



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

WiFi From Airport to Your business needs





Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

● Introduction : Why Wi-fi ?

- Good Penetration of the latest devices wifi enabled: I mate PDA, Nokia Communicator, Motorola, Play Station, etc
- High progress of the data users needs against voice
- Mobility market with business men travelling in the region with main meeting areas in the hotel lobbies, convention centres...and youth gathering in shopping malls.
- High volume of sessions noticed in our hotspot network in the middle east, in a very short period of time



Network Operator Services

wireless IP access solutions

global roaming

PicoPoint Technologies

GateKeeper: Cases

DUBAI INTERNATIONAL AIRPORT: High volume traffic and multiple billing channels serviced by PicoPoint Technologies

- Dubai International Airport is considered the Middle East's premier and busiest airport. In 2004, a total of 21.7 million passengers passed through the airport registering a 20.2% growth over 2003. The Airport Council International traffic statistics have ranked Dubai International Airport as one of the fastest growing airports in the world. According to forecasts the airport is expected to handle around 60 million by the year 2010.
- PicoPoint Technologies delivers the complete Operational and Business Support services and manages the added value of all inbound roaming customers of mobile carriers, ISP's and remote access providers for their multiple Airport Wi-Fi hotspots. High volume traffic management services and multiple billing solutions are essential to making the service a success, these are provided by PicoPoint Technologies' ASP service, GateKeeper. PicoPoint Technologies' business unit GBI enables roaming and associated billing and clearing for the Dubai International Airport towards its roaming partners.





Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

GateKeeper: HotSpot Management

- Full Control: DIA have full control over the service through the GateKeeper dynamic Management Portal.
 - Taking control of your network is key for Network Operators. GateKeeper is designed to manage wireless or wired networks remotely. Networks can be added, edited, grouped or removed via the central GateKeeper portal.
 - The dynamic Management Portal is a web-based tool through which you can achieve the following:
 - Review usage at its locations and/or download usage data
 - Set the price at your location
 - Review your account
 - Customize the look and feel of the user interface at your locations
 - Rapidly deploy new locations



GateKeeper: User Management

Manage your Customers

- GateKeeper provides you with a dashboard feeding essential information:
 - What Credit Card payments have been made?
 - What access methods are used?
 - How many sessions are initiated?
 - What Billing channels are used?
 - What is the roaming usage?
 - How much data is used?
 - Who is online?
 - Statistical Analysis
 - User Profiles

Rows: 1 - 20 of 20 | Print

Start Time	Location	Product Ordered	Payment Method	Charge	Currency	User
04-09-27 22:52:38	agheraton	30 minutes metered pass	Credit Card	66.00	ZAR	
04-09-27 21:16:45	agheraton	30 minutes metered pass	Credit Card	66.00	ZAR	
04-09-27 19:10:51	manchesterairport	One Time Access	Credit Card	3.10	GBP	
04-09-27 17:57:42	manchesterairport	One Time Access	Credit Card	1.50	GBP	
04-09-27 17:18:33	manchesterairport	One Time Access	Credit Card	3.20	GBP	
04-09-27 17:03:55	manchesterairport	One Time Access	Credit Card	4.10	GBP	
			Credit Card	24.75	USD	
			Credit Card	1.50	GBP	
			Credit Card	6.00	EUR	

Search overlay:
 From Date: 2004 Sep 27
 Location: (None)
 Search Reset

Version: 4.2.02 You are logged in as: Koerts - Admin

Start Time	User	Location	Access Method	Pass ID	Duration	Bytes-Up	Bytes-Down
004-09-28 11:10:26	anonymous	absham	1 hours metered pass	008655146557	00:02:00	14258	133758
004-09-28 11:08:30	anonymous	moshelha	5 hours metered pass	0047766618829	00:04:00	33300	92969
004-09-28 10:53:26	shot@gbis	schthamar	1 months pass	0053316382695	00:18:25	437866	1857631
004-09-28 10:50:25	anonymous	abibcc	1 hours metered pass	0052791491593	00:22:00	2640267	2937366
004-09-28 10:49:20	chango@gbis	agheraton	30 minutes metered pass	0049900138874	00:24:00	353917	3023358



GateKeeper: Access Management

Access Methods

- Choose per HotSpot what access methods are available at which price
 - Duration – for how long
 - Validity – until when
 - Sessions – how many sessions
 - Data – how much data
 - Speed – how fast
- Choose per HotSpot what billing channels are available
 - Credit Card – American Express, Diners, MasterCard, Visa
 - Prepaid – Voucher
 - Postpaid
 - Hotels room billing
 - SMS & Mobile phone

