



Generating Tech Support Report on 13th Generation Dell PowerEdge Servers

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Executive summary

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

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



1 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..

1.1 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 to 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.



1.2 Configuration Prerequisites

- TSR support is available with a base license on 13th generation PowerEdge servers. For more information about managing licenses, navigate to **Overview-> Server Lienses-> iDRAC Online Help** in the iDRAC web interface.
- The server must have a valid service tag (7 characters).
- You must have Login and Server control privileges.
- Ensure that the latest iDRAC firmware for 13th generation servers is available.
- To retrieve the OS and Application Data the OS Collector tool or iDRAC Service Module must be installed on the system .The OS Collector tool is preinstalled on the system. See the Dell Support site to upgrade or downgrade the OS Collector tool. To automatically collect the OS and Application data, ensure that iDRAC Service Module is installed and running on the server and a supported operating is installed on the server.
- TTYLogs are supported on storage controllers that have Agent free monitoring capability.
Example PERC 9.1-

- Constraints:

- Collect System Inventory On Restart (CSIOR) is enabled.
- Lifecycle Controller must be enabled, no other modes will be supported (ex: Disabled, Recovery etc.).
Example commands:
Get command: To get the current value of CSIOR.
"racadm get LifecycleController.LCAttributes.CollectSystemInventoryOnRestart"
Set Command: To set the CSIOR value.
"racadm set LifeCycleController.LCAttributes.CollectSystemInventoryOnRestart Enable"

1.3 Solution overview of TSR:

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

1.3.1 Update Operating System Health Data:

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



- **Automatic:** The method will update the OS and Application data automatically. This will require the iDRAC Service Module (iSM) to be installed and running in the Server OS. so you must ensure that the iDRAC Service Module (iSM) is installed and running in the server OS.
- **Manual:** If iSM is not installed and running in Server OS then user needs to manually execute the OS Collector script in Server OS to update the OS and Application Data.

The Steps for manual process:

- a. iDRAC exposes a virtual USB device labeled DRACRW containing the OS collector executable to the server OS.
- b. You must execute the executable from the DRACRW partition on the server OS. After the execution is completed, the OS and Application Data is copied to the iDRAC storage and DRACRW partition is detached.

1.3.2 Exporting TSR

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

You can collect the following information:

- Hardware data
- Storage TTY logs
- Filtered OS and Application Data
- (Unfiltered) OS and Application Data

1.3.3 Creates Job:

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

1.4 Update Operating System Health Data:

1.4.1 Using WS-Man:

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



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

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

Input Parameters:

1. UpdateType = 0 (Automatic)
UpdateType = 1 (Manual)

Note: Default value is "0"

This method returns the job ID once it is success.

Command to update OSAppHealthData:

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

Command to verify the job status:

```
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
```

1.4.1.1 Error messages:

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

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

or

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

Example:

```
winrm i UpdateOSAppHealthData http://schemas.dmtf.org/wbem/wscim/1/cim-  
schema/2/root/dcim/DCIM_LCService?SystemCreationClassName=DCIM_ComputerSystem+CreationCla  
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.

158

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:

- 169 • 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

- 174 • You have entered an invalid log type.

175
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

- 179 • If the iSM is not running.

180
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

- 188 • c

189
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"

195
196 MessageID = RAC1162



1.4.3 Using the iDRAC GUI:

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

System
PowerEdge R630
root, Admin

Overview
Server
Logs
Power / Thermal
Virtual Console
Alerts
Setup
Troubleshooting
Licenses
Intrusion
iDRAC Settings
Hardware
Storage
Physical Disks
Virtual Disks
Controllers
Enclosures
Host OS

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

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.

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: > [Advanced Export Options](#)

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

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](#)

Collection Time will take less than 2 Minutes

3. Click **Attach OS Collector**.

System
PowerEdge R630
root, Admin

Overview
Server
Logs
Power / Thermal
Virtual Console
Alerts
Setup
Troubleshooting
Licenses
Intrusion
iDRAC Settings
Hardware
Storage
Physical Disks
Virtual Disks
Controllers
Enclosures
Host OS

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

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
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Technical Support Report Data

Options: > [Advanced Export Options](#)

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

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](#)

Collection Time will take less than 2 Minutes

Attach OS Collector

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).

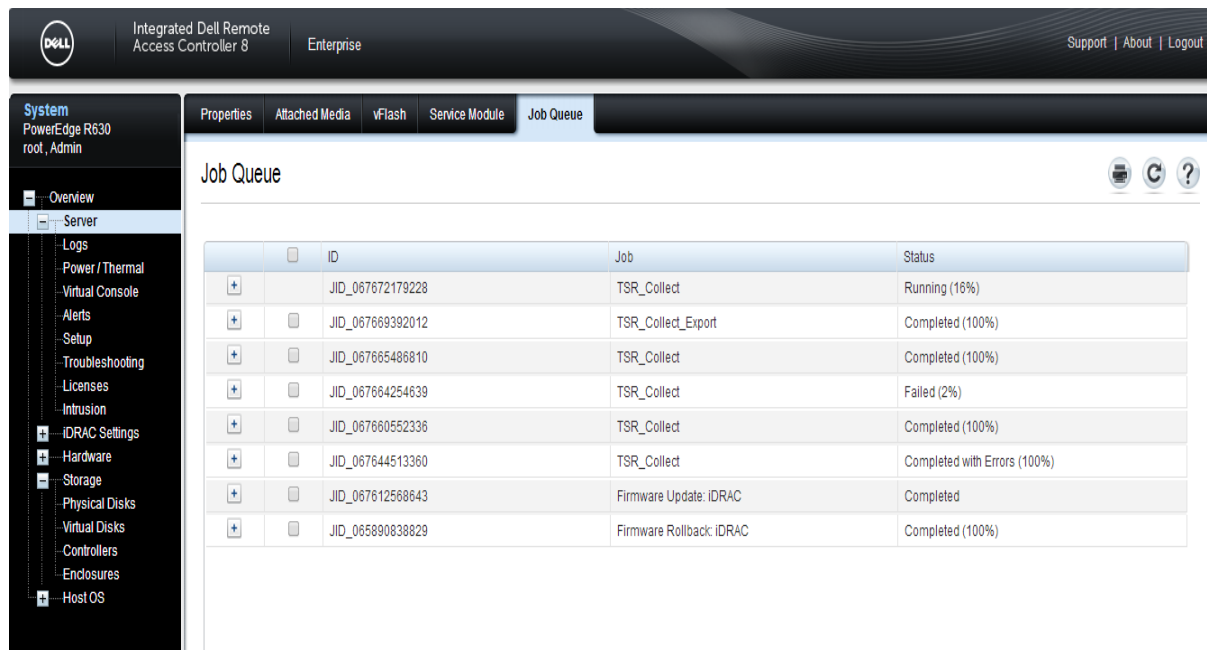
[Launch Virtual Console](#) [Close](#)

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.

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

Viewing Job status:

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



The screenshot displays the iDRAC GUI interface. The top navigation bar includes the Dell logo, 'Integrated Dell Remote Access Controller 8', 'Enterprise', and links for 'Support | About | Logout'. The left sidebar shows a tree view with 'System' selected, and 'Job Queue' is highlighted under the 'Server' section. The main content area is titled 'Job Queue' and contains a table with the following data:

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_067612568643	Firmware Update: iDRAC	Completed
JID_065890838829	Firmware Rollback: iDRAC	Completed (100%)

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.

1.4.4 Using the Lifecycle Controller UI:

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.



1.5 Exporting TSR

1.5.1 Using WS-Man:

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

The ExportTechSupportReport method is defined in the DCIM_LCService class.

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

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

ExportTechSupportReport Input Parameters:

The following are the input parameters for ExportTechSupportReport method.

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

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

Command to run ExportTechSupportReport:

For Single Input Selection:

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



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

For Multiple Input Selections:

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

ExportTechSupportReport.xml file content:

```
<p:ExportTechSupportReport_INPUT xmlns:p="http://schemas.dmtf.org/wbem/wscim/1/cim-  
schema/2/root/dcim/DCIM\_LCService">
```

```
  <p:DataSelectorArrayIn>1</p:DataSelectorArrayIn>  
  <p:DataSelectorArrayIn>2</p:DataSelectorArrayIn>  
  <p:DataSelectorArrayIn>3</p:DataSelectorArrayIn>  
  <p:IPAddress>IP address of target</p:IPAddress>  
  <p:ShareName>User specified name</p:ShareName>  
  <p:UserName>target username</p:UserName>  
  <p>Password>target password</p>Password>  
  <p:ShareType>either 0 or 2</p:ShareType>  
</p:ExportTechSupportReport_INPUT>
```

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

ExportTechSupportReport_OUTPUT

Job

EndpointReference

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

ReferenceParameters

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



SelectorSet

Selector: InstanceID = JID_111034772764, __cimnamespace = root/dcim

ReturnValue = 4096

Command to verify the job status:

```
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
```

1.5.1.1 Error messages:

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

- An export job is in progress and you initiate another export TSR job

Message:

The iDRAC is unable to start the Tech Support Report job, because a report collection job is already running on the server.

Check the Dell Message Registry for event/error message information at.

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

or

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

- You provided an invalid input parameter.

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

ExportHealthReport_OUTPUT

Message = Invalid value of parameter DataSelector

MessageArguments = DataSelector



MessageID = LC017

ReturnValue = 2

1.5.2 Using RACADM:

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

Command to export the collected logs to a CIFS share:

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

Command to export the collected logs to an NFS share:

```
$racadm techsupreport export -l 192.168.22.25:/myshare
```

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

```
$ racadm techsupreport export -f report.zip
```

Command to verify job status:

```
$racadm jobqueue view -i <Job ID>
```

1.5.2.1 Error messages:

1. The following error:

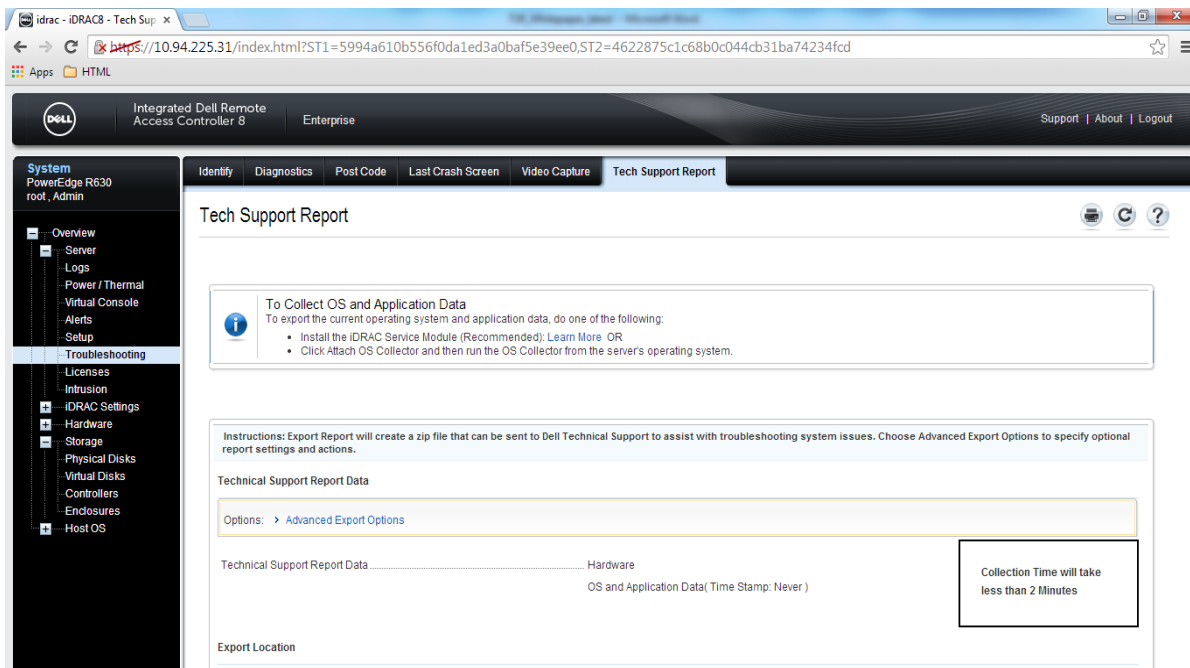
Message = The export operation is unsuccessful. Run the RACADM "techsupreport collect" command again and then retry the export operation.

MessageID = RAC1151

1.5.3 Using iDRAC GUI:

1. Login to iDRAC GUI.
2. Click **Overview**-> **Server**-> **Troubleshooting**-> **Tech Support Report**.
The **Tech Support Report** page displays the **Basic Export Options**.





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

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

- RAID Controller Log
- Enable Report Filtering under

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

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

4. Select the file location to save the report:
 Local - To save to the file to a location on the system.
 Network - To save the file to a network share.

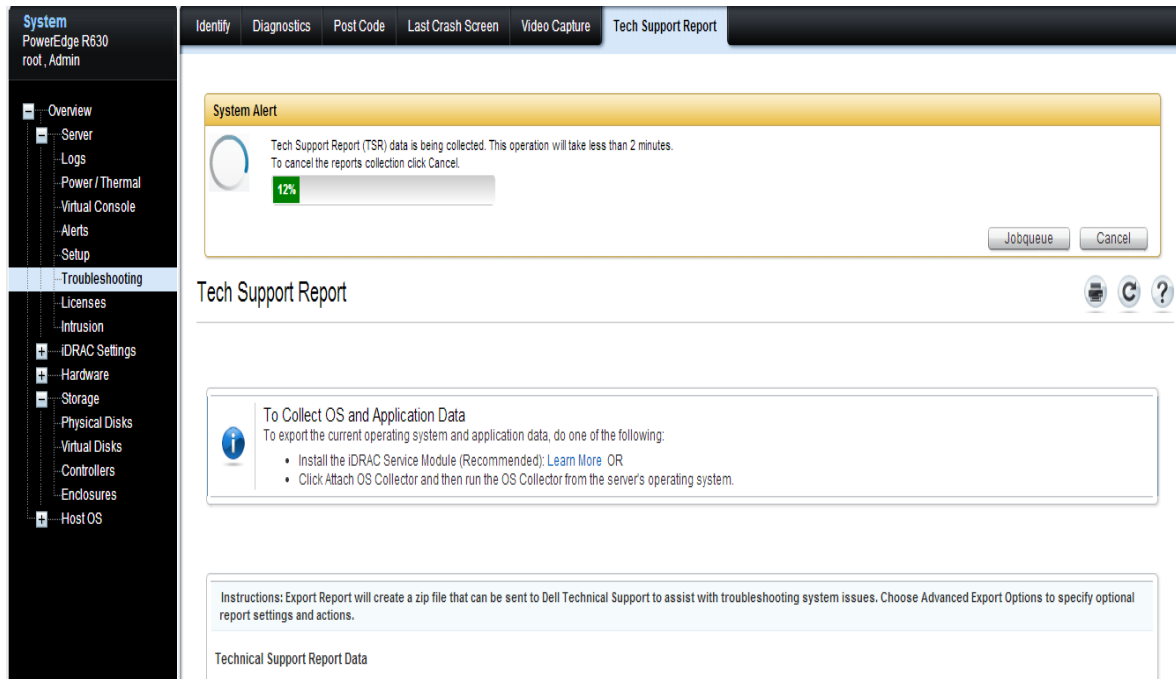
Local Export:

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

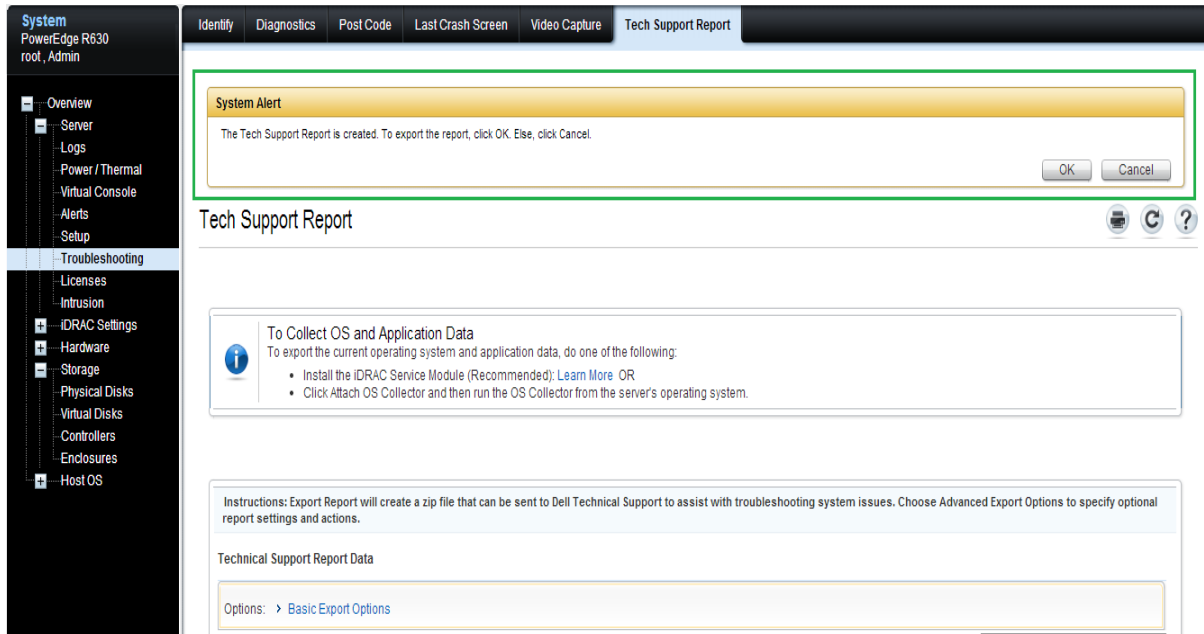
The Export button is enabled

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

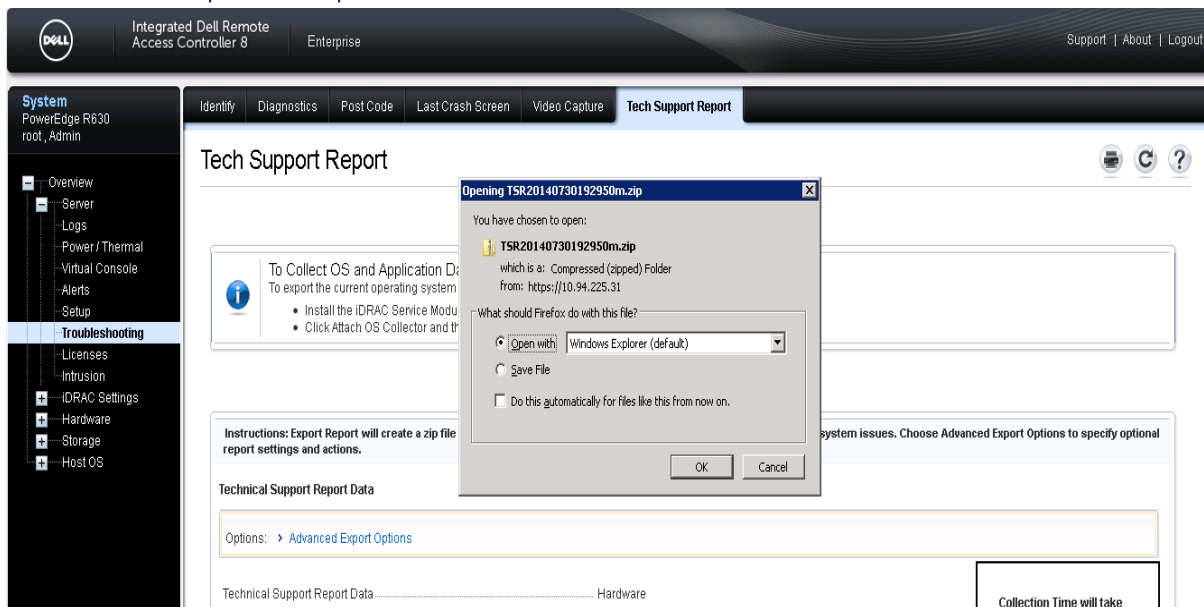
The progress of the export is displayed. The file is exported and available on the location as a zip file.



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



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



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

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.

Network Export:

5. Select File location as “Network”.



System
PowerEdge R630
root, Admin

Overview
Server
Logs
Power / Thermal
Virtual Console
Alerts
Setup
Troubleshooting
Licenses
Intrusion
