User-Level Unit Tests Plans

- 1. For each user-level operation, a list of *test cases* is produced.
- 2. This list of cases constitutes the *unit test plan* for each operation.
- 3. A user "operation" is denoted by the user actions required to invoke it, with the following specific conventions for typical invocation forms:
 - a. Denote a menu command as "Menu Name -> Item Name".
 - b. Denote a toolbar command as "Toolbar Name -> Tool Name", where "Tool Name" is the label on the tool, or the roll-over help text if not labeled, or a suitable text mnemonic for the tool name if it is neither labeled nor instrumented with roll-over help.
 - c. Denote a typed command (i.e., command-line input) by its typed string name.
- 4. A unit test plan is defined in the following tabular form:

Case No. Inputs Expected Output Remarks

Provide a description of all required user inputs. When inputs are in a GUI dialog of some form, describe fully all typed values, all mousebased input actions (e.g., clicking a particuler checkbox), and all required user actions to confirm the input (e.g., clicking an "OK" button). If inputs are in some other format, e.g., click mouse and drag, then fully describe the required input actions in appropriate user-level terms. If available, provide a screenshot of the input dialog(s), or reference to a document where a screenshot is available, such as in a users manual or requirements document. ...

Provide a description of all expected output. If output is to the screen, then fully describe the screen contents and/or provide a screen shot of the expected output. If a generic (or specifi c) sample screenshot is available, such as in a users manual or requiredocument. provide a reference to it. If output is in some other form, e.g., a fi le, then provide a complete description of all output data, and/or a dump of the actual data, and/or a document reference to where the output data are described or enumerated.

Provide any appropriate remarks that explain the test case.

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5. When a particular input action sequence or output format is common to many operations, that sequence or format can be given common name or description, and then referenced to by that name in multiple unit test plans.

- 6. A unit test record is the same table, with an additional rightmost column labeled "**Results**".
 - a. If the test case passes, then the results entry is empty.
 - b. If the test case fails, then the results entry describes the exact nature of the failure.