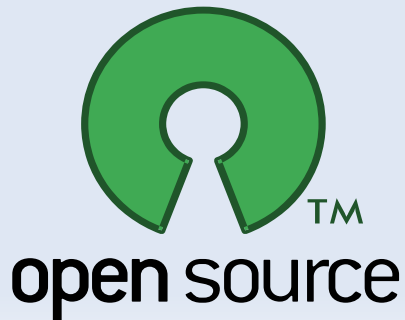


CppCMS



The High Performance Web Framework



By Artyom Beilis

In The Beginning...

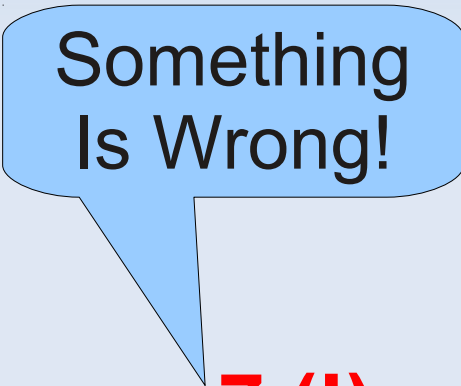
Year:
2006

New PC:
AMD 64 bit,
1GB memory

Use:
Gaming
Blogging



90
frames per second



7 (!)
pages per second



Framework Idea – 2006

Native Code:

No: Byte Code

No: Just (not) in Time

Yes: Native Code

C++

Recycle:

Objects

Connections

Data

Pages

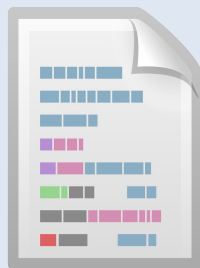


CppCMS – 2012

700 downloads/month



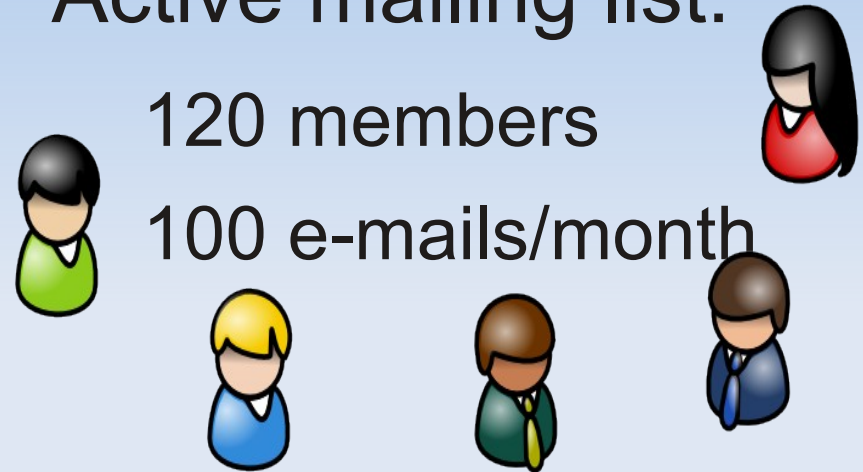
100,000 lines of code



Active mailing list:

120 members

100 e-mails/month

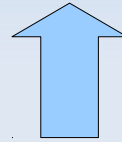
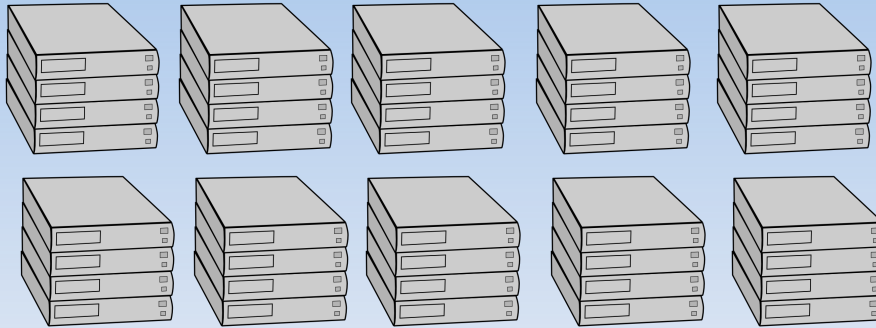


Code contributions to

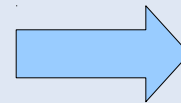
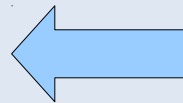


