## Cohesity DataPlatform Protecting Individual MS SQL Databases Solution Guide

5

Abstract

This solution guide outlines the workflow for creating backups with Microsoft SQL Server databases and Cohesity Data Platform.

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## About this Guide

This paper details the steps for protecting individual MS SQL Server Databases. IT administrators are defined as individuals who have the role of managing storage and data protection of applications (virtual or physical) in a data center. Databases administrators are individuals who have the purpose of managing Microsoft SQL Servers.

#### **Intended Audience**

This paper is written for IT administrators and DBAs familiar with managing data protection of Microsoft SQL Server. Cohesity recommends having familiarity with the following:

- <u>Cohesity DataProtection</u>: Cohesity DataProtection is an end-to-end data protection solution that is fully converged on Cohesity DataPlatform.
- Microsoft SQL Server: Microsoft SQL Server is a relational database management system, which supports a wide variety of transaction processing, business intelligence and analytics applications.

The Microsoft SQL Server referenced in this paper has the following resources

- Windows Server 2012 R2
- 8 vCPU cores
- 8 GB RAM
- 2 x iSCSI disks
- Microsoft SQL Server 2014 (X64) Enterprise ED.

## Configuration Overview

Cohesity supports backing up MS SQL Server running on VMware and Physical Servers. The Cohesity Cluster captures Full Database Server Backup and can optionally backup database transaction logs, so you can roll forward to any point in time. To learn more about the relationship between Protection Jobs and Policies, see <u>About Policies and Protection Jobs</u>. For instructions on how to use the Cohesity Dashboard to backup MS SQL Server, see <u>Add or Edit Protection Job to Protect</u> <u>Microsoft SQL Server</u>.

### Feature Overview

There are many reasons to protect individual MS SQL Server databases. Some have a higher priority than others, like mission critical databases. These may require more frequent backups, a different schedule, or a different retention period.

The Cohesity SQL Physical agent has been enhanced to protect individual MS SQL Server databases. Cohesity DataProtect now provides the ability to select multiple individual databases, and individual databases across different servers for protection under Cohesity. It supports both Standalone and SQL cluster (FCI) environment.

### Installing Cohesity Windows Agent

The Agent is the Cohesity software that you install on physical servers and certain VM hypervisors to enable Cohesity to protect them.

The Cohesity Agent has been enhanced to protect individual databases by tracking the changes at the file level. It uses the FileSystem Change Block Tracker (CBT) driver to capture changes to database files. The Cohesity Agent is not automatically upgraded. A new agent should be manually downloaded from the Cohesity Cluster.

#### **Download Cohesity Agent**

Log into the Windows host server with an Administrator level account. Use the internet browser to connect with your Cohesity Cluster. Login into the Cohesity Cluster UI. Navigate to Protection->Sources-> "Download Physical Agent" and download the agent, see figure 1. For more details please refer to Cohesity document <u>Install and Manage the Agent on Windows Servers</u>.

C	OHESITY sv4	-dell33-c4-ve01 🗸 Prot	ection Monitoring	Platform Admin	More 🗸	? AD
So	urces				Download Physical Agents	Register Source -
	1 Registered Source	28 Total Ob	0 jects Pro	3 tected Objects	277 Unprotected Objects	73.5 TİB Total Size
	Source Name	Source Type vCenter	Registered Jun 29, 2018 3:17	Pm Jul 18, 2	ed Obje 2018 4:39am 280	cts Size Protecte 73.5 TiB 100 GiB
					© 2018 Cohesity Sup	port Help RESTAPI Download (

Figure 1 - Download Cohesity Physical Agent

#### Select Cohesity Windows Agent Type

From the "Download Agents" window, choose the Windows Agent. Ensure the Agent has been downloaded to the Server you want to protect.

Download Agents	×
You must install the Cohesity Agent on Servers t installing the Agent and registering the Server w up by Cohesity.	hat will be protected by Cohesity. After ith Cohesity, that Server's data can be backed
Agent	
Windows	+
Linux	4
AIX	4
Figure 2 - Cohesit	y Windows Agent

It is not necessary to uninstall an existing Cohesity Agent if one exists. The installation will update the Cohesity Agent. And in the case of an existing agent, no reboot is required. For first time installs, the Cohesity Agent comes complete with all current enhancements.

#### Install the Cohesity Agent

As an administrator with local system privileges on the Microsoft SQL Server, run the executable and complete the installation wizard.



