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Mbed Silicon Partner Workshop

Debugging Tests

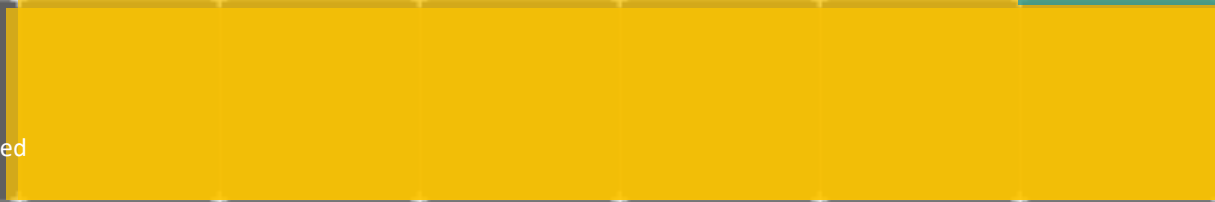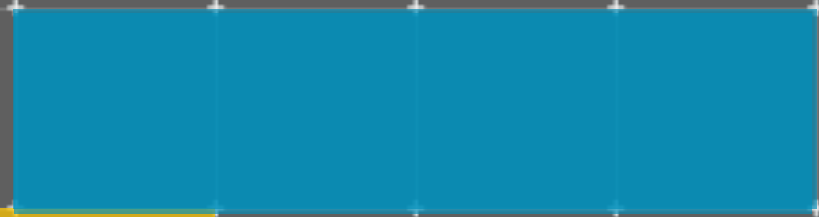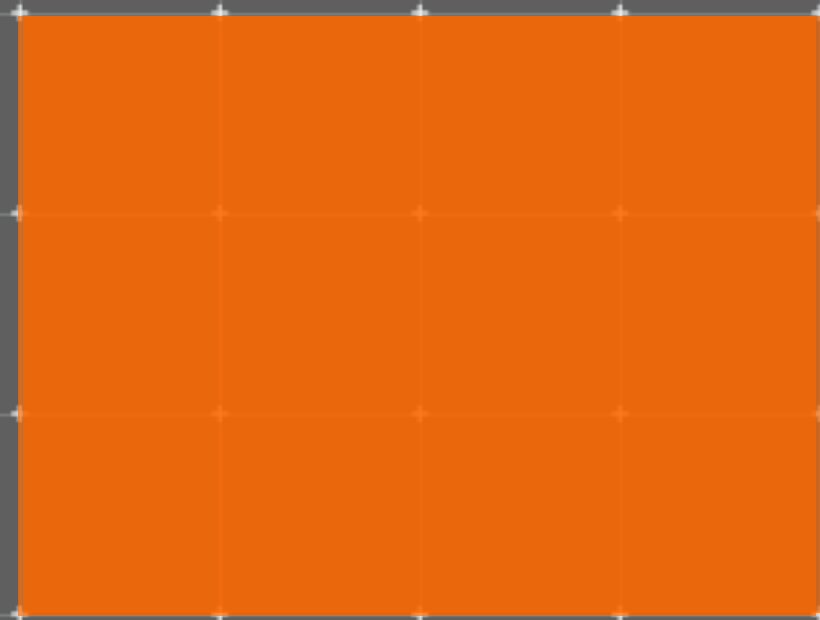28th of March 2018

