

# ResourceLoader 2

## The Future of Gadgets

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# What are Gadgets ?

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- Extra functionality created by users (javascript / css)
- Wiki pages
- Overview on [[Special:Gadgets]]

A screenshot of a Wikipedia user preferences page. At the top, there is a navigation bar with links for Krinkle, Mijn overleg, Mijn voorkeuren, Mijn volglijst, Mijn bijdragen, and Afmelden. Below the navigation bar, there is a sidebar with instructions to 'Set \$wgLogo to the URL path to your own logo image.' and a preview of a yellow sun-like logo. The main content area is titled 'Voorkeuren' (Preferences). A horizontal menu bar below the title includes links for Gebruikersprofiel, Uiterlijk, Datum en tijd, Bewerken, Recente wijzigingen, Volglijst, Zoekinstellingen, Divi, and Gadgets. The 'Gadgets' link is circled in white. The bottom of the page features a footer with the WIKIMANIA 2012 logo and the Wikimedia Foundation logo.

# Workflow & Issues

# Script creation and editing

# Script creation and editing

- MediaWiki-namespace

[`\[\[MediaWiki:Gadget-Example.js\]\]`](#)

# Script creation and editing

- MediaWiki-namespace

[`\[\[MediaWiki:Gadget-Example.js\]\]`](#)

- Requires 'editinterface' (administrators-only by default)

# Management

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- Properties are stored at [[MediaWiki:Gadgets-definition]]

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- Create/remove by editing the list syntax

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- Properties are stored at [[MediaWiki:Gadgets-definition]]
- Create/remove by editing the list syntax
- Worse than wikitext

# Management

The screenshot shows a web browser window with the following details:

- Title Bar:** Bezig met bewerken van MediaWiki:Gadgets-definition
- Address Bar:** nl.wikipedia.org/w/index.php?title=MediaWiki:Gadgets-definition&action=edit
- User Interface:** Wikipedia navigation bar with links like Krinkle, Overleg, Voorkeuren, Volglijst, Bijdagen, Afmelden.
- Breadcrumbs:** Bericht, Overleg, Lezen, Bewerken, Geschiedenis.
- Search Bar:** Zoeken
- Page Content:** The title is "Bezig met bewerken van MediaWiki:Gadgets-definition". The page contains two sections of code:
  - == Weergave ==**
    - \* Externe links|exlinks.js
    - \* Diffkleuren|Diffkleuren.css
    - \* VectorSearchNav[ResourceLoader]|VectorSearchNav.js
    - \* Achtergrondkleur|Achtergrondkleur.css
    - \* LocalLiveClock[ResourceLoader]|LocalLiveClock.js
    - \* UTCLiveClock[ResourceLoader]|UTCLiveClock.js
    - \* Berichtbalk|Berichtbalk.css
    - \* HideFundraiser|HideFundraiser.css
    - \* Direct-link-to-Commons[ResourceLoader]|Direct-link-to-Commons.js
    - \* Sneltoetsen|removeAccessKeys.js
    - \* Uitleg verwijderlijst|UitlegVerwijderlijst.css
  - == Hulpmiddelen ==**
    - \* OpenStreetMapFrameUit[ResourceLoader]|OpenStreetMapFrameUit.js
    - \* Extra bewerkingsknoppen|extrabewerkingsknoppen.js|extrabewerkingsknoppen.css
    - \* Navigatie popups|popups.js|popups.css
    - \* purgelink|purgelink.js
    - \* HotCat|HotCat.js
    - \* updatemarker|updatemarker.css

# Management

The screenshot shows a web browser window with the following details:

