

Microsoft SQL Server and Veeam Backup & Replication

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Agenda


- Backup Job Options
- Under The Hood
- Veeam Backup & Replication **v9**
- Veeam Explorer *for Microsoft SQL*
- Microsoft SQL Always-On
- Veeam Virtual Labs and SQL
- Free SQL stuff

Backup Job Options

I am new to SQL server. What do I need to know?

One click

Edit Backup Job [Production VMs]

 **Guest Processing**
Choose guest OS processing options available for running VMs.

Name

Virtual Machines

Storage

Guest Processing

Schedule

Summary

☒ **Enable application-aware processing**
Quiesces applications using Microsoft VSS to ensure transactional consistency, performs transaction logs processing, and prepares application-specific VSS restore procedure.
Customize application handling options for individual VMs and applications [Applications...](#)

☒ **Enable guest file system indexing**
Creates catalog of guest files to enable browsing, searching and 1-click restores of individual files. Indexing is optional, and is not required to perform instant file level recoveries.
Customize advanced guest file system indexing options for individual VMs [Indexing...](#)

Guest OS credentials

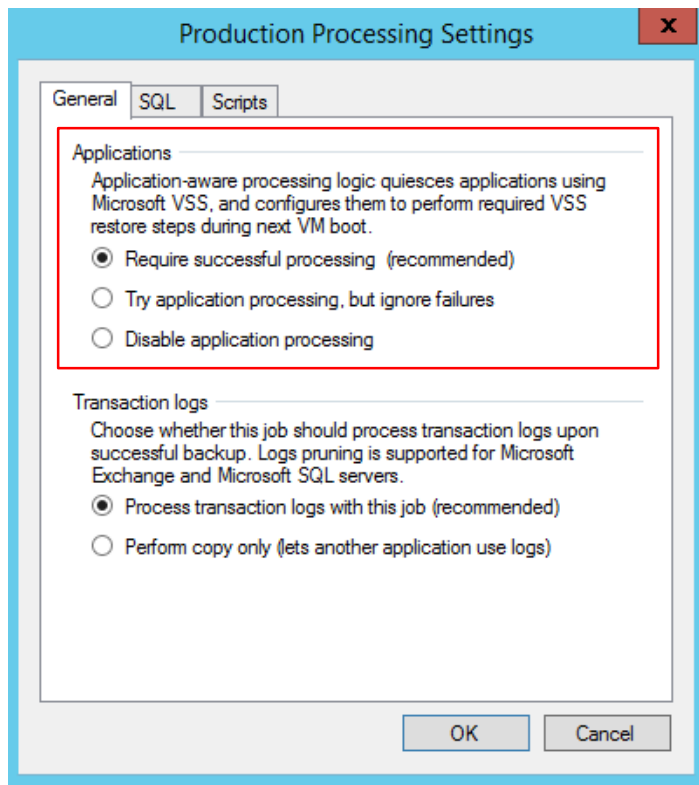
Credentials: [testveeamservice \(testveeamservice service account in ...\)](#) [Add...](#)
[Manage accounts](#)

Customize guest OS credentials for individual VMs and operating systems [Credentials...](#)

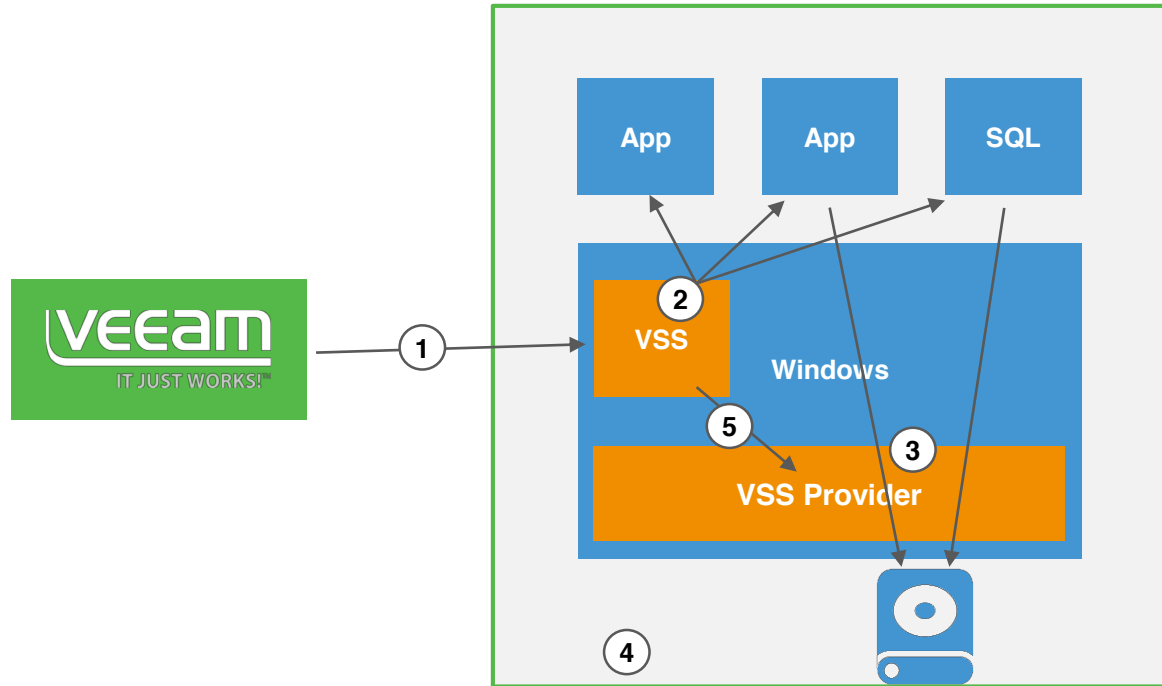
Guest interaction proxy:
[Automatic selection](#) [Choose...](#)
[Test Now](#)

