



hp OpenView IUM prepaid data solution

the critical link to capturing service value

Prepaid services offer a low-risk option to new service subscribers. It's a key to increasing future telecom revenues. And prepaid may emerge as the preferred way to deliver voice over IP (VOIP) or streaming video services.

But prepaid services are accompanied by several challenges. One is the revenue leakage that can occur when a prepaid credit expires before the call or data transfer is completed. Another is the difficulty of rating calls and services in real time. Content, such as Wireless Application Protocol (WAP) content or e-mail, can change from call to call, and the rating may change with location. What's more, new technologies such as 3G are always on, with services varying in price.

take advantage of key enablers

The secret to getting the most out of prepaid services lies in getting more accurate usage data and being able to act on it immediately—while a call is in progress, and before the revenue opportunity is lost. Fortunately, enabling hardware and software are emerging that provide the needed granularity and speed. Some of these enablers include:

- data switches with prepaid call control and hot accounting, including CDMA and GPRS switches
- active IP flow managers that can identify and control IP flows
- new content rating systems

The HP OpenView IUM Prepaid Data Solution lets you take maximum advantage of these new advances in hardware and software. The IUM Prepaid Data Solution works with the HP OpenView Internet Usage Manager (IUM) to provide event-based mediation and correlation for incoming prepaid data. It provides a link between IUM data collectors, and integrates not only with these data sources but also with rating, provisioning, control, and audit systems. Moreover, the IUM Prepaid Data Solution delivers pre-rating and session control feedback to service control points (SCPs) and data control points.

benefiting the operator, service provider— and customer

For the mobile virtual network operator (MVNO) or other operator, the HP OpenView IUM Prepaid Data Solution has broad appeal. For example, it allows processing call detail records (CDRs) from content services in real time while checking a subscriber database to assure sufficient credit for the content transaction. The IUM Prepaid Data Solution ensures a more rich and consistent customer experience, too. Its real-time data collection and aggregation enable you to identify when to send recharge requests to customers using content services.

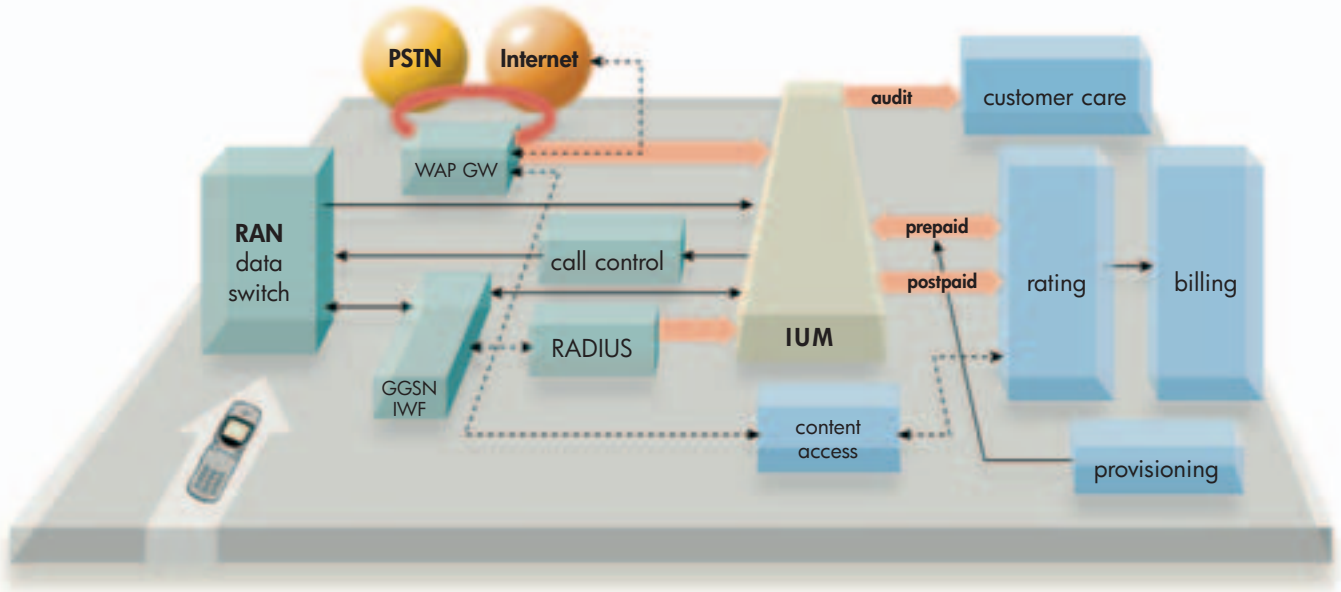
benefits of the hp OpenView IUM prepaid data solution

