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# Routine Planning

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# Routine Planning Description

## Overview:

This scenario describes routine production planning within the Planning Subsystem. A routine plan is used to ensure the efficiency and timeliness of processing jobs. Routine plans are generated at specified times by the production planner. Upon activation of a plan, a portion of it is sent to the Data Processing Subsystem for production. This scenario emphasizes the following new Release B functionality:

- Control of On-Demand requests
- Limited Automatic Replan capabilities
- Production Strategies

## Assumptions:

- Production Requests have already been entered into the PDPS Database as described in the Entering Reprocessing Requests Scenario.
- A Resource Plan exists and all Ground Events that need to be considered have been entered as described in the Resource Planning Scenario.

# Routine Planning Details

## Scenario:

The scenario starts out with the Production Planner using the Planning Workbench to do the following:

- Increases the threshold for notification for a Limited Automatic Replan based on the late arrival of data from external sites (EDOS, other DAACs, etc.). This will cause fewer notifications to the Production Planner about these events.
- The limit for the maximum size of a single On-Demand job based on CPU time is increased. This limit is used to throttle On Demand requests such that a huge request doesn't bring Routine processing to a halt.
- The Production Planner now creates a new candidate plan based on the active one
- The list of production requests in the PDPS Database are displayed and the Production Planner selects the new reprocessing request to be added to the plan.
- The production strategy used by this plan is modified to raise the priority of the reprocessing request type. A new version of the candidate plan is selected to be created and displayed.

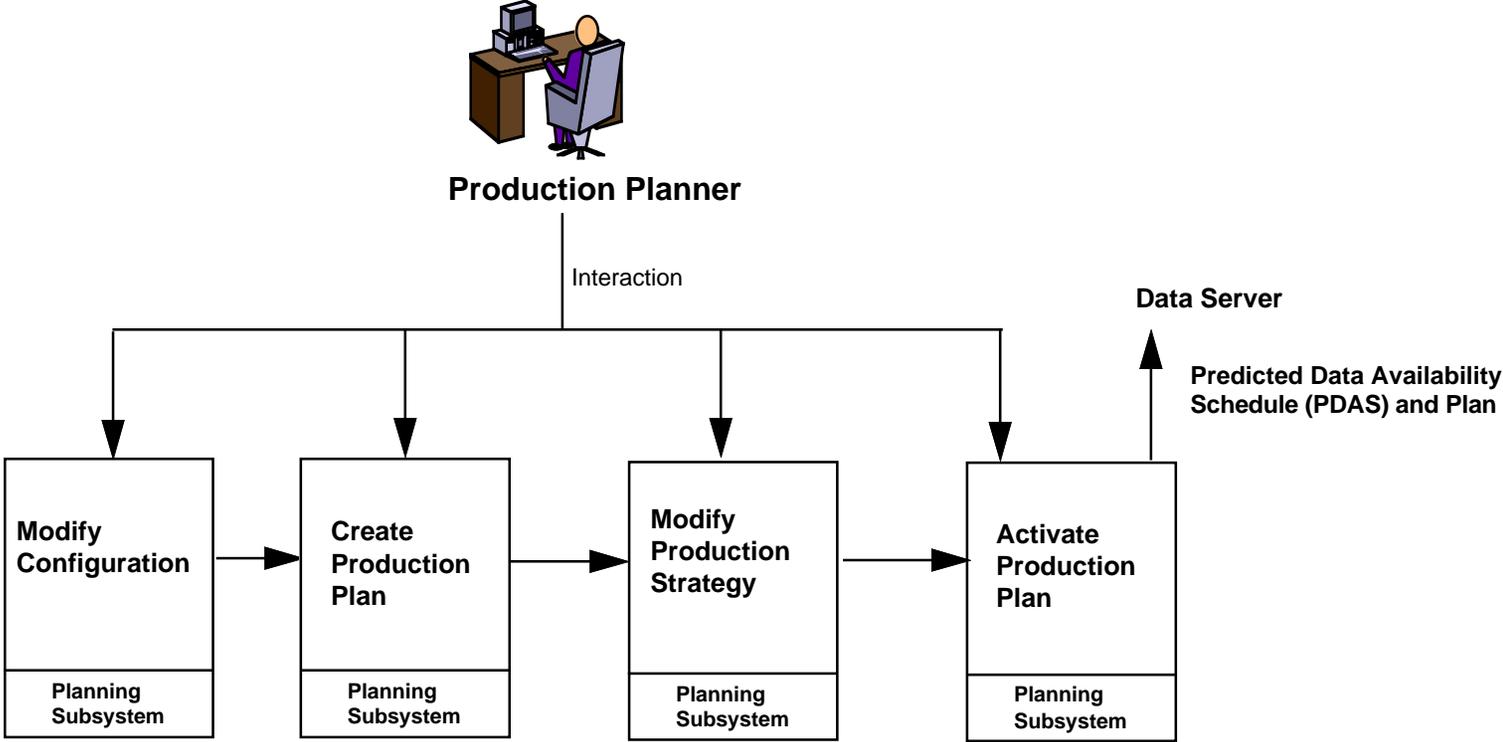
This will take a few minutes, so the system displays a message to the affect that it is working on it. When completed, a timeline of the current plan is displayed along with a list of all target dates that haven't been met (see the Replanning Scenario). The timeline shows a prediction of the individual PGEs and ground events against the various resources that they will consume. The Production Planner can iterate on different strategies until a suitable plan has been determined, at which time it is activated.

