



International Association
of Software Architects

IASA Foundation Reference Model

A map for architects



- Why the FRM?
- What is the FRM
- Ontology
- Meta-Model and Architecture Style
- Primer
- Working Group Process



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“IASA_Foundations_and_Taxonomy_Workgroup_Charter.doc

“IASA_F_T_Workgroup_Roadmap_and_Status.doc”

If you don't remember anything else



■ The FRM

- defines a set of TERMS
- defines how TERMS relate to each other in an ONTOLOGY
- describes a model for adopting architecture within an enterprise
- can be adapted to your needs

Why the FRM – Top 5 Reasons



- Architects lack a common set of terms to work with
- There is no comprehensive map of how concepts fit together
- Architecture is split between SAs and EAs with nothing to connect them
- We cannot certify if we don't know what we do
- We need a foundation for other working groups

What is the FRM - Goals



- Add a “global architectural order” and “the big picture” to the existing concepts
- Focus on “the business of IT architecture” in its own right
- Be as non-prescriptive as possible
- No reference frame, no order: we had to figure out how to best categorize and order all these “architectural things”

What is the FRM - Basic Charter



- **Chart the “largely uncharted” profession of IT architecture**
 - can be understood and leveraged consistently
- Does not compete
- Delivers the necessary foundation to
 - serve the needs of our members
 - achieve the vision and objective of the IASA

Packets of the FRM



- Deliver 'packets' to help aid understanding
 - Reduce the complexity by giving proper information at appropriate level
- Divided into 2 packets
 - Packet 1 is for standard architects (i.e. practitioners)
 - Packet 2 is for vendors and consultancies for alignment purposes (tools and process providers)

What is the FRM - Deliverables



Glossary/Ontology

FRM Primer
Usage Examples/Scenarios for
End Users of the FRM &
Architectural Styles

For end users – Packet 1

**Architectural Style Metamodel
(ASM)**

XYZ Arch. Style Framework (e.g. IBM, EDS...)
**IASA Architectural Style
Framework (IASAF):**
IASA UnitOps,
Guidelines and (Sample) ArchStyle

For providers – Packet 2



- Provides a clear language for architects
 - No more secondary level arguments
- Is maintained BY architects
 - Removes vendor and corporate control
- Explains relationships between terms
 - Helps to understand fundamental architecture concepts
 - Drives better quality architectures
 - Allows for 'mapping' between architectures

