

# WILS: A Good Hall Monitor Actually Checks the Hall Pass



Lori MacVittie, 2009-30-09

*Are you monitoring the network, servers, stack, or the application? The answer may mean the difference between your application being available or not.*

One of the biggest problems with moving away from simple [load balancing](#) to [application delivery](#) is that network teams don't often get the memo and the application teams don't have a good understanding of what load balancers *can* do so they can't even offer suggestions regarding how to architect a better solution to availability. That means neither team really understands the role of health monitoring in maintaining availability for applications.

What *should* happen is this: application requests should only be sent to nodes (application instances) which are currently available. Health monitoring is the way in which it is determined by the [load balancer/application delivery controller](#) whether a node is "up" (available) or "down" (unavailable). There are several ways in which health monitoring is possible, but only one will provide the availability assurance necessary. Read carefully, there will be a quiz at the end. Ready?



**ICMP / PING** This method sends an ICMP PING at specified intervals to the node. If the node responds, it is considered "up".

**TCP HANDSHAKE** This method opens a TCP connection to the node on the specified port, goes through the motion of the three-way handshake, and then closes the connection. If the handshake completes, the node is considered "up".

**HTTP GET/POST** This method actually talks to an application, sort of, by sending an HTTP GET or POST to the application *server*. If the HTTP status returned is 200 OK, the node is considered "up"

**APPLICATION LAYER VERIFICATION** This method is essentially an HTTP GET/POST but includes a verification check of the data returned. If the response returned contains the right "stuff", as specified by the configuration, then the node is considered "up".

Now, which of these do you think is the right one to use if you want to ensure that requests are only ever sent to a "node" that will respond correctly to the user and thus fulfill the operational and business definition of "available"?

Exactly. If you're monitoring just the network (ICMP / PING) or the stack (TCP HANDSHAKE), or the server (HTTP GET/POST) then you can't really be sure that the [application](#) is *actually available*. The only option here that ensures everything from the network to the application is actually "up" and available is the application layer verification method.

So when you configure that load balancer/application delivery controller, consider what it is you're load balancing (hint: it's an *application*) and how that monitor should actually determine whether an application is available or not.



- [WILS: The Concise Guide to \\*-Load Balancing](#)
- [WILS: Network Load Balancing versus Application Load Balancing](#)
- [WILS: InfoSec Needs to Focus on Access not Protection](#)
- [WILS: Applications Should Be Like Sith Lords](#)
- [WILS: Cloud Changes How But Not What](#)
- [WILS: Application Acceleration versus Optimization](#)
- [WILS: Automation versus Orchestration](#)
- [Cloud Computing Makes Servers Obsolete](#)
- [Layer 7 Switching + Load Balancing = Layer 7 Load Balancing](#)
- [Not all application requests are created equal](#)
- [Cloud Balancing, Cloud Bursting, and Intercloud](#)

F5 Networks, Inc. | 401 Elliot Avenue West, Seattle, WA 98119 | 888-882-4447 | f5.com

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F5 Networks, Inc.  
Corporate Headquarters  
info@f5.com

F5 Networks  
Asia-Pacific  
apacinfo@f5.com

F5 Networks Ltd.  
Europe/Middle-East/Africa  
emeainfo@f5.com

F5 Networks  
Japan K.K.  
f5j-info@f5.com

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