



# Restoring and recovering databases from primary storage

## Snap Creator Framework

NetApp  
February 18, 2021

# Table of Contents

Restoring and recovering databases from primary storage ..... 1

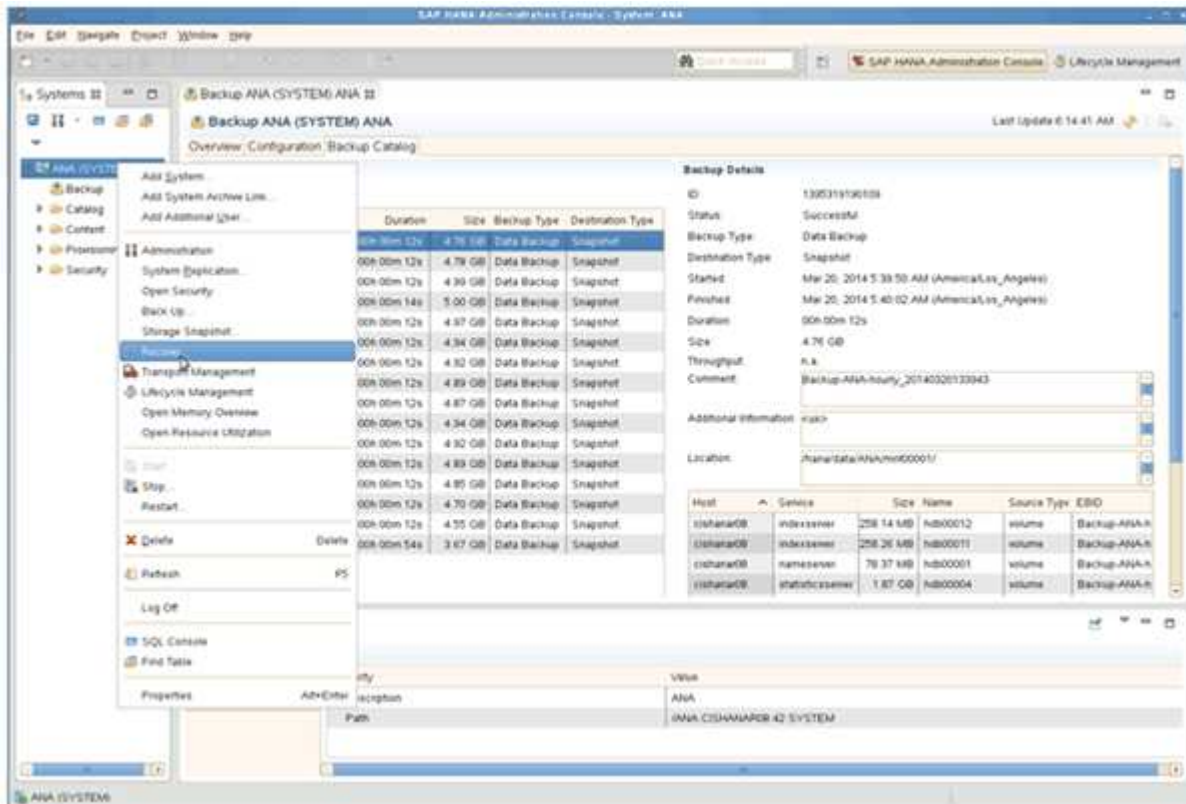
# Restoring and recovering databases from primary storage

You can restore and recover the database from the primary storage.



You cannot restore file-based backup copies from Snap Creator.

1. Within SAP HANA Studio, select **Recover** for the SAP HANA system.

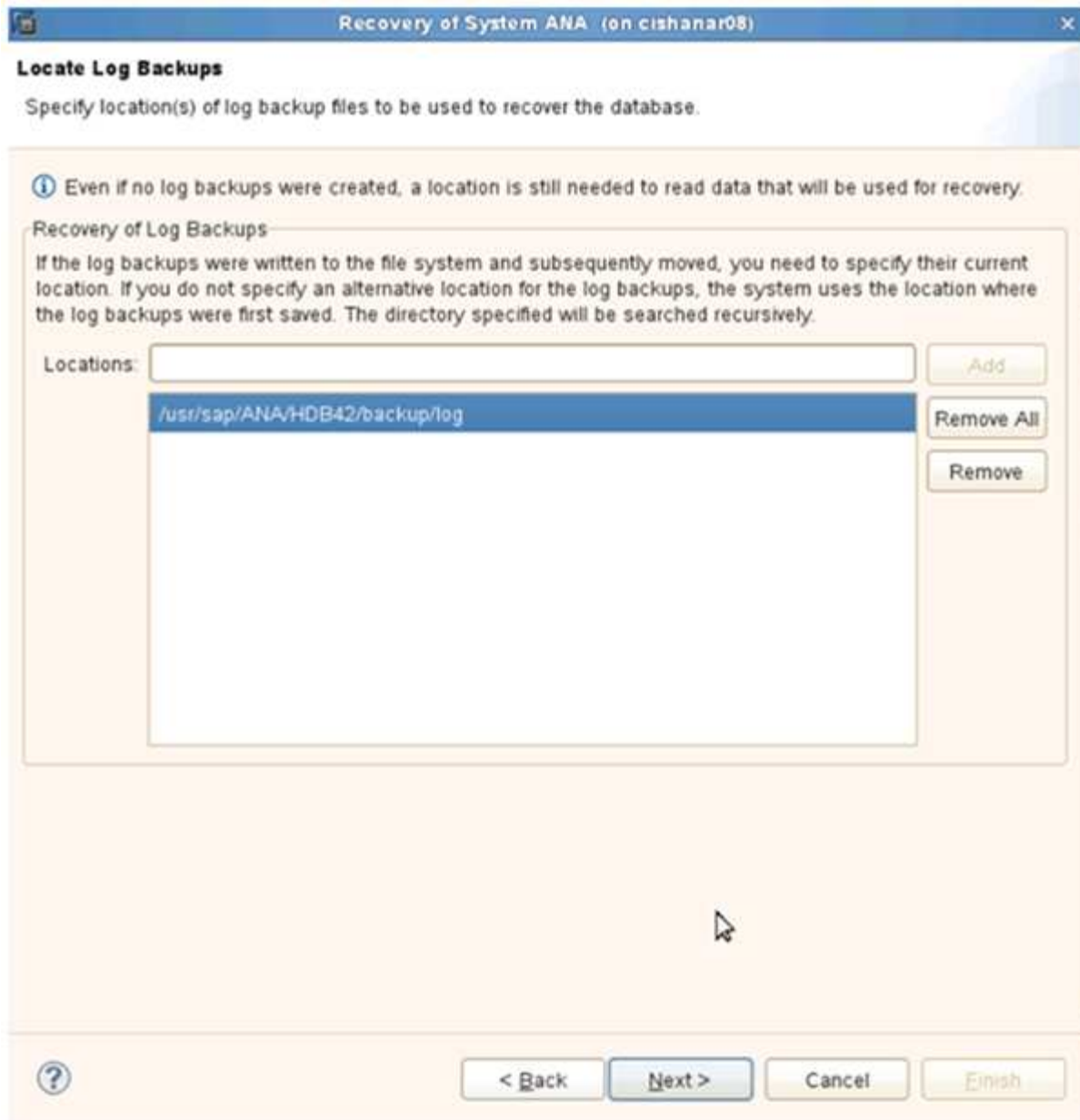


The SAP HANA system shuts down.

