



Everyplace Wireless Gateway Version 2.1

Sales Education 7/12/01

Eric Otchet

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Whenever,
However...



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Agenda

- Introduction (market and strategy)
- Customer requirements
- Product offering
- Customer benefits
- Roadmap
- Sales approach
- Competition
- Pricing
- Sales tools
- Key contacts/Sales support
- Closing

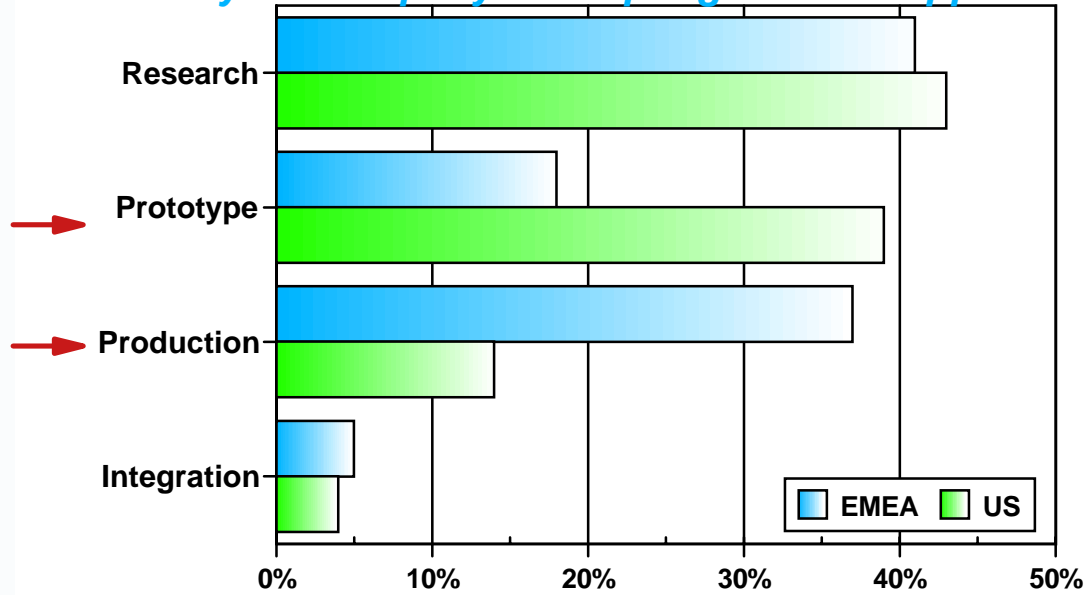
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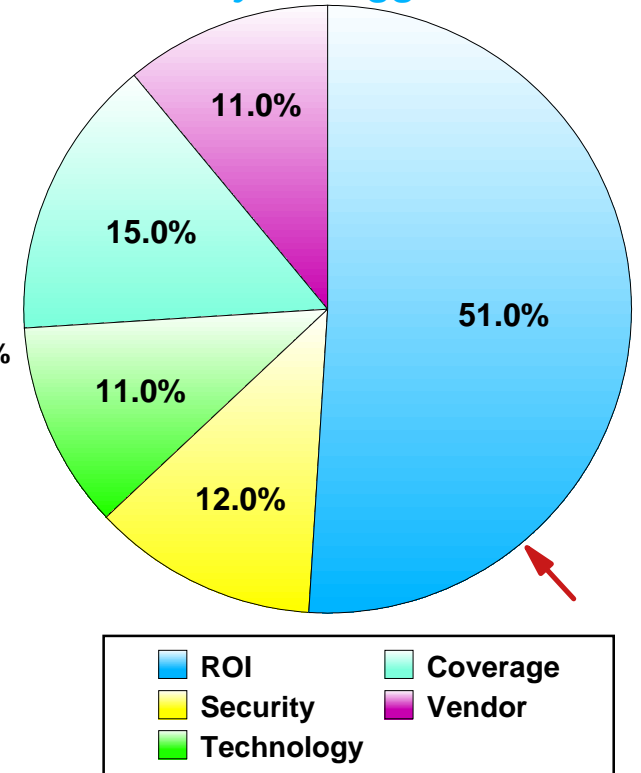


Enterprise Market Maturity

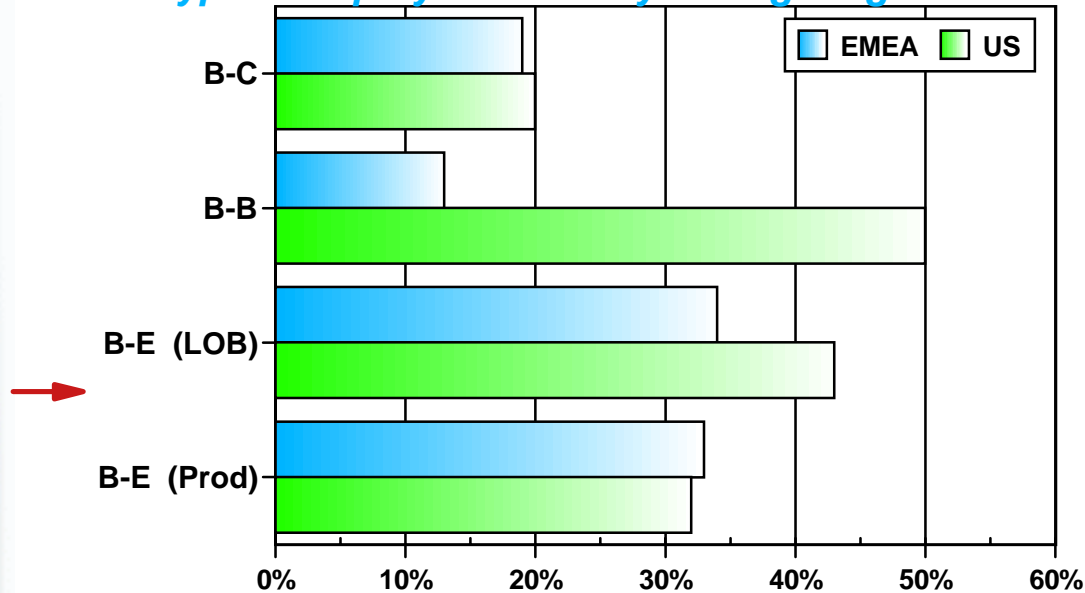
Where is your company in adopting wireless applications?



