

## **3.2 Problem Management Activities**

### **3.2.1 Trouble Ticket and Problem Tracking Scenario**

#### **3.2.1.1 Scenario Description**

This scenario describes the life of a trouble ticket from ticket submission to problem resolution. In this example, a trouble ticket for a network that is running slow is submitted. This scenario begins once the user realizes the problem. It follows the ticket through submission, opening, analysis and resolution. The actors in this scenario are the User, Ops Supervisor, Technician and the ECS system.

#### **3.2.1.2 Frequency**

This scenario will run as needed. V0 Trouble Ticket statistics are approximately 2/day/DAAC. EP6 TT statistics are TBD. Remedy, using Sybase, is limited only by the capacity of Sybase.

#### **3.2.1.3 Assumptions**

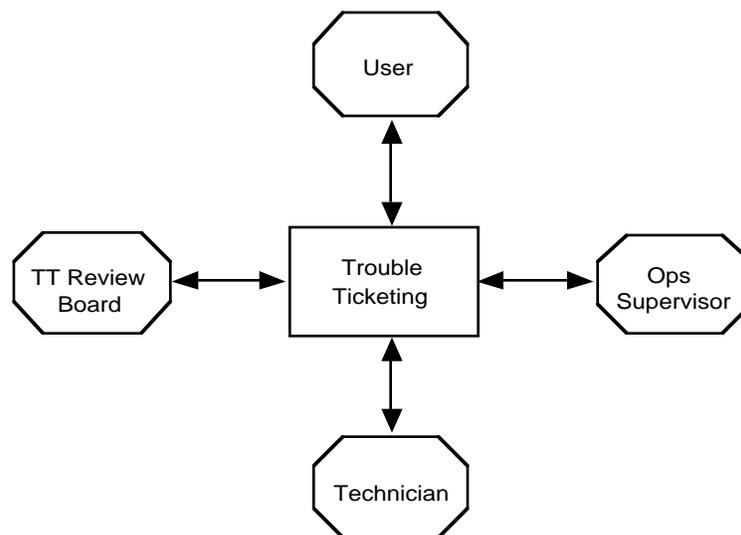
1. The Ops Supervisor continuously monitors for incoming Trouble Tickets.
2. The Technician periodically checks for E-mail for notifications of assigned Trouble Tickets.
3. In this scenario, the Ops Supervisor and the Technician can assign any status or priority to a Trouble Ticket. This will be configurable at each DAAC.
4. For an internal submission the User, now called the Operator (someone at a DAAC), would log into Remedy, fill out the two required fields (Short Description and Submitter ID), fill out any other helpful fields (e.g. Software Resource), and click on apply. The User's information will automatically be inserted and the scenario would start at step 6.
5. For EOC Trouble Ticketing, the procedural methods and layouts will be the same as those at a DAAC (dealt with here).
6. TTs are not automatically assigned to the individual that will perform the fix in Release A.
7. Fields required for TT submission (Short Description and Submitter ID) are provided.
8. There is no convention in Remedy to physically attach a file to a TT. To achieve this effect, one would send E-mail with the file attached. The body of the message should indicate TT number, submitter ID and any relevant information pertaining to the attachment. This will be documented in "Help."
9. These steps are an outline for the lifecycle of an average TT. The system has been configured such that each site will have the flexibility to create a lifecycle from this example which best fits their needs.
10. There are two ways for a site to share TT information with another site. The first is to forward a TT to the other site thereby opening a new TT there. The second is to E-mail

this information to the other site allowing them to review it without it being logged into Remedy.

11. If there needs to be more communication between individuals in working the TT, they may do so as needed.
12. Groups can be Ops Supervisor, TT Review Board Chair, and TT Review Board.
13. The TT Review Board can suggest, comment, reject, approve or otherwise recommend actions as they deem necessary.
14. Escalation times can be set at each site to send E-mail to particular group for different statuses and priorities.

### 3.2.1.4 Components

Figure 3.2.1.4-1 indicates the interaction between the DAAC personnel and the ECS subsystems.



**Figure 3.2.1.4-1. Trouble Ticket Scenario Components**

### 3.2.1.5 Preconditions

Preconditions for this scenario are a Trouble Ticket must be submitted, a Ops Supervisor must be monitoring for incoming Trouble Tickets, Remedy should be running normally.

### 3.2.1.6 Detailed Steps of Process

Table 3.2.1.6-1 represents the details of this scenario. The times and duration given are approximate.

