User Manual

Basic Configuration
HiProvision Add-on: Generic Reporting Engine
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1. INTRODUCTION

1.1 Description

This document is valid as of Dragon PTN R4.3DR. This add-on provides the possibility to generate different detailed Dragon PTN reports (template based), exported in different output formats.

![Figure 1 General: Reporting Engine](image)

1.2 Supported Hardware, Firmware, Software

The supported hardware, firmware and software within this Dragon PTN release can be found on the Portal [https://hiprovision.hirschmann.com](https://hiprovision.hirschmann.com) via Shortcuts → Downloads.

1.3 Manual References

Table 1 is an overview of the manuals referred to in this manual. ‘&’ refers to the language code, ‘*’ refers to the manual issue. All these manuals can be found in the HiProvision Help function as well.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>DRA-DRM801-&amp;-*</td>
<td>Dragon PTN Installation and Operation</td>
</tr>
<tr>
<td>[2Mgt]</td>
<td>DRA-DRM830-.&amp;-*</td>
<td>HiProvision Management Operation</td>
</tr>
<tr>
<td>[3]</td>
<td>DRA-DRM822-.&amp;-*</td>
<td>HiProvision Alarms List</td>
</tr>
</tbody>
</table>
2. INSTALLATION/ACTIVATION (ADD-ONS TILE)

2.1 Prerequisite

None.

2.2 Activate

1. The Reporting Engine add-on is by default available in HiProvision and can be found via Dashboard → (Tools) Add-ons to activate it. Later on, the Inventory Tile will be used as well to configure/generate the reports.

![Figure 2 Dashboard: Inventory/Add-ons Tile](image)

2. Click the Reporting Engine tab;

![Figure 3 Enable Reporting Engine](image)

3. Check the Enabled checkbox;

4. Report Folder: indicates the folder in which the reports are generated and saved.
NOTE: It is advised to change this folder to a folder which is HiProvision version independent. As a result, you will still see the generated reports if you upgrade your HiProvision software to a higher version.

5. Report Template Folder: indicates the folder in which the Report Templates are installed.
   NOTE: If you want to reuse older templates from a previous HiProvision version, just copy paste the older templates into this new folder.

6. Reporting Engine User / Password (default = reportengine): by default the user/password reportengine/reportengine is filled out. The reportengine user is by default available as administrator in the Users tile. Any other user/password in the Users tile can be filled out as reporting engine user/password. CAUTION: the Report Engine User must be a different user than the one used for logging in in HiProvision. If you use the same users, the add-on user could log out the HiProvision login user.

7. Click the Save Settings button.

8. When the HiProvision servers were already started, a pop-up requests to restart the servers. If the servers were not started yet, just start the servers. (Re)start the HiProvision servers via Dashboard → Servers → (Stop) / Play buttons;

9. The (re)start of the servers will start up the Reporting Engine ('REP') process.

10. If the 'REP' process is in the Started state, the Reporting Engine add-on is up and running. It acts according the configured settings Figure 3.

![Reporting Engine process (=REp) starts](image-url)
3. REPORT HANDLING (INVENTORY TILE)

3.1 General

Report creation and generation must be done in the Dashboard → (Tools) Inventory tile. Follow the steps below:

- (see §3.2) Step 1: Define/Configure the report: type, filtering, output format...
- (see §3.3) Step 2: Generate (=run) the desired report;
- (see §3.4) Step 3: View/download the generated report;

![Figure 5 General Report Flow](image)

### Table 2 Report Menu Buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPORT</td>
<td>Define/Configure a report: select report type, filtering, output format...</td>
</tr>
<tr>
<td>![Run icon]</td>
<td>Run the selected report. This will generate the report in the desired output format. The generated reports will be saved in the Reports folder in Figure 3.</td>
</tr>
<tr>
<td>![Delete icon]</td>
<td>Delete the selected defined/configured report, it does not delete the linked generated reports (=results).</td>
</tr>
<tr>
<td>RESULT</td>
<td>Refresh button.</td>
</tr>
<tr>
<td>![View icon]</td>
<td>View the selected pdf report in the PDF VIEWER on the right-hand side. If a report file different from *.pdf is selected, this button will be greyed out, and the report must be viewed after downloading the file via the button.</td>
</tr>
<tr>
<td>![Download icon]</td>
<td>Download the selected report and view it locally.</td>
</tr>
<tr>
<td>![Delete icon]</td>
<td>Delete the selected generated report. Multiple select (via CTRL + SHIFT) and deletion is possible as well. Deleting the generated report from the list also deletes the physical output file from the Reports folder.</td>
</tr>
</tbody>
</table>
3.2 Define/Configure Report

