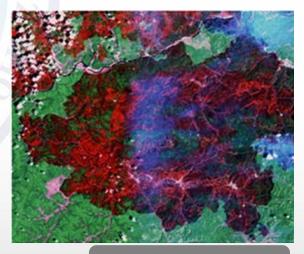
Land-use Survey



Drought Assessment



Flood Assessment



Fire Assessment