- Title Bar:** Bezig met bewerken van MediaWiki:Gadgets-definition
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- User Interface:** Wikipedia navigation bar with links for Krinkle, Overleg, Voorkeuren, Volglijst, Bijdragen, and Afmelden.
- Breadcrumbs:** Bericht, Overleg, Lezen, Bewerken, Geschiedenis, Zoeken.
- Page Title:** Bezig met bewerken van MediaWiki:Gadgets-definition
- Content Area:** The page contains a list of MediaWiki gadgets and their corresponding JavaScript files and CSS stylesheets. The list is organized into sections: "Weergave" and "Hulpmiddelen".
  - Weergave:**
    - \* Externe links|exlinks.js
    - \* Diffkleuren|Diffkleuren.css
    - \* VectorSearchNav[ResourceLoader]|VectorSearchNav.js
    - \* Achtergrondkleur|Achtergrondkleur.css
    - \* LocalLiveClock[ResourceLoader]|LocalLiveClock.js
    - \* UTCLiveClock[ResourceLoader]|UTCLiveClock.js
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  - Hulpmiddelen:**
    - \* OpenStreetMapFrameUit[ResourceLoader]|OpenStreetMapFrameUit.js
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# Management

The screenshot shows a web browser window with the following details:

- Title Bar:** Bezig met bewerken van Med... (nl.wikipedia.org)
- Address Bar:** nl.wikipedia.org/w/index.php?title=MediaWiki:Gadgets-definition&action=edit
- User Interface:** Wikipedia navigation bar with links like Krinkle, Overleg, Voorkeuren, Volglijst, Bijdragen, Afmelden.
- Content Area:**
  - Section:** Bezig met bewerken van MediaWiki:Gadgets-definition
  - Section:** Weergave
    - \* Externe links | exlinks.js
    - \* Diffkleuren | Diffkleuren.css
    - \* VectorSearchNav[ResourceLoader] | VectorSearchNav.js
    - \* Achtergrondkleur | Achtergrondkleur.css
    - \* LocalLiveClock[ResourceLoader] | LocalLiveClock.js
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    - \* HideFundraiser | HideFundraiser.css
    - \* Direct-link-to-Commons[ResourceLoader] | Direct-link-to-Commons.js
    - \* Sneltoetsen | removeAccessKeys.js
    - \* Uitleg verwijderlijst | UitlegVerwijderlijst.css
  - Section:** Hulpmiddelen
    - \* OpenStreetMapFrameUit[ResourceLoader] | OpenStreetMapFrameUit.js

# Translation

# Translation

- Some solutions exist,  
invented by the community

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invented by the community

```
// User interface messages
msgHelp: {
    'ca': 'Llengua',
    'cs': 'Výběr jazyka',
    'da': 'Vælg sprog',
    'de': 'Sprachauswahl',
    'en': 'Language select',
    'eo': 'Lingvoelekto',
    'es': 'Seleccionar idioma',
    'et': 'Keele valimine',
    'fa': '\u0627\u0646\u062A\u062E\u0627\u0628 \u0632\u0628\u0627\u0646',
    'fi': 'Valitse kieli',
    'fr': 'Sélecteur de langue',
    'ko': '언어 선택',
    'mk': 'Јазик',
    'ml': 'ഭാഷ തിരഞ്ഞെടുക്കുക',
    'nds': 'Sprakutwahl',
    'nl': 'Taal',
    'pl': 'Wybierz język',
    'pt': 'Seleção do idioma',
    'ru': 'Выбор языка',
    'sv': 'Välj språk'
},
msgSelect: {
    'ca': 'Selecciona',
    'cs': 'Vybrat',
    'da': 'Vælg',
    'de': 'Auswählen',
    'en': 'Select',
    'eo': 'Elekti',
    'es': 'Escoger',
    'es': 'Escoger',
    'eo': 'ЕЛЕКТИ',
    'eu': 'Sezioa',
    'qe': 'улаштјен',
    'sq': 'osejtë'
}
```

# Translation

- Some solutions exist, invented by the community
- No native handling for localization

```
// User interface messages
msgHelp: {
    'ca': 'Llengua',
    'cs': 'Výběr jazyka',
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    'ko': '언어 선택',
    'mk': 'Јазик',
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    'nl': 'Taal',
    'pl': 'Wybierz język',
    'pt': 'Seleção do idioma',
    'ru': 'Выбор языка',
    'sv': 'Välj språk'
},
msgSelect: {
    'ca': 'Selecciona',
    'cs': 'Vybrat',
    'da': 'Vælg',
    'de': 'Auswählen',
    'en': 'Select',
    'eo': 'Elekti',
    'es': 'Escoger',
    'es': 'Escoger',
    'eo': 'ЕЛЕКТИ',
    'eu': 'Sezioa',
    'qe': 'улаштуйен',
    'sq': 'Avtet'
}
```