2. Select the recovery type and click **Next**.

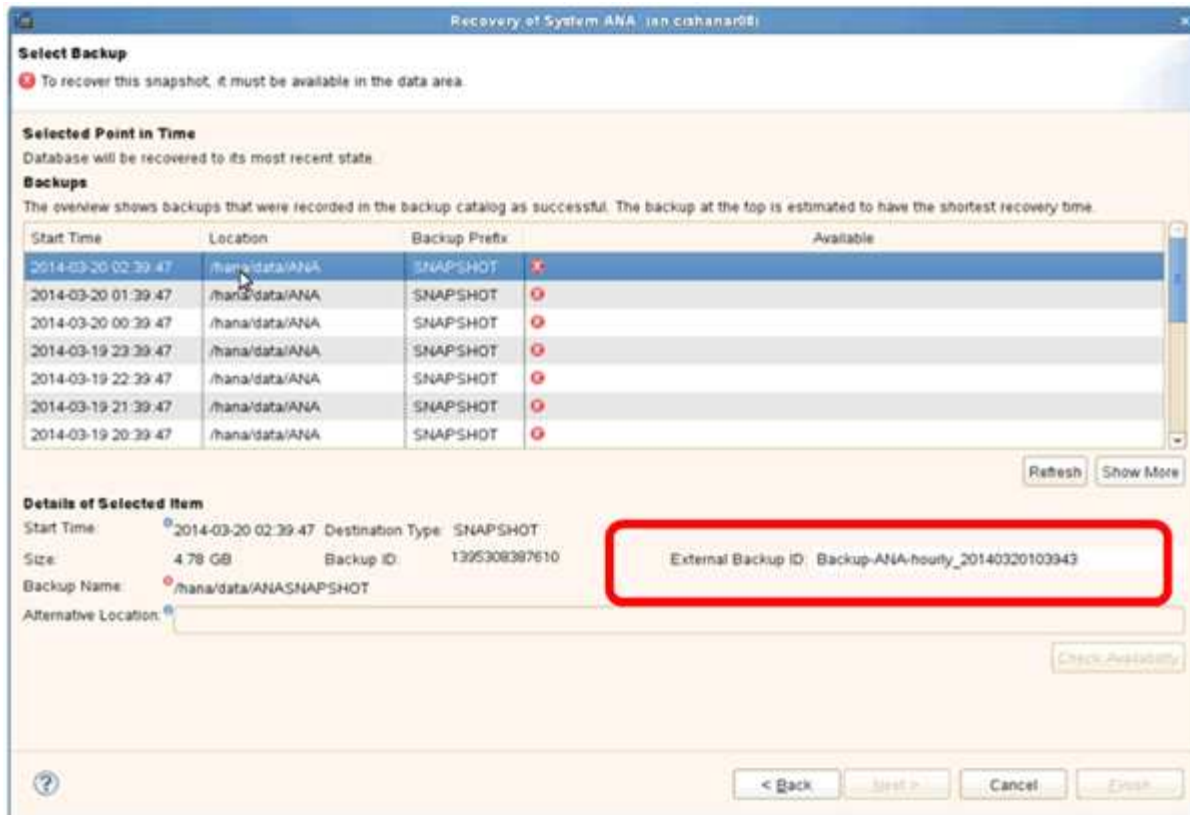


3. Provide the log backup locations and click **Next**.



The list of available backups you see is based on the content of the backup catalog.

4. Select the required backup and record the external backup ID.



5. Deactivate the SnapVault relationship.



This step is only required with clustered Data ONTAP.

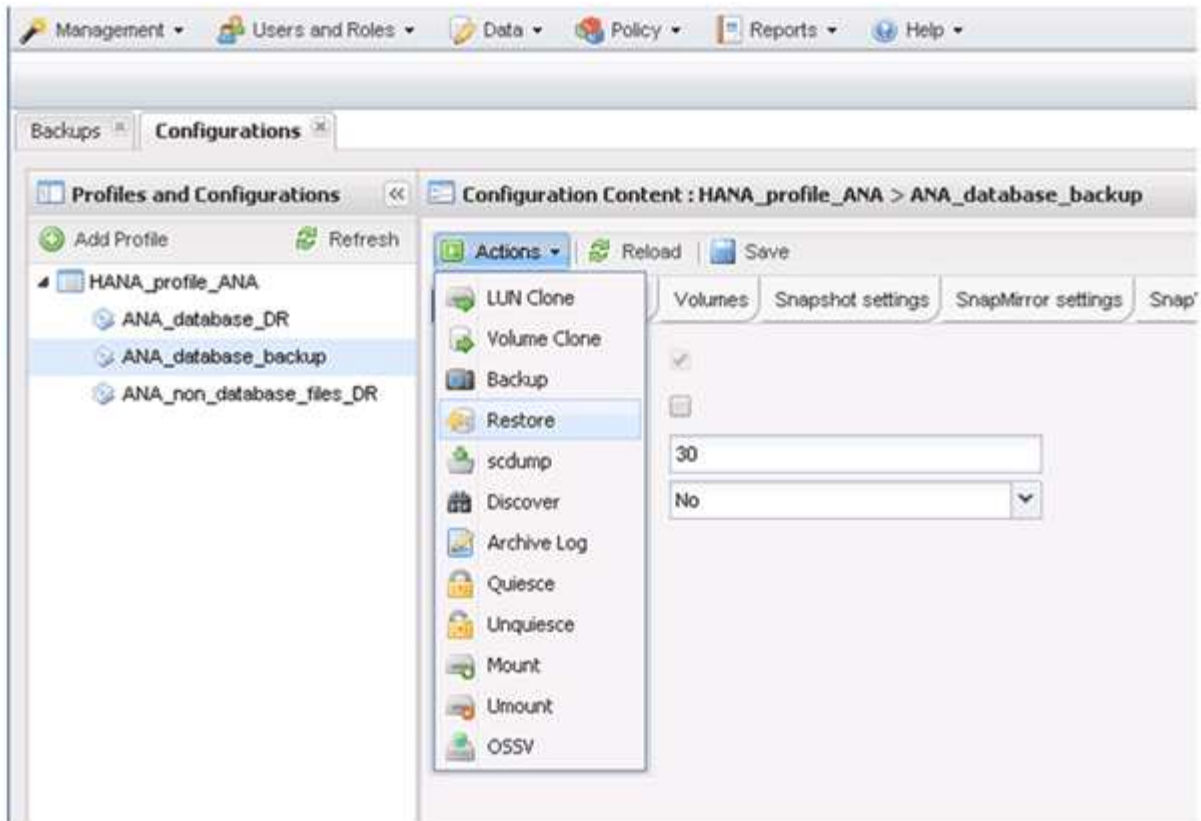
If you need to restore a Snapshot copy that is older than the Snapshot copy currently used as the base Snapshot copy for SnapVault, you must first deactivate the SnapVault relationship in clustered Data ONTAP. To do that, execute the following commands on the backup cluster console:

```
hana::> snapmirror quiesce -destination-path hana2b:backup_hana_data
Operation succeeded: snapmirror quiesce for destination
hana2b:backup_hana_data.

hana::> snapmirror delete -destination-path hana2b:backup_hana_data
Operation succeeded: snapmirror delete the relationship with destination
hana2b:backup_hana_data.

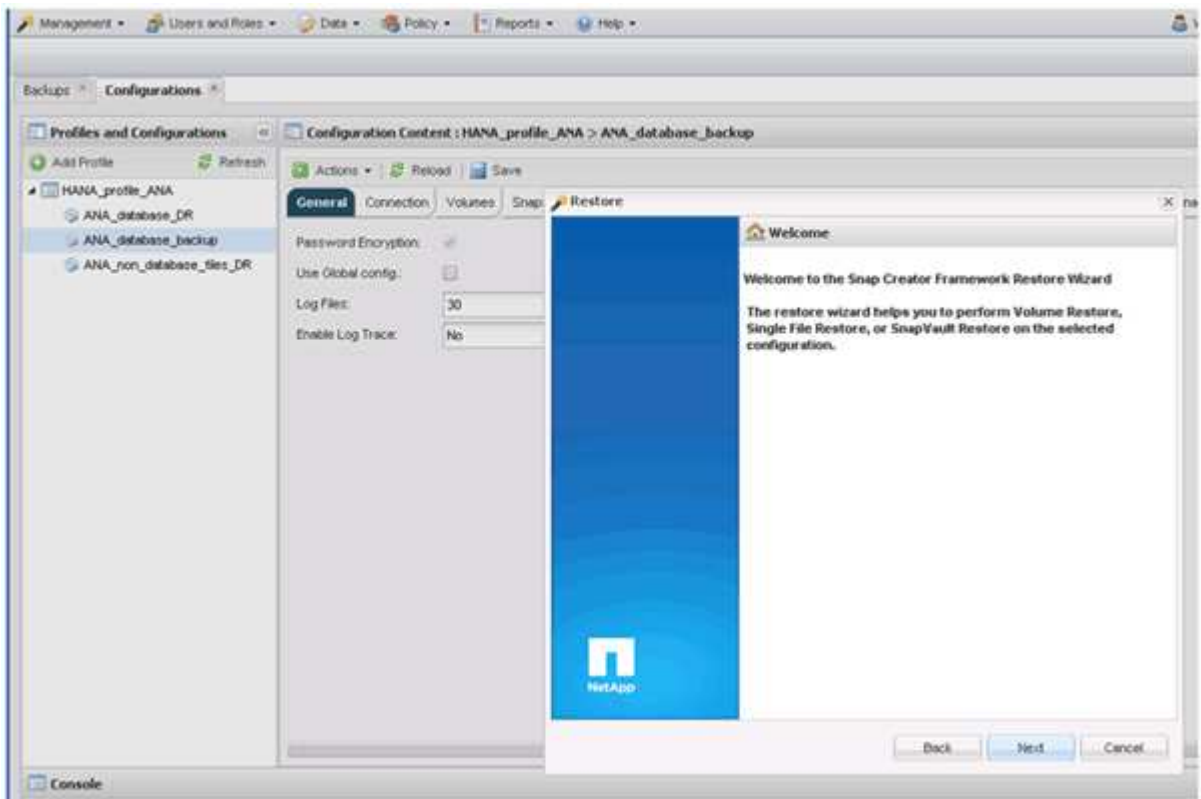
hana::> snapmirror release -destination-path hana2b:backup_hana_data
[Job 6551] Job succeeded: SnapMirror Release Succeeded
```

