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# Le Sueur County, MN

Tuesday, June 2, 2015

Board Meeting

## Item 7

**10:00 am Scott Gerr, MIS (20 min)**

*RE: Courthouse infrastructure upgrade*

Staff Contact:

## County Courthouse Infrastructure Upgrade

### Proposal 1

The County Courthouse infrastructure is now 20 years old and is built on old fiber technology. Almost all Departments use the Internet for day to day business. The local network traffic on the inside of the Courthouse has increased along with this activity. People access County servers daily for documents, ISeries lookups, GIS maps, and other proprietary applications. This increase has created the demand for the infrastructure to be upgraded. The switches that carry this traffic run at 1Gb speeds now and looking into the next 20 years, that speed needs to be increased now.

My recommendation is to do this upgrade now. The current fiber technology can provide local network speeds of 10Gb throughout the Courthouse and LEC. The Sheriff's Office will be using an new RMS that is a hosted solution, meaning that traffic inside the LEC will increase. Most Departments as mentioned earlier are using the Internet for daily operation. In order to eliminate bottlenecks of traffic, and to make sure daily operations of the County run smoothly, this upgrade should be done now.

I have included 2 vendor quotes, one is for the fiber upgrade throughout the Courthouse and the LEC. The other is for upgrading our Courthouse switches to accommodate the new fiber technology.

This upgrade would also provide from a security standpoint, moving all State fiber and routers up to the MIS Department office that currently in unsecure places in the building.



IT PRODUCTS TECHNOLOGY SOLUTIONS PEACE OF MIND®

ITsavvy LLC  
 313 South Rohlwing Road  
 Addison, IL 60101  
 www.ITsavvy.com

| Quote Details           |             |
|-------------------------|-------------|
| <b>Quote #:</b>         | 2730348     |
| <b>Date:</b>            | 05/21/2015  |
| <b>Payment Method:</b>  | Net 30 Days |
| <b>Client PO#:</b>      |             |
| <b>Shipping Method:</b> | Ground      |

**Bill To:**  
 Le Sueur County  
 Accounts Payable  
 88 S Park Ave  
 Le Center, MN 56057  
 507-357-8286

**Ship To:**  
 Le Sueur County  
 Jeff Neisen  
 88 S Park Ave  
 Le Center, MN 56057-1658  
 United States  
 507-357-8286

**Client Contact:**  
 Jeff Neisen  
 (P) 507-357-8286  
 jneisen@co.le-sueur.mn.us

**Client Executive:**  
 Matt Butler  
 (P) 630.396.6305  
 (F) 630.396.6322  
 mbutler@ITsavvy.com

| Item Description  | Part #   | Tax | Qty | Unit Price | Total       |
|---|----------|-----|-----|------------|-------------|
| 1 <b>HP</b><br>SFP+ transceiver module - 10GBase-SR - LC/UPC multi-mode - up to 980 ft - 850 nm - for HP 5406, 6120, 6600-24, 6600-48; Modular Smart Array P2000 G3; ProLiant DL360p Gen8 | 14064741 | Y   | 17  | \$350.00   | \$5,950.00  |
| 2 <b>HP</b><br>Expansion module - Gigabit Ethernet x 20 + 2 x SFP+ - for HP 5406, 5412, E5406, E5412, E8206, E8212  | 14064828 | Y   | 5   | \$2,175.00 | \$10,875.00 |
| 3 <b>HP</b><br>Expansion module - 10 GigE - 8 ports - for HP 5406, 5412, 8206, 8212   | 14064830 | Y   | 2   | \$2,600.00 | \$5,200.00  |

|               |                    |
|---------------|--------------------|
| Subtotal:     | \$22,025.00        |
| Shipping:     | \$0.00             |
| Tax:          | Exempt             |
| <b>TOTAL:</b> | <b>\$22,025.00</b> |

ITsavvy is always looking to deliver the lowest cost possible to our clients. This results in fluctuating prices that you will find are lower more often than not. However, prices are subject to increases without notice in the event of a manufacturer or distributor price increase. Available inventory is subject to change without notice. This document is a quotation only and is not an order or offer to sell.

We do accept credit cards for payment. However, if the credit card is provided after the order has been invoiced there will be a charge of 3% of the total purchase.

Unless specifically listed above, these prices do NOT include applicable taxes, insurance, shipping, delivery, setup fees, or any cables or cabling services or material.

All non-reoccurring services are 50% due upon signing of contract, 40% due upon delivery of equipment, balance due upon install.

ITsavvy's General Terms and Conditions of Sale, which can be found at [www.ITsavvy.com/termsandconditions](http://www.ITsavvy.com/termsandconditions), shall apply to and are incorporated into all agreements with Client, including all Orders.

