TOGAF

Version 9 Enterprise Edition

Module 28
ADM Architecture Requirements Management

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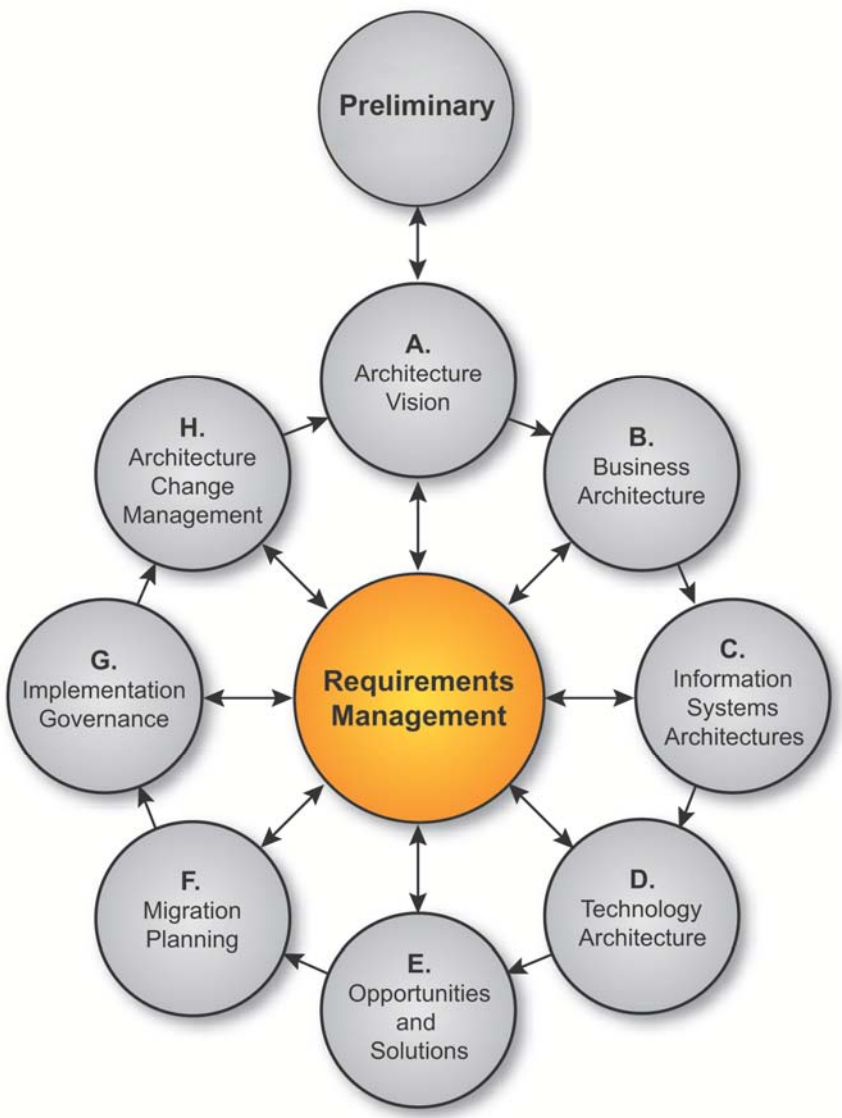
Module Objectives

The objectives of this module are to understand:

- The process of managing Architecture Requirements during application of the ADM
- What it consists of
- What inputs are needed for it
- What the outputs are

ADM Requirements Management



The process of managing architecture requirements:

- Applies to all phases of the ADM cycle
- Is central to the ADM process
- Is a dynamic process addressing the identification of requirements, their storage and delivery to the phases

Approach

- The ability to deal with changes in the requirements is crucial to the ADM process since architecture deals with uncertainty and change
- Architecture bridges the divide between the aspirations of the stakeholders and a practical solution.
- The Requirements Management process does not dispose of, address or prioritize requirements; this is done within the phases of the ADM.

