Scilab

uman

User manual in console & advanced documentation features

(c) Samuel Gougeon

3 / 2023

uman 3.2

- uman — User manual in console. Advanced multimodal and multilingual documentation.
- uman .. b — Lists bugs reported about a given item, in the web browser
- uman .. w — Shows the online help page or the reference web page of an item
- uman .. @ — Selects messages from Scilab mailing lists archives
- disp_usage — Displays allowed syntaxes to call a given function
- Preferences — Setting of uman() configuration preferences
- uman internals — Technical internal aspects about how uman() works

uman > uman

uman

User manual in console. Advanced multimodal and multilingual documentation.

Syntax

```
uman
uman pattern
uman pattern options
uman -options pattern
uman -options pattern options
```

```
uman item g
uman item gx..
uman item gL
uman item gL<lang>
```

```
uman item w
uman item wx..
uman item wr..
uman item wL
uman item wL<lang>
uman item1|item2|.. wL<lang>
uman "item1 | item2 | .. " wL<lang>
```

```
uman bugNumber b
uman item b
uman label>item b
uman label/author>item b
uman author>item.. b
uman author/label>item b
uman author/label1|label2|..>item b
uman "author/label1|label2|.. > item" b
uman … ba
```

```
uman topic! @
uman topic @
uman author>topic! @
uman author1|author2>(topic1|topic2)&topic3&~(topic4|topic5)! @
uman author><Ndays @
uman author>topic<Ndays! @
uman "author > topic1 | topic2 < Ndays!" @
uman … @d
uman … @s
```

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Table of contents

Arguments

pattern

a single string: function name, symbol ($, [, etc), expression, bug number... about which informations are queried. The query is considered case-insensitive if it is all in lowercase. It is case-sensitive otherwise.

To include white spaces, comma ",", semi-colon ";", colon ":", "=", "//", parentheses, or braces, quotes ".." delimiting the `pattern` are mandatory.

options

Options described here are available when calling uman(). Another set of "fixed" options changing uman's behavior is available as uman preferences.

`options` is a single string without spaces, specifying one or several options. Each character (order and case insensitive) is a switch enabling a specific feature. Available options are described here-below.

By default, `options` are specified *after* the `pattern`. Otherwise, `"-"` must prefix the options string.

Options

- defined as default ones, as *Default display sections* preferences,
- specified before the `pattern`, prefixed with `-`,
- and specified after the `pattern`

are cumulated, with the following decreasing priorities:

after pattern > before pattern > preferences > overall implicit default values.

WHERE the content must be displayed

By default, the text output is displayed in the console. Other targets are possible.

Priorities between targets options are: b > w, g > (console) > @

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g : Help browser **G**UI. `uman` calls the Scilab help browser for the given `pattern`.

If the browser is not already opened, it is called in the active language, or in the language forced with the complementary option `"L##"`.

If the `pattern` belongs to an external package installed *but not loaded*, related help pages can't be available in the help browser. Then, the queried page is displayed *in the console*, ending with a warning in the footer.

⚠ When `"g"` is used with `"x"` (eXternal packages), the page displayed in the browser is the Scilab version (if any) of the `pattern`, not the external one. Indeed, there is no way to force the browser considering first or only non-Scilab pages.

w : Web page: displays the related online help page in your web browser. Please see uman .. w for more information.

b : Bugs query: displays in your web browser a page listing online reported bugs related to the given `pattern`. Please see uman .. b.

This uman() mode is impacted by the *Show only unresolved bugs* configuration preference, that can be overridden with the `ba` calling option.

@ : Mailing lists @listes.scilab.org (web archives): Searches messages by subjects, authors, max message age, and displays the result in your web browser. None of other uman() options are used in "@" mode. Please see uman .. @

j : **J**ournalize: Records in currently opened diaries (if any) all `uman` outputs printed in the console.

By default, all opened diaries are paused before and resumed after "uman" flows, in order to not be fed. If no diary is priorly opened, no journalization is done.

WHAT must be displayed

By default, the help page matching the query is displayed, with the following minimal sections:

- Path in the help tree
- Actual name of the feature (after a possible redirection), and its short description
- List of allowed syntaxes
- *See also* section

Additional sections may be displayed on demand (here-below).

Priorities between contents options are: **u > s > a > p,d,e,h**

u : **u**sages : displays only the list of syntaxes defined for the pattern. This option has the highest content priority. It cancels all other contents options, but is ignored by the b, w and g mode options.

s : displays the **s**ummary of the help **s**ection of the `pattern`, instead of its page.

This option works also with the `"g"` one (Scilab help GUI). In the opposite, it is ignored in `"w"` web mode.

a : **A**ll sections displayed. It is a shortcut for `"pdeh"` options.

p : **P**arameters: displays the *Arguments* section.

When a page has no *Arguments* or *Parameters* section, its *Description* section is always displayed.

d : **D**escription: displays *Description, Bibliography, References, Authorship* sections, as well as any other sections of unidentified types.

e : **E**xamples: display identified Examples section(s)

Examples included in other types of sections are displayed within these ones. Using "`e`" has no effect on their display.

h : **H**istory of the `pattern`.

HOW the query must be processed

c : Clear the Console before displaying the page.

L## : **L**anguage: gets the version of the page in Language ##, where ## mainly stands for one of the `en | fr | ja | pt | ru` language codes. Other codes such as `de | zh | fa` are as well supported, provided that resources in these languages are available (some external modules are translated into them). Otherwise, the session's language is used.

If `L` is specified as last option without ## code, or if the specified code is out of this list, the reference version in english is considered.

Since `uman 2.0`, partial corpus out of the en,fr,ja,pt,ru languages list are supported. Just put the corresponding .jar file on your computer as a usual package. "uman" will tap from it as soon as the chosen item will be available in the chosen "extra" language, and will automatically tap from other Scilab default resources to complete otherwise.

x : Priority to e**X**ternal packages and references. This flag is used in 2 different ways:

- When two homonymous features are proposed in Scilab versus in an external module (ATOMS, other package) or in FileExchange, or as a local user-defined function with heading comments, by default `uman` addresses the Scilab version. Then "`x`" can be used to target the eXternal version first.

- "`x`" can also be used to process "faux-amis": When the same `pattern` exists in Scilab and in an eXternal scientific *language BUT with 2 different meanings*, by default the Scilab meaning is considered. If the eXternal meaning must be considered instead, use "`x`". Then, `uman` will redirect the user toward the *equivalent* Scilab page.

  Faux-amis examples: `end`, `load`, `home`, `null`, `range`, `type`, etc. Hence, `uman null` will display the Scilab *null()* page, while `uman null x` will display the Scilab *kernel()* page, which is the equivalent of the *null()* Octave function.

r : **R**efreshes / **R**eloads the documentation list of all installed external modules, and deletes from the uman cache all pages already extracted from external modules.

For modules managed with the ATOMS system, the update of uman's registery is done automatically after each new installation or uninstallation of a module, and running the "r" option is useless.

Running once the "`r`" option will be useful
- for any user, after changing the set of *Paths of external modules out of ~/contrib* in uman Preferences, or
- for pages writers, after building a new version of pages.

Description

`uman..` is a **u**nified display command of the **u**ser **man**ual and of other Scilab documentation. Help pages of Scilab (current functions or former removed ones), of ATOMS packages, of external packages, or heading comments in local functions are covered. Some references of the Scilab FileExchange are also available. The display may be performed in text mode in the console, as well as in the help browser, or on http://help.scilab.org in your web browser.

`uman..` displays pages in any available language, without switching the session. The table of contents of the function's directory may be listed instead. The list of documented bugs related to a given item can be displayed online in a simple way.

For more than 220 external input words (coming from other scientific languages), uman automatically redirects the query to the equivalent or most relevant Scilab reference.

Supported OS

Windows, Linux and Mac OS, with Scilab 5.5 and Scilab 6.

Main features

1. "uman" allows to easily select, grab and display informations
   - from embedded Scilab help pages,
   - from pages of installed ATOMS modules,
   - from heading comments in local user-defined functions,
   - from pages of other external modules, packed in .jar archives in a standard way,
   - from pages of former removed Scilab functions,
   - from the online Scilab help pages and search engine,
   - from ATOMS web pages (220 entries) and their comments,
   - from online Scilab forges,
   - from Scilab FileExchange pages (60 entries),
   - from Scilab's bugs tracker,
   - from archives of all official Scilab mailing lists,
   - and from other external web sites presenting Scilab resources.

