

White Paper

Achieving Sustainable Compliance

A central reporting tool can streamline compliance reporting across the entire organization, enabling them to meet dynamic compliance requirements quickly and efficiently

“Regulatory compliance to standards like SOX are a huge deal, in both the actual execution of data protection, as well as assuring one’s compliance. Auditors often demand complete transparency into a company’s data and the underlying IT environment to make sure that the data is protected and secured. The problem is that companies might have tens of thousands of end points that don’t have this level of visibility into their networks. It’s just too complex.”

*- Jason Buffington
Senior Data Protection Analyst
Enterprise Strategy Group (ESG)*

Compliance is a critical issue that nearly all organizations have to deal with in some way, but it’s an issue that backup software vendors have abjectly failed to address. Rightly so, developers have been focused on moving data from disk to tape quickly and efficiently and had no idea that one day regulators would be requesting proof and documentation. As a result, reporting was not a development priority, making it difficult if not impossible to produce reports required for compliance reporting today.

Compliance Requirements are Growing Increasingly Complex

Nearly all organizations—whether they’re big or small, public or private, physical or virtual—have some sort of compliance requirements. They have to show internal and external regulators that their business information—particularly financial information as well as customers’, partners’, and employees’ personal information—is protected. If the information is not protected adequately, the organization must show how it plans to remediate the issue. This end-to-end, womb-to-tomb protection protects critical data as it flows through the business systems that make up an organization’s IT environment.

This, of course, doesn’t mean that every system will be audited on a regular basis from now until perpetuity. Part of the compliance process is identifying the discrete subset of systems that need to be audited as a control. Typically, an organization’s audit servers will be eight to ten percent of the overall server environment and represent the most critical assets in the IT environment.

Organizations are also required to provide validation that internal controls in the form of data protection policies have been set and that key data protection metrics are being monitored, collected, and analyzed. This includes backup success and failure rates, restore testing, media testing, media expiration, and media location. This ensures that business information is being protected throughout its entire lifecycle. It’s not uncommon for auditors to show up, ask to see job A, B, and C and require that a backup administrator prove that the data can be restored. If that means a fieldtrip to Iron Mountain, so be it.

Auditing and Compliance Create a Huge Burden on the IT Organization

Unfortunately, meeting auditing requirements can be a major burden on even the most well-funded IT groups. Compliance risk can be measured by more than just fines and penalties. The process of proving compliance requires additional workload by the IT team. Typically, organizations will set up a compliance committee made up of stakeholders from across the business and the IT department who set and standardize audit requirements. Then, one of the IT members creates a series of scripts to capture pertinent data and compile it in reports.

The administrator—or team of administrators in large organizations—must then fulfill multiple auditing requests per week for both internal and external auditors. Stakeholders often lose reports and request extraneous or repetitive reports. Regulatory bodies rotate auditors, making organizations “start over” as each new auditor has their own preferences when looking at data. The volume of requests can easily swamp administrators, preventing them from doing much more than scripting, compiling, and reporting. Wash, rinse, repeat.

Unfortunately, the compliance landscape is only getting bigger and more complex. New laws and regulations are being passed every year, and organizations keep expanding into new markets with their own unique regulatory landscape. As a result, compliance auditing is becoming an enormous drain on human capital, making it critical that organizations reduce the time spent producing compliance reports and sharing those reports with stakeholders.

Sustainable Compliance Requires Policy Enforcement, Accurate Information and Integrated IT Operations

There is, however, a way to maintain a sustainable compliance posture that meets all regulatory requirements in a cost efficient, streamlined manner. Administrators can't be firemen called at a moment's notice to compile this report or that report, rushing around, trying to collect data from all over the environment at once. An inability to standardize compliance reporting leads to inaccurate and incomplete audits, administrative nightmares,

a reshuffling of IT priorities away from strategic projects, and costly, disruptive surprises.

Organizations need to have methodical, well-planned practices and policies in place. The audit committee needs to meet once a month to update policies, ensure existing policies are being met, and plan for future compliance requirements. Everyone needs to know their role and procedures need to be met and enforced.

Administrators need to be armed with timely, accurate information about data protection status. Information is power. Administrators need to be able to respond to audit requests quickly and efficiently without sapping resources away from more strategic projects. A paper trail needs to be documented and shared easily with all stakeholders to prove that the organization is indeed doing what it is required to do.

