“Broadband & Ubiquitous”

Success for Hotspot® Business

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Senior Executive Vice President, CTO

NTT Communications Corporations

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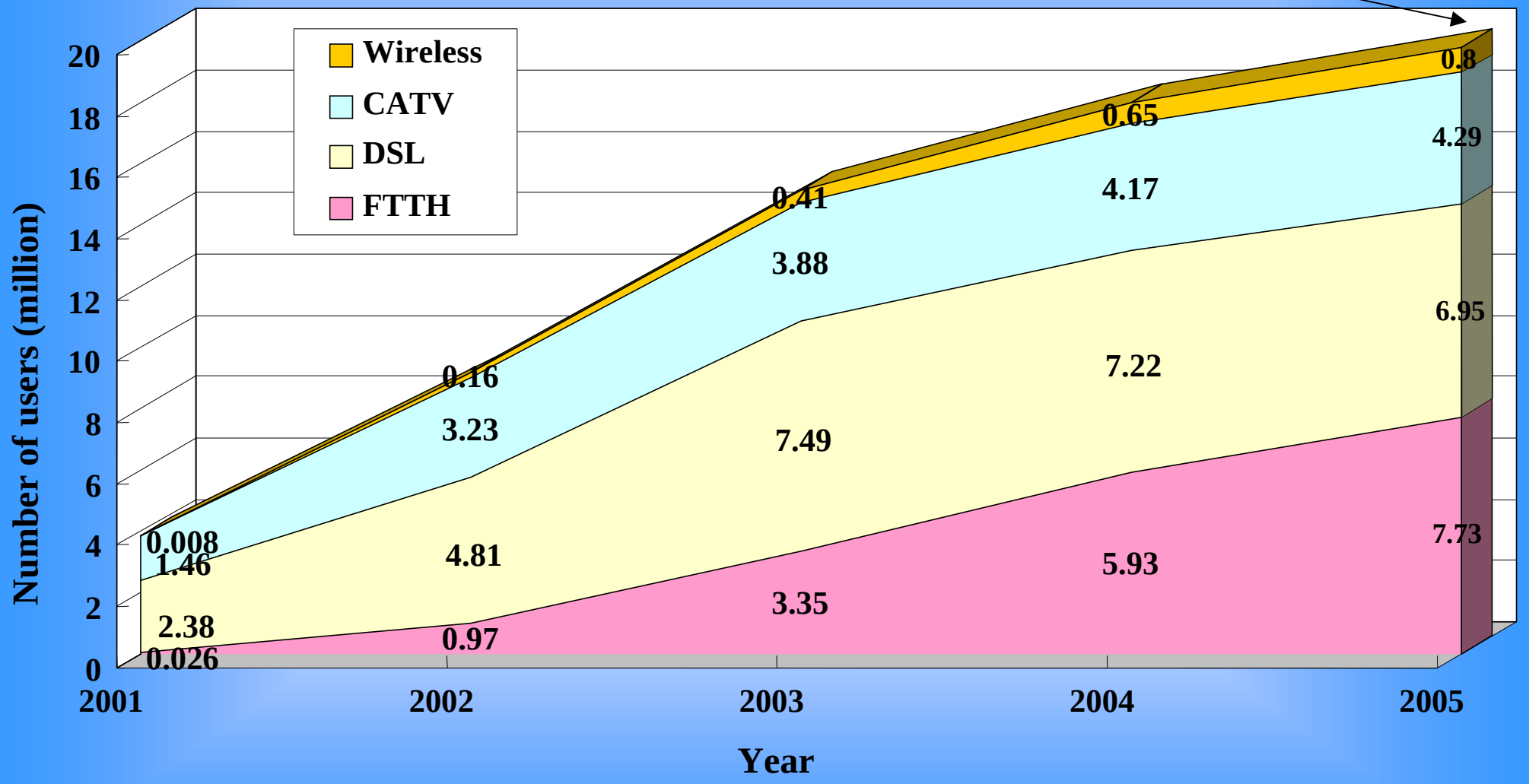
Home Broadband Usage Growth

N. of users will reach **24.94M in 2005**



Ref. White paper; "Information and Communications in Japan," Ministry of Public Management, Home Affairs, Post and Telecommunications, Japan.