iDRAC Settings
Hardware
Storage
Physical Disks
Virtual Disks
Controllers
Enclosures
Host OS

Options: > Advanced Export Options

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

Export Location

File Location..... Local ☒ Network

Network Settings

Protocol..... ☒ CIFS ☐ NFS

IP Address.....

Share Name.....

Domain Name.....

User Name.....

Password.....

[Test network connection](#)

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

[Attach OS Collector](#) [Export](#)

Collection Time will take less than 2 Minutes

6. Type the network share details. Select **I agree to allow Technical Support to use the data**.
The **Export** button is enabled.

System
PowerEdge R630
root, Admin

Overview
Server
Logs
Power / Thermal
Virtual Console
Alerts
Setup
Troubleshooting
Licenses
Intrusion
iDRAC Settings
Hardware
Storage
Physical Disks
Virtual Disks
Controllers
Enclosures
Host OS

Options: > Advanced Export Options

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

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..... *****

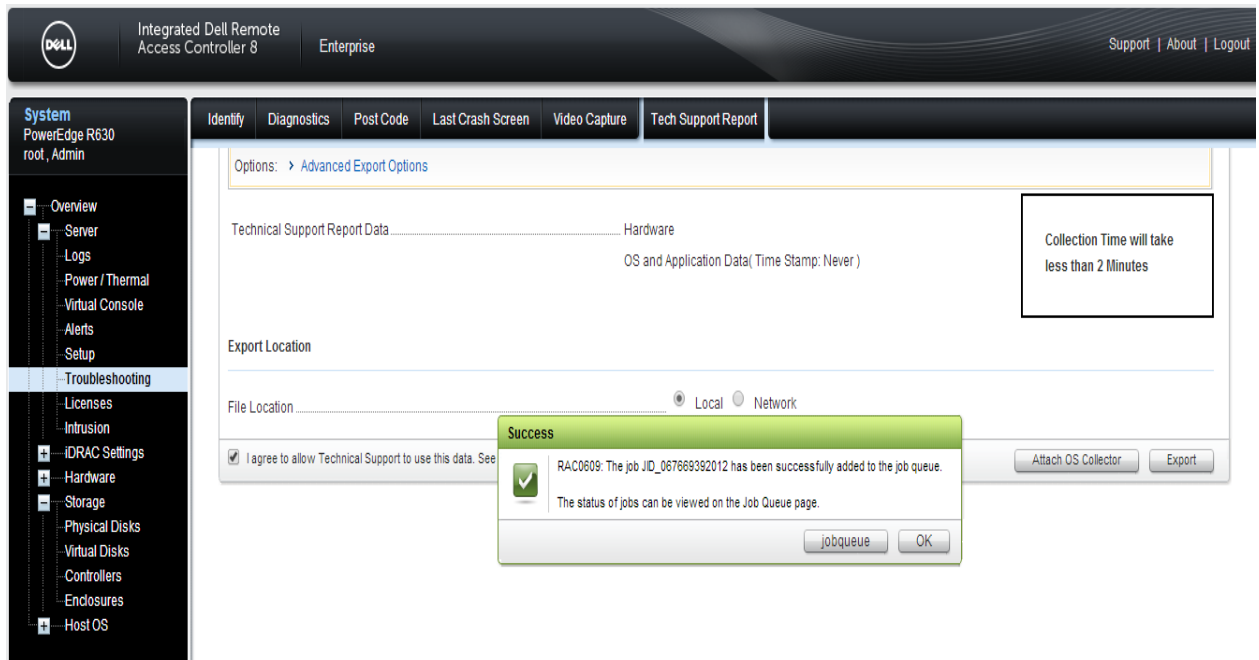
[Test network connection](#)

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

[Attach OS Collector](#) [Export](#)

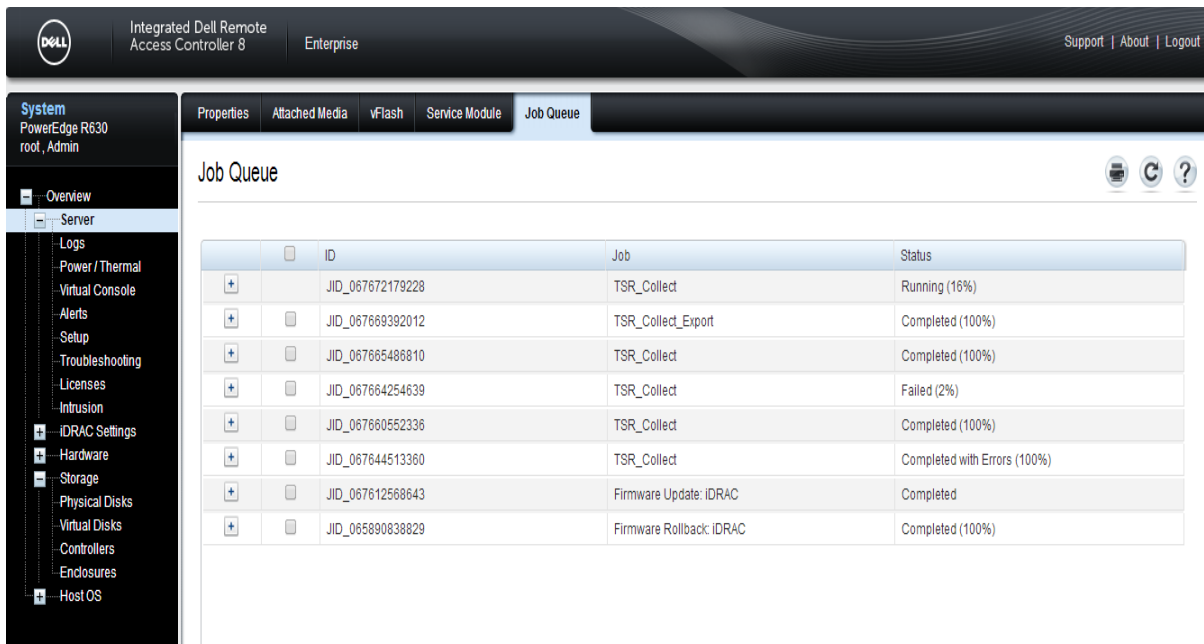
Collection Time will take less than 2 Minutes

7. Click **Export**. A pop-up window with the job details is displayed.



To view the job status

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



1.5.3.1 Error messages:

The following error message is displayed if a TSR job is already in progress and you initiate another job.

