



Generating Tech Support Report on 13th Generation Dell PowerEdge Servers

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1 Executive summary

2 This white paper provides information on the Tech Support Report feature and
3 generating the report using out-of-band interfaces such as WS-Man, RACADM, iDRAC
4 GUI, and LC UI.

5 The Tech Support Report feature available on the 13th generation PowerEdge servers
6 enables you to collect and export system information such as hardware, OS and
7 Application data, storage controller logs, and Lifecycle Controller logs in a standard zip
8 format. This zip file is used by the technical support personnel to troubleshoot any issue
9 with the system.



Deployment and configuration guide for Tech Support Report

This Dell technical white paper provides detailed information on how to update the OS and Application Data remotely and export the Tech Support Report (TSR) to a network or local share using WS-Man, RACADM, iDRAC GUI, and Lifecycle Controller GUI..

Introduction:

In the Information technology era, organizations both large and small depend on servers for business development. Servers help in accessing vital data round the clock hence it is important for any organization to maintain the server without any malfunction. A server malfunction may occur due to network failure, hardware problems and so on. You will then require system logs to identify the cause of a malfunction in a server.

On Dell PowerEdge 11th generation servers and later, the Dell System E-Support Tool (DSET) allows you to gather the system configuration report. This report is used by the Dell technical support to troubleshoot any issues with the system. You must select the filter option while installing the DSET.

Note:

- If iDRAC isn't enabled the user has to ensure that there is an in-band agent (OMSA) to collect detailed HW and storage information. Depending on the option an additional 15-30 minutes and a potential reboot is required to install in-band agent)
- You must install the DSET tool and run it on a host system (both Windows and Linux) to access the report.

On the 13th generation Dell provides the Tech Support Report feature that allows you to generate the report remotely from a host system using iDRAC out-of-band interface without having to install the DSET tool.. Users can get the report remotely from host using iDRAC out of band interfaces. With this feature users need not install the DSET tool on host and on the other hand gets the report in approximately 20minutes, which is faster than the DSET.

Note: The Tech Support Report feature is also available on the 12th generation PowerEdge servers. However, this feature is limited to Hardware inventory data only.



42 1.2 Configuration Prerequisites

- 43
- 44 • TSR support is available with a base license on 13th generation PowerEdge servers. For
45 more information about managing licenses, navigate **to Overview-> Server Licenses->**
46 **iDRAC Online Help** in the iDRAC web interface.
 - 47 • The server must have a valid service tag (7 characters).
 - 48 • You must have Login and Server control privileges.
 - 49 • Ensure that the latest iDRAC firmware for 13th generation servers is available.
 - 50 • To retrieve the OS and Application Data the OS Collector tool or iDRAC Service
51 Module must be installed on the system .The OS Collector tool is preinstalled on the
52 system. See the Dell Support site to upgrade or downgrade the OS Collector tool. To
53 automatically collect the OS and Application data, ensure that iDRAC Service Module is
54 installed and running on the server and a supported operating is installed on the server.
 - 55 • TTYLogs are supported on storage controllers that have Agent free monitoring
56 capability.

57 Example PERC 9.1-

58

59 - **Constraints:**

- 60 • Collect System Inventory On Restart (CSIOR) is enabled.
- 61 • Lifecycle Controller must be enabled, no other modes will be supported (ex: Disabled,
62 Recovery etc.).

63 Example commands:

64 **Get command:** To get the current value of CSIOR.

65 "racadm get LifecycleController.LCAtributes.CollectSystemInventoryOnRestart"

66 **Set Command:** To set the CSIOR value.

67 "racadm set LifeCycleController.LCAtributes.CollectSystemInventoryOnRestart Enable"

68 1.3 Solution overview of TSR:

69 The Tech Support Report feature allows you to update the OS and Application health
70 data and collect and export DSET equivalent information. The TSR workflow consists of
71 the following.

72 1.3.1 Update Operating System Health Data:

73 This method updates the OS and Application data and saves it to the iDRAC internal
74 storage. You can update the OS and Application data using any of the following options:



- 75
- 76 • **Automatic:** The method will update the OS and Application data automatically. This will
77 require the iDRAC Service Module (iSM) to be installed and running in the Server OS. so you
78 must ensure that the iDRAC Service Module (iSM) is installed and running in the server OS.

79

 - 80 • **Manual:** If iSM is not installed and running in Server OS then user needs to manually
81 execute the OS Collector script in Server OS to update the OS and Application Data.

82

83 The Steps for manual process:

84 a. iDRAC exposes a virtual USB device labeled DRACRW containing the OS collector
85 executable to the server OS.

86 b. You must execute the executable from the DRACRW partition on the server OS.
87 After the execution is completed, the OS and Application Data is copied to the iDRAC
88 storage and DRACRW partition is detached.

89

1.3.2 Exporting TSR

90 This method gathers or collects information that traditional DSET provides and exports the
91 report file to the respective remote share paths (CIFS/NFS) or local share

92 You can collect the following information:

- 93 • Hardware data
- 94 • Storage TTY logs
- 95 • Filtered OS and Application Data
- 96 • (Unfiltered) OS and Application Data

97

1.3.3 Creates Job:

- 98 • A Lifecycle Controller job is created as soon as TSR is initiated, since it could take few min
99 to complete the collection and export.
- 100 • You can verify the job status by using WS-Man/RACADM/GUI interfaces.
- 101 • The TSR job is not a scheduled job, hence it will run immediately.
- 102 • We can access the report, once the job is complete.

103

104

1.4 Update Operating System Health Data:

105

1.4.1 Using WS-Man:

106 The UpdateOSAppHealthData method updates the latest operating system health data based on
107 the UpdateType input parameter provided and saves the information in the iDRAC internal
108 storage. This method is defined in the DCIM_LCSERVICE class.



109 For more information on input, output parameters and method details, see the
110 Dell_LCCManagementProfile in the profile document in the dell tech center.

111 <http://en.community.dell.com/techcenter/systems-management/w/wiki/1906.dcim-library-profile>
112

113 **Input Parameters:**

- 114 1. UpdateType = 0 (Automatic)
115 UpdateType = 1 (Manual)

116 ***Note: Default value is "0"***

117 This method returns the job ID once it is success.

118 **Command to update OSAppHealthData:**

119 winrm i UpdateOSAppHealthData http://schemas.dmtf.org/wbem/wscim/1/cim-
120 schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationCla-
121 ssName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -u:%iDRAC
122 username% -p:%iDRAC password% -r:https://%iDRAC ip address%/wsman -SkipCNCheck -SkipCACheck -
123 encoding:utf-8 -a:basic @{UpdateType="0/1"}

124 **Command to verify the job status:**

125 winrm get [http://schemas.dmtf.org/wbem/wscim/1/cim-
126 schema/2/root/dcim/DCIM_LifecycleJob?InstanceID=%JOB_ID%](http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LifecycleJob?InstanceID=%JOB_ID%) -r:https://%IPADDRESS%/wsman:443 -
127 u:%USERNAME% -p:%PASSWORD% -a:basic -encoding:utf-8 -SkipCACheck -SkipCNCheck -
128 skiprevocationcheck

129 **1.4.1.1 Error messages:**

130 This method returns an error message if iSM is not running. For more information on the error
131 message, check the Dell Message Registry at.

132 <http://en.community.dell.com/dell-groups/dtcmedia/m/mediagallery/20440477>

133 or

134 <http://en.community.dell.com/techcenter/systems-management/w/wiki/lifecycle-controller>

135 Example:

136 winrm i UpdateOSAppHealthData http://schemas.dmtf.org/wbem/wscim/1/cim-
137 schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationCla-
138 ssName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -u:root -



```
139 p:calvin -r:https://10.94.225.68/wsman -SkipCNCheck -SkipCACheck -encoding:utf-8 -a:basic  
140 @{UpdateType="0"}  
  
141 UpdateOSAppHealthData_OUTPUT  
  
142 Message = Unable to start the collection of OS and Application Data because the iDRAC Service Module  
143 (iSM) is not running in the server OS.  
  
144 MessageID = SYS140  
  
145 ReturnValue = 2
```

146 1.4.2 Using RACADM:

147 Command to automatically collect the OS health data:

```
148 $racadm techsupreport collect -t <Type of logs required>
```

149 Example:

```
150 $racadm techsupreport collect -t OSAppNoPII
```

151 The types of logs supported:

- 152 ○ SysInfo - System Information
- 153 ○ OSAppNoPII - Filtered OS and Application data
- 154 ○ OSAppAll - OS and Application data
- 155 ○ TTYLog - TTYLog data

156 Note: If the type of log information is not specified, the SysInfo log is collected by default. You can
157 provide multiple options by using a comma as a delimiter. The options are case insensitive.

159 Command to manually collect the OS and Application data:

```
160 $racadm techsupreport updateosapp -t <Type of OS App logs>
```

161 Example:

```
162 $racadm techsupreport updateosapp -t OSAppAll
```

163 The types of OS logs supported:

- 164 ○ OSAppNoPII - Filtered OS and Application data
- 165 ○ OSAppAll - OS and Application data

166 Command to verify job status:



167 \$racadm jobqueue view -i <Job ID>

168 **1.4.2.1 Error messages:**

- If you do not have sufficient access privileges to perform the **techsupreport collect** operation.

170 Message = Unable to run the command, because of insufficient user
171 privileges. Make sure that you have appropriate privileges, and then
172 retry the operation.

173 MessageID = RAC1115

- You have entered an invalid log type.

176 Message = The entered log type is invalid. Check help text for the list
177 of valid log types and retry the operation by entering a valid log type.

178 MessageID = RAC1145

- If the iSM is not running.

