

CAI Framework report
11/13/091:39 PM

Document Name	Ref.ID	Document Description	Document Purpose	Why CAI thinks it is required		
Application Overview	AKC01	Starts with the application's primary purpose to the users. It then describes the main business functions within the application, and provides a graphic representation of the application and its business environment	Describes to a person who has no knowledge of the Application exactly what its purpose is for the Company. Starts with the application's primary purpose to the users. It then describes the main business functions within the application, and provides a graphic representation of the application and its business environment. Also contains a graphical view of the major interactions between the system and the external environment. This could be another application, internal business function, or external business function. In the Yourdon data flow modeling context this DFD.0	<p>(1) Corresponds to the "Glossary / Acronyms", "Services or Functions" and "System Overview" Content areas;</p> <p>(2) During interviews, TD SME's expressed a need for an overview for training purposes and a need to describe the application architecture or dependencies within a high view of TD Bank IT architecture;</p> <p>(3) Provides understanding of the system and subsystem; why it exists; what it does for the company; who uses it</p> <p>(4) Provides information such as the following:</p> <p>A) Who does what when</p> <p>B) How does the function connect to the automated part of the Application</p> <p>C) Which of the Data Flows are associated with which of the Functions</p> <p>D) How do the Terminators (outside Entities) connect to the Function</p>		
				<p style="text-align: center;">***</p>		
				<p style="text-align: center;">***</p>		
Online Navigation (Screen Flows)	AKC02	Documents the application's online system, the user displays (screens), and the navigation. Menu options and function keys are documented with each display	Provide both technical support staff and application users easy English language navigation through the various levels and screens of an on-line application. Provides sample screen pictures and any relevant business rules (if available) to help understand the screens and their functions.	<p>(1) Provides understanding of the system or subsystem's screen structure and navigation paths</p> <p>(2) During interviews, TD SME's expressed a need for online processing to be separately documented and that all screen layouts should be documented</p>		

CAI Framework report
11/13/091:39 PM

<p>Batch Job Flows and Processing Schedules</p>	<p>AKC03</p>	<p>Documents the application's batch jobs and the batch processing schedules. The flow within the batch job is documented for those jobs that are designated as critical or important</p>	<p>Provides the application support analyst a view of the batch processing jobs/flows (if available) dependencies and schedules. This helps the support analyst in fault identification, re-start points and a good understanding of the batch processing cycles which are required for production and also batch job/program testing.</p>	<p>(1) Corresponds to the "Batch Processes" Content area; (2) Provides understanding of the structure and flow of batch jobs; describes files and databases passed or accessed by each job (3) During interviews, TD SME's expressed a need that "Jobs that run for a long time should be noted" and for "more information about jobs"; (4) Provides information such as: Job JCL Name Brief Description of Job Daily, Weekly, Monthly, Quarterly, On Request Jobs that must complete before this one or any other requirements that must occur Jobs depending on the completion of this job</p>		
<p>Application Design Overview</p>	<p>AKC04</p>	<p>A high level Data Flow Diagram of the application's main business functions depicting for each the data flows, data storage, and the outside entities and their interaction. Includes narratives to describe the data flow within each major function</p>	<p>Provides the application support analyst a detailed narrative and diagrammatic view of all major application components, data structures and their interactions. This helps the support analyst understand the detailed design of the application which is needed for communication within the department, modifying application components or fixing application components that fail.</p>	<p>(1) Corresponds to the "Product Functions / Transactions" and "Operating Environment or Configuration" Content areas; (2) Provides understanding of the structure of the system; describes relationships between subsystems; describes primary modules within subsystemes (3) During interviews, TD SME's expressed concern that some of the existing subsystem documentation "are missing basic purpose and explanation of why the subsystem is different from other DAS subsystems" and that existing documentation doesnt have enough detail</p>		