1. Click the Report button to open the Report wizard:

![Report Wizard: Report Type Selection](image)

**Figure 6 Report Wizard: Report Type Selection**

2. Report Type Selection:
   - Fill out a Report Name;
   - Select one of the Report Types below and click Next>>:
     - Event: Reports all the events that have occurred in HiProvision;
     - Timed Event: Reports only the events of the last 24 hours;
     - Fiber Optics: lists all the optical ports (=port with SFP/XFP) from the live network;
     - Hardware: lists all the nodes, IFMs, ports (depending on the selected template) and its status indicated in color. If HiProvision is offline, the color will be grey. If HiProvision is online, the status color indicates the severity color of the network element;
     - Link: lists all the links including the bandwidth, occupancy, tunnels, services…;
     - Port: lists all the ports with their most important properties;
     - Service: lists all the services (Ethernet or Circuit Emulation), with more less details depending on the selected template;
     - Tunnel: lists all the tunnels, with more or less details depending on the selected template;
     - SyncE: lists all the SyncE recovery ports and their SyncE properties and status;
     - Software: lists all the versions and editions (active version, backup version, hardware edition, …) of the IFMs that are installed in the selected nodes.

3. Filtering: The second page in the wizard allows to setup a filter for your report. Depending on the selected Report Type, the filter can differ a little bit. Configure the desired filtering and click Next>>;
4. Report Parameters:
   - Select a Report Template from the drop-down list. See the table below for an overview of the available templates per report type;
   - Select one or more desired Report Formats: PDF (=default)/CSV/HTML/TXT/XLS/XLSX;
   - Click the Finish button. After clicking this button, the report will be configured, but not yet generated;

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Report Template</th>
<th>Description</th>
</tr>
</thead>
</table>
| Event       | EVRT-v01.repx   | Following values are reported for every event:
               |                 | - TimeStamp
               |                 | - User
               |                 | - Address ID
               |                 | - Address Name
               |                 | - Message
<p>|              | EVRT-ForExcel-v01.repx | Same template as EVRT-v01.repx, but optimised for using in Microsoft Excel |
| Timed Event  | TERT-v01.repx | Same template as EVRT-v01.repx but only for the events in the last 24 hours |</p>
<table>
<thead>
<tr>
<th>Report Type</th>
<th>Report Template</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Optics</td>
<td>TERT-ForExcel-v01.repx</td>
<td>Same template as TERT-v01.repx, but optimised for using in Microsoft Excel</td>
</tr>
</tbody>
</table>
| Fiber Optics | FORT-v01.repx | Following values are reported for every optical port:  
- Node Name  
- Node ID  
- Port address  
- Laser Wavelength (nm)  
- Type of the optical module  
- Signal status  
- Status of the optical module  
- Status of the optical transmitter  
- Temperature  
- Optical Tx power  
- Optical Rx power |
| Fiber Optics | FORT-v01.repx | Same template as FORT-v01.repx, but optimised for using in Microsoft Excel |
| Hardware | HIRT-Node-v01.repx | Following values are reported for every node:  
- Type  
- Name  
- ID  
- Status  
- Address |
| Hardware | HIRT-NodeModule-v01.repx | Reports same fields as in HIRT-Node-v01.repx, but for every module |
| Hardware | HIRT-NodeModulePort-v01.repx | Reports same fields as in HIRT-Node-v01.repx, but for every port |
| Hardware | HIRT-NodeModulePortForExcel-v01.repx | Same template as HIRT-NodeModulePort-v01.repx, but optimised for using in Microsoft Excel |
| Link | LCRT-LinkLevel-v01.repx | Following values are reported for every link:  
- Link Termination ports  
- Link type  
- DCN bandwidth  
- Name  
- Bandwidth  
- Min Total Link Bandwidth  
- Configured bandwidth in both directions  
- Link Occupancy in both directions  
- Link status |
| Link | LCRT-TunnelLevel-v01.repx | Reports same fields as in LCRT-LinkLevel-v01.repx, including following extra information:  
- The tunnels configured on this link with their total bandwidth |
| Link | LCRT-ServiceLevel-v01.repx | Reports same fields as in LCRT-TunnelLevel-v01.repx, including following extra information for every service:  
- The Gross Bandwidth and Burst size in both directions |
<p>| Port | PORT-WithoutService-v01.repx | reports for every port some status information |
| Port | PORT-WithoutService-ForExcel-v01.repx | Same template as PORT-WithoutService-v01.repx, but optimised for using in Microsoft Excel |
| Port | PORT-WithService-v01.repx | reports for every port some status information including the service name and service type of the service to which this port belongs. |
| Port | PORT-WithService-ForExcel-v01.repx | Same template as PORT-WithService-v01.repx, but optimised for using in Microsoft Excel |</p>
<table>
<thead>
<tr>
<th>Report Type</th>
<th>Report Template</th>
<th>Description</th>
</tr>
</thead>
</table>
| Service     | SERT-v01.repx   | Reports following values for the selected Ethernet service:  
- Ports  
- Port type  
- VLAN information |
|             | SERT-Detail-v01.repx | Reports same fields as in SERT-v01.repx including following information  
- Pseudo wire information  
- QoS settings of the ports  
- QoS settings of the LSPs |
|             | SCRT-v01.repx   | Reports following values for the selected Circuit Emulation service:  
- Ports  
- Port type  
- Service parameters |
|             | SCRT-Detail-v01.repx | Reports same fields as in SCRT-v01.repx including following information  
- Pseudo wire information  
- QoS settings of the ports  
- QoS settings of the LSPs |
|             | SSERT-v01.repx  | Does not contain sufficient information for serial Ethernet services. Use SSERT-Detail-v01.repx instead. |
|             | SSERT-Detail-v01.repx | Reports following values for the selected Serial Ethernet services:  
- Ports  
- Pseudo wire information  
- QoS settings of the ports  
- QoS settings of the LSPs |
|             | SLM-v01.repx    | Reports following values for the selected Local Mode services:  
- Ports  
- E1 connection  
- Service parameters |
|             | SLM-Detail-v01.repx | Reports same fields as in SLM-v01.repx including following information  
- QoS settings of the ports |
|             | SVCE-v01.repx   | Reports following values for the selected Voice services:  
- Ports  
- Service parameters |
|             | SVCE-Detail-v01.repx | Reports same fields as in SVCE-v01.repx including following information  
- Pseudo wire information  
- QoS settings of the ports  
- QoS settings of the LSPs |
| Tunnel      | TCRT-v01.repx   | Reports following values for every selected Tunnel:  
- Link Name  
- Termination ports  
- Labels |
| SyncE       | SYRT-v01.repx   | Lists all the SyncE recovery ports and including their SyncE properties and status |
| Software    | SWRT-v01.repx   | Lists all the versions and editions (active version, backup version, hardware edition, ....) of the IFMs that are installed in the selected nodes. |
5. Customized logo (optional): You can create your own custom logo on the top-right hand corner of the reports with respect to the conditions below:
   - file name: logoright.png
   - file type: png
   - preferred aspect ratio (width*height) 2:1
   - preferred size: 140px*70px
   - must be placed in the ReportTemplates folder: ReportTemplates\logoright.png

