The Open Group
IT Architect Certification Program

How to enhance the value of the IT Architect to the business

A White Paper by:

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Executive Summary

IT Architecture is becoming the discipline that separates success from failure in large or complex IT projects. The ones that succeed have a well-designed architecture that supports (and is responsive to changes in) the business need as it evolves and changes to respond to market and competitive pressures.

This document is a proposal to The Open Group membership and also to practicing IT Architects – and companies who employ them – with an interest in helping to define and shape the program.

IT Architecture is an essential foundation to realize the vision of Boundaryless Information Flow™, which enables secure access to integrated information whenever and wherever needed.

Purpose

This White Paper describes a proposal for the design and development of an IT Architect certification program. The Open Group IT Architect certification program provides for accreditation of third-party IT Architect certification programs – affiliated certifications – and for direct certification of individuals.

The program proposed within this document will be referred to as The Open Group IT Architect certification program.

The nomenclature described by this document is expected to evolve and change according to the needs of the industry.

Audience

This document is a proposal for consideration issued to The Open Group membership, and also to practicing IT Architects – and companies who employ them – with an interest in helping to define and shape the program.

The proposed requirements are intended to be minimally intrusive to companies who have already established certification programs of their own.

Individuals who are currently performing the role of an IT Architect will find the concept of certification of great value.

Consumers of information technology-related consulting will find value in a mechanism for evaluating the skills of existing and future IT Architects providing consulting services.

Companies that do not already have IT Architect certification programs will find value in supporting a certification program that raises and standardizes the skills of IT Architects within their organizations.

The IT industry will find value in a common process and certification framework that normalizes the industry's interpretation of requirements for certified IT Architects. This framework is evolutionary and will change as the IT industry requirements change. The authors believe that this process can become a vehicle for continuously improving architectural skills across the IT industry.

"30% of Global 2000 organizations will emphasize the role of, and need for, Enterprise Architects in the coming two years."

Source: Meta Group Report

The Problem

While many large organizations need to have the ability to respond rapidly to changes in the market, competition, and globalization forces such as the Internet, it is hard to achieve that state without a well-defined architecture that is geared to the needs of the business. Even when the need is clear, and management is behind the plan, it is hard to be sure that the people

employed have the required ability, experience, and skill. Philip Allega in a recent Meta Group report states that 30% of Global 2000 organizations will emphasize the role of, and need for, Enterprise Architects in the coming two years. At the same time as demand for qualified individuals is exploding, organizations are wary as many high profile projects have failed to deliver what the business needs.

What is needed is a method of determining the skills, experience, and knowledge of a professional IT Architect, with clear standards and measures for each of these attributes. Additionally, that method should be applicable and relevant around the world, so that practitioners in all areas have equivalent levels of skill, knowledge, and experience. This White Paper sets out how The Open Group's members believe that can be achieved.

Goals

The goals of The Open Group IT Architect certification program are to:

1. Elevate the practice of IT architecture in the industry and the professionals who perform it through the validation of experience, credentials, and quality control.

2. Define a set of standards for IT Architect certification programs.

3. Obtain IT industry recognition and validation of IT Architect certification programs, and, by extension, to recognize the certification credentials that are attained by the professionals who go through those programs.

4. Provide a direct certification channel for individuals who do not have access to a certification program accredited by The Open Group.

The Open Group IT Architect certification program is unique in that it is designed to validate in a professional the existence of those characteristics that enable the effective practice of IT architecture. The Open Group IT Architect certification program is also different because it is skills *and* experience-based – it goes beyond validating the existence of knowledge.

A common characteristic of other programs is that they test or validate the existence of relevant knowledge – but nothing beyond that. Knowledge is a critical first step to becoming effective at anything. But the effectiveness, potential, and the degree and value of contribution rise to a new level as relevant skills and experience are gained in a topical area. It is clearly important to know a subject, but it is much more valuable to have applied that knowledge, gaining real-world experience in the process. It is for that reason that The Open Group IT Architect certification program is based on an assessment of IT Architect skills and experience; not just knowledge tests.

Proposed Program

The Open Group IT Architect certification program will be available in two forms:

1. Affiliated Certification where individual qualifications are obtained through IT Architect certification programs developed and managed by companies and organizations to meet their specific requirements. These programs will allow an individual to become certified in The Open Group IT Architect certification program once the programs have been accredited by The Open Group.

2. A Direct Certification program where The Open Group is the certifying organization.

The IT Architect Defined: Roles and Responsibilities

What is an IT Architect?

The IT Architect defines – or architects – solutions to client business problems through the reasoned application of information technology. Those solutions are manifested as architectures and can include systems, applications, and process components. They may also involve the application and integration of a broad variety of products, technologies, and services, various systems and applications architectures, and diverse hardware and software components.

