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## Introductions

- Name
- Company & role
- Experience with enterprise and integration architecture
- Experience with Anypoint Platform and MuleSoft products
- What do you plan on architecting on Anypoint Platform?
- What do you want to get out of class?




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## Course logistics

- Class is typically from **09:00 to 16:00** on **days 1 and 2** and from **09:00 to 15:00** on **day 3**
- 1 hour lunch break, typically from **12:00 to 13:00**
- **2 breaks** each morning and afternoon
  - Other breaks as desired - just ask!
- Please let us know if you have **other business** to attend to!




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# Module Welcome To Anypoint Platform Architecture: Application Networks

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# Introducing the course

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## There are two architecture courses and certifications

- Anypoint Platform Architecture: **Application Networks** and MuleSoft Certified **Platform Architect** - Level 1
  - Define and be responsible for an organization's Anypoint Platform strategy
  - Direct the emergence of an effective application network out of individual integration solutions following API-led connectivity across an organization
- Anypoint Platform Architecture: **Integration Solutions** and MuleSoft Certified **Integration Architect** - Level 1
  - Drive and be responsible for an organization's Anypoint Platform implementation and the technical quality, governance (ensuring compliance), and operationalization of the integration solutions.
  - Work with technical and non-technical stakeholders to translate functional and non-functional requirements into integration interfaces and implementations



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## Target audiences for the courses

- Anypoint Platform Architecture: **Application Networks**
  - **Senior Solution and Enterprise Architects**
    - With basic knowledge and experience with the components of Anypoint Platform
    - Experienced in common integration approaches (like SOA) and integration technologies/platforms
- Anypoint Platform Architecture: **Integration Solutions**
  - **Solution and Technical Architects or lead/senior developers**
    - With experience developing and deploying non-trivial Mule applications
    - Focused on designing enterprise integration solutions
    - Experienced in common integration approaches (like SOA) and integration technologies/platforms




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## Course prerequisites

- Prior to attending this course
  - **Experience with Anypoint Platform** and its constituent components
    - *Getting Started with Anypoint Platform*
    - *Anypoint Platform Development: Fundamentals*
    - *MuleSoft.U Development Fundamentals*
    - *API-Led Connectivity Workshop* by MuleSoft Presales upon request




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## At the end of this course, you should be able to

- **Direct** the emergence of an effective **application network** out of individual integration solutions following API-led connectivity, working **with all relevant stakeholders** on all levels of the organization
- **Create** credible **high-level architecture models** for integration solutions on Anypoint Platform such that functional and non-functional requirements are likely to be met and the principles of **API-led connectivity** and application networks are followed
- Course is predominantly about **cloud-native architectures** using the MuleSoft-hosted Anypoint Platform - **CloudHub**




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## Course outline

- Module 1: Putting the Course in Context
- Module 2: Introducing MuleSoft, the Application Network Vision and Anypoint Platform
- Module 3: Establishing Organizational and Platform Foundations
- Module 4: Identifying, Reusing and Publishing APIs
- Module 5: Enforcing NFRs on the Level of API Invocations Using Anypoint API Manager
- Module 6: Designing Effective APIs




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## Course outline

- Module 7: Architecting and Deploying Effective API Implementations
- Module 8: Augmenting API-Led Connectivity With Elements From Event-Driven Architecture
- Module 9: Transitioning Into Production
- Module 10: Monitoring and Analyzing the Behavior of the Application Network




