

HTML5 Multi-Tenant Rich Internet Application Container

Stingray is a web space that manages native content, together with 3rd party widgets and the interaction between them. Leveraging the power of HTML5; for faster and more efficient write once, run everywhere apps.

Stingray is the result of a 7 man-year product development project by WebFG to create an enterprise level, natively multi-channel financial information and trading terminal. Part of that process was to bring together the best technology and to integrate all elements necessary to make it suitable for both for professional and active retail market users. Once developed, the resulting analysis made it evident that part of this technology that could be used in a complementary concept and with a much broader scope for its use, this being a web application container for HTML5 applications. Due to the technology used for the original development we can now provide a container space that manages different web content, offering the possibility for content interaction. As a container, it's more precisely an "HTML5 Multi-Tenant Rich Internet Application Container" where:

- Container = a web space which connects content.
- Multi-tenant = multiple applications (even 3rd party) running in a single container
- RIA = web applications with richer content that allow greater interaction.

Development can be made within a single framework (a single container) with a unique architecture, hosting the content as widgets, web apps etc.

- Stingray has a local storage capacity for users (non personal) data and keeps this resident in the local device, avoiding the need to repeatedly download the same data each time the application is started.
- Has an off-line capability which allows the continued use of some features and content even when the internet connection is temporarily lost or in an area without coverage.
- Has the ability to integrate with the user's desktop.
- Easy to use 3rd party widgets off-the-shelf e.g stocktweets included with a "drag & drop".
- Based on WebSockets.
- Users can play video upon their preferred device.



The screenshot displays the Stingray web application interface. At the top, there are market indices for New York (Nasdaq 100), London (Ftse 100), Tokyo (Nikkei 225), and Madrid (Ibex 35). The main dashboard includes a 'Watchlist' table, a 'Chart' area with a line graph, and several widget cards for 'Advanced Watchlist', 'StockTweets', 'Twitter', and 'Youtube'. A 'ReutersInsider Last Tweets' section is visible at the bottom left, and an 'equities' section with market stats is at the bottom right.

Name	Last
REPSOL YPF	19.780
BANKINTER	4.073
IBERDROLA	5.031
BANCO SANTANDER	6.106
BANCO POPULAR	3.457
BBVA	6.110
MAPFRE	2.317
CAIXABANK	3.298
BANCO SABADELL	2.640
BANKIA	3.725

	-0.044	2.640	2.646	847752	15:34:50
	-0.024	3.726	3.728	2955529	15:35:33

Portlet Support.

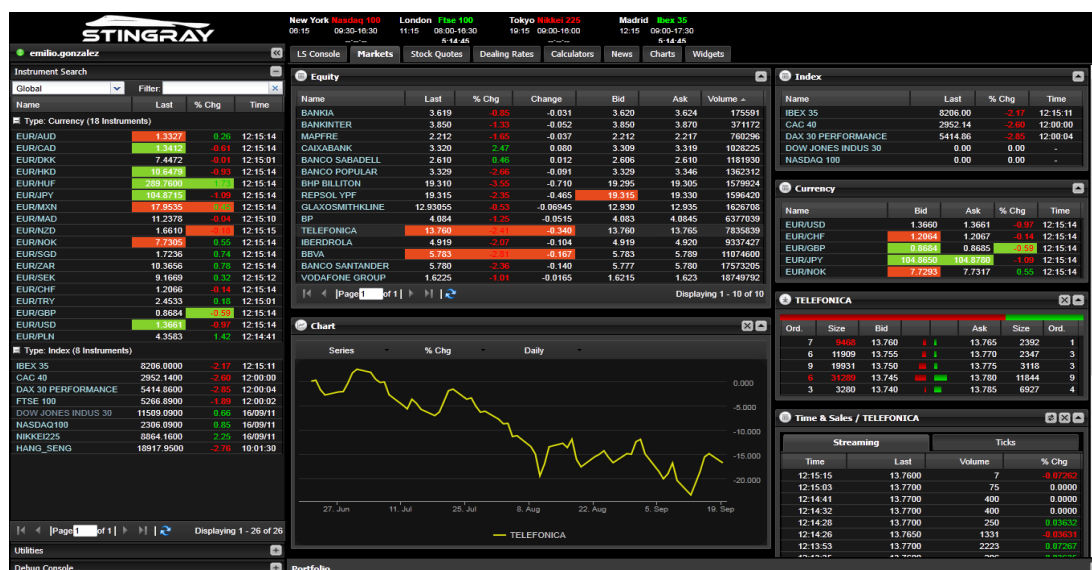
Our objective was to develop an interaction between different components, whether developed internally or by 3rd parties. This interaction is via bidirectional widgets not only between themselves but also within the back-end.

Stingray supports HTML5 and all compliant browsers, so that you write once and it will run on any browser; desktop, tablet, smartphone etc.

HTML5 development can improve navigation and provides more features, e.g. it allows;

- The HTML function as an application,
- Geolocation, navigation and positioning.
- The use of multiple-threads. These "background threads" can do complex Mathematical Calculations, make Requests network, or local access storage while the main web page responds to the user scrolling, clicking, or typing.

Stingray also provides scalability that allows you to maintain an effective way of distributing data, charts, news, etc that can scale to thousands of concurrent users.



WebStreamer.

Stingray supports WebStreamer solutions and the integration of client libraries used to communicate with the leading push servers and WebSocket gateways that are part of WebFG's WebStreamer platform. It can leverage the advantages of HTML5/WebSockets which was designed for bidirectional, real-time communication over the Web. WebSockets provides a far more efficient protocol, and scales far more effectively than the existing http1.1 used currently with HTML4.

MFDS

Stingray has been integrated with WebFG's MFDS (Market & Financial Data Solution) which is an independent, scalable and flexible multi-vendor and multi-asset platform, providing 'best-of-breed' integration that aggregates many different data sources. WebFG is Europe's leading independent provider of web based solutions for the integration, presentation and promotion of market, financial data and products and Stingray has easy access to the breadth of existing Financial Market Data feeds with features such as User Permissioning, Authentication, Reporting, Code mapping for data normalization, multi-provider that are available in the MFDS data warehouse.

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