



Portable Computer and
Communications Association

<http://www.pcca.org>

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INTRODUCTION

The PCCA continues to gain new members, and to do well at a time when the whole industry is suffering some of its greatest challenges in a long time. PCCA meetings continue to be well attended as the PCCA has tackled some of the most difficult problems facing this industry, including the question of how wireless hotspots will integrate with cellular-data networks, and just how well new networks such as GPRS and 1XRTT support enterprise applications. Next year will be exciting, and meetings will emphasize topics such as the barriers facing wireless-data adoption by enterprises, new mobile platforms, advances in tethering options and details on new cellular technology such as EDGE and 1XEV-DO.

This issue of the newsletter reports on the last two quarters of 2002, and also discusses 2003.

NEXT MEETING – FEBRUARY 4-6, 2003

Background

This is a joint meeting of the PCCA and The Open Group, with whom the PCCA now has a formal relationship, which we describe below.

We are soliciting contributions for this meeting. Please contact Peter Rysavy if you would like to present at this meeting on either day, or if you would like to participate in the workshop.

This multi-part meeting will be held in San Francisco.

February 4: PCCA meeting on Mobile IP, Application Persistence and Roaming.

February 5: Joint PCCA/Open Group workshop: Enterprise adoption of Wireless Data - Barriers and Solutions. Including demonstration and interoperability plugfest.

February 6: OpenGroup meeting on secure mobile architecture

Preliminary Agenda

February 4. PCCA Meeting. 9:00 AM to 4:00 PM.

Invitees: PCCA members, The Open Group members.

This meeting is intended to address in greater detail some of the issues and questions raised at the November 6 PCCA meeting on the topic of wireless hotspots. These issues apply to



wireless data in general, and relate to how applications, authentication, and networking protocols should behave in emerging wireless networks, including enterprise networks, wireless hotspots and 2.5G/3G cellular data networks. This is intended as a working meeting to develop definitive conclusions. This meeting also offers an opportunity to bring to life the recently signed memorandum of understanding with the Mobile Management Forum whose members have been considering these issues in their work as well.

Proposed topics include:

- How important is it for applications and sessions to be able to persist in coverage drops, and in transitions from one type of network to another (e.g., enterprise network to public network, or WLAN to cellular network?)
- Are there fundamental differences between requirements for horizontal markets versus vertical markets?
- How important is Mobile IP for providing seamless mobility, and what vendors are supporting it to what level?
- To what extent can solutions be deployed using Mobile IP?
- What are alternative approaches and their tradeoffs?
- What are the different categories of roaming with respect to authentication, billing, IP networking?
- What are network, device and application requirements for the different categories of roaming.

Agenda:

- Introductions.
- PCCA update on membership and future meetings.
- Presentations on topics related to application persistence, Mobile IP and roaming.
- Discussion and analysis.

February 5. PCCA/Open Group Workshop. 9:00 AM to 4:00 PM.

Workshop focus: Enterprise adoption of Wireless Data - Barriers and Solutions. Including demonstration and interoperability plugfest.

Invitees: PCCA members, The Open Group members, CIOs and IT Managers.

8:30 AM to 11:30 AM, room 1 - Presentations and Q&A on enterprise adoption of wireless data. Presentations will be both from the industry and from enterprises to identify the key barriers towards widespread adoption of wireless data, as well as to provide an overview of existing solutions.

11:30 AM to 4:30 PM, room 2 - Demonstration and interoperability plugfest. Vendors and operators will demonstrate their wireless data solutions, including networks, devices, platforms, infrastructure software and wireless applications. Participating vendors will demonstrate interoperability on an ad hoc basis.

12:00 PM to 1:00 PM. Lunch



1:30 PM to 4:30 PM, room 1 - In depth discussion (panel or comparable format) on issues raised in the morning session, general Q&A, and summarizing of the key issues facing widespread enterprise adoption, as well as recommended solutions.

Note that from 1:30 to 4:30, attendees will have the option of attending the demo/plugfest, or attending the in-depth discussion, or going back and forth.

February 6, Thursday The Open Group Mobile Management Forum Meeting

Invitees: The Open Group members, PCCA members, CIOs and IT Managers.

