



DATA RESILIENCY CHECKLIST

**Critical Questions To Assess Backup
Operations Protections**

INTRODUCTION

Enterprise IT organizations are working at breakneck speeds to enact virtualization and cloud transformations to meet everyday business demands. The focus on these broader IT infrastructure evolutions often comes with a blind spot: backup operations. While assumptions may be made that new data protection technologies are “good enough” at ensuring compliance and data resiliency, verifying that this is the case can be the difference between weathering a major data loss and finding your organization under major customer, investor, and regulatory scrutiny.

IT infrastructure leaders can leverage simple yet pointed questions to identify just how effective their teams’ tools and protocols are at protecting data and ensuring that it is available for key recovery events. “Yes” or “No” answers will isolate weaknesses in day-to-day operations, audit readiness, and holistic oversight that will need to be shored up before leaders can feel confident that data is fully protected.

QUESTIONS TO ASSESS YOUR BACKUP OPERATIONS PROTECTIONS:

1. Are All Of Our Key Resources & Assets Being Backed Up?
2. Are We Backing Up Data According To The Right Protocols?
3. Are We Regularly Meeting Our Backup Success Goals?
4. Can We Definitely Pass Our Next Backup Audit...And Can We Do It Efficiently?
5. Does Our Backup Team Fix Problems Quickly...And Can We Prove It?

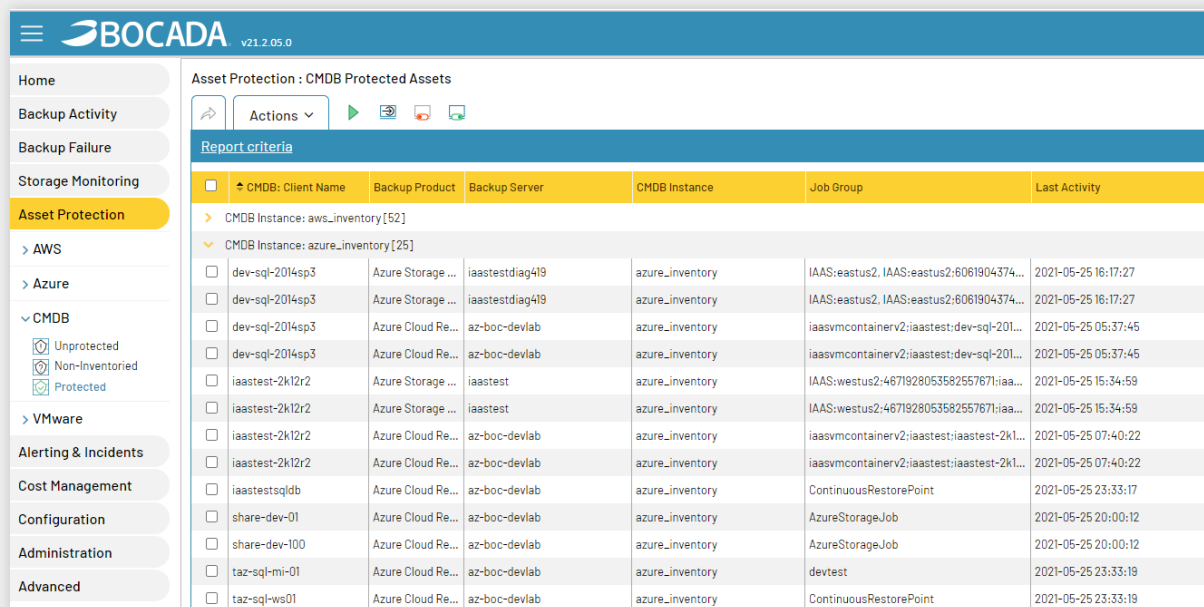
1. Are All Of Our Key Resources & Assets Being Backed Up?

How confident are you that all of your organization's resources and assets are actually being backed up? The speed with which assets are created, and the breadth of teams empowered to create those assets, can often mean that resources are left wholly unprotected.

Regardless of how asset records are kept—using asset inventory software, creating propriety in-house databases, relying on CSV files—data protection teams need a way to efficiently review backup logs, compare them against asset lists, and determine if those assets are actually being backed up.

Tackling this manually is so time intensive that teams doing this work will only do it once or twice a year. Further, the inherent human error involved in the process likely means many unprotected assets are left unidentified. However, by leveraging automated cross-referencing and reporting processes, teams can quickly, effectively, and comprehensively identify unprotected assets and develop ready-made punch lists to use for further investigation.

