Armstrong Process Group

Armstrong Process Group (APG) is committed to providing proven and practical process guidance for aligning information technology and systems engineering capabilities with business strategy. Our unique combination of integrated strategic process improvement consulting, customized classroom training, professional development products, and project coaching ensures our clients can practice sustainable development.

Our broad and extensive experience in many different business domains and organizational environments allows APG to provide our clients with the knowledge of the critical success factors and typical challenges most organizations face.

APG Lifecycle Portfolio

APG offers an integrated perspective for the business and technology landscape (see Figure 1 below). A key factor in sustainability is recognizing the different process lifecycles within an organization, understanding how they are different, but at the same time, how they are related to one another.

FIGURE 1 INTEGRATED BUSINESS-TECHNOLOGY LANDSCAPE

APG understands these lifecycle integration touch points and how critical they are to long-term viability.
Business Domain Experience

APG and our consultants have had numerous experiences over the last twenty years delivering world-class solutions to Fortune 1000 companies and government agencies in many different business domains.

- Aerospace/Aviation
- Energy/Utilities
- Financial Services
- Government
- Healthcare/Medical Devices
- Insurance
- Manufacturing
- Military/Defense
- Retail
- Telecommunications

Engagement Types

- Adoption of standard enterprise architecture, systems engineering, and solution delivery methods (e.g. TOGAF, OpenUP, INCOSE, Harmony, RUP)
- Adoption of standard modeling specifications – UML, SysML, Business Process Modeling Notation (BPMN), Business Motivation Metamodel (BMM), and others
- Creation of internal professional development programs and certification programs – TOGAF, ITAC, OCUP, OCEB
- Creation of domain- and organization-specific taxonomies (or metamodels)
- Acquisition and deployment of tools

Service Delivery Approaches

- Process improvement consulting
- Facilitated workshops
- Instructor-led training (ILT) and web-based training (WBT)
- Project coaching and mentoring
- Tool installation and configuration

Tool Experience

APG has found that most organizations need to adopt some sort of tooling in order to sustain their new practices. To this end, APG has formed partner relationships with many of the leading vendors in the architecture and engineering space (see Partners below). However, APG understands that it is critical to ground any new practice in process first, for without the appropriate context, “a fool with a tool is still a fool.”

- Process definition and management
- Formal modeling
- Requirements management
- Traceability
- Reporting
- Governance
- Workflow management
- Collaborative environments
- Asset management
- Configuration management
Professional Services
APG has a comprehensive offering of professional services to provide a complete, integrated framework that can be tailored to each organization’s unique needs (see Figure 2 below). Our broad and extensive experience in many different business domains and organizational environments allows APG to provide our clients with the knowledge of the critical success factors and typical challenges most organizations face.

Method Framework
• Description of how architecture work is initiated, performed, governed
• Integration with other business and IT lifecycles and processes

Skills Framework
• Description of skills and experiences required by architecture participants
• Includes professional development and certification programs

Taxonomy Framework
• Definition of relevant types of architectural assets and their relationships
• Often includes various reference models

Tools Framework
• Suite of integrated tools, aligned with method, that implements taxonomy
• Includes modeling, requirements management, repositories, governance

Figure 2 Critical Elements of a Development Practice Framework

Strategic Process Improvement
APG provides consulting services to help organizations plan and rollout their process improvement initiatives.

• Organizational/professional development and skills assessment
• Process definition and process modeling
• Business-IT alignment
• Enterprise architecture
• Portfolio/program management
• Systems engineering
• Software development
• Industry frameworks (TOGAF™, RUP®, MDA®, CMMI®, DoDAF, INCOSE)
Project Coaching
APG provides project coaching services to help organizations practically apply new process and tool skills on real projects. APG clients find that coupling formal classroom training with APG Professional Services ensures consistent alignment of the process improvement program with business objectives.

- Project management
- Business process modeling
- Requirements and analysis
- Architecture
- Software design
- User interaction design
- Quality assurance and testing
- Development
- Configuration management

Tool Deployment
APG provides tool deployment services to help organizations plan and rollout their tool implementation initiatives.

- Organization licensing assessment
- Deployment planning and execution
- Tool installation, configuration, and integration
- Import existing project assets

Training
APG has a comprehensive classroom training curriculum of over 30 courses that cover all aspects of enterprise development lifecycles. APG has designed most courses as one- and two-day classes to allow a timely, focused education experience. These shorter courses can be more effectively combined with other APG courseware to deliver a custom training program that specifically targets the education objectives of the organization.

