



IBM Domino plug-in overview

Snap Creator Framework

NetApp
April 09, 2021

This PDF was generated from https://docs.netapp.com/us-en/snap-creator-framework/domino-ops/concept_backup_operations_using_domino_plug_in.html on April 09, 2021. Always check docs.netapp.com for the latest.

Table of Contents

- IBM Domino plug-in overview 1
- Understanding IBM Domino plug-in backup operations 1
- Understanding IBM Domino plug-in restore operations 2

IBM Domino plug-in overview

The IBM Domino plug-in for the Snap Creator Framework offers a complete backup and recovery solution for Domino databases on NetApp storage. With the IBM Domino plug-in, you can back up databases efficiently and restore them as needed without taking database servers offline. The plug-in uses IBM-provided APIs to ensure application consistency.

With key NetApp data protection technologies tightly integrated in the Snap Creator Framework, you can use the IBM Domino plug-in to:

- Create application-consistent Snapshot copies on primary storage
- Replicate Snapshot copies to secondary storage for disaster recovery and archiving

Integrated technologies include Snapshot, SnapMirror, and SnapVault.

Understanding IBM Domino plug-in backup operations

Unlike other backup technologies, the IBM Domino plug-in allows data to be written to the database during backup operations. It ensures that the backup is consistent with application data by recording any changes to the database during backup operations in a temporary directory called changeinfo. At restore time, it applies these changes to the database after restoring data from the Snapshot copy.

During backup operations, database files are said to be in backup mode. Although the Snap Creator Framework refers to these files as “quiesced,” that is not the case. Data continues to be written to the files while the Snapshot copy is being made.

High-level steps are as follows:

1. List databases, templates, and mailboxes in the volumes to be backed up.
2. Put files in backup mode, one database at a time.
3. Check for inconsistent or corrupted databases.



You can force the plug-in to proceed with backup operations despite errors, as described in [task_using_the_gui_to_create_a_configuration_file.md#STEP_AA41331683A24598B7845367CB967F99](#) step

4. Make a Snapshot copy of each volume.
5. If Domino transaction logging is in use, archive copies of Domino transaction logs for use in up-to-the-minute restore operations.
6. Take files out of backup mode, one database at a time.
7. Record changes to the database since files were put in backup mode in the changeinfo directory.

Understanding IBM Domino plug-in restore operations

The IBM Domino plug-in restores database files from the Snapshot copy of the volume on which the database is stored. When the Snapshot restore operation is complete, the plug-in applies any changes recorded in the changeinfo directory.

High-level steps are as follows:

1. Restore database files from Snapshot copies.
2. Apply changes recorded in changeinfo directory.
3. Apply transaction log information, if available.

Restore options

The plug-in offers a wide variety of restore options:

Restore type	Description
Volume restore (point-in-time)	Restores the entire volume to its state at the time of the Snapshot copy.
Volume restore (up-to-the-minute)	Restores the entire volume to its state at the time of the Snapshot copy, then plays forward Domino transaction logs to the most recent copy.
Volume restore (selectable up-to-the-minute)	Restores the entire volume to its state at the time of the Snapshot copy, then plays forward Domino transaction logs to a specified time.
Single-file restore (point-in-time)	Restores a single file to its state at the time of the Snapshot copy (NFS only).
Single-file restore (up-to-the-minute)	Restores a single file to its state at the time of the Snapshot copy, then plays forward Domino transaction logs to the most recent copy (NFS only).
Single-file restore (selectable up-to-the-minute)	Restores a single file to its state at the time of the Snapshot copy, then plays forward Domino transaction logs to a specified time (NFS only).

Note: For up-to-the-minute and selectable up-to-the-minute restores, Domino transaction logging must be enabled.

Transaction logs can only be played forward. Selecting a time before the Snapshot copy was created causes a restore error.

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.