

SEI CMMI-DEV Reference Legend for CAI Process Alignment Grid

SEI Goals/Key Practices Legend

	Key Practice
	Goal
	Activity
	Commitment
	Ability
	Measurement
	Verification
	Definition of an Involved Group

Reference Document Legend

	CAI Application Support Process Guide
	Tracer User Guide
	Transition Guide: Volumes 1, 2A, 2B, 2C, AKT Training, AKT Estimating, Application Knowledge Notebook, Team Leader KnowledgeNotebook, Training, Team Operations Notebook, Associate Notebook
	Assessment Guide
	CAI Knowledge Databases
	Tracer User Group
	Tracer (as a tool)
	CAI Application Support Process and Tracer Training
	IT Support Leadership Workshop
	Does Not Apply to Application Support Function
	Documentation Standards Manual

CMMI-DEV: Level – 2

SEI Goals/Key Practices		Addressed by MM Process (Y/N)	LEVEL 2: REPEATABLE				
Requirements Management (RM)		Level 2	Reference or Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	Process Step/Task	Document Reference(s)
GOAL 1: System requirements allocated to software are controlled to establish a baseline for software engineering and management use.							
Software engineering group: Team Leader/Team analysts; Project Manager: Team Leader; REVISIONS: Senior Management: Account Manager, Business Unit Manager, Service Delivery Manager (SDM); Software Quality Assurance Group: CAI Quality Organization;							
1. The software engineering group reviews the allocated requirements before they are incorporated into the software project.		Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 2, 8	WR35 Requirements Definition Checklist
GOAL 2: Software plans, products, and activities are kept consistent with the system requirements allocated to software.							
2. The software engineering group uses the allocated requirements as the basis for software plans, work products, and activities.		Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 9, 10, 11, 27	WR19A Member Modification Checklist WR21 Database Change Request Form WR32 Work Request Folder Checklist WR38 Work Request Planning Checklist WR44 Work Request Management Plan
3. Changes to the allocated requirements are reviewed and incorporated into the software project.		Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 22, 32, 33	WR25 Supplemental Project Change Request (Scope Change) WR38 Work Request Planning Checklist WR44 Work Request Management Plan
Commitment 1 - The project follows a written organizational policy for managing the system requirements allocated to software.		Y	CAI Software Policy Manual	Requirements Management (RM)	Requirements Management Policy		
		Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 2, 5, 8, 32, 33	WR25 Supplemental Project Change Request (Scope Change) WR35 Requirements Definition Checklist
Ability 1 - For each project, responsibility is established for analyzing the system requirements and allocating them to hardware, software, and other system components.					Does Not Apply to MM		
Ability 2 - The allocated requirements are documented.		Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 1, 2, 3	WR01 Work Request TLKT49 Work Request Management Plan
Ability 3 - Adequate resources and funding are provided for managing the allocated requirements.		Y	OPS Guide	Introduction	Team Roles and Responsibilities		
				Section 1 and Appendix A	Work Request Process and WR Documents	Steps 2, 5, 7, 8	WR35 Requirements Definition Checklist

Ability 4 - Members of the software engineering group and other software-related groups are trained to perform their requirements management activities.	Y	MM Trainer's Manual Vol. 1	Policies and Procedures; Multimedia Training	-	-	Complete Volume; Tests, Training Evaluations
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Test Module CD, MM Supplementary Files CD Tracer Supplementary Files CD
	Y	Transition Guide, Volume 1	Activity 3800	Initial Team Activities	Task 3810	TLKT39 Client Development Standards
			Activity 7500	Client Process and Procedures	Task 7505	TLKT25 WR Process Amendments
			Activity 8100	Establish Documents for Current Site	Task 8125	
			Activity 8200	Train CAI Team in Managed Maintenance Process	ALL TASKS	TG07 MM Training Request
		Activity 8300	Train CAI Team in CAI Managed Maintenance Software (Tracer)	ALL TASKS	TG07 MM Training Request	
Measurement 1 - Measurements are made and used to determine the status of the activities for managing the allocated requirements.	Y	OPS Guide	Section 1, Appendix A, and Section 5	Performance Metrics and Modified Function Points Review	Tracer as a tool. Steps 16,17	WR16 User Group Meeting Minutes WR17 & WR18 WR Status Reports
Verification 1 - The activities for managing the allocated requirements are reviewed with senior management on a periodic basis.	Y	OPS Guide	Introduction	Team Roles and Responsibilities		Definition of Senior Management
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 6, 17, 18, 19	WR16 User Group Meeting Minutes WR17 Open Work Request Status Report WR18 Closed Work Request Status Report WR37 Agenda for Monthly Client Management Meeting
Verification 2 - The activities for managing the allocated requirements are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 6, 17, 18, 19, 34	WR16 User Group Meeting Minutes WR17 Open Work Request Status Report WR18 Closed Work Request Status Report WR26 Work Request Issue Form WR37 Agenda for Monthly Client Management Meeting
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the allocated requirements and reports the results.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 27, 29, 42, 46	WR19a Member Modification Checklist WR21 Database Change Request Form WR23 Program Quality Control Checklist WR32 Work Request Folder Checklist WR36 Quality Control Issue Description WR39 Peer Review Status
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Software Project Planning (SPP)	Level 2	Reference Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	Process Step/Task	Document Reference(s)
GOAL 1: Software estimates are documented for use in planning and tracking software.						
SPP (Project Development Plan)						

9. Estimates for the size of the software work products (or changes to the size of software work products) are derived according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 11, 12, 22, 23, 32, 33	WR03 Online Enhancement Complexity Worksheet WR04 Online Enhancement Complexity Worksheet Instructions WR05 Online New Complexity Worksheet WR06 Online New Complexity Worksheet Instructions WR07 Batch Enhancement Complexity Worksheet WR08 Batch Enhancement Complexity Worksheet Instructions WR09 Batch New Complexity Worksheet WR10 Batch New Complexity Worksheet Instructions WR11 Work Request Estimating Matrix WR25 Supplemental Project Change Request (Scope Change)
10. Estimates for the software project's effort and costs are derived according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 11 to 13, 22	WR03 Online Enhancement Complexity Worksheet WR04 Online Enhancement Complexity Worksheet Instructions WR05 Online New Complexity Worksheet WR06 Online New Complexity Worksheet Instructions WR07 Batch Enhancement Complexity Worksheet WR08 Batch Enhancement Complexity Worksheet Instructions WR09 Batch New Complexity Worksheet WR10 Batch New Complexity Worksheet Instructions WR11 Work Request Estimating Matrix WR12 Work Request Estimate WR13 Estiamte Notification Memo
11. Estimates for the project's critical computer resources are derived according to a documented procedure.				Does Not Apply to MM		
12. The project's software schedule is derived according to a documented procedure.	Y	OPS Guide	Section 1, Appendix A, Appendix H, and Appendix I	Work Request Process and WR Documents	Steps 16, 17, 22, 23, 24	WR16 User Group Meeting Minutes WR37 Agenda for Monthly Client Managemetn Meeting WR38 Work Request Planning Checklist WR44 Work Request Management Plan TLKT48 Project Development Plan TLKT49 Work Request Management Plan

15. Software planning data are recorded.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 10, 11, 17, 23, 24	WR03 Online Enhancement Complexity Worksheet WR04 Online Enhancement Complexity Worksheet Instructions WR05 Online New Complexity Worksheet WR06 Online New Complexity Worksheet Instructions WR07 Batch Enhancement Complexity Worksheet WR08 Batch Enhancement Complexity Worksheet Instructions WR09 Batch New Complexity Worksheet WR10 Batch New Complexity Worksheet Instructions WR11 Work Request Estimating Matrix WR12 Work Request Estimate
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, WR Unestimated, WR Preliminary Estimate Completed Graph, WR Event Printout
GOAL 2: Software project activities and commitments are planned and documented.						
2. Software project planning is initiated in the early stages of, and in parallel with, the overall project planning.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8 ,9, 10	WR35 Requirements Definition Checklist WR38 Work Request Planning Checklist WR44 Work Request Management Plan TLKT48 Project Development Plan
5. A software life cycle with predefined stages of manageable size is identified or defined.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents		P02 Work Request Process Flow
6. The project's software development plan is developed according to a documented procedure.	Y	OPS Guide	Section 1, Appendix A and Appendix H	Work Request Process and WR Documents	Steps 1 to 51	WR38 Work Request Planning Checklist WR44 Work Request Management Plan TLKT48 Project Development Plan TLKT49 Work Request Management Plan
7. The plan for the software project is documented.	Y	OPS Guide	Section 1, Appendix A and Appendix H	Work Request Process and WR Documents	Steps 10, 17, 22	WR38 Work Request Planning Checklist WR44 Work Request Management Plan TLKT48 Project Development Plan TLKT49 Work Request Management Plan
8. Software work products that are needed to establish and maintain control of the software project are identified.	Y	OPS Guide	Section 1 and Appendix A Appendix I	Work Request Process and WR Documents	Steps 10, 17, 22, 23, 34	WR12 Work Request Estimate WR13 Estimate Notification Memo WR17 Open Work Request Status Report WR18 Closed Work Request Status Report Final Estimate WR38 Work Request Planning Checklist WR44 Work Request Management Plan TLKT48 Project Development Plan
13. The software risks associated with the cost, resource, schedule, and technical aspects of the project are identified, assessed, and documented.	Y	OPS Guide	Introduction	Roles and Responsibilities/Identify Project Risks		
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8 to10, 22, 23, 32 to 35	WR01 Work Request WR25 Supplemental Project Change Request WR26 Work Request Issue Form WR38 Work Request Planning Checklist WR44 Work Request Management Plan
14. Plan for the project's software engineering facilities and support	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8 to 10	WR35 Requirements Definition Checklist

tools are prepared.	Y	Transition Guide, Volume 1	Activity 3300	Identify All Physical Requirements	ALL TASKS	AKT18 Library Environment TLKT05 Account Overview TLKT18 Time Reporting Guidelines TLKT33 After-Hours Procedures TLKT39 Client Development Standards TR41 Tracer Install Plan and Schedule TR42 Tracer Table Initialization Worksheet
			Activity 3400	Establish Physical Operation	ALL TASKS	
			Activity 3500	Security	ALL TASKS	
			Activity 3600	Start Team on Client Site	Tasks 3620 to 3640	
			Activity 3800	Initial Team Activities	ALL TASKS	
GOAL 3: Affected groups and individuals agree to their commitments related to the software project.						
Software Engineering Group and other affected groups (CAI MM Team)						
1. The software engineering group participates on the project proposal team.				Does Not Apply to MM		
3. The software engineering group participates with other affected groups in the overall project planning throughout the project's life.	Y	OPS Guide	Section 1, Appendix A, and Appendix H	Work Request Process and WR Documents	Steps 8, 9, 10, 16	WR17 Open Work Request Status Report WR18 Closed Work Request Status Report TR20 Service Level Agreement Team Operations Notebook
Individuals and groups external to the organization (User Group); organization (CAI Application Support Teams); Senior Management (Team Leader) REVISIONS: Senior Management: Account Manager, Business Unit Manager, Service Delivery Manager (SDM)						
4. Software project commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 14, 16, 19, 22, 55	WR12 Work Request Estimate WR15 Team Leader Weekly Report Checklist WR17 Open Work Request Status Report WR18 Closed Work Request Status Report
	Y	Transition Guide, Volume 1	Activity 9300	Status Reporting	Tasks 9305, 9320, 9325	
Commitment 1 - A project software manager is designated to be responsible for negotiating commitments and developing the project's software development plan.	Y	Transition Guide, Volume 1	CAI Roles for the Transition		Activities 2300 and 11200	TLKT25 WR Process Amendments TLKT48 Project Development Plan TLKT49 Work Request Management Plan Team Operations Notebook
Commitment 2 - The project follows a written organizational policy for planning a software project.	Y	CAI Software Policy Manual	Project Development	Assign Team Leader		
Ability 1 - A documented and approved statement of work exists for the software project.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 1, 8, 9, 10	WR01 Work Request WR12 Work Request Estimate WR13 Estimate Notification Memo WR35 Requirements Definition Checklist WR38 Work Request Planning Checklist
	Y	Transition Guide, Volume 1	Activity 4100	Initial Scope Analysis	Tasks 4125, 4130	TR11 (Manage Maintenance Engagement Scope Document)
Ability 2 - Responsibilities for developing the software development plan are assigned.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 5, 7, 21	Assigned in Tracer
Ability 3 - Adequate resources and funding are provided for planning the software project.	Y	Transition Guide, Volume 1	Activity 2100	Prepare and Interview for Staffing	ALL TASKS	
			Activity 2200	Hire Team	ALL TASKS	

