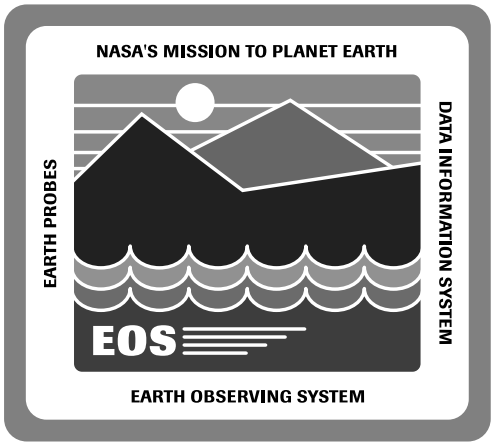

MSS - Trouble Ticketing

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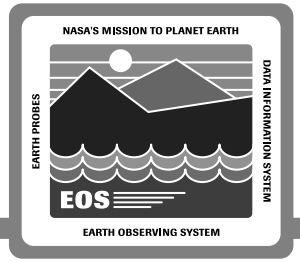
ECS Release A SDPS/CSMS Critical Design Review

17 August 1995

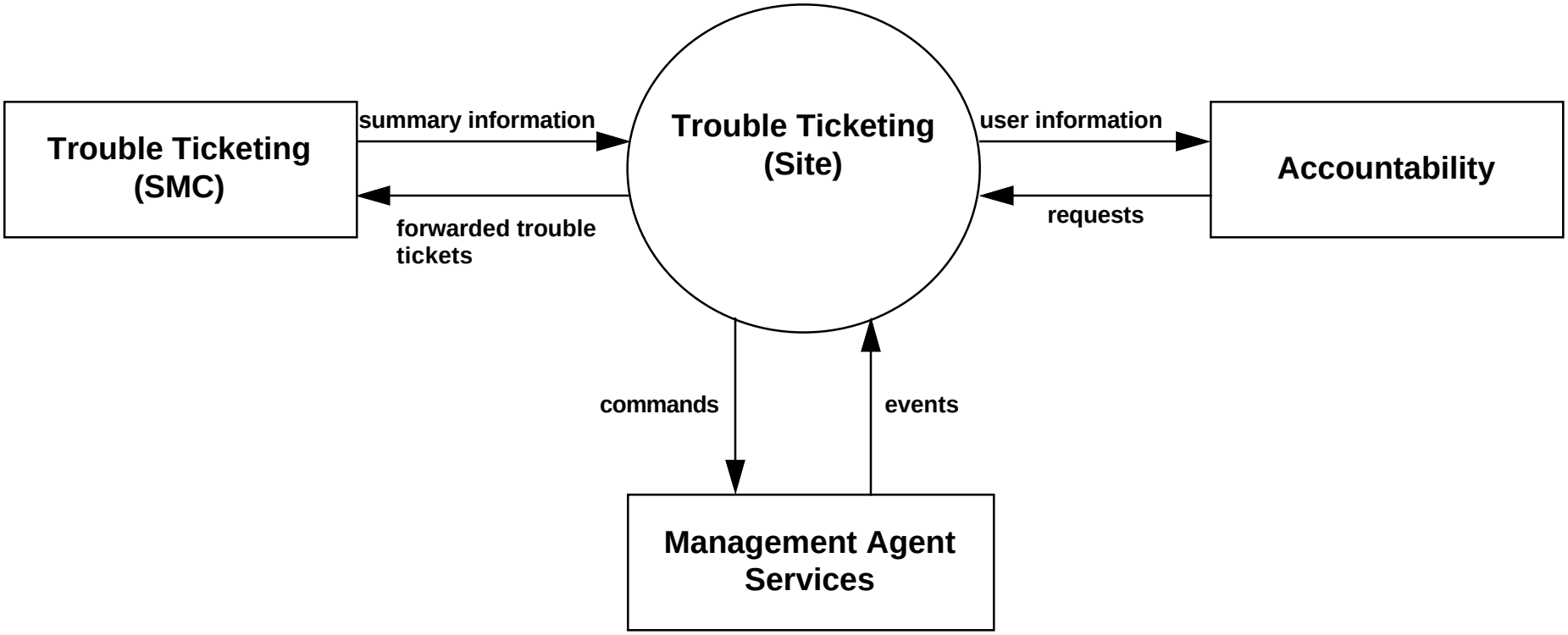
Trouble Ticketing Overview



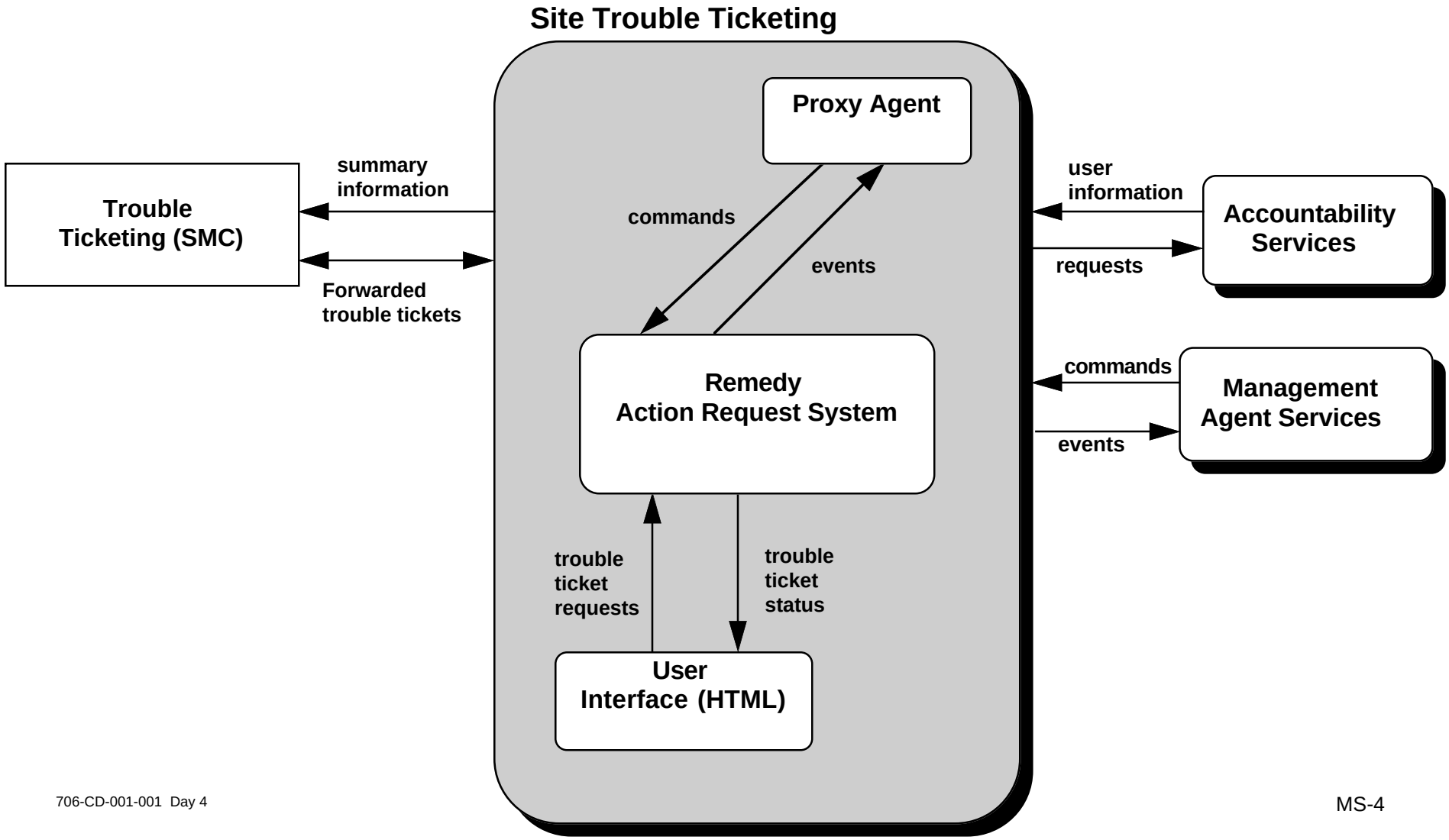
What is trouble ticketing?

- **Provides a standard means of reporting, tracking, classifying, and describing problems**
- **Requested at PDR**
- **Remedy Action Request System chosen as COTS package**

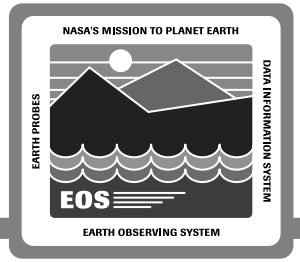
Trouble Ticketing Context



Trouble Ticketing Design



Trouble Ticketing Design Description



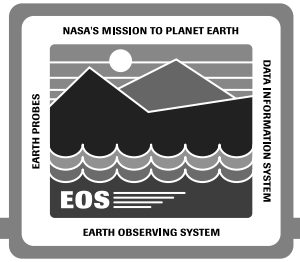
Components

- Remedy Action Request System (COTS) chosen to provide the core functionality
- HTML forms provided to allow end users a common interface for submitting and querying their trouble tickets
- Proxy Agent
  - utilizes the reuse of ECS custom software
  - provides lifecycle services (e.g. startup, shutdown)

