

How can an IT Organization narrow the linguistic chasm between *tech speak* and *business speak* across the Enterprise?

... with common vocabulary

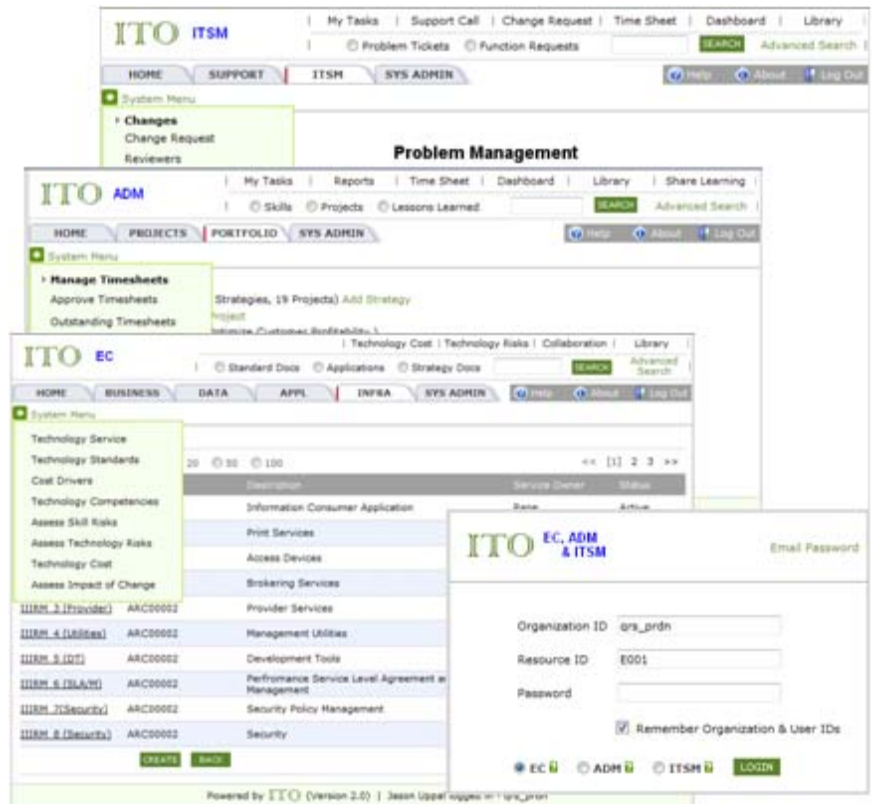
# The Information Technology Organization

Software Solutions by QRS

## EALC Software ITO

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Enterprise Architecture Life Cycle

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# EALC Software: ITO

## Business Context

The motivation for this tool is to:

- Provide a single repository for structured and unstructured enterprise architecture data that meets the needs of various stakeholders.
- Promote reusability via the repository and reduce the lead time to implement an effective EA Practice.
- Reduce the workload of domain architects by making standard information accessible without requiring deep domain expertise
- Allow various stakeholders to publish and re-use architectural and supporting artifacts
- Give client organizations the ability to extend the Repository by using an open architecture to build it.
- Integrate enterprise architecture context, business drivers, principles and governance.

## Key Stakeholders and Their Information Needs

Stakeholder	Their Information Needs
CxO - provide the BIF to enable capability based planning	
• CEO	M&A Assessment - Time and cost to integrate Back office activities. Time and cost to integrate net New capabilities of an acquired firm into current core capabilities of the enterprise.
• COO	Continuous Improvement - Latency cost of new product launch
• CFO	Risk - business risk from old/obsolete technologies, risk from bring in new technologies
• CIO	Service Level and Total Cost of Technical Automation
IT Organization Management - communicate BIF Capabilities to senior LOB management and help program and project teams remain focused on business priorities	
Chief Architect	Ability to define , communicate and execute a clear Technology and Business

