

TODOS for Haver on Cuis

Planning for out HaverOnCuis approach.

Minimum Viable Product

The following items must be finished to deliver a minimum viable product.

Alpha Version

1. Home packages for modules | 84c13114-129d-41d4-bb25-abfedf815a6c.
OK
2. ChangeSet needs to listen to the module system modifications. **OK**
3. File into a module must work. **OK**
4. Repeated file-ins must work | 31c6b8bb-13ea-4d67-ba86-d5f5904a8346.
OK
5. The environments documentation must be up to date. **OK**
6. Generated ZIP-file for installation, with all useful packages.
 1. Implement a package-finder-kernel, with a package installer using the existing infrastructure.
 2. Use it to generate a zip-file for installing Haver.
 1. Pack the DejaVU freetype fonts. | DONE before 2021-04-17
 2. Implement a file-finder, that gathers all the licenses in one text file. | DONE before 2021-04-17
 3. Add some sort of script generation. | DONE before 2021-04-17
 4. Try this on a raspi | DONE 2021-04-17
 5. Add a release number to the file names | OPEN 2021-04-22
| TESTING 2021-04-23 11:27:35
 6. Add dedicated license files to some directories.
 3. Document the process and the result using Erudite. | CANCELED 2021-04-13
7. Website for HaverOnCuis | 641074f2-1e14-4f43-964f-b2c5d6be5627
 1. Use sourcehut to host the stuff. Nope we host it on our virtual servers. | 2021-04-22
 2. Try to produce a simple demo video. We will produce tiny snippets, that will be included in the document. | BUSY before 2021-04-22

3. Try Sphinx to generate a decent website. | 4b3c7937-dc40-482a-a97d-311b7ead0e57 | BUSY 2021-04-20 20:19:20
4. Try to adapt the pygments syntax highlighting to our Phisher-Bryce style. | OPEN 2021-04-22 | CANCELED before 2021-04-27
5. Try to integrate squeakjs for a simple demo. OPEN before 2021-04-27
8. Minor Clean-Ups and finishing touches
 1. Enable zip-file generation from an unpacked zip file.
 2. Document all the know restrictions.
 3. Store the package name in packages to recreate the module (parts) with the right package. | 290b20af-7f6a-4503-af35-51e31689dafc | OK for interfaces before 2021-04-27
 4. Deal with different Unicode-Points when using Unicode | DONE 2021-04-19
 5. Make Juan aware of the web site before informing the mailing-list | DONE 2021-04-26
 6. Make Ken Dickey aware of the website | DONE 2021-04-26
 7. Add an imprint to web-site | OPEN 2021-04-27 07:49:00

Beta Version

1. Add some sort of built in communication | OPEN 2021-04-27
2. Try to include scamper in the distribution, if it can be ported.
3. Tutorial with a simple application, may be implementing a calculator? Best would be something that requires module imports, otherwise implement a browser for all available packages.
4. A browser for available packages.
 1. Use the kernel from the alpha version in a package browser.
 2. Use the package-name mechanism to implement plugins.
 3. Implement a plugin that installs packages from a zip-file.
 4. Implement a plugin that allows file-in into a module.

Open Issues At Large

The following this should be done in no particular order. 2020-12-05 11:43:13:

- Class Renaming must work | f49a8518-e49e-4235-821a-68b0d2e9ba38
- Move Cuis-Patches into a directory of their own | d7c8b29b-2eae-4b36-8768-75c3a8930a07
- Think about adding Emacs keybindings to Haver/Cuis | d58aa56f-501a-4284-ba58-278089f65b0b
- Find some Mercurial hosting service | dafcc4801-82fe-4cc5-a326-2542735557df
- Create a website for HaverOnCuis | 641074f2-1e14-4f43-964f-b2c5d6be5627
- Include spell checking for code | 1786e8d8-de34-4798-91f9-a9aa99d63a22

