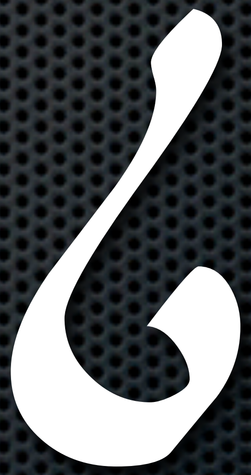
Silme

that should do the trick



Origins

Origins

- missing layer between apps and data

Origins

- missing layer between apps and data
- people tend to focus on front-end tools

Origins

- missing layer between apps and data
- people tend to focus on front-end tools
- tools strongly dependent of one data format

Origins

- missing layer between apps and data
- people tend to focus on front-end tools
- tools strongly dependent of one data format
- continuous wheel reinvention

Goals

Goals

- generic l10n operations simplified to maximum

Goals

- generic l10n operations simplified to maximum
- format independency

Goals

- generic l10n operations simplified to maximum
- format independency
- source independency

Goals

- generic l10n operations simplified to maximum
- format independency
- source independency
- platform indepencency

Goals

- generic l10n operations simplified to maximum
- format independency
- source independency
- platform indepencency
- make localization over time easier

Target

Target

- L10n tools developers

Target

- L10n tools developers
- Localizers with beginner programming knowledge

Target

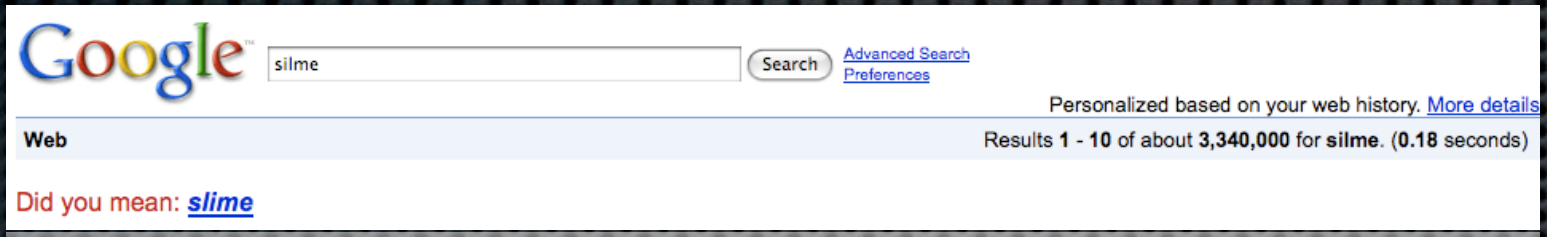
- L10n tools developers
- Localizers with beginner programming knowledge
- Application developers

Target

- L10n tools developers
- Localizers with beginner programming knowledge
- Application developers
- Buildsystem admins

The “name” thing...

The “name” thing...



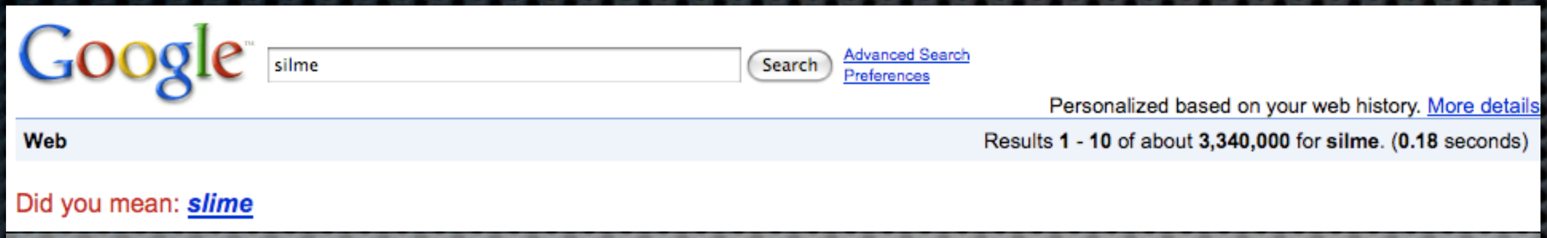
silme

Personalized based on your web history. More details

Results **1** - **10** of about **3,340,000** for **silme**. (**0.18** seconds)

Did you mean: ***slime***

The “name” thing...



