Tools and tricks for monitoring your network

KEEPING WATCH

If you can't monitor everything yourself, why not let your computers watch your computers? This month we examine some practical techniques for network monitoring. **BY JOE CASAD**

You can't inspect a computer network the way you inspect a line of show dogs. Dozens of processes are at work at any moment – all within a motionless rack or an innocuous beige case – and no one has enough eyes to watch the status of everything.

While you stop to fill out another requisition form, files fly down wires, web servers serve up pages, data servers accept and log transactions, and CPUs execute millions of instructions every second. The need for network monitoring has been around for nearly as long as the need for networks. This month, we look at some tricks and tools for keeping watch.

We start with a comparison of some open source network monitoring tools. You'll learn about the very scalable Hobbit. We'll also show why the powerful and extensible Nagios is a favorite of many admins, and we'll describe why Monit is the easiest answer for users who want their monitoring system to restart services automatically.

We'll examine how network administrators use the SNMP-based MRTG graphing tool to visualize and troubleshoot network performance. You'll also learn how to install and configure MRTG, and you'll get a practical look at how to create and interpret system performance graphs.

We close with a pair of articles on working with Nagios. The first article shows how to monitor log files using the Nagios *check_logfiles* plugin. You'll learn why *check_logfiles* is better than previous plugins at monitoring rotating logs, and you'll glimpse the benefits of watching logfiles with a tool like Nagios.

Our final article describes an example of the ingenious solutions you can build around the very versatile Nagios. As you'll learn, Nagios is so simple and powerful, you can even adapt it to interface with home-built electronic devices. We'll show you how to decorate your server room with a handy traffic light that alerts you to potential problems.

Network monitoring isn't just for the enterprise. Even small networks will benefit from the techniques we discuss in this month's cover story. Read on for some great network monitoring tools and tricks. ■