



GRUNT

The JavaScript Task Runner

Grunt - сборщик проектов

- Написан на JavaScript для Node.js
- Выполняет задачи (tasks)
- Конфиг — обычный JS-файл
- Текущая версия — 0.4
- Используется в jQuery, Modernizr, ...



Пример: структура проекта

- + [src]

- foo.js

- bar.js

- main.js

- main.min.js

Пример: установка

```
npm uninstall -g grunt
```

```
npm install -g grunt-cli
```

```
npm init
```

```
npm install grunt --save-dev
```

```
npm install grunt-contrib-jshint --save-dev
```

```
npm install grunt-contrib-uglify --save-dev
```

```
npm install grunt-contrib-concat --save-dev
```

Пример: Gruntfile.js

```
module.exports = function(grunt){  
  
    grunt.initConfig({  
        //task settings go here  
    });  
  
    grunt.loadNpmTasks('grunt-contrib-jshint');  
    grunt.loadNpmTasks('grunt-contrib-concat');  
    grunt.loadNpmTasks('grunt-contrib-uglify');  
  
    grunt.registerTask('default', ['jshint', 'concat', 'uglify']);  
  
};
```

Пример: настройка задач

```
jshint: {  
  all: ['Gruntfile.js', 'src/*.js']  
},  
concat: {  
  dist: { src: 'src/*.js', dest: 'main.js' }  
},  
uglify: {  
  all: { files: { 'main.min.js': ['main.js'] } }  
}
```

Пример: запускаем

```
$ grunt
```

```
Running "jshint:all" (jshint) task
```

```
>> 3 files lint free.
```

```
Running "concat:dist" (concat) task
```

```
File "main.js" created.
```

```
Running "uglify:all" (uglify) task
```

```
File "main.min.js" created.
```

```
Done, without errors.
```

Установка: package.json

```
{  
  "name": "grunt-usage-example",  
  "version": "0.1.0",  
  "devDependencies": {  
    "grunt-contrib-jshint": "~0.4.3",  
    "grunt-contrib-uglify": "~0.2.0",  
    "grunt-contrib-concat": "~0.2.0",  
    "grunt": "~0.4.1"  
  }  
}
```


Шаблоны проектов: grunt-init

```
$ npm install -g grunt-init
```

```
$ git clone git@github.com:gruntjs/grunt-init-jquery.git ~/.  
grunt-init/jquery
```

```
$ grunt-init jquery
```

Basic tasks

```
grunt.registerTask('myAliasTask', ['jshint', 'concat', 'uglify']);

grunt.registerTask('myCustomTask', function(){
  grunt.log.writeln(' Current task name: ' + this.name);
});
```

Multi tasks: описание

```
grunt.initConfig({  
  myMultiTask: {  
    first: 'Single string',  
    second: [1, 2, 3]  
  }  
});
```

```
grunt.registerMultiTask('myMultiTask', function(){  
  grunt.log.writeln(this.target + ' : ' + this.data);  
});
```

Multi tasks: использование

```
$ grunt myMultiTask:first
```

```
Running "myMultiTask:first" (myMultiTask) task
```

```
  first : Single string
```

```
Done, without errors.
```

```
$ grunt myMultiTask:second
```

```
Running "myMultiTask:second" (myMultiTask) task
```

```
  second : 1,2,3
```

```
Done, without errors.
```

Раздельные конфигурации

```
grunt.initConfig({  
  jshint: {  
    debug: { ... },  
    release: { ... }  
  }  
  // ...  
  // Same for concat and uglify  
});
```

```
grunt.registerTask('debug', ['jshint:debug', 'concat:debug',  
  'uglify:debug']);  
grunt.registerTask('release', ['jshint:release', 'concat:  
release', 'uglify:release']);
```

Файлы: сокращенный формат

```
grunt.initConfig({  
  myTask: {  
    myTarget: { // compact format  
      src: ['src/header.txt', 'src/*.js'],  
      dest: 'main.js',  
      nonull: true  
    }  
  }  
});
```

Файлы: объект files

```
grunt.initConfig({  
  myTask: {  
    myTarget: { // files object format  
      files: {  
        'main.js': ['src/header.txt', 'src/*.js'],  
        'libs.js': ['lib/*.js']  
      }  
    }  
  }  
});
```

Файлы: массив files

```
grunt.initConfig({  
  myTask: {  
    myTarget: { // files array format  
      files: [  
        { src: ['src/header.txt', 'src/*.js'],  
          dest: 'main.js', nonull: true },  
        { src: ['lib/*.js'], dest: 'libs.js' }  
      ]  
    }  
  }  
});
```


Свойства контекста: multi task

```
grunt.registerMultiTask('myMultiTask', function(){  
    var task = this;  
    grunt.log.error('Something went wrong'); // errorCount++  
    ['name', 'nameArgs', 'args', 'errorCount', 'target']  
        .forEach(function(propName){  
            grunt.log.writeln(propName + ': ' + task[propName]);  
        });  
});
```

Свойства контекста: значения

```
$ grunt myMultiTask:first:second
```

```
Running "myMultiTask:first:second" (myMultiTask) task
```

```
>> Something went wrong
```

```
name: myMultiTask
```

```
nameArgs: myMultiTask:first:second
```

```
args: second
```

```
errorCount: 1
```

```
target: first
```

Асинхронные задачи: описание

```
grunt.registerTask('asyncTask', function() {  
    var done = this.async();  
    console.time('Completed in ');  
    setTimeout(function(){  
        console.timeEnd('Completed in ');  
        done();  
    }, 1000);  
});
```

Асинхронные задачи: выполнение

```
$ grunt asyncTask
```

```
Running "asyncTask" task
```

```
Completed in : 1002ms
```

```
Done, without errors.
```

Программный запуск других задач

```
grunt.registerTask('myTask', function() {  
  grunt.task.run('foo', 'bar');  
  grunt.task.run(['bar', 'baz']);  
});
```