Major Use Cases

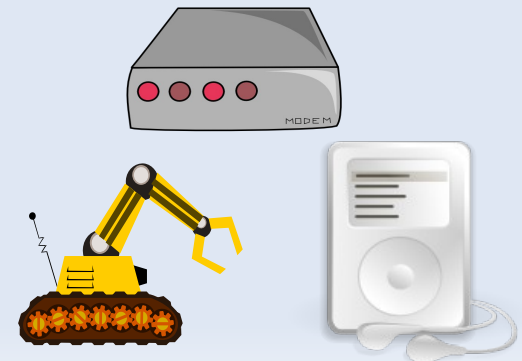
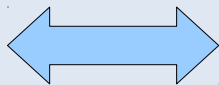
Web
Server
Farms



Web
Interfaces

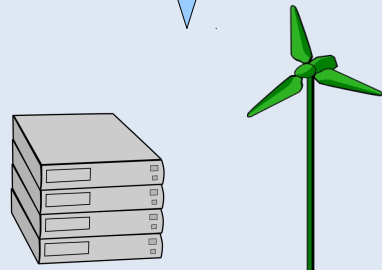
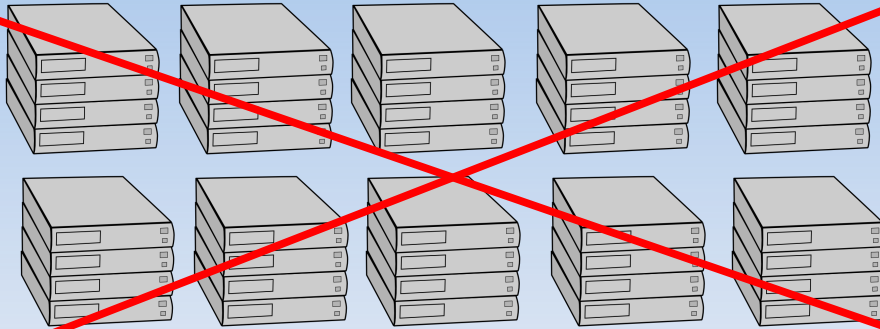


Embedded
Systems



Resource Consuming Systems

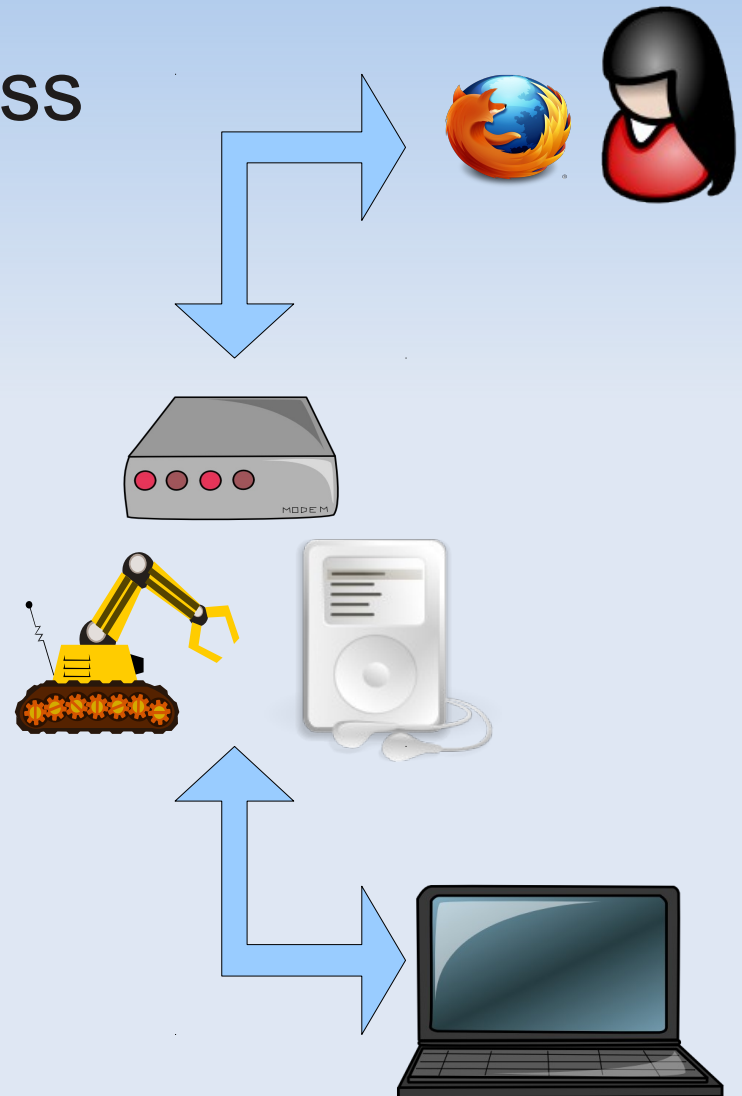
PHP
Rails
Java
.Net



C++/CppCMS

Embedded Web Interfaces

- Native code – direct HW access
- Tiny all-in one executable
 - CppCMS library: 1.3MB
 - Python: 2.2MB
- Both
 - User Interface
 - RESTFuI API
 - JSON-RPC API