[< Previous](#) [Next >](#) [Finish](#) [Cancel](#)

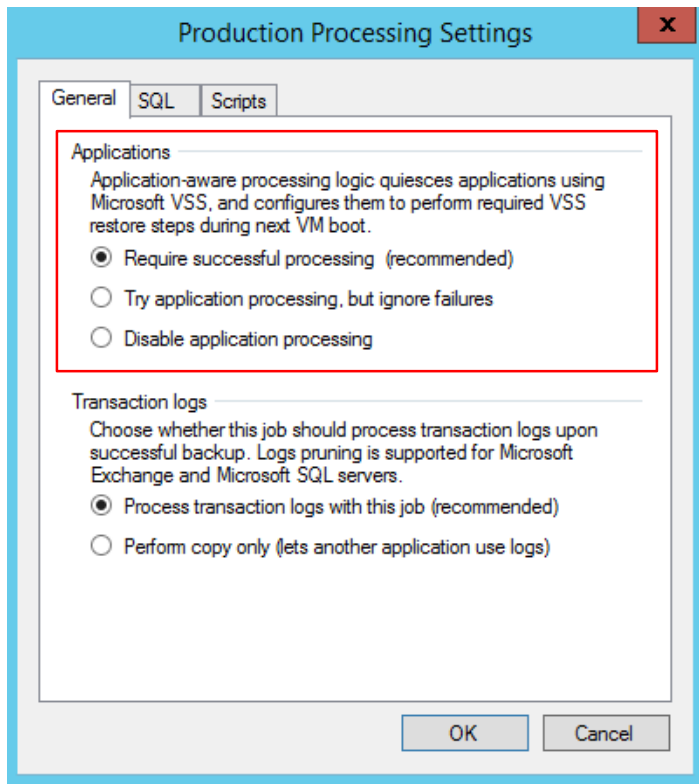
VSS options



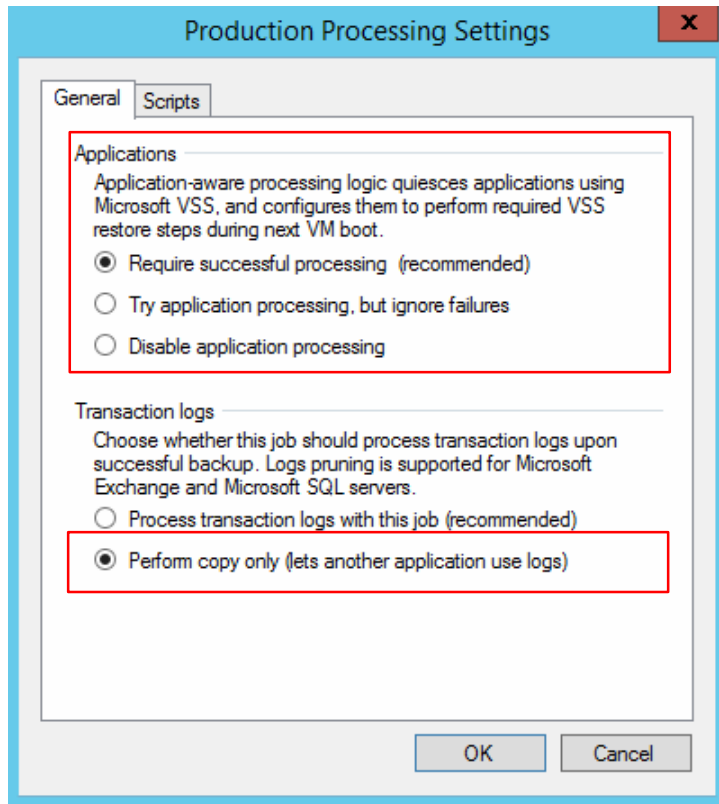
VSS inside Guest VM



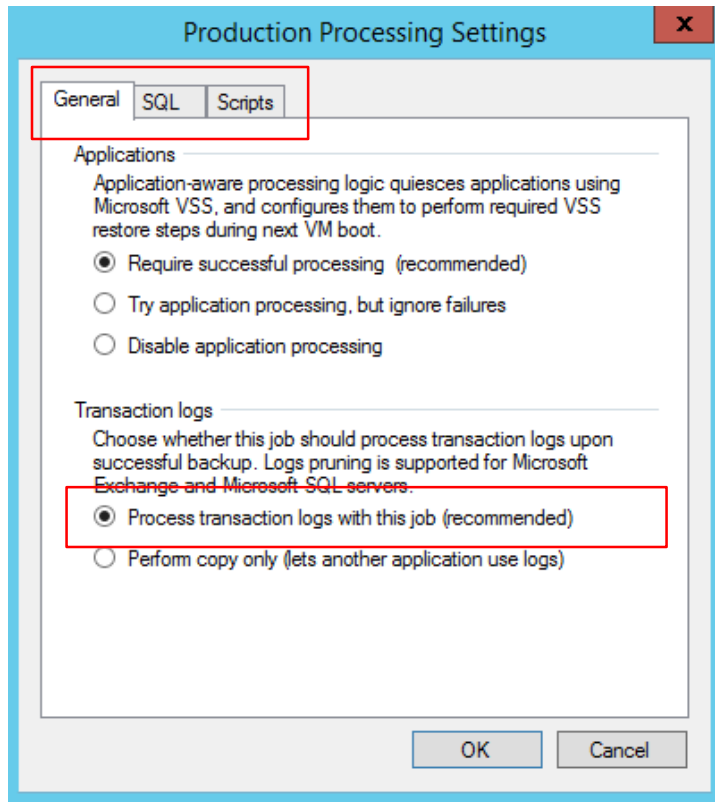
VSS options



COPY_ONLY option



Process transactions logs



Data and log files

Every database always has at least one data file (.MDF) and one log file (.LDF)