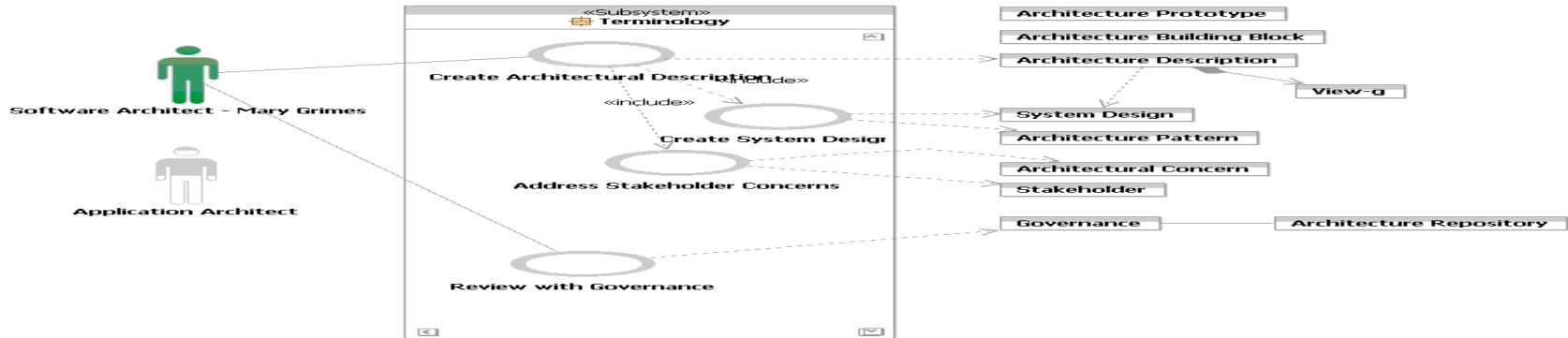


- See HTML docs

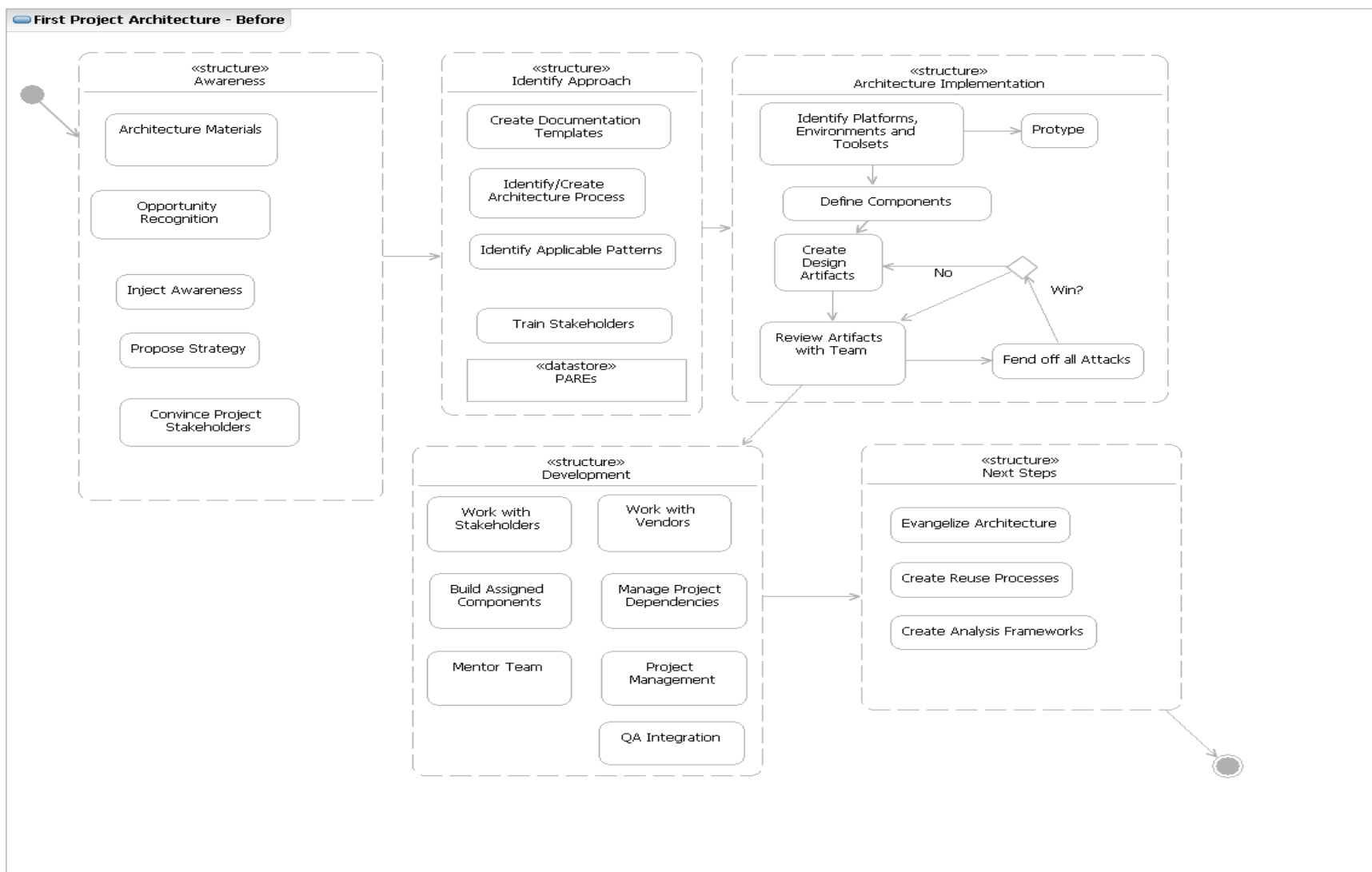


- Describes common architecture scenarios
 - starting points for architects (ex. First project architecture)
 - Shows common stumbling blocks
 - Describes the benefit of using the FRM
 - Show how to implement at project OR enterprise level
- Describes common usage patterns
 - What roles use what terms
 - How terms interact

