
IT Plan – Agency Submitted

475 ND MILL AND ELEVATOR ASSOCIATION

Version: 2009-B-01-00475

Project: **Infrastructure**

Date: 11/20/2008

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Agency IT Plan Contact Data

North Dakota Mill & Elevator Association IT Plan Contact:

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Review of Agency's IT Architecture

REVIEW OF AGENCY'S IT ARCHITECTURE

The ND Mill's Information System is entirely located within the Mill's building complex, located in Grand Forks, ND. We have no applications running on the State's systems. The Mills system consists of 6 main servers, 4 secondary servers, 50 workstations, 4 laptops/tablet PCs, 12 forklift mounted computers, departmental & personal printers. These devices are connected via an Ethernet LAN. The backbone of the 100base-T network is fiber optic transitioning into CAT5 twisted pair cabling. The active forklift mounted computers connect via an 802.11g firewalled sub-net with WPA-2 PSK security & a remote server running MS Terminal Services Manager, with access only to their specific inventory application. The Mill is connected to the outside world via an Internet Server, a SonicWall Pro 3060 Firewall and two SDSL lines. These SDSL lines are load balanced by the SonicWall. Our mail gateway & web servers connect internally via a special protected zone within our firewall.

There are 4 major business applications on the Mill Information System

dbc SMARTsoft Accounting - running under Windows Server 2003 & MS SQL 2000: This is our primary accounting program. It also handles the Grain Department functions of purchasing, delivery, storage, pricing & payment for our major raw material, (hard red spring wheat & durum wheat). In addition it also handles the Sales & Accounting Department functions of tracking sales, production and to some extent, shipping. IT service of this application is provided via a maintenance/support agreement with the vendor & by the NDM IT Department. This program is interfaced with our data warehouse and through the data warehouse to a few customer information utilities on our Website.

Microsoft Business Solutions Great Plains Dynamics Payroll - running under Windows Server 2003 & MS SQL 2005: This program handles our Payroll & Human Resource functions. IT service of this application is provided via a maintenance/support agreement with Microsoft, additional support through DFC Consultants of Fargo & the NDM IT Department. This program is interfaced with Kronos TimeKeeper, a time clock program. Access to this program is limited to the payroll clerk, the human resources manager, the accounting manager & the IT manager.

NDM Data Warehouse - running under Windows Server 2003, MS SQL 2000, MS Access and Crystal Reports 8: This is our central information data structure for the compiling of and reporting of information from all our data sources. This program pulls data from our main accounting program & feeds specific limited access data to our web server. The data in the program is distributed to authorized users on a case by case basis. It is supported by ComputerWare of Grand Forks, ND & the NDM IT Department.

MS Office Professional - (we use all versions from 2000 thru 2007, usually updating as the workstation it runs on is replaced): Outlook (Email & Scheduling), Word (SP), Excel

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(SS), Access (DB), PowerPoint (Presentations) This program is supported by the NDM IT Department.

We also have various other computer based applications spread throughout the Mill's operations:

Barcode & Wireless Based Bag Inventory Tracking - (MS SQL & Access) As our flour is packed & loaded on pallets, we print a barcode & add to finished bag inventory. As the trucks & railcars are loaded, the pallets of bagged products are scanned out of inventory & matched to a sales order. The bill of lading is then printed. (On internal data network)

Vendor Managed Inventory - (Intellution, Dialogic & Cold Fusion) Customer has flour level sensors in their raw flour tanks connected to a black box w/modem. At the mill we have a computer that dials that black box at intervals, retrieves the info on bin levels & posts that info (both numerically & graphically) on an Internet accessible screen (On internal data network)

Bearing & Grain Temperature Monitoring - (Rolfes) We have a computer connected to temperature probes in our grain bins & on the various bearings in our grain elevator. This temperature info is fed to the computer screen & alarm threshold levels are set to flag problem areas. (Not on internal data network)

Security Camera Monitoring & Recording - Security cameras throughout our NDM complex feed into a couple of computers. There the video is captured, recorded & displayed. (Not on internal data network)

NIR & Farinograph Lab Testing Equipment - Grain quality tests are preformed, recorded & the results printed for our flour customers. (Not yet on internal data network)

Flour Milling Operations & Measurement - Movement of grain & flour, through the milling process, is partially controlled by a series of computers. These computers control most of the process, show status of the system & monitor their performance. (Not yet on internal data network)

IT Capture Notes:

We have no "IT Capture Projects" planned.

