

**Oracle® Communications  
Session Monitor**

Release Notes

Release 3.3.80

**E60608-02**

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# Contents

<b>Important Notes .....</b>	<b>1</b>
<b>Release 3.3.80.0.1 2015-02-06.....</b>	<b>2</b>
<b>Release 3.3.80.0.0 2015-01-23.....</b>	<b>2</b>
<b>Release 3.3.70.0.0 2014-09-26.....</b>	<b>3</b>
<b>Release 3.3.60.2.0 2014-09-12.....</b>	<b>4</b>
<b>Release 3.3.60.1.2 2014-09-18.....</b>	<b>5</b>
<b>Release 3.3.60.1.1 2014-08-29.....</b>	<b>5</b>
<b>Release 3.3.60.1.0 2014-08-04.....</b>	<b>5</b>
<b>Release 3.3.60.0.0 2014-07-18.....</b>	<b>6</b>
<b>Release 3.3.50.1.3 2014-07-04.....</b>	<b>8</b>
<b>Release 3.3.50.1.2 2014-06-27.....</b>	<b>9</b>
<b>Release 3.3.50.1.1 2014-05-28.....</b>	<b>9</b>
<b>Release 3.3.50.1.0 2014-04-30.....</b>	<b>9</b>
<b>Release 3.3.50.0.0 2014-04-17.....</b>	<b>10</b>
<b>Release 3.3.40.2.1 2014-04-11.....</b>	<b>12</b>
<b>Release 3.3.40.2.0 2014-04-01.....</b>	<b>12</b>
<b>Release 3.3.40.1.0 2014-01-30.....</b>	<b>13</b>
<b>Release 3.3.40.0.2 2014-01-16.....</b>	<b>13</b>
<b>Release 3.3.40.0.1 2014-01-10.....</b>	<b>14</b>
<b>Release 3.3.40 2013-12-17.....</b>	<b>14</b>
<b>Release 3.3.13 2013-12-17.....</b>	<b>15</b>
<b>Release 3.3.12 2013-11-22.....</b>	<b>15</b>
<b>Release 3.3.11 2013-11-13.....</b>	<b>15</b>
<b>Release 3.3.6 2013-10-16.....</b>	<b>16</b>
<b>Release 3.3.5 2013-10-11.....</b>	<b>16</b>
<b>Release 3.3.4 2013-10-08.....</b>	<b>16</b>

<b>Release 3.3.3</b>	<b>2013-10-04</b> .....	<b>16</b>
<b>Release 3.3.2</b>	<b>2013-09-30</b> .....	<b>16</b>
<b>Release 3.3.1</b>	<b>2013-09-23</b> .....	<b>17</b>
<b>Release 3.3.0</b>	<b>2013-09-07</b> .....	<b>17</b>

## Important Notes

Because the way Oracle Communication Session Monitor stores data has changed, calls and registrations history will be dropped when upgrading from 3.0 to later versions.

Due to adjustments to the database model, the upgrade from previous installations may take longer than usual.

In order to minimize the impact of this change, the data migration will happen in background after the upgrade is applied. Therefore, when upgrading from a 3.1.X or 3.2.X version, it is possible that in a few hours after the upgrade the performance of the system is lower and some calls may be lost.

Based on how much history you have on your system, our support people can estimate the amount of time required for the background upgrade task to complete.

Starting with the release 3.3.40.0.0 the user interface is available only over HTTPS for security reasons. In some situations, this can cause the upgrade dialog to continue showing the running progress bar even after the upgrade was successfully completed.

If the upgrade progress bar does not disappear after 30 minutes of starting the upgrade, please refresh the browser window.

Please reset the admin user password via the Mediation Engine GUI. You may choose the same password. This is necessary due to an updated password hashing mechanism.

In order to upgrade to version 3.3.60.0.0 and above you need to have at least release 3.3.50.0.0 installed. If you run on older release, please upgrade to the latest release in the 3.3.50.X.Y branch first, before continue with the upgrade to the most recent release.

Due to the introduction of Scheduled Data Deletion the System Setting "RTP recording data retention" has been removed. The data retention of RTP recordings can be configured in the Platform Setup Application (PSA) accordingly.

The way how traffic capturing is configured has been changed as of the 3.3.70.0.0 release. Please double-check the filters and settings at the Media Protocols page in PSA.

As of release 3.3.70.0.0 the IPFIX connection between SBC probes and OCOM machines enforces secure communication by default. If you upgrade from a previous version please check your configuration in PSA (Trusted Certificates) and on the SBC probe(s).

As of release 3.3.80.0.0 the connection setup between OCSM probes and Mediation Engines (ME) has changed. After an upgrade you may need to pair probes and MEs.

With the added support for the IPv6 protocol as of release 3.3.80.0.0 the default capturing filters have been modified. If you experience any capturing issues after an upgrade please review the filters and settings at the Media Protocols and Signaling Protocols pages in PSA.

