



Run a scan

XCP

Ciaran McNamara, Barb Einarsen
December 16, 2020

Table of Contents

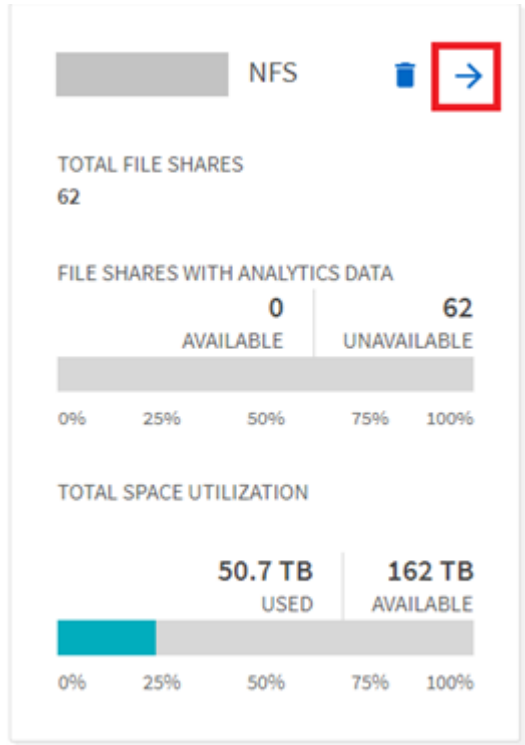
Run a scan 1
Learn about graphs 2

Run a scan

When the NFS/SMB files system is added to the XCP File Analytics GUI, you can start a file system scan to analyze and represent the data.

Steps

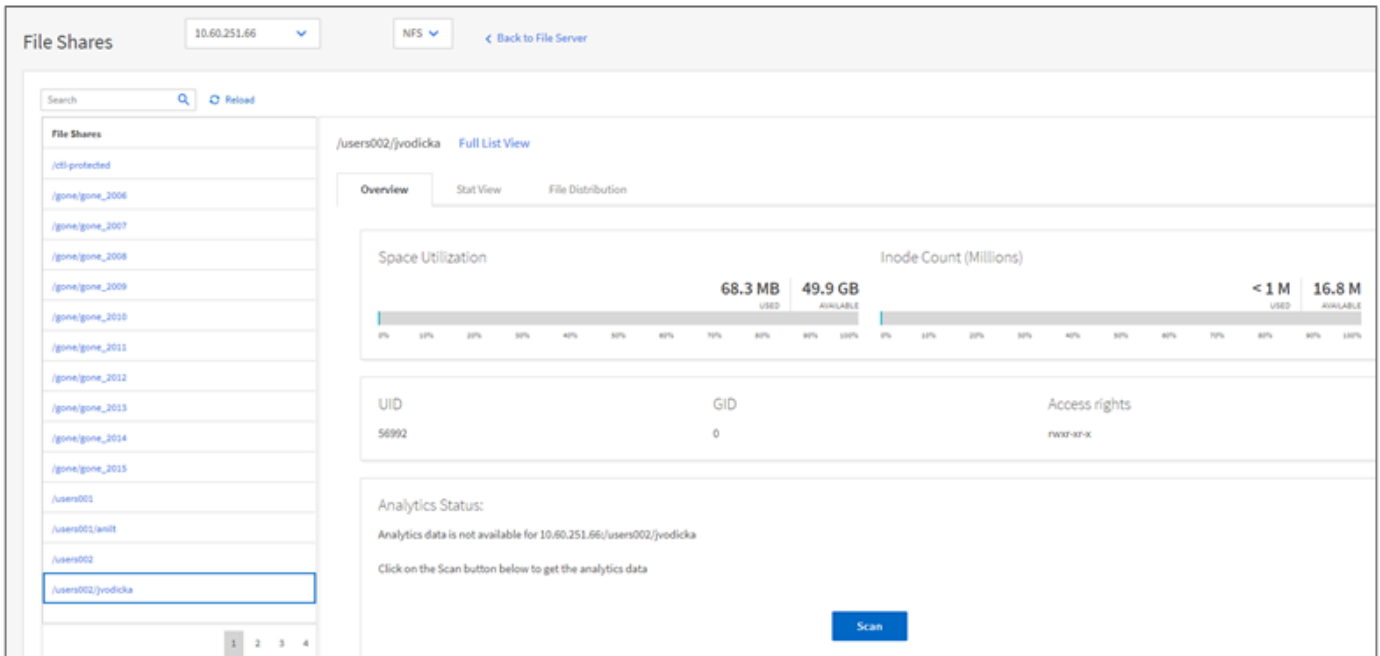
1. Click the arrow on the added file server card to view the file shares on the file server.



