

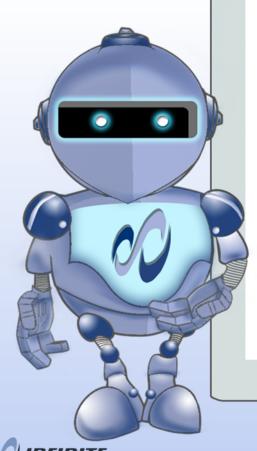
Quality Assurance (QA) Responsibilities

WTS_U201_ITI





Learning Objectives



Upon completion of this course you will:

- Type list of objections here...
 - Understand the Quality Assurance (QA) Process.
 - Understand how to verify Artifacts at the AOR Level.
 - Understand how utilize the QA Tool to track both project level and organizational level compliance.
 - Understand how QA Tool is used to track Business Risk that is not tracked in WTS
 - Understand how the QA Tool is used to tie ITI's strategy to the work being done across the organization.





Quality Assurance Member Responsibilities

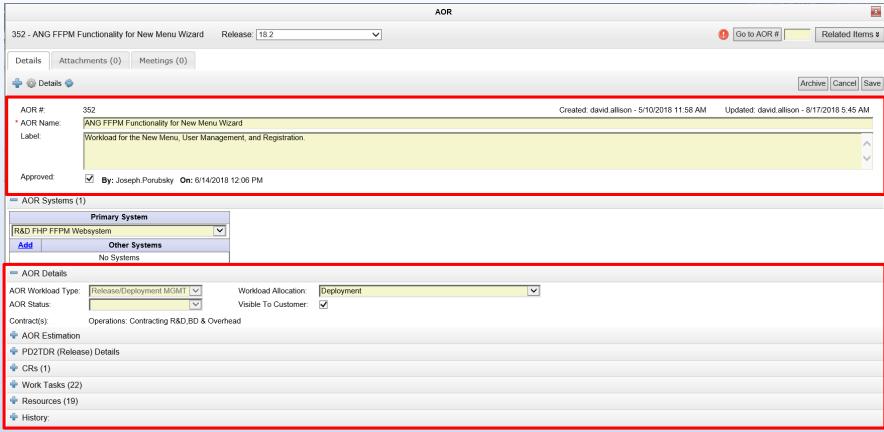
- Facilitates quality assurance activities associated with ensuring projects follow established guidance, plans, and processes.
 - Ensures process related issues are resolved.
 - Audit organizational and project software development process areas and ensuring that
 activities are compliant in accordance with ITI's Organization Guidance and ITI's Software
 Sustainment Handbook (Standard Guidance).
 - Ensures process improvement initiatives address areas of non-compliance (Lessons Learned).
 - Ensures projects are closed and documentation is complete.





QA Member Responsibilities - AORs

During the Planning phase, the QA member works closely with the PM (Project Manager) to verify AORs (Areas of Responsibility) in WTS from the Projects menu







QA Member Responsibilities – AORs

AORs (or Area of Responsibility) are taskers to complete a CR (or Customer Requirement). The following types of AORs are:

- Deployment Management AORs
- Release Management AORs
- AORs that accomplish the actual work

The artifacts for these AORs are color-coded according to the legend below:

Release Level Artifact

Deployment Management Level Artifact

Software Sustainment Management Level Artifact

In the example below, the artifacts are colored according to their respective AOR:

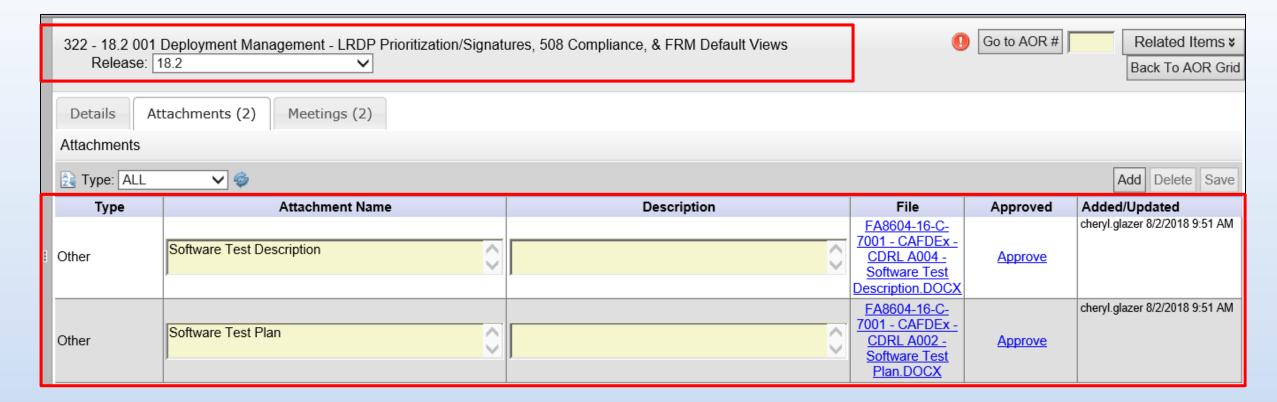
		<u> </u>		
Create and Approve Technical Requirements/Design: Technical Designs completed	6A	1. Technical Designs	1. Lead Developer	Y
Create/Save DAR slide with every Technical Design	6A	1. DAR	1. Lead Developer/Primary BT Member	Υ
Create, Present and Approve Customer Design: Customer Presentation Completed and Approved	6B	1. Customer Designs	1. Primary BT Member/SME	Υ
Develop and Approve the Data Model: Data Model Completed	6C	1. Data Model	1. Lead Developer	Υ
Combined World Books at with Books at Management Tools and Books Bloom World	5A	1. QA Audit	1. Joe Porubsky	
Synchronize Work Products with Project Management Tools and Project Plans: Work		2. WTS	2. David Coulter/Dan Gilbert/Sean Walker	Y
Products, Project Management Tools and Project Plans are updated and synchronized	4A	3. AOR Report	3. Oscar Loera	Y
to reflect changes that have occurred and progress that has been made		4. Estimating Tool	4. Proj MGR	