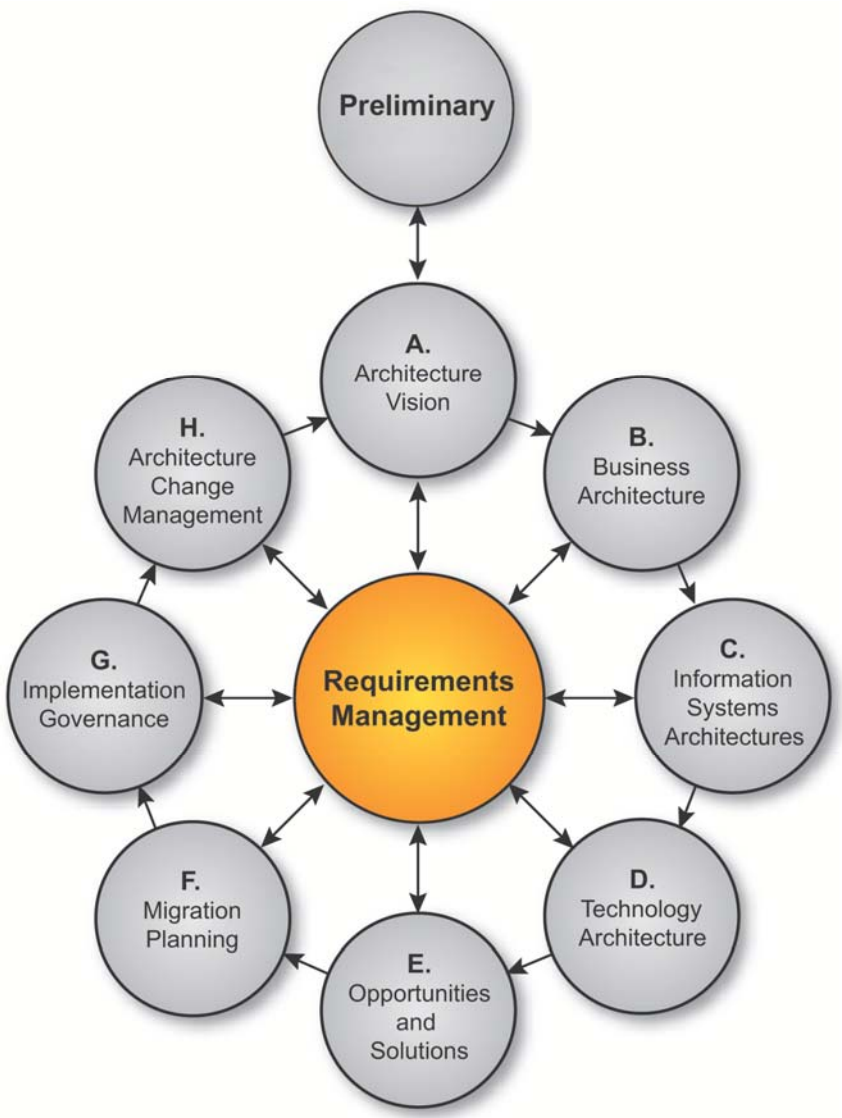
Resources

- TOGAF specifies generic needs for requirements, not specific tools or processes
- It recommends use of
  - Business Scenarios
  - Volère Requirements Specification Template (see next slide)
  - Commercial off the shelf tools

Volère Requirements Specification Template

- This is a freely available useful requirements template
- **The "Waiting Room"**
  - This is a repository for requirements that are beyond the planned scope, or the time available, for the current iteration. Having the ability to store future requirements helps avoid the perception that they are simply being discarded, while at the same time helping to manage expectations about what will be delivered.

Requirements Management: Inputs



- Requirements-related outputs from each ADM phase.
- The first high-level requirements are produced as part of the Architecture Vision.
- Each architecture domain then generates detailed requirements.
- Deliverables in later ADM phases contain mappings to new types of requirements

Steps Overview

Requirements Management Steps

2. Baseline requirements
3. Monitor baseline requirements
5. Identify changed requirement and record priorities
8. Update the requirements repository with information relating to the changes requested, including stakeholder views affected

ADM Phase Steps

1. Identify/document requirements
4. Identify changed requirement
6. Assess impact of change
7. Implement changes arising from Phase H
9. Implement change in the current phase
10. Assess and revise gap analysis for past phases

Steps in Detail

1. Identify/document requirements *(ADM Phase Step)*
   - Use Business Scenarios or an equivalent technique
2. Baseline requirements *(Requirements Management Step)*
   1. Determine priorities arising from current phase of ADM
   2. Confirm stakeholder buy-in to resultant priorities
   3. Record requirements priorities and place in requirements repository.
3. Monitor baseline requirements *(Requirements Management Step)*

