

### The Project:

- Write an API that accepts a set of data (host performance data) in one format, and outputs the data in a different format.
- The API must provide the ability to filter and to sort the records by one or more fields (e.g. filter by site\_name, or sort by site\_location ASCENDING and by host\_name DESCENDING).
- The API only needs to handle CSV and XML formats, but you should be able to plug in new formats with minimal changes to the code (or configuration).
- The API should be able to go both directions with both formats.
- Find the sample XML & CSV data attached, as specifications for each format.

Along with the application sources, you must provide the following unit tests:

- Test case #1: Generate CSV output from XML input, output must be sorted by by operating system, then by host\_id descending.
- Test case #2: Generate CSV output from XML input, filtering by site\_name=' NY-01' and sort by host\_name ascending.
- Test case #3: Generate XML output from XML input, sorted by load average (1 min) ascending, then host\_id descending.

Submit a zip file with the Eclipse project (or the project of your preferred IDE) to: [job.us@ipsoft.com](mailto:job.us@ipsoft.com) with the subject "IPsoft Code Test". The zipped file must contain:

- Source code
- Test cases
- A README file that documents any assumptions and design trade-offs you make along the way, instructions to compile/run the test, and a list of any 3<sup>rd</sup> party libraries used.