Enterprise Integration Architect

Designing high-confidence executable integration for the modern enterprise.
**Enterprise Integration Architect**

Booz Allen’s Enterprise Integration Architect is the second service offering within the Enterprise Integration Design portfolio, which connects and streamlines processes, services, and data to help organizations effectively achieve mission critical goals and capitalize on new opportunities.

1. **Assess**
   Takes a holistic look at mission needs, business requirements and current IT solutions to determine which elements should be maintained, modernized or retired.

2. **Architect**
   Develops a blueprint and specifications that define how current and new components come together, and paves the way to a truly integrated enterprise.

3. **Assemble**
   Brings together components that enhance agility, optimize cost-effectiveness, and meet the evolving needs of the enterprise.

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To succeed in this new environment, organizations need the critical ability to make accurate, quick, and informed decisions about the core systems that enable mission success.

The only certainty is uncertainty.
The days of stable long-term budgets are gone. Replaced with increasing uncertainty, today’s enterprises are facing increasingly complex and challenging environments with fewer resources, shorter time frames and greater overall risk. To succeed in this new environment, organizations need the critical ability to make accurate, quick and informed decisions about the core systems that enable mission success and where to invest to meet emerging needs.

Against this modern and increasingly connected landscape, enterprise integration must evolve from complexity to simplicity. Yesterday’s long-range and large-scale integration efforts must be broken into smaller, more affordable, and low-risk components that better support the new demands of today’s uncertain environments.

Leaders must be confident that current integration efforts will not only increase mission capabilities and reduce sustainment costs, but also have the coherence and specificity to accommodate incremental changes along the way. Moving forward, effective implementations must be built on top of complete solutions that are fully accountable to both short-term demands and long-range goals.

Take back control.
Booz Allen’s modular approach puts control back in the hands of the enterprise. From immediate access to informed views for improved decision-making, to efficient and accountable artifacts, the goal is simple: high-confidence executable integration architectures that meet increased demands with increased results.

From intra-enterprise “system-of-systems” integration for improved efficiency and sustainability, to extra-enterprise “enterprise-of-enterprises” integration for enhanced interoperability and capabilities, Booz Allen’s unique approach provides the building blocks for enterprises to design and deploy effective, mission-critical integrations on any scale. Whether integrating existing systems, adding new capabilities, or modernizing existing applications, this approach gives organizations a compete answer to a previously challenging environment.

Ultimately, this executable approach and baked-in granularity gives today’s systems owners, senior leaders and vendors the comprehensive integration tools and proven expertise they need to rapidly respond to short-term challenges without sacrificing long-term priorities.
EXECUTABLE ARCHITECTURE

Booz Allen’s Enterprise Integration Architect delivers the building blocks for today’s modern enterprises to develop, deploy, and interface mission architectures. These modular components provide the control, flexibility, and coherence needed to simplify complex challenges and deliver a stable and agile enterprise.

Booz Allen follows a proven three-phase methodology to produce executable architecture puts critical control back in the hands of the enterprise. From modular, open architectures to detailed specifications that ensure greater interoperability, executable architecture produces open, fully integrated environments that eliminate complexity and increase results.

**Core Tenants**

**Mission Driven:**
Full traceability and visibility of systems, activities, and capabilities to mission needs.

**Enterprise Perspective:**
Intelligent technology injection/convergence through gaps, redundancies, and reuse analysis.

**Open/Modular Systems:**
Government owned systems with open modular design generates greater supplier base, reduces vendor lock-in, and increases innovation while fostering component reuse.

**Analyze**
Analyze operational requirements to derive technical requirements, provide enterprise awareness, and define service delivery recommendations based on the most efficient alignment to mission and technology priorities.

This phase provides traceability, transparency and integration throughout the Enterprise. Identifies candidate services to meet prioritized needs and efficiency goals via consolidation of existing services and systems or identification of new services or systems to meet capability gaps.

**Design**
Design cost-effective, interoperable enterprise architecture that promotes re-use, flexibility and decreased time-to-market. Support analysis, studies, and pilot efforts to compile a prioritized service portfolio and delivery roadmap.

This phase employs in-depth technical considerations in defining open architectures and supporting artifacts required to meet mission needs while empowering the client to make informed acquisition decisions and increase accountability of solution developers.

**Validate**
Validate components through execution of Independent Verification and Validation (IV&V) testing and the use of Conformance Test Kits (CTKs) to ensure components meet defined requirements and specifications.

