Web Services for Digital Library Construction
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Web services provide well-defined services using standard protocols that can be connected together to form larger systems. The protocols themselves are designed for machine-to-machine communication, although with XSLT, HTML interfaces can be created on top of many. Web services are very well suited to digital libraries where there are standards for many aspects, and therefore services can be constructed that can interact in expected ways. Web services do, however, come in various flavors, such as SOAP and REST. SOAP offers greater functionality, but REST is simpler and often easier to work with.   The OAI-Protocol for Metadata Harvesting is an example of a REST service that is being promoted by the NDLTD.

OCLC Research's XISBN service is a very simple REST service that can function as part of larger systems that need to relate various ISBNs. It accepts one ISBN and returns a list of other ISBNs associated with the first by virtue of being associated with the same 'work'.

Here is an example of the result the URI `http://purl.org/net/xisbn/0192816640`:

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <idlist>
    <isbn>0192816640</isbn>
    <isbn>0820312037</isbn>
    <isbn>0820315370</isbn>
    <isbn>0393015920</isbn>
    <isbn>0393952274</isbn>
    <isbn>0393952835</isbn>
    <isbn>0140430210</isbn>
    <isbn>0192811320</isbn>
    <isbn>0192835947</isbn>
    <isbn>0460872885</isbn>
    <isbn>1853262706</isbn>
    <isbn>0874131219</isbn>
  </idlist>
```

As another example of the REST approach, the OpenURL registry (http://purl.org/openurl/) shows OAI being used both as a Web service and as a Web browser accessible site. This is done with the application of XSLT style sheets that convert the OAI repository XML into HTML for display and interaction.