STORAGE DEVELOPER CONFERENCE
SDC 21
BY Developers FOR Developers
Virtual Conference
September 28-29, 2021

Simplifying Client Interactions with SMI-S using PyWBEM

Using SMI-S 1.8.0 Mock Servers

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Background

- Pywbem and pywbemtools are python packages that provide access to WBEM Servers.
  - Pywbem provides a python API for accessing WBEM Servers
  - Pywbemtools include a Command Line interface for accessing WBEM Servers via command prompts
- They also provide a mechanism for mocking WBEM Servers, including SMI-S Servers
- Mock servers can be extremely useful for developing applications and tools on your local system

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Uses of Mock Servers

- Explore SMI-S 1.8.0 features
  - The mock servers support the WBEM Server Profile and Advanced Metrics for Arrays (both are new in SMI-S 1.8.0)
- Develop Tools to be used with SMI-S Servers
- Develop client software for SMI-S Servers
- As a local test environment for testing tools and applications

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Publicly available SMI-S 1.8.0 Mock Servers

- A publicly available GitHub repository can be found here:
  - https://github.com/FarmerMike252/SMI-S_Mocks
- The mock servers were developed to illustrate some of the new features in SMI-S 1.8.0 (which is now an ISO Standard)
  - The link to the ISO Standard is: iso.org/search.html?q=24775
- A set of "Quick Start Guides" are also in the repository
  - These guides are designed to help IT users find useful information (e.g., Hardware, product, software, capacity and performance information) in an SMI-S server.
  - The guides are pywbemcli (part of pywbemtools) command line scripts to access WBEM servers (the scripts work on the Array mock server).
  - These guides are illustrated in video's on the SNIA pywbem page: https://www.snia.org/pywbem
  - The Quick Start Guides folder also contains the presentation used in the installation and setup video (for installing python, virtual environments, pywbem and pywbem tools).

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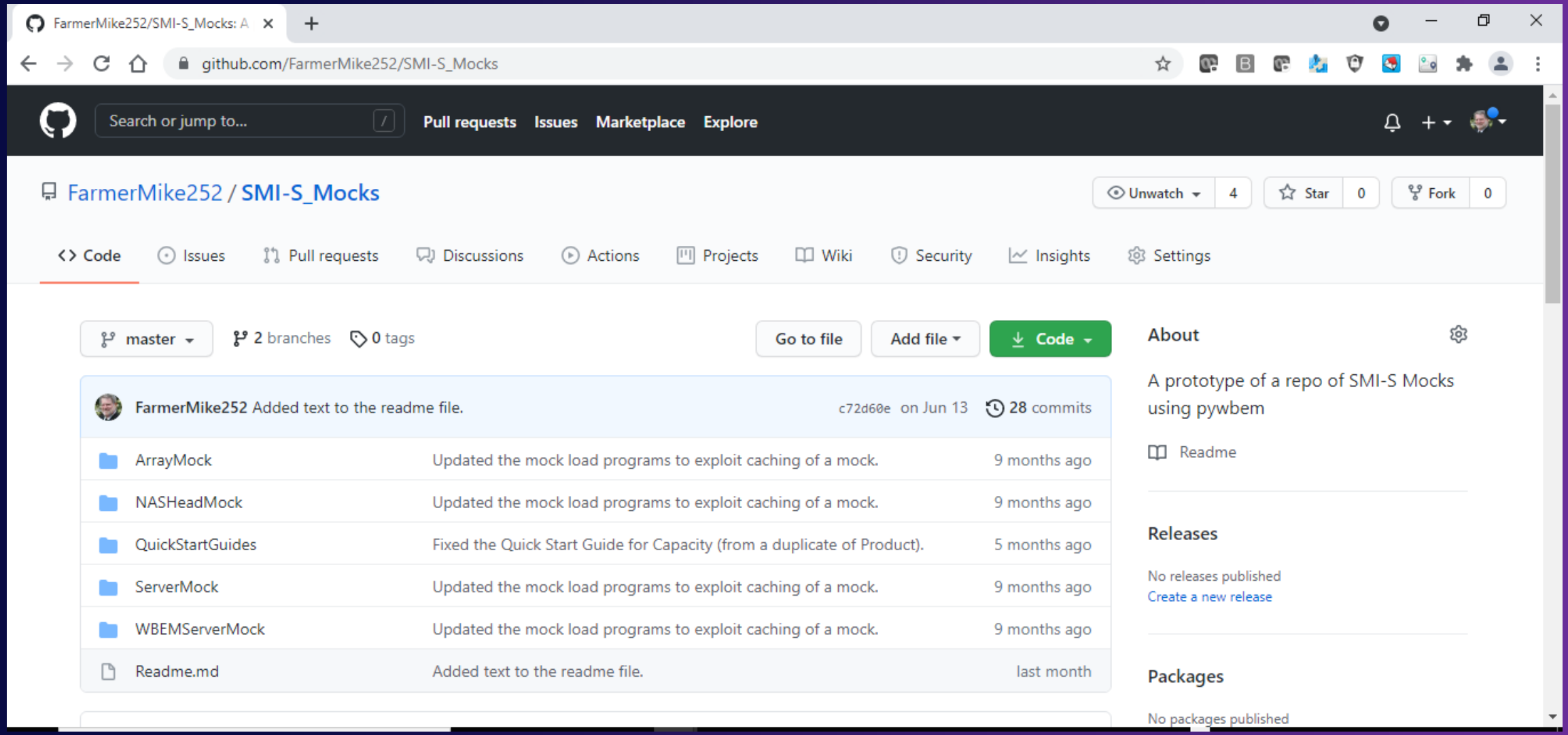
Github Mocks