**Table 3.2.1.6-1. Trouble Ticket Scenario Process (1 of 4)**

<b>Step</b>	<b>Time (mins)</b>	<b>User</b>	<b>Operator (Ops Supervisor, Technician)</b>	<b>ECS System</b>	<b>Figure</b>
1	<1	Upon realization that a problem exists, a user selects the Trouble Ticket icon from the ECS Desktop.		ECS Desktop invokes user-preferred browser with Trouble Ticketing home page URL.	
2	<1	User views Trouble Ticketing HTML home page options.		(Options: Submit TT, List TTs)	3.2.1.6-1
3	<1	User selects the Submit Option.		System calls Trouble Ticket Submit page. System automatically retrieves user information from database. (e.g., e-mail address, name, phone number, etc. ). If this information is not correct, then it can be corrected via User Services.	
4	<5	User enters problem impact, problem short description, and problem long description.			3.2.1.6-2
5	<1	Satisfied with entry, user then clicks on the submit button to submit TT.			
6	<1			System creates new entry in Remedy, notifies Ops Supervisor, displays successful submission HTML page (except for internal submissions) which includes the TT number, and notifies User via e-mail which will also include TT number. Rules for the notification via e-mail will be configurable at each DAAC.	3.2.1.6-3

Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
7	<1	User receives e-mail verifying that the TT was submitted.	Ops Supervisor receives notification that a new Trouble Ticket has entered the system.		
8	<1		Ops Supervisor refreshes TT list to check for most recent TTs.	System (Remedy) refreshes list.	3.2.1.6-4
9	<1		Ops Supervisor selects TT for work and opens it.	System (Remedy) opens TT.	3.2.1.6-5
10	<5		Reports and diagnostics of TTs can be generated through Remedy to help in resolving problem (optional).		Configurable
11	<5		On examining the detailed information, the Ops Supervisor changes the value of Ticket Status from New to Assigned.	(Options: Assigned, Forwarded)	
12	<1		The Ops Supervisor assigns the value of Low to the Assigned-Priority field.	(Options: Low, Medium, High)	
13	<1		The Ops Supervisor assigns the Trouble Ticket to a particular Technician to fix the problem.		
14	<1		The Ops Supervisor clicks on Apply to carry out these new changes.	System (Remedy) delivers e-mail to Technician.	3.2.1.6-6
15	<1		The Technician receives e-mail notifying him/her of the assignment.		
16	<3		The Technician inputs an initial entry into the Resolution Log (which is a free text diary) indicating the proposed course of action.		

Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
17	<1		The Technician then clicks on Apply to update the TT with this status.	System (Remedy) updates TT.	
18	30		As the Technician analyzes and attempts to resolve the issue that the TT addresses, the Technician updates the Resolution Log with pertinent information.		
19	<1		Each update to the Resolution Log is followed by a click on the Apply button to commit the update.	System (Remedy) updates Resolution Log with time/date, name of modifier, and current log.	
20	<1		When a solution is found, the Technician changes the Ticket Status to "Solution Proposed."	(Options: Solution Proposed)	
21			The TT Review Board Chair compiles a package of new "Solution Proposed" TTs for review by the board.		
22			The TT Review Board considers the sensibility and long term effects of the proposed solution for this TT.		
23			The TT Review Board approves the solution and changes the Status to "Implement Solution." If the TT Review Board found this to be a configuration issue, they would generate a CCR and proceed as in the Custom Software Problem Scenario.	(Options: Forwarded, Closed, Implement Solution)	

24			The Technician fixes the problem and changes Status to "Solution Implemented."		
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Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
25	<1		The TT Review Board approves fix, selects "Key Words," "Closing Code," "Hardware Resource," and/or "Software Resource" values as applicable, and upon User Verification Closes TT.		3.2.1.6-7
26	<1	The User receives e-mail notifying him/her of the TT being closed.			

### 3.2.1.7 Postconditions

Network is executing normally and Trouble Ticket remains in database for future reference.



