**4. Command Reference**

This chapter documents all available commands in the Mango Workbench, grouped into:

* **Production Commands**
* **Debug & Experimental Commands**
* **Special Console Symbols**

Each command includes a description and a usage example.

**4.1 Production Commands**

These are available in all builds for primary operations.

**add transform**

Adds a transform to the current sequence by name or ID.  
**Example:** add transform SlidingMaskOverlayTx

**clear sequence**

Clears the current transform sequence.  
**Example:** clear sequence

**exit**

Exits the Workbench application.  
**Example:** exit

**find best sequence**

Reorders the sequence to find the highest-scoring permutation.  
**Example:** find best sequence

**get**

Retrieves the value of a configuration key.  
**Example:** get Rounds

**help**

Displays built-in help with command summaries.  
**Example:** help

**list**

Shows global config and current sequence status.  
**Example:** list

**optimize sequence**

Optimizes both global rounds (GR) and per-transform rounds (TR).  
**Example:** optimize sequence

**optimize sequence gr**

Optimizes global rounds (GR) only.  
**Example:** optimize sequence gr -max 9

**run comparative analysis**

Benchmarks the current Mango sequence against AES.  
**Example:** run comparative analysis

**run munge**

Launches automated discovery for optimal sequences.  
**Example:** run munge

**run regression tests**

Runs all internal validation and regression tests.  
**Example:** run regression tests

**run sequence**

Runs encryption, decryption, and scoring for the active sequence.  
**Example:** run sequence

**set**

Updates a global config value.  
**Example:** set Rounds 10

**🔧 CLI Command Reference — Profile Management**

**run classification**

**Usage:** run classification  
Automatically selects the best-known profile based on heuristics.

**save profile <name>**

**Usage:** save profile Test  
Saves the current sequence under a given profile name.

**replace profile <name>**

**Usage:** replace profile Test  
Replaces the named profile with the current sequence.

**delete profile <name>**

**Usage:** delete profile Test  
Deletes a saved profile. Irreversible.

**rename profile <old name> <new name>**

**Usage:** rename profile "Foo Bar" "June’s Favorite"  
Renames a saved profile from old name to new.

**list profiles [pattern]**

**Usage:** list profiles or list profiles Test\*  
Lists all profiles. Supports wildcards.

**touch profiles**

**Usage:** touch profiles  
Recalculates all profile scores using current metrics.

**4.2 Debug & Experimental Commands**

Only available in Debug builds or for development use.

* batch optimize sequences
* batch optimize + reorder sequences
* log to screen
* log to file
* log to sql
* convert file to sql
* query
* run query console
* run analyzer
* run auto weight tuner
* run benchmark transforms
* run profile transforms
* run MangoCipher
* run munge e
* run munge k
* run smart munge
* run visualization

**4.3 Special Console Symbols**

**$ (Paste Sequence)**

Allows direct pasting of a full sequence.  
**Example:**  
$MaskedCascadeSubFwdFbTx -> SubBytesInvTx -> ApplyMaskBasedMixingTx

**! (Bang Command)**

Loads the "god-sequence" for the current InputType.

* ! alone clears and loads it.
* Appending ! to a command (e.g., run sequence !) uses the god-sequence.