The screenshot shows the 'Tech Support Report' tab in a web interface. At the top, there are tabs for 'Identify', 'Diagnostics', 'Post Code', 'Last Crash Screen', and 'Tech Support Report'. Below the tabs, the title 'Tech Support Report' is displayed. A message box with an information icon states: '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.' Below this, a section 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.' contains a form for 'Technical Support Report Data'. The form has a dropdown menu for 'Options' set to 'Advanced Export Options'. It includes checkboxes for 'Technical Support Report Data', 'Hardware', and 'OS and Application Data(Time Stamp: Never)'. A box on the right indicates 'Collection Time will take less than 2 Minutes'. Below the form, there is a section for 'Export Location' and 'File Location'. A yellow error message box is overlaid on the form, stating: 'A job operation is already running. Please retry after the earlier job is completed.' with an 'OK' button. At the bottom of the form, there is a checkbox for 'I agree to allow Technical Support to use this data. See [Full Terms and Conditions](#)'.

1.5.4 Using Lifecycle Controller UI:

The **Export Tech Support Report** feature allows you to export the TSR to a USB Drive (or) Network Share (CIFS/NFS).

You can collect the following data:

- Hardware
- RAID Controller Logs
- Operating System and Application Data

NOTE: Operating System and Application Data is enabled only if this data is already collected and cached using the OS collector tool on iDRAC. Lifecycle Controller only retrieves the cached data. For more information on collecting OS and Software application data using the OS collector tool in iDRAC, see the iDRAC User's Guide at dell.com/support/manuals.

1. [Exporting the Tech Support Report Using the Lifecycle Controller](#), you should Press <F10> during Power-on-self-test (POST) to start Lifecycle Controller.



