DCA11MA076

Gulfstream Problem Reporting Quick Reference Guide

(22 pages)

Gulfstream

DOCUMENT NO:	GVI-GER-7501	FAA PROJECT NO:	N/A
CURRENT REVISION:	As Noted	INITIAL DATE:	11/24/2008
GAC CAGE CODE:	59734	MODEL:	N/A
VENDOR REFERENCE:	N/A	ATA NO:	N/A

CERTIFICATION DATA TOP ASSEMBLY NO (if applicable):

G650 Problem Reporting Quick Reference Guide

[redacted]

DEPARTMENT:	Systems Integration	TECHNICAL APPROVAL:	[redacted]
SECTION:		TECHNICAL APPROVAL:	
PREPARED BY:	[redacted]	PROJECT ENGINEER:	[redacted]
CHECKED BY:	[redacted]	MANAGER APPROVAL:	[redacted]

REVISION APPROVAL

REV	REVISED BY	APPROVED BY	SIGNATURES	DATE
A	[redacted]	[redacted]	[redacted]	3/31/09
		[redacted]	[redacted]	8·31·09

REVISION APPROVAL

REV	REVISED BY	APPROVED BY	SIGNATURES	DATE
B	[redacted]	[redacted]	[redacted]	9/15/09
	[redacted]	[redacted]	[redacted]	9/15/09
		[redacted]	[redacted]	8/10/2009
		[redacted]	[redacted]	9/11/09
		[redacted]	[redacted]	8.21.09
		[redacted]	[redacted]	8/21/09
		[redacted]	[redacted]	8/11/09
		[redacted]	[redacted]	9/14/09
		[redacted]	[redacted]	8/10/09
		[redacted]	[redacted]	8.10.09
		[redacted]	[redacted]	8/11/09

REVISION HISTORY

REV	PARA	DESCRIPTION OF CHANGE
-	-	Initial Release, No Change (NC)
A	1.1, Figure 1	CCB name change to PRRB
	Appendix A.1	Added field description symbol definition
	Table 1	System changed to a required field (Red)
		Priority field name changed to Severity with new definition
		Added the following fields:
		Added UUT Configuration, Failed MOD, Failure Date, Hack Time, Flight Number
	Table2	Added Submitter and Submit Date/Time field
		Changed CCB Coordinator field to PRRB Coordinator
	Table 3	Added DR/DI # field
	Figure 4,5,6,7	Modified to display the current interfaces including new fields
	Figure 8	PR Process Flow name change to G650 PR Workflow
		PR Workflow and all related data and interface snapshots updated
	Figure 9,10	Modified to display the current interfaces including new fields
B		Multiple revisions throughout document to describe the PR process updates.

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1.0 INTRODUCTION

1.1 Purpose

This document is meant to be a quick reference guide for engineers using TeamTrack for problem reporting on the G650 program.

This document will provide an overview of the problem reporting process, instructions for entering problem reporting data and managing problem report status using TeamTrack.

Definitions, Abbreviations and Acronyms

Primary Items	Items, such as issues and incidents, are stored in database and follow a workflow process.
Fields	Individual piece of information that is associated with a PR during submit, transition and update.
Workflow	It ensures the proper flow of primary items using a defined process that consist of fields, states, and transitions.
Projects	A collection of Primary items submitted by users. Projects are assigned to a workflow that defines how items are routed between states using transitions and ownerships.
State	A position in the workflow where the primary items reside.
Transition	Transitions move items (issues) from state to state and display as buttons at the top of the "Item Details" frame.
PRRB	Problem Report Review Board
Owner	A single user who is the owner of the item in a particular state defined by system administrator.
Secondary Owner	A group with appropriate privileges to view update and transition items. Each state may have primary and secondary owners.

2.0 APPLICABLE DOCUMENTS

2.1 GAC Documents

GER-7786 Problem Reporting Process Description Document

2.2 External Documents

SERENA TEAMTRACK 6.6 User's Guide

SERENA TEAMTRACK 6.6 Administrator's Guide

3.0 GUIDELINES

3.1 G650 Problem Reporting Process

A tailored version of the problem reporting process outlined in GER-7786 was developed for the G650. This process flow is shown in Figure 1.

