HPE OSS
Customer Experience Assurance V5.3

Release Notes

Hewlett Packard Enterprise

Notices

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Preface

This document contains the release notes of HPE OSS Customer Experience Assurance (CEA) V5.3 product.

Please read this document before installing or using the HPE OSS Customer Experience Assurance.

Intended Audience

This document is intended for CEA users, who will use or administrate the platform.

Disclaimer

This document contains a reference about Quippets functionality based on OTT, Voice and other modules that requires an additional licensing.

Notation Styles

References to standard items are noted in Cursive

Section, Figures and Data table References are hyperlinks noted in Cursive

Information Statements are noted with an information icon

Warning Statements are noted with a warning icon

Sample notes look as follows. If you require a Danger or Warning alert, modify the caution alert label.

	NOTE: Note alert.

	NOTICE: Notice alert.

	CAUTION: Caution alert.

	TIP: Tip alert.

Chapter 1 Introduction

1.1 Software Version

Table 1: Software Version

Software	Version	OS	Other
Customer Experience Assurance (CEA)	5.3	SUSE Linux Enterprise Server SLES 11 x86_64 SP3	JAVA 8 and Google Maps

1.2 Supported Hardware

Table 2: Supported Hardware

Software	Version	Hardware
Customer Experience Assurance (CEA)	5.3	HPE Proliant DL380 Gen8 and G9

1.3 Typographical Conventions

The following textual conventions are used in this document:

-       Hyperlinks: Displayed as underlined text e.g. http://java.sun.com/javase/downloads/index.jsp

1.4 Associated Documents

The following documents contain useful reference information:

•   HPE Customer Experience Assurance 5.3 – Installation and Configuration Guide

•   HPE Customer Experience Assurance 5.3 – Platform Administration Guide

•   HPE Customer Experience Assurance 5.3 – User Guide

•   HPE Customer Experience Assurance 5.3 – Datasources and functions

•   HPE Customer Experience Assurance 5.3 – Interfaces

•   HPE Customer Experience Assurance 5.3 – Customer Care

1.5 Software License Key

1.5.1 For Production Systems

The HPE OSS CEA License keys for production systems are obtained from the HPE Software Licensing portal: https://softwaresupport.hpe.com/.

Customers actually receive an Electronic Delivery Receipt which includes a direct link to the Licensing Portal with the Entitlement Order Number (EON) already pre-populated.

License activation allows customers requesting and receiving electronic license keys to unlock the HPE OSS CEA software product that HPE delivers upon purchase order.

1.5.2 For non-Production Systems

Please note that the pre-requisite to obtaining support for HPE OSS CEA Non-Production licenses is a valid support contract covering the Production license copies of products.

Licenses keys would be generated and installed in servers by HPE OSS CEA Global Practice.

1.6 Support

Please visit our HPE Software Web site at: https://softwaresupport.hpe.com/ for contact information, and details about HPE Software products, services and support.

The Software support area of the Software Web site includes the following:

- Troubleshooting information

- Patches and updates

- Problem reporting

- Training information

- Support program information

Chapter 2 Packages and Dependencies

CEA 5.3 supersedes the previous releases. The software is delivered with the following packages:

Table 3: Binary Packages

Package	Version	Build	RPM
FlowSight standard base platform package	5.3.0	77780	flowsight-base-nwi-standard-5 3.0-77780.noarch.rpm
FlowSight binary package	5.3.0	77780	flowsight -bin-nwi-5.3.0-77780.x86_64.rpm
FlowSight binary vcea package	5.3.0	77780	flowsight -bin-pkg-vcea-5.3.0-77780.x86_64.rpm
FlowSight vcea config package	5.3.0	77780	flowsight -config-vcea-nwi-5.3.0-77780.noarch.rpm
FlowSight standard Graphical User Interface	5.3.0	77780	flowsight -gui-standard-5.3.0-77780.x86_64.rpm
FlowSight Device Database package (DEVICE DB)	5.3.0	77780	flowsight -device-db-nwi-5.3.0-77780.noarch.rpm
FlowSight utilities package	5.3.0	77780	flowsight -utils-nwi-5.3.0-77780.x86_64.rpm

Table 4: Configuration packages (Mediation)

