

Translation of article "Ein Migrationsbericht aus der Praxis"

# A practical Migration Report



Windows 7 beats Vista, but many companies are still working with the predecessor product XP. CMS Hasche Sigle shows how easy migrating to 7 can be

IT-BUSINESS / Daniel Feldmaier

## A short checklist on migrating Windows XP to Windows 7

- Licenses for Windows 7
- New Hardware if existing clients are too old and need to be replaced
- New software or update options for older programs which are no longer Windows 7 compatible

Windows XP has proved itself in the business environment and thus outlived the unsuccessful Windows Vista. Praise is currently being heaped on Microsoft for the successor, Windows 7. It turns out to be an operating system that is well suited to corporate environments, especially thanks to its user-friendliness and fast performance.

CMS Hasche Sigle, one of the largest law companies in Germany, is planning to move from XP to Windows 7. "Migrating a system that works perfectly means exposing the company to a variety of risks", warns René Küster, IT Project Manager with Hasche Sigle, possibly thinking of the

old adage: "Never change a running system". After all, the task was to migrate the operating system of no less than 1,200 clients run by the law company.

"The fact that support for Windows XP had been discontinued was our main motivation for taking the challenge of migrating to Windows 7. Even now, Windows XP doesn't provide full support for state-of-art hardware" Küster continues. In April 2014, support and security updates will be discontinued for good.

Due to the large numbers of users who log in from on the road, the new direct access technology which replaced VPN was an interesting feature for Hasche Sigle. It

uses a secure data tunnel to connect external users with the corporate network. Other arguments that made the prospect of Windows 7 exciting for the company were Bitlocker, the integrated encryption technology, a location-dependent firewall, and simpler user account management. "One thing that we was really exciting for us", says Küster "was that Windows 7 had drivers to match more or less any state-of-art hardware."

## PAYING DIVIDENDS

The most important question for Hasche Sigle prior to migration was whether the move should be implemented as a big bang



## Project

- **Customer:** CMS Hasche Sigle, Law firm with more than 600 attorneys
- **Problem:** Current hardware not fully supported by Windows XP: Mainstream Support for XP is already discontinued. Extended Support runs out in April 2014.
- **Solution:** Migration of 1,200 clients from Windows XP to Windows 7
- **Service provider:** The Windows 7 migration process was handled internally by the Hasche Sigle IT department.
- **Software additionally required:** CLMSoftware (Client-Lifecycle-Management) Baramundi Management Suite for software distribution
- **Duration of implementation:** around three months in total
- **Cost overhead:** 1,200 licenses or updates to Windows 7, Office 2007 Licenses, hardware costs, overtime
- **Training overhead:** two to four hours per department during migration

or step by step. And the question as whether or not separate they would need to deploy a separate client manage software, (CMS), or could handle things with built-in tools, was still open. "Migration using built-in tools often appears to be an appealingly cheap option - and it is after all part of the system administrators daily grind", Küster reports. "Our analysis up front revealed that this approach is the right choice for small business with some 40 to 50 clients. If you have a larger number of clients, the benefits that a special tool offers definitely tip the balance from a technical, time and financial point of view." The automated roll-out and the ability to install additional software in a single process, and to inventory the hardware and software at the same time are some of the other benefits.

## INVENTORY

The IT department started the project with a complete inventory of hardware and software and a compatibility check. During the hardware scan, the administrators tested which devices would not work on Windows 7 and which would work following a simple upgrade, such as adding more RAM. Older clients, graphics and sound cards were potential sources of issues here.

## SOFTWARE-CHECK:

- 1 Does the software run on Windows 7 and if not, do we need an update?
- 2 Is there any software preventing the migration?
- 3 If software doesn't run on Windows 7, can we possibly run it in Windows 7's XP mode?
- 4 License costs: How many licenses do we need? Where are updates possible? Do we need to buy new licenses?
- 5 Do it make sense to install a Key Management Server?

- 6 Do hardware-linked licenses (OEM licenses) involved? An inventory of these licenses is required up front to be able to reassign precisely after migration.