			Activity 3600	Start Team on Client Site	ALL TASKS	
Ability 4 - The software managers, software engineers, and other individuals involved in the software project planning are trained in the software estimating and planning procedures applicable to their areas of responsibility.	Y	Transition Guide, Volume 1	Activity 8200	Train CAI Team in Managed Maintenance Process	ALL TASKS	
			Activity 8300	Train CAI Team in CAI Managed Maintenance Software (Tracer)	ALL TASKS	
Measurement 1 - Measurements are made and used to determine the status of the software planning activities.	Y	Tracer User Guide	Chapter 7 Appendix A Appendix F	Tracer Report Module and Report Samples		WR Status Report, WR Unestimated, WR Preliminary Estimate Completed Graph, WR Event Printout
Verification 1 - The activities for software project planning are reviewed with senior management on a periodic basis.	Y	OPS Guide	Introduction	Define Senior Management		
			Section 1 and Appendix A	Work Request Process and WR Documents	Step 55	Weekly Status Report, WR15 Team Leader Report Checklist TR20 Monthly Status Report
Verification 2 - The activities for software project planning are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 19, 32, 34, 55	WR15 Team Leader Report Checklist WR17 Open Work Request Status Report WR18 Closed Work Request Status Report WR25 Supplemental Project Change Request WR26 Work Request Issue Form Weekly Staff Meeting, SLA
REVISIONS: Senior Quality Assurance Group: CAI Corporate Quality Organization						
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software project planning and reports the results.	Y	OPS Guide	Introduction			
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 27, 29, 42, 46	WR19a Member Modification Checklist WR21 Database Change Request Form WR23 Program Quality Control Checklist WR32 Work Request Folder Checklist WR36 Quality Control Issue Description WR39 Peer Review Status
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Software Project Tracking and Oversight (SPT&O)	Level 2	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	Document Reference(s)
GOAL 1: Actual results and performance are tracked against the software plans.						
1. A documented software development plan is used for tracking the software activities and communicating status.	Y	OPS Guide	Section 1, Appendix A, Appendix H and Appendix I	Work Request Process and WR Documents	Steps 1 - 55	WR17 to WR23 TLKT48 (Project Development Plan), TLKT49
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		Event Printout, WR Status Report, Issue Report
5. The size of the software work products (or size of changes to the software work products) are tracked, and corrective actions are taken as necessary. (This activity also supports Goal 2.)	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		Event Printout, WR Status Report, WR19a (Member Modification Checklist)
6. The project's software effort and costs are tracked, and corrective	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 10, 11	WR03 to WR11 Complexity Estimating

actions are taken as necessary. (This activity also supports Goal 2.)	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		Event Printout, WR Status Report, Performance Reports
7. The project's critical computer resources are tracked, and corrective actions are taken as necessary. (This activity also supports Goal 2.)	Y	Does Not Apply				
8. The project's software schedule is tracked, and corrective actions are taken as necessary. (This activity also supports Goal 2.)	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 32 - 34, 55	WR15 (MM Team Leader Weekly Report Checklist) WR25 (Supplemental Project Change Request) WR26 (Work Request Issue Form) Escalation Process
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report
9. Software engineering technical activities are tracked, and corrective actions are taken as necessary. (This activity also supports Goal 2.)	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 28, 29, 42	WR19 (Programmers Checklist) WR19a (Member Modification Checklist) WR22 (Unit Test Checklist) WR23 (Program Quality Control Checklist) WR30 (Production Module Release Form) WR36 (Quality Control Issue Description) IN05 (Production Incident Ticket)
			Section 3 and Appendix C	Incidents	Steps 11 and 12	
10. The software risks associated with cost, resource, schedule, and technical aspects of the project are tracked.	Y	OPS Guide	Introduction, Section 1 and Appendix A	Work Request Process and WR Documents	Steps 10, 22, 32 to 35	WR25 (Supplemental Project Change Request) WR26 (Work Request Issue Form) WR38 (Work Request Planning Checklist) WR44 (Work Request Management Plan)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Issue Form, Issues Report, WR Status Report
11. Actual measurement data and replanning data for the software project are recorded. (This activity also supports Goal 2.)	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		Time Entry
Software Engineering Group (CAI Application Support Teams and User Group)						
12. The software engineering group conducts periodic internal reviews to track technical progress, plans, performance, and issues against the software development plan.	Y	OPS Guide	Introduction, Section 1 and Appendix A	Work Request Process and WR Documents	Steps 34, 55	WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) WR26 (Work Request Issue Form)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, Issues Report
	Y	Transition Guide, Volume 1	Activity 3100 Activity 9300	Create Transition Plan Status Reporting	Task 3140, 3145, and 9305	TR19 (Transition Weekly Status Report)
	Y	ITQA Guide			Steps 21-23	

13. Formal reviews to address the accomplishments and results of the software project are conducted at selected project milestones according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 16, 19, 34, 55	WR16 (User Group Meeting Minutes) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) WR26 (Work Request Issue Form)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, WR Event Printout
	Y	Transition Guide, Volume 1	Activity 3200 Activity 9300	CAI TM & TL On Client Site Status Reporting	Task 3220, 9320, and 9325	TR20 (Service Level Agreement)
GOAL 2: Corrective actions are taken and managed to closure when actual results and performance deviate significantly from the software plans.						
2. The project's software development plan is revised according to a documented procedure.	Y	Transition Guide, Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	11250	TLKT25 (WR Process Amendments)
	Y	ITQA Guide			Step 26	
GOAL 3: Changes to software commitments are agreed to by the affected groups and individuals.						
Individuals and groups external to the organization (User Group); Organization (CAI Application Support Teams); Senior Management (Team Leader)						
3. Software project commitments and changes to commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.	Y	Transition Guide, Volume 1	Activity 4200 Activity 9300	Verify Scope of Effort Status Reporting	Tasks 4225 - 4240 Task 9320	TR20 (Service Level Agreement)
Software Engineering Group (CAI Application Support Teams); other software-related groups (User Group); Project Software Manager (Team Leader)						
4. Approved changes to commitments that affect the software project are communicated to the members of the software engineering group and other software-related groups .		OPS Guide	Section 1 and Appendix A		Steps 16, 19, 32, 34, 55	WR15 (Team Leader Report Checklist) WR16 (User Group Meeting Minutes) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) WR25 (Supplemental Project Change Request)
	Y	Transition Guide, Volume 1	Activity 11400	Assemble Associate Notebook	11430	TLKT36 (Metrics Document)
	Y	ITQA Guide			Steps 12 and 16	
Commitment 1 - A project software manager is designated to be responsible for the project's software activities and results.	Y	Transition Guide, Volume 1	Activity 2300	Assign Team Leader	2305 -- 2330	
Commitment 2 - The project follows a written organizational policy for managing the software project.	Y	CAI Software Policy Manual	Software Project Tracking and Oversight (SPT&O)	Software Project Tracking and Oversight Policy		
Ability 1 - A software development plan for the software project is documented and approved.	Y	OPS Guide	Section 1, Appendix A, and Appendix H	Work Request Process and WR Documents	Steps 10, 14, 22	WR12 (Work Request Estimate) TLKT48 (Project Development Plan)

		Y	Transition Guide, Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	11250	TLKT25 (WR Process Amandments)
	Ability 2 - The project software manager explicitly assigns responsibility for software work products and activities.	Y	OPS Guide	Introduction Section 1 and Appendix A	Work Request Process and WR Documents	Steps 5, 7, 21, 24	WR01 (Work Request) WR12 (Detailed Work Request Estimate) WR13 (Estimate Notification Memo) WR44 (Work Request Management Plan)
	Ability 3 - Adequate resources and funding are provided for tracking the software project.	Y	OPS Guide	Introduction Section 1 and Appendix A	Work Request Process and WR Documents	Steps 5, 7, 21, 24	WR12 (Work Request Estimate) Estimating Matricies
		Y	Tracer				Tracer and MS Project98 MS Office Visio
		Y	Transition Guide, Volume 1	Activity 1100	Engagement Planning	Task 1105	
				Activity 2200	Hire Team	Tasks 2205 to 2220	
				Activity 2300	Assign Team Leader	Tasks 2305, 2350, 2355	
Software Managers/First-line Software Managers/Senior Management/Project Manager (Team Leaders)							
	Ability 4 - The software managers are trained in managing the technical and personnel aspects of the software project.	Y	MM and Tracer Training				
		Y	MM Leadership Workshop				
		Y	Transition Guide, Volume 1	Activity 2300	Assign Team Leader	Tasks 2305, 2310, 2315, 2320, 2325	TG01 (MM Applications Technical Support Requirements) TG02 (CAI MM Training Assessment) TG03 (Customized Individual Training Plan) TG03A (Customized Training Plan in Leadership) TG04 (Matrix of Who Needs What Training) TG05 (Technical Training Schedule) TG06 (CAI Leadership Assessment)
				Activity 7400	Flow Charting & Data Flow Diagrams	Tasks 7405 to 7420	
				Activity 7500	Client Process and Procedures	Tasks 7505 to 7525	
				Activity 7600	Supplemental Technical Training	Task 7605	
			Activity 11200	Develop Materials for Team Operations Notebook.	Task 11256, Task 11258	TLKT26 (Management Escalation Guidelines); TLKT27 (Associate Escalation Guidelines)	
	Ability 5 - First-line software managers receive orientation in the technical aspects of the software project.	Y	See Ability 4				
	Measurement 1 - Measurements are made and used to determine the status of the software tracking and oversight activities.	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, Event Printout Application Activity and Performance Report Time Entry
	Verification 1 - The activities for software project tracking and oversight are reviewed with senior management on a periodic basis.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 55	WR15 (Team Leader Report Checklist) Weekly Staff Report
		Y	Transition Guide, Volume 1	Activity 2300	Assign Team Leader	Task 2340	TR20 (Service Level Agreement)
	Verification 2 - The activities for software project tracking and oversight are reviewed with the project manager on both a periodic and event-driven basis.	Y	Does Not Apply				

Software Quality Assurance Group (Development Analysts and Team Leaders);
REVISIONS: Senior Quality Assurance Group: CAI Corporate Quality Organization

Verification 3 - The software quality assurance group reviews and/or audits the "Revised" Plans & Commitments activities and work products for software project tracking and oversight and reports the results.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 34, 35	WR26 (Work Request Issue Form)
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Software Subcontract Management (SSM)	Level 2	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: The prime contractor selects qualified software subcontractors.						
1. The work to be subcontracted is defined and planned according to a documented procedure.	NA	NA	NA	NA	NA	NA
2. The software subcontractor is selected, based on an evaluation of the subcontractor bidders' ability to perform the work, according to a documented procedure.	NA	NA	NA	NA	NA	NA
GOAL 2: The prime contractor and the software subcontractor agree to their commitments to each other.						
3. The contractual agreement between the prime contractor and the software subcontractor is used as the basis for managing the subcontract. (This activity also supports Goal 4.)	NA	NA	NA	NA	NA	NA
4. A documented subcontractor's software development plan is reviewed and approved by the prime contractor.	NA	NA	NA	NA	NA	NA
6. Changes to the software subcontractor's statement of work, subcontract terms and conditions, and other commitments are resolved according to a documented procedure.	NA	NA	NA	NA	NA	NA
GOAL 3: The prime contractor and the software subcontractor maintain ongoing communications.						
7. The prime contractor's management conducts periodic status/coordination reviews with the software subcontractor's management. (This activity also supports Goal 4.)	NA	NA	NA	NA	NA	NA
8. Periodic technical reviews and interchanges are held with the software subcontractor.	NA	NA	NA	NA	NA	NA
9. Formal reviews to address the subcontractor's software engineering accomplishments and results are conducted at selected milestones according to a documented procedure. (This activity also supports Goal 4.)	NA	NA	NA	NA	NA	NA

GOAL 4: The prime contractor tracks the software subcontractor actual results and performance against commitments.						
5. A documented and approved subcontractor's software development plan is used for tracking the software activities and communicating status.	NA	NA	NA	NA	NA	NA
10. The prime contractor's software quality assurance group monitors the subcontractor's software quality assurance activities according to a documented procedure.	NA	NA	NA	NA	NA	NA
11. The prime contractor's software configuration management group monitors the subcontractor's activities for software configuration management according to a documented procedure.	NA	NA	NA	NA	NA	NA
12. The prime contractor conducts acceptance testing as part of the delivery of the subcontractor's software products according to a documented procedure.	NA	NA	NA	NA	NA	NA
13. The software subcontractor's performance is evaluated on a periodic basis, and the evaluation is reviewed with the subcontractor. (This activity also supports Goal 3.)	NA	NA	NA	NA	NA	NA
Commitment 1 - The project follows a written organizational policy for managing the software subcontract.	Y	CAI Software Policy Manual	Software Subcontract Management (SSM)	Software Subcontract Management Policy	NA	NA
Commitment 2 - A subcontract manager is designated to be responsible for establishing and managing the software subcontract.	NA	NA	NA	NA	NA	NA
Ability 1 - Adequate resources and funding are provided for selecting the software subcontractor and managing the subcontract.	NA	NA	NA	NA	NA	NA
Ability 2 - Software managers and other individuals who are involved in establishing and managing the software subcontract are trained to perform these activities.	NA	NA	NA	NA	NA	NA
Ability 3 - Software managers and other individuals who are involved in managing the software subcontract receive orientation in the technical aspects of the subcontract.	NA	NA	NA	NA	NA	NA
Measurement 1 - Measurements are made and used to determine the status of the activities for managing the software subcontract.	NA	NA	NA	NA	NA	NA

Verification 1 - The activities for managing the software subcontract are reviewed with senior management on a periodic basis.	NA	NA	NA	NA	NA	NA
Verification 2 - The activities for managing the software subcontract are reviewed with the project manager on both a periodic and event-driven basis.	NA	NA	NA	NA	NA	NA
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the software subcontract and reports the results.	NA	NA	NA	NA	NA	NA
Software Quality Assurance (SQA)	Level 2	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: Software quality assurance activities are planned.						
SQA Group ((Team Leader, Quality Analyst, In Team Quality Assurance Analyst); Affected groups and individuals (CAI Application Support Teams); Customer's SQA personnel (Senior Client Analysts))						
1. An SQA plan is prepared for the software project according to a documented procedure.	Y	Transition Guide, Volume 1	Activity 9100	Standards Definition	Task 9105	TR36 In Team Quality Assurance Procedures
	Y	ITQA Guide			Steps 4, 5, 6	ITQA01 ITQA02 ITQA03
	Y	DQA Guide				TLKT50 Software Quality Assurance Plan
GOAL 2: Adherence of S/W products and activities to applicable standards, procedures, and requirements is verified objectively.						
SQA Group (Team Leader, Quality Analyst, In Team Quality Assurance Analyst)						
2. The SQA group's activities are performed in accordance with the SQA plan. (This activity also supports Goal 1.)	Y	ITQA Guide			Steps 4, 5, 6	ITQA01 ITQA02 ITQA03
	Y	DQA Guide				TLKT50 Software Quality Assurance Plan
3. The SQA group participates in the preparation and review of the project's software development plan, standards, and procedures.	Y	ITQA Guide				TLKT50 Software Quality Assurance Plan
4. The SQA group reviews the software engineering activities to verify compliance.	Y	ITQA Guide			Steps 21, 22, 23, 26	WR30 WR38 WR44 ITQA05
	Y	DQA Guide			Steps 13, 14, 17, 27, 28, 37, 38	DQA09 DQA11 DQA12
5. The SQA group audits designated software work products to verify compliance.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29, 42	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR32 (Work Request Folder Checklist) WR36 (Quality Control Issue

						Description)
	Y	Transition Guide, Volume 2A	Transition Samples	TLKT SAM5		TLKT47 (ITQA Process Flow)
	Y	ITQA Guide				DQA09 SQA Checklist TLKT50 Software Quality Assurance Plan
GOAL 3: Affected groups and individuals are informed of software quality assurance activities and results.						
SQA Group (CAI Application Support Teams/ Designated Analysts/QC Analysts); Affected groups and individuals (CAI Application Support Teams); Customer's SQA personnel (Senior Client Analysts)REVISION: SQA Group (CAI Corporate Quality Organization); Software Engineering Group (SEPG: Software Engineering Process Group)						
6. The SQA group periodically reports the results of its activities to the software engineering group.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
	Y	Transition Guide, Volume 2A	Transition Samples	TLKT SAM5		TLKT47 (ITQA Process Flow)
	Y	ITQA Guide				DQA09 TLKT50 Software Quality Assurance Plan
8. The SQA group conducts periodic reviews of its activities and findings with the customer's SQA personnel , as appropriate.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 9, 16, 19	WR16 (User Group Meeting Minutes) Weekly Staff Meetings
	Y	Transition Guide, Volume 2A	Transition Samples	TLKT SAM5		TLKT47 (ITQA Process Flow)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, Event Printout
	Y	ITQA Guide				TLKT50 Software Quality Assurance Plan
GOAL 4: Noncompliance issues that can not be resolved within the software project are addressed by senior management .						
Senior Management (Team Leader); SQA Group (Designated Analysts/QC Analysts); Experts independent of SQA Group (Team Leader/User Group/Senior Client Analysts); Members of software project (CAI Application Support Teams); Senior Management/Project Manager (Team Leader) REVISIONS: SQA group (CAI Quality Organization);						
7. Deviations identified in the software activities and software work products are documented and handled according to a documented procedure. (This activity also supports Goal 3.)	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
	Y	Transition Guide, Volume 1	Introduction	CAI Roles in the Transition Engagement		