Unprotected Asset Report



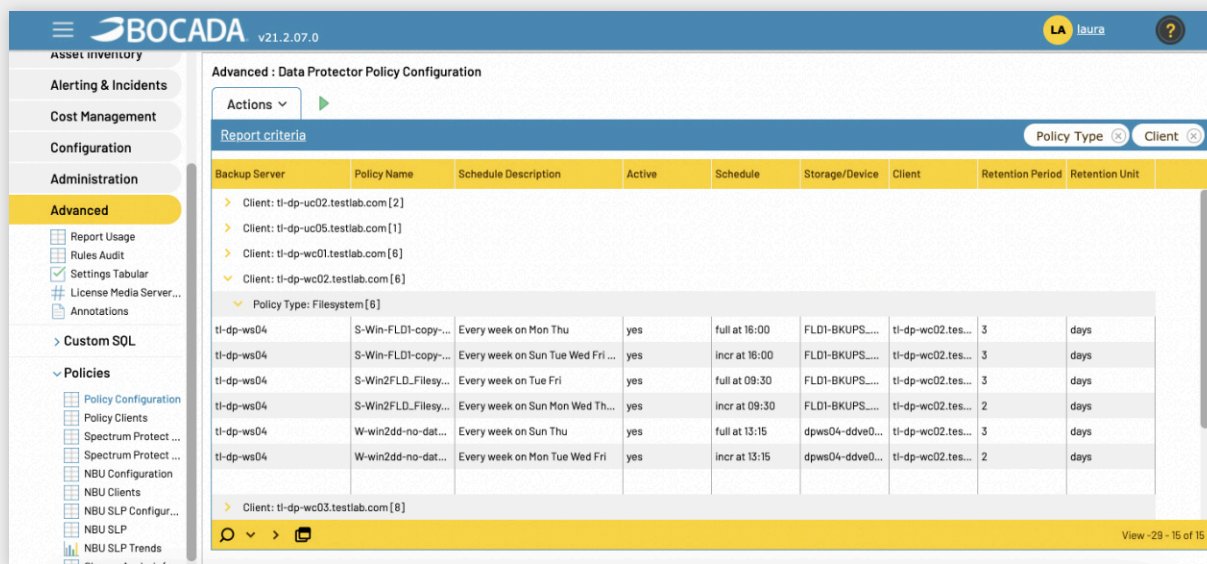
CMDB Client Name	Backup Product	Backup Server	CMDB Instance	Job Group	Last Activity
dev-sql-2014sp3	Azure Storage ...	iaastestdiag419	azure_inventory	IAAS: eastus2, IAAS: eastus2:6061904374...	2021-05-25 16:17:27
dev-sql-2014sp3	Azure Storage ...	iaastestdiag419	azure_inventory	IAAS: eastus2, IAAS: eastus2:6061904374...	2021-05-25 16:17:27
dev-sql-2014sp3	Azure Cloud Re...	az-boc-devlab	azure_inventory	iaasvmcontainerv2:iaastest:dev-sql-201...	2021-05-25 05:37:45
dev-sql-2014sp3	Azure Cloud Re...	az-boc-devlab	azure_inventory	iaasvmcontainerv2:iaastest:dev-sql-201...	2021-05-25 05:37:45
iaastest-2k12r2	Azure Storage ...	iaastest	azure_inventory	IAAS: westus2-4671928053582557671:iaa...	2021-05-25 15:34:59
iaastest-2k12r2	Azure Storage ...	iaastest	azure_inventory	IAAS: westus2-4671928053582557671:iaa...	2021-05-25 15:34:59
iaastest-2k12r2	Azure Cloud Re...	az-boc-devlab	azure_inventory	iaasvmcontainerv2:iaastest:iaastest-2k1...	2021-05-25 07:40:22
iaastest-2k12r2	Azure Cloud Re...	az-boc-devlab	azure_inventory	iaasvmcontainerv2:iaastest:iaastest-2k1...	2021-05-25 07:40:22
iaastestsqldb	Azure Cloud Re...	az-boc-devlab	azure_inventory	ContinuousRestorePoint	2021-05-25 23:33:17
share-dev-01	Azure Cloud Re...	az-boc-devlab	azure_inventory	AzureStorageJob	2021-05-25 20:00:12
share-dev-100	Azure Cloud Re...	az-boc-devlab	azure_inventory	AzureStorageJob	2021-05-25 20:00:12
taz-sql-mi-01	Azure Cloud Re...	az-boc-devlab	azure_inventory	devtest	2021-05-25 23:33:19
taz-sql-ws01	Azure Cloud Re...	az-boc-devlab	azure_inventory	ContinuousRestorePoint	2021-05-25 23:33:19

2. Are We Backing Up Data According To The Right Protocols?

There are clear cut guidelines set internally by IT security teams or externally by government regulators around what data needs to be backed up, and how often. No doubt your backup team knows this. However, with new servers and resources spun up so quickly by assorted IT teams and personnel, are you sure your backup team has had a chance to put the right protocols in place?