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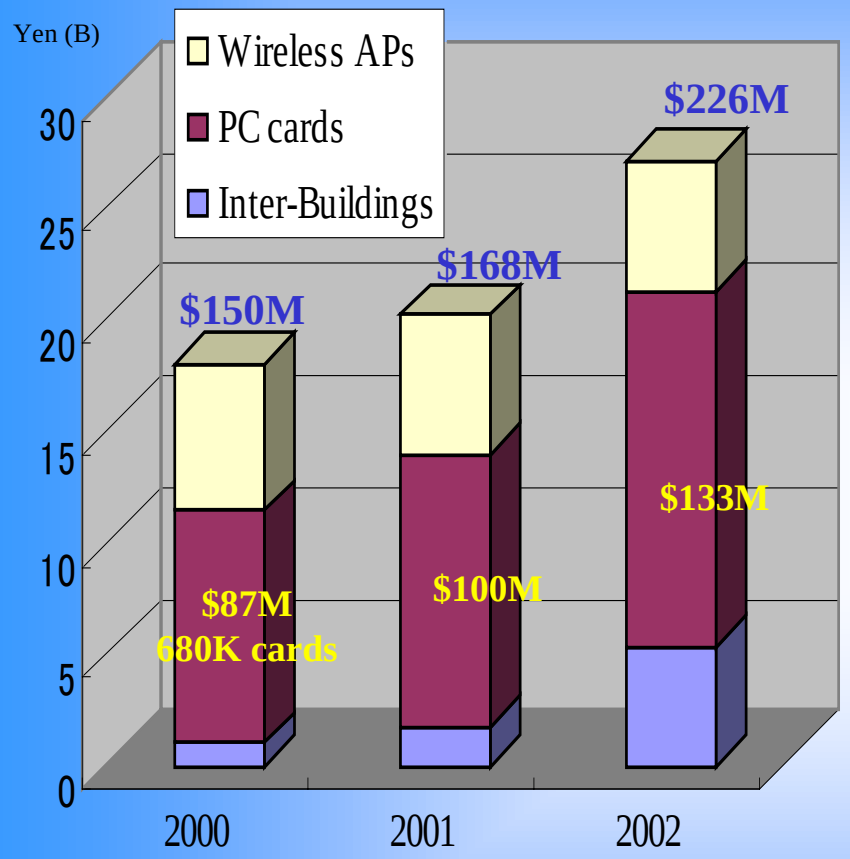
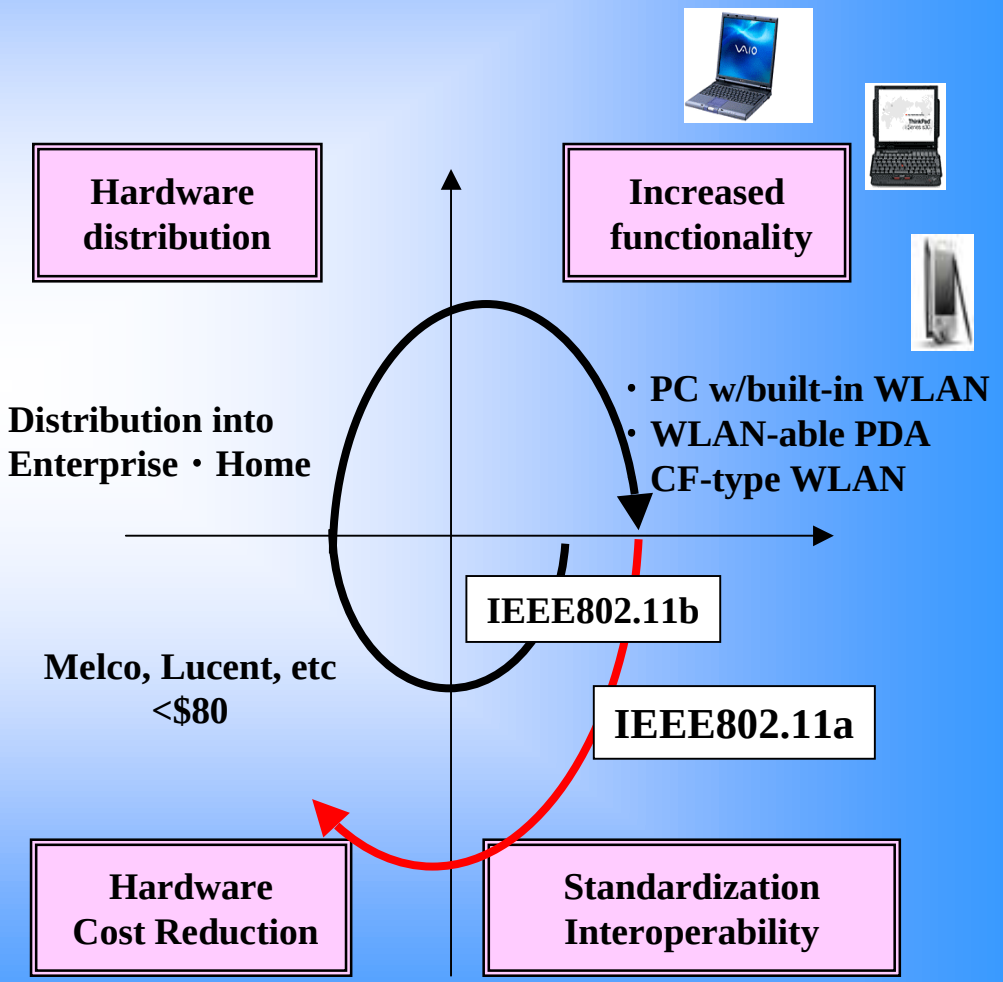
Wireless LAN Market in Japan