Figure 3 - Cohesity Agent Setup

#### **Cohesity Agent Setup**

By default, the **Volume CBT** (Changed Block Tracker) component is selected for installation. This component is required to perform incremental backups and requires a reboot to function. Without a reboot, only Full backups can be performed on the server.

The **File System CBT** (Changed Block Tracker) component is required for MS SQL file-based protection. There is no system reboot required for File System CBT installation on MS SQL Servers that have not been registered with Cohesity DataProtect (i.e. new MS SQL Servers protected with Cohesity DataProtect.)

Select Components and Install What components would you like	ation Location to install and where?		S
Add-on Components			
Volume CBT (Changed Block T This is required in order to perform	<b>Tracker)</b> n incremental backup of volume	s. Server restart	required.
File System CBT (Changed Blo This is required for incremental bac Server 2012 R2 or individual datal	<b>ock Tracker)</b> ckup of individual VMs hosted b bases hosted by SQL Server,	oy Hyper-V on Wind	ows
Installation Location			
Setup will install Cohesity Agent i Browse to select a different folde	in the following folder. To c er.	ontinue, click Nex	t. Click
C:\Program Files\Cohesity		Bri	owse
At least 15.3 MB of free disk spa	ce is required.		
ersion: 6.0	< Back	Nevt >	

Figure 4 - Cohesity Components



#### Specify the service account

Cohesity recommends the service account be an Active Directory domain user account and a member of the local administrative group on the MS SQL Windows Server, with logon rights to install the Cohesity Windows Agent. Be sure that the service account has been given the sysadmin server role in the Microsoft SQL Server Instance.

IOCAL SYSTE	M account				
O The following	user account:				
The specified server and sl	user account r hould have the	nust have loc "Log on as a :	al administrato service" right	or privileges on th	nis
User name:					
Password:					

Figure 5 - Specify Service Account

### Registration of MS SQL Server

Registration of MS SQL Server with Cohesity DataProtect is a two-step process; Register MS SQL Server host as a Physical Server on the Cohesity Cluster. And secondly, register the MS SQL Server application.

#### **Register as a Physical Source**

Login to to the Cohesity Cluster UI. Navigate to Protection(Tab)->Sources->Register Source->Physical Server.

COHESITY sv4-dell33-c4-ve01 ~	Protection Monitoring	Platform Admin More $\lor$	(P) (P)
Sources		Down	Register Source
1 O Sources Applications	3 Protected Objects	277 73.5 T Unprotected Objects Total Size	Hypervisor Physical Server MS SQL Cluster Oracle Source
Search by Source name Q VMware (1) Source	Protected Unprotected	Tatal Size Protected Size	Pure Storage Array NAS AWS Azure Cloud
(j) 10.2.46.143	3 277	73.5 TiB 100 GiB	Jul 18, 2018 11:39am 🚥
		© 2018 Cohesity Support Help RES	FAPI Download CLI License Agreement cohesity.com

Figure 6 - Cohesity Sources

Cohesity supports registering physical servers by FQDN or IP addresses. However, it is recommended to register the servers using the fully qualified domain name (FQDN). In this example, '*PROD-VR-Win12r2.qa01.eng.cohesity.com*' is used to register the server as a source. When Server registration finishes, a new entry will appear in the Physical Servers section on the Sources page.

Register Physical Server	
Hostname * PROD-VR-Win12r2.qa01.eng.cohesity.com	
Hostname or Server IP Register Server Cancel	

Figure 7 - Using FQDN

#### Register the server as a MS SQL Server

Now you can register the MS SQL Server that is running on the Physical Server with the Cohesity Cluster. Click on the icon and choose "Register as MS SQL Server". Once the server is registered as a MS SQL Server Cohesity will discover all the MS SQL Instances and databases on that server. More information on registering MS SQL Server as a Cohesity Source can be found in <u>Register a Physical Server</u>.



Figure 8 - Cohesity MS SQL Server Source

#### **Successful Registration**

Figure 9 shows a MS SQL Server successfully registered as a MS SQL Server Cohesity Source. The MS SQL Server is now ready to be used as a source for a Protection Job. Notice that the MS SQL Server appears in both the Physical and MS SQL sections.