QA Member Responsibilities – AOR Artifacts

AOR artifacts are documents that represent evidence that work performed throughout an AOR complied with standard and organizational guidance. Artifacts are uploaded to the AOR attachments tab in WTS







QA Member Responsibilities – QA Tool

The QA Tool is a workbook that is used to track PD²TDR processes related to approved CRs and AORs. The QA Tool includes the following sections (or tabs):

- QA Audit Checklist
- Measurements
- Artifact Catalog
- QA Lessons Learned and POAM
- Organizational Audits
- Business Risk Register
- IT Division Strategy





QA Tool – QA Audit Checklist

AORs and CRs are added to the QA checklist. The checklist tracks processes and deliverables and indicates if the Standard Guidance has been followed.

The location of the checklist items are synchronized (or numbered) to the relevant section of the Software Sustainment Handbook (i.e. P15_5_5.5.1).

	Planning																						
CR		P2 _5.1_Ha s the SR Database been maintaine d as part of daily operation s?	SRs been scrubbed & categoriz	P4_5.2_ Has the scope of the project been determin ed?	P5_5.2.1 _Have all inputs been assemble d?	ave Estimatin g Procedur	system change requests	P75.2. 3_Have SRs/CRs been prioritize d?	P85.2. 4_Has formal approval been obtained ?	P9_5.3_ Has baseline for Configur ation Mgt been establish ed?	P105.3. 1_Has the RTM been set up?	P11_5.4_ Has Cybersec urity Security Assessm ent been complete d?	P125.4. 1_Has a CIA determin ation been made?	P13_5.4. 2_Have CRs been compare d with IA controls for security posture changes?	P14_5.5_ _Has the AOR been setup?	P15_5_5.5. 1_Has Project Planning been initiated?	P165.5. 2_Is the execution of the plan being tracked?	P17/ Qa1_8_Ha ve Keg Artifacts been collected and filed?	DS1_5 Have Design Activities been complete d?	Ds2_5.1_ _Have technical requirem ents & design been created?	DS3_5.1. 1_Have technical design slides been built and approved ?	oes Every AOR/CR contain a	
Project: 27 Aug Deployment																							
FHP																							
Research and Development: Development of Tools Tied to New Revenue	352: ANG FFPM Functionality for New Menu Wizard	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	Y	Y	N	N
Research and Development: Development of Tools Tied to New Revenue	353: ANG Working Capital Fund Bill & MORD Maintenance: Automate & simplify current WCF Bills & MORD process through convergence of disparate data sources	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	Y	Y	N	N
Research and Development: Development of Tools Tied to New Revenue	413: ANG Target Load & AF1269 Maint: Automate & Simplify current targe					Y	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	Y	Y	N	N
Research and Development: Development of Tools Tied to New Revenue	N	Y	Y	Y	Υ	N	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	Y	Y	N	N	
Comm	Comments:						Captured as business risk Register.										WTS 15928.						





QA Tool – QA Audit Checklist Explained

- The QA Checklist includes the following elements:
 - Workload Allocation 3 Types Program Management, Deployment, and Production
 - CR (Customer Reconciliation): This is a requested customer deliverable e.g. Research and Development: Development of Tools Tied to New Revenue
 - AOR (Area of Responsibility): AORs are at the level which teams are assigned, work effort can be estimated, and artifacts (work products) are collected. AORs are numbered and available for tasks to be associated with them CR (e.g. 352: ANG FFPM Functionality for New Menu Wizard).
 - Planning (P1_x to P17_x): These are deliverables (or artifacts) associated with the planning phase of the PD2TDR model i.e. Has an initial Project Meeting been held?
 - Design (DS1_x to DS14_x): These are deliverables (or artifacts) associated with the design phase of the PD2TDR model i.e. Have technical requirements & design been created?
 - Develop (DV1_x to DV10_x): These are deliverables (or artifacts) associated with the development phase of the PD2TDR model (e.g. Was code checked out, updated, and committed back to SVN)?
 - Test (T1_x to T9_x): These are deliverables (or artifacts) associated with the testing phase of the PD2TDR model i.e. Has a test plan been developed?
 - Deploy (DP1_x to DP6_x): These are deliverables (or artifacts) associated with the deployment phase of the PD2TDR model i.e. Was the Go Live Deployment Checklist used & users notified?





QA Tool – QA Audit Checklist Explained cont'd

- QA Checklist elements continued:
 - Review (R1_x to R4_x): These are deliverables (or artifacts) associated with the review phase of the PD²TDR model i.e. Were the lessons learned gathered from ITI team leads and their members (to include developers) for each AOR?
 - QA (QA1_x to QA12_x): These are deliverables (or artifacts) associated with the QA (Quality Assurance) phase of the PD²TDR model i.e. Have non-compliant items on the QA Audit tool been addressed and resolved?
 - Comments Additional comments can be entered for each element at any time





QA Tool – Measurements

The Measurement section is utilized to measure each Key Activity to ensure progress is being made in accordance with plan and schedule and make adjustments as needed, measure the quality of products resulting from Core Component Processes Key Activities as defined by the customer, utilize quantitative measurements as indicators of current workload, system performance and as required by customers to ensure contractual quality assurance plan criteria is met, measure process adherence quality objectives in terms of task completion in accordance with process guidance and project plan, and measure Key Activity Results ensuring they align with ITI company strategic goals.

