

## Call Rating, Tariffing and Fraud Control

### Call Rating for Security and Flexibility

The ability to rate calling activity or event detail is critical to a service provider's differentiation. Additionally, the complexity of global rating requirements in the new world network – coupled with the demand for intelligent real-time rating for security – makes it essential for a service provider to look for the highest level of performance and flexibility from a rating engine.

The ORYX platform is a proven performer that has supported over 40,000 customizable rate plans on a single server. Our patented technology offers a number of flexible and powerful configurations for assigning charges to all types of calling activity. Rating may be based on:

- SS7 ISUP level information
- Long distance calls, zones, periods, units or holidays
- ANI or CLI, Dialed number, or trunk group
- Roaming requirements
- Restricted calling areas
- Different units or multiple currencies
- Configurable time periods
- Hypotenuse rating for callback calls or segment rating when no hypotenuse rate exists
- Multiple simultaneous calls (call waiting or conference calling)
- Free calling programs
- One-time call set up fees and/or daily/monthly subscription fees
- Calling party pays
- Event detail to support pay-as-you-go programs

### How Call Rating Works

Call rating allows system administrators to define charges placed on users' inbound and outbound calling activity. A number of different rate plans may be created for more flexibility of various calling services or

programs. Rating may also help determine balance precision and thresholds, as well as define currency multipliers when needed. Different rate plans may be used in pre- and post-paid wireless and calling card-type applications, or in charging users for their calls by adjusting allotted credit or debit balances, which may also help prevent fraud on non-billed accounts.

The ORYX call rating engine is a precise and sophisticated tool that enables service providers to rate phone calls to and/or from the platform in true real time. True real-time rating allows service providers to tear down calls exactly when a subscriber reaches insufficient balance to continue the call. The ORYX administrator may create one or more rate plans with options to:

- **Rate local inbound and inbound calls toll-free**
- **Assign charges for the callback on the second leg of the call**
- **Designate certain call types at certain times as free or discounted**
- **Establish defaults for threshold and determine the appropriate subscriber prompting**

When a subscriber places or receives a call, the rate table (inbound or outbound) that best matches both the source and destination phone numbers is used to determine the appropriate rate for the call. For even more flexibility, different rates can be assigned to different parts of the call, specifying initial period rate and subsequent period rate.

Once a rate plan is created, it is assigned to a customer, user, batch, or card account. Rating may be user- or card account-dependent if required. Call rating is used to internally track ORYX credit or debit card balances. The ORYX system generates call detail reports (CDRs) to provide data to an external billing system, which may provide billing statements.

### Sample Call Rating Screen

Plan: One\*Rate  
From: [REDACTED]  
To: [REDACTED]

Period	Days	Free	Initial Time	Initial Rate	Subseq. Time	Subseq. Rate
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1. 0800-1300	7/0	Na.	60	1.00	60	1.00
2. 1300-1700	7/0	Na.	60	0.25	60	0.25
3. _____	_____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____	_____	_____

F1:Help F2:Exit F3:Cancel

### Fraud Protection

With any calling service solution, it is critical for the service provider to be able to monitor usage and set any necessary parameters to protect against fraud. The ORYX platform has a number of configurable parameters that may help alleviate this challenge, such as:

- ▶ Real-time interface for alarming
- ▶ Automatic shut-off for bad PINs
- ▶ Disconnect or inability to place calls at \$0.00 balance
- ▶ Configurable number of maximum passcode retries with transfer-to-operator or disconnect
- ▶ Configurable number of consecutive failed account entries
- ▶ Requirement for a PIN for calling
- ▶ Support for single consecutive user
- ▶ Configurable dialing plan restrictions for local, long distance, international, and specific area and country codes
- ▶ Configurable maximum call length

### Multiple Services — Same Platform

ORYX stands out in the market because of the unique flexibility of its platform applications, making it the preferred solution for any type of pre-paid wireless environment. ORYX improves network architecture for the pre-paid environment, and the platforms can be configured anywhere in the world to meet specific market demands.

By choosing the world class ORYX solution as the foundation for their enhanced services, telephony and IP providers around the globe can offer a suite of industry-leading applications including pre-paid wireless, unified communications, enhanced messaging, and pre-paid and post-paid enhanced calling — all from a single platform.

### Sema Telecoms: Your Partner for Business Success

Sema Telecoms is a world leader in communications software and solutions offering a unique combination of consulting, systems integration and software products. Supporting over 120 million subscribers at 350 customer sites worldwide, the company meets the needs of wireline, wireless and convergent networks with an extensive portfolio of end-to-end solutions for business support, network management, pre-paid, messaging and enhanced services, as well as mobile commerce. Our ORYX enhanced services solutions give providers a flexible, scalable platform to deploy a wide range of revenue-generating enhanced services.

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