# Sharing

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- No native way to load gadgets from another wiki

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- No native way to load gadgets from another wiki
- Community workarounds

# Sharing

- No native way to load gadgets from another wiki
- Community workarounds
- Export/import feature incomplete  
(requires post-import manual fix-ups)

# Sharing

# Sharing



**WIKIMEDIA  
COMMONS**

Navigation

- Main Page
- Welcome
- Community portal
- Village pump

Vilniusde bėnėm  
Community portal  
Welcome  
Vilnius

Message Discussion

## MediaWiki:Gadget-HotCat.js

```
//<source lang="javascript">
/*
HotCat V2.11

Ajax-based simple Category manager. Allows
Supports multiple category changes, as well
plugs into the upload form. Search engines
can be selected interactively.

Authors:
    can be selected from the dropdown menu.
    The user can choose multiple categories at once. Categories are added to the
    search bar when the user selects them. The user can then click the "Search" button to
    search for the selected categories.
```

# Sharing

The screenshot shows the Dutch Wikipedia homepage. The 'Overleg' tab is selected. Below it, the title 'MediaWiki:Gadget-HotCat.js' is displayed. A code snippet for the gadget is shown:

```
//<source lang="javascript">
/*
HotCat V2.2

Ajax-based simple Category manager. Allows adding/removing
Supports multiple category changes, as well as redirect an
plugs into the upload form. Search engines to use for the
can be selected interactively.

Authors:
  0.0: July 2007 - 2010-05-26: original version by [[User:Dschwen]
    additions by many editors, notably [[User:Dschwen]
    and [[User:JINDO]] No explicit license assumed on
    contributions by many editors' notes by [[User:Dschwen]
    0.0: July 2007 - 2010-02-26: initial development by [[User:Dschwen]
    and [[User:JINDO]] No explicit license assumed on
    contributions by many editors' notes by [[User:Dschwen]
```

The page content continues below the code snippet, but is mostly cut off at the bottom of the image.

# Future Gadgets 2.0

# ResourceLoader

# ResourceLoader

- Focus on front-end performance

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- Access to interface messages

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- Access to interface messages
- JavaScript libraries (jQuery & MediaWiki.js)

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- Focus on front-end performance
- Access to interface messages
- JavaScript libraries (jQuery & MediaWiki.js)
- Cross-wiki modules (foreign module source)

# Resource Loader

- Focus on the code
- Accessibility
- JavaScript
- Create
- var \$button = jQuery( '<div>' , {  
 id: 'mw-example-button',  
 text: mw.msg( 'gadget-example-button' )  
} );  
  
\$button.on( 'click' , function ( e ) {  
 jQuery( '#mw-panel' ).fadeOut();  
} );

# Editing

# Editing

- [[MediaWiki:Gadget-Example.js]] → [[Gadget:Example.js]]

# Editing

- [[MediaWiki:Gadget-Example.js]] → [[Gadget:Example.js]]
- Permissions separate from MediaWiki namespace

# Management

# Management

- [[MediaWiki:Gadgets-definition]] → [[Special:Gadgets]]

# Management

- [[MediaWiki:Gadgets-definition]] → [[Special:Gadgets]]
- [[Gadget definition:Example.js]]

# Management

- [[MediaWiki:Gadgets-definition]] → [[Special:Gadgets]]
- [[Gadget definition:Example.js]]
- Permissions separate from MediaWiki namespace

Gadgets – Wikipedia 2.0-alpha

localhost/mw/trunk/phase3/index.php/Special:Gadgets

Root My talk My preferences My watchlist My contributions Log out

Set \$wgLogo to the URL path to your own logo image.