Measurements	Complian t Y/N	CAPDEX Locationistorage	ANG Location/Storage	Objective Mapping	Who is responsible for collecting the	Analysis: What kind of action and when	Collection Instructions	Measured
Maintain the SR Database: Quantitative Measurements include measuring the number and age of current SRs. These metrics are reported in ITI Monthly Status Reports (MSR)		https://infinitetech.sharepoint.com/EDT/Eusiness/Shared/s20Dcouments/FComs/Allite ms.asp/Roof-Didetes/EPEDT/S2EDsiness/S2EShared/s20Dcouments/FCOperation s26ECAFDE#320Contracts/20/26EA860432D58/2D120/2D7001x2932EA007x20x2D s20Monthlps/20Status/20Report6Folder/CTIDs/00/200088FE446B97750940A507849 EE5826C40D4/eusijA7C75882_E9474F8E-B438-F33870330C4} https://infinitetech.sharepoint.com/EDT/Eusiness/Shared/s20Dcouments/Fcoms/Allite ms.asp/2de/S2EDTJs2EBusiness/S2EShared/s20Dcouments/S2EA06 s20Dcontracts/20x289/3313_122019x2DDcs/200089x2942090205eps/202015 s20Dpls/s204202089/3313_122019x2DDcs/200089x29320PcDPs/2030x20Seps/202015 s20Dpls/s204202089x3931_s2019x2DDcs/200089x29320PcDPs/2030x20Seps/202015 s20Dpls/s204202089x3931_s2019x2DDcs/200089x29320Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoms/Allite ms.asp/2fcoaffolder/S2EBDTJs2EBusiness/S2EShared/s20Dcouments/Fcoaffolder/S2EBDTJs2EBUsiness/S2ESABA0488837760940A507849 EE5886C4A048ws/Afc7Fs2ES-B94-44F8E-B439F333B70330C4} VTSAOFI192183.1Release2	https://infinitetech.shatepoint.com/BDT/Business/SharedX20Documents/Forms/ Allterns.aspx/BootFolders.v2FBDTX2FBusiness/2FSharedX20Documents/2F Operationsx2FANI8x20Contractx20x28x99133.v2015x20Dcx2D0083x28x20D DPx2030x20Septx202015x20ptusx204x20optionx20gearsx2FMSFlastFolderDT IDe/001200089FF448B37750340A507849E58x8C4DxViews/A7C79E82-B947- 4F8F-B439-F933B70330C4}	2,3	Collection overseen by Erwin for MSR, Project Mgr and Team Leads take action as necessary	Work as of the end of the Reporting Period (Table 2 MSR) are tracked. Action is required if if outliers are found to be beyond	Collect for monthly analysis include in MSR	SR activity during reporting period and SRs Open/In work as of the end of the reporting period.
Determine the Scope of the Project (Release): Activities are measured using progress measurements as reported in the AOR Project Management Tool and/or WTS		WTS - AOR 192 (18.1 Release).		1,2,4,5	QA Manager (Shahir Arif)	Review to ensure process is both efficient and adequat to achieve desired results.	Identify Results in ITI QA Audit Tool	Scope is on AOR & in WTS
Establishing the baseline for Functional Requirement Configuration Management: Adherence Measurements include QA Quality checklist to ensure CSPIDs have been linked to functional requirements and the functional requi		SYN: CATRAINING SUPPORT_CYTs_RTMs		1, 4	QA Manager (Shahir Arif)	Lessons learned andror failor the process it efficiencies can be gained by performing in other ways	Identify Results in ITI QA Audit Tool	The CM Baeline is done in SVN
Perform Cybersecurity (Anticipated Risks) Assessments: Activities are measured using process adherence pass/fail measurements as reported in the QA Audit Tool.		WTS - AOR 192 (18.1 Release) WTS - Software Development AOR.		1.4	QA Manager (Shahir Arif)	Take Action based on risk measurements as identified in Handbook Guidance. Ensure Risks are monitored and take action as required to mitigate risk	Identify Results in ITI QA Audit Tool	Cybersecurity risk analysis completed
Initiate Project Management Tools: Activities are measured using process adherence pass#ail measurements contained in the QA Audit Tool.		https://infinitetech.sharepoint.com/IT/CAFDEN/Sharet/20Documents/Forms/Alltens.aspx/BoxDG-detes-22d/T2-CAFDEN/25/Sharet/20DOcuments/SC/Beleasex/2020ad/220 System/20M/anagement/2ffx/20CAFDEN/25/Sac4/20DOcuments/SC/Beleasex/20lnifo/EolderCTID-0xif/2000332286668D40F-448FF7A408BE335E00 QA Audit Tool VTS - AOR 192 (ISL Belease)		1,2,3,4,5	QA Manager (Shahir Arif)	If tools are not being utilized reinforce process compliance and Initiate tools as required	Identify Results in ITI QA Audit Tool	Tools were used.
Overall Process Compliance activities are measured using process adherence pass/fail measurements contained in the QA Audit Tool.		https://infinitetech.sharepoint.com/IT/CAFDEN/Sharet/20Documents/Forms/Alltens, spx://Bootof-deter-32df172df-AFDEN/25/Sharet/20Documents/20Feleasex/20andx/20 System/20Managements/20x20CAFDEN/22DCFN/20PTSx2f1t/20Releasex/20InfokFo IderCTID-0xdf20003322866185D40F-448FF7A403BE335E00 QA Audit Tool VTS - AOR 132 (ISI Belease)		1,2,3,4,5	QA Manager (Shahir Arif)	If processes are not being followed reenforce process compliance and initiate tools as required	ldentify Results in ITI QA Audit Tool	Processes were followed.
Create and Approve Technical Requirements/Design (D1): The AOR Project Management Tool and/or WTS is used to track workload task progress as a measure of percent complete.		Attached to: WTS - Software Development AORs		1,2,3,4,5	QA Manager (Shahir Arif)	Project manager ensures process is followed in accordance with guidance, QA Audits Compliance	Identify Results in ITI QA Audit Tool	Design was created. What is being measured? Ex: was it on time, was it accuratewas percent of progress on time with scheduled timeframes, etc.