Apps signing is deprecated as of 3.3.80.0.0.

**Bug Fixes**

- Fixed a security vulnerability with glibc (CVE-2012-6656, CVE-2014-6040, CVE-2014-7817, CVE-2015-0235).
- Fix a bug that causes unreliable processing of voice quality stats with more than one probe.
- Fixed an issue where data was not processed properly if a signed server certificate is used, but the required CA certificate was missing.
- Fixed a bug that hinders an Oracle SBC configuration file to be uploaded.
- Fixed an issue where device to device KPIs were wrong for users restricted to a realm.
- Fixed an issue where some extra bytes were captured with Napatech based probes.
- Fixed a correlation issue Control Plane Monitor (OCCPM) for SCTP multi-homing scenarios.

**New Features****IPv6 Monitoring Support**

Oracle Communication Operations Monitor (OCOM) supports monitoring for SIP, SIP-I, SIP-T, RTP, and RTCP over IPv6. This includes interworking and session correlation with IPv4.

**Oracle SBC Configuration Import**

The import of an existing Oracle SBC configuration helps to reduce the OCOM setup time and provides instant results with familiar names and network topologies. This import includes SIP devices, SIP trunks, and hostnames.

**Extended Voice Codec Support**

In line with the Oracle SBC calculation OCOM extends the processing of VoLTE codes (AMR-NB, AMR-WB), and, based on packet loss metric, less common codecs like iLBC, Speex, iSAC, OPUS, and the G.722 family.

**Secure Cloud-Capable Probe-ME Link**

Probes now use a single TLS connection to connect to a Mediation Engine (ME). This simplifies network setups and supports probes behind NAT/firewalling routers. Connections between ME's and probes can be secured with TLS using certificates.

**UI Localization**

OCOM offers localization support in its graphical user interface. OCOM is shipped with English language support. Additionally a language file for Simplified Chinese is provided.

**Legacy-free Sun Hardware Probe**

Oracle Communications Session Monitor Product Family supports Sun server models X4-2 and X4-2L for high-bandwidth capturing with network interface cards Sun Dual Port 10GbE (Intel 82599), Sun Dual/Quad Port 1GbE (Intel i350XT).

The probes support up to 4\*10GbE or 8\*1GbE interfaces while sniffing at wire speed depends on the hardware configuration.

## Other improvements

- Improved search capabilities for Packet Inspector.
- Secure deletion of realm data.
- Processing of duplicate SIP header.
- Extended SCTP protocol support.
- Better scaling in Voice Quality graphs for long calls.
- Mandatory password change dialogs.
- Cross-Site Request Forgery protection.

## Bug Fixes

- Fixed a security vulnerability with SSLv3 (CVE-2014-3566 and CVE-2014-8730).
- Fixed time order of packets in PCAP download files.
- Fixed a bug that prevented users from see registrations in their realm.
- Fixed url params and counters selection interaction on device page.
- Fixed a bug displaying calls with an empty call time.
- Fixed a bug where call legs were not properly correlated on MEC.
- Improved SIP/Megaco correlation based on a complete SDP pair for cases where the SIP/SDP answer was seen more than 5 s after the Megaco transaction.
- The maximum transmission unit (MTU) can be set for network/monitoring interfaces.
- The limit of devices in the *Device Map* is adjustable via the system settings.
- Removed remaining limitations to 64 realms.
- Removed the limit of 25 items in the devices dropdown menu when a new Dashboard panel is created.
- The permission “Changing the realms” has been renamed to “Modify realms”.
- Reduced delay of display of min/average MOS values in the Calls table for calls via non-RR proxies.
- Improved help on how Traces page works.

## Release 3.3.70.0.0

2014-09-26

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## New Features

### Secure connection between SBC probes and ME (IPFIX over TLS)

The Oracle Communication Operations Monitor (OCOM) Mediation Engine allows secure connections from an SBC probe. The IPFIX link used by SBC probes to send data to Mediation Engine (ME) is now secured with TLS + certificates.

This feature can be disabled in PSA to allow a fallback to unencrypted connections.

### CDR Extensions

The number of columns in call data records has been extended in order to support an easier segmentation of network and call paths. The additional columns cover ingress, traversing, and egress devices; realm and MEC identifiers; normalized phone numbers and type information; additional voice quality information (better MOS, RTCP delay).

## DPDK capture cards

Standard Intel NICs can be used to replace legacy capture cards. This requires an OCOM probe based on Oracle Linux.

## Message-Flow Diagram load times

Message-flow diagram load times have been improved significantly, especially for calls with lots of different protocols.

## Voice Quality frontend and backend improvements

Several improvements in the Voice Quality frontend and backend have been made. This includes a fixed alignment of 10 sec chunks in the GUI, an unified scale in VQ graphs and CSV exports, an improved scaling in VQ graphs, a better handling of RTP corner cases, and an improved packet loss and burstiness handling.