- Port some version of Haver (on Python) to Cuis | b6f79818-3f4a-486e-bf43-ab90a43f097e
- Decide about a Patreon account | c7141c27-397e-4731-a570-195bc881984a
- Create a module with buttons created from menu entries (see Parsel2) | 72c57a84-aafa-4b75-ae80-3d977e318fc6
- Retire the Gitlab repo | f1a25ab5-bfbb-400e-ac30-1bc96b1c5d29
- Add overriding imports and exports
- Port the ModulesTools package to Modules.
- Allow the redefinition of existing global classes in modules | 6a6ac472-0ce7-45fd-80a8-2f8b16d5b3db
- Investigate the VirtualEnvironment idea | 254cfa16-74ed-4b1d-9fd5-9b45d1af8880
- Port the transactions stuff to HaverOnCuis | b80d86f5-1faa-416c-87bf-6a4a8e597481
- Implement some sort of OODBMS to HaverOnCuis | 6558e0af-44b6-42a4-9a4e-bc0f3cced5e1
- Investigate a backtracking concept like that of ICON | dda75bcd-2b43-4c45-b78a-fc7a40c1c7e5
- Use backtracking to implement multiple-dispatch | 063a5804-eae9-4121-b0f9-3515640ac150
- Create a "Haverize" script | f6e59790-296a-4a00-b2c2-10d84563c00d
- Create a refactoring Browser that allows for moving things (classes, methods, modules) around | 4ab4134a-d013-497e-b8e1-33d185163bea
- Create module-aware browsers | a3deee3c-ad3c-46e7-8c5f-3aade851c36e
- Port telemorphic to HaverOnCuis | df04a11b-35d9-47cd-8d70-b1ae7c96c3ad
- Add a instance slot concept like Pharo's | c72265aa-c0ef-4a78-9b93-5adbd432ee1f
- Adapt Erudite to modules | 51155444-59b3-4848-bfe9-d23c86bea74d
- Correct the documentation of environment-aware symbols | ca0ab811-2068-4177-87a4-c61ec4bf33aa
- Create a AppImage of Cuis/HaverOnCuis | bbfe1799-5411-41bc-8549-20494182d7b0
- Create a standalone Windows version of Cuis/HaverOnCuis | 8215d794-516f-4da1-a18e-a501f7260d99
- Investigate a MacOS version (ARM only) of HaverOnCuis | cdeba74f-5963-4ef2-821c-1625c54359fb
- Implement home packages for modules | 84c13114-129d-41d4-bb25-abfedf815a6c
- Implement a nicer module browser with named panes and buttons | 69607a93-a6d7-41b3-b72b-f2e73360beda
- Port the Parsel2 stuff to HaverOnCuis | f62615f3-ac62-45ca-b4c7-6e9a847f82b6

- Simplify the base patch for environments (maybe recreating it) | 9bc719b9-9a11-4cc6-b69c-dece13ea3d60
- Make importing from SimpleEnvironments possible in Modules | be0cf204-c64f-419a-a31d-f0fd16d3928a
- Move the Modules environment to SimpleEnvironments | 30073149-27ce-427b-83d0-50a5cbd07ba0
- Make code-completion themeable | c54ccdb4-b077-43e1-b8c8-dfaf4ff4c49c
- Make code-completion work with modules | ca52e4d3-3121-4cab-8afd-d78e11ebb3fa
- Add the deprecation patch, I once prepared | 635c6bc2-e40b-431b-aba8-a2760bf1b93f
- Investigate CodeRocket's LR-parser wrt. priorities | 83df9805-8022-4d0c-9ded-035efa9632a8
- Integrate KLGCustomize, HaverOnCuis and Environments | 7b0bfac2-6818-4f46-968e-29bac38348eb
- Create a cool icon for Haver | a1ac2fe9-2fe2-4865-a782-875a1d0aebd3
- Create a tutorial for moving environments | 4ee23a50-9c0d-4462-9e76-05a3abc332d0
- Create a tutorial for creating DND-aware MVS applications | d3972de3-8b1a-4553-9aab-8d8e70e7259a
- Add undeclared handling to environments (at least to modules) | e7c8a841-42e8-4956-9cc9-315f28f2a221
- Think about a graphical action builder | 0f934309-86f6-41c5-a0a9-2f5414168b7b
- Think about a graphical UI builder | 9bc0d82b-ba31-440a-8ee7-51dc7cfa4b4e

Immediate Actions

d7c8b29b-2eae-4b36-8768-75c3a8930a07 Reorganize improvements and patches

OPEN 2020-12-05 12:15:07 | BUSY 2020-12-05 13:48:02 | DONE 2020-12-05

dda75bcd-2b43-4c45-b78a-fc7a40c1c7e5 Investigate a backtracking concept like that of ICON. Goals and failure a present in the whole language, this probably requires new semantics and a new compiler or encoder.

