

The Internet Protocol Detail Record Organization  
**2004 Annual Report**



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## PRESIDENT'S ADDRESS

Greetings IPDR Members; thank you for your participation in 2004. IPDR completed leaps to fulfill its mission and consolidated version 3.5 into reference source code available to members.

I would like to take a moment to highlight some significant accomplishments that you helped create last year:

- **CableLabs DOCSIS** – IPDR/Streaming relieves the cable industry of intensive broadband accounting needs.
- **ANSI progress** – The ATIS TMOC Accounting Management team is working with IPDR to bring ours towards national standards status.

When we set out as a member-driven organization in 1999, we set our sights on an ambitious goal: *To reduce the time and cost of usage measurement and exchange for next-generation services.* To review our progress so far:

In **1999** we began work.

In **2000** we delivered the NDM-U specification and proved it could work.

In **2001** we improved and finalized NDM-U with Version 3.

In **2002**, we began to deploy NDM-U within large carriers

In **2003**, we enriched NDM-U with streaming and settlement to complete the end-to-end accounting flow.

In **2004**, we completed IPDR/Streaming standardization in the cable industry and began ANSI standardization

Your continued involvement in 2005 will see IPDR rollouts from major MSOs, another wireless carrier, and further standardization in emerging industries such as VoIP, VoD, digital music, push-to-talk, and WiMax.

Thank you for being a part of positive change for our industry.

Aron C. Heintz  
President, IPDR.org

## **IPDR.ORG IN THE INDUSTRY**

IPDR.org has always examined ways on how the work being done within the organization would be able to benefit different industry sectors (i.e., cable and content). In 2004 the organization developed formal liaison partnerships. Throughout each group there was an enthusiastic willingness to work together and a strategic plan was introduced.

For over two years, IPDR.org worked to align the IPDR Streaming Protocol to align with the requirements identified by CableLabs®, the research and development consortium dedicated to pursuing new cable telecommunications technologies for its cable operator members. Prior to the year-end, CableLabs announced that the IPDR Streaming Protocol is now a mandatory element within the DOCSIS (Data Over Cable Service Interface Specification) 2.0 Subscriber Accounting Management Interface Specification (SAMIS), and is expected to be widely deployed by cable operators worldwide.

In addition to cable, the telecom industry has begun to explore how the IPDR.org specifications can effectively tie into the work being done within their groups. The ATIS TMOOC committee has adopted a work item to bring IPDR Specifications(s) toward ANSI and ITU-T as accredited American and international standards respectively.

The work with the TMOOC group is a joint effort supported by the IPDR.org's Protocols and Business Requirements working groups. The charter of the group has begun to address the accounting interface between VoIP-handling networks and service elements and OSS/BSS. The ultimate success of this collaboration will signify substantial completion of IPDR.org's efforts to develop a cross-platform, cross –sector, and cross-BSS common standard for accounting and measurement of next generation services.

And finally in 2004, IPDR.org embarked on a joint initiative to address the needs within the content industry. By combing efforts with the Content Reference Forum, IPDR.org started to explore the ways that IPDR.org specifications can be tailored to the music industry's growing problems of their rapidly expanding online offerings. IPDR.org management sees the content industry as one of the fastest growing transactional markets on the internet today. The groups will continue to develop an overall strategy to outline and address the next steps.

## **IPDR.ORG TECHNICAL PROGRAM**

### **Protocol Working Group**

The Protocol Working Group (PWG) released the IPDR Streaming Protocol 2.0 specification in late April. The release of this specification provides the industry with an advanced streaming protocol for accounting information exchange, and delivers a compelling solution to the technical and business challenges faced by the next-generation equipment and server vendors.

Following the release of their specification the group took on the responsibility of developing the liaison relationship between IPDR.org and ATIS TMOOC. The groups met for the first time at the IPDR.org membership meeting in September, and quickly developed a charter and plan for moving forward. To date the group continues to meet on a regular basis and is targeting the issuance of a draft American National Standard in 2005.