2. From the list of file shares, click the name of the file share to scan.
3. Click **Scan** to start the scan.

XCP displays a progress bar for the scan.

4. When the scan is complete the **stat view** and **file distribution** tabs are enabled to allow you to view graphs.

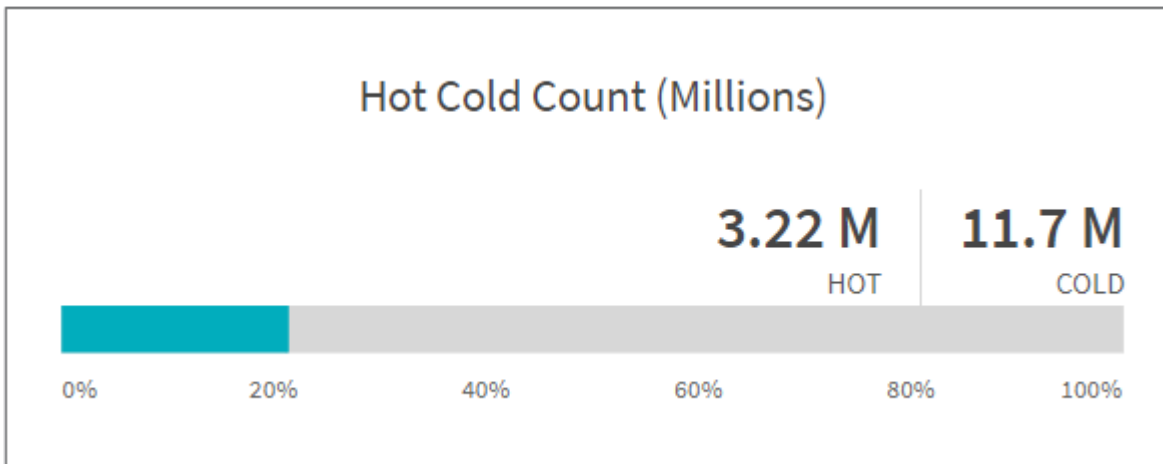


Learn about graphs

The File Analytics GUI dashboard displays multiple graphs for visualizing File Analytics.

Hot Cold Count Graph

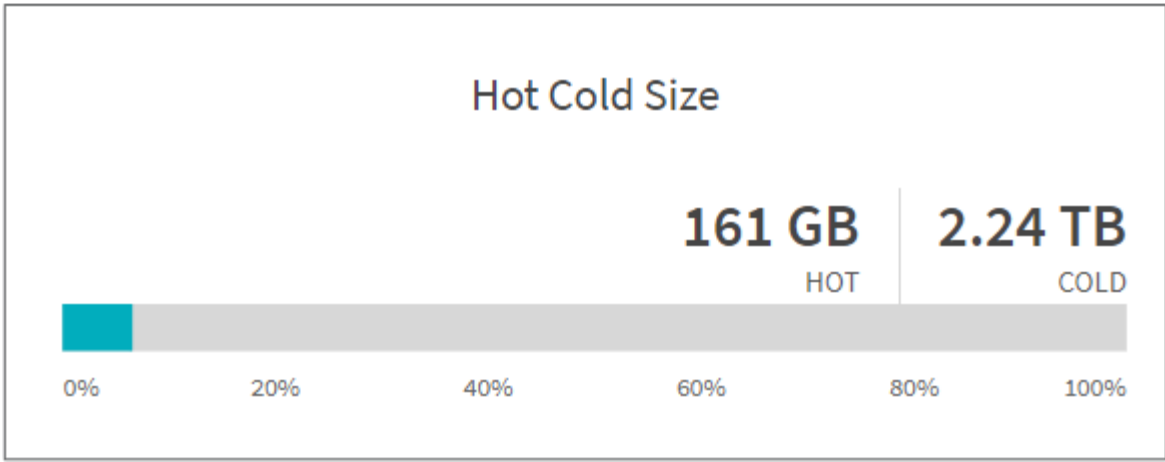
XCP File Analytics categorizes files not accessed for 90 days as cold data. Files accessed in the last 90 days are hot data. Criteria to define hot and cold data is based on access time only.