Checking this manually is not feasible. The sheer scale of backup clients in an enterprise environment means it's next-to-impossible to check all backup clients and their corresponding backup policies. Automating this process, however, changes the game entirely. By leveraging solutions to automatically check all backup clients and their policies, IT teams have an efficient way to confirm that backups are fully aligned with compliance regulations... or that backup policy updates are needed immediately.

Backup Policy Configuration Report



Advanced : Data Protector Policy Configuration

Report criteria: Policy Type (x) Client (x)

Backup Server	Policy Name	Schedule Description	Active	Schedule	Storage/Device	Client	Retention Period	Retention Unit
Client: ti-dp-uc02.testlab.com [2]								
Client: ti-dp-uc05.testlab.com [1]								
Client: ti-dp-wc01.testlab.com [6]								
Client: ti-dp-wc02.testlab.com [6]								
Policy Type: Filesystem [6]								
ti-dp-ws04	S-Win-FLD1-copy...	Every week on Mon Thu	yes	full at 16:00	FLD1-BKUPS...	ti-dp-wc02.tes...	3	days
ti-dp-ws04	S-Win-FLD1-copy...	Every week on Sun Tue Wed Fri ...	yes	incr at 16:00	FLD1-BKUPS...	ti-dp-wc02.tes...	3	days
ti-dp-ws04	S-Win2FLD...Filesy...	Every week on Tue Fri	yes	full at 09:30	FLD1-BKUPS...	ti-dp-wc02.tes...	3	days
ti-dp-ws04	S-Win2FLD...Filesy...	Every week on Sun Mon Wed Th...	yes	incr at 09:30	FLD1-BKUPS...	ti-dp-wc02.tes...	2	days
ti-dp-ws04	W-win2dd-no-dat...	Every week on Sun Thu	yes	full at 13:15	dpws04-ddve0...	ti-dp-wc02.tes...	3	days
ti-dp-ws04	W-win2dd-no-dat...	Every week on Mon Tue Wed Fri	yes	incr at 13:15	dpws04-ddve0...	ti-dp-wc02.tes...	2	days
Client: ti-dp-wc03.testlab.com [8]								

View -29 - 15 of 15

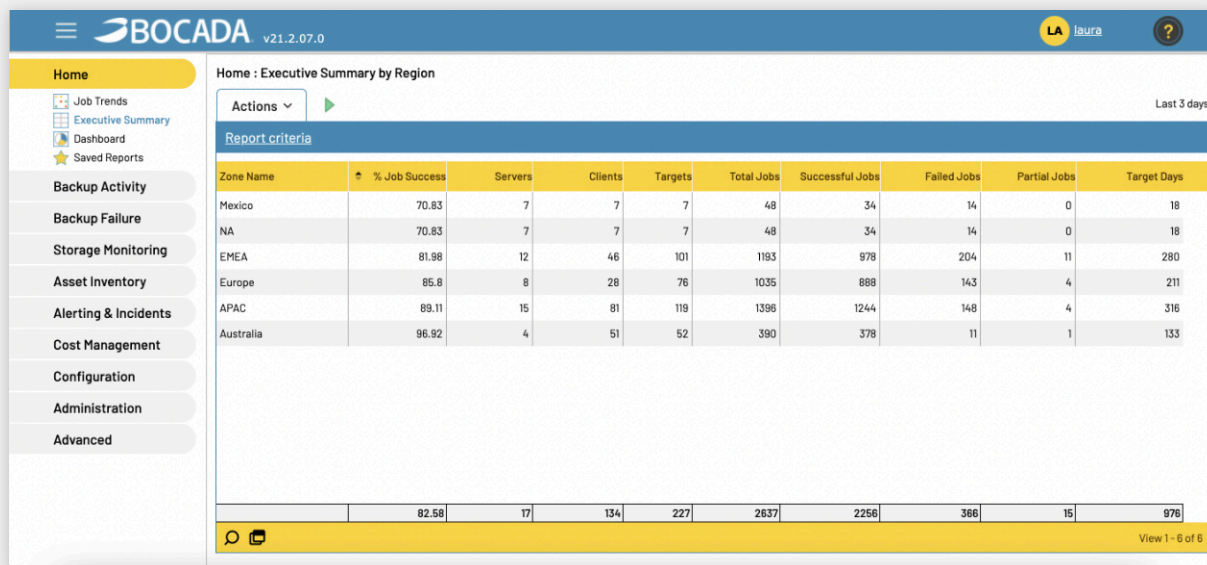
3. Are We Regularly Meeting Our Backup Success Goals?

