

# Oracle Communications Performance Intelligence Center (OCPIC)



The latest Oracle Communications Performance Intelligence Center (OCPIC) delivers enriched network observability and real time intelligence empowering communication service providers to maintain an optimal subscriber experience.

OCPIC provides highly granular insights into the behavior of the networks, perfect for debugging purposes. With its extensive protocol library and common analytical interface, it is the most innovative and valuable observability solution embraced by network service providers worldwide.

## PRODUCT OVERVIEW

Converting network traffic into useful business intelligence empowers communication service providers to maintain optimal customer experiences, promoting customer loyalty, advocacy and brand-bonding behavior. Servicing the needs of multiple departments, Oracle Communications PIC offers in depth, targeted analysis and intelligence into the network traffic customized to a need: network performance, service assurance, marketing campaigns, subscriber profiling and network security.

### Key Business Benefits

- Supports key functions in a single platform
- Enriched GUI with enhanced dashboard
- Single user interface
- Multi-network signaling monitoring: PSTN, 2G, 3G, 4G, IMS, GPRS, VOIP, 5G
- Multi-protocol signaling monitoring: SS7, SIGTRAN, DIAMETER, SIP, GTP, BSSAP, RANAP, S1AP, HTTP2
- Maintain optimal customer experience
- Reduce churn by promoting customer loyalty, advocacy and brand bonding behavior
- Plan and budget marketing campaigns accordingly
- Real time inputs on traffic
- Prevents fraud and revenue loss
- User extensible analytical interface

As networks evolve, communication service providers are challenged to maintain a holistic view of the service quality, end user experience across different network technologies. Oracle Communications PIC eases the burden, supporting a library consisting of over 120 protocol definitions targeting networks that service both fixed and cellular operators. A common user interface and analytical capability lessens the learning curve by offering users a familiar interface no matter what the underlying network topology is being observed. Oracle Communications PIC offers a broad range of deployment options.

This capability allows flexible and cost-effective engineering specific to the budget and performance needs of the network being managed. Signaling networks are not static and one of the challenges facing network operators is keeping pace with growing and evolving networks. Oracle

Oracle Communications PIC is composed of four functional blocks: acquisition, mediation, application and observability platform. This loosely coupled architecture allows components to be engineered independently. As networks grow individual components can be sized accordingly without affecting the overall reliability and functionality of the system.

**Data Acquisition:** A choice of two options are available when choosing data acquisition capabilities. Data acquisition may be provided as a solution integrated with Oracle Communications signaling platforms. This option lessens the administrative burden by sharing network parameters with the integrated platform. An alternative solution utilizing non-intrusive IP probes guarantees a broad range of acquisition coverage.

**Mediation:** Mediation is a processor intensive activity that performs the real-time correlation of messages; creating detailed records, generating key performance indicators and storing the information for use by applications and analytical engines. Mediation may be deployed as a regional and/or a central component based upon performance and geographical requirements.

**Management and Applications:** Oracle Communications PIC presents a common application and user interface independent of the network monitored. Network data is gathered and normalized across multiple network types where it is utilized by the applications and analytical interfaces. The ability to define the logic to create custom key performance indicators allows operators to expand the capabilities of the system. New rules and filters can be instantly defined and implemented offering the agility necessary for operators in managing their ever-changing networks allowing them to make informed business decisions in a fraction of the time.

**Observability Platform Integration:** This newly added optional component is an add-on that provides powerful integration with Observability application like Grafana. OCPIC is now power-packed with hundreds of ready-to-use out-of-the-box KPIs across all generations of communications that can be visualized and be part of the observability dashboards in few clicks. This gives a rich User Interface for visualizing the dashboards with granular control on the appearance with built-in advanced alerts and deeper insights. It also gives an advanced visibility with correlation between various KPIs.

#### Key Features

- Flexible engineering and deployment options
- Ease of integration with Oracle signaling products and vendor agnostic probed solutions
- Real-time statistics, reporting and alarming
- Extensive protocol support
- Call/session tracking across multiple protocols/networks
- By defining the logic users can easily create new performance indicators to further enhance the capability

## OCPIC IS A GAME CHANGER

			
<p><b>BETTER UX</b> : Rich and dynamic user interface with better user experience for the observability of the system</p>	<p><b>DEEPER INSIGHTS</b> : Powerful features to observe the entire network with deeper insights for advanced troubleshooting.</p>	<p><b>ADVANCED VISIBILITY</b> : Tools for deeper correlation between various KPIs visualized and set specific conditions for alerts generation for advanced visibility of the networks.</p>	<p><b>GREATER OPTIMIZATION</b> : With clearer visibility and proactive monitoring, operator is better prepared with data for optimization of the network resources.</p>