The Hot Cold Count graph displays the number of inodes (in millions) that are hot or cold in XCP NFS. In XCP SMB, this graph denotes the number of files that are hot or cold.

The colored bar represents the hot data and shows the percentage of files accessed within 90 days.

Hot Cold Size Graph



The Hot Cold Size graph displays the percentage of files that are hot and cold and the total size of the files in each category. The colored bar represents the hot data and the uncolored part represents the cold data. Criteria to define hot and cold data is based on access time only.

Entries in Directory Graph








The 'Entries in Directory' table shows the distribution of directory entries across different depths. The table has three columns: 'Depth', 'Count', and a visual bar representing the count. The '1-10' depth category has the highest count, followed by 'empty' and '10-100'.

Depth	Count
10-100	443506
100-1K	19818
1K-10K	1050
1-10	2362671
>10K	21
empty	479797

The Entries in Directories graph displays the number of entries in directories. The Depth column contains different directory sizes and the Count column indicates the number of entries in each directory depth.

File Distribution by Size Graph







File Distribution By Size

File Size	Count	
8-64KiB	5998834	
10-100MiB	17069	
>100MiB	3589	
<8KiB	16046580	
64KiB-1MiB	1034391	
1-10MiB	109732	
empty	467594	

The File Distribution by Size graph displays the number of files that are under the given file sizes. The File Size column contains the categories of file size and the Count column indicates the distribution of the number of files.

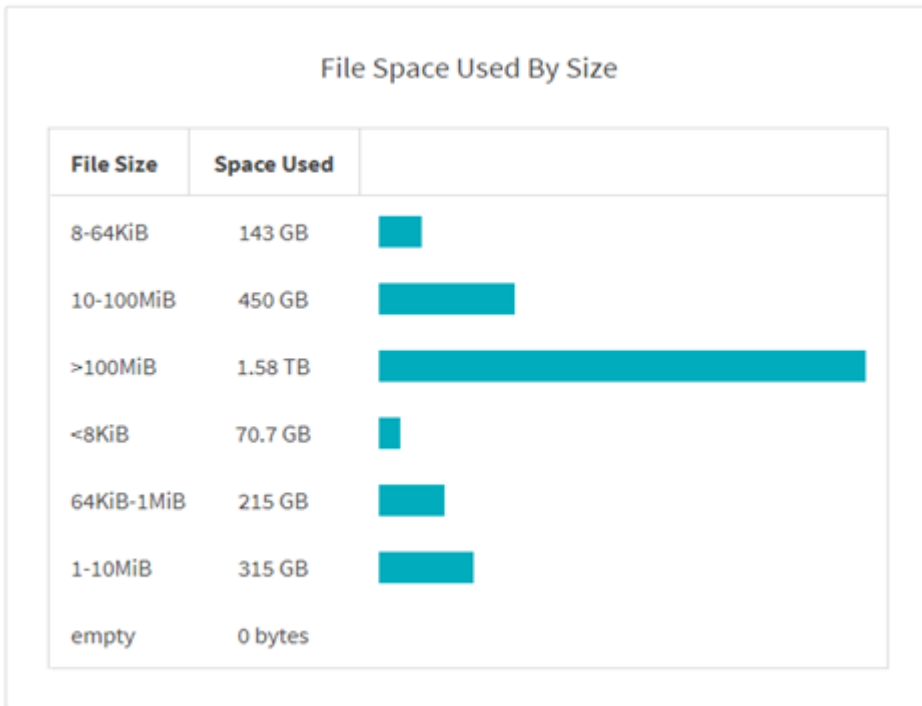
Directory Depth Graph

Directory Depth

Depth	Count	
6-10	18121522	
0-5	1911157	
>100	145	
16-20	888382	
21-100	196239	
11-15	6597542	