		Y	ITQA Guide	Delivery Quality Assurance (DQA) Process/Action Plan	ALL	ALL	ALL maybe DQA09 CHECK THIS????
Commitment 1 - The project follows a written organizational policy for implementing software quality assurance (SQA).	Y	CAI Software Policy Manual	Software Quality Assurance (SQA)	Software Quality Assurance Policy			
	Y	Transition Guide, Volume 1	Activity 9100	9100.4 to 9100.5	Task 9105		TR36 (MM In-Team Quality Assurance Procedures)
Ability 1 - A group that is responsible for coordinating and implementing SQA for the project (i.e., the SQA group) exists.	Y	OPS Guide	Introduction				Quality Business Plan TLKT50 Software Quality Assurance Plan
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29, 42		WR19a (Member Modification Checklist) WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR30 (Production Module Release Form) WR36 (Quality Control Issue Description)
	Y	ITQA Guide					TLKT50 Software Quality Assurance Plan
Ability 2 - Adequate resources and funding are provided for performing the SQA activities.	Y	OPS Guide	Introduction				Corporate Quality Plan
Ability 3 - Members of the SQA group are trained to perform their SQA activities.	Y	OPS Guide	Introduction				
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29		WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description) Training Videotapes
	Y	Transition Guide, Volume 1	Activity 3200	CAI Transition Manager & Team Leader on Client Site	Task 3235		
	Y	ITQA Guide					ITQA Training
Ability 4 - The members of the software project receive orientation on the role, responsibilities, authority, and value of the SQA group .	Y	OPS Guide	Introduction	Team Roles and Responsibilities			
	Y	Transition Guide, Volume 1	Activity 3200	CAI Transition Manager & Team Leader on Client Site	Task 3235		
			Activity 9100	Standard Definition	Task 9105		TR36 (MM In-Team Quality Assurance Procedures)
Measurement 1 - Measurements are made and used to determine the cost and schedule status of the SQA activities.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 21		
	Y	ITQA Guide					TLKT50 Software Quality Assurance Plan
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples			Event Printout, Critical Application Downtime Graph, Tracer Software Summary
	Y	Tracer					Identify Resources Screen

Verification 1 - The SQA activities are reviewed with senior management on a periodic basis.	Y	Process and Asset Repository Library				TLKT50 Software Quality Assurance Plan SQA Checklist Meeting Minutes
REVISIONS: Senior Management: Account Manager, Business Unit Manager, Service Delivery Manager (SDM)						
	Y	Transition Guide, Volume 1	Introduction	CAI Roles in the Transition Engagement		
Verification 2 - The SQA activities are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 22, 26, 28, 29	WR20 (Specification Quality Control Checklist) WR22 (Unit Test Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
Verification 3 - Experts independent of the SQA group periodically review the activities and software work products of the project's SQA group .	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 9, 16	WR16 (User Group Meeting Minutes)
	Y	Transition Guide, Volume 1	In Development	In Development	In Development	In Development What goes here now???? DQA Manual and SEPG Charter????
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, WR Issues Log
	Y	ITQA Guide				SQA Checklist TLKT50 Software Quality Assurance Plan
	** DEBATE **	DQA Guide				DQA04 DQA09
Software Configuration Management (SCM)	Level 2	Reference Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: Software configuration management activities are planned.						
Software Configuration Management (CAI Application Support Teams)						
1. An SCM plan is prepared for each software project according to a documented procedure.	Y	Transition Guide, Volume 1	Activity 3800	Initial Team Activities	Task 3820	
			Activity 11200	Develop Materials for Team Operations Notebooks	Task 11288, Task 11290	TLKT45 (Software Configuration Management Plan))
GOAL 2: Selected software work products are identified, controlled and available.						
2. A documented and approved SCM plan is used as the basis for performing the SCM activities. (This activity also supports Goal 1.)	Y	OPS Guide	Appendix G	Managed Maintenance Documents		TLKT45 (Software Configuration Management Plan)
3. A configuration management library system is established as a repository for the software baselines.	Y	OPS Guide	Appendix G	Software Configuration Mgt.		TLKT45s (Software Configuration Management Plan)
	Y	Transition Guide, Volume 1	Activity 3800	Initial Team Activities	Tasks 3815, 3820	AKT16 (Library Environment)
			Activity 11200	Develop Materials for Team Operations Notebooks	Tasks 11288, 11290	TLKT45 (Software Configuration Management Plan)
4. The software work products to be placed under configuration management are identified.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 42	WR19 (Programmer's Checklist) WR19a (Member Modification Checklist) WR30 (Production Module Release Form) WR31 (Program Turnover Procedures)
			Appendix G	Software Configuration Mgt.		TLKT45s (Software Configuration Management Plan)

		Y	Transition Guide, Volume 1	Activity 4100	Initial Scope Analysis	Tasks 4110	AKT07 (Application Component Inventory)
7. Products from the software baseline library are created and their release is controlled according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 40-45	WR19 (Programmer's Checklist) WR19a (Member Modification Checklist) WR24 (User Acceptance Memo) WR30 (Production Module Release Form) WR31 (Program Turnover Procedures)	
			Appendix G	Software Configuration Mgt.		TLKT45s (Software Configuration Management Plan)	
GOAL 3: Changes to identified software work products are controlled.							
5. Change requests and problem reports for all configuration items/units are initiated, recorded, reviewed, approved, and tracked according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 1-47		
			Appendix G	Managed Maintenance Documents			
			Section 3	Incidents	Steps 1-45		
6. Changes to baselines are controlled according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 26, 27, 29, 41-46	WR21 (Database Change Request Form) WR19 (Programmer's Checklist) WR19a (Member Modification Checklist) WR30 (Production Module Release Form) WR31 (Program Turnover Procedures)	
			Appendix G	Software Configuration Mgt.		TLKT45s (Software Configuration Management Plan)	
GOAL 4: Affected groups and individuals are informed of the status and content of software baselines .							
Affected groups and individuals (Designated Application Analysts, Requester, and Users)							
8. The status of configuration items/units is recorded according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 42, 43	WR19 (Programmer's Checklist) WR19a (Member Modification Checklist) WR27 (Production Release Notice) WR30 (Production Module Release Form)	
			Appendix G	Software Configuration Management		TLKT45 (Software Configuration Management Plan)	
9. Standard reports documenting the SCM activities and the contents of the software baseline are developed and made available to affected groups and individuals.	Y	OPS Guide	Appendix G	Software Configuration Management	Section 5	TLKT45 (Software Configuration Management Plan)	
10. Software baseline audits are conducted according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents		WR19a (Member Modification Checklist) WR30 (Production Module Release Form)	
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)	
Commitment 1 - The project follows a written organizational policy for implementing software configuration management (SCM).	Y	CAI Software Policy Manual	Software Configuration Management (SCM)	Software Configuration Management Policy			
Software Configuration Control Board (Designated Analysts/QC Analysts); Members of SCM Group/Software Engineering Group/other software-related groups (CAI Application Support Teams)							

Ability 1 - A board having the authority for managing the project's software baselines (i.e., a software configuration control board-SCCB) exists or is established.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 10, 11, 41, 42	WR19a (Member Modification Checklist) WR30 (Production Module Release Form) WR38 (WR Planning Checklist) WR44 (WR Management Plan)
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
Ability 2 - A group that is responsible for coordinating and implementing SCM for the project (i.e., the SCM group) exists.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 25, 41-43	WR19a (Member Modification Checklist) WR30 (Production Module Release Form) WR31 (Program Turnover Procedures)
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
Ability 3 - Adequate resources and funding are provided for performing the SCM activities.	Y	OPS Guide	Introduction	Roles and Responsibilities		Roles of Primary Version Control Administrator and Secondary Version Control Administrator
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
			Activity 9100	Standard Definition	Task 9170	TR48 (Version Control Administrator Procedures)
			Activity 11200	Develop Materials for Team Operations Notebooks	Task 11288, 11290	TLKT45 (Software Configuration Management Plan)
Ability 4 - Members of the SCM group are trained in the objectives, procedures, and methods for performing their SCM activities.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 40, 42, 43	WR19a (Member Modification Checklist) WR30 (Production Module Release Form) Multimedia Training CDs and Videotapes
	Y	Transition Guide, Volume 1	Activity 3800	Initial Team Activities	Tasks 3820 and 3835	
			Activity 7500	Client Process and Procedures	Task 7525	TLKT45 (Software Configuration Management Plan)
			Activity 8200	Train CAI Team in Managed Maintenance Process	Task 8220	TLKT45 (Software Configuration Management Plan) TR20 (Service Level Agreement)
Ability 5 - Members of the software engineering group and other software-related groups are trained to perform their SCM activities.	Y	OPS Guide	Introduction	Roles and Responsibilities		Roles of Primary Version Control Administrator and Secondary Version Control Administrator
			Section 1 and Appendix A	Work Request Process and WR Documents	Steps 40, 42, 43	WR19a (Member Modification Checklist) WR30 (Production Module Release Form) Multimedia Training CDs and Videotapes
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
	Y	Transition Guide, Volume 1	Activity 3800	Initial Team Activities	Tasks 3820 and 3835	
			Activity 7500	Client Process and Procedures	Task 7525	TLKT45 (Software Configuration Management Plan)
			Activity 8200	Train CAI Team in Managed Maintenance Process	Task 8220	TLKT45 (Software Configuration Management Plan) TR20 (Service Level Agreement)
	Y	ITQA Guide			Steps 21-23	
Measurement 1 - Measurements are made and used to determine the status of the SCM activities.	Y	OPS Guide	Section 1	Work Request Process	Steps 42, 43	WR30 (Production Module Release Form) WR32 (Work Request Folder Checklist)
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
	Y	Tracer User Guide	Chapter 6	Time Entry Process		

Senior Management: Service Delivery Manager (SDM), Business Unit Manager (BU Manager); Account Manager, Area or Regional Manager; Project

Manager (Team Leader); SCM Group (Designated Analysts/QC Analysts); SQA Group (Designated Analysts, Developments Analysts, and Team Leader)

Verification 1 - The SCM activities are reviewed with senior management on a periodic basis.	Y	OPS Guide	Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
Verification 2 - The SCM activities are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Introduction	Roles and Responsibilities		Roles of Primary Version Control Administrator and Secondary Version Control Administrator
			Appendix G	Software Configuration Mgt.		TLKT45 (Software Configuration Management Plan)
Verification 3 - The SCM group periodically audits software baselines to verify that they conform to the documentation that defines them.	Y	OPS Guide	Introduction	Roles and Responsibilities		Roles of Primary Version Control Administrator and Secondary Version Control Administrator TLKT45 (Software Configuration Management Plan)
Verification 4 - The software quality assurance group reviews and/or audits the activities and work products for SCM and reports the results.	Y	OPS Guide	Appendix G			TLKT45 (Software Configuration Management Plan) TLKT50 (Software Quality Assurance Plan)
			ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
			ITQA Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples	

CMMI-DEV: Level – 3

SEI Goals/Key Practices	Addressed by MM Process (Y/N)	LEVEL 3: DEFINED				
		MANAGED MAINTENANCE REFERENCES				
Organization Process Focus (OPF)	Level 3	Reference or Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	Process Step/Task	Document Reference(s)
GOAL 1: Software process development and improvement activities are coordinated across the organization.						
Organization: CAI MM Team						
3. The organization's and projects' activities for developing and improving their software processes are coordinated at the organization level.	Y	MMRB Charter SEPG Charter	Section 2.2 Section 2.2	MMRB Responsibilities SEPG Responsibilities		
	Y	MMRB and SEPG meeting minutes	Introduction Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		

4. The use of the organization's software process database is coordinated at the organizational level.	Y	MMRB Charter SEPG Charter	Section 2.2 Section 2.2	MMRB Responsibilities SEPG Responsibilities		
5. New processes, methods, and tools in limited use in the organization are monitored, evaluated, and, where appropriate, transferred to other parts of the organization.	Y	MMRB Charter SEPG Charter	Section 2.2 Section 2.2	MMRB Responsibilities SEPG Responsibilities		
	Y	OPS Guide	Introduction			User Group Level
			Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		
	Y	Lotus Notes MM and Tracer Technical Databases				MM Technical Database Tracer Technical Database (All categories of both databases)
Y	Tracer User Group Meeting Minutes					
6. Training for the organization's and projects' software processes is coordinated across the organization.	Y	Transition Guide, Volume 1	Activity 8200	Train CAI Team in MM process	ALL TASKS	
			Activity 8300	Train CAI Team in MM Software (Tracer)	ALL TASKS	
						TR36 (MM In-Team Quality Assurance Procedures)
7. The groups involved in implementing the software processes are informed of the organization's and projects' activities for software process development and improvement.	Y	OPS Guide	Sections 1, 1A, 2A, 3A, 4A	Work Request Process Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments	Step 19	WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) Weekly Staff Meeting
	Y	Tracer User Group Meeting Minutes				
	Y	Lotus Notes MM and Tracer Technical Databases				MM Technical Database Tracer Technical Database (All categories of both databases)
GOAL 2: The strengths and weaknesses of the software processes used are identified relative to a process standard.						
1. The software process is assessed periodically, and action plans are developed to address the assessment	Y	MMRB Charter SEPG Charter	Section 2.2 Section 2.2	MMRB Responsibilities SEPG Responsibilities		

findings.	Y	DQA Process Guide		Delivery Quality Assurance Process		
GOAL 3: Organization-level process development and improvement activities are planned.						
2. The organization develops and maintains a plan for its software process development and improvement activities.	Y	MMRB Charter and SEPG Charter				CHECK LOCATION
	Y	Lotus Notes MM Databases	MM Marketing Database	Work Requests		MM Product and Operations Improvement, MM Process Enhancements
Commitment 1 - The organization follows a written organizational policy for coordinating software process development and improvement activities across the organization.	Y	CAI CAI Software Policy Manual Guide	Organization Process Focus (OPF)	Organization Process Focus Policy		
Commitment 2 - Senior management sponsors the organization's activities for software process development and improvement.	Y	MMRB Charter SEPG Charter	Section 2.3.1 Section 2.3.1	MMRB Executive Sponsor SEPG Executive Sponsor		
Commitment 3 - Senior management oversees the organization's activities for software process development and improvement.	Y	MMRB and SEPG Meeting Minutes/ Status Reports				
Ability 1 - A group that is responsible for the organization's software process activities exists.	Y	MMRB/SEPG Charter, Meeting Minutes Status Reports				
Ability 2 - Adequate resources and funding are provided for the organization's software process activities.	Y	MMRB/SEPG Members and Activities				
Ability 3 - Members of the group responsible for the organization's software process activities receive required training to perform these activities.	Y	MMRB Charter and SEPG Charter				CHECK LOCATION
Ability 4 - Members of the software engineering group and other software-related groups receive orientation on the organization's software process activities and their roles in those activities.	Y	CMM Team Orientation		\\corp-alt-08\SE\SE\SEPG\cai-sei-basic.ppt		
	Y	OPS Guide	Introduction			MM Training Videotapes, Multimedia CDs