181 Message = Unable to initiate the "techsupreport collect" operation for
182 the Tech Support Report (TSR) because the iDRAC Service Module (iSM) is
183 not running. Run the command "racadm get iDRAC.ServiceModule" to make
184 sure that iDRAC Service Module is installed and running on the server
185 operation system (OS) and also to verify that the collection of the
186 server OS data is enabled.

187 MessageID = RAC1161

- C

190 Message = Unable to initiate the techsupreport collect operation for the
191 Tech Support Report (TSR) because another collect operation is in
192 progress. Wait for the current collect operation to complete before
193 initiating another collect operation. To view the status of the
194 "techsupreport collect" operation, run the command "racadm jobqueue view"

196 MessageID = RAC1162



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1.4.3 Using the iDRAC GUI:

1. Login to iDRAC GUI.
2. Click to **Server-> Troubleshooting-> Tech Support Report.**

The screenshot shows the iDRAC GUI interface. On the left, there is a navigation tree under the 'System' tab with sections like Overview, Server, Logs, Power/Thermal, Virtual Console, Alerts, Setup, Troubleshooting, Licenses, Intrusion, iDRAC Settings, Hardware, Storage, Physical Disks, Virtual Disks, Controllers, Enclosures, and Host OS. The 'Troubleshooting' section is currently selected. At the top, there is a navigation bar with tabs: Identify, Diagnostics, Post Code, Last Crash Screen, Video Capture, and Tech Support Report. The 'Tech Support Report' tab is active. Below the navigation bar, there is a large information box with the heading 'To Collect OS and Application Data'. It contains instructions: 'To export the current operating system and application data, do one of the following:' followed by two bullet points: 'Install the iDRAC Service Module (Recommended): Learn More OR' and 'Click Attach OS Collector and then run the OS Collector from the server's operating system.' To the right of this box, there is another box titled 'Instructions: Export Report will create a zip file that can be sent to Dell Technical Support to assist with troubleshooting system issues. Choose Advanced Export Options to specify optional report settings and actions.' This box contains a link 'Options: > Advanced Export Options'. Below these boxes, there is a section titled 'Technical Support Report Data' with a dropdown menu set to 'Hardware'. To the right of this, it says 'OS and Application Data (Time Stamp: Never)'. A note on the right states 'Collection Time will take less than 2 Minutes'. At the bottom of the page, there is an 'Export Location' section with radio buttons for 'Local' and 'Network', and a checkbox for 'I agree to allow Technical Support to use this data. See Full Terms and Conditions'. At the very bottom right, there are 'Attach OS Collector' and 'Export' buttons.

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3. Click **Attach OS Collector.**

This screenshot shows the same iDRAC GUI interface as the previous one, but with a modal dialog box open over the main content. The dialog box is titled 'Attach OS Collector'. It contains instructions: 'OS Collector must be run on the server OS in order to export OS and Application Data. A virtual USB device labeled DRACRW has appeared in the server OS. This device contains the OS Collector utility; go to the Server OS and run the version of the utility appropriate to the OS type. After the OS Collector utility execution has completed, return to this page to finish exporting the Technical Support Report (TSR).'. Below this text, there are two buttons: 'Launch Virtual Console' and 'Close'. To the right of the dialog box, there is a note 'Collection Time will take less than 2 Minutes'. The rest of the interface, including the navigation tree and other buttons, remains visible in the background.

205



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NOTE: The **Attach OS Collector** is displayed only if the iDRAC Service Module is not installed and running on the server. If the iDRAC Service Module is running then the **Automatic** option is displayed and the **Attach OS Collection** option is not displayed. The **OS and Application Data** is automatically collected during export.

- 212
213
4. Follow the instructions on the screen to collect the latest OS and Application Data.

214
215
216

Viewing Job status:

217 To view the local or network export job status, click **Server-> Job Queue**.

| ID | Job | Status |
|------------------|--------------------------|------------------------------|
| JID_067672179228 | TSR_Collect | Running (16%) |
| JID_067669392012 | TSR_Collect_Export | Completed (100%) |
| JID_067665486810 | TSR_Collect | Completed (100%) |
| JID_067664254639 | TSR_Collect | Failed (2%) |
| JID_067680552338 | TSR_Collect | Completed (100%) |
| JID_067644513360 | TSR_Collect | Completed with Errors (100%) |
| JID_067612568643 | Firmware Update: iDRAC | Completed |
| JID_065890838829 | Firmware Rollback: iDRAC | Completed (100%) |

218
219
220
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Note: iSM is not running: iDRAC GUI will not display any error or warning message. But the Option "Attach OS collector" gets displayed.
Find more details in the section 1.4.3.

222

1.4.4 Using the Lifecycle Controller UI:

223
224

Lifecycle Controller does not support updating OS and Application Health data. You can use interfaces such as iDRAC GUI, RACADM, and WS-Man to update the information.



225 **1.5 Exporting TSR**

226 **1.5.1 Using WS-Man:**

228 ExportTechSupportReport method with the DataSelectorArrayIn input parameter to export the
229 TSR to a share location. This method returns the job ID if successful.

230 The ExportTechSupportReport method is defined in the DCIM_LCService class.

231 For more information, see the Dell_LCManagementProfile in the profile document. This is
232 available in dell tech center.

233 <http://en.community.dell.com/techcenter/systems-management/w/wiki/1906.dcim-library-profile>.

235 **ExportTechSupportReport Input Parameters:**

236 The following are the input parameters for ExportTechSupportReport method.

- 237 • DataSelectorArrayIn: The options available are:
- 0 - HW Data
 - 1 - OSApp Data Without PII
 - 2 - OSApp Data
 - 3 - TTY Logs

238 **Note:** The default value is 0. On the 12th generation PowerEdge servers, export of only hardware data is
239 supported.

- IPAddress: IP address of network share.
- ShareName: Network share address.
- ShareType: Type of network share (NFS=0 and CIFS=2).
- Username: The username to access the network share for the export result.
- Password: The password to access the network share.

240 **Command to run ExportTechSupportReport:**

241 **For Single Input Selection:**

242 We can provide the single input either 0 or 1 or 2 or 3 for DataSelectorArrayIn.



244 winrm i ExportTechSupportReport http://schemas.dmtf.org/wbem/wscim/1/cim-
245 schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+Creatio
246 nClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -
247 u:%iDRAC user name% -p:%iDRAC password% -r:https://%IPAddress%/wsman -SkipCNCheck -
248 SkipCACheck -encoding:utf-8 -a:basic -@{DataSelectorArrayIn="1";IPAddress="IP address of
249 target";ShareName="User specified name";ShareType="either 0 or 2";Username="target
250 username";Password="target password"}

251 **For Multiple Input Selections:**

252 Need to pass multiple input values through XML file. Attached sample XML file for more details.

253 ExportTechSupportReport.xml file content:

254 <p:ExportTechSupportReport_INPUT xmlns:p=http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService">
255
256 <p:DataSelectorArrayIn>1</p:DataSelectorArrayIn>
257 <p:DataSelectorArrayIn>2</p:DataSelectorArrayIn>
258 <p:DataSelectorArrayIn>3</p:DataSelectorArrayIn>
259 <p:IPAddress>IP address of target</p:IPAddress>
260 <p:ShareName>User specified name</p:ShareName>
261 <p:UserName>target username</p:UserName>
262 <p:Password>target password</p:Password>
263 <p:ShareType>either 0 or 2</p:ShareType>
264 </p:ExportTechSupportReport_INPUT>

265
266 winrm i ExportTechSupportReport http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+Creatio
267 nClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -
268 u:root -p:calvin -r:https://10.94.162.132/wsman -SkipCNCheck -SkipCACheck -encoding:utf-8 -
269 a:basic -file:C:\Users\Sreelakshmi_V\ExportTechSupportReport.xml
270

271 ExportTechSupportReport_OUTPUT

272 Job

273 EndpointReference

274 Address = <http://schemas.xmlsoap.org/ws/2004/08/addressing/role/anonymous>

275 ReferenceParameters

276 ResourceURI = http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LifecycleJob



277 SelectorSet

278 Selector: InstanceID = JID_111034772764, __cimnamespace = root/dcim

279 ReturnValue = 4096

280

281 **Command to verify the job status:**

282 winrm get http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LifecycleJob?InstanceID=%JOB_ID% -r:https://%IPADDRESS%/wsman:443 -u:%USERNAME% -p:%PASSWORD% -a:basic -encoding:utf-8 -SkipCACheck -SkipCNCheck –skiprevocationcheck

286 **1.5.1.1 Error messages:**

287 The following lists the scenarios when you may encounter an error.

288 • An export job is in progress and you initiate another export TSR job

289 Message:

290 The iDRAC is unable to start the Tech Support Report job, because a report collection job is
291 already running on the server.
292 Check the Dell Message Registry for event/error message information at.

293 <http://en.community.dell.com/dell-groups/dtcmedia/m/mediagallery/20440477>

294 or

295 <http://en.community.dell.com/techcenter/systems-management/w/wiki/lifecycle-controller>

297 • You provided an invalid input parameter.

298 winrm i ExportTechSupportReport http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationClassName=DCIM_LCService+SystemName=DCIM:ComputerSystem+Name=DCIM:LCService -u:root -p:calvin -r:https://10.94.161.123/wsman -SkipCACheck -SkipCNCheck -encoding:utf-8 -a:basic
301 @{@DataSelector="ABC";IPAddress="%%";ShareName="%%";ShareType="%%";Username="%%";Password="%%"}
303

304 ExportHealthReport_OUTPUT

305 Message = Invalid value of parameter DataSelector

306 MessageArguments = DataSelector



307 MessageID = LC017

308 ReturnValue = 2

309 **1.5.2 Using RACADM:**

310 After the required logs are collected, they can be exported to a remote file share (CIFS or
311 NFS) or a local file share (on a management system).

