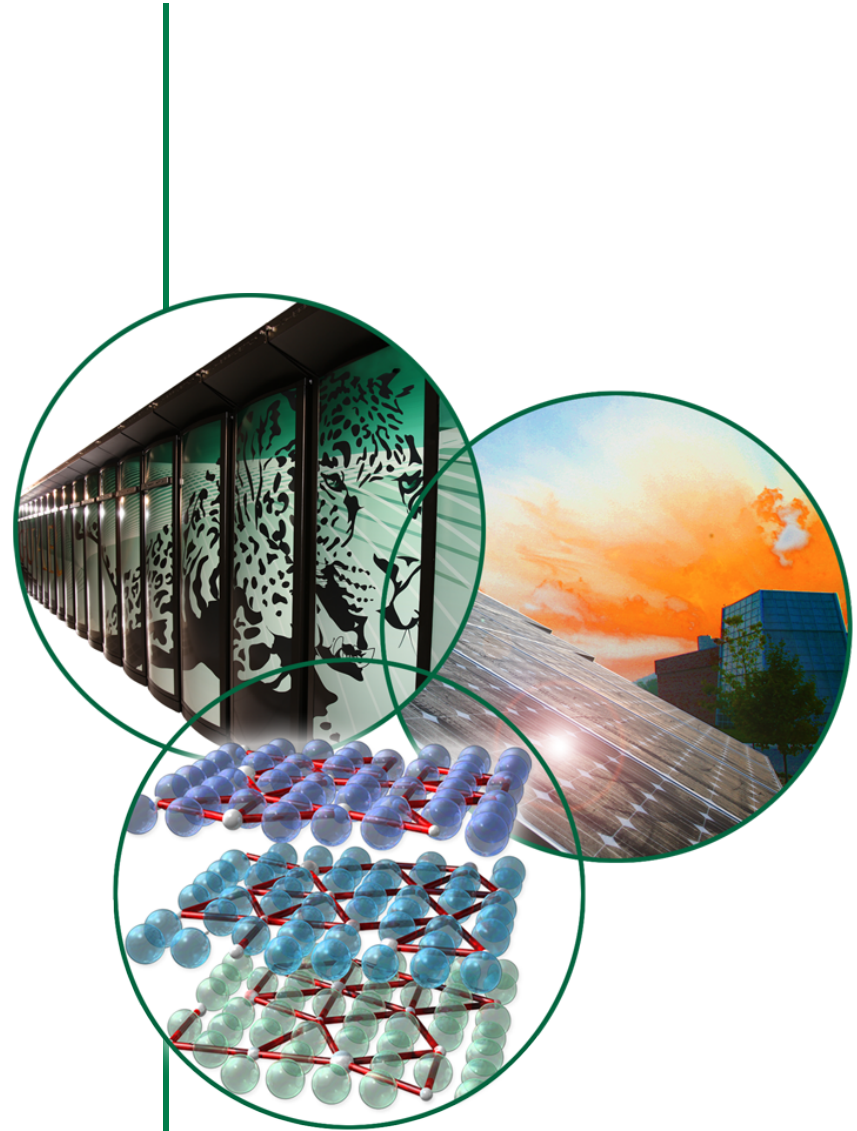# Controls Request Tracker

Karen S. White

ORNL

Igor Verstovsek

Cosylab

# What is Controls Request Tracker?

- Tool to manage work requests, used by SNS Controls Group

- Based on CPM (Cosy Project Manager) a task tracking system developed and used by Cosylab

- Built on top of Request Tracker (RT) open source software and an RDB (MySQL or Oracle)

- We contracted with Cosylab to customize for our needs

- Captures requests, along with other relevant information, from multiple sources in a central database

- Each task is called a "ticket"

- Supports grouping tickets and hierarchy

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Why CRT?

