

Pro's and Con's of Support Models
Data & Telephony
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Definitions:

- **Central** - support and management of network performed by ACNS
- **Decentral** - department and units maintain and support their own portion of the network, while ACNS manages and supports core infrastructure
- **Hybrid**
 - *model A* - comparable to current environment in that departments and units manage and support their own portion of **data** network while ACNS will manage and support **telephony**
 - *model B* - a parallel infrastructure in which telephony (VoIP, alarms, E911, keyless, etc.), are supported and managed on it's own network(s), while data network is managed and supported as in hybrid model A.

Infrastructure assumptions:

- redundant border routers
- redundant network paths (core routers) on campus at E7 and NESB
- 10 GB backbone to border
- 1 to 10 GB backbone connection to each "significant" building
- many more VLANS to connect units across different buildings

DATA

Model	Pro	Con
Central	<ul style="list-style-type: none"> • consistent application of security policies • college staff less distracted - more focused on desktop/application support • in general, a higher level of specialization of support staff • global monitoring; implies more accurate forecasting and efficient bandwidth allocation • increased ability to troubleshoot 	<ul style="list-style-type: none"> • longer lead time for add's, moves & changes • more "standard" level of service • "one size does not fit all" which could adversely effect current quality of service (expectations)

Model	Pro	Con
Decentral	<ul style="list-style-type: none"> • quick response time (higher level of service) • familiarity with environment & user base 	<ul style="list-style-type: none"> • more difficult to coordinate with central services • VLAN's very difficult (impossible?); implies departmental "ownership" of equipment beyond MDF • duplication of efforts implies higher cost of training support personnel
Hybrid	<ul style="list-style-type: none"> • most flexible of models • most quick turnaround • additional monitoring tools in place 	<ul style="list-style-type: none"> • susceptible to configuration errors • higher level of management complexity • higher cost if running parallel infrastructure

Telephony

Model	Pro	Con
Central	<ul style="list-style-type: none"> • single infrastructure • hardware consistency • highest level of confidence in E911 records accuracy 	<ul style="list-style-type: none"> • "vanilla" service lacks ability for customization which could impair quality of service (and cost of service)
Decentral	<ul style="list-style-type: none"> • fast response time for add's, moves and changes 	<ul style="list-style-type: none"> • low level of confidence in accuracy of E911 and related database integrity
Hybrid	<ul style="list-style-type: none"> • introduces possibility to create VoIP policy for add's, moves and changes performed by non-central staff 	<ul style="list-style-type: none"> • legalities of E911 and acceptable level of risk could be higher