## Other improvements

- A minimum volume of active calls can be configured for alerts.
- Date pickers in the GUI can be configured to start on Sunday/Monday.
- Improved support for SDP multipart MIME bodies.

## Bug Fixes

- Fixed an issue where MOS was not shown for intervals (chunks) with DTMF packets.
- Fixed an issue where the call state was incorrect in some NON-RR scenarios.
- Fixed an issue where the reconnect between Mediation Engine and probe did not work reliably in setups with network address translation.
- Fixed an issue where specific SIP Publish messages were not processed correctly.
- Fixed message column data mapping in Alerts web GUI.
- Fixed an issue where the *Suffix length* system setting was not working properly.
- Fixed an issue where RTCP messages were not shown with SBC probes.
- Fixed an issue with exceptions in the call queries of the REST API.
- Fixed a Javascript error in a dashboard button.
- Fixed an issue with the call segments page when a user is restricted to a realm.
- Improved handling of in-SIP-dialog subscribe messages.
- Added an option to improve merging calls on REFER if the Contact URIs of the original call and the new one differ by allowing to only compare the user name part of the URI.
- Improved memory footprint if CSV export is enabled for an App run.
- Fixed a security vulnerability with bash (CVE-2014-6271 and CVE-2014-716).

**Release 3.3.60.2.0**

**2014-09-12**

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## Bug Fixes and Improvements

- Filters in PSA are compiled to check if they are valid or not.
- Fix horizontal scrolling on grid-reload.
- Fixed a bug where prefix tags assigned to domain A could be seen by a user belonging to domain B.
- Fixed a bug regarding visibility of prefix tags in different realms.



- Fixed a bug in the bulk KPI removal page.
- Fixed a bug in the *Show Interval in Grid* feature on historical intervals.
- Fixed a bug where the *Metric Information* graph is empty under some condition.
- Fixed a bug where metrics were not removed when a device was removed.
- Fixed a bug in OCCPM that could result in a service not being restarted after failure.
- Show the download stream selection dialog only for calls with recorded media.
- The *Trunks* page has been renamed to *Trunks / Prefixes*.

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## Release 3.3.60.1.2

2014-09-18

### Bug Fixes

- Fixed an issue with SCTP associations in multi-home setups.
- Fixed a bug that can cause a core restart when parsing specific SCTP traffic.
- Fixed an issue where DIAMETER transactions were incorrectly timed out.
- Fixed a bug where Active calls graph were showing under rare conditions wrong KPI for active calls.

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## Release 3.3.60.1.1

2014-08-29

### Bug Fixes and Improvements

- Fixed a bug where a realm pattern could not be deleted if the user, which has created it, had been removed.
- Fixed a bug in the realms device visibility dialog when multiple realms are selected.
- Fixed a bug when Trunk devices were added as non-admin user and should be shared with other users.
- Fixed a bug where the list of realm patterns in the Platform Device dialog was incomplete.
- Removed a misleading error message when an SBC probe was accidentally added as standalone probe.

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## Release 3.3.60.1.0

2014-08-04

### Bug Fixes and Improvements

- Fixed an issue within call forking scenarios where call legs had missing SIP messages.
- Fixed an issue when browsing registrations.
- Fixed a bug where it was not possible to enable SAU for CPM within the *Platform Setup Application*.
- Fixed an issue where call flows with redirections (302) could display the wrong call state if there was a call fork triggered by the redirection.
- Fixed an issue with VLAN based *Platform Devices* in the call flow diagram.
- Fixed an issue with re-ordering of SCTP messages.
- Fixed a bug where a call leg was hidden for a non-privileged user because the device to leg comparison did not take the VLAN part of a device definition into account, hence a device hidden for a user could erroneously match a leg.
- Fixed an issue where gateway protocol services could time out improperly.

- Fixed displaying of DIAMETER messages in case of TCP transport, showing the correct message, if multiple messages were sent in one TCP packet and reassembling them correctly if they were split across TCP packets.
- Fixed an issue where the core would respond slowly to queries for particular phone numbers.
- Fixed an issue where de-duplication of network message could lead to an earlier (duplicate) message being removed, impacting the display and the correlation of call flows.
- Fixed an issue where de-duplication would ignore the time limit on multiple repetitions of the same message, removing valid re-sents of UDP frames.
- Fixed an issue where DIAMETER messages that contain XML tags were not properly displayed in the sequence diagram.
- Fixed an issue with binary H.248 correlation.
- Fixed a bug that could cause a core crash when parsing certain SIP headers like Diversion.
- Display only Dashboard and Alerts in case of CPM-only configuration.
- Improved *System Diagnostics* to contain selected database information for better troubleshooting.
- Improved reliability of media stream correlation.
- Improved performance of core in installations with multiple probes delivering high volumes of traffic.
- Improved documentation about Media Recording.
- Extended the codecs extracted for display in the call diagram to include codecs not using the RTP/AVP transport, specifically, the T.38 (t38) codec.
- Compress CDR / MDR / TDR files immediately after they are completed.
- New Javascript add-on to extract custom headers from calls in the calls grid.
- Showing an IE-specific page about compatibility if IE8+ is in compatibility mode.
- Added System Setting “Group new registrations from the same user”. This setting is by default true. If true, new system registrations from the same user are merged together. To disable this mode of operation, simply set the system setting to false.
- Added System Setting “Expanded levels” to control tree's expanded levels in the popup for a message (call flow diagram).
- Enabled CSV export for KPI in the CPM with embedded probe scenario.
- Any character is now allowed in sysadmin passwords in PSA.
- Filters in the context menu are more robust now.