What are your biggest concerns?



What type of deployments are you targeting?



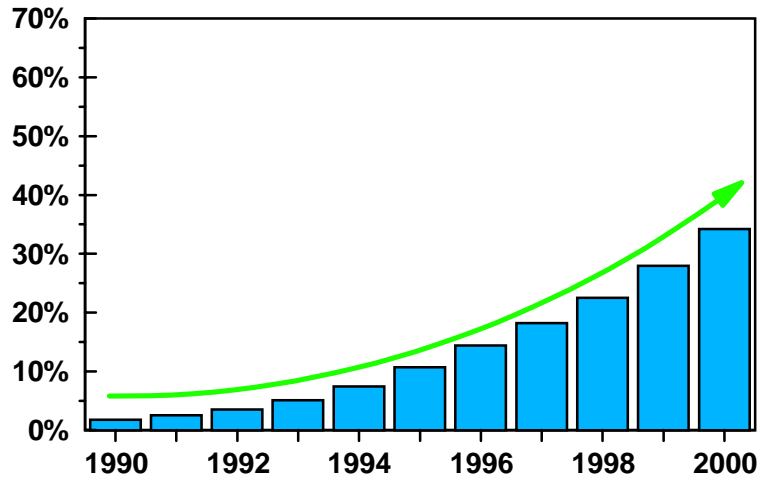
Source: Giga Information Group
2/23/2001 Survey Summary



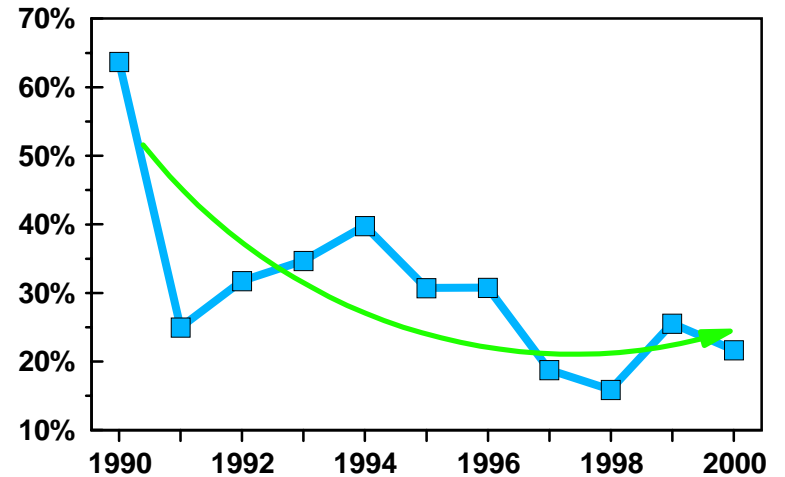
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US Carrier Environment

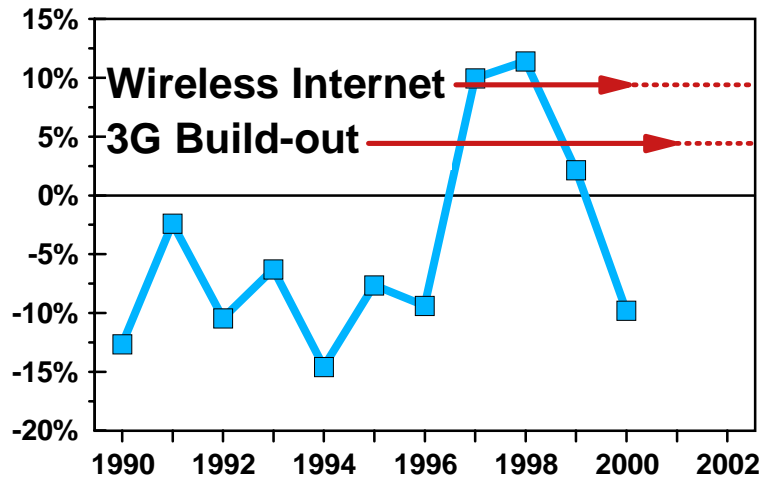
Market Penetration (Total Population)



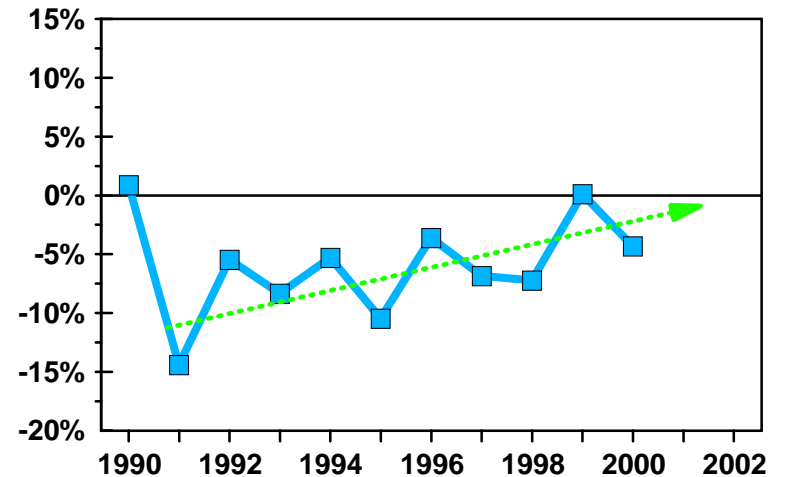
Y-T-Y Revenue Growth



Y-T-Y Capital/Sub Growth



Y-T-Y Revenue/Subscriber Growth



Source: CTIA





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IBM Strategy for Pervasive Computing

