



## hp OpenView internet usage manager 4.0

*convergent mediation for next-generation networks*

With the convergence of voice and data, of wireline and mobile services, ISPs and telecommunications businesses need to deploy new, flexible infrastructure within their networks and operational and business support systems. But with time-to-market pressures, ROI concerns, and the potential risk to current production operations, such upgrades must be implemented in a way that maximizes total return on assets while insulating current systems and processes from the greatly heightened workload brought on by these new services.

### the industry's premier mediation and usage management platform

That's where Hewlett-Packard's Internet Usage Manager (IUM) comes in. IUM provides a flexible, scalable platform for deploying the convergent mediation and usage management solutions required to operate the new generation of service provider infrastructures and maximize service revenue. IUM's flexibility enables it to easily complement existing infrastructure and processes, improving investment returns and minimizing risk. IUM mediation solutions can be deployed for wireline and wireless networks to support voice and data services, and to support prepaid and post-paid billing models. IUM collects, aggregates, and correlates usage data from across your network and services infrastructure and presents the data in an open, user-configurable format. IUM allows you to implement usage-based billing systems, manage capacity, and analyze subscribers' behavior to develop strategic marketing programs and profitable value-added services. It's really the critical link between your service delivery infrastructure and business support systems.

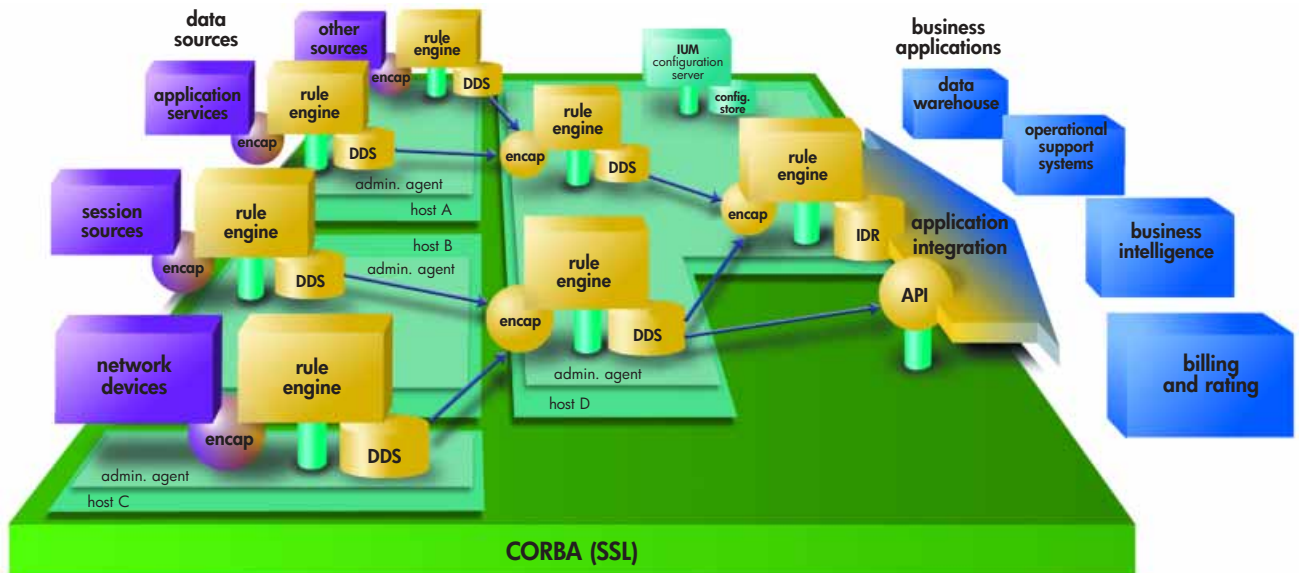
With its low entry cost and virtually unlimited scalability, IUM can be easily scaled across multiple networks and geographic locations and to millions of subscribers. Such scalability is made possible by its Distributed Datastore (DDS), part of a patent-pending, fully distributed architecture that enables data collection at or close to the source with user-configurable rules and collector hierarchies. IUM also leverages CORBA technology to ensure robust communications between remote components. And IUM's highly modular design provides flexible configuration control and management for a wide range of services.

