mata describe — Describe contents of Mata's memory

Description	Syntax	Option	Remarks and examples
Diagnostics	Also see		

Description

mata describe lists the names of the matrices and functions in memory, including the amount of memory consumed by each.

mata describe using *libname* describes the contents of the specified .mlib library; see [M-3] mata mlib.

Syntax

```
: mata \underline{d}escribe [namelist][, all]
```

: mata describe using libname

where namelist is as defined in [M-3] namelists. If namelist is not specified, "* *()" is assumed.

This command is for use in Mata mode following Mata's colon prompt. To use this command from Stata's dot prompt, type

```
. mata: mata describe ...
```

Option

all specifies that automatically loaded library functions that happen to be in memory are to be included in the output.

Remarks and examples

mata describe is often issued without arguments, and then everything in memory is described:

: mata describe

# bytes	type	name and extent
50	real matrix	foo()
1,600	real matrix	X[10,20]
8	real scalar	x

mata describe using *libname* lists the functions stored in a .mlib library:

: mata describe using lmatabase

# bytes	type		name and extent
508	auto	structdef scalar	AsArray_char()
188	auto	structdef scalar	AsArray_dup()
312	auto	structdef scalar	AsArray_top()
984	auto	numeric vector	Corr()
864	auto	numeric vector	Corrslowly()
400	auto	real matrix	Dmatrix()
340	auto	real matrix	<pre>Hilbert()</pre>
(output omitted)			
672	auto	transmorphic colvector	vech()
184	auto	real scalar	whether_ssd()

Diagnostics

The reported memory usage does not include overhead, which usually amounts to 64 bytes, but can be less (as small as zero for recently used scalars).

The reported memory usage in the case of pointer matrices reflects the memory used to store the matrix itself and does not include memory consumed by siblings.

Also see

[M-5] **sizeof()** — Number of bytes consumed by object

[M-3] Intro — Commands for controlling Mata

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