- Continue e-business market leadership
 - ▶ Software
 - ▶ Hardware
 - ▶ Services
- Build on what we've learned
 - ▶ Open standards
 - ▶ Industry wide consortiums
 - ▶ Partnerships as a requirement of success
 - ▶ Reliability, Scalability and Security "architected in"
- Protect our customers' legacy investments
- Ease our customers' pain

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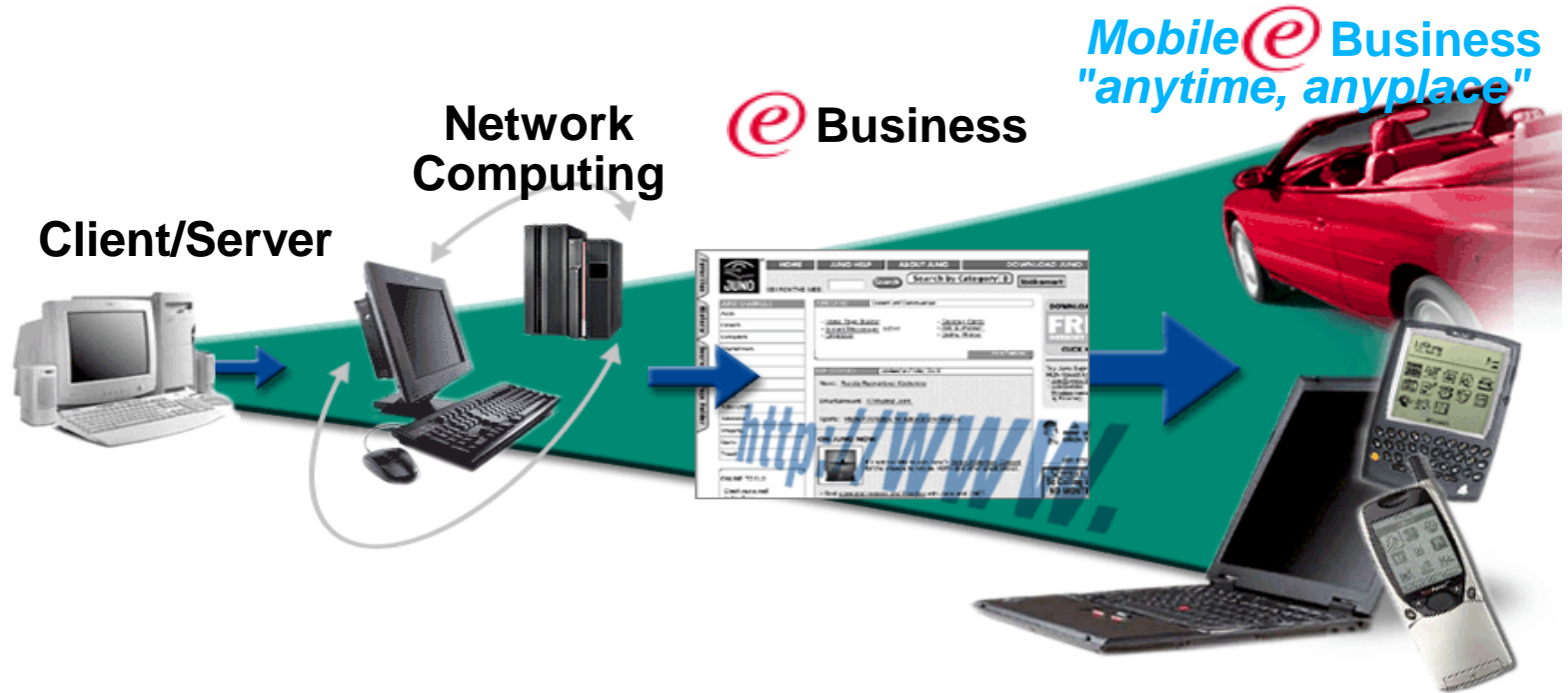
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What is Pervasive Computing

