HWDB Python Command Line Interface

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Purpose

The HWDB Python Command Line Interface allows users to enter hardware items to the hardware database, along with specifications and test results contained in CSV files.

Current Status

- A Python module has been created that wraps basic REST API functionality for use in Python scripts. Most of the available functionality has been implemented. Some issues with the REST API need to be resolved.
- A set of scripts using the above module is being created to allow users to upload items from the command line. The commands shown in this presentation are working, but with very limited error checking. Many smaller supporting scripts (e.g., lookups) need to be created. Features such as defining subcomponents and adding images need to be implemented.
- A more robust data model has been started for use in an upcoming GUI version of this utility.
- We are currently working with the photon detector group (Maritza Gonzales, Alessandro Minotti) to provide custom scripts that will do more sophisticated parsing from CSV files to simplify their workflow.

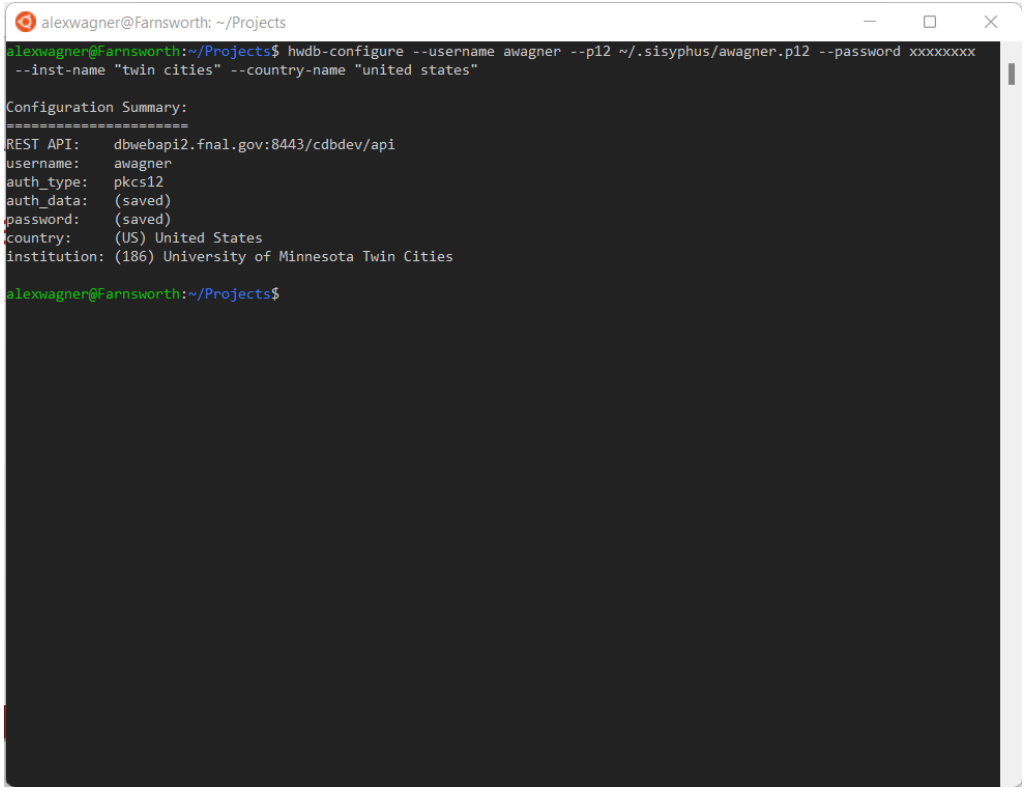
Interface design

Since command-line interfaces tend to have many parameters and can be confusing to use, we have chosen to not require the user to enter all the data at once. The commands can be used multiple times with different information, and it will not submit to the database until --submit is called.