Value of the IT Architect to the business

IT Architects perform a very valuable role in an organization. They are in the unique position of viewing both the business need and the solution implementation side of a problem. This bigger picture view allows IT Architects to ensure that the solutions fit within the organization's business direction, comply with their IT standards, and support the enterprise architecture. IT Architects are the technical conscience, responsible for the viability of the solution.

The Open Group IT Architect Certification: Process

Both certification paths require the same base level of experience and architectural skills in order to be recognized as a certified IT Architect. However, a company may levy additional certification requirements on their employees in order to satisfy internal skills requirements. Specific requirements above and beyond the base profession certification requirements are called extended certification requirements, or simply extended requirements. For example, an extended certification requirement

for the affiliated path may include experience with a proprietary or corporate methodology.

Having obtained the initial certification, an individual will be expected to enhance and update skills and experience through a process of Continuous Professional Development (CPD) that may require (either or both) annual renewal of certification or documentation of skills and experience gained in the period.

The Open Group IT Architect Certification: Criteria

Recommended Foundation Skill Requirements

There are two types of skills that all candidates for certification must demonstrate:

- Core foundation skills

- Discipline skills

In order to be certified the candidate must demonstrate that they meet or exceed the minimum skill level defined for each of the skills.

Assessing and Justifying Skills

The following levels of skill are proposed:

- Limited

- General

- Applied

- Deep

- Expert

The core foundation skills all require a skill level of *Deep* in order to qualify for certification. Discipline and extended skill requirements may include skill ratings less than *Deep* as defined by the particular certification program. However, candidates are urged to limit discipline and extended skill assessment requirements to those skills that require an *Applied* skill rating or above. Certification board reviews will evaluate the accuracy of a candidate's skill assessment.

Core Foundation Skills

The following is a list of the proposed core foundation skills for all IT Architect certifications (additional discipline skills may require other skills). The candidate should be able to perform the following list of skills without assistance. The candidate should have in-depth knowledge and the ability to lead others to perform the defined core skills. The candidate should be able to indicate that they have met successfully these skill-level criteria in repeated engagements. The core foundation skills can be categorized into architecture skills, people skills, and project management skills.

Core Foundation Skills	
People Skills	• Communication • Lead individuals and teams • Perform conflict resolution • Experience requirements
Project Management Skills	• Manage architectural elements of project plan
Architecture Skills	• Develop solutions architecture • Use modelling techniques • Perform technical solution assessments • Apply IT standards • Establish technical vision • Use design techniques • Apply methodologies • Design solution to functional and non-functional requirements • Elicit stakeholder requirements • Establish architectural decisions • Validate conformance of solution to the architecture • Perform as technology adviser

Experience Requirements

The following table defines the proposed experience requirements for The Open Group IT Architect certification program. Experience is measured in the certification application through the documentation of experience profiles.

Required Experience	
Application of Tools and Methods	Demonstrated repeated use of design methodologies and tools.
Broad Technical Experience	Candidates must have a broad set of technical and architectural experiences obtained during the design, development, and deployment of applications or systems on different platforms (software or hardware).
Contribute to Architecture Community	Demonstrated contributions to the architecture profession; for example, mentoring, publications, teaching, research collaboration, or participation in professional organizations.
Demonstrated Architectural Capability	Design sufficiently complex, challenging, and relevant architectures.
Demonstrated Success	Candidates must have acted in the role of the lead architect of at least three successful architectural engagements.
Lead Strategy/Design/ Implementation of Solution	Full lifecycle experience - in particular, the understanding and appreciation of the construction, implementation, and management aspects of a solution lifecycle - enables the IT Architect to produce solution designs that are truly viable and that can be successfully constructed, implemented, operated, and managed. A Certified IT Architect must have some full lifecycle experience.
Maintain Domain Expertise	Demonstrated expertise in applying architectural skills in a given industry or technical domain.
Perform as a Lead Architect	Performed as a lead IT Architect in the development of an architecture.

About The Open Group

The Open Group is a vendor-neutral and technology-neutral consortium, whose vision of Boundaryless Information Flow™ will enable access to integrated information within and between enterprises based on open standards and global interoperability. The Open Group works with customers, suppliers, consortia, and other standards bodies. Its role is to capture, understand, and address current and emerging requirements, establish policies, and share best practices; to facilitate interoperability, develop consensus, and evolve and integrate specifications and Open Source technologies; to offer a comprehensive set of services to enhance the operational efficiency of consortia; and to operate the industry's premier certification service, including UNIX® system certification. Further information on The Open Group can be found at www.opengroup.org.