Compliance is a holistic issue, and **auditing should be integrated into core IT operations.** Clear accountability throughout the IT apparatus needs to be determined and roles should be clearly defined. There needs to be infrastructure in place that allows audit requests to be made, met, and documented quickly and efficiently.

An enabling technology needs to be present. Backup software does a great job of backing up data but lacks the ability to provide clear reporting for compliance. A third-party vendor-agnostic solution needs to be deployed to gather, store, and export compliance information.

APTARE StorageConsole in the Data Center

APTARE StorageConsole provides organizations with a single, unified view into the storage environment, automatically collecting management information across distributed infrastructure. Administrators can view the management information—from utilization to backup status—in APTARE's central management dashboard and export hundreds of out-of-the-box and custom reports.

APTARE automatically compiles the information in real time, so compliance reports can be generated quickly and efficiently from the APTARE database instead of collected from thousands

of disparate components deployed across huge infrastructures. By using a single port to continuously update the Oracle 10g database that sits across the StorageConsole platform, APTARE is highly scalable and can handle large volume of data collection.

As a result, APTARE customers have been able to compile compliance reports that include tens of thousands of backup jobs spanning dozens of data centers in mere seconds, making it easier to identify, meet, and prove dynamic compliance requirements.

Some of the features APTARE can provide to help you include:

- Allowing you to set up your own dashboard and then drill down in the details of the errors
- See what tapes jobs were backed up to regardless of the complexity of the environment
- Prove your audit trail by documenting what you've done to resolve issues including opening trouble tickets
- Create audit groups to see only the servers under review

Sample Screen Shots

Job Summary Report

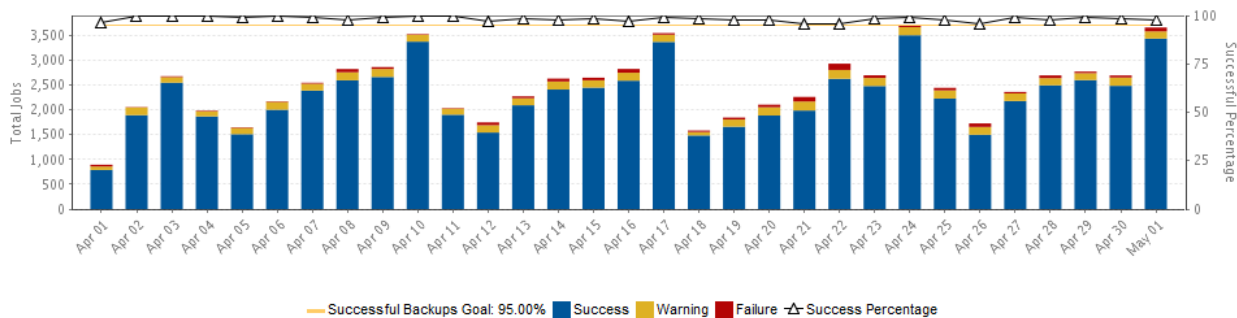
Server Group=Global Storage Infrastructure | May 01, 2013 12:00:00AM - May 01, 2013 11:59:59PM

Page 1 displaying 1,000 Jobs [Next](#)

