

Cross-DAAC Planning

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Overview



Cross-DAAC planning coordinates production between DAACs

- **Taking data production times at one DAAC into account in another DAAC's plans**
- **Identifying conflicts between production plans**

ECS Users

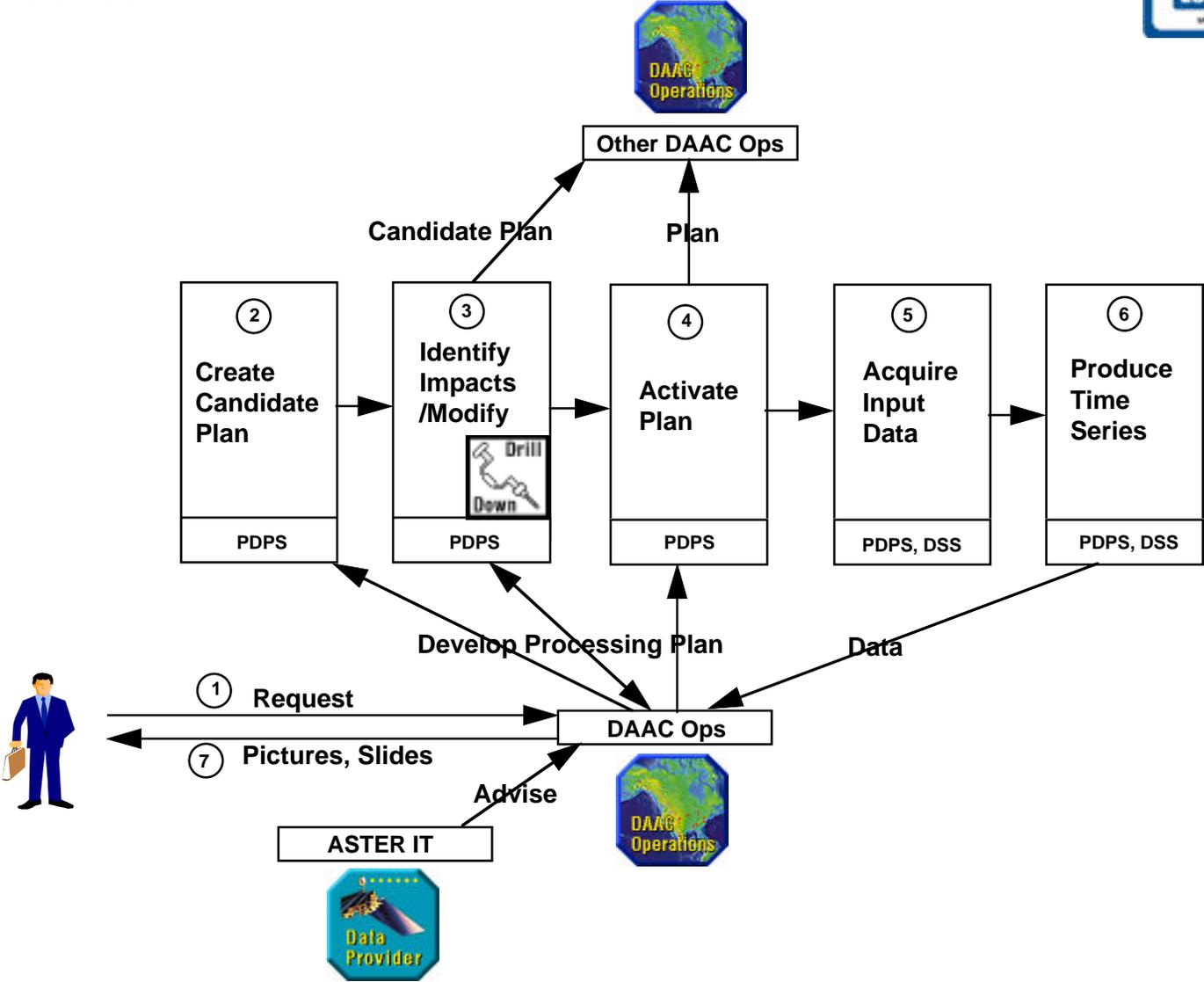
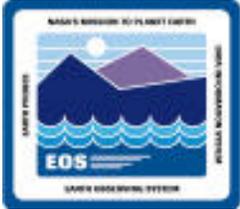
- **DAAC operations staff**
- **SMC**

Scenario Context: High priority request causes replanning

Examples of Events:

- **Any situation that causes a replan at one DAAC**
- **Creation of Data Availability Schedule on plan activation**
- **Exporting plans**
- **Importing and comparing plans**