Package	Version	Build	RPM
FlowSight Data (Gn/S11/S1-u) configuration package	5.3.0	77780	flowsight -config-pkg-vcea-nwi-data-5.3.0-77780.noarch.rpm

Table 5: Configuration packages (GUI)

Flowsight GUI configuration	5.3.0	77780	flowsight -config-pkg-vcea-gui-5.3.0-77780.noarch.rpm
FlowSight Data (Gn/S11/S1-u) configuration package	5.3.0	77780	flowsight -config-pkg-vcea-gui-data-5.3.0-77780.noarch.rpm

Table 6: Exporter packages (Mediation)

Package	Version	Build	RPM
Flowsight Exporter Binary package	5.3.0	77780	flowsight-bin-vcea-exporter-5.3.0-77780.x86_64.rpm
Flowsight Exporter Generic configuration package	5.3.0	77780	flowsight-config-vcea-exporter-5.3.0-77780.noarch.rpm
Flowsight Customer Intelligence & Customer Experience Exporter configuration package	5.3.0	77780	flowsight-config-pkg-vcea-exporter-dwh-5.3.0-77780.noarch.rpm
Flowsight App Flow Exporter configuration package	5.3.0	77780	flowsight-config-pkg-vcea-exporter-appflow-5.3.0-77780.noarch.rpm
Flowsight Web Flow Exporter configuration package	5.3.0	77780	flowsight-config-pkg-vcea-exporter-webflow-5.3.0-77780.noarch.rpm
Flowsight Customer Intelligence & Customer Experience Exporter Server configuration package	5.3.0	77780	flowsight-webapp-vcea-exporter-server-5.3.0-77780.x86_64.rpm

2.1 Dependencies

The following Open source packages and Zhilabs proprietary packages are mandatory to install and operate with this software release:

Table 7: Dependencies

Package	Dependencies
FlowSight standard base platform package	monit* (5.2.5_zl_1), sysstat (8.1.5-7.45.24), openssh (6.2p2-0.9.1), smartmontools (6.0-0.7.45)
FlowSight binary package	flowsight-base, jre1.8.0_31, jeval (0.9.4-zl_1), janino (2.7.6-zl_1), jython (2.5.2-zl_1), python-pycrypto (2.6.1-1), gwt (2.0.3-zl_1), python-pysnmp (4.1.16c-1.5), net-snmp (5.4.2.1-8.2.1), python-pyasn1 (0.0.13-5.4), python-beautifulsoup (3.0.8.1-8.1), python-paramiko (1.15.4-1), jline (0.9.94-zl_1), libpcap (1.1.1-20100507_zl_1), syslog4j (0.9.46-zl_1), jna (3.3.0-zl_1), commons-compress (1.2-zl_1), snmp4j (2.0.3-zl_1), libaho (1.0-zl_0), python-ecdsa(0.13-1)
FlowSight GUI package	tomcat6-zhilabs (6.0.20-zl_7), jre1.8.0_31, jline (0.9.94-zl_1), dialog (1.1-27.23.1), webgui-offline-resources (20101105-zl_1), xmlstarlet (1.0.1-3.15), commons-compress (1.2-zl_1), log4j-mini (1.2.15-26.27), tcptrace (6.6.7-zl_2), phantomjs (1.9.8-zl_1), highcharts-export (2.1.4-zl_2), R-patched (3.0.2-78.1), wireshark (1.12.8)

* Conditions of the AGPLv3 license must be followed if this library is modified

Chapter 3 New features

3.1 What's new

- The CEA V5.3 platform is a new minor version of HPE CEA OEM product that is extending the current solution capabilities already available on V5.2, improving **solution performance**, <u>allowing an increase of number of subscribers processed by each server</u>
- **New charts**
- **New Pivot-Table** feature, that improves **the solution usability**

The new release is also adding new software packages (requiring separated licensing and explained in specific documents):

- **Rest-API:** API for running <u>data queries on individual elements</u> (subscriber, cell, device model) from external systems.
- **Exporters:** interface for running <u>bulk data queries</u> from external systems.
  - Flow-level for Mobile Broadband User-plane (Web-browsing and Applications)
  - Aggregation for KQIs at subscriber level (Customer Experience Exporter)
  - Aggregation for Applications at subscriber level (Customer Intelligence Exporter)
- **Customer Care Dashboards,** advanced GUI that allows non-technical users to troubleshoot customer complaints in a very easy way
- **Troubleshooting,** advanced GUI that allows technical users to troubleshoot customer and network complaints in a very detailed way