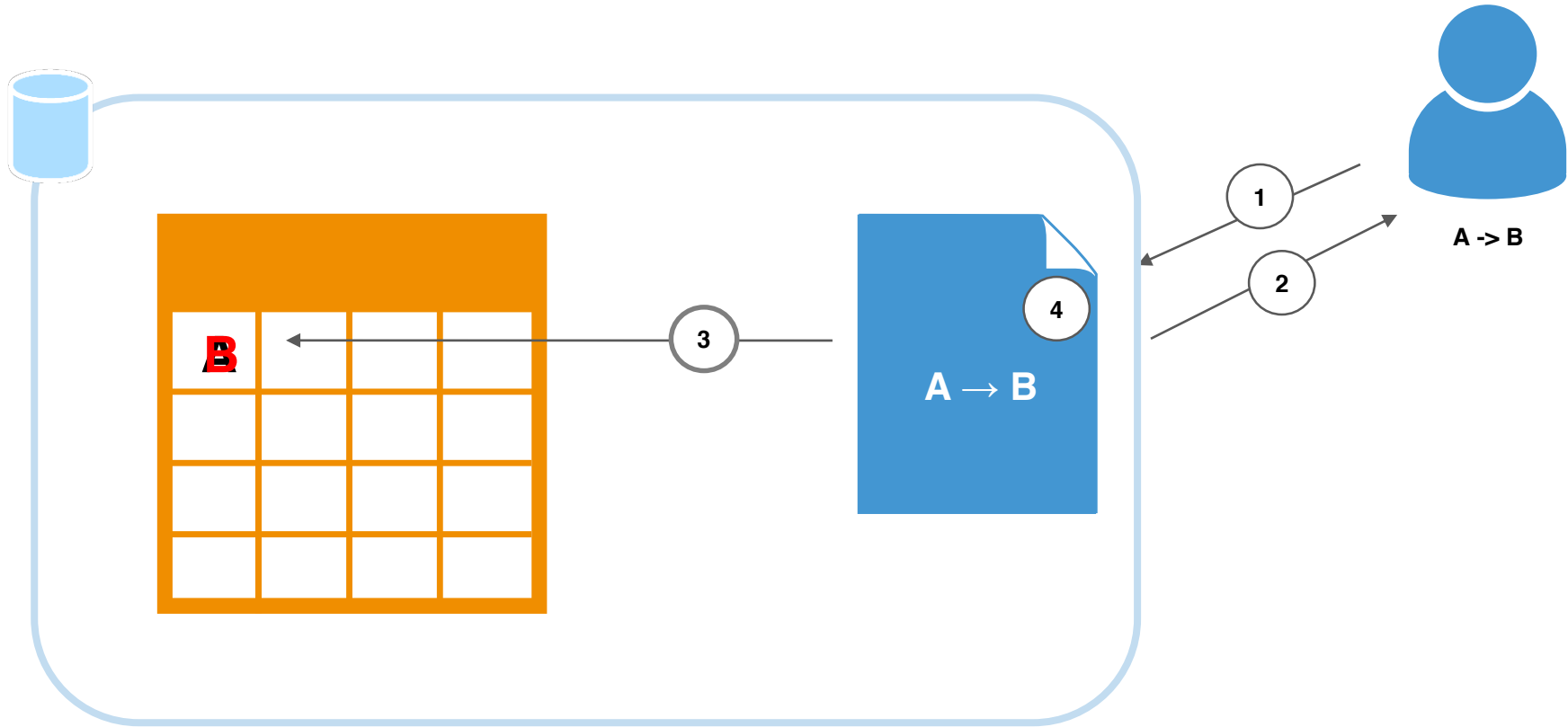


Database recovery models

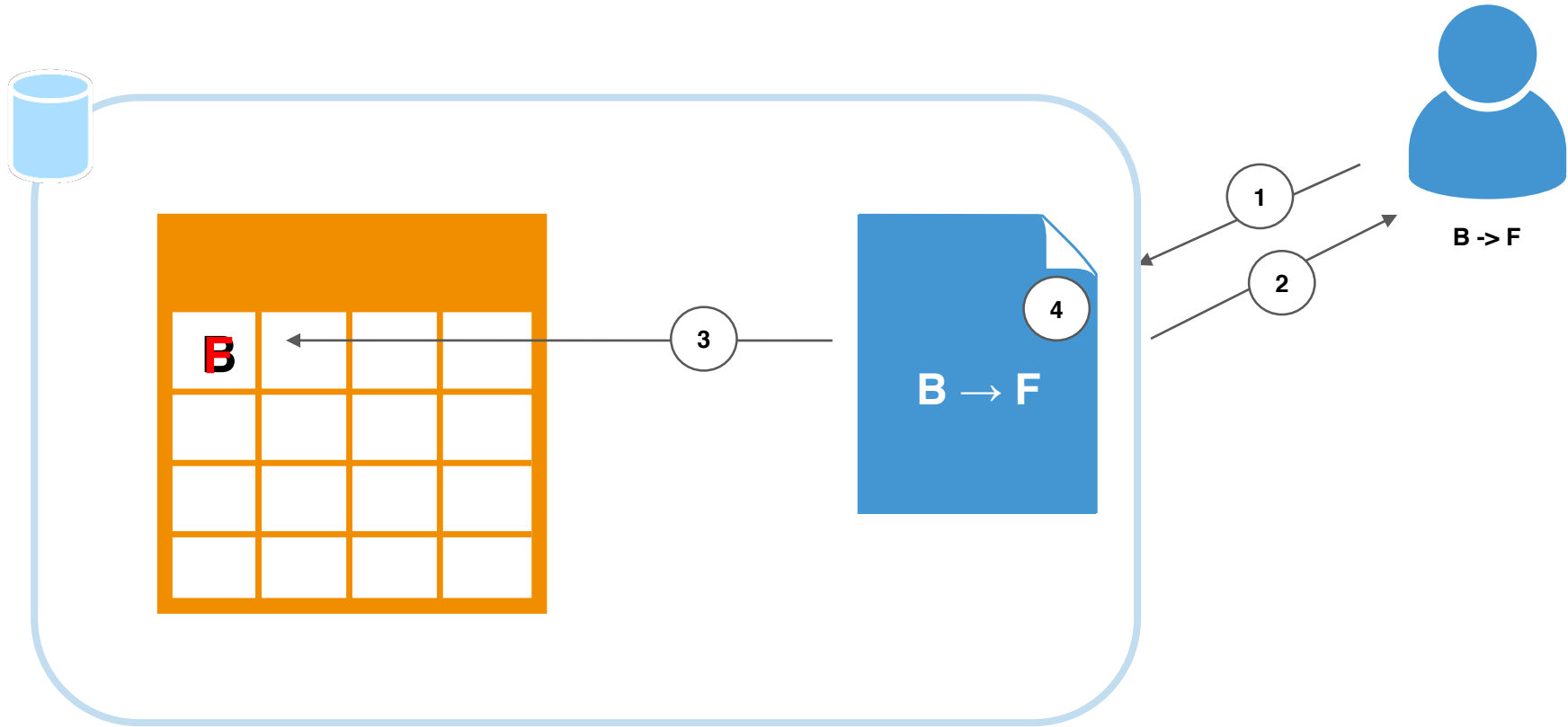
Simple

Full

Database recovery models: Simple



Database recovery models: Simple

