

# School Technology Cooperative Reaps a \$54 Million Benefit with Citrix® Solution

## IN BRIEF

- **Goal:** Enabling the Washington School Information Processing Cooperative (WSIPC) to provide 279 school districts in Washington State with centralized, real-time access to key school district administrative and reporting applications, while helping conserve state educational funds.
- **Solution:** Citrix® MetaFrame XP™ Presentation Server software
- **Results:** Washington State gains a projected net benefit of nearly \$54 million over five years, with an Internal Rate of Return (IRR) of 256 percent and a pay-back period of eight months. School districts receive stable administrative and reporting applications on a variety of client platforms.

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The Washington School Information Processing Cooperative (WSIPC) helps school districts across Washington deliver a better quality education to its children by providing the districts with cost-effective information systems. These systems support the sharing and management of fiscal, human resources, and student data. When it came time for WSIPC to deploy Skyward PaC-School Management Systems, a new Enterprise Resource Planning (ERP) solution statewide, it chose Citrix® MetaFrame XP™ Presentation Server software to deliver the ERP software. The Citrix solution has enabled WSIPC to centrally deploy and manage their applications; has allowed the ERP software to be accessed via a variety of client devices, including Macintoshes and Windows-based PCs; and offers an easy management infrastructure for supporting tens of thousands of users with little to no management required on the school district's part.

NOTE: This case study was authored by the Case Study Forum. The Case Study Forum is dedicated to writing and publishing case studies for the IT community. The financial analysis that appears in this case study was performed by ITCentrix, the premiere software and services company for measuring and managing the business value of information technology investments. Results shown are not a guarantee of equivalent performance.

## Benefits

Objective	Benefits Achieved
Conserve education funds	Nearly \$54 million in savings and benefits projected over five years due to Citrix® MetaFrame XP™ Presentation Server software.
Fast and easy application deployment	Centrally deploy and manage ERP application statewide to 42,000 users. Application updates available six months faster.
Extend the life of existing computer hardware	Application can run on different platforms, including Macintoshes, new PCs, legacy PCs, and mobile devices.
Simple, scalable management	Infrastructure allows for central management of tens of thousands of users by four IT staff directly responsible for Citrix MetaFrame XP Presentation Server.
Familiar, browser-based user interface	All users see the same Web-based interface, regardless of computing platform.
Aid in compliance with state and federal reporting regulations, such as the No Child Left Behind Act	Templates and reporting options for compliance are made available to all school districts as soon as they are published.

## About WSIPC

WSIPC is a 36-year-old, public, non-profit cooperative that provides IT services to 279 school districts in the state of Washington, including 698,000 students and 42,000 administrators and teachers. Ninety-four percent of the students in the state are served by districts that use WSIPC services.

WSIPC provides its member school districts with access to ERP software that includes modules for managing all aspects of a school district, including accounting, human resources, and student data processing services. WSIPC manages and deploys the ERP application from a central location, allowing economies of scale by saving each district the time and money it would take to manage and deploy the software by themselves, distributing the overall costs across 279 districts instead of a single district.

**"Citrix MetaFrame XP Presentation Server enabled us to substantially increase the reliability of our IT system and enabled large-scale deployments in a short amount of time, with a considerably smaller staff than we otherwise would have needed."**

MARK CALDWELL

MANAGER, SYSTEMS AND NETWORKS

WSIPC

## The Challenge: Rolling Out a New ERP System Statewide

In the past, WSIPC had developed a home-grown, character-based suite of software, systems and services that managed the student, financial and human resources assets of school districts. By September 2000, WSIPC realized it was time for an upgrade. The opportunity to upgrade was facilitated by the establishment of a statewide education network called the K-20 Educational Telecommunications Network, which provided all school districts in Washington with high-bandwidth Internet access.

Upgrading carried with it a new set of challenges:

- The 279 school districts run a wide variety of hardware, and the new software would have to run on all systems across all districts. Approximately 50 percent of the desktop PCs in the districts are Macintoshes, and many districts also have a significant number of older Intel desktops that are considered under-powered.
- The application would have to be delivered from a central location, because WSIPC's goal was to require no management or effort on the school district's part. Because the application would be ultimately used by 7,000 concurrent and 50,000 total users, it would have to be delivered on a system that was scalable, and have an easy management infrastructure. And because the system would be used by educators and administrators with varying levels of computing skills, it would have to be easy to use, yet sophisticated enough to manage the complex requirements of a school system.
- Finally, the implementation had to help school districts meet the reporting requirements for state and federal regulations, such as the No Child Left Behind Act.