3.1.1 Rest-API

Allows to access to data-store outside CEA GUI. CEA V5.3 REST API is intended to be used to:

1. Integrate CEA V5.3 with other tools like customer care screens or CRM systems.

2. Retrieve data per subscriber using the kqi-chart primitives.

3. Obtain data per individual elements (e.g. cell) by using the full CEA search language.

What the API is not for:

CEA V5.3 REST API should not be used to extract bulk information with massive queries. For that kind of task, you should use one of the available exporters.

More information in associated `HPE Customer Experience Assurance 5.3 - Interfaces` document

3.1.2 Pivot table

The Pivot Table of CEA V5.3 is a new mode to make the users easier to carry out a free exploration on the available data. This Free Exploration Feature is accessible by means of the Menu>Report>Full Search Panel Option and the selection of the Pivot Tab.

The Pivot Table Exploration Mode is ideal when starting using the tool because the query is automatically composed just by selecting its components graphically. It is accessible by means of the Query Input Tab from the Full Search Panel
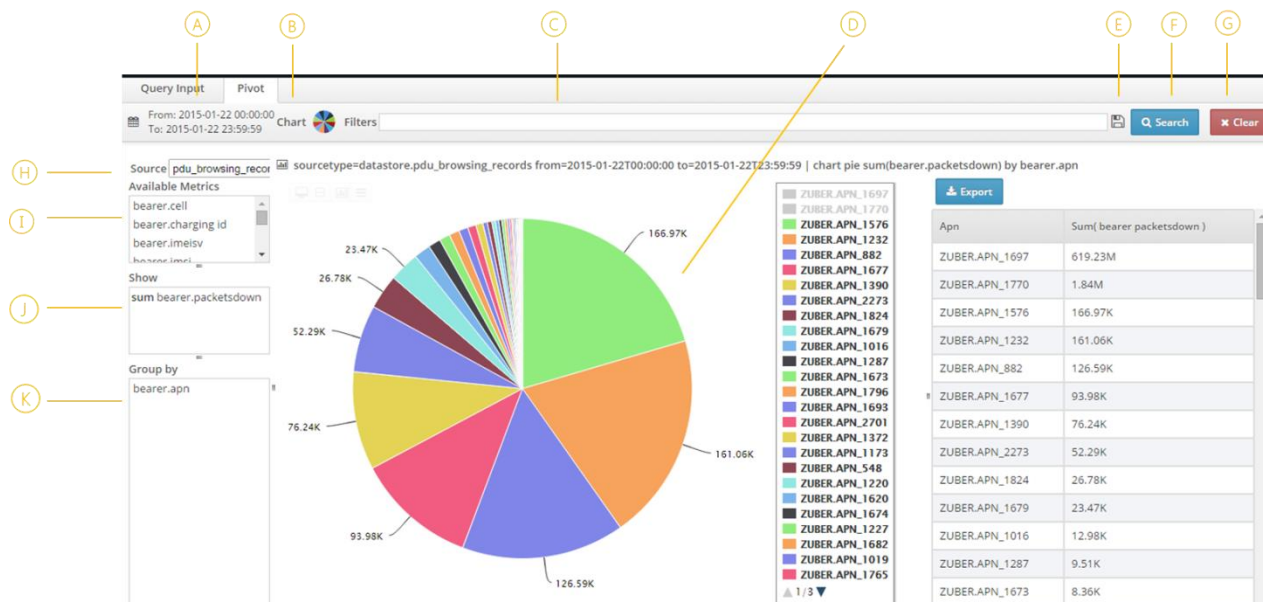
Figure 1. Pivot Table Panel

The *Pivot Table Panel* contains the following main items:

A. **Data Range Selector**: Use it to configure the query data range and the temporal aggregation.
B. **Chart Selector:** Use it to select the chart type in which the report will be shown. A further description of the available charts and options can be found in **Error! Reference source not found.** section
C. **Filter Configurator:** Use it to include, optionally, some filters in your query. A further description of the available filters and the way to write them can be found in *CEA 5.3 User-Guide – Data Sources and Functions* document.
D. **Whiteboard**: It is the area where the Query Result is shown.
E. **Save Query Button:** Use it to save your query for a later consultation and optionally share it with the rest of users.
F. **Search Button:** Use it to launch the query.
G. **Clear Button:** Use it to clear the query configuration.
H. **Source Selector:** Use it to select the data source.

