User Requirements for Cabling Support

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Dealing with Past Cabling Choices and with Ethernet's Success

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Cabling Mix Within the Enterprise

- 100% UTP - Most small and mid size organizations
  - New installations primarily 4-pair Cat 5 or 5e
  - Old installations Cat 3, 2-pair, 3-pair, 4-pair

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Cabling Mix Within the Enterprise

- 100% UTP - Most small and mid size organizations

- Mostly UTP, some STP - A few mid-size and many large organizations

- Mostly STP - a few large organizations
  - e.g.. IBM has an estimated 1/2 million STP drops

Cabling Mix Implications

- With mixed cabling infrastructure
  - Solutions are sought that run over the entire spectrum of installed cabling
- Legacy cabling is still an important to the end users
  - Need to support legacy cable can affect decision for entire enterprise
  - Premature replacement adds cost without increasing function

Are there emerging requirements?

- In parts of Europe use of two pair shielded 100 ohm cabling to an outlet was and still is a popular choice - allowed by IS11801

- Emerging Cat 7 cabling systems are being purchased with the expectation of supporting multiple applications with 2-pair per outlet

CIO Objectives

- Introduce applications based on need, and in part, on their ability to be replicated throughout the enterprise

- Replace cabling plants that can not robustly support required applications

- Choose minimum total cost solutions

CIO Expectations

- For large enterprises they can expect to have to support both legacy 2-pair cabling plants, and possibly new 2-pair installations, in addition to 4-pair wiring

What Technical Solutions Address User Requirements?

- Where 4-pair cabling is available, the 4-pair only solution meets requirements
- If 4-pair are not available, then a 2-pair solution is the only one that will save the costs of re-cabling

- **Make sure any solution can be applied to legacy 2-pair as well as 4-pair cabling!**