Main page Community portal Current events Recent changes Random page Help

Toolbox Upload file Special pages

Special page Create Go Search

# Gadgets

Below is a list of gadgets available on this wiki. Users can enable or disable these through their preferences page. This overview provides easy access to the gadget definitions and system message pages that define each gadget's description and title.

## Weergave

**Externe links** [Edit](#)

Open externe links in een nieuwe tab of venster. [Edit description](#)

[Permalink](#) [Export](#) [Modify gadget](#) [Delete gadget](#)

**UTC LiveClock** [Edit](#)

Klok in de rechterbovenhoek die de huidige UTC-tijd aangeeft. [Edit description](#)

[Permalink](#) [Export](#) [Modify gadget](#) [Delete gadget](#)

## Hulpmiddelen

**OpenStreetMap Frame** [Edit](#)

[Add description](#)

[Permalink](#) [Export](#) [Modify gadget](#) [Delete gadget](#)

**HotCat** [Edit](#)

[Add description](#)

[Permalink](#) [Export](#) [Modify gadget](#) [Delete gadget](#)

## Uncategorized

**Foo** [Edit](#)

[Permalink](#) [Export](#) [Modify gadget](#) [Delete gadget](#)

# Gadgets

## Editing Example:

X

Below is a list of pages that define

- recent changes

## Weergave

### UTC LiveClock

Klok in de rech

### Externe links

Open externe li

## Hulpmiddel

### OpenStreetMap

Add description

### HotCat

Edit

## Uncategoriz

### Foo

Edit

Add description

Gadget id: example

### Module properties

#### Scripts

Three.js × Two.js ×

#### Styles

Red.css × Three.css ×

#### Dependencies

jquery.ui.dialog × mediawiki.Title × mediawiki.util ×

#### Messages

monday × tuesday × wednesday × thursday × friday × saturday × sunday ×

### Gadget settings

#### Category

Weergave



#### Required user rights

delete × editinterface ×

#### Enable by default



#### Hide gadget



#### Share gadget



Save gadget

The gadget definitions and system mes

alink Export Modify gadget Delete g



# Localization

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- Uses MediaWiki core localization framework

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- Uses MediaWiki core localization framework
- Easy access through mw.message

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- Uses MediaWiki core localization framework
- Easy access through mw.message
- Basic parsing (\$1, {{SITENAME}}, {{PLURAL:}}, ..)

# Localization

- Uses [[MediaWiki:Gadget-example-welcome]]  
Hello \$1, welcome back!
- Easy access through mw.message
- Basic part of Gadget API:  
[[Gadget:Example.js]], {{PLURAL:}}, ..)  
mw.msg( 'gadget-example-welcome', mw.user.name() );  
  
// "Hello Krinkle, welcome back!"

# Using other modules

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- Gadgets can “use” other modules

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- Gadgets can “use” other modules
- Re-use commonly needed utilities

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- Gadgets can “use” other modules
- Re-use commonly needed utilities
- Dependencies

# Using other modules

- Gadgets can “use” other modules
- `var t = new mw.Title( 'image: an_example.jpg' );`
- Re-use commonly needed utilities
- `t.getNamespacePrefix(); // "File:"`
- `t.getMainText(); // "An example.jpg"`
- `t.getUrl(); // "/wiki/File:An_example.jpg"`

# Duplicatie Delen

# Duplicatie Delen

# mediawiki.org

**Gadgets**

**Editing Example:**

Gadget id: example

Module properties

Scripts

Three.js × Two.js ×

Styles

Red.css × Three.css ×

Dependencies

jquery.ui.dialog × mediawiki.Title × mediawiki.util ×

Messages

monday × tuesday × wednesday × thursday × friday × saturday × sunday ×

Gadget settings

Category

Weergave

Required user rights

delete × editinterface ×

Enable by default

Hide gadget

Share gadget

**Save gadget**

The gadget definitions and system message

halink Export Modify gadget Delete gadget

halink Export Modify gadget Delete gadget

halink Export Modify gadget Delete gadget

Uncategorize

# Duplicatie Delen

# mediawiki.org

The screenshot shows the MediaWiki Gadgets interface with the 'Editing Example' dialog open. The dialog contains the following information:

- Gadget id:** example
- Module properties**:
  - Scripts**: Three.js, Two.js
  - Styles**: Red.css, Three.css
  - Dependencies**: jquery.ui.dialog, mediawiki.Title, mediawiki.util
  - Messages**: monday, tuesday, wednesday, thursday, friday, saturday, sunday
- Gadget settings**:
  - Category**: Weergave
  - Required user rights**: delete, editinterface

A callout bubble highlights the 'Share gadget' button at the bottom left of the dialog.