312 **Command to export the collected logs to a CIFS share:**

313 \$racadm techsupreport export -l //192.168.22.25/myshare -u myuser -p mypass

314 **Command to export the collected logs to an NFS share:**

315 \$racadm techsupreport export -l 192.168.22.25:/myshare

316 **Command to export the collected logs to the local file system on a management
317 system:**

318 \$ racadm techsupreport export -f report.zip

319 **Command to verify job status:**

320 \$racadm jobqueue view -i <Job ID>

321 **1.5.2.1 Error messages:**

322 1. The following error:

323 Message = The export operation is unsuccessful. Run the RACADM "techsupreport
324 collect" command again and then retry the export operation.

325 MessageID = RAC1151

327 **1.5.3 Using iDRAC GUI:**

328 1. Login to iDRAC GUI.

329 2. Click **Overview-> Server-> Troubleshooting-> Tech Support Report**.

330 The **Tech Support Report** page displays the **Basic Export Options**.



The screenshot shows the iDRAC8 Tech Support Report interface. The left sidebar has a tree view of system components under 'System'. The main content area is titled 'Tech Support Report' and contains sections for collecting OS and application data, technical support report data, and export location options. A note indicates that collection will take less than 2 minutes.

331
 332
 333 The Basic Export Options page allows you to collect the Hardware and OS and
 334 Application Data. The latest OS and Application Data is automatically collected and
 335 included in the report if iDRAC Service Module is installed and running on the server. If
 336 the iDRAC Service Module is not available, a cached copy of the OS and Application Data
 337 (from a previous collection) is included in the report. The time stamp of the cached copy
 338 is displayed in the GUI.
 339
 340
 341
 342

343 3. Click Advanced Export Options to select the following additional options:
 344

- 345 • RAID Controller Log
- 346 • Enable Report Filtering under

347 NOTE: Select the Enable Report Filtering option, to export the user sensitive data such as
 348 registry details, MAC address, IP address and so on while collecting the OS and Application
 349 data.

350 User has the option to select only the required data to export.



351

352

353 4. Select the file location to save the report:

354 Local - To save to the file to a location on the system.

355 Network - To save the file to a network share.

356

357 **Local Export:**

358 5. Select **I agree to allow Technical Support to use the data.**

359 The Export button is enabled

System
PowerEdge R630
root, Admin

Identify Diagnostics Post Code Last Crash Screen Video Capture Tech Support Report

To export the current operating system and application data, do one of the following:

- Install the iDRAC Service Module (Recommended): [Learn More](#) OR
- Click Attach OS Collector and then run the OS Collector from the server's operating system.

Instructions: Export Report will create a zip file that can be sent to Dell Technical Support to assist with troubleshooting system issues. Choose Advanced Export Options to specify optional report settings and actions.

Technical Support Report Data

Options: > Basic Export Options

Technical Support Report Data

Hardware
 RAID Controller Log
 OS and Application Data (Time Stamp: Never)
 Enable Report Filtering

Collection Time will take less than 2 Minutes

Export Location

File Location Local Network

I agree to allow Technical Support to use this data. See [Full Terms and Conditions](#)

Attach OS Collector Export

360

System
PowerEdge R630
root, Admin

Identify Diagnostics Post Code Last Crash Screen Video Capture Tech Support Report

To export the current operating system and application data, do one of the following:

- Install the iDRAC Service Module (Recommended): [Learn More](#) OR
- Click Attach OS Collector and then run the OS Collector from the server's operating system.

Instructions: Export Report will create a zip file that can be sent to Dell Technical Support to assist with troubleshooting system issues. Choose Advanced Export Options to specify optional report settings and actions.

Technical Support Report Data

Options: > Basic Export Options

Technical Support Report Data

Hardware
 RAID Controller Log
 OS and Application Data (Time Stamp: Never)
 Enable Report Filtering

Collection Time will take less than 2 Minutes

Export Location

File Location Local Network

I agree to allow Technical Support to use this data. See [Full Terms and Conditions](#)

Attach OS Collector Export



361

6. Click **Export** to export the report.

362

The progress of the export is displayed. The file is exported and available on the location as a zip file.

The screenshot shows the Dell PowerEdge R630 system interface. The left sidebar menu includes System, Overview, Server, Logs, Power / Thermal, Virtual Console, Alerts, Setup, Troubleshooting, Licenses, Intrusion, iDRAC Settings, Hardware, Storage, Physical Disks, Virtual Disks, Controllers, Enclosures, and Host OS. The Troubleshooting section is currently selected. The top navigation bar has tabs for Identify, Diagnostics, Post Code, Last Crash Screen, Video Capture, and Tech Support Report, with Tech Support Report being the active tab. A yellow 'System Alert' box displays a progress bar indicating '12%' completion of a 'Tech Support Report (TSR) data is being collected. This operation will take less than 2 minutes.' Below the alert, there is a 'Tech Support Report' section with a large blue 'i' icon and instructions: 'To Collect OS and Application Data To export the current operating system and application data, do one of the following: • Install the iDRAC Service Module (Recommended): Learn More OR • Click Attach OS Collector and then run the OS Collector from the server's operating system.' At the bottom of the page, there is a 'Technical Support Report Data' section with a note: 'Instructions: Export Report will create a zip file that can be sent to Dell Technical Support to assist with troubleshooting system issues. Choose Advanced Export Options to specify optional report settings and actions.'

363

364

NOTE: You can click **Cancel** to stop the export. After export is completed, the following is displayed



367

368

7. Click **OK** to export the report.

369

370

8. Click **OK** to open/save the zip file and view the report

371

Note: While export is in progress, user can traverse to other pages and return back to "Tech Support Report" page to view the status and export the file.

372

373

Network Export:

374

5. Select File location as "Network".



375

376

377

378

System
PowerEdge R630
root, Admin

Identify Diagnostics Post Code Last Crash Screen Video Capture Tech Support Report

Options: > Advanced Export Options

Technical Support Report Data Hardware
OS and Application Data (Time Stamp: Never)

Collection Time will take less than 2 Minutes

Export Location

File Location Local Network

Network Settings

Protocol CIFS NFS

IP Address 10.94.192.100

Share Name CommonShare

Domain Name

User Name drac

Password ****

I agree to allow Technical Support to use this data. See [Full Terms and Conditions](#)

Attach OS Collector Export

6. Type the network share details. Select **I agree to allow Technical Support to use the data.**

The **Export** button is enabled.

379

380

System
PowerEdge R630
root, Admin

Identify Diagnostics Post Code Last Crash Screen Video Capture Tech Support Report

Options: > Advanced Export Options

Technical Support Report Data Hardware
OS and Application Data (Time Stamp: Never)

Collection Time will take less than 2 Minutes

Export Location

File Location Local Network

Network Settings

Protocol CIFS NFS

IP Address 10.94.192.100

Share Name CommonShare

Domain Name

User Name drac

Password ****

I agree to allow Technical Support to use this data. See [Full Terms and Conditions](#)

Attach OS Collector Export



381

382

To view the job status

383

Click Overview-> Server-> Job Queue to view the status of the job.

384

385

| ID | Job | Status |
|------------------|--------------------------|------------------------------|
| JID_067672179228 | TSR_Collect | Running (16%) |
| JID_067669392012 | TSR_Collect_Export | Completed (100%) |
| JID_067665486810 | TSR_Collect | Completed (100%) |
| JID_067664254639 | TSR_Collect | Failed (2%) |
| JID_067660552336 | TSR_Collect | Completed (100%) |
| JID_067644513360 | TSR_Collect | Completed with Errors (100%) |
| JID_067612598643 | Firmware Update: iDRAC | Completed |
| JID_065890838829 | Firmware Rollback: iDRAC | Completed (100%) |



386 1.5.3.1 **Error messages:**
387 The following error message is displayed if a TSR job is already in progress and you initiate
388 another job.

The screenshot shows the 'Tech Support Report' tab selected in the navigation bar. Below it, a section titled 'To Collect OS and Application Data' contains an information icon and instructions: 'To export the current operating system and application data, do one of the following:' followed by two bullet points. A note below says 'Collection Time will take less than 2 Minutes'. In the center, there's a warning dialog box with a yellow exclamation mark icon and the text 'A job operation is already running. Please retry after the earlier job is completed.' An 'OK' button is at the bottom right of the dialog. At the bottom left, there's a checkbox for agreeing to terms and conditions.

389

390 1.5.4 **Using Lifecycle Controller UI:**
391 The **Export Tech Support Report** feature allows you to export the TSR to a USB Drive
392 (or) Network Share (CIFS/NFS).

