



iQiYi Pad播放页JS/CSS打包流程

主站前端组 刘永生

2014年07月11日

需求：精细化合并打包

- 同步加载模块
 - base：共用的模块合并成的大文件
 - job：各页面特殊模块合并成的大文件
- 异步加载模块
- 依赖去重
 - 同步模块先加载，已经加载过的依赖文件的代码，在异步模块加载时不需要重复加载

模块：同步&异步

- 模块结构
 - load 自身加载逻辑
 - code 业务代码

```
▼ mod
  ▼ addLike
    code.js
    load.js
  ▼ albumList
    code.js
    load.js
  ▼ albumNumList
    code.js
    load.js
  ▼ appdownload
    code.js
    load.js
  ▼ attention
    code.js
    load.js
```

```
define(function(require,exports,module){
  var ModuleLoader = require('../..../kit/moduleLoader');
  var moduleLoader = new ModuleLoader('clickMap');

  // 加这句即变为同步module
  moduleLoader._sync(require('./code'));

  // 暴露对外的模块接口，异步形式便于模块加载未完成时调用
  //moduleLoader._export(['']);

  module.exports = moduleLoader;
});|
```

```
define(function (require, exports, module) {
  var ModuleLoader = require('../..../kit/moduleLoader');
  var moduleLoader = new ModuleLoader('loginKit');

  moduleLoader._loadWhile({
    when: [
      [Q.$('body'), 'tap', '[j-delegate="j-logout"]', function(mod){
        mod.logout();
      }]
    ]
  });

  // 触发模块加载的逻辑
  moduleLoader._export(['show', "hide", "afterLogin","focusLogin"]);
  module.exports = moduleLoader;
});
```

同步加载的模块的打包

- job入口大文件
 - 入口文件require('xxx/load')来引入页面需要的所有模块
 - 同步模块的load会require自身的code
- 打包结果
 - 所有同步模块的load和code都会合并到入口大文件中
 - 所有异步模块的load都会被合并到入口大文件中

```
/*
 * base 示例
 */

define(function(require,exports,module){
    var Job = require('../kit/job');

    var base = new Job({
        modules: [
            require("../mod/navBar/load"),
            require('../mod/player/load'),
            require("../mod/plycnt/load"),
            require('../mod/playerExt/load'),
            require('../mod/clickMap/load') //p
        ]
    });

    module.exports = base;
});
```

```
define(function(require,exports,module){
    var ModuleLoader = require('../..../kit/moduleLoader');
    var moduleLoader = new ModuleLoader('clickMap');

    // 加这句即变为同步module
    moduleLoader._sync(require('../code'));

    // 暴露对外的模块接口，异步形式便于模块加载未完成时调用
    //moduleLoader._export(['']);

    module.exports = moduleLoader;
});
```

异步加载模块打包

- 所有的异步加载的模块都单独打包
 - mod/**code**作为入口文件打包

JS打包流程

```
[2014-07-10 18:10:59.754] [TRACE] compile - log: Task built by fePadTest @ Thu Jul 10 2014 18:10:59 GMT+0800 (CST)
```

1. 打包base

```
[2014-07-10 18:10:59.756] [TRACE] compile - 获取config
[2014-07-10 18:10:59.757] [TRACE] package - 获取任务列表
[2014-07-10 18:10:59.757] [TRACE] package - 解析任务参数 0
[2014-07-10 18:10:59.757] [TRACE] package - 解析通配符, 获取文件列表
[2014-07-10 18:10:59.759] [TRACE] package - 执行任务 0
[2014-07-10 18:10:59.759] [TRACE] package - 处理文件: /root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/job/base.js
[2014-07-10 18:11:00.017] [TRACE] package - 记录base中模块 34
[2014-07-10 18:11:00.088] [TRACE] package - 将modules列表记录到内存中
[2014-07-10 18:11:00.089] [TRACE] package - 获取摘要
[2014-07-10 18:11:00.090] [TRACE] package - 添加tag
[2014-07-10 18:11:00.091] [TRACE] package - 输出到: /root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_build/job/base_ea2b2193f4.js
[2014-07-10 18:11:00.092] [TRACE] package - 解析任务参数 1
[2014-07-10 18:11:00.092] [TRACE] package - 解析通配符, 获取文件列表
[2014-07-10 18:11:00.092] [TRACE] package - 执行任务 1
[2014-07-10 18:11:00.093] [TRACE] package - 处理文件: /root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/job/longPlay.js
[2014-07-10 18:11:00.395] [TRACE] package - 与base中模块去重, 模块数: 73
[2014-07-10 18:11:00.395] [TRACE] package - 与base中模块去重完成, 剩余模块数: 51
[2014-07-10 18:11:00.487] [TRACE] package - 将modules列表记录到内存中
[2014-07-10 18:11:00.487] [TRACE] package - 获取摘要
[2014-07-10 18:11:00.490] [TRACE] package - 添加tag
[2014-07-10 18:11:00.490] [TRACE] package - 输出到:
/root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_build/job/longPlay_26f6c00961.js
```