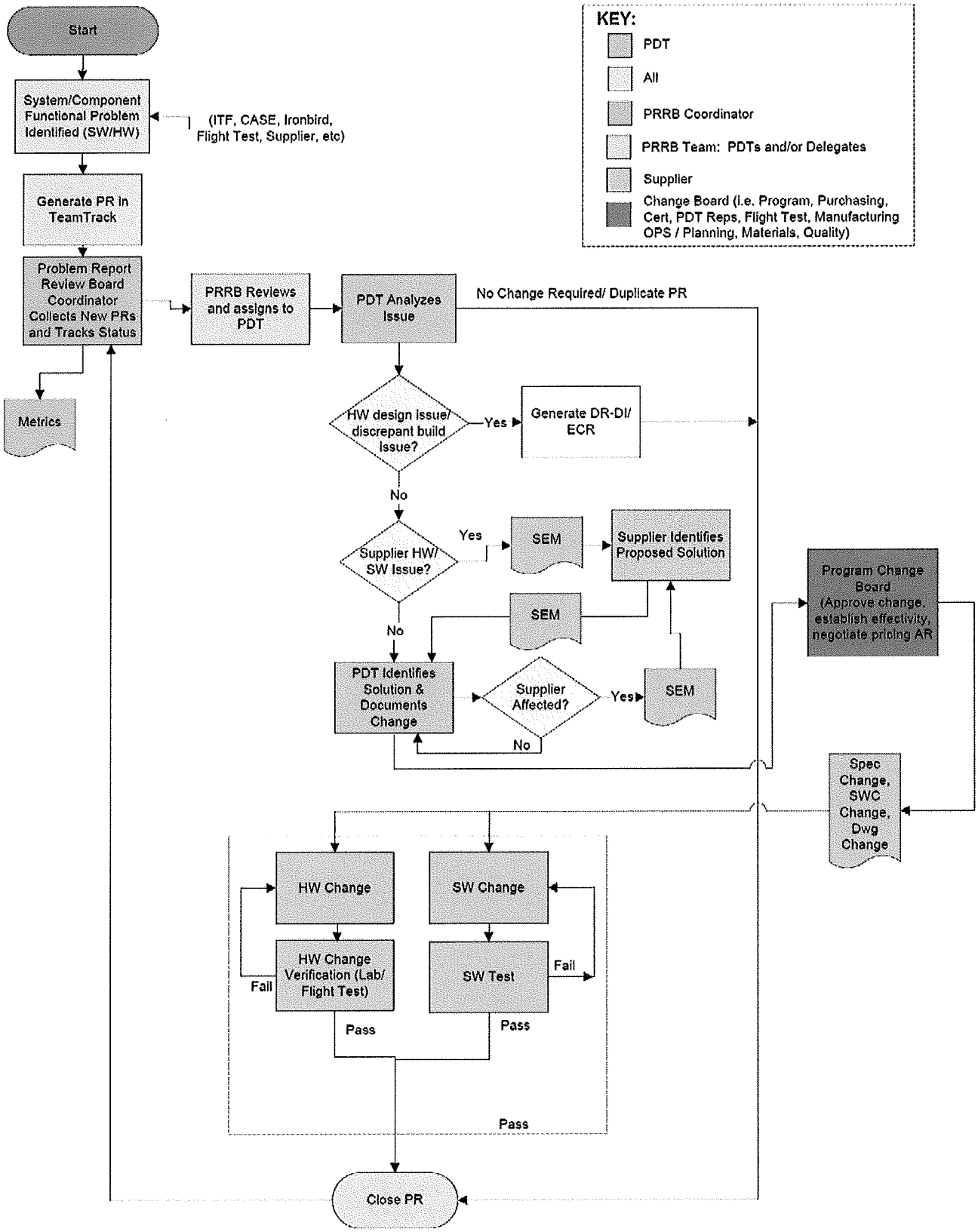

FIGURE 1 – G650 PR PROCESS FLOW

3.1.1 G650 Problem Reporting Process Description

Description of the process outlined in Figure 1:

A problem or issue is identified in one of the labs, test facilities or on an aircraft. The problem details are recorded and entered into the G650 TeamTrack database.

The Program PR Review Board (PRRB) Coordinator monitors the database, collects and tracks new, open and closed PRs, issues reports with metrics on a weekly basis and chairs the PRRB (comprised of representatives from each PDT). The PRRB acts to properly assign the responsible PDT if the problem is not clear and reviews closed PRs to ensure they have been properly resolved and documented.

Once the PR has been assigned to a PDT, the PDT Lead (or designee) will analyze the problem. If the problem requires an ECR or DR/DI, the PR is closed once an ECR or DR/DI is opened. Otherwise, the problem is investigated as either a GAC or Supplier issue until the root cause is found and a solution is identified. The solution may be determined by the PDT / GAC Cognizant Engineer or the system / component supplier. If the solution requires supplier involvement, communication is documented by TCM / SEM. The solution may undergo preliminary testing in the lab or on a test aircraft to validate the proposed solution.

After the final solution and go forward plan is documented, the PDT Lead (or designee) will determine if the PR will require program approval. If required, the solution and associated data and information regarding effectivity, cost, etc. are submitted to the program change board. Note: The members of the program change board include representatives from Engineering, Manufacturing Operations and Planning, Flight Test, Quality, Procurement and Materials.

Once approval is obtained, the specification, hardware, and/or software changes are implemented and verified in the lab or on the flight test aircraft. Once verification is satisfactorily completed, the PR may be closed by the PDT Lead (following concurrence / approval of the PDT customers - Flight Ops and DER).

3.1.2 G650 Problem Reporting Tool

The TeamTrack tool will be used for all problem reports on the G650 program for issues not specifically captured by the ECR and DR/DI systems. A single database will be utilized within TeamTrack for all G650 problem reports to ensure full visibility of all program related problems.

APPENDIX A PR ENTRY GUIDELINES – USING THE PR SYSTEM

When an issue is discovered, it needs to be entered into the PR system. Generally, the engineer that detects the issue will be responsible for submitting it (cog, FTE, etc). Once a PR is submitted, the PR will follow the process flow shown in Figure 1. This appendix provides guidelines for successfully entering, tracking and closing a PR for the G650 program. Besides the submitter, there are primarily two other users who will enter data into the PR – the PDT Lead and the Cog engineer assigned by the PDT Lead.

Appendix A.1 Submitting a PR

To access TeamTrack, type "TeamTrack" in the address line of the internet browser and hit return. The TeamTrack login, shown in Figure 2 appears. Enter the User ID and Password (GAC employee ID) to login into TeamTrack. The password should be modified after initial login by editing the user profile.

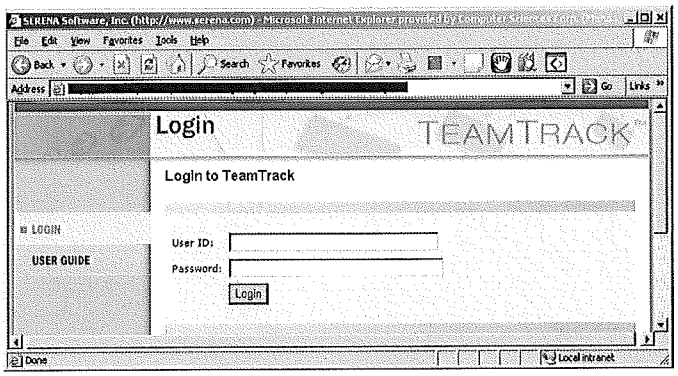

FIGURE 2 – TEAMTRACK LOGIN

Once logged in, the home page (Figure 3) appears. As indicated, PRs owned by the user is the default mode. The home page setting can be further customized (use the Help tab and read about "User Profile and Solution Setting Options"). To exit TeamTrack, select the Exit tab at the top right of the page.

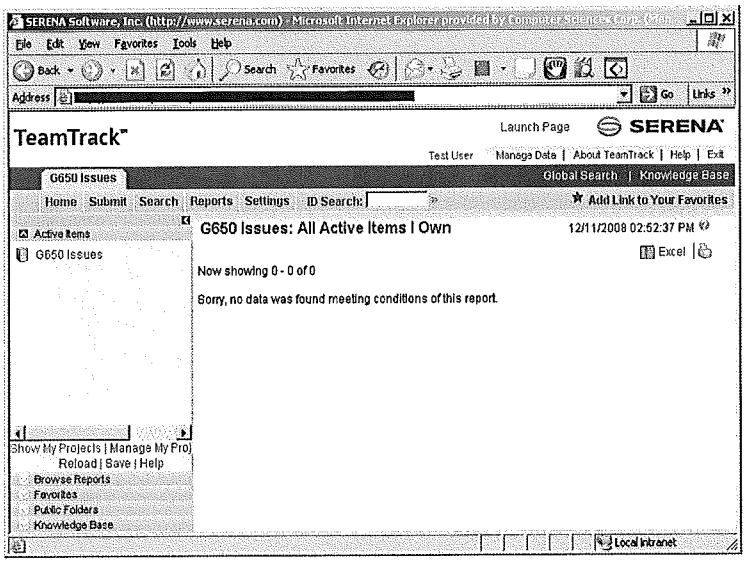

FIGURE 3 – TEAMTRACK HOMEPAGE

To create a PR, select the Submit Tab listed next to the Home Tab and below the G650 Tab. Figure 4, Figure 5, and Figure 6 will appear as one page with the Submit, Assign and Resolution sections open and ready for data entry. The System Fields section will be left unopened, as the fields are automatically updated by the system. To open or close a section, simply click on the + or – box next to the section name. Required fields are prefaced by their label being in red, such as *Title*. Enumerated fields have a pull-down arrow and text fields have a symbol at the end for spell checking. Some fields have a symbol and by moving cursor over the symbol, a description box appears. When initially creating a PR, only the Submit and Assign sections need to have data entered. The Resolution section can be updated at a later state. Once data is entered, select the OK button to enter the data and assign a PR number. The Reset Form button will clear data and the Cancel button will exit without saving. Figure 7 shows a submitted PR. An Issue Id (PR #) has been added to the Submit section, and a new section, State Change History, shows the transition from Submit to PDT Analyses. Also shown are a new set of buttons related to the actions that can be performed on the PDT Analysis state and will be further discussed in Appendix A.2.

