

## **CENTRE**™ (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/](http://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](http://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 1.2 Artifacts for Process Improvement**

**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 1.2 Artifacts for Process Improvement

## CENTRE CMMI Specific & Generic Evidence Elements:

### CENTRE – Organizational Process Focus

SP 1.1 *Establish and maintain the description of the process needs and objectives for the organization.*

**CENTRE Evidence:** The Organizational Process library direct evidence provided for compliance with this Specific Practice is the Document and Records Control module.

**CENTRE**

User: Marine  
[View My Employee Profile](#)  
[Change Password](#)  
[Accessibility Policy](#)

Home IT Service Management Change & Configuration Management Supply Chain Management Measurement & Analysis Problem Management Project & Financial Management Contract, Risk & SLA Management **Document & Record Control**

My Services Products & Services Catalog

#### Document Control

SEARCH FOR DOCUMENT

Document #:  -V

Title:

Abstract:

File Names:

Owner: Select a Owner

Classification Level: Select a Classification Level Code

DOCUMENT#	TITLE	AUTHOR	DCS SUBMISSION DATE	DB INFO REVISED	
991-V1	CENTRE Release 4.6.8 Internal Training Course Outline - Software Engineering	George Hadjikyriakou	10/23/2008 12:16:57 PM	10/24/2008 9:56:40 AM	<a href="#">View</a>
995-V1	Configuration Management, CMMI Training - Executive Management	Michael Angelakis	11/4/2008 10:16:41 AM	11/4/2008 10:16:41 AM	<a href="#">View</a>
994-V1	Draft Procedure - Validation, ITG QP-24 - Executive Management	Michael Angelakis	11/4/2008 9:03:15 AM	11/4/2008 9:47:00 AM	<a href="#">View</a>
			9:18 PM	11/3/2008 5:31:12 PM	<a href="#">View</a>

**CENTRE Release 4.6.8: Defects, New Features, and Changed Functionality**

**Course Description**

In this 60-minute training session, participants will be briefed in the new features, changed functionality, and corrected defects that were introduced as part of CENTRE Release 4.6.8. Affected CENTRE modules include Contracts Module, Projects Module, Service Records Module, Labor Resources Module, DCS, RCS, and Configuration Management Module.

**Objectives**

#### Records Control

SEARCH FOR RECORD

Record #:  -V

Title:

Comments:

File Names:

Access Type: Select an access type

Record Format: Select a record format

RECORD#	TITLE	AUTHOR	RCS SUBMISSION DATE	DB INFO REVISED	
379-V1	8010-000 Adelpia Cable Billing Spreadsheet	Judy Rexin	9/1/2008 10:45:50 AM	9/1/2008 10:46:47 AM	<a href="#">View</a>
449-V1	ITG Depot Audit Reports	Eric Tong	9/1/2008 10:45:50 AM	9/29/2008 5:37:38 PM	<a href="#">View</a>
231-V1	QA test results-Compaq parts	Eric Tong	9/1/2008 10:45:50 AM	9/1/2008 10:46:47 AM	<a href="#">View</a>
224-V1	Enrollment Packages	Harry Engel	9/1/2008 10:45:50 AM	9/1/2008 10:46:47 AM	<a href="#">View</a>
	Anti-Discrimination Test	Michael Short	9/1/2008 10:45:50 AM	9/1/2008 10:46:47 AM	<a href="#">View</a>

**Access Type: Public**  
**Record Format: Paper**  
**Main Location: 2744 b Gallow RD**  
**Sub Location: Cabinet# 4, Shelf #2**  
**Retention Period: 1 year**  
**Disposal Method: Shred**  
**Obsolete: Yes**  
**Classification Level: 1 - Public**

CENTRE CMMI Version 1.2 Compliance, Organizational Process Focus - White Paper

Author: Michael P. Angelakis

DCS #1034

Version: 4.0

Date: 04/13/10

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## CENTRE CMMI 1.2 Artifacts for Process Improvement

SP 1.2 *Appraise the organization's processes periodically and as needed to maintain an understanding of their strengths and weaknesses.*

**CENTRE Evidence:** The direct evidence supporting compliance with this Specific Practice is Organizational ISO Registration/Surveillance and Internal Audits as well as CMMI Appraisals. Specifically addressing CENTRE Industry compliance, the direct evidence includes ITIL Pink Elephant audits and certifications.

SP 1.3 *Identify improvements to the organization's processes and process assets.*

**CENTRE Evidence:** Change Requests classified as Improvements, Corrective & Preventive Actions and Organizational Innovations are the direct evidence to support compliance with this Specific Practice.