High Priority Request Functional Flow





Design Drivers

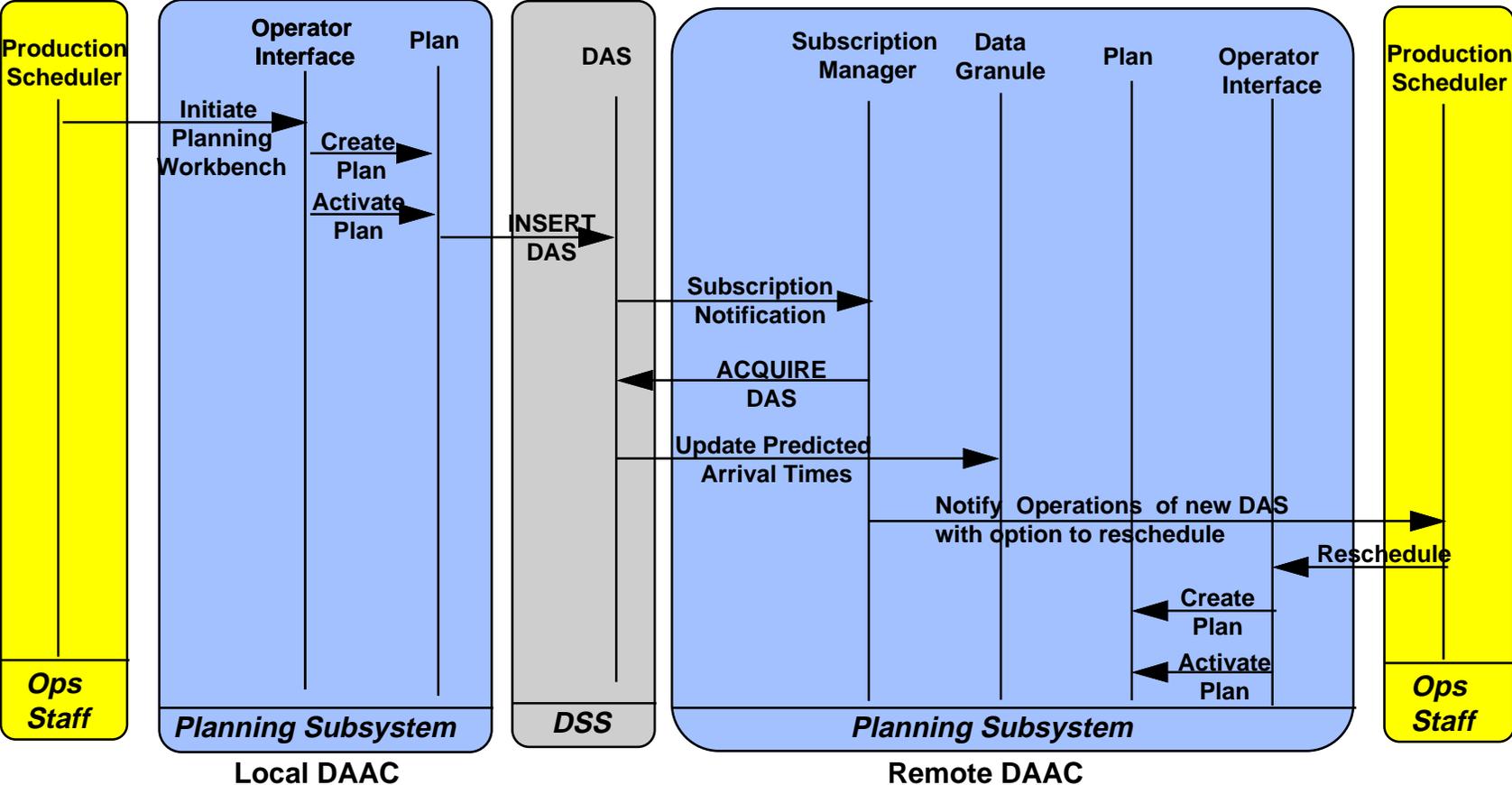
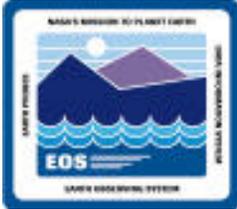
Architectural Drivers

- **Automatically account for data production times at other DAACs**
- **GUI for displaying cross-DAAC dependencies**
- **Conflicts between plans need to be identified**

New in Release B

- **Features**
 - **Inter-DAAC coordination**
 - **Cross-DAAC coordination view for SMC**
- **Tools**
 - **Data Availability Schedules (DAS)**
 - **Automatically produced and distributed via subscription whenever a plan is activated**
 - **Exported/Imported plans**
 - **Plans from multiple DAACs can be compared and data dependencies automatically identified**