   Do not care where the required information is: uman gets it from the right place and displays it for you: In the console, in the help browser, or in your internet browser for online resources, it's up to you.

2. The default factory settings of `uman` do not match your most frequent needs? `uman` has a comprehensive set of configuration parameters, easy to set in the uman Preferences interface. You will always be able to easily override them with compact command-line options.

3. No need to view the whole help page. Just choose information that you want to display: only usages (syntaxes) and See also. Or more: parameters, description, examples, history, table of contents of the item's help section.. If really the whole page must be displayed, the "a" option will do it.

4. You use to code in Octave language? Specify the Octave term you have in mind : More than 220 automatic redirections will target and display the closest Scilab equivalences. Other handy shortcuts are also defined for all users.

5. Just give a language code `en | de | fr | ja | pt | ru | zh` in option, and you get the right version of the help page in the console or online. No need to change the session language. Watching the reference en_US english version of the page is now straightforward, without leaving your locales.

6. The item of your query is a deprecated feature that has been removed from Scilab? `uman` will tell it to you, and may anyway display its former help page, online, or in the console or the help browser (provided that the https://atoms.scilab.org/toolboxes/removed complementary module gathering pages of removed features is installed).

7. You think that you met a bug? Check it with the "b" option, that will nicely list online documented bugs related to your query, possibly with filters (reporter's name, category, max age of last reports update), for Scilab and many ATOMS packages. Online users comments are as well directly reachable..

8. No need to load modules in the Scilab session. Even the documentation of packages that do not run under your Operating System can be viewed and displayed in the console.

9. Want to efficiently probe mailing lists, for some items, or some authors, on some given period? "uman" does it easily for you from the console.

Shortcuts

The following patterns (in lower case) do not exist as proper Scilab functions, but are uman-defined to display related contents or summaries in a comprehensive way, in the console or in the help browser:

apifun : List of *apifun* (external) function, if installed.

colors : Functions dealing with colors

files : List of file management functions

gui : Graphical User Interfaces. Interactive components (uicontrols)

hdf5 : List of functions managing HDF5 files

history : List of history management functions

ipcv : List of image processing functions of the external module *IPCV* (if installed).

keys : Page of Scilab's keyboard shortcuts

metanet : List of functions of the *Metanet* module (if installed)

plotting : List of graphical functions

signal : List of Signal processing functions

stats : List of functions in the Mathematics => Statistics section

trigo : List of trigonometric functions normal and hyperbolic, direct and inverse.

variables : List of items in the Scilab => Variables section

windows : MSWindows specific functions

xml : List of functions processing XML files and contents

Examples

**"s" option** : Summary of the item section

```
uman complex s        // in the session's language
uman complex slru     // in Russian
uman complex sglru    // in the help browser, in Russian
```

```
--> uman complex s
===============================================================================
Scilab > Elementary Functions > Complex numbers

 * complex — Build an array of complex numbers from their parts
 * conj   — Complex conjugate
 * imag   — imaginary part of complex numbers, polynomials, or rationals
 * imult  — multiplication by i the imaginary unitary
 * isreal — check if a variable is stored as a complex matrix
 * real   — real part of complex numbers, polynomials, or rationals


--> uman complex slru
===============================================================================
Scilab > Основные функции > Комплексные числа

 * complex — Построение массива комплексных чисел по их частям
 * conj   — сопряжение
 * imag   — мнимая часть
 * imult  — умножение на мнимую единицу i
 * isreal — проверка, имеет ли переменная вещественные или комплексные элементы
 * real   — реальная часть
```
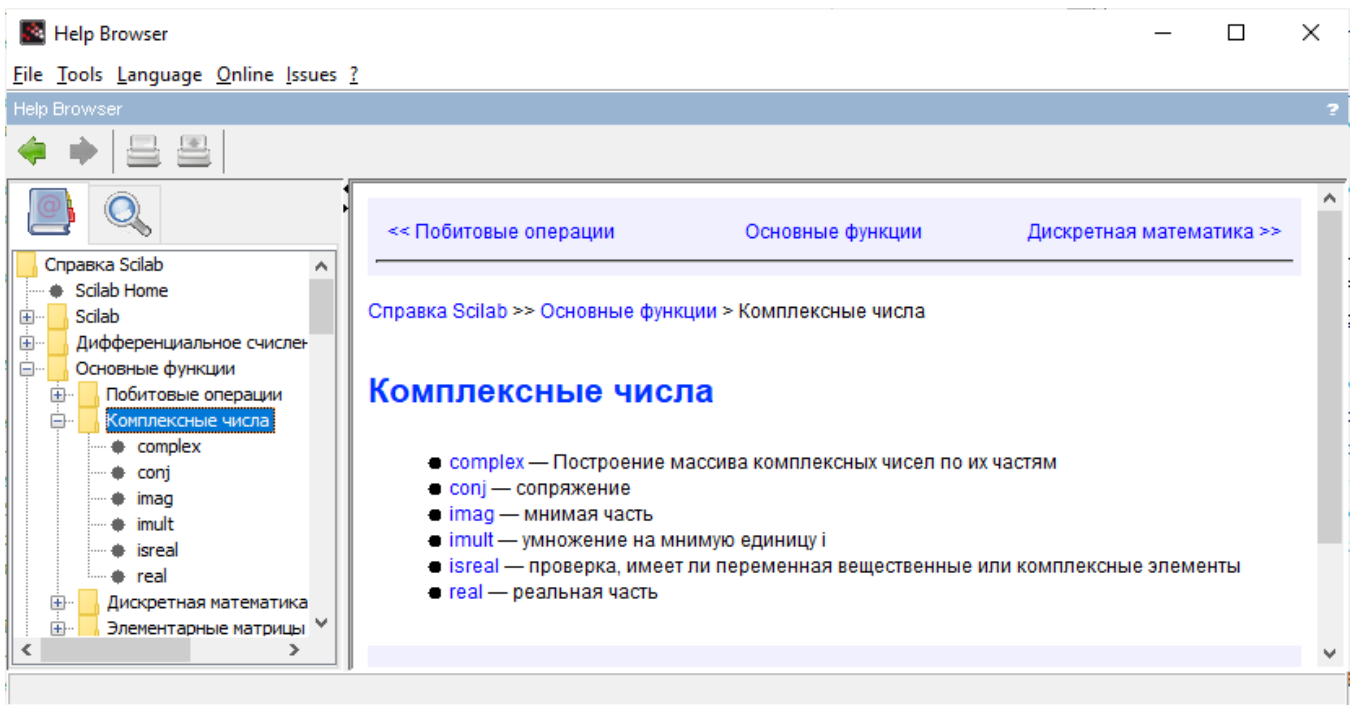
"u" option : prints only usages (synopses)

```
uman ndgrid u
```

```
--> uman ndgrid u

Scilab > Elementary Functions > Matrix generation > ndgrid
.......................................................
SYNTAXES
            [X, Y] = ndgrid(x)
            [X, Y] = ndgrid(x,y)
         [X, Y, Z] = ndgrid(x,y,z)
      [X, Y, Z, T] = ndgrid(x,y,z,t)
  [X1, X2, ..., Xm] = ndgrid(x1,x2,...,xm)
```

General mode in console :

```
// Please select each line one-by-one, execute it (CTRL+E), and see the result in
console

 uman eye p       // Section "Parameters" (Arguments) displayed
 uman eye d       // Section "Description" displayed
 uman eye e       // Section "Examples" displayed
 uman linspace h  // Section "History" displayed
 uman eye ph      // Sections "Parameters" and "History" displayed
 uman eye a       // All: full page displayed
 uman ones d      // "d" displays all misc. sections (like "Remarks") as well

 uman .* cpd      // Operators or symbols are accepted.
                  // Console Cleared before teh display
 uman $ cpde      // Another one. Displays examples as well.

 uman linespec a  // all in lowercase => the query is case-insensitive: "LineSpec"
found
 uman type a      // could display "type" or "Type" pages. "type" is prefered
 uman Type a      // displays the "Type" page , <> "type"
 uman typE a      // the "typE" exact page doesn't exist => "'typE' has no dedicated
page"

 uman linspace Lruph // Russian version of linspace's page (Parameters and History)
 uman linspace hpL   // English reference version, still for Parameters and history
                     // ("L" used instead of "l" (~ "1" = one), but "l" is OK).

 uman uint16 ce      // Pages presenting several functions are supported
                     //  (here int8, int16, etc)

 // Nested terms, itemized or unordered lists are supported
 uman brackets cd
```

```
  //     Let's decrease the console's width. Then re-run
uman brackets cd    // Wrapping is adjusted (but neither for the code samples)

  // Tables are supported :
uman plotsparse cd      // 2 tables without borders, in the arguments section
uman atomsSetConfig ac // tables with borders. Long lines in cells are wrapped

  // Inner redirections to pages or summaries :
uman keys          // inner redirection to the console page, with its Description
uman files         // Display the summary of functions dealing with files management.
                   // Other shortcuts are defined in the same way. Try with "stats"
```