## Release 3.3.60.0.0

2014-07-18

### New Features

#### DTMF telephone-events (RFCs 2833 and 4733)

Oracle Communication Operations Monitor (OCOM) parses DTMF tones contained in RTP telephone-event packets. You can filter for such calls in the *Recent Calls* and *User Tracking* table for easy lookup and inspect those events in the *Message Flow* diagram for troubleshooting. The permission model allows you to restrict access to confidential DTMF information (e.g. PIN numbers). DTMF data can be exported via *RTP Recording/PCAP*.

#### SIP DIVERSION Support (RFC 5806)

OCOM parses SIP Diversion headers, which allows you to filter for such calls in the *Recent Calls* and *User Tracking* table for easy lookup using the *Diversion URI* and *Diversion type* column. The data is available in the *Message Flow* diagram, too.

## SIP REFER Replaces Support (RFCs 3515, 3891, 5589)

OCOM supports in-dialog REFER messages in scenarios described in RFC 5589 sections 6.1, 6.2, 7.1, 7.2, 7.3. You can filter for such calls in the *Recent Calls* and *User Tracking* table for easy lookup. The *Call-Transfer* tab in the *Call Info* dialog provides you all involved sessions. This feature can be enabled and disabled at *System Settings*.

## Probe Awareness

The health status and bandwidth utilization can be monitored on Mediation Engines.

Standalone and embedded probes (SBCs) are supported in the GUI. Per probe KPIs/metrics allow you to inspect historical performance data and set up real-time alerting in case of issues.

## Scheduled Data Deletion

Data stored in the data warehouse can be scheduled for deletion and allows you to implement your data retention requirements.

Storage duration can be configured per data type – subscriber data (e.g. signaling data), RTP recordings, and KPI/Metrics data.

## REST API Improvements

Various improvements of the REST API help you to integrate OCOM into your network. The introduction of API keys for authentication allows you to run scripts with restricted user permissions. Configuration savepoints can be handled created, loaded, and restored using REST API, e.g. for HA setups in order to synchronize the configuration.

## Improvements

- Sun hardware support
- Virtualization support
- Support of dynamic port ranges for RUDP
- Extended Megaco (v3 I-BGP) and SCTP chunking support
- Support for partitions >2TB

## Bug Fixes

- Improved *Voice Quality* graph updates.
- Improved the robustness of cleanup jobs.
- Improved network information for *System Diagnostics*.
- Removed restrictions on OCFM password field.
- Raised the default number of messages in a sequence diagram from 100 to 500.
- Disabled IPv6 globally for avoiding security concerns on monitoring interfaces.
- Updated third-party components against potential security issues.
- Stop auto-refresh when a dashboard chart is hidden.
- The *Voice Quality* chart now tolerates up to 5 minutes of processing delay.
- Increased the timeout for a configuration task to complete in PSA from 1 to 5 min.
- Collapsed portlets do not perform network requests. Added setting to override each portlet's refresh interval.
- Added button for viewing details in *Link Quality*.
- Added new permissions to add/edit/delete prefix tags.
- Added the possibility to add/edit comments in savepoints.

- Added two example *Voice Quality Apps*, for streams and chunks.
- SCTP multi chunk frames are better displayed. Included Megaco BGF.
- Modified UID column in CDRs to always be 40 characters in length.
- Column menus in grids are now sorted alphabetically which makes it easier to find a column to hide/unhide.
- *Platform Devices* configuration items can be separated by commas.
- Improved IRQ balancing for network interfaces with non-standard names.
- Improved reliability of internal KPI synchronization.
- Changed the default disk scheduler, improving performance in some situations.
- Fixed an issue with *Registration Details* window on MEC machines.
- Fixed an issue with the display of *View Callers/Callee*.
- Fixed the CSV export of values that are zero.
- Fixed several HTML escaping issues.
- Fixed "Save selection" on the *KPI/Metrics* page for devices and IP tags.
- Fixed an issue with creation of IP tag if another one with the same name already exists.
- Fixed scheduling of imported alerts.
- Fixed loading of active calls on the MEC regional map
- Fixed reloading of Napatech filters and related services after an upgrade.
- Fixed alert notifications to contain the tag name for tag-based metrics.
- Fixed tag-based compound counters, they are not *Platform-wide* anymore as the tag is considered.
- Fixed a bug that applied wrongly time zones in *Apps* filters.
- Fixed an issue where SBC as a probe might not work correctly.
- Fixed issues where call correlation in a MEC setup would not work reliably if calls were connected via multiple devices.
- Fixed an issue where *Active Calls* KPI on MEC setups could increase constantly.
- Fixed an issue where legacy protocol messages would not be recognized correctly in high load scenarios.
- Fixed a bug with the HTML sequence diagrams for MEC correlated calls.
- Fixed an issue where media correlation would not work reliably on network bursts.
- Fixed issues where specific SIP PUBLISH messages with voice quality data were not correctly recognized and processed.
- Fixed an issue where specific timing on voice quality messages could cause a core restart.
- Fixed missing values for OPC, DPC in the call header of PDF reports.
- Fixed enabling/disabling of Add-Ons on an ME when accessing from MEC.
- Fixed a bug where restoring a savepoint in some cases did not work.
- Fixed transaction details footer message on CPM machines.
- Fixed the IN operator in the Apps API.
- Fixed a performance issue at deployments with more than 50 *Platform Devices*.