Measurement 1 - Measurements are made and used to determine the status of the organization's process development and improvement activities.	Y	MMRB Charter and SEPG Charter				CHECK LOCATION WHERE ARE THESE??
	Y	MMRB and SEPG Status Reports		StatusReports">\\corp-alt-08\SE\SE\SEPG>StatusReports		
Verification 1 - The activities for software process development and improvement are reviewed with senior management on a periodic basis.	Y	MMRB Charter and SEPG Charter		\\corp-alt-08\SE\SE\SEPG\SEPG-Charter.doc		Managed Maintenance Technical Database
	Y	MMRB Status Reports and Meeting Minutes				Managed Maintenance Technical Database
	Y	SEPG Status Reports and Meeting minutes		\\corp-alt-08\SE\SE\SEPG\Meetings		Monthly reports for the MM Documentation Team and Tracer Development Team are posted to the Lotus Notes corporate database.
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Organization Process Definition (OPD)	Level 3	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: A standard process for the organization is developed and maintained.						
1. The organization's standard software process is developed and maintained according to a documented procedure.						
2. The organization's standard software process is documented according to established organization standards.	Y	OPS Guide	MM Process Flows	P01 (Managed Maintenance Process Flow) P02 (Work Request Process Flow) P03 (Support Process Flow) P04 (Production Incident Process Flow) P05 (Operations Process Flow)		Complete Guide
	Y	Transition Guide, All Volumes	ALL SECTIONS			Complete Guide
3. Descriptions of software life cycles that are approved for use by the projects are documented and maintained.	Y	OPS Guide	MM Process Flows	P01 (Managed Maintenance Process Flow) P02 (Work Request Process Flow) P03 (Support Process Flow) P04 (Production Incident Process Flow) P05 (Operations Process Flow)		Complete Guide
	Y	Transition Guide, Volume 1	Process Flow	Managed Maintenance Transition Guide Transition Process Flow		

4. Guidelines and criteria for the projects' tailoring of the organization's standard software process are developed and maintained.	Y	OPS Guide	Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		
	Y	Transition Guide, Volume 1	Activity 3100 Activity 9100	Create Transition Plan Standard Definition	Task 3105	
						TLKT22 MM Process Amendment Signoff, TLKT46 MM Process Amendment Memo
GOAL 2: Information related to the use of the organization's standard software process by the software projects is collected, reviewed and made available.						
5. The organization's software process database is established and maintained.	Y	Tracer				
	Y	Lotus Notes MM Databases	Metrics Database	Monthly Reports		MM Documentation Team, Tracer Development Team; Monthly Reports, listed by Region, are posted to Lotus Notes corporate database.
			MM Technical Database	Work Requests		MM Documentation
			Tracer Technical Database			Tracer Documentation
6. A library of software process-related documentation is established and maintained.	Y	CAI Managed Maintenance SoftwareAssets				CAI Product Catalog and Product Order Form
	Y	Lotus Notes MM Databases	Metrics Database	Monthly Reports		MM Documentation Team, Tracer Development Team; Monthly Reports, listed by Region, are posted to Lotus Notes corporate database.
	Y	Lotus Notes MM Databases	MM Technical Database	Work Requests		MM Documentation
Commitment 1 - The organization follows a written policy for developing and maintaining the organization's standard software process and related process assets.	Y	CAI Software Policy Manual	Organization Process Definition (OPD)	Organization Process Definition Policy		
Ability 1 - Adequate resources and funding are provided for developing and maintaining the organization's standard software process and related process assets.	Y	OPS Guide	Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		

	Y	Lotus Notes MM Databases	MM Technical Database			Operations Guide, Tracer Documentation Process and Tools Feedback
			MM Marketing Database			MM Strategic Business Plan (5-Year Plan); Account Retrofit Requirements; MM/Tracer Rollout Strategy Document
Ability 2 - The individuals who develop and maintain the organization's standard software process and related process assets receive required training to perform these activities.	Y	OPS Guide	Introduction			
	Y	MM and Tracer Training Workbook				
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Training CDs, Tracer Training CDs
	Y	Transition Guide, Volume 1	Activity 8200	Train CAI Team In MM Process		
			Activity 8300	Train CAI Team in MM Software (Tracer)		
Measurement 1 - Measurements are made and used to determine the status of the organization's process definition activities.	Y	Lotus Notes MM Databases	Metrics Database	Monthly Reports		Tracer Development ; MM Documentation; Monthly Reports, listed by Region, are posted to Lotus Notes corporate database.
Verification 1 - The software quality assurance group reviews and/or audits the organization's activities and work products for developing and maintaining the organization's standard software process and related process assets and reports the results.	Y	OPS Guide	Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Training Program (TP)	Level 3	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: Training activities are planned.						
1. Each software project develops and maintains a training plan that specifies its training needs.	Y	MM Trainer's Manual Vol. 1 &2 and Training Materials	Policies and Procedures; Multimedia Training			See Complete manual; Trainer's Supplement CD;
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Supplementary Files CD, Tracer Supplemental Files CD
	Y	Transition Guide, Volume 1	Activity 1200	Assessment Findings Document with Client's Team Information	Task 1220	TG01s MM Transition Technical Support Requirements
			Activity 1300	Understand Technical Environment/System Software	Tasks 1305, 1310	TG01 MM Transition Technical Support Requirements TG02 CAI MM Training Assessment
Activity 2300			Assign Team Leader	Task 2305	TG03A (Customized Training Plan in Leadership) TG06 (CAI Leadership Assessment)	

			Activity 7100	Identify CAI Training Requirements	ALL TASKS	
			Activity 7200	Assemble Training Plans	Tasks 7205, 7210	TG05 Technical Training Schedule
			Activity 8200	Train CAI Team in Managed Maintenance Process	Tasks 8205, 8210	TG07 MM Training Request
			Activity 8300	Train CAI Team in CAI Managed Maintenance Software (Tracer)	Tasks 8305, 8310	TG07 MM Training Request
2. The organization's training plan is developed and revised according to a documented procedure.	Y	MM Trainer's Manual Vol. 1 &2 and Training Materials	Policies and Procedures; Multimedia Training			See Complete manual; Trainer's Supplement CD;
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Supplementary Files CD, Tracer Supplemental Files CD
	Y	Transition Guide, Volume 1	Activity 1200	Assessment Findings Document with Client's Team Information	Task 1220	TG01s MM Transition Technical Support Requirements
			Activity 1300	Understand Technical Environment/System Software	ALL TASKS	
			Activity 7100	Identify CAI Training Requirements	ALL TASKS	TG02 CAI MM Training Assessment, TG03 Customized Individual Training Plan, TG04 Matrix of Who Needs What Training,
			Activity 7200	Put Together Training Plans	Task 7210	TG05 Technical Training Schedule
GOAL 2: Training for developing the skills and knowledge needed to perform software management and technical roles is provided.						
3. The training for the organization is performed in accordance with the organization's training plan. (This activity also supports Goal 1.)	Y	OPS Guide	Introduction	In-Team Quality Assurance Responsibilities		
	Y	MM Trainer's Manual Vol. 1 &2 and Training Materials	Policies and Procedures; Multimedia Training	Training Program Evaluation; Training Status		See Complete manual; Trainer's Supplement CD;
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Supplementary Files CD, Tracer Supplemental Files CD
	Y	Transition Guide, Volume 1	Activity 2300	Assign Team Leader	Tasks 2305, 2325	TG03A (Customized Training Plan in Leadership) TG06 (CAI Leadership Assessment)

			Activity 3200	CAI TM & TL On Client Site	Tasks 3225, 3230, 3235	TLKT45 (Software Configuration Management Plan) TLKT48 (Software Development Plan) TLKT49 (Work Request Management Plan) TLKT50 (Software Quality Assurance Plan) TLKT51 (Organization Process Definition Plan)
			Activity 3600	Start Team on Client Site	Task 3650	
			Activity 3800	Initial Team Activities	Tasks 3830, 3835, 3840	
			Activity 6100	Application Knowledge Transfer Training	ALL TASKS	AKT01 - AKT21
			Activity 6200	How to Estimate Application Knowledge Transfers	ALL TASKS	EST01 - EST08
			Activity 7300	Customer Environment & Processing	Tasks 7325, 7340	
			Activity 7400	Flow Charting & Data Flow Diagrams	Tasks 7415, 7420	FLOW1 (Batch Flowcharting) FLOW2 (Online Flowcharting) DFD0 (Context DFD) DFD1 (Level One DFD)
			Activity 7500	Client Process and Procedures	Tasks 7505, 7510, 7515, 7520	TLKT23 (Support Process Amendments) TLKT24 (Production Incident Process Amendments) TLKT25 (Work Request Process Amendments) TLKT33 (After-Hours Procedures) TLKT34 (After-Hours Contact List) TLKT35 (After-Hours Escalation Flow)
			Activity 7600	Supplemental Technical Training	Task 7605	
			Activity 8100	Establish Documents for Current Site	Task 8125	TR15 (List of All MM Operations Guide Updateable Forms)
			Activity 8200	Train CAI Team in Managed Maintenance Process	Tasks 8215, 8220	TLKT45 (Software Configuration Management Plan) TR20 (Service Level Agreement)
			Activity 8300	Train CAI Team in CAI Managed Maintenance Software (Tracer)	Tasks 8325, 8330, 8335	
4. Training courses prepared at the organization level are developed and maintained according to organization standards.	Y	MM Trainer's Manual Vol. 1	Policies and Procedures; Multimedia Training	Training Evaluation; Training Program Records; Training Documentation Standards		See Complete manual; Trainer's Supplement CD;
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Supplementary Files CD, Tracer Supplemental Files CD
GOAL 3 : Individuals in the software engineering group and software-related groups receive the training necessary to perform their roles.						

5. A waiver procedure for required training is established and used to determine whether individuals already possess the knowledge and skills required to perform in their designated roles.						
6. Records of training are maintained.	Y	MM Training Database		Training Groups	Tracking Database	
	Y	Transition Guide, Volume 1	Phase 7000	Supplemental Technical Training		TG01 (Application Technical Support Requirements), TG03 (Customized Individual Training Plan)
Organization: Documentation & Training Team						
Commitment 1 - The organization follows a written policy for meeting its training needs.	Y	CAI Software Policy Manual	Training Program (TP)	Training Program Policy		
Ability 1 - A group responsible for fulfilling the training needs of the organization exists.	Y	MM Trainer's Manual Vol. 1	Policies and Procedures	Training Groups		Organization Chart
Ability 2 - Adequate resources and funding are provided for implementing the training program.	Y	MM Trainer's Manual Vol. 1	Policies and Procedures	Training Groups		Organization Chart
Ability 3 - Members of the training group have the necessary skills and knowledge to perform their training activities.	Y	MM Trainer's Manual Vol. 1 and Training Materials	Policies and Procedures; Multimedia Training; Trainer Certification	Group Training Responsibilities		Group and multimedia training is provided to Team Members, Team Leaders, Project Managers, and Trainers
	Y	Transition Guide, Volume 1	Phase 8000	ALL ACTIVITIES	ALL TASKS	
Software Managers: Application Support Team Leaders						
Ability 4 - Software managers receive orientation on the training program.	Y	MM Leadership Workshop				
Measurement 1 - Measurements are made and used to determine the status of the training program activities.	Y	PDS Team Tracer Database				
Measurement 2 - Measurements are made and used to determine the quality of the training program.	Y	MM Trainer's Manual Vol. 1	Policies and Procedures; Training Administration; Testing; Metrics			Complete Volume; Testing, Training Evaluations
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Test Module CD, MM Supplementary Files CD, Tracer Supplementary Files CD
	Y	PDS Team Tracer Database and Training QA Database				

Verification 1 - The training program activities are reviewed with senior management on a periodic basis.	Y	MM Trainer's Manual Vol. 1 & 2 and Training Materials	Policies and Procedures; Multimedia Training			Policies and Procedures, Tests, Training Evaluations (Questionnaires)
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			MM Supplementary Files CD, Tracer Supplemental Files CD
	Y	Transition Guide Volume 1	Activity 7200	Put Together Training Plans	Task 7230	TG04 (Matrix of Who Needs What Training) TG05 (Technical Training Schedule)
Verification 2 - The training program is independently evaluated on a periodic basis for consistency with, and relevance to, the organization's needs.	Y	MMRB Charter and MMRB Minutes				
Verification 3 - The training program activities and work products are reviewed and/or audited and the results are reported.	Y	MM Trainer's Manual Vol. 1 & 2 and Training Materials	Policies and Procedures; Multimedia Training			MM and Tracer Multimedia Training CDs, MM and Tracer Training Workbook, Tests, Training Evaluations (Questionnaires)
	Y	MM and Tracer Multimedia Training CDs	Multimedia Training Policies and Procedures			Multimedia Training Policies and Procedures; MM Supplementary Files CD Tracer Supplementary Files CD
	Y	Transition Guide Volume 1	Activity 7200	Put Together Training Plans	Task 7230	TG04 (Matrix of Who Needs What Training) TG05 (Technical Training Schedule)
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Integrated Software Management (ISM)	Level 3	Reference Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	Process Step/Task	Document Reference(s)
GOAL 1: The project's defined software process is a tailored version of the organization's standard process.						
ISM (Work Request Management); Transition Manager, MM Team Leader						
1. The project's defined software process is developed by tailoring the organization's standard software process according to a documented procedure.	Y	OPS Guide	Sections 1A, 2A, 3A, 4A	Work Request Process Amendments Support Process Amendments Production Incident Process Amendments Operations Process Amendments		
	Y	Transition Guide Volume	Activity 8100	Establish Documents for Current Site	ALL TASKS	TR15 (List of All MM Operations Guide Updateable Forms)