QA Tool – Measurements Explained

The Measurements section includes the following elements:

- Core Process Components These include plan, design, develop, deploy, test, and review
- Measurements These are qualitative and quantitative measurements used to gauge compliance to a core process i.e. Determine the Scope of the Project (Release): Activities are measured using progress measurements as reported in the AOR Project Management Tool and/or WTS
- Compliant Y/N– This is a yes or no answer to the question of compliance of a Measurement
- CAFDEx® Location/Storage This is the link or URL to an CAFDEx® artifact storage location
- ANG Location/Storage This is the link or URL to an ANG artifact storage location
- Objective Mapping This is used to map measurements to the appropriate objective
- Who is responsible for collecting the Measurement This names the POC or team responsible for collecting a particular measurement
- Analysis: What kind of action and when This is an analysis of the action that will be needed to fulfill a
 measurement and when this will be accomplished
- Collection Instructions These are instructions for how to collect a measurement
- Measured This defines the measurement element
- Comments These are comments added for an element





QA Tool – Artifact Catalog/Tracker

The Artifact Catalog (also known as the Artifact Tracker) section tracks deliverable artifacts (or documents) associated with each step in the PD2TDR Model.

							_				
								Project/Release	AOR Report		MSR
Core Process Compone	Keg Activity: Output/Artifact	Actual Artifact used	Code (1st 2 digits of the file name in the Sharepoint	POC	Compliant Y/N	Notes	₩TS	Folder https://infinitetech.sharepoint.com// I/CAFDE#SitePage#Home.aspu? ElootFolders/zFIT/zFCAFDE#ZitePage#Home.aspu? Eshared/z0Doouments/zFFPeleas s/s/20andx/20System/z0Manageme nt/zFIt/20CAFDE#/x/20CAFDE#/z0CAFDE#ZitePage# Stz2FIT/z0Release#Zidinfo/zFIT/z/ Elyz2DRelease#Zidinfo/zFIT/z/ Elyz2DRelease#FolderTIDE 00/20	MTS Release Level AOR (AOR.	WTS AOR: (104, 236, 237, 238, 241,	ANG ANG Intinintetes hasepoint com/EDIT/Business/Shareds/2 Discumenta/F.com/Edit/Business/Shareds/2 Discumenta/F.com/Edit/Business/Shareds/2 FBusiness/SCFShareds/2Discuments/CFFD15/2 FBusiness/SCFShareds/2Discuments/CFFD15/2 Destards/SCFD-Discuments/CFFD15/2 Destards/SCFD-Discuments/CF
nt			Release Folder)					009322866166D40F448FF7A409BE 935E006Views:x7BFBBA209E- BA48-443D-86AA- 43A6D13C2F6Bx/7D	https://dev.cafdex. com/VTS	242, 243)	CAFDE https://infinitechs.htmspoint.com/BDT/Business/Shareds/2 0Documents/Forms/Allitems.aspx/RoosFolderss/2FBDT1x2 FBusiness/2EFShareds/20Documents/2FDperations/2FFCA FBusiness/2EFShareds/2Documents/2FDperations/2FFCA FBusic/2CO-nates/2De22EFS8094-BC-C 7000x282FF0007x20: **OoMboothles/25astures/20Bacquis/Folders/1110-0c012000886
Planning	Maintain the SR Database: Monthly Status Report reflecting Quantitative SR	1. MSR Stored monthly 2. PC&P	1A	1. MSR: Greg Jones 2. PC&P: Proi MGR	Y N	Jene't will post last MSR to AOR 192	- 2	X			X
5.1	measurements, project charter and plan, and project release kick off meeting minutes.	3. Proi Kickoff Meeting Minutes	1B	3. Proj Kickoff Meeting Minutes: Proj MGR	N N			Ŷ			0
Planning 5.2A	Determine the Scope of the Project (Release Sprints and Unplanned Fix Sprints): A prioritized and approved list of CR/CSRDs.	ANG Approved CR list	2A	Proj MGR	N	Jene't working with Joe	2	×			,
Planning 5.2B	Perform Estimates and save documentation in ITI Estimating folder/container	None		Proj MGR	N						
Planning 5.3	Establish the Baseline for Functional Requirement Configuration Management: AOR Project Management Tool Reports, RTM, and WTS Reports.	1. Code Versions in SVN	2B	1. Derik Harris/Erin Mendoza	N		х	×	×		
0.0	Tront topochanagement room epoto, this, and it to hepoto.	2. AOR Report		2. Proj MGR	N	Jene't working with Joe	X	×	X		
Planning	Perform Portfolio Management (Anticipated Cyber Risks and Architecture) Assessments: AOR Project Management Tool Reports and/or VTS indicating	1. AOR Report - Proj MGR		1. Proj MGR	N	Jene't working with Joe	2	×	×		
5.4	cybersecurity risk and architectural assessment outcomes by CR/CSRD.	2. PfM Risk Assessment Workbook	3A	2. Terrence Manning	N	Jene't waiting on approval from Doreen	×	×	×		
Planning	Initiate Project Management Tools: AOR Project Management Tool Reports and WTS indicating CR/CSRD work task estimates, team assignments, and progress	 AOR Report inc. team assignments, and progress measurements - Proj MGR 	4A	1. Proj MGR	N		×		×		
5.5	measurements; Project Charter & Project Plan are completed and being utilized.	2. WTS Taskings to include work task estimates (T-Shirt Sizes)		2. Primary BT member	N						
Planning	Overall Process Compliance: QA Audit tool indicating adherence to process as pass#ail.	QA Audit	5A	Shahir Arif	N			×	×		
5.1A	Create and Approve Technical Requirements/Design: Technical Designs completed	Technical Designs	6A	Lead Developer/Primary BT Member	N		×			×	
Design 5.1B Design	Create/Save DAR slide with every Technical Design Create, Present and Approve Customer Design: Customer Presentation	Technical Designs		Lead Developer/Primary BT Member	N		×	X		×	
	Completed and Approved	Customer Designs	6B	David Coulter/Dan Gilbert	N		×			×	
5.3	Develop and Approve the Data Model: Data Model Completed Synchronize Work Products with Project Management Tools and Project Plans:	Data Model in SVN/VTS 1. QA Tool	6C	Erin Mendoza/Derik Harris 1. Joe Porubsku	N N		×	V	v	8	
Design	Work Products, Project Management Tools and Project Plans are updated and	2. VTS		David Coulter/Dan Gilbert/Sean Walker	N N		X	×	8		
5.4	synchronized to reflect changes that have occurred and progress that has been	3. AOR Report		3. Oscar Loera	N		X	×	X		
	made	5. Estimating Tool		5. Proj MGR	N						
Develop 5.1	Maintain CAFDEx® Code Configuration Management Practices: Code has been committed to SVN and prior versions saved in historical archive	SVN Code	2B	Erwin Torres/Erin Mendoza	N		×	×			
Develop	Develop Code: Progressive cyclical Develop and Test processes have been	Code MGMT Peer Review Log (IVTs)	7A	Bryan Arnett	N		X	×	×		
5.2	completed and code has been accepted/approved for deployment. Developer	Test Reports with customer Sign Offs	7B	2. David Coulter/Anna Knapp			X	X	8		
	Meeting minutes with measurements containing the number of Internal Verification			3. Primary BT Member			X	X		×	
	Surebassian Vanta Dandaran iith Danian Managaman Tanta and Sanian State	1. QA Tool		1. Shahir Arif			X	×	×		
Develop	Synchronize Work Products with Project Management Tools and Project Plans: Work Products, Project Management Tools, Project Plans have been updated	2. VTS 3. AOR Tool		David Coulter/Dan Gilbert/Sean Walker David State			X	X	×		
5.3	and synchronized	AUH 1001 Exec Report		Joe Porubsky Executive Team			X	X	×		
	and synonionized	Estimating Tool		Executive Feam Proi MGR			X	×	X		
		1. Test Plan	8A	1. Proj MGR	N	Jene't started on 8/8/18	8	Ŷ.	8		
	Develop a Test Plan: Test Plan, Test Descriptions, RTM Functional Requirement	2. Test Descriptions	8B	2. Proj MGR	N N	Jene't started on 8/8/18	2	×	×		
	Management Tool has been maintained in accordance with processes and	3. RTM Tool	8C	3. Primary BT Member	N N			×			
	previous and final Functional Requirement Definition versions are available in the Requirement Traceability Matrix (RTM).	Functional Requirements Definitions Versions (Contained within CVTs)	9B	4. Primary and 2nd BT Member		Jene't started on 8/8/18		×	×		





