

msgcat 2.0 with TIP # 412: Dynamic Locale Changing for msgcat with On-Demand File Load

- Elmicron
- TCL Activity
- Msgcat usage
- TIP399:multi locales
- TIP412:
 - Dynamic locales
 - Package locale
 - Callbacks
 - Interface
- Other requests
- Discussion

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Chat: oehhar
Wiki: hao





Elmicron

Auto ID
→ Barcode and RFID
→ Logistics



8 Employees

TclDevKit Licence



My TCL/Tk activities

Maintaining
BWidget, msgcat, Windows socket driver

Author of
Zint Bar code generator TCL interface

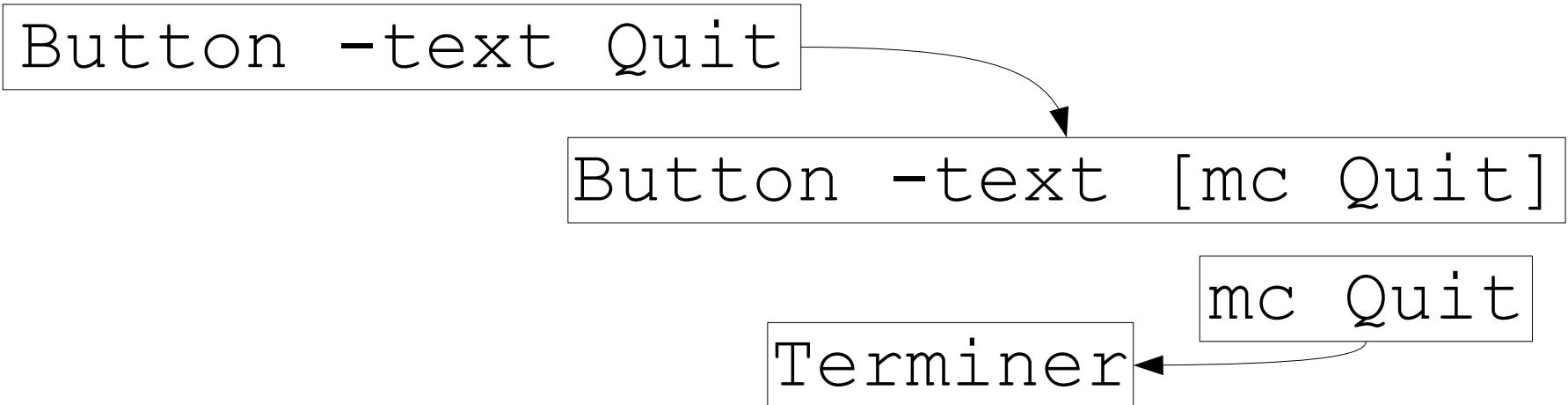
Contributed to
Rivet (tcl survives fork, form package, rpm's),
Img patch (write resolution field of bmp)

Misses WinCE(ETCL), but anyway, go Android

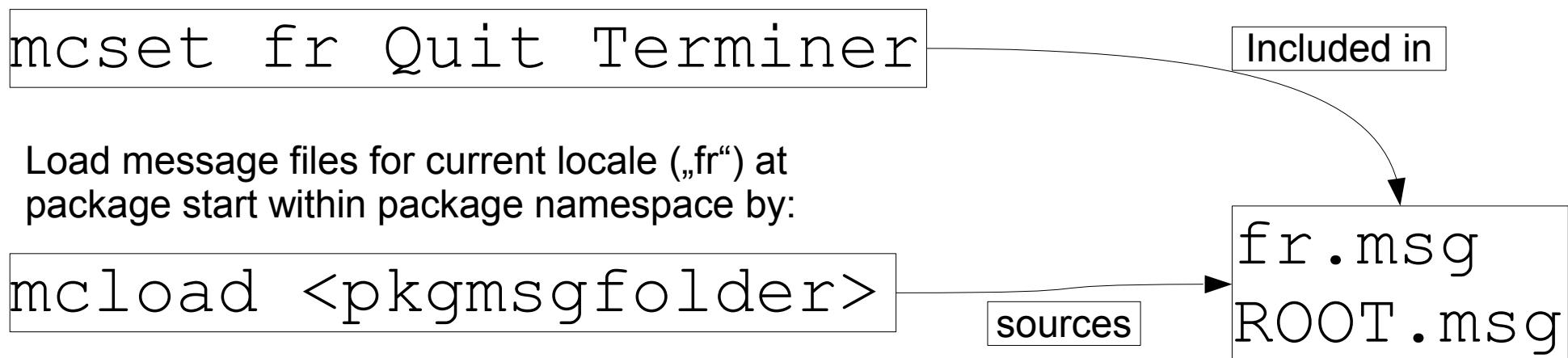
Msgcat

- Localisation: translate strings in dependency of the current locale
- Core package
- Current version: 1.5.2
- Implemented in TCL
- Uses dicts
- Identical in current TCL 8.5 and 8.6
- Used by clock core command
- Loaded on Tk startup

How to localize a program?



