



# **Storage layout recommendations for SnapCenter Plug-in for Microsoft SQL Server**

**SnapCenter Software**

Archana, Nirupama Sriram  
June 14, 2021

This PDF was generated from [https://docs.netapp.com/us-en/snapcenter/protect-scsql/reference\\_storage\\_layout\\_recommendations\\_for\\_snapcenter\\_plug\\_in\\_for\\_microsoft\\_sql\\_server.html](https://docs.netapp.com/us-en/snapcenter/protect-scsql/reference_storage_layout_recommendations_for_snapcenter_plug_in_for_microsoft_sql_server.html) on June 18, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- Storage layout recommendations for SnapCenter Plug-in for Microsoft SQL Server ..... 1
  - LUN and VMDK requirements ..... 1
  - LUN and VMDK sample layouts ..... 1

# Storage layout recommendations for SnapCenter Plug-in for Microsoft SQL Server

A well-designed storage layout allows SnapCenter Server to back up your databases to meet your recovery objectives. You should consider several factors while defining your storage layout, including the size of the database, the rate of change of the database, and the frequency with which you perform backups.

The following sections define the storage layout recommendations and restrictions for LUNs and virtual machine disks (VMDKs) with SnapCenter Plug-in for Microsoft SQL Server installed in your environment.

In this case, LUNs can include VMware RDM disks and iSCSI direct-attached LUNs that are mapped to the guest.

## LUN and VMDK requirements

You can optionally use dedicated LUNs or VMDKs for optimum performance and management for the following databases:

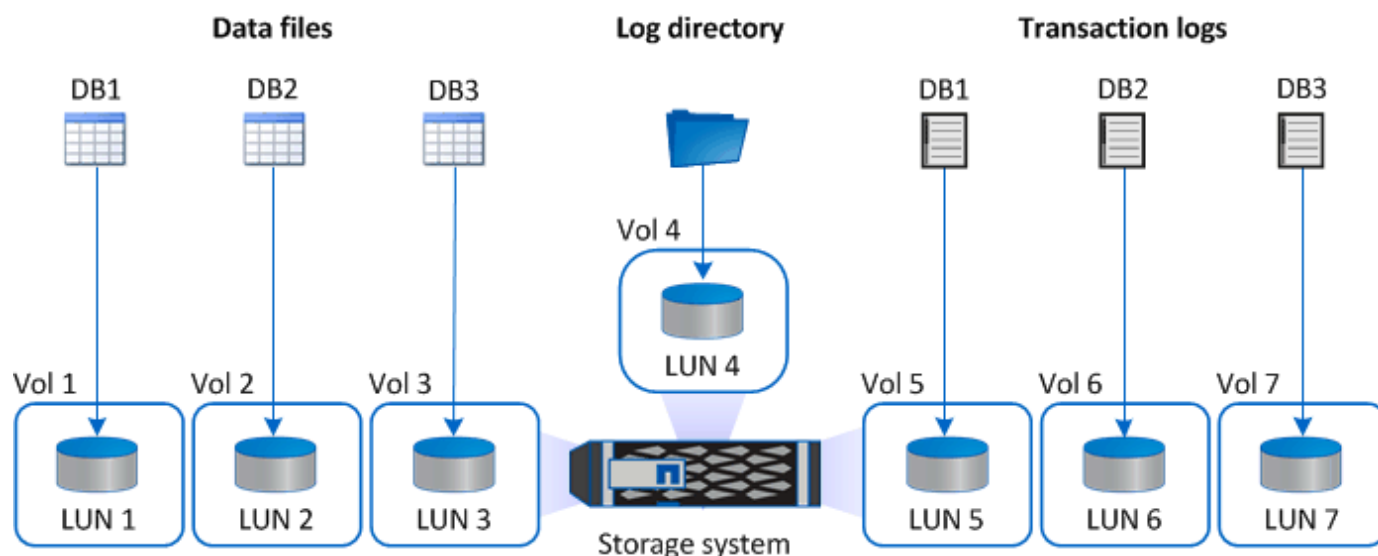
- Master and model system databases
- Tempdb
- User database files (.mdf and .ndf)
- User database transaction log files (.ldf)
- Log directory

To restore large databases, the best practice is to use dedicated LUNs or VMDKs. The time taken to restore a complete LUN or VMDK is less than the time taken to restore the individual files that are stored in the LUN or VMDK.

