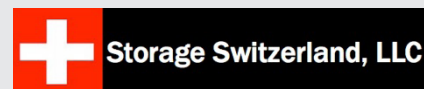


Unitrends Backup and Recovery Appliance Test Drive

George Crump, Storage Switzerland, Senior Analyst



Unitrends Test Drive Part I, August 27, 2010

Storage Switzerland recently began our testing of the Unitrends Recovery-711 Backup and Disaster Recovery Appliance. As is typical of our testing methodology, we focus on what the user experience is over the course of time more so than how many microseconds faster one unit is than another. While performance is important, it is also critical to know what it is like to live with a product day in and day out for an extended period of time. As a result, we try to run our test drives well beyond the typical 30-day evaluation period and give you a taste of what it will be like to live with the product.

Installing the Recovery-711 Appliance

With that as the backdrop, we mounted and brought up our Recovery-711 appliance in the lab. The Recovery-711 is a 1U form factor backup appliance with four disk drives in a RAID-10 (striped and mirrored) configuration that supports on-premise data protection. It may be



used with their vaulting appliances for a single-tenant private cloud implementation, which we will also test, or with Unitrends' Vault2Cloud multi-tenant public cloud implementation. Unitrends positions the 711 as an enterprise backup solution, and we expected an enterprise effort so we blocked out the day to get the system up and running. With other enterprise products, we are used to them taking the better part of a day to install and get to the point that you are ready to perform your first backup. This was not the case with the 711. Since it is an appliance, everything is pre-installed. We applied power, gave the unit an IP address, pointed our browser at it and we were ready to get to work. Initial setup took less than 10 minutes.

About Storage Switzerland

Storage Switzerland provides unbiased examinations and reviews of technological products. The company analyzes a product as well as discusses the product with current and future consumers to determine what the user experience is like over an extended period of time. Storage Switzerland does not receive any compensation for its reviews until after thoroughly examining a product, so users can rely on the company's views to be expressed candidly and truthfully.

Installing the Clients

The next step was to install the clients. Again, very easy. Unitrends provides an FTP site with all the client agents on it. Just download the one you need for the platform and then install for each client that you are going to back up. There were no questions to answer client side, just install and go. The final step was to add clients and get them scheduled. This again was straight forward, taking less than 10 minutes for the first one and less than a few minutes for the other.

As you would expect in an enterprise backup solution, the GUI had several different options that can be selected. We will go over the exact process of adding a client, creating a schedule and excluding or including files in our next entry of the test drive. For this entry we wanted to focus on getting the backup accomplished and making sure we could recover data. As you can see from the first video below we were able to move through the web GUI quite easily. We could quickly schedule backup jobs or manually start them.

In the next video, we walk through the process of manually scheduling a backup and show how to include certain directories or volumes. As the video shows, this process was also pretty easy to follow along, and we were able to accomplish this task very simply.

In our final video for this entry, we recovered data. With a name like Recovery-711, this better work. It did quite nicely. For demonstration purposes, we simply recovered an OS ISO

image, which gave us a chance to see how quickly the 711 could find a single file and put it back in place. The 711 leverages its disk-based backup capabilities to quickly find and restore the file in a matter of minutes.

Initial Take

Storage Switzerland's initial take on the Recovery-711 is very positive. This is a robust, enterprise strength backup application pre-packaged in an appliance form factor. We were able to complete our initial set of backups and recoveries with no problem at all. Like other enterprise backup applications the 711 has and needs a variety of options to cover the different types of data protection strategies that any data center might be faced with. It presents those options in a fairly easy to navigate interface. In

upcoming installments of our test drive we will explore each of these in more detail but for now the 711 is certainly making the grade.

Unitrends Test Drive Part II, September 10, 2010

Adding a Client

As we continue our ongoing test of the Unitrends Recovery Appliance, we will walk step-by-step through many of the tasks required when dealing with an enterprise backup process. The Unitrends appliance aced one the biggest challenges of any new system: getting the unit installed and running. As we showed last week, we were able to successfully backup and recover data within just a few minutes of installing the system. This week, we will focus on one of the

other more traditionally difficult tests--adding a client to the backup process.

The first step in adding a client is to download the correct client software from the Unitrends FTP site. Navigating that site is self-

explanatory as is the actual client installation. In the lab, this entailed copying the client install program to one of our servers and then executing the installation program.

On UNIX and Mac, this is a command line process, which for Mac users might be a little disconcerting, but considering that the Recovery Appliances should be installed in an enterprise, we don't think it is a major problem and certainly something that a system administrator could handle with ease. A simple "/" command and the install was underway, completing a few seconds later. For command line leery Macintosh environments, a call to Unitrends technical support offers quick guidance. In UNIX or Linux environments, the installation process should come as no surprise. For the Windows platform, which is probably the most common installa-

"The [Unitrends'] system has been rock solid reliable in an environment that is constantly changing."