QA Tool – Artifact Catalog/Tracker Explained

The Artifact Catalog/Tracker section includes the following elements:

- Core Process Components These include plan, design, develop, deploy, test, and review
- Key Activity: Output/Artifact This is the primary output or artifact for the core process
- Actual Artifact used This lists the actual document used to satisfy the artifact requirement
- Code This is 1st 2 digits of the file name in the SharePoint Release Folder
- POC This is the primary contact for the artifact
- Notes These are additional notes relates to the artifact
- WTS This is to note an associated WTS item
- Project/Release Folder This is to note the artifact is stored in the appropriate project/release folder





QA Tool – Artifact Catalog/Tracker Explained cont'd

- The Artifact Catalog/Tracker section elements continued:
 - AOR Report Location This is to note the AOR report artifact is stored in the appropriate AOR report location
 - MSR Location (ANG/CAFDEx®) This is to note the MSR artifact is stored in the appropriate MSR location
 - CVT/RTM Location in SVN This is to note the CVT/RTM artifact is stored in the appropriate CVT/RTM location
 - Code Location in SVN This is to note the Code artifact is stored in the appropriate CVT/RTM location
 - RTM Location in SVN This is to note the RTM artifact is stored in the appropriate RTM location
 - Standard Guidance Location This is to note the Standard Guidance artifact is stored in the appropriate RTM location
 - Cyber Info This is to note Cyber Security input has been received





QA Tool – QA Lessons Learned & POAM

The QA Lessons Learned & POAM section tracks critical inputs and deficiencies associated with planning and execution of each step in the PD2TDR Model. These lessons are discussed internally and used for future process improvement. The POA section addresses the "Plan of Action" to resolve deficiencies while the milestones are used to monitor progress and achievements.