The screenshot displays the GateKeeper web interface. At the top, there are navigation tabs: 'Hotspots', 'Locations', 'Vouchers', 'Sessions', 'Radius', and 'System'. Below these are buttons for 'Purchases', 'Browse Vouchers', and 'Generate Vouchers'. A search section includes a 'From Date' field with three dropdown menus and a 'Location' dropdown set to '(None)'. There are 'Search' and 'Reset' buttons. Below the search section, there is a 'To Date' field with three dropdown menus and a 'View' dropdown set to 'Show summary by day'. A table shows 'Rows: 1 - 20 of 1,309' with 'Previous' and 'Next' links. A table with columns 'Charge' and 'Currency' lists values: 16.0 EUR, 18.0 GBP, 76.0 USD, 28.0 GBP, and 24.0 USD. A summary table at the bottom right shows 'Day', 'Voucher Orders', and 'One Time Access Orders' for dates from 2005-01-09 to 2005-01-10.

Day	Voucher Orders	One Time Access Orders
2005-01-10	0	4
2005-01-10	0	9
2005-01-10	4	1
2005-01-09	0	9
2005-01-09	3	0



Network Operator Services

wireless IP access solutions



PicoPoint Technologies

GateKeeper: Web Integration

- User Experience on your website
 - GateKeeper provides your customers information on your Network

Your HotSpot lists and location information

Searchable by category, country, city and name

Hotspot Location Search

Name: Country:

Category: City:

Hotspots found: 57 [prev] 1 2 3 4 5 6 [next]

Name:	Category:	City:	Country:	Status:	Certification:
Amsterdam RAI - Rockefeller Restaurant	Convention Center	Amsterdam	Netherlands		
Amsterdam RAI Auditorium	Convention Center	Amsterdam	Netherlands		
Amsterdam RAI - Holland Hall Restaurant	Convention Center	Amsterdam	Netherlands		

Amsterdam RAI - Rockefeller Restaurant

Hotspot Information

name: *Amsterdam RAI - Rockefeller Restaurant*

category: *Convention Center*

website: <http://www.raiwireless.com>

address: *Europaplein 22, Amsterdam 1078 GZ*

country: *Netherlands*

status: *active*

certification:

description:

WLAN provider: *RAI Wireless*

GateKeeper: Web Integration

User Experience on your website

- GateKeeper provides your customers information on their profile, billing information and credit

User login and personal data

Credit information on:

Duration
Data
Value
History

Valid at:	Purchased on:	Time left:	% Left
hutspot	May 31, 2005	Expired	<input type="checkbox"/>
raiwireless	Jun 28, 2005	No credits left	<input type="checkbox"/>
viawia	Jun 22, 2005	171 days, more than 23 hours	<input checked="" type="checkbox"/>

Valid at:	Purchased on:	Initial time:	Time left:	% Left
viawia	Jun 22, 2005	180 days	171 days, more than 22 hours	<input checked="" type="checkbox"/>

[go back to overview](#)

Pass Information

Initial Time: 180 days
 Time Left: 171 days, 22 hours, 56 minutes, 5...
 First Used At: unknown on June 22, 2005
 Expiration Date: Mon Dec 19 14:25:07 CET 2005
 Valid At: viawia

Edit Contact Information

*Email Address:
 *Phone Num:

Edit Address Information

*Name:
 *Street: *No:
 *Zip Code: State:
 *City: *Country:

Options

Preferred Currency:

[Change your password](#)



Network
Operator
Services

wireless IP
access solutions



PicoPoint Technologies

GateKeeper: End to End Solution

Easy to Access

Nomadic or
Mobile User



Laptop





Network Operator Services

wireless IP access solutions



PicoPoint Technologies



**Nomadix AG-2100w
Wireless Access Gateway**

**Nomadix AG 3000
HotSpot Gateway**
Hotel Billing System (PMS)
RADIUS

**Nomadix AG 5000
Universal Subscriber Gateway**



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

How can you adapt this to your company:

- Technical team for deployment and management
- The relationship with the ISP
- A flexible pricing model
- Access Points and Gateway
- Gatekeeper choice
- Marketing model

The screenshot shows a web browser window displaying the Saudi Zones website. The page has a blue header with the 'SAUDI ZONES' logo. Below the header, there is a main content area with a light blue background. On the left, there is a graphic of a laptop and a coffee cup with the text: "(Welcome to Saudi Zones) You are in one of Saudi Zones locations enjoy surfing the internet Wirelessly." On the right, there is a registration form. The form is divided into two sections: 'Registered Users' and 'Trial Users'. The 'Registered Users' section has fields for 'Username:' (with a dropdown menu set to 'GBIA'), 'Password:', and a 'Forgot your password?' link. Below this is a 'New users, sign up here:' link and a 'submit' button. The 'Trial Users' section has a field for 'Enter a voucher number:' with a dropdown menu set to 'USD 1.50'. Below this is a 'Pay as you go: (Min 15 minutes)' section with a radio button selected for 'Price per minute: USD 1.50'. At the bottom of the form, there is a section for 'Or purchase on-line pass:' with the text 'No passes defined at this location.' and a 'submit' button. At the bottom of the page, there are logos for 'WiFi ZONE', 'GBIA', and 'شبكة نت Shabakah.Net'.