Primer – Glossary Usage

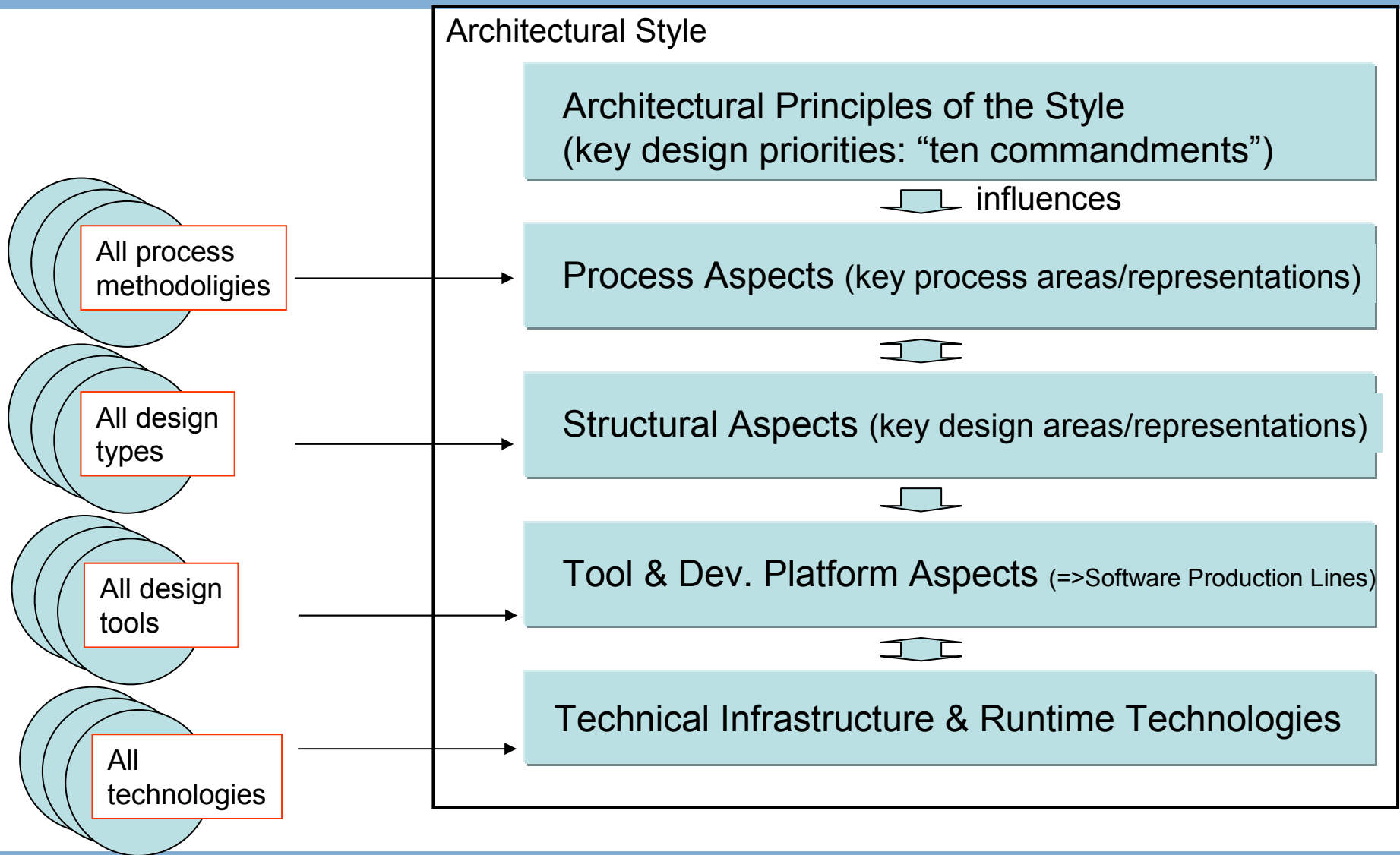


Primer – Common Scenario





- Describes how Vendors and Consultancies ‘align’ with the FRM
 - They may choose to develop an ‘Architecture Style’
- Describes the attributes of a valid Architecture Style
 - Unit Ops describe combinations of processes
 - Meta-model describes basic structure of a style