## Heritage:

- Operations Concept for the ECS Project: Part 2B - ECS Release B 604-CD-002-002 (Routine Production Scenario)
- Release B IDR 705-CD-005-001 Day 1 (Nominal Operations Scenario)

# Routine Planning

## Functional Flow

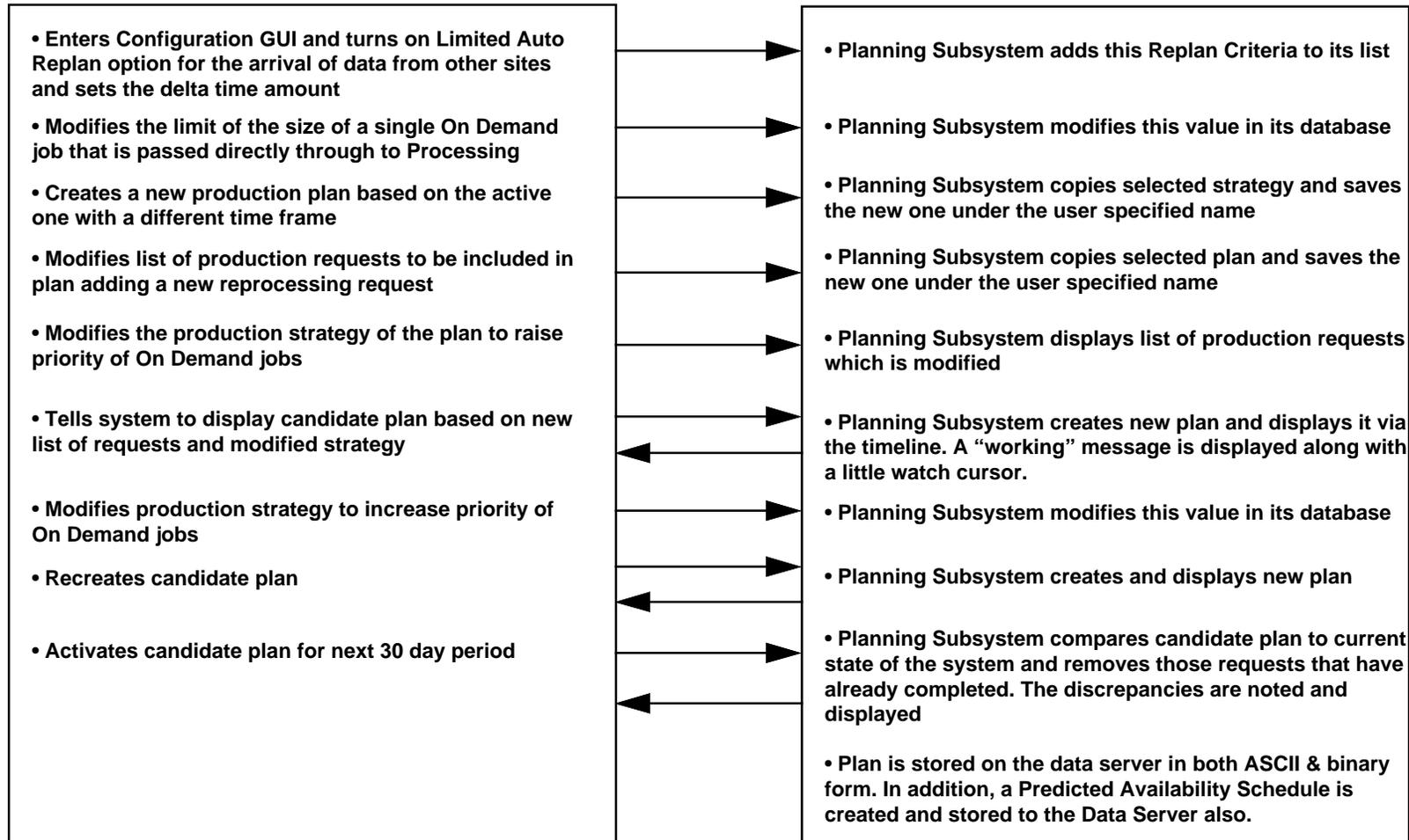
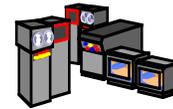


