



# Evolution of Enterprise Architecture Profession through Certification

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# Bio

- **Terence Blevins is a MITRE employee supporting the Air Force architecting effort. Mr. Blevins has been involved with the architecture discipline since the 80s, much of which was done while he was Director of Strategic Architecture at NCR Corporation. He has been involved with The Open Group since 1996 when he first was introduced to the Architecture Forum. He was co-chair of the Architecture Forum and frequent contributor of content to TOGAF including the Business Scenario Method.**
- **Mr. Blevins was Vice President and CIO of The Open Group where he contributed to The Open Group Vision of Boundaryless Information Flow™.**
- **Mr. Blevins holds undergraduate and Masters degrees in Mathematics from Youngstown State University. He is TOGAF 8 certified.**

# Disclaimer

- **The following contains expressed opinions and views of the presenter and not necessarily the opinions or views of the MITRE Corporation nor the US Air Force**
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# Acknowledgements

- **Fellow MITRE and US Air Force associates**
- **The Open Group**
  - **Members**
    - **Especially Hans van den Bent Vice Chair of the Certification Standing Committee and the Certification Standing Committee members!**
  - **Staff**
    - **Andrew Josey, James de Raeve, and the crew!**
  - **Partners**
    - **AOGEA members of Ethics Work Group**

# Abstract

- **Many professions rely on certification to maintain integrity. In this presentation we explore the role certification plays in various industries and draw parallels to the Enterprise Architecture profession. Finally we provide an informative update on TOGAF Certification Program and its specific role in maintaining the integrity of TOGAF.**

# I believe

- **Certification does not guarantee great architects**
- **Certification does not guarantee great architectures**
- **Certification is not a panacea**
  - But rather
- **Certification produces criteria that guides professional development!**
- **Certification does improve your chance of success in finding a great architect!**
- **Certification does improve your chance of getting great architectures – made by ever improving body of professionals!**
  - And
- **It is somewhat an ethical responsibility**

# Draft Code of Ethics from AOGEA

## - Canons

### ■ **CANON I: General Obligations**

- Members should maintain and advance their knowledge of the art and science of architecture, respect the body of architectural accomplishment, contribute to its growth, thoughtfully consider the social and environmental impact of their professional activities, and exercise learned and uncompromised professional judgment.

### ■ **CANON II: Obligations to the Public**

- Members should embrace the spirit and letter of the law governing their professional affairs and should promote and serve the public interest in their personal and professional activities.

### ■ **CANON III: Obligations to the Client**

- Members should serve their clients competently and in a professional manner, and should exercise unprejudiced and unbiased judgment when performing all professional services.

### ■ **CANON IV: Obligations to the Profession**

- Members should uphold the integrity and dignity of the profession.

### ■ **CANON V: Obligations to Colleagues**

- Members should respect the rights and acknowledge the professional aspirations and contributions of their colleagues.

# Who Opinion for 200

Case Number – 07-1160

**What**

**Why**

**How**

**Who**

**Certified Enterprise Architects**



# Who Opinion for 200

Case Number – 07-1160

**What**

**Why**

**How**

**Who**

**Who does Enterprise Architecting?**

## Who does Enterprise Architecting?

### Certified Enterprise Architects

- In my opinion EA should be done by external certified enterprise architects
  - Doesn't mean other architects wont be employed in EA
  - Architects that focus on the following contribute:
    - Business, information, services, infrastructure on the side of functionality;
  - And architects that deal in the space of ilities such as
    - Survivability, manageability, usability, security, etc
  - Further sub-classification of domain architects such as
    - Finance, Acquisition, Warfighting, Medical, ...



