Problem Management Enhancements

Doug Bowmer, Northrop Grumman

April 13, 2011

Problem Management and Related Processes

- Three distinct yet integrated processes
  - **Initial findings**
  - **Incident root cause analysis (RCA)**
  - **Problem management**

Initial Findings

- Incident management activity
- Initial findings, which are completed within 24 business hours after incident resolution, are provided for all severity 1 and 2 incident tickets
- Initial findings document the cause(s) of the incident – providing the customer an explanation of the incident
- When the root cause of the an incident or incidents is unknown, a problem record is opened for further investigation

Report contains incident information with completed initial findings

Severity 1 & 2 Initial Findings Report

DGS

Incident Number:	IM950582	**Severity Level:**	1
Open Time:	1/29/2011 9:47:18PM	**Resolved Time:**	1/30/2011 12:31:36AM
Category:	server-va	**Sub-Category:**	system status
Product Type:	unix	**Problem Type:**	production support
Cause Code:	Service Request	**Resolution Code:**	Cleared-No Trouble Found
Affected CI:	CVASV-CR63Q71	**Assignment:**	SERVERSERVICES-371/373
CI Type:	computer	**CI sub Type:**	Server
Location:	1107	**City:**	Chester
Address:	11751 Meadowville Lane	**Zip Code:**	23836
		Agency Code:	194

Incident Details

Brief Description:	(DGS) Server :- ORACLE5 server is down.
Initial Findings:	DGS developer initiated restart of server. Server stopped during rest art sequence because of a hardware issue with drive 0. Drive 0 was re seated which cleared the hardware error. Server was then allowed to c ontinue to boot normally. Services were verified after server complet ed boot up.
Resolution:	01/30/11 00:31:36 (david.din@ngc.com): Drive 0 had an amber light indicating a hardware issue. Drive was reseated which cleared the hardware error. Drive light turned green. Restarted server. Engineer verified that all services were working fine.

Incident Root Cause Analysis (RCA)

- Incident management activity
- Initiated by the agency or management for major incidents or outages
- Revised incident RCA form has been created
  - Provides incident details, root cause and corrective actions to prevent recurrence
  - Sequence of events or timeline to understand the relationships between the event and root cause(s) to prevent recurrence
- The ***targeted goal*** is to deliver “customer ready” RCA within eight business days

Problem Management

- Problem management process is to identify and eliminate the unknown underlying cause of one or more incidents
- When does this occur?
  - **Reactive - identifying the underlying causes of incidents in order to prevent future recurrences**
  - **Proactive - activities that identify and resolve problems before incidents occur by utilizing trending and predictive analysis**
- Detailed investigation to identify workarounds and permanent resolution of problems within the infrastructure
- Output of problem management is a known error record and/or a change request to eliminate the problem