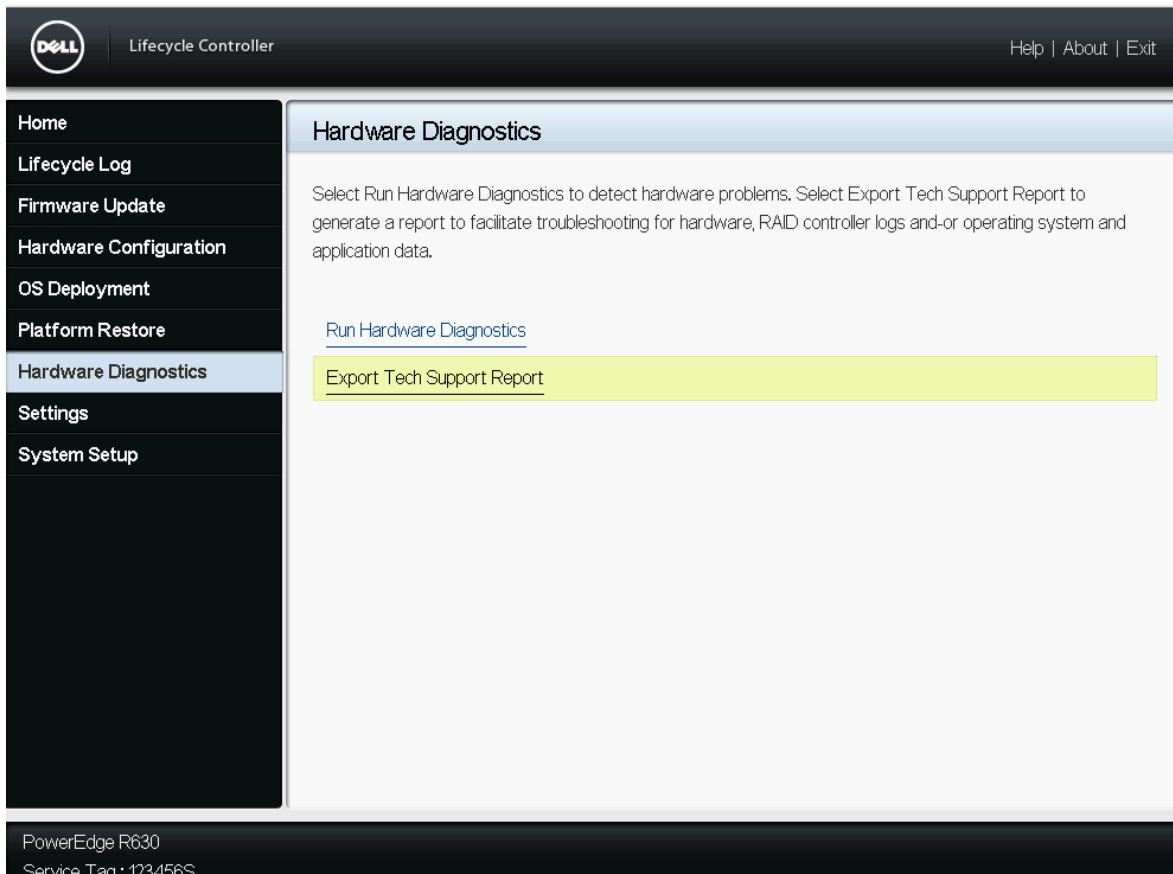
393 You can collect the following data:

394 • Hardware
395 • RAID Controller Logs
396 • Operating System and Application Data

397 NOTE: Operating System and Application Data is enabled only if this data is already
398 collected and cached using the OS collector tool on iDRAC. Lifecycle Controller only
399 retrieves the cached data. For more information on collecting OS and Software
400 application data using the OS collector tool in iDRAC, see the iDRAC User's Guide at
401 dell.com/support/manuals.
402 •
403 1. [Exporting the Tech Support Report Using the Lifecycle Controller](#), you should Press
404 <F10> during Power-on-self-test (POST) to start Lifecycle Controller.



- 405
406
407
2. In the left pane, click **Hardware Diagnostics**, and then click **Export Tech Support Report**.



408
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Figure 1. Hardware Diagnostics

3. On **Step 1 of 4: Terms and Conditions** page, read the conditions and select the **I agree to allow Technical Support to use tech support report data** option and click **Next**.



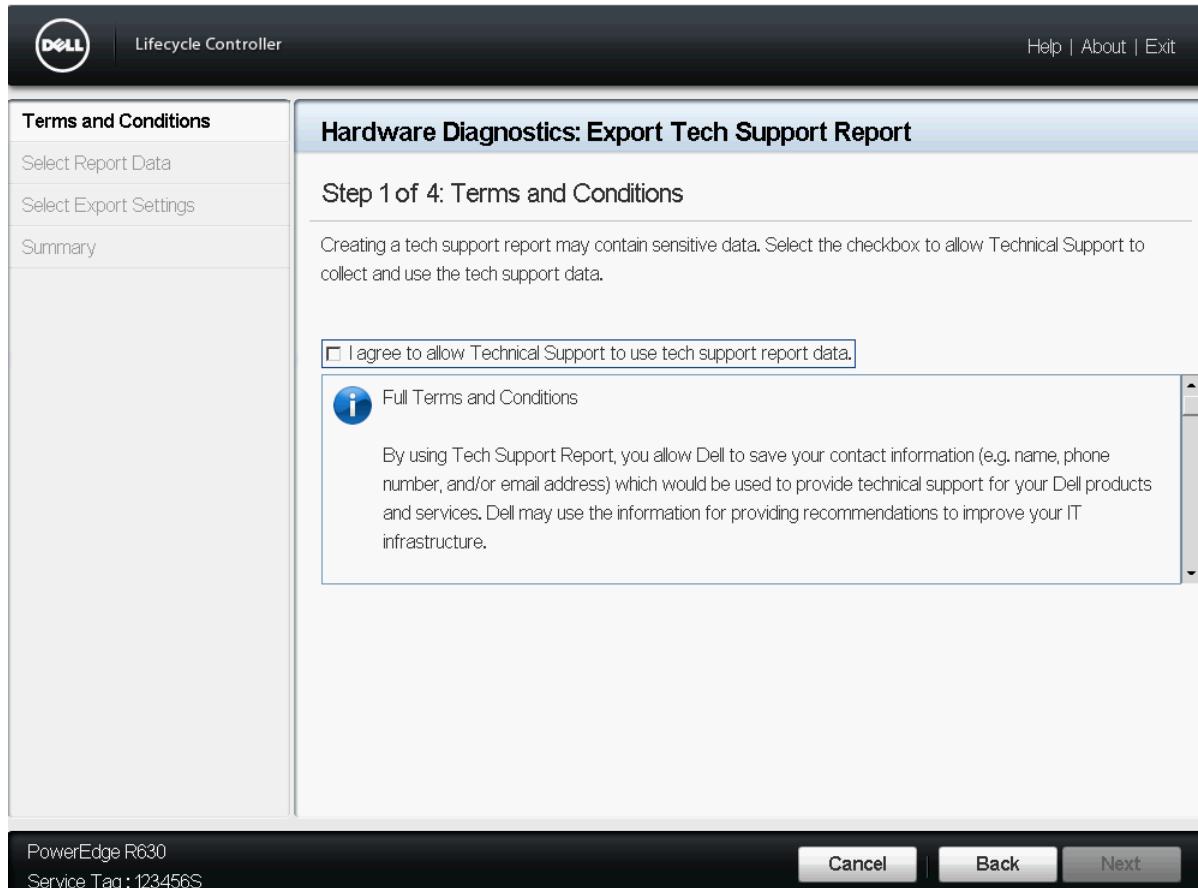
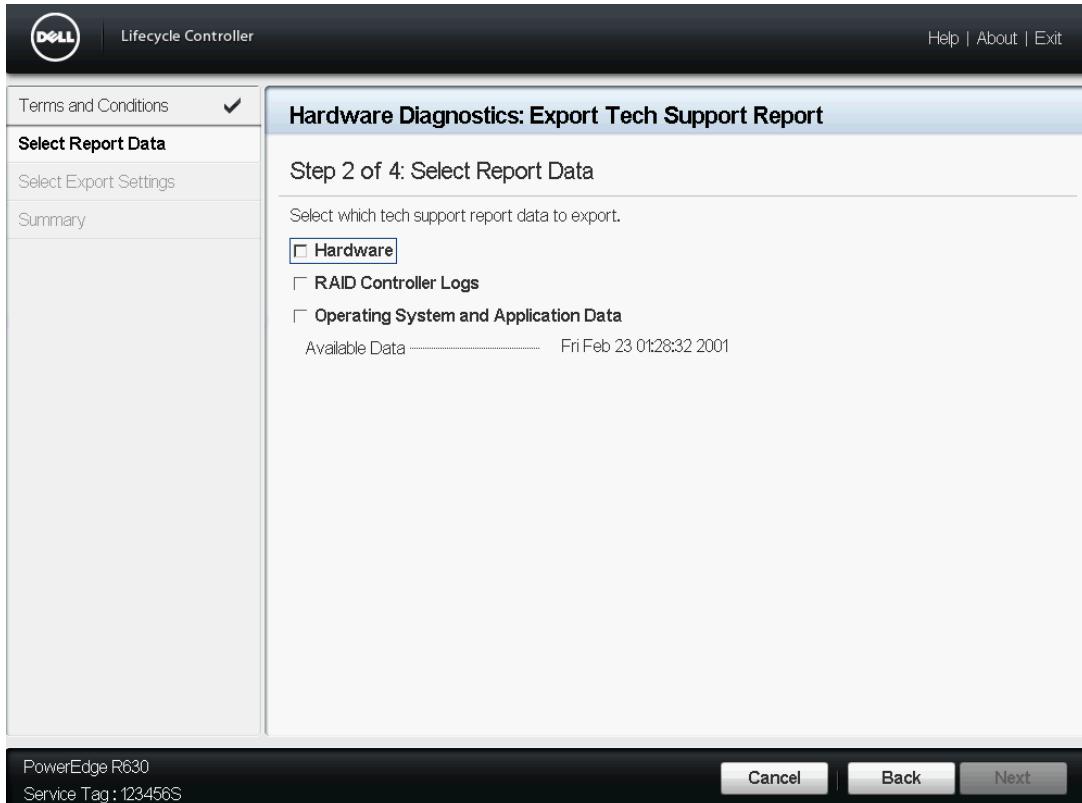


Figure 2. Step 1 of 4: Terms and Conditions

Note: The **Next** button is enabled only after you agree to the terms and conditions

- 415 4. On **step 2 of 4: Select Report Data** page, select the data options which you want to
- 416 include in the technical support report and click **Next**.
- 417





422
423 Figure 3. Step 2 of 4: Select Report Data

424
425 **Note:** The **RAID Controller Logs** option is enabled only if there is a RAID controller present on the
426 system. The **Operating System and Application Data** option is enabled only if this data is already
427 collected and cached using the OS collector tool on iDRAC. Lifecycle Controller only retrieves the
428 cached data. For more information on collecting the Operating System and Application Data using the
429 OS collector tool in iDRAC, see the *iDRAC User's Guide* at dell.com/support/manuals or see section
430 **1.3.1.1** in this document.