# Did You Know There is Certification

## ■ For the firefighter

- <http://www.state.il.us/osfm/PSandE/FFII.htm>
- <http://www.wavelandfiredepartment.com/TrainEquip/Trng.htm>

## ■ For the engineer

- <http://www.asq.org/certification/quality-engineer/index.html>
- [http://searchsoftwarequality.techtarget.com/tip/0,289483,sid92\\_gci1281155,00.html](http://searchsoftwarequality.techtarget.com/tip/0,289483,sid92_gci1281155,00.html)

## ■ For the doctor

- <http://www.reuters.com/article/healthNews/idUSTON17732620080121>

## ■ For the police officer

- <http://www.roundrocktexas.gov/home/index.asp?page=1202>

## ■ For the paralegal

- <http://www.nala.org/cert.htm>

## ■ For the nurse

- [http://www.sgna.org/certification/the\\_value\\_of\\_certification.pdf](http://www.sgna.org/certification/the_value_of_certification.pdf)

## ■ For accountant

- [http://en.wikipedia.org/wiki/Certified\\_public\\_accountant](http://en.wikipedia.org/wiki/Certified_public_accountant)

## ■ My favorite for the Beer Judge

- <http://www.bjcp.org/index.php>

# California Water Environment Association Says on Benefits

- Professional certification can be found in almost every industry in the United States today. Law, construction, auto repair, nursing, accountancy, information technology training, aerobic instructing, social work, engineering, software development, and association management just scratch the surface of the wide range of professions that have voluntary or mandatory certification.
- Certification has found its way into almost every industry for a reason: It helps advance the profession. Certification helps employers evaluate potential new hires, analyze job performance, evaluate employees, select contractors, market services, and motivate employees to enhance their skills and knowledge. Certificate holders benefit too. Certification gives recognition of competency, shows commitment to the profession, and helps with job advancement. The wastewater field is no exception to the explosive growth in professional certification. In fact, CWEA led the way offering the wastewater operator certification program in 1937.
  - [http://www.cwea.org/crj\\_new\\_howstart\\_whycert.shtml](http://www.cwea.org/crj_new_howstart_whycert.shtml)

# From Canadian Chamber of Commerce on Certification of Professions and Trades

- **“The Canadian Chamber sees the solution in two lights.**
  - **First, the need to deal with training the young skilled professionals of tomorrow in a way that fulfills market demands and**
  - **secondly, to ensure professional associations are part of the solution by streamlining their certification and upgrade training.”**

**The Canadian Chamber of Commerce is not a government organization. It is a highly respected VOICE OF BUSINESS! ..... The Canadian Chamber of Commerce is**  
*The Voice of Canadian Business*

# View on Value of Certification

## ■ For the certificants:

- Recognition by a third party
- Credibility
- Enhances professional reputation
- Personal accomplishment
- Supports continued professional development
- Demonstrates a high level of commitment to the field of practice
- Demonstrates a certain level of knowledge and skill
- Increases opportunities for career advancement and/or increased earnings
- Increases and/or validates skills and knowledge
- Meets employer or governmental requirements

- <http://seacrestcompany.blogspot.com/2007/08/value-of-accreditation.html>

# View on Value of Certification (cont.)

## ■ For employers:

- Improved customer satisfaction
- Increased safety (in applicable industries)
- Increased competence level of employees
- Used in making employment decisions
- Provides professional development opportunities for employees
- Ongoing enhancement of knowledge and skills
- Increased confidence in employees abilities
- Demonstrates employers commitment to competence
- Provides compliance with industry regulation or government requirements

- <http://seacrestcompany.blogspot.com/2007/08/value-of-accreditation.html>



# View on Value of Certification

## ■ For the sponsoring organization:

- Standardized practice and/or standards within an industry
- Advances the specialty/field and increases cooperation between organizations in the same discipline
- Provides means to establish and enforce an ethical code
- Provides a means for an industry to self-regulate

## ■ For the public:

- Helps in identifying qualified service providers
- Increases confidence in service providers
- Disciplinary process to follow in case of complaints

- <http://seacrestcompany.blogspot.com/2007/08/value-of-accreditation.html>

# Study supports periodic re-certification for doctors\*

- **“NEW YORK (Reuters Health) - The time elapsed since a primary care physician's last board certification correlates with a decline in the quality of care provided to patients, according to a study published today.”**

**\* Mon Jan 21, 2008 Reuters**

**<http://www.reuters.com/article/healthNews/idUSTON17732620080121>**

# View of Certification ROI

- **“One thing that has really changed is more pressure on corporations to measure and show ROI on certifications.**
- **Companies can measure ROI several ways:**
  - **Employee turnover decrease**
  - **Client retention improvement**
  - **Productivity increase**
  - **Faster ramp up for employees and engineers**
  - **Reduced hiring costs**
  - **Total annual savings”**