Hooks Analogy



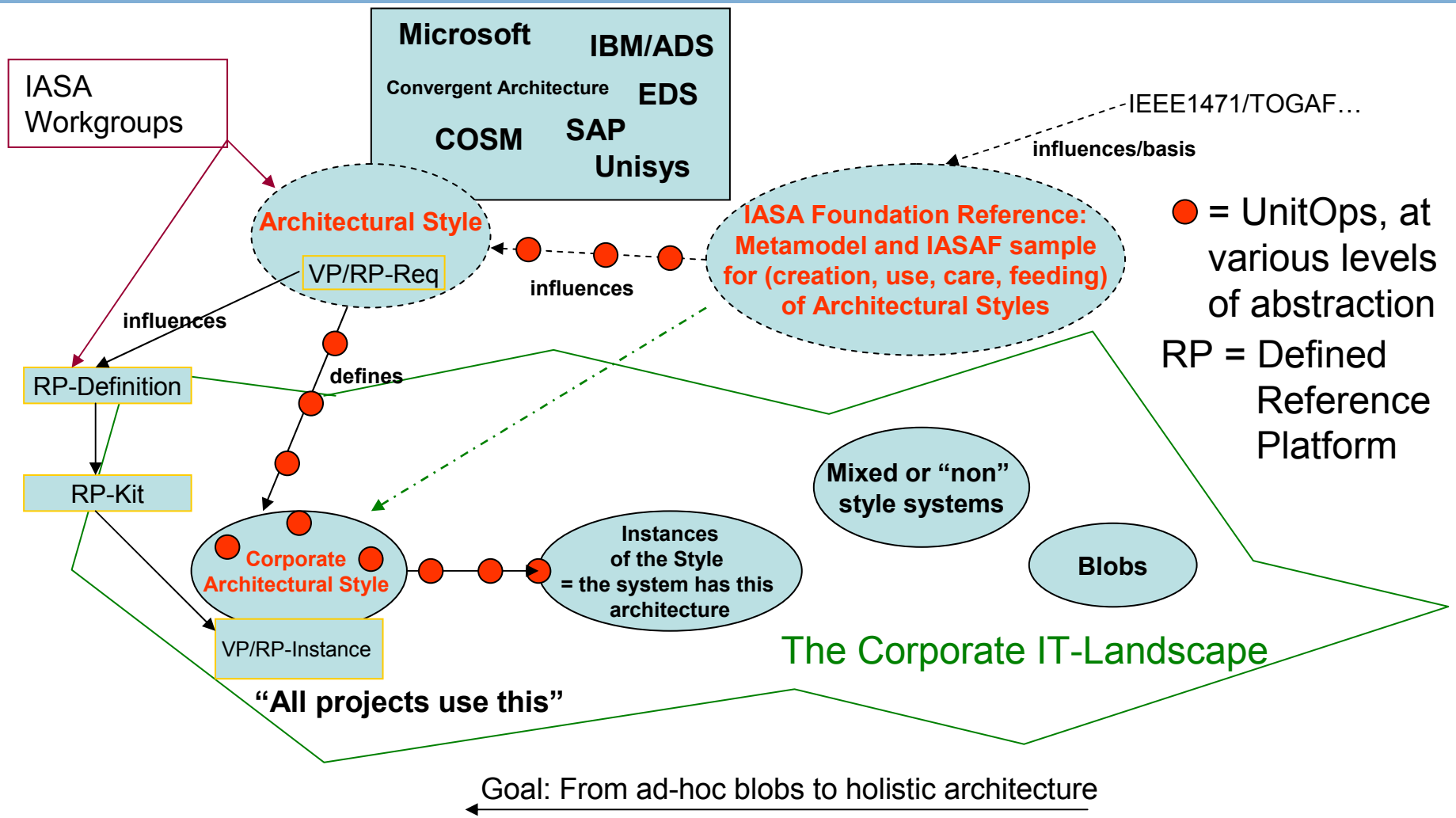
Hooks Description 1



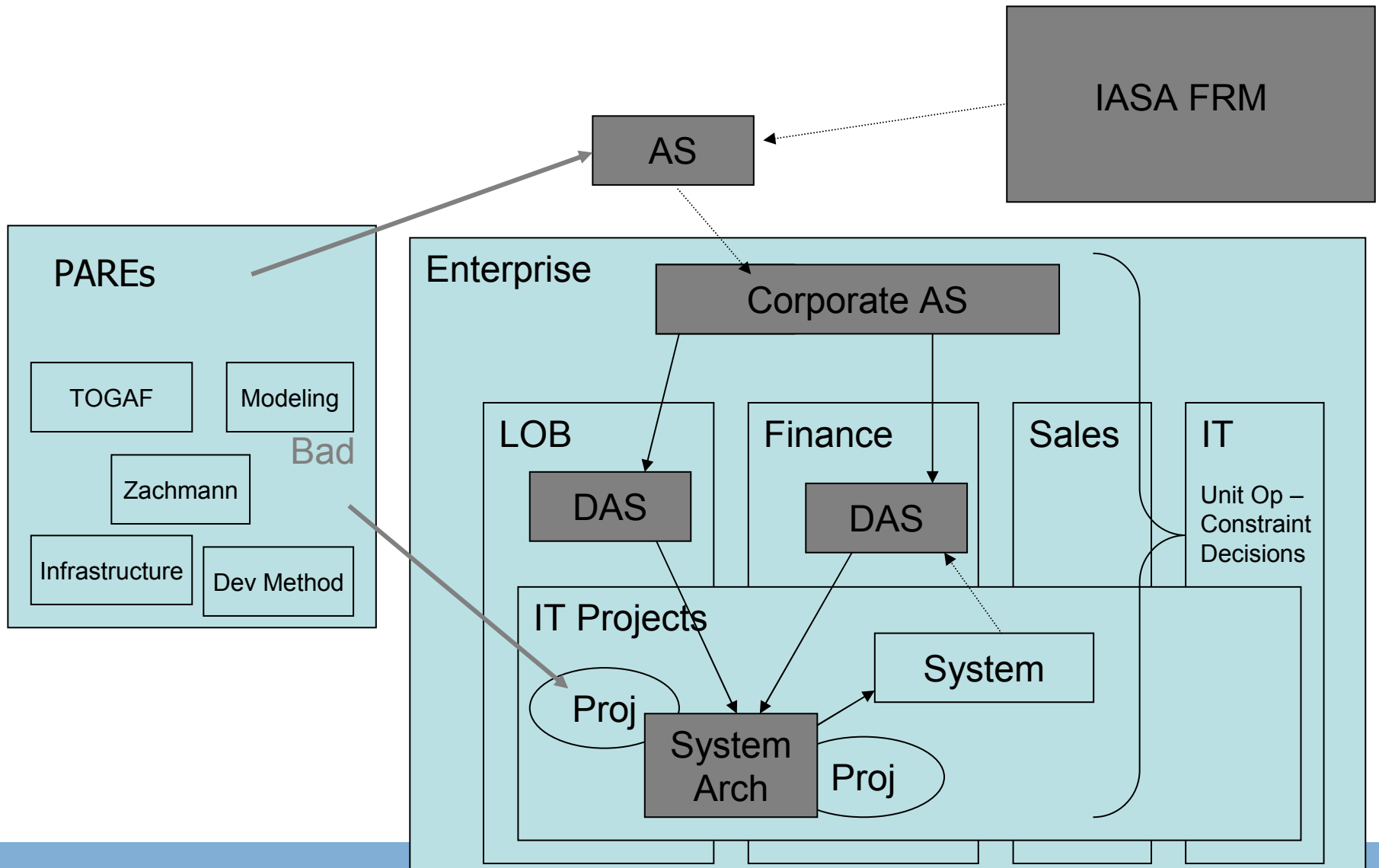
Hooks Diagram