This phase equips enterprises with the right tools to validate and hold material developers accountable to enterprise standards prior to integration.
**From Complexity to Simplicity**

Booz Allen gives organizations the tools to answer complex challenges with simple solutions. These proven building blocks provide the granularity and coherence needed to integrate systems effectively.

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**Enterprise Integration: Architect**

From Complexity to Simplicity

Booz Allen gives organizations the tools to answer complex challenges with simple solutions. These proven building blocks provide the granularity and coherence needed to integrate systems effectively.
Large-scale organizations in the civil, defense, and commercial sectors are often reliant upon complex systems engineering to ensure mission success and meet business objectives. Many of these organizations grew organically over time, often in response to immediate and substantial challenges, thus short-cutting a comprehensive enterprise perspective.

Reusable Components
Promotes re-use and adoption of common and core enterprise services across mission threads.
The resulting stove-piped enterprise contains monolithic systems full of duplicative and non-standard technology components that are both increasingly difficult, and expensive, to maintain. Moreover, these siloed systems often contain legacy and proprietary infrastructure that may hinder, and even prevent, organizations from effectively and efficiently delivering enterprise-wide services critical to mission success.

Booz Allen’s executable architecture provides a fully documented, incremental roadmap to transform monolithic and stove-piped systems into efficient, effective and truly integrated System-of-Systems. Designed to increase connectivity and support informed decision-making across the enterprise, this intra-enterprise convergence and connectivity is built on a strong foundation of shared services, open frameworks, and client-owned technology for success-driven enterprise integration.
CASE STUDY:

Enterprise-of-Enterprises Integration

High-risk organizations throughout the intelligence and defense sectors have often relied on a go-it-alone strategy to properly ensure the security of their data, people, and enterprises. Against traditional threats and conventional enemies, this proved an effective strategy for defending and mitigating risk across the enterprise from strategic to tactical echelons.

Measurable Results
Enhances risk mitigation through measurable progress and maturity results.
Integrating extra-enterprise systems for greater effectiveness and agility.

The resulting isolated enterprise is often rigid, unadaptable, and increasingly ineffective against the unconventional demands of modern, advanced asymmetric threats. Moreover, these inflexible systems, while both secure and connected internally, are often incapable of the rapid data sharing and interoperability required for working quickly across partner networks to mount an effective and agile joint response.

Booz Allen’s executable architecture provides a specifications-based approach that drives interoperability across systems and networks to increase capabilities and create a truly effective Enterprise-of-Enterprises. Designed to provide both increased accountability and measurable results that ease integration, this extra-enterprise interoperability is built upon open architecture and tailored industry standards to leverage capabilities and increase speed to delivery.

**Open Architecture Design**
Design with open architectures and tailored industry specifications to promote shared standards and common infrastructures. These client-owned systems, combined with a specification-based approach, ease integration, improve interoperability, and increase speed to delivery.

**Test-Driven Approach**
Utilize a test-driven approach that enables increased accountability for industry, systems integrators, and vendors by measuring progress and maturity results to accommodate changing requirements, protect investments, and deliver more agile and flexible systems.

**Increased Accountability**
Enables increased accountability by organizations for industry, systems integrators, and vendors.

**Reusable Components**
Promotes re-use and adoption of common-to-core enterprise services across mission threads.

**Modular Approach**
Provides increased agility through modular components that ease integration and increase speed to delivery.

**Increased Speed to Delivery**
Promotes re-use and adoption of enterprise services across mission threads.
CASE STUDY:

Cloud-Based Modernization

Heavily funded organizations in the civil, defense and commercial sectors have invested significantly in information technology to grow and sustain a competitive advantage. As such, many organizations grew dependent upon generous funding and a steady influx of new money to sustain these capabilities without adequate protection against future capital instability.

Sustainable Systems
Delivers more affordable and sustainable systems through increased efficiency and reduced complexity.
Modernization
Integrating applications and infrastructure for increased sustainability and scalability.

The resulting enterprise contains significant and expensive systems deployed on single-use infrastructure that is both economically unsustainable and inherently flawed. Moreover, these once-great legacy systems often perform poorly against newer systems built using modern, scalable, and dynamic cloud-based technologies.

Booz Allen’s executable architecture provides a scalable and elastic enterprise-wide architecture that modernizes both applications and infrastructure to deliver a sustainable and modernized cloud-enabled enterprise. Designed to decrease sustainment costs and increase effectiveness, this cloud-based modernization is built upon a common and core set of modular services that leverage reuse for truly sustainable infrastructure investments.

**Gap/Redundancy Analysis**
Conduct gap and redundancy analysis to identify common and core services for reuse/recycle. This comprehensive enterprise view delivers more efficient and affordable systems with realized cost savings.

