

IPv6: Moving to the next stage

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Where Are We Today?

◆ Good news

- Commercial deployments beginning in Asia
- Strong initiative from U.S. DoD
- Pilots in U.S. & Europe
- OS support is largely there
- Good hardware routing support
- CE devices and mobile handsets planned

◆ Bad news

- No meaningful revenue from IPv6 yet
- No enterprise deployments
- Few meaningful IPv6 applications or services

Why is IPv6 Deployment Slow?

- ◆ **Concerns about infrastructure upgrade**
 - Equipment upgrades are costly
 - Training, network management are a headache
- ◆ **Lack of perceived value**
 - Popular perception only focuses on larger address space
 - Applications duplicating workaround efforts
- ◆ **Workarounds proliferating**
 - NATs!
 - Server-based solutions for connectivity and mobility

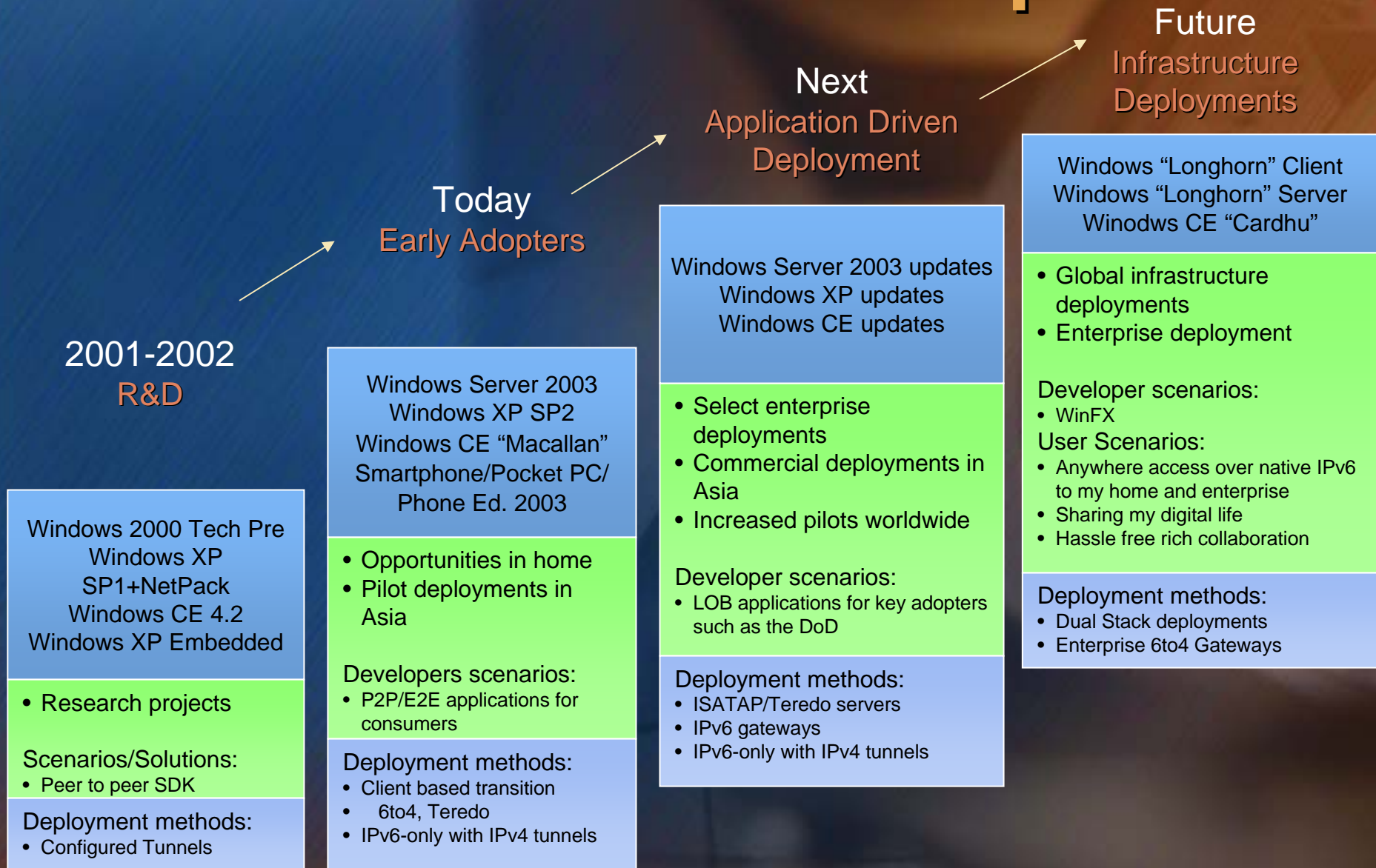
Taking the next step

- ◆ **Focus on applications, not infrastructure**
 - Break perceived mutual dependency between apps and infrastructure
 - Deploy transition technologies
 - 6to4, ISATAP, Teredo
- ◆ **Push deployment at the network edge**
 - Hosts, CE devices, applications
- ◆ **Take small steps on network upgrades**
 - Request IPv6 capability in new infrastructure
 - Develop your own IPv6 Transition Roadmap
 - Selectively turn on native IPv6 where appropriate
 - Edge network traffic will drive upgrade plan

