April 23, 2004

Marty Christofferson
Kevin W. Ezell
Town Of Dryden

SUBJECT: SYSTEM ANALYSIS REPORT AND RECOMMENDATIONS

GENERAL SYSTEM OVERVIEW: (See attached Diagrams)

The Computing Center completed a hardware and software review of the existing computer systems for the Town of Dryden on March 26, 2004. Mike Ziegler our Technical Manager completed a hardware/software inventory of all of the systems at the Town Hall and the Rec Department offices and most of the systems at the Highway Department. At the request of Jack Bush, Michael did not inventory the Fuel system or Jack’s workstation. Michael also talked with whatever users were available to get an idea of what they use their systems for and any outstanding issues they may have. The following is a brief synopsis of what we found.

Server:
The server is a build-up dual Intel Pentium III 800mhz system running Windows 2000 Pro workstation with 1 gigabyte internal memory and 5 hard drives. Total spinning space is 480 gigabytes with 362 gigabytes free. Due to the fact that this is not running server software there is minimal security setup. The system is basically running a peer to peer network. There is no tape backup on the server. This system is used basically for storage.

Workstations:
With the exception of 1 IBM and 1 Dell all of the systems are build-up or white box systems. Generally all but one of the workstations are usable. Mark’s build-up Celeron 500mhz system will need to be replaced. Of the remaining 17 systems, 13 are running Windows 98se, 1 is running Windows 2000 Pro and 3 are running Windows XP Pro. 10 of the systems have 256 megabytes of memory or more and 7 have 128 megabytes of memory or less. (See attached Belarc Advisor PC Audit sheets for each system)

Software:
The major applications used are Microsoft Office Standard and Professional versions, Microsoft Internet Explorer, and Microsoft Publisher. Depending on the user and their job there is software specific to what they do, such as billing, scheduling, and mapping. (See attached Belarc Advisor PC Audit sheets for exact software installed on each system) All software is loaded locally on the workstations.

Printers:
The Town has 19 total printers.(See attached sheet for model & serial numbers) Only the Lexmark E321 is currently setup to be shared by everyone. All other printers are setup locally, some are setup to be shared by 2-3 people.
**Internet Connectivity:**
Currently there are 2 Verizon DSL lines coming into the Town Hall. One is strictly for the Court System users and the other is for all other users. At this time there is one Linksys BEFSR41 4 port router and Linksys 16 port hub connected to the general DSL line. There is no router connected to the DSL line servicing the Court System users. It appears that Verizon is providing limited firewall support, however, it is not what we feel in required for adequate protection. The court computers are connected to each other via a DLink Switch. Email is hosted by Lightlink and there is one Hot Mail account.

**Outstanding Issues:**
Kevin’s system has an occasional memory error which does not seem to impact his ability to work.
Kris has reported that sometimes the Clerk program runs slow. This application is setup peer to peer between 3 systems.
Debbie’s system needs more memory to run her mapping software.
Diane’s system seems to have mouse issues.

**RECOMMENDATIONS:**

**Option # 1 : (preferred)**
Based on what we have found The Computing Center is recommending that The Town of Dryden purchase a Windows 2003 Small Business server with appropriate tape backup, upgrade all workstations to Windows XP Profession, drop down to one DSL or Broadband Internet connection (setup security through Active Directory), purchase a network shared laserjet printer and bring email in house. The following is pricing for this option:

**HEWLETT-PACKARD PROLIANT ML350 SERVER**
- Intel Xeon 2.8ghz. Processor
- 1.5 Gigabytes Internal Memory
- Qty. 3 146 Gigabyte Ultra SCSI HS Hard Drives Setup Raid 5 (Total spinning Space 292 Gigabytes)
- Integrated Smart Array 64i Controller
- Integrated Ultra3 SCSI Controller
- Existing Monitor To Be Used
- HP Keyboard & Mouse
- HP Redundant Hot Swap Power Supply
- 3 Year Onsite Warranty $3789.00

**APC SU1500 SMART UPS** $ 515.00

**MICROSOFT WINDOWS 2003 SMALL BUSINESS SERVER W/15 CALS**
- Windows 2003 Small Business Server
  - Exchange Email
  - Faxing

*The Town of Dryden would purchase this off State Contract*
Option # 2: (No workstation upgrades)