Pervasive Computing is a natural progression

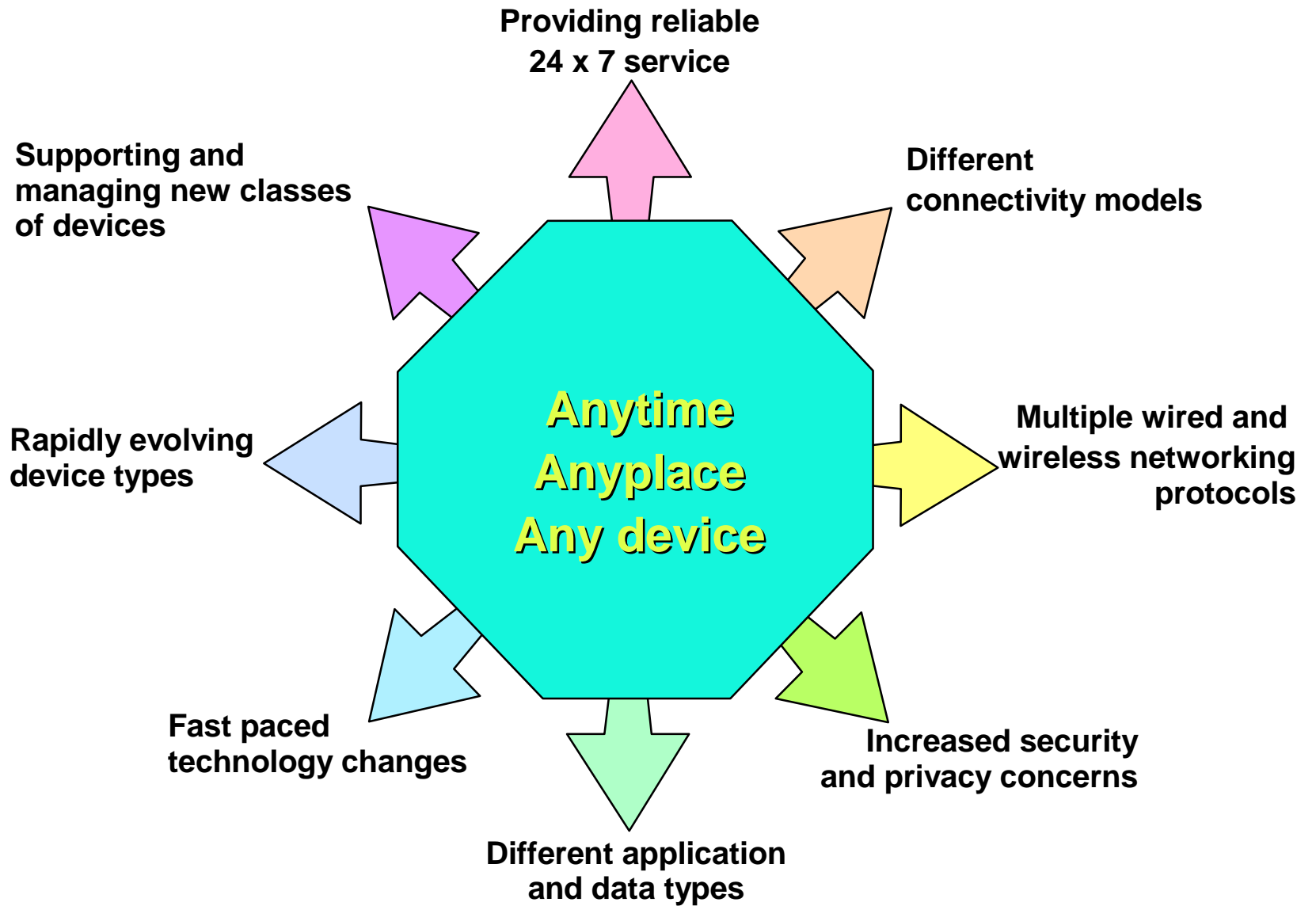


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Challenges





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Wireless Communication Challenges

- Limited bandwidth
- High latency
- High cost
- Poor reliability
- Security risks
- Many world-wide network technologies
- No standard programming interface
 - ▶ Air interface protocols often differ from wireline interface protocols
 - ▶ Wireless networks often use different addressing schemes

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Everyplace Wireless Gateway: Business Challenges / IBM Solutions

Business Challenges

EWG provides

CTO / CIO

To have a flexible, e-business infrastructure which can extend the reach of enterprise applications to the mobile wireless workforce under increasing budget pressures

An 'off the shelf', standards based flexible product that supports the extension of enterprise applications to current and future wireless devices over a wide variety of networks, all while protecting existing investments.

**LOB
Manager
(Service)**

To improve customer service demands by providing field service technicians with anytime, anyplace access to information and services

The ability to securely extend e-business to wireless devices and reach customers and employees on the right device and network based on demand.

**System
Integrators**

To expand revenue streams and reduce the cycle time of integrating products into solutions for multiple environments.

A standards based software infrastructure product for taking e-business mobile giving the SI additional opportunities with both new and existing customer sets.





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What is Everyplace Wireless Gateway ?

A gateway by definition, is something that bridges dissimilar environments.

Everyplace Wireless Gateway:

- allows IP based applications to run unchanged over non-IP based infrastructures.
- enables applications to transparently adapt to the unique characteristics of wireless networks.
- enables security and optimizations to be seamlessly added to applications used on a mobile device.

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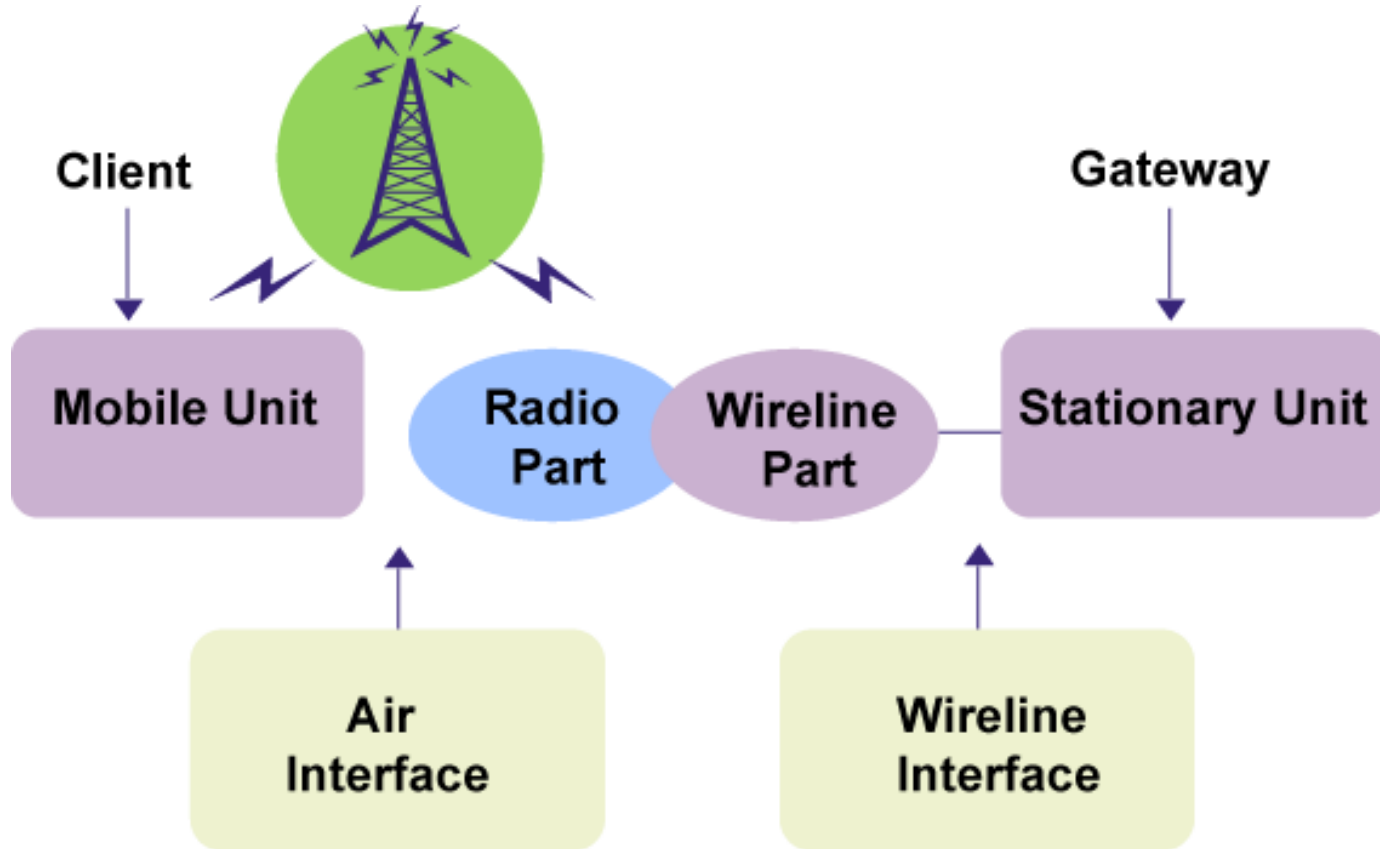
How would a company use Everyplace Wireless Gateway?

