
WysDM Software – Analysis And Reporting Goes Deep And Wide

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Abstract: WysDM Software has unleashed two tools designed to dramatically improve operational efficiencies while adhering to best practices in enterprise backup environments, and file server environments. Both provide deep visibility into their worlds, spotting problems and even acting to eliminate problems before they occur.

Introduction

WysDM (pronounced “wisdom”) Software is one of the cool new breed of storage software companies built from the ground up to help tackle old-school, real-world problems by applying state-of-the-art methodologies to issues that have plagued IT for years, or even decades.

In short, the company provides analysis, reporting, modeling, enforcement, and vision – in order to provide sight where none existed before. Once you let WysDM turn on the lights, it is amazing the things you’ll see – and be able to fix.

WysDM started in 2001 after a few of the founders left operations at Storage Networks, the first real SSP. Prior to STOR, these guys cut their teeth at Goldman Sachs in IT storage operations – so suffice it to say they understand the issues IT folks face.

The mission of the company is to provide tools that enable IT administrators and executives to understand their environments by providing vision and clarity, and to act on the information they derive to better their worlds. While it sounds noble, and even simplistic, the fact that we still are not capable of many fundamental tasks in IT means there is an absolute need for these kinds of products.

The company has been shipping products since the fall of 2003 and recently added a second major line. In 2005 WysDM won its first major OEM – EMC. The company currently sells primarily through indirect channels, such as OEMs and VARs, and has over 50 production customers to date. Our investigation has shown us that EMC alone has over 100 active engagements going on as of this writing. Customers come from all walks of life, but tend to be the bigger shops with the biggest problems.

The Products

WysDM has two primary offerings to date, with a third on the way. WysDM for Backups and WysDM for File Servers.

The value proposition for both, and I suspect subsequent products, is fairly straightforward. By adding visibility into your IT worlds – in this case backup and your file servers – you turn on the lights as to what is really going on. By doing that you gain intelligence by default. With that intelligence, assuming you act on it, you will improve your application availability, enforce best practices and consistency, reduce outages, and better manage your purchasing requirements in the future. Those are all good things, and are impossible to argue with.

In either case, IT uses manual measures to try to manage both the backup and the file server environments today. Excel spreadsheets are the most popular tool in these worlds. The mission of WysDM is to automate the most important data collection elements, and provide detailed cross-function analysis to help you do your job much more efficiently. For example, WysDM collects data from servers, storage, the network and applications to provide full rich context into what is really going on. All of what they do integrates with your existing operations infrastructure – whether homegrown or purchased. They can take the data and run it thru their Predictive Analysis Engine that enables you to focus on what is really important as opposed to blindly hunting. Finally, the products are completely customizable to adapt into the way you do business – not the reverse.

While the products will find a wide range of uses and applications, they both offer these primary functions: Monitoring, Reporting, Troubleshooting, Performance Management, and Capacity Planning.

WysDM For Backups

This product provides all the aforementioned functions geared specifically to your backup and recovery environment. It provides deep visibility into your environment to tell you what has happened and why, what is happening and why, and what will happen and why.

These functions lead to better overall data availability (knowing something didn't back up successfully, or hasn't been backed up in eons, for example), and should absolutely reduce both hard and soft costs associated with the backup and recovery operation. It will reduce hard costs by enabling staff to dramatically scale and postponing expensive incremental purchases, and reduce soft costs by radically improving data recoverability and enforcing corporate governance and best practices, for both internal and external compliance.

I won't belabor the point that backup stinks – it does. As bad as it is, with a huge percentage of backup operations failing, it is not knowing about the issues that is the real problem. It would be great if we fixed the actual backup/recovery problems, but that isn't realistic – the best we can hope for is the visibility to know what happened, and the ability to take action on it. WysDM not only helps us deal with problems real-time, but also actually helps us avoid them by predicting them in advance.

Since we admit we have a slew of problems just dealing with reactive issues, being proactive seems out of the question. However, once we have vision – that WysDM provides, and historical data, we can now predict the future with much more confidence. It would be nice to know, for example, that at this rate we'll cross our performance threshold in two months due to the fact that we're adding 500GB per week of new data to the backup process, and that the backup server is the issue, not the network. If we knew that, we could manage our SLA's and more importantly, the expectations of the business.