## Release 3.3.50.1.3

2014-07-04

### Bug Fixes and Improvements

- Fixed selection of the preferred number in multi-leg calls.
- Improved GUI responsiveness on the Registrations page when a full page refresh is triggered and filters are set.
- Improved GUI responsiveness on the User Tracking page when viewing old historical data.

**Bug Fixes and Improvements**

- Fixed a bug with permission management when *User roles* are active.
- Fixed a performance issue with exporting CSV files from registrations.
- Fixed an issue where legacy protocol messages would not be recognized correctly in high load scenarios.
- Fixed a performance issue with Packet Inspector.
- Fixed an issue with voice quality graphs in high load scenarios.
- Improved DIAMETER over TCP handling to show DIAMETER Cx messages that were segmented.
- Improved speed of user search on the user tracking page.
- Improved performance for loading calls.
- Added a system setting that changes how timestamps are applied for fragmented messages.

**Release 3.3.50.1.1****Bug Fixes and Improvements**

- Fixed a bug with generating System Diagnostics packages.
- File size improvements for the *System Diagnostics*.
- Improved memory monitoring for one of the internal processes.
- Improved scheduling of cleanup tasks.

**Release 3.3.50.1.0****Bug Fixes and Improvements**

- Fixed an issue where ENUM messages where not displayed correctly.
- Fixed an issue where session timeout KPI was not measured correctly.
- Fixed a bug causing specific IP tags not to show in the KPI library list.
- Fixed an issue where part of the traffic would not be processed after an upgrade or a reboot.
- Fixed an issue causing an empty diagram.
- Fixed an issue where Packet Inspector services would fail to start properly on customers with no or very low volumes of traffic.
- Fixes an issue that the codec name was not shown for codecs that did not have an rtpmap attribute in SDP.
- Fixed a bug when duplicate messages are not displayed, causing the relative time to be calculated between non-duplicate messages instead the new message and the last repeated from the previous group of repeated messages.
- Fixed an issue where DIAMETER Cx network frames would not show up in every call flow.
- Fixed a bug breaking the go back function to a previous user when logged as another user in some cases.
- Fixed a performance issue in the *Chart comparison* and *Recent call state repartition* example extensions.
- Fixed an issue where specific ENUM messages where not recognized correctly.

- Fixed a bug where deleting and creating a realm could cause calls to be assigned to the old realm to be assigned to the new one.
- Fixed the display of binary Megaco messages to show correctly Request/Reply and to avoid decoding errors.
- Fixed a bug that prevented Unicode characters to be used in tab names of the Oracle Communications Mediation Engine Connector dashboard.
- Fixed the display of RUDP messages when they do not use the standard port.
- Fixed Dashboard page not rendering after browser window is resized.
- Fixed an issue where preferred number for destination side did not work for custom headers.
- Fixed an issue with the export and import of Platform Devices when trunk devices with OTG/DTG are present.
- Improved performance for the user tracking auto-complete.
- Improved handling of RTP traffic with changes in packetization rate.
- Improved core memory consumption.
- Users with permission to view/edit other users can add/revoke permissions to/from users they did not create.
- In the setup assistant, only one default route is allowed to avoid a common configuration issue.
- *View Callers/Callee* displays a correct number of users.
- *Dumper raw buffer size* is ignored when imported into a 3.x installation.
- Improved support for voice quality SIP Publish messages sent from Polycom phones.
- Grey background for Voice Quality charts is cleaned in Internet Explorer.
- Automatically expand messages trees in sequence diagrams views.
- Upgrades are refused if there is not enough free disk space to migrate the data.

## Release 3.3.50.0.0

2014-04-17

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### New Features

#### Media Recording (RTP/RTCP)

Media Recording provides the ability to record RTP streams and RTCP messages for calls from and to configured subscribers. All related signaling and media traffic can be downloaded on a per-call basis. Multi-tenant capability, per-user permissions (enable/disable, RTP full/header only), audit logs, and automatic deletion of old recordings help you to integrate the product into your environment and to be compliant with legal requirements.