- To enable secure optimized connections from a mobile device to any application.
- To allow the flexibility to use different wireless networks based on coverage/pricing without changing existing applications.
- To allow the flexibility to use different mobile devices based on the users needs/preferences.
- To implement a wireless infrastructure that is standards based, extensible and highly scalable.
- To use one product to support multiple wireless capabilities like WAP, Messaging and Wireless Remote Access.

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The Wireless Network Environment

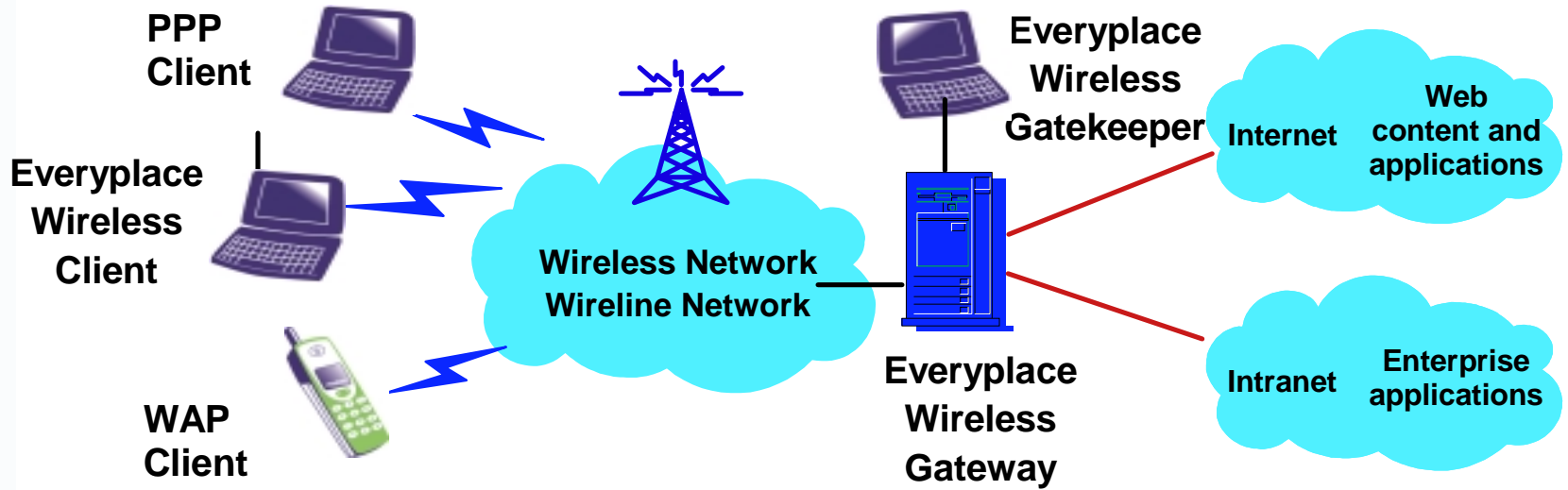


Basic Wireless Network Configuration



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Everyplace Wireless Gateway



Public Packet-Radio Networks:

CDPD and CS-CDPD

DataTAC 4000 (US)

DataTAC 5000 (Europe)

Modacom (Germany)

DataTAC 6000 (Asia)

DataTAC/IP

GPRS (GSM)

Mobitex (Worldwide)

Mobitex/IP (US)

PDC-P (Japan)

Cellular Networks:

AMPS and N-AMPS

CDMA

GSM

iDEN

PCS 1900

PDC (Japan)

PHS (Japan)

TDMA

Internet Connections:

Cable Modem

DSL

ISP

Dial Connections:

DIAL/TCP

ISDN

PPP

PSTN (POTS)

Private Packet Networks:

Dataradio

Motorola Private DataTAC

Satellite Network:

Norcom

LAN Connections:

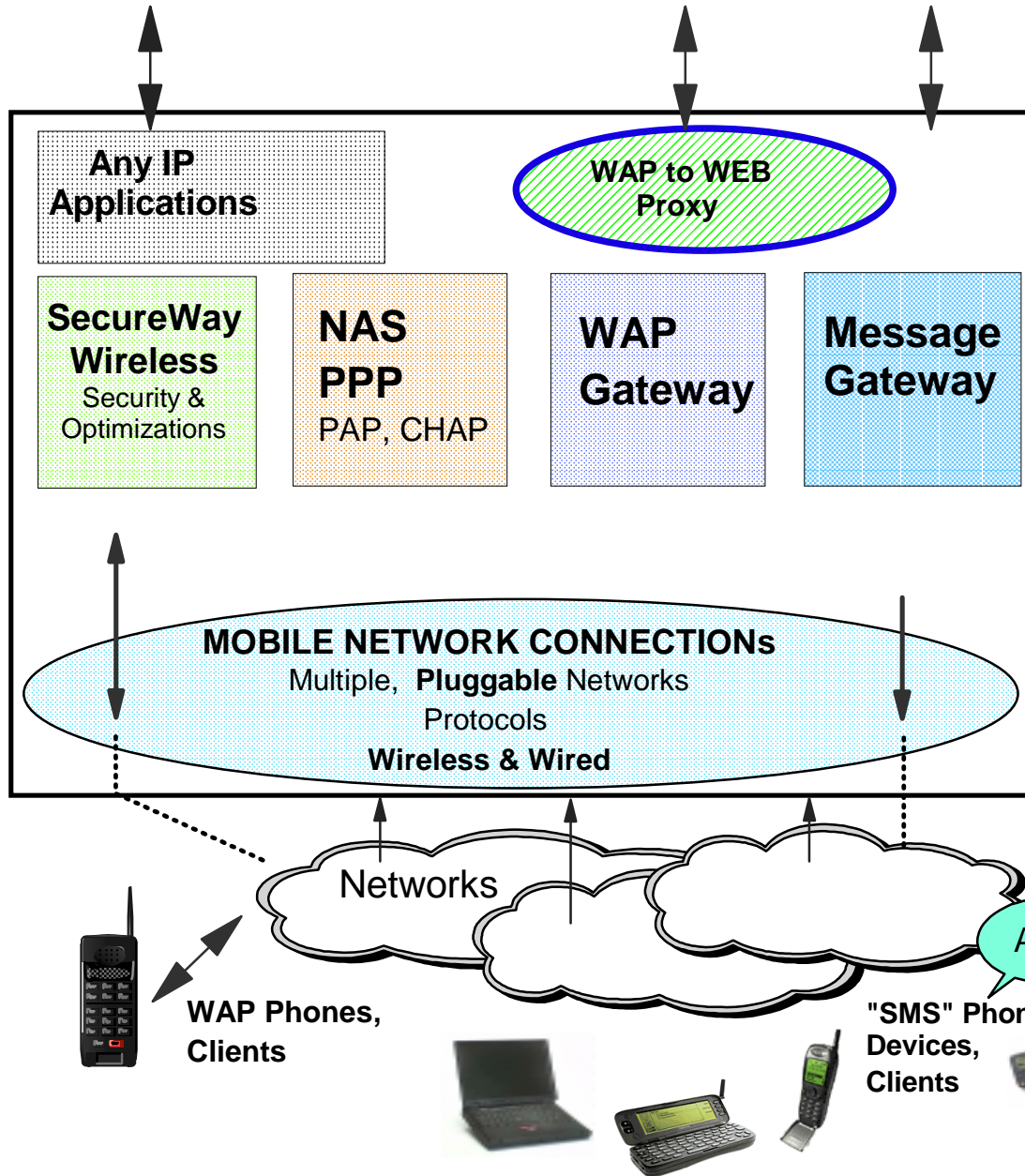
Ethernet

Token Ring

Wireless LAN



Everyplace Wireless Gateway



The *Everyplace* Wireless Gateway

- WAN and LAN
- WAP
- non-WAP
- Short Messaging
- Wireless IP (optimized & secure)
- Wired (optimized & secure)
- Standard PPP



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Everyplace Wireless Gateway Version 2.1

- Provides enterprise level security with authentication and encryption
- Runs all of your existing TCP/IP applications over wireless networks

- Supports devices that implement the Wireless Application Protocol (WAP) specification

- Supports WAP PUSH and SMS messaging through the Messaging Gateway

- Significantly improves wireless network performance while reducing costs through network optimization
- Configurable logging of comprehensive accounting information
- Supports clustering of Gateways for larger systems and backup
- Provides a worldwide wireless solution wherever you are through support of international wireless network technologies
- A single Gateway supports any combination of networks (both wired and wireless)

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Everyplace Wireless Gateway: Key features / benefits

Feature	Function	Benefits
Worldwide network technology support	Delivers applications to mobile users over a wide variety of wireless and wired networks	Provides solutions regardless of the network type
Messaging gateway	Supports WAP PUSH and SMS messaging	Gets information to individuals when and where they need it
Optimization	Improves network response time and reduces the amount of data transmitted with data compression and protocol optimization	Data exchange between application and user is faster and more efficient
Security	Provides two-way user authentication and data encryption	Lets authenticated users access data securely over unsecured networks
WAP support	Allows standards based support for devices with WAP browsers installed	Enables users to access information using wap enabled mobile devices
Scalability	Supports clustering of Gateways for larger systems and backup	Allows for dynamic addition of gateways to handle increases in traffic without shutting the service down

