

# Mobile Site Rewrite



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# Current implementation

- Ruby based mobile gateway utilizing Merb

## **Process:**

- A request comes in from a mobile browser
- The request generates a Device object in merb/extensions/request\_extension.rb
- The Device object picks a format in Device#format\_name
  - Any method\_missing that Device receives is looked up in the format specification
  - The formats are specified in config/formats.yml
- An Article is fetched for that device
  - First, the article figures out what kind of parser needed to be run on the page  
It then generates a key with that parser type.
  - It then checks to see if that has been cached
  - If it is not cached, it grabs scrapes the Wikipedia page and processes it with some /app/models/parsers/\* class
  - If it is cached, it returns that cached object
- The layout is generated with the returned Article#html
  - The device format is used heavily here (aka, "= current\_device.stylesheet\_name")
  - An "app/views/layouts/search#{format}.html.haml" file is rendered in the search area
  - Changes in the search box and CSS fields are the biggest difference between formats

# Mobile site rewritten in PHP

- Having the site in Ruby causes a number of headaches (for code review, code deployment, and server maintenance) given Wikimedia's mostly PHP-based infrastructure.

## **Rewrite rationale**

- Puts the code in our code repo rather than on github
- Easier to review code in a language that most Wikimedia/MediaWiki developers are already using (PHP, instead of Ruby)
- Easier on the ops team to maintain servers (most infrastructure is already built for PHP web apps, not Ruby web apps)
- Allows for third parties to easily create mobile sites
- Extensible for any MediaWiki installation
- Support current Ruby-implemented JSON based API (for iPhone, etc.)

# MediaWiki Extension

- PatchOutputMobile
  - Utilizing output buffer capability of PHP to capture final output before rendering
  - Strip various page contents that are not appropriate for mobile browsers
  - Ability to render both WML and XHTML content
  - Basic device detection and specialized format for various devices

# So what's next ...

- Proper device detection with WURFL
- Testing on various mobile devices

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