The Open Group IT Architect Certification Program (ITAC)
The Certification Authority Perspective

James de Raeve, The Open Group

j.deraeve@opengroup.org
Origins

- Members of The Open Group Architecture Forum considered the problem of IT Architect Certification several years ago:
  - Several of our members operated similar programs
    - Certification / profession / career management
  - Similar objectives
  - Comparable criteria, processes, but with proprietary aspects
  - Recognized value of standardizing certification criteria as a basis for promoting architecture as a profession
  - Recognition that IT Architect certification did not lend itself well to traditional certification methods such as Examinations
  - Peer review agreed to be the evaluation method
Value Proposition

Reduce Project Risk

Promote Academic Support

Individual’s Credential

Foundation for the Profession

Greater Client Value

Promote Giveback

Certification Increases Credibility

Grow IT Architect Community

ITAC Mumbai  Feb 2007
Timeline

- Submission of a detailed joint proposal to The Open Group by IBM and HP in Oct 04
- Development of core documents by ITAC working group
- Review and approval by Open Group members
- Program Launch in July 05
  - Level 2 - Master Certified IT Architect
- Level 1 (Certified IT Architect) published 01/06
Certification Process

Certification Package

Direct

Indirect

Program

Base OGITAC Requirements

Extended ACP Requirements

Submitted to ACP/OG

Re-Apply

Assessment Feedback

Board Interview

Board Assessment

Package Accepted by ACP/OG

Approval

Reject

Certified!

Board Feedback

3 Years

Re-Certified!

Abbrev. Board Review

Initial Review

Incomplete Package

Re-Apply
Core Certification Components

- **Certification Policy**
  - Rules, process, what-ifs

- **Conformance Requirements**
  - The *skills* and *experience* required to qualify for certification
    - And re-certification
  - Give-Back to the community
  - Professional Development

  [www.opengroup.org/itac/cert](http://www.opengroup.org/itac/cert)

- **Directory of Certified IT Architects**
  - Allows Candidates to choose whether their name and contact information is public or private
    - Conformation code to allow 3rd parties to confirm certification details
Skills Evaluation

- Self evaluation of skill level, proficiency and demonstrated experience
  - Activities in projects where the skills were demonstrated, documented in Certification Package
  - Sign-off by ACP Management and/or Referees
  - Validation during board interviews

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>Proficiency</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited</td>
<td>Limited or no knowledge</td>
<td>None</td>
</tr>
<tr>
<td>General</td>
<td>General conceptual knowledge only</td>
<td>Limited – Read about it, some education</td>
</tr>
<tr>
<td>Applied</td>
<td>Applied knowledge</td>
<td>Performs with assistance</td>
</tr>
<tr>
<td>Deep</td>
<td>In depth knowledge</td>
<td>Mastered the current state of the art. Able to perform without assistance</td>
</tr>
<tr>
<td>Expert</td>
<td>Expert knowledge</td>
<td>Advances the state of the art.</td>
</tr>
</tbody>
</table>
# Core Foundation Skills - examples

<table>
<thead>
<tr>
<th>Category</th>
<th>Skill</th>
<th>Description</th>
<th>Required Skill Level: Level 1</th>
<th>Required Skill Level: Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>Perform Conflict Resolution</td>
<td>Mediate opposing viewpoints and negotiate equitable solutions to ensure successful and stable outcomes.</td>
<td>General</td>
<td>Applied</td>
</tr>
<tr>
<td>Project Management</td>
<td>Manage Architectural Elements of an IT Project Plan</td>
<td>Given a project plan, identify those elements of the plan that put the integrity of the architectural elements at risk and manage those elements through to the agreement by the client/project manager that the project has been successfully completed.</td>
<td>Applied</td>
<td>Deep</td>
</tr>
<tr>
<td>Architecture</td>
<td>Develop IT Architecture</td>
<td>Given one or more business requirements, create the structures of a solution that can be validated to meet those requirements.</td>
<td>Applied</td>
<td>Deep</td>
</tr>
<tr>
<td>Architecture</td>
<td>Use Modeling Techniques</td>
<td>Use modeling techniques – such as use case, scenario modeling, prototyping, benchmarking, and performance modeling – to describe the problem space, to size the solution and to validate that the proposed architecture addresses the business requirements.</td>
<td>Applied</td>
<td>Deep</td>
</tr>
</tbody>
</table>
# Experience Requirements - example

<table>
<thead>
<tr>
<th>Breadth of Architectural Experience</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience producing IT architectures which:</td>
<td>A Certified IT Architect has a variety of IT architecture experience and contributes to the development of correct and complete solutions to business problems</td>
<td>Experience architecting IT solutions which:</td>
</tr>
<tr>
<td>• Involve the application and integration of a broad variety of products, technologies, and services from either the enterprise or solution perspective, and which</td>
<td>A Master Certified IT Architect has experience integrating multiple elements of IT architecture to enable the development of correct and complete solutions to business problems.</td>
<td>• Involve the application and integration of different products, technologies, and services from either the enterprise or solution perspective</td>
</tr>
<tr>
<td>• Encompass both functional and non-functional components within different elements of IT architecture (Business, Application, Infrastructure, Information)</td>
<td></td>
<td>• Encompass both functional and non-functional components across multiple elements of IT architecture in each project (Business, Application, Infrastructure, Information)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guidance to Candidates:</th>
<th>Guidance to Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Certified IT Architect has a variety of IT architecture experience and contributes to the development of correct and complete solutions to business problems</td>
<td>A Master Certified IT Architect has experience integrating multiple elements of IT architecture to enable the development of correct and complete solutions to business problems.</td>
</tr>
</tbody>
</table>
# Experience Requirements – example (2)

