APTARE®

Day in the Life of a Storage Administrator: which scenario best describes your duties?

MORNING

Without APTARE

8am – 9am

You drag your feet as you shuffle down the hallway to your cubicle, a night of restless sleep behind you. A big backup job was supposed to go down overnight, and your fingers are crossed that the job was successful. You turn on your desktop and call up the backup logs. Yeesh! Sure enough, the job failed, and now your morning is going to be shot trying to figure out why. Time to clear your morning schedule.

9am – 10am

There are seven different backup management tools open on your desktop, and your head is already spinning. Where was that Data Domain GUI? Your thumb and pinky start to ache as you constantly hit Alt-Tab to toggle between the dashboards. Your attempt at tracking the major backup job that had failed the night before requires following a windy and uncertain path between backup solutions as you search through log after log. Ok, looks like the directory was backed up to disk by NetBackup, but a copy didn't make it to tape. Why?

10am – 11am

More logs are opened on your desktop. It's now taking a few seconds between toggles, irritating you immensely as the morning winds down. You pore over spreadsheet after spreadsheet looking for that proverbial needle in a haystack that is going to give you some sort of clue why the backup failed. As you search, your mind starts to wander. There are likely other backup jobs that failed overnight, but you don't have time to even identify them much less remediate them. You're just going to have to hope they go through tonight. The organization's data protection policies haven't been met in months, something the higher-ups are going to find out next month when SOX auditors come to town.

A little dejected, you sigh, your shoulders slumping. This major backup error has put you behind schedule, and the day is already shot.

With APTARE

8am – 9am

You saunter down the hallway to your cubicle, a good night's rest behind you. An error with a big backup job was caught yesterday as you set the schedule, allowing you to fix the problem before the job could fail. The first thing you did this morning was to check your Blackberry, and sure enough, the job was a success. You turn on your desktop and call up APTARE StorageConsole and run through a consolidated list of all nightly backup logs across platforms. Yep, they're all right there from TSM and NetBackup to Avamar and Data Domain. There are a few minor failures but nothing that can't be fixed in the next few hours.

9am – 10am

APTARE's central backup reporting solution lists every backup job initiated overnight and its status. Most of the jobs are colored green for completed successfully, but a few yellows and reds are scattered throughout the database. With last night's close call corrected proactively, it's these minor jobs that you focus your attention on this morning. The ability to drill down to each individual job is like a bread crumb trail showing you why each failed backup was not completed. Disk space was the issue for one job, bandwidth on another. APTARE provides visibility into the backup infrastructure, making it easy to resolve each issue and re-initiate the failed jobs.

10am – 11am

Some jobs had failed initially, but agent procedures you had written were able to reset and re-initiate those jobs. These are indicated in yellow, indicating an error that needs to be checked into but the job was ultimately successful. This information is going to be extremely useful for the SOX audit scheduled for next month. The regulators are just going to want to see that the jobs were ultimately successful—not how the sausage was made—and this visibility reduces false negatives.

By the end of the morning, each backup failure from the night before has been identified, the issues resolved, and the job re-initiated. Despite a few minor errors and failures, the organization's data protection strategy hasn't been compromised, and you're on schedule for the day.

LUNCH

Without APTARE

11am – 12pm

Just when you start to make progress on identifying the error source, an email pops up in your inbox from the help desk. Apparently a server failed overnight, and some data was lost. An administrator is panicking (you can almost see the hands thrown up in the air through the tone of the email) and is asking if you can recover the data to the last backup. Harrumph... Easier said than done.

You dive back into the NetBackup logs to identify the most recent copy of the data. Your eyes start to blur as you scan rows and rows of jobs, looking for the server identification number. It turns out that the backup is missing. Time to go to tape. You identify eight tapes in the library that have the data you require. You set the recovery in motion.

12pm – 1pm

D'oh! The recovery has failed. Apparently, one of the tapes was out of order. You put in a request at Iron Mountain to track down the missing tape. The past hour was a complete waste and you are still no closer to recovery the data.

Back to the failed backup. Finally, after three hours of searching, you think you have found the source of the error. It turns out that a LUN associated with Data Domain is 98 percent of capacity, which is strange because the directory is the only thing that should be backed up to this particular piece of hardware. Regardless of the reason, you just need to ensure a successful backup. You make a note to find more capacity—no matter the cost.