**Future-State Modeling**
Model future state architecture to fully support informed decision-making across the enterprise. This executable architecture delivers modular components that increase agility and enhance risk mitigation.

**Agile Frameworks**
Improves agility, flexibility, and informed decision-making across enterprise integration.

**Improved Risk Mitigation**
Increases accountability and enhances risk mitigation through measurable progress and maturity results.

**Informed Decision-Making**
Increases accountability and enhances risk mitigation through measurable progress and maturity results.

**Modular Approach**
Provides increased agility through modular components that ease integration and increase speed to delivery.
Booz Allen’s unique Enterprise Integration methodology breaks down monolithic, closed, and unsustainable silos into reusable components to integrate processes and systems to meet cross-organizational mission needs and flush out inefficiencies.

**ANALYZE**

Analyze operational requirements to derive technical requirements, provide enterprise awareness, and define the service delivery recommendations based on the most efficient alignment to strategy and technology priorities.

**Features & Benefits:**
Identification of candidate services to meet prioritized needs and efficiency goals via consolidation of existing services and systems or identification of new services or systems to meet capability gaps while providing traceability, transparency, and integration throughout the enterprise.

**Artifacts:**

- **Mission Threads / Business Requirements**
  a “top down” service decomposition into prioritized services.

- **As-Is Analysis**
  a “bottoms up” service identification to identify as-is system functionality.

- **Solutions / Services Portfolio**
  provides clear traceability and transparency from operational needs and requirements to as-is and to-be services and solutions.
DESIGN
Design a cost-effective, interoperable enterprise architecture that promotes re-use, flexibility, and decreased time-to-market while supporting analysis, studies, and pilot efforts to compile a prioritized service portfolio and delivery road map.

Features & Benefits:
More informed acquisition decisions and increased accountability of solution developers resulting from the in-depth technical consideration in defined open architectures and supporting artifacts required to meet achieve desired goals.

Artifacts:
+ Enterprise Roadmap identifies acquisition packages.
+ Service Specifications defines reference architectures and interface specifications for interoperability requirements.
+ Reference Implementations reference implementations to validate reference architecture and specifications.
+ Conformance Test Kits automated conformance checks used throughout the development, integration, and validation cycles to ensure conformity.

VALIDATE
Execution of Independent Verification and Validation (IV&V) testing through the use of Conformance Test Kits (CTKs) to ensure components meet defined requirements and specifications.

Features & Benefits:
A higher degree of success rate as organizations are now equipped with the right tools to validate and hold material developers accountable to enterprise standards prior to assembly.

Artifacts:
+ Conformance Testing on acquired components from material developers.
+ Conformance Checklists technical conformance requirements for format and behavior.
THE FUTURE STARTS HERE

Inefficiencies from overlapping and duplicative activities plague many of today’s large-scale organizations, processes, and systems. Mostly the result of siloed environments that drive up costs and diminish mission capabilities — until now, the integration challenges often outnumber available answers.

Booz Allen’s executable architecture helps organizations take back control over costly, complex, and inflexible enterprise integration. This modular approach is designed to break complex challenges into reusable components that support tailored, open architecture standards for reduced vendor lock-in and more efficient, effective, and secure mission architectures.

From critical standards and specifications to an enterprise blueprint, executable architecture provides organizations with a simple and effective way to answer complex challenges with simple solutions that reduce inefficiencies and enable true mission integration.

To take back control and experience the power of truly executable architecture, please contact your Booz Allen representative today.
About Booz Allen

Booz Allen Hamilton has been at the forefront of strategy and technology consulting for 100 years. Today, the firm provides services primarily to the U.S. government in defense, intelligence and civil markets, and to major corporations and not-for-profit organizations. Booz Allen helps clients achieve success today and address future needs by applying functional expertise spanning consulting, analytics, mission operations, technology, systems development, cybersecurity, engineering, and innovation to design, develop, and implement solutions.

Booz Allen is headquartered in McLean, Virginia, employs nearly 23,000 people, and had revenue of $5.48 billion for the 12 months ended March 31, 2014. In 2014, Booz Allen celebrates its 100th anniversary year.

To learn more, visit www.boozallen.com. (NYSE: BAH)

8283 Greensboro Drive McLean, VA 22102
703-902-5000

Contacts

Greg Wenzel
Senior Vice President
Wenzel_Gregory@bah.com
703-917-2739

Bill Ott
Vice President
Ott_William@bah.com
703-377-0157

Ki Lee
Principal
Lee_Ki@bah.com
703-377-5275

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