Tracking #	Input Date	Input From	CMMI Process Area & SP	Lesson Learned	POA	1st Milestone Date	2nd Milestone Date	3rd Milestone Date	Final Implement Date	Release that applied Fix (or NA)
18.1E	15-Sep-17	Anna	Dev	Critical Dependancies are not being maintained in Dev Meeting Minutes	Reinforcing standard guidance	18.1 IP-1	18.1 IP-2	18.1 IP-3	18.1 Release	18.1
18.1F	16-Sep-17	Dan Gilbert	Planning	Need to reenforce estimating processes	Updated guidance and checklists. Reinforcing standard guidance	18.1 IP-1	18.1 IP-2	18.1 IP-3	18.1 Release	18.1
18.1H	7-Nov-17	Daniel Gilbert	Design	The amount of time it takes to fully design projects can be very time consuming. For this reason ITI believes that automating the design tool can save a lot of time with future work.	We will most likely use either https://mockflow.com/ or https://moqups.com in the future.	18.1 IP-1	18.1 IP-2	18.1 IP-3	18.1 Release	18.1
18.11	23-Jan-18	Maliha Aneel	All	Need to create an email template that gets distributed to the team when an SR is closed. The template should inloude all information relevant to the stakeholders.	The business team will create an email template that will include all relevant information required in the "SR resolution" emails.	Add to SR Procedure and Get Aproval	Create Training	Provide and Document Training		18.1
18.1K	28-Dec-17	CMMI Team SCAMPI C Appraisal also Anna, Shahir, Joe, Tanyetta, Erin and Essel following 29 March Dep.	All	Need to relook at the project plan that is now in WTS. Need to be able to assign workload that is identified in the project plan to specific individuals responsible for performing the work. Need to have need by dates and follow up to ensure all items such as go live checklis, FRR memo, test reports are in work and recieved as identified in PP. Proj Manager need to better communicate when artifacts are due and oversee deployment schedule. Need to Log Go-Live Checklist as a task in WTS. Clearly need to define roles and responsibilities for release. Need to make it clear to the team who is responsible for what. I.e who gathers/attaches Artifacts where, etc.	Work with exec team to complete this task by making the PP more robust in WTS. He will implement new AOR capabilities to assign tasks across AORs.					18.1
18.1L	28-Dec-17	CMMI Team SCAMPI C Appraisal	ОТ	Need to syncronize training plan that training team is using with training plan in Organizational Guidance	4/4/2018: Cheryl has created a training plan for team- need to get that training plan along with devs training plan into the tactical plan portion of the organizational guidance.					
18.1M	28-Dec-17	CMMI Team SCAMPI C Appraisal	All	Need to complete all of the SCAMPI C Appraisal Actions - Note: The SCAMPI C Appraisal POAM is considered a part of these lessons learned. Note: SCAMPI C reevaluated in June and Improvement actions continue	Need to track POAM established for the SCAMPI C and ensure items are tracked to completions	3/29/2018	5/24/2018	TBD	7/31/2018	18.1-18.2
18.1U	2-Apr-18	Dan		Need to add a back up resource to Project Manager.	Dan and Joe need to train Cheryl to support Joe when he is out.	5/24/2018	N/A	N/A	5/24/2018	18.1
18.1W	2-Apr-18	Joe		Improve the way we transition the CVTs into to the RTM. We need to improve the way we tie the CVTs to the RTM.	WTS capabilities need to be expanded to add RTM functionalities so that this process can be revolutionized.	5/24/2018	TBD	TBD	7/31/2018	18.2
18.1X	4-Apr-18	Dan, Shahir	OPD	Establishing Teams procedure needs to be revised and adopted.	ITI is rehosting WTS such that teams are identified within the system.However, while this functionality exits in WTS, we are just beginning to adopt.	5/24/2018	TBD	TBD	7/31/2018	18.2





QA Tool – QA Lessons Learned & POAM Explained

- The QA Lessons Learned & POAM section includes the following elements:
 - Tracking # This is a tracking number assigned to Lessons Learned input
 - Input Date This is the date of input into the QA Lessons Learned
 - Input From This is the POC from which input was received
 - CMMI Process Area & SP This is the area from which the input was gathered
 - Lesson Learned This is a description of the item noted as a learned lesson
 - POA (Plan of Action) This is a description of the action that will be taken in light of the lesson learned
 - 1st Milestone Date This is the date of the 1st milestone of achievement
 - 2nd Milestone Date This is the date of the 2nd milestone of achievement
 - 3rd Milestone Date This is the date of the 3rd milestone of achievement





QA Tool – QA Lessons Learned & POAM Explained cont'd

- The QA Lessons Learned & POAM section elements continued:
 - Final Implement Date Date of final implementation of all milestones
 - Release that applied Fix (or NA) This is the release where the fix was implemented
 - Notes This is to enter additional notes related to the lesson learned
 - Implemented This is a description of the items implemented from a lesson learned
 - Approved Update Standard Guidance and other things such as QA checklist as needed
 - Create and Provide Training on new processes that were added to Standard Guidance
 - Update Process Improvement Worksheet/Workbook This is for the addition of Process improvement updates
 - Additional Comments This is designated to additional lessons learned comments





QA Tool – Organizational Audits

The Organizational Audits section provides an area for organizational tracking of deliverables associated with artifact and QA compliance. This section also lists the audit schedule that is followed internally.