6. In the Snap Creator GUI, select the SAP HANA system, then select **Actions > Restore**.

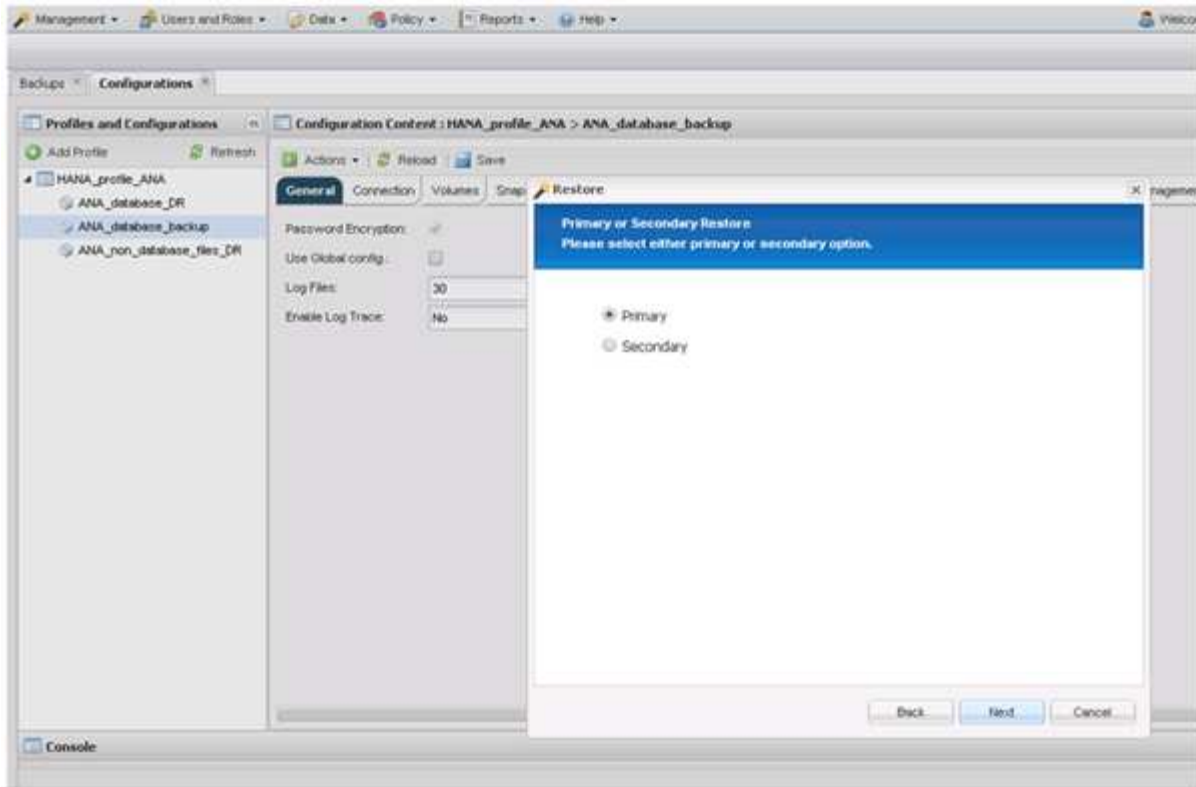


The Welcome to the Snap Creator Framework Restore Wizard screen appears.

