Pomelo—Game Server Framework
Base on Node.js

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Agenda

• Introduction to pomelo
• Influence
• Successful cases
• Future plans
The state of pomelo

Fast, scalable, distributed game server framework for node.js

Open source history
V0.2.0  2012.11.20
V0.3.0  2013.3.8
V0.4.3  2013.6.11
V0.5.5  2013.8.9
V0.6.7  2013.10.14
V0.7.0  2013.11.6

https://github.com/NetEase/pomelo
Pomelo position

- Realtime application server framework
- Game server framework
  - Mobile game
  - Web game
  - Social game
  - Small and Medium MMO RPG
Framework structure

- **Demos**
  - lord of pomelo
  - treasure
  - chat

- **Clients**
  - C/cocos2dx
  - iOS/android
  - web/javascript
  - unity3d

- **Tools**
  - admin console
  - command line
  - test robot

- **Libraries & Plugins**
  - AI
  - schedule
  - path-finding
  - AOI

- **Framework**
State of pomelo

- Pomelo is not a single project
- Almost 40 repos in total
State of pomelo — clients

Clients

- Javascript
  - Websocket version: pomelonode / pomelo-jsclient-websocket
  - Socket.io version: pomelonode / pomelo-jsclient-socket.io

- C
  - Socket version: NetEase / libpomelo

- IOS
  - Socket.io version: NetEase / pomelo-iosclient
  - Socket version: ETIV / PomeloClient-IOS-WebSocket
  - WebSocket version: GeforeLee / Websocket-Pomelo

- Android & Java
  - NetEase / pomelo-androidclient
  - Jzsues / pomelo-websocket-java-client

- Unity3d
  - Socket.io version: NetEase / pomelo-unityclient
  - Socket version: NetEase / pomelo-unityclient-socket

- Flash
  - Socket.io version: stokegames / pomelo-flashclient
  - Socket version: D-Deo / pomelo-flash-tcp

- Cocos2dx
  - C++: NetEase / pomelo-cocos2dcchat
Pomelo features

Features

- Elastic multi-process architecture
- Convenient server extension mechanism
- Simple and efficient server communication mechanism
- Rich extension components
Comparison with pomelo

Game server framework
- SmartfoxServer
- Bigworld

Realtime web application framework
- Derby
- Meteor
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# Pomelo in github

**Most Starred Today**
- NetEase / pomelo
- wojodesign / simplecart-js
- flabs / fastclick
- CloudMade / Leaflet
- camerond / jquery-minical

**Most Forked Today**
- binaryjs / node-binarypack
- binaryjs / js-binarypack
- na / binaryjs
- daeq / programmer-site
- hakimel / reveal.js

**Most Starred This Week**
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What is Pomelo?

Pomelo is a fast, scalable, distributed game server framework for Node.js. It provides the basic development framework and a lot of related components, including libraries and tools. Pomelo is also suitable for realtime web application, its distributed architecture makes Pomelo scale better than other realtime web frameworks.

The following is the composition of Pomelo:

포멜로(Pomelo)는 무엇인가요?

포멜로는 Node.js을 위한 빠르고, 규모 가변적인, 분산 게임 서버 프레임워크입니다. 라이브러리와 도구를 포함하며 기본 개발 프레임워크와 많은 관련 컴포넌트를 제공합니다. 포멜로는 실시간 웹 응용 프로그램에 적합한데, 포멜로의 분산 아키텍처는 다른 실시간 웹 프레임워크보다 규모 가변적(Scale)입니다.

다음은 포멜로의 구성입니다:
Pomelo club

http://nodejs.netease.com/
Pomelo club

岗位要求：
1. javascript开发一年以上
2. nodejs半年以上，了解服务端开发流程，了解服务端运用的相关技术
3. 了解socket通信，缓存机制
4. 使用过pomelo的优先
5. 有游戏有相关开发经验的优先
6. 有良好的团队合作能力

岗位职责：
1. 负责游戏服务端编码
2. 产品性能的不断优化

岗位要求：
1. js开发一年以上，一年以上服务端开发经验
2. node.js半年以上，熟悉服务端开发流程及服务端相关技术
3. 熟悉HTTP通信机制，了解socket/websocket通信机制
4. 熟练掌握SQL语句，熟悉mysql等常见数据库
5. 熟悉Linux操作系统, 有Nginx服务器的配置、维护、调优经验