Estimated Domestic Wireless LAN Market

（Source：Nikkei Communication 2001.12.17）

Spiral of Wireless LAN equipment distribution



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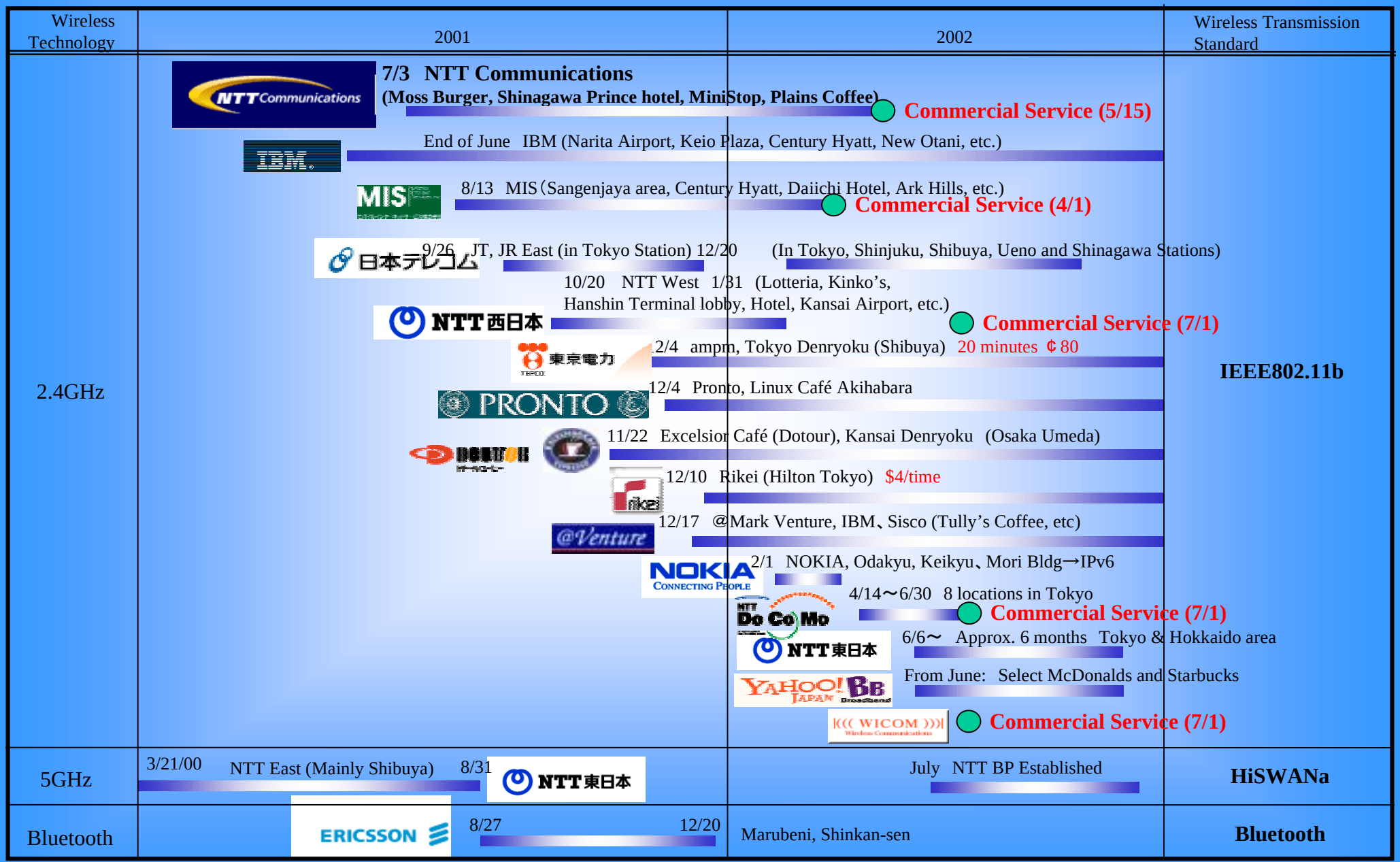
Field Trial and Commercial Service of Hotspot in Japan