- 431
432 5. On **Step 3 of 4: Select Export Settings** page, type or select the required information
433 and click **Next**.
434
435
 - To Export Tech Support Report to USB Drive – select the USB drive option,
436 and then select the name of the USB Drive and enter the file path details to
437 where the report is to export.
438



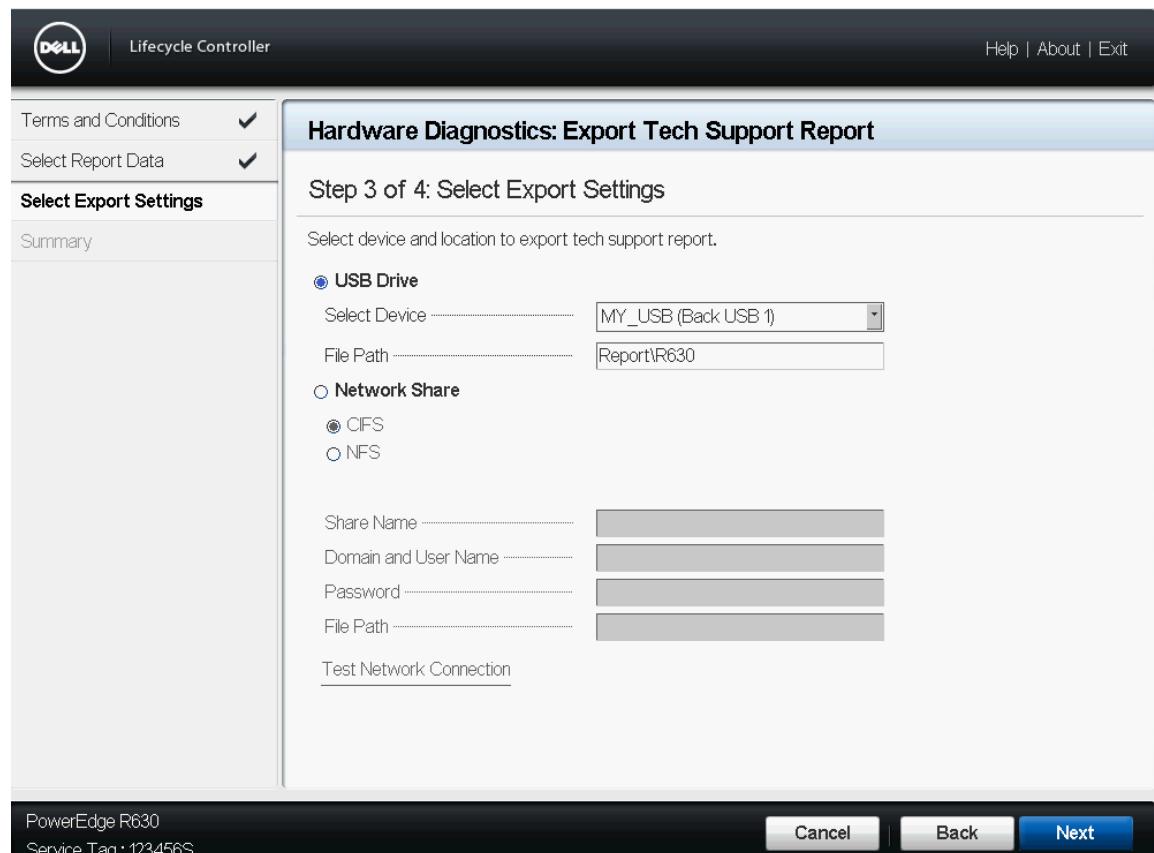


Figure 4. Step 3 of 4: Select Export Settings (USB)

- To Export Tech Support Report to NFS- Select the NFS option and type appropriate information.



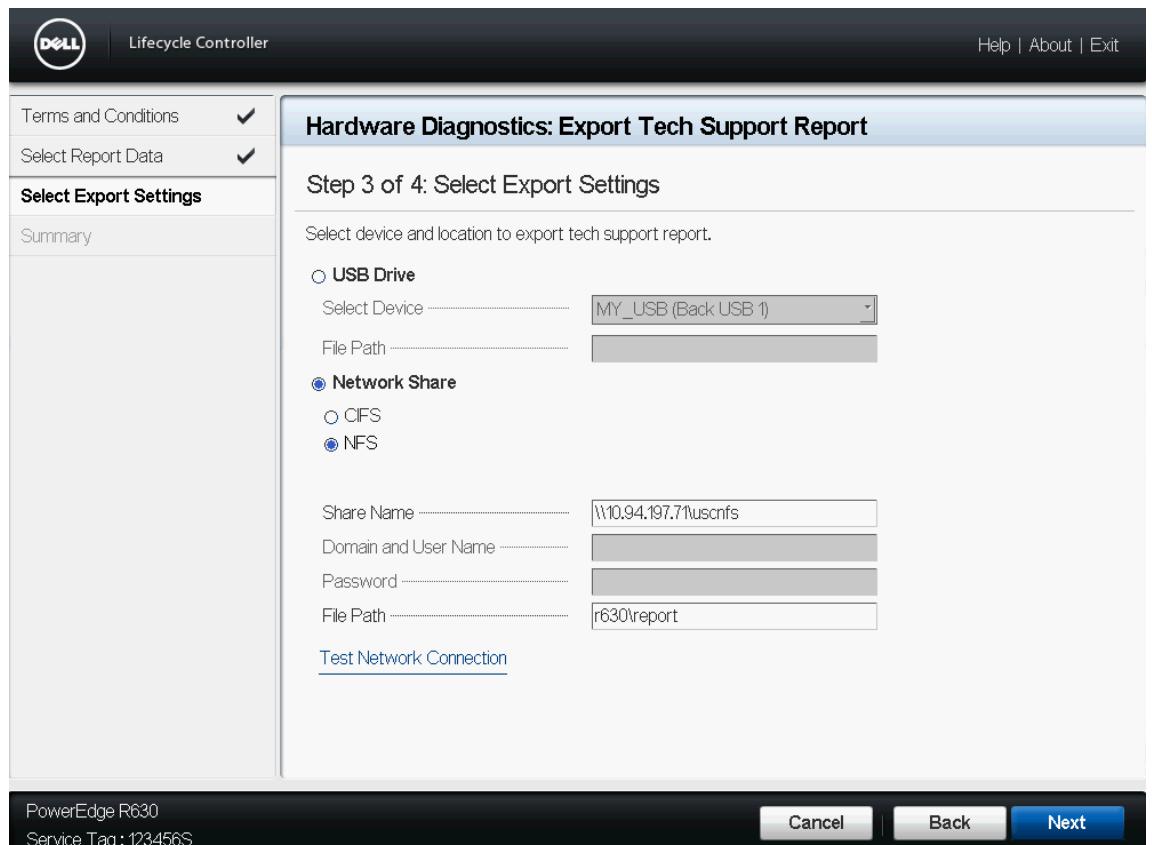


Figure 5. Step 3 of 4: Select Export Settings (NFS)

NOTE: Click **Test Network Connection** to verify if the Lifecycle Controller UI is able to connect to the IP address that is provided. By default, it pings the Gateway IP, DNS server IP, host IP and Proxy IP.

- To Export Tech Support Report to CIFS – Select the CIFS option and type appropriate information.



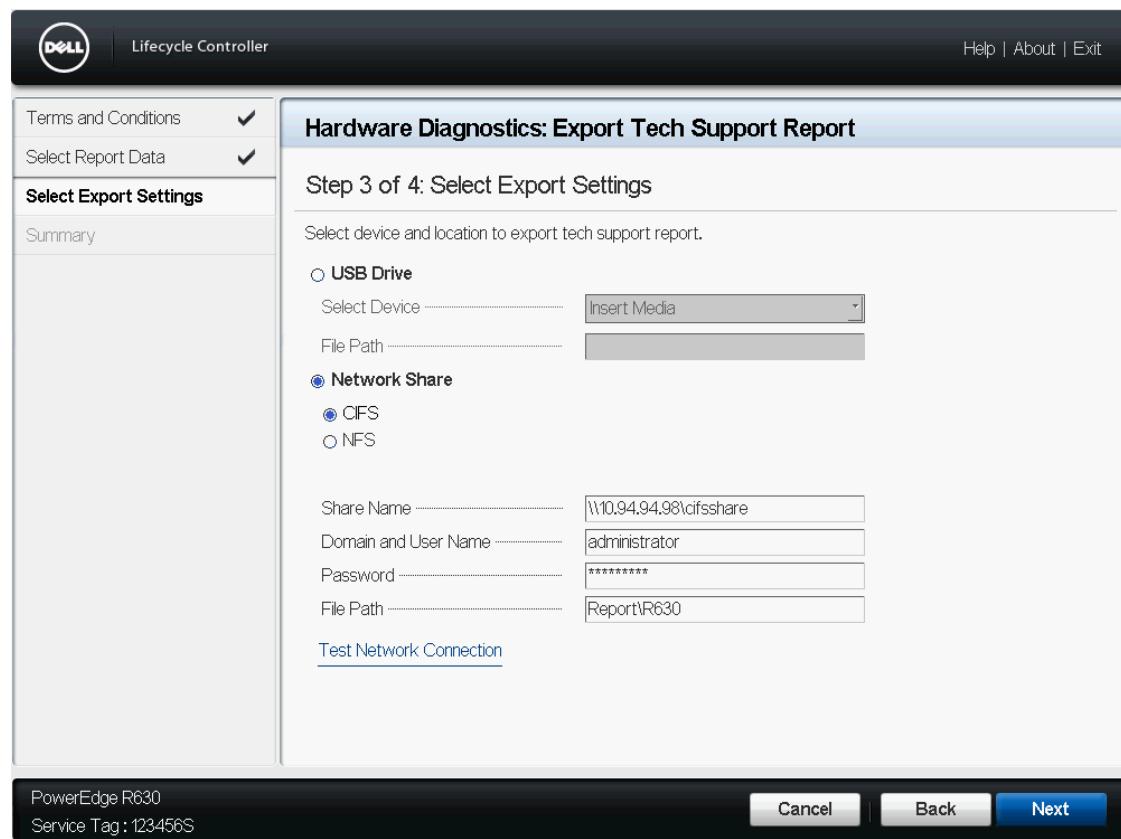


Figure 6. Step 3 of 4: Select Export Settings (CIFS)

NOTE: Click **Test Network Connection** to verify if the Lifecycle Controller UI is able to connect to the IP address that is provided. By default, it pings the Gateway IP, DNS server IP, host IP and Proxy IP.

