

Application Solution Architecture Design: A Scalable, Secure, and future-ready Solution Architecture for your Application

Motivation

Defining how an application will be built, deployed, and scaled is crucial after establishing its vision and user experience. The Application Solution Architecture phase connects the business needs with the technical implementation, ensuring the system is structured, secure, maintainable, and adaptable.

This step minimizes technical risks, aligns stakeholders on design decisions, and lays a strong foundation for further development phases.

What we bring

With extensive expertise in enterprise software design and modern cloud-native technologies, PRODYNA assists in creating a customized solution architecture that meets both current and future needs.

Our expertise includes:

- Established architectural frameworks and design methodologies
- Expertise in developing scalable, event-driven, and modular systems
- Built-in principles of security, performance, and maintainability
- Integration strategies (e.g., REST, events, GraphQL, external systems)
- Practical support in aligning architecture with DevOps, CI/CD, and cloud infrastructure

What you need

To get the most value out of this phase, you should have a clear idea of what the application should achieve – both from a business and user perspective.

This includes:

- A defined product or application vision
- An understanding of key business goals and challenges
- Clarity on expected features, user journeys, and integration needs

Awareness of any constraints (e.g. timelines, regulations, technical preferences). We'll take care of translating this vision into a robust and future-ready solution architecture.



Benefits

- Reduce technical risk with a validated architecture before development begins
- Align technical decisions with business goals and constraints
- Enable clean, modular, and future-ready design
- Facilitate MVP or custom development with clear architectural guardrails
- Ensure compliance, security, and performance from day one



Quick facts

- **Duration:** 1-2 weeks
- **Goal:** Deliver a scalable and secure solution design ready for MVP or full development
- **Format:** Co-creation workshop and expert-guided architecture design sessions



What you get

A well-documented solution architecture blueprint that aligns business needs with technical feasibility and sets the foundation for secure, scalable application delivery. You'll receive:

- Component diagrams and architectural patterns
- Domain model and service boundaries
- Data flow and integration design
- Security, compliance, and performance considerations
- Recommendations for infrastructure, DevOps setup, and technologies
- Alignment with the future MVP or custom development phase

PRODYNA will guide you and your team through the process in the following phases:

PHASE	ACTIONS
Requirements Engineering & Business Analysis (generally 1-2 days)	<p>We gather and clarify functional and non-functional requirements to ensure the architecture will meet business expectations.</p> <p>We address:</p> <ul style="list-style-type: none">• Business processes and user needs• Required features and expected usage patterns• Constraints (e.g. regulations, legacy system dependencies, scaling needs) <p>Outcome: A well-understood business and technical context for the solution design.</p>
Architecture Design (generally 2-4 days)	<p>We co-create the target architecture in alignment with cloud-native best practices and your organizational environment.</p> <p>Key aspects include:</p> <ul style="list-style-type: none">• Component and domain decomposition (e.g. microservices, modules)• Integration patterns (API, messaging, batch, third-party systems)• Runtime models (e.g. containers, serverless, hybrid)• Tech stack options (databases, backend/frontend frameworks, cloud services) <p>Outcome: A complete, documented solution design with clear separation of concerns.</p>
Security, Scalability & Compliance Alignment (generally 1 day)	<p>We ensure that critical architectural quality attributes are addressed upfront.</p> <p>We focus on:</p> <ul style="list-style-type: none">• Authentication, authorization, and data protection• Scalability requirements and performance targets• Logging, monitoring, and observability• Regulatory and organizational compliance (e.g. GDPR, ISO, etc.) <p>Outcome: A risk-mitigated, robust design ready for implementation.</p>
Handover & Next Steps (generally 1 day)	<p>We package the architecture for handover to development teams and align on next steps toward implementation or realization.</p> <p>We deliver:</p> <ul style="list-style-type: none">• Architecture documentation and visual models• Implementation guidance and scope recommendations• Technical decision log and open questions <p>Outcome: A shared understanding of the implementation roadmap and architectural guardrails.</p>

Note: This is our standard methodology. We are happy to modify and adapt to the specific needs of your organization.

Get started

To learn about pricing and how to get started, please contact info@prodyna.com.

About PRODYNA

PRODYNA is an innovative IT consultancy specializing in creating custom software solutions and serving the needs of corporates and enterprises across the European continent. Please visit www.prodyna.com for more information.