

Commodity Price Service

Revision: 1.2

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1.

Warning:

Due to certain client confidentiality requirements we may not be able to mention them, or provide specific information about techniques used.



Commodity Price Service

2. Project Overview

Several applications and end-users dispersed throughout our client's organization desire market-commodity pricing data. To support and minimize costly external requests, a common process captures and retains prices from respective providers or publishers. Then, to aid access from disparate technologies, we offer a Pricing Service that is based on industry web services standards. The following are the goals of the effort:

- Isolate the physical location and access mechanisms from the consumers of these prices. This allows the repository and capture process to adjust independent of the consumers.
- Deliver consistent prices.
- Offer multiple renditions of a Price Sheet, so requests can easily be consumed by their requestors. For instance, get results as HTML, XML, as a PDF report or downloaded to a Spreadsheet.
- Offer a choice of views. For instance, arranged as a Cross Table by Date or a standard grid by Location; Continuous Time-Series or only actual trading days.
- Offer time-series choices. For instance, choosing a date range or historic duration from the current date

3. Solution

The Pricing Service is responsible for retrieving market prices from a common repository.

The repository is populated by retriever agents. Any application that requires pricing data can interact with the Pricing Service to obtain requested data. This interaction is handled through several standard web service protocols.

The Pricing Service runs within its own web service container. Interactions are not limited to one single technology or protocol. Implementations can span literally any modern-day operating system. Service interactions are language independent and can be used by any of the following: Perl, Python, Java, C/C++, PHP, Microsoft COM, Microsoft .NET, Tcl, Delphi, WebObjects and Zope.

Technologies used:

- The service is originally delivered using an XML-RPC protocol as a Java™ service
- The service was then further refactored to support various commodity types, offering several rendition patterns. These patterns utilized XML, XSLT and XSLT-FO.
- To better address emerging industry trends, the service was then wrapped as SOAP web service complete with WSDL. This service was both implemented as a .NET™ and Java™ web service.
- Finally, to satisfy the needs of existing users with spreadsheet solutions, web queries were developed that interacted with this service to offer better integration and alleviate potentially error-prone copy and pasting of prices.