- DOE Order 413.3A Program and Project Management for the Acquisition of Capital Assets establishes a formal process for DOE construction projects
  - **5 Critical Decisions**
  - **Budget and schedule carefully managed**
  - **Support from Project Management professionals**
  - **Project milestones**
  - **Semi-annual reviews**
  - **Phased funding**

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DOE Critical Decision Process
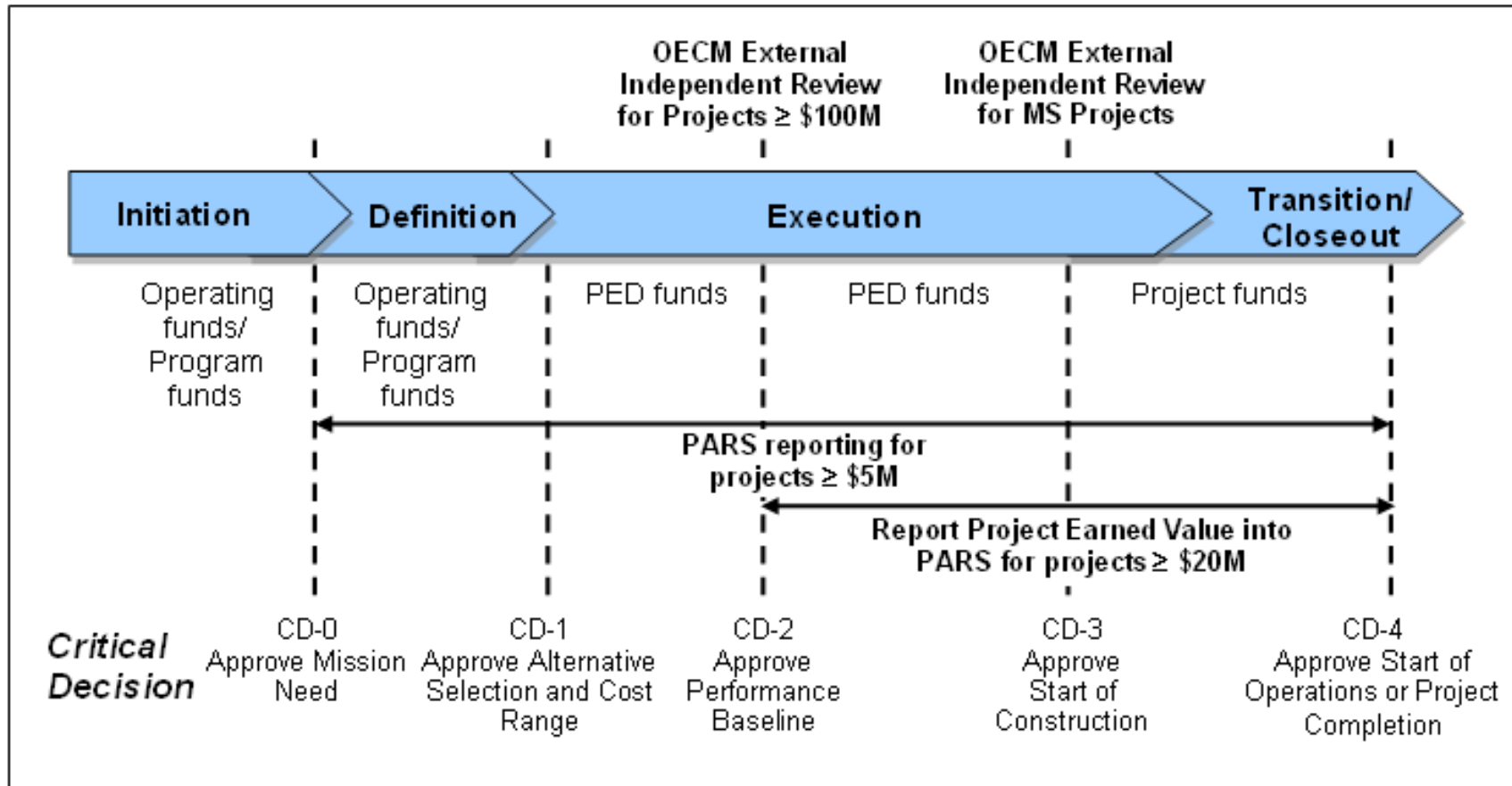
Source www.directives.doe.gov

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Operations

- Successful completion of CD-4 triggers the start of "Project Operations"