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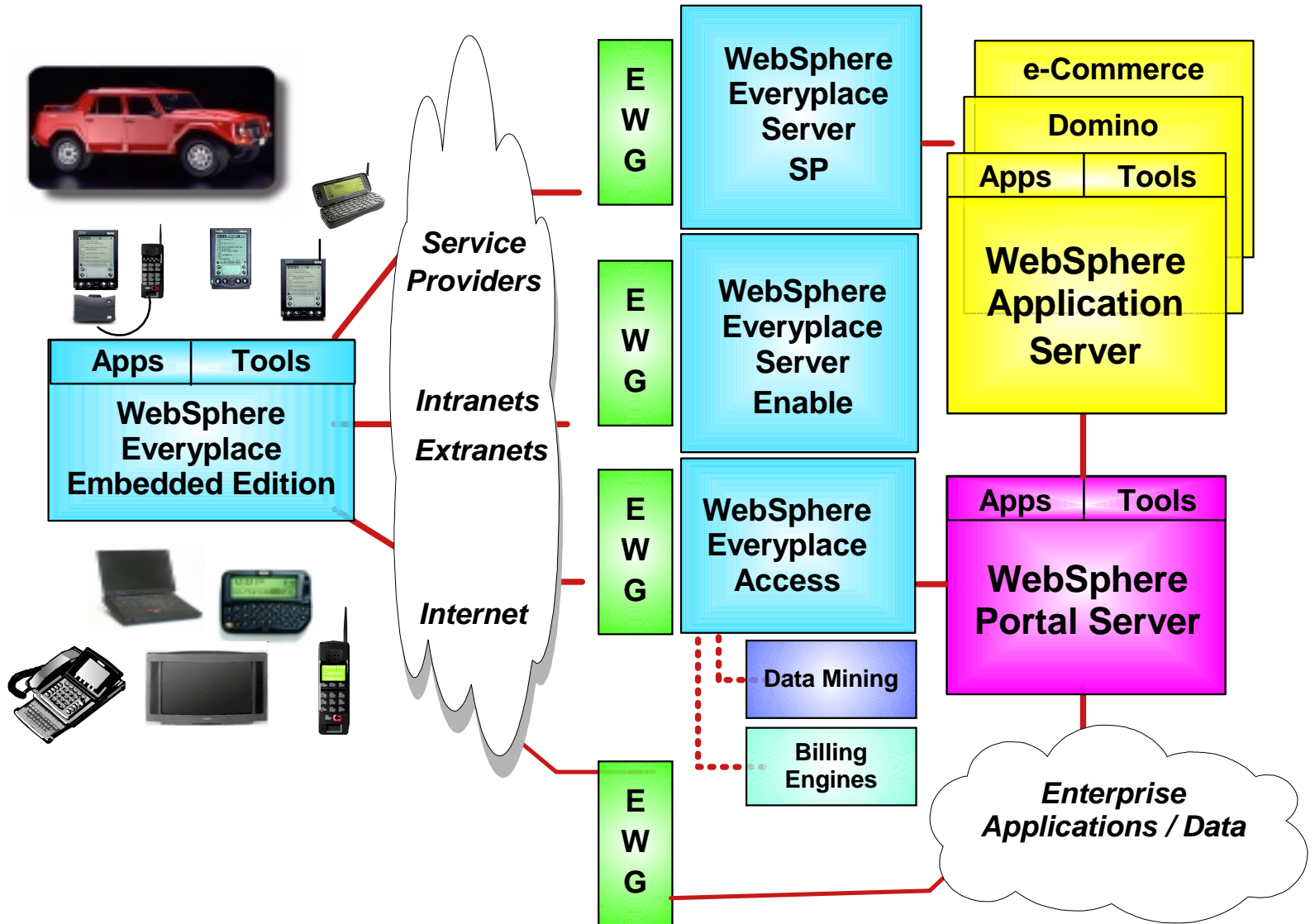
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Everyplace Wireless Gateway in IBM's End-to-End View





Roadmap

Everyplace Wireless Gateway

to:

- enable secure, optimized, wireless access to existing applications using full size devices like laptops.



Websphere
Everyplace
Access

to:

- add new devices with different screen sizes like mobile phones and PDA's

or

Websphere
Everyplace
Server
Enable
Offering

to:

- add a platform for mobile application development
- add device management functions and integration with existing authentication functions

or

Websphere
Everyplace
Server
Service
Provider
Offering

to:

- add new functions like location based services, subscription management and intelligent notification in an environment where scalability is critical

Start simple and grow



Sales approach

Everyplace Wireless Gateway sales opportunities

	Description	Detail Definition	Sales Example	Typical User	Typical Industry
Professional Productivity- Mobile Office	Tools to enable productivity of mobile workers	Communications Organization Secure Remote access to company information	Laptops or handheld devices with Wireless Client or WAP enabled mobile phone	Corporate mobile employee	Horizontal cross-industry application
Professional Productivity - Sales / Field Force Automation	Tools to enable customer service via face to face representative, over public or private networks	Contact Management Real-time authorization Customer inquiries Customer data entry	Laptops or handheld devices with Wireless Client	Customer facing employees	Industries with customer care staff , i.e.: Insurance Retail Pharmaceutical, Police Depts.
Operational Productivity	Tools to enable mobile field workers	Asset management, inventory tracking, workflow, ordering Workforce Management Fleet Management	Custom handheld devices with Wireless Client	Field Operations	Chemical & Petroleum Healthcare Utilities & Telecom Transportation
Subscriber Access	Ability to enable subscribers to have access to web content , SMS messaging services and wireless data access from mobile phones or handheld devices	Enable consumers to use WAP browser and receive SMS messages on mobile phones thereby increasing usage to generate revenue	Wireless Gateway configured to support Wap and Messaging functions	Consumer	Service Providers



Everyplace Wireless Gateway Competition

Company / Product	Strengths	Weaknesses
Nokia Product: Nokia Activ Server	<ul style="list-style-type: none"> • Early Mover • Install base with Carriers • Handset Manufacturer • Consumer Brand 	<ul style="list-style-type: none"> • WAP only • Struggle with carriers over end consumers • 3rd Party dependence for services
OpenWave Product: OpenWave System Services	<ul style="list-style-type: none"> • Early leader in browser and gateway • US install base • Broad partnerships 	<ul style="list-style-type: none"> • Carrier/WAP only focus • Limited success in EMEA • Head-to-Head competition with major handset manufacturers • 3rd party dependence for services
Ericsson Product: WAP Gateway	<ul style="list-style-type: none"> • Install base with Carriers • Handset Manufacturer • Consumer Brand 	<ul style="list-style-type: none"> • WAP and messaging only • Carrier focused • 3rd party dependence for services
Broadbeam Product: Axio Platform	<ul style="list-style-type: none"> • Enterprise focused • Remote access focused • Good ISV support 	<ul style="list-style-type: none"> • Application changes REQUIRED to use intelligent clients • New API must be used on client and on back-end to implement functions • 3rd party dependence for services



Pricing

Value Units - What are they ?