- increase revenues by implementing prepaid data billing models
- reduce revenue leakage from "zero-credit" usage losses
- act quickly, based on timely and accurate accounting information
- combine prepaid and postpaid models for value-added services, with services independent of the payment method
- upgrade incrementally while maintaining your existing infrastructure

key features of the hp OpenView IUM prepaid data solution

- **event-based mediation**—The IUM Prepaid Data Solution provides a streaming infrastructure between IUM collectors and implements aggregation in near real time. It easily integrates with network data sources and also with rating, provisioning, control, and audit systems.
- **event-based correlation**—This solution integrates usage events with account details in near real time, so you can reduce revenue leakage by pre-rating even high-volume, low-value items “on-the-fly.” For example, you can pre-rate WAP decks as a mobile user moves from one deck to another.
- **pre-rating and session control**—With this solution, you can monitor thresholds and provide alerts as thresholds are crossed. The solution can provide control feedback to SCPs and data control points, too. It even integrates with IP data flow control points.
- **both prepaid and post-paid billing models**—You gain support for real-time event handling, and interactivity with AAA, SCPs, and other critical processes required for prepaid data services. Of course, Internet Usage Manager continues to handle traditional postpaid billing mediation as well.
- **low-impact implementation**—You can easily implement this solution, with low impact on existing systems and with minimal risk to content rating. You can use existing prepaid cards, your current deployed switch network, and your present billing system. And as new technologies emerge, you can upgrade incrementally. If you already have an IP-based solution, implementation is even easier, with very little change needed to the network.
- **linkage between content and bearer audit trails**—Because you achieve a close linkage between call content and audit trails, you can easily track joint revenue flows.
- **accommodation for a variety of systems**—Whether a switch is using RADIUS accounting, SS7, Call Detail Records, or another accounting system, you can get accurate accounting information quickly.
- **multiple billing options**—The IUM Prepaid Data Solution allows a variety of billing options. You can base your billing on the services provided, such as the number of e-mails sent or the security level. Or you can bill on a per-use basis, depending on the number of SMS messages or voice call duration. You may want to send invoices based on a combination of user and service, such as teleconferencing or video on demand. You can even calculate rates based on WAP activity or IP flow—the choice is up to you.
- **content awareness**—With the IUM Prepaid Data Solution, you maximize choice among various strategies to implement prepaid content billing. For example, it’s no secret that SGSN CAMEL* control is not content-aware. But the IUM Prepaid Data Solution is compatible with CAMEL while independent of it, letting you assess any content without affecting operations.

*Customized Applications for Mobile network Enhanced Logic



IUM and content: scale your BSS infrastructure for prepaid and postpaid WAP and IP services

extends the industry's premier usage mediation and management platform

HP OpenView Internet Usage Manager is the industry's premier comprehensive usage mediation and management platform for wireline and wireless data services. It collects, aggregates, and correlates usage data from across your network and IP services infrastructure, and it presents the data in an open, user-configurable format. Internet Usage Manager allows you to implement usage-based billing systems, manage capacity, and analyze subscribers' needs and behavior so you can develop strategic marketing programs and profitable value-added services. It's the critical link between your service delivery and business support systems.

product specifications

primary functions

- Event-based mediation
- Event-based correlation
- Pre-rating
- Session control

collector packages

- PDSN/GGSN IP login
- RADIUS/DHCP accounting
- SCP
- Data control point
- WAP
- VOIP switches

revenue assurance

Audit support

other contents

Specialized documentation and toolkits

system requirements

Requires Internet Usage Manager 4.0

configuration

The HP OpenView IUM Prepaid Data Solution is available for HP OpenView Internet Usage Manager 4.0 running on HP-UX, Windows® 2000, Windows NT® and NT Terminal Server Edition, Linux, and Sun Solaris. The size and number of machines for any of the platforms depend on the service provider's business objectives, network topology, traffic volumes, and other parameters.



other hp OpenView usage management solutions

Need a convergent mediation solution for your wireline or mobile network? Look at these other closely related HP OpenView products:

- Dynamic Netvalue Analyzer uses your business model parameters and real-time usage data to analyze profitability and other business metrics.
- The IUM GPRS Solution and IUM CDMA Solution complement the Internet Usage Manager and Dynamic Netvalue Analyzer and extend them for use in 2.5G and 3G mobile data services environments.
- The IUM Software Developer Kit (SDK) enables the extension and creation of Internet Usage Manager components.



hp added value services

In an effort to provide you with predictable cost structures and business efficiency gain, HP offers a comprehensive set of services that include Consulting, Outsourcing, Support, Education, and Finance. For more information, go to the HP Services Web site at www.hp.com/hps.

ordering information

IUM Prepaid Data Solution Collector LTU	J5349AA
IUM Prepaid Data Solution Hardcopy Manual Set	J5350AA
IUM Prepaid Data Solution CD-ROM Media	J5351AA

take the next step

To find out more about the HP OpenView IUM Prepaid Data Solution and other HP OpenView usage management solutions, go to: www.hp.com/usage, or call the HP OpenView Usage Management Solutions Hotline at +1 408 447 4815.



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