uman

Release notes for uman 2.0

https://atoms.scilab.org/toolboxes/uman

2016-04-06

Contents

1   Main changes

- **The search engine of uman() has been rewritten**

  Aliases, shortcuts, and other redirections were mainly managed through a uman self-call, but this recursivity was limited to one level. With the growing number of uman's options, this architecture became unefficient and difficult to analyse and maintain. It could not process some usages properly. More cases are now conveniently handled. Extending the code will be easier whether it is necessary. The new architecture allows to efficiently handle multi-level languages options.

- **New option "u" and new function disp_usage()**

  Displaying only usages of any explicit function or of the embedding one is now possible.

- **New option @ / running mode (mailing lists)**

  Efficiently get informations from online archives of all Scilab mailing lists is now possible.

- **New features in "wb" bugs query**
  It is now possible to target a given bug number, or to list bugs in a given category, or from some given authors or commenters...

- **uman environment variables are now available**.
  They allow to somewhat customize uman's default behavior to get closer to your needs and make it even more handy.

- **Support to translation packages**: Any subset of Scilab help pages translated in a language out of the official list (en, fr, ja, pt, ru) can be bundled as an external standard package. uman can efficiently use them.

2   Global changes

1. uman and Scilab 6

   Thanks to the Scilab team. Early Scilab 6.0 bugs that impeded uman are now almost all fixed. uman is (really) available on ATOMS for both Scilab 5 and Scilab 6 versions, with standard installations.

2. Environment variables

   Environment variables are now available (global):
   - **umanDefaultOptions**, to choose your own default options (contents, language, etc). Command-line options are still available, to easily override default ones.
   - **umanMaxLineWidth**>=50. Default = 90. Useful when the console becomes very wide.
   - **umanUserPaths**, to point to packages out of `SCI\contrib` and `SCIHOME\contrib`
   - **umanNoStyle**, to cancel ASCII-conversion of bold and italic styles.

   Example: We want to set by default `umanNoStyle = %t`, `umanDefaultOptions = "d"`, and `umanMaxLineWidth = 100`. We will do: edit `SCIHOME\scilab.ini`
   In this file, we will add the following lines:

   ```
   global umanNoStyle umanDefaultOptions umanMaxLineWidth
   umanNoStyle = %T
   umanDefaultOptions = "d"
   umanMaxLineWidth = 100
   ```

3. Help pages

   For more clarity, "uman ... w" and "uman ... wb" have now dedicated help pages. Pages describing the new mode "uman ...@" and `disp_usages()` are as well added.
   Online pages are available here.

4. References added

   1. Redirections
   - internal: if installed: apifun, cglab, ipd, scimax. gui
   - to Scilab: deal, patch, surf2patch, urlread, webread
   - to external: inpolygon, polyarea, web
   2. **FileExchange**: strrand, rotate3d, mesharea, polygonmetrics, pdiv_inc, partfrac, browseURL
   3. **ATOMS**: visa, scinetcdf, Computer-Vision, favouritedirs, E4Coder, FireBird, BTD (bioinformatics), cglab
   4. **Forge** (with no ATOMS): scimax

5. Bugs fixed
   - Scilab 6-ready:
     - management +[] modified (partly); strtok() replaced.
     - 'Calling sequence' renamed 'Syntax' in Scilab 6 is taken into account.
   - The options had become case-sensitive.
   - For a contrib module, when the name of the main directory was not strictly the name of the module (as for instance with version indication), uman failed extracting pages from the jar.
   - When a jar file had a path with space(s), uman was unable to unzip it.