Client	Server	Product	Type	Start Date	Finish Date	Duration	MBytes	MBytes/Sec	Exit Code	# of Files	Tapes
lance	cindy	Legato NetWorker	Full	May 01, 2013 04:07:25AM	May 01, 2013 12:16:25PM	08:09:00	125,339.71	4.27	Successful	82	000016, 000102, 000292
Kissimmee	Aptare	Tivoli Storage Manager	Command	May 01, 2013 05:25:49AM	May 01, 2013 03:34:14PM	10:08:25	147,666.69	4.05	Successful	984	
Deland	Aptare	Tivoli Storage Manager	Command	May 01, 2013 05:26:35AM	May 01, 2013 11:46:39AM	06:20:04	41,525.38	1.82	Successful	236	
Deerfield	Aptare	Tivoli Storage Manager	Command	May 01, 2013 05:29:00AM	May 01, 2013 01:35:45PM	08:06:45	144,026.47	4.93	Successful	1,093	
Gainesville	Aptare	Tivoli Storage Manager	Command	May 01, 2013 05:31:17AM	May 01, 2013 02:14:29PM	08:43:12	119,660.48	3.81	Successful	746	
Delray	Aptare	Tivoli Storage Manager	Command	May 01, 2013 05:31:38AM	May 01, 2013 03:13:48PM	09:42:10	162,568.88	4.65	Successful	761	
Altmore	Aptare	Tivoli Storage Manager	Command	May 01, 2013 06:25:15AM	May 01, 2013 07:53:04PM	13:27:49	113,451.25	2.34	Successful	475	
disney	cindy	Legato NetWorker	Full	May 01, 2013 07:06:25AM	May 01, 2013 01:22:25PM	06:16:00	213,843.95	9.47	Successful	1,947,777	000066, 000076, 000647
houdini	cindy	Legato NetWorker	Full	May 01, 2013 07:07:25AM	May 01, 2013 03:30:25PM	08:23:00	195,896.53	6.49	Successful	1,208,705	000102, 000218, 000374, 000683
crystal	cindy	Legato NetWorker	Full	May 01, 2013 07:07:25AM	May 01, 2013 02:49:25PM	07:42:00	194,338.62	7.01	Successful	786,590	000074, 000610
miter	cindy	Legato NetWorker	Full	May 01, 2013 07:08:25AM	May 01, 2013 01:23:25PM	06:15:00	218,962.06	9.73	Successful	642,573	000102, 000218, 000374, 000683
chamberlin	seattle	HP Data Protector	Full	May 01, 2013 07:26:42AM	May 01, 2013 04:49:56PM	09:23:14	53,579.52	1.59	Successful	1,034,617	
marcusbakar	seattle	HP Data Protector	Full	May 01, 2013 08:22:07AM	May 01, 2013 01:13:45PM	04:51:38	19,616.83	1.12	Successful	76,371	
Leggett	Aptare	Tivoli Storage Manager	Incr Backup	May 01, 2013 09:24:48AM	May 01, 2013 01:35:25PM	04:10:37	0.00	N/A	Successful	0	
saintelias	seattle	HP Data Protector	Full	May 01, 2013 09:51:53AM	May 01, 2013 01:57:41PM	04:05:48	23,495.46	1.59	Successful	57,160	
kimball	seattle	HP Data Protector	Full	May 01, 2013 10:04:14AM	May 01, 2013 12:29:42PM	02:25:28	13,344.55	1.53	Successful	69,141	
wrangell	seattle	HP Data Protector	Full	May 01, 2013 10:06:58AM	May 01, 2013 12:20:24PM	02:13:26	7,116.56	0.89	Successful	38,607	
humphreys	seattle	HP Data Protector	Full	May 01, 2013 10:20:00AM	May 01, 2013 04:13:32PM	05:53:32	23,653.62	1.12	Successful	107,048	
hayes	seattle	HP Data Protector	Full	May 01, 2013 10:31:53AM	May 01, 2013 12:42:16PM	02:10:23	9,374.28	1.20	Successful	77,053	
Tehachapi	Aptare	Tivoli Storage Manager	Command	May 01, 2013 10:46:15AM	May 01, 2013 12:53:12PM	02:06:57	83,843.88	11.01	Successful	17	

Backup Status SLA

Server Group=Global Storage Infrastructure | Apr 01, 2013 12:00:00AM - May 01, 2013 11:59:59PM



Remedial Action Dashboard

Server Group=Global Storage Infrastructure | Mar 01, 2013 12:00:00AM - May 02, 2013 12:00:00AM