Process Area	Specific Practice	ltem	Last Date Artifact was Updated	Date Reviewed by QA	Compliant Y/N	Reason for Non Compliance	Audit Schedule
OPD		Has ITI established and maintained the organization's set of standard processes.	7/25/2018	7/25/2018	Y		End of Release
OPD	1.2	Establish and maintain descriptions of lifecycle models approved for use in the organization.	7/25/2018	7/25/2018	Y		End of Release
OPD	1.3	Establish and maintain tailoring criteria and guidelines for the organization's set of standard processes.	7/25/2018	7/25/2018	Y		End of Release
OPD	1.4	Establish and maintain the organization's measurement repository.	7/25/2018	7/25/2018	Y		End of Release
OPD	1.5	ITI's Organizatioanl Process Asset Library Catalog (e.g Catalog and selected items in Organizations Process Asset Library)	7/25/2018		Υ		End of Release
OPD	1.6	Establish and maintain work environment standards	7/25/2018	7/25/2018	Y		End of Release
						ITI is rehosting WTS such that teams are identified within the system Result: The Functionaliuty is there but the data is not defined and it is	
OPD	1.7	Establish and maintain organizational rules and guidelines for the structure, formation, and operations of teams.	7/25/2018	7/25/2018	Y	not fully utilized.	Captured as lessons learned under the 18.1-2 Release.
OPF	1.1	Establish and maintain the description of the process needs and objectives for the organization.	7/25/2018	7/25/2018	Y	_	End of Release
OPF	1.2	Appraise the organization's processes periodically and as needed to maintain an understanding of their strengths and weaknesses.	7/25/2018				End of Release
OPF	1.3	Identify improvements to the organization's processes and process assets.	7/25/2018	7/25/2018	Y		End of Release
OPF	2.1	Establish and maintain process action plans to address improvements to the organization's processes and process assets.	7/25/2018		Y		End of Release
OPF	2.2	Implement process action plans.	7/25/2018	7/25/2018	Υ		End of Release
OPF	3.1	Deploy organizational process assets across the organization.	7/25/2018	7/25/2018	Υ		End of Release
OPF		Deploy the organization's set of standard processes to projects at their startup and deploy changes to them as appropriate throughout the life of each project.	7/25/2018		Y		End of Release
OPF		Monitor the implementation of the organization's set of standard processes and use of process assets on all projects.	7/25/2018				End of Release
OPF		Incorporate process-related experieinces derived from planning and performing the process into the organizational process assets.	7/25/2018	7/25/2018	Y		End of Release
MA		Establish and maintain measurement objectives derived from identified information needs and objectives.	7/23/2018		Y		Monthly
MA		Specify measures to address measurement objectives.	7/23/2018		Υ		Monthly
MA		Specify how measurement data are obtained and stored.	7/23/2018		Y		Monthly
MA		Specify how measurement data are analyzed and communicated.	7/23/2018				Monthly
MA		Obtain specified measurement data.	7/23/2018		Y		Monthly
MA		Analyze and interpret measurement data.	7/23/2018		Y		Monthly
MA		Manage and store measurement data, measurement specifications, and analysis results.	7/23/2018		Y		Monthly
MA		Communicate results of measurement and analysis activities to all relevant stakeholders.	7/23/2018		Y		Monthly
SAM		Determine the type of acquisition for each product or product component to be acquired.	7/20/2018	7/20/2018	Y		Monthly
SAM		Select suppliers based on an evaluation of their ability to meet the specified requirements and established criteria.	7/20/2018		Y		Monthly
SAM		Establish and maintain supplier agreements.	7/20/2018		Y		Monthly
SAM		Perform activities with the supplier as specified in the supplier agreement.	7/20/2018		Y		Monthly
SAM		Ensure that the supplier agreement is satisfied before accepting the acquired product.	7/20/2018		Y		Monthly
SAM		Ensure the transition of the acquired products from the supplier.	7/20/2018		Υ		Monthly
PPQA		Objectively evaluate selected performed processes against applicable process descriptions, standards, and procedures.	7/27/2018		Y		Weekly
PPQA	1.2	Objectively evaluate selected work products against applicable process descriptions, standards, and procedures.	7/27/2018	7/27/2018	Y		Weekly





QA Tool – Organizational Audits Explained

The Organizational Audits section includes the following elements:

- Process Area This is the process area being audited
- Specific Practice This is the PD²TDR item that corresponds to the item being audited
- Item This is a description of the item being audited
- Last Date Artifact was Updated This is the last date of artifact auditing for an item
- Date Reviewed by QA This is the last date of QA review for an item
- Compliant Y/N– This is a yes or no answer to the question of compliance of an item
- Reason for Non Compliance This is to enter an explanation if an item is not compliant
- Audit Schedule This is the schedule for organizational auditing





QA Tool – Business Risk Register

The Business Risk Register follows guidance outlined in ITIs Software Sustainment Risk Management Plan (AOR 438).

AOR 438 produces a matrix comprised of potential business risk types, impacts, mitigations, and statuses. This is used to evaluate risk across several processes.

	Risk Type	Share with Custo	Priorit	Risk Area	Impacts	Action Owners	Project Impact-Mitigation Plan	Status	Owner	Likeliho od	Severi ty	Response (Avoid, mitigate, transfer,	Status	Additional Mitigation or Contingency Plan	Date Modified (By)
1	Business (Capacity)	r? ▼ No	1	Staffing - DC Team consumed with warrenty and process support. Need to close work in order to create capacity to support 18. Irelease	Scheduling	DC Team Leads	ITI will move work to WR or pull WR team into FRM work as needed	Open	ITI	High	High	accept} ▼ Mitigate	WR team engaged and working AORs for warenty support FRM and FHF	Process support will taper as POM concludes allowing for additional capacity. New employee training plan to shorten training curve and increase productivity is being deployed. Release will be split inot four deployments; incremental deployment will help manage risk.	1/26/2018 (SA & JP)
2	Business (Product)	Yes	2	Customer Support	Testing	l Coultor & Cambridge Do	Constraints on oustomer resources has potential impacts to operations – eg. Program Responsibilities –Customer Testing	Open	CAM	Med	Med	Mitigate	Low levels of oustomer support are addressed on a case by case basis. ITI implementing new customer integration testing procedure for IP2 and IP3.	Testing Contingency – ITI performs additional testing with use of working Goups	DG 12/01/17
3	Cybersecurity	No	3	Release Vulnerabilities	System Downtime	Terrence / Marissa	This serves as a notification that potential risks have been identified in Cyber Assessment tab where it will be tracked in detail.	Open	IΤΙ	Low	Med	Accept	ATO has been submitted - Awaiting C&A	Vulnerabilities have been addressed and ATO has been submitted for certification	DG 1/15/18
4	Infructructire	Yes	4	Infrustructure	System Performance	Davdid coulter	Cloud infruestructure impact - impact on system usage.	Open	ITI	High	Med	Mitigate	Software sustainment of code is underway.	Over the next year-two. ITI to keep abbreast of the proceess that are impacted thru vigorous testing.	SA 03/01/2018
5	User Mgmt	Yes	5	Customer Support	Drain of resources supporting/training new users.	Cambridge	There is risk in exposing unaffiliated users to the system. Vulnerabiliteis and opeing the system to unaffiliated user without a clear purpose in the forcess for the user	Open	IΤΙ	High	Med	Mitigate	Software sustainment of the user mgmt fuctionality is underway.	Define the purpose and process for such users. Consider continuity and process guides. Modernize data diotionary by making it useful to users that are not familiar with processes.	SA 03/01/2018
6	Business Risk	No	6	CMMI Certification	Estimation and Critical Dependencies	ITI CMMI/WTS Team	We will not be able to capture estimation and critical dependencies for 18.1 release be cause we broke existing funtionalities (in order to fix them).	Open	ITI	Low	High	Mitigate	Existing estimation and critical dependency proces are ODE, WTS team and bus team are wortking on new provessifunctionality in WTS	WTS sustainment work is underway to automate estimating processes.	1/19/2018 (SA & JP)
7	Business Risk	No	?	Risk Mitigation Stategies			-What is the primary objective of this deployment? -What areas have increased risk driven by lack of familiarity? -What areas have increased risk driven by process volatility? -What risk to the deployment is caused by production support? -What risk to the deployment is caused by resource constraints (Personnell)? -What risk to the deployment is caused by resource constraints (Non-Personnell)?	Open	ITI			Mitigate			CD 7/11/2018
8	Business (Contract)	No	7	CMMI Certification	CMMI Certification - SCAMPI C Appraisal findings need to be Addressed	ITICMMI/WTS Team	ITI will lose CMMI maturity level 3 certification	Open	IΤΙ	Low	High	Mitigate	Plan to readdress and initiate additional QA reviews has been deployed. Will perform another CMMI Scampi C in Mar time frame to reassess progress	CMMI Team engaged and CMMI executive team briefed on way ahead. Training ITI Staff on Evolving process. Ensure Training Plans are in place.	1/26/2018 (SA & JP)
9	Business (Contract)	No	8	Intellectual Property protection	Ability to minimize competition	Mike W	Work with attorney to review Intellectual Property status	Open		Low	High	Mitigate	ITI is moving toward SAAS - Attorney is developing minimum requirements for agreements	Attorneys will be kept abreast and recommend action	DG 1/26/18