# Duplicatie Delen

nl.wikipedia.org

The screenshot shows the 'Voorkeuren' (Preferences) page on the Dutch Wikipedia. At the top, there is a navigation bar with links for 'Krinkle', 'Mijn overleg', 'Mijn voorkeuren', 'Mijn volglijst', 'Mijn bijdragen', and 'Afmelden'. Below the navigation bar, there is a search bar with the placeholder 'Speciale pagina' and buttons for 'OK' and 'Zoeken'. The main content area is titled 'Voorkeuren' and contains a sub-section titled 'Gebruikersprofiel' (User profile). This section includes tabs for 'Uiterlijk', 'Datum en tijd', 'Bewerken', 'Recente wijzigingen', 'Volglijst', 'Zoekinstellingen', 'Diversen', 'Gadgets', and 'Gedeelde gadgets'. A note below the tabs states: 'Below is a list of gadgets from other wikis.' Under the 'Gadgets' tab, there is a section titled 'Weergave' (Display) with a checkbox labeled 'Voorbeeld: Voorbeeld omschrijving' (Example: Example description). The background of the page features a faint watermark of the Wikipedia globe logo.

WIKIPEDIA  
De vrije encyclopedie

Navigatie

Hoofdpagina  
Gebruikersportaal  
In het nieuws  
Recente wijzigingen  
Willekeurige pagina  
Hulp

Below is a list of gadgets from other wikis.

Weergave

Voorbeeld: Voorbeeld omschrijving

WIKIMANIA 2012

WIKIMEDIA

# Duplicatie Delen

nl.wikipedia.org

The screenshot shows the 'Voorkeuren' (Preferences) page on the Dutch Wikipedia. At the top right, there is a navigation bar with links for 'Krinkle', 'Mijn overleg', 'Mijn voorkeuren', 'Mijn volglijst', 'Mijn bijdragen', and 'Afmelden'. Below this is a search bar with 'OK' and 'Zoeken' buttons. On the left, there's a sidebar with the Wikipedia logo and text 'WIKIPEDIA De vrije encyclopedie'. Under 'Navigatie', there are links for 'Hoofdpagina', 'Gebruikersportaal', 'In het nieuws', 'Recente wijzigingen', 'Willekeurige pagina', 'Hulp', and 'Hulp'. The main content area is titled 'Voorkeuren' and includes tabs for 'Gebruikersprofiel', 'Uiterlijk', 'Datum en tijd', 'Bewerken', 'Recente wijzigingen', 'Volglijst', 'Zoekinstellingen', 'Diversen', 'Gadgets', and 'Gedeelde gadgets'. A section titled 'Weergave' contains a list of gadgets from other wikis. One gadget, 'Voorbeeld: Voorbeeld omschrijving', is highlighted with a white oval and a checkmark icon.

Speciale pagina

Krinkle Mijn overleg Mijn voorkeuren Mijn volglijst Mijn bijdragen Afmelden

OK Zoeken

## Voorkeuren

Gebruikersprofiel Uiterlijk Datum en tijd Bewerken Recente wijzigingen Volglijst Zoekinstellingen Diversen Gadgets Gedeelde gadgets

Below is a list of gadgets from other wikis.

Weergave

**Voorbeeld:** Voorbeeld omschrijving

WIKIMANIA 2012 WIKIMEDIA

# Demo

# ResourceLoader 2

The Future of Gadgets

[mediawiki.org/wiki/RL2TEST](http://mediawiki.org/wiki/RL2TEST)

Roan Kattouw - [[User:Catrophe]]

Timo Tijhof - [[User:Krinkle]]