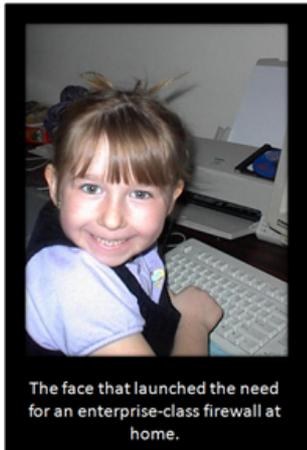# The Strategy Not Taken: Broken Doesn’t Mean What You Think It Means

Lori MacVittie, 2011-14-02

The definition of "broken" in IT is a lot more variable than in the real world. Sometimes you should follow the strategy not taken.

The face that launched the need for an enterprise-class firewall at home.

Don and I maintain a number of servers on which we run various web sites for fun.

Early on we determined we really did need a firewall both because we wanted to better control our young children's access to the Internet and to prevent unwanted visitors. We happened to have one land in our laps. For the past – well, many years now - it's been running with nary a glitch to trip us up. In other words, it ain't broke.

And yet we've seen increasingly odd behavior in delivery of content over the past couple of years, mostly related to video but often also related to AJAX-heavy web applications. We managed to narrow down the culprit to one component: that aged firewall.

It makes sense, if you think about it. That firewall was designed to be top-of-the line (it's an enterprise-class firewall) for its day. Its day, unfortunately, was one on which very little video was delivered and web applications were little more than CGI form submissions hidden within a set of static HTML pages. VPN traffic, video, VoIP. No traffic of this type was flowing over the Internet let alone enterprises in the days that firewall was conceived, designed and developed. But now that's a regular occurrence, and the poor thing simply can't handle the load nor the complex interaction between not only applications but components, too.

As far as we're concerned, it's broken – through no fault of its own – and it's time to retire it to the Information Highway Graveyard in the ether.

THIS AIN'T YOUR DADDY'S DATA CENTER

Core network and application delivery infrastructure in your data center is probably working just fine. Routers are routing, switches are switching.

It isn't that new routers route better or differently, it's mostly about throughput and rate of transfer these days, which has exponentially increased since the time you acquired the solutions. That has definitely changed. The frequency with which a wide variety of content is accessed, delivered, and exchanged via your data center infrastructure is radically different than that with which the same was exchanged years ago; in your daddy's (or mommy's) data center.

The infrastructure is not, technically speaking, broken. But it may not be working the way it should because it wasn't engineered to handle the load and usage patterns of today. It was engineered to handle yesterday's traffic – and yesterday's architectural models. Static models, brittle models. Models that certainly didn't take into consideration dynamism and virtualization and cloud computing and a multitude of mobile devices.

Not only are yesterday's infrastructure components ill-equipped to handle today's usage and traffic patterns, they don't play well with others – they aren't all able to integrate and collaborate with other components. That's necessary not only to achieve an acceptable economy of scale but to assure that the benefits ascribed to today's dynamic architectural models can be realized.

DATA CENTER (STRATEGY) REBOOT

If you're going to need to upgrade and modernize components (and it's likely you will) then it's probably also time to reconsider your data center strategy.
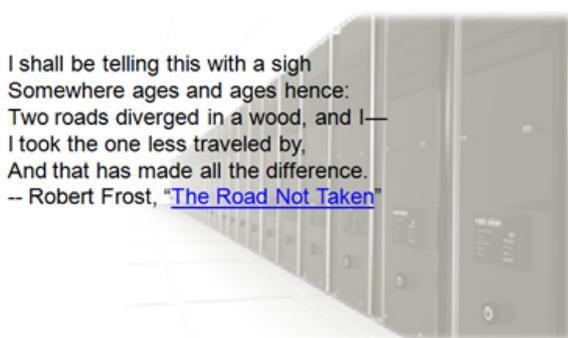
Because like components, it was probably based on a data center and environment that no longer exists and does not take into consideration all the new models and approaches to not only delivering applications but managing the infrastructure that accomplishes the tasks associated with that goal.

This is a non-trivial task and requires as much investment in upgrading processes as it does products. You've got to move from load balancing to application delivery; from scaling servers to scaling services; from securing networks to protecting information. The latter of all these requires new approaches, perhaps new solutions, but also new processes and new ways of looking at the data center. It requires that you look at the data center as an architecture, not an assembly line; as a means to an end and not the end itself. It's a strategic change of direction that requires a more collaborative environment not just between infrastructure components but between people, too.

Robert Whitely 🌐 of Forrester said it well in a recent blog, "It's Time to Reboot Your Infrastructure & Operations Strategy":

> 66 And that's where the need to reboot I&O comes in. This year's I&O research and events will focus on how you streamline I&O people, processes, and technology to support empowered employees. The goal is not to achieve cloud economics, but to take steps to get at least one order of magnitude less expensive in running your infrastructure and operations. [emphasis added]

This is a turning point, a fork in the road, for many organizations that have long relied on simply piece-mealing products

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.
-- Robert Frost, "The Road Not Taken"

into the data center without considering how those products might impact both operational and functional processes of delivering applications which, when you get down to it, is what all of IT is really about doing – either directly or indirectly. A new strategy is necessary to address the increasingly complex interactions required of data center components to not only scale efficiently in technological terms but in management and financial terms. As enterprise architecture is necessary to provide a framework in which applications can be deployed, integrated and managed so is a data center architecture necessary today to provide a framework in which network and application delivery network components can be deployed, integrated and managed. Such an architecture provides a core set of policies that govern the processes by which repeatable deployments and tasks can be accomplished and technology-focused policies for security, access and scalability can be applied.

When pundits, experts, and analysts talk about cloud computing being an opportunity and a catalyst for change, this is the underlying truth of what they're trying to get at. Cloud computing represents a fundamental shift in the way we think not just about compute or infrastructure or even services themselves, but about how those things are delivered, managed, and secured. It's about a strategy, not a solution. It's about processes, not products. It's about what it does, not what it is.

The question is will you adopt the strategy, as Robert Frost put it, less traveled? Will you continue to trod the path that leads to the same destination as it always has or will you take the initiative and adopt the strategy "less traveled by" that leads to a new and different – and one hopes more efficient and capable – data center? The time is now to rethink your strategy and start putting into place more collaborative components and processes, the kind that will lead to a more agile, efficient operational posture.

Related blogs & articles:

- *Focus of Cloud Implementation Depends on the Implementer*
- *It's Time to Reboot Your Infrastructure & Operations Strategy*
- *Cloud Chemistry 101*
- *Data Center Feng Shui: Process Equally Important as Preparation*
- *The Zero-Product Property of IT*
- *Don't Conflate Virtual with Dynamic*
- *It's Called Cloud Computing not Cheap Computing*
- *Infrastructure 2.0 + Cloud + IT as a Service = An Architectural Parfait*
- *The Cloudy Enterprise: Hours More Important Than Dollars*
- *Don't Throw the Baby out with the Bath Water*