"x" option : priority to eXternal references

```
// Scilab equivalences of external patterns not existing in Scilab
uman polyval d // Automatic Octave => Scilab redirection performed when possible.
               // polyval() does not exist in Scilab but is the Octave
               // function for Scilab's horner() => horner's page is displayed

uman flipdim x // If no eXternal version is found, Scilab's one is targeted anyway.

// Scilab equivalence of external faux-amis
uman end u         // targets the Scilab related page = controls (if | for | while..
end)
uman end ux      // "x" targets in priority an eXternal meaning for "end".
                 //   In Octave, "end" means "index of last element", as "$" in Scilab
                 //   => "$" page is displayed.
```

```
--> uman end u
Scilab > Control flow > end
...........................

--> uman end ux
Scilab > Scilab keywords > dollar
.................................
```

Using the GUI "g" mode:

```
uman strstr deg  // In the Scilab help browser the "de" options are ignored.
uman cholesky g  // aka "help cholesky". No dedicated page, but lists pages
containing "cholesky"
uman who gs        // The parent summary of the item can also be targetted in the help
browser.

// To switch the language in the help browser, this one must priorly be closed.
Then:
uman who gslru
```

With a local user's function:

```
function r=test(p, q)
   //
   // CALLING SEQUENCES
   // r = test(p)
   // r = test(p, q)
   //
   // PARAMETERS
   // p: 1st param (describe it here)
   // q: optional 2nd param (describe it here)
   // r: result (describe it here)
   //
   // DESCRIPTION
   // This function and its comments must be executed. It is designed to
   //  illustrate uman's acting as head_comments().
   //
   // Go on with other help sections. The block of comments must be continuous.

   r = p*q.^2
   // Last comment
endfunction
uman test   //  displays the heading block of comments in test()
```

```
--> uman test
function [r] = test(p,q)

 CALLING SEQUENCES
 r = test(p)
 r = test(p, q)

 PARAMETERS
 p: 1st param (describe it here)
 q: optional 2nd param (describe it here)
 r: result (describe it here)

 DESCRIPTION
 This function and its comments must be executed. It is designed to
  illustrate uman's acting as head_comments().

 Go on with other help sections. The block of comments must be continuous.
```

With an installed external ATOMS package:

```
uman atoms d              // List of ATOMS functions
yn = atomsIsInstalled("serial");
atomsInstall serial ;  // Let's install the 'serial' external module
atomsIsLoaded serial   // => %F
uman openserial ca
uman openserial s      // Summary of the 'serial' module.
uman openserial ag     // The help browser called with "g" does not come,
                       //  because 'serial' is  INSTALLED, but NOT yet LOADED.
                       //  Instead, the page is displayed in the console.

if ~yn, atomsRemove("serial"), end    // cleaning after the example
```

See Also

- uman preferences — Setting of uman() configuration preferences
- disp_usage — Displays allowed syntaxes to call a given function
- uman .. w — Shows the online help page or the reference web page of an item
- uman .. b — Lists bugs reported about a given item, in the web browser
- uman .. @ — Selects messages from Scilab mailing lists archives
- help
- apropos
- head_comments
- ATOMS "removed": Pages of removed functions
- https://help.scilab.org
- https://gitlab.com/scilab/scilab/-/issues
- Mailing lists archives
- Gitlab forges

Author

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History

Version	Description
3.2	2023-03-26 : 1 bug fixed.
3.1	2021-12-22 :

- uman can now be used in the advanced Scilab console, (since Scilab 6.1.0 support to UTF-8 characters).
- uman can now address pages of unregistered external modules, for functions belonging to a library loaded on the fly.
- Display of mathematical formulae improved: x^2 → x², multiline formulae, etc.
- 26 references added.
- 16 bugs fixed.

3.0	2019-08-22

- uman Preferences interface introduced, to manage all configuration parameters.
- New `'p'` option to display the Parameters section of a page. The display of this section is no longer mandatory.

Removed Functions and features: In console, web or helpbrowser modes, when querying information about a known removed feature, now

- `uman` displays an explicit message with last supporting Scilab version,
- `uman` proposes a possible replacement (if any),
- `uman` suggests targeting the archived online help page (if any).

`uman` now uses the complementary module https://atoms.scilab.org/toolboxes/removed whenever it is installed and pointing to it is relevant.

Other noticeable changes:

- The display of complex contents in table cells has been improved. See the Changelog file.
- <latex> formulae can now be displayed as text in the console, provided that a text-readable equivalent is provided in the alt <latex alt='..'> attribute in the source file of the page.
- *See also* section: A one-line compact display listing only items without their short description is now available as a Preference.
- Internal and external hyperlinks can now be indicated or displayed, according to a new preference.
- The display of Xcos blocks pages is improved: Useless 'Module' and 'Palette' sections ignored, as well as the 'Block Screenshot' and 'Contents' ones, irrelevant in console mode. By default, the "a" option is now forced.
- `uman .. g` no longer prints in the console a copy of the help page opened in the help browser. Printing is still done only when no content can be displayed in the browser (feature of an external unloaded module ; local user's function, ...).
- 19 bugs fixed.

2.1	2016-10-30

- 14 bugs fixed.

- The block of syntaxes is now aligned. New configuration variable "umanAlignSyntaxes".
- For a page without parameters section, the description section is now always displayed.
- French version of help pages added.

2.0	2016-04-06 : Major version. uman refactored. Many new features, improvements, fixed bugs. uman now runs fully with Scilab 6.
1.4	2015-07-31 : First version compiled for Scilab 6. 3 bugs fixed.
1.3	2015-07-12 : 20 bugs fixed. See changelog.txt for details
1.2	2015-06-06 : Upgrade. ~40 improvements and bugs fixed.
1.1	2015-04-02 : Technical release by ATOMS's admin (after fixing ATOMS server issue)
1.0	2015-03-22 : First release

uman .. b

Lists bugs reported about a given item, in the web browser

Syntax

```
uman bugNumber b

uman item b
uman author>item b
uman label>item.. b
uman label1|label2|..>item b

uman author/label>item b
uman label/author>item b

uman "label1|label2|.. / author> item" b

uman … ba
```

Arguments

b | xb | ba

> `b` is the uman's option making uman working in bug query mode.
>
> The `uman x` option setting the priority to features eXternal to Scilab (for instance ATOMS modules features) can be taken into account if only one item is provided. Otherwise, it will be ignored.
>
> `uman … ba` or `uman … ab` forces displaying All Bug reports related to the query, even if the *Show only unresolved bugs* option is checked in the user preferences.

bugNumber.

> Integer > 76 (entered as text): id of the targeted bug report on the Scilab Bugzilla bugs tracker.
>
> ⚠ A few hundreds of bug reports about Scilab websites (Scilab portal, bug tracker, mailing lists, forges, help pages, wiki, ATOMS and FileExchange portals, codereview) reported before 2022-09-07 were deleted on 2022-10. Targeting them through their number (all < 16895) will display an error page.

item

> Case-insensitive expression that must be searched in the title of bug reports. All reports whose title includes ALL the elementary words in the `item` are selected.
>
> Neither exclusion – `(NOT)` nor `| (OR)` conjunction operators are available for items.

author

> Case-insensitive id/name of a bug reporter. This criterion can be used only for resources on https://gitlab.com/scilab (Scilab et external related forges).
>
> 💡 To search former Bugzilla reports ≤ #16894 according to their `author`, the special `label` bugzilla (or its shortcut `bz`) must be used. The `item` is then always searched in the body of reports, instead of in their title. Most often the displayed list looks quite more fuzzy.

label, label1|label2|..

Case-insensitive name(s) of labels in which the selected bugs must be searched. If several labels are specified, only reports tagged with ALL of them are selected. This criterion is ignored for any forge out of https://gitlab.com/scilab.

