

Introducing Windows 8

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Agenda

- **Introduction**
- **Genealogy**
- **Windows 8 Overview**
- **Metro**
- **Start Menu**
- **Demonstration**

Introduction

- **Presenter: David F. Soll**
 - **Vice President and Chief Technology Officer, Omicron Consulting**
 - **Secretary, PCJS IEEE**
 - **Vice Chair, Princeton/Central NJ IEEE Computer Society**
 - **Senior Member of the IEEE**
 - **Recipient of the IEEE Region 1 Award**
 - **Past Chair, Princeton Chapter of the ACM**
 - **Senior Member of the ACM**
 - **Chair, TCF IT Professional Conference**
 - **Over 30 years in computing**

Genealogy

- **Windows 1.x, 2.x, /286, /386**
 - Never a commercial “hit”
- **Windows 3.0, 3.1, and 3.11**
 - 16 bit, ran on top of MS-DOS
- **Windows NT 3.1 and 3.5**
 - First 32 bit Windows not reliant on MS-DOS
 - Runs utilizing protected mode of the processor
- **Windows 95, 98, and ME**
 - 16 bit, still reliant on MS-DOS
- **Windows 2000**
 - Next generation of Windows NT
 - Both Server and Workstation
- **Windows XP**
 - Built from Windows 2000
 - Workstation only O/S
- **Windows Server 2003**
 - Server only platform built with Windows XP & 2000 base
- **Windows Vista**
 - Built from Windows XP & Server 2003
 - Major security changes from XP and Server 2003
 - Many Look and Feel Changes
- **Windows Server 2008**
 - Server only platform built from Windows Server 2003 and Windows Vista
- **Windows 7**
 - Built from Windows Vista and Windows Server 2008
 - Improvements to UAC and other security mechanisms
- **Windows Server 2008 R2**
 - Based on Windows 7, server only O/S
- **Windows 8**
 - Built from Windows 7
 - Borrows from Windows Phone O/S
 - Both Server and Workstation

Windows 8 Overview

- **Unified Operating System for:**
 - **PCs**
 - **Tablets**
 - **Smart Phones**
- **Support for:**
 - **Intel Processors (x86 and x64)**
 - **ARM (Advanced RISC Machine 32 bit RISC processor)**
- **Two versions:**
 - **Workstation & Server**

Windows 8 Overview

- **New Desktop Experience: METRO**
 - Metro originally appeared on Windows Phone 7 Operating System
 - Provides an easy to use interface for touch screens (such as tablets and smart phones)
 - Can switch to classic mode via registry edit
- **New Internet Explorer (actually 2 of them)**
 - **Dedicated Metro version**
 - No add-in
 - No tabs
 - **Application Style**
 - Similar to current IE experience

Metro

- **According to Wikipedia:**
 - **Metro is based on the design principles of classic Swiss graphic design**
- **Metro runs side by side with the classic Windows user interface**
- **New Look**
 - **Based on panels or rectangular sections of the screen**
- **New Programming Interface**
 - **Classic .NET programming interface is still available**
 - **Provides a whole new User Interface API**

Metro (cont'd)

- **Designed for touch screens**
- **Works well with a mouse but ...**
 - ✦ **Takes up more screen real estate**
- **Metro applications tend to provide horizontal scrolling (similar to iPhone, iPad, & Android devices)**
- **Metro applications share other user interface characteristics with phone/tablet operating systems (i.e.: left arrow button to return to previous screen)**

Metro vs. Traditional

- **Traditional applications are windowed**
- **Metro applications take over the whole desktop**
- **Traditional applications live within the legacy desktop**
- **Metro applications have their own display space (they take up the whole desktop)**
- **All applications participate in the application rotation (i.e.: Alt-tab and Windows-tab) including the desktop itself**
- **Metro icons (well, they're not really icons, they call them "tiles") can be "live"**

Updated Desktop Apps

- **Some of the desktop has been improved**
 - **Windows Explorer now has a ribbon**
 - **New Math Input Panel**
 - **Not very useful on a desktop**
- **Many new or rewritten re-written in Metro**
 - **Calendar**
 - **Maps**
 - **Mail**
 - **Music**
 - **Remote Desktop**

Who Stole the Start Menu?

- **The Start Menu  has been replaced**
- **Now, the start menu is a Metro interface**
 - **The Metro start menu doesn't look like a menu**
 - **Supports a search**
 - **Segregates the results (apps, settings, files, etc.)**
 - **Shows Metro applications differently than legacy**
 - **Supports a "Show all apps" (right click)**
 - **Also supports a show shrunken menu (click at bottom right)**

Demonstration



Windows 8 Server

- ➔ **Windows 8 Server**
- ➔ **Metro-Style Interface (not full Metro)**
- ➔ **New Server Manager**
- ➔ **Resilient File System (ReFS)**
- ➔ **Microsoft Online Backup Service (encrypted cloud backup for Windows 8 beta servers)**
- ➔ **Metro-style Remote Desktop**
- ➔ **Cluster Aware Updating (CAU) (all nodes in a cluster are updates in an automated way with no downtime for the cluster)**
- ➔ **SMB Encryption**
- ➔ **NIC teaming**
- ➔ **Hyper-V Increased Memory and Virtual Hard Drive Capacity**
- ➔ **Hyper-V replica**

Conclusions

- **The new Metro interface is good for phones and tablets but may not be optimal for a laptop or a desktop**
- **Basic underlying functionality is still Windows 7 based (plus the Metro infrastructure)**
- **The fast boot is amazing**
- **For developers, it's nice to have a single platform to develop for**
 - **But for users, do people want the same interface on all devices?**

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