

# Integrated Infrastructure Services

## DEPARTMENT OVERVIEW

### **Service Areas:**

1. IT Enterprise Operations
  - a. Enterprise/Desktop Services
    - i. Field Service
    - ii. Installation, Move, Add, Change
    - iii. Software Deployment, Evaluation, and Configuration/Testing
  - b. Help Desk
  - c. A/V Media Support
2. Voice and Network Services
  - a. WAN/LAN & Wireless Network Services
  - b. VoIP Services
3. Systems Administration
  - a. Network Account Provisioning
  - b. Server Support
  - c. Enterprise Application Services
4. Data Center Services
  - a. Disaster Recovery Planning
  - b. Capacity Planning
  - c. Data Center Management and Support

### **General Information:**

#### Infrastructure Facts:

- WAN Architecture
  - Switched Ethernet
  - Leased GigaMan Service from AT&T
    - 1 GB point-to-point connection to each campus/location
  - 100 MB Connectivity to the Desktop
- Internet Connectivity
  - 500 MB internet connection (Time Warner Telecom)

#### Help Desk

- Manning: 6 Specialists, 1 Senior Specialist
- 70,000 workorders processed per year
- Heat call ticketing system (ver 8.0)

#### Audio Visual/Media

- Manning: 3 AV Technicians, 1 Event/Media Specialist, 1 Video Systems Specialist
- Trouble shoot/repair all district A/V equipment (e.g. overhead projectors, TVs, stereo, mixing boards, karaoke machines, etc.)
- Authorized LG/Zenith warranty repair center
- Authorized Epson projector warranty repair center

- Provide augmented sound/multimedia support for District Special Events (e.g. Graduations, Convocations, Banquets, Board Meetings, etc.)

#### WAN/LAN/Voice and Wireless Network Services

- Manning: 3 Technicians, 5 Specialists, 1 Systems Administrator, 1 Coordinator, 1 Wireless Engineer, 1 Manager
- Maintain District LAN/WAN connectivity
  - 3,000+ Cisco switches across District
  - Voice Services
    - Administer District VoIP System and Services (11,000+ VoIP Telephones)
    - Trouble shoot repair District's remaining copper telephone lines (emergency lines, fax machines, alarm system, etc.)
  - Wireless connectivity
    - Cisco Wireless (Thick Access Point): Legacy Portable equipment
    - Aruba (Controller-Based Thin AP):
      - Business Careers HS 1-to-1 initiative
      - District-wide Wireless LAN initiative
        - Projected completion November 2008 (18 Month project)
        - Wireless LAN at each campus
        - 6,000 Aruba AP's when completed

#### Systems Administration

- Over 300 servers supported
- Maintain 99.99% availability

#### *Novell/Microsoft*

- Manning: 14 System Administrators, 1 Network Architect, 1 Manager
- Manages District File and Print services
- Support all Network (Operational and Instruction) Applications
  - Operational (examples)
    - Novell Netware
    - Microsoft/Active Directory
    - Groupwise (E-mail)
    - iTCCS (Student/HR/Business System)
    - Cognos
    - Munis
    - SmartFind Express
    - Cafeteria Point-of-Sale
  - Instructional (examples)
    - United Streaming
    - Riverdeep
    - Plato
    - Lexia
    - Rosetta Stone
    - Read180
    - FitnessGram

- Gradebook

### ***Unix/Enterprise Storage***

- Manning: 5 System Administrators, 1 Manager
- Manage AIX/Unix systems (Cafeteria, Library, Lotus Notes, Learning Management System)
- SAN Administration: Xiotech Magnitude 3D (20 TB SAN)
- Email Administration
  - Block more than 500K Spam emails per month
  - Process 40,000+ emails through NISD gateway daily

### **Enterprise/Desktop Services**

- Manning: 35 Technicians (various levels), 1 Manager
- Provide myriad of Desktop Services support to include field service support/small computer repair to all district sites--35,000 computers
- Augment network services and systems administration staff as needed
- Authorized Dell, HP, and Gateway Warranty Repair Center

### **Data Center Services**

- Manning: 1 Analyst, 1 Manager
- Oversees operation of 2 Tier 1 data centers
- Capacity planning for near and long-term district projects/programs
- Disaster recovery planning