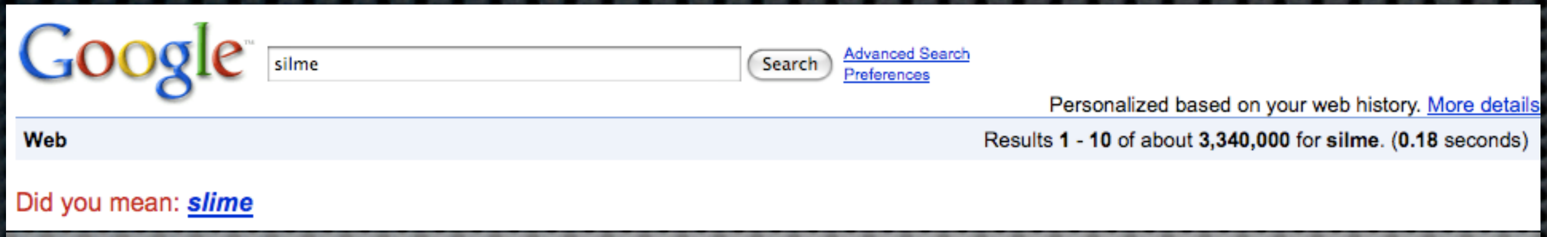
Personalized based on your web history. More details

Results **1** - **10** of about **3,340,000** for **silme**. (**0.18** seconds)

Did you mean: ***slime***

Silme (seel-may) is a letter in Tengwar alphabet

The “name” thing...



Personalized based on your web history. More details

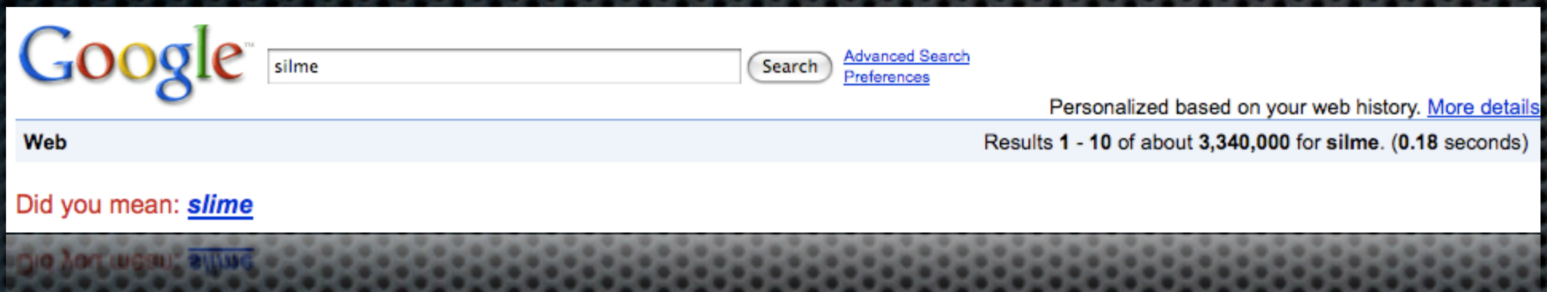
Web

Results **1** - **10** of about **3,340,000** for **silme**. (**0.18** seconds)

Did you mean: ***slime***

Silme (seel-may) is a letter in Tengwar alphabet

The “name” thing...



silme

Personalized based on your web history. More details

Web

Results **1** - **10** of about **3,340,000** for **silme**. (**0.18** seconds)

Did you mean: ***slime***

Silme (seel-may) is a letter in Tengwar alphabet

Features

Features

- generic

Features

- generic
- strong diff support

Features

- generic
- strong diff support
- extensible input/output (file, zip, sql, cvs, hg, svn...)

Features

- generic
- strong diff support
- extensible input/output (file, zip, sql, cvs, hg, svn...)
- extensible format support (dtd, xliff, prop., po, l20n...)

Features

- generic
- strong diff support
- extensible input/output (file, zip, sql, cvs, hg, svn...)
- extensible format support (dtd, xliff, prop., po, l20n...)
- modular (core, diff, formats, io)

Features

- generic
- strong diff support
- extensible input/output (file, zip, sql, cvs, hg, svn...)
- extensible format support (dtd, xliff, prop., po, l20n...)
- modular (core, diff, formats, io)
- multilocale

Structure

- silme.core
- silme.diff
- silme.io
- silme.format
- silme.fp

API - silme.core

- silme.core.Entity
- silme.core.EntityList
- silme.core.L10nObject
- silme.core.L10nPackage

API - silme.core.Entity

```
# properties
offlineApps.manageUsage=Show settings

# dtd
<!ENTITY netError.search.button  "Szukaj">

# gettext
msgid "YaST installation source"
msgstr "Źródło instalacji YaST"

# lol
<build.button: "Install">
```

API - silme.core.Entity

```
# properties
offlineApps.manageUsage=Show settings

# dtd
<!ENTITY netError.search.button  "Szukaj">

# gettext
msgid "YaST installation source"
msgstr "Źródło instalacji YaST"

# lol
<build.button: "Install">
```

id	value
offlineApps.manageUsage	Show settings
netError.search.button	Źródło instalacji YaST
YaST installation source	Szukaj
build.button	install