#### Display of Preferred Numbers

Preferred Numbers allow the use of normalized phone numbers throughout Oracle Communications Operation Monitor (OCOM). The configuration of trusted devices and headers makes it simple to obtain number information from existing number normalization systems within the network, ie. Session Border Controller (SBC) with Oracle SBC Header Manipulation Rules (HMR).

#### RTCP Reports

RTP Control Protocol Reports (RTCP) increase the visibility beyond your network edge and new Key Performance Indicators (KPI) for jitter, packet loss, and delay help you to monitor the end-to-end voice quality. This feature supports RTCP and RTCP-XR.

## **Session Request Delay (SRD)**

RFC6076 compliant Session Request Delay, known as Post Dial Delay (PDD) in the TDM world, is introduced to OCOM measuring both successful and failed session setup requests. Combined SRD metrics for SIP and TDM reporting can be used additionally.

## **JavaScript Add-Ons**

JavaScript extensions can be uploaded to OCOM and run in the browser. Users can write their own add-ons, which can be easily uploaded via the Platform Setup Application (PSA). Pre-built add-ons demonstrate the flexibility and power and can be used out of the box. Add-ons can be disabled at the user's request from the login prompt.

## **Virtualization Support**

As of this release virtualization of Mediation Engine (ME) and Mediation Engine Connector (MEC) are officially supported.

## **Alerting on dialed numbers (e.g. 911)**

Alerting based on numbers allows you to easily monitor calls to expensive or legally restricted numbers. Alerts can raise SNMP traps or email messages.

## **Fraud Monitor (OCFM) Enhancements**

Oracle Communications Fraud Monitor is now stronger tailored for Enterprise fraud scenarios including International Revenue Share Fraud (IRSF). The included blacklisting feature supports phone numbers and IP addresses/networks both for originating and terminating sides. In addition caller SIP User-Agent headers can be utilized to identify sources of fraudulent calls. The destination-based traffic spikes rule can be leveraged to detect abnormal call behavior such as a spike in traffic to foreign destinations that usually have little traffic.

## **Improvements**

- It is now mandatory to change the sysadmin password upon first login.
- Underlying software has been updated to recent versions.

## **Bug Fixes**

- Removed default KPI from the internal export metrics configuration.
- Fixed a bug that required a restart of the OCOM to enable or disable the User Actions Syslog logging facility.
- Improved display of P-RTP-Stat voice quality data in call details.
- Savepoints now contain probe configuration.
- Apps: fixed support for counting calls.
- Apps: limited the size of input parameters.
- Fixed a bug concerning the display of RTP streams when an SBC is anchoring the media stream in the call diagram. The arrows sometimes pointed in the wrong direction, and the return stream from the SBC was not shown. This also affected the directional arrows of the RTP messages in the PDF report.
- Fixed a bug regarding inconsistent decimal places for MOS and Jitter values in PDF reports.
- Fixed an issue with incorrect alphabetic ordering in the devices and tags dropdown on the KPI/Metrics page.
- Fixed a bug making it impossible to use the Dashboard Panel Wizard to add Device Metric/KPIs panels for devices but not for IP tags. Now both devices and IP tags can be used.

- Fixed prefix tags selection in the Devices page after clicking the prefix tags.
- Fixed a bug with Voice Quality for calls with duration of more than one hour.
- Fixed a bug with the name field in saved calls dialog.
- Call duration values are computed better on calls with re-INVITE messages.
- Added max length restriction of 100 characters to a phone number.
- Changed the timestamp format for absolute times in Message Flow to 6 digits.
- No negative values allowed in the “User devices chart history limit” system setting.
- Changed internal table optimization to be a nightly task instead of being an hourly task.

## Release 3.3.40.2.1

2014-04-11

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### Bug Fixes and Improvements

- Improved the stability of the upgrade process.
- Fixed a bug in the upgrade subsystem when CPM is enabled.
- Fixed a bug in the upgrade subsystem with ME+Probe systems.
- Fixed a security vulnerability with OpenSSL (CVE-2014-0160).

## Release 3.3.40.2.0

2014-04-01

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### Bug Fixes

- Improved logging of time adjustments for easier troubleshooting.
- Fixed a bug causing message flow diagrams to be empty in some cases.
- The time at which system maintenance actions are performed, has been changed slightly to account for very large setups.
- Fixed an issue causing the filtering by the prefix group column not to work.
- Fixed a bug that forbids the use of parameters in the REST API.
- Fixed the CSV export button functionality.
- Fixed a bug with bogus validation of both timeout and number of retries in RADIUS settings dialog.
- Fixed the call reports to include comments.
- Fixed a bug that applied incorrect time zones in Apps filters
- Fixed a problem with editing IP tag KPIs
- Improved support for long-running database updates.
- Fixed a display error when a user adds items to selection.
- Fixed the login redirection of PSA that required port 80 to be open.
- Improve REST API performance
- Limit user devices chart to calls not older than 30 minutes (configurable).
- Performance improvements for writing calls into database.
- Fixed a permissions issue related to the Bulk KPI functionality. Users that do not have the right to create devices can now create KPIs in bulk.
- Optimized the SQL queries created when the call details are viewed.
- Improved the performance of the *User Agent/Codec Statistics* App.
- Fixed an issue with the auto-refresh feature for the Registrations page.



