What Is APL WebServices

APL WebServices is a means to expose APL+Win software to web-connected users and machines. APL WebServices is a high performance, high-reliability, web services application you can use to easily expose your APL+Win-based calculations, business rules and application-specific output to a web-connected user. To access your APL+Win functions, the user can employ a web browser or the APL WebTransfer class.

- The *browser-based interface* interacts with APL WebServices using the http protocol and can respond with documents, in html, pdf, etc.or file downloads in any format. APL+Win functions in APL+Win workspaces on the server communicate with browser-based clients through APL WebServices.
- The APL WebTransfer class provides programmer access to APL WebServices, and underlying APL+Win functions and workspaces, either as a .Net assembly or an ActiveX/COM class. This access can be from another web-server, ASP/ASP.Net, Microsoft Office, any Win32 language APL+Win or VB6 and any .Net language, including C# or VisualAPL. APL WebTransfer supports binary or soap encapsulation of objects exchanged between the client and APL WebServices.

HTML form for Client Interaction

//http: protocol

PDF form for Client Interaction

//http: protocol

C# WPF GUI for Client Interaction

APL WebTransfer
.Net protocol

APL+Win for Client Interaction

APL WebTransfer ActiveX protocol

Microsoft Office for Client

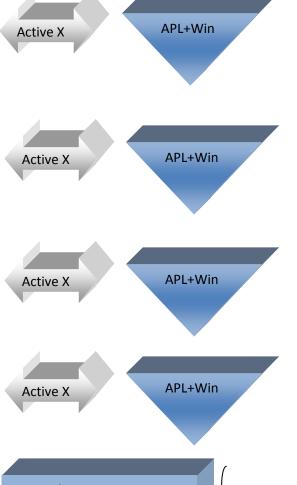
APL WebTransfer ActiveX protocol

Another web server (e.g. IIS and asp.net)

APL WebTransfer .Net protocol

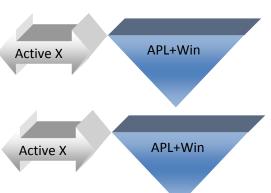
APL Web Services

- Scalable
- Load Balancing
- Request Queueing
- Stateless or Stateful
- Multi-threading



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APL WebServices automatically queues client requests, if necessary. APL WebServices is fully scalable to any number of web server machines using the 'busyid' url field of the APL WebServices workspace configuration.

For easy load balancing, the APL WebServices workspace configuration provides for a configurable pool of APL+Win workspace instances to satisfy client requests.

Each instance of APL WebServices can support multiple APL+Win functions and APL+Win workspaces. Each client request is independent and managed in a multi-threaded manner.

APLWebServices can service client requests synchronously or asynchronously.

APL WebServices provides for stateless or stateful instances of the web service. A '1 to 1' link between a client and a specific instance of an APL+Win workspace, so multiple calls to this instance can be made by this client until the '1 to 1' status is released by the client or a configurable timeout occurs.

Otherwise, by default, APL WebServices provides stateless communication between the client and the web server so each client request is independent.

The configuration of APL WebServices is easy with the included APL WebServices administration tool, the APL WebServices remote administration tool or any XML text editor.

A Beginners Guide to APL2000 WebServices:

This guide is included when APL WebServices is installed. It was created by Brian Chizever an IBM/Cognos employee and skilled APL programmer.

APL WebServices Technical Documentation:

APL WebServices includes technical documentation which is installed along with the software. This documentation is also available at: http://forum.apl2000.com/viewtopic.php?t=339

APL WebServices Development History:

APL WebServices was developed when APL2000 was a part of Cognos Corporation. APLNext LLC provides the current implementation, enhancement and maintenance for this .Net-based product. APL WebServices subscribers may contact support@apl2000.com for assistance. Customized consulting is available to help you obtain the best results with APL WebServices.

APL WebServices has been an essential component of numerous heavy-duty APL application systems created by APL2000 customers. Many of these systems have been in continuous and profitable use for years. The reliability and performance of APL WebServices is outstanding. In addition, it has proven to be a non-target for 'malware'.

To License APL WebServices:

Contact Sonia Beekman (<u>sales@apl2000.com</u>) to license this product. APL WebServices is available in desktop, professional and enterprise editions.

APL WebServices Programming Examples:

Several programming examples are installed in the '\samples' subdirectory with the APL WebServices software. Refer to the documentation provided with each example for details.

- 'Using APL WebServices with an HTML or PDF Client GUI' in the \ras_irr' subdirectory.
- Using APL WebServices APL WebTransfer, C# and Windows Presentation Foundation in the '\framingham' subdirectory.
- APLWebServices WebTransfer and Asychronous Requests in the '\framingham' subdirectory.