3 Changes in console (default) mode

1. Features

a) New option `'u'` to display only the list of usages (types of calls). Example :

```
--> uman members u

Scilab > Elementary Functions > Set operations > members
.........................................................
USAGES
 [nb [,loc]] = members(N, H)
 [nb [,loc]] = members(N, H, "last")
 [nb [,loc]] = members(N, H, "rows"|"cols")
 [nb [,loc]] = members(N, H, "rows"|"cols", "last")
 [nb [,loc]] = members(N, H, "rows"|"cols", "shuffle")
 [nb [,loc]] = members(N, H, "rows"|"cols", "shuffle", "last")
```

b) `disp_usage()` and `disp_usage(funame)`
`disp_usage("func")` is equivalent to `uman("fun","u")`.
In
```
function myFunHasAHelpPage(..)
    ...
    disp_usage()
    ...
endfunction
```
`disp_usage()` is equivalent to `uman("myFunHasAHelpPage", "u")`

c) Additional Languages

Up to uman 1.4, help pages of Scilab functions translated in languages out of the official {english, french, japanese, brasilian, russian} set of supported languages required using the "x" uman's option. This is no longer the case. The language "L##" option has now the priority and is sufficient, and you can even put it as your default in `umanDefaultOptions = "..L##"` environment variable.
Just put the external language package (with its Scilab_help_##_##.jar file) in your SCI\contrib or SCIHOME\contrib directory (or anywhere else pointed in `umanUserPaths`), and call uman for a page (in the language): that's all. If uman does not find the query in the given language, it will automatically try to complete your query in the session's language, and finally in en_US. Example with the partial package in farsi[1] (still rendered left-to-right. Hard to invert it...), thanks to M. Khorshidi :

---

1   Source: https://codereview.scilab.org/#/c/13746/

```
--> uman TMPDIR s
===========================================================================
Scilab > Variables > Predefined variables

 * TMPDIR      — chemin du répertoire temporaire
 * SCI         — variable containing the value of the root path of Scilab.
 * SCIHOME     — contains the path to preferences, history files of your Scilab session.
 * home        — Gives the user directory.
 * percente    — Euler number.
 * percenteps  — epsilon (floating-point relative accuracy)
 * percentf    — Boolean variable for false.
 * percenti    — imaginary unit
 * percentinf  — infinity
 * percentnan  — not-a-number
 * percentpi   — ratio of circle's circumference to its diameter
 * percents    — A variable used to define polynomials.
 * percentt    — Boolean variable for true.
 * percentz    — A variable used to define polynomials.


--> uman TMPDIR slfa
===========================================================================
متغیرها > متغیرهای از پیش تعریفشده > fa_IR > help > core > core > [fa_IR] New Chapter

 * SCI          — متغیری که مقدار مسیر ریشهی سایلب را در بر دارد.
 * SCIHOME      — این متغیر مسیر فایلهای تاریخچه و ترجیحات مربوط به جلسهی سایلب شما را در بر دارد.
 * TMPDIR       — مسیر دیرکتوری موقت
 * percenteps — ایسیلن، دقت نسبی ممیز شناور
 * percenti    — عدد نپر، واحد موهومی
 * percentinf — بینهایت
 * percentnan — عددی وجود ندارد
 * percentpi   — عدد پی، نسبت محیط دایره به قطر آن


--> uman TMPDIR dlfa
===========================================================================

TMPDIR < متغیرها > متغیرهای از پیش تعریفشده > fa_IR > help > core > core > [fa_IR] New Chapter
...........................................................................


TMPDIR - مسیر دیرکتوری موقت

توصیف
-----
ثابت TMPDIR مسیر مطلق دایرکتوری(بخوانید: دیرکتوری) موقت مربوط به یک فرآیند سایلب را نگه
میدارد. هر فرآیند (پروسه) سایلب دیرکتوری موقت خودش را دارد، که در زمان راهاندازی سایلب ایجاد
و به TMPDIR ارجاع داده میشود. دیرکتوری موقت با پایان یافتن سایلب حذف میشود.
این دیرکتوریهای موقت بهعنوان زیر-دیرکتورهای پوشهی موقت سیستم با نام SCI_TMP_<unique> ایجاد
میشوند، جاییکه <unique> متشکل از چند عدد میباشد که در هنگام راهاندازی سایلب برای آنکه هر
نام منحصر بفرد باشد، تولید می شود. در گنو/لینوکس، یونیکس و مک أو اس ایکس، حقوق دسترسی به
دیرکتوری به کاربر سایلب محدود میشود.
در هنگام اجرای سایلب نمیتوانیم ثابت TMPDIR را تغییر دهیم. با این حال، در گنو/لینوکس، یونیکس و
مک أو اس ایکس، پوشهی موقت سیستم (معمولا tmp/) را میتوان با تغییر متغیر سیستمی TMPDIR انتخاب
نمود.


همچنین ببینید
------------
   SCIHOME — این متغیر مسیر فایلهای تاریخچه و ترجیحات مربوط به جلسهی سایلب شما را در بر دارد.
   SCI — متغیری که مقدار مسیر ریشهی سایلب را در بر دارد.


-->
```