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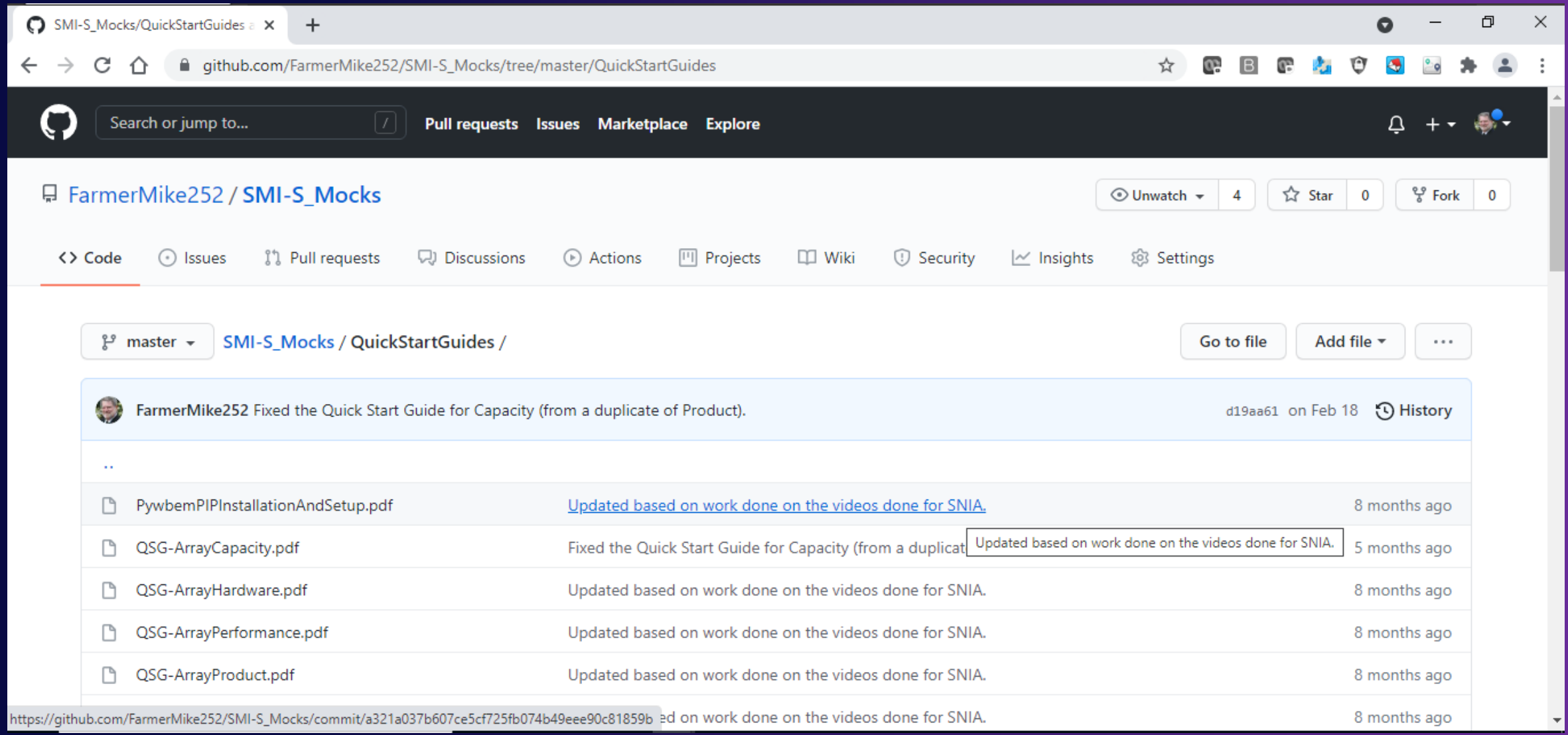
Setup Presentation