## Making the Move to a Citrix® Solution

WSIPC faced one basic decision when moving to the new ERP system: Should it write the ERP software itself, as it did with the previous solution, or should it buy a commercial, off-the-shelf package, and then deliver that solution remotely?

"After research, we found that going with an off-the-shelf solution was significantly less expensive, and we chose Skyward PaC-School Management Systems," says Mitch Benson, Supervisor, Systems Engineering for WSIPC. However, running this ERP software package on each client computer would present a problem, as not all of the disparate desktop computers within the 279 school

districts were capable of running the software. WSIPC chose to deliver the application using Citrix® MetaFrame XP™ Presentation Server software running on Microsoft® Windows® 2000 Servers. MetaFrame XP Presentation Server centrally deploys the application, so that it can be accessed over the K-20 network via any device with a Web browser.

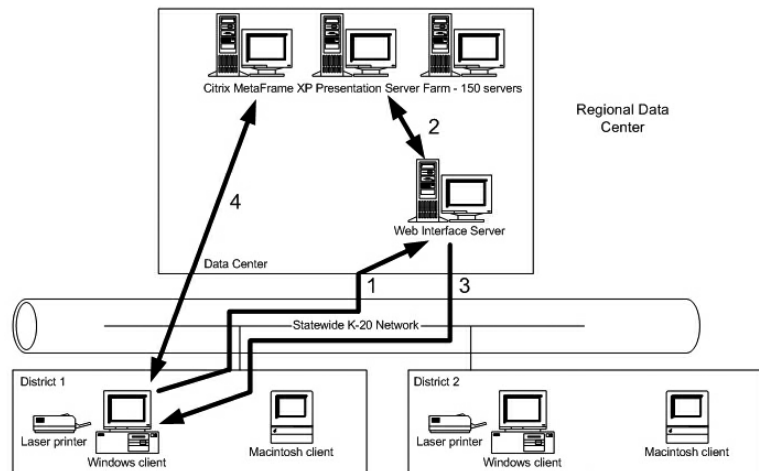
The Citrix solution is currently used to support 24 percent of WSIPC's user base. The remaining 76 percent will be converted by the third quarter of 2004. WSIPC currently has 900 concurrent user licenses of MetaFrame Presentation Server software which support 10,000 total users, and expects to have 5,000 concurrent user licenses serving 50,000 total users by the third quarter of 2004.

### An Inside Look at the Citrix Solution

WSIPC chose a Citrix MetaFrame XP Presentation Server solution that it implemented statewide, using Washington's K-20 network. Figure 1 shows how it works.

**WSIPC chose Citrix MetaFrame XP Presentation Server software for centrally deploying an ERP application statewide, allowing the application to be accessed by any device with a standard Web browser.**

**FIGURE 1: WSIPC'S CITRIX® METAFRAME XP™ PRESENTATION SERVER SOLUTION**



1. User connects to the Web interface server and gets a list of only the applications that they have access to.
2. User clicks on the application that they wish to access and the Web interface server communicates with the MetaFrame XP Presentation Server farm to obtain load-balanced connection and session information.
3. The Web interface server passes connection and secure access information to the user's client device.
4. The client device connects directly to the MetaFrame XP Presentation Server running the user's requested application. The MetaFrame XP Presentation Server and the client device transmit only mouse clicks, keystrokes, and screen updates over the network, optimizing bandwidth.

### The Bottom Line for WSIPC

**WSIPC's bottom line for the project: A cumulative five-year benefit of \$53,968,000, the ability to centrally deploy and manage key applications with a small staff, quicker software updates, a more stable operating environment, and better compliance with the No Child Left Behind Act.**

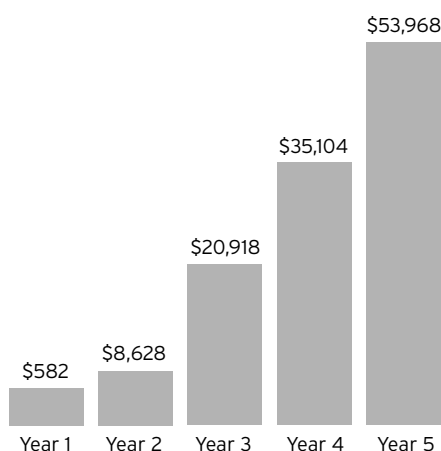
The Citrix implementation helped WSIPC cut costs, rapidly deploy and centrally manage the Skyward application, roll out updates immediately, and provide for a more stable operating environment. Because the software program runs centrally on 150 Citrix MetaFrame Presentation servers in a farm, it only needs to be updated on the server farm and is then instantly available statewide, delivering costs-savings and ensuring that the newest version is available to school districts immediately. In fact, school districts receiving the Skyward application via Citrix software have the latest versions up-and-running a full six months before school districts that run the application locally.