Steps in Detail

4. Identify changed requirement *(ADM Phase Step)*
   1. Remove or re-assess priorities
   2. Add requirements and re-assess priorities
   3. Modify existing requirements
5. Identify changed requirements and record priorities

   (Requirements Management Step)
   1. Identify changed requirements and ensure the requirements are prioritized by the architects and the stakeholders
   2. Record new priorities
   3. Ensure that any conflicts are identified and managed through the phases to a successful conclusion and prioritization
   4. Generate Requirements Impact Statement for steering the architecture team

Steps in Detail

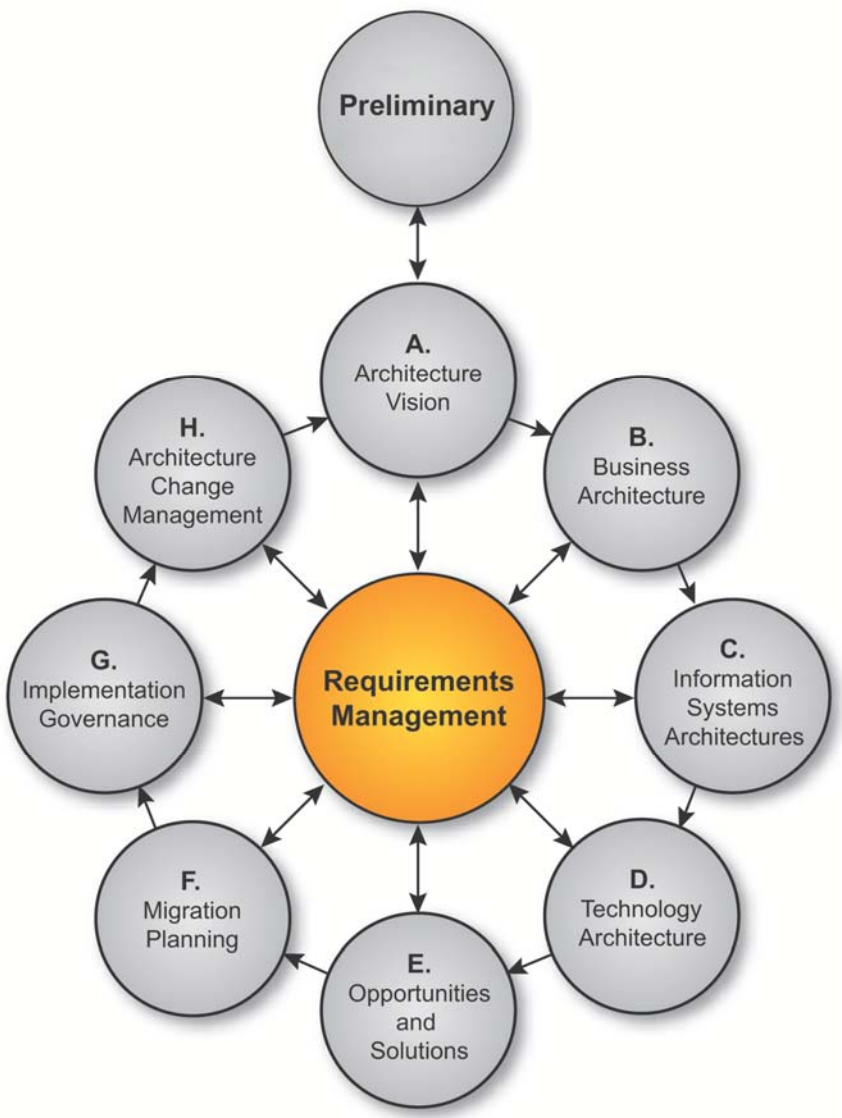
6. Assess impact of changed requirements on *(ADM Phase Step)*
   1. Current phase
   2. Previous phases
   3. Decide whether to:
      - Implement change (requires schedule for change management implementation)
      - Defer to future ADM cycle
   4. Issue new version of Requirements Impact Statement
7. Implement requirements arising from Phase H (Architecture Change Management) *(ADM Phase Step)*
   - The architecture can be changed through its lifecycle by Phase H. The Requirements Management process ensures that new or changing requirements are managed accordingly

Steps in Detail

8. Update the requirements repository with information relating to the changes requested, including stakeholder views affected *(Requirements Management Step)*
9. Implement change in the current phase *(ADM Phase Step)*
10. Assess and revise gap analysis for past phases *(ADM Phase Step)*

- If the gap analysis generates gap requirements, then this step will ensure that they are addressed, documented, and recorded in the requirements repository, and that the Target Architecture is revised accordingly.