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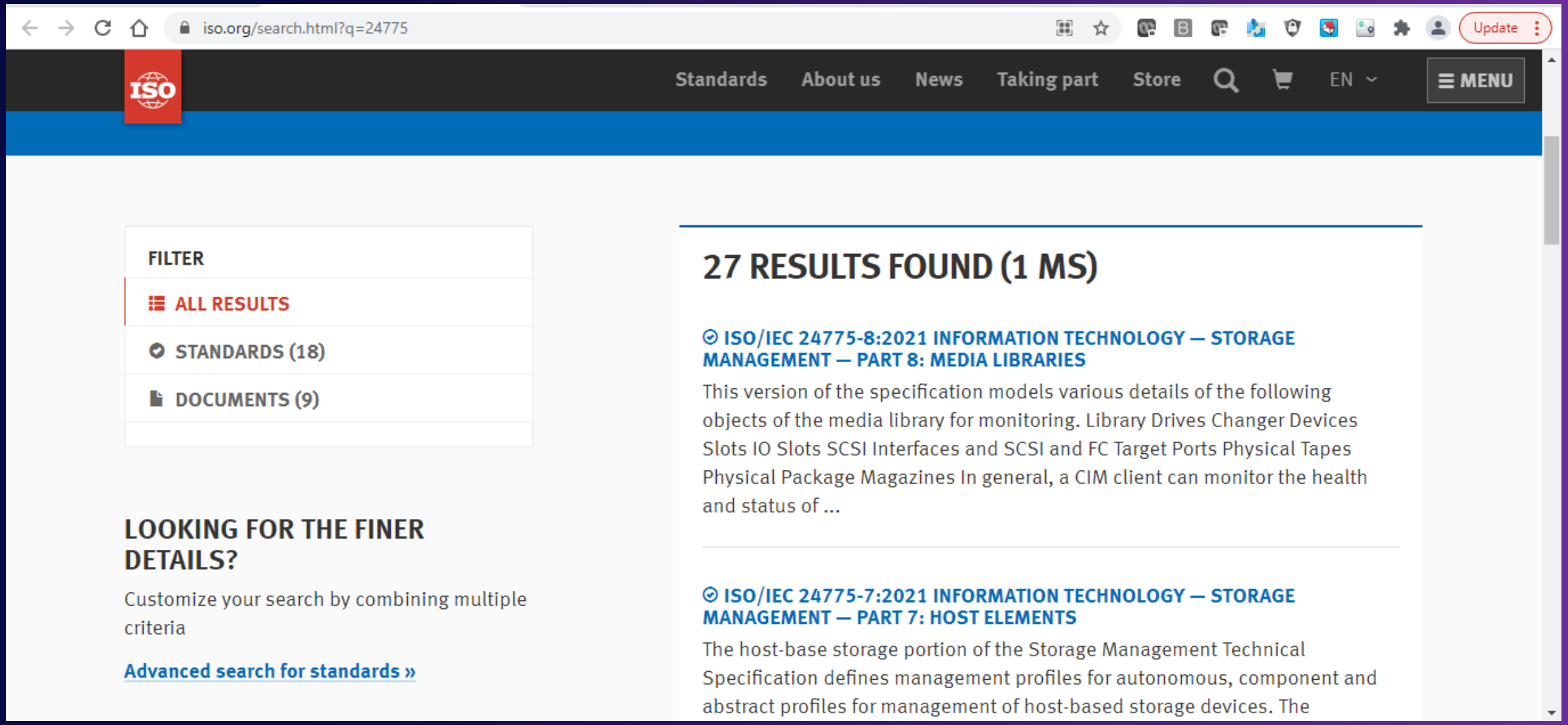
The ISO Standard



