[Belt and Suspenders: When one tool is not enough](#)

There has always been a drive in the software and infrastructure environment to find the ultimate single tool that achieves everything you need. It is truly the Holy Grail of the IT industry and much like the Holy Grail, it remains an unreachable goal for most organizations; but that's OK.

Enter the Portal

As the Internet rose to large acceptance and more of us began to get online the rise of the "portal" became the big trend. AOL and CompuServe were significant players as Internet providers and their portal style of content delivery began to take hold among other purely HTTP based sites such as Yahoo and MSN.

The dreaded buzz-term: Single Pane of Glass

If you are like me, you are tired of hearing the buzz-term Single Pane of Glass. This is the concept of delivering a single management application which extends its tentacles into your different environments to be able to view, manage and report on your overall infrastructure.

Much like how AOL and Yahoo wanted to keep you in their site as your single point of entry to the web, many vendors today are hoping to do the same with your server and application infrastructure.

The challenge with any single management and monitoring tool is that there is almost always a limit of some kind that caps off the ability to use it as your single and total management interface.

We are bombarded by the term "Enterprise" which is meant to say that the tool is all-encompassing. The truth of the matter is that like the Venn diagram shows, no single tool can be entirely efficient and ideal for every environment in your datacenter.

Any single tool may only be 60-70 percent effective in total management of any portion of your environment. So the Single Pane of Glass may actually only provide a partial view and administrative capability for what you actually have. Would you rather have a single tool that is 70% effective, or more tools that have a 100% reach into the areas you manage?

Belt and Suspenders method

You have probably heard the phrase "belt and suspenders" before. This is described in how you use more than one tool at the same time to achieve a single function; which in this case is keeping your pants up.

Your infrastructure is no different. You have web applications, monitoring applications, network infrastructure, server and blade infrastructure, environmental infrastructure just to name a few things. With the rise of the generalist and the blending of roles in the Systems Administration teams all over, we have a blurring of the lines between job functions and the same goes for tools used to

manage each of those infrastructure components.

Gone are the days where a vendor could come in and pitch that you will only need their tool. Let's look at a vSphere environment example:

> SCENARIO: You have 2 datacenters with 5 vSphere hosts per site, a Citrix VDI infrastructure, a Barracuda firewall, a Lotus Notes messaging infrastructure and an HP Desktop deployment as well as 100 Dell Wyse P20 zero-clients. To protect your application servers you use Double-Take Availability and you use Symantec NetBackup to back up to a DataDomain appliance.

In one paragraph we have covered a number of products and in fact we haven't touched on all that would really be present in your infrastructure. I didn't even get into full network products, desktop application management or numerous other tools and technologies that would be needed to run your business.

While you may have a Single Pane of Glass hope for this environment it just isn't possible to use any single product to cover all of your management needs. Once you spread yourself out to include more tools you would have lots of "Single Panes of Glass", thus removing the Single from the phrase.

NPOG: Numerous Panes of Glass

I'd like to be the first (although I'm probably not) to coin the term NPOG for Numerous Panes of Glass. You already have this today, and you will continue to use this method tomorrow.

Recall that the concept of the belt and suspenders method is not just using multiple tools that are completely disparate in their function, but to leverage more than one tool to manage, view, protect and monitor the pieces of your environment.

Server Protection through Belt and Suspenders

With vSphere 5.1 and vCenter 5.1 you have a significant new offering with the inclusion of vSphere replication in the core product. But let's say that you want to protect a Tier 1 application and be able to do recovery tests to your alternate site.

In this example, you cannot use vSphere replication because that tool cannot do "test recovery" to the alternate site while the primary protected server is online. This is where you would use a product like Double-Take Availability to do a full server protection and also be able to test your recovery without taking the primary instance offline.

You will still use vSphere replication to protect other systems in conjunction with your Double-Take environment because you can use the free tool (free once you've bought your vSphere license that is) and manage it through vCenter, and you will also use your Double-Take Console to manage your servers protected by that environment.

Server Backup through Belt and Suspenders

My final example will be about server backup. If you are using Veeam Backup and Replication to backup your entire virtual infrastructure then you are pretty pleased with that tool as it gives you all you need right? But don't forget those physical servers that host standalone applications which

cannot be virtualized for whatever reason. In this case you have to also maintain a secondary backup product like Symantec Backup Exec to back those servers up to tape or disk for their protection.

Keep those pants up as best as you can

So as you can see, there really is no such thing as the Single Pane of Glass (it makes me cringe just to type that really) and to give yourself the best advantage with managing and protecting your infrastructure it is best to use more than one tool to widen the coverage and give you the best methods to manage your datacenter.