CAI Framework report
11/13/091:39 PM

<p>Application Special Processing Routines</p>	<p>AKC05</p>	<p>Documents any manual or automated operational tasks that the application's Support Analysts do to support the application's production environment or the users. Documenting these is crucial to a smooth transition or rotation of application support staff.</p>	<p>Often application support analysts are responsible for performing some form of special processing within or for the business application. Examples of some types of special processing routines might be: Data Set Index Reorg, Business reorg routines, special inventory cycle count update during physical inventory, Data Tape creation, Temp File deletion, Temp or Sort File size allocation change. Any processing required by support analysts is documented here along with specific instructions and commands to complete. There may be specific notification instructions associated with any of these routines. An example of this is notifying the mail room that a tape is created and can be sent to a bank branch or other processing location.</p>	<p>(1) Provides understanding of additional responsibilities outside of the normal program and job maintenance support functions (2) Provides information such as: Name of the Program, Job, or Process; Library or location information on where the component can be found; Description of the routine or process and why it is needed; Whether it is automated, manual, or both; Detailed instructions on how to run or perform the Special Processing Routine and error codes or messages that may result</p>	
<p>External Interfaces</p>	<p>AKC06</p>	<p>A detailed list of the external interfaces and data transfers between the application and other applications, hardware devices, or other outside organizations. Typically, these are serial data files received, created, or transmitted from within a batch process or program</p>	<p>Provides the support analyst a detailed list of external interfaces between the application and external environment. This could be other applications, files sent to other organizations outside the business, schedules. This document identifies the program producing the file, record format name, frequency and relative size in records produced. This is invaluable when there is a problem or change to the interface. If a file is not produced/received it gives a very good starting point for fault analysis.</p>	<p>(1) Corresponds to the "Application Dependencies" Content area; (2) During interviews, TD SME's expressed concern that in some of the current documentation "Interfaces is completely missing" (3) Provides understanding of relationships to other application systems and/or outside entities (4) Provides information such as: Organization or Application from which the interface is coming Organization or Application to which the interface is going Description of the interface file (Cartridge, Diskette, Tape, FTP, Serial Transmission, Serial Device, or other electronic media) Run Frequency Job and Step that the interface is input to or originating from Location of the Copybook or other reference containing the Record Format of the interface file Estimated number of records contained in a typical file or transmission</p>	

CAI Framework report
11/13/091:39 PM

Application Component Inventory	AKC07	A complete source code inventory of the application including all of the online and batch programs, sub-programs, external sub-routines, and copybooks that make up the application. Includes a brief overview of each component and identification of special or critical components	A list of all program components within the application or subsystem with ID and English description of its function, This inventory may be broken down by on-line or batch programs, possibly significant component copy books, and called sub-programs/called sub-routines.	Not required because TD Bank staff can already get this information via Endeavor		
Complex and Critical Components	AKC08	A quick reference list of the programs and components that have been identified as critical (must be available or that must run without error in order to prevent serious impact on the business) or complex (unstructured code, compound conditional statements, multi-level subroutines calls, etc.)	A refined list of application components that reference critical or complex components. This is helpful to development or support analysts when changes have to be made to any of these components. Additional, testing or external quality control may be required to provide an additional measure of checking due to the importance or potential problems with a complex component. This may also aid the team leader in assigning any changes to these components to more experienced technical staff.	(1) Corresponds to the "Complex & Critical Components" Content area (2) Provides understanding of those components which need priority attention and/or the attention of the most experienced team members		
Files, Databases, and Component Relationships	AKC09	A cross reference table or set of tables with the application database tables, arrays, segments, and application "master" files as the columns to the cross reference. Then all of the application's programs or other code components as the rows of the cross reference. An alpha character at the intersection of a row and column states that a program accesses that data file or table. The alpha character indicates the type of access – read, insert, delete, etc. This AKC09 cross reference is maintained in an MS Access mini-application complete with its own reports and data entry and correction panels to maintain the AKC09 information.	This section identifies all major files and DB data structures by fully qualified and English language content description. A data structure inventory. Also provides a list of components relationship which read or update the data structures. This is necessary if a data structure is changed many programs within the main application, subsystem components which use the structure, or other applications which use the structure. If a change occurs to a structure in one system and components of another system use that structure, they will have to change as well. This section identifies what other components within this or other subsystems would have to change.	(1) Corresponds to the "Data Input Sources" and "Data Output" Content areas; (2) Provides understanding of which files and or databases are accessed by which programs (and, therefore, by which subsystems) - allows understanding of those subsystems which could be affected by any planned change (3) During interviews, TD SME's expressed a need for: A "Data Dictionary" or similar type of tool and for A "Data dictionary type information if it is easy to maintain"and for "something like CAI's AKC9 that tells you the subsystems that could be affected by a change" (4) Provides a list of all programs that access any files or databases and the type(s) of Access that the Program(s) allow		