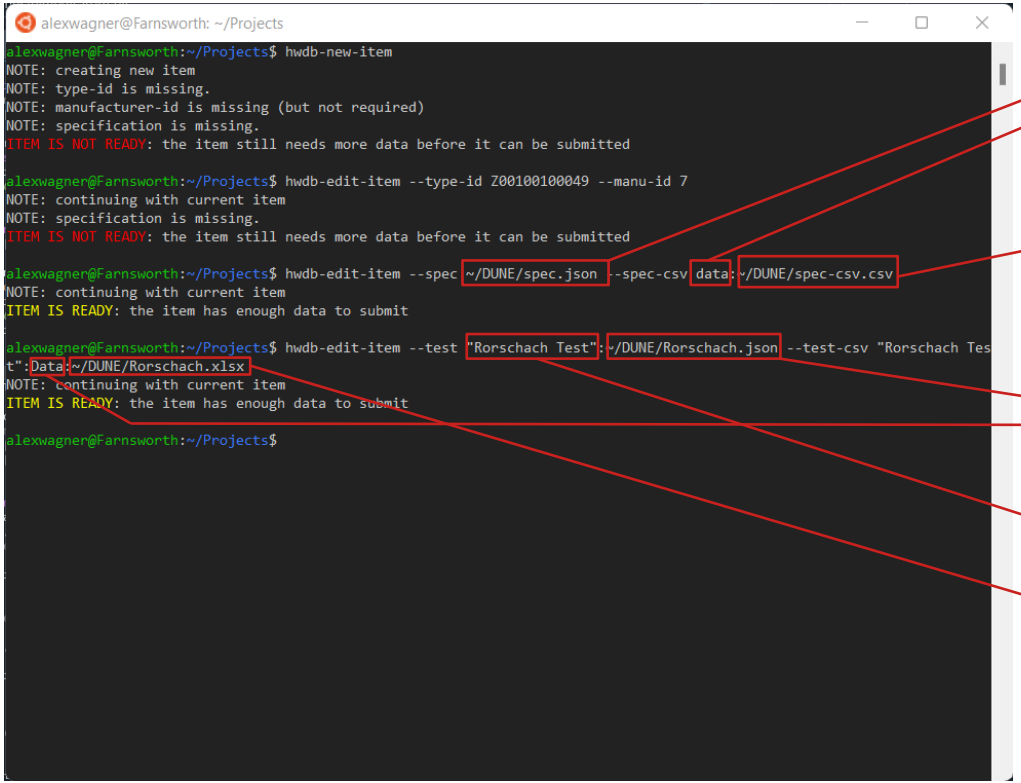
For example, a user could start an item, realize that he or she needs to see the specification format the item requires, enter a different command to look it up, then resume entering the item.

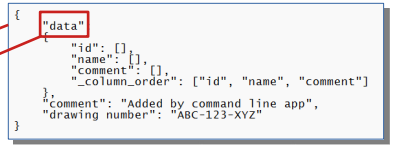
To make entry easier, the user can configure the utility with a given certificate and password, responsible institution, and country. These can be overridden in later commands, but if not supplied, these will be used as defaults.

Sample Use Case -- configure

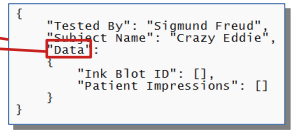


Sample Use Case – start new item





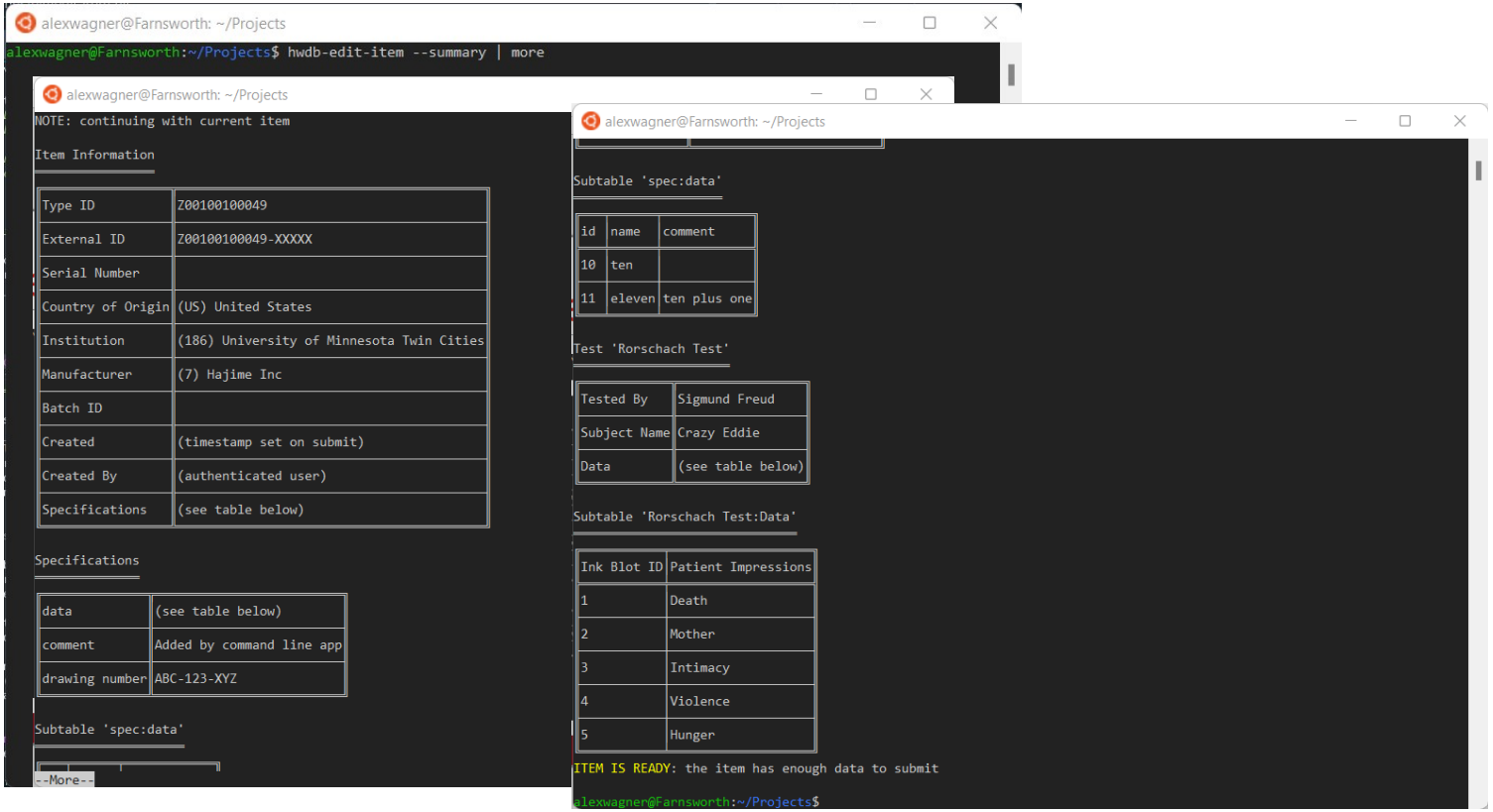
	A	B	C
1	id	name	comment
2	10	ten	
3	11	eleven	ten plus one



