



Curl Version 7

Rich Internet Application technologies are converging with desktop applications to form a new platform, variously called Desktop 2.0, RIA Desktop, or the Fit Client. The capabilities needed for Fit Client platforms include the standard RIA capabilities plus the ability to run applications off-line and directly from the desktop. With its newest addition, Curl stands out in addressing the needs of enterprises for secure, high-performance processing with large data sets and sophisticated user interfaces. Curl has always provided these capabilities, and with Version 7, they are available more easily than ever on the desktop. Enterprises now have a better choice for secure, mission-critical applications that use large data sets and require 3D and 2D rendering, sophisticated data input and visualization.

Version 7 provides the essential capabilities of the Fit Client such as support for rich user interfaces, complex application logic, and agile development. Curl has enhanced its desktop capabilities with the following new features:

- **Applet installer and desktop controls** – Curl applets can be installed on the desktop for online and offline operation in a secure sandbox. The installer creates shortcuts on the desktop and start menu with customizable icons and a skinnable user interface.
- **Client-side database** – Version 7 enables developers to build applications with local databases using the popular open source SQLite database engine combined with standard Curl techniques for data presentation and manipulation.
- **Demo applets** – These Web-enabled applications run standalone on the desktop, update when connected and provide real business value to enterprises. Demos include a Data Analysis using Gapminder.org data, Salesforce.com Dashboard and a Facebook Social Network Visualization.
- **Desktop security model** – With Version 7, desktop applications use the same security model as Curl applets. They run in a secure sandbox with local data access but limited system privileges. Curl applications can also be fully privileged applications, which require a standard digital signature provided by an established certification authority – self-signing is not allowed.



Curl eyeDecide Demonstration Application

There are currently three platforms in the RIA Desktop space: Curl, Adobe AIR, and Microsoft Silverlight that allow for browser-free applications which can be launched directly from the desktop that run off-line but can also be updated dynamically over the Internet. While Adobe AIR is gaining mind-share in the business-to-consumer space, Curl has more mind-share in the enterprise space. The reason is simple: Curl is more secure and provides better performance than Adobe AIR.

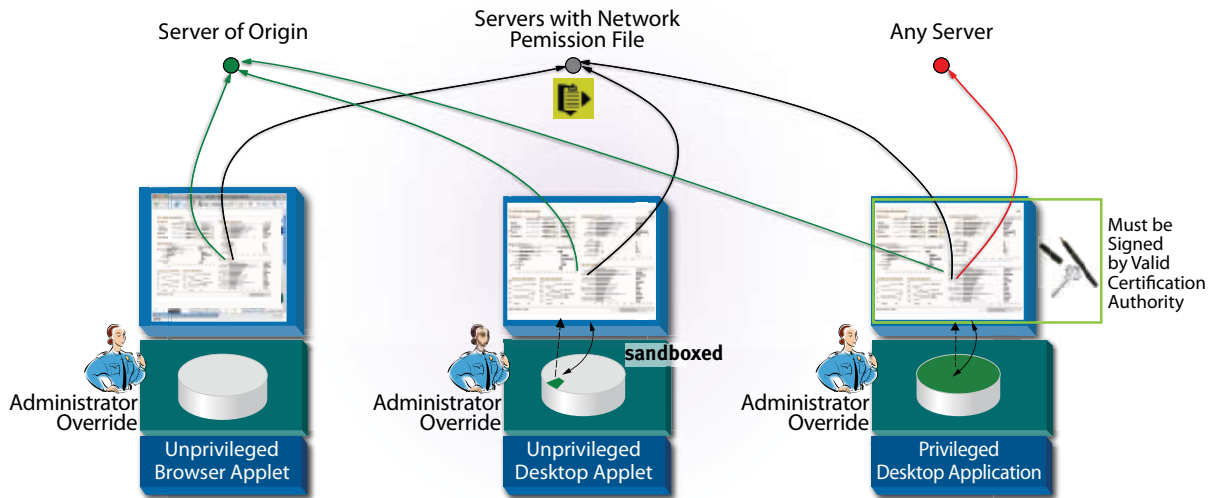


Figure 1: Curl Version 7 - Deployment and Security Models

Better Security

Curl is more secure because it strictly governs the system access and network access of browser- and desktop-based applets. Browser-based applets have the same security restrictions as any other RIA solutions. By default they can only access the server-of-origin preventing cross-site scripting and they have very limited access to disk space. The desktop applets can be installed on the user's desktop, do not need to run in a browser, and can access a SQLite database and more disk space than browser applets, but they too are strictly managed and cannot reach outside of their own sandbox. Curl also offers configuration files that desktop administrators can use to override security permissions and limit the domains and Curl applications available to desktop users. Finally, Curl makes it possible for Curl applets to access domains other than the server-of-origin provided the other domains have a network permission file. This gives Curl the flexibility to do client-side mashups but only with sites that explicitly allow it. Version 7 also supports the deployment of privileged desktop applications that have no security constraints, but can only be deployed under special license provided by Curl Inc. Figure 1 shows the deployment options and their security models.

Better Performance

In addition to security, Curl provides better performance than Adobe AIR and other RIA solutions (e.g. Ajax, Mozilla Prism, Google Gears). Curl applications are compiled into native code and have been performance optimized over the course of ten years of development. Curl applications can run ten times faster than Adobe Flex applications and faster still than Ajax applications. Curl applications also handle much more data in memory than Adobe AIR applications; Curl applications can maintain hundreds of thousands of records without degradation of the user experience.

Beyond The Curl Language

Version 7 enables HTML, JavaScript, Flash, and PDF documents to run in the Curl environment. Ajax and Adobe Flex applications will be able to execute with the same enterprise-level security and SQLite database access formally specific to the Curl platform. Version 7 is not just a desktop RIA solution – it's a platform that supports Curl, Ajax, and Flex applications on-line or off-line, browser based or desktop based. Version 7 extends the Curl platform so that it is a RIA Desktop for the Enterprise.



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