Reading path for software engineers

The software engineering pages in a sensible order, with four shorter paths for the evaluator, the architect, the operator and the reviewer or contributor, and the deeper documents to read after each step.

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This page puts the software engineering pages in order. Read the core path once; then follow the path for the role you have in your project. Each step names the deeper document to read when the help page is not enough.

Contents

1. The core path
2. The evaluator's path
3. The architect's path
4. The operator's path
5. The reviewer's and contributor's path

The core path

Step	Page	Deeper document
1	Exponential for software engineers	What Exponential is
2	Architecture overview	Kernel architecture
3	The request lifecycle	Kernel architecture
4	The content model for engineers	Content model and editing
5	Siteaccesses and configuration	INI override placements
6	Caching layers for engineers	Caches
7	Application servers	Velocity engines
8	Testing strategy	Quality checks
9	Release engineering	Source control and releases
10	Security engineering overview	Security standards

The evaluator's path

You decide whether Exponential fits a project.

1. Evaluating Exponential: the questions to answer and how to answer them.
2. Databases: choosing and running one and Application servers.

3. Scaling and clustering and Performance measurement and benchmarks.
4. Security engineering overview.
5. Backward compatibility policy and Dependency management with Composer.
6. Design review checklist to write the result down.

The architect's path

You design a system with Exponential at its center.

1. Kernel, lib and extensions: the layering.
2. Modules, views and access control.
3. Persistence and the database layer and Schema changes and migrations.
4. Events, extension points and plugins.
5. API design: REST, ezjscore and headless.
6. Multi-site installations and Internationalization and right to left.
7. Console, cronjobs and background work.

The operator's path

You run Exponential in production.

1. Deploying a change.
2. Velocity persistent workers.
3. Cache invalidation and clearing.
4. Observability: logs, debug bar and audit trail.
5. Incident handling.
6. HTTP security: headers, CSP, request rules and proxies.
7. The hosting runbooks: Hosting companies: start here.

The reviewer's and contributor's path

You review changes or send them upstream.

1. Git workflow.
2. Static analysis and code style and DB-less tests and test suites.
3. CI gates.
4. Code review checklist and Security review checklist.
5. Changelogs and upgrade notes.
6. Contributing upstream and Documentation as code.
7. Handling technical debt.

Related pages

- Software engineers: start here
- Glossary for software engineers
- Reading paths of the extension development course
- Free documentation: this page is free to copy, translate and improve under the GNU FDL 1.3.

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