Search for Change

**SEARCH CHANGE REQUEST**

Change Request ID:

Change Request Name:

Proposed Change:

Potential Non-Conformance/Justification:

Root Cause:

Actions Summary:

Category:

Change Type:

Change Authority:

Action Type:

Issued By:

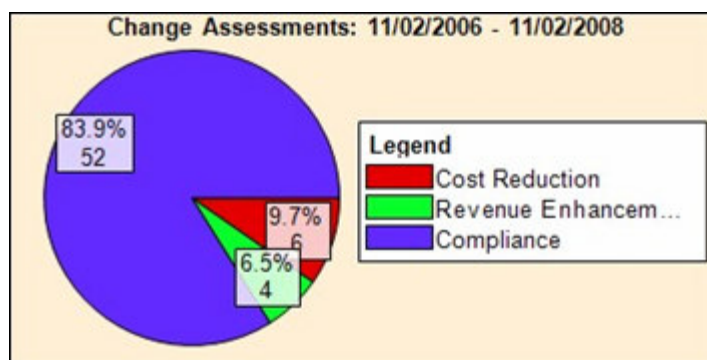
Approved By:

Assigned To:

Status:

Improvement  
Corrective Action  
Preventive Action  
Organizational Innovation  
Contract Initiation

Change Request #	Change Request Name	Change Authority	Proposed Change	Issued Date	Issued By
22	Configuration Items	Best Practices MRB	Define all items deemed as "Configuration Items" and make them available through a drop down menu selection. Further, define the appropriate change authority for each item and populate automatically the "Change Authority" field. Permit the selection of	12/11/2006 10:22:36 AM	Angel Michael
23	Risk Management	Software Engineering MRB	Enable Contract, Project and Task screens to record multiple potential risks and related mitigations	12/11/2006 10:34:39 AM	Angel Michael
25	Departmental Data Normalization	Software Engineering MRB	Please update the selection of "Affected Departments" list with all the valid departments within ITG. Please use the Organizational Chart to verify Department number and names.	12/11/2006 12:51:54 PM	Angel Michael



## CENTRE CMMI 1.2 Artifacts for Process Improvement

Compliance refers to conformity with Industry Standards including all Process Areas defined below. Each Change request is classified/marked for the Process Areas that are affected by its incorporation into the system.

CHANGE REQUEST [ 284 ] – PROCESS AREAS		
Process Area Name	Process Area Description	Select
CMMI/CAR	Causal Analysis & Resolution	<input type="checkbox"/>
CMMI/CM	Configuration Management	<input type="checkbox"/>
CMMI/DAR	Decision Analysis & Resolution	<input type="checkbox"/>
CMMI/IPM	Integrated Project Management + IPPD	<input type="checkbox"/>
CMMI/MA	Measurements & Analysis	<input type="checkbox"/>
CMMI/OID	Organizational Innovation & Deployment	<input type="checkbox"/>
CMMI/OPD	Organizational Process Definition	<input type="checkbox"/>
CMMI/OPP	Organizational Process Performance	<input type="checkbox"/>
CMMI/OT	Organizational Training	<input type="checkbox"/>
CMMI/PI	Product Integration	<input type="checkbox"/>
CMMI/PMC	Project Monitoring & Control	<input type="checkbox"/>
CMMI/PP	Project Planning	<input type="checkbox"/>
CMMI/PPQA	Process & Product Quality Assurance	<input type="checkbox"/>
CMMI/QPM	Quantitative Project Management	<input type="checkbox"/>
CMMI/RD	Requirements Development	<input type="checkbox"/>
CMMI/REQM	Requirements Management	<input type="checkbox"/>
CMMI/RSKM	Risk Management	<input type="checkbox"/>
CMMI/SAM	Supplier Agreement Management	<input type="checkbox"/>
CMMI/TS	Technical Solution	<input type="checkbox"/>
CMMI/VAL	Validation	<input checked="" type="checkbox"/>
CMMI/VER	Verification	<input type="checkbox"/>
Deleted		<input type="checkbox"/>
ISO 20000-1:2005	SECTION 4 – PLANNING AND IMPLEMENTING SERVICE MANAGEMENT	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 5 – PLANNING AND IMPLEMENTING NEW OR CHANGED SERVICES	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 6 – SERVICE DELIVERY PROCESS	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 7 – RELATIONSHIP PROCESSES	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 8 – RESOLUTION PROCESSES	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 9 – CONTROL PROCESSES	<input type="checkbox"/>
ISO 20000-1:2005	SECTION 10 – RELEASE PROCESSES	<input checked="" type="checkbox"/>
ISO 27001	Network Security	<input type="checkbox"/>
ISO 27001	Business Continuity	<input type="checkbox"/>
ISO 9001:2000	8.2.2 Internal Quality Audits	<input type="checkbox"/>
ISO 9001:2000	8.2 Monitoring and Measurement	<input type="checkbox"/>
ISO 9001:2000	4.2.3 Control of Documents	<input type="checkbox"/>
ISO 9001:2000	4.2.4 Control of Records	<input type="checkbox"/>
ISO 9001:2000	8.2.1 Customer Satisfaction	<input type="checkbox"/>
ITIL/Availability Management	ITIL V3 Availability Management	<input type="checkbox"/>
ITIL/Capacity Management	Capacity Management	<input type="checkbox"/>
ITIL/Change Management	Change Management	<input type="checkbox"/>
ITIL/Configuration Management	Configuration Management	<input type="checkbox"/>
ITIL/Event Management	ITIL V3 Process Area	<input type="checkbox"/>
ITIL/Incident Management	Incident Management	<input type="checkbox"/>
ITIL/Problem Management	Problem Management	<input type="checkbox"/>
ITIL/Release Management	Release Management	<input checked="" type="checkbox"/>
ITIL/Request Fulfillment	ITIL V3 Process Area	<input type="checkbox"/>
ITIL/Service Catalog	ITIL V3 Process Area	<input type="checkbox"/>
ITIL/SLA Management	Service Level Agreement Management	<input type="checkbox"/>

