Dell DR Series System
Release Notes for Version 3.2.6
Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.
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Release Notes

These Release Notes are intended to supplement the Dell DR Series system documentation to provide last minute information available for the latest release of the DR Series system software for the DR Series systems, DR4300e, DR4300, and DR6300. These Release Notes contain details about the latest updates, known issues, resolutions, and other information. For a complete list of available DR Series system documentation, see the topic, “Other Information You May Need,” at the end of these Release Notes.

NOTE: For instructions on configuration of DR Rapid devices, see the Dell DR Series System Administrator Guide. The guide is available at dell.com/support/home by selecting your specific DR Series system.

NOTE: It is recommended that you check for the latest versions of the DR Series system documentation available from Dell at dell.com/support/home.

Checking System Information

Before troubleshooting issues with any DR Series system, ensure that the installed DR Series system software is up to date. The related drivers, software, and firmware are available at dell.com/support.

To download the latest drivers and firmware for your system, follow the steps below:

1. Go to dell.com/support and enter your service tag or browse to your product.
2. Click Drivers and Downloads.
3. Click View All Drivers.
4. Confirm that you have the correct product to begin the search for all the related drivers, software, and firmware.

For information about how to check the current version of the DR Series system software installed, see the Dell DR Series System Administrator Guide or the Dell DR Series System Command Line Reference Guide at dell.com/support/home.

Drive and system capacities

The DR Series system is available in the following models running DR Series system software 3.2.6:

- **DR4300e system**: Consists of preinstalled DR Series system software on a modified Dell PowerEdge R730xd appliance platform.
- **DR4300 system**: Consists of preinstalled DR Series system software on a modified Dell PowerEdge R730xd appliance platform.
- **DR6300 system**: Consists of preinstalled DR Series system software on a modified Dell PowerEdge R730xd appliance platform and offers a higher base capacity than the DR4300.

The following table defines the internal system drive capacity and available physical capacity in decimal and binary values for the physical DR Series system hardware appliances. The capacity values listed represent the internal drive and available physical capacities that have been adjusted for the associated overhead in the DR Series system releases.
NOTE: TB and GB represent terabytes and gigabytes in decimal values, and TiB represents tebibytes in binary values. Tebibytes are a standards-based binary multiple of the byte, a unit of digital information storage.

Table 1. Drive and Available Physical Capacities for the DR4300e, DR4300, DR6300

<table>
<thead>
<tr>
<th>System Drive Capacity</th>
<th>9 Drive Capacity (12 DRV RAID6 with Hot Spare) (Decimal)</th>
<th>9 Drive Capacity (12 DRV RAID6 with Hot Spare) (Binary)</th>
<th>Total Logical Capacity at 15:1 Savings Ratios (Decimal)</th>
<th>Total Logical Capacity at 15:1 Savings Ratios (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TB (DR4300e system only)</td>
<td>4.5 TB</td>
<td>4.09 TiB</td>
<td>67.5 TB</td>
<td>61.35 TiB</td>
</tr>
<tr>
<td>1 TB (DR4300e system only)</td>
<td>9 TB</td>
<td>8.18 TiB</td>
<td>135 TB</td>
<td>122.7 TiB</td>
</tr>
<tr>
<td>2 TB</td>
<td>18 TB</td>
<td>16.37 TiB</td>
<td>270 TiB</td>
<td>245.55 TB</td>
</tr>
<tr>
<td>4 TB</td>
<td>36 TB</td>
<td>32.74 TiB</td>
<td>540 TB</td>
<td>491.1 TiB</td>
</tr>
<tr>
<td>6 TB (DR6300 system only)</td>
<td>54 TB</td>
<td>49.11 TiB</td>
<td>810 TB</td>
<td>736.65 TiB</td>
</tr>
<tr>
<td>8 TB (DR6300 system only)</td>
<td>72 TB</td>
<td>65.48 TiB</td>
<td>1080 TB</td>
<td>982.2 TiB</td>
</tr>
</tbody>
</table>

For information about external data storage capacity in the expansion shelf enclosures, see the following topic, “External Drive Capacity,” as well as the topic, “DR Series Expansion Shelf,” in the Dell DR Series System Administrator Guide at dell.com/support/home.