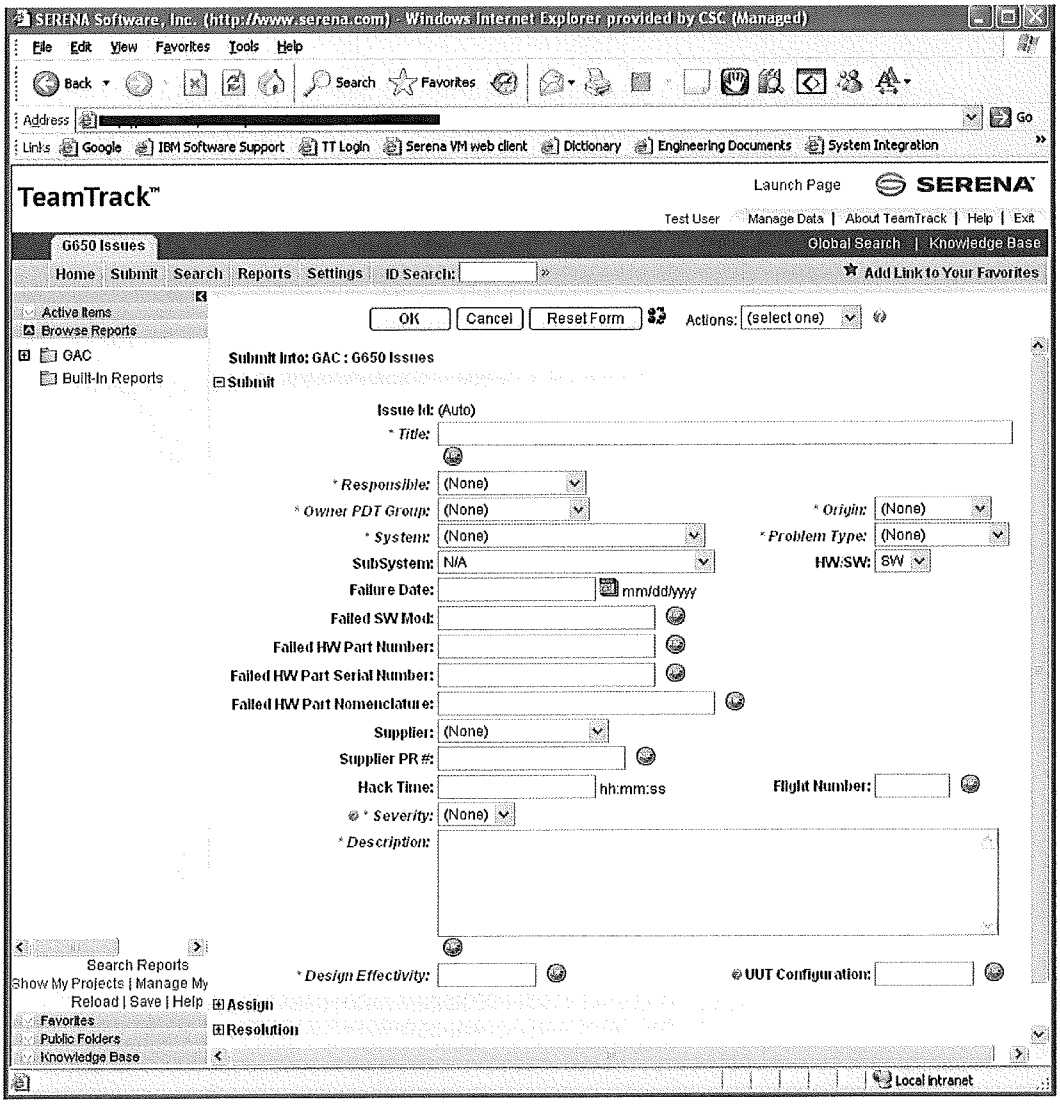

FIGURE 4 – SUBMIT SECTION

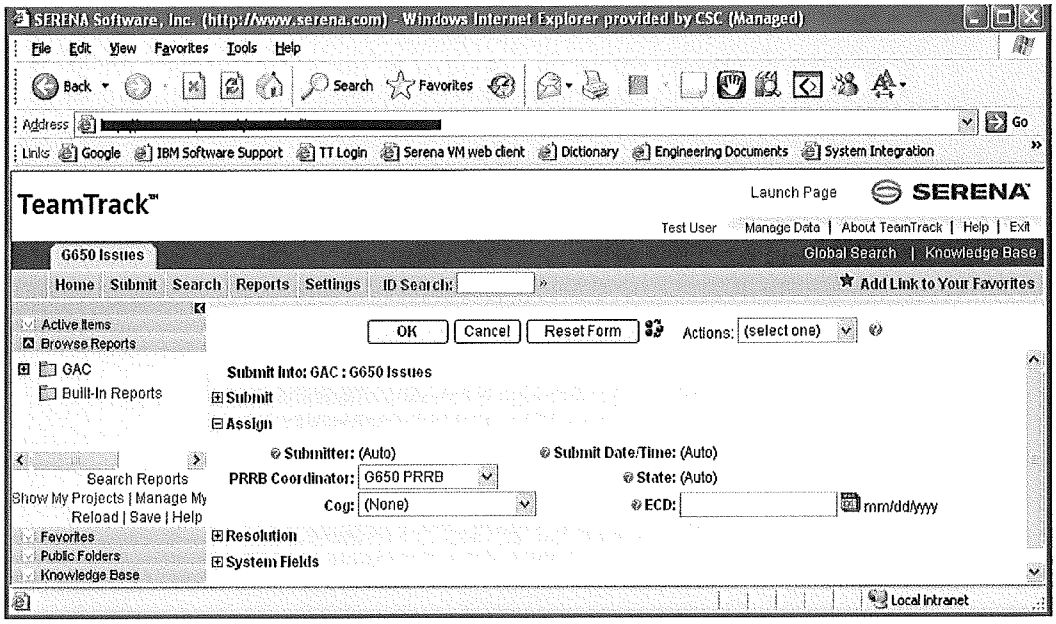

FIGURE 5 – ASSIGN SECTION

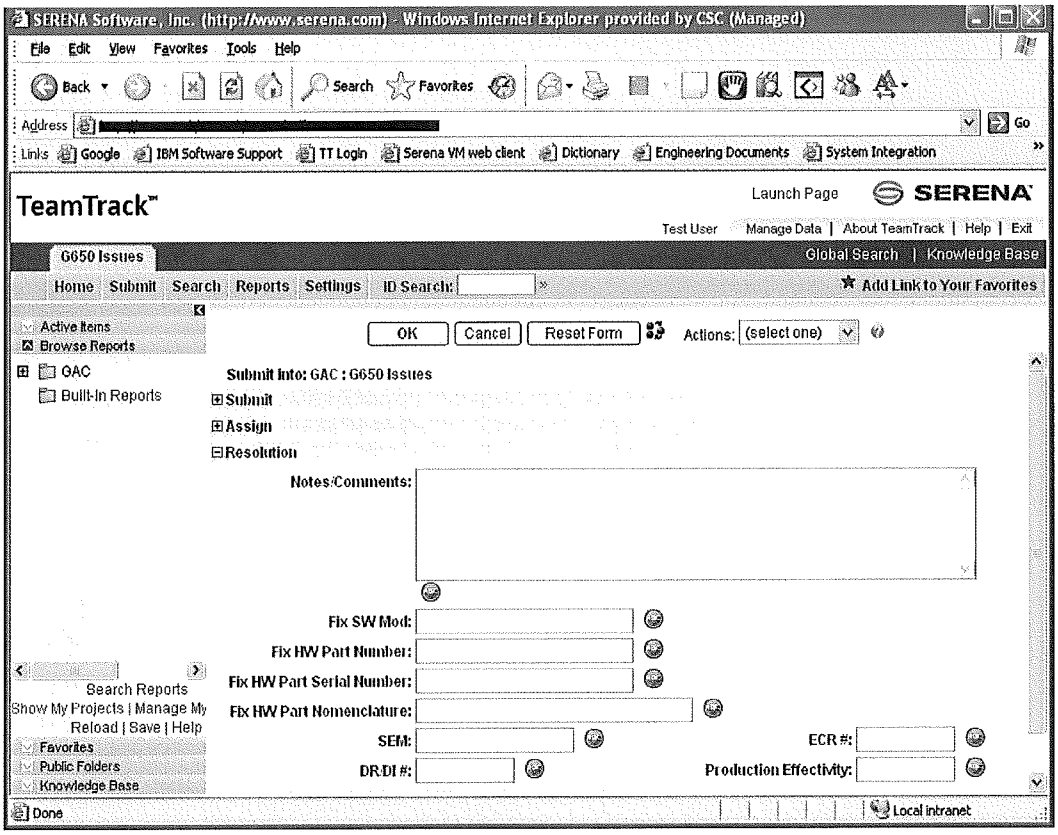

FIGURE 6 – RESOLUTION SECTION

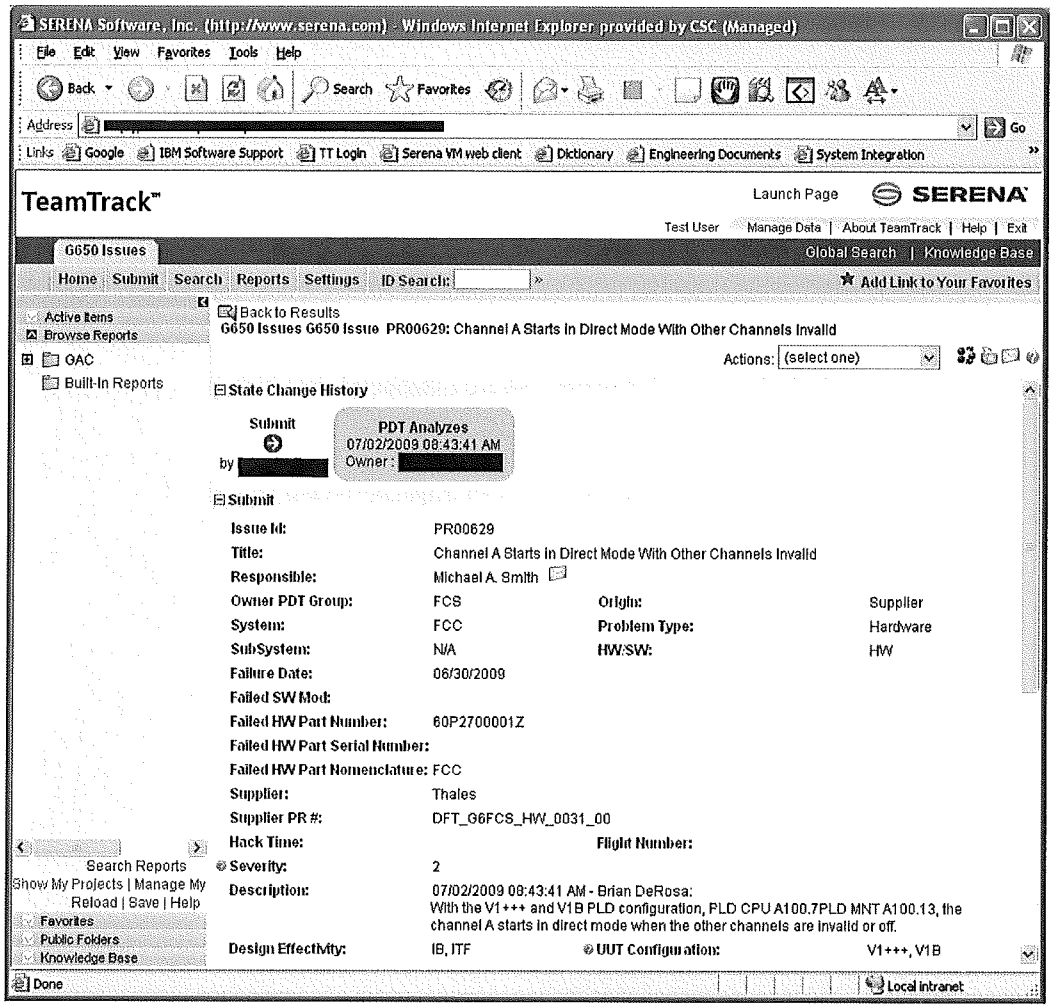

FIGURE 7 – SUBMITTED PROBLEM

Appendix A.1.1 Field Data for Submit Section

Table 1 lists the fields shown in Figure 4, describes the data that should be entered and lists the user responsible for entering the data.

TABLE 1 – SUBMIT SECITON FIELDS

Field	User	Description
*Title	Submitter	Text field to enter title of issue. Should be short and in direct relation to problem.
*Responsible	Submitter	Pull-down selection of person responsible for problem. Will be a list of PDT leads.
*Owner PDT Group	Submitter	Pull-down selection of group that should own the issue.

