

Angular Testing with Jest

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Steps to Install Jest in a New Angular Project and Remove Jasmine/Karma

1. Create a new Angular project:

```
ng new my-angular-project
cd my-angular-project
```

2. Install Jest and related packages:

```
npm install --save-dev jest @types/jest jest-preset-angular
```

3. Update the Angular configuration to use Jest:

```
// Create a file called setup-jest.ts in the root directory and
// add the following:
import 'jest-preset-angular/setup-jest';

// Update the package.json file to replace Jasmine/Karma with Jest
"scripts": {
  "test": "jest"
},
"jest": {
  "preset": "jest-preset-angular",
  "setupFilesAfterEnv": [
    "<rootDir>/setup-jest.ts"
  ],
  "testEnvironment": "jsdom",
  "globals": {
    "ts-jest": {
      "tsconfig": "tsconfig.spec.json",
      "stringifyContentPathRegex": "\\\\.html$",
      "isolatedModules": true
    }
  },
  "transform": {
    "^.+\\. (ts|js|html)$": "ts-jest"
  },
  "moduleNameMapper": {
    "^@app/(.*)$": "<rootDir>/src/app/$1",
    "^@environments/(.*)$": "<rootDir>/src/environments/$1"
  },
  "moduleFileExtensions": [
    "ts",
    "html",
    "js",
    "json"
  ],
  "snapshotSerializers": [
```

```
    "jest-preset-angular/build/AngularSnapshotSerializer.js",  
    "jest-preset-angular/build/HTMLCommentSerializer.js"  
  ]  
}
```

4. Remove Jasmine and Karma:

```
npm uninstall jasmine-core karma karma-chrome-launcher  
karma-coverage-istanbul-reporter  
karma-jasmine karma-jasmine-html-reporter
```

5. Create or edit tsconfig.spec.json file:

```
{  
  "extends": "./tsconfig.json",  
  "compilerOptions": {  
    "outDir": "./out-tsc/spec",  
    "types": [  
      "jest",  
      "node"  
    ]  
  },  
  "files": [  
    "src/polyfills.ts"  
  ],  
  "include": [  
    "src/**/*.spec.ts",  
    "src/**/*.d.ts"  
  ]  
}
```

6. Update Angular JSON file:

```
"architect": {  
  "test": {  
    "builder": "@angular-builders/jest:run",  
  }  
}
```