



SERVICE ORIENTED FRAMEWORK SCE's ROADMAP - VERSION 1.0



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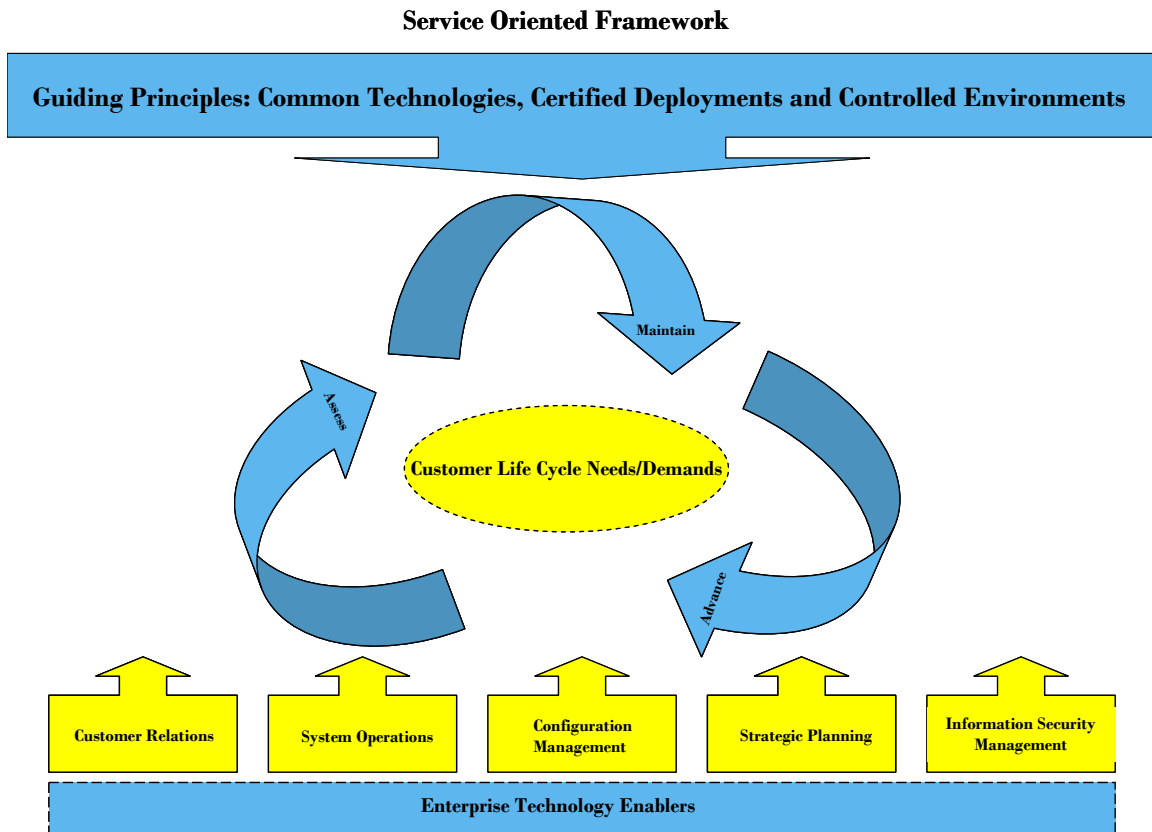
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Soft-Con's Service Oriented Framework

Soft-Con's Service Oriented Framework provides a foundation from which to guide beneficial results through the utilization of common technologies that support certified deployments under controlled operational environments. The end result ensures a Customer's lifecycle needs/demands are consistently assessed to achieve desired states of technology operations and advancement. Soft-Con's framework also ensures a high level of system availability and timely deployment of end-state technologies. As depicted below, the framework supports core objectives in maintaining operations for Web and Application environments; to include service management for Customer Relations, Change Management, System Operations, Strategic Planning and Information Security Management. As well, Enterprise Technology Enablers are provided to support the leveraging of mature and proven technologies as "quick hit" solutions.



The service oriented framework is a trademark of: 

The sections that follow provide an overview of our framework and the services provided to assist customers in addressing their business needs. Our corporate experience and expertise is our greatest asset in ensuring successful engagements in providing appropriate information technology services.