1pm – 2pm

It's lunch, but there's no time to get out of the office for a hot meal. You grab a sandwich from the vending machine in the break room, settling on ham when what you really wanted was turkey. You eat at your desk while printing out and compiling a series of backup and capacity reports for a meeting you have with the department heads. It's a once a quarter get-together and you'll be expected to give an assessment of the organization's data protection policies and forecasted capacities. This meeting is especially important since there is a new product launch next month and the SOX auditors are scheduled to arrive shortly after.

You have to reload the paper tray twice as hundreds of sheets of spreadsheets are printed and placed in huge black binders. NetBackup, Tivoli, Avamar, Data Domain. All have different reporting mechanisms with various layouts and vernacular. There's no time to make anything consistent. The department heads are just going to have to make do with what you have. Cripes! You're late to the meeting!

With APTARE

11am – 12pm

Suddenly an alert pops up in the APTARE dashboard (besides email, it's the only window open on your desktop). A server failed overnight, and some data was lost. The help desk guys put in a request through APTARE to have you take a look at it. Normally, they would have been able to recover the data themselves since APTARE is integrated directly with the service desk. But with a Windows 8 upgrade underway, they ask if you can help them out. You have the time, and it won't take but a few minutes, so you agree to take on the ticket.

Finding the server in question is easy in APTARE. It's literally blinking on your screen. You drill down into the last backup job associated with the server and see that you'll have to recover via tape. You compile the tape chain but notice that one of the eight tapes is out of order. You make the correction and set the recovery in motion.

12pm – 1pm

Hurray! The recovery was a success. Luckily APTARE was able to alert you that a tape was out of order. Otherwise the past hour would have been wasted. You close the ticket and move on to other, more pertinent duties. Priority one is finding out why there was an issue with the major backup job the previous night. APTARE identified that there was a problem and you were able to redirect the backup to other capacity, but now it's time to remediate the original problem—or it'll continue to occur.

You use APTARE to drill down into the failed job and immediately see that the LUN is 98 percent of capacity. The solution also provides file-level information on each LUN, and you're able to see that there are 40 copies of the same directory on the disk. After a little more investigation it looks as if each backup should be overwriting the previous version, but it's not happening. You make the tweak in NetBackup, and make a note to check with the owner of the directory to see if you can delete the redundant copies. You're just glad that the error was caught last night and not this morning. The fact that the data is already backed up while you're working on the solution is a huge coup, and now you have a resolution to report.

1pm – 2pm

It's lunchtime, and you usher your team out the door for a quick bonding session. Everyone grabs their Blackberries, so they're connected to APTARE while off-site. Anything that needs immediate attention can be addressed over appetizers.

AFTERNOON

Without APTARE

2pm – 3pm

The room turns as you walk through the door of the conference room. The meeting has already started. A few roll their eyes as you start to pass out the thick binders of backup reports. A few leaf through the pages but most don't bother. You tell them about the backup failure from the night before but assure everyone that after investigating the cause all morning you will be able to re-initiate the job shortly. In the meantime, someone is going to have to tell users not to use the directory until it is successfully backed up.

3pm – 4pm

You're talking numbers, but you're losing the room. No one is paying attention—even when you refer to the spreadsheets in the binders. You get the sense that you're talking over people's heads, but you don't know how else to communicate that the organization is going to run out of capacity sometime in the next three months. Suddenly, the CFO cuts you off. "The budget is the budget," she says. "You're just going to have to find a way to make it work."

You sigh and say that some hard decisions will have to be made in regards to capacity. Not all data will be backed up. You ask for priorities. Now you have the room, but it's too much. Everyone is saying that their project is critical, and they can't make compromises. Someone makes a performance dig. You look at the CTO who is sitting quietly off to the side. All decisions are pushed off to him, and he doesn't look to be happy at getting the unpopular task. You mentally tick off ways you can recover capacity or push off jobs to the next quarter. Maybe you can use capacity earmarked for other uses. Above all, you just hope nothing critical happens in the meantime.

4pm – 5pm

You slink out of the meeting before anyone can corner you about the morning's failures and head back to your cubicle. As expected, your inbox has exploded. You spend the next hour catching up on things you missed during the meeting.

With APTARE

2pm – 3pm

You arrived early and catch the owner of the directory before the meeting starts. As you suspected, it turns out that he doesn't need 40 copies of the same file and gives you permission to delete the redundant data. As the rest of the department heads file in you daydream about what to do with the unexpected capacity.