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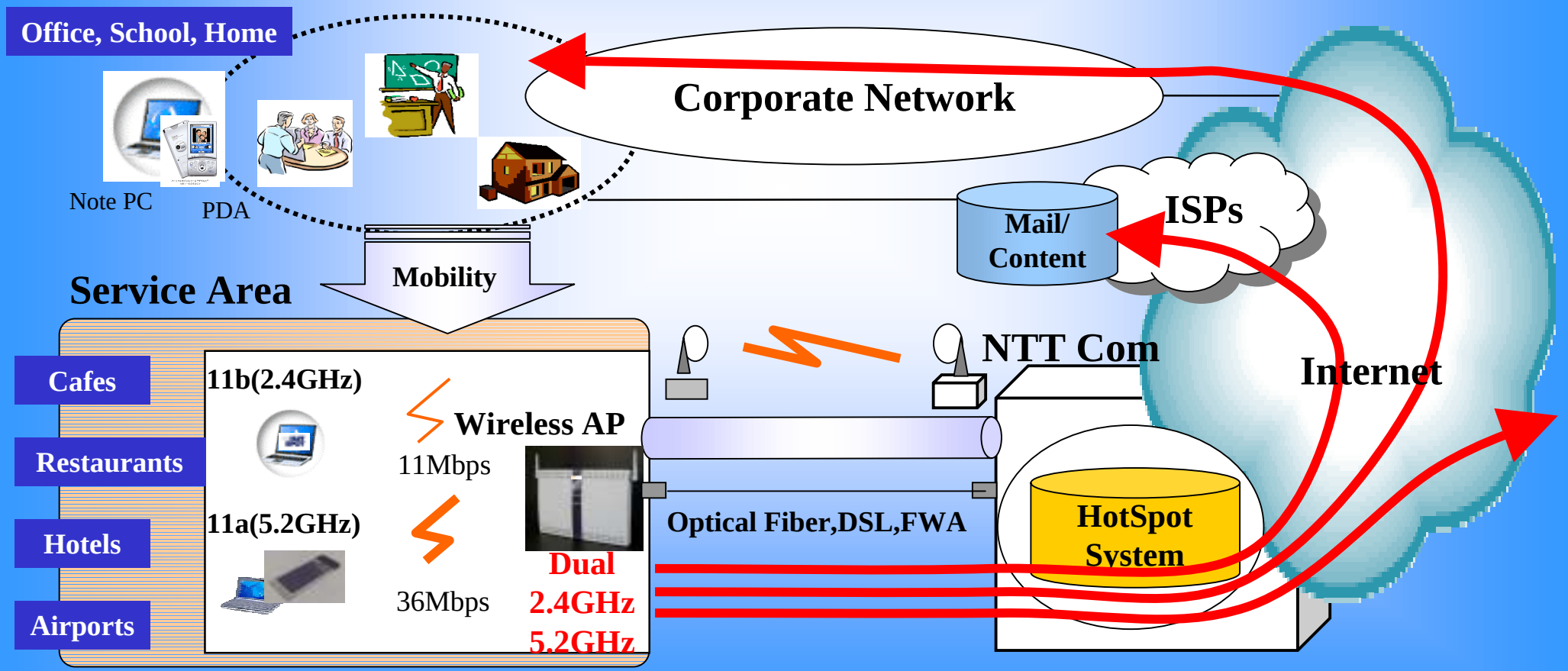
NTT Com's Hotspot Service