Customer Relations

Soft-Con's customer relations service area maintains solid customer relations to ensure service-related requirements are effectively identified and maintained. Our CR model ensures activities are conducted to identify and quantify end-user needs and to determine whether existing resources are adequate to support planned Web and/or Application systems deployment. Also, activities are conducted to identify resource shortfalls and areas of improvement to increase service levels and define service level agreements. The key functions of the customer relations element are as follows:

- Requirements Management
- Customer Relations Management
- Problem Management
- Resource Identification Management

Requirements Management

The requirements service area supports the capture and management of customer requirements that drive the deployment and management strategies for Web and Application product releases. Typically, these efforts are conducted within the initial phase of a project life cycle to document required services for integration and management of system components. This will include the integration of infrastructure resources, system/network equipment, COTS products and developed applications. As a result, all activities are guided by standard operating procedures that detail key activities to be conducted. This will include, but not be limited to the conduct of requirements identification, preparation of documentation and validation of required services. During the requirements identification process, emphasis is given to leveraging a customer's existing tool sets and resources to the maximum extent possible to streamline the capture and management process. Typical capture tools will include Microsoft Excel, Microsoft Access, Microsoft Project and/or the use of Soft-Con's requirements tracking tool. Once the service requirements have been identified, validation can be conducted within the stakeholder community to finalize the services baseline. Other operational considerations will be captured through the use of standard templates to be completed prior to the technology deployment. Overall, the templates will provide a means of defining the deployment strategy as well as the concept of operations for the product release. This will ensure proper integration of the product as a new functional component of the Web and/or Application system environment. As a result, key considerations are documented to support usability, performance, hardware/software maintenance, administration and security management.

Customer Relations Management

Our customer relations service area provides the front office element of the framework. Specific activities are conducted to ensure product deployments are accomplished within planned schedule and budget baselines. Also, the element ensures solid communications and coordination is maintained throughout the life cycle of the project initiative. Typical activities will include meeting facilitation, project coordination, problem management and status reporting. Also, activities are conducted to prepare service level agreements, work breakdown structures, discrepancy reports and to define project performance measures. These activities are guided through the use of Soft-Con's standard operating procedures that define the tools and methodologies to be employed in maintaining solid customer relations throughout the project lifecycle.

Problem Management

Problem management services are provided to ensure timely identification and management of problems (i.e., issues, risks and deficiencies) that affect successful IT deployments and service levels. Activities are to be conducted to ensure problems are identified and mitigated during each phase of the deployment process and during life cycle operations. Soft-Con's problem management process will typically be introduced during the initial project phase and continued throughout the lifecycle of the initiative. Our templates and standard operating procedures will provide the necessary guidance to maintain the process as a common practice within the product life cycle.

Resource Identification Management

Resource identification is commonly practiced in concert with customer relations services. The end goal is to effectively identify needed resource levels to support product deployments and operations for system components. Our activities include the preparation of staffing plans, conduct of capacity analysis and strategic planning. In profiling the deployment, developed templates (i.e., deployment template and operations template) are analyzed to ensure the appropriate resources are allocated to support each project initiative.

System Operations

Maintaining effective system operations is a key service objective within the framework. Effective services must be provided on a daily basis to ensure a high availability of resources for Web and Application system processing. The end goal is to maintain operations for those systems that support critical information processing for customers, partners and end-users. Ultimately, providing the necessary care and feeding for multi-tiered systems that coexist within a myriad of IT environments. We accomplish this by effectively sustaining secure channels of data communications between partnering systems; and maintaining robust data management and recovery schemas for application data. As a result, the appropriate strategies are employed to sustain operations for a varied mix of IT technologies, such as .Net and WebSphere front-ends, MQSeries and Tuxedo-Jolt middle-tiers, and SQL and Oracle back-ends. Fundamentally, Soft-Con's standard operating procedures will provide the necessary guidance to configure, integrate and maintain product deployments and to ensure products are highly secure and accessible. In summary, the following functions are essential in maintaining effective systems operations:

- Systems Administration
- Database Administration
- Facilities Management
- System Security Management
- IT Inventory Management
- Resource Management

Systems Administration

To support daily operations, administrative activities are conducted on a daily basis to maintain a high availability of computing resources. Our standard operating procedures ensure appropriate activities are conducted to develop, document, schedule, and perform recurring housekeeping functions including full, partial, and/or incremental back-up and recovery procedures. Also, activities are conducted to ensure hardware and/or software problems are reported on a daily basis and support is provided to the problem resolution process. Our overall approach ensures early

detection of potential problem areas through the monitoring and maintenance of daily system logs and analysis of system errors and deficiencies. Inherently, beneficial insights are gained through daily experiences and effectively communicated to increase system optimization and utilization.

Database Administration

Database administration is another critical aspect of our systems service model. In this area, standard operating procedures are followed to design, install and configure relational database management systems. Typical activities include the performance of database structure (schema) installation, data loading and access control activities. Services are also provided to evaluate and recommend available data management system products based on analysis and validation of user requirements. This will include proposal and implementation of file structures, indexing methods and data management procedures for specific system applications. Also, activities are conducted to ensure database integrity and to develop, document, schedule and perform recurring housekeeping functions. This typically includes the conduct of full, partial, and/or incremental back-up and recovery activities.