*Origin	Submitter	Pull-down selection of where problem originated (integration, testing...).
*System	Submitter	Pull-down selection of system affected by problem. The value of this field has a dependency to Owner PDT Group field, if the group is not responsible for any system, the list shows all of the systems and default value is "N/A".
SubSystem	Submitter or PDT Lead	Pull-down selection of subsystem affected by problem. The value of this field has a dependency to the system field, the default value is "N/A"
*Problem Type	Submitter	Pull-down selection of type of problem (design, facility...).
HW/SW	Submitter or PDT Lead	Pull-down selection that is defaulted to SW, but can be changed if necessary.
Failure Date	Submitter	Calendar entry for failure date
Failed SW Mod	Submitter	Text field to enter failed MOD information
Failed HW Part Number	Cog	Text field to enter the failed part number, if applicable.
Failed HW Part Serial Number	Cog	Text field to enter the failed part serial number, if applicable.
Failed HW Part Nomenclature	Cog	Text field to enter the failed part nomenclature, if applicable.
Supplier	PDT Lead	Pull-down selection of supplier associated with problem, if problem is supplier related.
Supplier PR#	PDT Lead or Cog	Text field to enter a Supplier PR number, if problem was determined to be supplier related. This field becomes a required field (turns red) if the problem is supplier related.
Hack Time	Submitter	
Flight Number	Submitter	Text Field
*Severity	Submitter	Pull-down selection of priority of problem 1-Must fix – Safety related, creates work stoppages, major impacts to supplier, or other major program impacts. 2-Major – Correct as soon as practical, Problem creates need for additional work, creates impacts to testing or other program impacts. 3-Routine – Program impacts are minimal, correction can be scheduled and implemented based on other workload and implemented in the normal course of business. 4-Minor – Program impacts are minor, correction and implementation can be delayed without any significant impact to the program
*Description	Submitter	Text journal field to enter PR Description, which allows users to enter up to 64000 characters and automatically insert date/time of the entries

		and the user ID of the author. This field has an append only option which prevent the users from modifying existing text.
*Design Effectivity	Submitter	Text field indicating the aircraft (or multiple aircraft) the problem has the effect on. Could be serial number of aircraft, or in pre-production, the test number of the aircraft.
UUT Configuration	Submitter	Unit Under Test Configuration

Appendix A.1.2 Field Data for Assign Section

Table 2 lists the fields shown in Figure 5, describes the data that should be entered and lists the user responsible for entering the data.

TABLE 2 – ASSIGN SECTION FIELDS

Field	User	Description
Submitter	Auto-Generated	PR Submitter information.
Submit Date/Time	Auto-Generated	PR date and time of Submit
PPRB Coordinator	PDT Lead	Pull-down selection that is defaulted, but can be changed if necessary.
State	Auto-Generate	Pull-down selection of state in PR process. Defaulted to be automatically generated by TeamTrack.
Cog	PDT Lead	Pull-down selection of person responsible for working on problem.
*ECD	PDT Lead	Calendar entry for Estimated Closure Date. This field is only required in PDT Analyzes

Appendix A.1.3 Field Data for Resolution Section

Table 3 lists the fields shown in Figure 6, describes the data that should be entered and lists the user responsible for entering the data.

TABLE 3 – RESOLUTION SECTION FIELDS

Field	User	Description
Notes/Comments	Cog	Text field to enter information about problem, such as what was involved in the analysis and how the problem was resolved.
Fix SW Mod	Cog	Text field to enter the software version/modification number problem is fixed in, if applicable.

Fix HW Part Number	Cog	Text field to enter a part number, if applicable.
Fix HW Part Serial Number	Cog	Text field to enter a part serial number, if applicable.
Fix HW Part Nomenclature	Cog	Text field to enter the failed part nomenclature, if applicable.
SEM	Cog	Text field to enter SEM number(s)
ECR#	Cog	Text field for an ECR number, if an ECR needs to be generated. This field becomes a required field (turns red) if the problem requires an ECR.
DR/DI #	Cog	Text field for DR/DI number, if a DR/DI needs to be generated.
Production Effectivity	Cog	Text field indicating the aircraft (or multiple aircraft) the problem has the effect on. Typically the serial number of the aircraft. Not applicable until aircraft is in production.

Appendix A.2 Editing the PR and Flow through the System

Figure 8 shows the process flow that is used in TeamTrack to move a PR through the system. As shown in Figure 7, the State Change History section shows the state the PR is according to the flow, as well as listing buttons representing actions in the flow. In the case of the PDT Analysis state, the actions (buttons) are: Initiate ECR/DR/DI, Supplier Issue, GAC Issue, PPRB Review and Completed. Additionally, an Update button is provided, which allows the updating of information. Selecting Update allows the editing the fields in the Submit, Assign and Resolution sections, and is available during all states in the process flow. When done Updating, selecting OK returns to State Change History, where an action can be selected to change to the next state in the process. In some cases, a field that was not required may become required. An example is if a problem is a Supplier Issue, then the Supplier PR# field in the Resolution section will become required (text title will turn to: Supplier PR#). Also, once a required field is filled in, the text title turns from red to green. It should be noted that if a required field is not filled in, TeamTrack will not allow the state to change.

To transition through the states shown in Figure 8, the same procedure of updating and selecting the appropriate action is followed, and is performed by the appropriate assigned user for the state. The PDT Lead user represents (Responsible) and the Cog user represents (Cog) in the figure. The (PPRB Coordinator) is not a user, as it does not enter data, however the PPRB can cause state transitions and has responsibility. The arrowed lines represent the actions (and subsequent buttons) to move the PR through the process. Traversing through the PR flow is fairly straightforward, however, there may be subtasks generated for linked PRs. This is discussed in more detail in below.