We have one full time person in IT & any salary/position info will be in the Agency Budget areas.

Planned Infrastructure Activities and Changes

PLANNED INFRASTRUCTURE ACTIVITIES AND CHANGES

Zero User Downtime

Use proactive maintenance procedures and perform this maintenance before/after normal working hours when feasible

(To keep our systems current, updates to hardware & software are installed on a regular basis. Spares are available for hot-swap on many critical elements of our system.)

Provide additional technical expertise & on-call coverage for our IT Department

(We have maintenance agreements with our software vendors & service arrangements to backup the IT Department.)

Protect and Secure the Mill's Information

(We are implementing a 2nd location, mirrored redundancy for our servers.)

Run daily data backups on tape sets that are rotated weekly with off site storage of the previous night's backup

Test the backup sets for reliability on a regular basis

Provide continuous Anti-Virus and Anti-Spam coverage of all workstations and servers with automatic definition updates

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Ongoing documentation updates of our Information Systems with operating, maintenance and disaster procedures for all

Promote Intelligent and Efficient use of our Information Systems

Obtain application and systems training for all users according to their needs

Streamline, automate and consolidate operations when and where possible

(We have an ongoing effort to eliminate paper by, directly or indirectly, feeding captured data into our systems. Our goal is to provide our people with the data they need in a timely manner, while reducing the possibility of errors.)

Continuously Upgrade & Modernize our Information Systems to insure it's continued usefulness

Replace or upgrade obsolete equipment, cabling and software on a regular basis

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1. If applicable, describe the reason for any extraordinary increase or decrease in your infrastructure costs.

2. Total number of desktop computers: 50
Number of desktops for which you are requesting replacement funding: 25
Average replacement cost/desktop: 1,500

3. Total number of laptop computers: 4
Number of laptops for which you are requesting replacement funding: 2
Average replacement cost/laptop: 3,000

What state planning region are these desktop/laptop computers located?

Region 1 0 2 0 3 0 4 5 4 5 0 6 0 7 0 8 0

4. What percentage of these pcs are running the following operating systems:

(total should be equal to 100%)

Open Source OS 0 %
MAC OS 0 %
Windows Vista 0 %
Windows XP 100 %
Other 0 %

5. What additional expenditures are being paid out of non-appropriated funds? 0

Please explain:

IT Asset Management Plan

Hardware:

Servers are replaced approximately every 4 years. They are obtained via WSCA contract pricing from HP/Compaq Government Sales.

Workstations (w/monitors) are replaced approximately every 4 years. The old systems are trickled down to lesser use positions. They are obtained via WACS contract pricing from Dell Government Sales Division.

Printers are replaced as needed when worn out. As their useful life is also approximately 4 years, like the workstations we expect to replace 1/2 of them each biennium. If increased function or speed is needed before the units reach life end, they are trickled down to lesser use positions.

Software:

Op. Sys. software & application software are updated on a regular basis & replaced when a new version is required, clearly has useful improved features or is no longer supported by the vendor. We maintain vendor maintenance agreements on our key application software.

Human assets:

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Training is obtained when needed for IT personnel & users. The IT department is backed up by vendor support & local network & IT service providers.

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		CURRENT APPROPRIATION	BUDGET REQUEST	OPTIONAL ADJUSTMENTS	REQUEST PLUS OPTIONALS	SUBSEQUENT BIENNIUM
IT5310	IT SOFTWARE AND SUPPLIES	\$97,300	\$102,165	\$0	\$102,165	\$107,273
IT5510	IT EQUIPMENT UNDER \$5000	\$71,848	\$101,048	\$0	\$101,048	\$106,100
IT6020	IT COMMUNICATIONS	\$195,000	\$204,750	\$0	\$204,750	\$214,988
IT6030	IT CONTRACT SERVICES & REPAIRS	\$103,650	\$131,650	\$0	\$131,650	\$138,200
	Total Budget:	\$467,798	\$539,613	\$0	\$539,613	\$566,561
475	MILL AND ELEVATOR	\$467,798	\$539,613	\$0	\$539,613	\$566,561
	Total Funding:	\$467,798	\$539,613	\$0	\$539,613	\$566,561