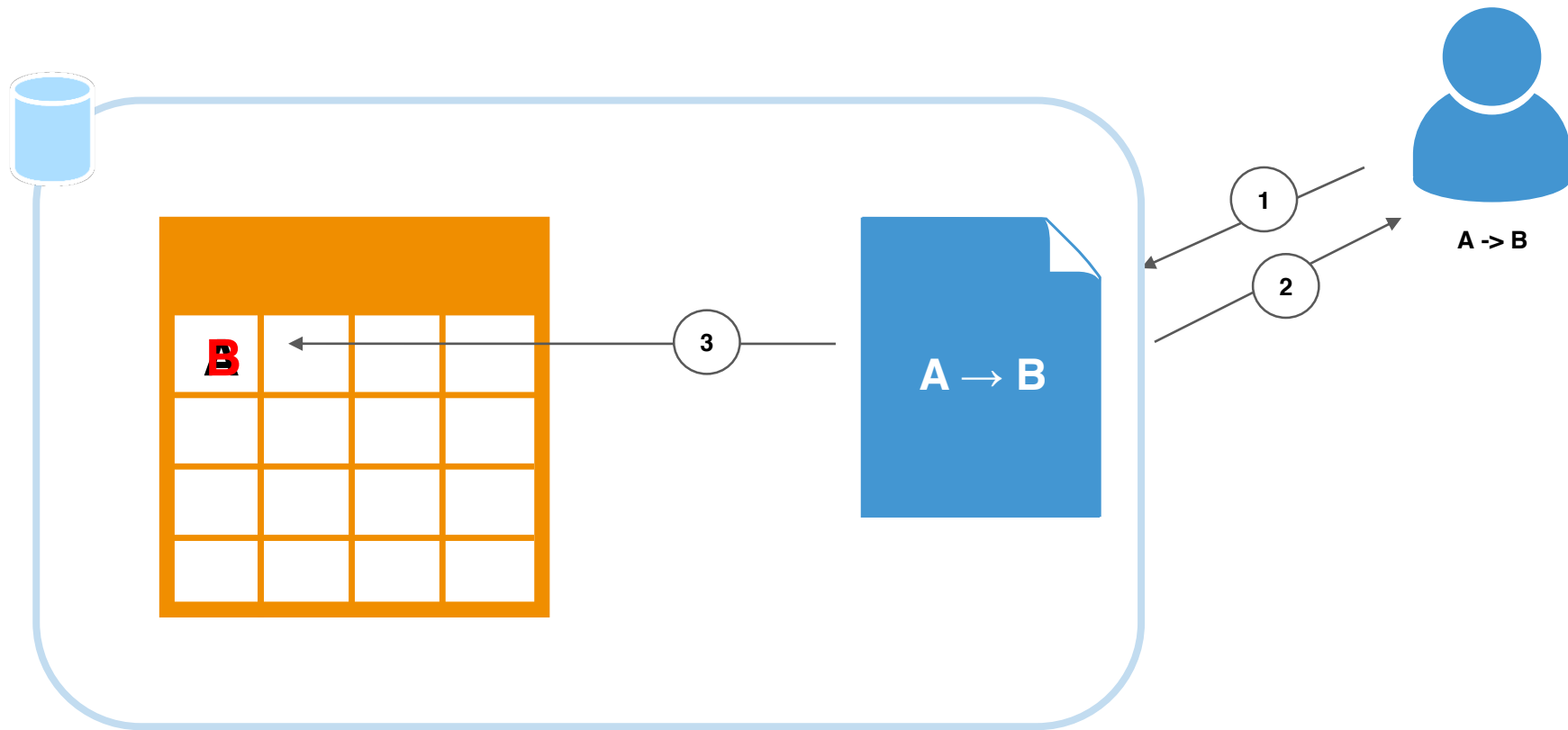


Database recovery models

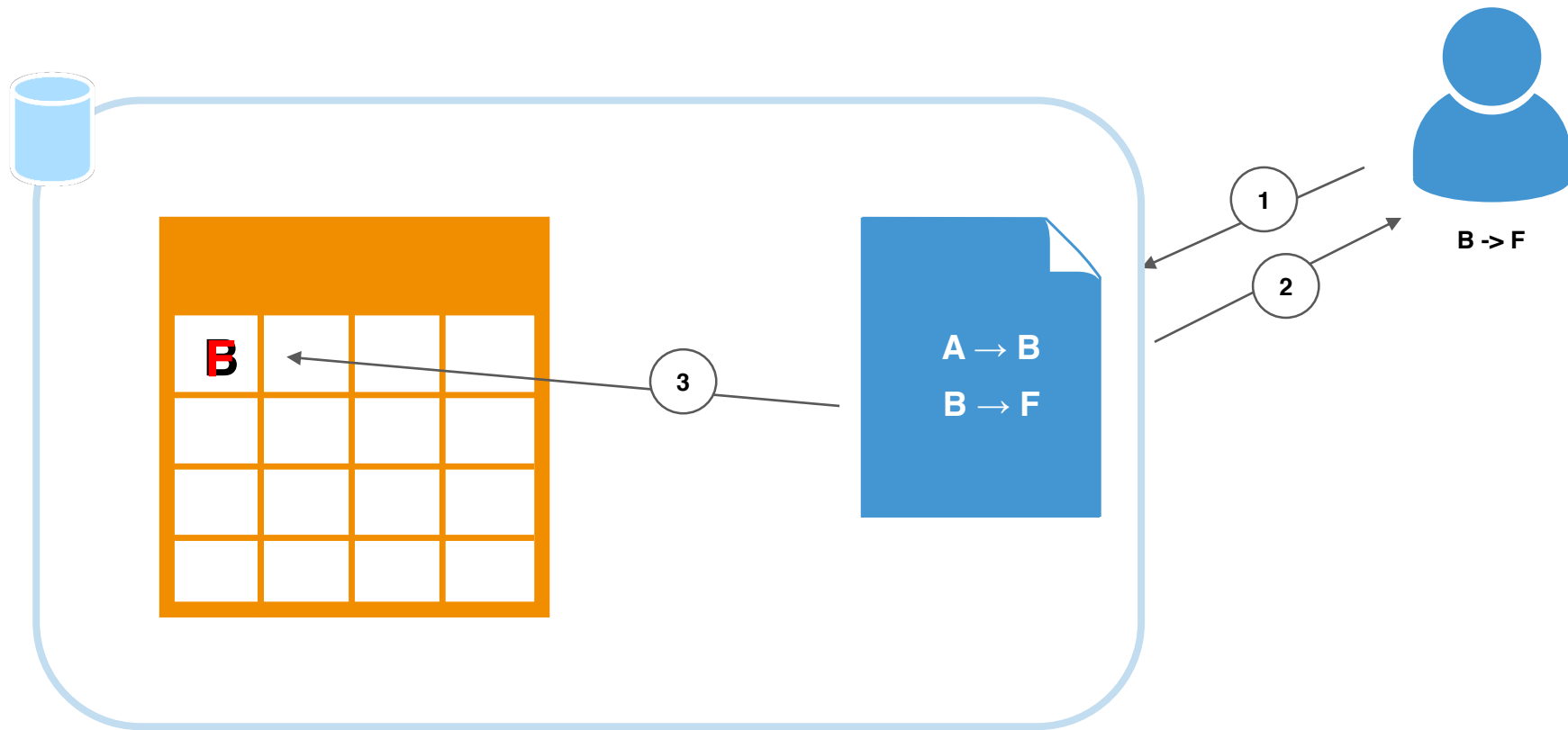
Simple

Full

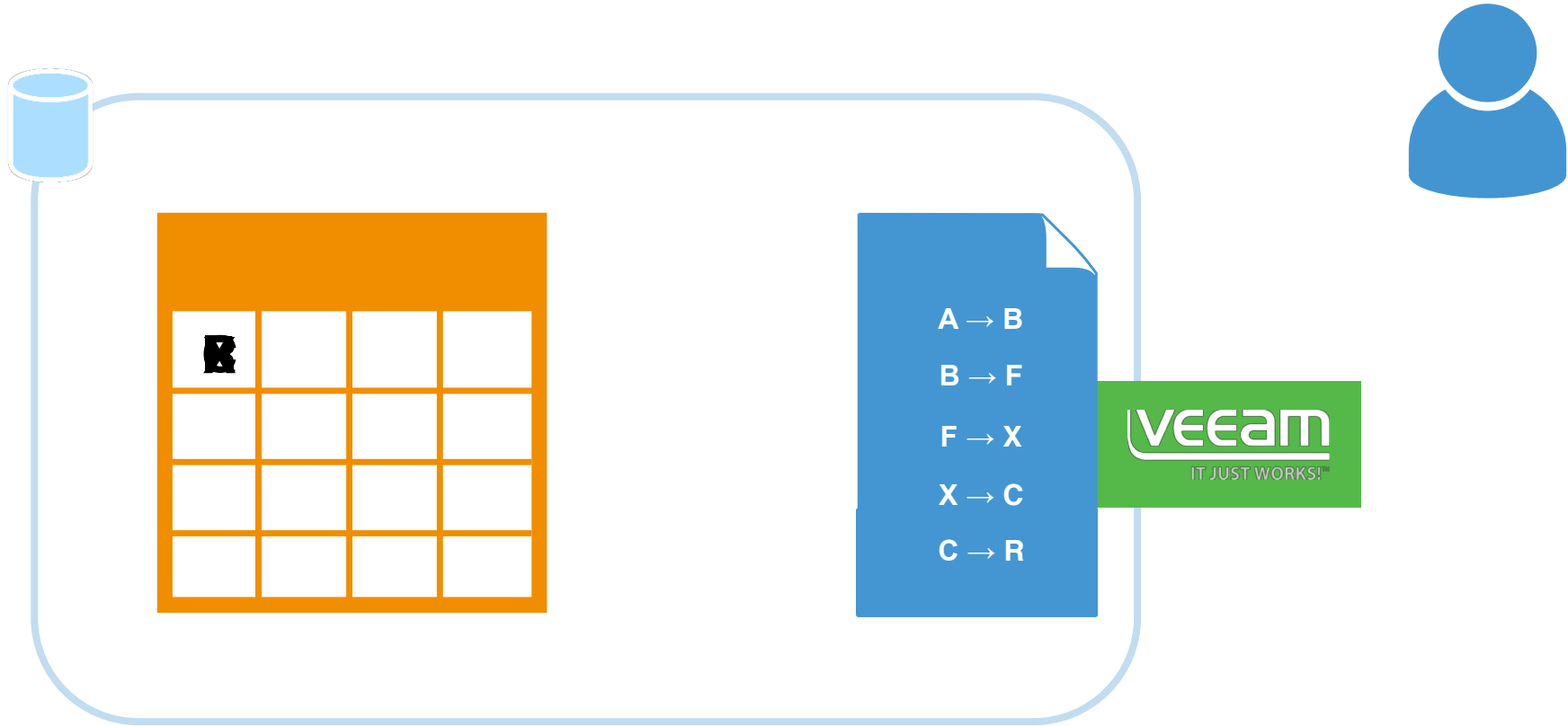
Database recovery models: Full