- Expand to 1000 locations (cafes, restaurants, hotels, airports, etc.)
- Provide service to individuals and enterprise for ¥1,600($13.3)/month
- Provide high speed WLAN(IEEE802.11a) connectivity environment



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Key Issues for "Hotspot" Business

- ***Broad Coverage vs. Investment ?***
- ***Easy to use vs. Security ?***
- ***New Value with Key Technologies vs. Simple Access***

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Broad Coverage vs. Investment ?

Key to success : Broad Coverage with Low Investment

☆ *Increase "Hotspot"*
by Roaming Service with other WISPs
- NTT Com's Hotspot has offered roaming on trial with NTT-BP and Wicom

☆ *Expand "Hotspot" as Spot Business*
with Area-oriented Contents, Advertisements, etc.
with Local Community Information
- NTT Com's Hotspot can manage location information

☆ *Cover other Area*
by Seamless Service with PHS, 2G/3G, FTTH, DSL, etc.

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Usability vs. Security ?

Key to success : Security Policy suited to Usage

☆ *For General Use : Easy to use > Security*

Use with any OS (OS, Platform independent)
Free from Extra Function
Enable Roaming with other WISPs

☆ *For Business Use : Easy to use < Security*

Require High Security beyond Security Level of Internet
Require End to End Security
(Both in the Wireless Segment and across the Internet)

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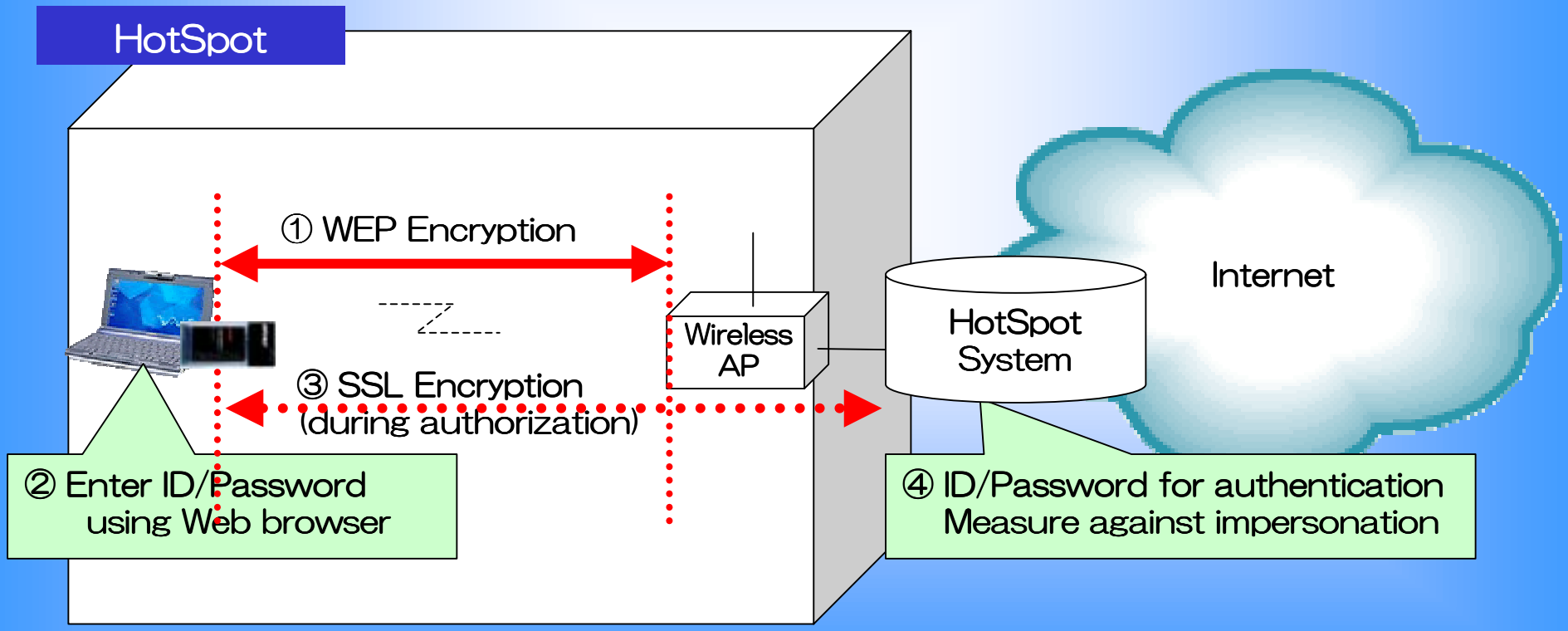
NTT Com's Security Policy for General Use

