UCAR Point of Presence (UPoP)

NETS update
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UPoP Introduction

- Officially began in May 2007 when UCAR assumed responsibility for secondary members previously behind UCDHSC
- UCDHSC has provided generous support for this effort, including:
  - equipment
  - staff assistance
  - facilities
Why UCAR?

- History of support for research and education networking
- Education and Outreach mission
- Management, contractual, accounting, and engineering support
- President’s Council support
What is the UPoP?

- A consortium of secondary institutions behind UCAR (from the FRGP point of view):
  - shared WAN services
  - intra-FRGP traffic
  - commodity Internet
  - Abilene (I2) and National LambdaRail (NLR) access
What does UCAR provide?

- Management and contractual support
- Network Operations Center support
- Engineering support
Current connections

- Auraria Higher Education Center
- Boulder Valley School District
- Centennial Board of Cooperative Educational Services
- City and County of Denver
- City of Boulder
- Colorado Alliance of Research Libraries
- Colorado Mountain College
Current connections, continued

- Deproduction
- Denver Health and Hospital Authority
- Metropolitan State College of Denver
- St. Mary’s Academy
- Educational Support Services (UCDHSC ATM video transport only)
Connection types

- Ethernet
  - QMOE
    - direct connections
- ATM
- T1
Contracts and billing

- Agreements
  - available on UPoP web page
  - between the non-profit entity and UCAR
- Pricing
  - varies and depends on number of members and how much they buy
Future items

- Additional UPoP members?
- Move to new equipment
- Additional growth behind CBOCES ("EAGLE-net")?
- SEGP from I2 and sponsor (CSU?)
- Annual UPoP member meeting?
- Ongoing outreach and follow up (to potential and existing members)?
Potential future members?

- CDHE (was CCHE; likely after March 2008 move)
- Johnson and Wales?
- Regis Jesuit High School?
- WICHE?
- EDUCAUSE?
- City of Longmont?
- Front Range Community College?
- Denver Film Society (on Auraria campus)?
- Various other school districts (or aggregation for these?)?
- Others?
Future equipment options for 1200 Larimer St.

Current equipment:
- **UPoP**
  - 1010
    - CSM OC3; UCB OC12; UCCS OC3; M20 OC12
  - 2511
    - OOB/modem/console
  - 7507
    - UPoP routing
  - 6503
    - Switch

Suggested replacement options:
- **FRGP**
  - 1010
    - CSM OC3; UCB OC12; QwestOC3; ESS OC3; M20 OC12
  - 2948
    - Switch
  - 6509
    - (720-3BXL)
      - Core routing and Ethernet switching functions
  - M20
    - Core routing functions

After July 2009:
- **FRGP/UPoP**
  - 1010
    - CSM OC3; UCB OC12; QwestOC3; ESS OC3; M20 OC12
  - 3845
    - OC3/ATM here if still needed? T1 routing, modem, and terminal service functions
  - 6509
    - (720-3BXL)
      - Core routing and Ethernet switching functions
  - M20
    - ATM routing only

Spares (plus modules):
- **UPoP**
  - 6503
  - 7513
  - M20
  - 1010

Spares (plus modules):
- **FRGP/UPoP**
  - 6509
  - 3845
  - M20
  - 1010

as of 2008-01-24 (JC); more notes on details and pricing is available in spreadsheet.
Scope and longer term?

- Direction discussion for Colorado “K-20” networking?
  - “As is” on through…
  - Statewide integration futures?
  - EAGLE-net example or other BOCES aggregation growth?
- National broadband efforts (e.g., ref EDUCAUSE papers on this)?
References

- [http://www.ucar.edu](http://www.ucar.edu)
- [http://www.frgp.net](http://www.frgp.net)
- [http://www.cisl.ucar.edu/nets/upop/](http://www.cisl.ucar.edu/nets/upop/)
- [http://www.educause.edu/](http://www.educause.edu/)
- [acronym decoder](http://www.educause.edu/)
- [upop-eng@ucar.edu](mailto:upop-eng@ucar.edu) for more UPoP info or questions