Database recovery models: Full



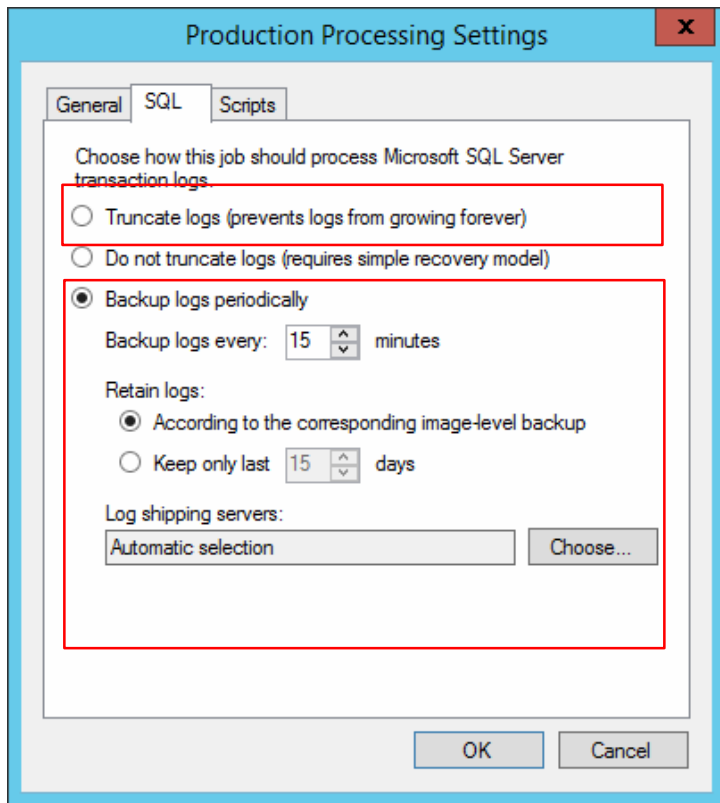
Database recovery models: Full



Database recovery models

- Use simple if you don't plan to perform transaction log backups and don't use point in time restore
- With full, you'll need to plan for transaction log backups and you can do point in time restores

SQL log options (SQL tab)