API - silme.core.Entity

```
# properties
offlineApps.manageUsage=Show settings

# dtd
<!ENTITY netError.search.button  "Szukaj">

# gettext
msgid "YaST installation source"
msgstr "Źródło instalacji YaST"

# lol
<build.button: "Install">
```

id	value
offlineApps.manageUsage	Show settings
netError.search.button	Źródło instalacji YaST
YaST installation source	Szukaj
build.button	install

API - silme.core.Entity

```
# properties
offlineApps.manageUsage=Show settings

# dtd
<!ENTITY netError.search.button  "Szukaj">

# gettext
msgid "YaST installation source"
msgstr "Źródło instalacji YaST"

# lol
<build.button: "Install">
```

	id	value
entity ->	offlineApps.manageUsage	Show settings
	netError.search.button	Źródło instalacji YaST
	YaST installation source	Szukaj
	build.button	install

API - silme.core.EntityList

entityList	
id	**value**
itemHistory.label	Browsing History
itemHistory.accesskey	B
itemPasswords.label	Saved Passwords
itemCookies.label	Cookies
itemOfflineApps.label	Offline Website Data

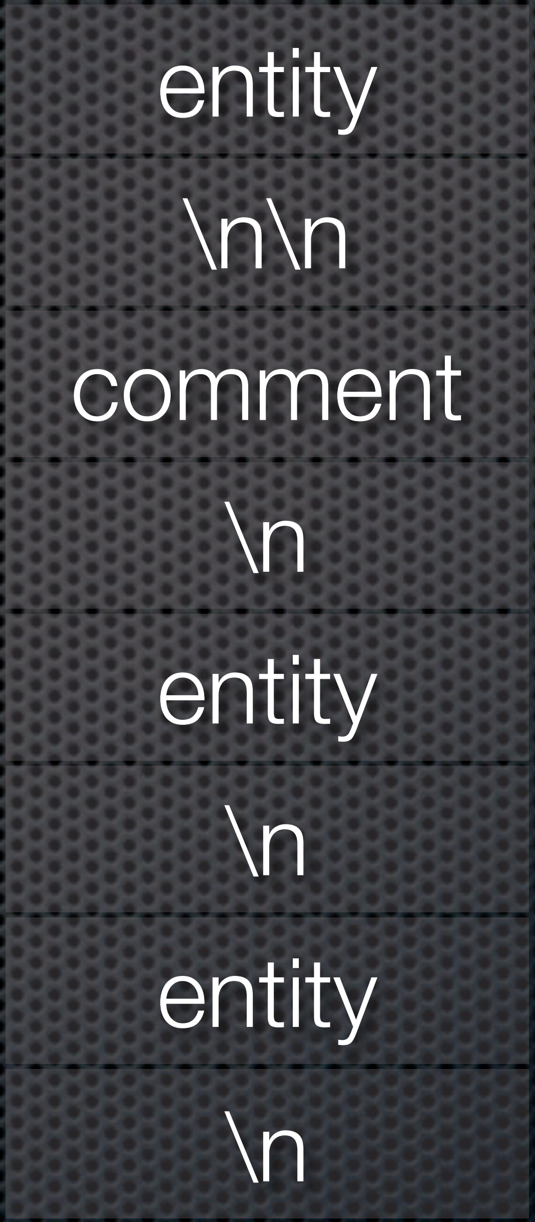
```
entityList = EntityList()
entityList.id = “sanitize.dtd”
entity = Entity(‘itemHistory.label’)
entity.setValue(‘Browsing History’)
entityList.addEntity(entity)
```

API - silme.core.L10nObject

```
<!ENTITY itemCookies.label            "Cookies">

<!--
temporary disabled
<!ENTITY itemDisabled                 “Disabled”>
-->
<!ENTITY itemCookies.accesskey        "C">
<!ENTITY itemCache.label              "Cache">
<!ENTITY itemCache.accesskey          "a">
<!ENTITY itemOfflineApps.label        "Offline Website Data">
<!ENTITY itemOfflineApps.accesskey    "O">
<!ENTITY itemDownloads.label          "Download History">
<!ENTITY itemDownloads.accesskey      "D">
<!ENTITY itemSessions.label           "Authenticated Sessions">
<!ENTITY itemSessions.accesskey       "S">
<!ENTITY window.width                 "30em">
```