Setup message catalog



Q1: Change locale at runtime

```
mclocale de_ch
```

```
mcload <pkgmsgfolder>
```

sources

```
de_ch.msg  
de.msg  
ROOT.msg
```

From clock.tcl

```
Clock -locale de_at
```

```
mclocale $locale
if { ![dict exists $McLoaded $locale] } {
    mcload $MsgDir
    dict set McLoaded $locale {}
}
set Month [mc January]
mclocale $old
```

sources

```
de_at.msg  
de.msg
```

TIP399: multi-language

Application: Multi-lingual web-site

```
msgcat::mcconfig -pattern {fr* de*}
```

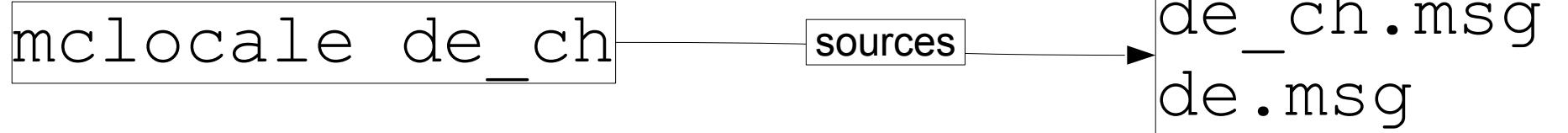
-> Set the list of files to load by mcload in addition to the current locale

Issues:

- Must be executed before any localized package load -> Tk loads on wish startup
- Language list may not be changed

TIP 412-1: dynamic locale change

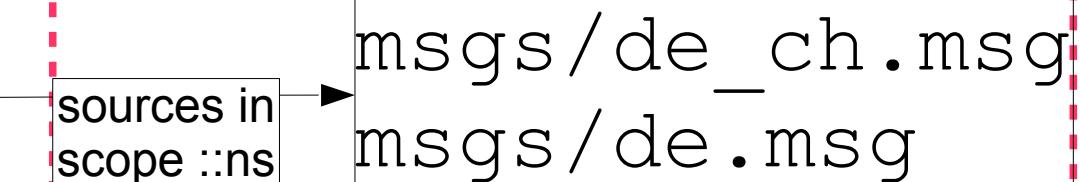
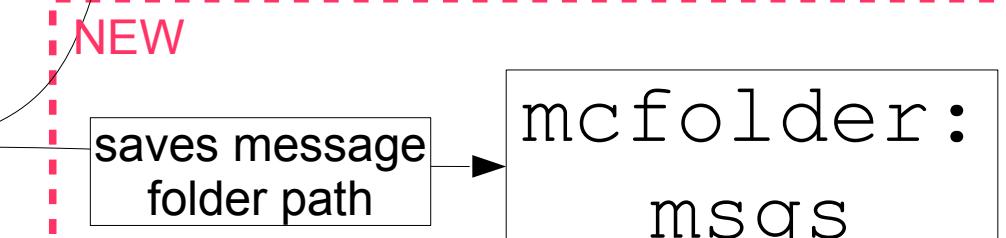
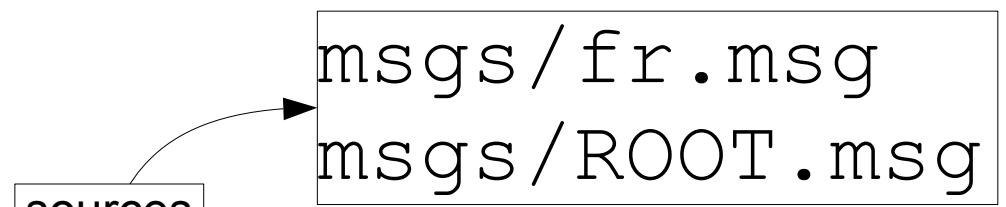
Load missing language files on locale change



```
# Init
mclocale fr
package require tp
```

```
# package tp
namespace eval tp {
    mcload msgs
}
```

```
# On locale change
mclocale de_ch
```



TIP 412-2: package locale

package locale independend of mclocale

```
mclocale $locale
if { ! [dict exists $McLoaded $locale] } {
    mcload $MsgDir
    dict set McLoaded $locale {}
}
set Month [mc January]
mclocale $old
```

clock.tcl with
TIP 412

```
mcpackagelocale $locale
set Month [mc January]
```

TIP 412-3: Package Callbacks

- locale changes (to adopt gui)

```
# package tp
namespace eval tp {
    mcload msgs
    mcpackageconfig set changecmd ::tp::lc
    proc lc {args} {puts pref=$args}
}
% mclocale de_ch
pref=de_ch de {}
```

- msg files to load (ex: load from db)

```
mcpackageconfig set loadcmd ::tp::lo
```

- mcunknown invoked for package
(ex: dynamic lookup)

```
mcpackageconfig set unknowncmd ::tp::uc
```

TIP 412-4: Interface

Management of the list of globally loaded locales:

`mcloaddlocales` `get/present/add/remove/clear`

Management of the package locale:

`mcpackagelocale` `set/get/preferences/isset/unset`

Management of the list of loaded package locales:

`mcpackagelocale` `loaded/present/add/remove/clear`

Package configuration operations:

`mcpackageconfig` `get/isset/set/unset` `option`

`option:` `mcfolder/loadcmd/changecmd/unknowncmd`

Check key existance:

`mceexists` `?-exactnamespace?` `?-exactlocale?` `key`

Package cleanup: `mcforgetpackage`

Other Msgcat requests

- TclOO: Two proposals on the wiki by Twylite and Eric Boudailler
 - > I have no idea about TclOO, sorry...
- Use msgcat from C: asked by René Zaumseil
 - > (At least) implement "mc" and "mcset" in C
 - > Stubs entry

Discussion

- Designed in 2012-03
- I would appreciate some feedback
- Pass by the TCT
- Am I the right person?