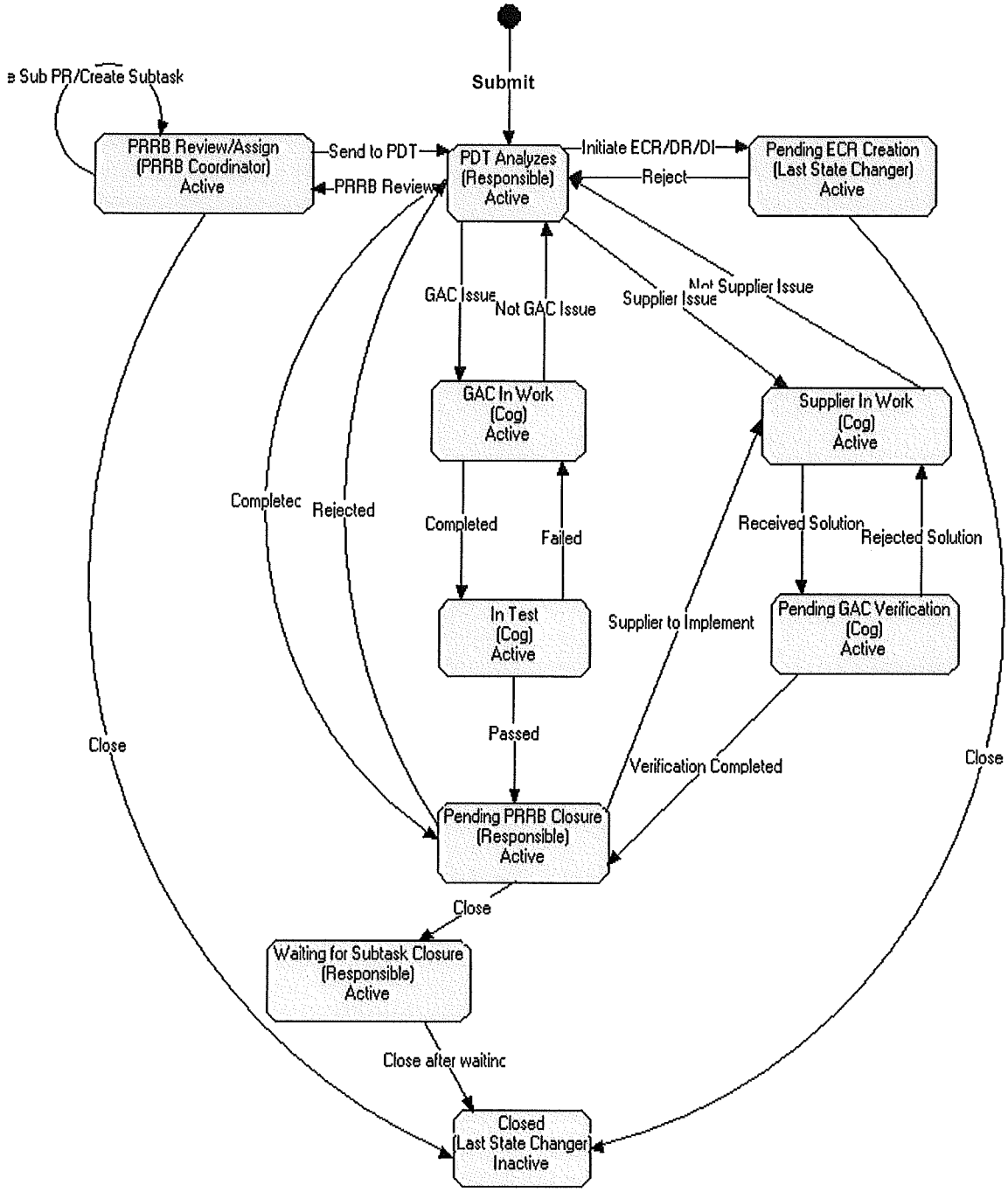

FIGURE 8 – G650 PR WORK FLOW

Figure 9 shows a PR ready for closure, with the history apparent.

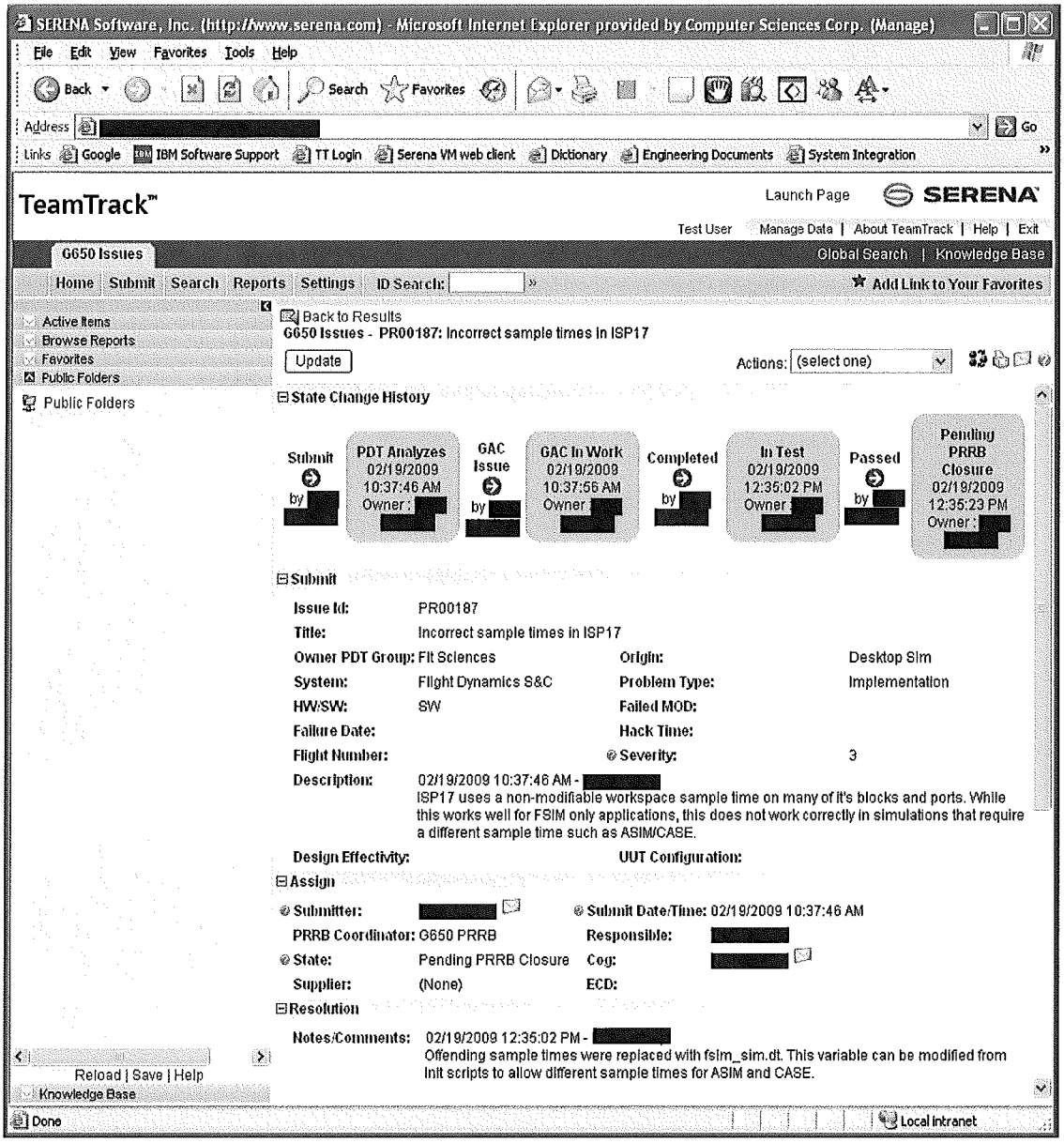

FIGURE 9 - PR READY FOR CLOSURE

Appendix A.2.1 Sub PRs (Generating related PRs)

In general, Sub PRs(Subtask) are created when a problem is associated with multiple systems or suppliers. If it is determined during PDT Analyzes that a sub PR (additional, related PR) needs to be created for the principle PR, the PPRB Review action button needs to be taken to set the PPRB Review/Assign State, as shown in Figure 8. Once in the PPRB Review/Assign State, the PPRB will create as many sub PRs for a Principle PR as needed. The PPRB uses the Initiate Sub PR/Create Subtask action button to open the sub PR, creating a link between the sub PR and the Principle PR and then selects the Send to PDT action button to send it back to the PDT Analyzes state. Figure 10 shows a Principle PR with a new Attachment section that lists a Sub PR. Figure 11 shows a Sub PR with the

Attachment section listing a Principle PR. It should be noted that a principle PR cannot be closed until all sub PRs are closed.