### what's new in internet usage manager

- enhanced architecture supports convergent mediation requirements with a single platform
- supports prepaid and post-paid billing models
- IUM Packet Collector provides nonintrusive data collection and extends content mediation capabilities
- integrates with HP OpenView Performance Insight, Service Information Portal, and Storage Area Manager
- expanded multi-device collectors reduce costs and simplify management
- new report configuration wizard enables faster setup and access to usage data

### benefits of hp internet usage manager

- simplifies usage-based billing for convergent services
- enables detailed understanding of customer usage for segmentation and business intelligence
- delivers new technology through a distributed component architecture, yet fits easily into legacy environments for maximum return on assets
- extensible plug-in components ensure your IUM deployment can keep pace with the roll-out of new equipment and services
- the HP Integrated Service Management (ISM) platform unifies IUM, business intelligence, revenue assurance, service assurance, and service delivery processes for maximum business agility
- IUM is backed worldwide, around the clock, by our own HP support services—for confidence in the capture of your revenue-sensitive data



## key features of IUM

- **one platform for convergent mediation requirements**—IUM includes major enhancements for converging wireline and wireless networks carrying voice and data services. These enhancements are part of a patented architecture that lets IUM effortlessly capture and correlate asynchronous, unpredictable, distributed events in massive numbers.
- **prepaid and post-paid billing models**—IUM supports real-time event handling and interactivity with AAA, Service Control Points, and other critical processes required for prepaid data services. Of course, IUM continues to address traditional post-paid billing mediation as well.
- **perfect matching of your business needs—without writing code**—IUM's rich toolset lets you specify multiple, simultaneous aggregation and correlation schemes that match your business needs, and it even lets you tailor them to feed multiple usage applications simultaneously from a single collector hierarchy. Storage and output options are extremely flexible, and you can easily specify all types of queries of the distributed data.
- **robust collection options**—IUM collects from a diverse set of data sources in both wireline and wireless networks as well as servers, storage, and other infrastructure components that support voice and data services. The new IUM Packet Collector extracts usage data directly from the network at wire speed and ensures nonintrusive data collection that keeps the infrastructure free for services delivery. IUM has also expanded its ability to meter multiple data sources with a single collector, improving cost-effectiveness and simplifying management.
- **powerful rule engine**—with IUM, you define aggregation, correlation, filtering, and adornment rules that match your business needs. Rules can be configured to support multiple, simultaneous data mediation tasks and produce tailored results for a variety of business and operational support systems from a single collector hierarchy.
- **flexible output**—the IUM Internet Data Record (IDR) generator provides completely configurable output formats, including HTML, XML (including IPDR NDM-U 2.5), ASCII-delimited records, ASCII fixed-field records, binary records, or as an SQL DB schema. Data storage options are also extremely flexible, and users can easily specify all types of queries against the distributed data stored in the IUM collector hierarchy.
- **carrier-grade reliability**—IUM's distributed architecture features inherent data persistence to protect against data loss. IUM has passed rigorous testing, encompassing hundreds of network and system failure conditions, in conjunction with major telecom customers.
- **secure role-based authentication**—IUM uses the CORBA-based Secure Sockets Layer (SSL) for secure transactions and robust communications; it features certificate-based authentication, access control lists, and public/private keys for secure role-based identification, authorization, and administration.
- **easy configuration, administration, and monitoring**—the integrated GUI "Launchpad" lets an administrator easily configure IUM, view collector logs and diagnostics, administer access privileges, and view performance statistics. A collector-linking feature allows automatic propagation of configuration changes from one collector to others in a group. In addition, a new report configuration wizard ensures you can view the usage data you need faster through easy, automated report setup.
- **central management of remote processes**—administration agents allow remote management of IUM's distributed collection infrastructure. Distributed agents allow you to start, stop, and monitor collectors all over the network right from the Launchpad. This means a single administrator can easily run the entire IUM infrastructure.
- **integrated service management**—IUM integrates with HP OpenView family products such as HP OpenView Operations, Network Node Manager, Performance Insight, Service Information Portal, and Storage Area Manager to maximize manageability of complex infrastructures.
- **platform portability and robust communications**—written in Java™ and based on industry-standard CORBA technology, IUM provides robust communications and support for HP-UX, Solaris, Linux, Windows® 2000, Windows NT®, and Windows NT Terminal Server Edition (TSE).