Require ONLY Browser(SSL) and WLAN capability

- Equivalent security level to the Internet is ensured

- Anyone can operate without extra software



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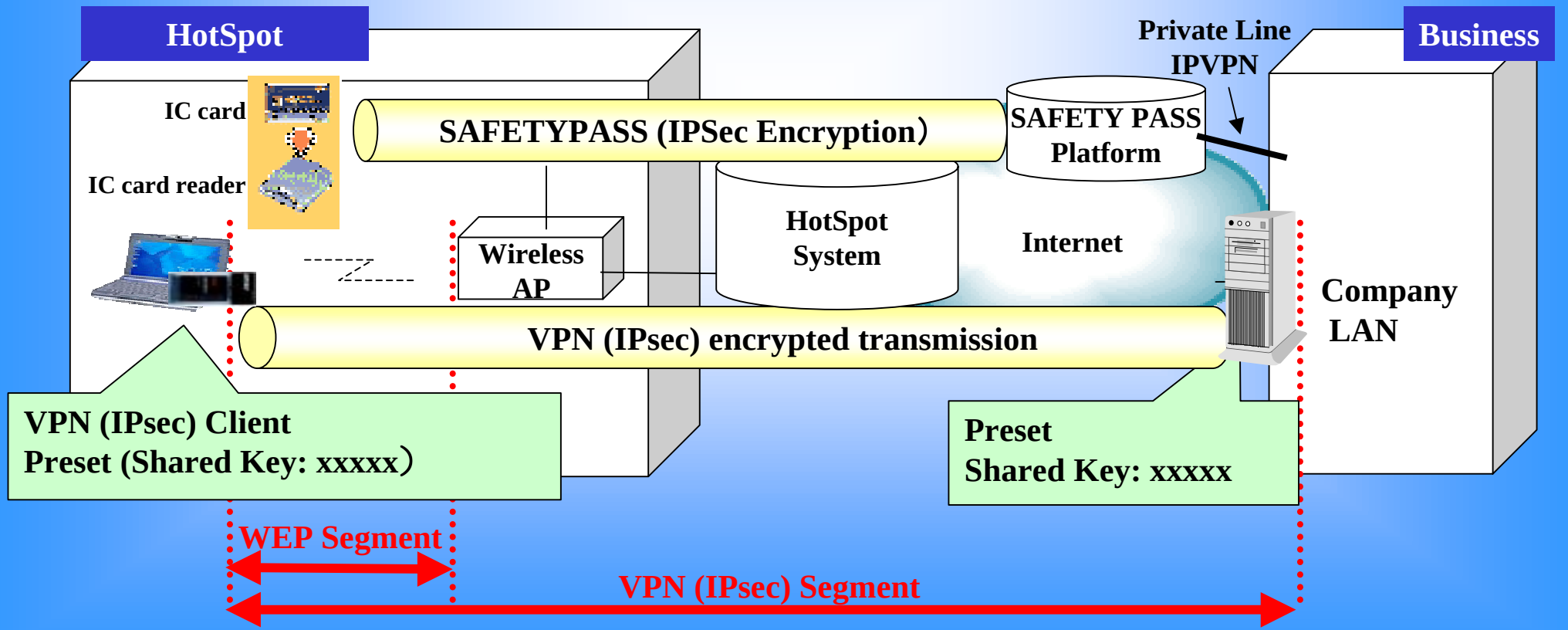
NTT Com's Security Policy for Business Use