BUSY 2020-12-05 13:39:24 | DEFERRED 2020-12-05 13:47:37

6a6ac472-0ce7-45fd-80a8-2f8b16d5b3db Allow the redefinition of existing global classes in modules. Ignore the warning, it does the right thing. We will fix this when we come to environment aware browsers (a3deee3c-ad3c-46e7-8c5f-3aade851c36e).

BUSY 2020-12-05 18:50:33 | WAITING 2020-12-05 19:17:04

4393f6b7-cbd9-4989-b435-9c0b82b372cc Check insert-super-class refactoring and make it work if necessary.

BUSY 2020-12-07 11:31:09 | DONE 2020-12-07 12:28:11

72c57a84-aafa-4b75-ae80-3d977e318fc6 Create a module with buttons created from menu entries (see Parsel2).
 OPEN 2020-12-07 12:37:13 | BUSY 2020-12-07 | TESTING 2020-12-21

be0cf204-c64f-419a-a31d-f0fd16d3928a Make importing from SimpleEnvironments possible in Modules. We won't do it that way, because we only need to import from the *Modules*-environment. We simply let the Modules' environment manager create a module called *Modules* that provides the right API and SPI.
 OPEN 2020-12-07 16:59:52 | BUSY 2020-12-08 16:00:44 | TESTING 2020-12-08 17:57:33 | DONE 2020-12-21 18:36:38

f6e59790-296a-4a00-b2c2-10d84563c00d Create a "Haverize" script. Got a first version working. It is foreseeable that this will become a whole package.
 OPEN 2020-12-08 14:43:23 | BUSY 2020-12-08 14:45:34 | TESTING 2020-12-08 15:48:52

fac7d855-e309-481f-8de8-8b6ed2f83d28 Create a module containing the AbstractModulesMorph and AbstractModulesModel classes under appropriate names. Port the browser logic to it.
 OPEN 2020-12-08 18:04:40 | BUSY 2020-12-09 17:13:55 | TESTING 2020-12-09 17:54:42 | DONE 2020-12-21

d29ed904-a28e-40aa-b008-03b23b45a21b Port the ModulesTools package to Modules.
 OPEN before 2020-12-09 | BUSY 2020-12-09 18:27:25 | TESTING 2020-12-21 18:40:24 | DONE 2021-03-22

b80d86f5-1faa-416c-87bf-6a4a8e597481 Port the transactions stuff to HaverOnCuis. Check array instance variable of OrderedCollection. (DONE 2021-01-03 22:26:13)
 OPEN 2021-01-03 19:57:48 | BUSY 2021-01-03 19:59:48 | TESTING 2021-01-03 | DONE 2021-03-22

6558e0af-44b6-42a4-9a4e-bc0f3cced5e1 Implement a OODBMS for HaverOnCuis.
 OPEN 2021-01-03 19:58:46 | BUSY 2021-01-04 12:11:57 | DEFERRED 2021-02-18

a3deee3c-ad3c-46e7-8c5f-3aade851c36e Create module-aware browsers.
 OPEN 2021-02-18 | TESTING 2021-03-22 17:59:38 | WATCHING 2021-03-22 18:26:42

84c13114-129d-41d4-bb25-abfedf815a6c Implement home packages for modules.
 OPEN 2021-02-18 | TESTING 2021-03-22 17:59:28 | WATCHING 2021-03-22 18:26:52

fbfe347a-bb76-43a1-bd33-1f846f4a4d22 Implement file-in into a module.
 OPEN 2021-02-18 | TESTING 2021-03-22 17:59:15 | DONE 2021-03-22 18:26:23

68be39c6-cb41-40bd-aacc-86549c0fed58 Implement a Class-Builder with a default module for class definitions without an environment.

