

Part III

Persistence

A Dialogue on Persistence

Professor: And thus we reach the third of our four ... err... three pillars of operating systems: **persistence**.

Student: Did you say there were three pillars, or four? What is the fourth?

Professor: No. Just three, young student, just three. Trying to keep it simple here.

Student: OK, fine. But what is persistence, oh fine and noble professor?

Professor: Actually, you probably know what it means in the traditional sense, right? As the dictionary would say: "a firm or obstinate continuance in a course of action in spite of difficulty or opposition."

Student: It's kind of like taking your class: some obstinance required.

Professor: Ha! Yes. But persistence here means **something else**. Let me explain. Imagine you are outside, in a field, and you pick a —

Student: (interrupting) I know! A peach! From a peach tree!

Professor: I was going to say apple, from an apple tree. Oh well; we'll do it your way, I guess.

Student: (stares blankly)

Professor: Anyhow, you pick a peach; in fact, you pick many many peaches, but you want to make them last for a long time. Winter is hard and cruel in Wisconsin, after all. What do you do?

Student: Well, I think there are some different things you can do. You can pickle it! Or bake a pie. Or make a jam of some kind. Lots of fun!

Professor: Fun? Well, maybe. Certainly, you have to do a lot more work to make the peach **persist**. And so it is with information as well; making information persist, despite computer crashes, disk failures, or **power outages** is a tough and interesting challenge.

Student: Nice segue; you're getting quite good at that.

Professor: Thanks! A professor can always use a few kind words, you know.

Student: *I'll try to remember that. I guess it's time to stop talking peaches, and start talking computers?*

Professor: *Yes, it is that time...*