Labels defined for the main Scilab's forge:

LABEL	DESCRIPTION
api, hardcoding, mexlib	Hard coding, API, mexlib, dynamic link
atoms, packages	ATOMS pkg manager
batch, cli, terminal	Scilab without IDE
build, compile	Building Scilab from sources
cacsd	CACSD module
containers	Lists cells structs features
demos	Demontrations
desktop, workspace, IDE	Desktop, console, docking, history, files browser etc
edit, editor, scinotes	Code editor
figfiles	Files from figures
files, rw, iodata	Files management (open, read/write, seek..). HDF5.
gui, uicontrol, interaction	GUI, events, menus, datatips, graphics editor...
help, doc	Contents of help pages
helpsys, docsys	Help system (build and see)
install	Scilab installation (obsolete)
internal, maintenance	Internals, maintenance (thirdparties, source tree organization,..)
java	Java features
m2sci, matlab	Code converter, .mat files
maths	Math features (except statistics)
optim, optimization	Optimization computing
OS	OS functions & files system
parallel	Parallel computing
plot, plotting, graphics	Plotting in graphical figures
preferences	Preferences management
stats	Statistical functions
string, text	Char / string / text processing
syntax, parser	Syntax / Interpreter
tests, perfs, quality	Tests, bunchmarks, coverage, profiling, slint
sparse	Sparse matrices
startup	Startup crash or issue (obsolete)
tcl, tcltk	TCL/Tk tclsci functions
translation, locale	Multilinguism features
vars, variables	Variables management (clear, global, editvar..)
xcos	Xcos
xml	XML/HTML files processing

----

onlineatoms	ATOMS web site
onlinehelp	Online help pages and search engine

----

regression	Regressions

internal operators

/   Separator between *labels* and *authors* lists. When only labels or only authors are specified, `"/"` is not needed.

\>   Separator between the labels or/and authors list and *items*. When no label and no author are specified, `">"` is not needed.

| separator between multiple labels.

"..."   When there is at least one space in any part of the whole search pattern (author, label(s), item), the whole pattern must be specified between single or double quotes.

Description

`uman .. b` runs the web browser defined in your Scilab preferences, and opens an URL searching in online Scilab bug trackers for the given item and criteria.

⚠ `uman .. b` requires an active internet connexion.

🔶 Aliases / redirections defined in uman are not used in "b" mode.

Example: `uman flipud b` won't look for and find the `flipud => flipdim` redirection. It will query Gitlab issues about `flipup` as is.

`Label(s)` and the `author` are taken into account only when https://gitlab.com/scilab is targeted. Otherwise, these criteria are ignored.

None of possible `item`, `labels`, or `author` of bugs-change specifications is mandatory. But giving at least one of them is more efficient ;-)

When several types of criteria are provided (`item`, `labels`, `author`), only bug reports fulfilling *all* of them are selected.

Processing of the query

Here below, Scilab/issues stands for https://gitlab.com/scilab/scilab/-/issues.

When a `bugNumber` is provided: the page of the bug numbered and documented on Scilab/issues is displayed. Example: `uman 11625 b`

Otherwise:

- If no `item` is provided, `uman` always queries the Scilab issue/bug tracker.

- Otherwise: `uman` looks for the item among native Scilab functions and other Scilab ressources installed on your computer, as it does in normal console mode. Then, according to the type of Scilab ressource where the item is found, the bug query is routed as it follows:

  - If the ressource is Scilab itself, Scilab/issues is targeted

  - If the ressource is an ATOMS module having a Scilab public forge, or if it is a package out of ATOMS but having a Scilab public forge registered by uman: the bug tracker of the forge is targeted. The list of documented bugs related to the `item` is selected and displayed on the tickets page of the Forge https://gitlab.com/scilab/forge/<module_name>/-/issues.

  - If the ressource is an ATOMS module without Scilab public forge: The comments section of its ATOMS page is targeted, where bugs may be reported.

  - If the ressource is a known FileExchange item: The comments section of the FileExchange page is targeted, where bugs may be reported.

- If the ressource is out of ATOMS, FileExchange, and Scilab forges, but is uman-registered and has a known website: Its website is targeted.

- If the item has been found in none of known ressources registered in uman: https://gitlab.com/scilab/scilab/-/issues is targeted.

Examples

```scilab
// ====== LIVE INTERNET CONNEXION REQUIRED ======
//
uman 11625 b      // Displays the Scilab/issues page of the bug #11625

uman ode b        // For any Scilab internal function, on Gitlab, well sorted

uman strrand b    // For functions registered on FileExchange, bugs may be
                  //  reported as users comments on the dedicated online page

uman gpib b       // Only registered as external ressource => website targeted.

uman flipud b     // Unknown pattern. The existing redirection to flipdim()
                  // is ignored => "flipud" is searched for as is on Scilab/issues.

uman cholesky b   // For any unknown pattern: searched as is on Scilab/issues

uman sparse> b       // Lists bugs about sparse matrices

uman sparse>find b   // Lists bugs about "find" with the "sparse" label

uman syntax>assignment b  // Lists bugs about "assignment" labelled in the
"syntax" category

uman syntax>assignment ba // idem, for All reports,including closed ones

uman sgougeon> b     // All reports ≥ 2022-10 posted on Scilab/issues by sgougeon

uman gougeon/bz> b   // All Reports < 2022-10 posted by gougeon on the former
Bugzilla bug tracker

uman gougeon/bz|maths> b  // Reports < 2022-10 posted by gougeon in the Maths
category
```

With an installed external ATOMS module having a Scilab forge:

```scilab
yn = atomsIsInstalled("stixbox");
atomsInstall stixbox ;  // Let's install stixbox
atomsIsLoaded stixbox   // => %F: no need to be loaded

uman logitfit ba   // A ticket about logitfit() exists on the
                   // stixbox forge. The related page is opened.

if ~yn, atomsRemove("stixbox"), end    // cleaning after the example
```

With an installed external ATOMS module *without* Scilab forge:

```scilab
uman disp_usage b  // The ATOMS page is targeted (comments section)
```

See Also

- debug
- slint
- uman — User manual in console. Advanced multimodal and multilingual documentation.
- uman .. w — Shows the online help page or the reference web page of an item
- uman .. @ — Selects messages from Scilab mailing lists archives
- https://gitlab.com/scilab/scilab/-/issues"
- https://gitlab.com/groups/scilab/forge/-/issues
- https://www.mail-archive.com/users@lists.scilab.org

History

Version	Description
3.2	2023-03-26 : • Migration from `bugzilla.scilab.org` to `gitlab.com/scilab/scilab/-/issues`. Due to the downgraded performances of the free Gitlab search engine, • `item` shorter than 3 characters or/and being non alphanumeric are now ignored. Examples : `".*."`, `"//"`, `"if"` .. • The `Ndays` argument is no longer available (maximal age of queried bug reports). • If `item` has several words, only reports whose title includes ALL of them (instead of formerly ANY of them) are selected. • only one `author` can be specified • Special `bugzilla = bz section` added when selecting bugs according to an author as formerly on the Scilab bugzilla bug tracker (<2022-09-07). • Migration from `forge.scilab.org` to `gitlab.com/scilab/forge/*/-/issues`. • `ba` now works as well with forges of Scilab external packages.
3.1	2021-12-22 : Option `"ba"` added. 2 bugs fixed.
3.0	2019-08-22 • New *List only unresolved bugs* configuration parameter introduced. • Querying bugs now requires simply the `"b"` option instead of the `"wb"` pair. The former `"b"` semantic is removed. • The syntaxes `uman section>.. b` and `uman author/section>.. b` are now supported, in addition to `uman author>.. b` and `uman section/author>.. b`. • List of Bugzilla categories updated and overhauled. • 13 bugs fixed about the "b" option. Page overhauled.
2.1	2016-10-30 : 7 bugs fixed. Translation of this page in french.
2.0	2016-04-06 : Separate help page for "uman .. b"
1.0	2015-03-22 : First uman release

uman > uman .. w

uman .. w

Shows the online help page or the reference web page of an item

Syntax

```
uman item w
uman item wx..
uman item wL
uman item wL<lang>
uman item1|item2|.. w..
uman "item1 | item2 | .. " w..
```

Arguments

w

> `w` is the `uman`'s option making it working in "Web page" mode.

item, item1|item2|,...

> Words or text expressions that must be searched for.
>
> - When it is all in lower-case, the item is searched in a case-insensitive way.
> - When it mixes upper and lower cases, the item is searched as is in a case-sensitive way.

options

> Available options are independent from each others and may be used alone or together.

> **x :** eXternal contents first: Use this option when the item is available in Scilab as well as in another external resource, and you want to target the external version instead of the Scilab's one.

> **L## :** The **L**anguage option is used only when https://help.scilab.org is targeted to process the given `item(s)`. It will be ignored in all other cases.
>
> Available language codes ## are `en` (default), `fr`, `ja`, `pt`, or `ru`.