API - silme.core.L10nObject

```
<!ENTITY itemCookies.label            "Cookies">

<!--
temporary disabled
<!ENTITY itemDisabled                 “Disabled”>
-->
<!ENTITY itemCookies.accesskey        "C">
<!ENTITY itemCache.label              "Cache">
<!ENTITY itemCache.accesskey          "a">
<!ENTITY itemOfflineApps.label        "Offline Website Data">
<!ENTITY itemOfflineApps.accesskey    "O">
<!ENTITY itemDownloads.label          "Download History">
<!ENTITY itemDownloads.accesskey      "D">
<!ENTITY itemSessions.label           "Authenticated Sessions">
<!ENTITY itemSessions.accesskey       "S">
<!ENTITY window.width                 "30em">
```



entity

\n\n

comment

\n

entity

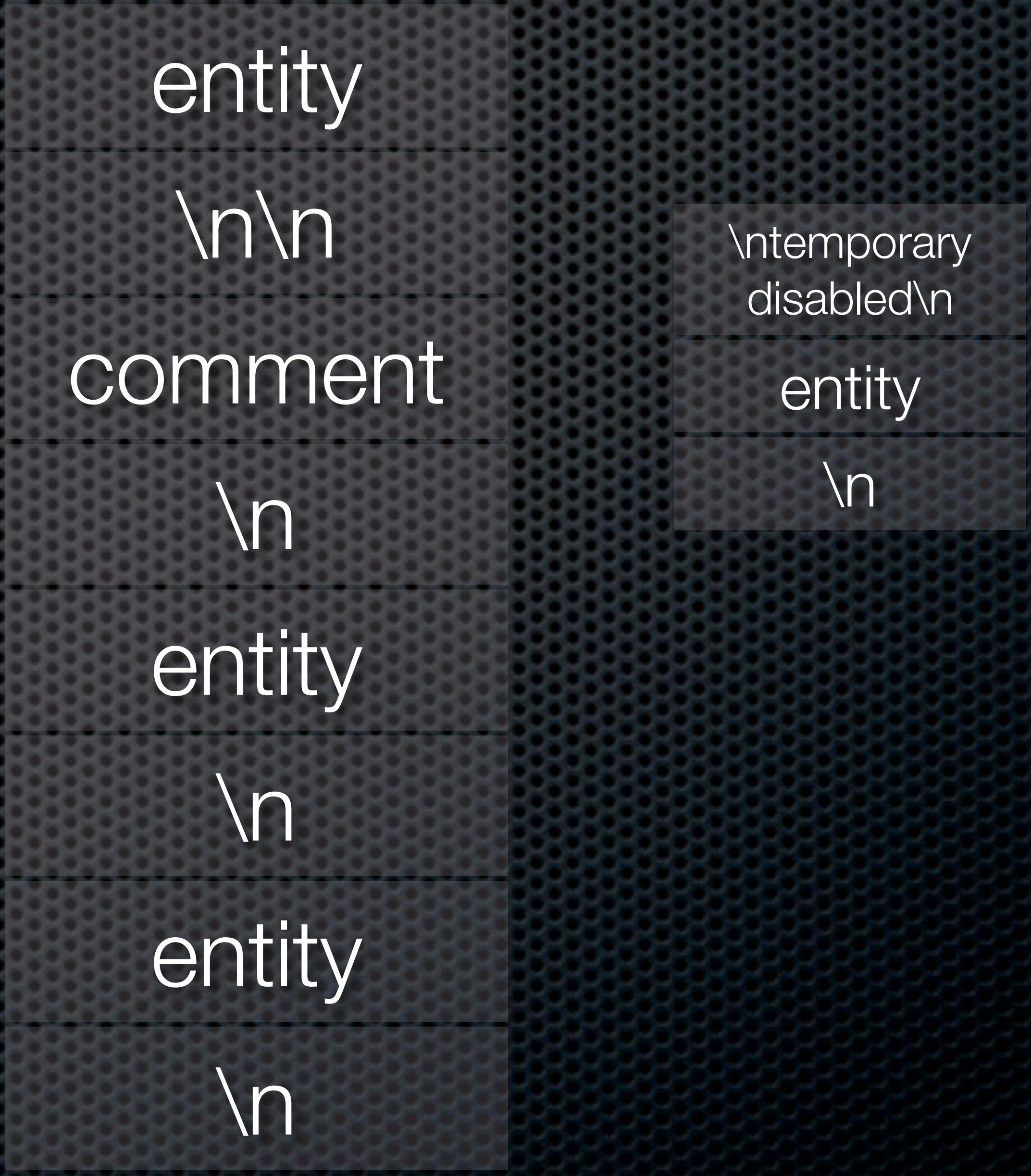