External Drive Capacity

Additional data storage can be added using the expansion shelf enclosures in the following capacities. The capacity values listed in the following table represent the additional storage capacity in the external drives that are available when you add the supported expansion shelf enclosures to a DR Series system appliance. For more information on the expansion shelf enclosures, see “Expansion Unit Limits” in the Dell DR Series System Interoperability Guide.

Table 2. External Drive Capacity and Available Physical Capacity for DR4300e, DR4300, DR6300

<table>
<thead>
<tr>
<th>DR Series System Drive Capacity</th>
<th>Available Physical Capacity (Decimal)</th>
<th>Available Physical Capacity (Binary)</th>
<th>Total Logical Capacity @ 15:1 Savings Ratios (Decimal)</th>
<th>Total Logical Capacity @ 15:1 Savings Ratios (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TB (DR4300e system only)</td>
<td>9 TB</td>
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<td>245.55 TiB</td>
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<td>4 TB (DR4300 and DR6300 only)</td>
<td>36 TB</td>
<td>32.74 TiB</td>
<td>540 TB</td>
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<td>72 TB</td>
<td>65.48 TiB</td>
<td>1080 TB</td>
<td>982.2 TiB</td>
</tr>
</tbody>
</table>
Supported Software and Hardware

For a complete list of the supported hardware and software for the Dell DR Series system, see the Dell DR Series System Interoperability Guide. You can download this guide by visiting dell.com/support/home and selecting your specific DR Series system, which opens the product support page to view product documentation for your system.

What's New in this Release

This release includes new features and enhancements as well as maintenance fixes for the DR Series system software. (Refer to the section, “Known Issues and their Resolutions,” for detailed information on maintenance fixes.)

The following list describes the major features and enhancements that are included in the current 3.2.6 release.

- **Support for new models of the DR Series system hardware** — This release of the DR Series system software supports the following new hardware appliance models: DR4300e, DR4300, and DR6300.
  
  **NOTE**: DR Series system software release 3.2.6 is only supported on the new DR Series system hardware models, DR4300e, DR4300, and DR6300.

- **Support for 8 TB drives** — With the availability of the new DR Series system hardware in this release, 8 TB drives are now supported.

Open Issues

<table>
<thead>
<tr>
<th>ID</th>
<th>Issue</th>
<th>Description/Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>26585</td>
<td>When performing a RM reset on the DR4300e, it may fail during boot up of the RM image.</td>
<td>Reset the DR Series system from iDRAC console if RM installation appears to hang. The system will boot from the hard disk and continue with the RM installation. When the RM installation completes, reboot the DR Series system.</td>
</tr>
<tr>
<td>25908</td>
<td>NDMP restore fails when backup is restarted with CommVault Simpana with large amounts of data.</td>
<td>NDMP Backup Restartable Extensions (BRE) are not supported in this release.</td>
</tr>
<tr>
<td>25832</td>
<td>RDNFS binary upgrade fails in RHEL 7 client.</td>
<td>Uninstall any existing RDNFS package and then install the new one.</td>
</tr>
<tr>
<td>25820</td>
<td>During software upgrade in GUI, issue occurs on Software Upgrade page, displaying Global View link (which is not accessible) and showing iDRAC address as N/A. The GUI is not refreshing properly.</td>
<td>Clicking global view on the menu should not be supported during an upgrade. This can be ignored in the GUI since it cannot be accessed. If you do not toggle between the Global View and software upgrade options in the GUI, the iDRAC address appears.</td>
</tr>
<tr>
<td>24597</td>
<td>CIFS usage graph shows that there are CIFS writes when running iSCSI I/O only.</td>
<td>The statistics reported on the iSCSI graph are accurate. Due to a bug, false statistics are reported on the CIFS graph, which can be ignored. It will be fixed in a future release.</td>
</tr>
<tr>
<td>23709</td>
<td>Changing machine host name does not get updated properly in all components.</td>
<td>This issue does not cause known failures to the normal operation of the DR Series system and can be ignored. It will be fixed in a future release.</td>
</tr>
<tr>
<td>20553</td>
<td>Specific umount options do not work for Rapid NFS.</td>
<td>The -l and -f options are not supported in the rdnfs unmount procedure.</td>
</tr>
<tr>
<td>ID</td>
<td>Issue</td>
<td>Description/Workaround</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>20426</td>
<td>Replication traffic that is configured to go through an assigned bond may still run through the default bond (bond0).</td>
<td>If you want to run replication traffic through another bond interface, contact Technical Support to update the route.</td>
</tr>
<tr>
<td>18837</td>
<td>Manual modifications made to the Rapid NFS rdnfs.cfg file are not preserved between plug-in updates.</td>
<td>Manually modify the rdnfs.cfg again after upgrading the plug-in.</td>
</tr>
<tr>
<td>17294</td>
<td>A NetVault Backup data copy or duplication will stop if the DR Series system goes into maintenance mode as it moves into a read-only condition when this occurs.</td>
<td>Restart the datacopy operation after the DR Series system enters the operational mode.</td>
</tr>
<tr>
<td>17206</td>
<td>Advanced networking allows you to change the IP of an interface that is part of a replication link.</td>
<td>Understand your current configuration before adding new advanced networking configuration so that you do not impact the current system configuration.</td>
</tr>
<tr>
<td>16280</td>
<td>When you try to get replication statistics, the system displays the Software error: Use of uninitialized value in division (/) at helper.pl line 3548 error.</td>
<td>This is due to the replication target not being in an operational state. Correct the replication target and refresh or use the CLI. The information is available by using the command line. We will correct this error in a future release.</td>
</tr>
<tr>
<td>9433</td>
<td>The dedicated hot spare is not automatically configured after replacing the hot spare drive in slot 0.</td>
<td>If the hot spare is replaced, run maintenance by using the --make_standby command. Contact Dell Technical Support for this action.</td>
</tr>
</tbody>
</table>