> Please see the uman page for more information.

Description

`uman .. w` requires an active internet connexion.

`uman .. w` runs the web browser defined in your Scilab preferences and opens an URL targeting the Scilab online help page or the reference web page of the item, or the Scilab online help search engine.

Several items may be provided, separated with "|". Then, the Scilab online help search engine is always called and queries any page about at least one of the items. Pages matching the maximal number of items are ranked first. There is no way no restrict the selection with AND or NOT conjunctions.

As with `uman` in console: when a single item is searched for and is not found as is, a redirection (alias) is searched for, and if any, it is targeted instead.

If the item or the list of items includes at least one space, the whole pattern (out of options) must be delimited within quotes or double-quotes.

⚠ Pages for the *current* official Scilab version are considered. Scilab's version that runs "uman" is ignored (if it is not the current official version).

⚠ "sw" options: It is not possible to target online Tables of Contents on https://help.scilab.org.

Querying a removed feature

When the item is a former Scilab feature that has been removed...

- before Scilab 5.3.1:
  - If a replacement exists:
    - A message is displayed in the console. It indicates the last Scilab version supporting the feature, and the name of its replacement.
    - The online page of the replacement is displayed.
  - Otherwise: the https://atoms.scilab.org/toolboxes/removed page is displayed.

  In addition, if the `atomsInstall("removed")` module is installed, the former page of the item is displayed in the console.

- after Scilab 5.3.0: Its archived page is displayed online.

Examples

```
// ====== ALIVE  INTERNET CONNEXION REQUIRED ======

uman ode w          // in the session's language (if it is registered, otherwise in
english)
uman ode wlpt       // in Portuguese
uman ode wl         // Reference page in english

uman type w         // could display "type" or "Type" pages. "type" is prefered
uman Type w         // displays the "Type" page (case-sensitive)
uman CUMSUM w       // page of the CUMSUM Xcos block
uman cumsum w       // page of the cumsum() Scilab function

uman linespec w     // all in lowercase => the query is case-insensitive: "LineSpec"
found

uman sort wlru      // Not found: The "w" option also searches inner redirections
                    // "sort => gsort" found and used.

uman cholesky w     // Unknown pattern => the online search engine is called

uman scimax w       // not on ATOMS but has a Scilab forge: its forge is targeted

uman contour3d w    // For a function only available and registered on FileExchange,
                    //  the related online page is opened.

uman gpib w         // Neither on ATOMS nor with a Scilab forge. Its website is
targeted

uman end wx         // "x" (priority to eXternal) can be used with "w". Here =>
Dollar page.
```

With an installed external ATOMS module :

```
uman uman w         // ATOMS's page of uman is targeted


yn = atomsIsInstalled("serial");
atomsInstall serial ; // Let's install the serial toolbox
atomsIsLoaded serial  // => %F: no need to be loaded


uman openserial w   // There is no (yet) online help pages for ATOMS packages.
                    //  => the page is displayed in the console instead
                    // (with a specific footer)


if ~yn, atomsRemove("serial"), end   // cleaning after the example
```

Documentation for Scilab removed features :

```
// atomsInstall removed ;
// atomsAutoloadDel removed ; // Then restart the session

// Case 1) Feature removed before Scilab 5.3.1 (no online archive)
 uman lgfft w   // without replacement
 uman getf w    // with a replacement

// Case 2) Feature removed after Scilab 5.3.0
 uman xbasr w   // without replacement
 uman MSDOS w   // with a replacement
```

See Also

- uman — User manual in console. Advanced multimodal and multilingual documentation.
- uman .. @ — Selects messages from Scilab mailing lists archives
- uman .. b — Lists bugs reported about a given item, in the web browser
- https://help.scilab.org

History

Version	Description
3.1	2021-12-22 : One bug fixed. Works around missing online pages for Scilab 6.1.1.
3.0	2019-08-22 • The documentation of former removed features is now managed. • Unavailable web page of an installed ATOMS or contrib module: Now by default the full page is printed. The contents options can still be used at calling time, and reactivate default défined in the preferences. • 2 bugs fixed.
2.1	2016-10-30 : Translation of this page in french.
2.0	2016-04-06 : Creation of this separate help page dédicated to "uman .. w"
1.0	2015-03-22 : First uman release.

uman > uman .. @

uman .. @

Selects messages from Scilab mailing lists archives

Syntax

```
uman topic! @   // users@
uman topic @
uman author>topic! @
uman author><Ndays @
uman author>topic<Ndays! @
uman "author > topic1 | topic2 < Ndays!" @
uman author1|author2>(topic1|topic2)&topic3&~(topic4|topic5)! @
uman … @d // dev@
uman … @s // StackOverflow [Scilab]
```

Arguments

author, autho*, author1|author2|..

Names (pseudonymes) of messages authors (case-insensitive).

"*" appended to a name will search for any author's name starting with the entry and having any trailing part.

⚠ **@s** ignores `authorS`.

topic, to*ic, topic1|topic2|,...

Case-insensitive words or text expressions that must be searched for.

"*" can be used inside any topic. It then matches any string, possibly empty. For instance "SI*P" will match "SIP", "SIVP", "soap", etc.

"?" will match *a single character* in the same way. For instance "S*P" will match "SIP", "SVP", "SoP", "s1p", etc.

"*" and "?" can't be used at the head of authors or topics.

Since they have special meanings, "& | ( ) ~ < >" characters are not (or badly) supported in topics.

⚠ **@s** processes only one `topic`.

NDays

Positive integer (entered as text): maximum age of messages to be selected, expressed in number of days up to now.

⚠ **@s** ignores `NDays`.

Internal operators

! Search only in subjects. When the search pattern ends with "!", the search is restricted to the subject of messages posted and archived on the mailing lists. Otherwise, both body and subject of messages are scanned.

> *authors* ">" *topics* separator. When no authors are specified, ">" is not required.

21

<   *topics* `"<"` *maximum messages age* separator. When no messages max age is specified, `"<"` is not required.

(..)   Grouping parentheses

| OR conjunction between topics or authors.

&   AND conjunction between topics. Meaningless between authors, since each message has only one author.

~   "NOT" modifier to exclude some topics. Can't be used for authors.

"..."   When there is at least one space in any part of the search pattern (authors, topics, messages age), the whole pattern must be specified between single or double quotes.

Description

`uman .. @`

- interprets the elements of your query,
- runs the web browser defined in your Scilab preferences,
- opens an URL that searches in the archives of official Scilab mailing lists homed at http://lists.scilab.org/mailman/listinfo, and finally displays the list of messages matching topic(s), author(s), and maximum messages age specifications.

- **@** alone targets the archives of the main `users@lists.scilab.org` forum, starting from 2018.
- **@d** targets the `dev@lists.scilab.org` archives, starting from 2014.
- **@s** targets the **S**tackoverflow forum. Search criteria are restricted for it.

⚠   `uman .. @` requires an active internet connexion.

`uman .. @` is console-quiet.

None of possible search criteria is mandatory, but giving at least one of them is more efficient ;-). When several types of criteria are provided (author, topic, message age), only messages fulfilling *all* of them are selected.

`uman .. @` does not take into account any other possible `uman` options. Noticeably, `uman .. L##` language option is ignored.

💡   Whenever Scilab users specific communities would use an active non-english and non-french speaking mailing list with public archives, please get in touch with `uman`'s author in order to possibly implement the `L##` language option within the `@` one.