Offer global addresses to enable VPN setup

- ***Easy configuration for various OS***
- ***End to end security assurance for crucial data not only in the Wireless segment but also across the Internet***

Offer SAFETYPASS service as an Internet Verification using an IC card



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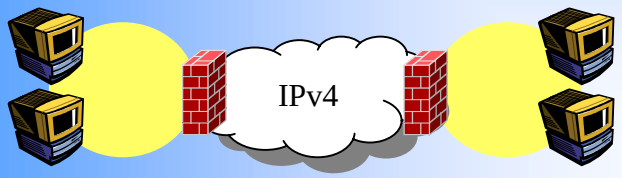
New Value with Key Technologies

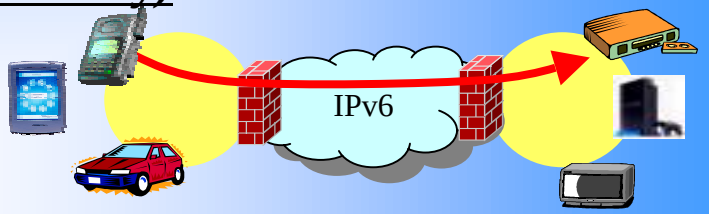
IPv6 provides New Value to Hotspot

- NTT Com's Hotspot will implement IPv4/v6 Dual Stack in 2003

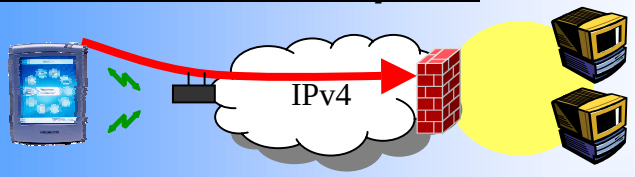
Network for computer (Complicated Setting)



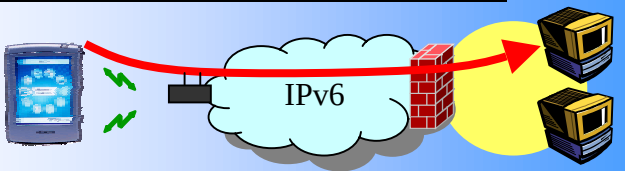
Ubiquitous network for every terminal (Plug and Play)



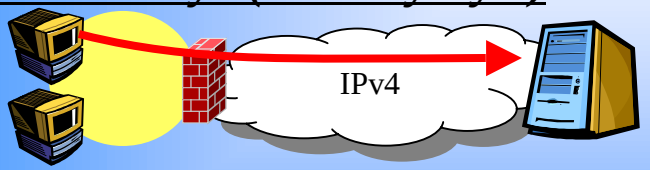
Access to the entrance of NW



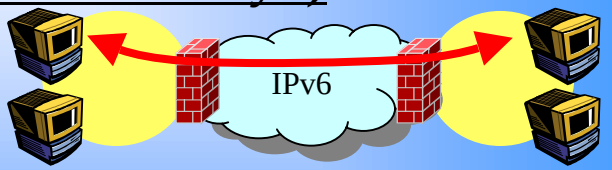
Direct access to the user's terminal



Client-Server style(one-way style)



P2P style(Interactive style)