**Known Issues and Resolutions**

The following table lists known issues and related resolutions addressed in this DR Series system release.

<table>
<thead>
<tr>
<th>ID</th>
<th>Issue</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>23879</td>
<td>Backup spanning across multiple tapes fail when 10 GB tape is used for Microsoft DPM.</td>
<td>Recommendations for backups spanning multiple tapes are documented in the DR Series best practices guide for Microsoft DPM available for your specific DR Series system at dell.com/support/home.</td>
</tr>
<tr>
<td>23641</td>
<td>Cannot join into the domain by adding a DR Series system to multiple OUs.</td>
<td>In the authenticate command type the format as follows: --ou topLevelOU/middleLevelOU/LowerLevelOU/TargetOU This format for adding OUs is now documented in the latest Dell DR Series System CLI Guide.</td>
</tr>
<tr>
<td>20870</td>
<td>RPC replication errors may be seen during replication from source DR Series system to target DR Series system.</td>
<td>The primary and secondary replication target should have the same MTU setting. Replication proceeds once the MTU is set to the same as the replica target. This recommendation has been added to the section, “Managing Replication Operations,” in the latest Dell DR Series System Administrator’s Guide.</td>
</tr>
<tr>
<td>ID</td>
<td>Issue</td>
<td>Resolution</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>20539</td>
<td>After installing Rapid CIFS Filter Driver, an incorrect driver version is displayed.</td>
<td>If at the end of successful installation, the version of the driver loaded (which can be checked using rdcifsclic.exe driver -q) is lower than the version of the installed package (listed under Control Panel &gt; Installed products), then you should restart the machine. This issue can occur if the system fails to rename/delete driver files under the system folder.</td>
</tr>
<tr>
<td>20456</td>
<td>Installation of SSL Certificate file in the GUI failed on Internet Explorer (IE) when using Remote Desktop.</td>
<td>When uploading the certificate file, the GUI uses the file name with the whole path, which works when uploading on a local system. When using RDP, in the IE browser settings, you need to disable the &quot;Include local directory path ..&quot; setting, as follows.</td>
</tr>
<tr>
<td>20424</td>
<td>The following message may appear on the console: &quot;vx_nospace...&quot; even if the system still has space.</td>
<td>This message is a result of trying to allocate a large contiguous block. The allocation of the contiguous block might fail, in which case, allocation continues without trying to keep the file contiguous. The vx_nospace error may appear, and this message can be safely ignored.</td>
</tr>
<tr>
<td>20188</td>
<td>When using cascaded replication for a large number of files (1M+), it may appear to take some time to see the actual files on the secondary target.</td>
<td>Namespace resync has to complete on the source and primary target and then data transfer has to start on both before transferring to the secondary target. Once the namespace resync completes on the first replication pair, resync then starts on the second replication pair. Until the namespace resync completes on the second pair, no data is transferred. This ensures the namespace resync completes faster and the snapshot can be deleted faster.</td>
</tr>
<tr>
<td>20009</td>
<td>User is able to create/write a file/directory in the share/container even though the user has only read permissions (file-level/security-level) on the share.</td>
<td>You can block write/create operations for a particular domain user by adding an extra ‘Deny’ ‘write’ acl for that user. (This issue occurs on the Windows 2008 client.)</td>
</tr>
<tr>
<td>19884</td>
<td>RDA plugin logging is not generated by default on physical hosts protected by vRanger because the plugin log service dellrllogsvc.exe is not installed by default.</td>
<td>To enable RDA plugin logging on physical hosts:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Copy %INSTALLDIR\Dell\RDA\dynlib \dellrllogsvc.exe from the vRanger server to the %INSTALLDIR\Dell\vRangerPhysicalClient &lt;timestamp&gt;rofs directory on the physical host.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Change the directory to: %INSTALLDIR\Dell \vRangerPhysicalClient&lt;timestamp&gt;rofs</td>
</tr>
</tbody>
</table>