Interfaces

- Management Agent Services (MSS) for management commands and event reporting
- Accountability Services (MSS) for user information
- SMC Trouble Ticketing Service for summary and trend reporting

ECS Trouble Ticketing



Definition of a standard ECS trouble ticket format

Standardization of the lifecycle of a trouble ticket

- **Classification & Prioritization**
- **Actions taken as a trouble ticket progresses**

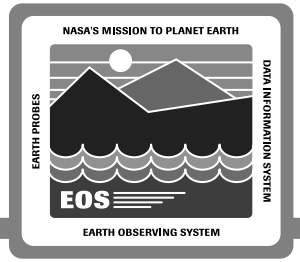
Graphical User Interface

Reporting and ad-hoc query capabilities

Adaptability at individual sites

- **custom reporting**
- **custom “action & escalation rules”**

Ways a Trouble Ticket Enters the System



Help desk staff receives phone call

End user submits through provided HTML screen

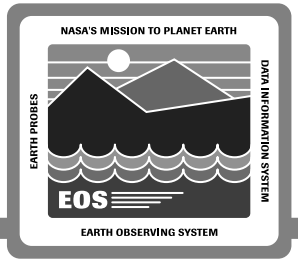
End user sends formatted e-mail

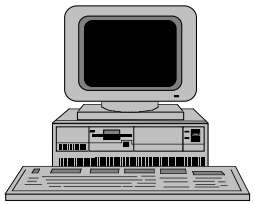
M & O staff enter through COTS GUI

Framework in place for

- **future intelligent generation of trouble tickets**
  - **HP OpenView (SNMP interface)**
  - **Physical Configuration Management**
  - **Performance & Fault Management**
- **interface with external systems**

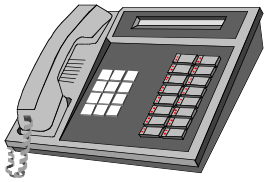
Ways a Trouble Ticket Enters the System



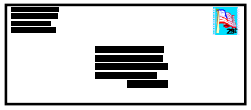


End User Desktop
(HTML interface)

Fault &
Performance
Management

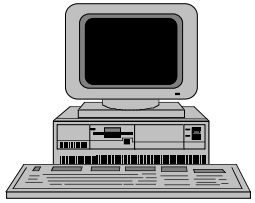


Telephone



e-mail

Remedy Action
Request System

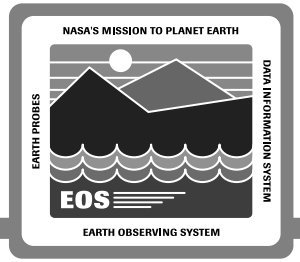


Operator Desktop
(Remedy GUI)

External
Systems

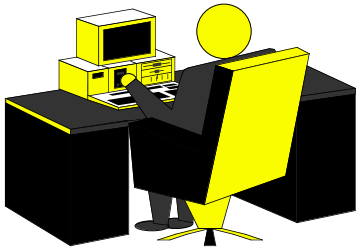
User Services/
Help Desk
(Remedy GUI)

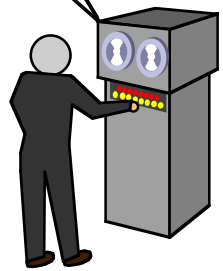
Trouble Ticketing Summary



- **COTS intensive**
- **COTS supports extension of functionality for the future**
- **Integrated into ECS**
- **Common trouble ticket “environment” which is still adaptable**

Scenario





1. Warning threshold for Science Processor disk space utilization is set at 70% and rearm value at 60%.

2. System is configured to change icon color to yellow, send an e-mail notification to the Production Monitor, and automatically delete extraneous files whenever the 70% disk space threshold is exceeded.

3. Disk fills past 70% threshold.

4. Performance application identifies exceeded threshold, changes icon color to yellow, sends e-mail notification to Production Monitor, and executes script to delete extraneous files from Science Processor.

5. Extraneous files deleted, disk utilization falls to 55%.

6. Performance application identifies disk utilization below rearm value, changes icon color to green and sends e-mail notification to Production Monitor.

7. Operator notices problem fixed automatically, does not issue trouble ticket.

8. Disk fills past 70% threshold again.

9. Performance application identifies exceeded threshold, again performs actions listed in step 4 above. The script is run again, but disk utilization remains above 60%.

10. Operator notices problem is not fixed automatically.

11. Operator opens trouble ticket, assigns it to a technician.

12. Technician frees additional disk space.

13. Technician activities lower disk utilization to 40%.

14. Performance application identifies disk utilization below rearm value, changes icon color to green and sends e-mail notification to Science Processor.

15. Technician closes trouble ticket.

16. Trouble ticket application sends e-mail notification of closure to originator (operator).