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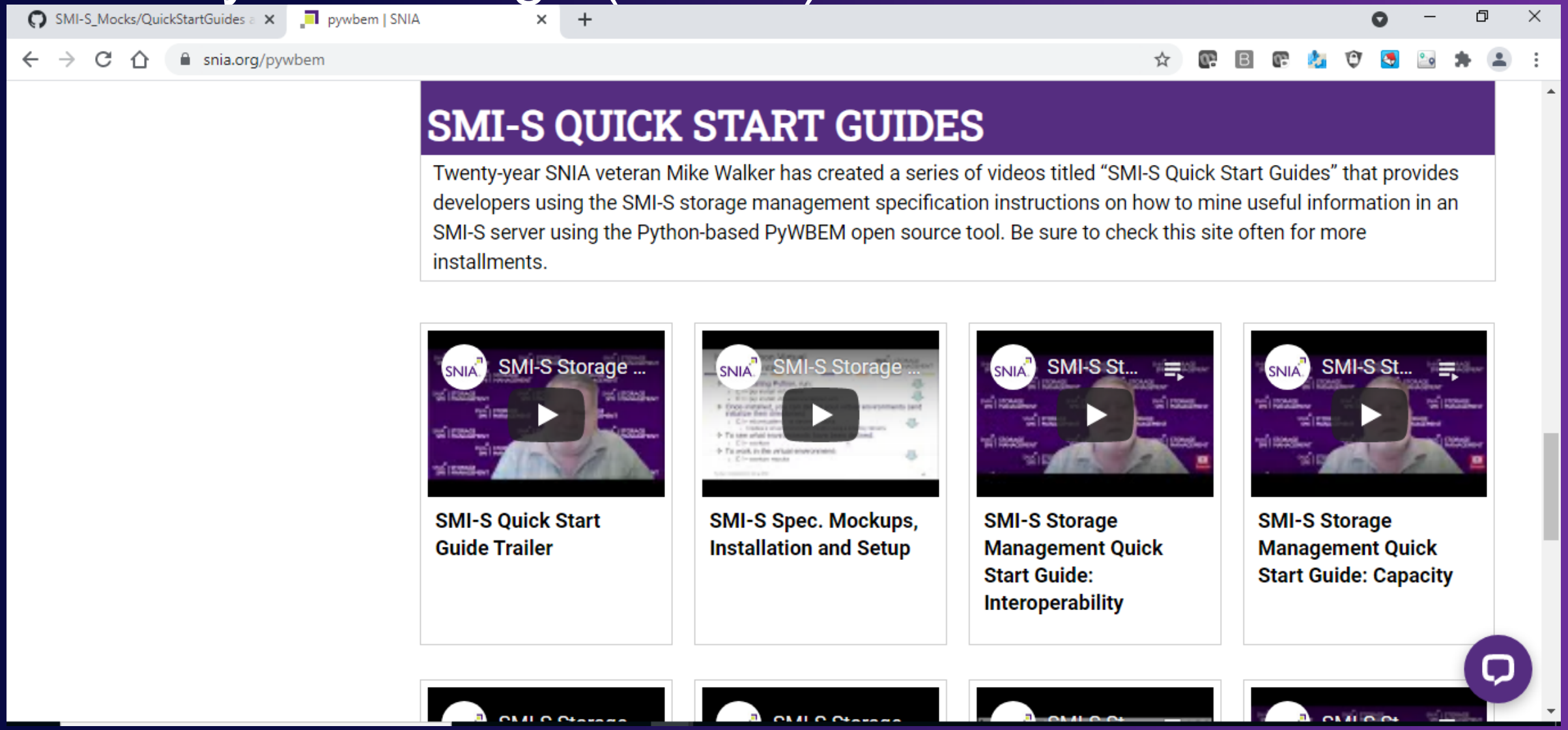
SNIA Pywbem Page (videos)



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Using the mock servers

- Feel free to use the mock servers in the Github repository
- Download or clone the repository
- Each mock is made up of three files:
  - A leaflist xml file – which defines the classes (mofs) to be loaded into the mock server
  - An instance mof file – that contains instances to be loaded in the mock server
  - A mockload python program – that performs the loading of the classes and instances

  These files need to be copied into your virtual environment working directory.

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