In addition, the Protocol Working Group was the primary group to assist with the IPDR reference library upgrades.

Protocol Working Group representatives:

Team Leader: Tal Givoly (Amdocs)

Team Editor: Steve Cotton (IPDR.org)

Team Contributors: Amit Kleinmann (Amdocs), Greg Weber (Cisco); Ty Roach (ACE\*COMM), Ken Sarno, (IPDR.org)

### **WLANAS Working Group**

The WLANAS Working Group publicly released the IPDR Supplier/Partner (S/PS) Settlement and IPDR Public WLAN Access Service specifications in May 2004. The release of these documents marked the final deliverable from the WLANAS group after a year of hard work.

The specifications enable inter-operator settlement for universal single-bill access to public WLAN (PWLAN) hotspots. The IPDR S/PS Settlement document resolves key technical limitations of cross-industry settlement interoperability. The IPDR PWLAN Access Service Specification is a component of the set of IPDR specifications that describe business requirements and protocols for usage measurement and usage reporting for IP-based services.

WLANAS Working Group representatives:

Co-chairs: Tim Allwine (VeriSign) and Betty Cockrell (Billing Concepts)

Technical Team Lead: Pankaj Patel (Convergys)

Technical Editor: Steve Cotton (IPDR.org)

Team Contributors: Pat Walls (Syniverse), Grace Chen (VeriSign)

### **MARKET AWARENESS**

How does IPDR.org market itself to the world? IPDR.org utilizes several marketing tools to ensure that our organization and its work are promoted throughout different industry structures, and all over the globe.

Our first and foremost activity is utilizing the accessibility of the world-wide web. IPDR.org keeps the web site current by updating the site with any newly published specifications, recent press releases, information on new industry liaisons and work initiatives, industry news, and a way to get updated information by registering for the number of email exploder lists available to both members and non-members. In addition, the members only site provides additional opportunities for members to easily find the latest internal releases, general and specific IPDR.org presentations, meeting information, and much more.

IPDR.org also realizes the importance of public presentations. In 2004 the President, staff, and member representatives have spoken on behalf of IPDR.org at various conferences and tradeshows around the world. Those efforts are greatly appreciated, and the success of this promotion is evident by the responses received at these events that there is a continued interest in the work being done within the organization.

A new initiative that IPDR.org took on this year was to host its first "Open Information Session." The session itself allows non-members an opportunity to learn about the latest work within the organization, as well as openly ask questions that directly relate to their line of business. The session was promoted within our "general" email exploder list, and attended by a number of companies. The mix of attendees included those interested in cable, content, and enterprise work. The "Open Information Sessions" will continue in 2005 and will be held on a bi-annual basis.

## **IPDR DOCUMENT SET – v3.5.1**

The IPDR.org Document Set is a proven method of handling the many specifications published by the organization. The Set includes a Document Map, which is an interactive file provides an easily accessible single point of entry to all IPDR.org specifications, and a Document Guide, which gives a brief description of each document and how they inter-relate. The Document Set is kept current as newly published specifications are released.

The IPDR Document Set is available through the IPDR.org web site. IPDR.org has received very positive feedback since the introduction of the set, and is continually accepting comments from users of the IPDR specifications.

## **IPDR.ORG'S REFERENCE LIBRARIES – C AND JAVA**

IPDR.org produced and released an updated set of the reference libraries. The libraries are available in both C and Java and are now compatible with the IPDR Document Set 3.5.1. The enhancements to the libraries included, backward compatibility, schema partitioning, compact format definition, enumerations, structures and arrays, updating the version numbering, primitive types and capability file. In addition, the Java set has been enhanced to support the IPDR WLAN Settlement Work.

IPDR.org would like to thank Infosys, Inc. for their hard work and professionalism in completing the upgrades; Ken Sarno, IPDR.org, for his management of the project; and the Protocol Working Group for their continued input. The Libraries are currently available to members only, and are fully downloadable from the members only area on the IPDR.org web site.

