Problem Management

MANDATORY CRITERIA

1. Does the tool facilitate the creation, modification, and closure of Problem records?
   
   Comments: Yes. The tool provides two (2) methods in which to create a problem record. The record can be created manually via the ‘Search Problems’ “New” tab and, the problem record may be created directly from the Incident Record. The 2nd method will also populate incident data into the Problem Record and generate the linkages between them. All modifications of the Problem record (including closure) are permanently logged.

Manual Problem Record

Incident Problem Creation

Create a New Problem Record or link this Incident to an Existing Problem Record

New Problem (Create Problem). The Incident will be linked
Problem Management

Search for existing Problem Records (Relate Problems)

Problem Record List from Search Criteria – Check Problems that apply. The user may view records by clicking on the Problem Hyperlink.

View Problem Record by clicking on the hyperlink.

2. Does the tool support the ability to distinguish between an Incident and Problem Records?
Comments: Yes. The Problem and Incident Record are independent records. The Problem record maintains the ability to distinguish between Problem, and Known Error. The ‘Related Incidents’ field identifies all associated Incident records if applicable.
Problem Management

3. Does the tool facilitate the automated matching of Incidents to Problems and Known Errors?
   Comments: Yes. The tool matches Incidents to Problem records which may be identified as a Problem or known error.

4. Does the tool support the ability to route and assign Problem records to pre-defined support staff or groups?
   Comments: Yes. The Problem record is assigned to the Individual who created the Problem record. It may be modified to identify a support staff member or support group.
Problem Management

5. Does the tool enable impact and urgency codes to be assigned to Problem records?  
   Comments: Yes. Impact and Urgency are assignable.

6. Does the tool facilitate progress tracking and monitoring of Problems? For example, tracking ownership and responsibility for establishing root cause.  
   Comment: Yes. The Manager of the record (assigned during the creation of the record) is assigned ownership and responsibility for establishing the Root Cause.
7. Does the tool facilitate the escalation of Problems after pre-defined thresholds have been breached?

Comments: Yes. There are several methods to facilitate the escalation of Problems. Using the ‘Notification Events’ module, notices to users, stakeholders, or any other individual email addresses may be generated via a query designed to compare threshold values.

A search via the ‘Search Problem’ screen based upon the status, Urgency, Impact, Priority, and or any other field criteria may be performed.

Using a saved ad-hoc report, pull a Problem report depicting the number of incidents associated to the problem record.

Saved Ad-hoc Query (lists the number of associated Incidents to non-closed Problem Records)

Problem Record # 3 from the above list showing the 3 Incidents associated to it, the number of records relating to a Problem may be a threshold breach.
Problem Management

Problem Record 3

Additionally, the Potential Problem Management System (PPMS) has the capability to run ad-hoc scans against Problem records. The combination of the PPMS Scan Request and the ad-hoc system provides infinite methods in which to define thresholds and send notifications.

In this PPMS example, a notification is sent if any Problem records have a Priority of level 3 or higher. The ad-hoc scan is designed to periodically review the problem records and send an e-mail notification if records are found which meet the criteria.

PPMS Scan Request to Analyze Problem Records that are 1-30 days old

Email notification received from ITG CENTRE

Email Message indication that it found matches to the PPMS Scan
Problem Management

Review the PPMS Scan Report

<table>
<thead>
<tr>
<th>SrNo Request</th>
<th>Incident Type</th>
<th>Issue Status</th>
<th>Priority Level</th>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HP Fuser Replacement</td>
<td>Unknown Issue</td>
<td>1 Days</td>
<td>Vespe, Robert R.</td>
</tr>
<tr>
<td>2</td>
<td>Dell Laptop Battery Replacement</td>
<td>Known Issue</td>
<td>3 Days</td>
<td>Vespe, Robert R.</td>
</tr>
<tr>
<td>4</td>
<td>HP Fuser Replacement</td>
<td>Unknown Issue</td>
<td>4 Days</td>
<td>Vespe, Robert R.</td>
</tr>
</tbody>
</table>

All PPMS Reports for this PPMS Record

<table>
<thead>
<tr>
<th>Potential Problem Group ID</th>
<th>Date Created</th>
<th>Potential Problem Specification ID</th>
<th>Potential Problem Specification Name</th>
<th>Review Date</th>
<th>Review By User</th>
<th>Potential Problem Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>193</td>
<td>8/28/2007 3:00:00 PM</td>
<td>96</td>
<td>Problem Records GT Priority 3</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

Identified Problem Records to Review with their Associated Incident Numbers

<table>
<thead>
<tr>
<th>PPRecordID</th>
<th>PPGroupID</th>
<th>DateTimeCreated</th>
<th>ProblemID</th>
<th>SrvcCallID</th>
<th>CreationDate</th>
<th>Model</th>
<th>ProblemDescr</th>
</tr>
</thead>
<tbody>
<tr>
<td>4141</td>
<td>193</td>
<td>6/28/2007 3:00:07 PM</td>
<td>10535</td>
<td>6/19/2007</td>
<td>M5200</td>
<td>PRINTER: Customer states the printer does not work</td>
<td></td>
</tr>
<tr>
<td>4144</td>
<td>193</td>
<td>6/28/2007 3:09:08 PM</td>
<td>105814</td>
<td>6/19/2007</td>
<td>M5200</td>
<td>PRINTER: Customer states the printer does not work</td>
<td></td>
</tr>
</tbody>
</table>
8. Does the tool provide historical data on Problems and Known Errors for use by support staff during the investigation process?