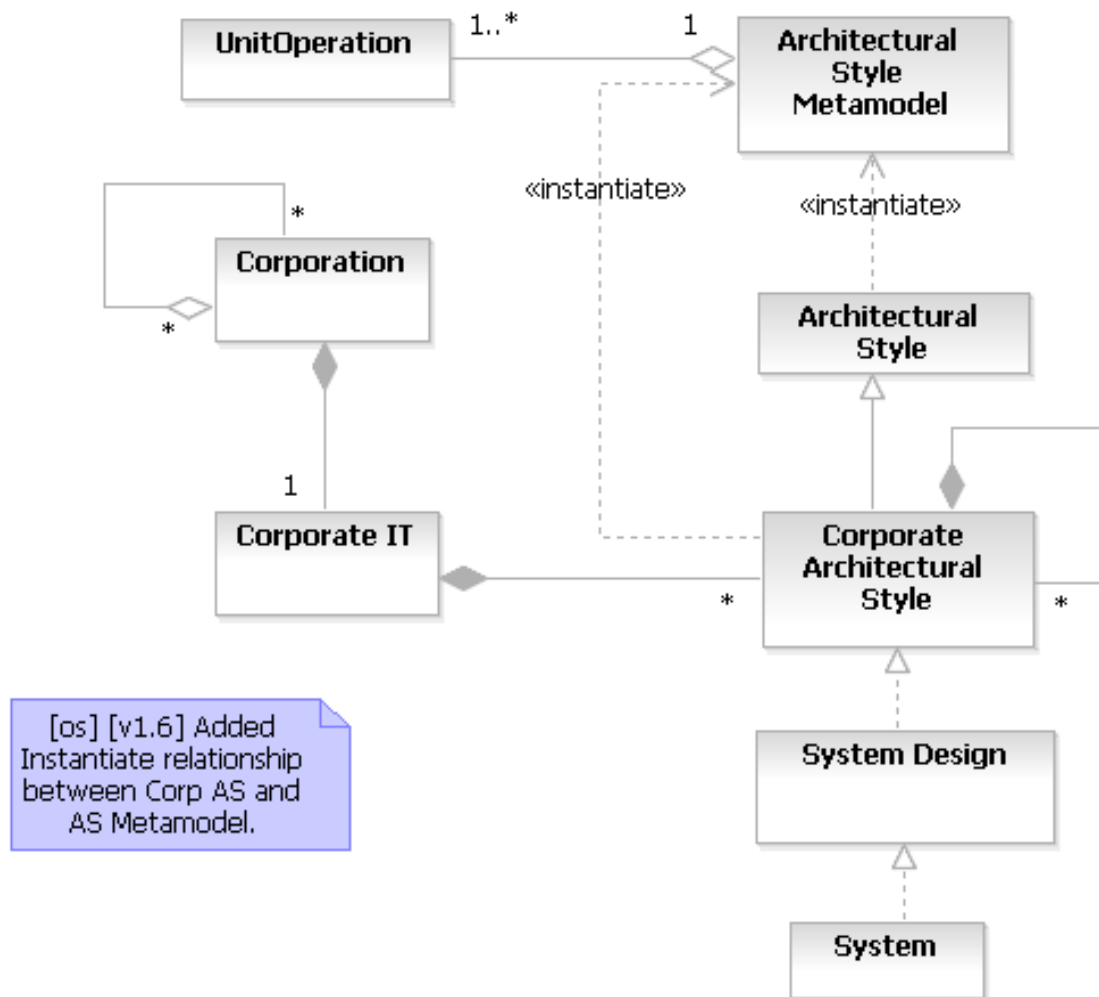
Meta-Model – Industry Context



What is the FRM – Corporate Application