Taking the next step

- ◆ **Make developers aware of IPv6**
 - **Mobility, ad-hoc, end-to-end support**
 - **Eliminate duplication of efforts**
 - **Ease of moving code from IPv4 to IPv6**
 - **No need to wait for infrastructure upgrades**
- ◆ **Build compelling IPv6 applications**
 - **Windows “Longhorn”**
 - **Peer to peer applications**
 - **Take advantage of mobility**

Microsoft IPv6 Roadmap



Longhorn Scenarios – Fully IPv6 Capable

Mobility

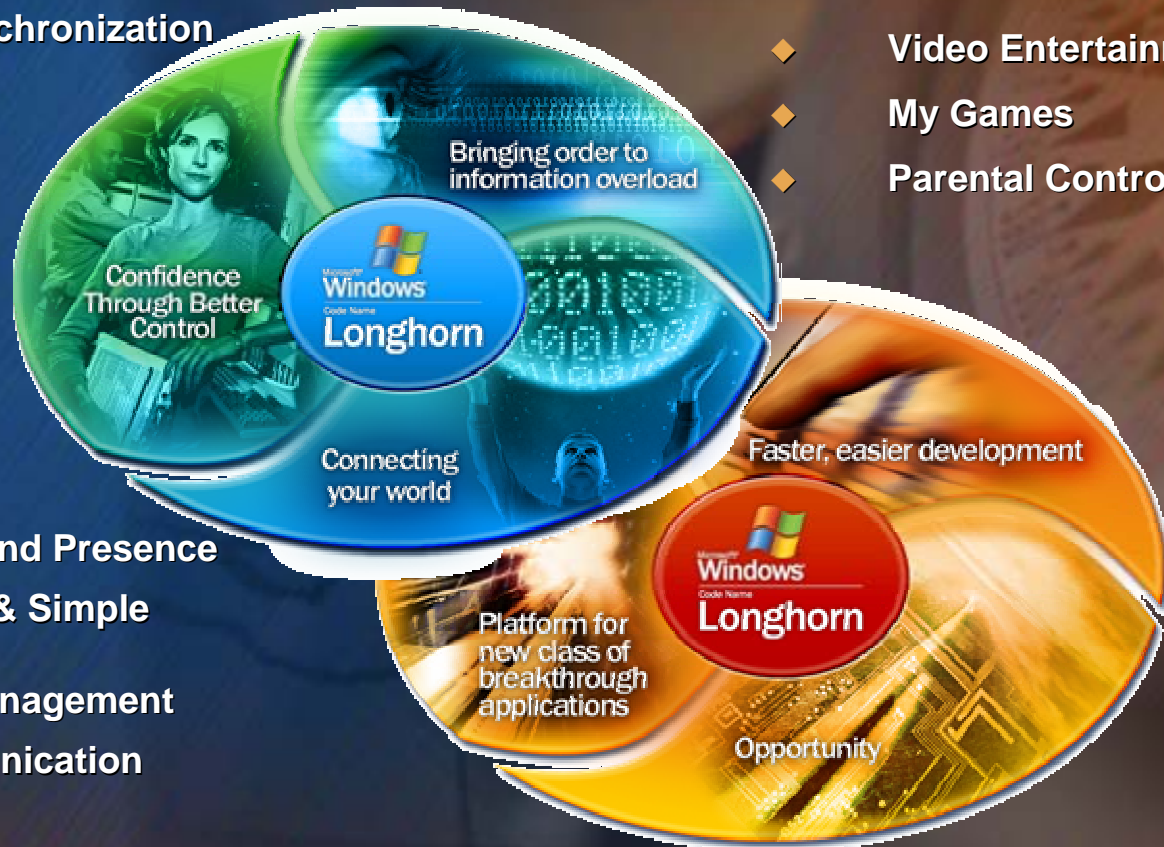
- ◆ Anywhere Wireless Networking
- ◆ PC and Device Synchronization
- ◆ Roaming
- ◆ Tablet PC
- ◆ Mobility Excellence

Communication

- ◆ People Discovery and Presence
- ◆ Instant Messaging & Simple Sharing
- ◆ Communication Management
- ◆ Application communication integration

Entertainment

- ◆ Pictures and Personal Video
- ◆ Music and Radio
- ◆ Video Entertainment
- ◆ My Games
- ◆ Parental Controls



Call To Action

- ◆ **All: Cooperate to help IPv6 take the next step**
 - Focus on moving the applications
 - Separate application migration and infrastructure migration
 - Consistency in communication
- ◆ **Developers: **You don't need infrastructure to move!****
 - Deliver protocol agnostic applications
 - Take advantage of IPv6+ functionality
 - Participate in Mobile IPv6 Technology Previews (ongoing)
- ◆ **Service providers**
 - Build the network that is built to last
 - Require IPv6 in all equipment purchased
 - Provide transition technologies to enable applications (6to4 & Teredo)
 - Participate in Teredo Technology Preview (June 2004)
- ◆ **Network equipment providers**
 - Sell IPv6 equipment for the network that is built to last
 - Complete IPv6 support esp in IGDs
 - Deliver consistent transition message to avoid confusion

The Microsoft logo is centered on the page. It features the word "Microsoft" in a white, bold, sans-serif font with a slight 3D effect. The background is a dark blue gradient on the left and a blurred image of a person's hands on the right, one holding a pen over a document.