

SMIRC 2018 Presentation  
“An Introduction to the How and Why of API”  
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1. What is it? An interface to share data between two systems
2. Advantages:
  - a. Retrieve data to complete an action without the user leaving your site
  - b. Text/data mining for applications or analysis
    - i. Anaconda Python Distribution
3. Rest: all the information is contained within the request itself
4. Common HTTP verbs:
  - a. GET -- request record
  - b. Put -- update record
  - c. Post -- create record
  - d. Delete -- delete record
5. Data returned in JSON and XML
  - a. Languages: Python, java, Ruby, PHP, C#
6. Data Science: collecting, querying, consuming and cleaning data extracted from a source or set of source
7. Anaconda cheat sheet:  
[https://docs.continuum.io/downloads/Anaconda\\_CheatSheet.pdf](https://docs.continuum.io/downloads/Anaconda_CheatSheet.pdf)
8. Library of Congress GitHub: <https://github.com/LibraryOfCongress/data-exploration>

Example using a spyder (python) notebook to show examples of pulling collection titles from loc.gov, then more titles, then images. All demos available on GitHub