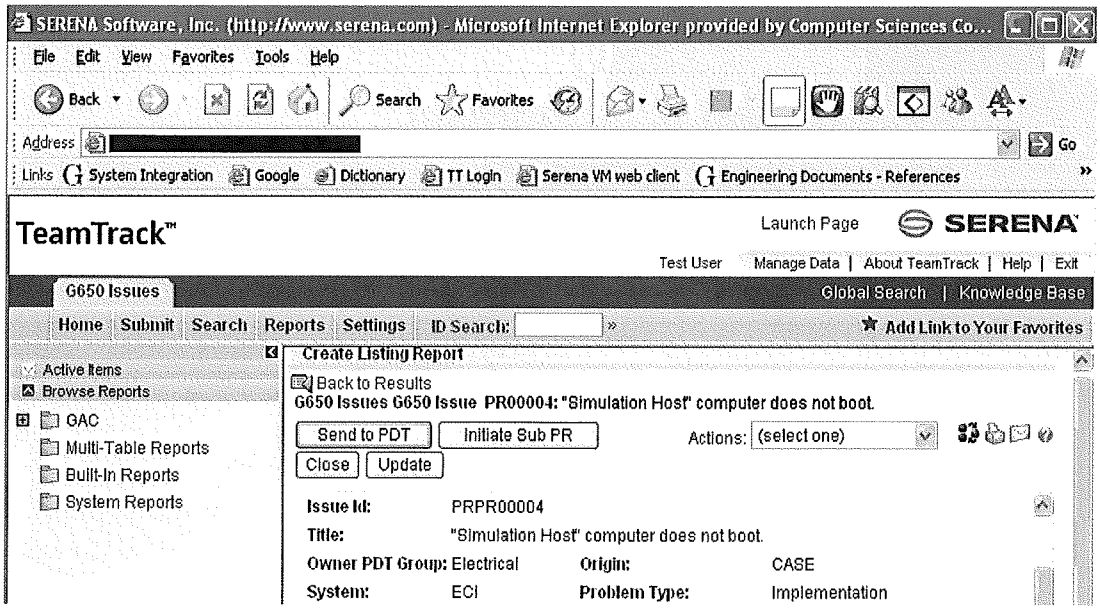

FIGURE 10 - CREATION OF A SUB PR

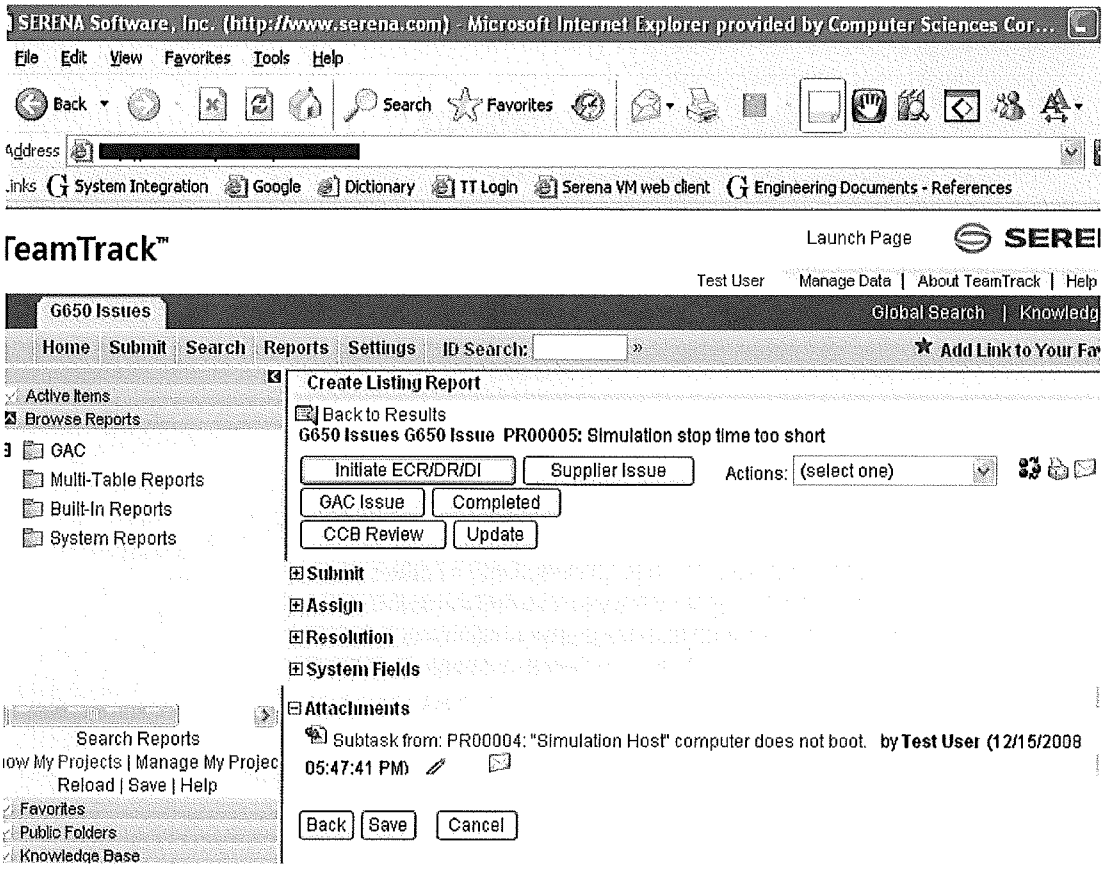

FIGURE 11 - SUB PR WITH REFERENCE TO PRIMARY

Appendix A.3 Reporting

TeamTrack provides a set of Built-in and System reports which can be found under "Browse Reports" on the left pane as shown in Figure 12. These reports cover the most common queries that are used in the G650 database. Custom reports, if specific information is desired, can also be created under GAC→ G650 Issues within "Browse Reports". For more information, use the Help tab and read more about "Custom Reports". Customized reports can be saved as private or public, however public reports are created, make sure the reports are saved under G650 Issues reports, so they can be visible to individuals who have privileges to access G650 database.