Figure 3.2.1.6-1. Trouble Ticketing Home Page

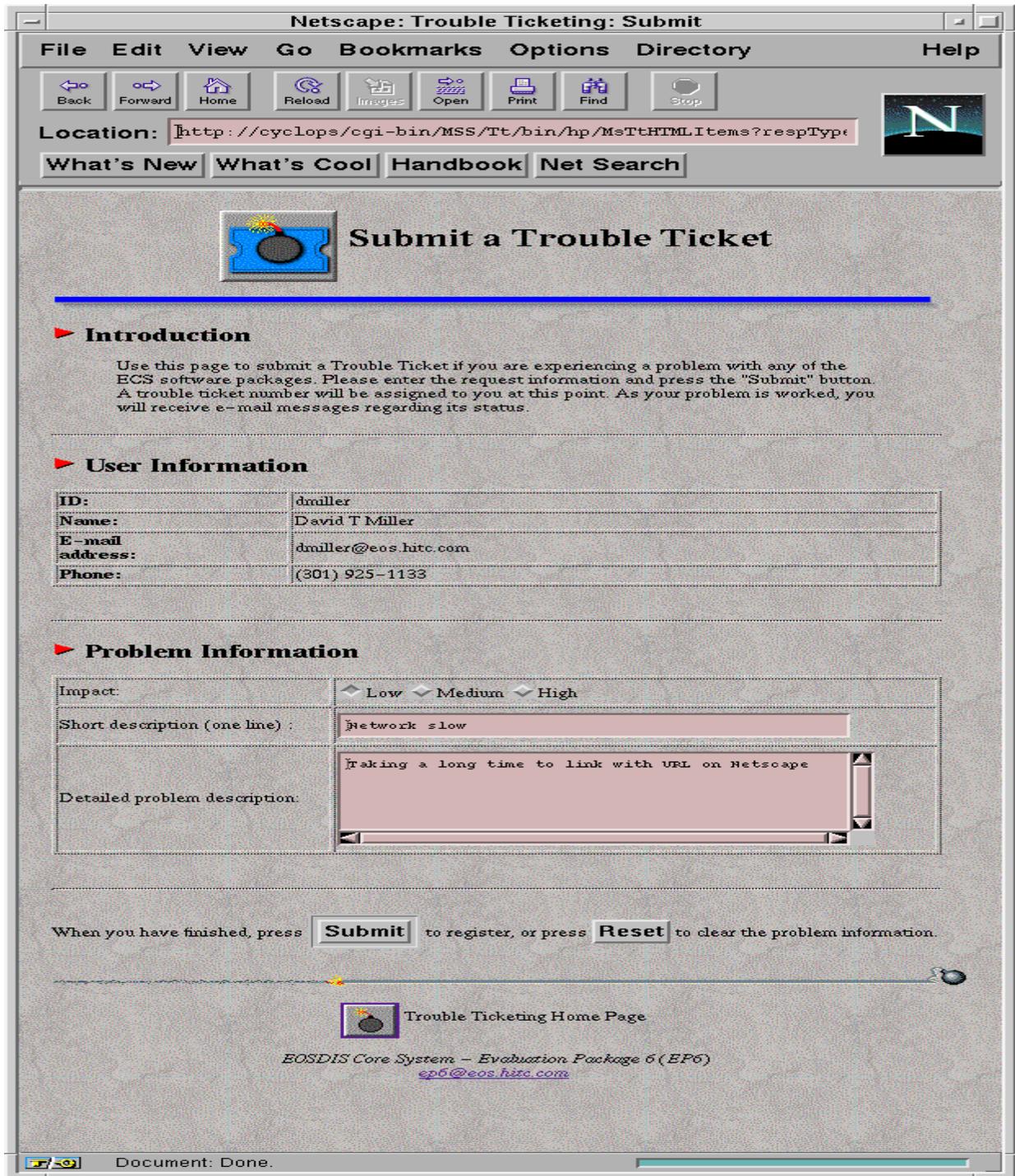