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

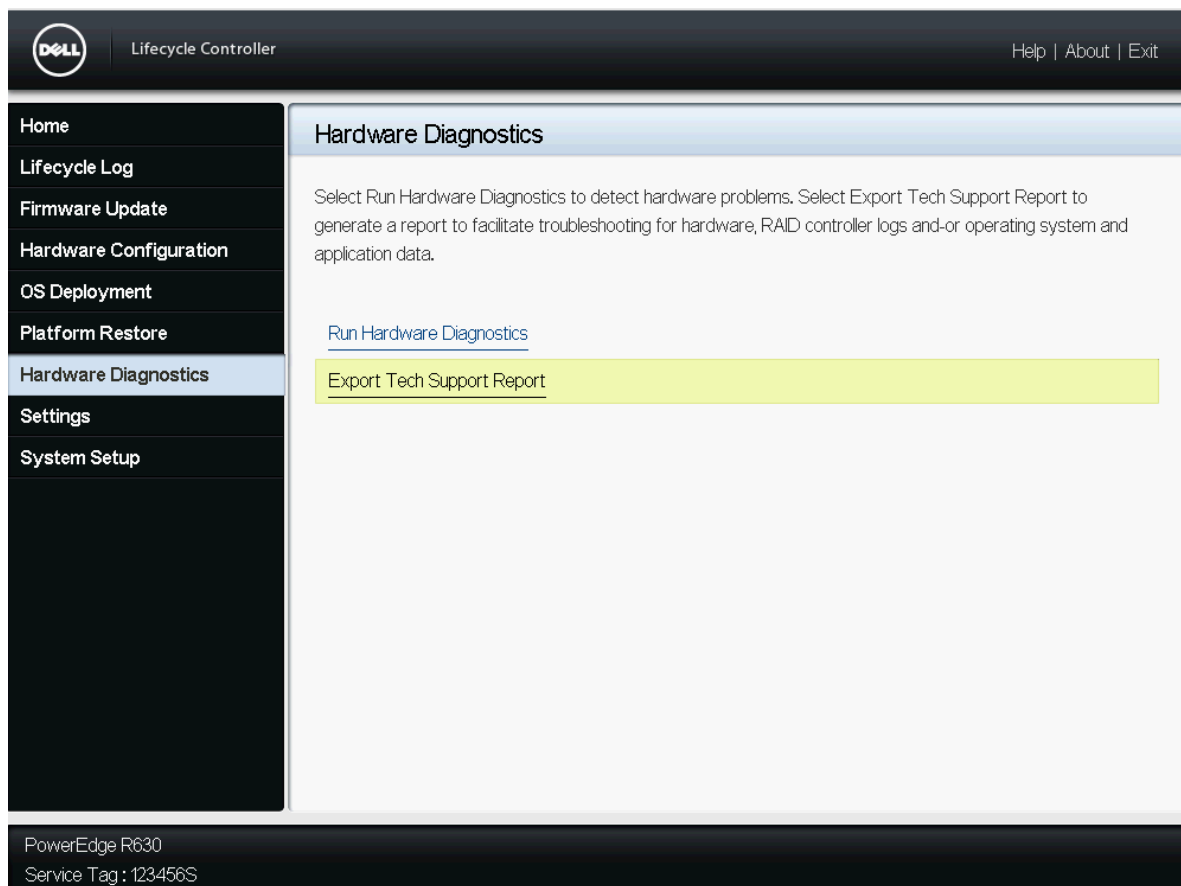


Figure 1. Hardware Diagnostics

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**.

Hardware Diagnostics: Export Tech Support Report

Step 1 of 4: Terms and Conditions

Creating a tech support report may contain sensitive data. Select the checkbox to allow Technical Support to collect and use the tech support data.

☐ I agree to allow Technical Support to use tech support report data.

i Full Terms and Conditions

By using Tech Support Report, you allow Dell to save your contact information (e.g. name, phone number, and/or email address) which would be used to provide technical support for your Dell products and services. Dell may use the information for providing recommendations to improve your IT infrastructure.

PowerEdge R630
Service Tag: 123456S

Cancel Back 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

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

The screenshot shows the Dell Lifecycle Controller interface for generating a Tech Support Report. The main window is titled 'Hardware Diagnostics: Export Tech Support Report'. On the left, there is a sidebar with navigation options: 'Terms and Conditions' (checked), 'Select Report Data' (active), 'Select Export Settings', and 'Summary'. The main content area is titled 'Step 2 of 4: Select Report Data' and contains the instruction 'Select which tech support report data to export.' Below this, there are three checkboxes: 'Hardware' (checked), 'RAID Controller Logs', and 'Operating System and Application Data'. A line of text below the checkboxes reads 'Available Data Fri Feb 23 01:28:32 2001'. At the bottom of the window, there is a dark bar with the system information 'PowerEdge R630' and 'Service Tag: 123456S', and three buttons: 'Cancel', 'Back', and 'Next'.