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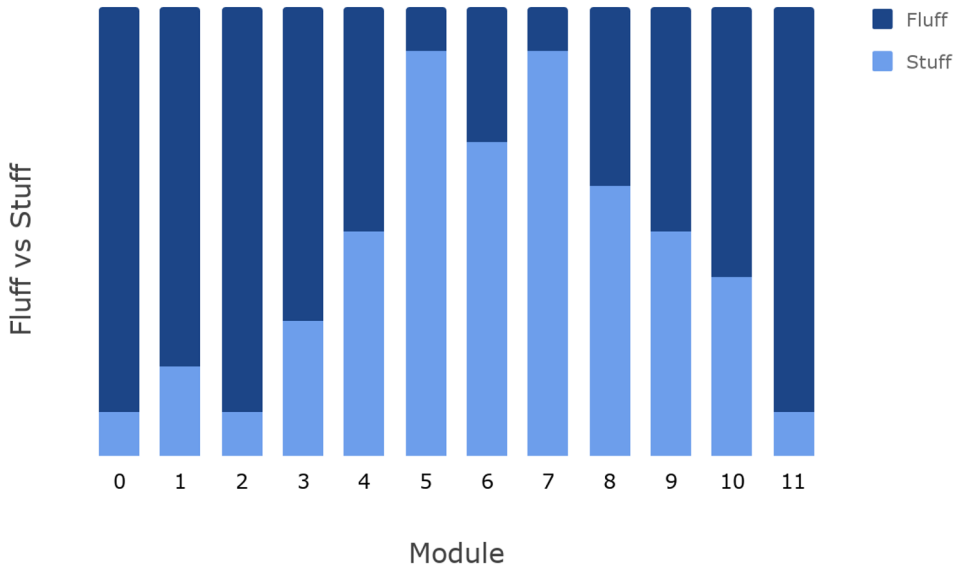
## Varying degrees of fluff and stuff







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## How the course will work

MuleSoft

- Central topic: How to **architect and design application networks** using API-led connectivity and Anypoint Platform
  - Partly **Solution Architecture**, partly **Enterprise Architecture**
- Light on **Business Architecture**, heavy on **Application and Technology Architecture**
- No architecturally **insignificant** design and implementation discussions
  - Fairly detailed discussion on strategies for invoking APIs in a fault-tolerant way
- **No code**, no Java, XML or RAML
  - RAML features are touched-on because they are important for the functioning of an application network




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## How the course will work

MuleSoft

- Case study: **Acme Insurance**
  - Background and motivation for most discussions
- Some **opinions are expressed** that are ambiguous, without a clear-cut distinction between correct or false
  - Such is the nature of architecture and design
  - **Challenge** the decisions made
  - **Discussion of tradeoffs** involved are important
- **Exercises**
  - Typically as **group discussions**
  - No actual "doing", on the computer, with Anypoint Platform or any of its components
- All architecture diagrams use **ArchiMate 3** notation




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## Course materials

- Available on MuleSoft Learning Management System
  - http://training.mulesoft.com/login
- **Course manual (PDF)**
  - A PDF of more than 200 pages
  - Includes all slide content with additional discussions and explanations
- **Course slides** (ZIP of PDFs)




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## At the end of this course, you should get certified!

- After you learn & master the content in this course, get the **MuleSoft Certified Platform Architect – Level 1** certification!
  - For the target audience, attending this class and studying the course manual should be sufficient for passing the exam
- This class comes with a **voucher for 2 attempts** for the exam
  - You will receive an email on the last day of class instructions to take the exam and a voucher code





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# Section
# Introducing Acme Insurance

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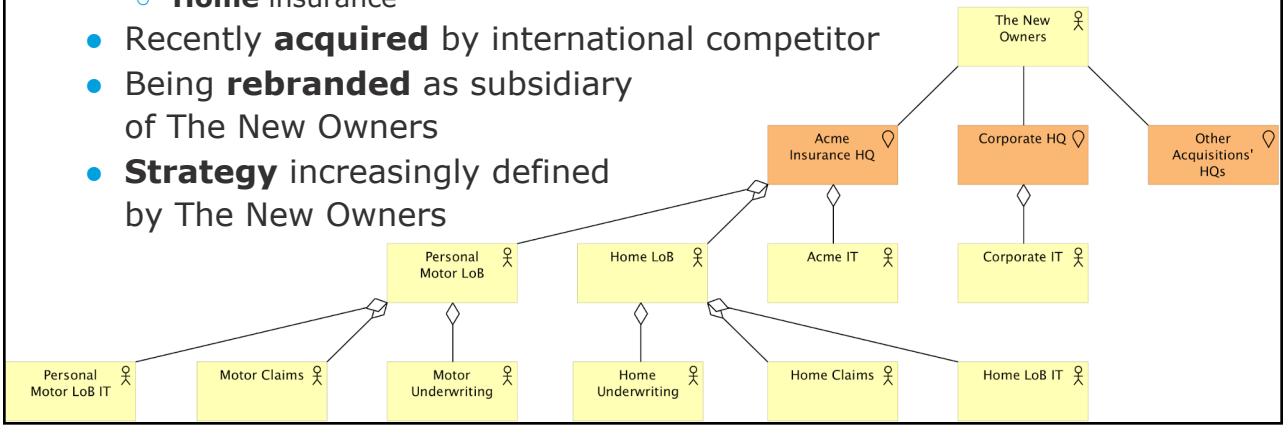
## The Acme Insurance organization