7. Click **Next**.



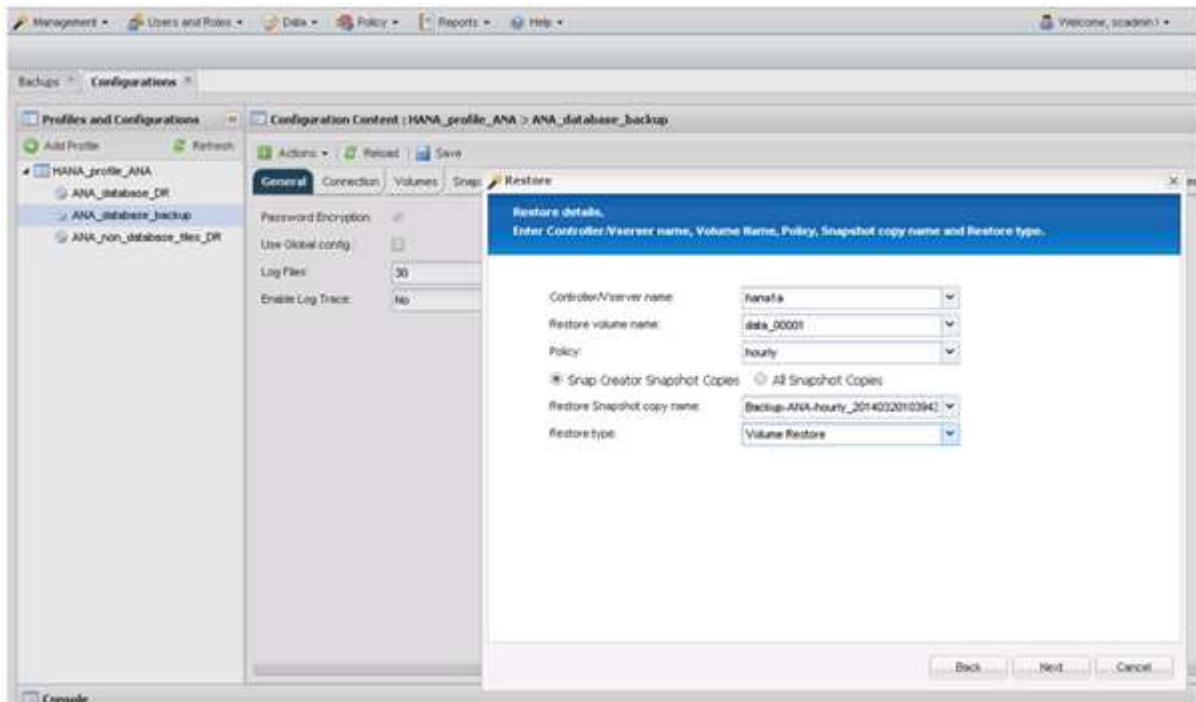
8. Select **Primary** and click **Next**.



9. Select restore from primary storage.

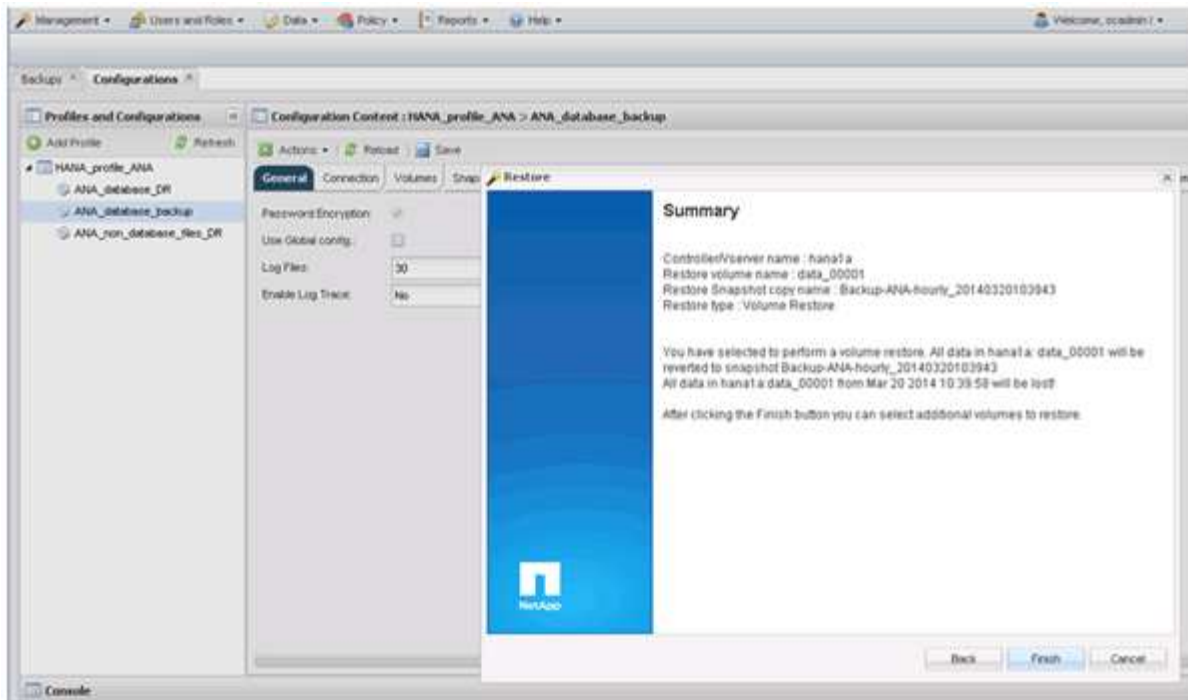
10. Select the storage controller, the volume name, and the Snapshot name.

The Snapshot name correlates with the backup ID that has been selected within SAP HANA Studio.