\n

entity

\n

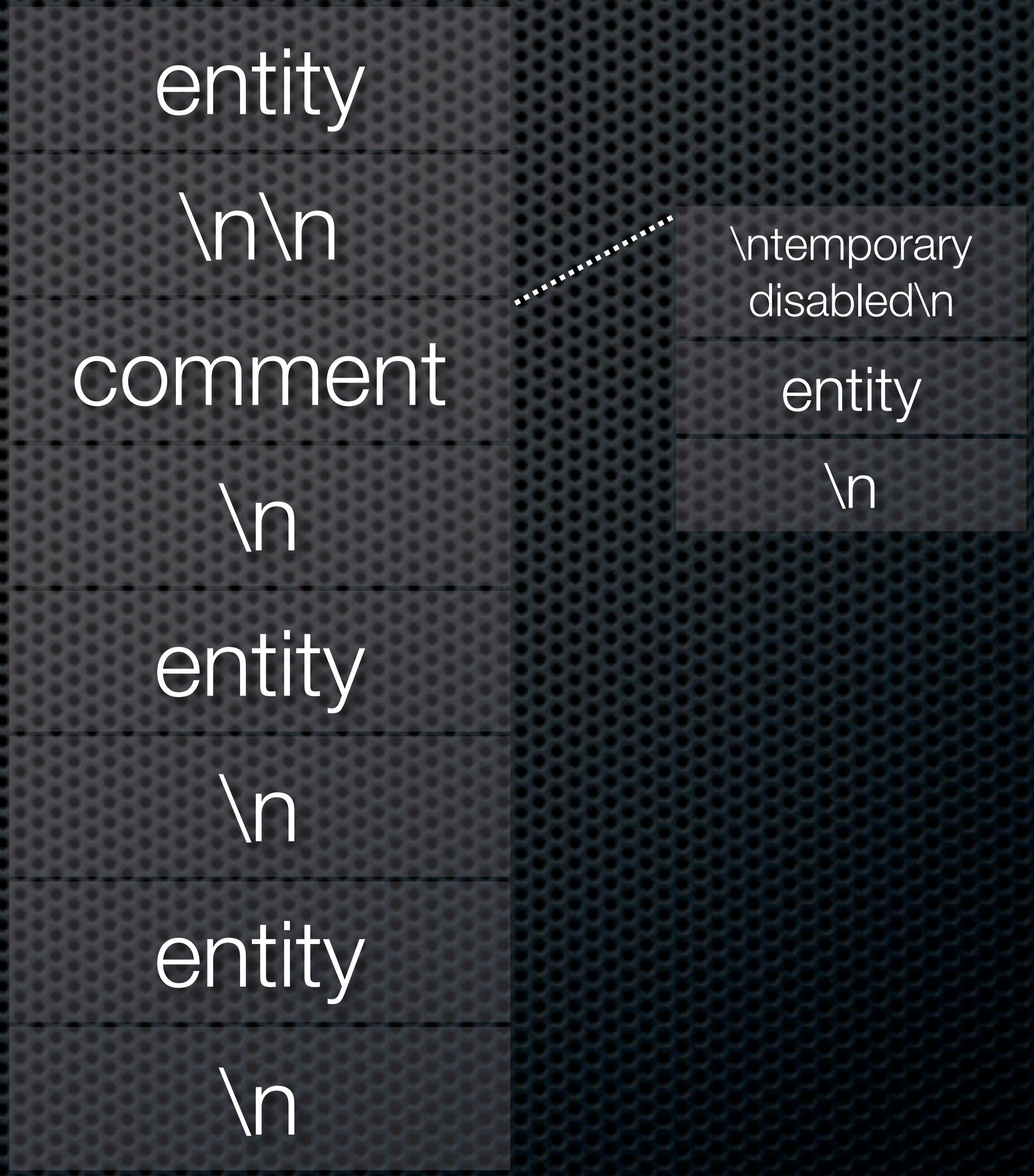
API - silme.core.L10nObject

```
<!ENTITY itemCookies.label            "Cookies">

<!--
temporary disabled
<!ENTITY itemDisabled                 “Disabled”>
-->
<!ENTITY itemCookies.accesskey        "C">
<!ENTITY itemCache.label              "Cache">
<!ENTITY itemCache.accesskey          "a">
<!ENTITY itemOfflineApps.label        "Offline Website Data">
<!ENTITY itemOfflineApps.accesskey    "O">
<!ENTITY itemDownloads.label          "Download History">
<!ENTITY itemDownloads.accesskey      "D">
<!ENTITY itemSessions.label           "Authenticated Sessions">
<!ENTITY itemSessions.accesskey       "S">
<!ENTITY window.width                 "30em">
```