- George Crump, Senior Analyst

tion type, the installation is, as you would expect, completely GUI driven. Simply follow the prompts, which amounts to clicking the “next” button a few times, and the client is installed and running.

In both cases the bulk of the “work” to be done with the client is from the web-based GUI, which controls the Recovery Appliance. In fact, we did several of our client installs via a remote connection, so not having to do much client side work made things easier. As the video will show, we were then able to step through the process of adding a client to the backup software. The next step was to add the new client’s information to our host table, then add the client to the backup job. As a final step we executed a manual backup of the client.

Storage Switzerland’s Take

I’m not sure how you can make adding a client to a backup process easier. While adding a client to the Recovery Appliance requires touching each new client, I find this process much easier than some of the “agent-less” backup software we have used that leverage some sort of file sharing protocol. When trying to set the various file sharing options, there always seems to be an odd wrinkle here or there that causes some clients not to work. Agents provide the consistency that most administrators seek. It should also be noted that editing a host table is usually a command line process, having it driven via a web interface made for a refreshing change. Since we are in a lab environment, host tables are our preferred setup. You can, of course, use other, more common methods like directory services to identify hosts with the agent installed.

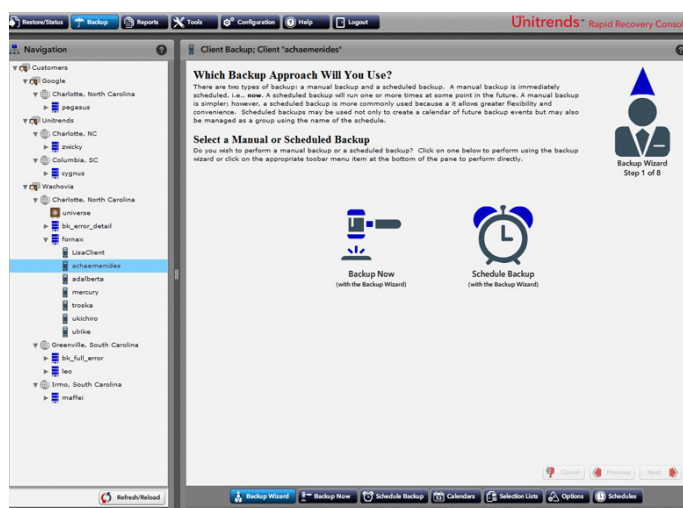
In our next update, we will cover how the scheduling aspect of the Recovery Appliance works. This is critical since most enterprises require very fine-grained scheduling at times, and most software makes you work very hard to achieve that granularity.

Unitrends Test Drive Part III, September 22, 2010

Scheduling and Exclusions

Our testing of the Unitrends backup appliance continues, and with the basics out of the way, we are moving on to some of the nitty gritty details that you expect and need out of an enterprise backup solution. This entry, we focus on scheduling of backup jobs, which in my experience with backup systems is critical in enterprise environments.

Before we get to scheduling, let’s talk about how the Recovery Appliance is working in our environment. We are repeatedly told by our readers that one of the things they like best about our reviews is that we test the products for a long time and we actually use them in production. We don’t cram everything possible into a week and see what happens. We live with the products. Just like cramming for a test doesn’t do you any good, rushing through a review doesn’t give you the real world information you want. This is the case with the Unitrends Recovery Appliance. We have had it in the lab for over a month now, and we use it every day to protect the data on our lab and production servers. Most days it runs without us even thinking about it, which is what you want for a data pro-



Screenshot of Rapid Recovery Console Scheduling Feature



Screenshot of Rapid Recovery Console Schedule Buttons

tection product, just work and let me know if something goes wrong. We've had no failures, no unexpected reboots or crashes. The system has been rock solid reliable in an environment that is constantly changing. Not something that the typical backup system handles well.

With our confidence in the system growing we have been assigning increasingly more clients and data to the appliance for it to protect. Although the evaluation system has more than enough storage on it to protect our entire environment a couple times over, our network can't always handle the transfer of all of that data at the same time, at least until we complete our 10GbE upgrade. Also there are situations where we will want data retained for different periods of time or times where I know certain servers will be less busy than others. For example, many of our lab servers are actually the most busy at night when they are sent off on a data generation task or some read/write performance test. In both cases these are situations where you want a finer level of control over the backup process than what a default job will provide.