Foundation Concepts

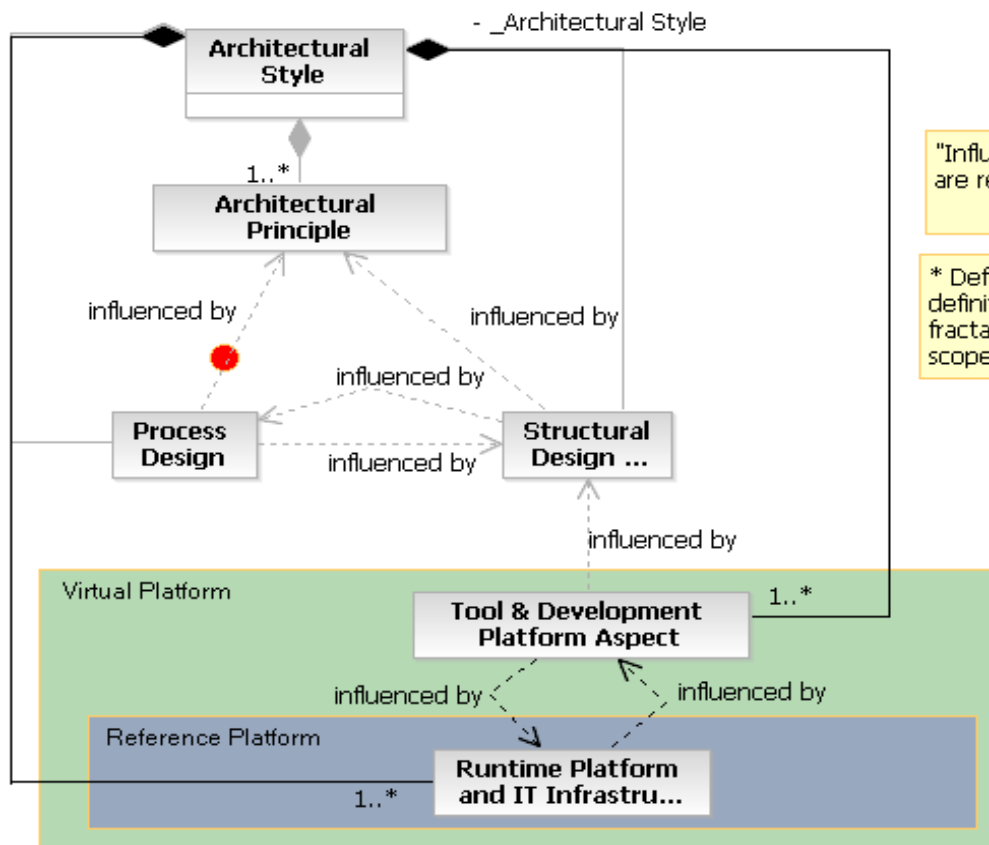


[os] [v1.6] Added Instantiate relationship between Corp AS and AS Metamodel.

