Project Name:		
PIT/OT Integration Feasibility Study		
Business objective served by this project		
Define the scope and requirements to integrate the phase 1 and phase 2 tools		
Project Manager/Leader:	Project Sponsor:	PDS Version/Date:
Arturo Núñez	Gustavo Arriagada	1 / 2010-10-20

Project Description

Issue Statement:

Although the Gemini phase 1 and phase 2 tools share some common foundations, the software models they are built upon are different. Information in a phase 1 proposal must be processed and converted into a phase 2 program, but the software is not flexible enough to faithfully translate all of the proposal into a phase 2 program, resulting in duplication of effort by both external PI and Gemini science support staff.

In addition, much of the functionality available in one tool cannot be easily reused in the other. The purpose of this project is to gather user requirements and clarify the main features that will help to streamline the observation experience with Gemini.

Project Objective Statement (POS):

The goal of this project is to gather and evaluate the user requirements and define a path forward for the limitations of the existing model.

Project Flexibility:

Flexibility Matrix	Least Flexible	Moderately Flexible	Most Flexible
Scope	✔		
Schedule			✔
Resources		✔	

Major Deliverables:

- Baseline user requirements for the PIT/OT integration project
- PIT/OT Integration plan definition

Assumptions:

- No software will be generated as a result of this project. The deliverables of this project will be used as input for subsequent desing and implementation phases
- At least one senior software engineer who is intimately familiar with the existing phase 1 and phase 2 model is required for project success. At least two engineers should be involved to prepare the way for future implementation stages, serve as a springboard for ideas, and provide a sanity check.
- A large portion of this phase of the project is the responsibility of science, who must provide the resources to help sort out and document user requirements. A small group of interested scientists will be charged with this task.
- The Sequence Model feasibility study project has been completed.

IS and IS NOT:

- **IS:** Focused on understanding the user needs, and preparing a plan to address them.
- **IS NOT:** An implementation project.
- **IS NOT:** The primary task of any software developer for the entire period of this project.

Strategy and Resources

Milestones and Stages:

There are three phases in this project:

- User requirements gathering

  Science documents the user requirements

  - User requirements document is produced by science and approved by systems engineering.

- Evaluation Phase

  Software reviews the user requirements and prepares a Conceptual Design

  - Kick off meeting
  - Conceptual Design Review

- Elaboration Phase

  Following the Conceptual Design Review, in this phase software requirements are extracted and the overall software architecture is produced. A plan is put in place to implement the architecture.

  - Software Requirements Document
  - PIT/OT Integration Plan

Estimated Costs:

- No equipment or resources beyond those afforded for normal software development.

Core Team Members(see Guidelines for Developing New Projects document):

- Arturo Nunez (Project Manager)
- Sandy Leggett (Project Scientist)
- Manuel Lazo (Systems Engineer)

Extended Core Team Members:

- Shane Walker/Larry O'Brian/Devin Dawson/Arturo Nunez (software engineering)
- Bryan Miller/Andy Stephens (science support)
- TBD science staff members (requirements gathering)

Dependencies that require coordination:

- This project will benefit from the outcome of the Sequence Model feasibility study.

Risks and Issues:

- There is a document that was produced by science describing initial user requirements that has not been reviewed by software yet.
- The major risk that this project faces is ensuring sufficient staff effort will be available.

Supplemental Resources:

- None