



Everything you wanted to know about Continuous Data Protection, but were afraid to ask.

FIVE REASONS FOR GETTING STARTED WITH CDP NOW.

BY RANDY M. BOWIE



Server Backup Whitepaper

When it comes to backup, one of the first questions on the table is how frequently your backups should occur. This seemingly simple question can actually have a complex answer, since it depends on how critical the data is and whether frequent backups will impede systems performance. Continuous Data Protection (CDP) increasingly factors into the backup discussion, but misunderstandings about CDP can just add confusion to what's already a complex situation.

So let's simplify things a bit.

1. What is Continuous Data Protection, and do I really need it?

As the name implies, continuous data protection (CDP) is a backup process that automatically saves a copy of changes made to data in real- or near real-time. The main benefit of CDP is its ability to enable recovery of data at the point just prior to the time when things went bad: when a virus was introduced, data became corrupted, etc. With CDP, there's no more having to go back to last night's, or last Friday's, backup and lose all the work that's been done between then and now. Whether you need it or not depends, of course, on the importance of the data, and on your organization's Recovery Point Objective (RPO) for that data. But with data growing in value, and more and more work being done digitally, all organizations should consider it.

2. What's the difference between "true CDP" and "near CDP," and which one makes sense for me?

There is an ongoing industry debate over the definition of CDP. The debate comes down to whether the backup granularity must be at the every write level, or whether backup can occur at a user-set interval that, while it's not every write, is far shorter than standard backup intervals, which are typically days (or even weeks). Out of this distinction has emerged two terms, true CDP and near CDP. True CDP adheres to the every write definition. Near CDP allows for a far broader definition – there are even some vendors categorizing their products as near CDP when their backup interval is as "ungranular" as 24-hours.

As for the question, "which one makes sense for me?", for streaming data, true CDP may be the right solution. But if you're backing up transaction or file-oriented, there's no effective difference between true CDP and near CDP in terms of protecting your data, and it makes no sense to pay extra for true CDP, or suffer the performance hit that typically comes with it.

JUST HOW TRUE IS "TRUE CDP"?

From Idera's viewpoint, true CDP must offer no more than one-second granularity between recovery points, which pretty much restricts true CDP to a Storage Area Network (SAN). Further, true CDP is more or less limited to streaming-type applications, and is not relevant for most servers, which tend to be transaction or file oriented – emails, documents, database, all of these end up as File System I/O. True CDP applications do not see changes written to the SAN until the operating system flushes its disk cache. Without getting into an overlong technical explanation, in order to really live up to the promise of being true CDP, the disk cache would have to be flushed after every change, which will seriously degrade performance.

Practically speaking, then, true CDP does not end up operating in real- life with one second granularity. Meanwhile, near CDP incorporates user-scheduled synchronizations. Realistically, these can be performed every 15 minutes, which minimizes the chance for data loss without losing any performance.

3. I don't want a backup solution that's going to take a long time and kill my servers' performance. Could that happen with CDP?

Near CDP, unlike true CDP, is not a performance-killer. Nor does it have to take a long time. That said, all CDP products are not created equal. With Idera Server Backup Manager, incremental backups are done at the block level, rather than at the file level. When compared to file-based full and incremental backups, this shortens backup windows and reduces I/O. Backups are so fast and lightweight that you can run them during the day, while your servers are in use, without impacting performance.

4. I have thousands of servers, physical and virtual, running Windows and Linux. Can CDP handle this?

When the CDP's done with Idera Server Backup Manager it can.

With Idera Backup Server Manager, you can manage thousands of servers with one web-based enterprise console. Idera Server Backup Manager has an extensible architecture, enabling you to easily add repositories as your needs grow. And Server Backup Manager provides multi-platform support: physical, virtual, Windows, Linux – Idera Server Backup can handle them all, covering the most popular virtualized platforms, including VMWare, Hyper-V, Citrix Xen, XenSource, Virtuozzo and KVM; MS SQL Server (2012, 2008 R2, 2008, 2005) and Express databases, plus complete server backup for MS Exchange Server 2013, 2010, and 2007.

And you can take care of all of your servers without overwhelming your IT resources. [Idera Server Backup Manager is quick to install, and easy to use.](#)

5. CDP sounds expensive, is it?

Not with Idera Server Backup Manager. Our goal is to make it affordable for you to backup all your servers, even the ones you may have been neglecting because of the high price of enterprise backup solutions. With Idera, you can get started with 5 physical servers for just \$1495.00 or 25 virtual servers for just \$3495.00 with no additional charge for SQL Server, MySQL, or Exchange.

And Idera Server Backup Manager is proven, protecting over 275,000 servers in some of the world's largest (and smallest) data centers.

With Server Backup Manager, we've made the complex simple and easy to use, enabling our customers to have the security and peace of mind that CDP offers, without the performance and financial costs.

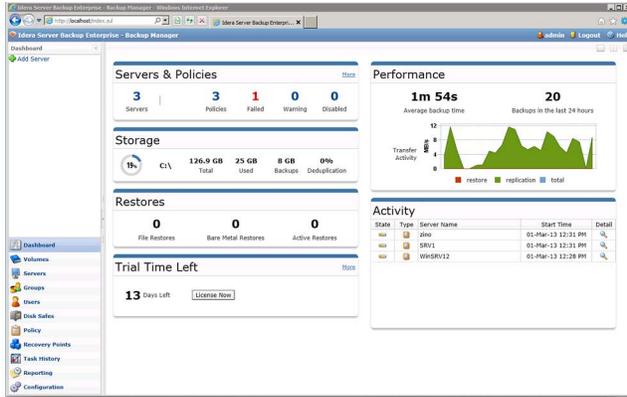
AUTHOR BIO

Randy M. Bowie
Senior Director of Engineering

Randy Bowie joined the Idera Server Backup team in 2012, bringing expertise in the delivery of solutions for the IT enterprise. Randy is currently responsible for the research and development organization at Idera.

Randy has spent the past 13 years working with the best teams in the industry at Idera, NetIQ, and PentaSafe to deliver award-winning solutions for security, systems management, configuration control and compliance.

Randy holds a Master of Science with emphasis on Mechanical Engineering from the University of Mississippi where he studied computational fluid dynamics.



TRY IDERA'S SERVER BACKUP MANAGER —14 DAYS FREE

Now that you've learned about what to look for in a Continuous Data Protection backup solution, here's a fast, proven, affordable way to keep your data nice and safe with Idera's Server Backup Manager. Back up in minutes, not hours with Continuous Data Protection while protecting physical and virtual servers, Windows and Linux. Get quick restores, from single files to Bare-Metal restore. [Try it for 14 days free.](#)

Idera is headquartered in Houston, TX with offices in London and Melbourne.

US +1 713 523 4433
877 GO IDERA (464 3372)

EMEA +44 (0) 1753 218410

APAC +61 1300 307 211

MEXICO +52 (55) 8421 6770

BRAZIL +55 (11) 3230 7938

WEB www.idera.com

TWITTER www.twitter.com/Idera_Software

FACEBOOK www.facebook.com/IderaSoftware

LINKEDIN <http://www.linkedin.com/company/idera-software>



Server Backup