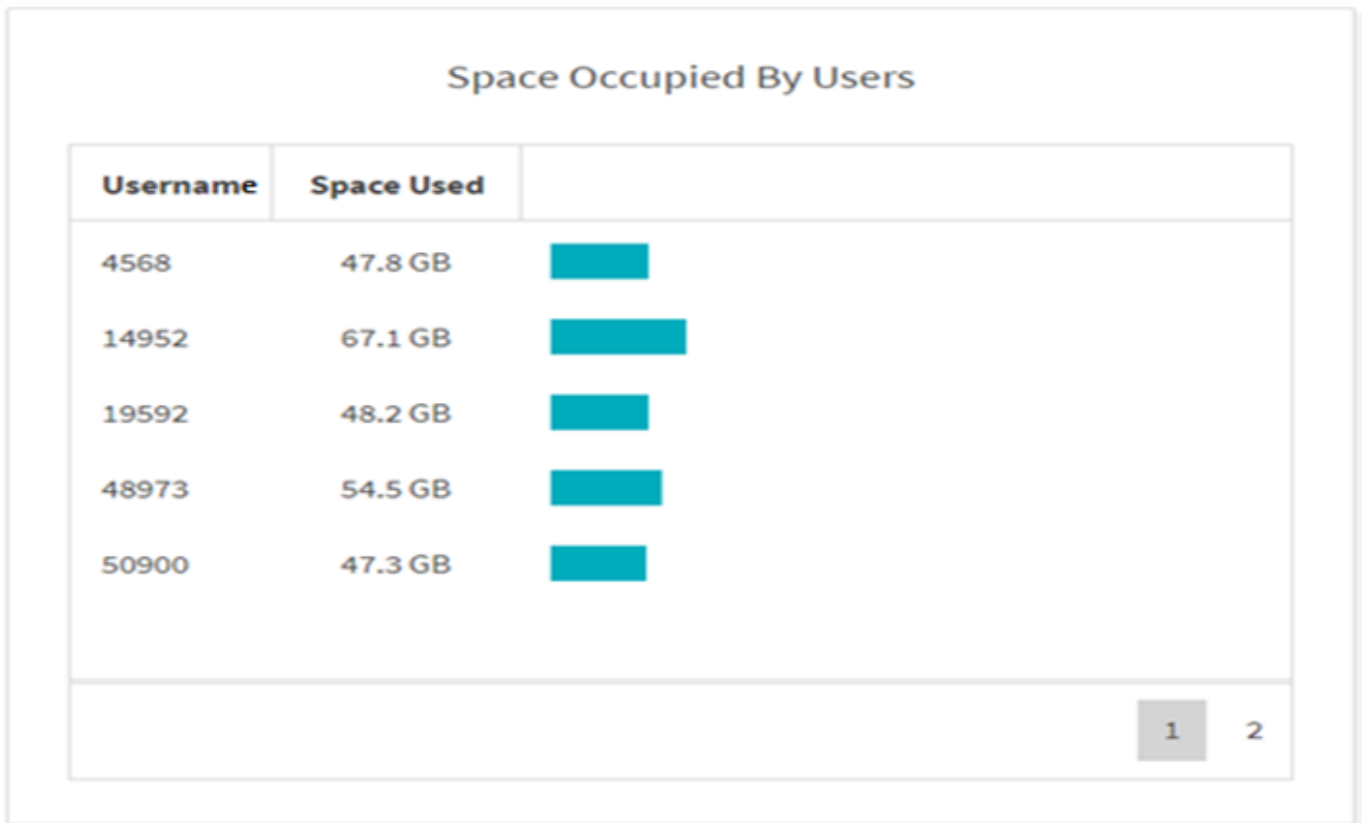
The Directory Depth graph represents the distribution of the number of directories in various directory depth ranges. The Depth column contains various directory depths and the Count column contains the count of each directory depth in the file share.