	Simplification roadmap
	Ability to define, communicate and execute Business Strategies and ensure their alignment to long term BIF capabilities
Strategic Planning	Allow bottom up information based planning and monitoring of expected business results in real or near real time.
Finance Audit Committee	Provide well defined and controlled process and allow audit committee to perform audit based on reliable information
<b>LOB Management</b> – Communicate BIF capabilities and Business Performance Dashboard	
LOB Operations	Communicate Service Levels agreement and demonstrate SLM results. Current BIF capabilities and LOB Expectations.
	Seamless process to define business strategies, implementation plans, execution and asset exploitation
	Transparent IT Services such as Help Desk, Incident Management, Program Management – the entire IT Service Catalogue
<b>ITO Teams</b> – Teams that support Boundaryless Information Flow Capabilities	
• Core IT Service Management	Seamless process to define core IT services, establish Service Level Agreements with clients and communicate how these SLA are being meet, what is the continuous improvement plan and define the engagement of all LOB resources.
• Solution Support	Provide Incident, Problem, Release Management, Value Realization and dashboard functions to ensure continuous engagement of all LOB partners and demonstrate tangible value from IT and LOB cooperation.
• Capabilities Definition Teams	Enterprise Architecture, Strategic Planning and Sourcing, Vendor Management – define required BIF capabilities and develop plan to procure these capabilities.
• Capabilities Build Teams	Program and Project management teams need a seamless way to work, develop content and share content with all involved parties from concept to asset retirement.

## Architecture

EALC repository is architected with the following principles:

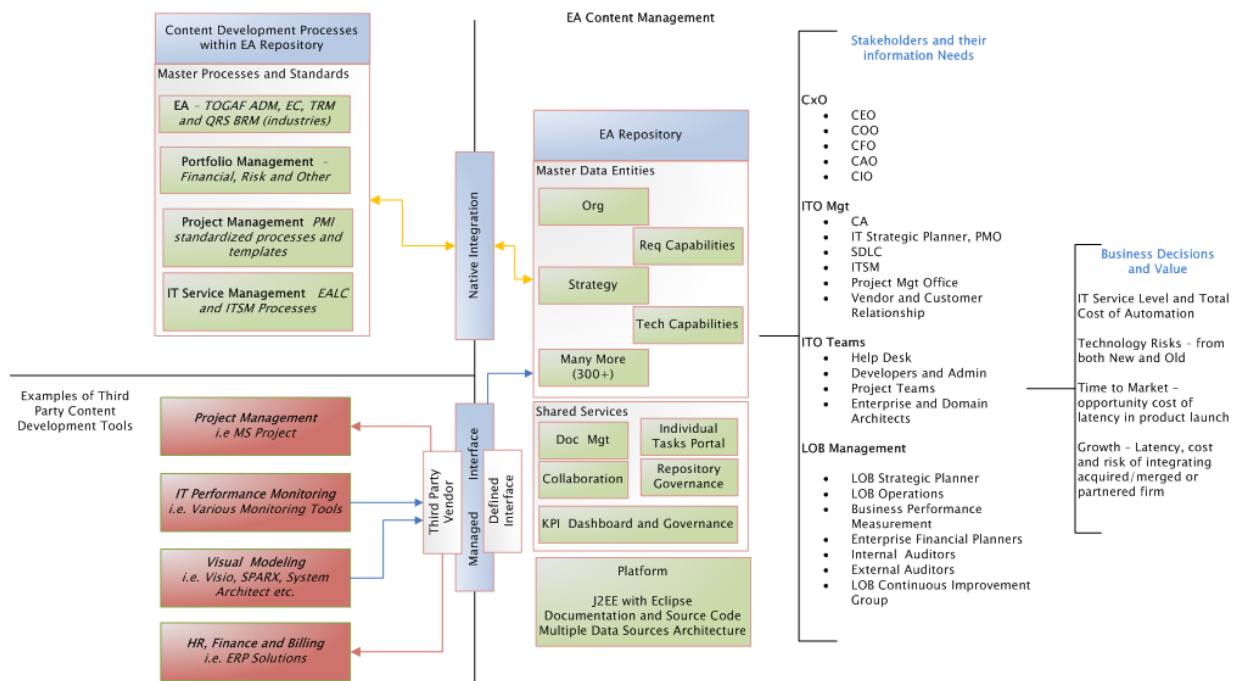
- Deliver Boundaryless Information Flow to the right stakeholders
- Define and manage Information only once

