Buzzword: API
Application Programmings Interface

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An API allows an application or service to communicate with other applications or services based on protocols in order to exchange data both internally and externally to other businesses and developers.
Examples:

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Google Maps
flickr
YouTube
twitter
amazon Product Advertising API
How it Works:

API

Defines the way two programs communicate

API is a software code written in XML

Application

REST API

ORIGINAL use to allow outside partners access to a company’s private data and recourse. This can also be referred to as machine-to-machine querying, or removing walls that to access data.

Programmings

Programmatic API

More commonly used for internal use. The same API’s can be used to create websites and mobile apps. The API can take the data from a company’s HTML and returns the data in XML or Javascript formats.

Interface
History:

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1980: For Hardware and Software Development
Last ten to thirteen years: Web API and REST API

SOA (early 2000’s)
SOAP
SOA’s evolution to REpresentational State Transfer (REST)
CRUD
ProgrammableWeb: Annual growth rate of 100%
(2005-2011)

13,000 API’s (April 2015)
Open Source

Project Open Data: “The technology that are commonly found in APIs was not designated by a single standards body or by a single company, it is based upon emulating the best practices of existing, successful providers over the last 13 years.”
Controversies:

API

Difficult Usability for both novice and expert users

Incorrect Use

Bugs and Significant Security Problems

Computer Execution versus Simple Interface for Users

“Gold Standard”

While programmers can adjust to changes in code, computers cannot
Relationship to Libraries:

API

Application

Programmings

Interface

Wayne State University

InterLibrary Loan

Copyright Royalties to Rights-Holders

RedLaser and Pic2Shop

WorldCat Search API and WorldCat Registry API

WorldCat Basic API

Blacklight or VuFind

Blend content from multiple discovery services with local catalogs

OverDrive, 3M Cloud Library, and Baker & Taylor

eBook publishers use their API's to allow their e-recourses to be accessed via the local catalog
Future:

API

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Ecosystems

Ability for Users to more easily Personalize API

In Libraries:

ILSs

Accounting Systems of the Library’s Parent Organization

eCommerce Systems

Online Ordering Platforms of Suppliers

eBook Lending Platforms

Discovery Services
Discussion
Questions:

1) API has helped libraries share information with other library networks and publishers. What other institutions could libraries begin, or more successfully, begin to share materials with via API?

2) This presentation mainly focused on libraries, how could API be incorporated into museums and archives?

3) As future librarians, how can we help contribute to and support the API community to continue to set standards for improvement?