Scheduling is an area that legacy backup products have struggled with. Integrating a relatively complex concept into a GUI that is approachable by the user is challenging. The usability of a feature like scheduling is compounded by the fact that you don't always use that feature, so when you do, you have to remind yourself of how it works. A good GUI should help with all of this, and it is something that the Unitrends Recovery Appliance does particularly well. As you

can see from the video below, we were easily able to navigate the GUI, create a new calendar to set when the different types of backups would be executed and then add a particular type of client to that schedule.

We believe that calendaring is particularly important in disk-to-disk backup systems. A tape backup concept of weekly full backups and daily incremental backups really does not apply to disk. There isn't the requirement to consolidate your full backup jobs together because you are not going to have to scan through individual tapes to complete a restore. We suggest using a quarterly or even a half year full backup strategy with disk and just doing incremental backups the rest of the time. My only request on scheduling would be to add the ability to do "Last Saturday of Every Quarter" instead of the "Last Day of the Quarter," which might be a weeknight as well as the option to disable the incremental job on that night. Despite that small nit, Unitrends gives you a lot of flexibility to design your calendar and its schedule almost any way you want.

In the screenshot, you will see that all the actions that you can take on a schedule are clearly presented with large buttons that guide you through the process. Most importantly, the GUI follows a top down workflow that allows you to fill in the details that it needs in the right order.

Storage Switzerland's Take

We found the scheduling capabilities of the Unitrends Recovery Appliance to be very good and provide almost all the fine grain control that

a user would want. It is important to remind you that we are running an enterprise-strength backup application without reading the manual and, although available, no help from Unitrends. Thus far, it meets the expectation of an appliance--plug it in and it works.

Unitrends Test Drive Part IV, October 1, 2010

Exclusion Lists

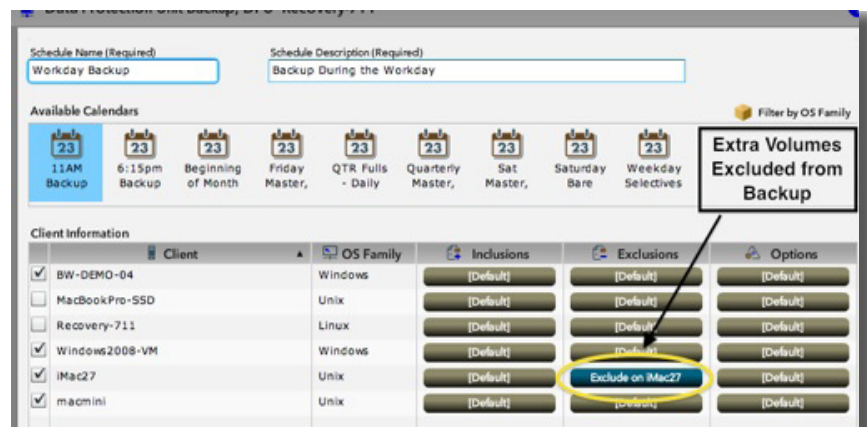
The larger the environment the more flexibility you need from your backup and recovery application. There are backup windows to meet, data that does or does not need to be protected and special retention requirements for some volumes or files on a server but not others. In our last entry in the Unitrends test drive, we showed the ease at which custom schedules can be created. In this entry, we will show you how to make exclusion lists to make sure that only certain files get protected by certain backup schedules.

With the Unitrends software, you can specifically include or exclude a range of files or volumes from the backup process. The flexibility and the part that I find very useful is the selection list that is built separately outside of the normal backup job schedule. Think of these standalone lists as basically rules that can then be applied to a schedule. That rule can be provided to any of the clients within the schedule.

A simple example would be if I wanted to exclude all C drives from backup of all of my Windows servers for some reason. I could create a selection list that would exclude C drives from the backup process. I would then set it to only be valid on Win-

dows servers and then drop that onto the clients as I create the schedule. In other words, you don't have to create an exclusion for every single client that is being backed up. Basically since most Windows servers are the same, I can make a universal exclusion one time, yet use it universally.

As you will see in the embedded video and the screenshot, we used the exclusions capabilities of the Recovery Appliance to exclude a very large repository of data from the backup process. It was data that was already redundant elsewhere and we did not need an extra copy of it.



Rapid Recovery Console Exclusion Screenshot

The whole exclusion process, as has been the case for all of our Unitrends testing, has been very simple and easy to do. The ease of the web interface, combined with the applanitized packaging of the product, plus a little working knowledge of how back systems function will place you 80% of the way to being able to successfully using the product. Which compared to most enterprise applications is way ahead of the game.

To view all accompanying videos and screen shots, please visit:

http://www.unitrends.com/unitrends_product_review.html