File Space Used by Size Graph



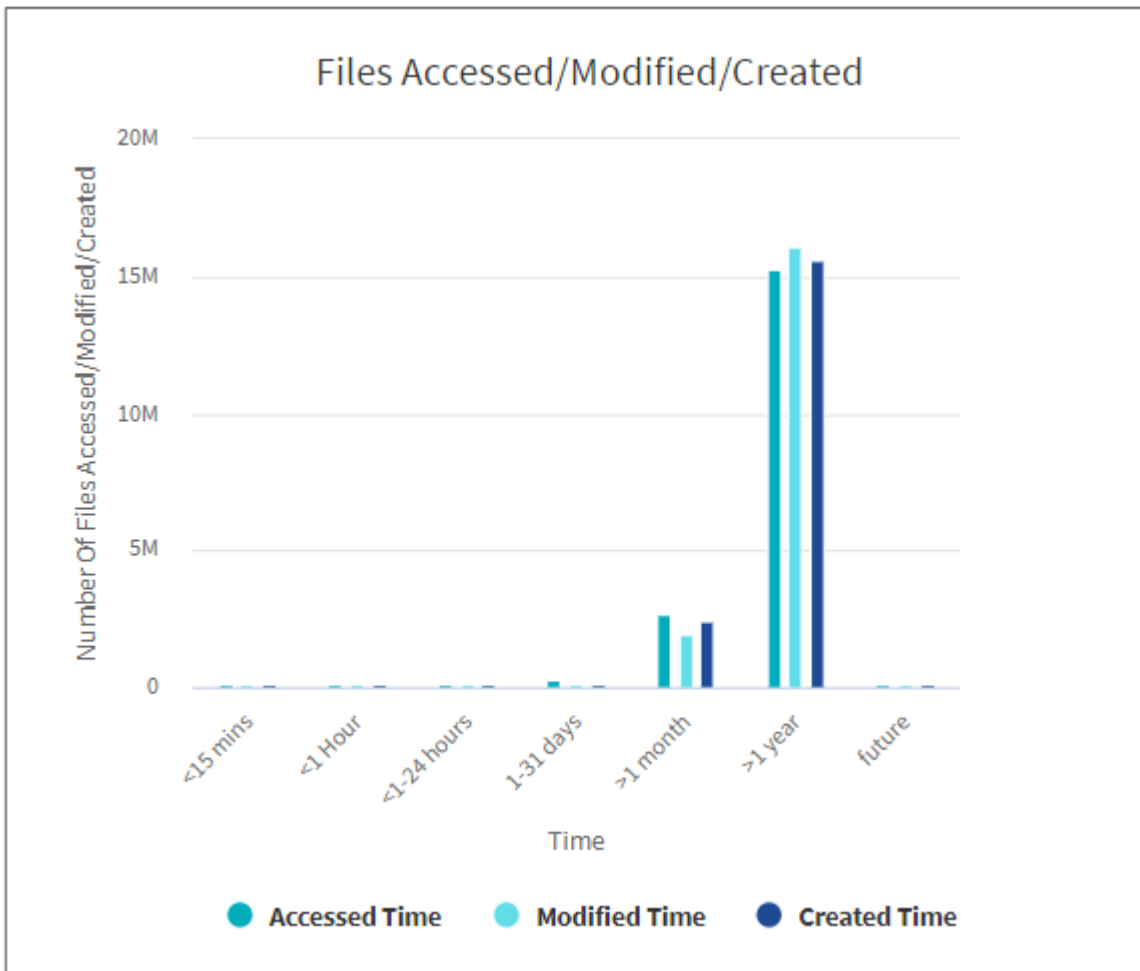
The File Space Used by Size graph displays the number of files in different file-size ranges. The File Size column contains different file size ranges and the Space Used column indicates the space used by each file size range.

Space Occupied by Users Graph



The Space Occupied by Users graph displays the space used by users. The Username column contains the names of users (UID when usernames cannot be retrieved) and the Space Used column indicates the space used by each username.