Popular Courses
- TOGAF™ 9 Certification Training
- TOGAF 8 Certification Program
- Business Process Modeling with BPMN™
- UML® Certification Fundamentals
- Iterative Development Fundamentals
- Use Case Modeling Fundamentals
- Requirements Management Fundamentals
- Object-Oriented Analysis and Design with UML
- Rational Unified Process® (RUP®) Fundamentals
- Tool training (IBM Rational, Sparx, No Magic, and others)

Please our website for a complete listing of all APG courses.
Partners

APG has partnership relationships with leading vendors and industry standards organizations. These partnerships enable APG to contribute feedback and provide leadership based on our real-world practice with clients.

Industry Standards

APG is an Influencing Member of the Object Management Group and contributes to Model Driven Architecture (MDA), the Unified Modeling Language (UML), the Software and Systems Process Engineering Metamodel (SPEM), and other formal modeling specifications.

APG is a member of the Architecture Forum at The Open Group and contributes the ongoing evolution of The Open Group Architecture Framework (TOGAF). APG also provides certified TOGAF Training curriculum, TOGAF Professional Services, and the APG TOGAF Process Library (which is certified for TOGAF Tool Support).

APG is a Committer to the Eclipse Process Framework (EPF) project and contributes to the Open Unified Process (OpenUP). APG provides services to organizations that wish to adopt agile development practices and the EPF Composer tool.

APG is a Knowledge Partner, Mentoring Partner and Tools Partner with the Association of Open Group Enterprise Architects (AOGEA).

Vendors

APG is an Advanced IBM Business Partner with Value Advantage Plus (VAP) capabilities and an IBM Independent Software Vendor (ISV). APG provides services to organizations that wish to adopt the Rational Unified Process (RUP) and the IBM Rational tool set (Rational System Architect, Rational Software Architect, Rational DOORS, Rational RequisitePro, Rational Rhapsody, Rational Method Composer, and others).

APG is a Valued Added Reseller (VAR) and training partner for Sparx Systems. APG provides services to organizations that wish to adopt the Enterprise Architect modeling tool.

APG is a MEGA Consulting and Distribution Partner. APG helps organizations adopt the MEGA Modeling Suite.
**EA-In-A-Box™**

**Operation**
- Rational Asset Manager
  - ATPL+ Rational Asset Manager (ATPL+RAM)

**Realization**
- ATPL+ Govern Solution Architectures (ATPL+GSA)
- ATPL+ Rational Unified Process (ATPL+RUP)

**Integration**
- Rational Focal Point
  - ATPL+RFP

**Visualization**
- Rational System Architect
  - ATPL+ Rational System Architect (ATPL+RSA)

**Foundation**
- TOGAF Certification, APG TOGAF Process Library (ATPL), Rational Method Composer (RMC)

Specialization: Business Architecture, BPM, DoDAF, UPDM, FEA, etc

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**Foundation Facet – Offerings**

**Standard Offering**
- TOGAF 9 Certification training (4 days)
- APG TOGAF Process Library (ATPL) licenses

**Adaptation Offering**
- Rational Method Composer licenses
- Method Composer Fundamentals training (1 day)
- ATPL Customization workshop (4 days)

**Additional Services**
- TOGAF 8-9 Bridge Certification training (2 days)
- TOGAF Executive Management Overview training (1/2 day)
- EA Practice Assessment workshop (5 days)
- TOGAF Adoption workshop (5 days)
- EA Advisory and Assessment service

Proven ►►►►►► Practical ►►►►►► Process™
Visualization Facet – Offerings

Standard Offering
- Rational System Architect TOGAF training (2 days)
- Rational System Architect licenses
- ATPL+ Rational System Architect (ATPL+RSA) licenses
- Rational System Architect Deployment workshop (5 days)

Additional Services
- Rational System Architect Asset Collection workshop (10 days)
- EA Vision workshop (5 days)
- Business Architecture Offering (16 days)
- Business Process Modeling Offering (13 days)

Specialization Facet – Offerings

Business Architecture Offering
- Business Service Fundamentals training (1 day)
- Business Analysis Modeling training (2 days)
- Business Component Modeling training (2 days)
- Rational Software Architect Business Architecture training (1 day)
- Business Architecture Workshop (10 days)

Business Process Modeling Offering
- Business Process Modeling with BPMN training (2 days)
- IBM Rational System Architect Business Process Modeling training (1 day)
- Business Process Modeling Workshop (10 days)
Business Architecture and Modeling Learning Path

Business Analyst

Domain Modeling with UML
#01-0302 (1 day)

Has basic formal modeling skills?

