CENTRE TM (Common Enterprise Resource)

Systems and Software Engineering Platform designed for CMMI compliance

Capability Maturity Model Integration (CMMI) is a process improvement approach that provides organizations with the essential elements of effective processes. CMMI helps integrate traditionally separate organizational functions, set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes. (Software Engineering Institute, SEI web-site, www.sei.cmu.edu/cmmi/general/)

CENTRE is a software product designed, authored and produced by **Integration Technologies Group Inc. CENTRE** is composed of configurable modules intended to provide compliance with **CMMI** process areas and **ISO** clauses while increasing organizational efficiency, effectiveness and continual improvement.

Integration Technologies Group Inc. (ITG), www.itgonline.com, is a systems and software engineering company founded in 1984 and headquartered in Falls Church, Virginia, USA. ITG is ISO 20000-1:2005, ISO 9001:2008 and ISO 27001:2005 registered. As well, the company is an SEI member and partner and has been externally appraised twice at CMMI Level 3.

This document contains brief descriptions of **CENTRE CMMI** Software features which cover specific and generic evidence of compliance for practices required by **CMMI for Development Version 1.2** process areas. As with all process improvement methodologies and industry best practices, management commitment, quality record collection, analysis and processing are required to achieve improvement objectives and successful appraisals and registrations.

CENTRE was developed to facilitate today's Best Practices Certifications and process improvement methodologies. By using **CENTRE**, businesses can increase efficiencies across key business processes and satisfy many of the requirements stipulated by the **SEI** and international standards boards. Some of the benefits that may be derived by implementing compliance with **CMMI** process areas are:

- Improved Quality of Output
- Increased Accuracy of Estimates
- Earlier Identification of Defects
- Accurate Measurements of Processes
- Higher Operational Efficiency
- Cost Reduction and Integration with Industry Standards

As a result, an organization using **CENTRE** will be recognized as delivering successful service to its clients and constituents with dependably high-quality and consistent methods and practices. The **CENTRE CMMI** Software 1.2 implementation includes 'CENTRE ISO 9001:2008' Quality Management System elements which are:

CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 1 of 6

CENTRE - Document Control System (DCS)

CENTRE - Records Control System (RCS)

CENTRE - Human Resources

CENTRE - Meeting Management

CENTRE - Customer Satisfaction Surveys

CENTRE - Supply Chain Management

CENTRE - Ad-Hoc Report Writer

These elements are described in more detail in the **CENTRE ISO 9001:2008** Compliance Package - White Paper.

Disclaimer

Use of CENTRE modules or similar software alone does not result in organizational CMMI conformance. Documented procedures, defined processes and work instructions, staff training and internal audits of Process Areas compliance are needed to prepare an organization for a CMMI appraisal. The ITG CENTRE Document Control System (DCS) contains documentation that describes the ITG Quality Management System and consists principally of the following documents:

- Business Quality Manual (BQM) in conformance with ISO 9001:2008,
- Information Technology Services Management manual (ITSM) in conformance with ISO 20000-1:2005,
- Information Security Management System manual (ISMS) in conformance with ISO 27001:2005,
- Corporate process workflow, Quality Procedures and Quality Work Instructions.

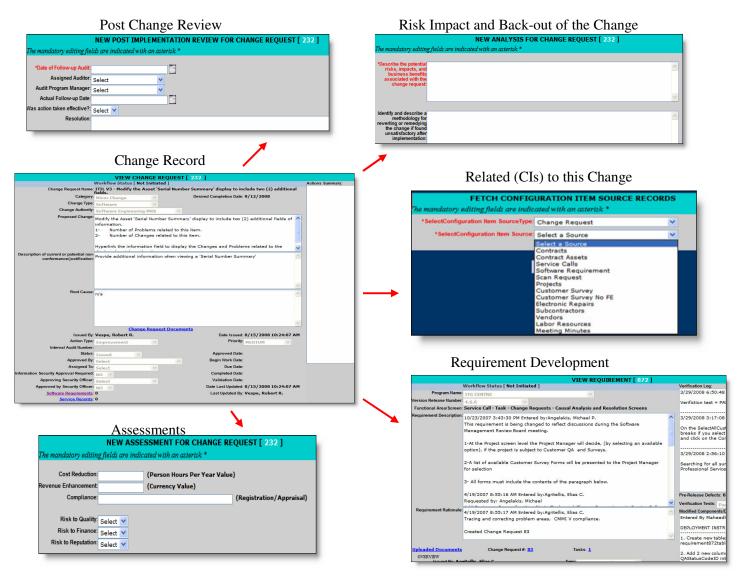
CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper
Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 2 of 6

CENTRE CMMI Specific & Generic Evidence Elements:

CENTRE – Requirements Management

SP 1.1 Develop an understanding with the requirements providers on the meaning of the requirements.