Real World Examples

Services Designed for My Customers:

- RESTFul API for Geographical Database:
 - **Architecture:** In Memory Database
 - **Performance:** **~1,000,000 request/minute** on low end hardware
- Advertisement Engine:
 - **Architecture:** in-memory indexing with intensive caching; SQL as storage engine
 - **Performance:**
 - ~300,000 ads/minute** on low end hardware
 - ~40,000 ads/minute** on Amazon's Smallest VPS

Some CppCMS Users

- <http://page2rss.com>

Creates and servers RSS feeds bases on page monitoring

- <http://dhiti.com>

Content discovery engine

- <http://tatoeba.org>

Sentence database for language learners

- <http://picase.net>

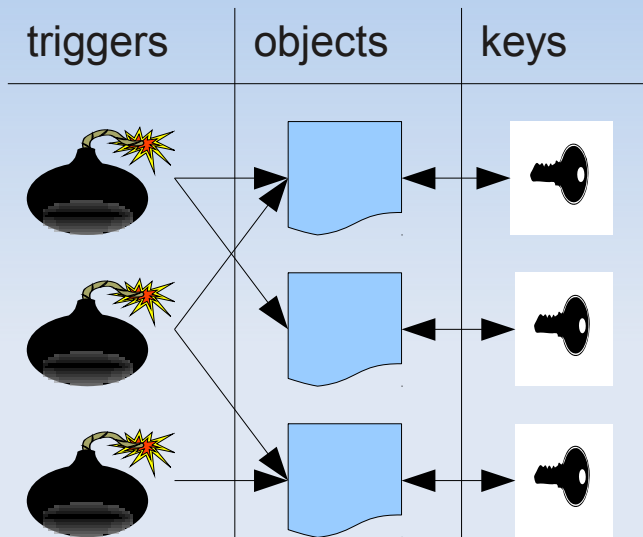
Image Sharing Service

Features

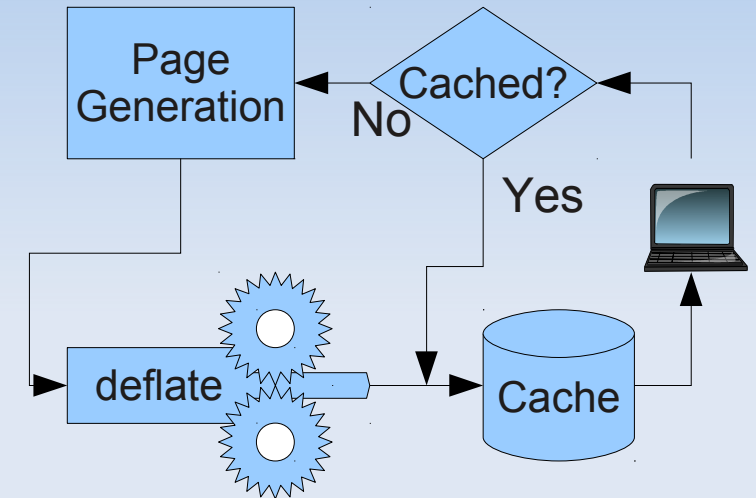
Built-in Web Sever
Anti-CSRF
Visual C++
Windows
GCC
LGPL & Commercial
Linux
Comet
FreeBSD
Clang
Solaris
Mac OS X
Web Templates
Localization
Nice URLs
Cache
SCGI
Ajax
Sessions
XSS-Filtering
FastCGI