6. On **Step 4 of 4: Summary** page, verify your selection and click **Finish**.



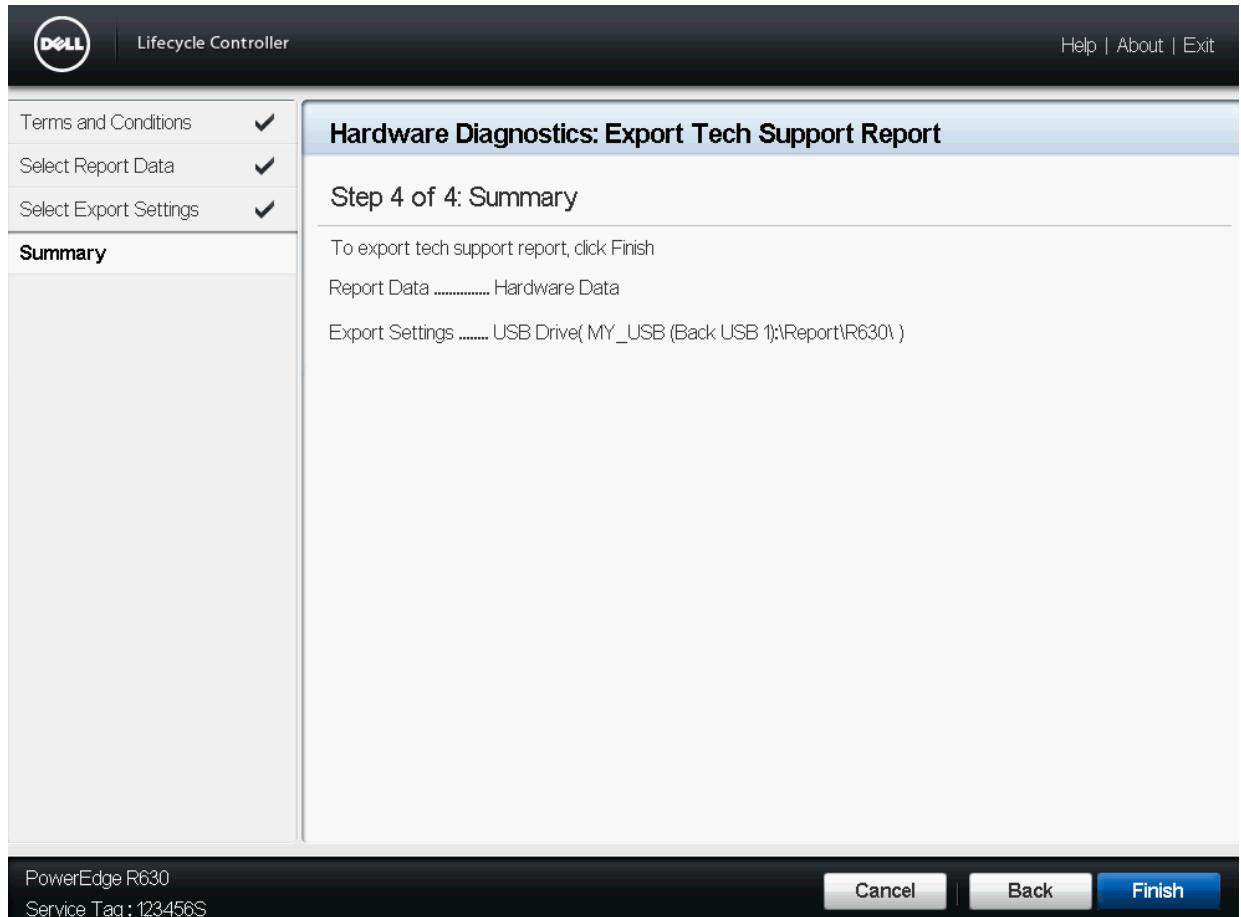


Figure 7. Step 4 of 4: Summary

Lifecycle Controller takes a few minutes to retrieve the selected report data and export the report file to the specified location.



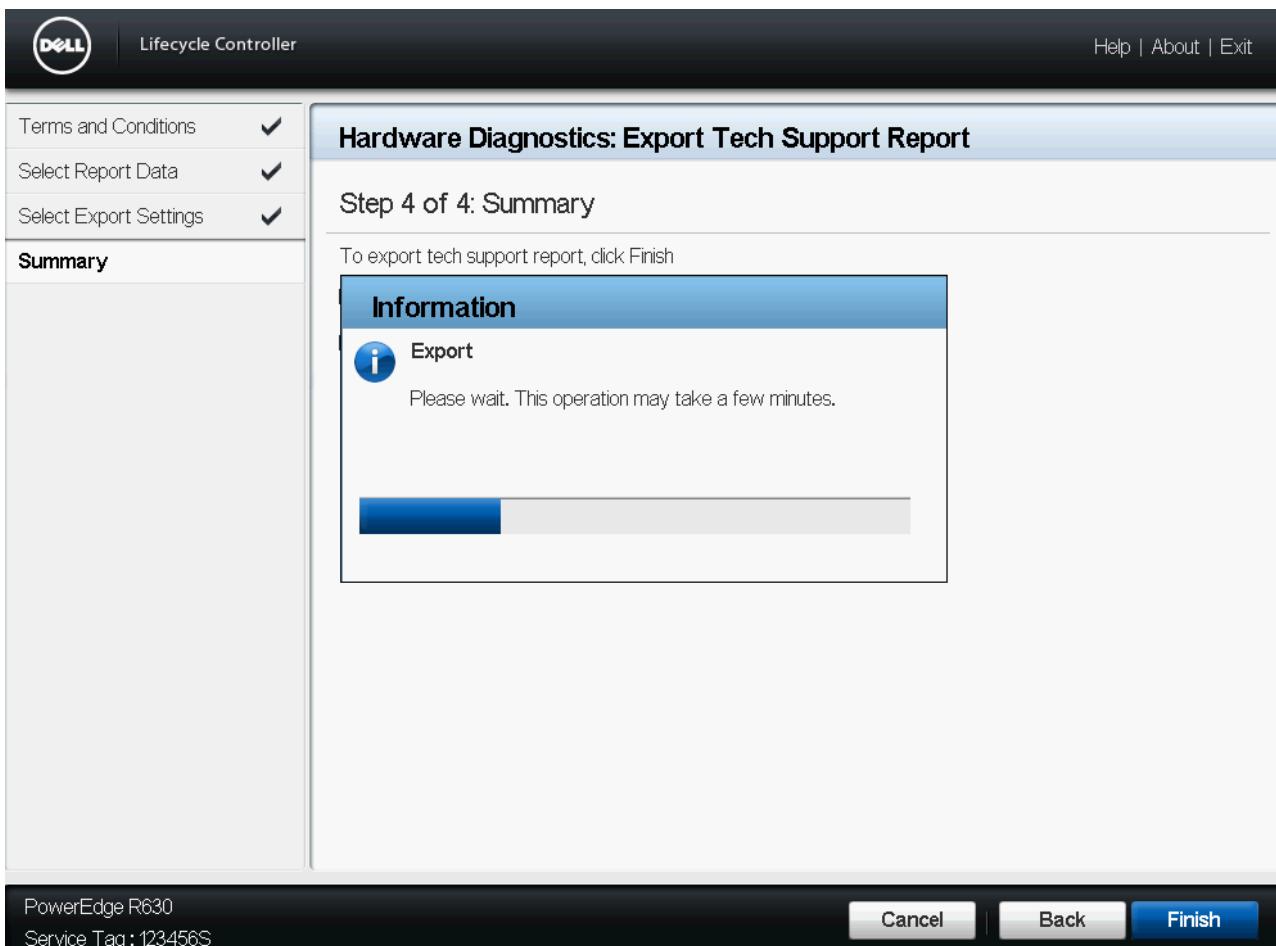


Figure 8. Export TSR operation In-Progress message

A message is displayed to indicate that the report is successfully exported.

The screen shots below display the messages that appear when an export operation is successful.