		1	Activity 9100	Standards Definition	Tasks, 9105, 9110	TR36 (In-Team Quality Assurance Associate Procedures) TR37 (Continuous Improvement Plan) TLKT47 (ITQA Process Amendments) ITQA Program & Process
			Activity 11200	Develop Materials for Team Operations Notebooks	Tasks 11238, 11240, 11242, 11244, 11246, 11248, 11250	TLKT19 (Intro. to MM OPS Guide Amend.), TLKT20 (Work Flow Matrix) TLKT21 (Client to CAI Mappings) TLKT22 MM Process Amendment Signoff) TLKT23 (Support Process Amendments) TLKT24 (Production Incident Process) TLKT25 (WR Process Amendments) TLKT46 (MM Process Amendment Menu) TLKT48 (Project Development Plan) TLKT49 (Work Request Management Plan)
2. Each project's defined software process is revised according to a documented procedure.	Y	Transition Guide Volume 1	Activity 3100	Create Transition Plan	Tasks 3140, 3145	TR15 (List of All MM OPS Guide Updateable Forms) TR36 (ITQA Associate Procedures) TR37 (Continuous Improvement Plan) TLKT19 (Intro. to MM OPS Guide Amend.) TLKT20 (Work Flow Matrix) TLKT21 (Client to CAI Mappings) TLKT22 MM Process Amendment Signoff), TLKT23 (Support Process Amendments) TLKT24 (Production Incident Process) TLKT25 (WR Process Amendments) TLKT46 (MM Process Amendment Memo) TLKT47 (ITQA Process Flow) TLKT48 (Project Development Plan) TLKT49 (Work Request Management Plan)
			Activity 3200	CAI Transition Manager & Team Leader on Client Site	Task 3235	
			Activity 8100	Establish Documents for Current Site	Task 8115	
			Activity 9100	Standards Definition	Tasks 9105, 9110	
			Activity 11200	Develop Materials for Team Operations Notebooks	Tasks 11246, 11248, 11250	
3. The project's software development plan, which describes the use of the project's defined software process, is developed and revised according to a documented procedure. (This activity also supports Goal 2.)	Y	OPS Guide	Section 1 and Appendix A	Work Request Process	Step 10	WR38 (Work Request Planning Checklist)WR44 (Work Request Management Plan)TLKT48 (Project Development Plan)
			Appendix H	Project Development Plan		TLKT48 (Project Development Plan)
			Appendix I	Work Request Management Plan		TLKT49 (Work Request Management Plan)

	Y	Transition Guide Volume 1	Activity 11200	Develop Materials for Team Operations Notebooks	Task 11250	TLKT23 (Call Support Process Amendments); TLKT24 (Production Incident Process Amendments); TLKT25 (Work Request Process Amendments) TLKT48 (Project Development Plan) TLKT49 (Work Request Management Plan) +H288 WR44 (Work Request Management Plan)
GOAL 2: The project is planned and manned according to the defined software process.						
4. The software project is managed in accordance with the project's defined software process.	Y	OPS Guide	Section 1	Work Request Process		
			Appendix I	Work Request Management Plan		
5. The organization's software process database is used for software planning and estimating.	Y	Tracer User Guide	Chapter 1	Introduction to the Tracer Suite		
			Chapter 5	Tracer Process Driver	Pages 20 - 28	
6. The size of the software work products (or size of changes to the software work products) is managed according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8 to 11, 22, 32	WR25 (Supplemental Project Change Request) WR35 (Requirements Definition Checklist)
			Appendix I	Work Request Management Plan		
7. The project's software effort and costs are managed according to a documented procedure.	Y	OPS Guide	Section 1	Work Request Process	Steps 8 to 11, 22, 32	
			Appendix I	Work Request Management Plan		
	Y	Tracer User Guide	Chapter 5	Tracer Process Driver	Pages 20 - 28	
8. The project's critical computer resources are managed according to a documented procedure.		Does Not Apply				
9. The critical dependencies and critical paths of the project's software schedule are managed according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 10	
			Appendix H	Project Development Plan		
			Appendix I	Work Request Management Plan		
10. The project's software risks are identified, assessed, documented, and managed according to a documented procedure.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8 to 10, 22, 32, 34, 35, 55	WR25 (Supplemental Project Change Request) WR26 (Work Request Issue Form) WR35 (Requirements Definition Checklist) WR38 (Work Request Planning Checklist) WR44 (Work Request Management Plan)
			Appendix I	Work Request Management Plan		

11. Reviews of the software project are periodically performed to determine the actions needed to bring the software project's performance and results in line with the current and projected needs of the business, customer, and end users as appropriate.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 16, 19, 55	WR15 (Weekly Time Audit Report)WR16 (User Group Meeting Minutes)WR17 (Open Work Request Status Report)WR18 (Closed Work Request Status Report)Weekly Team Staff Meeting
	Y	MM Leadership Workshop				
	Y	Transition Guide Volume 1	Activity 11200	Develop Materials For Team Operations Notebooks	Tasks 11220, 11222	TLKT12 (Customer Communication Grid) TLKT13 (Meeting Grid)
			Activity 11300	Assemble Team Operations Notebook	Task 11315	
Activity 11400	Assemble Associate Notebook	Task 11415				
Commitment 1 - The project follows a written organizational policy requiring that the software project be planned and managed using the organization's standard software process and related process assets.	Y	CAI Software Policy Manual	Work Request Management	Work Request Management Policy		
Ability 1 - Adequate resources and funding are provided for managing the software project using the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Tracer as a tool. Steps 5, 7, 16, 21, 24	WR03 to WR11 WR16 (User Group Meeting Minutes)
	Y	Transition Guide, Volume 1	Activity 1200	Assessment Findings Document with Client's Team Information	ALL TASKS	TR02 (Current Team's Workday Breakdown)
			Activity 2100	Prepare and Interview for Staffing	Task 2105	TR35 (Engagement Sourcing Plan)
			Activity 2200	Hire Team	ALL TASKS	TR03 (Technical Interview Form)
			Activity 4100	Initial Scope Analysis	ALL TASKS	TR34 (Initial Transition Scope Analysis)
Ability 2 - The individuals responsible for developing the project's defined software process receive required training in how to tailor the organization's standard software process and use the related process assets.	Y	Transition Guide, Volume 1	Introduction	Transition Success Factors		Commitment of CAI Staff to Transition and Supplemental Training
			Activity 11100	Create Project-Related Notebooks		
	Activity 11200	Develop Materials for Team Operations Notebooks				
	Y	Transition Manger Training Student Guide				
Ability 3 - The software managers receive required training in managing the technical, administrative, and personnel aspects of the software project based on the project's defined software process.	Y	Transition Guide, Volume 1	Activity 7500	Client Process and Procedures		
			Activity 7600	Supplemental Technical Training		
			Activity 11200	Develop Materials for Team Operations Notebooks		
	Y	MM Leadership Workshop				
Measurement 1 - Measurements are made and	Y	OPS Guide	Section 1	Work Request Process	Step 55	WR15 (MM Team Leader Weekly Report Checklist)

used to determine the effectiveness of the integrated software management activities.	Y	Tracer User Guide	Chapter 7 Chapter 9 Appendix A	Tracer Report Module, Table Database Utilities, and Report Samples		SLA Adherence Reports Time Entry Reports
	Y	Tracer and Tracer Sample Reports				WR Status Reports
	Y	Transition Guide Volume 1	Activity 4200	Verify Scope of Effort	Task 4240 (Develop Service Level Agreement)	TR11 (MM Engagement Scope Document) TR20 (Service Level Agreement)
Verification 1 - The activities for managing the software project are reviewed with senior management on a periodic basis.	Y	OPS Guide	Introduction	Managing Risks		
Verification 2 - The activities for managing the software project are reviewed with the project manager on both a periodic and event-driven basis.	Y	Does Not Apply				
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the software project and reports the results.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29, 42	WR19a (Member Modification Checklist) WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Software Product Engineering (SPE)	Level 3	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: The software engineering tasks are defined, integrated, and consistently performed to produce the software.						
1. Appropriate software engineering methods and tools are integrated into the project's defined software process.	Y	OPS Guide	Sections 1, 2, 3, 4	Process Flows		P01 (Managed Maintenance Process Flow) P02 (Work Request Process Flow) P03 (Support Process Flow) P04 (Production Incident Process Flow) P05 (Operations Process Flow)
	Y	Tracer User Guide	Chapter 2	Setup and Installation	Page 2.2	Issues Report
	Y	Transition Guide Volume 1	Activity 1200	Assessment Findings Document with Client's Team Information	Tasks 1210, 1220	TR02 (Current Team's Workday Breakdown)
			Activity 1300	Understand Technical Environment/System Software	Tasks 1305, 1310	TG01 (MM Application Technical Support Requirements)
			Activity 11200	Develop Materials For Team Operations Notebooks	Task 11208	TLKT06 (Project Overview)

2. The software requirements are developed, maintained, documented, and verified by systematically analyzing the allocated requirements according to the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 8-10, 22, 32	WR35 (Requirements Definition Checklist) WR38 (Work Request Planning Checklist)
3. The software design is developed, maintained, documented, and verified, according to the project's defined software process, to accommodate the software requirements and form the framework for coding.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 9-11, 22, 25, 26	WR03-WR10 (Complexity Estimating Worksheets) WR20 (Specification Quality Control Checklist) WR35 (Requirements Definition Checklist) WR38 (Work Request Planning Checklist)
4. The software code is developed, maintained, documented, and verified, according to the project's defined software process, to implement the software requirements and software design.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26-28	WR19 (Programmer's Checklist) WR19a (Member Modification Checklist) WR20 (Specification Quality Control Checklist) WR21 (Database Change Request Form) WR22 (Unit Test Checklist) WR23 (Program Quality Control Checklist) WR44 (Work Request Management Plan)
			Appendix F	Peer Review Process Guide		WR39 (Peer Review Status) WR40 (Peer Review Inspection Plan) WR41 (Peer Review Individual Inspection Log) WR42 (Peer Review Master Inspection Log) WR43 (Peer Review Inspection Summary Report)
	Y	Transition Guide Volume 1	Phase 11000	Team Leader Knowledge Transfer (TLKT)	Task 11260	TLKT28 (Client Programming Procedures and Standards) TLKT39 (Client Development Standards)
5. Software testing is performed according to the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 29	WR22 (Unit Test Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
	Y	Transition Guide Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	Task 11262	TLKT29s (Client Testing Standards)
6. Integration testing of the software is planned and performed according to the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 29	WR36 (Quality Control Issue Description)
7. System and acceptance testing of the software are planned and performed to demonstrate that the software satisfies its requirements.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 31, 45	WR24 (User Acceptance Memo) WR36 (Quality Control Issue Description)
	Y	Does Not Apply				Not in Managed Maintenance Team Scope
	Y	Transition Guide Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	Task 11262	TLKT29 (Client Testing Standards)

8. The documentation that will be used to operate and maintain the software is developed and maintained according to the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 36 to 39	WR27 (Production Release Notice) WR28 (Application Bulletin) WR29 (Application User Manual Update) WR32 (Work Request Folder Checklist)
	Y	Transition Guide Volume 1	Activity 6100	Application Knowledge Transfer Training	ALL TASKS	AKT01 - AKT21
			Activity 6200	How to Estimate Application Knowledge Transfers	ALL TASKS	
			Activity 11200	Develop Materials for Team Operations Notebook	Task 11266	TLKT31 (Documentation Procedures and Standards)
9. Data on defects identified in peer reviews and testing are collected and analyzed according to the project's defined software process.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 26, 29	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Discrepancy Log)
			Section 3 Appendix C	Production Incident Process and IN Documents	Steps 14 to 16	IN06 (Incident Issue Form)
			Appendix F	Peer Review Process Guide		WR39 (Peer Review Status) WR41 (Peer Review Individual Inspection Log) WR42 (Peer Review Master Inspection Log) WR43 (Peer Review Inspection Summary Report)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module, and Report Samples		Issues Report Critical Application Downtime Report Incident Detail Report Rework Trend Analysis Graph
GOAL 2: Software work products are keep consistent with each other.						
10. Consistency is maintained across software work products, including the software plans, process descriptions, allocated requirements, software requirements, software design, code, test plans, and test procedures.	Y	OPS Guide	Section 1, 2, 3 and Appendix A, B, C	ALL PROCESSES		
	Y	Transition Guide Volume 1	Activity 6100	Application Knowledge Transfer Training	ALL TASKS	AKT01 - AKT21
			Activity 6200	How to Estimate Application Knowledge Transfers	ALL TASKS	
			Activity 11200	Develop Materials for Team Operations Notebook	Tasks 11246, 11248, 11250, 11260, 11262, 11266, 11284, 11286	TLKT23 (Support Process Amendments) TLKT24 (Production Incident Process Amendments) TLKT25 (Work Request Process Amendments) TLKT28 (Client Programming Procedures and Standards) TLKT29 (Client Testing Standards) TLKT31 (Documentation Procedures and Standards) TLKT37 (Guidelines for Functional Specifications and Program Specifications) TLKT38 (Client QC Standards for Specifications and Programs) TLKT39 (Client Development Standards)

							TLKT48 (Project Development Plan) TLKT49 (Work Request Management Plan)
Commitment 1 - The project follows a written organizational policy for performing the software engineering activities.	Y	CAI Software Policy Manual	Software Project Engineering (SPE)	Software Product Engineering Policy			
Ability 1 - Adequate resources and funding are provided for performing the software engineering tasks.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Steps 5, 7, 21, 24		
	Y	Transition Guide Volume 1	Activity 1200	Assessment Findings Document with Client's Team Information	ALL TASKS	TR02 (Current Team's Workday Breakdown)	
			Activity 2100	Prepare and Interview for Staffing	Task 2105	TR03 (Technical Interview Form) TR35 (Engagement Sourcing Plan)	
			Activity 2200	Hire Team	ALL TASKS	TR03 (Technical Interview Form)	
Ability 2 - Members of the software engineering technical staff receive required training to perform their technical assignments.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 10, 11	WR03 to WR11 Complexity Estimating	
	Y	Transition Guide Volume 1	Activity 6100	Application Knowledge Transfer Training	ALL TASKS	AKT01 - AKT21	
			Activity 6200	How to Estimate Application Knowledge Transfers	ALL TASKS		
			Activity 7100	Identify CAI Training Requirements	Tasks 7105, 7110	TG02 CAI MM Training Assessment, TG03 Customized Individual Training Plan, TG04 Matrix of Who Needs What Training,	
			Activity 7200	Put Together Training Plans	Tasks 7205, 7210, 7215, 7225	TG05 Technical Training Schedule	
			Activity 7400	Flow Charting & Data Flow Diagrams	Tasks 7415, 7420	FLOW1 (Batch Flowcharting) FLOW2 (Online Flowcharting) DFD0 (Context DFD) DFD1 (Level One DFD)	
			Activity 7600	Supplemental Technical Training	Task 7605		
			Ability 3 - Members of the software engineering technical staff receive orientation in related software engineering disciplines.	Y	Transition Guide Volume 1	Activity 6100	Application Knowledge Transfer Training
Activity 6200	How to Estimate Application Knowledge Transfers	ALL TASKS					
Activity 8200	Train CAI Team in Managed Maintenance Process						
Activity 8300	Train CAI Team in CAI Managed Maintenance Software (Tracer)						
Activity 3200	CAI Transition Manager & Team Leader on Client Site	Task 3235				TLKT45 (Software Configuration Management Plan) TLKT49 (Work Request Management Plan)	
Activity 7500	Client Process and Procedures	Task 7525					
Activity 11200	Develop Materials For Team Operations Notebooks	Task 11250					
Ability 4 - The project manager and all software managers receive orientation in the technical aspects of the software project.	Y	Does Not Apply					

Measurement 1 - Measurements are made and used to determine the functionality and quality of the software products.	Y	OPS Guide	Appendix F	Peer Review Process Guide		WR42 (Peer Review Master Inspection Log) WR43 (Peer Review Inspection Summary Report)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Reports Module and Report Samples		Critical Application Down Time Report Rework Trend Analysis Graph Incident Reports SLA Reports Trending Reports Issue (QC) Report
Measurement 2 - Measurements are made and used to determine the status of the software product engineering activities.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 16, 18, 19, 55	WR16 (User Group Meeting Minutes) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) Weekly Staff Meeting
			Section 5	Performance Metrics		M03 (Monthly Status Report)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Reports Module and Report Samples		Work Request Status Report
Verification 1 - The activities for software product engineering are reviewed with senior management on a periodic basis.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Step 55	WR15 (MM Team Leader Weekly Report Checklist) TR20 (Service Level Agreement) Weekly Staff Meeting Weekly Status Report
Verification 2 - The activities for software product engineering are reviewed with the project manager on both a periodic and event-driven basis.	Y	Does Not Apply				
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software product engineering and reports the results.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 26, 29, 34	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR26 (Work Request Issue Form) WR36 (Quality Control Issue Description)
	Y	ITQA Guide				SQA Checklist TLKT50 Software Quality Assurance Plan
	Y	DQA Guide				DQA04 DQA09
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report
Intergroup Coordination (IC)	Level 3	Referenceor Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	ProcessStep/Task	DocumentReference(s)
GOAL 1: The customer's requirements are agreed to by all affected groups.						