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

- Picopoint Business Model for gatekeeper is based on a ASP model
 - you don't invest in hardware
 - you don't invest in software
 - you don't invest in maintenance and hosting
 - you don't invest in upgrading and adapting your system to the new devices
 - you don't have any CAPEX
- You just have an OPEX, based, on the volume of usage
- You have a flexible solution with possible adaptations to your requests
- You benefit from all the new features requested by the users of our 15 000 hotspots.



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

Annexes

● Extra slides



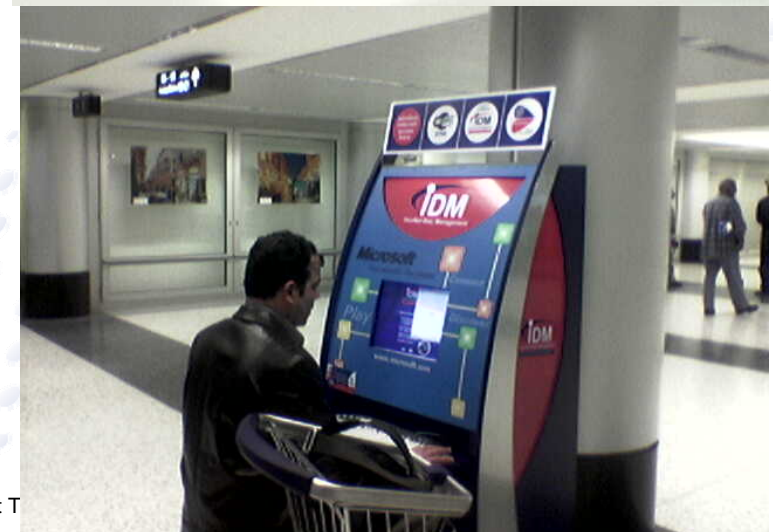
Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

Examples of Promotion



right © 2005 PicoPoint T



Network
Operator
Services

wireless IP
access solutions



PicoPoint Technologies

Examples of Promotion



Wireless Internet Card

WIRELESS INTERNET

maxspot (10-1)

30 min. / Dh 25

Instructions

maxspot The voucher number is hidden

- Right click on the wireless network icon in your task bar
- Select Maxspot from the available list and press connect
- Launch your Internet browser
- Type in your voucher number
- Press GO and browse at your leisure
- Logout to end session
- 60 minutes duration are available for one year after first connection

60 min.

Customer Support # +971 4 216 1313



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

PicoPoint Technologies

- PicoPoint Technologies operates since 2002 in the wireless field, enabling Wireless ISPs, Carriers and enterprises to offer various wireless IP services:
 - Services Provider for Network Operators (WISP's) and Mobile Carriers / ISP's in the Wireless IP Field (WiFi, WiMAX and more...)
 - Network Operator Service called GateKeeper: the state-of-the art OSS/BSS, Billing and Roaming services of choice for Wireless ISP's (Hotspot Operators)
 - Roaming, Clearing & Settlement Service GBIA™ (Global Broadband Internet Access), Services Access for more than 200 million Customers of Cellular Carriers and ISP's on more than 14.000 Hotspots and Hot-zones
 - Technology leader in the Wireless Internet Domain



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

GateKeeper Services

GateKeeper: overview

- **AAA Services:** critical user login authentication, charging authorisation and session usage accounting functionality
- **Payment Options:** GateKeeper allows for multiple payment options on each location – Credit Card, Vouchers, Post Paid, Hotel Solutions, etc...
- **Billing and Settlement:** GateKeeper calculates the revenue generated at the end of each month and distributes credit or debit notes to WISPs, Payment partners, and Roaming partners
- **Management Portal:** PicoPoint Technologies' customers have full control over the service through GateKeeper's dynamic Management Portal
- **NOC and Network Monitoring:** a completely serviced back-office solution includes a complete Network Operations Centre (NOC), a centralised service that enables you to fully utilise your resources
- **Customer Care:** 24x7 access to world class technical customer support



Network
Operator
Services

wireless IP
access solutions

global
roaming

PicoPoint Technologies

Contacts

- Picopoint Middle East
- Houssam Salha
VP Marketing & Business Development
- Palms Building - 6th Floor-Caracas - Beirut - Lebanon
- Phone: + 961(1) 742896 - Fax: +961(1) 742894