Taking Caching to The Limits

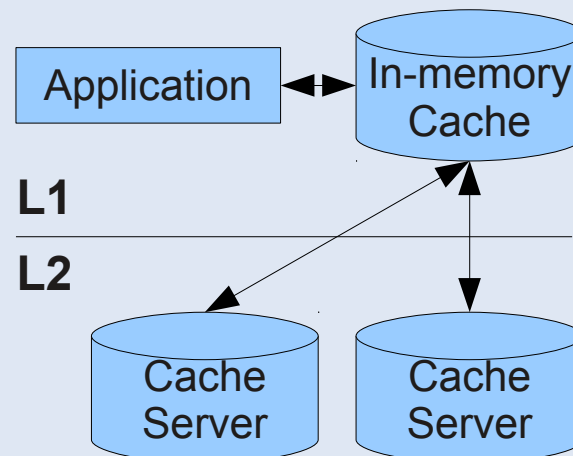
Cache Invalidation



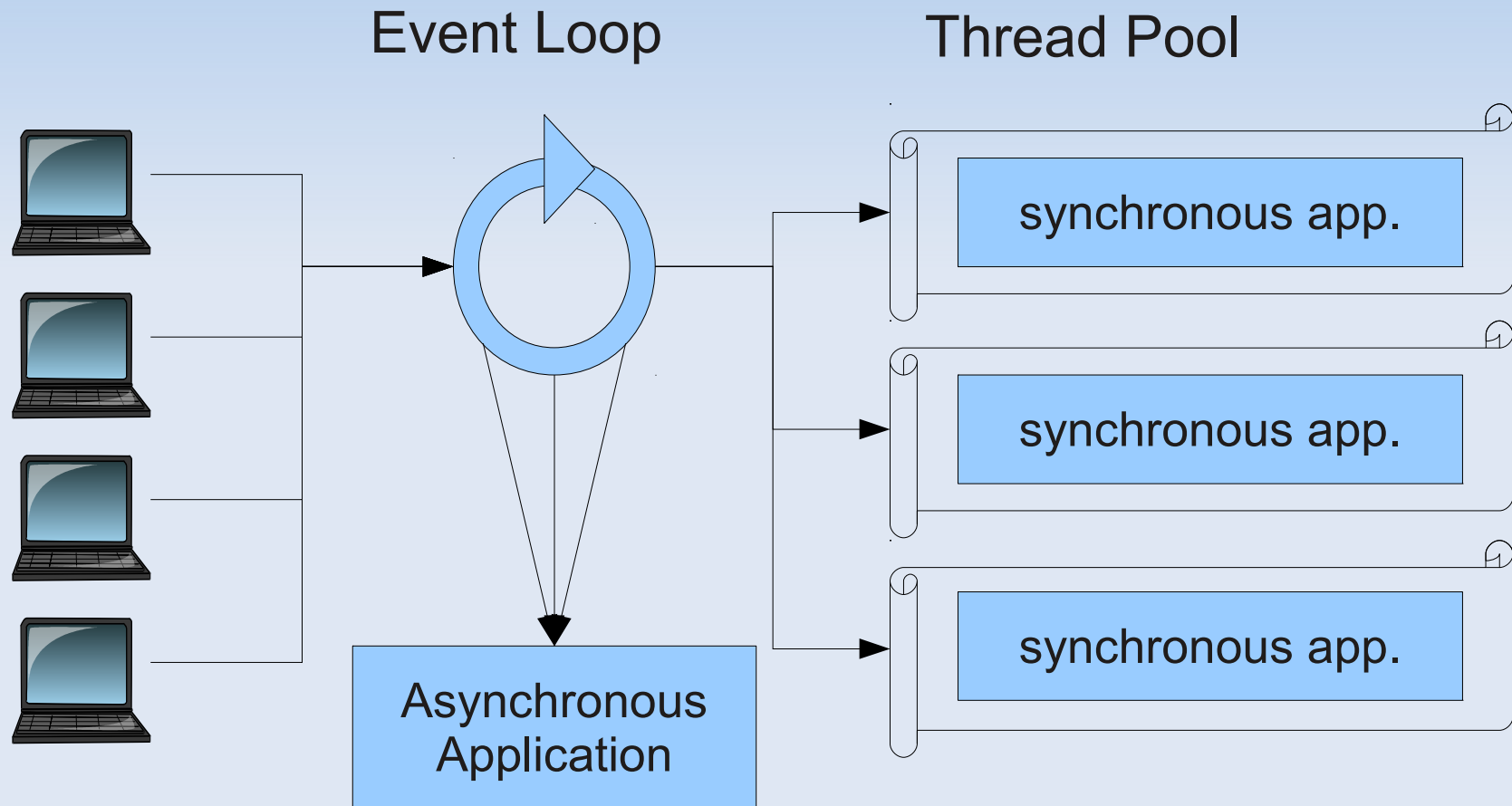
Gzip compression



Two levels cache



Asynchronous I/O



How To Get Help?

- *Tutorials, Reference, Examples, Source Code:*
<http://cppcms.com>
- *Community Support:*
CppCMS Users Mailing List
- *Commercial Support:*
Contact Me: artyomtnk@yahoo.com

Visit

<http://cppcms.com>

Questions?

Do you have any questions?

質問はおありですか。

Есть вопросы?

Маєте якісь питання?



יש לכם שאלות?

Avez-vous des questions ?