1. The software engineering group, and the other engineering groups, participate with the customer and end users, as appropriate, to establish the system requirements.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 1, 3, 8, 9, 11, 13, 14, 16, 19, 22, 32	WR01 (Work Request) WR02 (Acknowledge Work Request Receipt Memo) WR12 (Detailed Work Request Estimate) WR13 (Estimate Notification Memo) WR16 (User Group Meeting Minutes) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) WR24 (User Acceptance Memo) WR25 (Supplemental Project Change Request) WR26 (Work Request Issue Form) WR27 (Production Release Notice) WR28 (Application Bulletin) WR29 (Application User Manual Update) WR35 (Requirements Definition Checklist) WR36 (Quality Control Issue Description) WR37 (Agenda for the Monthly Client Management Meeting)
	Y	Transition Guide, Volume 1	Activity 4100	Initial Scope Analysis	Tasks 4105, 4110, 4125, 4130	TR34 (Initial Transition Scope Analysis)
			Activity 4200	Verify Scope of Effort	Tasks 4215, 4220, 4235, 4240	TR10 (Application/Resource Matrix and Application Transition Schedule) TR20 (Service Level Agreement)
GOAL 2: The commitments between the engineering groups are agreed to by the affected groups.						
3. A documented plan is used to communicate intergroup commitments and to coordinate and track the work performed.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Step 10	WR01 (Work Request) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) Project Plan
	Y	Transition Guide, Volume 1	Activity 4200	Verify Scope of Effort	Task 4240	TR20 (Service Level Agreement)
			Activity 11200	Develop Materials for Team Operations Notebook	Tasks 11210, 11218, 11220, 11222, 11252, 11288	TLKT 07 (Description of Services) TLKT11 (Customer Relationship Grid) TLKT12 (Customer Communication Grid) TLKT13 (Meeting Requirements Grid) TR21 (Operational Reporting Grid) TLKT45 (Software Configuration Management Plan)
4. Critical dependencies between engineering groups are identified, negotiated, and tracked according to a documented procedure.	Y	Transition Guide, Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	Tasks 11256, 11258, 11272, 11274	TLKT26 (Management Escalation Guidelines) TLKT27 (Associate Escalation Guidelines) TLKT34 (After-Hours Contact List) TLKT35 (After-Hours Escalation)

							Flow)
							TLKT11 (Customer Relationship Grid), TLKT12 (Customer Communication Grid), TLKT13 (Meeting Requirements Grid), AKT06 (External Interfaces)
5. Work products produced as input to other engineering groups are reviewed by representatives of the receiving groups to ensure that the work products meet their needs.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 9, 22, 27		WR21 (Database Change Request Form) WR03 - WR10 (Complexity Worksheets)
	Y	Transition Guide, Volume 1	Activity 10100	Application Knowledge Transfer Notebooks	Task 10125, 10120		TR01 (Application Knowledge Transfer Check List) AKT17 (User and Support Contacts)
			Activity 4200	Verify Scope of Effort	Tasks 4225, 4230, 4240		TR20 (Service Level Agreement)
GOAL 3: The engineering groups identify, track, and resolve intergroup issues.							
2. Representatives of the project's software engineering group work with representatives of the other engineering groups to monitor and coordinate technical activities and resolve technical issues.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 27, 34, 35		WR21 (Database Change Request Form) WR26 (Work Request Issue Form)
	Y	Tracer					Issue Tracking
	Y	Transition Guide Volume 1	Activity 3100	Create Transition Plan	Task 3140, 3145		TR28 (Issue Control Log)
			Activity 11200	Develop Materials for Team Operations Notebook	Task 11218, 11220, 11222		TLKT11 (Customer Relationship Grid) TLKT12 (Customer Communication Grid) TLKT13 (Meeting Requirements Grid)
6. Intergroup issues not resolvable by the individual representatives of the project engineering groups are handled according to a documented procedure.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Step 34		WR26 (Work Request Issue Form)
			Section 2 Appendix B	Support Process and Support Process Documents	Steps 15 to 18		CS05 (Call Support Issue Form)
			Section 3 Appendix C	Production Incident Process and IN Documents	Steps 14 to 16		IN06 (Incident Issue Form)
			Section 4	Operations Process	Steps 6 to 8		Escalation Procedures
	Y	Transition Guide Volume 1	Activity 11200	Develop Materials for Team Operations Notebook	Tasks 11256, 11258, 11276		TLKT26 (Management Escalation Guidelines); TLKT27 (Associate Escalation Guidelines); TLKT35 (After-Hours Escalation Flow)
7. Representatives of the project engineering groups conduct periodic technical reviews and interchanges.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 1, 8, 16, 19		WR01 (Work Request) WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) WR35 (Requirements Definition Checklist)
	Y	Transition Guide, Volume 1	Activity 10100	Assemble Application Knowledge Transfer Notebooks	Task 10125		AKT06 (External Interfaces) AKT17 (User and Support Contacts)

Commitment 1 - The project follows a written organizational policy for establishing interdisciplinary engineering teams.	Y	CAI Software Policy Manual	Intergroup Coordination (IC)	Intergroup Coordination Policy		
Ability 1 - Adequate resources and funding are provided for coordinating the software engineering activities with other engineering groups.	Y	OPS Guide	Introduction, Section 1	Roles and Responsibilities	Steps 1, 8	WR01 (Work Request) WR35 (Requirements Definition Checklist)
	Y	Transition Guide, Volume 1	Activity 1100	Engagement Planning	Task 1105	
			Activity 4100	Initial Scope Analysis	Task 4130	TR34 (Initial Transition Scope Analysis)
Ability 2 - The support tools used by the different engineering groups are compatible to enable effective communication and coordination.	Y	Transition Guide, Volume 1	Activity 1300	Understand Technical Environment/System Software	ALL TASKS	
			Activity 3500	Security	Task 3530	
			Activity 3800	Initial Team Activities	ALL TASKS	TLKT39 (Client Development Standards)
Ability 3 - All managers in the organization receive required training in teamwork.	Y	MM and Tracer Training				MM and Tracer Training Videotapes and Multimedia CDs, Manager as a Leader CD
		MM Leadership Workshop Training				
Ability 4 - All task leaders in each engineering group receive orientation in the processes, methods, and standards used by the other engineering groups.	Y	Transition Guide, Volume 1	Phase 7000	Supplemental Technical Training		
			Activity 3800	Initial Team Activities		TLKT39 (Client Development Standards)
Ability 5 - The members of the engineering groups receive orientation in working as a team.	Y	OPS Guide	Introduction			
	Y	Transition Guide, Volume 1	Activity 2400	Team Get-Together		
			Phase 5000	Transition Kick-Off Meeting	Task 3605 Tasks 5020 Task 5025	
Measurement 1 - Measurements are made and used to determine the status of the intergroup coordination activities.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 15-19	WR16 (User Group Meeting Minutes)
	Y	Tracer User Guide	Chapter 7 Appendix A	Tracer Report Module and Report Samples		WR Status Report, WR Unestimated, WR Preliminary Estimate Completed Graph
	Y	Transition Guide Volume 1				TR10 (Application/Resource Matrix and Application Transition Schedule)
Verification 1 - The activities for intergroup coordination are reviewed with senior management on a periodic basis.	Y	OPS Guide	Section 1 and Appendix A	Work Request Process and WR Documents	Step 55	WR15 (Team Leader Report Checklist) Weekly Staff Report

		Y	Transition Guide, Volume 1	Activity 2300	Assign Team Leader	Task 2340	TR20 (Service Level Agreement)
Verification 2 - The activities for intergroup coordination are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Step 22	WR17 (Open Work Request Status Report) WR18 (Closed Work Request Status Report) Weekly Staff Meetings Weekly Status Report	
	Y	Transition Guide Volume 1	Activity 10100	Assemble Application Knowledge Transfer Notebooks	Task 10105		
			Activity 10200	Application Transition Schedule			
		Does Not Apply					
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for intergroup coordination and reports the results.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 27, 42	WR19a (Member Modification Checklist) WR21 (Database Change Request Form) WR30 (Production Module Release Form)	
	Y	Transition Guide Volume 1	Activity 10300	Schedule & Track Application Transition Meetings (Turnover Support to CAI)	Tasks 10310, 10320		
			Activity 11500	Schedule & Conduct Team Leader Knowledge Transfer Review (Turnover Team Leadership to CAI)	Tasks 11510, 11520		
	Y	ITQA Guide				SQA Checklist TLKT47 TLKT50 Software Quality Assurance Plan	
			ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report	
Peer Reviews (PR)	Level 3	Reference or Manual	Section/Chapter	Page(s)/Location/Phase/Activity Name	Process Step/Task	Document Reference(s)	
GOAL 1: Peer review activities are planned.							
1. Peer reviews are planned, and the plans are documented.	Y	OPS Guide	Appendix F, Section 3.1	Planning			
	Y	OPS Guide	Appendix F, Section 5	Inspection Plan			
	Y	OPS Guide	Section 1, Appendix A	Work Request Process and WR Documents	Steps 26, 29, 32	WR40 (Peer Review Inspection Plan)	
GOAL 2: Defects in the software work products are identified and removed.							
2. Peer reviews are performed according to a documented procedure.	Y	OPS Guide	Section 1, Appendix F	Work Request Process and WR Documents	Steps 26, 27, 29, 42, 44		
3. Data on the conduct and results of the peer reviews are recorded.	Y	OPS Guide	Section 1 Appendix F			WR39 (Peer Review Status) WR40 (Peer Review Inspection Plan) WR41 (Peer Review Individual Inspection Log) WR42 (Peer Review Master Inspection Log) WR43 (Peer Review Inspection Summary Report)	

	Y	Tracer	Summary Screen			
Commitment 1 - The project follows a written organizational policy for performing peer reviews.	Y	CAI Software Policy Manual	Peer Reviews (PR)	\\corp-alt-08\caidata4\repostry\Corporate SEI\Software Policies\Level3\Peer Review Policy.doc		-
Ability 1 - Adequate resources and funding are provided for performing peer reviews on each software work product to be reviewed.	Y	OPS Guide	Appendix F, Section 5	Inspection Plan		WR40 (Peer Review Inspection Plan)
Ability 2 - Peer review leaders receive required training in how to lead peer reviews.	Y	OPS Guide	Appendix F	Peer Review Process Guide		
	Y	OPS Guide	Introduction			MM Training Videotapes Multimedia Training CDs
	Y	Software Inspection Training		Software Inspection Powerpoint Materials		
Ability 3 - Reviewers who participate in peer reviews receive required training in the objectives, principles, and methods of peer reviews.	Y	OPS Guide	Appendix F	Peer Review Process Guide		
	Y	OPS Guide	Introduction			MM Training Videotapes Multimedia Training CDs
	Y	Software Inspection Training		Software Inspection Powerpoint Materials		
Measurement 1 - Measurements are made and used to determine the status of the peer review activities.	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents		
	Y	Tracer	Summary Screen	Peer Review Process Guide		
Verification 1 - The software quality assurance group: reviews and/or audits the activities and work products for peer reviews and reports the results.	Y	CAI SQA Plan				
	Y	OPS Guide	Section 1 Appendix A	Work Request Process and WR Documents	Steps 26, 29	WR20 (Specification Quality Control Checklist) WR23 (Program Quality Control Checklist) WR36 (Quality Control Issue Description)
	Y	ITQA Guide	ITQA Process		Steps 21 to 23, 26	ITQA05 Findings & Recommendations Report