### Improvements

- Make timeout and retry values (used by RADIUS client during packed send/recv) configurable. To change them go to Settings -> External Devices -> RADIUS Authentication.

### Bug Fixes

- Fixed a bug that caused filters not to be saved in the configuration savepoints.
- Added a setting for adjusting the amount of historical data to be stored.
- Fixed a bug related to enabling the Packet Inspector functionality.
- Fixed a rendering bug in Internet Explorer 8 related to the Voice Quality tab.
- Fixed a JavaScript exception happening in Internet Explorer 8.
- Fixed a timezone issue in CPM transactions list.
- Made the warning notification popups to disappear after 6 seconds.
- Fixed a failure when updating an existing metric in Device KPI metrics.
- Fixed a bug which caused *Devices Mextrics Library* to be cleared (i.e all nodes removed) when user clicked to expand a node with children.
- Fixed a bug affecting the performance of the CSV exports.
- Changed the default value of the "Omit gray bars" system setting to true.
- Fixed a bug causing registration events in some realms not to work.
- Removed obsolete settings regarding storage size limits.
- Fixed the re-configuration after restart of diameter,mgcp,enum daemons.
- Prevent a potential timing issue while upgrading.
- Fixed an issue with updates that take longer than 30 minutes. **WARNING:** updates can take very long, depending on the version that gets upgraded and the amount of historical data.
- All schema changes to the database are now done during the update. Please note that in the worst case the update may take many hours, depending on the database fill levels.
- Fixed a rare condition in which a database upgrade would fail
- Improved the upgrade behavior and feedback.
- Fixed a bug where pressing the *Show in dashboard* button on a calls grid tracking a user would create a dashboard portlet without any calls showing up.

### Bug Fixes

- Fixed bug that prevents the OCFM product to connect to the Mediation Engine under some conditions.
- Fixed bug affecting user and Mediation Engine creation in the OCFM product.
- Fixed bug that makes the dialogs for adding and deleting a Mediation Engine show up twice in OCFM.
- Fixed a database configuration issue which could cause excessive memory usage.
- Improved core stability.

**Bug Fixes**

- Fixed a bug that may, in some cases, result in database issues after an upgrade.

**Release 3.3.40****2013-12-17**

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**Changes**

- The product has been re-branded to Oracle Communication Session Monitor.

**New Features & Improvements**

- Added HTTPS support.
- Added ability to create private and public folders for saved calls.
- Added persistence for user's adjustments to table columns.
- Added ability to export graph values to CSV.
- Added new fields to the CDR – P-Asserted-ID; Q.850; Diversion.
- Added ability to enable partial CDRs for ongoing calls.
- Improved KPI support on gateway protocol devices.
- Improved KPI support on non-SIP IP tags.
- Improved voice quality stats with Oracle Communication SBC as a probe.
- Improved frontend filters allow faster device selection.
- Remote access for Oracle support can be enabled and disabled.
- System diagnostics data can be downloaded in order to provide additional details to Oracle support service requests.
- Prefix tags can be used to group calls by a caller/callee prefix.

**Bug Fixes**

- Improved usability and stability of Platform Setup Application.
- Improved usability of the system with Internet Explorer 8, 10 and 11 browsers.
- Improved performance and stability of core components.
- Improved performance in case of core component restart.
- Improved stability of initial connection process when AE connects to ME
- Fixed network configuration related issues in Platform Setup Application.
- Fixed issues in calls grid filtering.
- Fixed an issue in calls grid date picker.
- Fixed message display issues on Message Flow-chart.
- Fixed a time display issue in Trunk section.
- Fixed issues in IP tag handling.
- Fixed issues in Apps.
- Fixed issues of KPI handling in KPI / Metrics page.
- Fixed user search related issues in User Tracking page.
- Fixed an issue in Registrations where amount of registrations might decrease.
- Fixed usability issues in Packet Inspector page.

- Fixed issues in realm definitions.
- Fixed an issue where custom logo background might have been wrong.
- Fixed issues in counter handling.
- Fixed issues in CDR generation.
- Fixed an issue where single SMNP Export could not be disabled.
- Fixed an issue where REST API might fail in environment with no devices.

## Release 3.3.13

2013-11-17

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### Bug Fixes and Improvements

- Fixed an issue in SAU graph where grey bar might have appeared in finished interval.
- Fixed an issue where user with proper permissions might not have been able to view KPI / Metrics monitoring in CPM.
- Fixed an issue where SAU KPI for DIAMETER traffic was counting unsuccessful authentication attempts.
- Fixed an issue where trunks page might have been inaccessible.
- Improved core performance.
- Reduced start-up time of internal services.