CENTRE Evidence: The Change Management module is utilized to provide the basis for the creation of "Requirements" in CENTRE. Upon the submission and approval of a Change Request, a Requirement is created and assigned. The direct evidence for this Specific Practice is Change and Requirements records.



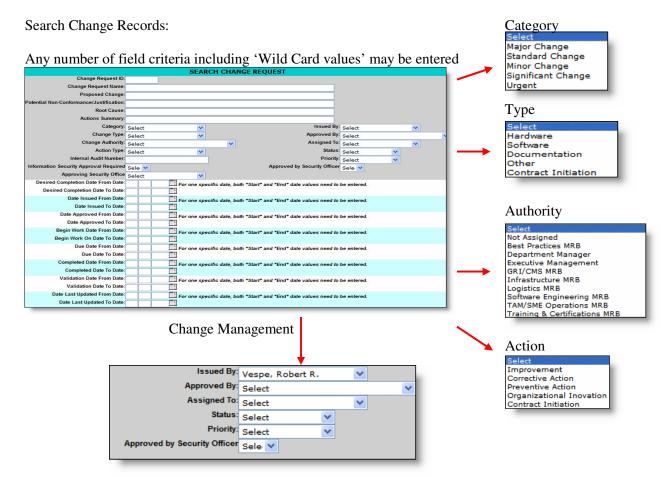
SP 1.2 Obtain commitments to the requirements from the project participants.

CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 3 of 6

CENTRE Evidence: As seen above, the Change Management Module requires both an analysis of the Change Request as well as approvals from the relevant authorities.

SP 1.3 Manage changes to the requirements as they evolve during the project.

CENTRE Evidence: Change Management records provide the direct evidence for this practice:



List of Matching Change Records (may be sorted by clicking on any 'Blue' column heading) -

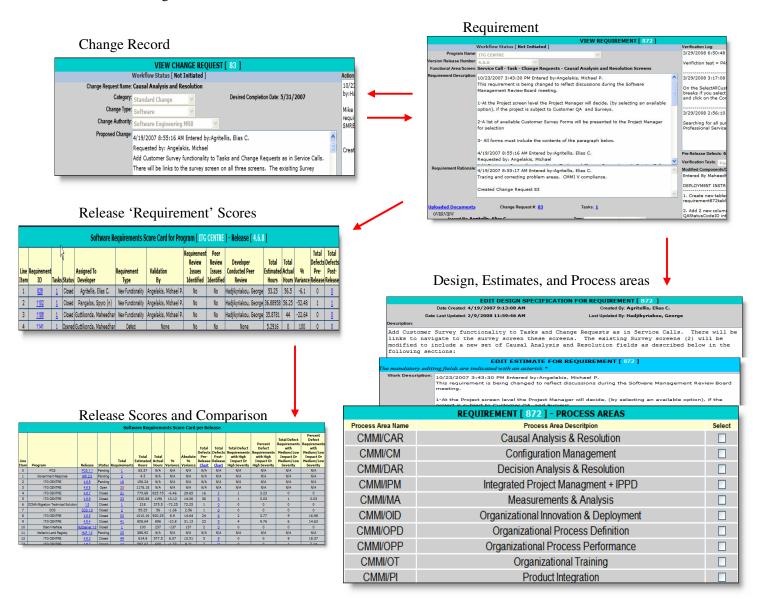
SELECT CHANGE REQUEST										
Change equest #	Change Request Name	Change Authority	Proposed Change	Issued Date	Issuer	Approved Date	Priority	Assigned To	Status	Begin Work Date
) <u>4</u>	Improve Phone Answering Procedure	Department Manager	How to answer phone by COs	9/18/2006 6:24:52 PM	Karmiris, Lefteris	1/23/2007 4:36:27 PM	LOW	Martinez, Christina G.	Closed	6/24/2007 4:36:27 PM
2 (Test Change Management Processes	Department Manager	This is to document the Change Request system for ITIL certification	9/29/2006 3:59:11 PM	Vespe, Robert R.		HIGH	None	Cancelled	
) <u>e</u>	ITIL Requirement - Add the Problem Record ID to the Change Request Screen	Software Engineering MRB	11/14/2006 Lee Leiber As requested and approved by the Software MRB 1. On the "Change Record", add a text box labeled "Affected CIs". This box will not be editable. 2. On the "Change Record", add a "Get Configuration Item" but	10/13/2006 5:16:06 PM	Vespe, Robert R.	11/9/2006 11:07:28 AM	HIGH	Hadjikyriakou, George	Closed	11/20/2006 12:11:44 PM
) <u>z</u>	ITIL Requirement – Add a Severity code and SLA values to the asset data record and service call scre	Software Engineering MRB	Add a Severity field (read-only calculated severity code (1-5) from the values indicated in the Criticality and Impact fields. Develop a method to use the criticality and impact codes to create a weighted severity code value. As an asset is entered,	10/13/2006 5:37:16 PM	Vespe, Robert R.	11/9/2006 11:10:56 AM	HIGH	Hadjikyriakou, George	Closed	11/15/2006 2:10:17 PM
<u>a</u>	REQUEST WITHDRAWN - ITIL Requirement - Record (Log) Asset Modifications	Best Practices MRB	Robert Vespe, 11-01-06 This Change Request is withdrawn – Serial Number Change' log file To satisfy the ITIL requirement, 'As changes are made to the CI record (dates, locations), the modified information is cyclically recorded in the 'Comme	10/18/2008 3:43:23 PM	Vespe, Robert R.		HIGH	None	Cancelled	
<u>e</u>	ITIL Requirement - Modify the Asset Record - Add a Lifecycle Status Field	Best Practices MRB	To satisfy ITIL's configuration management requirement "Does the tool support customizable CI Lifecycle status", please make the following changes; 1- Modification of the asset table is requested, create an additional asset field titled 'Lifecycle Stat	10/24/2006 9:45:29 AM	Vespe, Robert R.	11/5/2006 11:16:49 AM	MEDIUM	Hadjikyriakou, George	Closed	
) <u>10</u>	Inventory adjustments	Logistics MRB	Permit Ali to enter Inventory Management and "Receive" shipments from Falls Church Warehouse. Also permit Ali appropriate rights so that he can adjust the inventory of the HUD Warehouse.	10/24/2006 1:41:04 PM	Angelakis, Michael P.	11/9/2006 11:19:07 AM	NONE	Hadjikyriakou, George	Closed	10/12/2007 5:14:31 PM
11	Expansion of Subcontractor Data Profile	Software Engineering MRB	Expand Subcontractor Profile Screen to capture Subcontractor Service Levels and Rate Structure break down for all Subcontractors. Below is the information we will be capturing form Subcontractors and capturing into CEUTEE Subcontractor Service Level and	11/16/2006 2:25:51 PM	Medina, Abel F.	12/20/2006 4:13:15 PM	HIGH	Hadjikyriakou, George	Denied	12/26/2006 3:09:03 PM

CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper

Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 4 of 6

SP 1.4 Maintain bidirectional traceability among the requirements and work products.

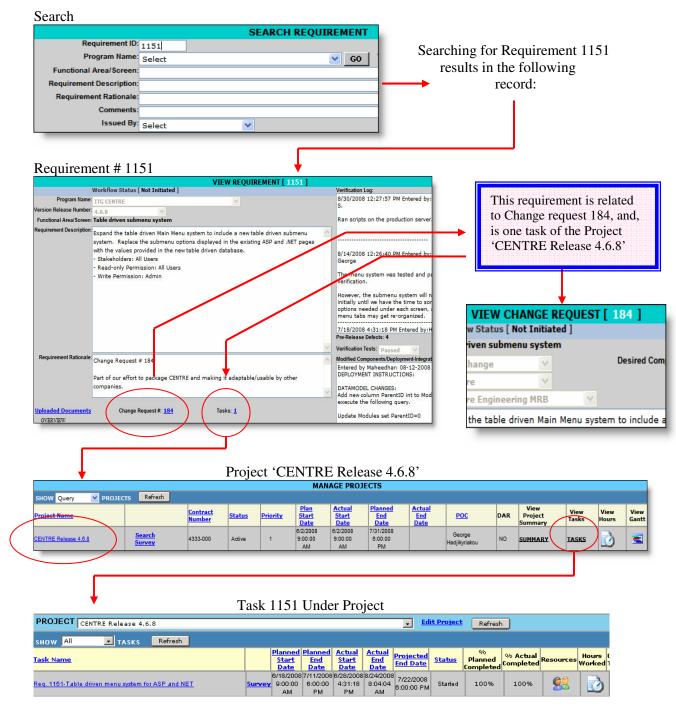
CENTRE Evidence: Approved Change Requests result in Requirements that are managed by the Release Management module:



SP 1.5 Identify inconsistencies between the project plans and work products and the requirements.

CENTRE Evidence: Each **CENTRE** Requirement is a task within a "Release" project:

CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper
Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 5 of 6



The direct evidence for this specific practice is that **CENTRE** enables "Requirements" to be defined as tasks of a Project and be subject to **Project Planning** and **Project Monitoring and Control.**

CENTRE CMMI Version 1.2 Compliance, Requirements Management - White Paper Author: Michael P. Angelakis DCS #1002 Version: 4.0 Date: 04/13/10 Page 6 of 6