

ACDM and RUP – AUP

Purpose: The purpose of this document is to explain the mapping between ACDM stages and RUP-AUP stages and to serve the Pangea team as a reference document.

1. Introduction

ACDM is an Architecture Centric Development Method that might be used to supplement architectural design using AUP's software process framework.

ACDM has the following 8 stages:

1. Discover Architectural Drivers

The goal is to discover and document the system's architectural drivers: high-level functional requirements, constraints, and quality attributes.

2. Establish Project Scope

The goal is to analyze the consolidated raw architecture drivers information gathered in stage 1 to clarify and refine the architectural drivers and to firmly establish the scope of the system/product.

3. Create/Refine Architecture

The goal is to design the initial architectural design, or refine the design based on the results of the architectural evaluation

4. Architecture Review

The goal is to evaluate the initial architectural design, or evaluate the refined design after architectural evaluation and experimentation.

5. Production Go/No-Go

The goal is to analyze the issues uncovered in Stage 4 during the architectural design evaluation and devise concrete strategies for how to address each issue.

6. Experimentation

The goal is to resolve the issues by executing the actions described for each issue in the Issue Deposition Document developed in Stage 5. Each action will be planned, executed, and tracked until resolved.

7. Production Planning

The goal is to use the architecture to plan the subsequent design and implementation of the system or product.

8. Production

The goal is to produce the elements of the system, test them, and integrated them into a system product.

AUP has the following phases:

1. Inception

The goal is to identify the initial scope of the project, a potential architecture for your system, and to obtain initial project funding and stakeholder acceptance.

2. Elaboration

The goal is to prove the architecture of the system.

3. Construction

The goal is to build working software on a regular, incremental basis which meets the highest-priority needs of your project stakeholders.

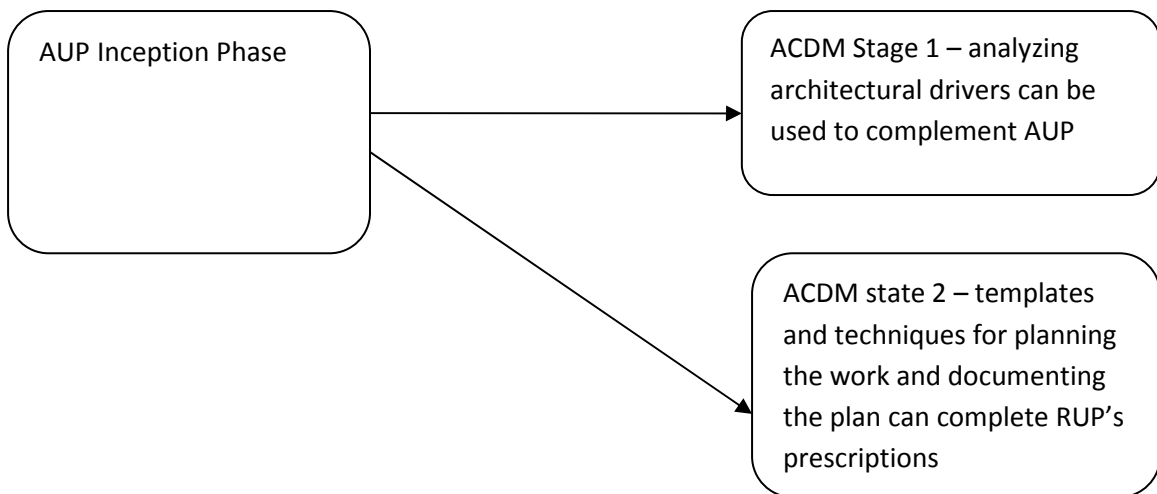
4. Transition

The goal is to validate and deploy your system into your production environment.