- Value units are like a Tivoli point or MQ capacity unit
- Value units provide a common licensing vehicle for products with multiple chargeable elements
 - ▶ i.e.. volume-tiered subscribers for the WES family products
 - ▶ Value units are product specific and not transferable to other products
- Licensing vehicle to reduce complex ordering structures to a single orderable.
 - ▶ Provide increased customer flexibility and reduces IBM ordering systems complexity
 - ▶ Recognize the customers' previous investments
- Customers purchase a pool of value units to cover the current environment plus anticipated growth (if desired)

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Pricing

Everyplace Wireless Gateway is priced on a per user basis with Value Points. Users are defined as :

- **Wireless Client Users:** devices that have the Wireless Client software installed and are used to access the Wireless Gateway.
- **Wap Device Users:** devices that use a WAP browser to access information through the Wireless Gateway. These could be, but are not limited to, Wap phones and/or devices that use a Wap browser.
- **Messaging Gateway Users:** users defined by the individual destination of messages sent by the gateway. A destination could be, but is not limited to, a pager or other device capable of receiving a short message.

To find the total number of user licenses required you add the number of Wireless Client Users plus the number of WAP Device Users plus the number of Messaging Gateway Users.

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Pricing Example 1.

- A service provider has 2000 subscribers. 1000 subscribers have phones with a WAP browser on it and are enabled by the service provider to access content with the browser. Each of these subscribers are also entitled to receive messages from the Messaging Gateway sent to the phone.

This service provider would need to buy:

0 (Wireless Client users)
1000 (Wap Devices Users)
+ 1000 (Messaging Gateway Users)
=====
2000 total user licenses

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Pricing Example 2.

- An enterprise customer has 1000 employees. 500 of these employees are equipped with mobile devices that have the Wireless Client installed. All 1000 employees have phones with Wap browsers and they all can receive short messages. In addition, there are 500 employees that also carry another device (a pager) capable of receiving messages from the Messaging Gateway.

This enterprise customer would need to buy:

500	(Wireless Client Users)
1000	(Wap Device Users)
+ 1500	(Messaging Gateway Users)
=====	
3000	total user licenses.

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Example:

Everyplace Wireless Gateway entry level price for 50 users

(**280** value units required per **50** users)

	Price per Value Unit (Level A)		Value units for 50 users	Total Price
Passport Level A price <u>without</u> subscription and Service	\$25	X	280	\$7,000
Passport Level A price <u>with</u> 1 year subscription	\$28	X	280	\$7,840





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Sales Tools

Where can you get more information?

- w3.ibm.com/pvc

What can you find there?

- Collateral
- White Papers
- Press announcements
- Demos
- More in-depth product information
- Application Briefs / Reference Information
- Links to other IBM wireless / mobile related sites

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Key contacts / Sales support

Product manager: Eric Otchet
Eric Otchet/Cranford/IBM@IBMUS
908 931- 4437 (tie 391-4437)

Sales Support

Technical Sales Support

	Sales Support	Technical Sales Support
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EMEA	Derek Ashmore Derek Ashmore/UK/IBM@IBMGB 44-1962-815798 (tie7-245798)	Jean-Michel Corrieu Jean-Michel Corrieu/France/IBM@IBMFR 33-4.9211.4711 (tie 36-4711)
AP	Ernest Lee Ernest WC LEE/Hong Kong/IBM@IBMHK@IBMAU 852-2825-7792 tie(1851-7792)	Yasunori Akenaga Yasunori Akenaga /Japan/IBM@IBMJP 81-46-215-6140 (tie 18086140)





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At a glance....Everyplace Wireless Gateway

■ **Description:**

- ▶ The Everyplace Wireless Gateway is a distributed, scalable, multipurpose UNIX communications platform that supports optimized, secure data access by both Wireless Application Protocol (WAP) and non-WAP clients over a wide range of international wireless network technologies, as well as local area (LAN) and wide area (WAN) wireline networks. It integrates the WAP Version 1.2.1 standard support as defined by the WAP Forum together with award-winning IBM Secureway wireless technology for supporting standard Internet Protocols (IP) efficiently and securely over both IP and non-IP wireless bearer networks

■ **Target Market:**

- ▶ Wireless carriers, ISPs, ASPs, other service providers and Enterprise Customers

■ **Availability:**

- ▶ GA ; July 31, 2001

■ **Pricing:**

- ▶ Value Points, Passport Advantage with volume tier discounts
- ▶ Subscription & support bundled

■ **Audiences:**

- ▶ CIO, CTO

■ **Key Differentiators:**

- In addition to the functions provided by the IBM Secureway Wireless gateway:
- Compliance with WAP Version 1.2.1 standard including WAP Push support and Non Wap Push support
- Persistent storage of cookies on behalf of WAP clients
- Secure features based on the Internet Transport Layer Security standard using a Wireless Transport Layer Security (WTLS) connection between WAP clients and the WAP gateway
- Secure HTTP (HTTPS) requests using secure sockets layer (SSL) made on behalf of WAP clients
- A choice of encryption key strengths for both key exchange and bulk encryption methods
- Interfaces to IP network types like, GSM, TDMA, CDMA and GPRS among others
- Interfaces to SMS network types (SMS-SMPP, SMS-UCP).

■ **References Available:**

- Toronto Police Department
- Arizona Public Service
- Bullhead City Police Department
- Netherlands National Police Agency
- KUSA Television News



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In Summary... Everyplace Wireless Gateway V2.1

Opens the world of pervasive e-business by:

- Expanding your e-business opportunities by extending your applications to mobile devices
- Leveraging Web open standards
- Preserving your IT investments through support for open standards and use of proven technologies
- Enabling you to easily integrate new devices and networks without changing your applications
- Enabling new solutions, applications, and services to be effectively deployed in both general business and industry focused environments
- Setting a standard for a scalable, reliable, and security-rich infrastructure

Provide information and services to your customers

virtually ANYWHERE.... ANYTIME !

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