The meeting kicks off and you ensure everyone that the directory was backed up successfully overnight, the server is back in production and it's business as usual. You then bring up the APTARE Capacity Forecast report you emailed to everyone the day before, and heads nod as they call it up on their tablets. You point to a simple chart that shows historical data usage, current capacity and forecasted needs over the next year. You mention the storage you just reclaimed and suggest that a full audit could uncover additional ways to reclaim additional capacity and meet neds. Someone asked what the audit would entail. "APTARE already tracks the information in real time, and it'll give us a good snapshot to determine where to start" you say, and the decision is made to begin immediately.

3pm – 4pm

The chargeback report is discussed next as each manager outlines his department's use of storage capacity and costs. It's almost become a game between them to see who can squeeze the most cost savings out of their usage. Someone boasts that they were able to save $100,000 annually by moving non-critical data to a lower tier. Someone else changed a policy to back up a chunk of data every other week instead of weekly. The bragging continues as the CFO and CTO exchange pleased glances and give you the thumbs up. Now that everyone knows the full impact that each business initiative has on storage costs, a price can be put on rolling out a new product, improving performance or scaling to meet demand. The information is easily digestible in charts and graphs and is updated in real time. Transparency has created a competitive streak—and it's the budget that is benefiting the most.

4pm – 5pm

You try to sneak out of the conference room after the meeting, but everyone wants to catch you about some project or another. The CFO pulls you aside and invites you to sit in on a product roadmap meeting the following day. An important launch is coming up, and she wants to make sure that infrastructure needs are being met. You agree, knowing that being included on the ground floor will enable you to better prepare in the long run. You appreciate the vote of confidence and increased responsibilities. It's nice to be seen around the office as more than just a "cost center".

EVENING

Without APTARE

5pm – 6pm

Where did the day go? You haven't made a dent in your to-do list, you still haven't recovered data from the failed server, last night's failed backup job hasn't been re-initiated,and now it's time to get the backup environment ready for tonight's jobs. Opening separate tools for each backup solution takes a good 15 minutes itself, and you still don't have the visibility you need.

You start setting jobs that need to execute overnight, cherry-picking which ones get priority status. With the additional workload there's only so much bandwidth available. Job pruning is just part of the job.

6pm – 7pm

It's now time to get tapes in order, setting up for the long night. You clean up space to ensure there is enough capacity to execute each backup, but as the environment gets closer to full capacity, it gets harder and harder to squeeze everything in. Sure, you can try to implement new policies that will reclaim capacity, but who has the time to do anything. Plus, it would require budget up front that isn't likely to be approved by the CFO. She thinks storage bleeds too much cash as it is. And frankly, she's probably right.

7pm – 8pm

The halls are nearly empty and the cleaning crew has just vacuumed around your feet for the third evening in a row. It's time to go home, so you just close up shop and cross your fingers that everything was set correctly. If not, you'll know soon enough.

You stop by KFC on the way home. There's just not enough time to cook tonight and barely enough time to catch up with the family. It doesn't matter, you guess, they seem just as busy as you. As the car rumbles under street lights and traffic signals you imagine yourself sitting in your leather recliner, the family nearby, the tube tuned in to Dancing with Stars, your Blackberry chirping on the table beside you, and you just know that multiple failure alerts are filling up your inbox. Such is the life of a storage administrator.

With APTARE

5pm – 6pm

Where did the day go? Today was so exciting as you successfully executed the big backup job, recovered data for a failed server and made new inroads with the management team. You finally make it back to your desk and start setting the jobs that need to execute overnight. Most are set automatically based on the organization's backup policies, but you always like to check just in case. APTARE is open on your desktop as you check to make sure disk space is available and the tapes are set. If anything is out of the ordinary, APTARE will flag it, allowing you to remediate the issue before the job executes and fails. In fact, APTARE alerts you that a backup as it's currently set up won't fit in the backup window that you've provided. You make a few corrections by moving other jobs around, and the issue is fixed.

6pm – 7pm

It's quitting time, so you head out the door to go to the gym on the way home. The organization is putting together a triathlon team to raise money for leukemia research, and you need to get in your five miles on the treadmill. Half-way through the workout your Blackberry chirps. It's APTARE telling you that the first batch of backups has gone smoothly.

7pm – 8pm

You make it home in time to help cook dinner, and the family gathers around the TV to watch everyone's favorite Dancing with the Stars. You recount your wonderful day, and are generally pleased with the family's reaction. They're interested. Your Blackberry sits on the table next to you, chirping once in a while, but you know it's nothing you can't handle remotely. Such is the life of a storage administrator.