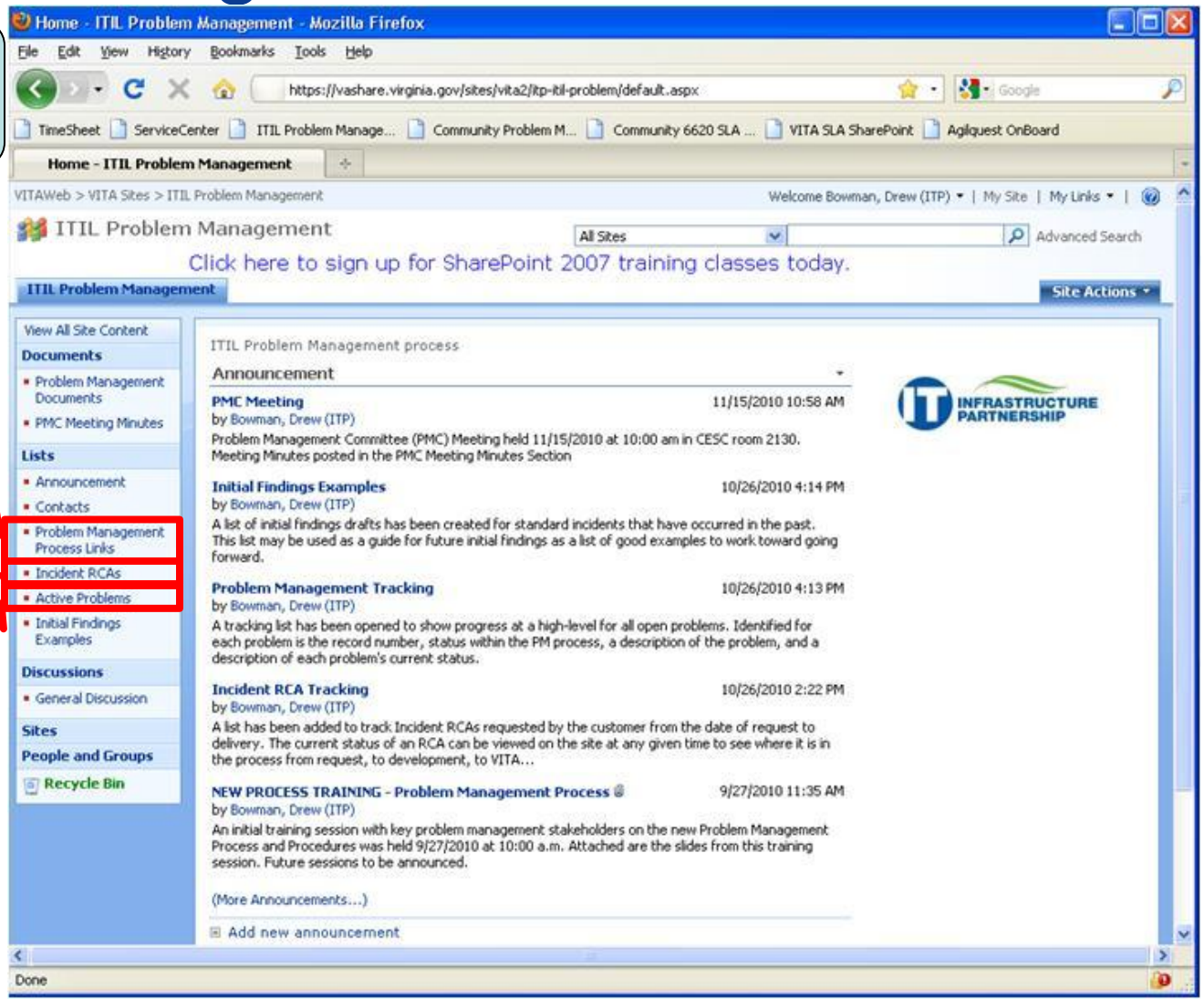
Problem Management SharePoint Site

Problem ticket information is available to AITRs and ISOs

Links to problem management process info

Status tracking for open RCAs

Status tracking for active problems



Problem Management SharePoint Site

Records can be sorted by agency; status information is available

VITAWeb > VITA Sites > ITIL Problem Management

Welcome Bowmer, Doug (ITP) | My Site | My Links

ITIL Problem Management

All Sites | Advanced Search

classes today.

ITIL Problem Management

ITIL Problem Management > Active Problems

Active Problems

View All Site Content

Documents
- Problem Management Documents
- PMC Meeting Minutes

Lists
- Announcement
- Problem Management Process Links
- Incident RCAs
- Active Problems
- Initial Findings Examples

Discussions
- General Discussion

Sites

People and Groups

Tracking of active problems within the ITP Infrastructure.

Actions | View: Active Problems

Title	Start Date	Service Area	Agency	Assigned To	Status	Description	Status Description	Priority	Proactive?	Related Record(s)
PM015719	1/14/2011	Server	DMV	Sedillo, Ed (ITP)	1 - Investigation	DMV - Internet Issue - Webpage unavailable	Performing analysis on server cluster that houses the DMV Web application along with workign with customer who is working to correct any issues from an application perspective based on the error condition logged.	3 - Average	No	
PM015734	3/6/2011	End-User	VDACS	Craig, Mike (ITP)	1 - Investigation	VDACS Oracle Browser application intermittently experienceing time-out condition.	Removal of remaining Novell Componets is in progress and most remaining users are remote and rarely come in to a VDACS office. Their home offices have slow bandwidth that does not accommodate remote support. We are working with their schedules to coordinate a remote session when they are in a VDACS or other COV office to complete this task. Also, we have discovered irregularities pertaining to the assets and have updated notes accordingly.	3 - Average	No	
PM015739	2/9/2011	Server	TAX	Lickey, James (ITP)	1 - Investigation	TAX CACSG is running extremely slow. The system clocks when trying to take an action. Approximately 30 users are affected. It was determined that between 8:30am and 9:00am on 2/7/11 the Unix servers at CESC were taking 200ms+ to respond. This resulted in poor application performance for the CDCO application staff members and the AR and Siebel users at VaTax. End-users have indicated that the freezing of the CACSG application often occurs 3 or 4 times a week. In the situation on the morning of 2/7/2011, the slowness lasted for a period of 30 minutes.	Implementing OPNET monitoring of TAXSUN81 server to monitor traffic from end-users to the application to determine the source of the latency.	3 - Average	No	
PM015741	2/14/2011	Server	DSS	Kies, David	1 - Investigation	"The server PPIMAGE continues to generate alerts that the Critical Disk Space threshold has been crossed. 82 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 37 within the month preceding 2/8/2011.	Work Request "DSS_20100801 Payment Processing Server Replacement" has been opened to replace PPImage.	3 - Average	Yes	
PM015744	2/14/2011	Server	DMV	Sedillo, Ed (ITP)	1 - Investigation	"The server T-RPS-FLOW continues to generate alerts that the Available Physical Memory threshold has been crossed. 64 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 46 within the month preceding 2/8/2011.	T-RPS-FLOW Tag #100090766 will be replaced with NG Tag #00128869	3 - Average	Yes	KE0210
PM015746	2/14/2011	Server	VDOT	McCreight, Hugh (ITP)	1 - Investigation	"The server COAPP65 continues to generate alerts that the % Free Space threshold has been crossed. 60 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 16 within the month preceding 2/8/2011.	Initial investigation	3 - Average	Yes	
PM015747	2/14/2011	Server	DOC	Bromilow, Justin (ITP)	1 - Investigation	"The server DOCCORUATDB1 continues to generate alerts that the Disk Space Critical threshold has been crossed. 52 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 19 within the month preceding 2/8/2011.	Initial investigation.	3 - Average	Yes	
PM015748	2/14/2011	Server		Polemeni, Joe	1 - Investigation	he server CSH01 continues to generate alerts that the Available Physical Memory threshold has been crossed. 48 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 21 within the month preceding 2/8/2011.	Initial investigation.	3 - Average	Yes	
PM015749	2/14/2011	Server	TAX	Sedillo, Ed (ITP)	1 - Investigation	"The server 222V4CTXCDCO continues to generate alerts that the % Total Processor Time threshold has been crossed. 41 alerts have been generated on this server between 11/11/2010 and 2/8/2011, and 12 within the month preceding 2/8/2011.	Initial investigation.	3 - Average	Yes	

Questions?

Problem Management SharePoint Site:
https://vashare.virginia.gov/sites/vita2/itp-itil-problem/Lists/Active%20Problems/Active%20Problems.aspx