Examples

```
// ====== ALIVE INTERNET CONNEXION REQUIRED ======

// Mailing lists: Search Scilab online archives: The "@" option
// --------------------------------------------------------

uman struct @       // Search "struct" in any part of messages

uman struct! @     // Search "struct" only in Subjects

uman struct*! @    // Any of "struct", "structs", "structure", "structures".. in
Subject

uman struct*! @d   // Same query, but for dev@lists.scilab.org

uman grand&setting @   // Messages with "grand" AND "setting" in any part
```

```
uman grand&~setting @ // Messages with "grand" AND WITHOUT "setting" in any part

uman "grand & ~setting" @    // idem. Use quotes when there are blanks.

uman cell|struct! @          // Subject with "cell" OR "struct"

uman "(cell|struct)&~array!" @  // Subject with "cell" OR "struct", AND NOT
"array"
                                // Quotes are mandatory to protect the leading (

uman "(cell|struct)&~(function|array)!" @  // Subject with "cell" OR "struct",
                                           //   AND NEITHER "function" NOR "array"

uman denizet>bitmap|image! @  // Subject with ("bitmap" OR "image") FROM Denizet

uman steer|povy> @    // All messages FROM ("Steer" OR "Povy")

uman david><300 @     // All messages FROM "David" in the last 300 days

uman "><300" @d       // All messages on dev@ in the last 300 days

uman ode! @s          // All threads on StackOverflow with "ode" in the title
```

See Also

- uman .. w — Shows the online help page or the reference web page of an item
- uman .. b — Lists bugs reported about a given item, in the web browser
- uman — User manual in console. Advanced multimodal and multilingual documentation.
- http://lists.scilab.org/mailman/listinfo

History

Version	Description
3.2	2023-03-26 : option "@s" added.
3.1	2021-12-22 :
	• Option "@d" added to address the dev@ development list. • Mailing lists archives moved to http://lists.scilab.org/mailman/listinfo are now addressed.
3.0	2019-08-22 : 4 bugs fixed.
2.1	2016-10-30 : 1 bug fixed. Translation of this page in french.
2.0	2016-04-06 : @ option introduced.

disp_usage

Displays allowed syntaxes to call a given function

Syntax

```
disp_usage()
disp_usage(fname)
```

Arguments

fname
> text = name of a function (macro in Scilab language, or Scilab built-in function).

Description

`disp_usage()` displays in the console the main usage informations about the Scilab function in which `disp_usage()` is called. This may be used mainly when an error -- for instance about input or output arguments -- is detected. `disp_usage()` may then be called before calling `error(..)`, as a usage reminder.

When **fname** is provided, the usage information about the function named **fname** is displayed.

Example of display:

```
--> disp_usage unwrap

Scilab > Elementary Functions > unwrap
.....................................
SYNTAX
                    unwrap() // runs some examples
 [U, breakPoints] = unwrap(Y)
 [U, breakPoints] = unwrap(Y, z_jump)
  [U, cuspPoints] = unwrap(Y, "unfold")
              U = unwrap(Z)
              U = unwrap(Z, z_jump)
              U = unwrap(Z, z_jump, dir)
```

💡 The alignment mode of syntaxes inside the block may be changed through the uman preferences.

💡 `disp_usage('fname')` is equivalent to `uman fname u`. The `uman..` call should be prefered.

⚠ `disp_usage()` can be called without input parameters only inside a `function / endfunction`. Then **fname** is implicitly the name of the embedding function.

⚠ If the function named **fname** has no standard help page but is only documented through its heading comments, `disp_usage(..)` displays the full block of heading comments, so not necessarily (only) a USAGES section.

⚠ `disp_usage(..)` calls `uman(..)` and requires the `uman` module.

Examples

Example #1 : *unwrap(..)* is an existing function, with its help page. We are artificially redefining it herebelow in order to introduce disp_usage() in it to show how it works:

```
fp = funcprot(); funcprot(0);
function unwrap(x)
    if typeof(x)~="constant"
        // warning(...) may be helpfully called
        disp_usage()   // <<<=======
        // error(...) may additionally be called
    end
endfunction
funcprot(fp);
// Then let's call it
unwrap("abc")
clear unwrap // clearing it automatically recovers the default true
version
```

Example #2 : Usage in a local user's function documented only through heading comments

```
function r=foo(a, b, c)
    // USAGE:
    // foo()          // demo
    // r = foo(a,b)    // returns a^2 - b
    // r = foo(a,b,c) // returns a^2 - b + sin(c)
    //
    // DESCRIPTION
    // foo() is a test function aiming to illustrate disp_usage()
    //

    select argn(2)
        case 0
            disp("Here should be a demo")
            r = []
        case 2
            r = a.^2 - b
        case 3
            r = a.^2 - b + sin(c)
        else
            disp_usage()
            error("Wrong number of input arguments")
    end
endfunction
foo(%pi) // Display the full bloc of heading comments of foo(), in place
of any
        // standard help page.
        // Possible calling syntaxes to foo() must then be indicated in
the
        // first lines of comments in this bloc.
```

```
--> foo(%pi) // Display the full bloc of heading comments of foo(), in place of
any

function [r] = foo(a,b,c)
 USAGE:
 foo()          // demo
 r = foo(a,b)    // returns a^2 - b
 r = foo(a,b,c) // returns a^2 - b + sin(c)

 DESCRIPTION
 foo() is a test function aiming to illustrate disp_usage()

at line    21 of function foo
Wrong number of input arguments
```

Example #3 : External call of disp_usage() for a specific macro or primitive:

```scilab
// Functional type of external call:
disp_usage("members")

// Console-oriented type of external call:
disp_usage meshgrid

// uman equivalence:
uman meshgrid u
```

See Also

- uman — User manual in console. Advanced multimodal and multilingual documentation.
- uman_config — Setting of uman() configuration preferences
- ATOMS webpage of the uman module
- Archived help pages of old Scilab function
- head_comments
- help
- warning
- error

History

Version	Description
2.1	2016-10-30 • The block of syntaxes is now aligned. New uman configuration variable "umanAlignSyntaxes". • Translation of this page in french.
2.0	2016-04-06 : First publication, bundled within the `uman` module.

uman > Preferences

# Preferences

Setting of uman() configuration preferences

Description

In some extend, the behavior of `uman` can be changed through the Toolboxes/uman's section of the Scilab Preferences interactive interface.

User's uman() preferences are recorded in the file `SCIHOME/uman_preferences.xml`. This file is automatically created while running uman 3.0 or later for the first time.
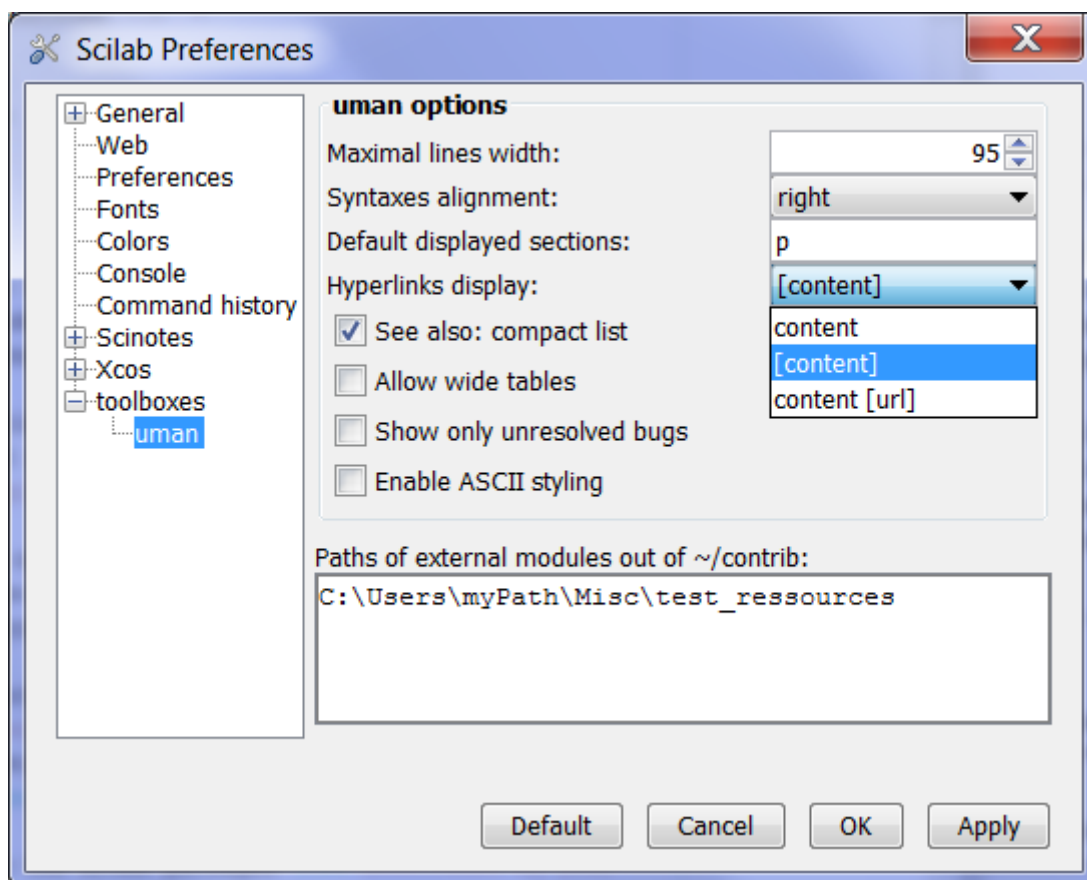
Contents

- Available parameters
  - Default calling options
  - Maximal line width
  - Syntaxes alignment
  - See also: compact list
  - Hyperlinks display
  - Allow wide tables
  - Enable ASCII Styling
  - List only unresolved bugs
  - Paths of external modules out of ~/contrib
- Examples
- See also

Available parameters

Maximal lines width

Decimal integer in [50, 110]. Values out of this interval are ignored. Default value = 90.