8
<table>
<thead>
<tr>
<th>ID</th>
<th>Issue</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>19552</td>
<td>When there is no data to replicate (for example, replication state is INSYNC), replication statistics might indicate a target is running out of disk space even though the target has enough space.</td>
<td>3. Run the command: deldrlgsvc.exe install&lt;br&gt;4. Run the command: deldrlgsvc.exe start&lt;br&gt;This occurs because the replication process detected target space full condition when there is pending data to be replicated, but, at a later time, that pending data was removed and replication was insync. We do not query target disk state when replication is idle. On a similar note, we might not indicate target space full condition when there is no data to replicate as well. An error state in the replication statistics makes sense only when replication is not in sync.</td>
</tr>
<tr>
<td>19485</td>
<td>Adding a host name does not work if you use a FQDN and the host name has letters in it.</td>
<td>You can add names as long as the name is made only of numbers and it is not a FQDN where a period is used in the name string.</td>
</tr>
<tr>
<td>19186</td>
<td>If you change the hostname or the domain name after setting up the DR Rapid plug-in, then you may get the wrong backup mode pass-through or de-dupe.</td>
<td>Uninstall and then reinstall the DR Rapid plug-in for this information to be set correctly.</td>
</tr>
<tr>
<td>19023</td>
<td>Events information is not captured in the GUI when the date and time under System Configuration is changed to a date and time in the past.</td>
<td>This type of event information is captured in the CLI, by using the –show –alerts</td>
</tr>
<tr>
<td>18848</td>
<td>In the Internet Explorer 9 and 10 browsers, when you navigate to a DR Series system from within Global View, and then log out of that system and return to Global View, you are logged out of the machine running the Global View.</td>
<td>This issue does not occur with any other supported browser. For browser information, see the Dell DR Series System Interoperability Guide.</td>
</tr>
<tr>
<td>18178</td>
<td>The AIO-Stress tool fails when using Rapid NFS.</td>
<td>Rapid NFS, which uses FUSE, does not support AIO.</td>
</tr>
<tr>
<td>18501</td>
<td>Rapid NFS performance drops significantly with parallel NFS ingest from same client.</td>
<td>When using Rapid NFS on your client, it is suggested that you do not run NFS from the same client to the DR Series system in parallel as this will affect your overall performance.</td>
</tr>
<tr>
<td>18144</td>
<td>A File name too long error is displayed after trying to create a directory structure that exceeded 522 directories.</td>
<td>The limit on a path within a mount point is 4096 bytes.</td>
</tr>
<tr>
<td>18022</td>
<td>Windows 2008 and newer servers cannot assign local users (other than administrator) to Access Control Lists (ACLs). Windows 2008 and later does not query the local users on the DR Series platform.</td>
<td>Assign ACLs to the built-in Administrator user on the DR Series platform if using Windows 2008 and later.</td>
</tr>
<tr>
<td>ID</td>
<td>Issue</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>17661</td>
<td>If the cable is removed from a network interface and the network is restarted, the interface does not get an IP. If you then reinser the cable, you must restart the network to get an IP.</td>
<td>Ensure that the interfaces that you want to add or modify are connected when making Advanced Networking changes. To restart the network, type network --restart at the CLI command line.</td>
</tr>
<tr>
<td>17193</td>
<td>DR Rapid critical message Alert RDS Restore failed reported on DR4x00 system. In addition to the error, an event is generated internally in the DR Rapid plug-in when the read operation fails</td>
<td>The DR Rapid plug-in generates events for any kind of read failures.</td>
</tr>
<tr>
<td>16745, 17621</td>
<td>If you have the same client for OST and RDS operations and you manually update the client connections, unexpected messages are displayed as:</td>
<td>To work around the issue, use a different client for OST and RDS rather than sharing the same machine for both protocols.</td>
</tr>
<tr>
<td></td>
<td>[root@swsys-49 ~]# stats -- clients --type RDA RDA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Client(s) Type plug-in OS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Backup Software Last Access Connection(s) Mode r310-sys-39 RDS -- -- 0 Default</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[root@swsys-49 ~]# ost -- update_client --name r310-sys-39 --mode auto Client is connected with default values. Please update to non-default values.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In Linux systems, the RDS plug-in installation fails if the OST plug-in is already installed in the system</td>
<td></td>
</tr>
<tr>
<td>16660</td>
<td>When BE has an issue connecting to the server, it may not return detailed errors to the OST plug-in.</td>
<td>See the client log files for the detailed information on the connection failure.</td>
</tr>
<tr>
<td>16427</td>
<td>When upgrading your system using the iDRAC, if the upgrade package also contains new iDRAC firmware, the upgrade fails to complete.</td>
<td>Upgrade the DR code using the CLI or GUI using the normal network interface and not the iDRAC.</td>
</tr>
<tr>
<td>16053</td>
<td>After you install the Rapid CIFS plugin and replication operations are performed, you receive a blue screen and the following error: STOP 0x000000027 (parameter1, parameter2, parameter3, parameter4) RDR_FILE_SYSTEM</td>
<td>This is a Microsoft bug that occurs on shared network resources on a computer that is running Windows Server 2008 R2 or Windows 7. To fix, see MS KB2584874.</td>
</tr>
</tbody>
</table>
## Third Party Components