<table>
<thead>
<tr>
<th>Experience Producing Architectures</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least two (2) years of experience developing IT architectures with supervision, for example through mentoring.</td>
<td>Guidance to Candidates: The Program is intended to recognize those individuals that possess both the required skills and a level of experience that suggests that they are capable of successfully contributing to IT Architecture projects. Candidates for Level 1 Certification (Certified IT Architect) are expected to have the ability to produce architectures with occasional assistance from more experienced IT Architects (e.g. Master or Distinguished Level IT Architects).</td>
<td>At least three (3) years of experience producing IT architectures. Guidance to Candidates: The Program is intended to recognize those individuals that possess both the required skills and a level of experience that demonstrates that they have mastered the ability to successfully produce IT Architectures. Candidates for Level 2 Certification (Master Certified IT Architect) are expected to have taken responsibility for producing successful IT architectures with occasional assistance from less experienced IT Architects where appropriate.</td>
</tr>
</tbody>
</table>
Experience Profiles

- Experience is documented through Experience Profiles
  - Establish a history of successful architectural performance
- Each Experience Profile includes
  - A description of the business purpose of the project
  - A concise description of the project
  - The Candidate’s role
  - The Candidate’s period of involvement
- Documented according to the certification package template
Experience Profiles (2)

- Application of Tools and Methods
  - Demonstrated use of architecture methods and tools

- Demonstrated Success
  - The work was “yours” …,
  - And accepted by the client

- Perform as a Lead Architect (Master level)
  - Acted in the role of the lead architect of a major component or subsystem.
Accreditation
Accreditation

- We accredit organizations to enable them to certify their own employees within the ITAC program

Benefits:

- Scale
- Time, Place, Control
- Use of Open Group materials
- “Grandfathering” of people already certified by the accredited program
- Portable qualification
  - Works both ways!
- Kit of parts to help in developing an internal profession
Accreditation

- Involves an in-depth assessment of the way in which the ITAC conformance requirements and evaluation process are instantiated within the organization’s program
  - Plus spot checks
- **Same Conformance Requirements**
- **Equivalent processes**
- **Anyone certified by an Accredited Certification Program would be certifiable directly**
- **One register of Certified IT Architects**
Extended Requirements

- Accredited Certification Programs may add extended requirements
  - additional certification criteria
- Must not modify or conflict with base certification

Conformance Requirements

- Examples:
  - Industry Extensions
  - Cultural Extensions
  - Corporate/Organizational Extensions
  - ‘The secret sauce’
Certification Status

- 1713 people certified
- 7 direct Certification Boards held to date
- Boards planned in parallel with Open Group meetings:
  - April – Paris
  - July – Austin Texas
  - October – Europe
- Additional Boards are held according to demand
  - Need at least three candidates
- Accreditation
  - IBM completed accreditation in January 06
  - EDS completed accreditation in November 06
  - Two major integrators in process
    - Adopting the program documents and systems for internal use
The Beginnings of a Profession

- AOGEA - The Association of Open Group Enterprise Architects
- The professional association for Enterprise Architects
- Launched January 29th
  - Over 700 members at launch
- Goals:
  - To increase job opportunities for all of its members
  - To increase members’ market value by advancing professional excellence
  - Raise the status of the profession as a whole.
- Full membership is open to people with either TOGAF or ITAC certification
  - Associate, Student and Affiliate memberships also available
Advancing professional excellence

- An Enterprise Architect’s skills have to be based on:
  - An accepted professional structure
  - High standards of expertise
  - Recognized best practice
  - An assurance that the skills are transferable between enterprises

Promoting the profession

- AOGEA is committed to enhancing the careers of its members through:
  - Promoting the value of the Association to employers
  - Knowledge sharing and communication within the community
  - Local chapters
Future Directions for ITAC

- Additional level of skill and experience
  - Level 3 definition “Distinguished Certified IT Architect”
  - 3 “streams”:
    - Practitioners
    - Enterprise Architects
    - Profession Leads
  - First draft for member comment planned for April

- Local access
  - British Computer Society
  - CIBIT (Netherlands)
  - …
Things we’ve learned

- An industry standard vocabulary and set of criteria enable productive conversations about the skills and needs of IT Architects and IT Architecture practices

- The ITAC documents are of great value in establishing and maintaining a profession internally
  - “We didn’t write it, it’s an industry standard, we can’t/won’t change it. We don’t have to maintain it, but we can contribute to it’s evolution”
  - “We’ve been looking for a way to start developing a proper career structure for our Architects. With ITAC we have found it”

- An independent qualification:
  - “now certification is not just internal it’s understood by our customers, so it’s worth my time and effort”
Benefits to Customers

- An industry consensus definition of IT Architecture skill and experience requirements
  - The beginnings of a profession
- For internal use –
  - career development,
  - internal profession
- For recruitment of staff and contractors
  - 3 hours of peer interview already done!
- For procurement of services
  - Now: preference
  - Future: requirement
Questions, Comments….. ?

Further information can be found at:
http://www.opengroup.org/itac/cert
http://www.aogea.org