

# UI5 Testing with Karma

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# Agenda

**Karma Test Runner**

**UI5 Plugin**

**Demo**

**Outlook**

# Karma Test Runner



## Test on Real Devices

Test your code on real browsers and real devices such as phones, tablets or on a headless PhantomJS instance.



## Remote Control

Control the whole workflow from the command line or your IDE - just save a file and Karma will run all the tests.



## Testing Framework Agnostic

Describe your tests with [Jasmine](#), [Mocha](#), [QUnit](#), or write a simple adapter for any framework you like.



## Open Source

Developed for and maintained by the open source community at [GitHub](#).



## Easy Debugging

Easy debugging directly from your IDE via WebStorm or Google Chrome.



## Continuous Integration

Simple integration with [Jenkins](#), [Travis](#) or [Semaphore](#).

Master's Thesis: <https://github.com/karma-runner/karma/blob/master/thesis.pdf>

# UI5 Plugin

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karma-openui5 v0.x

- Insert sap-ui-core.js
- Apply bootstrap config
- MockServer support
- Autorun test modules

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## Challenges

- Difference between Karma and HTML test setup
- Duplicated bootstrap config
- No isolation of multiple test pages
- Local server required when not using UI5 CDN

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## Solution (karma-ui5 v1.x)

- Run HTML pages in <iframe>
  - Consistent setup
  - No additional bootstrap / test config
- UI5 Tooling integration to serve local UI5 dependencies

# Before

```
module.exports = function(config) {
  config.set({

    basePath: 'webapp',

    frameworks: ['qunit', 'openui5'],

    openui5: {
      path: 'https://openui5nightly.hana.ondemand.com/resources/sap-ui-core.js'
    },

    client: {
      openui5: {
        config: {
          theme: 'sap_belize',
          language: 'EN',
          bindingSyntax: 'complex',
          compatVersion: 'edge',
          async: true,
          resourceroots: {'sap.ui.demo.todo': './base'}
        },
        tests: [
          'sap/ui/demo/todo/test/unit/AllTests',
          'sap/ui/demo/todo/test/integration/AllJourneys'
        ]
      },
      clearContext: false,
      qunit: {
        showUI: true
      }
    },

    files: [
      { pattern: '**', included: false, served: true, watched: true }
    ]
  });
};
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};
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## After

```
module.exports = function(config) {
  "use strict";

  config.set({

    frameworks: ['ui5'],

    ui5: {
      url: "https://openui5nightly.hana.ondemand.com"
    }
  });
};
```

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    }
  });
};
```

## After (with UI5 Tooling)

```
module.exports = function(config) {
  "use strict";

  config.set({

    frameworks: ['ui5'],

  });
};
```

# Demo

# Outlook

## UI5 CLI Integration

- „ui5 test“ command
- No need for a karma.conf.js

# Thank you.

Contact information:

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GitHub: <https://github.com/SAP/karma-ui5>

# UI5con

learn.explore.connect.