Web Services

What are Web Services?

The definition of Web Services by w3org, the World Wide Web consortium, states: *"A Web service is a software system designed to support interoperable machineto- machine interaction over a network. It has an interface described in a machine-processable format (specifically WSDL). Other systems interact with the Web service in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialisation in conjunction with other Web-related standards."*

Rather more usefully they also say: *"Web services provide a standard means of interoperating between different software applications, running on a variety of platforms and/or frameworks. The Web services architecture is an interoperability architecture: it identifies those global elements of the global Web services network that are required in order to ensure interoperability between Web services."*

In today's fast paced world, the need to access data residing on third party systems, either privately or publicly available is increasingly desirable - if not essential - to staying or getting ahead of the competition. Web services is the mechanism by which data can be passed between systems connected not only to internal networks, but to any machine connected to the Internet.

What does this mean to the credit industry?

Traditionally, credit IT systems have been standalone, often old or on niche databases with poor or non-existent connection capabilities. On many systems, data can only be transferred in batches. In others, data can be accessed using a local or wide area network from billing or CRM systems.
EDI (Electronic Data Interchange) has existed for decades and is still widely used in some sectors, allowing subscribers to a particular service to exchange data using standard data formats, often using an EDI broker to convert the data between different, incompatible systems such as the PC often used by a small supplier and an IBM mainframe used by a global manufacturer. These EDI systems frequently use private data circuits to exchange data which, while effective, are expensive. Web services enable any company (or individual) to gain access to these services through a simple Internet connection.
In order for Web services to be useful to an organisation, some form of contract must exist between it and one or more service or data providers. The participants in a contract agree on the format of messages to be exchanged and, of course, any charges that may be incurred. The format of the individual messages may be any that can be encoded within the standard format, and the agreement could be as simple as the data request or accepting the format of data provided by the data provider (and the associated charges) by clicking a button on a web site. The data provider may in some cases be unaware of the use of their services until the payment appears in their books or the order appears in the order book. Other contracts, particularly for high value or confidential data, may require more traditional contractual negotiations to ensure that security requirements are adequately defined and implemented.
This last point is critical in the credit industry as almost all data held is confidential to some degree, and the transmission of this across the internet in a simple text format would always be unwise and usually illegal. Fortunately Web Services have a number of security mechanisms that may be deployed in order to protect the data. These include external encryption such as SSL, and internal encryption built into the WSDL specification.

Collections example

A collections department in a utility (Acme Power and Aqua) based in the Midlands wants to outsource the management of its IT system, but wishes to retain their personnel, who understand the industry and the customer base. The billing system is already outsourced to a specialist third party service provider in London and the Customer Relationship Management (CRM) system is in Bangalore.
The manager of the collections department at Acme wants to use another specialist service provider to outsource the collections IT system. As all three systems, and Acme, are connected to the Internet, it is possible to integrate all these systems by transmitting the relevant data across the internet using Web Services at each location to assemble and encrypt the data and decrypt and dissemble it at the receiving end. The services of credit reference agencies are also easily included in this scenario as their data is also available, packaged up by the third party provider into a single data delivery.
The collector can access the outsourced service using a simple browser, such as Internet Explorer or Firefox and all the integration is taken care of by the outsource provider. Data from the credit reference agencies can be used singly or in combination to aggregate credit scores, trace absconders, correct addresses or even send alerts when debtors re-appear or miss critical payments. This data can then be used to re-segment a debtor, resume a chase or other strategy. It is even possible to integrate data from each of the other providers into a single screen display.

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shaping credit management