- Formal project schedules and milestones replaced with metrics for production hours and availability

- Annual or less frequent reviews of technical achievements

- Groups manage their work less formally and without PM support

- Work includes commissioning, operational support, upgrades, improvements, smaller scale construction

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Nature of the Work

- During Operations, work is driven by:
    - Meeting design goals that exceed CD-4
    - Addressing emerging availability issues
    - Building systems and features that were "descoped" during construction
    - Machine support
    - New features

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Nature of the Work

- Frequent customer requests from many sources
  - In response to operational issues
  - Verbally, in meetings, hallways
  - By e-mail

- Requests made to Group Leader, Team Leader, Engineers

- Very high volume of requests exceeds available resources

- Important to carefully prioritize

Without CRT

- Task management varied by team or individual

- Work managed via strings of e-mails, spreadsheets personal databases, other distributed files

- Difficult to get complete picture of any project all in one place

- No common way to communicate

- Getting current status information meant contacting someone for each project

- Impossible to prioritize work without an accurate, complete list of all requests

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Tickets

- Tickets have many fields: Status, Type, System, Subsystem, Requestor, Developer, Dependencies, Dates, Effort

- Complete history of ticket is saved

- Accept updated through web interface or e-mail

- Supports attachments

Ticket Types and Status

Status

New - Unassigned

Open – Work In Progress

Stalled – Work can't proceed

Resolved – Completed

Rejected – Won't be completed

Deleted – Won't show in reports

Ticket Types

Problem

Maintenance

Configuration

Documentation

Improvement

Idea

Management

Milestone

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How do we use CRT? – Phase I

- Controls Group/Team Leaders enter tickets and assign to developers based on requests from customers or problems reported in e-log

- Developers can enter, grab (volunteer), reply to, resolve, reassign, update tickets and add more information

- Tickets can be linked to predefined milestones such as "July 2010 Outage" and/or grouped to form projects

- Individuals use to manage work load, report status

- Group/Team Leaders get data to prioritize, balance work loads, track progress, justify requests for resources

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CRT Interfaces and Reports

- Dashboard for each user that can be customized according to user preferences

- Predefined reports and an interface for user designed reports

- Simple and complex searches

- We have added custom reports

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Create a Ticket

Searches

Report – Tickets Resolved This Week

#	Id	Queue	Owner	Subject	Status	Last Update
1	1063	SNS-CNTRLS-Device_Control-Cooling-RCCS_&_QMCS	Danny R. Parrott Jr.	Configure DTL, CCL, and QMCS area resistivity transmitters for temperature compensation	resolved	2009-10-02 13:38:13
2	203	SNS-CNTRLS-Protection_Systems-APPS	Dennis Bryan Moss	Spare parts training for APPS equipment	resolved	2009-09-29 18:32:00
3	628	SNS-CNTRLS-Protection_Systems-Radiation_Protection-RMS3	Dennis Bryan Moss	Install RMS III in target cask cart room	resolved	2009-09-29 18:31:01
4	991	SNS-CNTRLS-Global-Computer-OPIs	Shaun N. Cooper	Target moderator OPI replacement	resolved	2009-09-30 14:07:31
5	829	SNS-CNTRLS-Device_Control-Cryogenics	Steven M. Hartman	Cryo controls maintenance tasks -- 2009 Summer	resolved	2009-09-28 15:54:20
6	356	SNS-CNTRLS-Device_Control-Cryogenics	Steven M. Hartman	Add new Cryo alarms	resolved	2009-09-28 15:53:07

