

Running the models in ACT-R

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1 Requirements

To run the models you need:

- A LISP distribution; LTM^C the interfaces and the models have been tested under ACL 7.0 and ACL 8.0.
- ACT-R 6

2 Installation

2.1 Installing LTM^C

To install LTM^C simply extract the content of LTM^C.zip to any folder of your choice. LTM^C can be loaded by (a) loading `loader.lisp` which can be found at the top level of the folder hierarchy of the unpacked LTM^C.zip, (b) loading `lTMDB_2006_09_13.lisp` which can be found in the `net` subdirectory of the LTM^C directory, and (c) by calling `(simsis->lTM dc:dataContent)` from the LISP prompt. You need to load LTM^C before you can use the interfaces.

2.2 Installing the Interfaces

To install the interfaces, copy the files `lTM-dm.lisp` and `lTM-buffer.lisp` to the `modules` directory of your ACT-R installation. The file `lTM-utils.lisp` needs to be placed into the `support` directory of the ACT-R installation. All three files are contained in `interfaces.zip`.

After copying the files the modules will be automatically loaded whenever you load ACT-R. If you do not want to use one or both of the modules just remove the corresponding file(s) from the `modules` directory and reload ACT-R.

3 Running the Models

It is suggested that you copy all files in `models.zip` into the `models` directory of the ACT-R installation. If you decide to place the models elsewhere you might need to adjust some paths to be able to run the models.

3.1 Fan Experiment

All fan experiment models are run by calling `(average-person-location)` from the LISP interpreter after loading:

- `fan.lisp` for the ACT-R proper model (you need to remove `ltm-dm.lisp` from the `modules` directory to run ACT-R proper).
- `test-fan-chunks.lisp` for the LTM-Buffer model.
- `dm-fan.lisp` for the LTM-DM model.

3.2 Hierarchy Experiment

All hierarchy experiment models are run by calling `(do-child-parent)` from the LISP interpreter after loading:

- `actr-hierarchy.lisp` for the ACT-R proper model (you need to remove `ltm-dm.lisp` from the `modules` directory to run ACT-R proper).
- `test-hierarchy.lisp` for the LTM-Buffer model.
- `dm-hierarchy.lisp` for the LTM-DM model.

3.3 Moses Illusion

To run the Moses Illusion in ACT-R proper load `test-illusions-actr.lisp`. To run the Moses Illusion in LTM-Buffer load `test-illusions.lisp`. To run the Moses Illusion in LTM-DM load `test-illusions-dm.lisp`.

4 Licensing

LTM^C as well as its ACT-R interfaces are distributed under the terms of the GNU General Public License. (see <http://www.gnu.org/copyleft/gpl.html>)