

Home and Mobile Computing

Status and Plans

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Home and Mobile “computing”

- What is ACB used for
- What makes it complicated
- Simpler, more robust solution
- Facing technological evolution

ACB - What for?

- Internet access
 - Standard commodity internet
 - E-Mail, limited CERN network access
- Home workplace
 - Monitoring of equipment, home working
 - Required: “NICE”-access, X-windows, CERN filebase, applications
- CERN suppliers

What's special about ACB

Why should it be difficult?

- Internet access - commercial ISPs
 - Sufficient for “surfing”, reading mail
- ACB opens the CERN Network
 - Security requirements complicate the picture
 - Limit access to CERN users
 - Identify users beyond password authentication
 - Implemented through Call-back

ACB Problems

- Hardware / Modem problems
- Call-back is troublesome
 - Standards-based implementation is the exception
- Configuration problems
 - half a dozen Windows variants
 - Linux, Macintosh, PDAs
 - “application” configuration - NICE, Email, etc.
 - Need to tune “prise en charge” for ACB problems
- Traveller’s requirements differ from home user’s

Simplified, Robust Solution

- Alternative to Call-back
 - Dial-in Calling Line identification
 - SmartCard/CryptoCard (SecureID)
 - 0800 number(s)
- Two ongoing projects
 - home-made - W2000 Microsoft RAS based
 - outsourced - Swisscom 'RAS'

Technological Evolution

- Access beyond telephone connections
 - xDSL, cable[-TV-]modems, PLC, WLL, UMTS
 - the telecommunications operator becomes the network provider
 - Internet-only Link to the CERN network
- Network starts outside CERN
 - Application implements security/authentication
 - Virtual Private Network through ISP connection
 - full functionality once properly authenticated