

turning knowledge into practice

Lessons Learned: Migrating to Windows Vista in a Large Scale Survey

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Introduction

- Overview of Windows Vista
- Current survey requirements
- Field Test with Windows Vista
- Conclusion
- Q & A

Windows Vista - History

- Released in January, 2007
- First new operating system in five years
- First major change to an OS since Windows 3.11 to 95
- Successor to Windows XP
 - Primary purpose to correct security vulnerabilities in XP
 - Updated user interface and graphical style

Windows Vista - Reviews

- Received mixed reviews on release
- Positive Features
 - Stronger security – Windows Defender and malware detection
 - Greater stability – few system crashes
 - Networking enhancements – especially wireless networking
 - Incorporates IPv6, the next generation TCP/IP
 - Includes new graphics, Aero

Windows XP

XP Laptop

Internet Explorer
Outlook Express
VNC Viewer 4
Transmission

My Documents
My Recent Documents
My Pictures
My Music
My Computer
Control Panel
Set Program Access and Defaults
Connect To
Printers and Faxes
Help and Support
Search
Run...

All Programs

Log Off Shut Down

Program Files

File Edit View Favorites Tools Help

Back Search Folders

Address C:\Program Files

Folders	Name	Size	Type
Desktop	Adobe		File
My Documents	ATI Technologies		File
My Computer	AvantGo Connect		File
Hard Drive (C:)	CAI_Mngr		File
cabs	Common Files		File
Config Utils	ComPlus Applications		File
Documents and Settings	DVD		File
EPOAgent	Electronic_PTE		File
IPAQFlashCard	FileAction		File
MSOCache	Gateway		File
PrePointsec - System Volume Inform	iLearning		File
Program Files	InstallShield Installation Information		File
RECYCLER	Intel		File
System Volume Information	Internet Explorer		File
trainer	LapCon		File
WINDOWS	McAfee		File
winnt	Messenger		File
WUTemp	Microsoft ActiveSync		File
DVD Drive (D:)	microsoft frontpage		File
RECOVER (E:)	Microsoft Office		File
Control Panel	Movie Maker		File
	MSN Gaming Zone		File
	NetMeeting		File
	Online Services		File
	Outlook Express		File

Windows Vista - Aero

The screenshot displays the Windows Vista Aero desktop environment. On the left, the Start menu is open, showing links to Internet Explorer, Windows Mail, and various system folders like Documents, Pictures, Music, Games, Search, Computer, Network, Connect To, Control Panel, Default Programs, and Help and Support. The taskbar at the bottom features the Start button, a search box, and a taskbar button for 'Program Files'. A File Explorer window is open, showing the 'Program Files' directory. The window title bar indicates the path: Computer > Local Disk (C:) > Program Files. The File Explorer interface includes a menu bar (File, Edit, View, Tools, Help), a toolbar with 'Organize', 'Views', and 'Burn' buttons, and a list of folders and files. The 'Folders' pane on the left shows a tree view starting from Desktop, then Vista Laptop, Public, Computer, and Local Disk (C:), with 'Program Files' selected. The main pane displays a list of folders and files with columns for Name, Date modified, and Type.

Name	Date modified	Type
Adobe	08-27-2007 7:00 PM	File
BitLocker	09-13-2007 3:55 PM	File
CAIManagerNet	05-08-2008 2:48 PM	File
Common Files	09-14-2007 1:18 PM	File
CyberLink	08-27-2007 7:01 PM	File
Electronic_PTE	01-29-2008 1:08 PM	File
Google	11-06-2007 2:01 PM	File
hp	11-06-2007 12:35 ...	File
iLearning	09-17-2007 9:25 AM	File
InstallShield Installatio...	11-06-2007 12:35 ...	File
Intel	08-28-2007 10:53 ...	File
Internet Explorer	11-06-2007 2:01 PM	File
Java	08-27-2007 7:02 PM	File
Microsoft Games	09-13-2007 3:53 PM	File
Motorola	08-27-2007 6:56 PM	File
Movie Maker	11-02-2006 8:41 AM	File
MSBuild	11-02-2006 8:35 AM	File
MSN	11-02-2006 8:35 AM	File
MSSOAP	09-14-2007 1:18 PM	File

Windows Vista - Reviews

- Negative Features
 - System requirements demanded greater system resources than that required for Windows XP
 - Too many editions compared to XP
 - Not complete – service pack in works not long after release
 - More expensive.
 - Bottom line for many reviewers was that Windows XP was good enough, but Vista was a good move only if getting a new PC

Current Survey Requirements

- National survey conducted by RTI in all 50 states and District of Columbia
 - 70,000 interviews conducted each year
 - 700 Field Interviewers and 60 supervisors
- Screenings conducted with handheld computer
- Interviews conducted with laptop computer
- Screening and Interview data transmitted to RTI via analog phone line

New Equipment Field Test

- Current fleet aging and scheduled for replacement in 2009
- In January 2008, conducted a field test to evaluate new hardware
- Objectives included evaluating new operating systems
- Decided to include Windows Vista as part of the field test

Windows Vista - Field Test

- Immediate benefits:
 - Unlike XP, Vista installs drivers for USB devices on all USB ports
 - Boot up time 15% faster than Windows XP
- Problems encountered:
 - Interview software took 30% longer to load than in Windows XP
 - Security pop-ups from “User Account Control” required an administrator password for a new program to run. Had to turn off through a global registry setting
 - New version of Mail client required minor changes to interview software

