



## Better Monitoring with WebWatchBot Series

Strategies and Tactics: Which is better for website monitoring: Ping, Port, HTTP or Transaction?

All monitoring types, e.g. ping, port, and http, are not created equal. In fact, the differences between these types are broad.

When monitoring a server with a ping, a small packet of information – random data – is sent and echoed back. Monitoring a server with a ping will at the very least signify that the server is running. If the response time of the ping is slow over a short period of time, it may also indicate that the server is busy or that there is some network congestion. On a scale of 1 to 10 of monitoring effectiveness, a ping ranks a solid 3. It provides the most basic metric for server health, but still cannot inform you if that server is doing all of the jobs it needs to be doing, such as running a web server, database, etc.

Monitoring a server by connecting to a port tests the ability to connect to a server and to a specific tcp port. Common tcp ports include but are not limited to: 80 for the web server and 25 for the outgoing mail server. Monitoring a port is effective for knowing that a server is up and running and that a specific service listening on a port is responding by accepting connections. On a scale of 1 to 10, port monitoring ranks a solid 6. Port monitoring is a step up from ping monitoring since a port monitor will inform you if a specific job is being performed by a server.

Monitoring a server by http provides a richer and deeper level of monitoring. Like ping monitoring, one can test that a server is running, and like port monitoring, one can test that a specific port is working and being serviced. However, http takes monitoring one step further. Http monitoring will download data from a specific URL, whether it is HTML, a gif file, a PDF file, or any other type of document. With this downloaded data, one can test that data through searching or comparison for validity and gain a broader picture of how the server is behaving. If the URL requested generates HTML from a database even more of the server's health is exposed. On a scale of 1 to 10, http monitoring ranks at the top – a 10.

When deciding which method to use for monitoring, take into account how important the server is that you are monitoring and how much needs to be tested. If you are just interested to know when a server crashes completely, use a ping monitor. If you are interested to know when a server crashes and/or if a specific service stops responding, use a port monitor. To understand when a web application and a URL stops behaving properly, always go with an http monitor.