There are hundreds of reports and views for any and all personnel requirements. I can look at one tape drive in the tape library all the way to the application beyond the server to ascertain if and when a problem has or will occur. Each report or view is entirely customizable to the needs of the viewer. They can see all the things they care about, and none of the things they don't.

WysDM for File Servers

Network Appliance is one of most successful hardware companies in the entire storage business. They built a huge company predicated on building cheaper, faster, and simpler solutions to an enterprises file serving environment. Now they have become a mainstay of the IT world, with well over a hundred thousand installations.

The issue for Netapp users is that while the systems certainly provide that simple, faster, cheaper mantra, there are so many of them that managing them can be a huge challenge. File data is the fastest growing data on the planet and as such is causing enormous headaches for the Netapp user. Also, with all the functions that a filer provides today (snapshot, snapmirror, snapvault, and running multi-protocols such as CIFS, NFS, iSCSI and FCP concurrently, the "simple" part of the equation doesn't always ring true.

WysDM for File Servers acts similarly in fashion to WysDM for Backups – once configured, the software gathers Filer and Nearstore information and also gathers data on the surrounding infrastructure in order to provide enhanced visibility into the file server world. Like its sister product, WysDM for File Servers enables users to see what's going on

thru a myriad of reporting options, and to act on the information. They can enforce best practices on the filers just like they do in backup, only instead of watching whether a backup job failed, they look to see if a file system is filling up or does a new filer deviate from the “gold standard” that the business has set? They watch performance metrics such as the I/O rates of individual disks or “hot” file systems, and enable more intelligent billing based on SLA’s.

Performance optimization is always an issue in a filer world, so WysDM spent a lot of time on performance reporting. Users can use a single screen to monitor and measure performance across all of their protocols concurrently – NFS, CIFS, and iSCSI. The product monitors and reports on Netapp’s most used features such as Snapshots – instantly showing you volumes with the highest snap utilization, or replicate snaps. You can easily see the fastest growing volumes or the most active volumes, and see a host of metrics to enable capacity planning functions.

One of the most useful components of the product is the configuration management tool. This allows you to maintain a configuration inventory – and to report on deviations outside the scope set by your team. Change management is one of the most difficult challenges in the storage world, so a tool like this can dramatically improve your ability to perform root cause analysis and more importantly, to prevent inappropriate configuration changes from causing harm to the environment. WysDM can quickly make comparisons between two configurations, pointing out the exact differences.

Over 250 reports ship standard with the product, on areas including asset management, capacity planning, change management, charge back, performance management, data protection management, and service level agreement management.

WysDM for File Servers focuses on NetApp today, but the protocol engines are the same across the industry, therefore users should expect other offerings to be available shortly.

The Bottom Line

EMC has customized the backup product to help its customers see the light. Already, we are getting feedback that those customers are looking to add even more of the WysDM functionality to their worlds. These are the kinds of products that are almost inarguable in value; they tend to pay for themselves instantly by showing a gaping hole or eliminating a future issue. You won’t hear a ton about that, because it’s human nature to hide the fact that you had such a problem, but all the early feedback has been entirely positive. It remains to be seen if WysDM can continue to thrive as it moves from anonymity to the big leagues, but it certainly has the right stuff to bring to market. The company has passed the initial stage of its evolution brilliantly, and if it can successfully manage through high velocity growth and inevitable competition from some big players, could be a force to be reckoned with. The only competition thus far is with Bocada in the backup reporting space, and really nothing in the file server space. Even in the backup space the two players are heading in different directions, so there will most likely be room for both. The fact that the WysDM lineage is one of real IT users and not vendors shows well in the product. What they lack in sexy marketing they have more than made up for thus far in putting truly valuable and useful elements into their code – and they have done it all on their own, with no outside capital, which may be their most impressive feat to date. WysDM will make your people and operation smarter, and that is a worthy investment.

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