The Citrix implementation also helps the school districts comply with the "No Child Left Behind" Act by making templates and reporting options for compliance available to all school districts as soon as they are published.

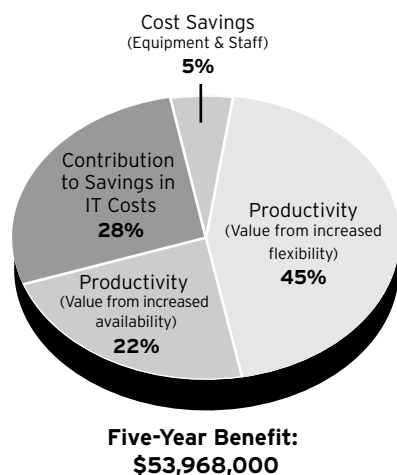
## Business Analysis of the Solution

A detailed analysis of the implementation shows that WSIPC will recognize a cumulative benefit of \$53,968,000 over a five-year period by employing the Citrix solution. The project has an Internal Rate of Return (IRR) of 256 percent, and a payback period of eight months.

The \$53,968,000 benefit is composed of cost-savings from equipment and staff, increased availability of the ERP application, increased productivity because of greater flexibility in using and deploying the application, and an overall contribution to IT cost-savings. Non-WSIPC districts spend \$125 per student in IT costs, compared to \$60 per student in WSIPC districts, and the Citrix implementation accounts for 10 percent of that savings. The following chart provides a detailed, five-year analysis.



**Cumulative Five-Year Benefit (\$000)**



Project Summary						
Annual ROI	858%					
Payback Period for Citrix Project (mos.)	8					
Cumulative Five Year Benefit (\$000)	\$53,968					
Annual Net Value of Citrix/Student(\$)	\$15					
Project Costs (\$000)						
	Startup	Year 1	Year 2	Year 3	Year 4	Year 5
Hardware, Software & Implementation	\$1,258	\$0	\$1,917	\$930	\$398	\$398
Staff Costs		\$165	\$165	\$165	\$165	\$165
<b>Total</b>	<b>\$1,258</b>	<b>\$165</b>	<b>\$2,082</b>	<b>\$1,095</b>	<b>\$563</b>	<b>\$563</b>
Benefits (\$000)						
Cost Savings (Equipment & Staff)		\$649	\$2,623	\$1,442	\$806	\$806
Contribution to Saving in IT Costs		\$389	\$2,664	\$3,673	\$4,105	\$4,537
Productivity (value from incr. availability)		\$312	\$2,136	\$2,946	\$3,292	\$3,639
Productivity (value from incr. Flexibility)		\$650	\$4,451	\$6,137	\$6,858	\$7,580
<b>Total</b>		<b>\$1,999</b>	<b>\$11,874</b>	<b>\$14,197</b>	<b>\$15,062</b>	<b>\$16,562</b>
Financial Analysis (\$000)						
Net Value	(\$1,258)	\$1,834	\$9,792	\$13,102	\$14,498	\$15,999
Cumulative Net Value	(\$1,258)	\$577	\$10,368	\$23,470	\$37,969	\$53,968
Net Present Value	\$40,895					
Annual ROI	858%					
Internal Rate of Return (IRR)*	256%					
Payback Period(months)	8					
Key Performance Indicators (KPIs)						
Annual Cost of Citrix/Student (\$)	\$2					
Annual Net Value of Citrix/Student(\$)	\$15					
Annual Business Value of WSIPC(\$m)	\$45					

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\*Internal Rate of Return (IRR) is the interest rate that makes net present value of all cash flow equal zero. IRR, in this case, is more meaningful because the initial costs understates the actual costs over the life of the project. IRR more fully recognizes these costs because it considers costs over the life of the project (not just initial costs).

## Looking to the Future

Twenty-four percent of the WSIPC user base currently uses the Citrix solution. By the third quarter of 2004, the solution will be rolled out to all WSIPC school districts. At this time, it is used for key administrative ERP applications, but WSIPC's Caldwell notes, "We can envision other applications coming online. For example, if the state goes with a particular school busing system, we can deploy that via the Citrix system very rapidly, with minimal impact and downtime."

In the near future, he says, "The issues raised by the 'No Child Left Behind' Act could readily be solved by using Citrix software as a platform. We believe that the deployment of this platform could meet nearly any challenge that may be presented from a legislative perspective."