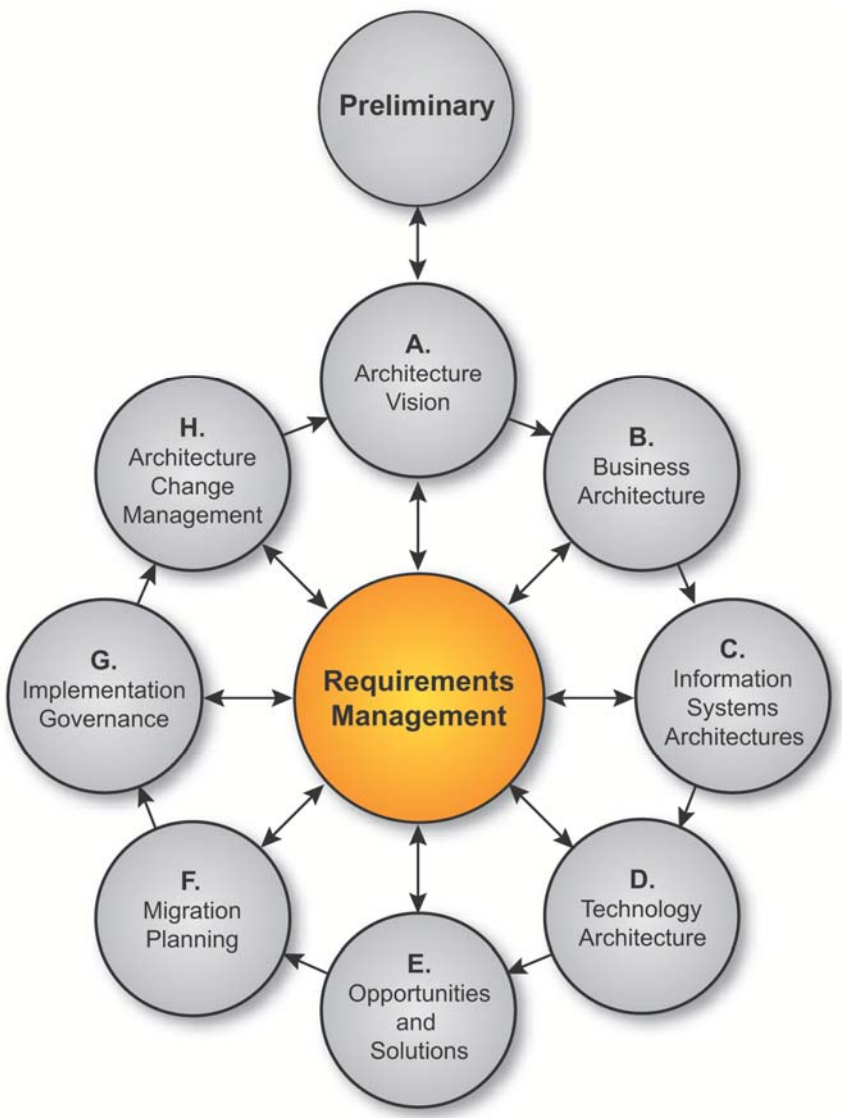
Requirements Management: Outputs



A structured requirements statement, including:

- Changed requirements
- Requirements Impact Statement, which identifies the phases of the ADM that need to be revisited to address any changes.
- The final version must include the full implications of the requirements (e.g., costs, timescales, and business metrics).

Summary



- Requirements Management is an ongoing activity of the ADM.
- The requirements repository contains the current requirements for the Target Architecture.
- When new requirements arise, or existing ones are changed, a Requirements Impact Statement is generated that identifies the phase of the ADM to be revisited. This goes through various iterations until a final version is produced.