CAI Framework report
11/13/091:39 PM

<p>Reports and Paper Products (Basic Info, Distribution, and Samples)</p>	<p>AKC10</p>	<p>A detailed list of the reports and any other type of printed output produced by the application. Includes job, program, and report distribution information. Samples of key reports are included</p>	<p>Identifies all business critical reports and an electronic image sample of what each report looks like. Additionally, provides production frequency, average number of pages and distribution. Most application analysts and users do not know what reports are produced by the application. Many support requests deal with new reports which may already exist, but are not known or a small change to an existing report would satisfy the request rather than a complete redevelopment of a new report.</p>	<p>(1) Corresponds to the "Production Reports / Logs" Content area; (2) Provides understanding of the reports produced by the sytem or subsystem and of the business areas affected if there are problems with the report (3) Provides information such as: Identification Number of the Report Job that produces the Report Program that produces the Report Brief description of the Report Frequency that the Report is produced (for example, Daily or Weekly) Normal page volume of the Report Who the recipients are for the Report</p>		
<p>Failure History</p>	<p>AKC11</p>	<p>A record of the recent application failures that have occurred. Assists with correlating current failures and those that have occurred in the last 6 to 12 months.</p>	<p>Helps the support analyst in analyzing failure history to determine patterns or root cause analysis of an existing failure.</p>	<p>(1) Corresponds to the "Open Production Defects" Content area; (2) Provides understanding of components that may fail again (based on previous experience) and helps to fix problem quickly by reviewing previous solution(s); (3) Provides information such as: Date and Time the failure occurred Job or Online Screen that failed Job Step where the failure occurred Component that failed Failure Code or Error Message if there is no Failure Code (for example, JCL ERR) Cause of the failure and a synopsis of the Problem Solving activities that took place to resolve it</p>		

CAI Framework report
11/13/091:39 PM

<p>Application Trouble Areas and Resolutions</p>	<p>AKC12</p>	<p>Documents previously identified problem areas or application errors that occur periodically, but have not been corrected due to low priority or inability to duplicate. Associated corrections or "work around" solutions for each are also documented</p>	<p>Enables any support analyst to quickly determine if a current problem has occurred previously and what was done to repair. This can significantly reduce the amount of time to fix a problem. It is extremely important when the analyst who was familiar with previous problems and what was done to repair them is not available.</p>	<p>(1) Corresponds to the "Troubleshooting Guides & Utilities" Content area; (2) Provides understanding of problems that team members should be aware of in order to better prepare to be able to support the system (3) Provides information such as: Description of the problem How notification of the problem occurred The steps taken to resolve the problem</p>		
<p>Troubleshooting Utilities and Programs</p>	<p>AKC13</p>	<p>This is a list of any unique programs or jobs used to assist in the support of the application. These are specialty programs written in-house by the support staff for this purpose, sometimes designed specifically to the application's database. Documenting these programs is crucial to a smooth transition or rotation of application support staff</p>	<p>Most businesses and almost all programmer have Troubleshooting Utilities or personal utility programs. These help identify problem areas, track a particular function or data and identify probable causes or remediation. Many of these are in personal programmer libraries and are only known by them. This section documents the ones which re used on a regular or reoccurring basis and how to use them to diagnose or fix a specific problem type.</p>	<p>(1) Corresponds to the "Troubleshooting Guides & Utilities" Content area; (2) Provides understanding of what tools exist to help solve problems when they occur (3) Provides information such as: Name of the program, job, utility, debugger, etc. Libraries where the Source and executable Components exist Brief description of when and how the Component is used</p>		
<p>Production and Account Security</p>	<p>AKC14</p>	<p>Describes any online or batch security procedures or protected logon IDs required for the application. Also documents any occurrences of "hard coded" IDs or devices in programs for the purposes of support</p>	<p>Identifies all security functions required for the various technical or user functions. These function could be within the development, support or application user environments. There may be specific security by department role, or by development/test regions, specific functions that only certain users can access. Security administrators and contact information is also provided. This helps add or change any security options or settings quickly with a minimum of wasted time.</p>	<p>(1) Corresponds to the "Production & Account Security" Content area; (2) Provides understanding of security requirements that must be addressed when (a) adding a new support team member or user and (b) adding or modifying system features (3) Provides information such as: ID's that are necessary to support the application Access Authority for Environments, Data Sets, and Transactions A Security Profile for the Application.</p>		

CAI Framework report
11/13/091:39 PM

<p>Work Request History and Open WR Backlog</p>	<p>AKC15</p>	<p>A brief history of the requested application changes and enhancements that have been completed during the last 6 to 12 months. Then a list of the change requests (work requests) either already in process or waiting in the priority queue (backlog) for assignment</p>	<p>Provides a list of all enhancements implemented within the last 6 months. This contains the what, who, when, where and why of all recently implemented enhancement requests. If there is an application failure or other type of production problem, one of the first places a support analyst will look is what has changed recently. This again helps to identify possible problem areas based on recent changes to the application. Reduces time to fix.</p>	<p>(1) Provides understanding of recent changes so that, if there are problems, recently modified programs and/or jobs can be examined in order to minimize problem investigation time (2) Provides information such as: Number assigned to the Request Date the Request was received Date the Request was completed Estimated Hours for the Request Actual Hours in which the Request was completed A brief Description of what the Request is intended to accomplish</p>		
<p>Library Environment</p>	<p>AKC16</p>	<p>Documents the specific library names containing the application source code and executable components. If multiple staging is used, the libraries are separated by Development, QC testing, User Acceptance testing, Staging, and Production purposes</p>	<p>All development and support analysts need to know where specific system components, data, text routines, files and databases are stored. Library name, physical storage device address or identity. It is like knowing the location of a filing cabinet that contains a specific type of information you need to find or use.</p>	<p>**** (1) Corresponds to the "Developers Guide" Content area; (2) Provides understanding of libraries which may need to be accessed in order to correct a problem (3) Provides information such as: A brief description of the Library Environment The file name of the Unit Test Library The file name of the Acceptance Test Library The file name of the Production Staging Library The file name of the Production Environment</p>		