Paris, France

Introduction

- Debugging Tests
  - Exporting to an IDE
  - Running a test while debugging
- Building Tests
  - Test structure
  - Build output
- Running Tests
  - Starting, stopping, results
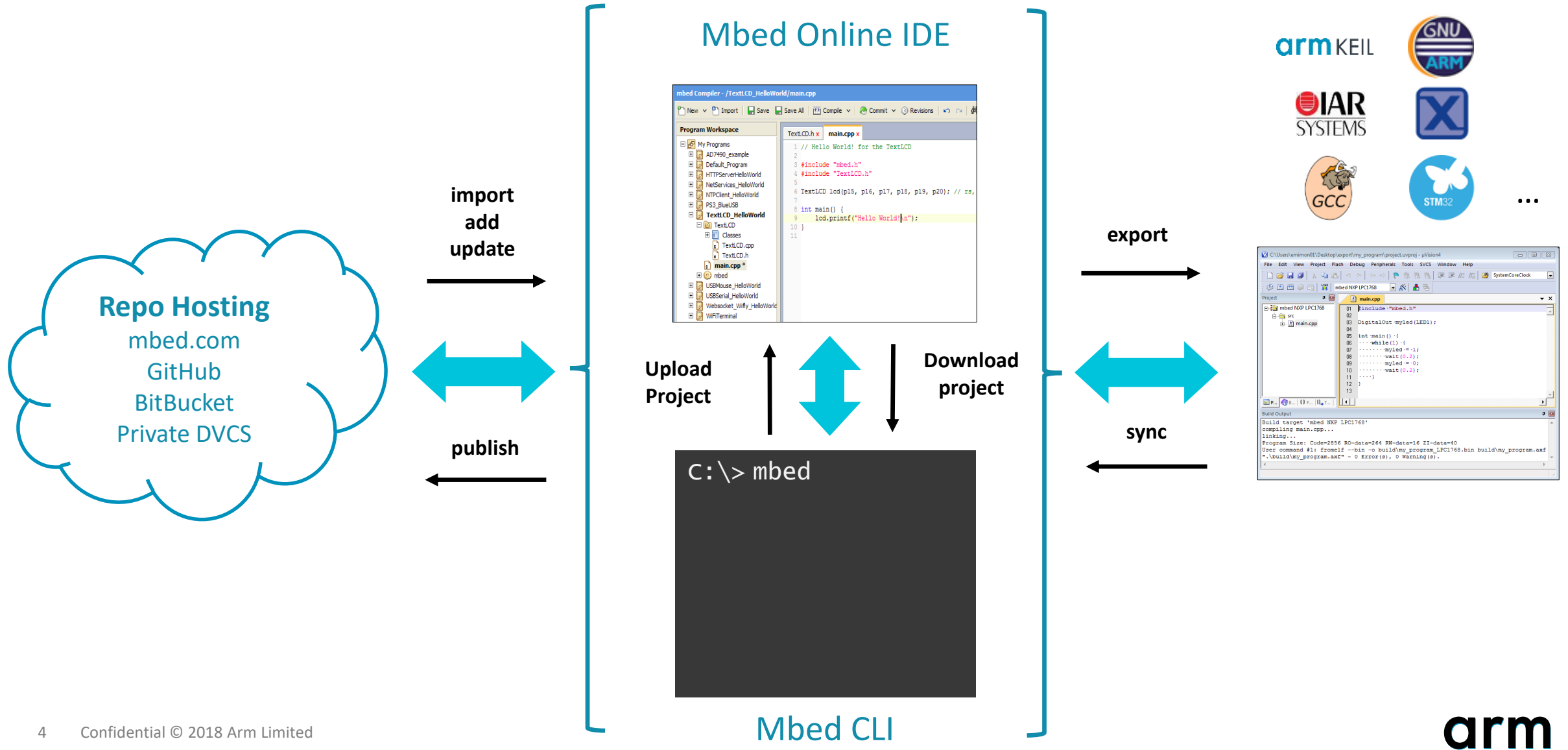- Writing Tests
  - Structure of a test

Covered in Documentation
https://os.mbed.com/docs/latest/tools/testing.html

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Debugging Tests

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Development Environments

Supported IDEs

Mbed Online IDE

Repo Hosting
mbed.com
GitHub
BitBucket
Private DVCS

import add update

export

Upload Project

Download project

sync

publish

C:\> mbed

Mbed CLI

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Exporting a test to an IDE

1. Check supported IDEs for the target

```
mbed export -S | grep "Platform\|<target name>"          *
```

2. Locate the path to the test

```
mbed test --compile-list -n <test name>
```

3. Copy the test's source code from its test directory to your **project's root**.
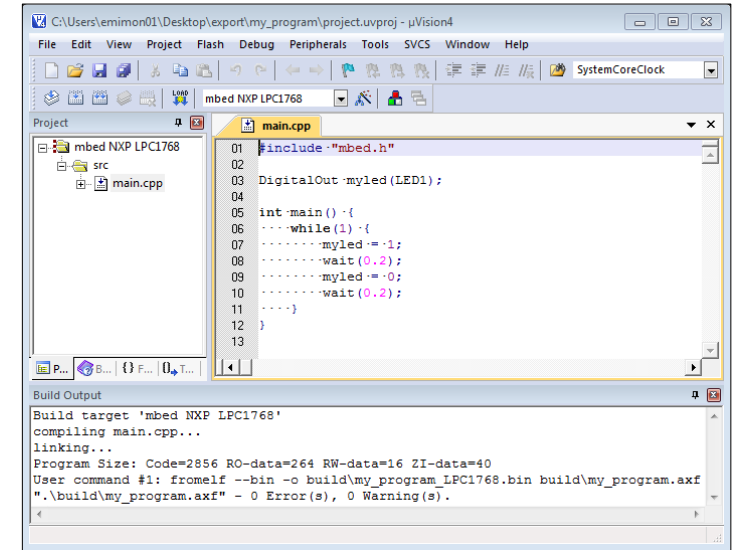
* Using grep optional

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Exporting a test app (Continued)

4. Export (a.k.a. generate project files)

```
mbed export -i <IDE name>
```

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Running the test app

1. Open your IDE

2. Build the project

3. Flash it onto your target via your debugger

4. Bring the target out of reset, and run the program

The target waits for the test tools to send a synch string over the serial port.