Enterprise-scale backup environments aren't just massive in size but also unique in how different segments of the environment are managed. Can you say with confidence that each distinct part of your organization's environment—cloud vs on-prem, different business units, unique backup servers, geographic regions—is equally well protected?

Relying on piecemeal reports from different backup products or team members likely means receiving data in many different formats with a host of different metrics shown. It's scattered, inconsistent, and offers little insight into whether any teams or segments are continually underperforming.

Aggregating all of this in a normalized way via a single dashboard removes this operational uncertainty. You can quickly and easily assess backup data health, pinpoint segments that are lagging behind benchmarks, and guide data protection teams to install protocols that ensure data is fully protected and restorable.

Executive Summary Report



Zone Name	% Job Success	Servers	Clients	Targets	Total Jobs	Successful Jobs	Failed Jobs	Partial Jobs	Target Days
Mexico	70.83	7	7	7	48	34	14	0	18
NA	70.83	7	7	7	48	34	14	0	18
EMEA	81.98	12	46	101	1193	978	204	11	280
Europe	85.8	8	28	76	1035	888	143	4	211
APAC	89.11	15	81	119	1396	1244	148	4	316
Australia	96.92	4	51	52	390	378	11	1	133
	82.58	17	134	227	2637	2256	366	15	976

4.

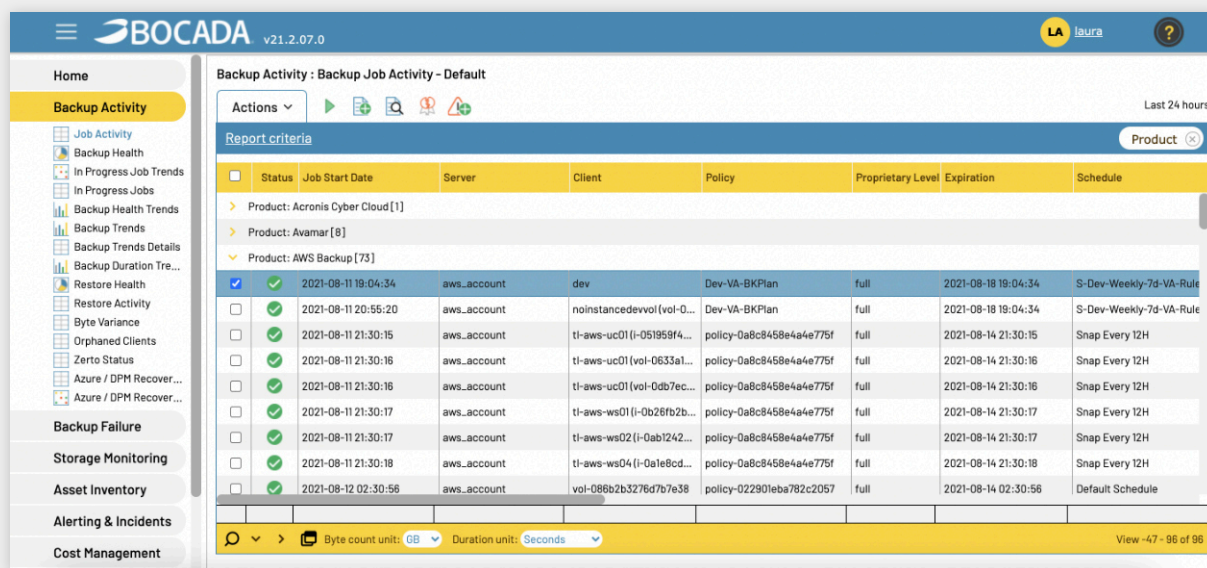
Can We Definitely Pass Our Next Backup Audit...And Can We Do It Efficiently?