The Mobile Management Forum will be conducting the first review of their Secure Mobile Architecture Framework. This is based on the Issues and Requirements document which will be published to coincide with this event. MMF meetings are normally closed to non-members but on this occasion the meeting will be open to all delegates who attended the Tuesday or Wednesday session.

Meeting Location

The meeting will be held at the Hyatt Regency Hotel, San Francisco International Airport.

Hyatt Regency, San Francisco Airport.
1333 Bayshore Highway
Burlingame, California
94010 USA
Tel: 1-650-347-1234

Hotel details are forthcoming.

Registration

Registration will be via The Open Group web page. Details will be posted soon.

Memorandum of Understanding with The Open Group

At the last meeting on November 6, the PCCA executed a memorandum of understanding with Mobile Management Forum of The Open Group. The agreement is as follows:

Memorandum of Understanding Between The Open Group, Mobile Management Forum (MMF) and Portable Computer and Communications Association (PCCA)

The MMF and the PCCA are industry organizations that promote mobile computing and communications, and standardize related technology. The MMF and PCCA are working to establish and promote mobile computing and communication standards, and to provide future computing and



communication technologies that use wireless communications for applications that span a broad range of platforms and devices.

The MMF and PCCA agree to the following objectives to obtain synergistic effects:

- (a) Both organizations will cooperate and collaborate with each other to promote mobile computing and communications for the growth of the global market.
- (b) Both organizations will cooperate and collaborate with each other to document the requirements and issues surrounding the enterprise deployment and integration of mobile computing wireless communication technologies.
- (c) Both organizations agree to exchange information on proposals for mobile computing and communications policy, best practices and standardization.
- (d) Both organizations agree to actively support the other's activities to promote mobile computing and communications standardization.
- (e) Both organizations authorize each other to reproduce and distribute each others' public materials to their respective memberships. However, these rights do not include ownership rights of the incorporated materials.
- (f) Where Intellectual Property materials are shared between organizations for review purposes, it will be done on the understanding that the reviewing organization will provide a timely response.
- (g) Members of each organization will follow the intellectual property policy of the other organization when participating in that organization.
- (h) Both organizations agree to make available to members their intellectual property policy.
- (i) After one organization releases new specifications, the other organization agrees to update any of its released materials that happens to incorporate such specifications at appropriate times and as needed to maintain compatibility of both organizations' specifications.
- (j) Each party may terminate this Agreement for any reason upon thirty (30) days prior written notice.
- (k) Neither party shall be liable to each other for any special, incidental, indirect, punitive, patent infringement, or consequential damages.

MEMBERSHIP UPDATE

By Gloria Kowalski.

The PCCA welcomes America Online, Hughes Network Systems, Ali Sharif and Home Design Consultants the newest members since the last issue of this newsletter:

America Online. Associate level. <http://www.aol.com>. Representative: John Owens, Technical Director of Connectivity.

Hughes Network Systems. Associate level. <http://www.hns.com> Representative: Mahesh Bhave, Vice President.



Ali Sharif. Individual level. Consultant.

Home Design Consultants. Individual level. www.homedesign-consultants.com
Representative: Angela Moore, Partner.

Here is information that these companies have provided.

Hughes Network Systems. Hughes Network Systems, Inc, a wholly owned subsidiary of Hughes Electronics Corporation (HUGHES), is the world's leading provider of broadband satellite network solutions for businesses and consumers, with more than 500,000 systems ordered or shipped to customers in 85 countries. Hughes Network Systems pioneered the development of high-speed satellite Internet access services, which it markets globally under the DIRECWAY® brand. In addition, Hughes Network Systems is a leading manufacturer of DIRECTV® satellite television receivers, having shipped more than 10 million systems to date. Headquartered outside Washington, D.C., in Germantown, Maryland, USA, Hughes Network Systems maintains sales and support offices worldwide. The earnings of HUGHES, a unit of General Motors Corporation, are used to calculate the earnings attributable to the General Motors Class H common stock (NYSE: GMH). To learn more about Hughes Network Systems, please visit <http://www.hns.com>.