# Routine Planning

## Points of View



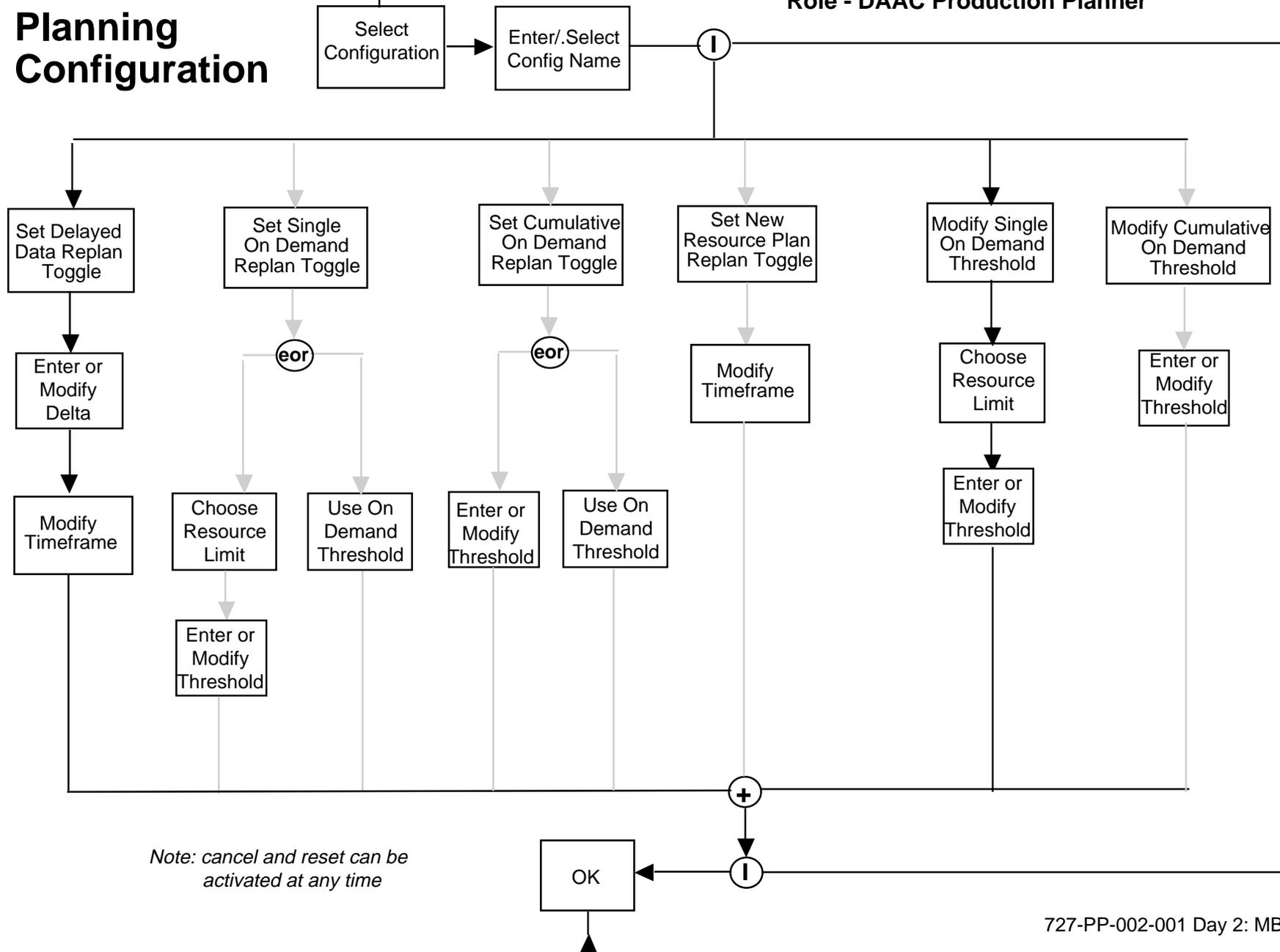
**Production Planner**



# Workflow- Planning Configuration