> i   **Please, notice that the list of available datasources depends on the acquired licence.**

I. **Available Metrics Selector:** Use it to drag every available metrics you would like to include in the query and drop it in the next **Show Selector.** The available metrics depends on the selected datasource.
J. **Show Selector:** Use it to include the available metrics you would like to include in the query and configure the temporal aggregation.
K. **Group by Selector:** Use it to include different dimensions to the result.

3.1.3 Customer Care and Quippets

CEA V5.3 provides an advanced Customer Care Application and Quippets inside the Apps menu.

> NOTE: This component requires an additional license, and is optional.

3.1.3.1 Quippets

A "quippet" or **Q**uestion **S**nippet is a definition for a question that the user of the system can ask very fast. In other words, quippets are dashboards that show KPI values for specific subscribers.

Some use cases could be:

- What is the speed of the connection for a subscriber?
- What are the OTT Apps used by a subscriber?
- What are the cells serving a subscriber?
- What are the sessions of a subscriber?
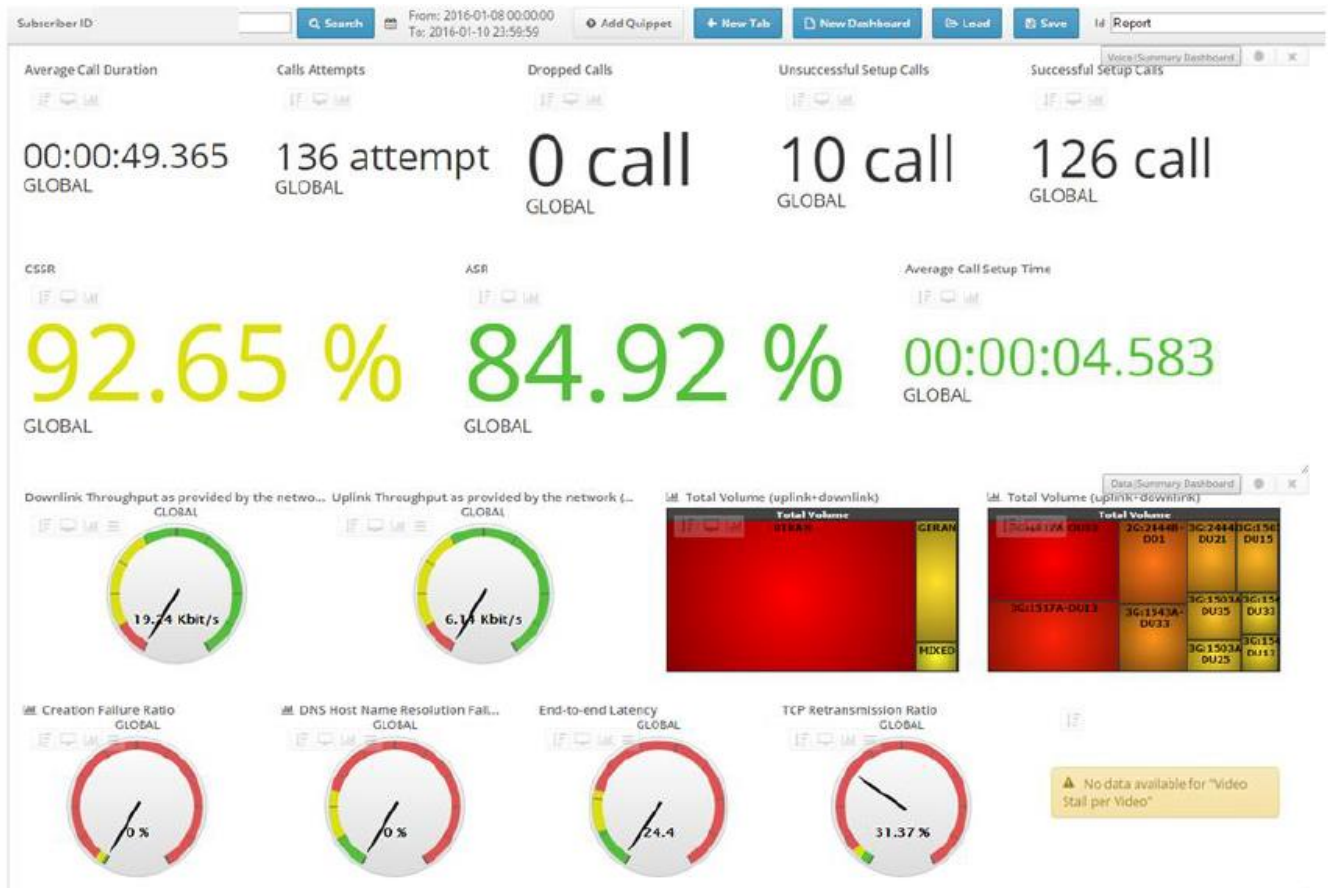- What is the technology used by a subscriber?

