Overview

1. Setting up

2. Exercises

3. Final Remarks
Setting up
Setting up the Virtual Machine

Start your Virtual Machine (VM)!

The VM contains an image of Ubuntu 14.10 with all you need to work with SYCL.
Setting up the Virtual Machine

Start your Virtual Machine (VM)!

The VM contains an image of Ubuntu 14.10 with all you need to work with SYCL

Having Problems?

- Check the documentation on the USB
- Ask anyone with a Codeplay T-shirt!
ComputeCpp: A (WIP) SYCL 1.2 implementation

- Codeplay’s **ComputeCpp** is a pre-release alpha version
- Early access to the core feature-set of the SYCL 1.2 for OpenCl
- Support for Windows, Linux, ARM, Android and many more targets
- Interested? Contact sycl@codeplay.com
OpenCL implementation

- **ComputeCpp** requires an OpenCL implementation with SPIR support
The Virtual Machine contains a Trial Version
Evaluation of **ComputeCpp**

The Virtual Machine contains a Trial Version

**Please Note**

- Can only work inside the VM
- Will work until the 15th of April
- Please do not evaluate performance!
  → Most of the OpenCL calls are currently blocking
  → Extra debugging code is inserted
Executing the Sample Code

From a terminal

```
$ cd ComputeCpp/sample_code/
$ mkdir build
$ cd build
$ cmake .. -DCMAKE_BUILD_TYPE=Release
$ make
$ make test
```

All the sample code should execute and give the correct result
Exercises
SYCL Tutorial - Hands on!

Let's do some coding!
Building the exercises

- Exercises are build using `make`
- `SYCL_ROOT` and `OPENCL_LIB_DIR` should be defined
  
  ```bash
  $ export SYCL_ROOT=$HOME/ComputeCpp-15.05-Linux/
  $ export OPENCL_LIB_DIR=$AMDAPPSDKROOT/lib/x86_64/
  ```

- Some exercises are not complete!
  → Solutions are on the solutions folder
The exercises

- Each exercise has a README.md file with instructions
- We will focus on three exercises today:
  - exercise0: Test the setup
  - exercise1: Basic SYCL exercise
  - exercise2: Using the Hierarchical API
  - exercise3: Playing around with image filters
Final Remarks
Final Remarks

Thank You For Attending!

If you have any questions or comments...

sycl@codeplay.com