Success message in case of an export to a USB drive:



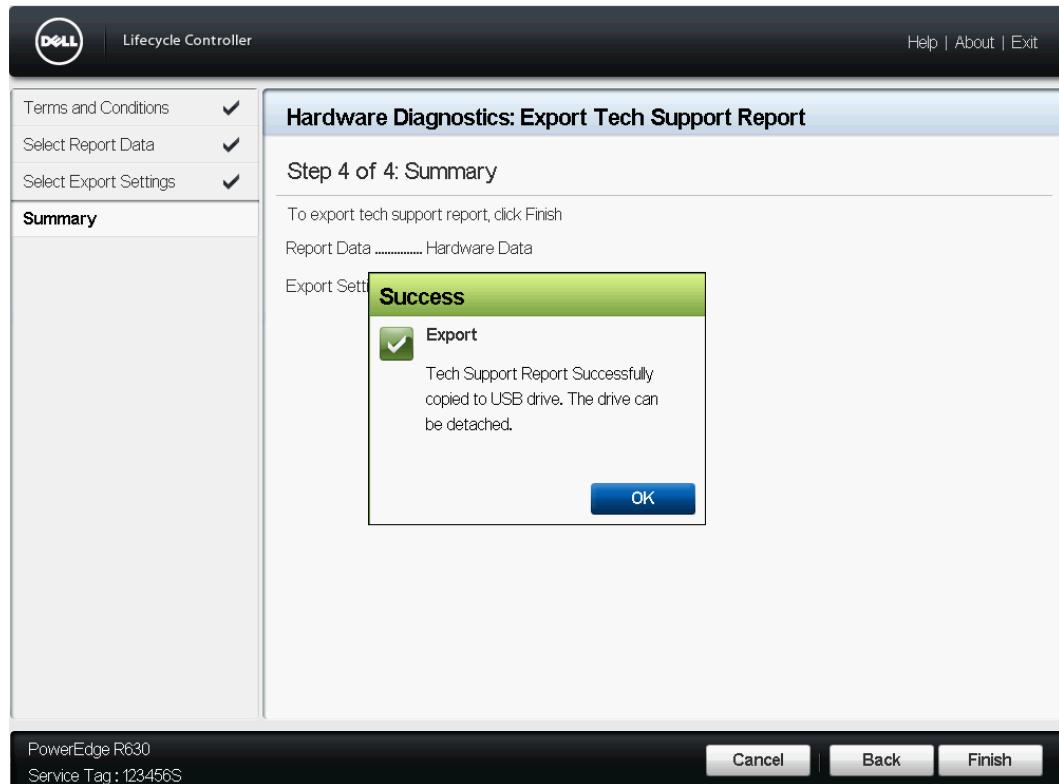


Figure 9. Export TSR to USB drive success message

- Success message in case of export to a network share (CIFS/NFS):



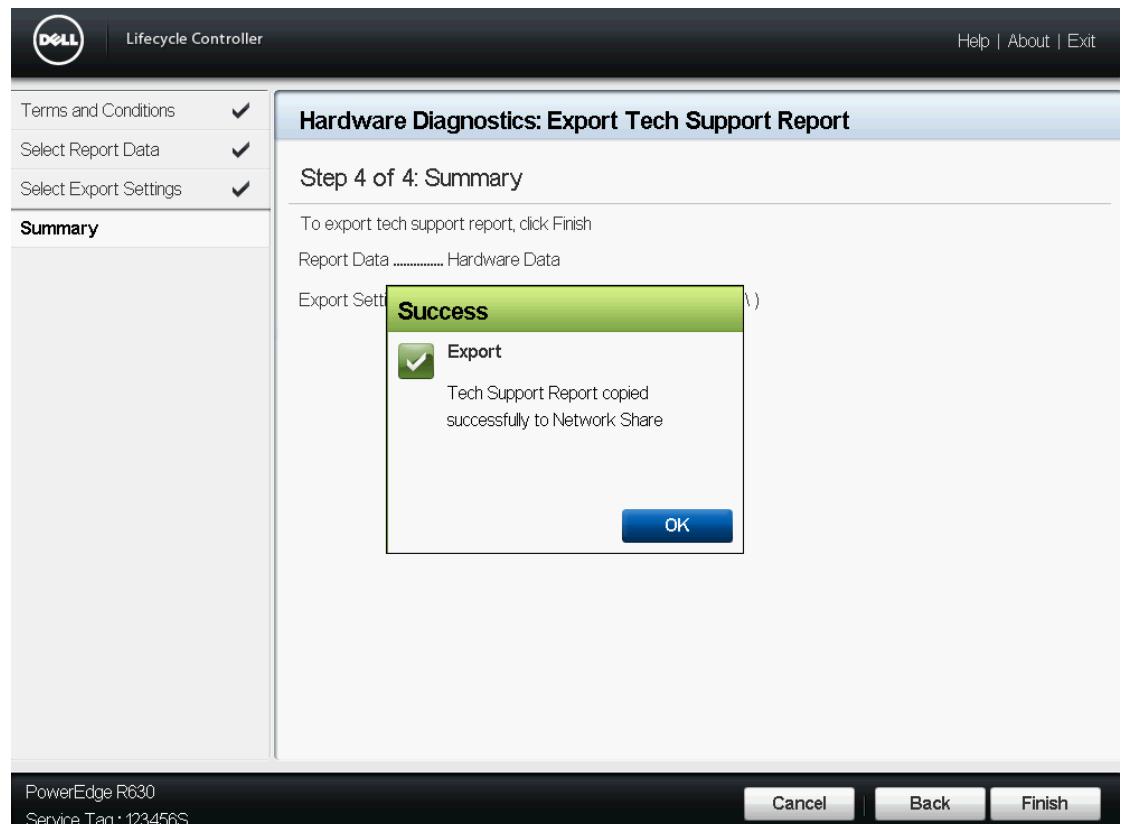


Figure 10. Export TSR to Network Share success message

1.5.4.1 Error messages:

The screen shots below display the messages that appear when an export operation fails.

- Error message when there is a failure in retrieving the selected report data.



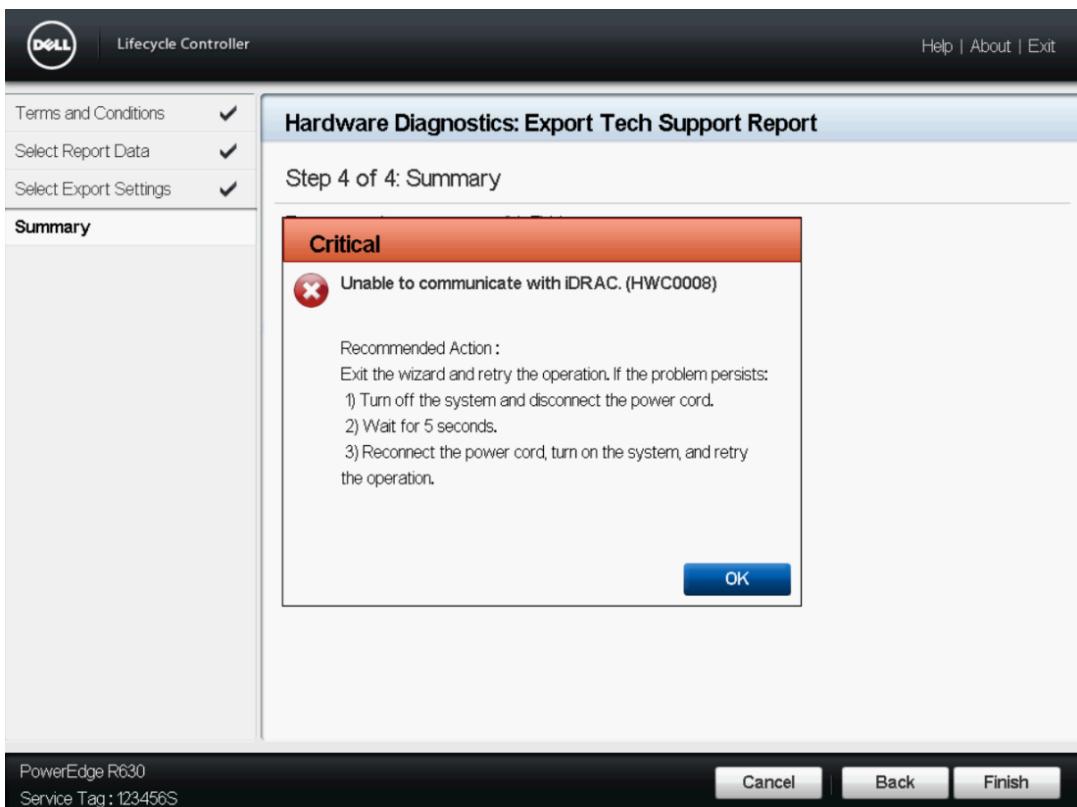


Figure 11. Export TSR critical error message

- Error message when Lifecycle Controller is unable to connect to the network share.