- Implement industry based processes to manage information that are natively integrated
- Open Integration approach to third party data definition and management tools

## Repository Governance

The repository governance is exclusive responsibility of EA Governance. The stewardship for governance is provided by the CIO with support from the Chief Architect.

## EA Repository Architecture



## Functional Capability

### Summary Functional Capability

EA Repository complies with the following major business functions. Table below is based on Functional Assessment of EA tool.

Capability	Total Points Available	Score [Vendor's Assessment]	Weight
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1 TOGAF ADM	48	44	10%
2 EA Content Framework	56	50	5%
3 TOGAF Reference Architecture	28	24	15%
4 EA Modeling	24	16	5%
5 Enterprise Architecture Continuum	20	16	5%
6 EA Repository and Reuse	20	16	15%
7 Enterprise Architecture Governance	12	10	5%
8 Support for other Management Frameworks	40	40	15%
9 System Security	24	24	5%
10 Preloaded Data to accelerate TOGAF based EA adoption	16	14	20%
<b>Total - Weighted Compliance</b>	<b>87%</b>		

### Detailed Functional Capability

Required Capabilities	Vendor Response	
Module and Business Capabilities	Describe how your system implements the required capability.	Rating [0 to 4]
<b>1 TOGAF ADM</b>		
• 1.1 Architecture Requirements		
• 1.2 Preliminary Phase		
• 1.3 Architecture Vision		
• 1.4 Business Architecture		
• 1.5 Information Systems Architecture		

• 1.6 Data Architecture		
• 1.7 Application Architecture		
• 1.8 Infrastructure Architecture		
• 1.9 Opportunities and Solutions		
• 1.10 Migration Planning		
• 1.11 Implementation Governance		
• 1.12 Architecture Change Management		
<b>2 EA Content Framework: Viewpoints and Views</b>		
• 2.1 Total cost of Technology and Compliance to Service Level Agreement		
• 2.2 Determine obsolete technology risks and their impact on the business processes categorized by criticality of the business process.		
• 2.3 Determine technology risks as new products and services are being defined.		
• 2.4 Enterprise strategic intent and information management capabilities required to achieve the intent.		
• 2.5 Skills demand and availability and gap - transform and run the business.		
• 2.6 Assess the impact of data change on Business, Application and Technology.		
• 2.7 Assess the impact of Process change on Data, Application and Technology.		
• 2.8 Assess the impact of Application change on Business, Data and Technology.		
• 2.9 Assess the impact of Technology change on Business,		

Data and Application .		
• 2.10 Assess the impact of Architecture Requirement Change on the Business Capabilities – planned and built.		
• 2.11 Assess the impact of M&A on current Enterprise Capabilities.		
• 2.12 Can System create, manage and reuse the Building Block concept of: Architecture Building Blocks?		
• 2.13 Can System create, manage and reuse the Building Block concept of: Solution Building Blocks?		
• 2.14 Can System create, manage and reuse the Building Block concept of: Does the system provide the capability to create new products and services by integrating the ABBs and SBBs?		

**3 TOGAF Reference Architecture**

• 3.1 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Business Applications?		
• 3.2 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Infrastructure Applications?		
• 3.3 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Platform Interface?		
• 3.4 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Platform Services?		
• 3.5 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Infrastructure Interface?		