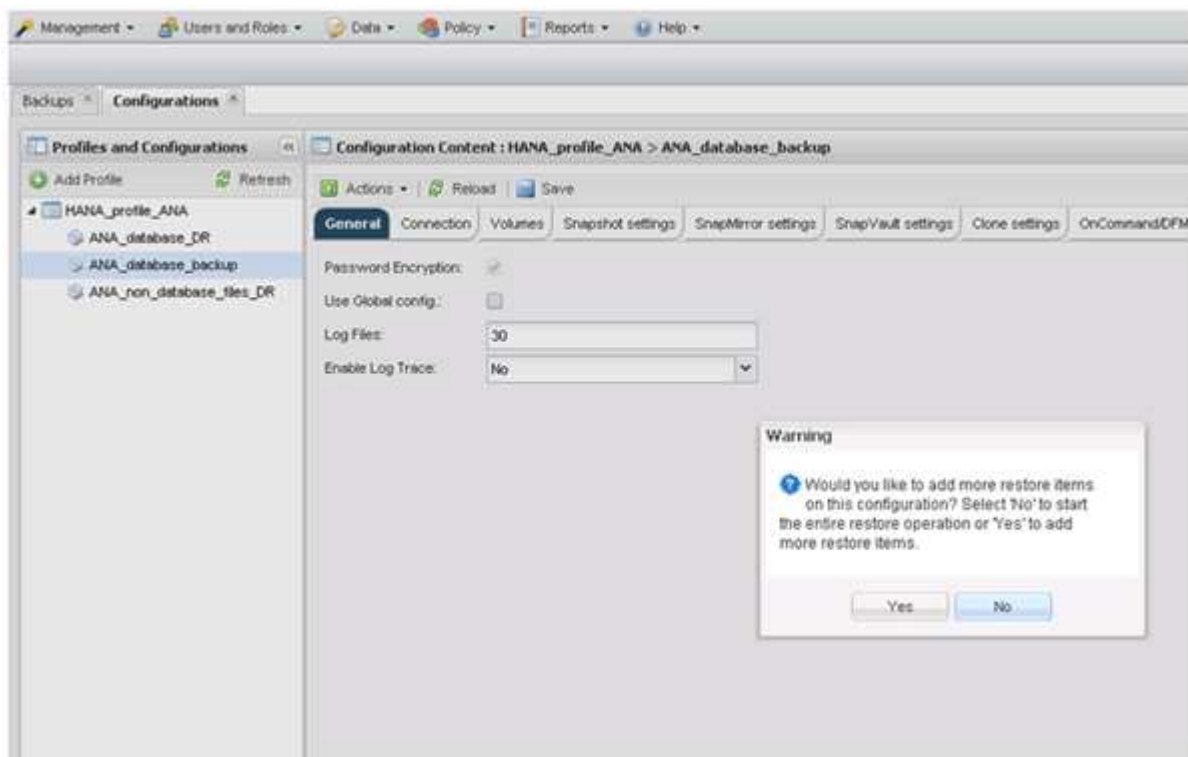


11. Click **Finish**.



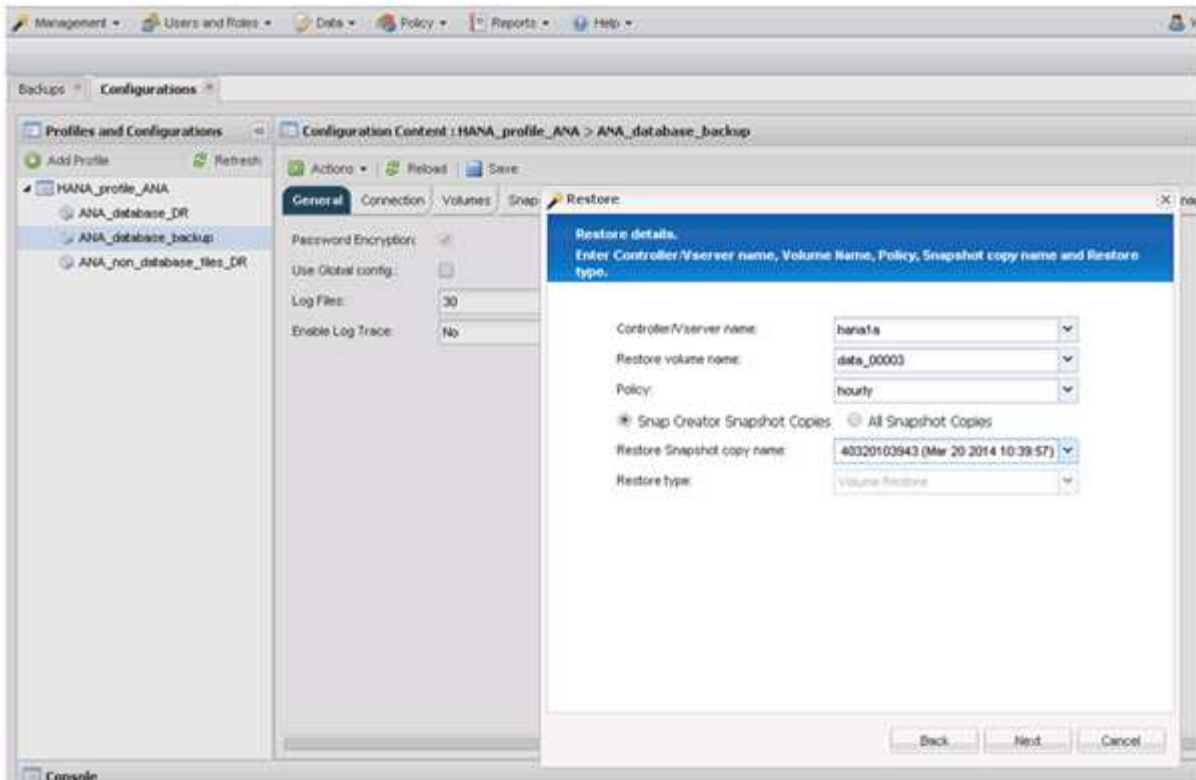


12. Click **Yes** to add more restore items.

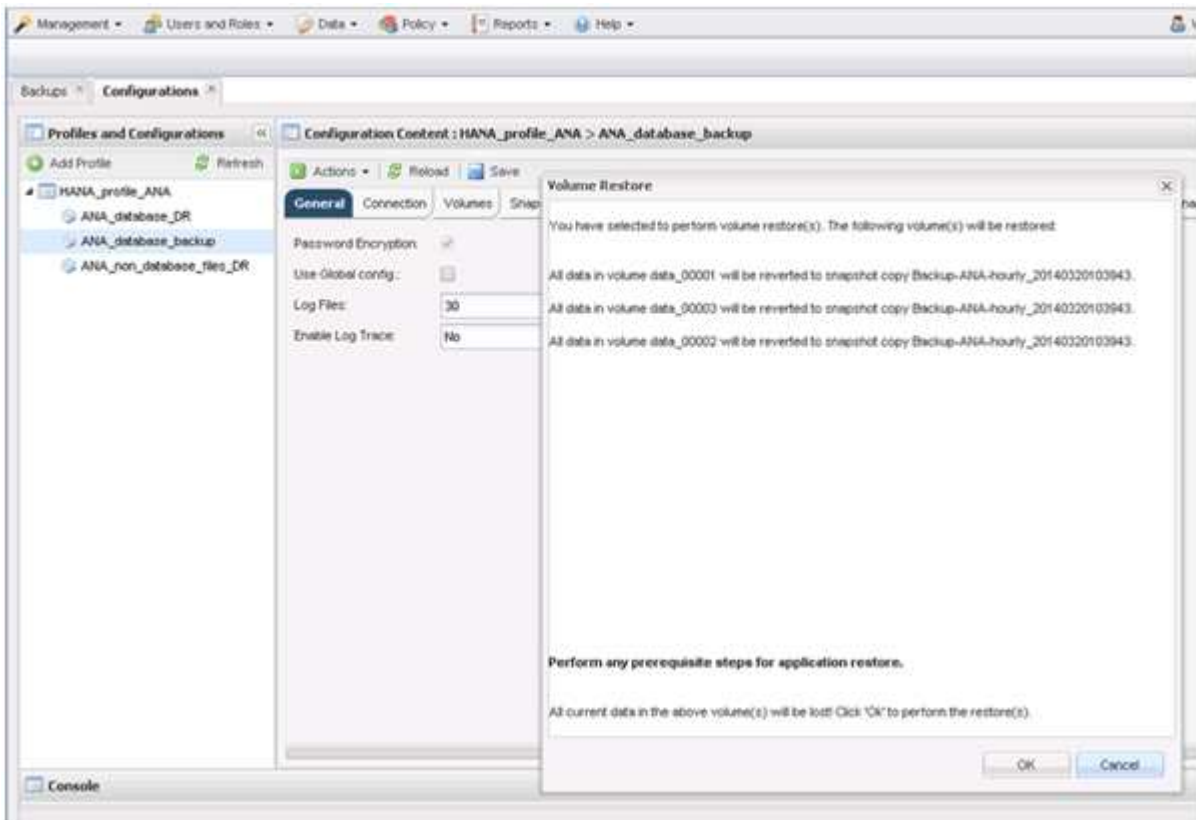


13. Select the storage controller, the additional volume name, and the Snapshot name.

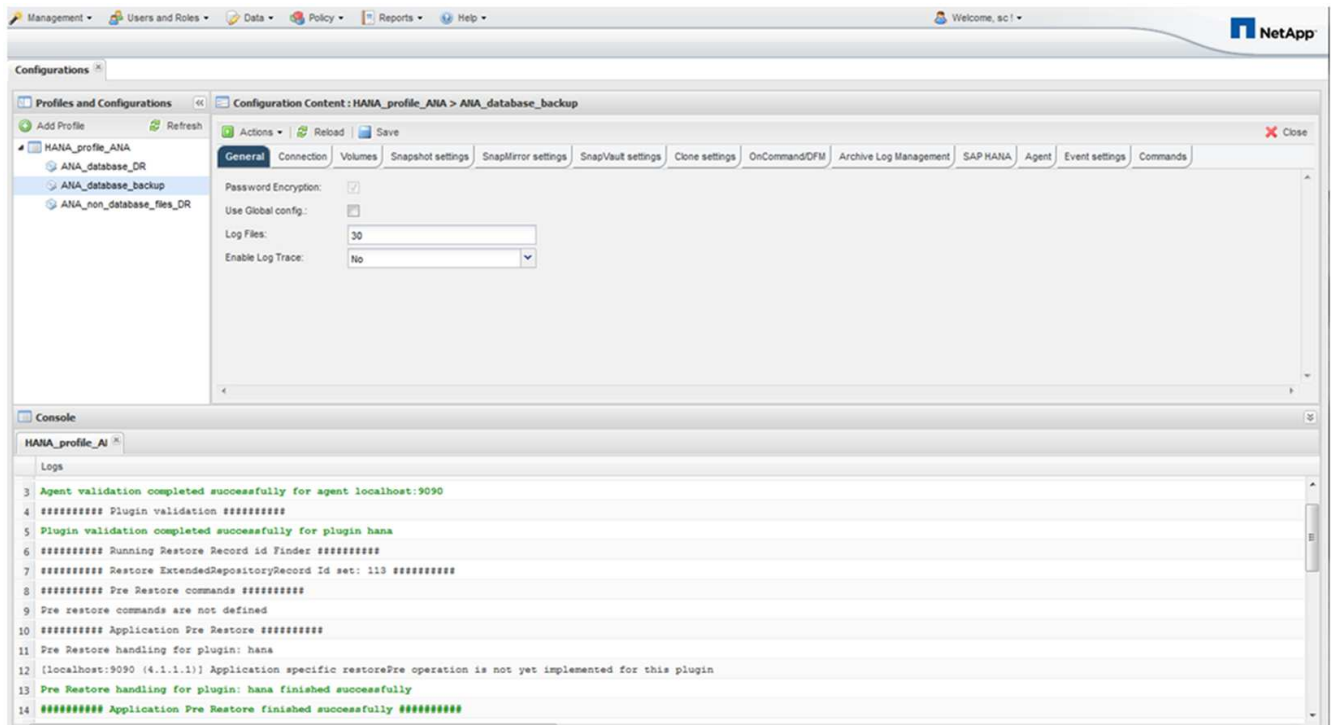
The Snapshot name correlates with the backup ID that has been selected within SAP HANA Studio.



14. Repeat steps 10 through 13 until all required volumes are added; in our example, data\_00001, data\_00002, and data\_00003 need to be selected for the restore process.