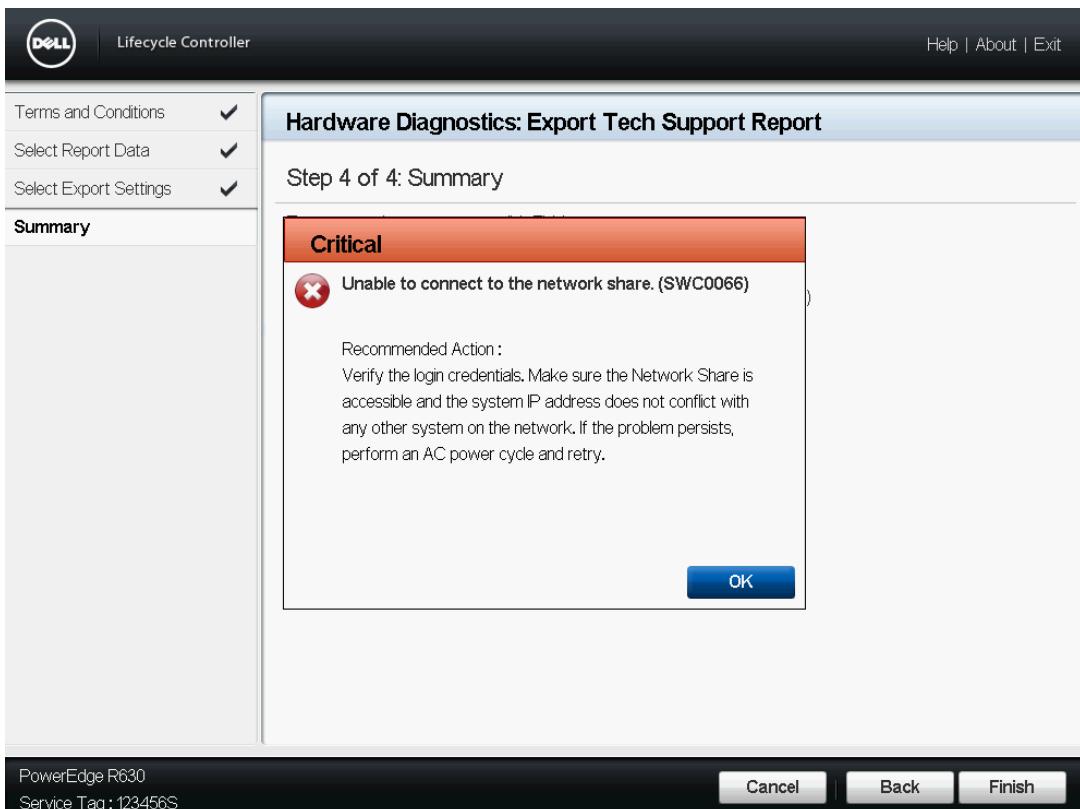
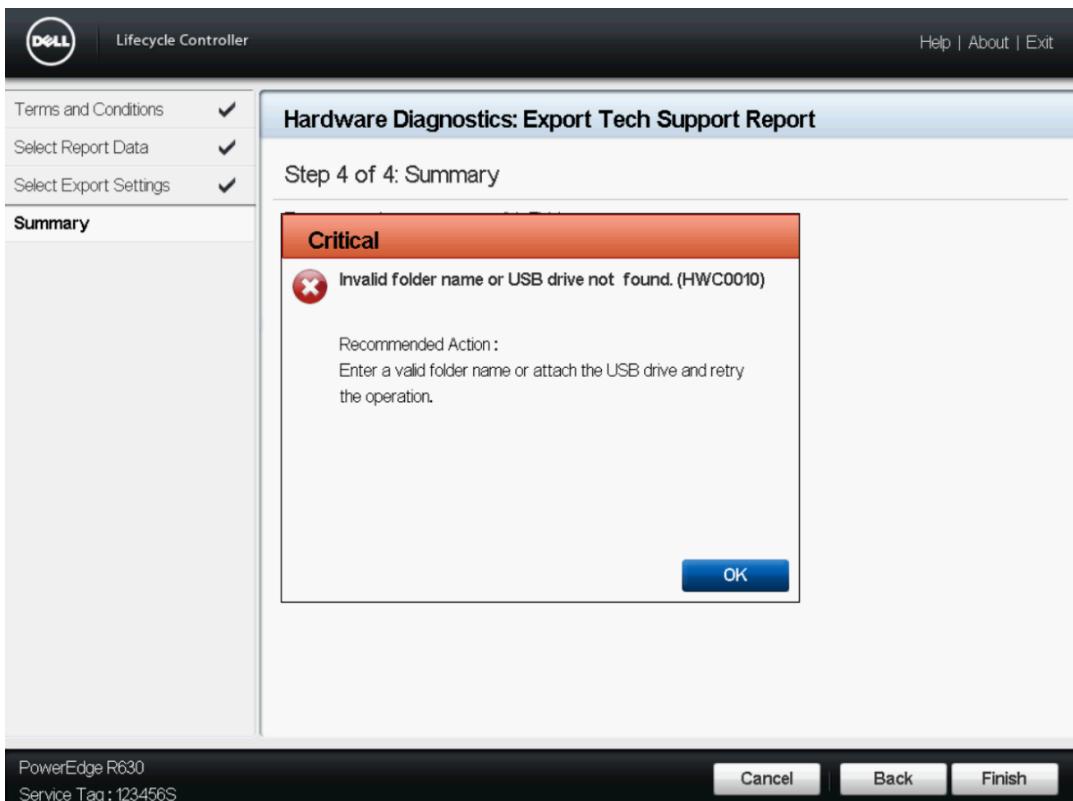


Figure 12. Export TSR to Network Share critical error message

Error message when the export fails because you have provide an invalid folder name or the USB drive is not found.





- Error message when the export fails because there is not enough space to copy to the USB drive.



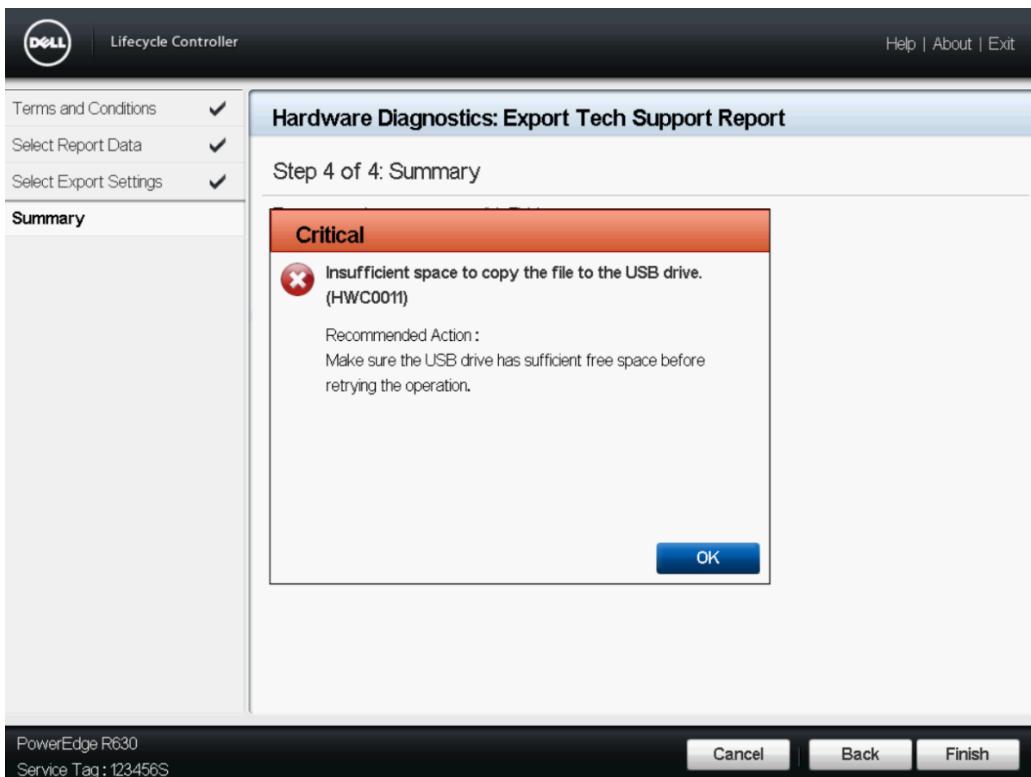


Figure 14. Export TSR to USB drive critical error message2

- Error message when the export fails because the USB drive is read only.



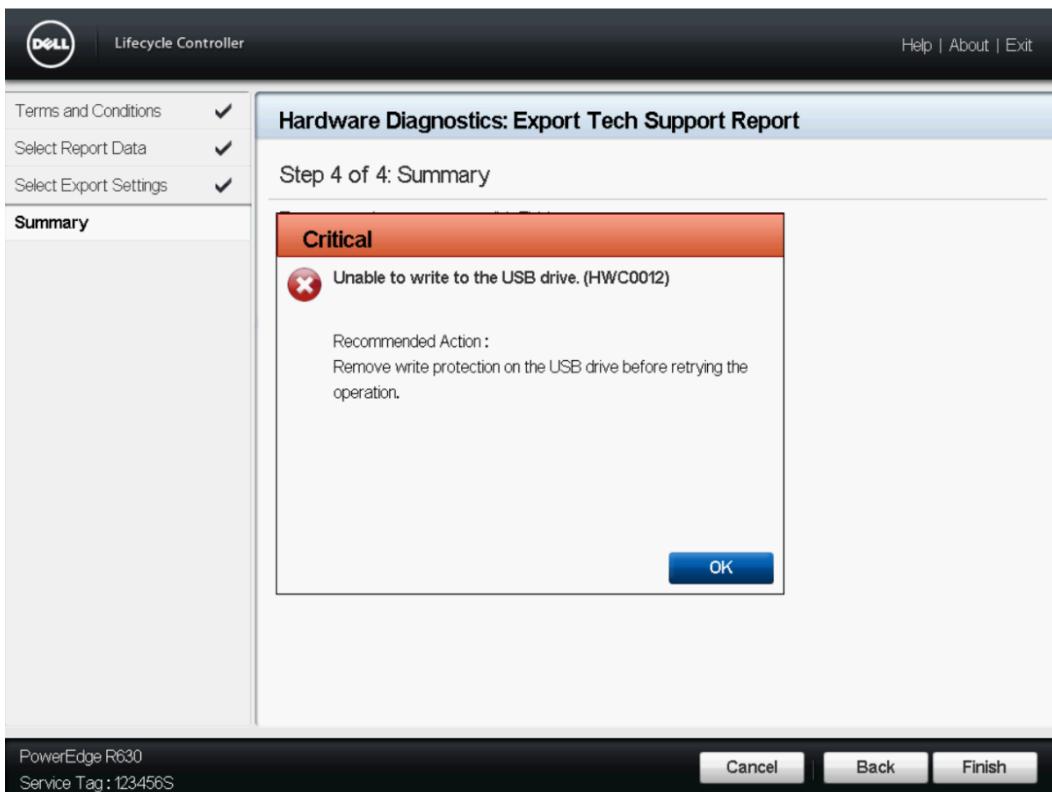


Figure 15. Export TSR to USB drive critical error message3

Note: The Lifecycle Controller UI does not display the job status. However, it displays the success or error message after the job is completed.

1.6 Conclusion:

TSR enables the users to collect system information that includes Hardware, OS and Application Data, Storage Controller Logs and create a report, which may be downloaded to local or network share and help Tech Support troubleshoot an issue. User can get the report remotely using any of iDRAC out-of-band interfaces.

Using the TSR feature you can generate and access reports quickly which results in saving time and effort.

Learn more

For more information on the Enterprise servers, see dell.com/PowerEdge.



