NETS Marshall Field Site (MFS) bandwidth improvement review

Jim VanDyke
Jeff Custard
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Objective

• Improve network connectivity for MFS
  – More WAN bandwidth for all MFS users
  – LAN connectivity improvements for field site locations

• 3 components
  – LAN outside main building [removal of 802.11 WLAN]
  – MFS main building LAN improvements
  – WAN connection improvements [back to ML]
What NETS did--LAN

• Installed fixed, outdoor pedestals for new rugged switches (for trailer connections)
• Re-terminated field site fiber from main MFS building to new pedestals
• Improved cabling back to NETS closet in main MFS building
What NETS did--WAN

• Evaluated options:
  – Existing copper? No high bandwidth solutions available [T1 backup link only]
  – Fiber? Unavailable (and costly to pursue)
  – WWAN: unlicensed (no good because of interference)
  – WWAN: licensed (spectrum and vendor eval)
Licensing delay issue

- Once we settled on DragonWave for the WWAN connection, there was a delay in getting license approved
- The process: NETS->SASS->NTIA->NSF->FCC (then reverse).
- Process bogged down at NSF.
- Introduced delay to this part of the process.
NETS process changes

• For future field project support, NETS has incorporated changes into our work request system [emphasis on contacts and communication] including the following:
• dates and deadlines: all pertinent--start, end, milestones, etc., along with flexibility options
• improved communication with contacts: primary and secondary (for both NETS and group being supported)--and agreement on communication flows--who talks to who and relays info as applicable
• any special needs/setup requirements noted in advance
• follow-up throughout project at agreed upon calendar dates
• after project completion: follow up mechanisms (e.g., survey? calls? email?)?

• Others?
• Suggestions? Please let Jim or Jeff know.
References

• NETS home page at
  http://www.cisl.ucar.edu/nets/

• NETS MFS project page at
  http://www.cisl.ucar.edu/nets/internal/projects/mfs/

• Comments or suggestions to
  vandyke@ucar.edu or jcustard@ucar.edu