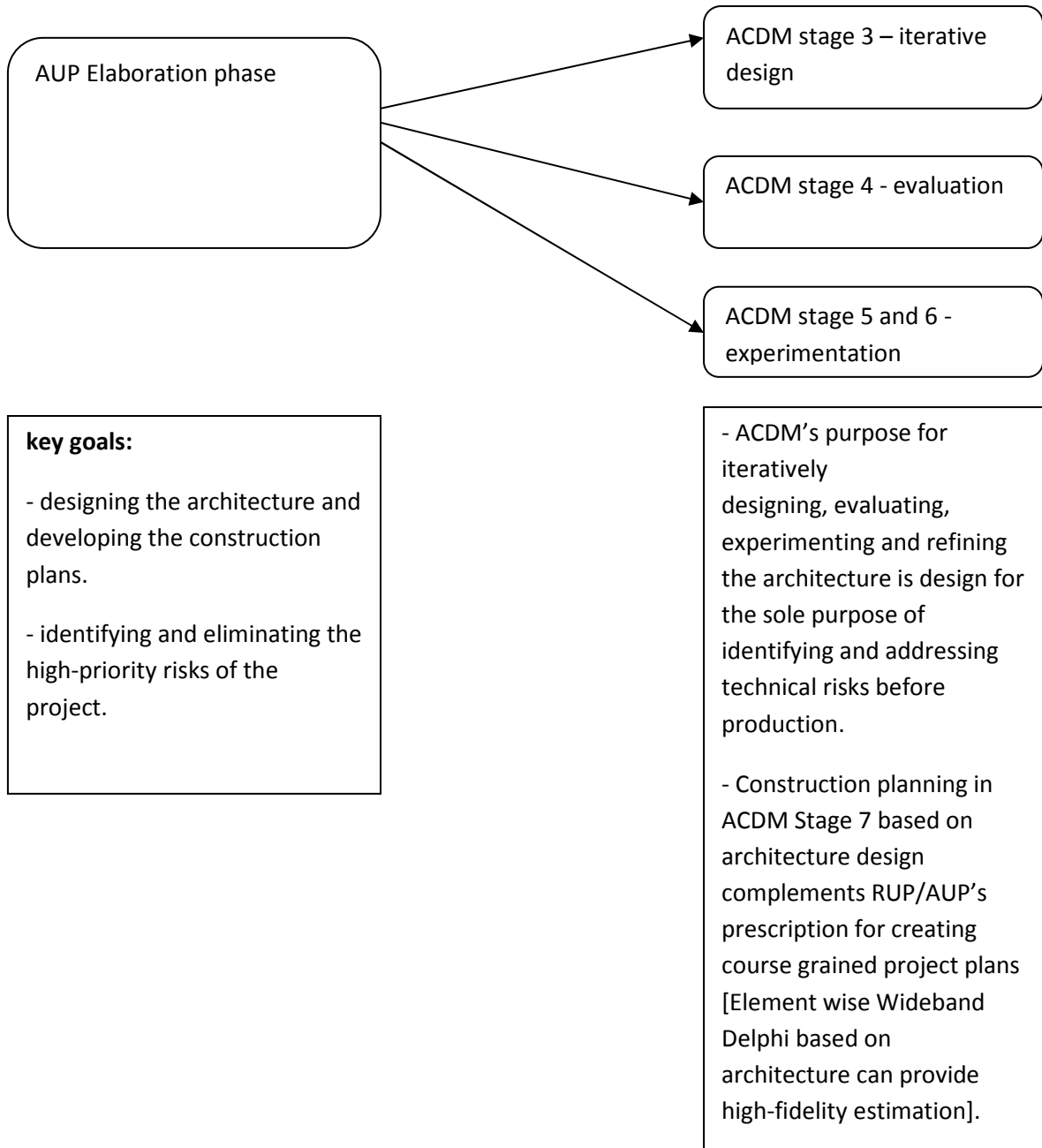
The mapping between ACDM stages and AUP phases are described in the following sections.

2. Mapping between RUP-AUP and ACDM

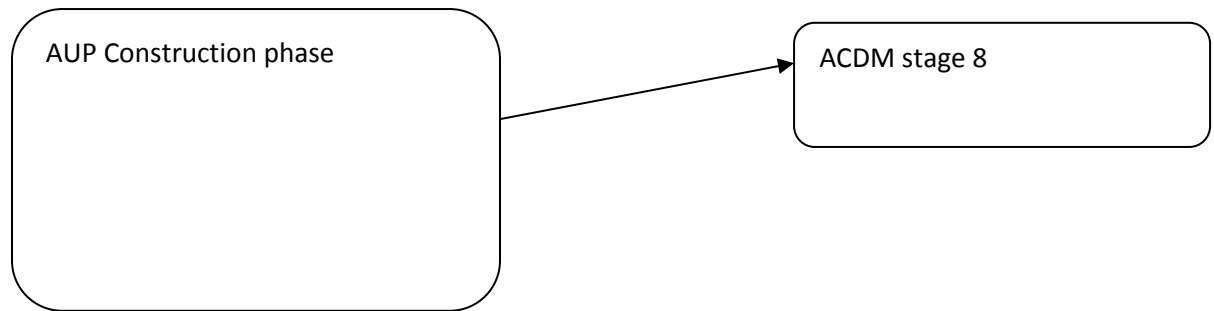
2.1. Mapping of AUP Inception phase to the stages of ACDM



2.2. Mapping of AUP Elaboration phase to the stages of ACDM



3. Mapping of Construction phase to ACDM stages



-detailed designs, element development, testing, and integration of the system elements

-production plan created in Stage 7 and tracking techniques presented in Stage 8 can be used to track construction process.

-Nice and complementary use of both RUP/AUP and ACDM frameworks.

4. Mapping of AUP's Transition phase to ACDM stages

AUP's Transition phase

No mapping to ACDM

- Final product base line is created and deployed, training materials, and documentation is completed and transitioned to the customer.

- ACDM is a design process framework and intentionally allows an organization to determine the best way to transition the product of system into the production environment.

3. Conclusion

If the choice is made to incorporate ACDM into the AUP framework, care should be taken to not further complicate the instantiation and use of RUP-AUP. Master design plan defined by ACDM may not be required if ACDM is used in a AUP project management context, but techniques and guidelines for producing the Master Design Plan and the Production Plans can contribute to the development of RUP - AUP Planning documents.