As a general rule, mission critical software must be investigated in depth prior to any operating system change and tests must be performed wherever necessary.

## BIG BANG VERSUS STEP BY STEP

Two strategies are potential candidates for the roll-out: step by step or big bang. The latter is necessary if you have software that needs to be migrated parallel to a server. However, if something goes wrong during this process, a tiny error can quickly develop

into a major crisis. In a step by step migration, multiple platforms need to be run in parallel for an extended period of time. Hasche Sigle opted for the step-by-step method based on the following plan:



RENÉ KÜSTER, IT project manager, CMS Hasche Sigle

**Step 1: Planning & tests.** Three months were required for planning and testing the migration of 1,200 clients through to the initial roll-out.

**Step 2:** Preparation and testing of the CMS with a Client ManagementSystem by Baramundi Software AG

**Step 3:** Migration by department. Migration of clients by department where

users were trained parallel to the migration. Project manager Küster recommends user training due to the differences in the XP and 7 GUIs. Step by step migration with user training in parallel may cause more planning and organizational overhead, but according to Küster it reduces the cost and support overhead after the migration. Finally, the ability to cope with the new operating system immediately after the migration enhances the user experience, thus promoting acceptance.

**Step 4: Office 2007**

Migration from Office 2003 to Version 2007 including training

**Step 5: Support**

anning of an internal helpdesk.



## Tips for successful migration

- Create a detailed roll-out concept up front of the project.
- Allow for the costs of new hardware and software.
- If possible, migrate step by step.
- Test first, then migrate.
- If the roll-out involves replacing the hardware, you need excess licenses.
- Migrating the operating system and Office at the same time can be challenging for users.
- User training parallel to the migration promotes a seamless change and prevents production outages.
- Adapt server operating systems to match the clients. Windows Server 2008 R2 in combination with Windows 7 mitigates potential issues
- Registry and filesystem privileges are handled in a far more restrictive way by Windows 7 than by XP. It is important to test at an early stage and modify as required.



## USER TRAINING

Hasche Sigle trained its users by department, taking the individual workflows in the company into consideration. The duration of the training was two to four hours. In this time, the computers were migrated to the new operating system and the users were then able to apply their

newly acquired knowledge at their desktops immediately after completing training.

## COSTS

“It goes without saying that a migration is going to cause additional work overhead. This includes overtime on weekends or night shifts”, Küster explains. The cost of new hardware and software has to be added on top.

## CONCLUSIONS

“Looking back from today’s perspective, the migration actually looked more difficult than it turned out to be. Detailed planning up front, a flexible CMS and experienced administrators in the company and client management provider-side were definitely very useful”, says René Küster summing up. He wholeheartedly recommends client man-

agement systems: „A roll-out without a CMS wouldn’t be much fun, today. The CMS handles many time-consuming routine jobs and helps to avoid errors. Software-based client management also makes sense because you need to install each client multiple times between procurement and retirement. We also use the CMS for system management and inventory and as an interface to our helpdesk.“ □

## Saving time and nerves

Details are often decisive to a successful migration. A couple of examples:

### • PE Boot via PXE

For a Windows 7 roll-out the client management system should support PE boot via PXE. If this is given, text mode driver integration for supporting special controller is easily handled. Using Linux for the boot considerably increases the overhead for modifying the boot image.

### • Back up user Profiles

Users are happy if they can keep most of their settings. The User State Migration Tool (USMT) by Microsoft can be used for this. In this case, user profiles were automatically migrated using the Baramundi Management Suite.

### • Group profiles

Compared to Windows XP, the number of group profiles has grown substantially in Windows 7. ADMX Migrator is useful for converting or creating policies.

### • Don’t forget your print servers

Drivers on print servers also need to support Windows 7.

### • Consider special cases

All special cases need to be automated cleanly. The 80/20 rule applies here: 20 percent of the software accounts for 80 percent of the work.