Le Sueur County Fiber Backbone upgrade

|         |                 |   |           |              |
|---------|-----------------|---|-----------|--------------|
| 1400 ft | 012T88-33180-A3 | Corning OM3 12 F Plenum Armored Fiber       | \$ 3.01   | \$ 4,214.70  |
| 1200 ft | 012T8P-31180-A3 | Corning OM3 12 F Indoor / Outdoor Fiber     | \$ 4.77   | \$ 5,718.60  |
| 200 ft  | 012ED8-T1331-A3 | Corning SM 12F SM Plenum Armored Fiber      | \$ 2.07   | \$ 413.10    |
| 2 ea    | CCH-04U         | Corning Rack Mount Fiber Enclosure 12 Panel | \$ 373.61 | \$ 747.23    |
| 1 ea    | CCH-02U         | Corning Rack Mount Fiber Enclosure 4 Panel  | \$ 292.95 | \$ 292.95    |
| 6 ea    | CCH-01U         | Corning Rack Mount Fiber Enclosure 2 panel  | \$ 243.70 | \$ 1,462.21  |
| 18 ea   | CCH-CP12-E4     | Corning 12 Fiber LC Panel OM3/4             | \$ 98.27  | \$ 1,768.80  |
| 2 ea    | CCH-CP12-A9     | Corning 12 Fiber LC Panel SM                | \$ 109.50 | \$ 219.00    |
| 20 ea   | CCH-CS          | Corning Cassette splice enclosure           | \$ 122.09 | \$ 2,441.88  |
| 14 ea   |                 | OM3 12F LC 3M Pigtail                       | \$ 101.57 | \$ 1,422.04  |
| 2 ea    | 602313          | SM 12F LC 3M Pigtail                        | \$ 182.25 | \$ 364.50    |
| 5 pkg   |                 | Fusion Splice Protectors 50 ea.             | \$ 13.50  | \$ 67.50     |
| 1 ea    | 11802-725       | CPI Wall Rack                               | \$ 516.90 | \$ 516.90    |
| 240 ea  |                 | Splice Charge                               | \$ 5.00   | \$ 1,200.00  |
| 20 ea   |                 | LC-LC 2M OM3 Patch Cable                    | \$ 45.23  | \$ 904.50    |
| 6 ea    |                 | Lc-LC 2M SM Patch Cable                     | \$ 45.23  | \$ 271.35    |
| 1 ea    |                 | Misc Hardware                               | \$ 150.00 | \$ 150.00    |
|         |                 | Equipment Total                             |           | \$ 22,175.25 |
| 200 hrs |                 | Labor                                       | \$ 65.00  | \$ 13,000.00 |
|         |                 | Project Total                               |           | \$ 35,175.25 |

# Technical Solutions

608 Walnut  
Madison Lake, MN. 56063  
(507) 243-4590 Fax (507) 243-4591

Le Sueur County Fiber backbone upgrade.

**Project Scope:** To provide new OM3 fiber backbone from IT rack (MDF) to All other Racks (IDFs) including a new fiber between the Courthouse and the Law Enforcement Center. To provide new OM3 fiber within the Law Enforcement between the Jail APC rack, Jail Wall Rack, Dispatch Desk and the sheriff's department rack. Extend the Outside SM fiber coming into the building in the Maintenance office to the IT Center on 3<sup>rd</sup> floor.

**Purpose of upgrade:** To enable 10 gig data communication between the MDF and IDFs. This will allow for faster connections between PC's and server to accommodate more Data intensive programs being instituted and allow for future IT growth. This fiber upgrade will greatly increase network speed between the Law Enforcement Center and the Courthouse servers. This upgrade will also allow for more advanced Video Surveillance systems Which need much higher bandwidth and will require a separate dedicated Physical network. Extending the outside single mode fiber to the IT center will allow for greater security of the state and county networks by housing critical equipment in a secure area. Consolidating headend equipment in one area will eliminate points of failure and simplify administration.

**Project Installation:** Installation of the OM3 fiber between the MDF and all IDFs within the Courthouse can be installed without disruption of service. Once the OM3 fiber is installed and activated the existing OM1 fiber can be removed.

The fiber between the Courthouse and the Law Enforcement center will need to be pulled out to pull in a new OM3 fiber. To provide uninterrupted service of the County and State networks use of 2 sets of Wireless bridges purchased for the installation of parking lot Video surveillance would be set up between the Courthouse and Law Enforcement Center to provide 2 separate networks County and State. This system could be put in place days before the cutover to be sure there are no issues with the wireless network.