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## CENTRE CMMI 1.2 Artifacts for Process Improvement

**SP 2.1** *Establish and maintain process action plans to address improvements to the organization's processes and process assets.*

**CENTRE Evidence:** The CENTRE Document and Records Control module contains all documented processes. Selected processes as seen below may be used as direct evidence for compliance with this Specific Practice.

<u>DOCUMENT#</u>	<u>TITLE</u>	<u>AUTHOR</u>	<u>DCS SUBMISSION DATE</u>
937-V1	Draft Procedure - IT Security Management, ITG QP-22 - Executive Management	Michael Angelakis	2/12/2008 2:06:51 PM
994-V1	Draft Procedure - Validation, ITG QP-24 - Executive Management	Michael Angelakis	11/4/2008 9:03:15 AM
993-V1	Draft Procedure - Verification, ITG QP-23 - Executive Management	Michael Angelakis	11/3/2008 3:49:18 PM
769-V2	Procedure - Change Management, ITG QP-16 - Executive Management	Michael Angelakis	2/20/2007 3:57:28 PM
807-V2	Procedure - Configuration Management, ITG QP-19 - Executive Management	Michael Angelakis	5/10/2007 4:16:45 PM
147-V7	Procedure - Control of Documents, ITG QP-2 - Executive Management	Lefteris Karmiris	6/28/2004 11:47:00 AM
148-V2	Procedure - Control of Non-Conforming Products, ITG QP-4 - Executive Management	Lefteris Karmiris	6/28/2004 12:08:00 PM
146-V4	Procedure - Control of Records, ITG QP-3 - Executive Management	Lefteris Karmiris	6/28/2004 11:34:00 AM
150-V5	Procedure - Corrective Action, ITG QP-6 - Executive Management	Lefteris Karmiris	6/28/2004 12:37:00 PM
617-V3	Procedure - Decision Analysis and Resolution, ITG QP-14 - Executive Management	Michael Angelakis	10/6/2005 1:47:00 PM
220-V4	Procedure - Internal Audits, ITG QP-7 - Executive Management	Lefteris Karmiris	7/30/2004 5:00:00 PM
544-V1	Procedure - Management Review Boards, ITG QP-11 - Executive Management	Michael Angelakis	5/12/2005 5:57:00 PM
151-V4	Procedure - Management Review, ITG QP-8 - Executive Management	Michael Angelakis	6/28/2004 12:48:00 PM
806-V2	Procedure - Organizational Innovation and Deployment, ITG QP-18 - Executive Management	Michael Angelakis	5/10/2007 1:30:02 PM
905-V2	Procedure - Organizational Process Performance, ITG QP-20 - Executive Management	Michael Angelakis	11/5/2007 4:31:59 PM
580-V3	Procedure - Organizational Training, ITG QP-13 - Executive Management	Tina Hong	7/20/2005 4:10:00 PM
159-V4	Procedure - Preparation and Submission of Procedures, ITG QP-1 - Executive Management	John Cambiotis	6/29/2004 7:58:00 PM
149-V3	Procedure - Preventive Action, ITG QP-5 - Executive Management.	Lefteris Karmiris	6/28/2004 12:23:00 PM
953-V1	Procedure - Problem Analysis and Resolution, ITG QP-23 - Executive Management	Michael Angelakis	4/4/2008 5:06:12 PM
804-V2	Procedure - Process Performance Measurements, ITG QP-17 - Executive Management	Michael Angelakis	5/9/2007 3:38:36 PM

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## CENTRE CMMI 1.2 Artifacts for Process Improvement

### SP 2.2 *Implement process action plans.*

**CENTRE Evidence:** The direct evidence for compliance with this Specific Practice is contained in the Projects module as action plan implementations.