COHESITY sv4-dell33-c4-ve01	~ Protec	tion Monitoring Pl	atform Admin More ~		?
Sources				Download Cohesity Agent Regis	ter Source 👻
2 Sources Appli	1 cations Prote	3 cted Objects	278 Inprotected Objects	73.6 TiB 100 Git Total Size Protected Size	3
PROD-VR-Win12r2 Q					
MS SQL (1) Source	<ul> <li>Protected</li> </ul>	Total Size	Protected Size	Refreshed	
PROD-VR- Win12r2.qa01.eng.cohesity.com	No		-	Jul 18, 2018 12:09pm	₿
Physical (1)	Destacted	Total Cira	Destorted City	Beferehad	
PROD-VR- Win12r2.qa01.eng.cohesity.com	No	-	-	Jul 18, 2018 12:09pm	⊕
			© 2018 Cohesity Support	Help REST API Download CLI License Agreement	cohesity.com

Figure 9 - Cohesity Registration of MS SQL Server.

## Create a Protection Job

A Protection Job is a backup job that runs repeatedly, based on an associated Policy, to backup data from a Source and store it on the Cohesity Cluster.

Existing Cohesity Volume Based SQL jobs are not automatically changed to File Based SQL jobs. A new protection job must be created to use the File Based backup method. Cohesity recommends deleting the old Volume Based SQL job (keep the snapshots), and create a new Cohesity File Based job to protect the same MS SQL Server. During the short time between the deletion of the old Volume Based SQL job, and the new File Based SQL job the server will be unprotected.

#### **Protection Tab**

Navigate to Protection(Tab)->Protection Jobs->Create Job-> MS SQL Server.

	Protect -
Virtual Serv	er
Physical Ser	rver (Block-based)
Physical Ser	rver (File-based)
View	
MS SQL Ser	ver
Oracle Data	base
Remote Ada	pter
Pure Storag	e Volume
NAS	

Figure 10 - Cohesity Protection Job Tab

#### New Cohesity MS SQL Job

Enter a name and description which will identify your Protection Job. Select the Source Type "MS SQL Servers".

New SQL Job:	Production-SingleDB	s a single MS SQL Server Database.
Source	Select	
Protect	Cancel MS SQL Hosts and Clusters	
	MS SQL Servers Objects: 1 Size: 69.9 GiB	© 2018 Cohesity

Figure 11 - Job Name and Source Type

#### **Cohesity MS SQL Sources**

Cohesity presents you with a hierarchical list of SQL objects. Object selection is hierarchical, for example, if you select a Host System parent, all of its child Objects (Instances) are selected, or if you select a SQL Instance, all of its child Objects (Databases) are selected. For file-based protection, select only the databases you want Cohesity to protect.

- **MS SQL Server host:** Choosing the SQL host, protects the host, the SQL Instance and all the databases under the SQL Instance.
- **MS SQL Instance:** Choosing the SQL Instance, protects the SQL Instance and all the databases under the SQL Instance.
- **MS SQL Database:** Choosing the individual SQL databases protects the databases which have been selected. One or more databases can be selected individually.

MS SQL S	Ervers MS SQL Server Host
> Object	S MS SQL Instance
✓ □ ₽	PROD-VR-Win12/2.qa01.eng.cohesity.com 📓 👁
▶ □	PVDB50VR • MS SQL Database
	V 😝 PVDB50VR/Acct_951857_VR 👁
	□ 😝 PVDB50VR/Acct_912716_VR σ
	□ 🗃 PVDB50VR/Acct_887596_VR 👁
	□ 🗃 PVDB50VR/Acct_883453_VR 👁
	□ 😝 PVDB50VR/Acct_655968_VR 👁
	□ 🗃 PVDB50VR/Acct_850067_VR 👁
	□ 🗃 PVDB50VR/Acct_529040_VR σ
	□ 🗃 PVDB50VR/Acct_525344_VR 👁
	□ 🗃 PVDB50VR/Acct_497497_VR 👁
Add	Cancel

Figure 12 - Cohesity Source Selection

#### **Select a Policy**

A Protection Policy is a reusable set of settings that define how and when Virtual and Physical Servers, Views, Database Servers, are protected, replicated and archived. Select an existing protection policy or create a new protection policy and then select Next. Please refer to Cohesity document on "Policy and Protection" for creating new protection policy.



Figure 13 - Cohesity Protection Policy



#### Select a Storage Domain

A Storage Domain is a named storage location in the Cohesity Partition. A Storage Domain defines the storage policy for deduplication. Choosing a Storage Domain determines where the Cohesity Cluster stores the snapshots. For more details about Storage Domains see <u>Create or Edit Storage Domains</u>.



