

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/)

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 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.

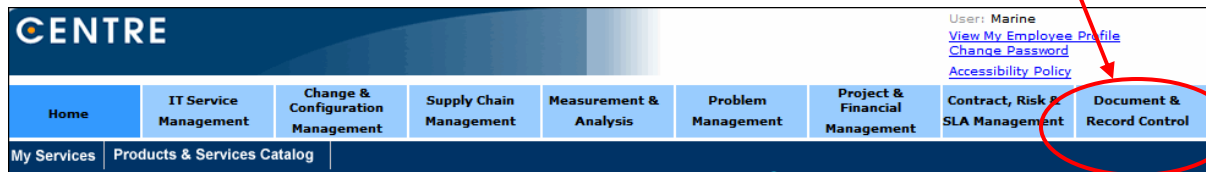
CENTRE CMMI 1.2 Artifacts for Process Improvement

CENTRE CMMI Specific & Generic Evidence Elements:

CENTRE – Organizational Process Definition

SP 1.1 *Establish and maintain the organization's set of standard processes*

CENTRE Evidence: The direct evidence provided for compliance with this Specific Practice are the Quality Procedures, Quality Work Instructions, Corporate Policies and Guidance related documents residing in the Document and Records Control module.



SP 1.2 *Establish and maintain descriptions of the lifecycle models approved for use in the organization.*

CENTRE Evidence: The direct evidence supporting compliance with this Specific Practice is contained in DCS #536, Software Engineering Department Operations Description. The model described is Waterfall with Iterative and Incremental content.

Software Engineering Department Operations Description - Software Engineering				
Document#	Document type	DCS Submission Date	Classification Level	Owner
Document #536-V18	Work Instructions/Descriptions	5/9/2005 1:32:00 PM	1 - Public	George Hadjikyriakou
Publication Info		Contents Revised	DB Info Revised	
		4/7/2008 5:28:13 PM	10/29/2008 10:51:24 AM	
Authors		Department	Restricted to	
George Hadjikyriakou		Software Engineering		
Abstract		View Document		
This document outlines the goals to be satisfied and the practices to be followed during the execution of software projects. They have been designed to fulfill ITG's quality requirements and to ensure minimum level of effort, reduced cost, and high-quality deliverables. Added description of recently developed models used for estimation of hours, defects, and completion date prediction.		Software Engineering Department Operations Description - Software Engineering v18.doc		
Past Obsolete versions		Retrieve archive of files as		
536-V1	5/9/2005 1:32:00 PM			
536-V2	5/18/2005 10:55:00 AM			
536-V3	6/13/2005 2:52:00 PM			
536-V4	6/27/2005 3:30:00 PM			
536-V5	9/8/2005 1:23:00 PM			
536-V6	11/2/2005 9:06:00 AM			
536-V7	11/4/2005 10:25:00 AM			
536-V8	11/10/2005 10:14:00 AM			
536-V9	1/25/2006 10:46:00 AM			
536-V10	6/2/2006 11:24:00 AM			
536-V11	6/7/2006 3:50:00 PM			
536-V12	6/12/2006 5:34:00 PM			
536-V13	11/14/2006 1:13:16 PM			
536-V14	11/22/2006 1:21:47 PM			
536-V15	6/19/2007 4:50:14 PM			
536-V16	4/2/2008 5:45:18 PM			
536-V17	4/3/2008 9:06:23 AM			

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

Author: Michael P. Angelakis

DCS #1033

Version: 3.0

Date: 04/13/10

Page 3 of 7

This document contains sensitive, proprietary and privileged information which may not be disclosed, copied, distributed or used in any manner by other parties without the expressed written consent of Integration Technologies Group, Inc.

CENTRE CMMI 1.2 Artifacts for Process Improvement

SP 1.3 *Establish and maintain the tailoring criteria and guidelines for the organization's set of standard processes.*

CENTRE Evidence: The direct evidence to support compliance with this Specific Practice is contained in Quality Procedure QP-21, Tailoring Guidelines.

SEARCH FOR DOCUMENT

Document #: -V

Title:

Abstract:

File Names:

DOCUMENT#	TITLE	AUTHOR	DCS SUBMISSION DATE	DB INFO REVISED
906-V1	Procedure - Tailoring Guidelines, ITG QP-21 - Executive Management	Michael Angelakis	11/5/2007 4:45:05 PM	10/30/2008 3:51:36 PM

Procedure - Tailoring Guidelines, ITG QP-21 - Executive Management

Document#	Document type	DCS Submission Date	Classification Level	Owner
Document #906-V1	Quality Procedures	11/5/2007 4:45:05 PM	1 - Public	Michael Angelakis

Publication Info **Contents Revised** **DB Info Revised**
11/5/2007 4:45:05 PM 10/30/2008 3:51:36 PM

Authors	Department	Restricted to
Michael Angelakis	Executive Management	

Abstract **View Document**

This procedure defines the guidelines for changes to Company processes. This document was approved by the Best Practices MRB on November 2, 2007.

[Procedure - Tailoring Guidelines, ITG QP-21 - Executive Management.doc](#)

Past Obsolete versions **Retrieve archive of files as**

SP 1.4 *Establish and maintain the organization's measurement repository.*

CENTRE Evidence: The totality of CENTRE records, across all modules, constitutes the organizational measurement repository.

As seen on the following page, in addition to the referenced records above, CENTRE maintains a repository of Standards and Models compliance by relating Change Requests and Requirements to supported process areas.

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

Author: Michael P. Angelakis

DCS #1033

Version: 3.0

Date: 04/13/10

Page 4 of 7

This document contains sensitive, proprietary and privileged information which may not be disclosed, copied, distributed or used in any manner by other parties without the expressed written consent of Integration Technologies Group, Inc.

CENTRE CMMI 1.2 Artifacts for Process Improvement

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"/>

CENTRE CMMI 1.2 Artifacts for Process Improvement

SP 1.5 *Establish and maintain the organization's process asset library.*

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

CENTRE CMMI 1.2 Artifacts for Process Improvement

SP 1.6 *Establish and maintain work environment standards.*

CENTRE Evidence: The direct evidence for compliance with this Specific Practice is contained within the Documents and Records Control module as the following artifacts:

EMRP (DCS #434)

Employee Handbook (DCS #161)

CPR certifications

Harassment Training (DCS #766)

Disability Sensitivity (DCS #364)

Fire Evacuation Plan

Work Instruction: ITG Software Development, ITG QWI-19 (DCS #528)

Procedure: Software Development, ITG QP-15 (DCS #623)

Information Technology Services Management (DCS #738)

Information Security Management System (DCS #959)