The next time an auditor asks for the backup records from a particular server over a particular time frame, how long will it take your team to fulfill that request? And, will they be able to?

Going one by one into each backup server, extracting backup metadata, and then consolidating that data into clean, well-formatted reports is extremely time intensive. Further, it assumes the data is even available, which is often not the case given backup products' short data retention periods.

However, when teams rely on tools to automatically collect and retain backup servers' historical data on an ongoing basis, and consolidate that data under a single dashboard, they will be well-equipped to quickly and effectively respond to auditor requests. Personnel can then spend less time on audits and more time on daily operations monitoring.

Backup Job Activity Report



Status	Job Start Date	Server	Client	Policy	Proprietary Level	Expiration	Schedule
Success	2021-08-11 19:04:34	aws_account	dev	Dev-VA-BKPlan	full	2021-08-18 19:04:34	S-Dev-Weekly-7d-VA-Rule
Success	2021-08-11 20:55:20	aws_account	noinstantdevvol (vol-0...	Dev-VA-BKPlan	full	2021-08-18 19:04:34	S-Dev-Weekly-7d-VA-Rule
Success	2021-08-11 21:30:15	aws_account	ti-aws-uc01 (i-051959f4...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:15	Snap Every 12H
Success	2021-08-11 21:30:16	aws_account	ti-aws-uc01 (vol-0633a1...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:16	Snap Every 12H
Success	2021-08-11 21:30:16	aws_account	ti-aws-uc01 (vol-0db7ec...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:16	Snap Every 12H
Success	2021-08-11 21:30:17	aws_account	ti-aws-ws01 (i-0b26fb2b...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:17	Snap Every 12H
Success	2021-08-11 21:30:17	aws_account	ti-aws-ws02 (i-0ab1242...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:17	Snap Every 12H
Success	2021-08-11 21:30:18	aws_account	ti-aws-ws04 (i-0a1e8cd...	policy-0a8c8458e4a4e775f	full	2021-08-14 21:30:18	Snap Every 12H
Success	2021-08-12 02:30:56	aws_account	vol-086b2b3276d7b7e38	policy-022901eba782c2057	full	2021-08-14 02:30:56	Default Schedule

5.

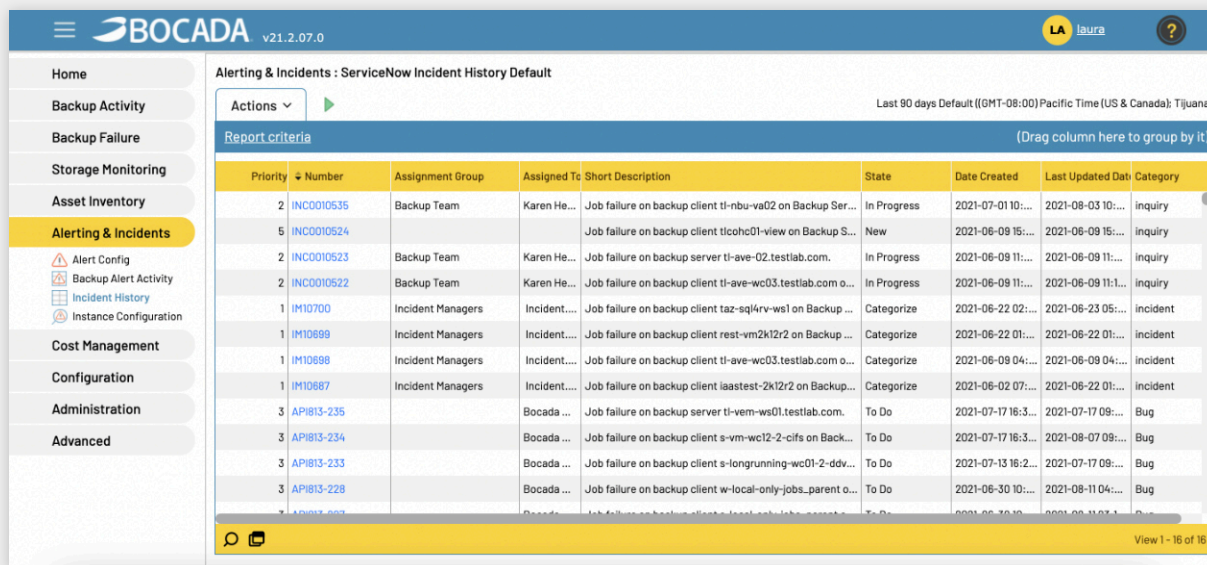
Does Our Backup Team Fix Problems Quickly...And Can We Prove It?