When the console is wide, this parameter allows to restrict the display of help contents on shorter lines, in order to remain easily readable. If the console is narrower than the *Maximal lines width*, its actual width is considered.

Allow wide tables

When this option is checked, the display of wide tables can be done beyond the *Maximal lines width*, but still always within the console's width. Most often this does not downgrade the lines readability, since lines of text are anyway shorter in each cell of a multicolumn table.

Example with `lines()(1)==109` and `umanMaxLinesWidth==90` :

... without Allowing wide tables:

```
-->//~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ Console's edge >>>>|
--> uman EXTRACTBITS e
...
Examples
--------
 In the following table, we present the results obtained for the number 215
 according to several combinations of the parameters.

  ------------------------------------------------------------------------------------
  | Input         | Bits to Extract| Number of Bits or| Treat Bit Field| Output       |
  |               |                | Index of Bit     | as an Integer  |              |
  | 11010111 (215)| Upper Half     | Ignored          | no             | 01100000 (208) |
  | 11010111 (215)| Upper Half     | Ignored          | yes            | 00001101 (13)  |
  | 11010111 (215)| Lower Half     | Ignored          | no             | 00000111 (7)   |
  | 11010111 (215)| Lower Half     | Ignored          | yes            | 00000111 (7)   |
  | 11010111 (215)| Range starting | 6                | no             | 11010100 (212) |
  |               | with MSB       |                  |                |              |
  | 11010111 (215)| Range starting | 6                | yes            | 00110101 (53)  |
  |               | with MSB       |                  |                |              |
  | 11010111 (215)| Range starting | 6                | no             | 00010111 (23)  |
  |               | with LSB       |                  |                |              |
  | 11010111 (215)| Range starting | 6                | yes            | 00010111 (23)  |
  |               | with LSB       |                  |                |              |
  | 11010111 (215)| Range of bits  | [ 2, 5 ]         | no             | 00010100 (20)  |
  | 11010111 (215)| Range of bits  | [ 2, 5 ]         | yes            | 00000101 (5)   |
  | 11010111 (-41)| Upper half     | Ignored          | no             | 11010000 (-48) |
  | 11010111 (-48)| Upper half     | Ignored          | yes            | 11111101 (-3)  |
  ------------------------------------------------------------------------------------
 In the following diagram, two decimal digit numbers are coded on an only byte. The
 diagram decode the input to obtain two separate digits.
...
```

... "Allow wide tables" being checked:

```
--> uman EXTRACTBITS e
...
Examples
--------
 In the following table, we present the results obtained for the number 215
 according to several combinations of the parameters.

  --------------------------------------------------------------------------------------------------
  | Input         | Bits to Extract     | Number of Bits or Index| Treat Bit Field as an| Output       |
  |               |                     | of Bit                 | Integer              |              |
  | 11010111 (215)| Upper Half          | Ignored                | no                   | 01100000 (208) |
  | 11010111 (215)| Upper Half          | Ignored                | yes                  | 00001101 (13)  |
```

```
| 11010111 (215)| Lower Half           | Ignored      | no       | 00000111 (7)  |
| 11010111 (215)| Lower Half           | Ignored      | yes      | 00000111 (7)  |
| 11010111 (215)| Range starting with MSB| 6          | no       | 11010100 (212)|
| 11010111 (215)| Range starting with MSB| 6          | yes      | 00110101 (53) |
| 11010111 (215)| Range starting with LSB| 6          | no       | 00010111 (23) |
| 11010111 (215)| Range starting with LSB| 6          | yes      | 00010111 (23) |
| 11010111 (215)| Range of bits        | [ 2, 5 ]     | no       | 00010100 (20) |
| 11010111 (215)| Range of bits        | [ 2, 5 ]     | yes      | 00000101 (5)  |
| 11010111 (-41)| Upper half           | Ignored      | no       | 11010000 (-48)|
| 11010111 (-48)| Upper half           | Ignored      | yes      | 11111101 (-3) |

 ----------------------------------------------------------------------------------

 In the following diagram, two decimal digit numbers are coded on an only byte. The
 diagram decode the input to obtain two separate digits.
...
```

Default calling options

The *Path in the help*, the *Syntaxes*, and the *See also* sections are always displayed by default.

This parameter allows to specify the calling options used as default ones, in place of the factory default values. To do so, just enter one or several character codes representing the chosen default options, as described in the main uman page: "p" for Parameters, "d" for the Descriptions, "e" for Examples, "h" for History, "l##" for a language, etc. Remarks:

- When a default language "l##" is specified, it is safer to write it as the last option.
- "w", "b" and "@" options are always ignored as default ones: The default uman mode is always the console mode.
- "r" as default is ignored.
- "j" can be set as default to feed opened diaries with every uman call.
- "x" as default is possible. It could help new scilabers coming from Octave or Matlab. However, one must keep in mind that there is no explicit option able to cancel this default at calling time.
- "s" as default is overriden by p | d | e | h | a | u at calling time.
- "u" as default is overriden by p | d | e | h | a | s at calling time.

Syntaxes alignment

Sets the alignment mode of syntaxes displayed in console for a function. Proposed values: "" | "l" | "r" (default)

- "" : Cancels any alignment:

```
Scilab > Elementary Functions > size
....................................
SYNTAXES
 sz = size(x)
 [n1, n2] = size(x)
 [n1, n2, n3, ...] = size(x)
 n = size(x, sel)
```

- "l" : The LHS block of output arguments is Left-justified. All the "=" characters in expressions "LHS = fun(RHS)" and other "fun(RHS)" occurrences are aligned together.

```
SYNTAXES
 sz                = size(x)
 [n1, n2]          = size(x)
 [n1, n2, n3, ...] = size(x)
 n                 = size(x, sel)
```

- "r" (default): The LHS block of output arguments is Right-justified. All the "=" characters in expressions "LHS = fun(RHS)" and other "fun(RHS)" occurrences are aligned together.

```
SYNTAXES
               sz = size(x)
         [n1, n2] = size(x)
 [n1, n2, n3, ...] = size(x)
                n = size(x, sel)
```

Hyperlinks display

Let's consider the `<a href="https://scilab.org">Scilab website</a>` hyperlink. The actual pointed URL can be local or remote. Then, uman() proposes 3 ways to display this in text mode:

- *content* : Only `Scilab website` is displayed. Nothing indicates that there is an hyperlink.
- *[content]* : `[Scilab website]` is displayed. We know that an hyperlink exists. We don't know what is its target. This is the default mode when installing uman().
- *content [url]* : `Scilab website [https://scilab.org]` is displayed. When the *content* IS the URL, *[url]* = `[https://scilab.org]` is displayed only once.

💡 Hyperlinks are never displayed
- in tables of contents,
- in summaries ("s" mode),
- in the *See also* section, excepted for items that are external references/URL.

See also: compact list

When this option is unchecked, the *See also* list of items is displayed in the console in full-text mode, one row per item, with their short descriptions, as in the help browser. Example:

Option unchecked:

```
--> uman xmlGetValues
../..

See Also
--------
  setPreferencesValue — Set preferences value
  xmlXPath       — Make a XPath query on a XML document
  XML path language [https://www.w3.org/TR/1999/REC-xpath-19991116/]
  xmlRead        — Read a XML stream from a local or distant file
  xmlDelete      — Delete a XML document
  atomsGetConfig — Get ATOMS system parameters
  printsetupbox  — Display print dialog box.
  csvDefault     — Get or set defaults behavior for csv files.
```

Option checked (default setting):

```
See Also
--------
 setPreferencesValue | xmlXPath | XML path language
[https://www.w3.org/TR/1999/REC-xpath-19991116/] |
 xmlRead | xmlDelete | atomsGetConfig | printsetupbox | csvDefault
```

Enable ASCII Styling

When this option is checked, parts of the original text that are in italic are displayed with "/.../", and are capitalized "TEXT IN BOLD" instead of bold.

⚠️ This option is not recommended. Indeed, "/" may sometimes be confused with divisions, while changing the case of -- say -- variables names may also be confusing.

Show only unresolved bugs

This option modifies the behavior of *uman .. b*, when querying some information about declared bugs of the given item.