Comments: Yes. Support Staff may interrogate historical data by using the Problem search screen or the ad-hoc reporting system. Using the search screen, any single field or combination of fields may be interrogated. Using the ad-hoc reporting system, reports tailored to ones needs may be executed and saved for future requirements. The ad-hoc reporting system has the capability of combining multiple tables (Problem and Incident tables) for in-depth analysis.

Search by Manufacturer and Model

List of Matching Problem Records to the Search Criteria

Problem Record with Related Incidents

Ad-hoc Reporting System

Sample ad-hoc Report
Problem Management

9. Does the tool facilitate the generation of customizable management reports?
Comments: Yes. CENTRE facilitates the generation of customizable management reports through the use of the Ad-hoc Reporting system as shown in Question 8 above.

Additionally, CENTRE maintains a Potential Problem Management System (PPMS) to identify trends and notify individuals or groups as stated thresholds’ breach. The PPMS tool is built upon the ad-hoc reporting system criteria, and allows one to select any field or group of fields from the Problem and Incident records. Using the Problem entry screen combined with the ad-hoc selection criteria provides the user with infinite methods to select records to identify potential issues before they become problems.

Example; The PPMS Screen is set to Monitor HP Fuser Failures. If it detects 3 or more failures within the past 120 days a notice is sent. This scan executes daily and uses the ad-hoc scan parameters (select query) to extract data and generate a report data for analysis.

PPMS Scan Request

10. Does the tool facilitate the entry of free text for the recording of Problem descriptions and resolution activities?
Comments: Yes. There are four (4) free text fields.
Problem Management

INTEGRATION CRITERIA

Terminology
1. Does the tool's use of terms and definitions align with ITIL terms and definitions?
Comments: Yes

Change Management
1. Does the tool facilitate the association of Problem records to Change records?
Comments: Yes. The relationships between the Problem Record and RFC’s are maintained on the Problem and Change Records accordingly.

Problem Record

Changes Associated to the Problem Record

Problem Record automatically creates the Problem Record link within the RFC Record

<table>
<thead>
<tr>
<th>Configuration Item Source Type</th>
<th>Configuration Item Source</th>
<th>KeyColumn Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Request</td>
<td>Contract Assets</td>
<td>174829</td>
</tr>
<tr>
<td>Change Request</td>
<td>Problem</td>
<td>1</td>
</tr>
<tr>
<td>Change Request</td>
<td>Scan Request</td>
<td>13</td>
</tr>
<tr>
<td>Change Request</td>
<td>Scan Request</td>
<td>14</td>
</tr>
<tr>
<td>Change Request</td>
<td>Software Requirement</td>
<td>740</td>
</tr>
</tbody>
</table>
Configuration Management
1. Does the tool integrate with CMDB to support the association of Problem records to CI records?

Comments: Yes. CI records may be integrated to the associated Problem record via the Change Record.

Problem Record

Changes Associated to the Problem Record

Change Record with links to the associated CI

Integration Technologies Group (ITG) ITIL V3 Problem Management Assessment
Robert R. Vespe
Problem Management

Incident Management
1. Does the tool facilitate the association and maintenance of the relationships between Incident and Problem records?
Comments: Yes. Incident Records are linked to their associated Problem record.
Problem Management

2. Does the tool facilitate the automated creation of Problem records from Incidents records?
   Comments: Yes. Problem Records may be created or Related from the ‘View Incident’ screen.

Incident Problem Creation

Create a New Problem Record or link this Incident to an Existing Problem Record

New Problem (Create Problem). The Incident will be linked

Search for existing Problem Records (Relate Problems)
3. Does the tool enable the Problem Management team to communicate status and progress reports, as well as temporary solutions and workarounds to the Service Desk staff?
Comments: Yes. The Problem Management team has the capability to enter status, progress information, and, workaround solutions into the Problem record for Service Desk review.
OPTIONAL CRITERIA
1. Is the tool able to automate the increase in the severity or impact classification of a Problem according to the number of associated Incidents and/or the number of End Users affected?

Comments: Yes. The Problem record is associated to an Incident-Impact-Urgency Matrix. This configurable matrix is triggered by the number of incidents. As thresholds are reached, the Impact and Urgency may be adjusted. If desired, alert recipients may be added to the matrix.

The Impact and Urgency values modify the priority value and are configurable. If desired, alert recipients may be added to the matrix.

Problem Record Configurable Incident Count values

<table>
<thead>
<tr>
<th>Select IncidentCount</th>
<th>Impact</th>
<th>Urgency</th>
<th>Alert Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>2</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>3</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>30</td>
<td>4</td>
<td>4</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>40</td>
<td>5</td>
<td>5</td>
<td>Assign Recipients</td>
</tr>
</tbody>
</table>

Problem Record Priority Matrix

<table>
<thead>
<tr>
<th>Select Impact</th>
<th>Urgency</th>
<th>Priority</th>
<th>Alert Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>3</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>3</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
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<td>Assign Recipients</td>
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<tr>
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<td>3</td>
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<td>Assign Recipients</td>
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<td>Assign Recipients</td>
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<tr>
<td>2</td>
<td>5</td>
<td>4</td>
<td>Assign Recipients</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>Assign Recipients</td>
</tr>
</tbody>
</table>

Organization Name: Integration Technologies Group, Inc.
Brand name of Product: CENTRE (Common ENTerprise, REsource, system)
Version of Product to be Assessed: Release 4.6.8
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