Total Row(s): 33

Backup Server	Client	First Start Date	Last Finish Date	Job Count	Status Code(s)	Remediation Action
aptarenbu-win	PRODENCATMCS1W	Mar 21, 2013 03:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	smsuc0-new	Mar 21, 2013 07:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	Prodvdmtp9w	Mar 21, 2013 05:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	PRODEXFE5W	Mar 21, 2013 05:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	PRODEXFE3W	Mar 21, 2013 05:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	prodplate1w	Mar 21, 2013 03:28:54PM	Apr 01, 2013 01:28:54AM	23	30901	
aptarenbu-win	PRODVDMTP8W	Mar 21, 2013 03:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	PRODVDMTP6W	Mar 21, 2013 03:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	prodexmbx1w.eagle.ewidgets.com	Mar 21, 2013 05:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	prodexha01w	Mar 21, 2013 03:28:54PM	Apr 01, 2013 01:28:54AM	22	30901	
aptarenbu-win	PRODENCFLHA3W	Mar 21, 2013 05:28:54PM	Apr 01, 2013 01:28:54AM	11	30901	
aptarenbu-win	testqmdccdenc1w	Mar 21, 2013 05:28:55PM	Mar 31, 2013 05:45:35PM	11	30999	APTARE Demonstration: open ticket 123 Mandar Kulkarni: Case is being worked on by Engineer APTARE Demonstration: work continues APTARE Demonstration: work continues APTARE Demonstration: closing tkt APTARE Demonstration: Append 2nd note
aptarenbu-win	PRODQMSA12LND1W	Mar 21, 2013 05:28:55PM	Mar 31, 2013 05:42:02PM	11	30999	

Mission Control

Server Group=Global Storage Infrastructure | Apr 25, 2013 12:00:00AM - May 08, 2013 01:50:36PM

Total Row(s): 1349

Name	Apr 25	Apr 26	Apr 27	Apr 28	Apr 29	Apr 30	May 01	May 02	May 03	May 04	May 05	May 06	May 07	May 08
alex	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Alton	●	●	●	●	●	○	●	●	●	●	○	○	○	○
Anaheim	●	●	●	●	●	●	●	●	●	●	●	●	○	○
andy	○	○	○	○	○	○	○	○	○	○	○	○	○	○
▶ angel123	●	●	○	○	●	●	●	●	○	○	●	○	○	○
▶ angol	●	●	●	●	●	●	●	●	●	●	●	○	○	○
▶ anna	●	●	○	○	●	●	●	●	○	○	○	○	○	○
Anniston	●	●	●	●	●	●	●	●	○	○	●	○	○	○
▶ antarctic	●	●	●	●	●	●	●	●	●	●	●	○	○	○
▶ antigua	●	●	●	●	●	●	●	●	●	●	●	○	○	○
Antioch	●	●	●	●	●	●	○	●	●	○	●	○	○	○
▶ apollo	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Aptare	●	●	●	●	●	●	●	●	●	●	●	●	○	○
▶ aptarebue11d	●	●	●	●	●	●	●	●	●	●	●	○	○	○
▶ aptaredev1	●	●	●	●	●	●	●	●	●	●	●	○	○	○
▶ aptaredev2	●	●	●	●	●	●	●	●	●	●	●	○	○	○
▶ aptarew2003-external	●	●	●	●	●	●	●	●	●	●	●	○	○	○
Arcata	●	●	●	●	●	●	○	○	○	○	○	○	○	○
Atascadero	●	●	●	●	●	●	●	●	●	○	●	○	○	○
▶ atlantic	●	●	●	●	●	●	●	●	●	●	●	○	○	○
Atmore	●	●	○	○	○	○	○	○	○	○	○	○	○	○
▶ augusta	●	●	●	●	●	●	●	●	●	○	○	○	○	○
▶ aussie	●	●	○	○	○	○	○	○	○	○	○	○	○	○
▶ austria	●	●	●	●	●	●	●	●	●	○	○	○	○	○
▶ azerbaijan	●	●	●	●	●	●	●	●	●	●	●	○	○	○
babe	○	○	○	○	○	○	○	○	○	○	○	○	○	○
▶ baby	●	●	○	○	○	○	○	○	○	○	○	○	○	○
backupexec1	●	●	●	●	●	●	●	●	●	●	●	○	○	○

Conclusion

Compliance requirements are only getting more complex. Organizations spin their wheels and spend precious IT resources to compile compliance reports; resources that can be better utilized on more strategic projects. However, sustainable compliance can be achieved. APTARE provides organizations with a central storage reporting tool that automatically collects backup information across platforms in real time. The data is stored in a secure and scalable database where it can be exported in the form of compliance reports for both internal and external stakeholders.

Visit APTARE.com to learn how StorageConsole solutions can help streamline and maximize your compliance reporting efforts.