2. 打包job, 与base去重

```
/root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_build/job/shortPlay_476287c144.js
```

3. 打包异步模块mod, 与base去重

```
[2014-07-10 18:11:00.529] [TRACE] package - 解析任务参数 2
[2014-07-10 18:11:00.530] [TRACE] package - 解析通配符, 获取文件列表
[2014-07-10 18:11:00.538] [TRACE] package - 执行任务 2
[2014-07-10 18:11:00.538] [TRACE] package - 处理文件: /root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/mod/subscribe/code.js
[2014-07-10 18:11:00.549] [TRACE] package - 与base中模块去重, 模块数: 29
[2014-07-10 18:11:00.549] [TRACE] package - 与base中模块去重完成, 剩余模块数: 3
[2014-07-10 18:11:00.553] [TRACE] package - 将modules列表记录到内存中
[2014-07-10 18:11:00.553] [TRACE] package - 获取摘要
[2014-07-10 18:11:00.553] [TRACE] package - 添加tag
[2014-07-10 18:11:00.554] [TRACE] package - 输出到:
/root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_build/mod/subscribe/code_8eda603044.js
```

4. 输出版本号与加载碎片

```
[2014-07-10 18:11:01.803] [TRACE] output - 执行输出任务 0
[2014-07-10 18:11:01.803] [TRACE] output - 处理文件
/root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_compile/output/pages/long/longPlay.tpl
[2014-07-10 18:11:01.803] [TRACE] output - 组织输出参数 longPlay
[2014-07-10 18:11:01.806] [TRACE] output - 渲染输出模板 longPlay
[2014-07-10 18:11:01.807] [TRACE] output - 输出到: /root/.jenkins/.jenkins/workspace/fePadTest/20140621162523_ad_madebyserver/_output/fragments/long/job.ftl
```

JS打包输出

除了上传到cdn
上的大文件，
同时输出页底JS
版本号碎片

```
<script type="text/javascript">
var map={
  "job/base":"job/base_6897a992ad",
  "job/shortPlay":"job/shortPlay_e256f4cf7f",
  "mod/playerExt/code":"mod/playerExt/code_50153d1648",
  "mod/navSuggest/code":"mod/navSuggest/code_7974eac8b6",
  "mod/plycnt/code":"mod/plycnt/code_1b28ae13a8",
  "mod/share/code":"mod/share/code_20de1168c1",
  "mod/reply/code":"mod/reply/code_4ceb44fc28",
  "mod/updown/code":"mod/updown/code_a45f116652",
  "mod/player/code":"mod/player/code_ce8c9dd799",
  "mod/feedback/code":"mod/feedback/code_f2a91b89cd",
  "mod/comment/code":"mod/comment/code_489d0c23a6",
  "mod/changeInfo/code":"mod/changeInfo/code_a83252cc07",
  "mod/vv/code":"mod/vv/code_d896b3e9ab",
  "mod/videoDownload/code":"mod/videoDownload/code_fad4fa8da9",
  "mod/wxfloater/code":"mod/wxfloater/code_8dc795a8d2",
  "mod/qiyuAfterVideo/code":"mod/qiyuAfterVideo/code_c8cc34b49e",
  "mod/loginKit/code":"mod/loginKit/code_0799544d02",
  "mod/feedComment/code":"mod/feedComment/code_9560cf3157",
  "mod/subscribe/code":"mod/subscribe/code_db31e5ba99",
  "mod/playHistory/code":"mod/playHistory/code_ffbefca3d4",
  "mod/addLike/code":"mod/addLike/code_d8b3352a77",
  "mod/commentUser/code":"mod/commentUser/code_fa0975e230",
  "mod/skin/code":"mod/skin/code_64538aee1a",
  "mod/historyRecorder/code":"mod/historyRecorder/code_d3924a0c4e"
};
Q.load("shortPlay", map);
</script>
```

css打包输出

1. 打包base.css

2. 打包job.css

3. 打包异步模块mod.css

4. 输出页头css版本号

除了上传到cdn上的大文件，同时输出页头css版本号碎片

Thanks!

iQIYI 爱奇艺

PPS

开启全新视界