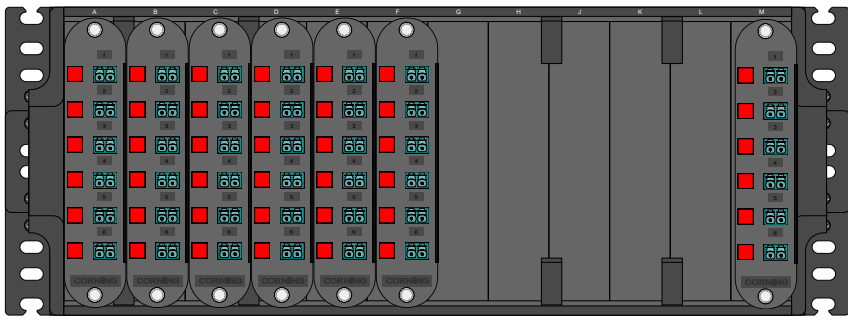
Low Voltage Structured Wiring  
Audio, Video, & Telecommunications Systems  
Video Surveillance equipment Sales and Rental  
Electronic Service

# Technical Solutions

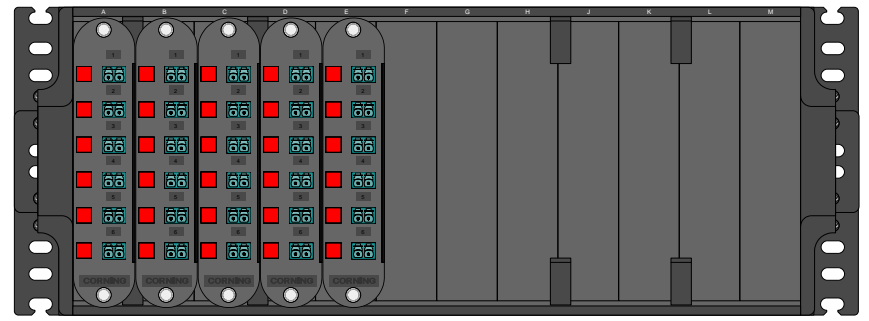
608 Walnut  
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The fiber between the Jail and Sherriff's office may need to be pulled out in order to pull in the new OM4 fiber. If network down time can be allowed this could be done with a 1 day disruption of service.

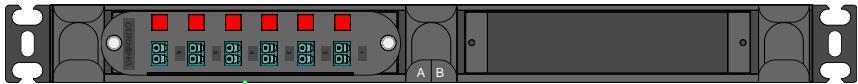
Low Voltage Structured Wiring  
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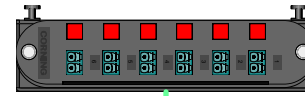
3<sup>rd</sup> Floor IT Wall Rack



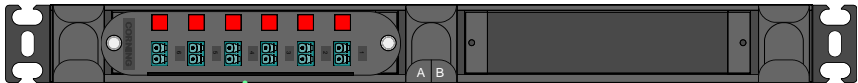
Jail APC Rack



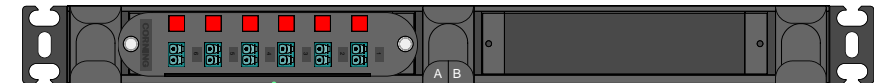
2<sup>nd</sup> Floor Court Admin



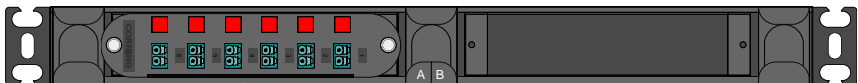
Dispatch Desk



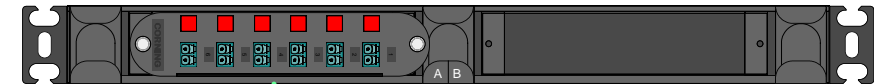
1<sup>st</sup> Floor



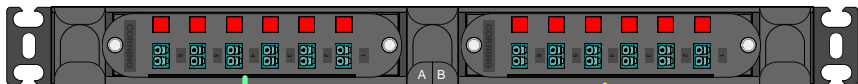
Jail Wall Rack



BSMT Human Services




Sheriff Rack



BSMT Maint Office

- 12F OM3 Indoor Armored Fiber
- - - - - 2x12F OM3 Indoor / Outdoor Fiber
- 12F SM Indoor Armored Fiber

|   |   |         |        |           |
|---|---|---------|--------|-----------|
|  | <b>Technical Solutions</b>                |         |        |           |
|   | Le Sueur County<br>Fiber Backbone Upgrade |         |        |           |
| May 14, 2015  | SIZE                                      | FSCM NO | DWG NO | REV       |
|   | SCALE                                     | 1 : 1   | SHEET  | May1 OF 1 |