



PJM Command Line Interface

- A cross platform Java based application run from the command prompt to perform functions against PJM applications without using a web browser
- Formerly referred to as “PJM Browserless App”
- Now referred to as “CLI” or Command Line Interface
- The CLI handles authenticating your user against the PJM Single Sign On and performs an XML or CSV upload/download against a running PJM application

- Legacy apps had multiple different “browserless” jars.
- Each JAR was specific to know how to upload and download against a single application.
- New CLI was designed for one app to be able to communicate with any PJM refreshed application.
- Some PJM members and customers had requested this functionality in the late 1990’s. When PJM started refreshing the apps the CLI was created to continue providing members with functionality they have in legacy apps.

- PJM refreshed apps provide REST web service endpoints.
- REST endpoints consume and produce XML documents.
(InSchedule is the exception)
- Conventions were used such as HTTP PUT for uploads and HTTP GET for downloads. /rest/secure for service that require authentication and /rest/public for services that do not.
- Conventions allowed PJM to write 1 “dumb” CLI that could be reused across 20+ PJM apps without writing custom JARs.

- A lot of members and customers!
- Some applications we have witnessed 85% of the traffic is through the CLI and only 15% through the UI.
- The CLI has been integrated in some 3rd party trading desk platforms so people may be using it and not even know it.
- Smaller users who do not have IT departments to write custom apps but need to automate uploads and downloads

- And now...a demonstration.

- *Where can I get it?* Download from PJM.com:
<http://pjm.com/~media/etools/exschedule/pjm-command-line-interface-java-6.ashx>
- *Is there documentation?* Yes, included in the download is a PDF user manual as well as samples from each app, XSD, XML, and sample calls.
- *What do I need to run it?* Java6 or higher. May be Java7 soon as Java6 is End-Of-Life from Oracle.
- *Do I need to use the CLI?* No. We have documented how to write your own with just HTTP calls. <http://pjm.com/~media/etools/pjm-browserless-authentication-guide.ashx>

- Any questions???