### • Order excess licenses for Client Management in good time.

## USER FRIENDLINESS CHECK

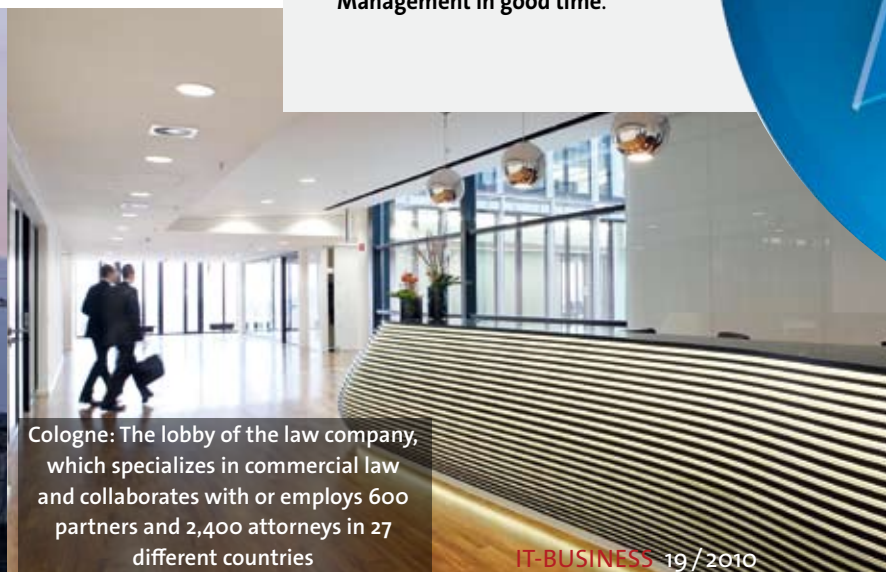
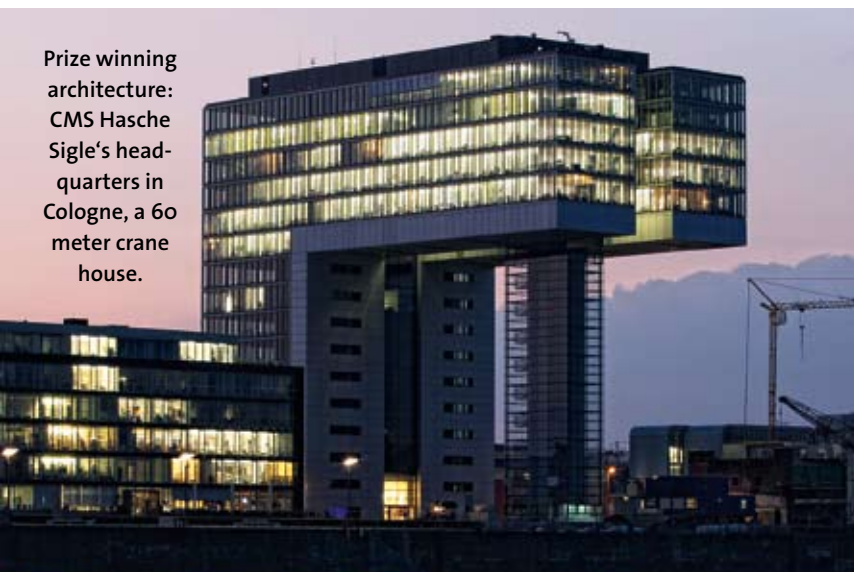
With respect to the installation technology, the law firm had a choice between cloning and native unattended installation.

Cloning is a very fast process, but has the disadvantage that a large generic pool of drivers is installed at the same time. Each computer has every single driver, no matter whether it actually needs them.

The second option is an unattended install. It takes more time but also offers some benefits. The clients are only given the drivers they actually need. At the end of the day, this approach gives you a more stable resulting system than imaging.

The company ran a user satisfaction survey parallel to the migration. The results revealed that the majority of the users was very happy with the process and results of the migration to Windows 7 and Office 2007.

Prize winning architecture: CMS Hasche Sigle’s headquarters in Cologne, a 60 meter crane house.



Cologne: The lobby of the law company, which specializes in commercial law and collaborates with or employs 600 partners and 2,400 attorneys in 27 different countries