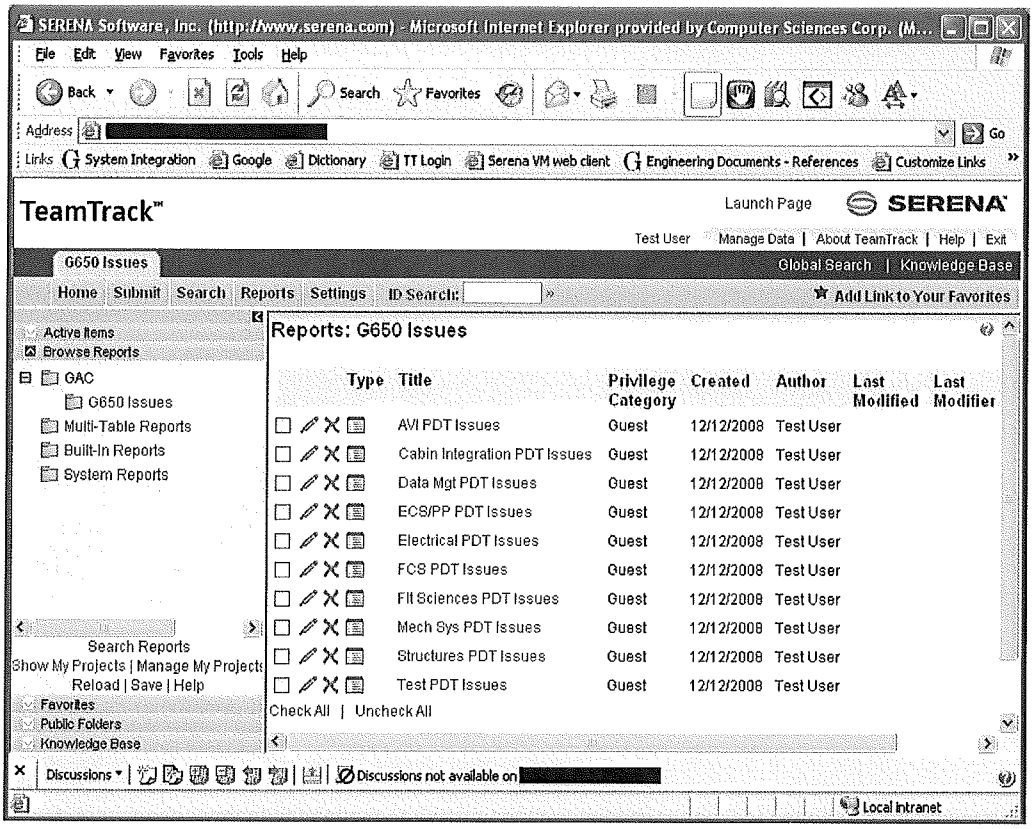

FIGURE 12 - BUILT-IN REPORTS

Appendix A.4 Notification

The member of each PDT may subscribe to or unsubscribe from an existing notification which they have access to view. In order to use notification capabilities, you have to modify your User Profile. Figure 13 and Figure 14 guide you how to activate a notification.

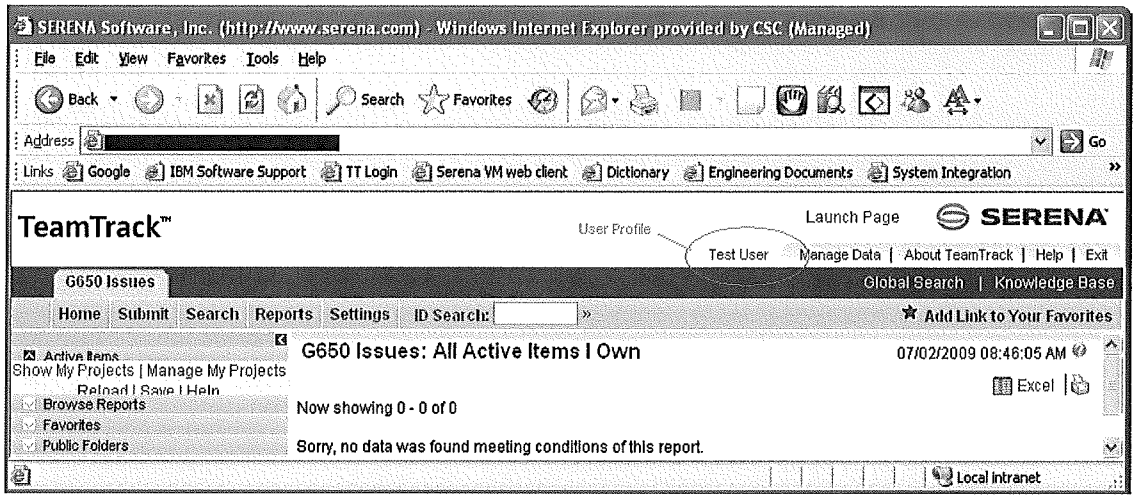

FIGURE 13 – MODIFY USER PROFILE

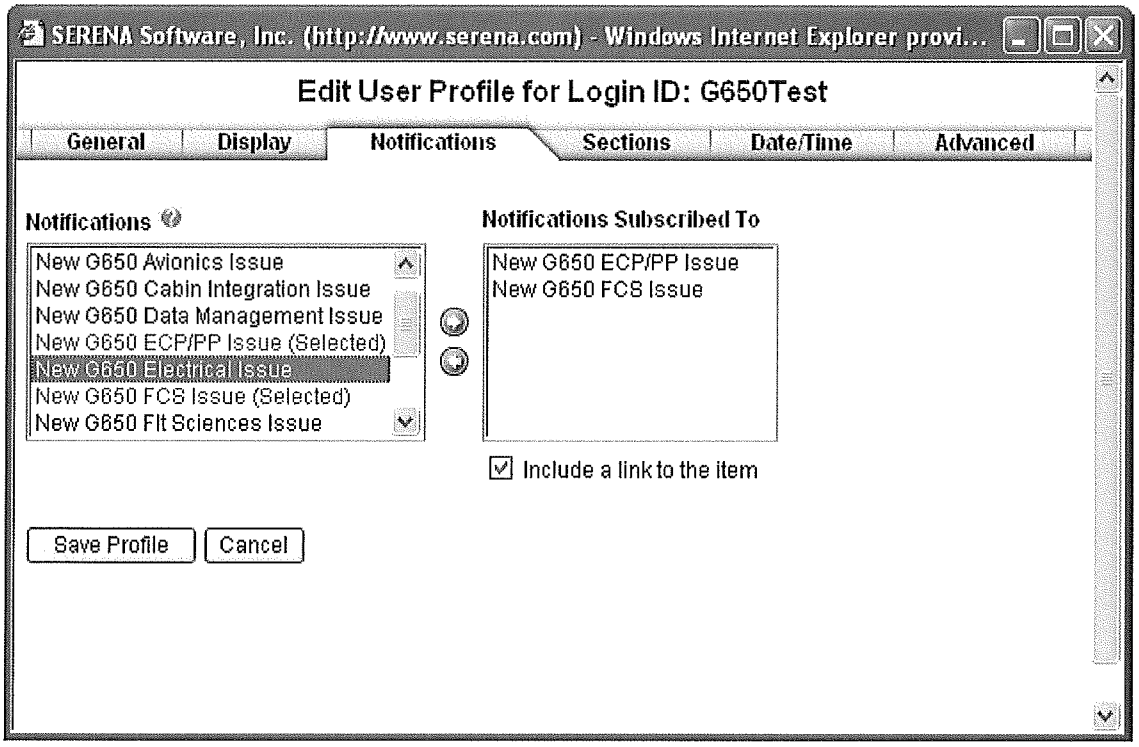

FIGURE 14 – SUBSCRIBE OR UNSUBSCRIBE TO A NOTIFICATION