

## **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...*