Business Process Designer

Capturing Business Rules
#01-0303 (1 day)

Yes

No

Formally capturing rules?

Business Architect

Model Driven Service-Oriented Architecture
#01-0204 (2 days)

TOGAF Certification Training
#01-0217 (4 days)

Tool User

Method Composer Fundamentals
#01-0609 (1 day)

Business Service Fundamentals
#01-0304 (1 day)

Business Analysis Modeling
#01-0305 (2 days)

Business Component Modeling
#01-0306 (2 days)

Business Process Modeling with BPMN
#01-0310 (2 days)

Rational System Architect TOGAF
#01-0618 (2 days)

Enterprise Architect TOGAF
#01-0623 (2 days)

Enterprise Architect Business Arch
#01-0610 (1 day)

Enterprise Architect BPM
#01-0614 (1 day)

Rational

Sparx

Tool user?

Yes

No

BAM and BCM can be combined into an accelerated three-day course

Additional Courses

UML Certification Preparation
#01-0808 (1 day)

Model Driven Architecture Fundamentals
#01-0203 (1 day)
**Systems Engineering Learning Path**

![Diagram of Systems Engineering Learning Path]

1. **Team Member**
   - Systems Engineering Fundamentals
     - #01-1001 (2 days)

2. **Systems Engineer**
   - Elicitation experience?
   - **OOSEM – Analyze Stakeholder Needs**
     - No
     - Requirements Gathering Fundamentals
       - #01-0701 (1 day)

3. **Systems Architect**
   - TOGAF Certification Training
     - #01-0217 (4 days)

4. **Tool User**
   - Method Composer Fundamentals
     - #01-0609 (1 day)

- **OOSEM – Analyze System Requirements**
  - Requirements Management Fundamentals
    - #01-0702 (1 day)

- **SysML User Fundamentals**
  - #01-1002 (2 days)

- **OOSEM – Define Logical Architecture**
  - SysML Modeling Fundamentals
    - #01-1003 (3 days)

- **Advanced SysML Modeling**
  - #01-1004 (2 days)

- **Advanced Systems Architecture**
  - #01-0223 (2 days)

- **DoDAF Fundamentals**
  - #01-0221 (4 days)

- **UPDM Fundamentals**
  - #01-0222 (4 days)

- **IBM Rational Rhapsody Fundamentals**
  - #01-0624 (1 day)

- **IBM Rational DOORS Fundamentals**
  - #01-0616 (1 day)

- **Sparx Enterprise Architect System Engineering**
  - #01-0625 (1 day)

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* OOSEM is the Object-Oriented System Engineering Method from the International Council on Systems Engineering (INCOSE)

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Proven ➔ Practical ➔ Process™
APG TOGAF Process Library (ATPL)

Features & Benefits
- Complete representation of TOGAF 8.1.1
- Architecture Development Method (ADM)
- Enterprise Continuum
- Resource Base
- Proven, standards-based approach
- Widespread adoption
- Customize TOGAF to organization needs
- Integrate TOGAF with other lifecycles and processes
- Provide stable platform for migrating to future versions of TOGAF
- Establish an effective and sustainable enterprise architecture program
- Certified by The Open Group

Overview
The APG TOGAF Process Library (ATPL) is an innovative and unique way of using the industry's leading open enterprise architecture development method and framework – The Open Group Architecture Framework TOGAF™ – 2007 Edition (Incorporating 8.1.1). All portions of the specification are represented in the ATPL and are organized into the same four parts that are found in the printed book, PDF version, and HTML versions (from The Open Group's website – the official source of the TOGAF standard). The ATPL also is certified by The Open Group as meeting its requirements for TOGAF 8 Tool Support.

The ATPL contains all of the process guidance found throughout TOGAF (in the form of guidelines, concepts, and checklists), as well as work breakdown structures (WBS) for the Architecture Development Method (ADM).

With the ATPL, end user organizations now can base their enterprise architecture (EA) practices on TOGAF and create organization-specific versions of TOGAF that represent the concerns of their business and technology environments. With the ATPL, TOGAF can now be integrated with other processes, such as IBM Rational Unified Process® (RUP®), Open Unified Process (OpenUP), Telelogic Harmony™ processes, ITIL®, COBIT, in addition to organization-specific processes.