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Report – Tickets By Status

Ticket Status

deleted – 3% ● new – 45% ● open – 45% ● rejected – 1% ● stalled – 6%
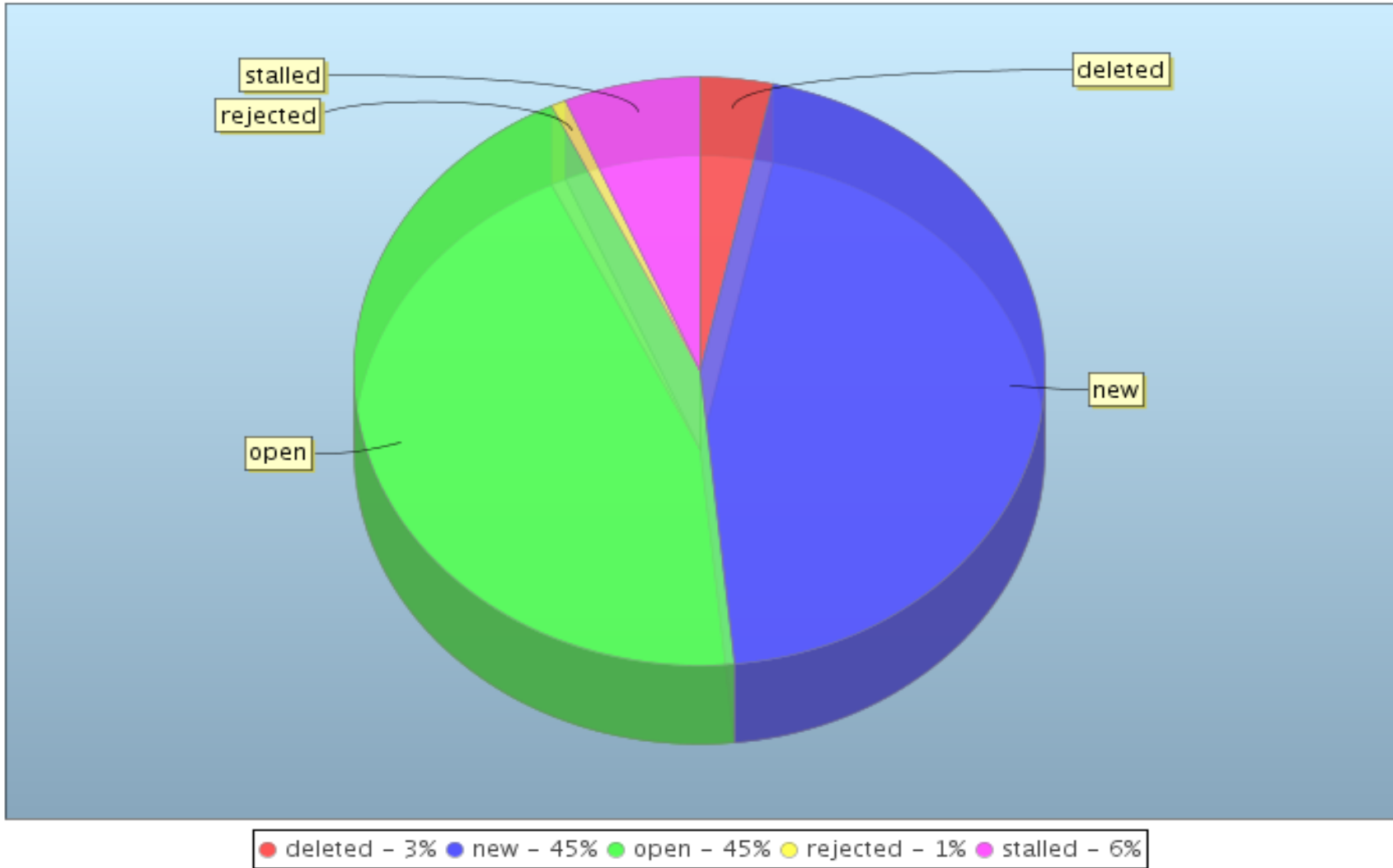
Report - Summary of All Tickets

Status	Ticket Count ▼
Rejected	3
Deleted	15
Stalled	28
Open	196
New	198
Active (new, open, stalled)	**422**
Resolved	563
Total	**1003**

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Status and Future Plans

- **Using CRT since May 2009**

- **Over 1000 tickets entered**

- **Easy to use, has already been very useful**

- **We use a fraction of CPM features**

- **SNS uses a Work Order system built on DataStream to manage maintenance, repair and outage work on the machine**

- **We plan to develop CRT functions**
  - **To turn a ticket into a DataStream work order**
  - **To turn an e-log entry and turn it into a CRT ticket**

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