Site to site security (No security within LAN)

End to end security

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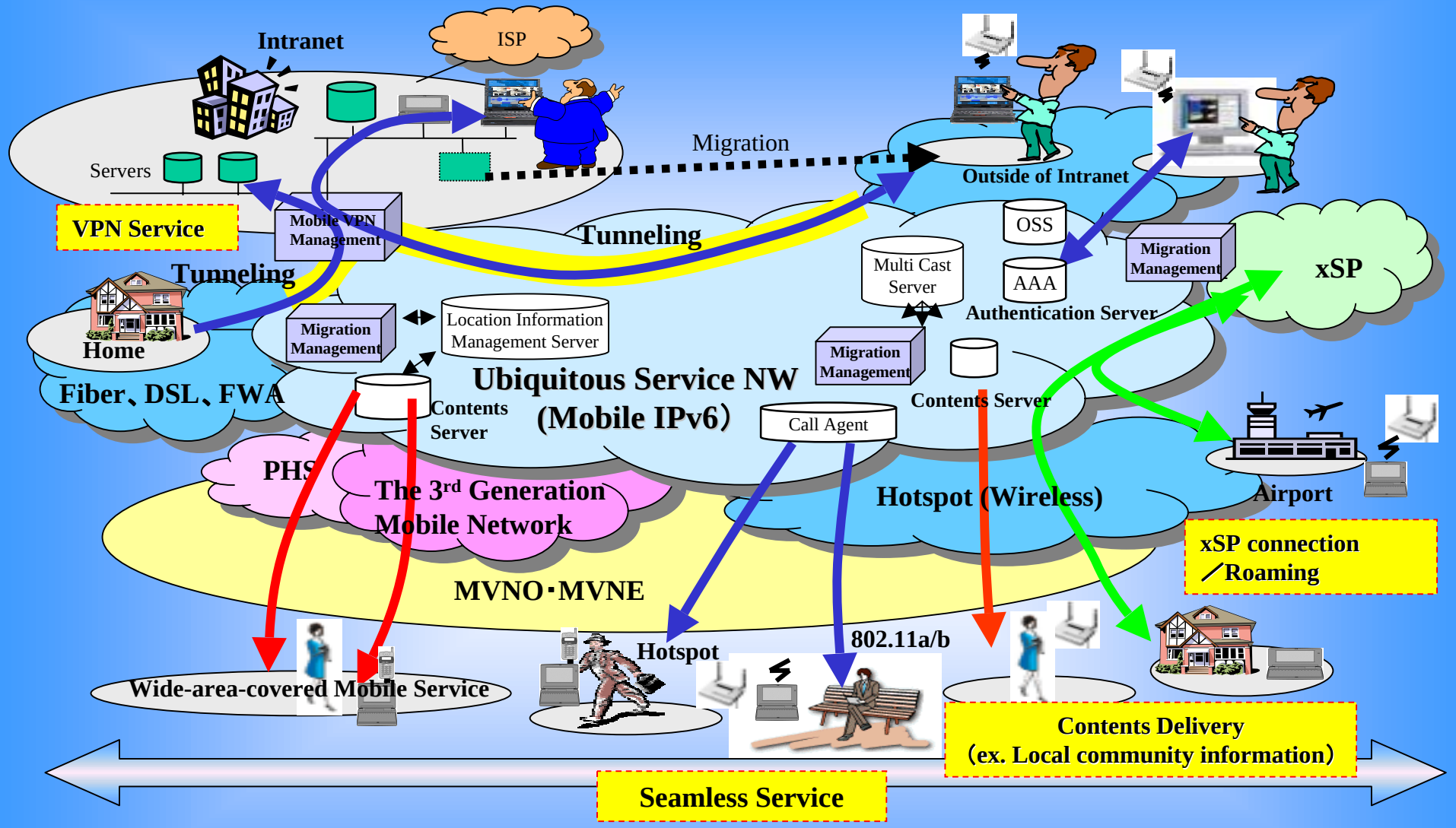
Key Tech Drive Ubiquitous World



Synergy among Terminal, Software, and Highly developed NW will bring us new revolutionary information service

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