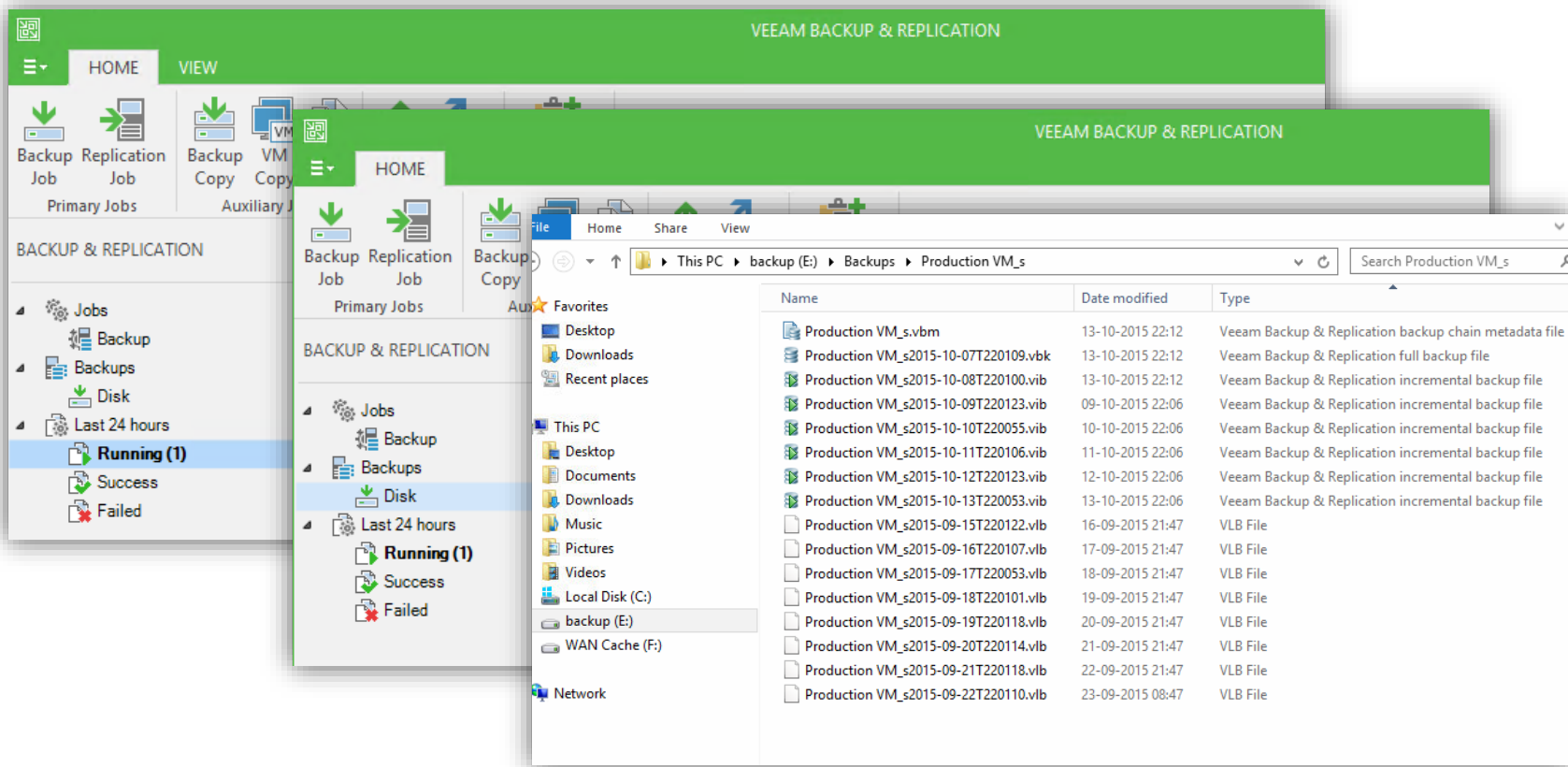
Under the Hood

Yes, Veeam Does File Backup ... LOG Files Backup

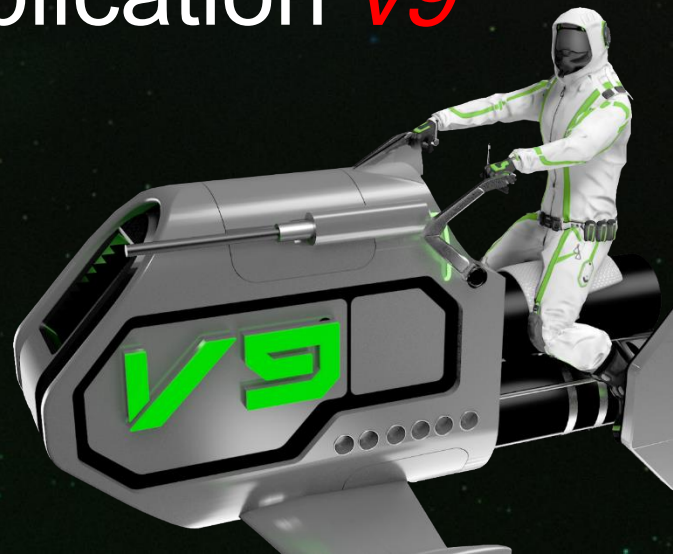
SQL transaction log backup

- Additional job that runs continuously in the background
- Very granular intervals for better RPO – up to 5 minutes
- Requires Full Recovery Model
- Allows Point In Time restore and restore to a specific transaction

SQL log backup: What it looks like



NEW Veeam Backup & Replication v9



What's new in v9?

- Object level restore: Tables, stored procedures, views
- Remote staging server
- Veeam Explorer *for Oracle* — if you're here by mistake 😊