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Starting the test

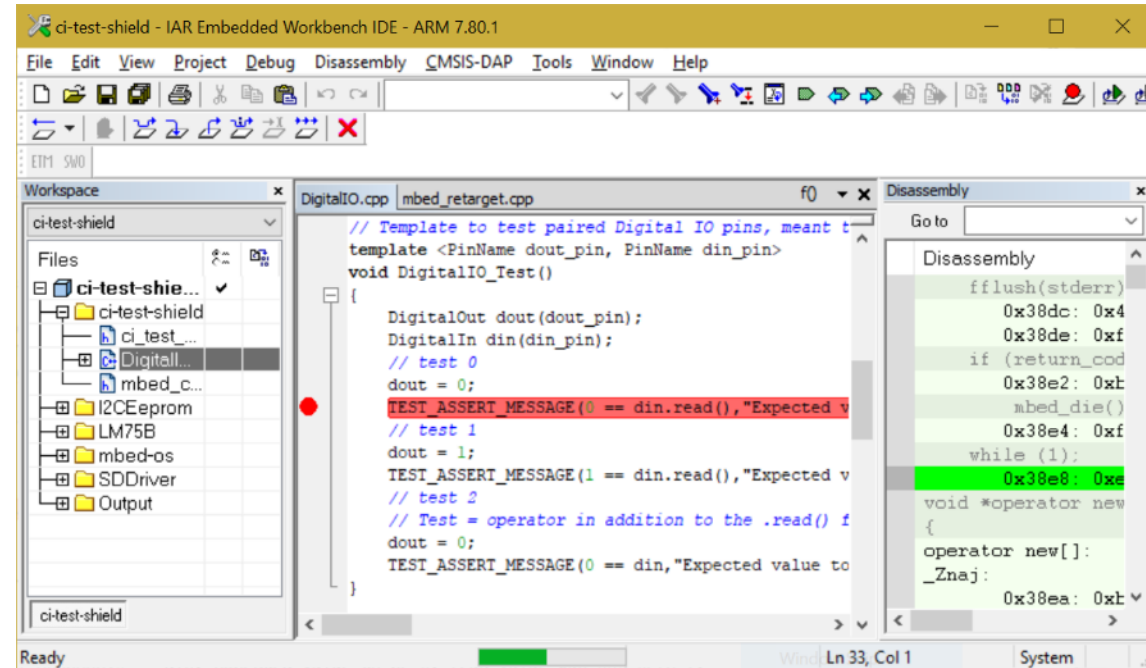Take note of the device's serial port

```
mbedls
```

Kick off the test

```
mbedhtrun --skip-flashing --skip-reset -p <serial port>:9600
```
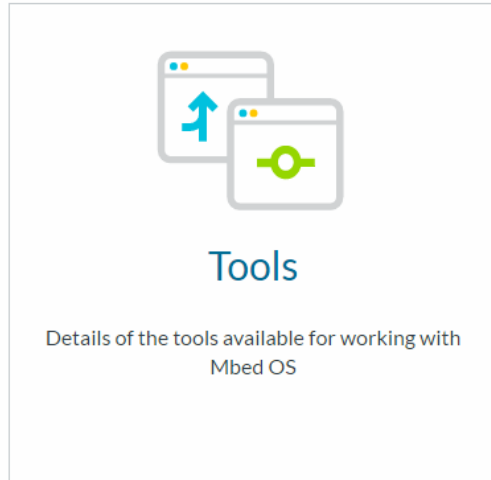
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Debugging

Set breakpoints in the code, etc.

Debugging

View test output

```
[1522183928.79][CONN][RXD] >>> Running case #4: 'Digital I/O on DIO_4/DIO_5'...
[1522183928.85][CONN][INF] found KV pair in stream: {{__testcase_start;Digital I/O on...
[1522183928.90][CONN][INF] found KV pair in stream: {{__testcase_finish;Digital I/O on...
[1522183928.96][CONN][RXD] >>> 'Digital I/O on DIO_4/DIO_5': 1 passed, 0 failed
```

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Documentation

Tools

Details of the tools available for working with Mbed OS

Testing Applications
https://os.mbed.com/docs/latest/tools/testing-applications.html

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Questions?

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Thank You!

Danke!

Merci!

谢谢!

ありがとう!

Gracias!

Kiitos!

감사합니다

धन्यवाद

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