## Release 3.3.12

2013-11-22

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### Bug Fixes and Improvements

- Fixed an issue in the memory assignment for the database subsystem.
- Fixed the import of Palladion 2.20 savepoints, if RADIUS users were populated with additional attributes.
- Fixed an issue with the device ordering in CPM.
- Fixed an issue with disabled button *Newer* in the calls/registrations pages.
- Added a switch to PSA – refresh the page view of network configuration.
- Improved the responsiveness when filtering the calls table.
- Improved the processing of MEGACO/MGCP traffic.

## Release 3.3.11

2013-11-13

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### Bug Fixes

- Fixed an issue where Voice Quality collector could not be enabled.
- Fixed an issue where calls might end up in UI with delay.
- Fixed an issue with H.248 messages not appearing in some cases.
- Fixed an issue where registrations count might decrease.
- Fixed an issue with *Newer* and *Older* buttons in grids displaying calls and registrations.
- Fixed an issue with dedicated probe for CPM.
- Fixed login error when logging in takes too long
- Fixed empty call flow for some calls.
- Fixed MEGACO correlation in case the MEGACO flow is incomplete.

- Fixed missing MGCP packets in a separate probe scenario.
- Fixed missing MGCP packets in calls longer than 90 seconds.
- Improved status bar feedback when searching.
- Fixed missing default KPIs when logged in as user who does not have admin privileges.
- Fixed displaying global KPIs taking too long on a system with many KPIs.
- Fixed issues when adding interface in PSA.
- Fixed an issue where searching calls for caller/callee is taking too long.

## **Release 3.3.6**

**2013-10-16**

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### **Bug Fixes**

- Fixed an issue in User Tracking if the telephone number contains literals.

## **Release 3.3.5**

**2013-10-11**

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### **Bug Fixes**

- Fixed MEGACO correlation in case the MEGACO flow is incomplete.
- Fixed missing MGCP packets in a separate probe scenario.
- Fixed missing MGCP packets in calls longer than 90 seconds.
- Improved status bar feedback when searching.
- Fixed missing default KPIs when logged in as user.
- Fixed displaying global KPIs taking too long on a system with many KPIs.
- Fixed issues when adding interface in PSA.
- Fixed searching calls for caller/callee taking too slow.

## **Release 3.3.4**

**2013-10-08**

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### **Bug Fixes**

- Fixed empty call flow for some calls.

## **Release 3.3.3**

**2013-10-04**

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### **Bug Fixes**

- Fixed login error when logging in takes too long.

## **Release 3.3.2**

**2013-09-30**

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### **Bug Fixes**

- Fixed issue where a long running system might be unable to store data.

### Bug Fixes

- Fixed performance issues with database queries.
- Fixed an issue with upgrading taking long time.
- Fixed issue where in some cases generating a PDF might fail.
- Increased the device limit in KPI/Metrics library.
- Fixed several issues related to filtering.
- Fixed an issue in Packet Inspector packet details.

## Release 3.3.0

### New Features & Improvements

- KPIs for IP tags: All the KPIs available at device level can now be defined also for IP tags.
- It is now possible to save complex filtering settings for future use.
- Top 10 devices: New dashboard widgets can show the top 10 devices as ordered by selected KPIs.
- Packet Inspector: Stores all raw packets, with the exception of RTP. It requires standalone probes only (no SBC probes) and it requires the probe be installed on a separate physical server from the Mediation Engine. This traffic can be then filtered centrally from the Mediation Engine. The filtering results can be downloaded in the PCAP format. It is a separately licensed extension, similar to the REST API or the CDR Extension with respect to ordering.
- The COM product can now export selected KPIs in a format accessible to the Oracle Communications Data Model (OCDM) product
- The COM product can also interrogate an OCDM instance for data-mining results about a particular user. This information is displayed in a widget in the User Tracking page.

### Bug Fixes

- Fixed the URL in FDP notifications.
- Fixed an issue with User Roles and RADIUS users.
- Fixed an issue with MEC dashboard.
- Fixed a race condition issue with the user domain of Caller/Callee.
- Fixed dynamic points for dynamic rule of International Calls.
- Fixed an issue in REST API URLs.
- Changed auto-refresh feature at the Calls page – always show the newest calls.
- Fixed issues with leaking counters.
- Fixed an issue with downloading message flow diagram.
- Fixed a display issue in message flow diagrams.
- Fixed a limitation in User Tracking.
- Fixed timestamp issue in the Calls table for ISUP calls.
- Fixed an issue when upgrading from release 3.1.0.
- Fixed a KPI library issue that affects non-admin users.
- Fixed an issue with realms device visibility.

- Fixed a time zone issue on the Voice Quality page.
- Fixed an installer issue with old RAID controllers.