When the item is a native Scilab one, the query is sent to *https://gitlab.com/scilab/scilab/-/issues*. By default this option is checked. Then only bugs related to the item and whose report is still open are listed. To always list *all* related bugs, whatever their report is open or closed, uncheck this option.

Paths of external modules out of ~/contrib

> vector of texts. Each component indicates the path to a directory out of the default supported ones (SCI\contrib, SCIHOME\contrib), where `uman` must look for additional resources. These modules must be packaged according to minimal rules described in the page about uman Technical aspects.

Examples

Let's edit your uman preferences file (you must have used uman() at least once before):

```
scinotes SCIHOME/uman_preferences.xml readonly
```

Now open the preferences GUI at the uman section:

```
jdeff org.scilab.modules.preferences.XConfigManager openPreferences
prefs; // once for all
prefs toolboxes/uman ;
```

Get the value of uman parameters from the configuration file, through a Scilab instruction:

```
xmlGetValues("//uman",["AlignSyntaxes"  "AllowWideTables" "AsciiStyling"
..
                    "DefaultCallOptions" "ListOnlyUnresolvedBugs"
"MaxLinesWidth" ..
                    "PrintHyperlinks" "SeeAlsoOnlyKeywords"]', ..
            "SCIHOME/uman_preferences.xml")
```

```
--> xmlGetValues("//uman",["AlignSyntaxes"  "AllowWideTables" "AsciiStyling" ..
  >                    "DefaultCallOptions" "ListOnlyUnresolvedBugs"
"MaxLinesWidth" ..
  >                    "PrintHyperlinks" "SeeAlsoOnlyKeywords"]', ..
  >             "SCIHOME/uman_preferences.xml")
 ans  =
  "r"
  "unchecked"
  "unchecked"
  "p"
  "checked"
  "85.0"
  "[content]"
  "checked"
```

See Also

- uman — User manual in console. Advanced multimodal and multilingual documentation.
- preferences
- xmlGetValues

Author

Samuel GOUGEON

History

Version	Description
3.0	2019-08-22 • uman's *Preferences* interface introduced. • Preferences are now stored in the file `SCIHOME/uman_preferences.xml`. It is no longer possible to change them through the user's startup file scilab.ini • New uman parameters: *Hyperlinks display, See also: compact list, Allow wide tables, Show only unresolved bugs* • Creation of this page. Informations about uman configuration moved here from the main `uman`'s page.
2.1	2016-10-30 : New configuration variable *umanAlignSyntaxes*.

uman internals

Technical internal aspects about how uman() works

Table of contents

Technical aspects

How uman() works

- `uman` scans SCI/contrib/*, SCIHOME/contrib/*, and all paths/* set as *Paths to external modules out of ~/contrib* parameter in the uman Preferences. It then sets the list of all ./jar/*.jar archives found, and for each, identifies the name of the related modules (as basename of the *.start files), and the related languages.

    This inventory is performed
    - the first time uman is run after being installed,
    - after each time that an ATOMS module is installed or uninstalled,
    - or when the "r" option is used.

- When uman is called, a complex algorithm analyses the `pattern` to determine whether it is about an item of Scilab, or of an ATOMS module (and then which one), or of an external resource in an Scilab forge or of the Scilab FileExchange or elsewhere, or if it's an alias or redirection. In this later case, the true target and its reference (module's name, URL, etc) are determined.

    Using the "x" option changes some priorities in this algorithm.

    Details of the algorithm can be found in the code, starting at the label "SEARCHING FOR THE RIGHT HELP TARGET".

- When the item has actually an help page, the page is extracted from its ./jar/*.jar archive and stored in a `SCIHOME/uman` subdirectory used as a cache. Forthcoming calls of uman for the same item will then use the page in cache (unless the "r" option is used).

Packaging of modules and their documentation

To be correctly parsed for documentation, the minimal setup of a registered module (ATOMS or others) is as follows:

- The name of the module's root directory is free.
- A subdirectory ./etc must exists and have a file ./etc/*.start, where * is the module's name. This file can be empty but is mandatory. It is used only to get the name.
- A subdirectory ./jar must exist. It stores all `scilab_##_##_help.jar` standard help zipped archives (as built by the Scilab documentation builder), where `##_##` stands for each supported language (one file per language).

That's all. Additional subdirectories may exist but are ignored by uman.

Known limitations

1. `uman` can't display correctly Right-to-Left languages in the console.
2. Display of tables:
   - center- or right-justification in cells is not rendered in the console.
   - The indentation and line wrapping are incorrect for structured contents (nested itemized lists, contents in table cells,..) included in a table.
   - Cells vertically merged with rowspan are not supported.
3. If multiple versions of a module are installed or declared (in SCI\contrib* or SCIHOME\contrib* subdirectories, etc), its selected pages are unpredictable.
4. For any local function, heading comments set in a multiline bloc of comments /*...*/ are ignored. See the bug report #14353.
5. LaTeXed expressions without alt=".." text equivalent defined in the source file can't be displayed as clear text. However, their existence is indicated in the text.
6. For pages in Chinese, long lines without space are not wrapped.

Resources used and references

For the console, "g", and "w" modes

The following resources are considered:

- Scilab->Scilab and external->Scilab aliases, and list of faux-amis (if the "x" option is used).
- Scilab official pages, in all officially supported languages (en, fr, ja, pt, ru).
- ATOMS modules installed in "all users" as well as in "user" modes.
- Other external modules installed in the SCI\contrib or SCIHOME\contrib directories or their subdirectories.
- Other .jar archives stored in the directories or sub-directories at the *Paths of external modules out of ~/contrib* declared in uman Preferences.
- Local user functions written in Scilab language, with heading comments used as embedded help contents, and without standard help page.

If the pattern or its possible alias is not found in these resources, other registered uninstalled external resources are scanned against it, namely:

- External-to-external aliases.
- Registered uninstalled ATOMS modules.
- Some other public modules available on the Scilab forge.
- Well-packed, identified and original resources on the Scilab FileExchange.
- Other external references out of ATOMS, the Scilab forge, and the FileExchange.

If finally one of these resources matches the given `pattern`, a message inviting to use the "w" option -- or even the actual pattern -- is displayed in the console.

For the "w" web mode

- Contents of Scilab official online help pages, in all officially supported languages (en,fr,ja,pt,ru).
- Contents of ATOMS modules installed in "all users" as well as in "user" modes.
- Names of other registered ATOMS modules.
- Names of other public modules on the Scilab forge.
- Well-packed and identified resources on the Scilab FileExchange.
- Other registered external resources.
- Search engine on http://help.scilab.org

Scilab-to-Scilab, external-to-Scilab, and external-to-external aliases may as well be found and used along the successive searching steps, from the raw input pattern to the actually displayed page.

For the "b" bugs mode

When the unique and final item is a...

- Scilab function : Scilab Bugzilla website.
- Function of an installed ATOMS module :
  - If the module has a Scilab Forge: ticket page of the forge
  - Otherwise: Comments section of the ATOMS.scilab.org page of the module
- FileExchange item: The Comments section of the related FileExchange page.
- Other external items registered in uman with a reference web site : portal of the given web site.
- Unknown item, multiple items separated with "|" : Search engine on http://bugzilla.scilab.org

See Also

- uman — User manual in console. Advanced multimodal and multilingual documentation.
- uman preferences — Setting of uman() configuration preferences
- uman page on ATOMS
- ATOMS page of "removed" module

Author

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History

Version	Description
3.2	2023-03-26 : - 6 Matlab/Octave redirections added. - Added references: 4 for ATOMS packages. 33 for *removed* functions.
3.1	2021-12-22 : 26 redirections / references added.
3.0	2019-08-22 - `uman` now automatically detects whether any ATOMS module has been installed or uninstalled during the session, and rescans ressources accordingly. The reloading `'r'` option is still available. It can be used when you install contribs other than ATOMS ones.

- `uman` now uses automatically the ATOMS packages list downloaded by your ATOMS manager to complete its own set of ATOMS references. Hence, `uman` is now always up-to-date about ATOMS ressources, provided that your ATOMS manager is so.

- `uman` messages can now be translated. There are already available for french.

- 75 redirections / references added.

- ~100 unitary tests added for all uman modes.

2.1	2016-10-30 : 19 references added.
2.0	2016-04-06 : 22 references added.
1.4	2015-07-31 : 10 references added.
1.3	2015-07-12 : 20 references added.
1.2	2015-06-06 : Code ready for Scilab 6.
1.0	2015-03-22 : First release