



Microsoft



Windows 7 Reviewer's Guide

A First Look at Windows 7

DRAFT

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Introduction

Computers are an integral part of the everyday lives of billions of people. PCs come in more sizes and shapes, can do more things, and are used for more purposes than anyone could have imagined just five years ago. Over the years, the Windows® operating system has become much more than simply the backbone of the PC; it's the connective tissue that enables people to communicate with others, manage a busy schedule, succeed at school or work, or just have fun.

As the role of the PC has continued to evolve at a rapid pace, your expectations for what an operating system should deliver have grown. First and foremost, you care more than ever about the basics. You want your PC to deliver on the “fundamentals”—to be ready, responsive, safe, reliable, and work well with the applications and devices you depend on. You want everyday tasks to be faster and easier—including new choices in how you interact with your PC, greater control over your desktop, and the ability to quickly find what you need, regardless of where it resides.

You also want all of your digital devices—including PCs, multifunction printers, cell phones, cameras, and MP3 players—to connect and work together, so that you can easily find, access, and share information across the components of your digital world. You want to get more out of your devices, easily connect them to your PC, and take full advantage of the features you paid for. As you add more PCs to your home, you want to be able to add them to your home network and easily share media and files across your PCs. And with access to more digital media than ever, you want to be able to enjoy that media when and where you want, regardless of how or where it's stored.

Finally, you want a simpler, more integrated online experience. You want to easily get online, stay connected on-the-go, and remain productive anywhere, with access to work resources from home or other locations. You want your PCs and

Designing Windows 7

Windows software is part of the everyday experience of billions of people. They experience it in significant ways, such as using a Web cam to visit with a loved-one on the other side of the world. And they experience it in small ways, such as simply launching a favorite program or game. In each case, their satisfaction depends on those experiences just working—in a way that's intuitive and inspiring. In designing Windows 7, we focused on delivering greater customer satisfaction in both big and small ways.

In Windows Vista® and Windows Server® 2008, the most recent releases of the Windows platform, Microsoft introduced a number of substantial investments in platform technology. Among those were a new graphics subsystem, a new driver model, a new componentization model, and significant enhancements to the kernel to improve security. In Windows 7, we're making fewer major architectural changes, instead building on the platform improvements we made in Windows Vista to deliver innovative end-to-end experiences to consumers and businesses. Our goal is to ensure the investments that our partners and customers have made in Windows Vista are fully respected and that they continue to deliver great value as customers move to Windows 7.

Windows 7 delivers new end-to-end experiences with attention to the critical details that drive customer satisfaction. To accomplish this, we made some changes in how we designed and built Windows 7. The planning process documented the end-to-end experiences to be delivered in this release, not just the technology we

planned to build. Teams are accountable for complete, end-to-end scenarios, with a focus on how customers will experience the technology.

Great customer experiences require seamless operation across hardware, software, and devices. When Windows Vista was initially released, not all of Microsoft's partners had adapted their products to run well on the Windows Vista platform. This diminished many customers' first experience with Windows Vista. In Windows 7, Microsoft worked closely our partners from the earliest planning phase, during which we solicited early feedback on design concepts. Before writing code, Microsoft talked to OEMs. Before defining APIs, Microsoft talked to developers. And before adding support for new devices, Microsoft worked with device manufacturers to understand what scenarios would be enabled by next-generation hardware.

Market Trends

In designing Windows 7, Microsoft examined how the industry has changed and where it's headed. In doing so, a few key themes emerged:

- **Hardware advances.** Although Tablet PCs with touch screens were introduced more than five years ago, new devices have revitalized the role of touch in the user experience. Other technology becoming commonplace includes solid state disk drives, faster wireless networking, enhanced Bluetooth connectivity, multi-core CPUs, 64-bit processors, and powerful new graphics accelerators.
- **Expanded diversity and complexity of devices.** The type and range of devices available continues to expand: Nearly 1,500 new Plug and Play identifications are reported daily and more than 4 million Plug and Play devices are expected by 2010. Devices such as MP3 players and mobile phones can store more information and are becoming increasingly complex.
- **Growth of mobile computing and new form factors.** In the United States, laptops are now more prevalent than desktops. New form factors are arriving at a rapid pace, including NetBooks, ultra mobile PCs, and Tablet PCs. Furthermore, with the increasing popularity of laptops, PCs are becoming less shared and more personal, with customers often citing "the computer fits my personality" as a factor in purchase decisions.
- **More connectivity options.** People want to easily get online and stay online through whatever type of connectivity is available. And with the lines between personal and work activities continuing to blur, people want access to all of the information they care about whether at work, at home, or on the road—all through a single, integrated user experience. Enabling a mobile, always-connected workforce is critical to a business's ability to compete, with IT professionals challenged to do so in a way that minimizes costs and helps maintain security.
- **Multiple PCs per household.** More than 50 percent of U.S. households today have more than one PC. However, setting up a home network is difficult for the average consumer. Managing, finding, and selectively sharing information across multiple PCs can be even more challenging.
- **Ever-increasing role of media.** Consumers have access to more types of digital media, including music, video, TV, photos, and an ever-increasing amount of rich content on the Web. They want that media to be easier to discover, use, and share—accessible through more devices without added complexity, regardless of whether they are listening to music on wireless headphones or watching a movie on a big-screen TV.
- **Rapidly evolving Web.** Browsing the Web remains the single most popular activity on the PC, with people spending more time on the Web and doing more things on it. They want a Web browsing experience that supports all that the Web has to offer, with everyday tasks and content at their fingertips. And they want to know that they're protected from hackers, malware, viruses, and other forms of Internet-based threats.

Engineering Focus Areas

Based on these trends, Microsoft focused its design efforts for Windows 7 around a few key themes—areas where we saw the greatest opportunity to deliver value to end users and IT professionals:

- **Specialized for Laptops.** Microsoft focused on how Windows 7 could enhance the user experience on laptops, making them more responsive, energy-efficient, secure, and easier to use.
- **Designed for Services.** Web-based services are an increasingly important component of the user's computing experience, so significant emphasis was placed on integrating services into the overall Windows experience.
- **Personalized Computing For Everyone.** Microsoft designed Windows 7 to provide a personalized computing experience for everyone—one that gives people greater control over their desktops and enables them to more quickly get things done, putting access to everyday tasks and content right at their fingertips.
- **Optimized For Entertainment.** In Windows 7, Microsoft worked to help consumers experience digital media in new ways, enabling them to take advantage of the increasing range of connectivity options to share their media with other computers and devices.
- **Engineered For Ease of Ownership.** Security and quantifiable cost savings are key reasons for businesses to adopt a new operating system, with application and device compatibility being the top barriers to adoption. So Microsoft worked to make sure that Windows 7 included enhancements to make it easier to manage and keep secure, and that it ran well with the same applications and devices as Windows Vista.

Continued Delivery of New Value

Another goal for Windows 7 is to begin to establish a regular release cycle, so that customers and partners can benefit from predictable updates to the core operating system. However, many client experiences today are delivered through the Web, and you expect innovations to these experiences more frequently than is possible

with a core Windows operating system release. To this end, Microsoft has established vehicles to deliver new and enhanced customer experiences on an ongoing basis, with Windows Live™ as a delivery vehicle for consumers and the Microsoft® Desktop Optimization Pack (MDOP) as a delivery vehicle for IT professionals.