AMD Uses Customization Technology to Personalize Windows Vista User Experience

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Dale Adamson, Software Manager, Human Computer Interface Team, AMD

AMD had become successful in the market for high-end video graphics chips and cards by taking a low profile—and letting its OEM and other customers customize the products with their own distinctive identities. Microsoft® Gold Certified Partner Stardock provided that capability for AMD in the market for Windows® XP—and it does so again for Windows Vista™ and the newly mainstream market for 64-bit desktop computing.

Customer Profile
Advanced Micro Devices (AMD), based in Sunnyvale, California, is a leading global provider of innovative processing solutions in the computing, graphics, and consumer electronics markets. It has 16,000 employees.

Software and Services
- Windows Vista™
- Technologies
  - Microsoft® .NET Framework

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Business Needs
You may not know it when the high-end video graphics chip or card in your computer comes from AMD, and that’s fine by the company. In an age when there seems to be no limit to marketing and promotion, the anonymity of AMD in the high-end video graphics business is actually a competitive advantage for the company.

That’s because its anonymity allows its customers—including leading computer makers and leading graphics card vendors—to brand and customize the software for those graphics chips and cards to create competitive advantage with their customers, who are the end users of the products.

To enable its customers to apply their own graphical identities—called "skins"—to its Catalyst Control Center software, AMD turned to Stardock Systems, a Microsoft® Gold Certified Partner based in Plymouth, Michigan.

Because Stardock’s product, DirectSkin, works with the same Microsoft .NET Framework that was used to design the Catalyst Control Center, the two products integrated easily with each other. AMD then added a variety of skin files from which corporate and technology customers could choose. Those customers could also download additional skins from the Web or use Stardock’s SkinStudio technology to create
their own skins, including their own logos and other graphics. The Catalyst Control Center with DirectSkin was released in 2004.

By 2006, AMD had new requirements for the customization capabilities of its Catalyst Control Center. The Windows Vista™ operating system was about to be released. AMD, an early adopter of Windows Vista, needed to ensure that the customization features of its Catalyst Control Center were compatible with the latest version of the operating system.

At the same time, AMD needed to update the product to support the 64-bit desktop systems that Windows Vista was about to make mainstream.

Solution

To maintain and expand market share, AMD had to remain ahead of the market—and that required support for Windows Vista, as well as native 64-bit support for the skinning technology that was integrated into the Catalyst Control Center.

AMD didn’t have far to turn to get that support for Windows Vista and 64-bit computing. Stardock, the same company with which it had partnered on customization technology since 2001, produced DirectSkin 5.0, which meets AMD’s requirements.

The new version of DirectSkin is compatible with Microsoft .NET Framework version 2.0, which gives AMD the native 64-bit support it wanted, as well as other .NET Framework 2.0 features such as transparent menus. DirectSkin 5.0 is expected to add per-pixel title bars for Windows Vista in the near future.

The process of updating DirectSkin and integrating it into the Catalyst Control Center took a couple of months. “Throughout the process, we found that the support we got from Stardock was very good—as always,” says Dale Adamson, Software Manager, Human Computer Interface Team, AMD. “Our long relationship with Stardock is based in part on the company’s responsiveness, and Stardock came through for us once again in delivering a version of DirectSkin that was ready for Windows Vista.”

The new version of DirectSkin complemented a range of other features that AMD added to the Catalyst Control Center to take greater advantage of the latest operating system and the more powerful 64-bit computing environment.

For example, the Catalyst Control Center supports enhanced, live 3-D previews, which show users how various changes, such as faster frame rates, will affect the imagery.

Benefits

Stardock and DirectSkin have enabled AMD to bring a high degree of easy customization, which has long been one of AMD’s competitive advantages, to the new arena of Windows Vista and 64-bit computing.

“The ability of our customers to customize our software is central to our business and to our growth,” says Adamson. “You can’t give customers too much customization—the more you empower them, the more capabilities they want. We’re in business to meet those customer requirements. Stardock has enabled us to do just that as we move into the market for Windows Vista and 64-bit computing. And DirectSkin makes customization as easy for our customers to implement as it is easy for us to provide the capability in the first place.”

Beyond making the Catalyst Control Center an application that can be customized with skins, DirectSkin enabled that capability with virtually no impact on AMD’s development costs. “Left to our own devices, we’d have had to hire developers and invest significant funds to realize this capability on our own,” says Adamson. “With DirectSkin, we get the capability and it’s built to work with our software, so we can drop it in with very little effort. We can’t take that for granted because other technologies would require us to accommodate them.”

The versions of the Catalyst Control Center and AMD video graphics products that are Windows Vista compatible were released in January 2007, coincident with the release of the Windows Vista operating system. The products have been a commercial success, according to Adamson. But AMD isn’t stopping there.

“The Catalyst Control Center is hugely popular, with 2 million downloads per month,” says Adamson. “We want to build on that popularity by giving users the ability to control not just graphics, but also more of the AMD product settings, through the same interface. As we do so, the ability to customize that interface through DirectSkin will be increasingly important.”