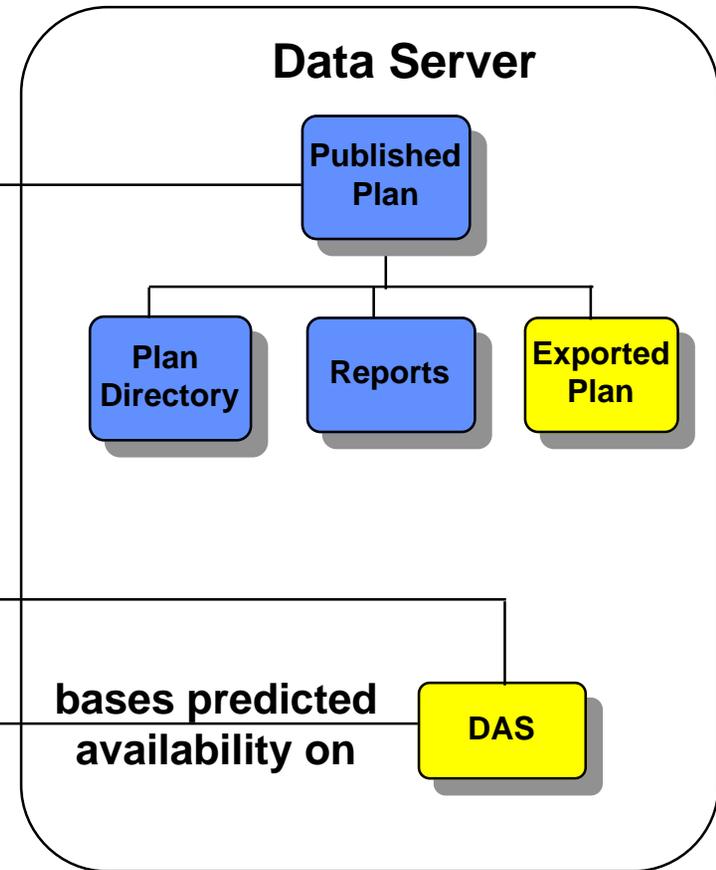
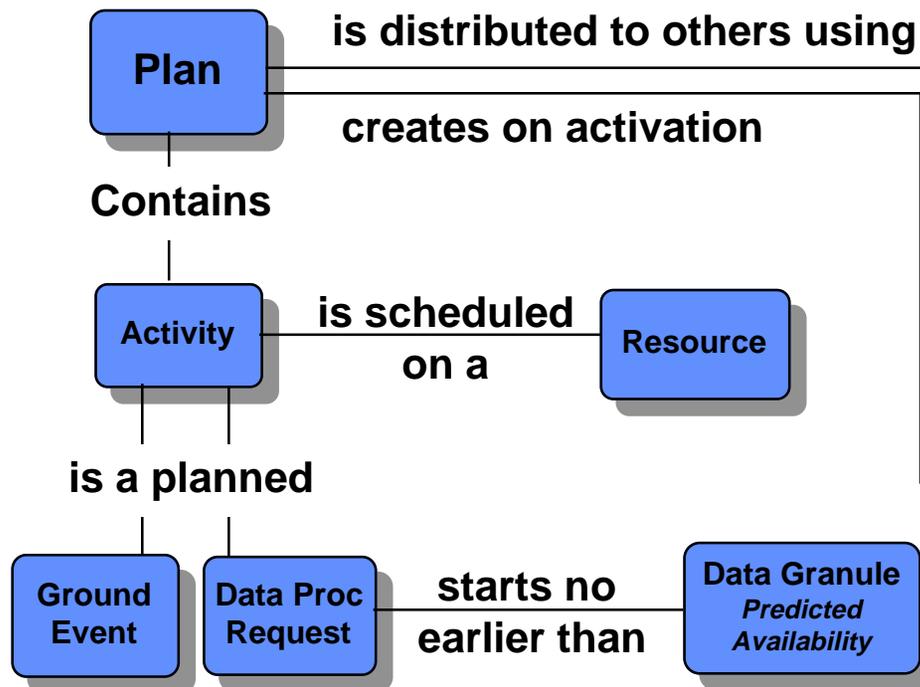
Software Design - Change Notification using DAS



Software Design



Planning Subsystem



Planning Workbench



Release B Additions



Evolutionary Features

Potential Future Enhancements

- **Automatic replans when a new DAS is received**
 - **If DAS indicates that needed data is going to be available at a much different time than originally expected**
- **“What if” planning at remote site**
 - **Allowing SMC or another DAAC to produce candidate plans**

Emerging Technology

- **Influencing AutoSys/AutoXpert to handle more of planning’s requirements. Their federated version may evolve to handle cross-DAAC planning.**



Current Status

COTS Selection

- Delphi class libraries

Trade Study and Prototype planned for CDR

- Graphics and report capabilities
- The minimum subset of planning information needed to be shared
- The cost/benefit effects of further automation

Critical Decision

- Resolution of operations concept

Next Step

- Present approach at operations workshop
- Preventing plan oscillation

Summary



Cross-DAAC Planning

- **Planning Subsystem automatically takes into account other DAAC's plans when creating production plans**
 - **Data Availability Schedules**
- **When data dependencies cause conflicts between DAACs, the Planning Subsystem can display the plans and identify where the conflict occurs**
 - **Export and Import of Plans**
 - **Displays**
 - **Reports**
- **These tools are used by SMC to support schedule coordination and adjudication when required**