



The Role of the Software Architect



Topics of Discussion

- What is a Software Architect?
- What is the typical role of the Architect in the development process?
- How does the Architect create an architecture?

A teal circular graphic is partially visible on the left side of the slide, overlapping the edge.

What is a Software Architect?

Translates the requirements of stakeholders into an architecture based on a solid knowledge of the problem domain, the business context, the human context, the solution domain, technology roadmaps and preceding architectures



What is a Software Architect?

- Technical expert (depth, breadth)
- Holistic and high-level view
- Efficient and clear communicator
- Diplomat and mediator
- Business domain knowledge (optional)



Typical Roles of the Architect

- Varies depending on size of company, project, team and methodology used

Typical Roles of the Architect

Inception	Elaboration	Construction	Transition
<ul style="list-style-type: none"> o Provides technical advice to business o Understands technology ecosystem o Helps clarify scope o Business rationale o Chooses methodology (optional) o Assists in planning elaboration phase 	<ul style="list-style-type: none"> o Assists with use case analysis, requirements, risks o Technology choice o Defines architecture (components, error handling, infrastructure security) o Data/object model o Prototyping o Coding guidelines o Assists in staffing the development team o Test plan o Assists in planning construction phase 	<ul style="list-style-type: none"> o Lead developer (optional) o Enforces compliance with architecture and methodology (design & code reviews) o Mentors developers o Reviews and adds to architecture if needed 	<ul style="list-style-type: none"> o Performance tuning o Assists in roll-out to production o QA o Assists in migration (optional)

Business rationale
scope of project

Analysis, design requirements
architecture
plan for code

Iterative coding, testing, integration of use cases

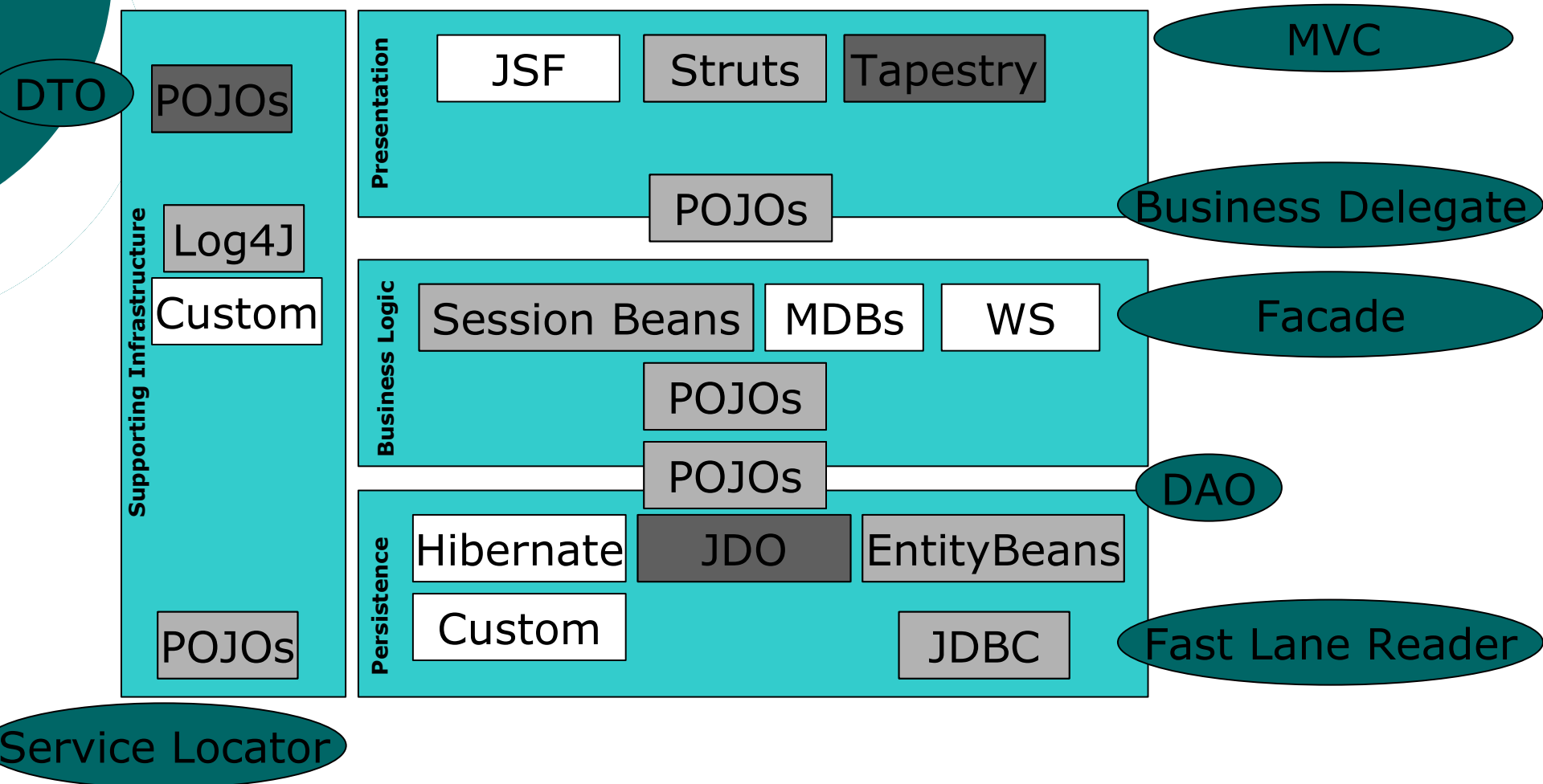
Roll-out to production



Creating an architecture

- Guided by a number of factors:
 - Requirements
 - Technology choice
 - Available skills
 - Budget
 - Timelines
 - Best practices
 - Design patterns
 - Frameworks and Components

Creating an architecture (Simplified)



References and other info

- Sun Certified Enterprise Architect
- Microsoft Certified Architect Program (MCAP)
- Worldwide Institute of Software Architects - **WWISA**:
<http://www.wwisa.org/>
- International Association of Software Architects - IASA:
<http://www.iasahome.org/iasaweb/appmanager/>



Questions