MuleSoft

- Well-established, medium-sized, regional **insurance provider**
- Two lines of business (LoBs):
  - **Personal motor** insurance
  - **Home** insurance
- Recently **acquired** by international competitor
- Being **rebranded** as subsidiary of The New Owners
- **Strategy** increasingly defined by The New Owners

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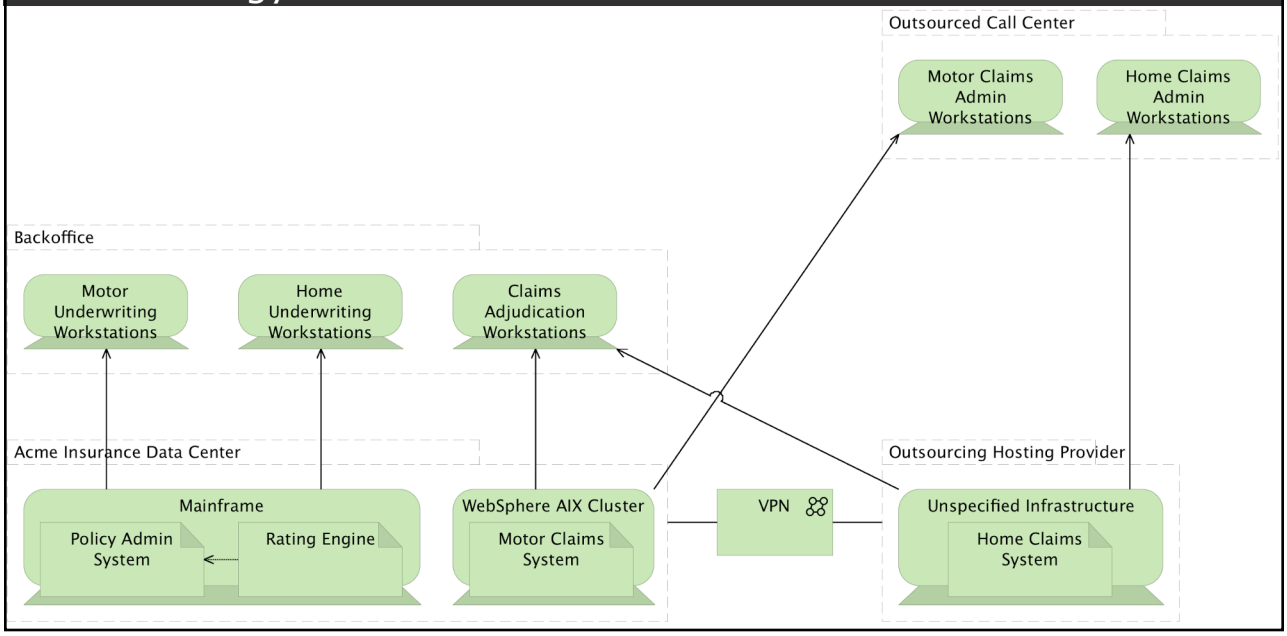
## A glimpse into Acme Insurance's baseline Technology Architecture

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## A glimpse into Acme Insurance's baseline Technology Architecture

- **IBM-centric** Data Center with Mainframe and clusters of AIX machines
- **Policy Admin System** runs on Mainframe and is used by Motor and Home Underwriting
  - Motor and Home policies use different data schemata
- **Motor Claims System** is operated in-house on WebSphere / AIX
- Web-accessible **Home Claims System** is operated externally
- Claims systems used by Acme Insurance's **Claims Adjudication**
- Claims systems also used by **outsourced call center**




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# Acme Insurance's motivation for change