Planning Workbench

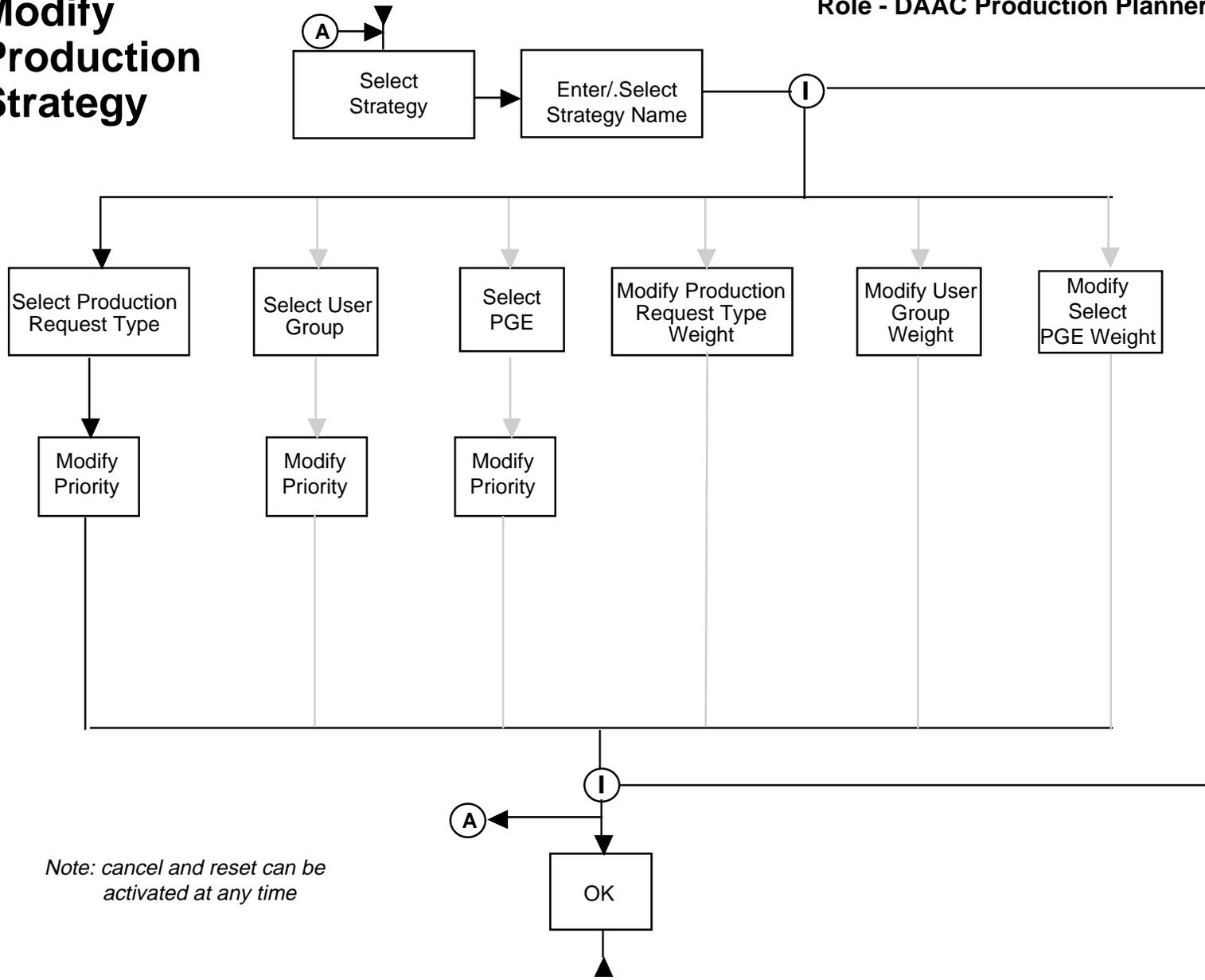
Activity - Configure Production Planning  
Role - DAAC Production Planner