<http://gocertify.com/article/martinbean.shtml>

# Views on Certification from Real People

- **“I think that certification can be very useful for both consumers and for the professionals who are being certified. For consumers, cert. tells people that the person they're considering meets certain qualifications and has completed a certain amount of training. Some certs also require people to maintain their training, to keep it up to date. So with cert, consumers can know that the person with the cert. has met some training standards.**
- **Also, for the professional, cert. helps limit the number of people who can have the qualifications that are needed for the cert. This can be very helpful for a lot of reasons.”**
  - Licensed Psychologist
- **“In my field, I think it is essential. I am certified/credentialed as a clinical nurse specialist and as a nurse practitioner. It means that I graduated from the appropriate programs that meet certain criteria, have passed certification exams and am up-to-date with continuing education requirements. Certification, as well as licensing, is required in order to be able to treat and prescribe and to bill insurances for my service. If I provided unsafe care my licenses would be at risk in order to protect potential clients. Were I seeking treatment, I wouldn't want to entrust my care to someone who did not meet these minimum standards.”**
  - Certified Clinical Nurse Specialist



# So What's up with TOGAF 9 Certification

# The Certification Standing Committee





- Our *vision* is a foundation of a scalable high integrity TOGAF certification programs for individuals, organizations, and tools in support of certified architects, creating certifiable architectures, using certified architecture tools yielding Boundaryless Information Flow™ and lowering the overall cost of integration and interoperability.
- Our *mission* is to act as the specification authority for, and to professionally manage resolutions to, the certification program in a organized fashion based on a balanced view of business value between customers and suppliers of certified TOGAF products (people, process, and technology). TOGAF contains a method that can be used to develop Enterprise Architectures.

# Geography of IT Related Certifications

	Knowledge	Skills and Experience
Design, Development, and Deployment	Most IT Certifications	IT Specialist Certification
Architecture	TOGAF Certification (etal)	IT Architect Certification
...		

# TOGAF 8 Certification



	<p><b>For Individuals</b></p>	<p><b>Knowledge based</b></p>
	<p><b>For organizations providing training courses</b></p>	<p><b>Course syllabus meets requirements. Instructor certified</b></p>
	<p><b>For organizations providing professional services</b></p>	<p><b>Abide by code of practice. Services provided by certified Architects</b></p>
	<p><b>For organizations providing tools</b></p>	<p><b>The tool supports the TOGAF ADM</b></p>



# TOGAF 9 Certification Areas

## ■ Training

- The Key Learning Points (KLP) of TOGAF
- The hows of training delivery
  - Use of certified trainers
  - Use of standardized tests

## ■ Trainee/Individual

- The KLPs of TOGAF
- The hows of testing

## □ Tools

- The KLPs of TOGAF
- The hows of TOGAF support

## □ Professional services

- The KLPs of TOGAF
- The hows of TOGAF support

**Bottom line: the sweet spot is the conformance requirements for the whats of TOGAF. This received much attention in KLP Project.**

# TOGAF 9 Certification Issues Addressed

## ■ Training

- Level of governance and audit?
- Prefer to audit that a quality system in place, not audit courses.
- Require trainers to have a formal trainer qualification?

## ■ Trainee/Individual

- Need minimum conformance requirements.
- Large numbers of certifications, or a higher knowledge?
- Do we need to certify everybody? Practitioner certainly most important!
- Compare with industry best practices!
- Support English as 2<sup>nd</sup> language!

## □ Tools

- Agreed its important.
- Conformance criteria are weak.
- More than just modeling. How to move this forward?
- Might revise Tools certification out of cycle.

## ■ Professional services

- Did we get this right?
- What is the value to the client?
  - Perceived assurance, but no conformance to assure it!
- Can we truly govern it?

