

# Isolating the Problem

Now that we have the ask-questions approach nailed down let's cover another effective troubleshooting method, isolating the problem. The goal of this method is to shrink the scope of the potential issue. Let's start with a simple game. I have a number I'm thinking of that's less than 100. Can you figure out what it is? You have five questions you can ask me. As you might have guessed, just guessing a number isn't the way to go. Is it 5? No. Is it 7? No. Your odds of figuring it out this way are super low. Instead, you should be shrinking the scope of where the number could be. You could ask, is it greater than 50? No. We know the number is 50 or less. We've just isolated our problem and cut down half of the answers we started with. To narrow the scope further you could ask, is it greater than 25? Yes. Is it greater than 38? Yes. Is it lower than 45? Yes. Is the number 42? Yes, the number is 42. Nice work. The power of isolating a problem can quickly and effectively help you figure out where the issue lies. The isolate-the-problem method is meant to shrink the scope of your problem so that you know you're looking in the right area. After you continually isolate the problem you'll eventually end up at the root cause. Root cause is the main factor that's causing a range of issues. Finding the root cause is a critical concept in IT support because it means that you're able to prevent an issue from happening again and again to multiple users. Sometimes the root cause can be difficult to find and extremely obscure. Don't give up if it isn't immediately obvious. Discovering root cause may be tedious but it's well worth the effort. Now let's take a look at a not-so-good and a good example of isolating the problem.

Hi, Marty. I can't get my email to work on my laptop. Hi, Gail. I'd be happy to help with that. Somebody came in the other day with the same problem.

Let's uninstall and re-install the application. It still doesn't work.

Hey Marty, I can't get my email to work on my laptop. Oh, hey, Gail. Sure. I'd love to take a look at that. Have you tried checking your mail on your phone or tablet or something like that? No, it doesn't look like that's working either. Let me try. Wow, I can't get in either. Let me look into this for a sec.

It appears that the email server is down. The notice says that it's going to be down for about another hour. How about we wait an hour, try again, and if you're still having problem we can dig deeper? Okay. Thanks, Marty. Your welcome, Gail. As you can see it's vital to use the isolating the problem method to decrease the scope of the issue. If you can rule out a problem area to look at you can troubleshoot more efficiently.