Facilities Management

Effective facilities management is an integral part of operations. In that activities are to be conducted to prepare the system facility for receipt and management of required system/infrastructure equipment. Our approach towards facility management incorporates the use of facilities checklists and standard operating procedures to ensure appropriate steps are followed to prepare the environment for operations. Key to effective facilities management is the analysis given to the conduct of site preparation activities to determine required power, cooling and floor space. Additional effort is conducted to ensure provisions are made to address network and data communications and to ensure equipment can be properly staged and integrated into the existing environment. Our goal is to ensure all facilities related activities are well coordinated and any major concerns are raised in advance of the project's deployment deadline.

System Security Management

As a part of daily operations, system security activities are conducted to maintain proper system accessibility and to minimize security vulnerabilities. Our goal is to address system security as a recurring activity that is well orchestrated and planned in addressing the organization's security guidelines and standards. Therefore, a common focus must be maintained in the conduct of compliance activities and identification of mitigation strategies. Key services include the loading of security patches, execution of monitoring tools to assess the potential for vulnerabilities and the preparation of action plans to address known weaknesses. Also, activities are conducted to prepare required waivers and deviations to document allowances that must be granted given the need to continue systems operations under specialized conditions.

IT Inventory Management

The process of inventory management coincides with the establishment of the system's formal baseline and is validated upon deployment of new and updated components into the baselined environment. To ensure functional components are properly managed, a functional audit is conducted within the CM process prior to integration of components into the existing environment. The information captured from the functional audit is typically maintained in Soft-Con's Inventory Database to maintain the functional baseline of the system. In turn activities are

also conducted upon the staging of new equipment to ensure what was received is what was ordered. This activity is typically referred to as the physical audit and is also conducted within the configuration management process. The results of the audit are also captured in the inventory database to maintain the physical baseline for the system. Equally important is the need to update the inventory as components are updated or decommissioned as a part of daily operations. Once captured, inventory information is of extreme benefit in supporting security reviews, capacity planning and strategic analyses.

Resource Management

To sustain system operations, the appropriate resource levels must be maintained throughout the product life cycle. This requires a constant assessment of how service levels are being met and the degree of accomplishment in meeting established performance measures. Through the development and updating of Soft-Con's project profile template, assessments are performed to ensure that the appropriate personnel and infrastructure resources are available and effectively maintained. The end goal is to ensure successful outcomes in maintaining a project's service level agreement. In turn, performance measures are captured and reported to communicate how well operational objectives are being met.

Change Management

Change management is a vital function in maintaining effective operations. Activities are conducted to baseline and maintain configuration control of Web and Application components throughout the project life cycle. Our CM approach ensures adequate policies and controls are in place to manage changes to system and infrastructure components. The end goal is to ensure proposed changes are thoroughly reviewed and supported by the appropriate change management artifacts before incorporated into the formal baseline. This is accomplished through the following processes:

- Configuration Management
- Development of CM policies and standards

Configuration Management

Configuration management is a critical process responsible for identifying, controlling, and tracking all versions of hardware, software, documentation, processes, procedures, and all other components of the IT environment. Our goal is to ensure that only authorized components, referred to as configuration items (CIs), are used in the IT environment and that all changes to CIs are recorded and tracked throughout the system's life cycle. To achieve this goal, a configuration management database must be developed and maintained to identify configuration items and their relationships. The database also provides an important tool in managing changes to the IT environment during product release and as updates are made to the environment. The accuracy of the information stored in the database is crucial to the success of CM and Problem Management, as well as other service management functions. Therefore, a review process is conducted periodically to ensure the accuracy of the system baseline.

Development of CM Policies and Standards

The keys to effective configuration management are rooted in the policies and standards that ensure proper management of a project's system environment. Our methodology incorporates a check and balance approach to ensuring CM practices and standards are upheld. As a result, policies and standards are prepared to define how activities are to be conducted to establish CI artifacts under the justification of CM and to define how artifacts are to be changed. Also activities are conducted to define how artifacts enter and leave the controlled environment and how different version of configuration items is to be made available. Equally important are the methods used to clearly define how CM tools are to be used to enable and enforce CM.

Strategic Planning

Strategic planning is a vital service area in ensuring high levels of system capabilities are maintained throughout a project's life cycle. Soft-Con's methodology towards strategic planning ensures activities are conducted annually to identify and validate shortfalls and quantify needed hardware and software acquisitions. Also, activities are defined to support the justification of equipment procurements and to determine the return on IT investment. Equally important is the focus given to defining the sequencing plan for needed solutions and the planning to ensure effective solutions implementation. The core elements of strategic planning are as follows.