OPEN 2021-02-18 | BUSY 2021-02-19 15:38:17 | DONE 2021-03-22

2033ffa0-c612-4bd0-9bdd-c7feb5944adf Investigate a simple application delivery scheme. App-Images weren't the so great.

That's the minimum shared objects we need:

```
-rwxr-xr-x 1 bear bear 378K Feb 21 14:10 vm-display-X11.so*  
-rwxr-xr-x 1 bear bear 15K Feb 21 14:10 vm-sound-null.so*
```

The first version will use a simple zip-file.

OPEN 2021-02-21 13:12:19 | BUSY 2021-02-21 13:12:31 | DEFERRED
2021-03-22 | BUSY 2021-04-01

123e4e81-8942-420b-9aea-17649626ef59 Update the environments documentation.

OPEN 2021-03-23 20:43:45 | BUSY 2021-03-23 20:48:24

f8285284-3fa9-45a4-a965-545503745ffb Write a tutorial.

OPEN 2021-03-23

Actions With Some Know Details

dafc4801-82fe-4cc5-a326-2542735557df

Mercurial hosting. We will use heptapod (Canceled). We will use sourcehut.

BUSY 2020-12-05 12:51:44 | DECISION 2020-12-05 13:36:35
| CHANGED 2021-02-18 13:35:09

8be86bfd-e1ae-4100-97f3-d2f85f989fa6 Implement system extension packages that store the actual method category in method property and use it after installation.

OPEN 2020-12-06 15:02:32

83df9805-8022-4d0c-9ded-035efa9632a8 Investigate CodeRocket's

LR-parser wrt. priorities Will write a simple calculator grammar. Did not write a grammar, found out that it includes a manual written with Erudite and has an included scanner generator and all the stuff one needs for a grammar. Way to go for porting Haver on Python to Cuis (b6f79818-3f4a-486e-bf43-ab90a43f097e)

BUSY 2020-12-06 15:11:15 | OK 2020-12-06 15:38:04

0f934309-86f6-41c5-a0a9-2f5414168b7b Think about a graphical action builder. Choosing an icon is bit complicated, this might make sense. We will postpone until we know how often we will build create new action groups.

OPEN 2020-12-10 12:13:12

Defects

f49a8518-e49e-4235-821a-68b0d2e9ba38 Patch the System-Dictionary»#renameClass: Did it in another way, perhaps this method must be patched, too.

OPEN 2020-12-05 12:13:50 | BUSY 2020-12-05 18:06:41 | TESTING 2020-12-05 18:47:29

ea672ea8-1eb6-4d9f-829e-5539d3fc406b The versions browser does not diff, reverting versions does not work.

OPEN 2020-12-06 14:20:21 | TESTING 2020-12-06 15:09:06 | WATCHING 2020-12-09 17:09:58 | DONE 2020-12-21 18:31:50

57400aef-d0ac-483a-a9ff-5b3d1b331921 Reexporting imported symbols will not work. This statement is subject to testing, it was derived solely on theoretical considerations.

The current implementation is untested and crappy, it will not work (2021-01-05).

- 1) Will remove the imported symbols from the list of bound symbols. (DONE 2021-02-18 13:10:08)
- 2) Will enable drag and drop for imported symbols. (DONE 2021-02-18 20:31:56)

OPEN 2020-12-06 15:07:50 | BUSY 2021-01-03 14:53:26 | TESTING 2021-01-03 17:27:26 | BUSY 2021-02-18 12:56:57 | TESTING 2021-02-18 20:32:15

030be14a-5be0-43e7-bd8b-630c3dc28b49 Investigate why using a newly created class in a modules or environment in existing classes' code requires recompiling that class. (Might be our missing undeclared handling). Maybe creating new associations messing up #declare:using: is root of this evil. #declare:using: sends #add: which copies the association it adds. Redefining global classes does not work. It should trigger a recompilation.

