## MKS at ITT: Managing ATM Projects

A Presentation for WDCA CMWG

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# Agenda

- 1. Where we started
- 2. Why MKS
- 3. MKS Integration
- 4. Process Workflow





## WHERE WE STARTED





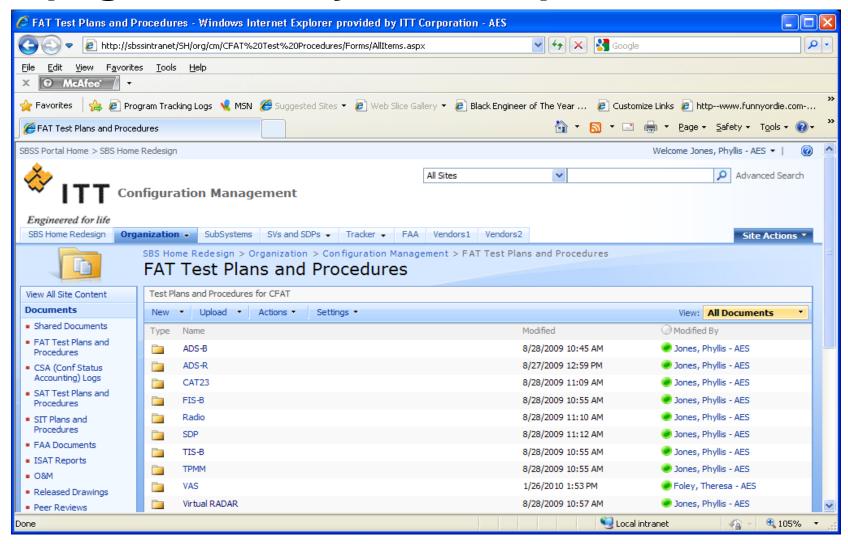
#### Sharepoint

- •Used as primary document repository
  - CCB Materials
  - Request For Change (RFCs)
  - Program Trouble Reports (PTRs)
  - •Release Request (RRs)
  - •CDRLs
  - Status Accounting Logs
  - •Subcontractor documentation/releases





## A page in the day of Sharepoint







## Excel used as primary tracking tool

- Excel was used to track EVERYTHING
  - CSA logs
  - Lease Info
  - Document Process Status
  - Test Information
  - Status of Test Information
  - New Sites
  - Construction
  - •Etc. etc. etc.





#### Information All Over the Place

Our users love keeping important program information on:

- Their individual workstation hard drives
- Network hard drive (in various locations)

#### **Problems:**

- No Structure
- Various locations to find similar data
- Confusing
- •Unable to locate the "holder" of the info when needed.

Even in Sharepoint it was a problem because we just kept creating more tabs and folders. Everyone was not updated on where new information was being kept consistently.





## WHY MKS





## **NEEDS / VENDORS**

Documented our requirements for a CM Tool

- One database to hold program information
- Relational
- Hardware Control
- Document Management
- Software Control
- Easy to implement program processes
- Future maintenance costs

Sent out RFPs to the following companies

- •IBM
- CMstat
- •MKS





### **IBM**

Maximo Asset Configuration Management System

#### Pros:

- Provides a highly structured, user definable solution
- Geared towards our hardware control requirement
- •Module-based system (work management, inventory management, procurement management, etc)

#### Cons:

- The design must be well defined
- The system is too structured and maintenance intensive
- \$\$\$\$





## **CMSTAT**

#### Pros:

- Administration module made it a one-stop shop to customize the application
- Standardized workflow templates
- Item/Part Management module well thought out. HW management is their specialty
- Highly modularized

#### Cons:

- •Customizations had to be done by CMstat (including form name changes, workflow mods)
- The interface was "klugy," non-intuitive.
- **•**\$\$\$





## **MKS**

#### Pros:

- •Speed of bringing the system "live" (having a useable system developed and ready to populate)
- Fully configurable by in-house staff
- •Build the support structure as we need it and how we need it (hardware, document management, etc.)
- Highly relational

#### Cons:

- Too many triggers can slow performance
- Would prefer a true custom report writer
- **•**\$\$\$





## MKS INTEGRATION





### **MEETINGS**

- Our Vision
- •Buy-In
- •Each Group's Input on Process Flows affecting them
- Managing Expectations





### **Our Vision**

- •Our vision is to have a Single Source of Truth.

  Having a database design affords that
- The ability to Relate data was also crucial.

What PTRs affect a new software release

or

What technical documents were affected by a RFC.





#### **BUY-IN**

- •To communicate our vision and assess use of the tool, we met with teams from:
  - Implementation and Construction
  - Systems Engineering
  - Development
  - Test
  - Procurement
  - Finance
  - Production
  - Operations and Maintenance
  - Product Assurance





#### **PROCESS FLOWS**

- •At each team meeting, we mapped out their process flows for items that they manage, such as
  - Specifications, drawings, etc. (Release Request / approval flows)
  - Developed software (ready to test flows)
  - Deployment (Release Request /approval flows)
  - New parts orders (Production / buyer flows)
  - Construction (site readiness flows)
  - O&M (site maintenance / field flows)

Just to name a few . . .





#### **MANAGE**

## **EXPECTATIONS**

Don't promise the world! Be realistic.