Figure 14 - Cohesity Storage Domain

#### Specify MS SQL Backup Settings

Click on "MS SQL Setting" to expand it. The MS SQL Settings provides the following options.

- **Backup Method** Choose **File-based** for backing up individual databases. Cohesity File-based backups are much faster because it only backups up the selected MS SQL databases and not the entire MS SQL Server Instance.
- **Copy Only** Enabling this option will prevent the backup from breaking the log chain. It is recommended to use Cohesity DataProtect for MS SQL to ensure that your MS SQL DB backup does not break the SQL DB log chain on backup. Use Copy-Only backups with MS SQL native backup with Cohesity DataPlatform if a secondary copy via SMB share is required.
- User Databases Select the User Databases to backup all user databases. It is recommended to leave at default.
- Systems Databases Select whether to backup or skip System Databases. It is recommended to leave at default
- AAG Preferences Specifies which replica to take a backup from if the database is part of an AAG group. This option applies to MS SQL Always On Availability Groups. Cohesity recommends "Use Server Preferences"

For more details see Protect MS SQL Server.

○ Volume-based		
0		
User Databases		AAG Backup Preferences
Back up All Databases	Ŧ	Use Server Preferences
System Databases		
Backup	-	
	<ul> <li>Volume-based • File-based</li> <li>Viser Databases</li> <li>Back up All Databases</li> <li>System Databases</li> <li>Backup</li> </ul>	<ul> <li>Volume-based</li> <li>File-based</li> <li>User Databases</li> <li>Back up All Databases</li> <li>System Databases</li> <li>Backup</li> </ul>

Figure 15 - Cohesity MS SQL Options

Cohesity gives you the choice of two backup methods; volume based or file based. Under the volume based method Cohesity creates a backup of the volumes for that host server. This captures a backup of the MS SQL Server data and log files and everything else located next to them on that volume. If the volume is large, it may contain a lot of other files which do not necessarily need to be protected. The file based method protects just the MS SQL Server files and will result in a significant reduction in backup and restore times. The volume based method is an option when you protect the source at the host level. The file based method is an option when you protect the source at the individual database level.

#### **Specify Advanced Backup Settings**

Advanced Settings are populated with default settings and can optionally be adjusted. For more details read the second half of <u>Protect MS SQL Server</u>.

- Start Time Indicates when the job should run.
- End Date Select the date on which the Protection Job stops capturing Snapshots.
- QoS Policy Select an appropriate Quality of Service (QoS) Policy. Cohesity recommends using the default.
- Indexing Indexing is enabled by default and required for file recovery. Cohesity recommends using the default.
- Alerts & Priority Optional settings if you want Alerts to be created and sent for different events. Alert notification
  is important for monitoring the success, failure, or SLA violation of the job. Cohesity recommends using the
  default.

dvanced		
Start Time	10:44am America/New_York	
End Date	Never	
QoS Policy	Backup HDD (Default)	
Indexing	Disabled	
Alerts & Priority	Alert on Failure Medium Priority	
SLA	Incremental: 60 minutes Full: 120 minutes	

Figure 16 - Cohesity Advanced Options

Click the "Protect" button, and the job is created and will start according to the policy set.

## Backup MS SQL Database

#### **Protection Job Run**

Once the Protection Job is created, it will run based on its Start Time. Subsequent job executions are listed under Job Runs, and will indicate duration, type, and status. MS SQL Server administrators can also use this page to quickly confirm that business-critical databases are protected with Cohesity DataProtect.

Production-S	SingleDB	Go to Prote	ection Jobs		
Job Runs Audit T	rail Settings	Statis	stics		
7 days Jul 13, 2018	Jul 19, 2018 12	All	SQL Full (CBT)	SQL Full (No CBT)	Log
Start Time	Duration	SLA	Schedule Type	Logical	Data Read
Jul 19, 2018 10:49am	9s	Pass	Log	1 MiB	84.5 KiB
Jul 19, 2018 10:28am	21m 2s	Pass	Log	1 MiB	0 Bytes
Jul 19, 2018 10:27am	55s	Pass	Incremental	5 MiB	512 KiB
Jul 19, 2018 10:06am	20m 45s	Pass	Log	0 Bytes	0 Bytes
Jul 19, 2018 9:51am	23s	Pass	Log	1 MiB	84.5 KiB
Jul 19, 2018 9:30am	20m 48s	Pass	Log	1 MiB	84.5 KiB
Jul 19, 2018 9:15am	10m 22s	Pass	Log	1 MiB	84.5 KiB
Jul 19, 2018 9:11am	58s	Pass	Incremental	5 MiB	512 KiB