加分项：
1. 使用过Pomelo的优先
2. 有游戏有相关开发经验的优先
3. 有良好的团队合作能力
4. 熟练使用Github，跟踪多个相关项目
搜索结果 pomelo

- 深入浅出node.js游戏服务器开发——基于Pomelo的MMO RPG开发
  2013年3月28日 ... 在上一篇文章中，我们介绍了如何使用Pomelo来搭建聊天服务器。在这篇文章中，我们为大家介绍如何使用Pomelo搭建基于MMO RPG服务器，并 ... http://www.infoq.com/cn/articles/game-server.development.3

- 网易NodeJS开源游戏框架pomelo访谈
  2012年11月20日 ... 谭靖雄在9月份的HJS活动中分享过“Node.js游戏服务器开发”的话题，目前他准备对相关研究成果进行开源发布，网易对其进行了专访，请关注 ... http://www.infoq.com/cn/news/2012/11/nodejs-nodejs.framework

- 深入浅出node.js游戏服务器开发——Pomelo框架的设计动机与架构介绍
  2013年8月14日 ... 在本系列第一篇文章中我们介绍了游戏服务器的基础、基本模型以及用pomelo搭建解决了运行架构的问题。随后两篇文章我们会对示例 ... http://www.infoq.com/cn/articles/design-motivation-and-introduction-of-Pomelo-framework

- 网易开源基于Node.js的游戏服务器框架pomelo
  2012年11月24日 ... 最近，网易在Github上开发了基于Node.js的游戏服务器框架—pomelo，它包括基础的开发框架和相关的扩展组件（如工具包），可以 ... http://www.infoq.com/cn/news/2012/11/pomelo-opensource
Meetings
Charlie Crane: Game server development in node.js

Node.js is really suitable for realtime network application, and game server is a typical one. However, game server technology is not as open as other technology, there is almost no open source framework and standard about it. Pomelo framework is a fast, scalable, distributed game server framework for node.js, which we open sourced 6 months ago and gained a lot of attention. We believe it's going to change the whole industry of network game. This topic is about the design of pomelo framework (abstract, scalability, performance etc.), and how to develop game server with it.
Amazing talk about Pomeo, a Node JS game server framework by @jiecc One of the best talks in #jsconfau pic.twitter.com/TLK9nJdMTo1

@brianleroux agreed. @jiecc is hilarious, too.

Marius Gundersen @GundersenVarlus
"If the server quacks like a duck and fly like a duck, then it is a duck!" - @jiecc #jsconfau

@brianleroux
omg rodeo game server dev w/ @jiecc in Side Track is rad

@jsconfau
Lxjs 2013.10.2 —— Lisbon

http://lxjs.org/speakers/charlie-crane

Charlie Crane is a senior engineer, architect from NetEase Inc., one of the biggest network company in China. He has been working on web application and game for 8 years, developing products like blog, SNS and online web games.

He's given talks on game and web server development at conferences like QCon, Velocity, jsconf around China. He's enthusiastic at open source technology, especially distributed web, game architecture and node.js. Recently he and his team open sourced the pomelo framework, which is a fast, scalable, distributed game server framework for node.js.
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Success cases

• Realtime Message Push Platform

  This platform is used in NetEase, product servers use it to push messages to clients in real time.

Features

- Instantaneity & Accuracy & Reliability
- Highly scalable & Highly Available
- Multi-platform support: ios, android, web
Success cases

Applied Products

- Youdao Cloud Notes
- Flower Field
- City Dating
- Cloud Music
- EasyReader
- Fruit Matching Game
- Treasure-house
Success cases

Card Game—ShenMu

http://shenmu.iccgame.com/index.shtml
Success cases

Combat Strategy Game—Ancient songs

http://www.ixuanyou.com/
Success cases

Realtime Communication Tools — ZhongQingBangBang

http://wap.youth.cn/bangbang/
Success cases

- The magic card hunter [https://itunes.apple.com/cn/app/id6649640688](https://itunes.apple.com/cn/app/id6649640688)
- Coal instant messaging [http://www.mtjst.com](http://www.mtjst.com)
- Yong Le golden flower [http://pan.baidu.com/s/1pCmfD](http://pan.baidu.com/s/1pCmfD)
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Future plans

- Improvement of framework
- More suitable for realtime & scalable web application
Future plans

- International development
- More foreign contributors
- More foreign applications
Future plans

- Complement of documents on framework
- Publication of books
Thank you!