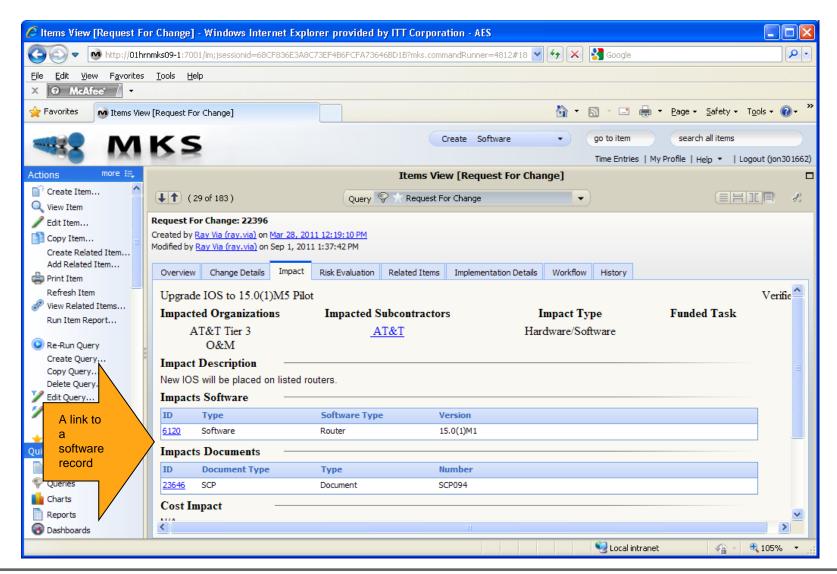
#### **DEVELOPING THE TOOL**

- •Those trained as MKS Administrators took a team's requirements and worked on their "type" or form and associated workflows.
- Look at how each team's information relates to another's.
  - •Example: The test team's PTRs should be linked to the Software records that are being released.
  - •Or a lease should be linked to the site.
- •Reiterations with each team in the organization to
  - Improve and
  - •Refine!





#### RECORD LINK EXAMPLE







## **Training**

■ Administrator training – 2 weeks

Stood up the following types (forms):

- Sites (site / hardware information)
- Program Trouble Reports (bug tracking)
- Request for Change (RFC tracking)
- Hardware (links to Sites)

Several more types were created and original type "tweaked" as more users began getting acclimated to the new tool

New types were:

- Release Requests
- Document
- Lease, etc.





## Training – cont'd

- Small groups
- One-on-one
- Specific training slides developed per application

A lot of one-on-one training still goes on today for new hires and for those who simply "forget."





## MKS Integration – Getting data in

- Data Imports
  - > Imported information from Excel files to create initial records.
- Manual Entry





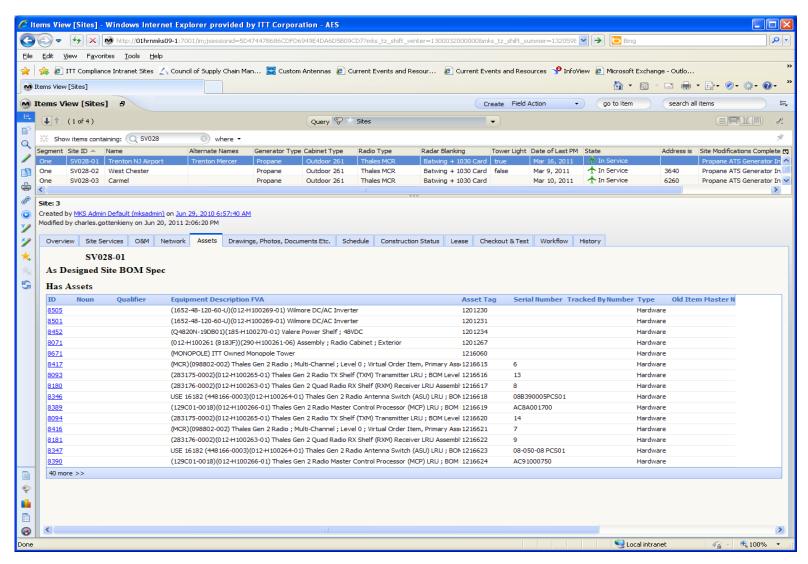
#### **MKS Integration**

- Hardware Platform: (Dell PowerEdge R610s)
  - Virtual machine Development server
  - ➤ Production servers: 2 physical servers, one is the MS SQL DB Server and the other machine has the MKS Server product running.
  - ➤ OS: MS Windows 64-bit 2008 R2 Server.





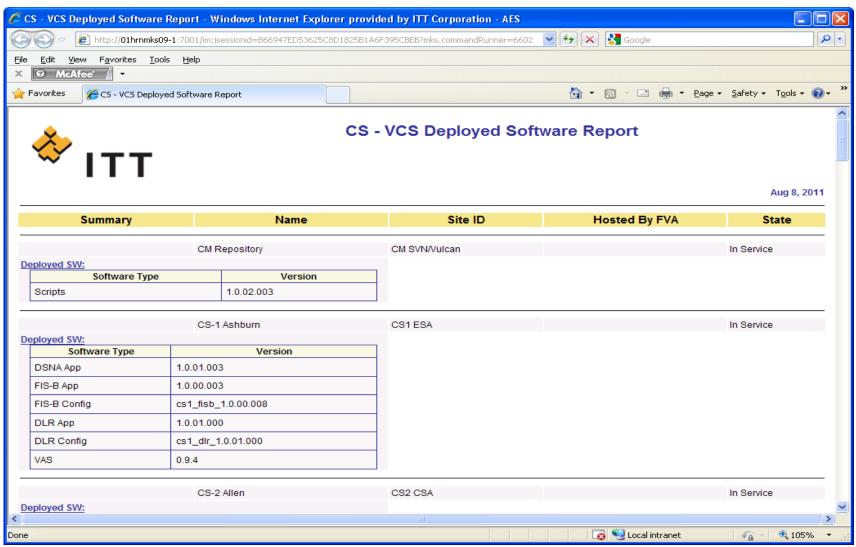
#### **Asset Information in MKS**







## **MKS** Reporting







#### **Process Workflow**





#### One of the MKS Workflows – Request for Change