OPEN 2020-12-07 12:35:51 | DIAGNOSIS 2020-12-10 14:22:07 BUSY 2020-12-13 17:41:33 | DIAGNOSIS 2020-12-21 18:31:00

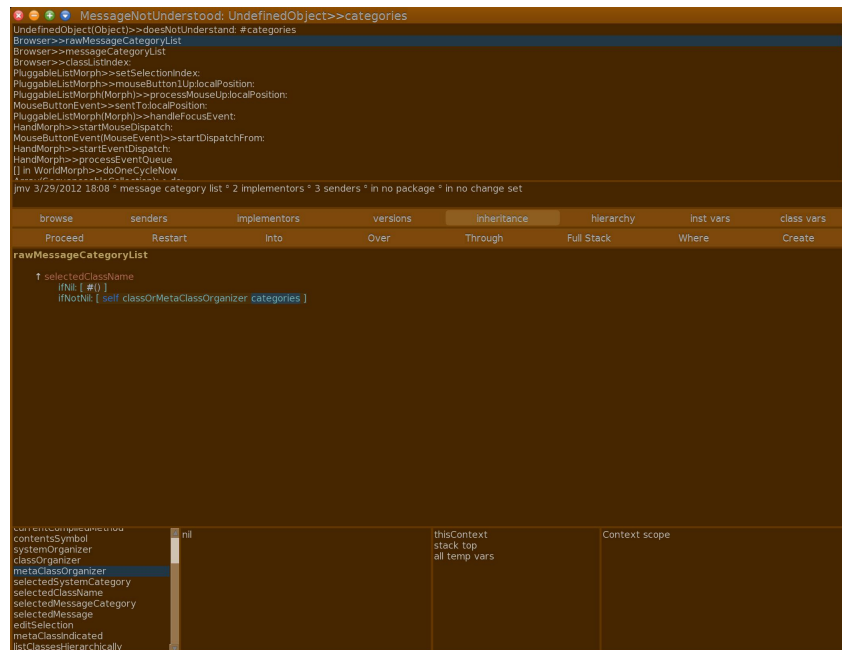
fdfb56ab-678f-4893-b242-3f26fd4b95c5

Defining a class in an environment with the same name as a global class defined in Smalltalk leads class organizer instance-variables in the browser being nil. See the screenshot below for details.

Browser»#selectedClassName: answers nil for the global class. Using the environment-aware class list for filtering does not work. Obviously we have one case (Action) that is not part of the system organisation. If we have two classes in the same category; one global, another one in an environment, only one defined last is stored in the system organisation.

Categorizer»#classify:under:suppressIfDefault: uses #>= to find the insertion point. This string comparison is by no means environment aware.

Now even Environments are messed up. Of course they are:
 The environment-awareness test-case resets the symbol-manager.
SystemDictionary»#className: contained dubious code.
 OPEN 2020-12-07 16:35:29 | DIAGNOSIS 2020-12-07 22:16:43
 STILL OPEN | 2020-12-09 11:03:32 | WATCHING | 2020-12-09 17:01:11



31c6b8bb-13ea-4d67-ba86-d5f5904a8346 Filling in a package with modules over an existing package leaves one with a debugger.

OPEN 2020-12-09 | DONE 2021-03-23

970e8f95-82e7-427f-b47d-d570e4022847 Inspecting the contents of a code file creates the modules contained in that file. Probably this true for opening a code browser on the package. Yup it does!

OPEN 2020-12-09

f6795b8d-0e56-4cb5-b5ce-f7cd66b38d3c Removing a module does not remove it's classes from the system. Keeping the environments in computations leads to spurious references. (WRONG 2021-02-27 19:03:14). Sometimes the class building stuff picks the wrong module. Got the reason: Classes created by the parameterized class builder are bound in *Smalltalk* instead of their proper environment (2021-02-27 19:44:08).

OPEN 2021-02-27 | BUSY 2021-02-27 16:15:13 | DIAGNOSIS 2021-02-27 19:44:08 | TESTING 2021-02-27 19:53:36

ce53a2c6-e7d1-4d74-bef7-ff8ce7b771a4 Using exactly a module *Always use <Module>* does not work in a browser. The same is true for *Use category or <Module>*. The global default module setting has no influence. The use category stuff does not even create a

class, but works for the global setting. In general the global looks OK.

OPEN 2021-03-09 | WATCHING 2021-03-23

290b20af-7f6a-4503-af35-51e31689dafc File outs of interface components miss the package name.

OPEN 2021-04-14