## **INDUSTRY LIAISON PARTNERS**

IPDR.org continues to promote the importance of usage measurement and exchange to liaison organizations and strives to reach out and partner with groups that align their work with IPDR.org. This year much work has been done to enhance the depth of information developed and exchanges within several of the liaisons that are either newly established or have been ongoing. The following partnerships have been active in 2004:

**Alliance for Telecommunications Industry Solutions** -- ATIS OBF and TMOC taskforces are currently reviewing WLANAS specification and remains interested in VOIP applications for IPDR technology.

**Cable Laboratories** -- Cable Modem™ (aka DOCSIS™ Data Over Cable System Interface Specification) has adopted the IPDR 3.5 Document Set as its standard usage accounting technology. Interest in PWLAN and Streaming IPDR has grown throughout 2004.

**Content Reference Forum** - The CRF has formally signed a partnership agreement and is an integral player in introducing the IPDR.org work to the content industry.

**IPCC** –The International Packet Communications Consortium informally cooperates with IPDR on accounting records and details.

**TeleManagement Forum** (TM Forum) - IPDR.org maintains a strategic liaison relationship with TM Forum and is a charter member of the TM Forum's Industry Group Advisory Board (IGAB). In addition, TM Forum has organized a working group

to address billing, and IPDR.org plans to provide input to their work on a continuous basis.

**Wi-Fi Alliance** - The partnership between the IPDR.org and the Wi-Fi Alliance brings together cross industry players to facilitate the early adoption of the IPDR.org WLAN Accounting and Settlement specifications. The Wi-Fi Alliance is a nonprofit international association formed in 1999 to certify interoperability of wireless Local Area Network products based on IEEE 802.11 specification.

## **BOARD OF DIRECTORS – 2004**

Aron Heintz – President and COO, IPDR.org  
Tim Allwine - VeriSign  
Betty Cockrell – Billing Concepts  
Tal Givoly – Amdocs  
Kevin McCoy – Cisco Systems  
Jim Cunningham – Hewlett-Packard  
Stefan Mihai – ACE\*COMM  
Steve O'Neal – Sprint PCS  
Pankaj Patel – Convergys

## **LIST OF MEMBERS 2004**

### **Charter Members**

Ace\*Comm  
Amdocs  
Billing Concepts  
Cisco Systems, Inc.  
Convergys  
Hewlett-Packard  
Rogers AT&T Wireless  
Sprint PCS  
VeriSign

### **Supporting Members**

American Management Systems  
CIBERNET  
CSG Systems, Inc.  
Dan Net AS  
EDB Telescience AS  
Infosys  
IntelIntrado  
Openet Telecom Limited  
SBC Laboratories, Inc.  
Syniverse Technologies TeleStrategies

### **Associate Members**

Airpath Wireless  
Canadian Clearinghouse  
Brainshield Technologies  
Defense Information Systems Agency – (DISA)

Digital Route  
MetraTech Corp.  
Nomadix  
Primal Solutions  
TOGEWAnet

## 2004 FINANCIALS

### IPDR.org 2004 Revenue and Expenses

As of December 31, 2004

(all figures in \$1,000)

	Jan-Dec
<b>Total Revenue</b>	<b>307.71</b>
<b>Expenses</b>	
Technical & Editorial Support	97.15
Marketing	87.80
<u>Operations &amp; Member Relations</u>	<u>124.41</u>
<b>Total Expenses</b>	<b>309.36</b> <sup>1</sup>
<b>Cash Flow</b>	
Money in Bank (Dec. 31, 2004)	<b>344.35</b>

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<sup>1</sup> Aside from periodic special investments, the corporation operates as a going concern, matching expenses to revenues. Expenses in 2004 slightly exceeded revenues, as approved in budget plans established by the Board of Directors in Q1 2004.