



Using the plug-in framework to create custom plug-ins

Snap Creator Framework

Zachary Wambold
January 19, 2021

Table of Contents

Using the plug-in framework to create custom plug-ins 1

Using the plug-in framework to create custom plug-ins

The plug-in framework enables you to create your own plug-ins for Snap Creator or reuse the existing plug-ins. The plug-in provides Snap Creator with the steps for handling backup and recovery of a given application.

The plug-in framework defines the following methods:

- quiesce - Method for handling quiesce for a given application plug-in
- unquiesce - Method for handling unquiesce for a given application plug-in
- discover - Method for handling discovery of storage objects for a given application plug-in
- scdump - Method for handling collection of support information, database, operating system, and SnapDrive
- restore - Method for handling restore for a given application plug-in
- restore_pre - Method for handling prerestore operations for a given application plug-in (can use built-in restore CLI of Snap Creator)
- restore_post - Method for handling post-restore operations for a given application plug-in (can use built-in restore CLI of Snap Creator)
- clone_pre - Method for handling preclone operations for a given application plug-in
- clone_post - Method for handling post-clone operations for a given application plug-in
- describe - Method for describing what a plug-in implements. This is optional for Perl plug-ins but required for native plug-ins under plug-ins/native.
- clone_all - Method for handling cloning for a given application plug-in (cannot use built-in cloning interface)
- clone_cleanup - Method for handling cleanup if a clone operation fails
- restore_cleanup - Method for handling cleanup if a restore operation fails



The plug-in framework supports Perl, PowerShell, Java, UNIX Shell, and Python for programming. NOTE: The plug-in framework enables you to implement objects and functions that exist within the Snap Creator.

+ For example, error handling is available, which means the plug-in can use the standard implementation Snap Creator uses. This reduces the work required to create a plug-in.

- Perl plug-ins are installed under /plug-ins/PLUG-IN-name/PLUG-IN.pm.
- Native plug-ins are installed under /plug-ins/native/plugin.sh,plugin.java.plugin.bat, and so on.
- The plug-in must be installed where it is supposed to run. This can be Snap Creator Server or Snap Creator Agent depending on the set up of Snap Creator.

For more information about the plug-in framework, plug-ins, and a plug-in user guides, see the [Snap Creator Framework Discussions Community forum](#).

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.