

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...*