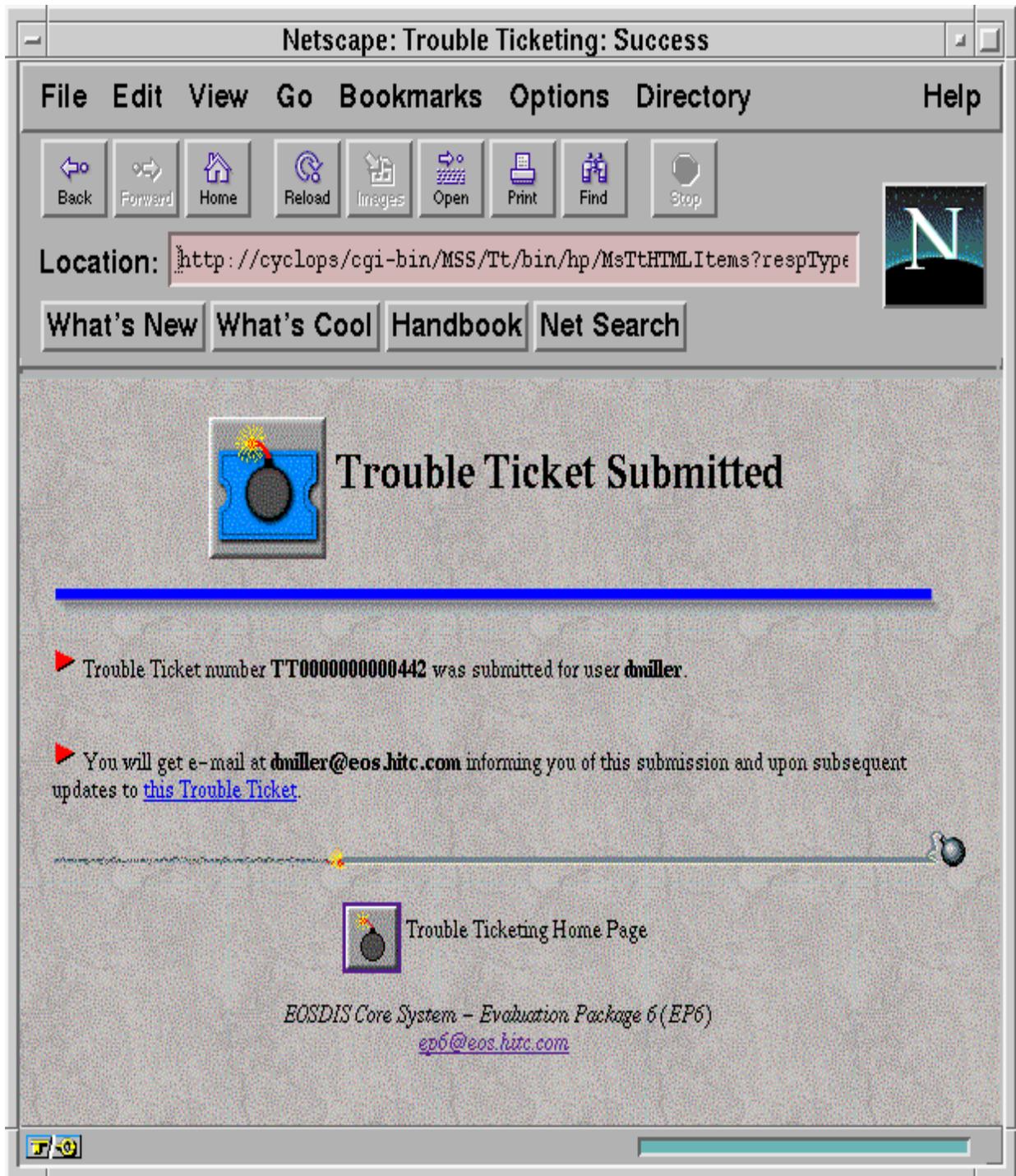
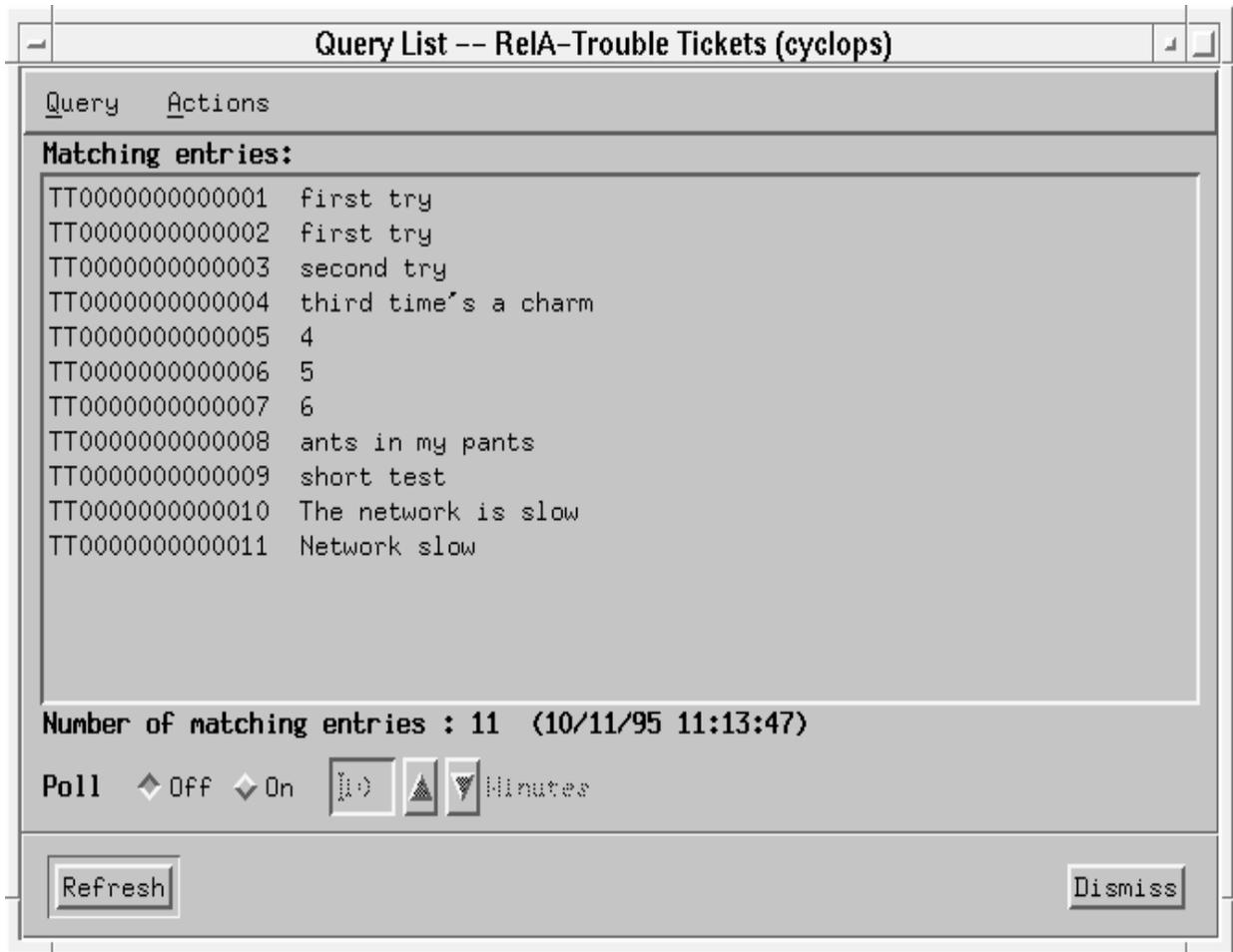