Figure 17 - Cohesity Protection Job Run

#### **Protection Job Run Details**

In the Cohesity Cluster UI, the MS SQL Database Protection Job -> Backup Run Details will show just the Microsoft SQL Server databases found and protected by Cohesity DataProtect. This is an additional level of detail to confirm that the backup is successful. As an example see figure 18.

	MSS	SQL Object Name		Last Attempt Start Date	Duration	Data Read	Logical Size	Status	
	> F V	PROD-VR- Win12r2.qa01.eng.cohesi	ty.com	Aug 2, 2018 12:32pm	26s	6 MiB	6 MiB	Success	
	~	PVDB50VR/Acct_9	87526_VR	Aug 2, 2018 12:32pm	<1s	6 MiB	6 MiB	Success	
		Started	Task						
		Aug 2, 2018 12:32pm	App file: E:\SQL_Data_01/Acct_987526_VR_Data.mdf, uuid=9345152447178943194_acct_987526_vr_data.mdf, Backup size: 4.0 MB, Backup type: Full, Ski alignment, Skipped coalescing					ype: Full, Skipped	
		Aug 2, 2018 12:32pm	SubTask 0	Task 0 will backup 4194304 bytes from E:\SQL_Data_01\Acct_987526_VR_Data.mdf					
		Aug 2, 2018 12:32pm	App file: E alignmen	App file: E\SQL_Logs_01\Acct_987526_VR_Log.ldf, uuid=10206565463485497488_acct_987526_vr_log.ldf, Backup size: 2.0 MB, Backup type: Full, Skipped alignment, Skipped coalescing					
		Aug 2, 2018 12:32pm	SubTask 1	Task 1 will backup 2097152 bytes from E:\SQL_Logs_01\Acct_987526_VR_Log.ldf					
		Aug 2, 2018 12:32pm	Requestin	Requesting permit for sub-task 0 on PROD-VR-Win12r2.qa01.eng.cohesity.com					
		Aug 2, 2018 12:32pm	Requestin	Requesting permit for sub-task 1 on PROD-VR-Win12r2.qa01.eng.cohesity.com					
		Aug 2, 2018 12:32pm	Permit gra	granted to sub-task 0					
		Aug 2, 2018 12:32pm	Permit granted to sub-task 1						
		Aug 2, 2018 12:32pm	Finished s	sub-task 0					
		Aug 2, 2018 12:32pm	Releasing	Releasing permit for sub-task 0 on PROD-VR-Win12r/2.qa01.eng.cohesity.com					

Figure 18 - Cohesity Protection Job Run Details

## Restore an MS SQL Server Database

Cohesity provides the ability to restore an individual databases. MS SQL Server or individual databases can be restored to their original location or an alternate location. There are two general restores:

- Clone a database, see <u>Clone an individual MS SQL Server Database</u>
- Restore a Standalone database. This is described below. For more information see Restore an Individual MS SQL Database

#### Restore a Database back to a MS SQL Server Instance

Navigate to the Recovery screen. Protection->Recovery->Recover Button->MSSQL.

Files or Folders
VMs
Physical Server
MS SQL
Oracle
Pure Storage Volume
Instant Volume Mount
NAS

Figure 19-Cohesity Recover Menu

#### Choose a Database

The search and filter options provide a powerful way of finding and selecting databases from backups. Enter the characters of a SQL Server or database name and a list of items displays. Select an item from the list. You can optionally <u>specify the wildcard character</u> \*. Search results can be narrowed by specifying filter criteria.



Figure 20-Cohesity Search and Filter

#### Specify MS SQL Restore Options

Cohesity provides several options for databases restores:

- A. If restoring to the original SQL Server instance, you can toggle the Overwrite Original Database if you want to **overwrite the original database** with the restored one.
- B. To restore log files, and primary and secondary data files, to different locations, click Add Alternative Log File and Secondary Data File Locations and provide locations for each.
- C. Provide a **Database Name** for the restored database.
- D. By default, an MS SQL restore WITH RECOVERY is performed. You can optionally toggle this off to perform a restore WITH NORECOVERY.