<ul style="list-style-type: none"> <li>• 3.6 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Communication Infrastructure?</li> </ul>		
<ul style="list-style-type: none"> <li>• 3.7 Can the system create, manage and reuse the technical reference model for TRM and III-RM: Business Application - III RM?</li> </ul>		
<b>4 EA Modeling</b>		
<ul style="list-style-type: none"> <li>• 4.1 Does the system provide Visual Modeling Capability?</li> </ul>		
<ul style="list-style-type: none"> <li>• 4.2 Does the system provide capability to inter-relate Business, Data, application and infrastructure data attributes?</li> </ul>		
<ul style="list-style-type: none"> <li>• 4.3 Does the system use the relational data repository for persistent data storage?</li> </ul>		
<ul style="list-style-type: none"> <li>• 4.4 Does the system provide forward and reverse modeling capability?</li> </ul>		
<ul style="list-style-type: none"> <li>• 4.5 Does the system provide capability to populate reusable repository?</li> </ul>		
<ul style="list-style-type: none"> <li>• 4.6 Does the system provide the capability to seamlessly migrate models from contextual, conceptual, logical and physical state?</li> </ul>		
<b>5 Enterprise Architecture Continuum</b>		
<ul style="list-style-type: none"> <li>• 5.1 Does the system provide capability to preload and extend industry defined reference architectures for TRM and III-RM based technical services?</li> </ul>		
<ul style="list-style-type: none"> <li>• 5.2 Technology and Infrastructure Applications</li> </ul>		
<ul style="list-style-type: none"> <li>• 5.3 Master Data Architecture</li> </ul>		

• 5.4 Business Process		
• 5.5 Business Skill		
<b>6 EA Repository Reuse</b>		
• 6.1 Total Cost of Technology Ownership to provide agreed Service Level		
• 6.2 Publish Service Catalogue and Demonstrate Compliance		
• 6.3 Technology Risks		
• 6.4 Growth		
• 6.5 Elapsed time to launch new products and services		
<b>7 Enterprise Architecture Governance</b>		
• 7.1 Does the system provide mechanism to enforce effective decision making at agreed checkpoints throughout the ADM life cycle?		
• 7.2 Does the system provide mechanism to ensure continuous architecture alignment to the business needs and solutions compliance to the architecture?		
• 7.3 Does the system provide mechanism to conduct and manage compliance assessment?		
<b>8 Support for other Management Frameworks</b>		
• 8.1 Investment Portfolio Management		
• 8.2 Project Management		
• 8.3 Project Management Flexibility		
• 8.4 IT Service Management		

• 8.5 Strategic Planning and Business Performance Monitoring		
• 8.6 Continuous Improvement and Staff Engagement		
• 8.7 Collaboration		
• 8.8 Document Management		
• 8.9 Architecture Maturity Assessment and EALC Scorecard		
<b>9 System Security</b>		
• 9.1 Authentication		
• 9.2 Authorization		
• 9.3 Audit		
• 9.4 Asset Protection		
• 9.5 Administration		
• 9.6 Risks Management		
<b>10 Preloaded Data</b>		
• 10.1 What preloaded data does the system have that will help accelerate the adoption of TOGAF ADM and its integration with current IT systems delivery and management life cycle?		
• 10.2 What preloaded data does the system have that will help accelerate the adoption of TOGAF Enterprise Continuum?		
• 10.3 What preloaded data does the system have that will help accelerate the adoption of TOGAF EA Governance and integration of all other management framework in EA life cycle?		
10.4 What preloaded data does the		

system have that will help the EA team demonstrate the value of TOGAF to the following key stakeholders of EA:		
• Chief Architect and EA Team		
• Chief Technology Officer		
• Investment Portfolio Management and Strategic Planning		
• Chief Financial Officer		
• Chief Executive Officer		

### Technical Capability

EA Repository is built with traditional multi-tier web architecture. The system has been certified on the following technologies:

#### Server Platform:

- Windows, Unix, Solaris, Linux
- App Server: J2EE compliant APP Server, Use Eclipse plug-in to develop appropriate configuration files
- Database Server: Oracle, MS SQL, DB2, MySQL
- Report Server: Jasper Report Server is integrated. Use any other web based report server to create a publish additional reports into TSO Reports repository
- Use pre-defined Data Marts for additional online analysis and use any other analysis tools
- Use Built in Batch Scheduler or use third party batch scheduling tool