# Workflow- Modify Production Strategy

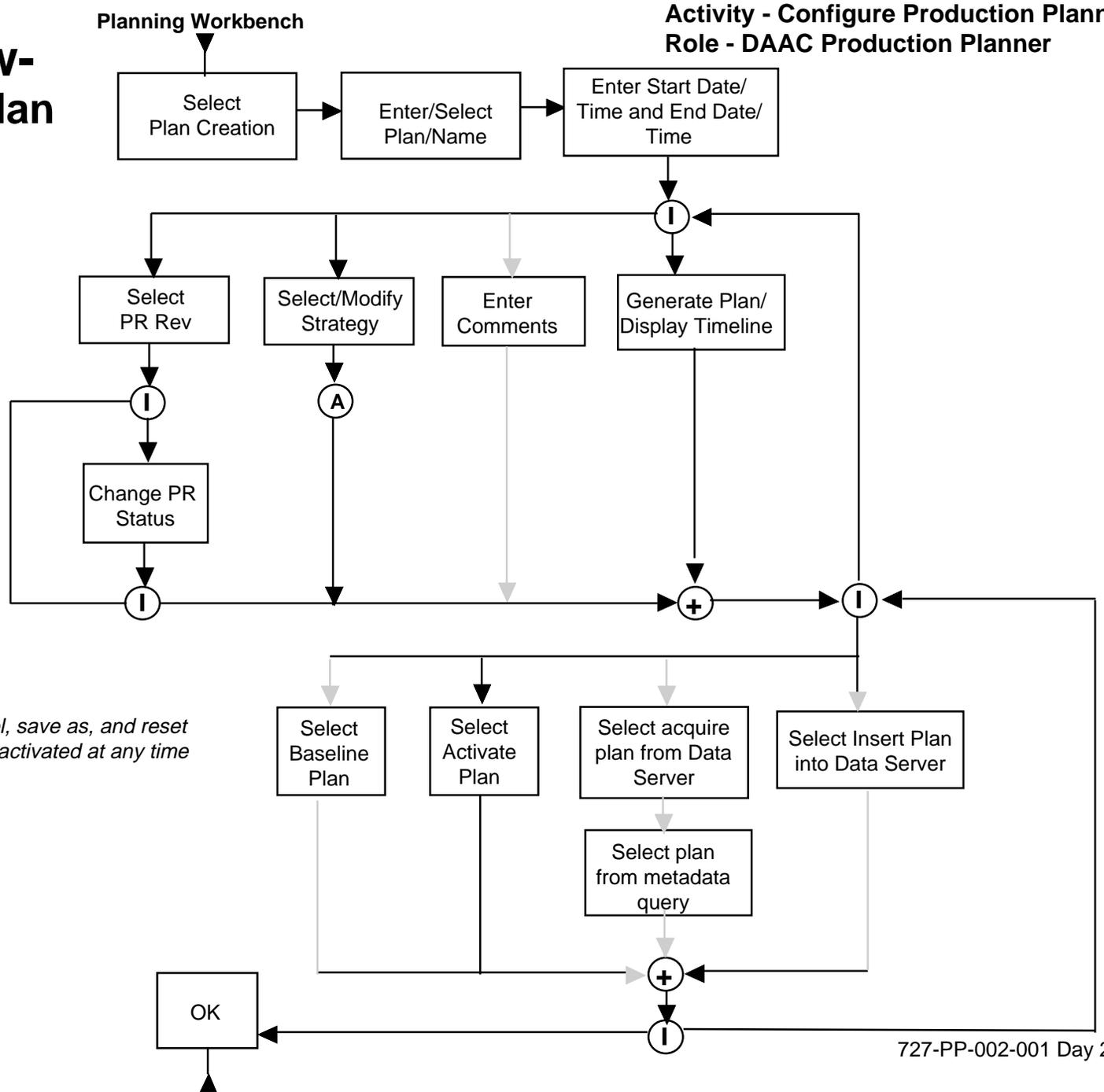
Planning Workbench

Activity - Configure Production Planning  
Role - DAAC Production Planner



*Note: cancel and reset can be activated at any time*

# Workflow- Create a plan



# Routine Planning

## Data Activity

Operator Function	Data Element	Operation Interactions
Enter Configuration	Configuration Name	Edit
	External Data AutoReplan Toggle	Edit
	External Data AutoReplan Delta	Edit
	External Data AutoReplan Timeframe	Edit
	Single On-Demand AutoReplanToggle	Edit
	Single AutoReplan CPU Limit	Edit
	Single AutoReplan Disk Limit	Edit
	Single AutoReplan RAM Limit	Edit
	Cumulative On-Demand AutoReplan Toggle	Edit
	Cumulative AutoReplan CPU Limit	Edit
	Cumulative AutoReplan Disk Limit	Edit
	Cumulative AutoReplan RAM Limit	Edit
	AutoReplan for Resource Plan Change Toggle	Edit
	Resource Change AutoReplan Timeframe	Edit
	Individual On-Demand CPU Limit	Edit
	Individual On-Demand Disk Limit	Edit
	Individual On-Demand RAM limit	Edit
	Cumulative On-Demand CPU Limit	Edit
	Cumulative On-Demand Disk Limit	Edit
	Cumulative On-Demand RAM limit	Edit
	Estimate of On-Demand Resources	Edit
Enter Strategy	PGE Weight	Edit
	User Group Weight	Edit
	PR Type Weight	Edit
	PGE Priority	Edit
	User Group Priority	Edit
	PR Type Priority	Edit

# Routine Planning

## Data Activity

Operator Function	Data Element	Operation Interactions
Create Candidate Plan	StartTime	Edit
	EndTime	Edit
	Description	Edit
	Status (Candidate/Active)	Display
	Plan Name	Edit
	Production Request List	Edit
	Production Strategy	Edit
Activate Plan	StartTime	Edit
	EndTime	Edit
	Comment	Edit