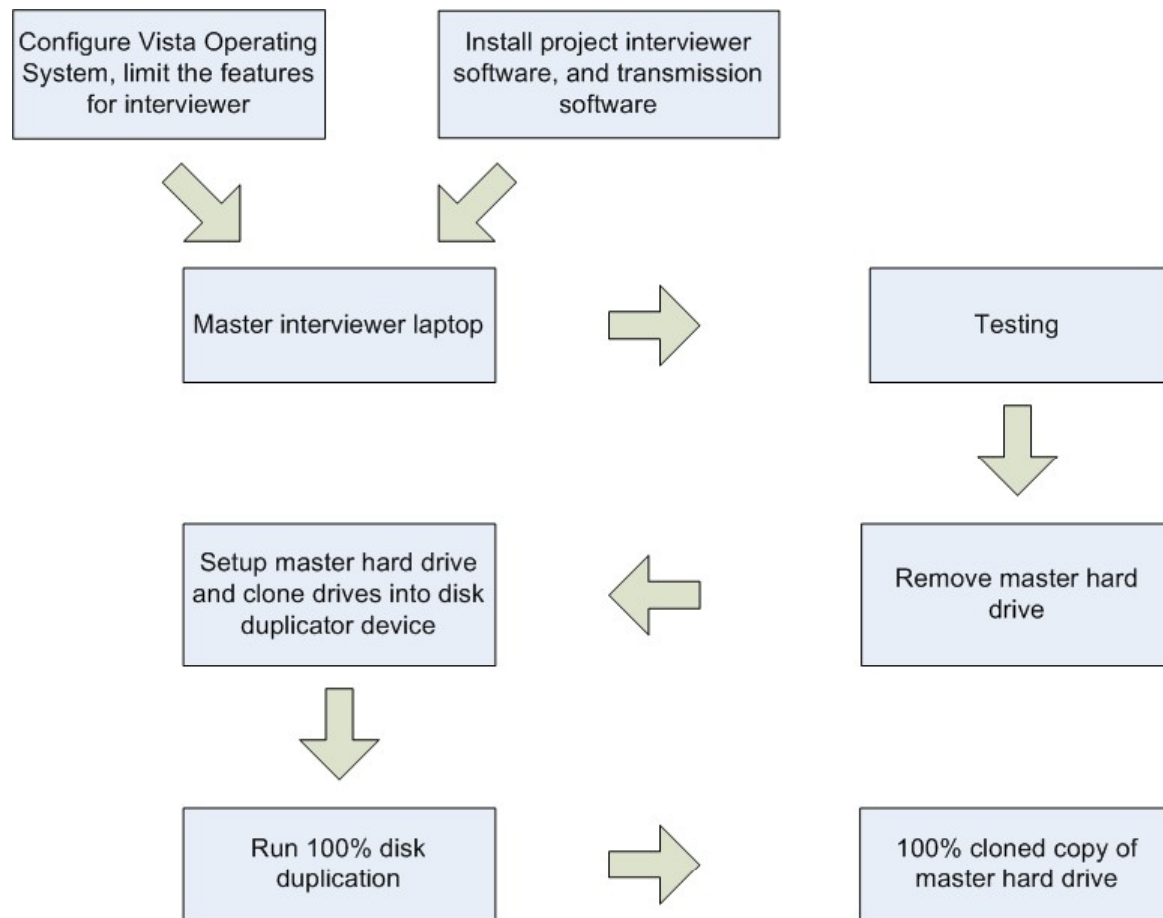
Windows Vista - Field Test (cont.)

- Current software not compatible with Vista:
 - First project to work with Vista – RTI did not yet have Vista versions of software
 - Needed new versions of disk encryption and anti-virus software.
 - Vista includes **BitLocker**, a hard disk encryption program, but it required a **Trusted Platform Module (TPM)** chip, which was not available in the laptop we tested.
 - RTI has since procured Vista compatible versions, but they are less stable than XP versions.

Windows Vista - Field Test (cont.)

- Windows Mobile Device Center (WMDC):
 - ActiveSync was replaced by WMDC
 - ActiveSync and WMDC are used to connect the handheld device with the laptop
 - WMDC was a step back from ActiveSync and had less functionality. Initially, features such as backup and restore, wireless sync, and synchronization of mail, calendar and address book had been removed.
 - With ActiveSync we could treat all of the iPAQs as one device, and only had to create one connection. WMDC treated each handheld computer as a new device. Any time a new handheld computer was connected, WMDC had to create a new partnership.

Preparation of Field Test laptop



Windows Vista - Field Test (cont.)

- Creating interviewer laptops took longer with Vista:
 - Use disk duplicator to copy the hard drive from master laptop to the hard drives of the interviewer laptops
 - With Windows XP, duplicator copies only active data and operating system files – takes around 10 minutes
 - Disk duplicator does not recognize hard drives with Vista installed
 - To copy a Vista hard drive, had to do a 100% copy – 60 GB hard drive takes around 30 minutes

Windows Vista - Field Test (cont.)

- Licensing Issues:
 - 5 different editions – which version is appropriate?
 - Ultimate has the most features and was used during the field test.
 - Ultimate does not support Volume License Keys, which is a huge drawback because of quantity of laptops involved.
 - Business version supports VLK, but does not include BitLocker

Conclusions

- The pros did not outweigh the cons:
 - RTI had decided to stay with Windows XP, and not move to Vista
 - Current interview software was stable and ran well under Windows XP. Applications required clunky software workarounds in order to run under Vista.
 - Vista Ultimate could be downgraded to Windows XP
- Decision: purchase equipment that is Windows Vista ready, but run Windows XP instead. Leaves option open to upgrade to Vista at a later date.

Q&A

Any questions?