QA Tool – Business Risk Register Explained

The Business Risk Register section includes the following elements:

- # This is the number assigned to each item
- Risk Type This is the area from which the risk originates
- Share with Customer? This is a yes or no answer to the question of items shared with the customer
- Priority This is the priority for an item
- Risk Area This identifies the area of business risk
- Impacts This identifies impacts from the business risks
- Action Owners (Joint need both) This designates the POC(s) associated with actions related to risks
- Project Impact-Mitigation Plan This is a description of the plan to address and mitigate manifested risks
- Status This lists the status of a risk
- Owner This lists the risk owner
- Likelihood This lists the likelihood of a risk being manifested





QA Tool – Business Risk Register Explained cont'd

The Business Risk Register section elements continued:

- Severity This lists the severity of an associated risk
- Response (Avoid, mitigate, transfer, accept) This list the potential response to an associated risk
- Status This lists the status of a response to a business risk
- Additional Mitigation or Contingency Plan This is a description of any additional plans to address and mitigate manifested risks
- Date Modified (By) This is the last date that the item was modified and the POC who made modifications





QA Tool – IT Division Strategy

The IT Division strategy section tracks the potential opportunities for new and expanded business with our current partners and future customers.

Effort	Priority	Status	Contract Renew	Admin Savings	Competition	Current Product / New Customer	New Product /Current Customer	New Product/ New Customer	Other	Comments
Contracting: Sustainable Growth										
Current Products										
Expansion of CAFDEx®		?				х				
CAFDEX® Specifically Configured to New Processes										
FHP for Active Duty(AD)		Proposal In Work				x				
FHP Fuel		On Hold				x				On Hold until May 2018
New Products										
OFCO (Other Funded Customer Orders)		Proposal Submitted						х		
Non-Fly DLR		Proposal Submitted						х		
New Customers				•	•					
Navy		?						х		
Implementation of Pipeline Management Strategies		?						х		
Proposals to pursue workload outside of CAFDEx [®]		?							x	
New Sales for GSA Contract									x	
Operational Excellence										
People										
LMS		Design							x	
Skill Tracking		?							х	
Process										
CMMI Maturity Level 3 Appraisal - Nov 2018	3	Prepping							x	SCAMPI Appraisal is schedule for Nov 12th 2018; Teams is incorporating findings from SCAMPI-C Appraisal from Dec 2017. Another SCAMPI-C in WR coming up.
Technology										
Workload Tracking System (WTS)	2	Develop							x	
Other										
CAFDEx 18.1	1	Develop				x				Mar 29th/May 24th Deployments
CAFDEx 18.2	3	Planning				x				Aug 16th/Nov 8th Deployments
CAFDEx® Website		?								Synce website and material to integrate to WTS RQMT Storage
Certifiaction Training for MPN		In Work								





QA Tool – IT Division Strategy Explained

The IT Division Strategy section includes the following elements:

- Effort This is the business department associated with contracting and sustainable growth, operational excellence, and other endeavors
- Priority This is the priority of an associated business strategy
- Status This is the status of an associated business strategy
- Contract Renew This is to note whether or not a contract will be or has already been renewed
- Admin Savings This is to note any administrative savings
- Competition This is to note any potential business competition
- Current Product / New Customer This is to note the addition of new customers to our current products
- New Product /Current Customer This is to note the addition of current customers to our new products
- New Product/ New Customer This is to note the addition of new customers to our new products
- Other This is for any other items missed previously
- Comments –This is for additional comments





QA and Project Manager Responsibilities

The QA member reports directly to, and works closely with the Project Manager to ensure plans, guidance, and processes are adhered to during the project's PD²TDR process.

The QA reviews processes thereby assisting the Project Manager with their responsibilities to:

- Ensure progress through each phase of ITI's PD²TDR model in accordance with schedule by ensuring commitments to work are determined and assigned.
- Helps to address and overcome barriers that impair progress.
- Document deliverables to include signatures/approvals required to meet milestone requirements and move through the model.





Review



- by ensuring compliance with process
- verifying that required artifacts are attached to their respective AORs.
- using the QA Checklist to track compliance with process and catalog artifacts.

The QA member works closely with the Project Manager to:

- ensure plans, guidance, and processes are adhered to during the project's PD2TDR process.
- confirms progress through each phase of ITI's PD²TDR model is made in accordance with schedule by ensuring commitments to work are determined and assigned.