3.3 Generate (=Run) Report

1. Select the defined/configured report in the REPORT list, and click the play button.
2. The 'Report Status' field changes into Pending. The table below lists all the possible report status values.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Flow:</td>
<td>Idle &gt; Pending &gt; (Running) &gt; Finished</td>
</tr>
<tr>
<td>Idle</td>
<td>The report has been defined/configured but has not been generated (=run) yet in this HiProvision session.</td>
</tr>
<tr>
<td>Pending</td>
<td>The report is being generated right now, the processing of the report is ongoing. The report will be finished soon. For big reports, the status turns into 'Running'. For smaller reports, the status will almost immediately turn into 'Finished'.</td>
</tr>
<tr>
<td>Running</td>
<td>Only visible for big reports that take longer to generate. A big report is being generated right now, the processing of the report is ongoing. The report will be finished soon. This status should turn into the 'Finished' status.</td>
</tr>
<tr>
<td>Finished</td>
<td>The report has been generated successfully. It can be viewed/downloaded in the RESULT section.</td>
</tr>
</tbody>
</table>
| Failed        | The generation of the report failed, no report has been generated. Possible cause(s):
                  - invalid Report Engine User/Password in Figure 3. Make sure that the filled out user and password exist in the Users tile;
                  - Disk full: minimum 100MB empty disk space is required. |

3. Once the generation has finished, the generated reports in all the selected output formats will be listed in the RESULT list.

3.4 View/Download Report

1. Select the desired report in the RESULT section and click the button to view a selected pdf in the PDF Viewer (right-hand section) or click the button to download the report (any output format).

4. ABBREVIATIONS

<table>
<thead>
<tr>
<th>CSV</th>
<th>Comma Separated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFP</td>
<td>Small Form Factor Pluggable</td>
</tr>
<tr>
<td>XFP</td>
<td>10 Gigabit Small Form Factor Pluggable Module</td>
</tr>
</tbody>
</table>