On 20 November 2002 Hughes Network Systems announced that Industry Canada has granted Hughes Network Systems approval to use the SPACEWAY North American satellites at 99° and 101° west longitude to provide services to, from and within Canada. This authorization permits SPACEWAY satellites to utilize Ka-band spectrum for advanced broadband services to earth stations licensed in Canada. SPACEWAY's coverage footprint will exceed 80% of Canada's population, including many geographically dispersed and underserved areas. "We are delighted with the timely approval of our SPACEWAY Fixed Satellite Service (FSS) application by Industry Canada. As a result, Hughes Network Systems can now fulfill its objective to provide next-generation broadband services for DIRECWAY customers throughout all of North America. It's notable that SPACEWAY is the first international Ka-band FSS satellite operator to be authorized in Canada," said Mike Cook, senior vice president and general manager of SPACEWAY. Scheduled for launch in 2003, with commercial service beginning in 2004, SPACEWAY will provide full-mesh connectivity for delivery of high-bandwidth, multimedia services. In addition to its unique peer-to-peer architecture, SPACEWAY incorporates many other advanced features - such as on-board processing, packet switching, spot beams, and bandwidth-on-demand. It will open up a wealth of opportunities for delivering high-speed, broadband services and new IP applications to North American enterprises. Applications include high-quality, secure videoconferencing, telecollaboration, Internet access, telemedicine, and distance learning-on-demand.

According to Mahesh Bhawe of Hughes Network Systems, and PCCA representative, the new SPACEWAY project allows Hughes to attach Wireless LANs access points to SPACEWAY terminals and to offer "Wi-Fi from the sky" -- hotspots as coverage, back-up and overlay -- for continental US to complement any other hotspot solution, or as a



stand alone solution. The system using SPACEWAY will be ready in 2004, but is being implemented as a trial with today's satellite technology. Mahesh spoke about this at the November 6 PCCA meeting, his presentation is available in the members section of the PCCA web site.

Home Design Consultants. Home Design Consultants, offers to the client a complete line of services, including but not limited to the following, Regional Planning, Urban Design and planning, Policy Planning, Permit Processing, Public Agency Support, Redevelopment Planning and Government Coordination. As a extended service we will also provide the following services to our clients. Physical Planning, Environmental Documentation, Resource Management, Permit Processing, Engineering Service, Land Development, Transportation Planning and Engineering, Water and Sewer Engineering, Cadastral and Topographic Surveying, Subdivision Mapping, Digital Mapping, Geodetic/Control Surveying, Construction Surveys and Photogrammetry.

For membership information please check our website at www.pcca.org or contact me directly by email at pcca@pcca.org. or by phone at 541-490-5140.

LAST MEETING, WIRELESS HOTSPOTS, NOVEMBER 6

This meeting focused on wireless hotspots. Forty-one people from the following companies participated:

America Online, AT&T Wireless, Broadbeam, Cisco Systems, Dell Computer, Ecutel, Hughes, IBM, Intel, iPass, Lucent, M&V Reloc, MCCI, NetMotion Wireless, Novatel Wireless, Open Group, Qualcomm, Rysavy Research, Sierra Wireless, Sony Ericsson, Strix Systems, TDK R&D, Toshiba, Transat Technologies and Wayport.

This meeting, hosted by IBM, focused on wireless hotspots. Presentations, listed in the order given, included:

- Host presentation by Peter Lee, IBM. A Perspective on Wireless Hotspots.
- Peter George, Open Group. Mobile Management Forum.
- Dang Nguyen, Toshiba. Hot Spot Product and Service.
- Dan Lowden, Wayport. Market and Technical Drivers and Inhibitors for Wi-Fi in the Public Space.
- Sherelle Farrington, Cisco. PWLAN Architecture & Integration with Cellular Networks.
- Jon Russo, iPass. Enterprise Connectivity Services - Secure Broadband & Wireless Access.
- Mahesh P. Bhave, Hughes. Direcway Wireless LAN Services.
- Michael Fekety, Lucent. Secure Mobile Data Solutions for Enterprises (SMDSe).
- Amos Gregory, Cisco. 802.11 Technology with Networks in Motion.
- John Baker, Transat Technologies. Seamless Integration of WLAN with 3G and GSM Networks.



Notes, presentations and the minutes (which include meeting conclusions) are available in the members' section of the PCCA web page at <http://www.pcca.org/private/members.htm>. If your company is a PCCA member and you do not have a user ID and password, please send a request to the PCCA. If you do not know whether your company is a member, check <http://www.pcca.org/membership/members.htm>.