For this option, The Computing Center is recommending that The Town of Dryden purchase a Windows 2003 server and an appropriate tape backup unit, leave the workstations as they are, drop down to one DSL or Broadband Internet connection (setup security through Active Directory), and run email through our email service. The following is pricing for this option:

**HEWLETT-PACKARD PROLIANT ML350 SERVER**
- Intel Xeon 2.8ghz. Processor
- 1.5 Gigabytes Internal Memory
- Qty. 3 146 Gigabyte Ultra SCSI HS Hard Drives Setup Raid 5 (Total spinning Space 292 Gigabytes)
- Integrated Smart Array 64i Controller
- Integrated Ultra3 SCSI Controller
- Existing Monitor To Be Used
- HP Keyboard & Mouse
- HP Redundant Hot Swap Power Supply
- 3 Year Onsite Warranty

**APC SU1500 SMART UPS**

**MICROSOFT WINDOWS 2003 SMALL BUSINESS SERVER W/15 CALS**

**HEWLETT-PACKARD INTERNAL ULTRIUM 230 TAPE DRIVE**
- Maximum Storage With Compression 200gb
- Includes 10 Ultrium Tape Cartridges

**VERITAS BACKUP EXEC FOR WINDOWS 2003 9.1**

**HEWLETT-PACKARD LASERJET 4200N PRINTER**
- 35 Page Per Minute Print Speed
- 100 Sheet Multi-Purpose Input Tray
- 500 Sheet Input Tray
- Integrated JetDirect Network Card
- 1 Year Warranty

**MDAEMON/DOUBLECHECK EMAIL/VIRUS/SPAM SERVICE**
- The Computing Center Would Host The Town of Dryden's Email
- Includes Email Virus & Spam Protection
- One Time Setup Fee $65.00
- $7.25 Per User Per Month 20 users

**Pricing**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEWLETT-PACKARD PROLIANT ML350 SERVER</td>
<td>$3789.00</td>
</tr>
<tr>
<td>APC SU1500 SMART UPS</td>
<td>$515.00</td>
</tr>
<tr>
<td>MICROSOFT WINDOWS 2003 SMALL BUSINESS SERVER W/15 CALS</td>
<td></td>
</tr>
<tr>
<td>HEWLETT-PACKARD INTERNAL ULTRIUM 230 TAPE DRIVE</td>
<td>$3112.00</td>
</tr>
<tr>
<td>VERITAS BACKUP EXEC FOR WINDOWS 2003 9.1</td>
<td>$519.00</td>
</tr>
<tr>
<td>HEWLETT-PACKARD LASERJET 4200N PRINTER</td>
<td>$1352.44</td>
</tr>
<tr>
<td>MDAEMON/DOUBLECHECK EMAIL/VIRUS/SPAM SERVICE</td>
<td></td>
</tr>
<tr>
<td>One Time Setup Fee</td>
<td>$65.00</td>
</tr>
<tr>
<td>$7.25 Per User Per Month</td>
<td></td>
</tr>
<tr>
<td>20 users</td>
<td>$145.00 Per Month</td>
</tr>
</tbody>
</table>
Win95 runs fuel ticketing program; did not collect full data.

Per user request, did not collect any data from this machine.
DesignJet 650c C2859B SN: ESB5337408
DeskJet 692c C4582A SN: CN74H1K0M6
DeskJet 855CSe C4575A SN: SG64A1617H
DeskJet 990CSe C6455B SN: MY07D4C10J
Fujitsu M4097D duplex scanner (SCSI) SN: 521499
HP Color Copier 190 SN: SGB03109KW
HP Fax 1020 SN: CNH27AITSW
LaserJet 1200 C3144A SN: CNJ005444
LaserJet 4L SN: USB8972910
Lexmark E321 4500-201 SN: 98909VRD
OfficeJet 710 SN: MY03LG315C
OfficeJet 520 C3801A SN: US76HA43SX
Okidata Microline 184 SN: 705AIK06544
Okidata Microline 320 SN: 706A12673818
Okidata Microline 321
Okidata Microline 13
Okipage 10e SN: 007A1047625
Okipage 14ex SN: 008A0001307
Visioneer Onetouch 8650 SN: 016A004154D1