Figure 2.Quippets creation

There are several pre-defined quippets[1] which the user can select by clicking on "Add Quippet" button. After selecting this button he would find the following elements: CRM, Credit, Data, Fault Management, KQI Reports, OTT, Policy, RAN Performance, Roaming, SMS, Trouble Ticket and USSD.

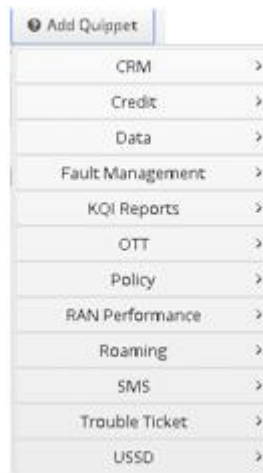[1] List of available quippets will rely on licenses purchased

Figure 3.Predefined Quippets

3.1.3.2 Customer Care

CEA V5.3 platform supports different Customer Care levels. The aim of any Customer Care is to filter out as many complaints as possible at each level.
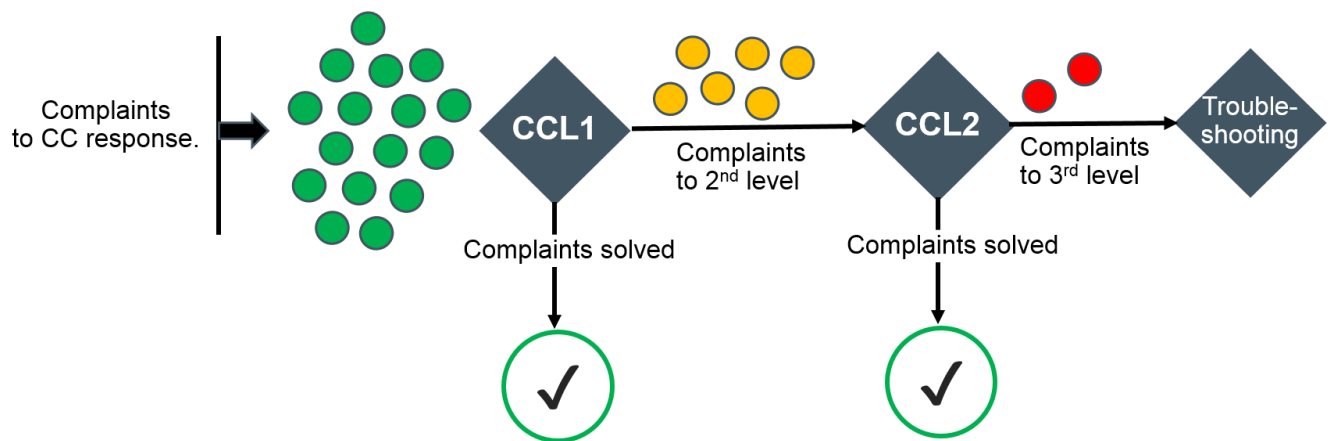

Figure 4. Customer Care levels

Customer Care Level 1 support is the first attempt at solving customer complaint. Customer Care Level 1 reports are accessible via Reports menu and they provide data that:

- Is at a very high level.

- Requires low technical knowledge to interpret.