CMMI-DEV: Level 4

SEI Goals/Key Practices	Addressed by MM Process (Y/N)	LEVEL 4: MANAGED MANAGED MAINTENANCE REFERENCES
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Quantitative Process Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
GOAL 1: The quantitative process management activities are planned.						
1. The software project's plan for quantitative process management is developed according to a documented procedure.	Y	OPS Guide	Section 1 Appendix A	1-5 to 1-7	11, 12	WR03 to WR11: pp. A-3 to A-20
	Y	Transition Guide Volume 2A	Team Leader SAM1	TRANS SAM5-14.1	Team-Based Goals	TLKT14s
			Transition SAM1	TRANS SAM1-20.1 to TRANS SAM1-20.20	Service Level Agreement	TR20s
2. The software project's quantitative process management activities are performed in accordance with the project's quantitative process management plan. (This activity also supports Goal 2.)	Y	OPS Guide	Section 5	5-1, 5-2		
	Y	Tracer Guide	Chapter 9	9.17 to 9.22 9.23 to 9.26		Service Level Goals Service Level Agreements
	Y	Transition Guide Volume 2A	Team Leader SAM1	TRANS SAM5-14.1	Team-Based Goals	TLKT14s
			Transition SAM1	TRANS SAM1-20.1 to TRANS SAM1-20.20	Service Level Agreement	TR20s
3. The strategy for the data collection and the quantitative analyses to be performed are determined based on the project's defined software process.	Y	OPS Guide	Section 1 Appendix A	P02 (Flow);	All yellow process steps that require data collection	
			Section 2 Appendix B	P03 (Flow); 2-5, 2-6	All yellow process steps that require data collection; Steps 10, 12	CS04, pg. B-4
			Section 3 Appendix C	P04 (Flow); 3-3, 3-4	All yellow process steps that require data collection; Steps 6, 24	IN01, IN02, pp. C-1, C-2; IN05, pg. C-5
			Section 5	5-1, 5-2		
	Y	Transition Guide Volume 1	Activity 3400	3400.4	Task 3415	
			Activity 9200	9200.1 to 9200.11		
GOAL 2: The process performance of the projects defined software process is controlled quantitatively.						
4. The measurement data used to control the project's defined software process quantitatively are collected according to a documented procedure.	Y	OPS Guide	Section 1 Appendix A	P02 (Flow);	All yellow process steps that require data collection	
			Section 2 Appendix B	P03 (Flow); 2-5, 2-6		
			Section 3 Appendix C	P04 (Flow); 3-3, 3-4		
	Y	Tracer Guide	Chapter 1 Chapter 6			Introduction, Time Entry
	Y	Tracer	Time Entry Process, Event Process Screen			Tracer On-line Documentation
5. The project's defined software process is analyzed and brought under quantitative control according to a documented procedure.	Y	OPS Guide	Section 5			Performance Metrics
	Y	Tracer Guide	Chapter 7 Appendix A			

		Y	Transition Guide Volume 1	Activity 9200	9200.1 to 9200.11		
6. Reports documenting the results of the software project's quantitative process management activities are prepared and distributed.		Y	Tracer Guide	Chapter 7 Appendix A			Tracer Reports, Work Request Status Report (Closed), pg. A.65 Work Request Status Report (Open), pg. A-66
		Y	Transition Guide Volume 1	Activity 9300	9300.1 to 9300.7		
		Y	Transition Guide Volume 2A	Transition SAM1	TRANS SAM1-16.1 to TRANS SAM1-16.3	Biweekly Transition Status Report	TR16s
				Transition SAM1	TRANS SAM1-19.1 to TRANS SAM1-19.4	CAI MM Status Report	TR19s
Transition SAM1				TRANS SAM1-21.1	Operational Reporting Grid	TR21s	
Quantitative Process Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference	
GOAL 3: The process capability of the organization's standard software process is known in quantitative terms.							
7. The process capability baseline for the organization's standard software process is established and maintained according to a documented procedure.		Y	OPS Guide	Introduction Sections: 1, 2, 3, 5	1 to 6, 1A-1, 2A-1, 3A-1		(Sect. 5) Performance Metrics
		Y	Lotus Notes MM Databases	MM Marketing Database	Work Requests		MM Product and Operations Improvement, MM Process Enhancements
		Y	Transition Guide Volume 1	Activity 4100	4100.11	Task 4130 establishes the baseline for measurement as part of SLA development.	
				Activity 11200	11200.30 to 11200.38	Task 11240: Current Client Process ; Task 11242: Maps Client Process to CAI Process Task 11244: Client Approval for Process Modification; Tasks 11246 to 11250: Document Amended Processes	
		Y	Transition Guide, Volume 2A	Transition SAM1	TRANS SAM1-20.4	Service Level Agreement, Revision History section	TR20s
				Team Leader SAM5	TLKT SAM5-20.1, TLKT SAM5-20.2	Work Flow Matrix	TLKT20s
				Team Leader SAM5	TLKT SAM5-21.1 to TLKT SAM5-21.5	Client-CAI Mapping	TLKT21s
				Team Leader SAM5	TLKT SAM5-22.1 to TLKT SAM5-22.3	MM Process Amendment Signoff	TLKT22s
				Team Leader SAM5	TLKT SAM5-23.1, TLKT SAM5-23.2	Call Support Process Amendments	TLKT23s

			Team Leader SAM5	TLKT SAM5-24.1, TLKT SAM5-24.2	Production Incident Process Amendments	TLKT24s
			Team Leader SAM5	TLKT SAM5-25.1 to TLKT SAM5-25.4	Work Request Process Amendments	TLKT25s
Quantitative Process Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
Commitment 1 - The project follows a written organizational policy for measuring and quantitatively controlling the performance of the project's defined software process.	Y	OPS Guide	Introduction Sections: 1, 2, 3, 5	1 to 6, 1A-1, 2A-1, 3A-1		Process Amendments, (Sect. 5) Performance Metrics
	Y	Tracer Guide	Chapter 6 Chapter 7 Appendix A	6.18, 6.19, 7.50, 7.51, A-52 to A-61		Time Entry ,Time Audit Detail Report; Time Audit Summary Report
Commitment 2 - The organization follows a written policy for analyzing the process capability of the organization's standard software process.	Y	OPS Guide	Introduction Sections: 1, 2, 3, 5	1 to 6, 1A-1, 2A-1, 3A-1		Process Amendments, (Sect. 5) Performance Metrics
	Y	Tracer Guide	Chapter 6 Chapter 7 Appendix A	6.18, 6.19, 7.50, 7.51, A-52 to A-61		Time Entry ,Time Audit Detail Report; Time Audit Summary Report;
	Y	Transition Guide Volume 1	Activity 11200	11200.30 to 11200.38	Task 11240: Current Client Process ; Task 11242: Maps Client Process to CAI Process Task 11244: Client Approval for Process Modification; Tasks 11246 to 11250: Document Amended Processes	
	Y	Transition Guide, Volume 2A	Team Leader SAM5	TLKT SAM5-20.1, TLKT SAM5-20.2	Work Flow Matrix	TLKT20s
			Team Leader SAM5	TLKT SAM5-21.1 to TLKT SAM5-21.5	Client-CAI Mapping	TLKT21s
			Team Leader SAM5	TLKT SAM5-22.1 to TLKT SAM5-22.3	MM Process Amendment Signoff	TLKT22s
			Team Leader SAM5	TLKT SAM5-23.1, TLKT SAM5-23.2	Call Support Process Amendments	TLKT23s
Team Leader SAM5			TLKT SAM5-24.1, TLKT SAM5-24.2	Production Incident Process Amendments	TLKT24s	
Team Leader SAM5	TLKT SAM5-25.1 to TLKT SAM5-25.4	Work Request Process Amendments	TLKT25s			
Quantitative Process Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
Ability 1 - A group that is responsible for coordinating the quantitative process management activities for the organization exists.	Y	OPS Guide	Introduction Section 1 Section 2 Section 3 Section 5	3 to 6, 1A-1, 2A-1, 3A-1, 1-14, 1-15, 1-17, 1-18	26, 29	Team Leader (pg. 4); IQAA (pp. 5-6; QC Analyst (Steps 26, 29); Practice Manager (Process Amendments);, (Sect. 5) Performance Metrics
	Y	Transition Guide, Volume 1	Activity 9100	9100.4 to 9100.5	Task 9105	

Ability 2 - Adequate resources and funding are provided for the quantitative process management activities.	Y	Lotus Notes MM Databases	MM Marketing Database	Policies and Procedures		MM Strategic Business Plan (5-Year Plan); Account Retrofit Requirements; MM/Tracer Rollout Strategy Document
	Y	Transition Guide, Volume 1	Activity 9100	9100.4 to 9100.5	Task 9105	
Ability 3 - Support exists for collecting, recording, and analyzing data for selected process and product measurements.	Y	Tracer	Tracer Report Module; Tracer Tracking Module			MM Support Team
	Y	Lotus Notes MM Databases	MM Marketing Database	Policies and Procedures		MM Strategic Business Plan (5-Year Plan); Account Retrofit Requirements; MM/Tracer Rollout Strategy Document
Ability 4 - The individuals implementing or supporting quantitative process management receive required training to perform these activities.	Y	OPS Guide	Introduction Section 1	3 to 8		MM and Tracer Training Videotapes and Multimedia Training CDs
	Y	Tracer	Tracer Report Module; Tracer Tracking Module			MM Support Team
	Y	Transition Guide, Volume 1	Activity 2300	2300.4 to 2300.7	Task 2310, 2315, 2320, 2325	
			Activity 9100	9100.4, 9100.5	Task 9105	
Quantitative Process Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
Ability 5 - The members of the software engineering group and other software-related groups receive orientation on the goals and value of quantitative process management.	Y	OPS Guide	Introduction Section 5	3 to 6; 5-1 to 5-21		MM Support Team, Transition Manager, Team Leader, IQAA
	Y	Transition Guide, Volume 1	Activity 8200	8200.1 to 8200.4		
			Activity 8300	8300.1 to 8300.6		
	Y	Transition Guide, Volume 2A	Transition SAM1	SAM1-36.1 to SAM1-36.3		TR36s
Measurement 1 - Measurements are made and used to determine the status of the activities for quantitative process management.	Y	Tracer Guide	Chapter 7 Appendix A	7.12 to 7.14, 7.32 to 7.34, 7.38 to 7.40; A.6, A.36, A.37, A.65, A.66		Call Support Detail, WR Status Report, Incident Detail Report
Verification 1 - The activities for quantitative process management are reviewed with senior management on a periodic basis.	Y	OPS Guide	Section 1 Section 5 Appendix A	A-25 to A-28, 5-8, 5-9, 5-14	16, 19	Monthly Status Report, WR Status Report, Weekly Status Report, User Group Meeting, Weekly Staff Meet
	Y	Transition Guide Volume 1	Activity 10300	10300.4, 10300.5, 10300.8, 10300.9	Tasks 10310, 10320	
			Activity 11500	11500.4, 11500.5, 11500.8, 11500.9	Tasks 11510, 11520	
	Y	Transition Guide Volume 2A	Transition SAM1	TRANS SAM1-16.1 to TRANS SAM1-16.3	Biweekly Transition Status Report	TR16s

Verification 2 - The software project's activities for quantitative process management are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Section 1 Section 5 Appendix A	A-25 to A-28, 5-8, 5-9, 5-14	16, 19	Monthly Status Report, WR Status Report, Weekly Status Report, User Group Meeting, Weekly Staff Meet
	Y	Transition Guide Volume 1	Activity 10300	10300.4, 10300.5, 10300.8, 10300.9	Tasks 10310, 10320	
			Activity 11500	11500.4, 11500.5, 11500.8, 11500.9	Tasks 11510, 11520	
Y	Transition Guide Volume 2A	Transition SAM1	TRANS SAM1-19.1 to TRANS SAM1-19.4	CAI MM Status Report	TR19s	
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for quantitative process management and reports the results.	Y	OPS Guide	Introduction	5 to 8		IQAA
	Y	Transition Guide, Volume 1	In Development			
Software Quality Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
GOAL 1: The project's software quality management activities are planned.						
1. The project's software quality plan is developed and maintained according to a documented procedure.	Y	OPS Guide	Section 1 Appendix A	1-14, 1-15, 1-17, 1-18	26, 29	WR20, pg. A-33; WR23, pg. A-36; WR36, pp. A-51, A-52
	Y	Tracer Guide	Chapter 9	9.1 to 9.7		Table Maintenance
	Y	Transition Guide, Volume 1	Activity 9100	9100.12	Task 9140	
	Y	Transition Guide Volume 2A	Team Leader SAM5	TLKT SAM5-38.1 to TLKT SAM5-38.2	Client QC Standards for Specifications and Programs	TLKT38s
2. The project's software quality plan is the basis for the project's activities for software quality management. (This activity also supports Goal 3.)	Y	OPS Guide	Section 1 Appendix A	1-13 to 1-15, 1-17, 1-18	25, 26, 29	WR 19 to WR20, pp. A-29 to A-33; WR23, pg. A-36; WR36, pp. A-51, A-52
	Y	Tracer Guide	Chapter 9	9.17 to 9.26		Table Maintenance
	Y	Associate Notebook	Processes and Procedures	TLKT SAM5-38.1 to TLKT SAM5-38.2	Client QC Standards for Specifications and Programs	TLKT38s
	Y	Team Operations Notebook	Processes and Procedures	TLKT SAM5-38.1 to TLKT SAM5-38.2	Client QC Standards for Specifications and Programs	TLKT38s
GOAL 2: Measurable goals for software product quality and their priorities are defined.						
3. The project's quantitative quality goals for the software products are defined, monitored, and revised throughout the software life cycle.	Y	OPS Guide	Section 5	5-1 to 5-21		Performance Metrics

	Y	Tracer Guide	Chapter 7 Chapter 9 Appendix A	7.14 to 7.16, 7.26, 7.27, 7.42, 7.43, 9.17 to 9.26		Graphs and Reports, pp. A.3 to A.5, A.39 to A.41, A.62, A.67
	Y	Transition Guide Volume 1	Activity 4100	4100.11	Task 4130 establishes the baseline for measurement as part of SLA development.	
	Y	Transition Guide, Volume 2A	Transition SAM1	TRANS SAM1-20.4	Service Level Agreement, Revision History section	TR20s
Software Quality Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
5. The software project's quantitative quality goals for the products are allocated appropriately to the subcontractors delivering software products to the project.	NA	NA	NA	NA	NA	NA
GOAL 3: Actual progress toward achieving the quality goals for the software products is qualified and managed.						
4. The quality of the project's software products is measure, analyzed, and compared to the products' quantitative quality goals on an event-driven basis.	Y	Tracer Guide	Chapter 7 Chapter 9 Appendix A	7.14 to 7.17, 7.23, 7.35, 7.36, 7.43 to 7.45, 7.53, 9.17 to 9.26		Graphs and Reports, pp. A.7, A-8, A.17, A.35, A.42, A.43, A.64, A.67, A.69
	Y	Tracer	Table Maintenance			SLA Text Table
	Y	Transition Guide Volume 1			Microsoft Project Plan created in Task 3105 . When updated, it can be used to determine work compatibility, as well as differences between estimated and actual completion dates.	
Commitment 1 - The project follows a written organizational policy for managing software quality.	Y	OPS Guide	Introduction Section 1 Appendix A	1 to 6, 1-13 to 1-15, 1-17, 1-18	26, 29	WR20, pg. A-33; WR23, pg. A-36; WR36, pp. A-51, A-52
	Y	Transition Guide, Volume 2A	Transition SAM1	SAM1-36.1 to SAM1-36.3		TR36s
			Transition SAM1	In Development	Continuous Improvement Process	TR37s
			Team Leader SAM5	TLKT SAM5-28.1 to TLKT SAM5-28.3	Client Programming Procedures and Standards	TLKT28s
			Team Leader SAM5	TLKT SAM5-29.1 to TLKT SAM5-29.4	Client Testing Standards	TLKT29s
			Team Leader SAM5	TLKT SAM5-31.1 to TLKT SAM5-31.6	Documentation Standards and Procedures	TLKT31s
			Team Leader SAM5	TLKT SAM5-37.1 to TLKT SAM5-37.10	Guidelines for Functional Specifications and Program Specifications	TLKT37s
			Team Leader SAM5	TLKT SAM5-38.1 to TLKT SAM5-38.2	Client QC Standards for Specifications and Programs	TLKT38s