2. Improvements

1. Tables: long lines in cells and in the history section are now wrapped.
   ex: `uman man d  // (extract)`

```
// with uman 1.4:
 ----------------------------------------------------------------------------------
 | imagedata         | Pointer to external image data
 | imageobject       | A wrapper for image data and its associated meta-information
 | inlinemediaobject | An inline media object (video, audio, image, and so on)
 | screenshot        | A representation of what the user sees or might see on a computer scree
 | mediaobject       | A displayed media object (video, audio, image, etc.)
 | scilab:image      | Any Scilab code into the <scilab:image> foo() <scilab:image> will be ex
 ----------------------------------------------------------------------------------

// with uman 2.0:
 Image tags:
 ----------------------------------------------------------------------------------
 | imagedata         | Pointer to external image data                              |
 | imageobject       | A wrapper for image data and its associated meta-information |
 | inlinemediaobject | An inline media object (video, audio, image, and so on)      |
 | screenshot        | A representation of what the user sees or might see on a computer |
 |                   | screen                                                      |
 | mediaobject       | A displayed media object (video, audio, image, etc.)        |
 | scilab:image      | Any Scilab code into the <scilab:image> foo() <scilab:image> will be |
 |                   | executed by an instance of Scilab and the generated graphic included |
 |                   | directly into the documentation. This is a Scilab extension of |
 |                   | Docbook and is based on the driver/xinit/xend feature.      |
 ----------------------------------------------------------------------------------
```

2. Items that title is several-worded like 'Scilab documentation format' could not be addressed neither in the console, nor directly in the help browser nor in the online help, because their single-word id that is the pattern to use to address them was displayed nowhere. In 'See also' sections and Summaries, their id is now displayed instead of their title. Example:

```
// with uman 1.4:

--> uman help s
================================================================================
Scilab > Online help management

 * add_help_chapter — Add an entry in the help list
 * apropos         — searches keywords in Scilab help
 ...
 * Link toolbox help with Scilab one — How to make hyperlink in toolbox help
                    pointing to Scilab's items
 * Scilab documentation format — on line help XML file description format
 * manedit         — editing a manual item
 ...

// with uman 2.0:

--> uman help s
================================================================================
Scilab > Online help management

 * add_help_chapter — Add an entry in the help list
 * apropos         — searches keywords in Scilab help
 ...
 * how_to_link_toolbox_help — How to make hyperlink in toolbox help pointing to
                    Scilab items
 * man             — on line help XML file description format
 * manedit         — editing a manual item
 ...
```

→ "`uman man ..`" can now be used to display the "`Scilab documentation format`" page, in the console, as well as in the help browser ("uman man g..") or online ("uman man w..")

3. `<screen>` areas were not specifically identified and delimited. Example from *uman double e* :

```
// with uman 1.4 (extract)

 --> i = int32((rand(1000,1000)-0.5)*10000);
 --> tic(),for j = 1:100, double(i); end, toc()
  ans  =
     2.2464656

 --> tic(),for j = 1:100, iconvert(i,0); end, toc()
  ans  =
     2.2771408

// with uman 2.0
 ...................................................
 :  --> i = int32((rand(1000,1000)-0.5)*10000);     :
 :  --> tic(),for j = 1:100, double(i); end, toc()  :
 :   ans  =                                          :
 :      2.2464656                                    :
 :                                                   :
 :  --> tic(),for j = 1:100, iconvert(i,0); end, toc() :
 :   ans  =                                          :
 :      2.2771408                                    :
 ...................................................
```

4. The list of jar files was weekly updated. It is now just set at the first use of uman, and when the `'r'` option is used to intentionally refresh it.