As The Open Group releases new versions of TOGAF, APG will also create new versions of the ATPL (which will be freely available to licensed customers). The flexibility of the ATPL Framework (see below) allows for easy migration of an organization's existing additions and changes to future versions of TOGAF.

With the published ATPL website, architecture practitioners also have a new way of navigating the content found in TOGAF using a familiar tree view explorer that allows one to drill down to specific content rapidly.

Price
- Website: Free download
- Method library: $795 per named user

Product
- #02-0103

Audience
- Chief Information Officer
- Vice President/Director in IT
- IT manager
- Enterprise architect
- Process architect

System requirements
- Browsing ATPL: Mozilla Firefox v1.5+ or Microsoft Internet Explorer v6.0+
- Customizing ATPL: EPF Composer v1.2.0.2

About Armstrong Process Group
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ATPL Framework

Figure 1 APG TOGAF Process Library (ATPL) Framework

"The ATPL provides organizations with a reliable and stable platform for maintaining and evolving their investments in their enterprise architecture practices. Enterprise architecture practitioners need to focus on actually practicing architecture and delivering real business value, not figuring out how to do it."

- Chris Armstrong, President, Armstrong Process Group

ATPL Plus

ATPL Plus (ATPL+) is a set of extensions to the base TOGAF 8.1.1 plugins described by the ATPL. With ATPL+, end users will gain the following features and capabilities:

- Consistent specification of the ADM as a set of fine-grained tasks (assignable to individuals in a work breakdown structure) with clearly specified input and output work products
- Tasks grouped into reusable process patterns
- Consistent specification of work products (deliverables and artifacts) and relationships amongst them
- Clear specification of EA roles, which tasks they participate in, and which work products they work with
- Configuration of ADM method content (tasks, work products, roles) into an agile, iterative lifecycle
- Easier and more consistent approach to tailoring TOGAF for an organization

ATPL+ also provides a stable, consistent platform for integrating the ADM lifecycle into other processes such as the IBM Rational Unified Process (RUP), the Telelogic Harmony processes and others (DSDM, OpenUP), as well as adding guidance for using EA tools such as Telelogic System Architect and Sparx Enterprise Architect.
Existing ATPL+ Plugins

- **ATPL+ Govern Solution Architectures (ATPL+GSA)**
  ATPL+GSA refines the descriptive guidance found in Phase G: Implementation Governance of TOGAF ADM.

- **ATPL+ Rational Unified Process (ATPL+RUP)**
  ATPL+RUP integrates TOGAF ADM with the IBM Rational Unified Process (RUP) and is an IBM Ready for Rational Software validated product.

Customizing the ATPL

Licensees of the APG TOGAF Process Library can customize it to create their own versions of TOGAF. Using the EPF Composer tool (an open-source, freely available tool), organizations can extend ATPL method content and method configurations to represent their tailoring of TOGAF and enterprise architecture. For example, with the ATPL and EPF Composer, an organization can:

- Change names of TOGAF phases, activities, and deliverables
- Add organization-specific content (phases, activities, deliverables, guidelines, examples)
- Integrate TOGAF with other lifecycles such as RUP, ITIL, and PMI
- Integrate TOGAF with organization-specific processes
- Add domain-specific content related to financial services, telecommunications, healthcare, manufacturing, systems engineering, government, and defense, for example
- Add technology-specific content such as service oriented architecture (SOA), system platforms (IBM, HP, Microsoft, Sun, etc) and package platforms (SAP, Oracle, etc)
- Add tool-specific content for products from companies such as Telelogic, MEGA, IBM Rational, Sparx, Metis, and Troux
- Provide collaborative Wiki-based environment for discussing and evolving use of processes on real projects†
- Enable translation and localization of method content into different languages‡

Please contact APG Sales for more details on how to license the ATPL for internal use, including volume discounts and site licenses.

Integration with Web-Based Training

While students are taking the web-based tutorial (WBT) lessons for the APG TOGAF 8 Certification Program, they can access TOGAF-specific process guidance in the APG TOGAF Process Library (ATPL). Virtually every slide in each lesson has a hyperlink in the lower left corner that takes the student directly to the original TOGAF content referenced on the slide.

† Requires use of an additional freeware tool – please contact APG for details.
‡ Requires use of an additional commercial tool – please contact APG for details.