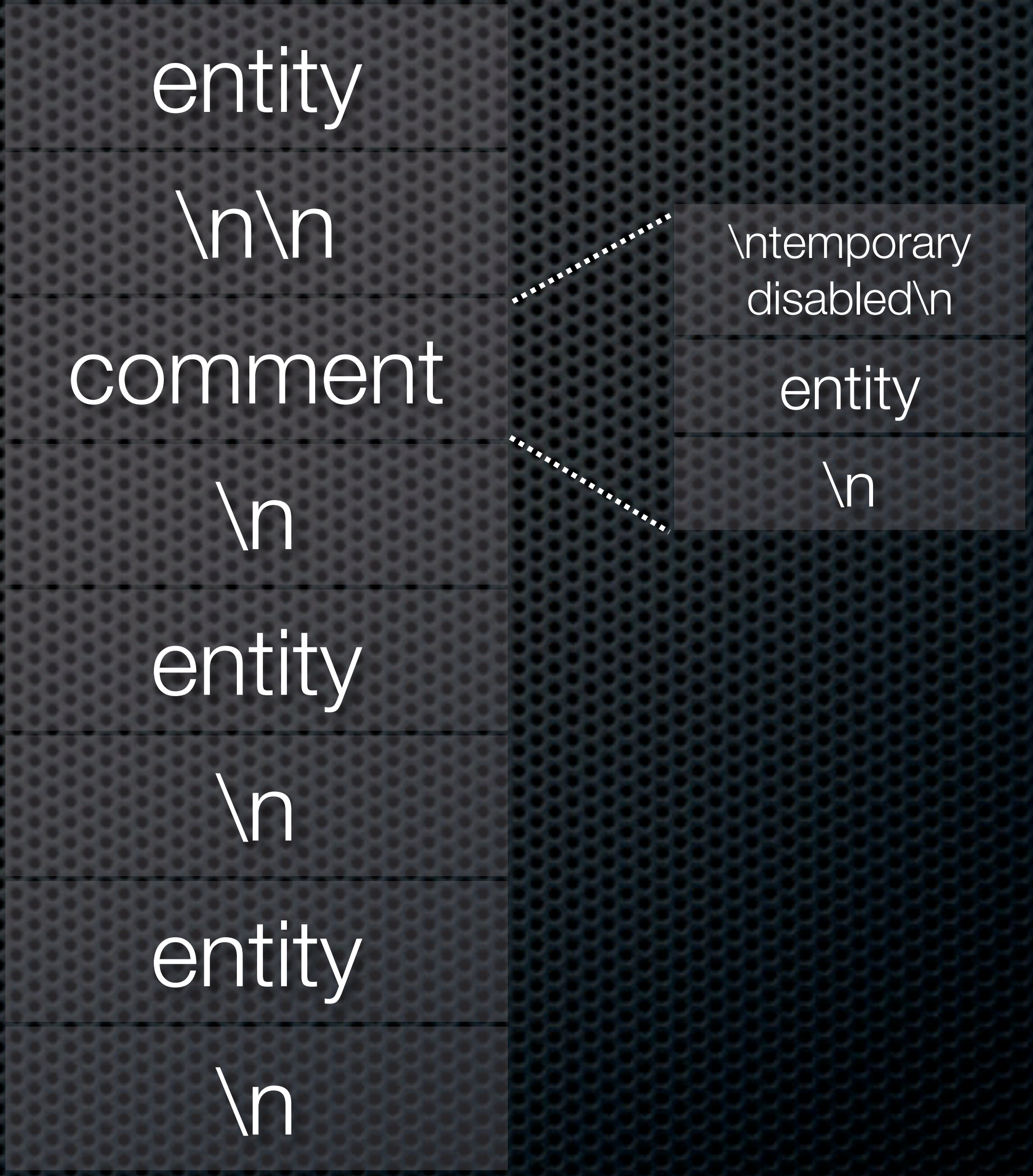
API - silme.core.L10nObject

```
<!ENTITY itemCookies.label            "Cookies">

<!--
temporary disabled
<!ENTITY itemDisabled                 “Disabled”>
-->
<!ENTITY itemCookies.accesskey        "C">
<!ENTITY itemCache.label              "Cache">
<!ENTITY itemCache.accesskey          "a">
<!ENTITY itemOfflineApps.label        "Offline Website Data">
<!ENTITY itemOfflineApps.accesskey    "O">
<!ENTITY itemDownloads.label          "Download History">
<!ENTITY itemDownloads.accesskey      "D">
<!ENTITY itemSessions.label           "Authenticated Sessions">
<!ENTITY itemSessions.accesskey       "S">
<!ENTITY window.width                 "30em">
```