15. When all volumes are selected, click **OK** to start the restore process.



The restore process is started.



Wait until the restore process is finished.

16. On each database node, remount all data volumes to clean Stale NFS Handles.

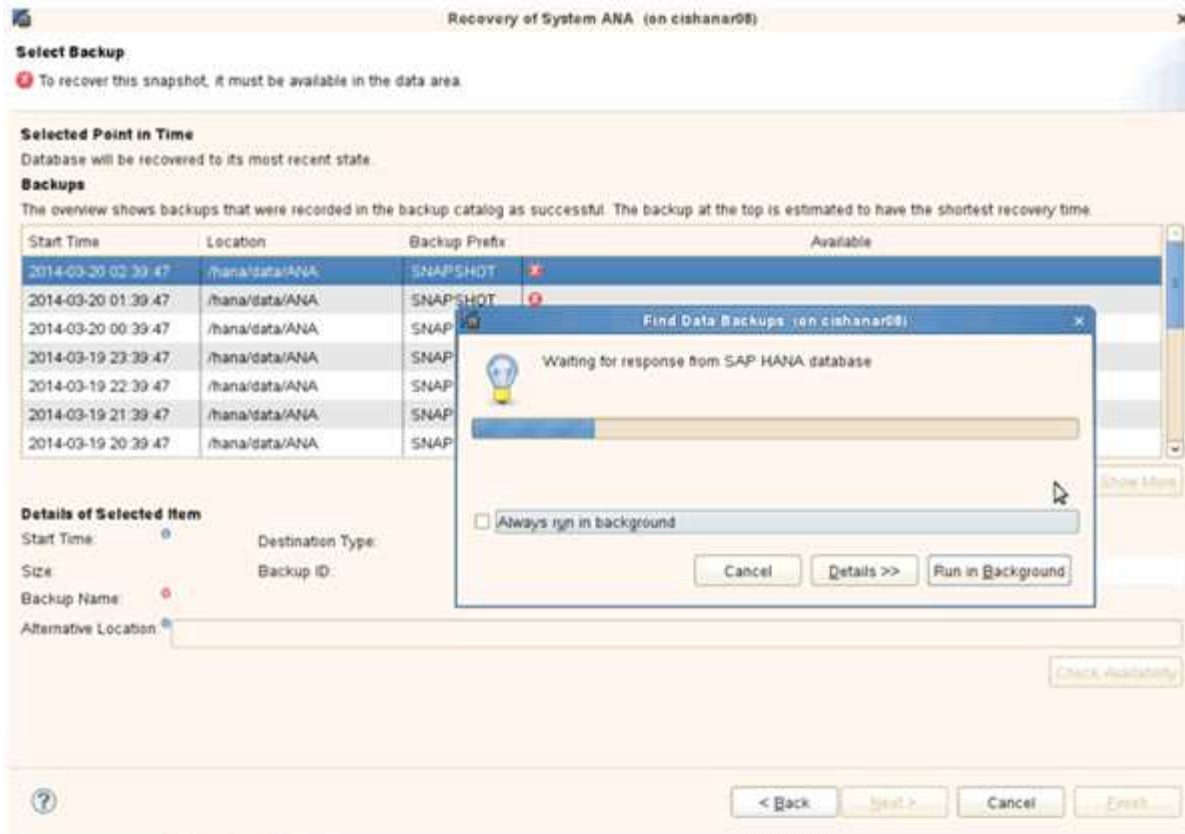
In the example, all three volumes need to be remounted at each database node.

```

mount -o remount /hana/data/ANA/mnt00001
mount -o remount /hana/data/ANA/mnt00002
mount -o remount /hana/data/ANA/mnt00003

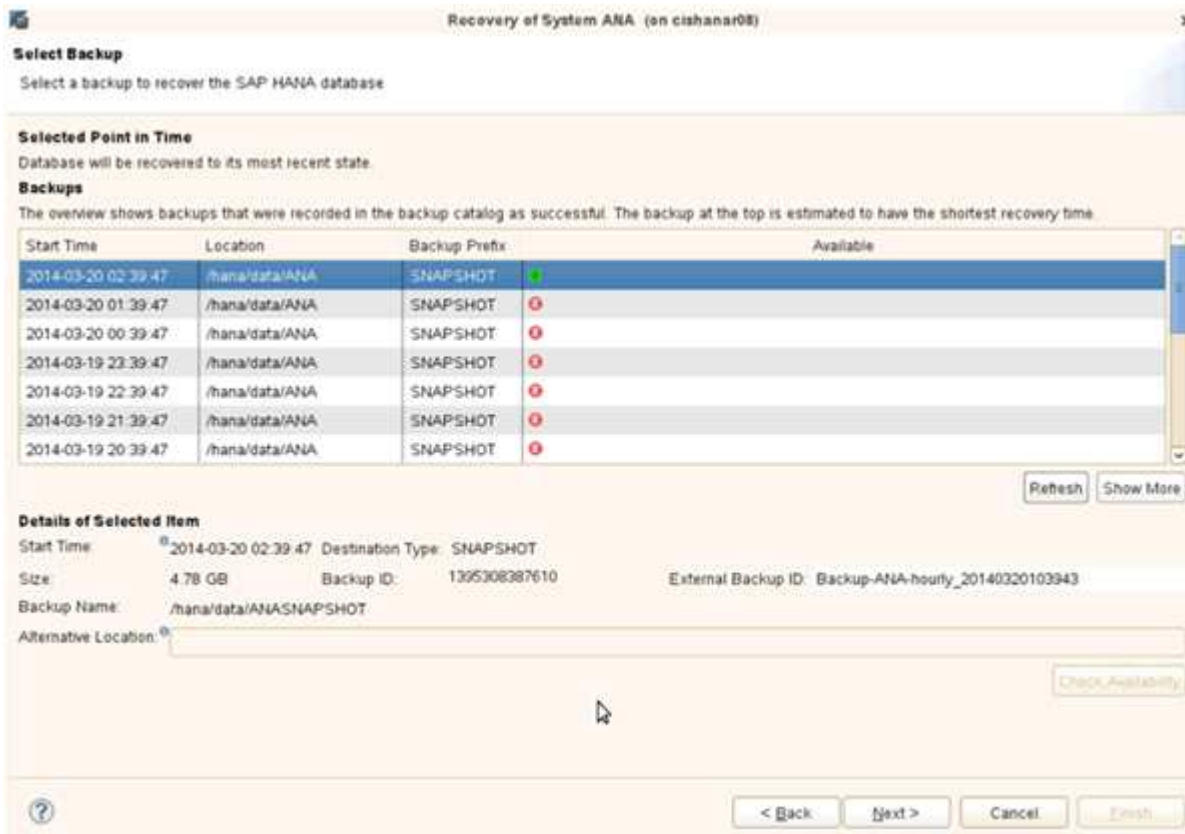
```