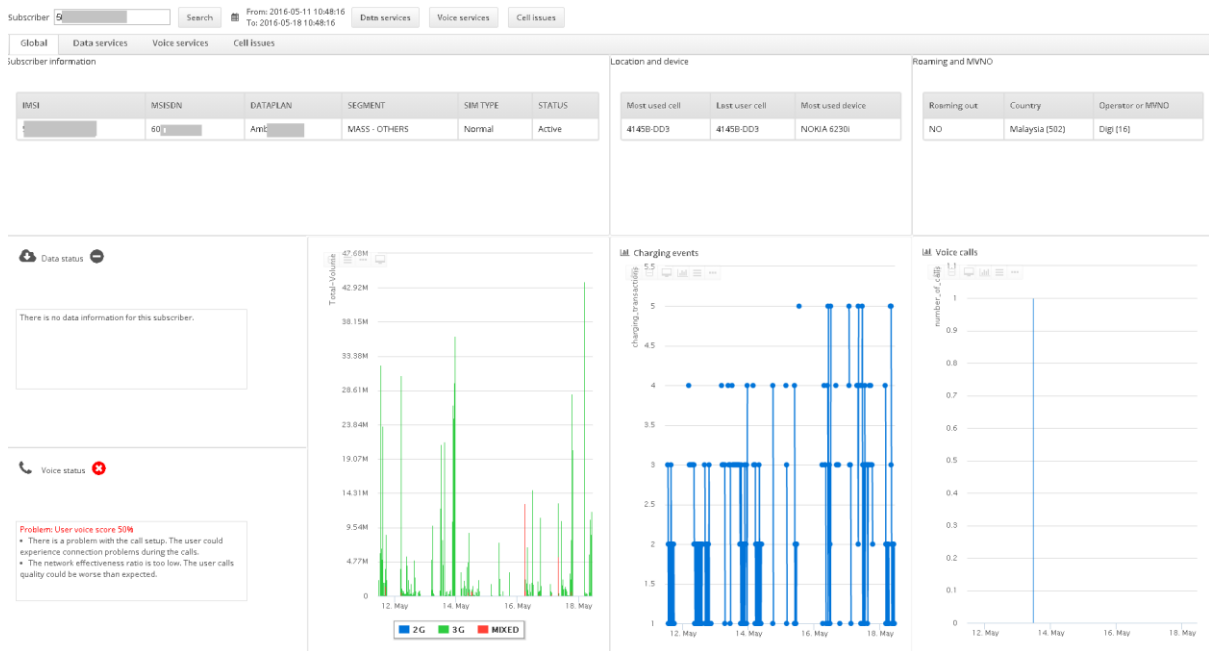- Allows initial assessment after a quick glance.

Figure 5. Customer Care Level 1 dashboards

If the customer complaint is NOT solved by a CCL1 agent, it moves on to CCL2 support.

Customer Care Level 2 module provides data that:

- Is high level, although more detailed than CCL1 data.
- Requires low technical knowledge to interpret.
- Allows initial assessment of status with key indicators.
- Available also for voice

When support levels 1 and 2 do not provide a satisfactory result, a deeper troubleshooting is required. Just a small percentage of the complaints should go on to level 2 support, and even less to the last level.

Those last level, level 3 requires an additional licensing.

Chapter 4 Known Issues

Those issues are not solved in CEA 5.3, and will be solved in future version:

ID	Title	Impact for end user	Workaround in current release
4653811808	[Core][Gui][Funct] Next page not working in datastore.session_daily_unique_subsc	Cannot view all data in result tables in a simple page	Download the report results
5308968854	[Core][FullSearch][Const] Data discrepancies using brackets	User should not use brackets in Full Search Panel queries	Not provided

Maintenance packs will be generated periodically for bug-fixing

Those issues are actually open in CEA 5.2 and solved in CEA 5.3:

ID	Title	Impact for end user	Solved in current release
5309875662	[Zen5][Const] Partial Results not working in al Reports	Partial results not shown in scheduled	OK
5308953384	[Core][Stability] Core traces in Mediation servers	No impact for end user	OK
5309029301	[Core][Log][Error] Logs filled with error	No impact for end user	OK
5309032656	[Core][Exporter][Logs] Error in Exporter log: reading field mappings file	No impact for end user	OK
5309229106	[Logs][App] Error reading report results from store table	No impact for end user	OK
5309259169	[Core][OTT][Categorization] High value of generic-app in OTT	OTT reports categorization is lower than expected	OK