Designing For Scalability With Erlang/OTP: Implement Robust, Fault-Tolerant Systems
Synopsis

If you need to build a scalable, fault tolerant system with requirements for high availability, discover why the Erlang/OTP platform stands out for the breadth, depth, and consistency of its features. This hands-on guide demonstrates how to use the Erlang programming language and its OTP framework of reusable libraries, tools, and design principles to develop complex commercial-grade systems that simply cannot fail. In the first part of the book, you’ll learn how to design and implement process behaviors and supervision trees with Erlang/OTP, and bundle them into standalone nodes. The second part addresses reliability, scalability, and high availability in your overall system design. If you’re familiar with Erlang, this book will help you understand the design choices and trade-offs necessary to keep your system running. Explore OTP’s building blocks: the Erlang language, tools and libraries collection, and its abstract principles and design rules. Dive into the fundamentals of OTP reusable frameworks: the Erlang process structures OTP uses for behaviors. Understand how OTP behaviors support client-server structures, finite state machine patterns, event handling, and runtime/code integration. Write your own behaviors and special processes. Use OTP’s tools, techniques, and architectures to handle deployment, monitoring, and operations.

Book Information

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Customer Reviews

I believe the whole point of writing reviews is to help others decide by giving an unbiased view which is very difficult most of the time. Yet, I'll try to highlight certain facts along with my comments without
stealing the thunder in any way. The initial chapters of the book require basic level of understanding of Erlang/OTP while later chapters (ch-13 to 15) are mostly generic. The content is very well organized which is great for both cover-to-cover and ad-hoc content reading styles. The book takes a practical approach towards the subject, which needless to say in itself is very complex. This approach helps the reader to grasp the topic while looking at real world scenarios. It also does a great job at clearly demarcating the corner-cases and special conditions which can be skipped the first time for cover-to-cover book reading style. This helps in getting a hold of the usual (sunny-day) cases before digging into the rainy-day or special conditions. Although I was familiar with prior art on various architectural styles (say DynamoDB and Riak) but reading this book made more sense as to how that applies and more so with Erlang/OTP. In my view the book maintains a very delicate balance between content and its application while stops just before trying to spoon-feed too much. So, it does what any good book must do - builds the interest in the subject and encourage self learning / discovery which follows thereafter. I must warn you though if you are not an Erlanger, you would become one after reading this book. The book maintains a good balance between text, code and pictures to explain the subject. Although it was clear to me due to prior art but at certain junctures the graphics should be enhanced to aid the first-time-readers. I am a huge fan of separate reference section, which is missing in the book although they are embedded at places where things are introduced for the first time. Having a separate section saves time when coming back just for them apart exposing the user to specialized content (say research papers). Kudos to Francesco and Steve for making the topic look ever so simple.

I had been trying to learn OTP, and this book really helped cement the concepts in my mind. It’s very thorough, and I found it easy to follow and digest.

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