* Task Name
Recover-PROD-VR-Win12r2.qa01.eng.cohesity.com_PVDB50VR_Acct_987526_VR_Jul_19_2018_11-36am
Selected SQL Database
PVDB50VR/Acct_987526_VR Cobesity Cluster sv4-dell32-c4-ve01
Conesity cluster sv4-deit55-c4-veo1
Restore to Original SQL Server Instance?
Overwrite Original Database?
* Restore Database Files to
E:\SQL_Data_01\
Missing folders will be automatically created
Add Alternative Log File and Secondary Data File Locations
* Database Name
Single_987526_VR
Recover Point
Jul 19, 2018 10:27am (Latest Recover Point) 🔮 🥒
C Recover Databases Do you want to perform an MS SQL Restore WITH RECOVERY?
Recover Back Cancel

Figure 21 - Cohesity Database Restore Options



#### **Recovery Point**

Cohesity "Recovery Point" link provides the ability to recover the database to a particular point in time; choose the recovery point, and select the option to specify a point in time. With 6.0 and later, backup administrators can also leverage "Restore to a New Time" to a different MS SQL Server Instance that is registered with Cohesity DataProtect.

Recovery Point	<ul> <li>Restore to a New Time</li> </ul>	
) Jul 19, 2018 11:27am		
Jul 19, 2018 10:27am		
Jul 19, 2018 9:11am	0	
50(13),2010 0.0500	Jul 19, 2018 8:10:08	Jul 19, 2018 11:19:36
	07/19/2018 12 08	: 50 : 58
Jul 19, 2018 8:02am	07/19/2018 12 08	: 50 : 58
○ Jul 19, 2018 8:02am ○ Jul 19, 2018 7:02am	07/19/2018	: 50 : 58

Figure 22 - Cohesity Recovery Point In Time Restore

The Recovery Task is Created. In this step, you can view a summary of the options for the current task and a list of the items to be restored.



Figure 23 - Cohesity Recovery Task Detail



In the Cohesity Cluster UI, the Show Subtasks button will show subtasks that Cohesity executed in order to complete the restore. It will also show that the Microsoft SQL Server database was successfully restored. See figure 24 below.

Recovery Options	
Target Parent Sour     View Name: cohesi     Full Backup Time:     Source Server: PR     Target Server: PRO     Data File Destinati     Instance Name: PV     New Database Nam	ce Type: Physical Server ty_int_143588 Jul 19, 2018 11:27am D-VR-Win12r2.qa01.eng.cohesity.com D-VR-Win12r2.qa01.eng.cohesity.com on: E:\SQL_Data_01\ DB50VR ne: Single_987526_VR
(Hide Subtasks)	
Start Time	Task
Jul 19, 2018 11:55am	VSS restore info: db=Acct_987526_VR, expected_size=5.0 MB
Jul 19, 2018 11:55am	VSS restore info: num_dbs=1, total_expected_size=5.0 MB; task 143588
Jul 19, 2018 11:55am	Log replay info: num_dbs=0, num_logs=0, total_expected_size=0B; task 143588
Jul 19, 2018 11:55am	Adding restore task to partition queue for being scheduled
Jul 19, 2018 11:55am	Starting database restore task on Magneto slave 18
Jul 19, 2018 11:55am	Initiating VSS setup

Figure 24 - Cohesity Recovery Task execution detail

#### Verification

A quick visual check using SQL Server Management Studio (SSMS) will verify the successful recovery of the database.



Figure 25 - Verification

## Summary

Cohesity DataProtect provides a comprehensive solution to your data center storage requirements. Cohesity DataProtect is uniquely designed to handle MS SQL Server databases; a solution now that allows for individual MS SQL Server database protection.

This means individual MS SQL Server databases are quickly identified, and a Protection Job can be created, executed and monitored from a single pane of glass UI. Individual MS SQL Server databases are effectively protected with all your other MS SQL Server databases. Tailoring your database protection needs down to the individual business-critical database is now easy to do.

## About The Author

Scott Lorenz is a Solutions Engineer at Cohesity. In his role, Scott focuses on SQL Server business-critical applications, databases, and data protection with Enterprise and Cloud Storage.

### Version History

Version	Date	Document Version History
Version 1.0	July 2018	Original Document