MANAGE PROJECTS														
SHOW <input type="text" value="Query"/>		PROJECTS		<input type="button" value="Refresh"/>										
Project Name		Contract Number	Status	Priority	Plan Start Date	Actual Start Date	Planned End Date	Actual End Date	POC	DAR	View Project Summary	View Tasks	View Hours	View Gantt
<a href="#">CLIN V Desktop Refresh</a>	<a href="#">Search Survey</a>	8068-005	Active	1	7/1/2008 9:00:00 AM	7/1/2008 8:00:00 AM	12/18/2008 6:00:00 PM		Sheri Mendez	NO	<b>SUMMARY</b>	<b>TASKS</b>		

### SP 3.1 *Deploy organizational process assets across the organization.*

**CENTRE Evidence:** The direct evidence for compliance with this Specific Practice is the deployment of CENTRE and associated documentation.



### SP 3.2 *Deploy the organization's set of standard processes to projects at their startup and deploy changes to them as appropriate throughout the life of each project.*

**CENTRE Evidence:** The direct evidence for compliance with this Specific Practice is Change and Project Management records.

#### Change Management Records

SELECT CHANGE REQUEST								
Change Request #	Change Request Name	Change Authority	Proposed Change		Issued Date	Issuer	Approved	Priority
<a href="#">4</a>	Improve Phone Answering Procedure	Department Manager	How to answer phone by COs		9/18/2006 6:24:52 PM	Karmiris, Leftaris	1/23/2007 4:36:27 PM	LOW
<a href="#">5</a>	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
<a href="#">6</a>	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
<a href="#">7</a>	ITIL Requirement – Add a Severity code and SLA values to the asset data record and	Software Engineering MRB	1- 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		10/13/2006 5:37:16 PM	Vespe, Robert R.	11/9/2006 11:10:56 AM	HIGH

#### Project Management Records

Project Name		Contract Number	Status	Priority	Plan Start Date	Actual Start Date	Planned End Date	Actual End Date	POC	DAR	View Project Summary	View Tasks	View Hours	View Gantt
<a href="#">8026-000 Depot Billing</a>	<a href="#">Search Survey</a>	8026-000	Active	1	6/9/2006 8:00:00 AM	6/9/2006 8:00:00 AM	7/31/2009 5:00:00 PM		Jason Dudley	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		
<a href="#">8032-000 Depot Billing</a>	<a href="#">Search Survey</a>	8032-000	Active	1	6/5/2006	6/5/2006	10/14/2011		Jason Dudley	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		
<a href="#">8055-002 Depot Billing</a>	<a href="#">Search Survey</a>	8055-002	Active	1	6/6/2006 8:00:00 AM	6/6/2006 8:00:00 AM	9/30/2013 5:00:00 PM		Jason Dudley	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		
<a href="#">8068-000 Depot Billing</a>	<a href="#">Search Survey</a>	8068-000	Active	1	6/5/2006	6/5/2006	12/29/2011		Jason Dudley	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		
<a href="#">8076-000 Contract Billing</a>	<a href="#">Search Survey</a>	8076-000	Active	1	6/5/2006	6/5/2006	11/30/2008		Jason Dudley	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		
<a href="#">8102-555 LGB Best Practices Management</a>	<a href="#">Search</a>	8102-555	Active	1	3/20/2008	3/20/2008	8/20/2008		Michael	NO	<a href="#">SUMMARY</a>	<a href="#">TASKS</a>		

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## CENTRE CMMI 1.2 Artifacts for Process Improvement

**SP 3.3** *Monitor the implementation of the organization's set of standard processes and use of process assets on all projects.*

**CENTRE Evidence:** The direct evidence for compliance with this Specific Practice are Measurement and Analysis records and related Project reports as seen throughout this document.

MEASUREMENT & ANALYSIS		
Reports marked with a (Y) will only retrieve data from year <input type="text" value="2008"/> and beyond. You may change this to access data prior to the current year.		
<b>Project</b>	<input type="radio"/> Find Tasks Exceeding Planned Period of Performance	<input type="radio"/> Find Project Cost Categories Exceeding Year To Date Budget <input type="radio"/> Project Financial Performance
<b>QA</b>	<input type="radio"/> Contract QA Summary Results <input type="radio"/> Contract QA Summary Results By TAM <input type="radio"/> Contract QA Summary Results By SME <input type="radio"/> Contract QA Summary Results By Local FE <input type="radio"/> Contract QA Summary Results For a specified Score and Specified User Category	<input type="radio"/> QA Summary Results For Each Contract <input type="radio"/> Contract QA Summary Results By City <input type="radio"/> Contract QA Summary Results By BDM <input type="radio"/> Contract QA Summary Results By Subcontractor <input type="radio"/> Contract QA Less than Mean and Parameter