Figure 3.2.1.6-2. Trouble Ticket Submit Page



**Figure 3.2.1.6-3. Trouble Ticket Confirmation Page**



**Figure 3.2.1.6-4. Trouble Ticket List**

**Modify Individual -- RELA--Trouble Tickets (cyclops)**

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**Actions**

Ticket-Id       Ticket Status       Assigned-Priority

Short Description       Submitter Impact

Long-Description       Resolution Log

Submitter ID       Assigned-To       Closing Code

Submitter Name       Last-modified-by       Rejection Code

Submitter Phone       Create-date       Closed/Rejected-by

Submitter eMail       Modified-date       Close/Rejection-date

Submitter Home DAAC

Forwarded-to       Software Resource

History       Key Words       Hardware Resource

Number 1 of 1

**Figure 3.2.1.6-5. Trouble Ticket New**

**Modify Individual -- RELA--Trouble Tickets (cyclops)**

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**Actions**

Ticket-Id:       Ticket Status:       Assigned-Priority:

Short Description:       Submitter Impact:

Long-Description:       Resolution Log:

Submitter ID <input type="text" value="jdmiller"/>	Assigned-To <input type="text" value="Technician"/>	Closing Code <input type="text"/>
Submitter Name <input type="text" value="David T Miller"/>	Last-modified-by <input type="text" value="Help Desk"/>	Rejection Code <input type="text"/>
Submitter Phone <input type="text" value="(301) 925-1133"/>	Create-date <input type="text" value="10/11/95 11:13:38"/>	Closed/Rejected-by <input type="text"/>
Submitter eMail <input type="text" value="jdmiller@eos.hitc.com"/>	Modified-date <input type="text" value="10/11/95 11:16:07"/>	Close/Rejection-date <input type="text"/>
Submitter Home DAAC <input type="text"/>	Forwarded-to <input type="text"/>	Software Resource <input type="text"/>
History <input type="text"/>	Key Words <input type="text"/>	Hardware Resource <input type="text"/>

Number 1 of 1

**Figure 3.2.1.6-6. Trouble Ticket Assigned**

**Modify Individual -- ReIA-Trouble Tickets (cyclops)**

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**Actions**

Ticket-Id       Ticket Status       Assigned-Priority

Short Description       Submitter Impact

Long-Description       Resolution Log

**Submitter ID**       Assigned-To       Closing Code

Submitter Name       Last-modified-by       Rejection Code

Submitter Phone       Create-date       Closed/Rejected-by

Submitter eMail       Modified-date       Close/Rejection-date

Submitter Home DAAC

Forwarded-to

Software Resource

History       Key Words       Hardware Resource

Number 1 of 1

**Figure 3.2.1.6-7. Trouble Ticket Closed**