17. Go to SAP HANA Studio and click **Refresh** to update the list of available backups.

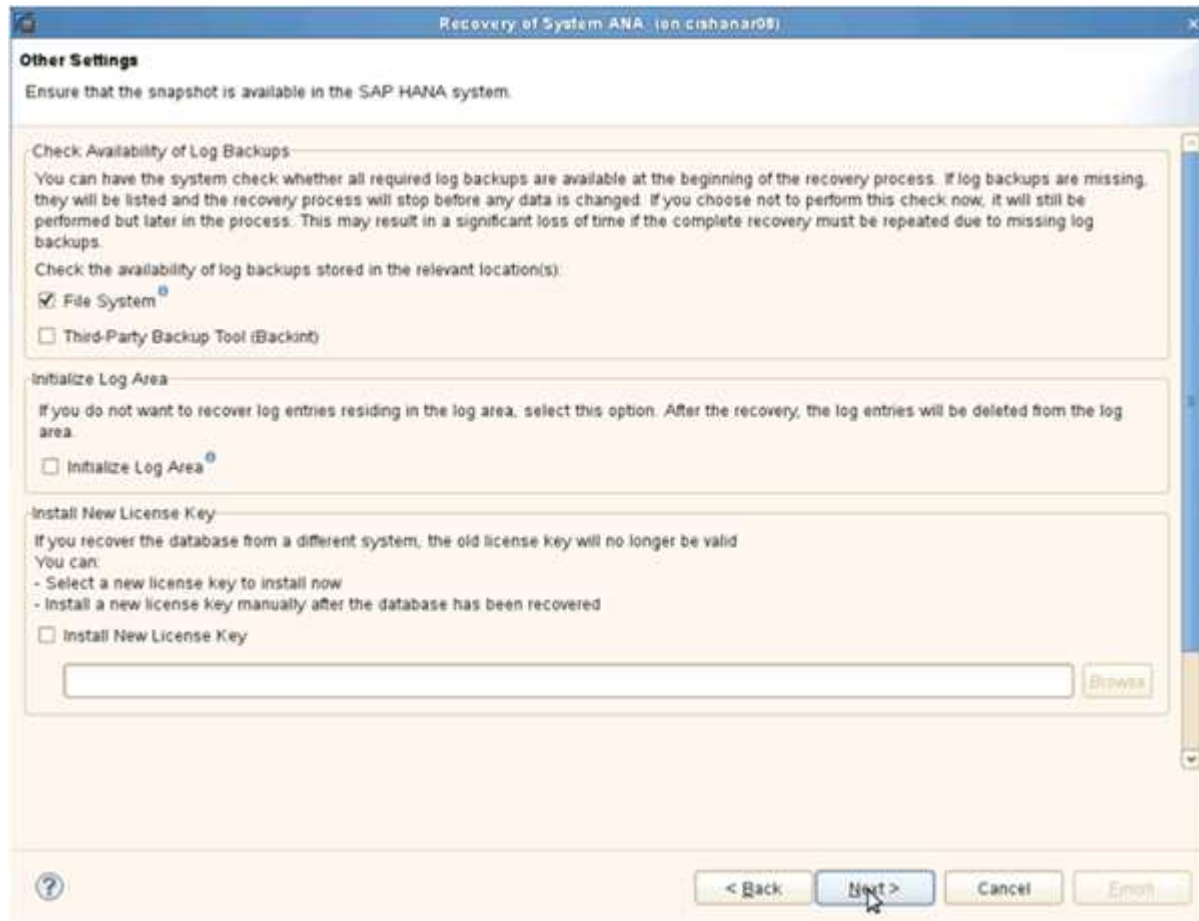


The backup that has been restored with Snap Creator is shown with a green icon in the list of backups.

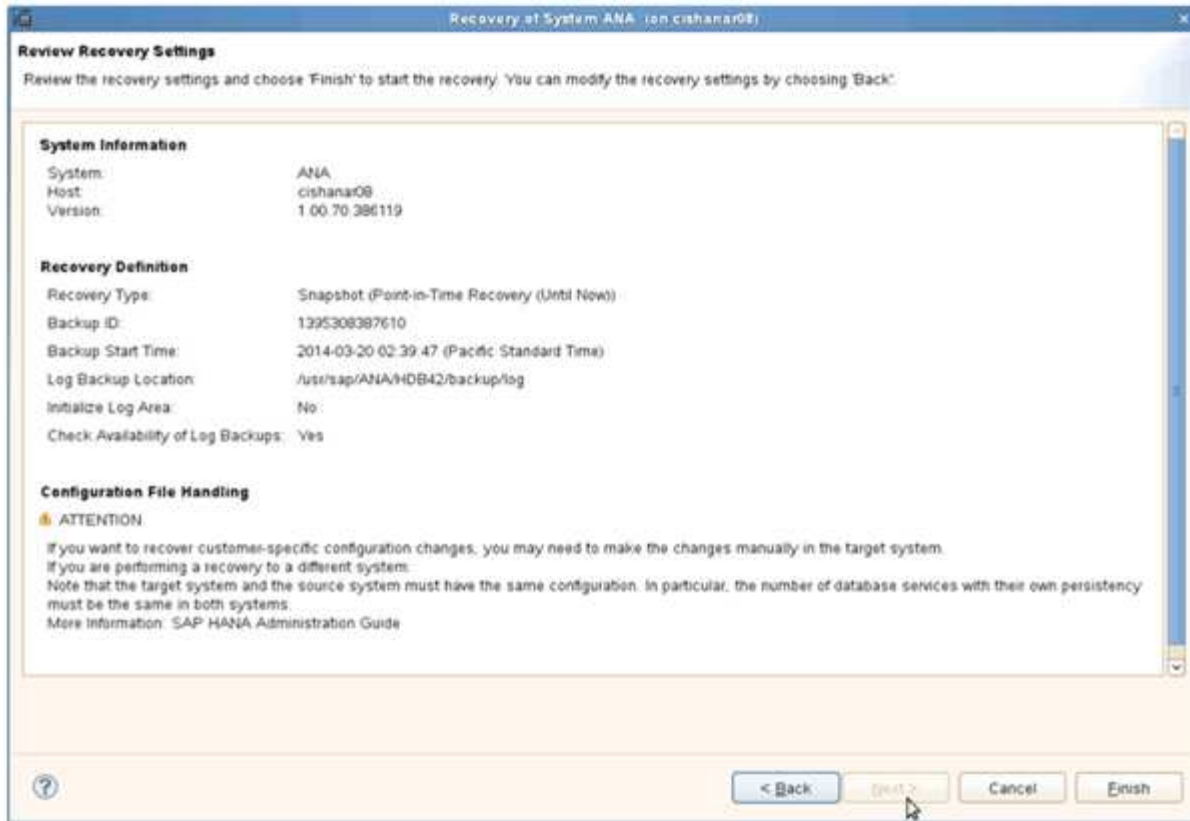
18. Select the backup and click **Next**.