CAI Framework report
11/13/091:39 PM

User and Support Contacts	AKC17	Identifies the main user organizations and the primary user contacts for the application. Includes their office locations, mail stops, job titles, and telephone numbers. There is also a separate section containing all of the contacts needed for supporting the application such as suppliers, third party vendors, external support organizations, external interface contacts, EDI contacts, etc	Who are the main application or power users of the application. These are key contacts for specific user application functions or individuals responsible for interface with the IT support group. Typically these key users help in functional acceptance testing or various approval levels for enhancement requests. They may be the contact person when changes are made to the application production.	(1) Corresponds to the "Contact Information" Content area; (2) Provides understanding of individuals who may need to be notified if system problems arise (3) During interviews, TD SME's expressed a need "to see who made the recent changes and what they did"; (4) Provides information such as: Internal or External Location of the contact person Name of the contact person Position or Job Title of the contact person Phone and/or pager number of the contact person Fax number Address of the contact person E-Mail address of the contact person Mailing Address of the contact person		

Backup and Recovery Procedures	AKC18	Documents any manual or automated processes that the Support Analyst (not Operations) performs for the purpose of saving, restoring, or reorganizing the Production version of the application data. Includes procedures that must be performed for Disaster Recovery	Usually this is a contact person and phone who is responsible for application and data backup. It may also identify the type of backup done for the application components and data. Example, generation data groups,	(1) Provides understanding of special backup or recovery routines that are performed by the support team in order to support the application system (2) Provides information such as		

CAI Framework report
11/13/091:39 PM

Development Utilities	AKC19	Documents the location and the use of any purchased development utilities used in the development and support of the application such as compilers, search tools, debuggers, and data inquiries	This document identifies all the development tools and Tools and Utilities used by developers and support analysts in program development and testing. It may also identify the location of "how to use" manuals. This is also needed to identify training requirements for new individuals coming into the organization. Within this area can also be identified who are the key people who know this tool or utility best. This can save a great amount of trial and error time on the part of people who do not know the utility well.	<p>(1) Corresponds to the "Deployment Practices & Tools" and "Source Change Management Tools" Content areas;</p> <p>(2) Provides understanding of tools which can aid in developing changes and/or correcting errors</p> <p>(3) During interviews, TD SME's expressed a need for information about development tools to be readily available</p> <p>(4) Provides information such as: The name of the Development Utility A Description of the environment where the utility is found on the system The name of the platform on which the utility is used A Description of where the instructions, tutorial, or technical reference documents are found The name of the Development Utility Vendor The name of a local analyst who is the most knowledgeable about the utility</p>		
Network Design (Client/Server)	AKC20	Describes how the three client/server network layers are applied within the application. Includes a diagram to illustrate the layered design	This document is helpful if data or components are transferred or stored on different nodes of a network. It is also helpful in communicating with infrastructure personnel when discussing a particular device or problem within the network. This section illustrates the identities, locations and interconnections of the various network components and layers. This is required for locating or tracing data or components transferred or stored in different locations within the network.	<p>(1) Provides understanding of multi-tier structure of C/S applications</p> <p>(2) Provides information about the C/S layers</p>		

					
					
Network Locations (Client/Server)	AKC21	Describes each of the major application client/server nodes and where that host or server resides	A more detailed view of the client/server network devices or nodes. This contains but is not limited to information like: Device type, manufacturer, system software, specific application components or data structures stored, communication protocol, component network ID. Network support contact.	(1) Provides understanding of physical implementation of C/S layers (2) Provides information such as Platform, Location and whether shared or not.		

CAI Framework report
11/13/091:39 PM

Key Controls	N/A	New document - CAI does not currently have; Built in training facilities – any training tellers, training database or special code built into the application.	May contain procedures, security and data structures required for user training. Could also contain procedures for refreshing data, schedules and contacts.	Corresponds to the "Key Controls" Content area		
---------------------	------------	---	--	--	--	--