- IT Portfolio Management
- IT Acquisition Management
- Capacity Management
- IT Cost Management

IT Portfolio Management

In addressing the future needs of a project, IT portfolios are developed to document the target state of a project's environment. Soft-Cons portfolio management process highlights the use of standard templates to document the need for change and the prescribed course of action. The goal is to determine what solutions are needed to increase services levels and to set the stage for determining needed IT acquisitions and timelines for technology insertion. A key focus of portfolio management is the effort given to ensure all solutions are aligned and compliant with applicable components (e.g., business, information/data, and technical) of the enterprise architecture.

IT Acquisition Management

Throughout the project life cycle, all IT acquisitions should be viewed as an investment in the future. As a result, our methodology ensures identified gaps in service levels are effectively addressed. Also, the appropriate supporting documentation must be prepared to document the specific hardware and software components to be acquired and to substantiate the need for change. Like any investment, addition's to the project's portfolio should produce a return (i.e., a set of benefits), and this return on investment should be measured and reported in relation to costs. Measuring return on investment is important to ensure that expected benefits from the planned acquisitions are realized. To accomplish this, metrics are developed and processes established to collect and report these data throughout the product life cycle.

Capacity Management

As product deployments are increased there becomes a point at which infrastructure resources can be strained. Hence, the goal of capacity planning is to ensure adequate reserves are maintained to prevent unneeded stresses on the IT infrastructure. Thus, a common view must be maintained to consistently assess the collective capacity of system components of the IT environment. Our approach towards capacity planning ensures periodic assessments are conducted from a functional as well as physical perspective. Key activities are conducted to assess processing workloads and resource levels across the entire enterprise environment. Also, methods are incorporated to mitigate the potential for capacity overruns and effectively address negative impacts on critical resource levels.

IT Cost Management

In maintaining effective operations, each IT project is profiled as a part of Soft-Con's customer relations service area. As a result, activities are conducted to ensure cost expenditures are defined and maintained within the established levels. Also, allowances are made within the process to mitigate the potential for cost overruns before they occur. At any interval within the life cycle process, interventions can be prescribed to realign the project expenditures and to reach agreement on appropriate courses of action.

Information Security Management

Soft-Con's Information security services are provided to define and communicate the organization's security plans, policies, guidelines, and relevant regulations as defined by associated external industry or government agencies. As a result, information security measures are taken at strategic, tactical and operational levels. Also, assistance is provided to ensure measures are followed as defined by approved policies and guidelines. Our information security services are as follows:

- System Certification and Accreditation
- Information Security Assessment
- Business Resumption \ Continuity of Operations

System Certification and Accreditation

The outcome of Soft-Con's certification and accreditation (C&A) process is to put together a collection of documents that describes the evaluated security posture, evaluated security risks and recommended corrective actions. This is what we term the Certification Package. A typical Certification Package usually consists of the required documentation that must be provided to substantiate the security posture of the project as defined by the security organization. To include, but not be limited to System Categorization Statement, System Description and System Boundaries, Network Diagram and Data Flows, Software and Hardware Inventory, Business Risk Assessment, System Risk Assessment, Contingency Plan and System Security Plan. As a result, services are typically provided in development of the C&A package and to provide clarifications as needed.

Information Security Assessment

Our goal towards information security assessment is to provide a clear understanding of current information security risks and areas of vulnerability on the project's environment. Also efforts are conducted to raise internal awareness of information security and enable more informed decision-making concerning gaps in organizational security controls, policies and processes. The end result provides an actionable plan to improve the overall security posture by addressing security issues before they are exploited.

Business Resumption \ Continuity of Operations

Our approach towards business resumption ensures appropriate stakeholder involvement within the initial phase of a project's deployment. As a result, adequate time is provided to prepare an effective strategy in maintaining operations in the event of a disaster. The end goal is to ensure buy-in within the stakeholder community concerning ownership of the overall methodology. This is accomplished through the internalization of the business resumption plan and the essential elements that insure a successful recovery of operations. Activities must be conducted to ready the organization for successful plan activation and recovery and to demonstrate the design of the plan in ensuring continued operations. Therefore it is essential that the continuity of operations plan (COOP) is adequately reviewed and approved within the body of participants that must orchestrate business resumption. To include, but not be limited to the conduct of workshops, train-the-trainer sessions, and the preparation of information to foster awareness of business resumption activities.

Enterprise Technology Enablers

Technology enablers add value through the insertion of technical solutions that optimize performance, increase capacity and ensure availability in the delivery of operational services. Our objectives for technology enablers include the integration of market proven tools and products that lower IT costs, increase service levels and improve operational performance. In many cases, technology enablers provide "quick hit" solutions that support best practices in Web and application systems management. Our experience has shown that throughout the project life cycle opportunities exist to increase service levels through the integration of proven technologies that improve system-to-system collaboration, overall system integration and performance, and increases system usability. This has led Soft-Con to continually examine how well services are provided and determine methods to increase service delivery throughout the product life cycle.