5. External modules not on ATOMS but having a public forge -- such as *Scimax* -- are now supported.

6. For pages having multiple `xml:id`, all syntaxes were displayed instead of only syntaxes matching the given pattern (ex: `man int32`)

7. *uman*'s URL is now displayed at loading, for comment, scoring and bug report

```
Start "uman" : User MANual in console and online
      Load macro..
      Load help page
      Enter "help uman" to get help
      Comments, scoring, bug reports: http://atoms.scilab.org/toolboxes/uman#new_comment
```

3. Bugs fixed

- The `<important>`, `<superscript>` and `<subscript>` tags were not supported.
- When the japanese archive is used, wrapping of lines in summaries of untranslated sections was shortened. ex: uman call slj
- In synopses, '&' characters were displayed as '&'. Ex: uman uman u
  In examples, '&' characters were displayed as '\&'. Ex: uman uman e
- 'uman graphics' targetted the Graphics page, instead of the summary of graphical functions => 'graphics' replaced with 'plotting'.
- With *SciMax* installed, listing its summary produced an error '*Invalid index*'
- When the page of an external module installed but unloaded was targeted with 'g', the message "*module not loaded => not browsable*" was no longer displayed

4   Changes in web mode "uman ... w"

1.   Bugs fixed

- 'uman Type w' did not target the right page.
- 'uman interval w' yielded an error (while *Int4Sci* is installed).
- 'uman item1|item2 w' produced an error with host().

5   Changes in bugs query mode "uman .. wb"

1.   New features

New types of queries can be performed: It is now possible to target the page of a given Scilab bug number ; the list of bugs tagged in some bug categorie(s) ; or/and from some author(s) or commenter(s) ; or/and bugs reports changed within the last N days :

```
uman bugNumber wb
uman author>item.. wb
uman author1|author2|..>item.. wb
uman author><Ndays wb
uman section/>item.. wb
uman section/><Ndays wb
uman section1|section2|../author1|author2|..>item1|item2|..<Ndays wb
uman "section1|section2|.. / author1|author2|.. > item1 | item2 |..<Ndays" wb
```

2.   Examples

```
uman 11625 wb              // Displays the bugzilla page of the bug #11625

uman graphics/><30 wb      // Reports in the graphics category, changed max 30 days ago

uman maths/gougeon> wb     // Reports / comments by gougeon in the Maths category

uman helpsys/gougeon>console wb // Reports / comments by gougeon about "console"
                                // in the "help system" category

uman "<10" wb              // Reports changed within the last 10 days.
```

3.   Bugs fixed

- 'uman $ wb' returned all bug reports, instead of reports with a title including some '$'.
  'uman \$ wb' had to be used instead.
- 'uman mode wb' unexpectedly listed bugs about 'simp_mode'. As well, 'uman matrix wb' included bugs about x_matrix(), etc
- uman <pattern> wb: '.','*','\','|' special regexp characters in pattern were not escaped before calling bugzilla. patterns such that .\., ./., .*., ./, .\, ||, **, etc were unsuccessful
- 'uman dir|%dir_p wb' listed many lines without 'dir' or '%dir_p' but with 'directory'.
- 'uman list(wb' or with any item having a '(' produced a grep error.
- 'uman [wb' displayed *'grep: Can not compile pattern'* in infinite loop.

6   New uman '@' mode : comb online archives of Scilab mailing lists

1.   New syntaxes

```
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!" @
```

2.   Examples

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

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

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

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

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

uman struct&~(array|scilab)! @  // Subject with "struct" AND NOT ("array" OR "scilab")

uman "(cell|struct)&~(function|array)!" @  // Subject with "cell" OR "struct",
                                       //  AND NOT "function" OR "array"

uman denizet>SEP|graphics! @  // Subject with ("SEP" OR "graphics") FROM Denizet

uman steer|couvert>SEP! @     // Subject with "SEP" FROM ("Steer" OR "Couvert")

uman elias>genlib<200! @      // Subject about "genlib" FROM "Elias" in last 200 days

uman agnel><200 @             // All messages FROM "Agnel" in the last 200 days
```