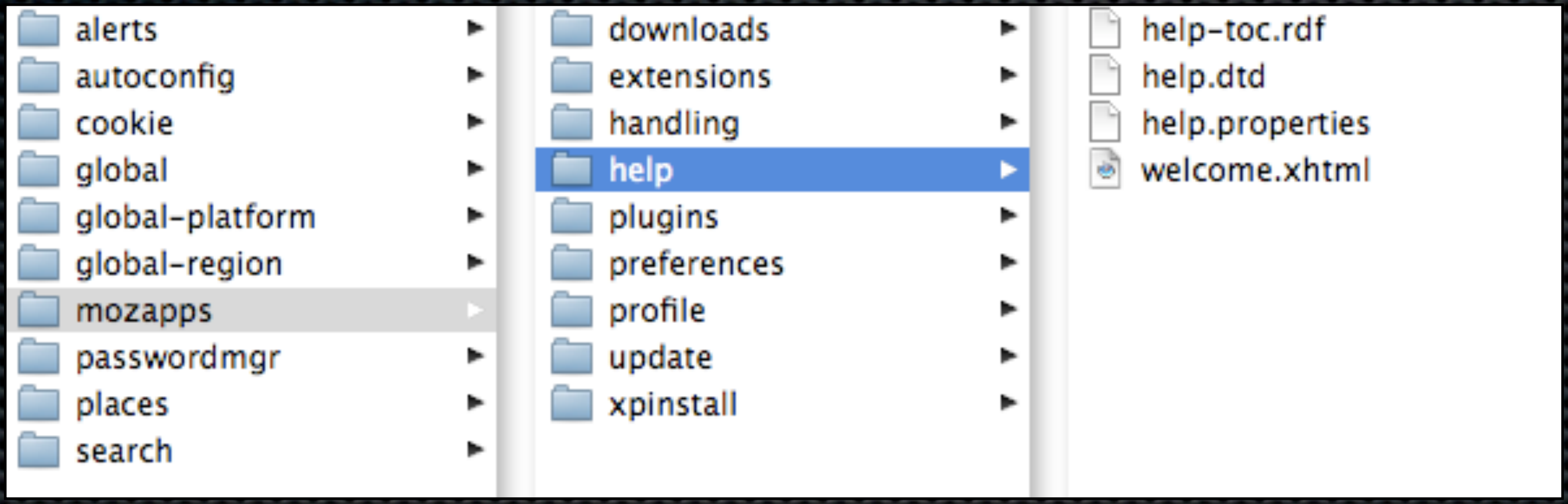


API - silme.core.L10nObject

```
<!ENTITY itemCookies.label              "Cookies">

<!--
temporary disabled
<!ENTITY itemDisabled                   “Disabled”>
-->
<!ENTITY itemCookies.accesskey          "C">
<!ENTITY itemCache.label                "Cache">
<!ENTITY itemCache.accesskey            "a">
<!ENTITY itemOfflineApps.label          "Offline Website Data">
<!ENTITY itemOfflineApps.accesskey      "O">
<!ENTITY itemDownloads.label            "Download History">
<!ENTITY itemDownloads.accesskey        "D">
<!ENTITY itemSessions.label             "Authenticated Sessions">
<!ENTITY itemSessions.accesskey         "S">
<!ENTITY window.width                   "30em">
```