#### Development Utilities

- Eclipse J2EE IDE with appropriate J2EE app server plug-in

- Clients have access to Source Code for further extensions that are unique

#### Consumer Application

- Browser – MS IE or Firefox or any other browser
- LDAP integration – MS Active Directory or Sun One Directory Service
- SaaS option includes stand-alone authentication and privileges capability

### **Implementation Options**

There are many options on how organizations can exploit the capabilities of ITO Software.

- **Off the Shelf Solution:** install software on your internal infrastructure and contract QRS team to support and provide enhancements to the system. This option follows the traditional software license model of one time install cost and annual support cost as a percentage of the original purchase price. QRS team offers 24X7 support from our development center in Eastern Canada and Western China.
- **Software as a Toolkit and Extend:** Purchase ITO as a tool kit with source and all documentation. Clients are free to extend and deploy on as many sites and locations as they wish. The license limit prohibits the client to commercialize the software outside of their immediate group of companies. Each new release of ITO will be made available to the client; however, it is client's responsibility to integrate the new with current extended release. QRS team will support the client in this endeavour.
- **Software as a Service:** Use QRS managed software as a Service on shared or dedicated site. QRS team will accept the responsibility for support, maintenance and extensions. QRS data center will comply with all your security, privacy, and performance service level agreements.

### **Business Case**

Recognize the fact that software alone will not be sufficient to produce the outlined business case. It is a pre-requisite to implement an effective EA Practice based on QRS toolkit prior to starting the implementation of the ITO Software.

Consider the following cost and benefits drivers to compute an overall tangible business case.

Cost Drivers

The target cost outlined below is a typical cost shown for the purpose of ROI calculations. To get a detailed quote based on your specific requirements, please contact your customer area representative. All costs are in US Dollar.

Implementation option	Cost Drivers	Target Cost	Cost Influences
Off the Shelf	Software License and Implementation professional Services	\$50K Software license  \$50K professional services	Level of business process streamlization as well as inclusion of – Portfolio, Program, Project and IT Service Management. A complete EA repository requires all of the above plus Performance Dashboard integration.
	Annual Maintenance which includes 24X7 phone in support, bug fixing current minus 2 releases and all new releases  Current release schedule one major and four minor releases per year	15% of the Software price	# of modules and service level agreement  Platinum, Gold, and Silver
Software as a Toolkit and Extend	Software License and knowledge transfer professional services	\$150K source code and all documentation  \$100K professional services	Knowledge transfer team skills
	Maintenance – optional	15% of the software price	
SaaS	One time Implementation Cost	\$5k one time	Streamlined EALC processes, roles and responsibilities, governance as well as technologies and business process standardization
	System access fees	\$250/user/year	Annual access costs are influenced by # of users, Storage, Bandwidth Usage and required Service Level Agreement.

Benefit Drivers

Benefit type	Benefit Drivers	Tangible/ Intangible	Benefit Influencers
Human Resources	Information is currently managed in # of repositories and integration of information from these repositories is manual activity	Tangible and quantifiable  An ITO of 250 people could reduce their FTE staff by 5 people	Consider processes within – Portfolio Management and Strategic Planning, Project Management, IT Service Management, Enterprise Architecture, and Knowledge Management define required resources after these processes are streamlined.
Value of Decisions that are based on reliable information	Streamlined governance processes ensures the right decisions and made with information and information is developed and validated by the skilled staff	Tangible but not quantifiable	Consider time spent by decision teams along EALC – such as Architecture Review Boards, IT Change management Project Steering Committees etc.
	Benefits of gates based investment management methodology		Measure what percentage of initiatives pass through their successive checkpoints and compare this number through current IT investment management life cycle.
Value of Information Transparency		Intangible	