Figure 3. Step 2 of 4: Select Report Data

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

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



Dell Lifecycle Controller Help | About | Exit

Terms and Conditions ✓
 Select Report Data ✓
Select Export Settings
 Summary

Hardware Diagnostics: Export Tech Support Report

Step 3 of 4: Select Export Settings

Select device and location to export tech support report.

☒ **USB Drive**
 Select Device: MY_USB (Back USB 1)
 File Path: Report\R630

☐ **Network Share**
☒ CFS
☐ NFS

Share Name:
 Domain and User Name:
 Password:
 File Path:
[Test Network Connection](#)

PowerEdge R630
 Service Tag: 123456S

Cancel Back **Next**

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.

Dell Lifecycle Controller Help | About | Exit

Terms and Conditions ✓
 Select Report Data ✓
Select Export Settings
 Summary

Hardware Diagnostics: Export Tech Support Report

Step 3 of 4: Select Export Settings

Select device and location to export tech support report.

☐ **USB Drive**
 Select Device: MY_USB (Back USB 1)
 File Path:

☒ **Network Share**
☐ CIFS
☒ **NFS**

Share Name: \\10.94.197.71\uscnfs
 Domain and User Name:
 Password:
 File Path: r630\report

[Test Network Connection](#)

PowerEdge R630
 Service Tag : 123456S

Cancel Back Next

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.

Hardware Diagnostics: Export Tech Support Report

Step 3 of 4: Select Export Settings

Select device and location to export tech support report.

☐ USB Drive

Select Device: Insert Media