Veeam Explorer *for Microsoft SQL*

SQL Always-On

Microsoft SQL Always-On Availability Groups Support

SQL Always-On Availability groups

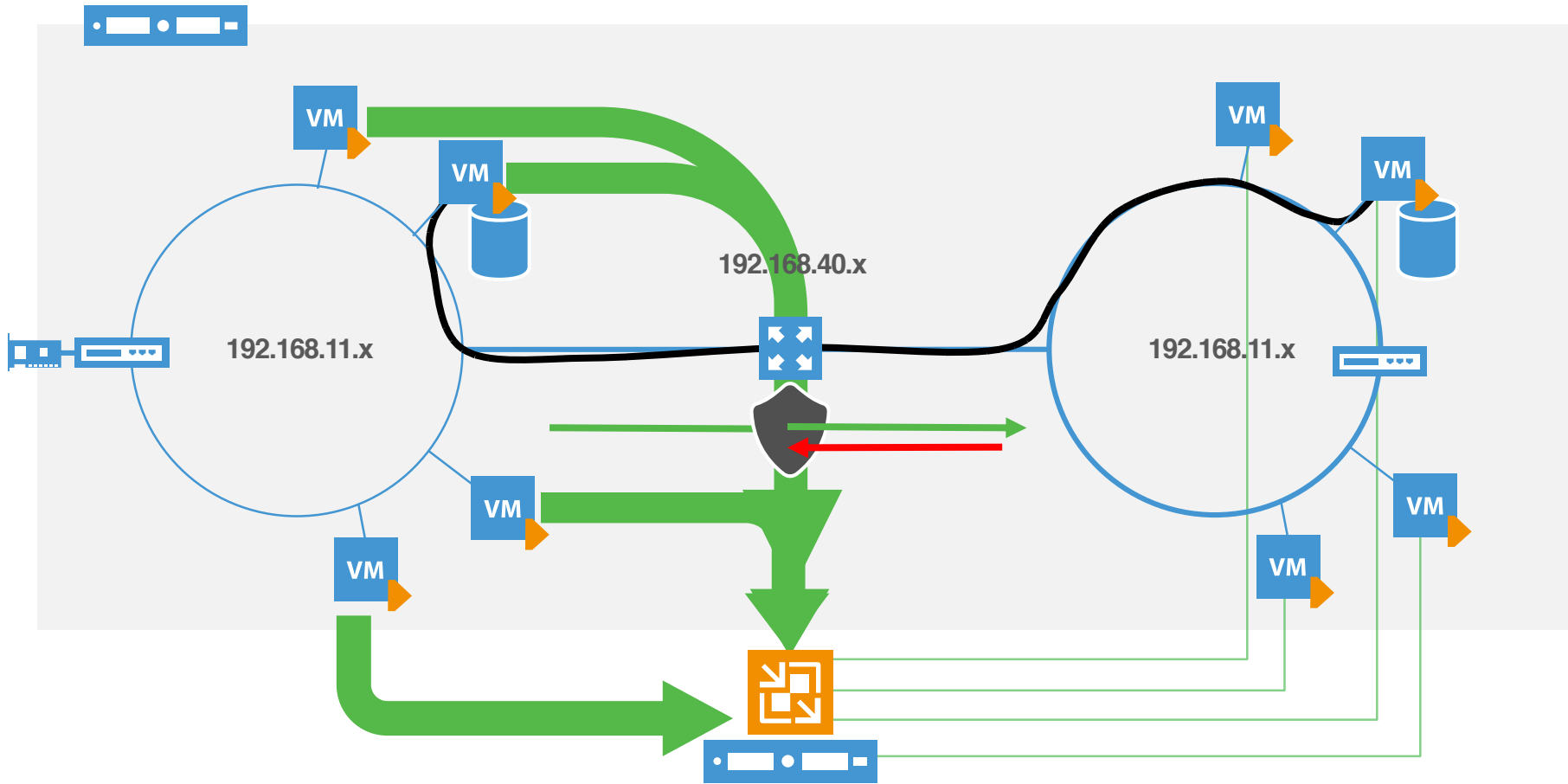
- Main thing: Do not use copy only for SQL Always-On
- Automatic detection of secondary replicas
- You can back up logs from your secondary replicas

Virtual Labs and SQL

The Power of Sandbox, Time Travel and Backups Validation

Veeam Virtual Lab

- Part of SureBackup verification environment
- Allows to start VMs in an isolated network
- Access to Virtual Lab VMs from production network



Why use Virtual Lab with SQL?



- Automatic recovery verification
- Patch/Service pack update testing
Including Always-On Availability groups setup
- Access to point in time SQL data from your backup files

The SQL Free Stuff

More Online


3 hours of Veeam and SQL videos:


<http://go.veeam.com/learn-microsoft-sql-server-free-video-tutorial-course.html>



[FREE ONLINE COURSES](#)

Learn Microsoft SQL Server






PART 1: Veeam and Microsoft SQL Server – 101

The first video tutorial of the Veeam Microsoft SQL Server Series will help you to get started with SQL Server. It will focus on basics such as SQL Server architecture, its key components and their functions.


[Download slides](#)



PART 2: Veeam and Microsoft SQL Server – Always-On

As a data platform for business-critical applications enabling the Always-On Business™, SQL Server requires the most reliable protection. This video tutorial – enriched with live demos – covers three main topics on SQL Server protection, which include SQL transaction log management, restore options for Microsoft SQL Server databases and getting the most out of your SQL backups with Veeam's Virtual Lab.

[Download slides](#)



PART 3: Veeam and Microsoft SQL Server – Deep-Dive

This episode wraps up our SQL Server course with a technical deep-dive on the SQL server: Always-On availability enabled by Veeam. It will show you how things work under the hood, so you can maximize your SQL Server protection.

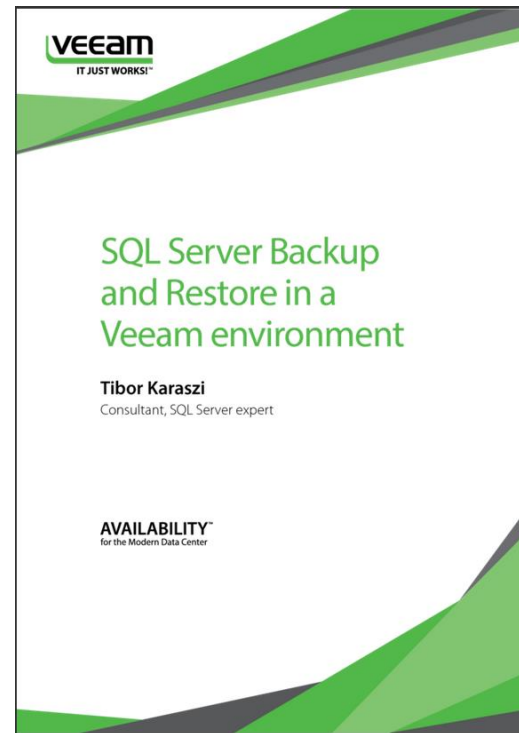
[Download slides](#)



WHITE PAPER

Tibor Karaszi, Microsoft SQL MVP DBA's view on Veeam Backup & Replication™

<http://www.veeam.com/wp-sql-server-backup-with-veeam.html>



Veeam Endpoint Backup

Veeam Endpoint Backup™ for physical SQL servers

- VSS enable
- ALL databases will default be truncated
- Not cluster support

veeam.com/endpoint

Thank you!