

**NASCIO Recognition Awards Nomination 2007
Data, Information and Knowledge Management****Nebraska Department of Correctional Services Digital Law
Library****Executive Summary**

Faced with escalating costs for printed legal reference materials, the Nebraska Department of Correctional Services and the Nebraska Office of the Chief Information Officer partnered to create digital law libraries in seven facilities. These two Nebraska State Agencies implemented a secure web-based solution, utilizing Citrix and thin clients to access the online Westlaw database. By eliminating the need for the subscription of hardback books at five facilities and CD media subscriptions at two facilities, the project will save \$1,703,235 in subscription costs by 2015. The project is projected to recoup the up front hardware and software cost in a little over four years.

The Nebraska Department of Correctional Services Digital Law Library has also improved efficiency and safety. Operational improvements include:

- Reducing the cost of subscriptions;
- Reducing the labor required to maintain current law library operations, gaining valuable time back that is required to monitor inmate movement and activities within the library during operations;
- Freeing up space that was being used by book shelves;
- Extending legal research to additional inmate areas which meets the state requirement to provide legal research for inmates;
- Eliminating the time required to escort inmates to and from the law library;
- Improving inmate and staff safety by eliminating a possible method of hiding and passing contraband and by reducing inmate movement; and
- Improving the efficiency of inmate research by eliminating the need to wait for replacements of damaged books.

Business Problem and Solution

Problem

Faced with escalating costs for printed legal reference materials, the Department of Correctional Services partnered with the Office of the Chief Information Officer to design a more efficient and safer method of providing inmate access to legal materials. Department of Correctional Services staff identified the following problems with the paper-based system:

- The annual cost of printed reference materials at each location was projected to increase by 13% each year.
- Printed documents became damaged and needed to be replaced.
- Keeping printed copies of research/libraries materials current and up-to -date required staff time.
- Printed materials presented a safety risk because books were used by inmates to hide and pass contraband or messages.
- Some printed materials were being replaced by online applications.
- Any online solution must be designed to maintain restrictions on communication between inmates or with others outside of the correctional institution.

Objectives

Objectives of the digital law library project included:

- Reducing the cost of providing reference materials at 7 facilities;
- Maintaining data security;
- Limiting inmate activity to legal research and preparation of legal documents only;
- Providing support using existing staff; and
- Providing a managed inmate printing solution.

Options

Three options were explored:

1. Placing CD-ROM servers at each location;
2. Retaining paper documents at five locations and CD-ROM servers at two locations; and
3. Providing access to digital law materials through a secure, web-based solution.

Solution

To keep hardware costs and on-going technical support at a minimum, a secure web-based solution, utilizing Citrix and thin clients to access the on-line Westlaw database was implemented. A thin client is a diskless computer which depends primarily on a centralized server for processing activities and mainly focuses on conveying input and output between the user and the remote server. The thin clients chosen for this project offer stable, manageable, desktop-like performance with proven enterprise technology for maximum security and low total cost of ownership. A custom hardened Linux kernel was also implemented for added security while lowering the need for technical support.

In the aforementioned client-server architecture, Citrix Presentation Server™ was selected to serve the Microsoft's Internet Explorer browser that was secured by a custom front end known as Public Web Browser (<http://www.teamsoftwaresolutions.com>). Presentation Server provides the ability to install, publish, and manage applications that can pull its content from the centralized location.

The published resources can then be securely accessed by preauthorized users which can be tailored to fit the needs for anywhere, anytime, any device that has a TCP/IP connection. Presentation server is known as the industry standard for delivering applications that provide a low cost and high security solution.

To connect the various locations with the centralized server, virtual local area networks (VLANS) were established, thus logically separating the staff and inmate networks. Local site firewalls were installed to protect the network traffic and block potential unauthorized inmate usage.

To further reduce costs all print traffic was directed to the Citrix server for approval and sent to an authorized printer. This provides the facilities the ability to utilize existing printers without having to incur additional hardware and maintenance expenses.

This project had a production start date of July 6, 2006.

Operational Improvements

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- Freeing up space that was being used by book shelves;
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Public Benefits

The Nebraska Department of Correctional Services Digital Law Library project has benefited Nebraska taxpayers, the State of Nebraska, and the Department of Corrections by reducing the costs of library materials and thus saving a projected \$1,703,235 in tax dollars over ten years. The following table shows projected cost saving by year.

| Fiscal Year | Paper Costs | Online Costs | Savings |
|---------------------------------------|--------------------|---------------------|--------------------|
| FY 2005-2006 | \$285,291 | N/A | |
| FY 2006-2007 | \$322,378 | \$478,786 | (\$156,408) |
| FY 2007-2008 | \$364,188 | \$370,480 | (\$6,292) |
| FY 2008-2009 | \$411,532 | \$381,356 | \$30,176 |
| FY 2009-2010 | \$465,031 | \$392,559 | \$72,472 |
| FY 2010-2011 | \$525,485 | \$404,099 | \$121,386 |
| FY 2011-2012 | \$593,799 | \$415,984 | \$177,815 |
| FY 2012-2013 | \$670,992 | \$428,226 | \$242,766 |
| FY 2013-2014 | \$758,221 | \$440,835 | \$317,386 |
| FY 2014-2015 | \$856,790 | \$453,828 | \$402,962 |
| FY 2015-2016 | \$968,172 | \$467,200 | \$500,972 |
| TOTAL SAVINGS (Over Ten Years) | | | \$1,703,235 |