## FEATURES AND BENEFITS

Standalone or Integrated Acquisition	<ul style="list-style-type: none"> <li>Standalone utilizing probes offers flexible options to deploy</li> <li>Integrated with all Oracle Communications signaling products, lessens administrative burden By sharing configuration data</li> <li>Multi network signaling monitoring: PSTN, 2G, 3G, 4G, IMS, GPRS, VOIP, 5G</li> <li>Multi-protocol signaling monitoring: SS7, SIGTRAN, DIAMETER, SIP, GTP, BSSAP, RANAP, S1AP, HTTP2</li> </ul>
Observability and Analytics	<ul style="list-style-type: none"> <li>Enhanced GUI for ease of operation and track real time parameters</li> <li>Feature rich dashboard allows operators to capture significant data points and take Appropriate measures as and when required</li> <li>Maintain a report in parallel to marketing campaigns being run for enhancement and corrections</li> <li>Provides network wide graphical and analytical information over long periods of time focused On various network functions</li> </ul>
Mediation and Storage	<ul style="list-style-type: none"> <li>Real time correlation of signaling messages</li> <li>Extensive protocol library, over 123 protocols for wireline, cellular, VOIP, and IMS networks</li> <li>Static enrichment converts parameters to human readable form, improves efficiency and reduces faults</li> </ul>
Management and Applications	<ul style="list-style-type: none"> <li>Common administrative interface, consistent view across all network technologies</li> <li>Real time or historical tracing across multiple interfaces and networks</li> <li>Unique statistical engine creates custom key performance indicators (KPI's) and alarms</li> <li>Alarm management and forwarding quickly drill down to identify and diagnose issues</li> </ul>
Network and Service Performance	<ul style="list-style-type: none"> <li>Optimal network and service performance maintains customer satisfaction with less churns</li> <li>Observes network trends and forecasts network upgrade requirements</li> <li>Manage interconnection and service level agreements</li> </ul>
Network and Service	<ul style="list-style-type: none"> <li>Localize failures with call tracing over multiple network views</li> </ul>
Troubleshooting	<ul style="list-style-type: none"> <li>Automatically retrieve messages pertaining to a call or session</li> <li>Full message decoding</li> <li>Historical tracing for accurate and responsive root cause analysis</li> </ul>
Interconnect Message Accounting	<ul style="list-style-type: none"> <li>Increases revenue, prevents fraud and billing issues</li> <li>In depth information to support billing and accounting arbitration</li> <li>Combines capability to offer accounting with trouble shooting and network assurance</li> </ul>

### Oracle Communications Solutions

- Oracle Communications Policy Management.
- Oracle Communications DSR
- Oracle Communications Policy Control Function (PCF)
- Oracle Communications Common Signaling, Security and Edge Protection Proxy (SEPP)
- Oracle Communications Common Signaling, Network Repository Function (NRF)
- Oracle Communications Common Signaling, Unified Data Repository/ Unstructured Data Storage Function (UDR /UDSF)
- Oracle Communications Common Signaling, Service Communication Proxy (SCP)
- Oracle Communications Common Signaling, Binding Support Function (BSF)
- Oracle Communications Common Signaling, Interworking and Mediation Function (IWF)
- Oracle Communications Common Signaling, Network Exposure Function (NEF)

Roaming Statistics and Reports	<ul style="list-style-type: none"> <li>• Real time surveillance</li> <li>• Proactive management with pre-defined KPI's</li> <li>• Roaming reports for 2G, 3G, 4G and 5G</li> </ul>
Network Security	<ul style="list-style-type: none"> <li>• Feel confident knowing your subscribers and network resources are secure</li> <li>• Organize and search massive amounts of signaling data in real time</li> <li>• Quickly identify fraudulent activity and network abuse</li> <li>• Stay ahead of attackers and implement course correction at ease</li> </ul>
Subscriber Intelligence	<ul style="list-style-type: none"> <li>• Visibility to track subscriber activity</li> <li>• KPI's may be created to trigger alarms when quality thresholds are not met</li> </ul>
Root cause analysis	<ul style="list-style-type: none"> <li>• Enables service providers to find root cause of a service network efficiency with just two clicks</li> <li>• Can be used to proactively forecast the possibility of an untoward incident</li> </ul>
Data export	<ul style="list-style-type: none"> <li>• Export processed data for use by value added applications</li> <li>• Interface with Oracle Communications Analytics</li> <li>• Relieves applications from burdens of acquisition, mediation and protocol variants</li> </ul>
Virtualization	<ul style="list-style-type: none"> <li>• Acquisition, mediation and application servers may be deployed within virtual machines</li> </ul>

Table 1. Oracle Communications PIC Features and Benefits

## SUMMARY

To supply the services of a demanding consumer, networks continue to grow, technologies continue to evolve. Oracle Communications PIC's flexible interface and extensive protocol library makes it ideal for service providers, whether they are managing growth, tackling issues with an evolving network, ensuring a quality of service for subscribers or providing feedback for ongoing marketing campaigns. Oracle Communications PIC empowers CSP's to gain control of their networks and maintain a competitive edge.

Oracle Communications solutions enable service providers to both manage and monetize the explosive growth in mobile data traffic and multimedia applications. They help service providers analyze subscribers' quality of service, set policies to improve customer experience and optimize network performance. Oracle Communications helps billions of people, devices and machines intelligently connect and engage over any network. With proven capabilities, scalable solutions, network security, common intelligent signaling platform, Oracle Communications solutions guarantees high availability and continued support.

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## Integrated Cloud Applications & Platform Services

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