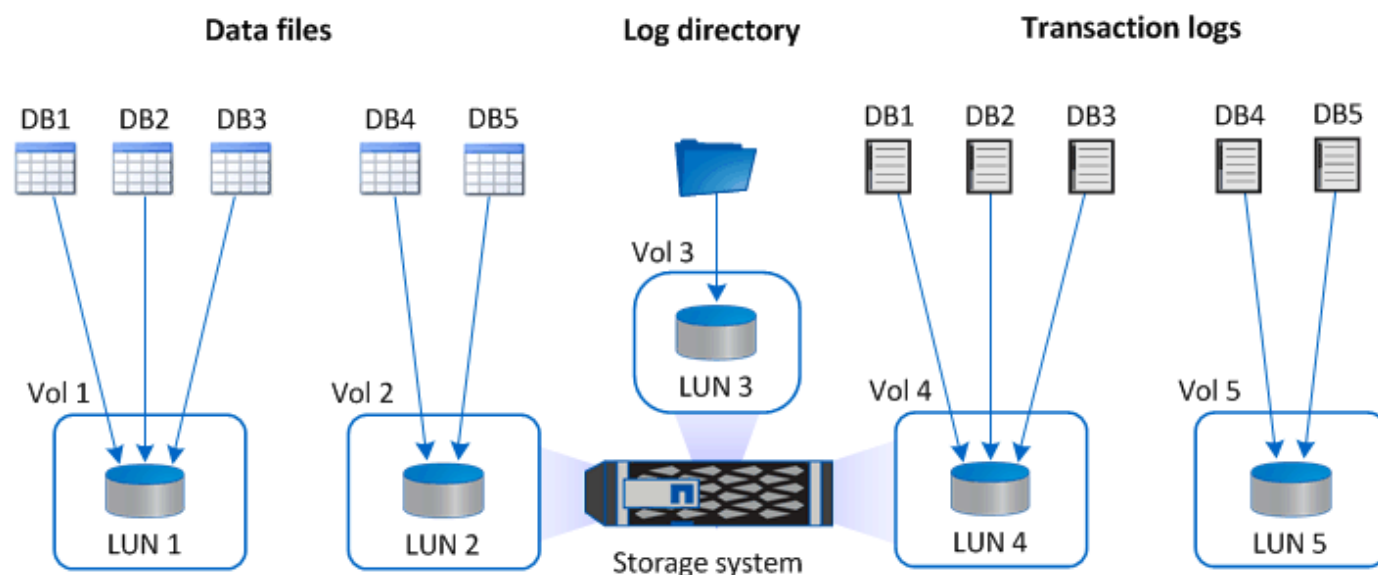
For the log directory, you should create a separate LUN or VMDK so that there is sufficient free space in the data or log file disks.

## LUN and VMDK sample layouts

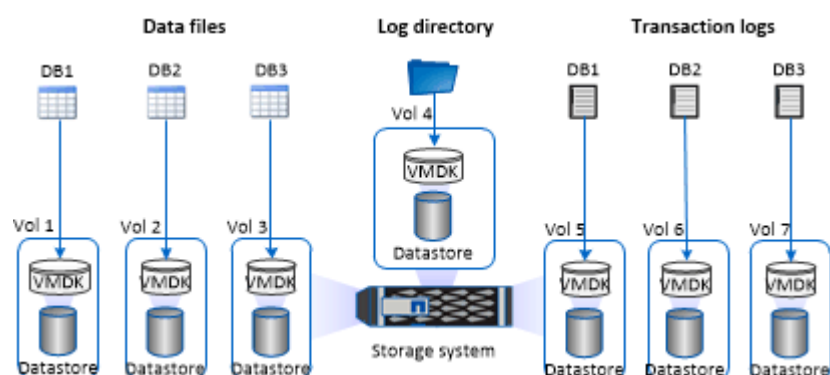
The following graphic shows how you can configure the storage layout for large databases on LUNs:



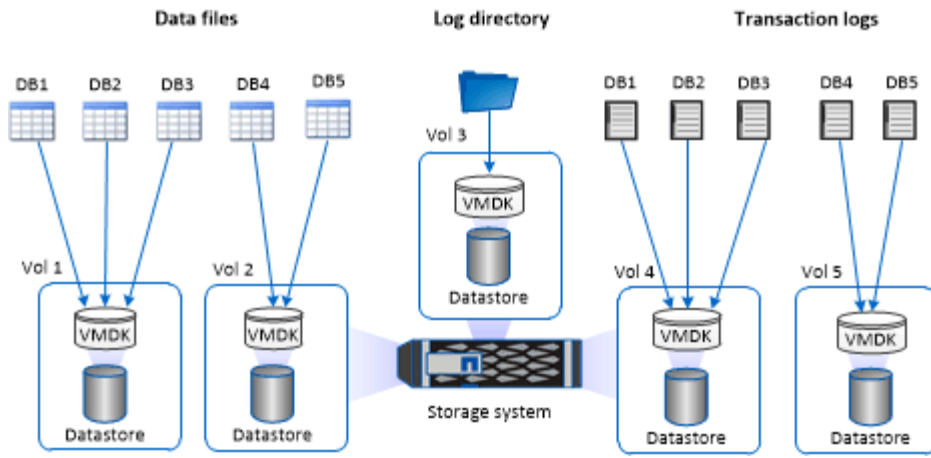
The following graphic shows how you can configure the storage layout for medium or small databases on LUNs:



The following graphic shows how you can configure the storage layout for large databases on VMDKs:



The following graphic shows how you can configure the storage layout for medium or small databases on VMDKs:



## Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system- without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.