File Path:

☒ Network Share

☒ CIFS

☐ NFS

Share Name: \\10.94.94.98\cifsshare

Domain and User Name: administrator

Password: *****

File Path: Report\R630

[Test Network Connection](#)

PowerEdge R630
Service Tag : 123456S

Cancel Back Next

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.

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

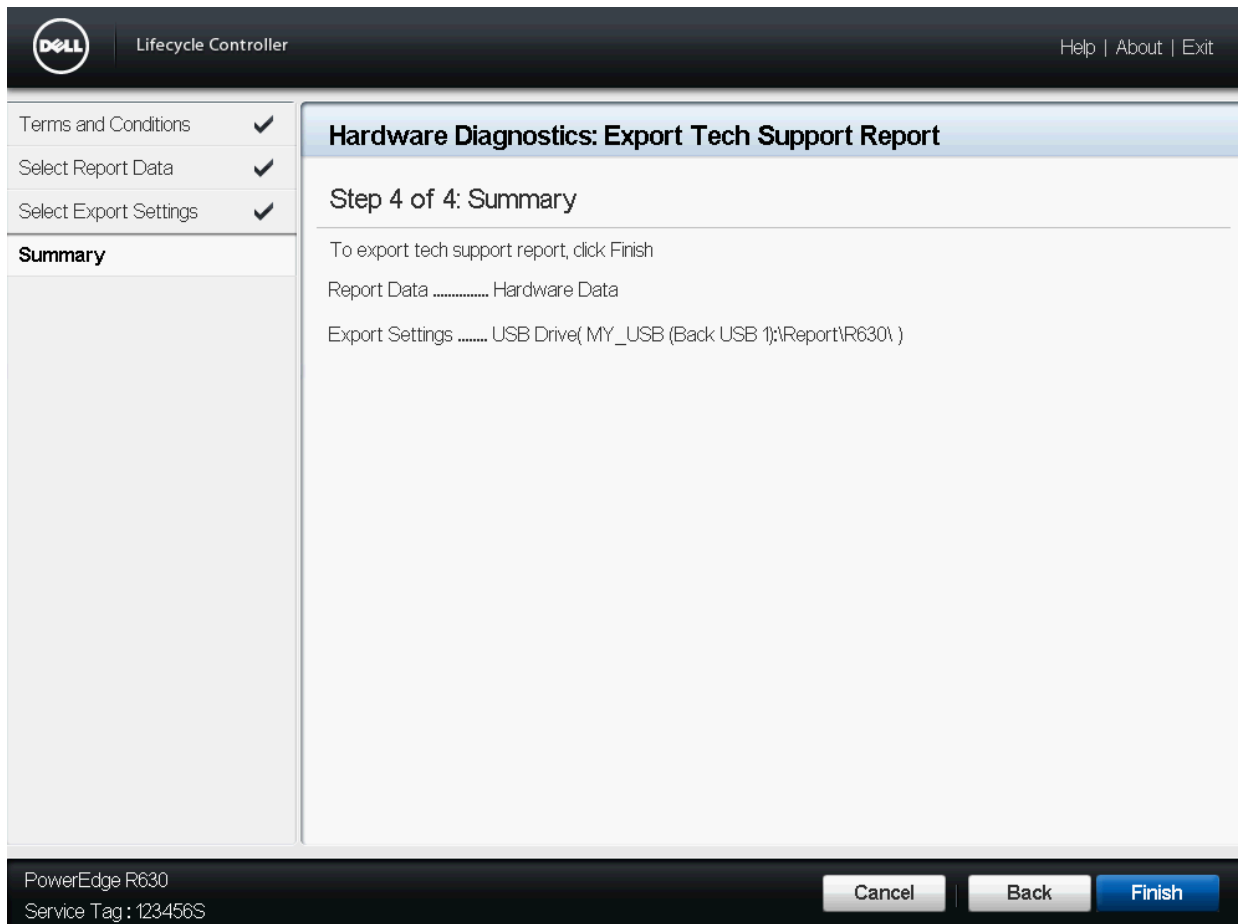


Figure 7. Step 4 of 4: Summary

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

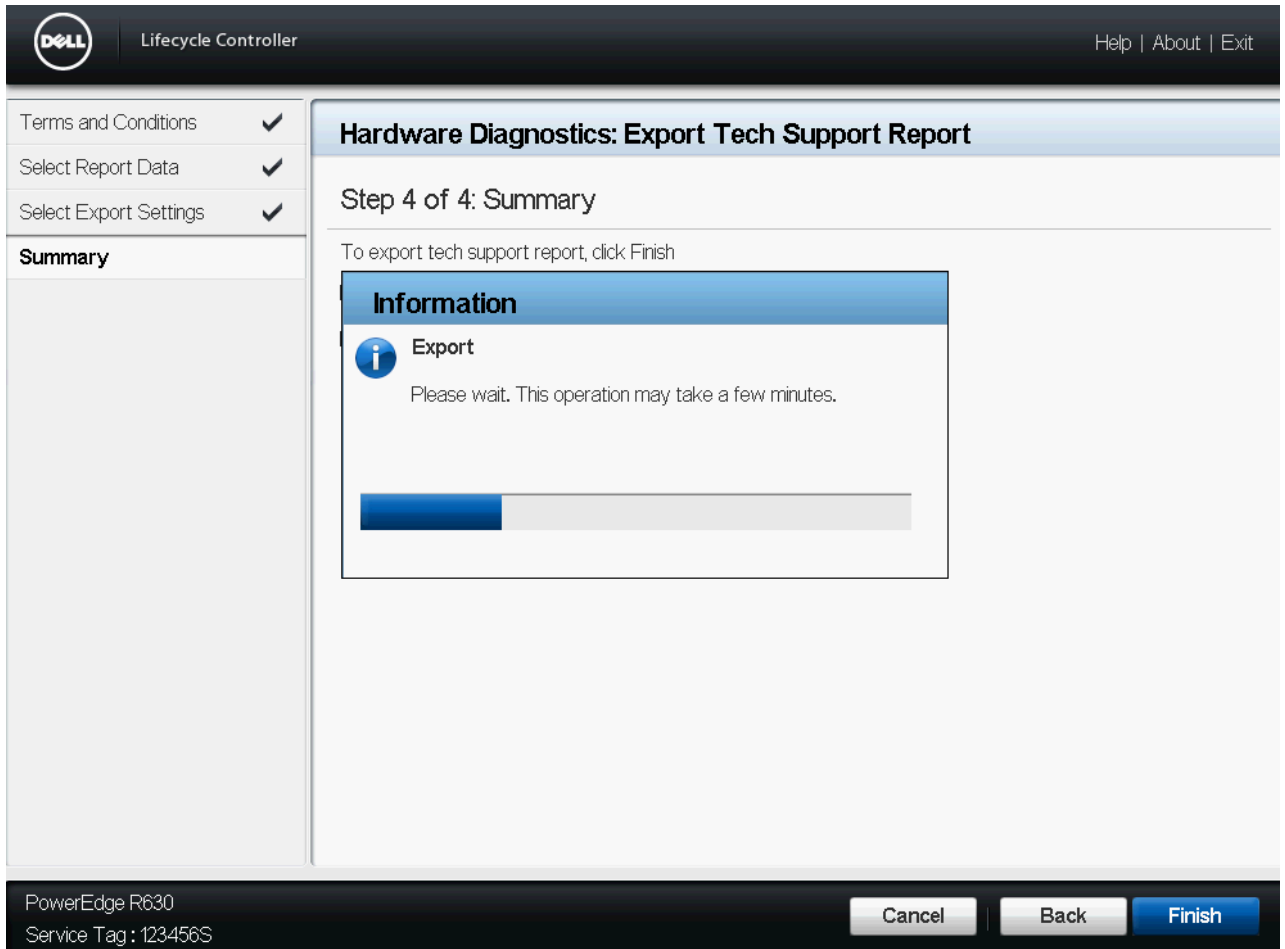


Figure 8. Export TSR operation In-Progress message

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:



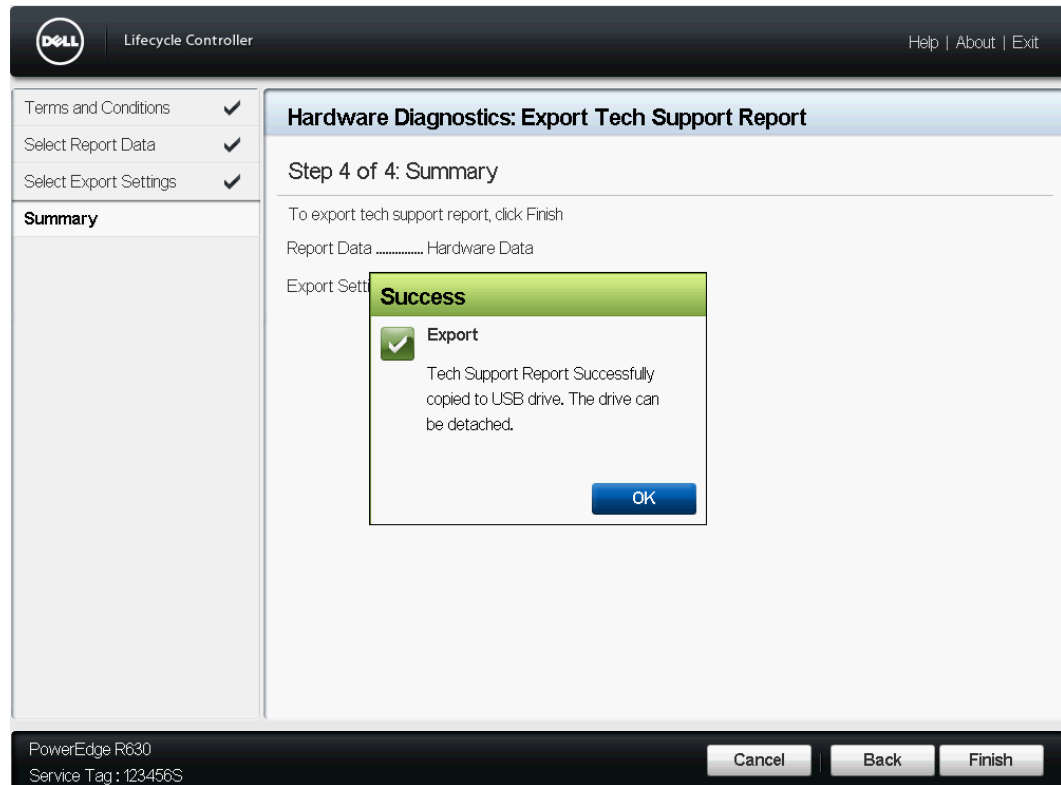


Figure 9. Export TSR to USB drive success message

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

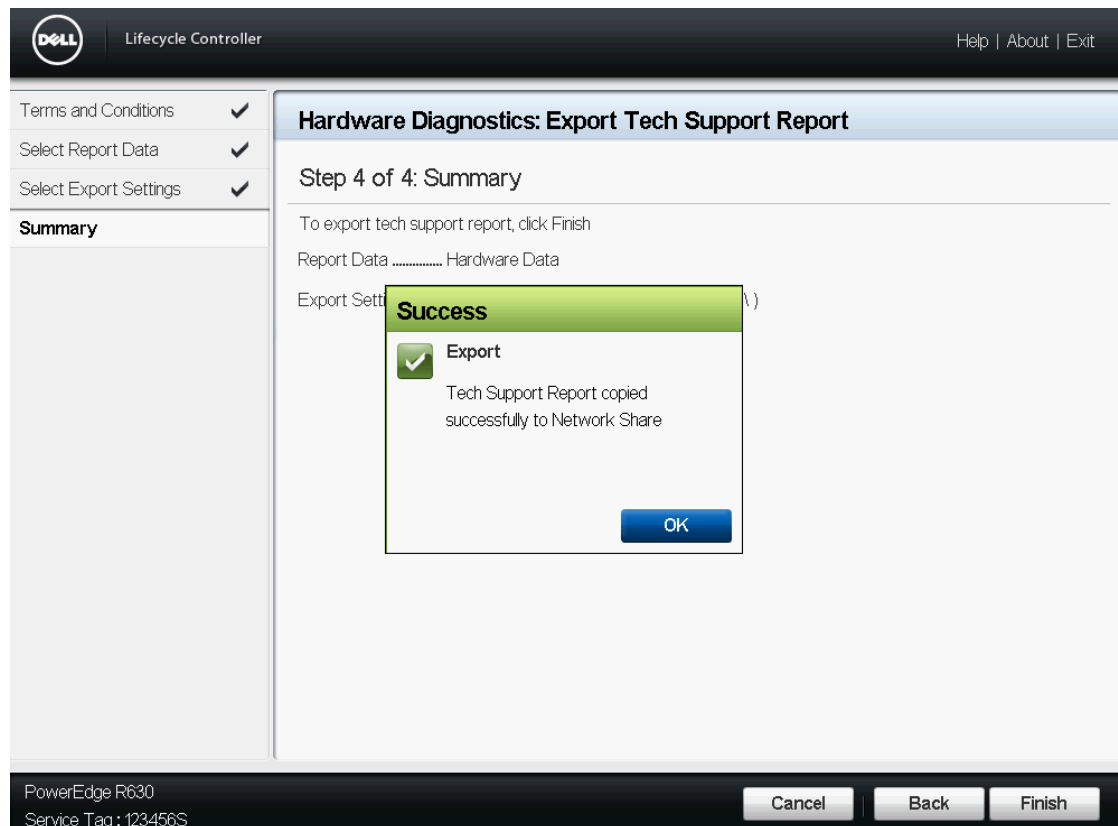


Figure 10. Export TSR to Network Share success message

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.

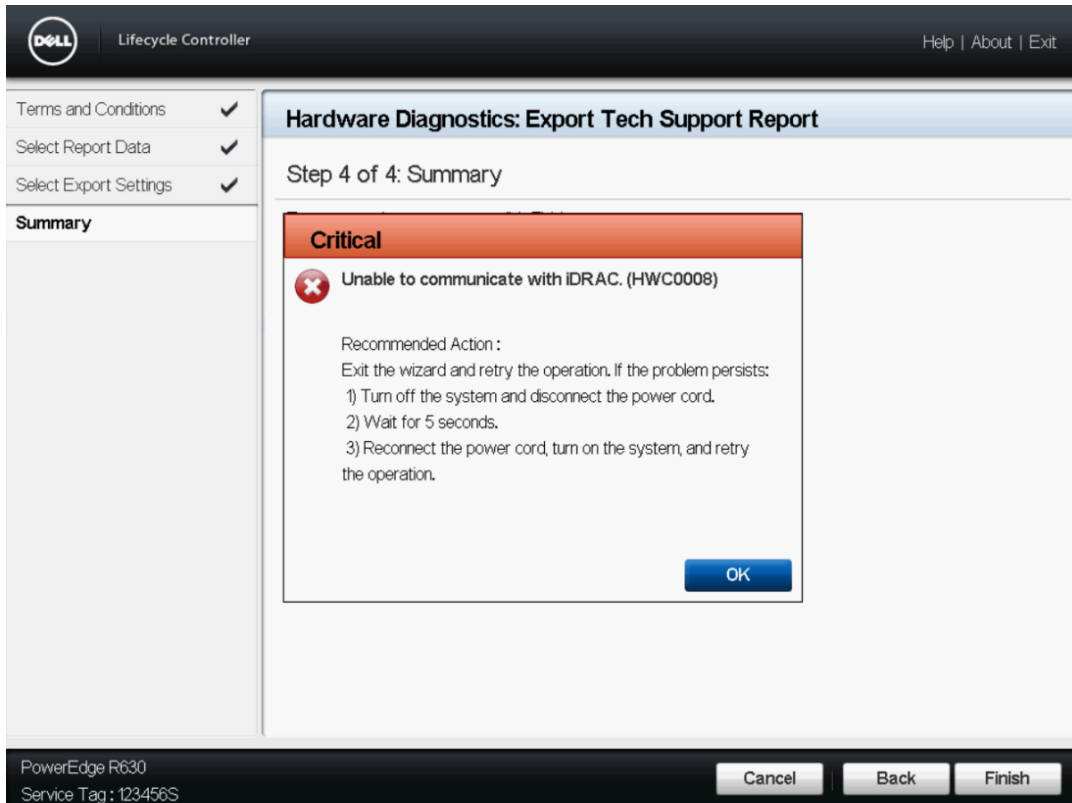


Figure 11. Export TSR critical error message

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

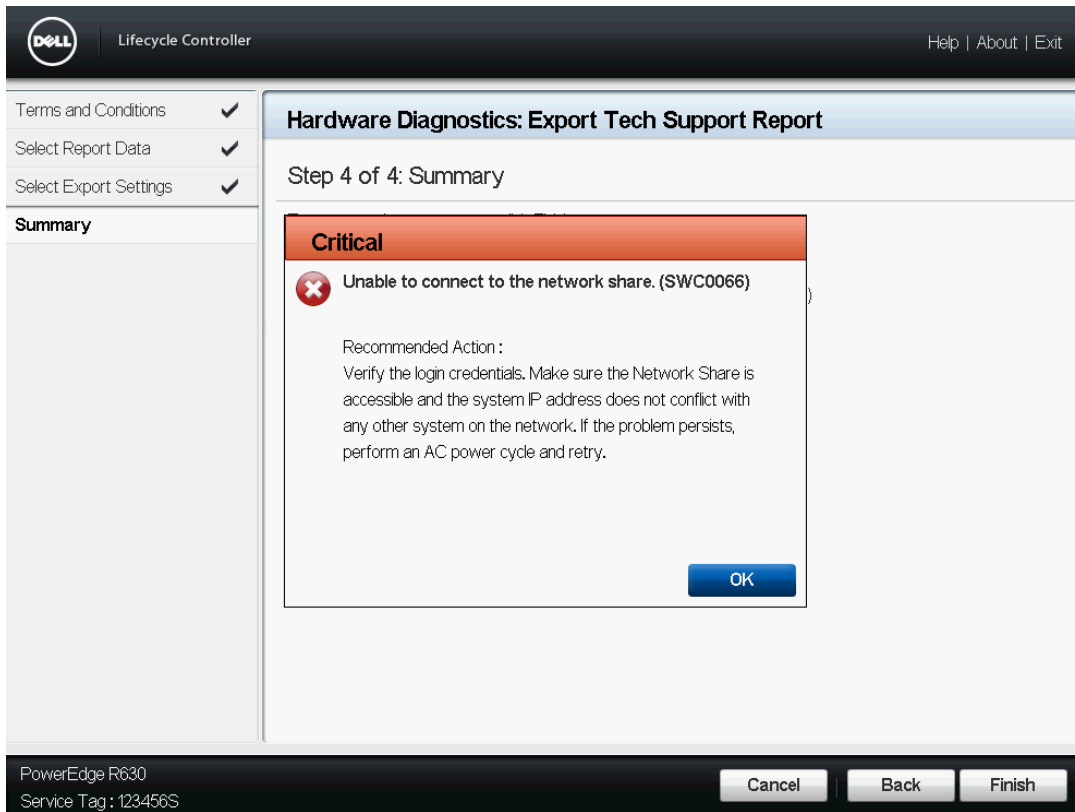


Figure 12. Export TSR to Network Share critical error message

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



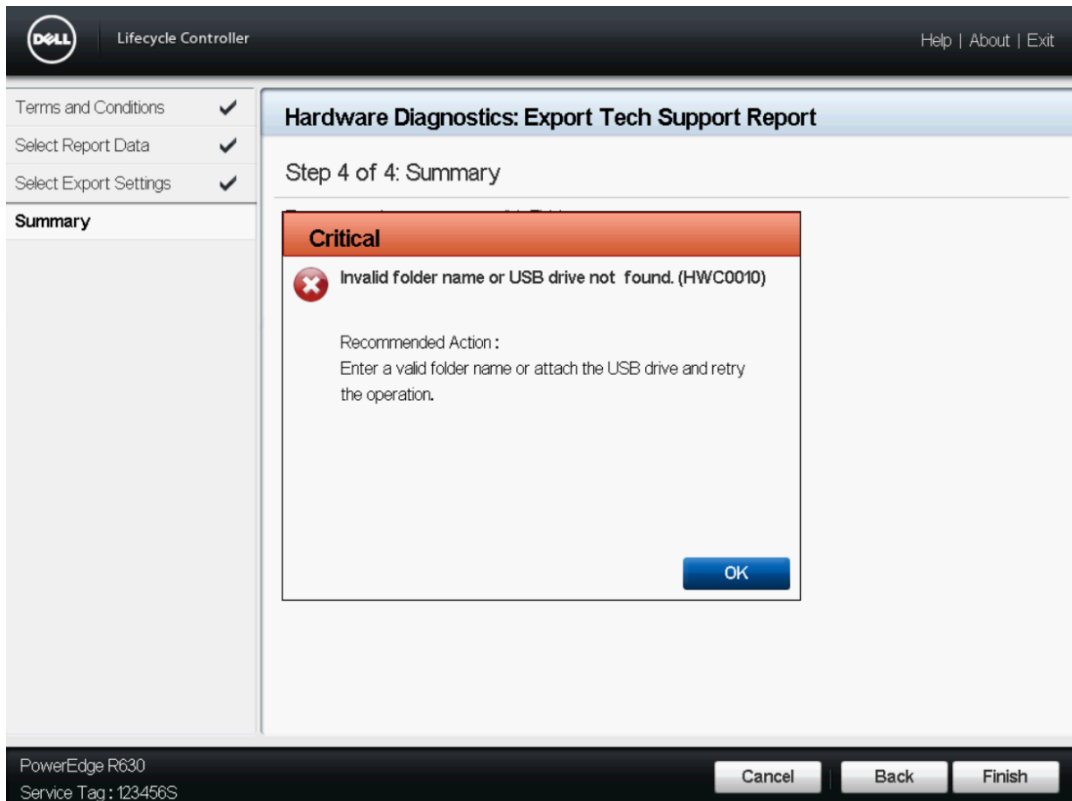


Figure 13. Export TSR to USB drive critical error message1

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

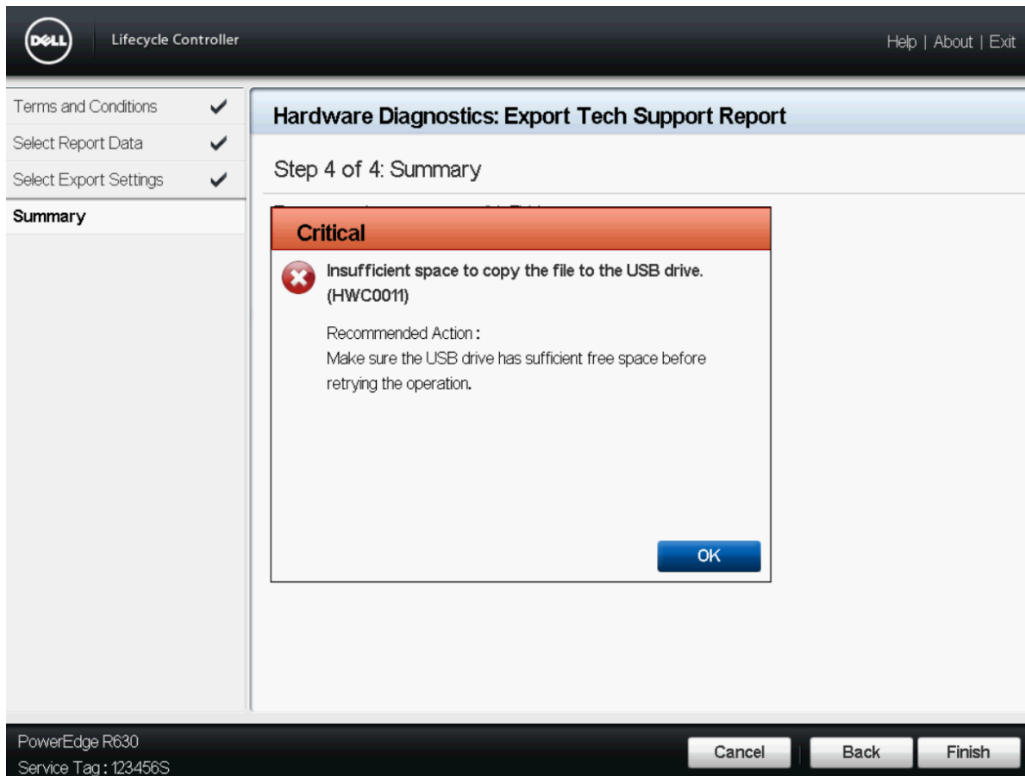


Figure 14. Export TSR to USB drive critical error message2

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

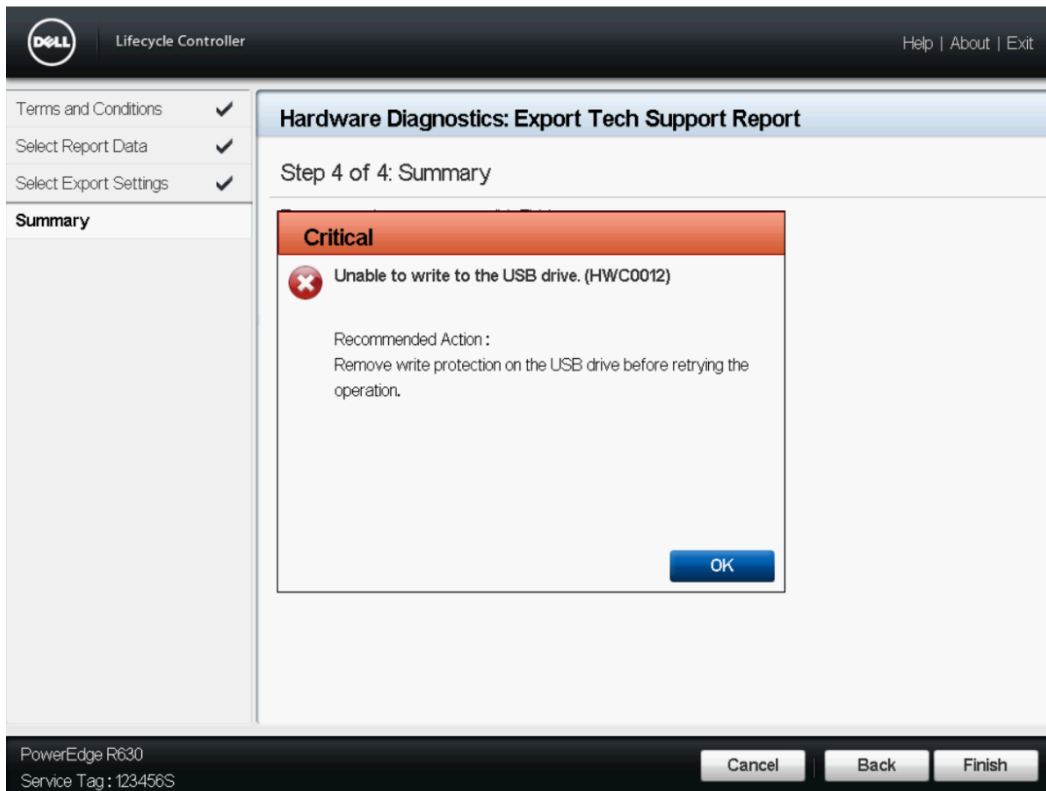


Figure 15. Export TSR to USB drive critical error message

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.