Software Quality Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
Ability 1 - Adequate resources and funding are provided for managing the quality of the software products.	Y	OPS Guide	Introduction	5 to 8		IQAA
	Y	Lotus Notes MM Databases	MM Marketing Database	Policies and Procedures		MM Strategic Business Plan (5-Year Plan); Account Retrofit Requirements; Rollout Strategy Document
			Metrics Database			Documentation Team Tracer Support Team
	Y	Transition Guide, Volume 1	Activity 9100	9100.4, 9100.5	Task 9105	
	Y	Transition Guide, Volume 2A	Transition SAM1	SAM1-36.1 to SAM1-36.3		TR36s
Ability 2 - The individuals implementing and supporting software quality management receive required training to perform their activities.	Y	OPS Guide	Introduction Chapter 1	1 to 6		MM and Tracer Training Videotapes and CDs; IQAA,
	Y	Tracer Guide	Chapter 1	1.5		Tracer Training Videotapes and CDs
	Y	Lotus Notes MM Databases	MM Marketing and Tracer Technical Database	Work Requests		Introduction
			MM Marketing Database	Policies and Procedures		MM Strategic Business Plan (5-Year Plan); Account Retrofit Requirements; MM/Tracer Rollout Strategy Document
	Y	Transition Guide, Volume 1	Activity 9100	9100.4-9100.5	Task 9105	
	Y	Transition Guide, Volume 2A	Transition SAM1	SAM1-36.1 to SAM1-36.3		TR36s
Ability 3 - The members of the software engineering group and other software-related groups receive required training in software quality management.	Y	OPS Guide	Introduction Chapter 1	1 to 8		MM and Tracer Training Videotapes and CDs; IQAA
	Y	Transition Guide, Volume 1	Activity 8200	8200.1-4		
			Activity 8300	8300.1-6		
Software Quality Management	Level 4	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
Measurement 1 - Measurements are made and used to determine the status of the software quality management activities.	Y	OPS Guide	Introduction Section 1 Appendix A	1 to 6, 1-13 to 1-15, 1-17, 1-18	26, 29	WR20, pg. A-33; WR23, pg. A-36; WR36, pp. A-51, A-52
	Y	Tracer Guide	Chapter 7 Appendix A	7.20 to 7.22		Issues Report, pg. A.44

Verification 1 - The activities for software quality management are reviewed with senior management on a periodic basis.	Y	OPS Guide	Introduction Section 1 Appendix A	1 to 6, 1-13 to 1-15, 1-17, 1-18	26, 29	WR20, pg. A-33; WR23, pg. A-36; WR36, pp. A-51, A-52
	Y	Tracer Guide	Chapter 1	1.1 to 1.5		
	Y	Lotus Notes MM Databases	MM Marketing and Tracer Technical Databases	Work Requests		Introduction
	Y	Transition Guide Volume 2A	Transition SAM1	TRANS SAM1-28.1 to TRANS SAM1-28.2	Transition Issue Control Log	TR28s
			Transition SAM1	TRANS SAM1-36.1 to TRANS SAM1-36.3		TR36s
Verification 2 - The activities for software quality management are reviewed with the project manager on both a periodic and event-driven basis.	Y	OPS Guide	Introduction Section 1 Appendix A	5, 6, 1-10 to 1-12, 1-14, 1-15, 1-17, 1-18	19, 22, 26, 29	WR17 pg. A-27; WR18, pg. A-28; WR36, pp. A-51, A-52 Weekly Team Meet
	Y	Tracer Guide	Chapter 7 Appendix A	7.12 to 7.14, 7.20 to 7.22, 7.32 to 7.34, 7.38 to 7.40, 7.50 to 7.52		A.6, A.36, A.44, A.51, A.54, A.65, A.66
	Y	Lotus Notes MM Databases	Metrics Database		Issues are posted to the Database	Documentation Team Tracer Support Team
	Y	Transition Guide Volume 2A	Transition SAM1	TRANS SAM1-28.1 to TRANS SAM1-28.2	Transition Issue Control Log	TR28s
			Transition SAM1	TRANS SAM1-36.1 to TRANS SAM1-36.3		TR36s
Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software quality management and reports the results.	Y	OPS Guide	Introduction Section 1 Appendix A	5, 6, 1-14, 1-15, 1-17, 1-18	26, 29	WR20, pg. A-33; WR23, pg. A-36; WR36, pp. A-51, A-52 B17
	Y	Transition Guide, Volume 1	In Development			

CMMI-DEV: Level 5

SEI Goals/Key Practices	Addressed by MM Process (Y/N)	LEVEL 5: OPTIMIZED				
		MANAGED MAINTENANCE REFERENCES				
Defect Prevention	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
GOAL1: Defect prevention activities are planned.						

	1. The software project develops and maintains a plan for its defect prevention activities.		OPS Guide	Section1 Appendix F	1-27, 1-29, 1-33	Step28(CodeandUnit Test); Step 29 (Progrm QC and System Test, (Peer Review), Step 31 User Acceptance Test	WR22, WR23, WR24, WR36, WR36, Appendix F (Peer Review Process)
	2. At the beginning of a software task, the members of the team performing the task meet to prepare for the activities of that task and the related defect prevention activities.		OPS Guide	Section1 Appendix F	1-29,	Step28(CodeandUnit Test); Step 29 (Progrm QC and System Test, (Peer Review), Step 31 User Acceptance Test	WR22, WR23, WR24, WR36, WR36, Appendix F (Peer Review Process)
	GOAL 2: Common causes of defects are sought out and identified.						
	3. Causal analysis meetings are conducted according to a documented procedure.		OPS Guide	Section 1 Appendix A Appendix F	1-29 to 1-32	M010–M19	WR44, Appendix F (Peer Review Process), WR Management Plan (Appendix I), M)5
	5. Defect prevention data are documented and tracked across the teams coordinating defect prevention activities.		MMOPS Transition Guide	Section 1 Appendix A		Step 29, Tasks 11200, 11300, 11400 sections	WR39–WR44, Appendix F (Peer Review Process) Team Operations Notebooks and team meetings
	Defect Prevention	Level 5	Reference Manual	Section/ Chapter	Page(s)	Process Step/Task	Document Reference
	GOAL 3: Common causes of defects are prioritized and systematically eliminated.						
	4. Each of the teams assigned to coordinate defect prevention activities meets on a periodic basis to review and coordinate implementation of action proposals from the causal analysis meetings.		Transition Guide			Tasks 3040, 3140, 3145. 3605, Tasks 11200 and 11300 sections	Weekly Team Status Meeting TLK Doc Overview and Agenda , Team Operations Notebooks; TR08,
	6. Revisions to the organization's standard software process resulting from defect prevention actions are incorporated according to a documented procedure.		OPS Guide Transition Guide	5		All Tasks in 11200 (11246, 11248, 11250, 11268) , 11300 and 11400 sections (especially 11325, 11330, 11340, 11425, 11430)	Amend CS, IN, and WR Process Diagrams Tasks (TLKT23, 24, 25, 32, 48, 49) Software Configuration Management Plan, Work Request Management Plan, Weekly Team Status Meeting and Agenda, Metrics Reports (M06, M07, M10, M11, M15, M17), TLKT18t to TLKT39t
	7. Revisions to the project's defined software process resulting from defect prevention actions are incorporated according to a documented procedure.		OPS Guide Transition Guide	WR Section 1A			Check: Metrics, Use references to Master Defect Log, Peer Review Process, WR Management Process,
	8. Members of the software engineering group and software-related groups receive feedback on the status and results of the organization's and project's defect prevention activities on a periodic basis.		OPS Guide Transition Guide	Section 1	1-14	Step 16	User Group Meeting, Client Management Steering Committee Meets. Agenda and Minutes
	Commitment 1 - The organization follows a written policy for defect prevention activities.						Check about corporate policies with Brian Eckert
	Commitment 2 - The project follows a written organizational policy for defect prevention activities.						Check about corporate policies with Brian Eckert
	Defect Prevention	Level 5	Reference Manual	Section/ Chapter	Page(s)	Process Step/Task	Document Reference
	Ability 1 - An organization-level team to coordinate defect prevention activities exists.		OPS Guide Transition Guide	Introduction Section 1 CAI Roles			MM Teams, MM OPS Guide, Transition Guide (CAI Roles)

	Ability 2 - A team to coordinate defect prevention activities for the software project exists.		OPS Guide Transition Guide	Introduction Section 1 CAI Roles			MM Teams, MM OPS Guide, Transition Guide (CAI Roles)
	Ability 3 - Adequate resources and funding are provided for defect prevention activities at the project and organization levels.	Check with Brian	OPS Guide Transition Guide	Introduction Section 1 CAI Roles			MM Teams, MM OPS Guide, Transition Guide (CAI Roles)
	Ability 4 - Members of the software engineering group and other software-related groups receive required training to perform their defect prevention activities.		OPS Guide Transition Guide MM and Tracer Training	Section 1		Tasks 8200 and 8300 (Train CAI Team in MM Process and Tracer)	MM and Tracer Training MM Leadership Training DQA and ITQA Training Peer Review Training
	Measurement 1 - Measurements are made and used to determine the status of the defect prevention activities.		OPS Guide Tracer	Section 3			Tracer Incident Detail and Incident Status Reports; Incident resolutions are tracked in Tracer. Work Requests are tracked in Tracer for defect prevention activities. WR Status Report is available to determine status of the activities.
	Verification 1 - The organization's activities for defect prevention are reviewed with senior management on a periodic basis.	Check with Brain	OPS Guide Transition Guide			Tasks 9300 Status Reporting	User Group Meetings, Client Status Meetings
	Verification 2 - The software project's activities for defect prevention are reviewed with the project manager on both a periodic and event-driven basis.		Transition Guide Tracer			Tasks 9300 Status Reporting	Account Manager review with Team Leader based on Tracer metrics (Incident Reports and Defect Prvention Work requests)
	Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for defect prevention and reports the results.	Check with Brain				Tasks 9300 Status Reporting	Software Quality Assurance Plan, SQA Group
	Technology Change Management	Level 5	Reference Manual	Section/ Chapter	Page(s)	Process Step/Task	Document Reference
	GOAL 1: Incorporation of technology changes is planned.						
	1. The organization develops and maintains a plan for technology change management.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater's Group, CIT, SEPG, MMRB (MMRB Charter)
	GOAL 2: New technologies are evaluated to determine their effect on quality and productivity.						
	2. The group responsible for the organization's technology change management activities works with the software projects in identifying areas of technology change.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater's Group, CIT, SEPG, MMRB (MMRB Charter)
	4. The group responsible for the organization's technology change management systematically analyzes the organization's standard software process to identify areas that need or could benefit from new technology.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater's Group, CIT, SEPG Plan , Check with Ted or Gene)
	5. Technologies are selected and acquired for the organization and software projects according to a documented procedure.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater's Group, CIT

	6. Pilot efforts for improving technology are conducted, where appropriate, before a new technology is introduced into normal practice.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater's Group, CIT
	Technology Change Management	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
	GOAL 3: Appropriate new technologies are transferred into normal practice across the organization.						
	3. Software managers and technical staff are kept informed of new technologies.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	7. Appropriate new technologies are incorporated into the organization's standard software process according to a documented procedure.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	8. Appropriate new technologies are incorporated into the projects' defined software processes according to a documented procedure.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Commitment 1 - The organization follows a written policy for improving its technology capability.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Commitment 2 - Senior management sponsors the organization's activities for technology change management.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Commitment 3 - Senior management oversees the organization's technology change management activities.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Technology Change Management	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
	Ability 1 - A group responsible for the organization's technology change management activities exists.						Get from Brian Eckert, SEPG
	Ability 2 - Adequate resources and funding are provided to establish and staff a group responsible for the organization's technology change management activities.						Get from Brian Eckert, SEPG (is there a charter)
	Ability 3 - Support exists for collecting and analyzing data needed to evaluate technology changes.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Ability 4 - Appropriate data on the software processes and software work products are available to support analyses performed to evaluate and select technology changes.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Ability 5 - Members of the group responsible for the organization's technology change management activities receive required training to perform these activities.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Measurement 1 - Measurements are made and used to determine the status of the organization's activities for technology change management.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela

	Verification 1 - The organization's activities for technology change management are reviewed with senior management on a periodic basis.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Verification 2 - The software quality assurance group reviews and/or audits the activities and work products for technology change management and reports the results.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	Process Change Management	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
	GOAL 1: Continuous process improvement is planned.						
	2. The group responsible for the organization's software process activities (e.g., software engineering process group) coordinates the software process improvement activities.						Organization Level is Corporate Level here, not MM Team Level, SEPG and MMRB (Get documents from Brian Eckert), check if there is a documented procedure
	3. The organization develops and maintains a plan for software process improvement according to a documented procedure.						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	4. The software process improvement activities are performed in accordance with the software process improvement plan. (This activity also supports Goal 3.)						Organization Level is Corporate Level here, not MM Team Level, Gene Clater, Ted Kobela
	GOAL 2: Participation in the organization's software process improvement activities is organization wide.						
	1. A software process improvement program is established which empowers the members of the organization to improve the processes of the organization.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	6. Members of the organization actively participate in teams to develop software process improvements for assigned process areas.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	10. Software managers and technical staff receive feedback on the status and results of the software process improvement activities on an event-driven basis.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Process Change Management	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
	GOAL 3: The organization's standard software process and the projects' defined software processes are improved continuously.						
	5. Software process improvement proposals are handled according to a documented procedure.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	7. Where appropriate, the software process improvements are installed on a pilot basis to determine their benefits and effectiveness before they are introduced into normal practice.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela

	8. When the decision is made to transfer a software process improvement into normal practice, the improvement is implemented according to a documented procedure.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	9. Records of software process improvement activities are maintained.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Commitment 1 - The organization follows a written policy for implementing software process improvements.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Commitment 2 - Senior management sponsors the organization's activities for software process improvement.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Ability 1 - Adequate resources and funding are provided for software process improvement activities.						None
	Ability 2 - Software managers receive required training in software process improvement.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Ability 3 - The managers and technical staff of the software engineering group and other software-related groups receive required training in software process improvement.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Ability 4 - Senior management receives required training in software process improvement.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Process Change Management	Level 5	Reference Manual	Section/Chapter	Page(s)	Process Step/Task	Document Reference
	Measurement 1 - Measurements are made and used to determine the status of the software process improvement activities.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Verification 1 - The activities for software process improvement are reviewed with senior management on a periodic basis.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela
	Verification 2 - The software quality assurance group reviews and/or audits the activities and work products for software process improvement and reports the results.						Organization is CAI Level not MM Team Level, Gene Clater and Ted Kobela