Data backups will fail at some point in time. It's an inevitable part of backup operations, but something that stands in the way of keeping data protected and restorable. Do you know how long it takes to fix those failures to ensure data resiliency?

Typical failure remediation lag times are the result of many bottlenecks inherent in the remediation process: identifying that a backup job run on a critical asset failed, populating a ticket with relevant details about that failure in a ticketing system, and monitoring the process of resolving the underlying issues.

Addressing these bottlenecks through automation greatly improves those lag time. Failures can be readily identified and tickets created in near-real time. This optimizes team labor hours around improving operations and keeping assets protected, all while shoring up the average resolution window. Further, by keeping track of typical resolution windows, teams can develop benchmarks around times to beat for fixing failure issues.

Backup Failure Ticket Monitoring



Priority	Number	Assignment Group	Assigned To	Short Description	State	Date Created	Last Updated Date	Category
2	INC0010535	Backup Team	Karen He...	Job failure on backup client ti-nbu-va02 on Backup Ser...	In Progress	2021-07-01 10:...	2021-08-03 10:...	Inquiry
5	INC0010524	Backup Team	Karen He...	Job failure on backup client ticohc01-view on Backup S...	New	2021-06-09 15:...	2021-06-09 15:...	Inquiry
2	INC0010523	Backup Team	Karen He...	Job failure on backup server ti-ave-02.testlab.com.	In Progress	2021-06-09 11:...	2021-06-09 11:...	Inquiry
2	INC0010522	Backup Team	Karen He...	Job failure on backup client ti-ave-wc03.testlab.com o...	In Progress	2021-06-09 11:...	2021-06-09 11:1...	Inquiry
1	IM10700	Incident Managers	Incident....	Job failure on backup client taz-sql4rv-ws1 on Backup ...	Categorize	2021-06-22 02:...	2021-06-23 05:...	Incident
1	IM10699	Incident Managers	Incident....	Job failure on backup client rest-vm2k12r2 on Backup ...	Categorize	2021-06-22 01:...	2021-06-22 01:...	Incident
1	IM10698	Incident Managers	Incident....	Job failure on backup client ti-ave-wc03.testlab.com o...	Categorize	2021-06-09 04:...	2021-06-09 04:...	Incident
1	IM10687	Incident Managers	Incident....	Job failure on backup client laatest-2k12r2 on Backup...	Categorize	2021-06-02 07:...	2021-06-22 01:...	Incident
3	API813-235		Bocada ...	Job failure on backup server ti-rem-ws01.testlab.com.	To Do	2021-07-17 16:3...	2021-07-17 09:...	Bug
3	API813-234		Bocada ...	Job failure on backup client s-vm-wc12-2-clfs on Back...	To Do	2021-07-17 16:3...	2021-08-07 09:...	Bug
3	API813-233		Bocada ...	Job failure on backup client s-longrunning-wc01-2-ddv...	To Do	2021-07-13 16:2...	2021-07-17 09:...	Bug
3	API813-229		Bocada ...	Job failure on backup client w-local-only-jobs.parent o...	To Do	2021-06-30 10:...	2021-08-11 04:...	Bug

CONCLUSION

Several certainties exist in enterprise IT infrastructure operations. Bad actors will continually try to penetrate infrastructures with cyberattacks...all while auditors continually request evidence that data is secure and restorable in the event of an attack or regulatory query. These ever-present dynamics mean IT infrastructure leaders must assess just how resilient their IT operations are at safeguarding data and seek practices and tools that support comprehensive data protection.

Introducing automation, centralized monitoring, and proactive alerting and triaging addresses this reality head on. It empowers data protection teams to quickly identify issues that stand in the way of successful data restorations, business continuity, and ongoing audits, all while giving IT infrastructure leaders the assurances they need that data protection operations are secure.



About Bocada

Bocada LLC, a global IT automation leader, delivers backup reporting and monitoring solutions that give enterprises complete visibility into their backup performance. Bocada provides insight into complex backup environments, enabling IT organizations to save time, automate ongoing reporting activities, and reduce costs. With the largest installed customer base in the Fortune 500, Bocada is the world's leading provider of backup reporting automation.

For more information, visit [**www.bocada.com**](http://www.bocada.com)