API - silme.core.L10nPackage

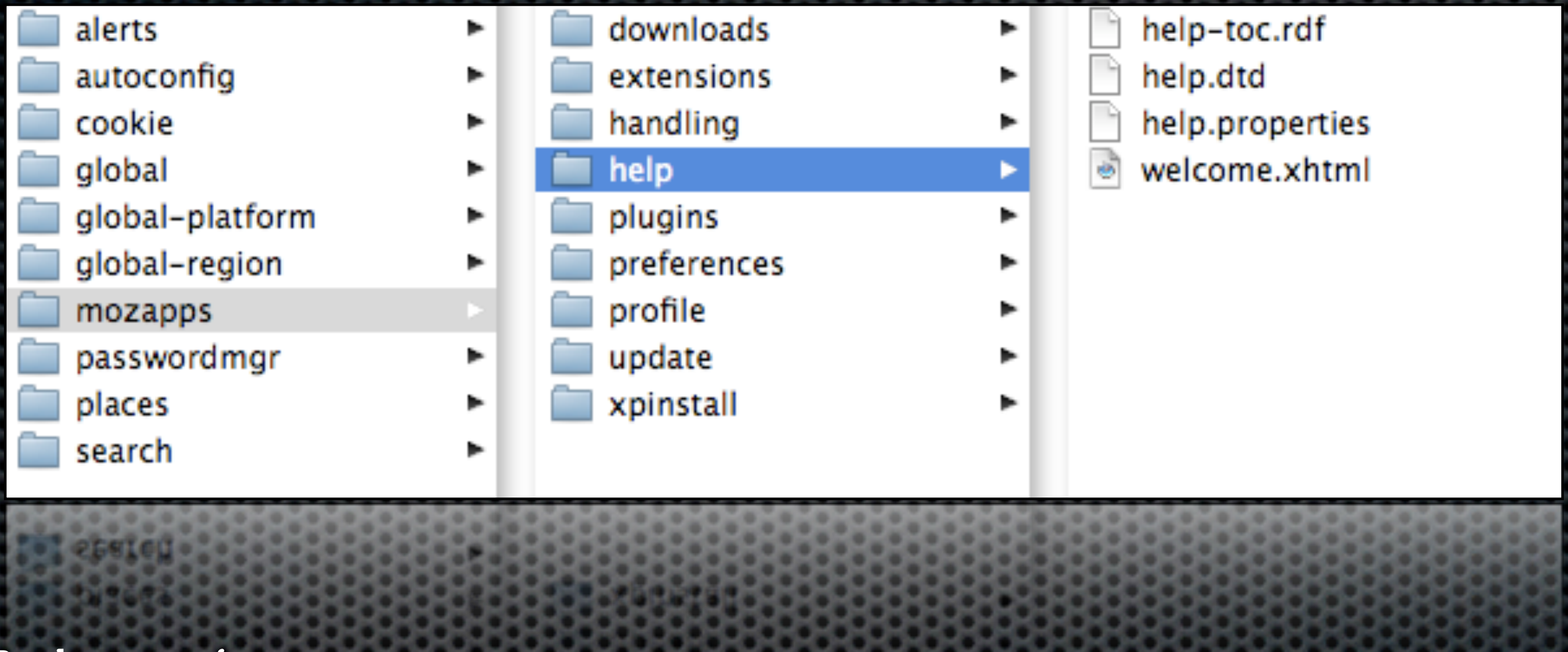


alerts
autoconfig
cookie
global
global-platform
global-region
mozapps
passwordmgr
places
search

downloads
extensions
handling
help
plugins
preferences
profile
update
xpinstall

help-toc.rdf
help.dtd
help.properties
welcome.xhtml

API - silme.core.L10nPackage



```
l10nPackage = {
   id: 'mozapps',
   objects: {},
   packages: {
     'downloads': ...
     'help':{
       id: 'help',
       packages: {},
       objects:{
         'help.dtd': L10nObject,
         'help.properties': L10nObject}
     }
     'profile': ...
   }
```

API - silme.diff

- silme.diff.(Entity|EntityList|L10nObject|L10nPackage)Diff
- silme.core.*.diff()
- silme.core.*.applyDiff()

API - silme.diff

- silme.diff.(Entity|EntityList|L10nObject|L10nPackage)Diff
- silme.core.*.diff()
- silme.core.*.applyDiff()

```
entityDiff = entity.diff(entity2)
entityListDiff = entityList.diff(entityList2)

entity2 = entity.applyDiff(entityDiff)
entityListDiff2 = entityList.applyDiff(entityList2)
```

API - silme.io

- silme.io.manager
- silme.io.file|svn|cvs|hg|jar|mysql
- *.getL10nPackage()
- *.writeL10nPackage()

API - silme.format

- silme.format.*.Parser
- silme.format.*.Structure
- silme.format.*.Serializer

API - silme.fp

- silme.fp.object
- silme.fp.diff

Examples

- Several nice examples of what you can do today

Example1

- Task: write a tool that will find an entity in a package

Example2

- Task: Write a tool that will get all entities with word “Open” in it

Example3

- Write a tool that puts english entities when ab-CD is missing

Example4

- Task: Write a tool that will apply a change made on one file in one locale to other locales

Example5

- Task: Write a simple GUI localization tool

Example6

- Task: Write a simple web localization app

Example7

- Task: Get l10n entity in your app

Future

- API freeze
- PEP08
- L20n
- silme.logging
- silme in js2.0?

What about existing tools or other ways of L10n?

- nothing changes – existing tools will still work
- current L10n tools can start using Silme file parsers
- L10n tools can be rewritten to fully support Silme with e.g. L10nPackages, L10nObject

Bigger tools and Silme

- more work needed
- still not as much as if writing a tool without Silme

Possible requirements

- file format parsers for new file formats
- diff format parsers for new output styles
- and everything not included in Silme

Compare-locales and Silme

- L10n.ini
- INI-Files
- specific output
- L10nPackage and L10nObject statistics
- filtering packages and objects
- collecting errors and warnings

Thank you