The IUM Launchpad is a one-stop configuration, administration, and monitoring tool that makes operating IUM easy

## sample deployments from the IUM installed base

application type	business objective
Internet data center/ Web hosting	bandwidth sales, capacity planning, quality of service
GPRS, 3G mobile data	content billing, customer analysis
broadband access	usage-based billing, caching strategy
backbone transit	settlement, peering, bandwidth utilization
Internet telephony, VPN	usage-based billing
application hosting	utility-based IT services
enterprise IT	server consolidation, desktop chargeback, route optimization

## supported data sources

IUM enables collection from a wide variety of data sources in both wireline and wireless networks as well as from the systems, servers, and infrastructure components providing voice and data services.

IUM collectors can be implemented through selection of out-of-the-box preconfigured data source modules, configuration of an IUM general-purpose data source module, use of a contributed data source plug-in from the IUM Developer Program, or plug-in development using the IUM Developer Kit. IUM's component-based architecture makes it easy and straightforward to integrate new usage data sources.

Literally any data source can be supported. You can get up and running faster and have the flexibility to adapt your infrastructure as your needs change.

For a current listing of out-of-the-box preconfigured collectors, see [www.hp.com/usage](http://www.hp.com/usage).

The following general-purpose data source modules can be easily configured to collect from hundreds of devices. The sample use cases exemplify the wide range of supported data sources that may be of interest.

### general-purpose, reconfigurable data source modules

type	sample use cases
ASCII delimited file	Web logs, RADIUS logs, FTP, IPDR
ASCII fixed-width file	724 Solutions WAP log
ASN.1*	Ericsson GGSN, Motorola SGSN
binary data	Cisco NetFlow (native)
Cisco IP accounting	Cisco routers with Cisco IP Accounting enabled
directory	LDAP lookup
JDBC database query	Oracle, SOLID databases
protocol-based	Nortel GTP Prime*
RMON MIB	NetScout probe
SNMP	Foundry Networks, Cisco devices
SNMP Polling MUX	Foundry Networks, Cisco devices, server and storage devices
UDP	Cisco Netflow, Juniper cflowd
XML	XML file

\*Part of the IUM GPRS solution

## solution partners

As the industry-leading IP mediation platform, IUM has demonstrated its interoperability with dozens of solution partners, and more are added constantly. Visit our Web site for more details of our integration with these leading vendors:

724 Solutions	Foundry	Openwave
Amdocs	HighDeal	Oracle®
AMS	Inktomi	Packeteer
Anite Telecoms	Lucent	P-Cube
Calculus	Microsoft®	Portal Software
CheckPoint	Motorola	Unisphere Solutions
Cisco	Netscape	Real Networks
CMG	Nokia	Sepro
Concord	Nortel Networks™	Siemens
Digiquant	IPDR	StarVox™
Ericsson	OpenPort	

## ordering information

### hp OpenView internet usage manager 4.0

- Host machine LTU
- General-purpose collector LTU
- SNMP multi-device collector LTU
- IUM Packet Collector

## configuration

HP OpenView Internet Usage Manager 4.0 is available for 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

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

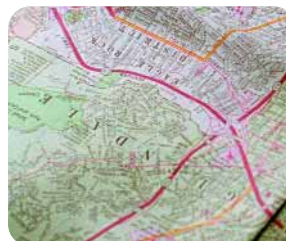
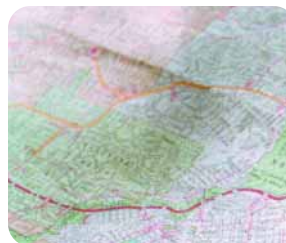
- The HP OpenView IUM GPRS Solution and IUM CDMA Solution complement IUM and HP Dynamic Netvalue Analyzer for 2.5G and 3G mobile data services environments. The IUM Prepaid Data Solution enables support for prepaid data billing models.
- HP OpenView Dynamic Netvalue Analyzer uses your business model parameters and real-time usage data to analyze profitability and other business metrics.
- HP OpenView IUM Software Developer Kit (SDK) enables the extension and creation of IUM 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](http://www.hp.com/hps).

## take the next step

To find out more about IUM and other HP OpenView Usage Management Solutions go to [www.hp.com/usage](http://www.hp.com/usage), or call the HP OpenView Usage Management Solutions Hotline at +1 408 447 4815.



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