# Trainee/Individual Segments

## Decision Makers

- Portfolio Managers
- Sponsor
- Program Managers

Need to know benefits of architecture  
In support of decision making

**How To Leverage**

Need to know how to participate in architecting workshops

**How To Participate**

**How To Architect**

Need to know how to adapt and use TOGAF

## Participants/ Stakeholder/ Surrogates

- Subject Matter Experts
- Process Managers
- Operational Managers
- Business Unit Leaders
- Implementers
- Business planner

**Our current focus**



## Architecture Developers

- Architects (member of TOGAF Team)
- Architect Service Deliverers

# Status on Certification Subjects

## ■ Training

- The whats of TOGAF
  - Great work by team!
  - KLPs team succeeded
- Trainers to be certified
- Use of standard Internet Based Test
- Program open for business

## ■ Trainee/Individual

- The whats of TOGAF
  - Great work by team!
  - KLPs team succeeded
- Migration path from those certified in TOGAF 8
- Program open for business

## □ Tools

- The whats of TOGAF
  - Great work by team!
  - KLPs team succeeded
- Strategy in place
- Program open for business in 6 months

## □ Professional services

- The whats of TOGAF
  - Great work by team!
  - KLPs team succeeded
- Strategy in place
- Program open for business in 6 months

# Tools Certification Strategy Statement

- Enable the tool vendors to address their specific target markets
- Allow tools certification in specific areas of TOGAF
- For each area there will be
  - Conformance requirements
  - Vendor claims of conformance, maybe levels of conformance,
  - Similar approach to TOGAF 8
    - More specific conformance requirements packaged to address the specific areas
- These specific areas of tool certification will be developed in our open forum
- Critical to this strategy is the involvement of
  - Tool providers
  - Tool customers
  - Certification Standing Committee, and
  - The Open Group Staff

# Professional Services Certification Strategy Statement

- **Enable the Professional Service providers to utilize the TOGAF brand**
- **Certify that**
  - Service providers are trained in TOGAF
  - Promote use of certified TOGAF tools, and
  - Adhere to a TOGAF code of practice
- **For each of these there will be**
  - Open process to develop conformance requirements
  - Process for providers to assert conformance
  - Process for assessment of the assertion for conformance, and
  - Communication process for publicizing certificates of compliance
- **Critical to this strategy is the involvement of**
  - Professional Service providers
  - Professional Service customers
  - Certification Standing Committee, and
  - The Open Group Staff

# Summary

- We have learned a great deal from industry on why we need certification and where to apply certification
- We have improved the integrity of the program with TOGAF 9
- We will continue to mature with your support through cooperation and collaboration – The Open Group Way!





# Backup



# Principles of CSC

- **CSC-1**
  - **Integrity**
- **CSC-2**
  - Build on success
- **CSC-3**
  - Scale for future success
- **CSC-4**
  - Respond to business context for certification
- **CSC-5**
  - Apply experience and advances in other certification programs
- **CSC-6**
  - Divide work for parallel execution
- **CSC-7**
  - **Manage**
- **CSC-8**
  - **Follow existing rules of operation**

# High Priority Issues

Pr #	Summary
<a href="#">19</a>	A review of the TOGAF Certification Policy is required to decide if it needs revising to accommodate certification against the new specification due in 2008
<a href="#">20</a>	Does the TOGAF 8 Training Product Standard allow a training course to be a combination of distance learning and instructor led
<a href="#">21</a>	Create a TOGAF Certification Program Strategy in 2 Phases
<a href="#">22</a>	We should take the opportunity to improve the TOGAF renewal rate following a TOGAF Renewals Survey in December 2007.
<a href="#">23</a>	The TOGAF Certification program is not prepared for the introduction of TOGAF 9.
<a href="#">24</a>	There is insufficient quality assurance on the provision of TOGAF Training.
<a href="#">25</a>	Issues with the current requirements for TOGAF Training certification
<a href="#">26</a>	There is no certification against the Training provider or the Instructor except that they are TOGAF certified
<a href="#">27</a>	When we issue TOGAF 9 certification for individuals, how can we guarantee that we will keep the present and recently TOGAF 8 certified people "on board". Concerns may be that: -TOGAF 8 certification is outdated -I will have to spend 4 or more days+
<a href="#">28</a>	In the present Certification scheme for individuals a large group of interested people do not have the possibility to attend a training and certify. i.e. - Architecture project member other than Practicing Architects (project managers, project s
<a href="#">29</a>	The emergence of non-English TOGAF will create requirement for non- English training products /examination/certification
<a href="#">30</a>	Should now refer to TOGAF 8.1.1