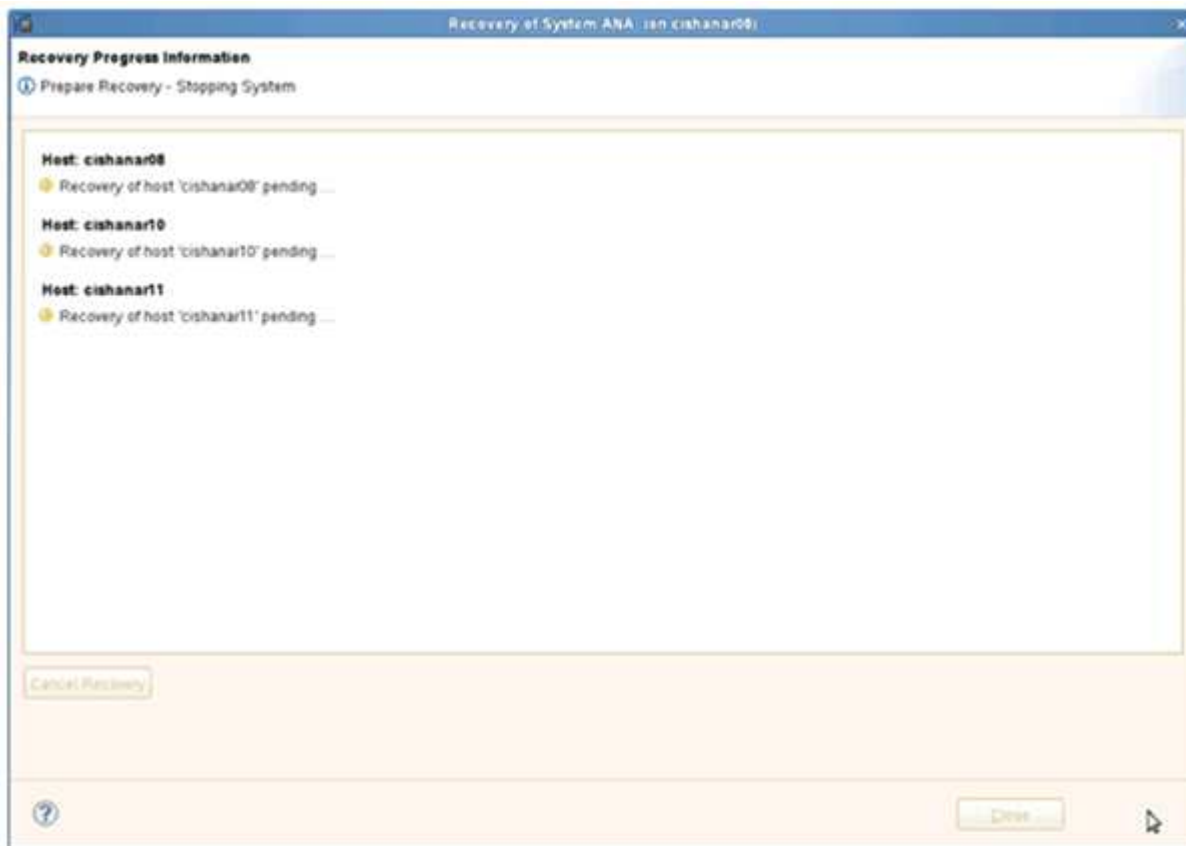
19. Select other settings as required and click **Next**.



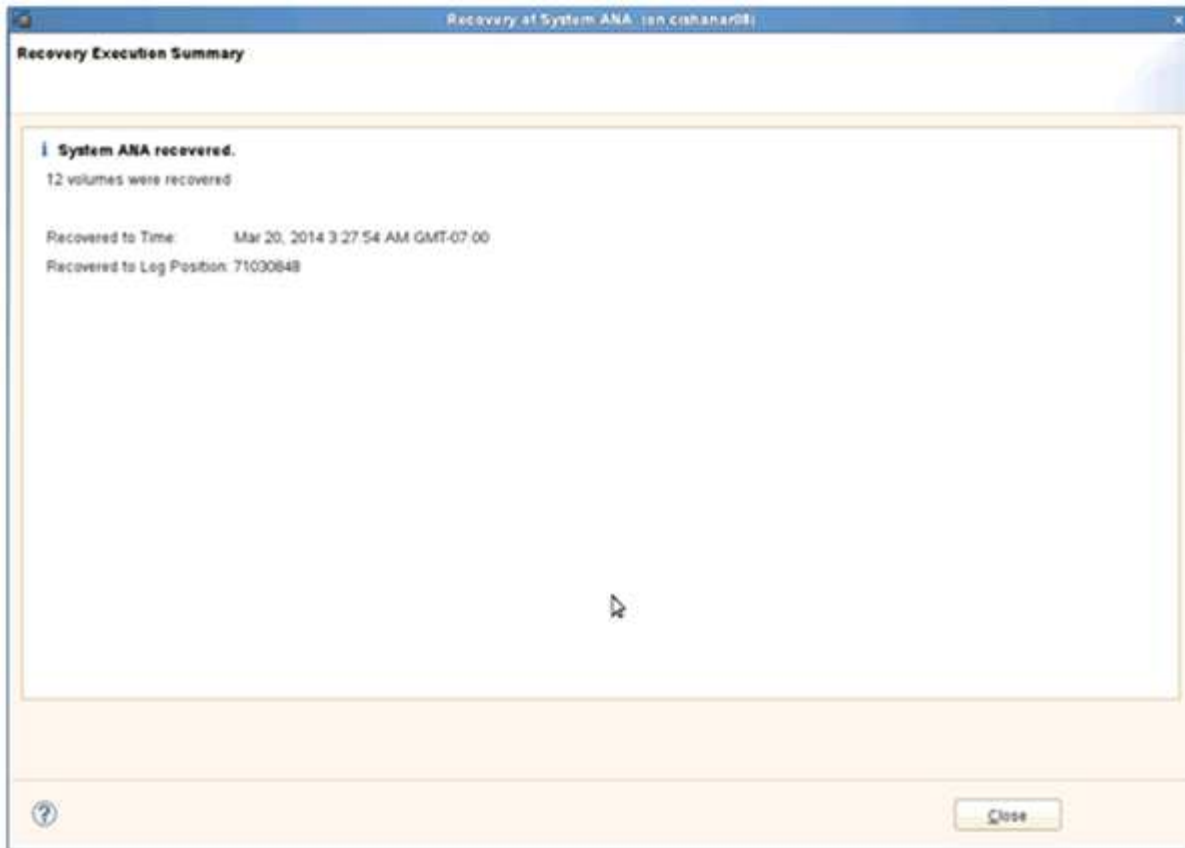
20. Click **Finish**.



The recovery process begins.



21. After recovery is finished, resume the SnapVault relationships, if required.



## 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.