PCCA MEETING, ENTERPRISE APPLICATIONS, JULY 16, 17

This meeting focused on the use of enterprise applications with cellular data networks. There was also a GPRS workshop held. Thirty seven people from the following companies participated:

Alice Systems North America, AT&T Wireless, Hewlett-Packard, Hitachi, IBM, Intel, MCCI, Medtronic Physio-Control, Megisto Systems, Microsoft, Motorola, NetMotion Wireless, Nortel Networks, Novatel Wireless, Rysavy Research, Sierra Wireless and VoiceStream Wireless.

Highlights of the meeting included:

- Presentation by Tom Kurata, Voicestream/T-Mobile on network deployment and features.
- Presentation By Bob O'Hara, Microsoft on wireless initiatives for Pocket PC
- Presentation by Igor Kostic, Microsoft, Wireless Architecture In Windows Platforms
- Microsoft's planned support for GPRS in Windows
- Issues with using PPP as an interface to wireless devices
- Debriefing of prior day workshop using VoiceStream and AT&T Wireless GPRS networks
- VPN performance over GPRS, including overhead and reliability
- Minimum network performance requirements for Microsoft enterprise applications
- Improvements to TCP stack in Windows XP for wireless
- Pros/cons of different application approaches, including middleware, client/server, web based and terminal server
- Presentation on migration To IPv6, Tim Moore, Microsoft

Thanks to Intel for hosting this meeting, to VoiceStream and AT&T Wireless for hosting their GPRS networks, and to Motorola and Sierra Wireless for supplying devices for the workshop.

2003 MEETINGS

The PCCA meets once per quarter. Meetings for 2003 are currently planned as follows:

Feb 4-6, 2003. San Francisco, CA. Special joint meeting with The Open Group. See above.

Q2, 2003. Planned topic: EDGE technology in detail.



Q3, 2003. Planned topic: wireless platform comparison, including .NET Compact, Java and BREW.

Q4, 2003. Location to be determined. Planned topic: Tethering: IR, USB, Bluetooth.

For any company wishing to host a meeting; please send an e-mail to the PCCA. Why would you want to host a meeting? There are two reasons. First, it is often less expensive to host a meeting in your local area than to travel to one. Second, the hosting company is invited to present information about its products and services in a host presentation at the beginning of the meeting.

For the latest information on PCCA meetings and other events, see <http://www.pcca.org/news/news.htm>.

SUMMARY OF CURRENT WORK

This section summarizes the work currently underway by the standards and architecture committee.

- ❑ **Quarterly Meetings.** These meetings are used to plan our work, provide updates on work projects, and then focus in depth on technical issues facing the industry. At each meeting we analyze one or more major topics using a symposium format that consists of technical presentations followed by discussion.
- ❑ **Interoperability Workshops.** The PCCA regularly holds interoperability workshops that address usage, development, and deployment of mobile devices, networks, and applications. We have held GPRS and CDMA2000 1XRTT workshops so far, using network provided by AT&T Wireless, Cingular Wireless, T-Mobile and Verizon Wireless.
- ❑ **Wireless Extensions to NDIS.** These objects, which now include support for GPRS, are available in Microsoft Windows. We are working with Microsoft to examine how the OS, protocol stacks, and applications can best take advantage of these objects. Future appendices will define support for UMTS and CDMA2000.

ABOUT THIS NEWSLETTER

This is the newsletter of the Portable Computer and Communications Association. Effective 2000, this newsletter has been distributed via e-mail. The purpose of this newsletter is to keep PCCA members current with the activities and directions of the PCCA. This newsletter is published on a quarterly basis and is distributed to everybody on the PCCA mailing list, including both PCCA members and non-members. Prior copies of this newsletter are available at <http://www.pcca.org/news/news.htm>.

We welcome contributions. If you have any topics or articles you would like to contribute, please contact us at pcca@pcca.org. The editor of this newsletter and chair of the PCCA



Standards and Architecture Committee is Peter Rysavy, 1-541-386-7475. For questions about PCCA membership, please contact PCCA Director Gloria Kowalski, pcca@pcca.org, 1-541-490-5140.