

## PART 2



# Identification

*Let's work the problem, people. Let's not make things worse by guessin'.*

—Eugene F. Kranz<sup>1</sup>

**T**he first thing to do when an application experiences performance problems is obvious: identify the root cause of the problem. Unfortunately, all too often this is where the real trouble starts. In a typical scenario where everyone is looking for the source of a performance problem, developers blame the database for poor performance, and the database administrators blame both the developers for misusing the database and the storage subsystem administrators because their very expensive piece of hardware ought to provide much better performance. And as the complexity of the application and infrastructure supporting it increases, so does the mess.

Chapter 3 presents different identification methods applicable to different software layers. The aim of this part is to introduce and employ a methodology that avoids guesswork and that will establish where the bottleneck is beyond any doubt.

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1. This quote is from the movie *Apollo 13*, directed by Ron Howard. It can be heard about three minutes after the famous line “Houston, we have a problem.”