Meta-Model 2



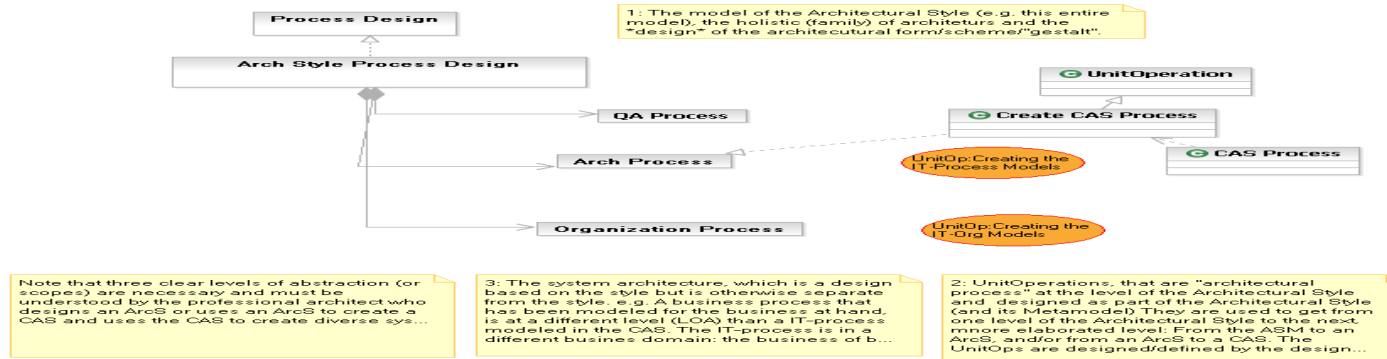
Architecture Style Metamodel



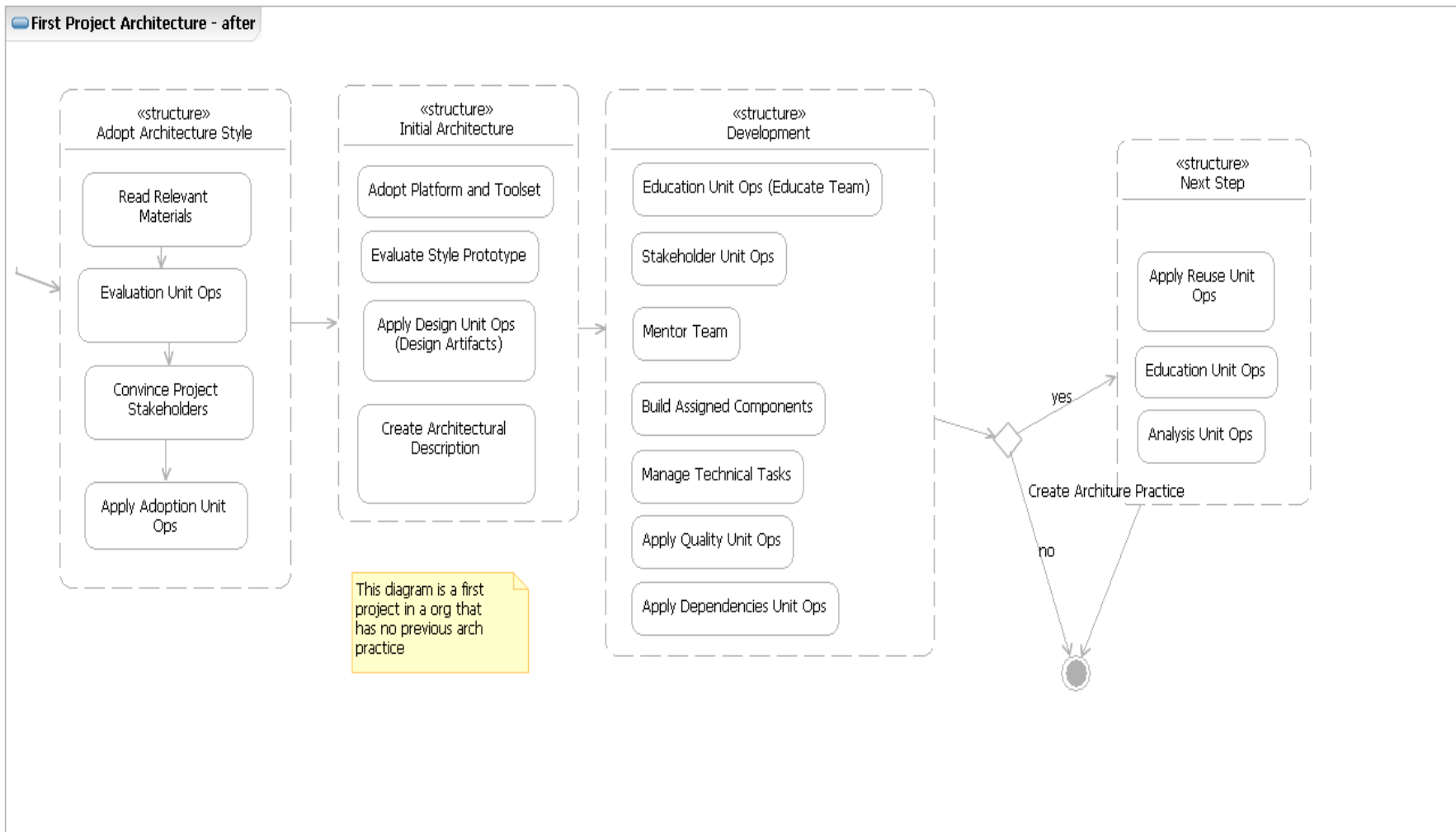
"Influence" dependencies are reified into UnitOps.

* Definition of an Arch Style must include a definition of Arch Scope. RH: Yes, since ArchS are fractal and obey OOT rules, they may exhibit scope (inheritance, composition)

MetaModel – Process Design



Packet 2 – Common Scenario After



The IASA Workgroup Value Chain



IASA Professional Member

- + Potential interaction as WG 1st round reviewer
- + Interaction as 2nd round reviewer
- + Networking/Know-how with WG members
- + Potential nomination to IASA WG
- + IASA membership recognition

IASA Associate Member/Student

- + Free IASA Obs. Membership
- + Networking with IASA Members (no WG access)
- + Only sees “official releases” of WG

IASA Contributing Member

- Elected/nominated as *active* participant in the WG. Must convince WG leader of qualification and reference site in infrastructure WGs.
- + Networking/Know-how
 - + New customers
 - + Free IASA Membership contingent on WG participation

IASA Fellows

**Foundations & Taxonomy WG
orients the other WGs into “big picture”:**

- Automotive
- Finance/Insurance
- etc.

IASA WG Sponsors

- + Interaction with expert architects and their respective reference sites
- + Membership in WG (through IASA Membership employees)
- + Results/Participates in WG
- + Is recognized sponsor of IASA&WG



Initial Versions, Review, Voting



- **February Alpha Review**
 - 100 Senior Professional Architects in teams of 3-5, review the existing results
 - Feedback done directly with working group and via documentation
- **April Beta Review**
 - an Enterprise Architecture event to present and discuss with 2-300 architects
- **June/July Gold Vote**
 - all IASA members to review and vote on the final output of the model
 - results will be taken to the Board of Advisors (see IASA website for definition of BoA)

Member Value



- **Members**
 - IASA Members attain insight on well-formed concepts and results.
 - IASA Workgroup Members attain interesting customers to apply workgroup results
 - Customer/Sponsor (IASA Members) attain qualified consulting and well formed concepts based on consolidated IASA work
- **Sponsors**
 - Align architecture consulting and practice to styles
 - Value in reuse and standardization