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CHAPTER 10



Performance Patterns

This chapter contains a variety of topics we haven't had the opportunity to discuss elsewhere. Although small, they are extremely important for high-performance applications. There is no unifying thread to guide you through this chapter but the desire to obtain top-notch performance in simple tight loops and complex applications alike.

We begin the chapter with JIT compiler optimizations, which are vital for good performance of CPU-bound applications. Next, we discuss startup performance, which can be critical for client applications that exercise the user's patience. Finally, we discuss processor-specific optimizations, including data- and instruction-level parallelism, and several smaller topics.