Source code for some components can be found at [http://opensource.dell.com](http://opensource.dell.com).

Copyright notices can be found below at [Copyright Notices](#).

<table>
<thead>
<tr>
<th>Component</th>
<th>License</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>keyutils utility 1.2.1.el5</td>
<td>GPL (GNU General Public License) 2.0</td>
<td>A copy of the license can be found below at <a href="http://opensource.dell.com">GNU (Lesser General Public License) 3.0</a></td>
</tr>
<tr>
<td>libtalloc2 2.0.8.24.1</td>
<td>GPL (GNU General Public License) 3.0</td>
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</tr>
<tr>
<td>libsigc++20 2.2.4.2.1.el6</td>
<td>GPL (GNU General Public License) 2.0</td>
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</tr>
<tr>
<td>xmlsec1-openssl 2.12.8.el6</td>
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<td>A copy of the license can be found below at <a href="http://www.openssl.org/source/license.html">OpenSSL License</a></td>
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</tbody>
</table>
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Version 2, June 1991

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<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell DR Series System Getting Started Guide</td>
<td>Provides an overview of how to set up the physical DR Series system hardware and includes technical specifications.</td>
</tr>
<tr>
<td>Dell DR Series System Owner’s Manual</td>
<td>Provides information about applicable physical DR Series system features, troubleshooting the DR Series system, and installing or replacing the DR Series system components.</td>
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<tr>
<td>Dell DR2000v Deployment Guide</td>
<td>Provides information about deploying the virtual DR Series system, DR2000v, on supported virtual platforms.</td>
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<td>Dell DR Series System Administrator Guide</td>
<td>Provides information about managing backup and replication operations using the DR Series system GUI.</td>
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<td>Provides information on supported hardware and software for the DR Series systems.</td>
</tr>
<tr>
<td>Dell DR Series System Command Line Reference Guide</td>
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