

Java Web Start

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JWS technology is a new and innovative technology for deploying client side applications based on the Java 2 platform. It is the plumbing between the computer and the Internet that allows the user to launch full-blown Java applications via any browser, on any platform, from anywhere on the Web, in a secure fashion. It provides the best of both worlds: The ease of deployment and use of HTML, as well as the power and flexibility of a fully-fledged application.

With JWS, users can experience all the things that they liked about a client-based application, including the rich presentation, the usability, the highly technical implementation, and so on.

From a technology standpoint, JWS has a number of key benefits that make it an attractive platform to use for deploying applications:

- A single application can be made available on a Web server and then deployed on a widevariety of platforms, including Windows 95/98/ NT/2000, Linux, and Solaris.
- JWS allows applications to be launched independently of a Web browser. This can be used for off-line operation of an application. Desktop shortcuts may also be used, making launching the Web-deployed application similar to launching a native application.
- JWS takes advantage of the inherent security of the Java Platform. Applications by default run in a protective environment (sandbox) with restricted access to local disk and network resources. It allows the user to safely run applications from sources that are not trusted. In addition, JWS technology enables you to use the latest Java 2 technology with any browser.

JWS's real value is that a full application is downloaded, cached, and ultimately made executable without the limitations of a specific browser.

The following diagram shows how JWS technology works both from a user and technical perspective:

The yellow arrow shows the user experience. A single click on a link launches a full-featured Java technology-based application, which may never have been present on the local computer before.

The grey arrows show what really happens behind the scenes:

- When the user clicks a download link, the browser is instructed to invoke JWS technology. JWS technology presents a splash screen.
- JWS technology queries the Web to determine if all necessary resources for the application are already downloaded. If they are, and the most recent version of the application is present, the application will be launched immediately (step 3).

If the resources are not present or an update is available, JWS will download the needed resources. Thus, the initial download and subsequent updates of an application happen transparently.

The only prerequisite is to download and install JWS software on the client machine. This is a one-time download and, once done, installing and upgrading applications might be a thing of the past.

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