Oracle Communications Billing and Revenue Management offers a comprehensive roaming settlement solution for handling complex roaming agreements and data transfer procedures based on the latest Transferred Account Procedure (TAP) roaming standard, version 3.11, recommended by the GSM Association.

**Equip Yourself for More Enhanced and Complex Roaming Agreements**

The convergence of a wide variety of networks and services is driving global seamless roaming initiatives, bringing the focus on roaming to the forefront. The Transferred Account Procedure (TAP) roaming standard is receiving widespread adoption as a result of several industry trends:

- Roaming between Wi-Fi networks and between GSM/UMTS networks and wireless local-area networks (WLANs)
- Increased roaming between fixed and wireless networks driven by IP Multimedia Subsystem (IMS) services, which enable convergence regardless of access technologies
- Increased availability of Wi-Fi networks in commercial aircraft, enabling roaming for airline passengers
- Roaming between GSM/UMTS and Code Division Multiple Access (CDMA) networks
- General Packet Radio Service (GPRS) roaming
- UMTS/GPRS handover
- Roaming using Customized Application Mobile Enhanced Logic (CAMEL)
- Optimal routing

The industry is rapidly moving from predominantly circuit-switched and voice call-based roaming to more data-, content-, and session-oriented services. The resulting adoption of new technologies, such as UMTS/3G and IMS, and the increased complexity of capturing and transferring the required TAP data, is creating an increasing need for operators to equip themselves for much more enhanced and complex roaming agreements.

Roaming is the second-largest source of revenue for many operators, and the convergence of networks and services provides significant revenue opportunities. Roaming technology in Oracle Communications Billing and Revenue Management...
enables operators to leverage new standards quickly to take advantage of global seamless roaming initiatives and maintain a competitive edge. Oracle Roaming Manager-TAP, which is part of the Oracle Communications Billing and Revenue Management platform, can be quickly deployed as part of Oracle Communications Billing and Revenue Management or as a standalone component in conjunction with third-party technology.

**An End-to-End Roaming Solution**
Oracle’s end-to-end roaming solution enables service providers to rapidly adapt to changing business needs by supporting the following business processes:

**Creation of Complex Roaming Agreements**
Oracle Roaming Manager-TAP helps in defining roaming agreements in the system; capturing all the details of partners, products, discounts, settlement information, high-usage thresholds, taxation, currency, and so on; and performing maintenance activities such as changes of agreement and termination of service.

**Definition of Products/Services**
Oracle Roaming Manager-TAP enables you to design partner service offerings and promotions in the system.

**Definition of Interoperator Tariffs (IOT)**
You can use Oracle Roaming Manager-TAP to define agreed tariffs, settlement information, and high-usage thresholds.

**Data Transfer Procedures**
Oracle Roaming Manager-TAP handles all aspects of data transfer:

- Generates out-collect TAP files for incoming roamers from partners
- Receives and validates in-collect TAP files for end users who roamed in the partner’s networks
- Generates rejects in in-collect TAP files
- Handles rejects from partners (RAP-IN): acknowledges them, validates them, fixes the errors, and resends the corrected TAP files
- Receives and generates notification files
- Rates roaming calls (TAP-IN) for end users
- Rates TAP out calls based on the Interoperator Tariff (IOT) agreed on by the partners

**Billing Management**
Oracle Roaming Manager-TAP lets you invoice partners based on settlement information.

**Settlements**
Oracle Roaming Manager-TAP allows you to settle and reconcile with partners and generate the appropriate general ledger transactions.

**Dispute Management**
Oracle’s solution also lets you log and resolve disputes and rejects.
Revenue Assurance
Oracle’s solution maximizes revenue by reporting on in-roamers with high usage.

Self-Service
Using Oracle Roaming Manager-TAP, you can allow partners to view their usage reports and invoices on a self-service basis.

Oracle actively monitors new versions of TAP and Returned Account Procedure (RAP) released by the GSM Association, and implements them as soon as possible, allowing you to adopt them quickly on your existing Oracle Communications Billing and Revenue Management platform.

Benefits of Oracle Roaming Manager-TAP

Increased Revenues
- Offer competitive roaming pricing for any service—voice, messaging, data, content, value-added services, 3G services, and future services.
- Offer innovative price models for both home and visiting subscribers.
- Charge subscribers for roaming usage in a timely manner, enabling faster collection of roaming revenue.
- Quickly recover revenue from rejected call records via support for RAP processing.

Reduced Cost of Operations
- Reduce or eliminate the need for clearinghouses by directly settling with roaming partners using Oracle Communications Billing and Revenue Management’s full settlement capabilities.
- Centralize configuration of roaming agreement data onto a single roaming solution.
- Eliminate compliance penalties by deploying a roaming solution that can support standards changes in a more timely manner.
- Leverage support for multiple versions of TAP by processing different versions concurrently and achieving easier integration with network partners.

Improved Revenue Assurance
- Quickly and accurately reconcile with network partners using Oracle Communications Billing and Revenue Management’s full bilateral settlement and reconciliation process.
- Use the flexible error-handling system for correcting errors and recycling the RAP roaming records.
- Track the progress of records through the system using the optional Revenue Assurance Manager.
- Ensure that all revenue is being accounted for and receive notifications of potential issues.
- Use High Usage Reports to help minimize roaming fraud.
Flexible, Extensible, High-Performance Solution

- Oracle Roaming Manager-TAP offers out-of-the-box support for the latest TAP/RAP versions, along with the ability to create and manage your own TAP/RAP templates based on your service offering.
- Oracle Roaming Manager-TAP enables flexible pricing and promotion configuration in support of any type of voice, data, or content services.
- Oracle Roaming Manager-TAP was developed using a batch-rating architecture designed for very high-performance processing.

Roaming Revenue Management Architecture

Oracle employs a four-tier real-time distributed design that supports both traditional batch processing of calls as well as interaction with real-time network services. The architecture includes all of the following features:

Client Tools

Graphical client tools, based on Java and supported on Windows, are easy to use and available in multiple languages.

Revenue Management Application Server

The application server rapidly processes a high volume of calls and provides a user-configurable environment for quickly adapting to new business requirements. The server runs on HP-UX and Sun Solaris systems.

Relational Database

Oracle Roaming Manager-TAP leverages Oracle Database for storage of all information, including reference data, system configuration, priced call data, audit logs, billing data, summary information, and statistics. The use of Oracle Database makes Oracle Roaming Manager-TAP robust and secure, with excellent support for third-party applications.

Open Integration

Oracle provides an open application interface (C, C++, Java) to enable direct real-time integration, as well as optional integration components, including Web Services, .NET, Diameter, Oracle’s Siebel CRM, and SAP ERP.

Contact Us

For more information on Oracle Communications Billing and Revenue Management, call 1.800.ORACLE1 to speak to an Oracle representative, or visit oracle.com.