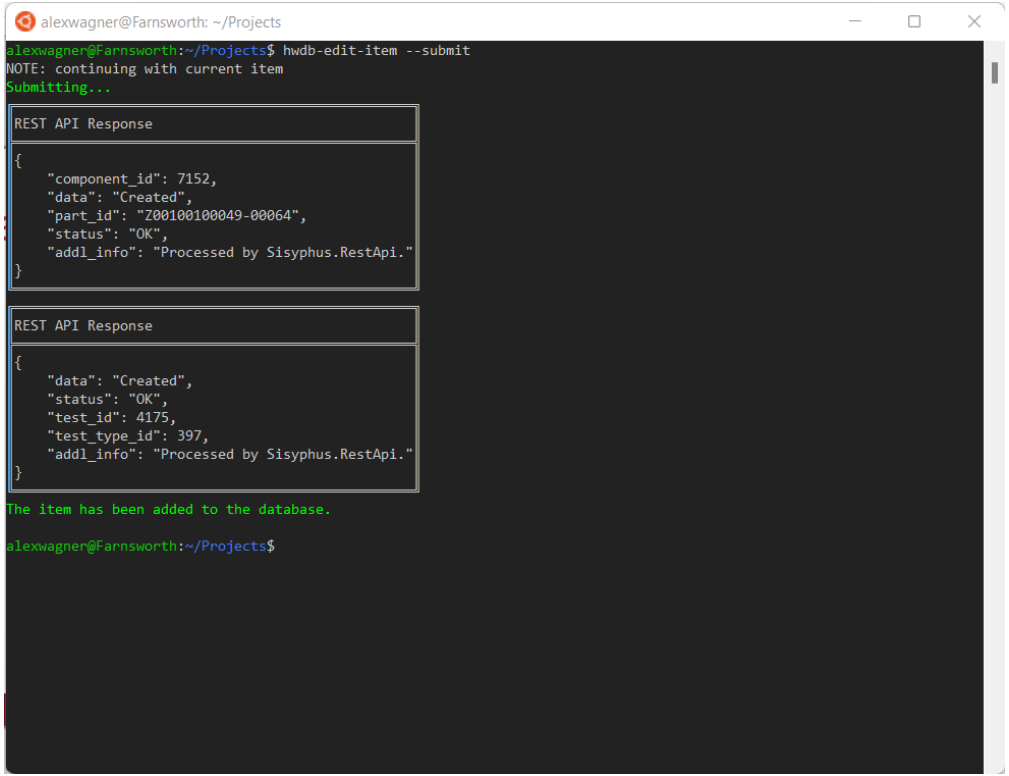
Defined in HWDB for this component type

	A	B
1	Ink Blot ID	Patient Impressions
2	1	Death
3	2	Mother
4	3	Intimacy
5	4	Violence
6	5	Hunger

Sample Use Case – view summary



Sample Use Case – submit



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