Files Accessed/Modified/Created Graph

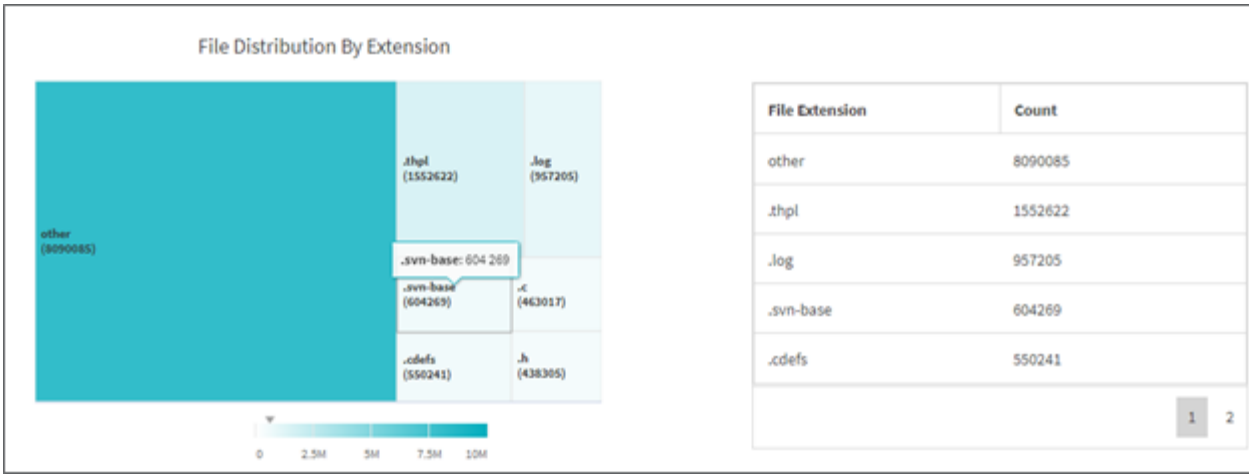


The Files Accessed/Modified/Created graph displays the count of files changed overtime. The X-axis represents the period of time within which changes were made and the y- axis represents the number of files changed.



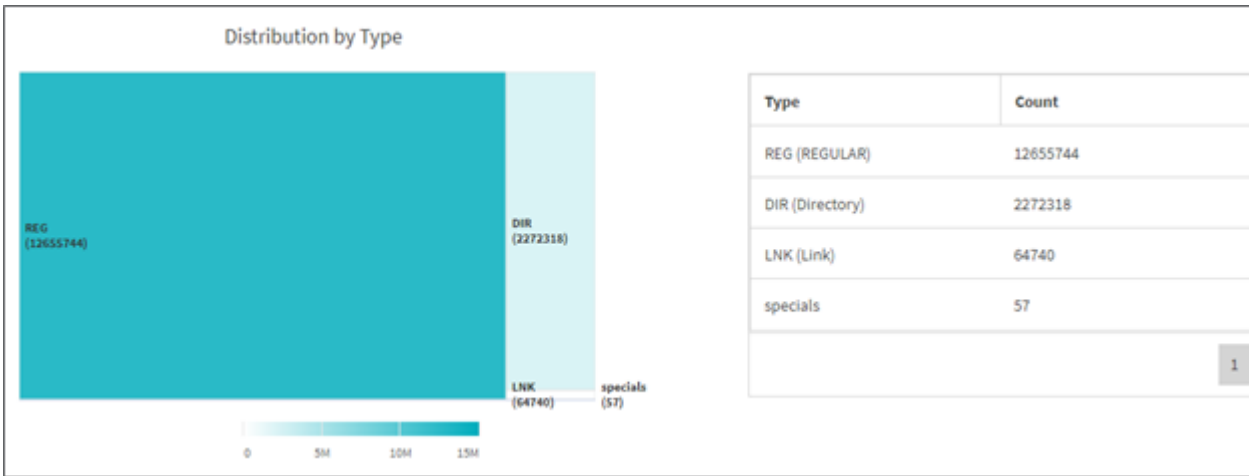
To get the access time (atime) graph in SMB scans, check the box for preserving atime before running a scan.

File Distribution by Extension Graphic



The File Distribution by Extension graph represents the count of the different file extensions in a file share. The size of the divisions representing the extensions is based on the number of files with each extension.

File Distribution by Type Graph



The Distribution by Type graph represents the count of the following types of files:

- REG: Regular files
- LNK: Files with links
- Specials: Files with device files and character files.
- DIR: Files with directories
- Junction: Available in SMB only

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.