Cog X Native Runtime

Internal Maintenance Specification

Version 1

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This document describes the design of the Cog X Native Runtime described in the Cog Native Runtime External Reference Specification.

# Code Organization

The Native Runtime will be written in C++, preferably C++11, though it is unclear if this will be compatible with Autonomy’s build system. The code will be divided into several “packages:”

1. *Constant Folding:* blah
2. *Pipelining:* blah
3. *Partitioning:* blah
4. *Placement:* blah
5. *GPU Resources:* double blah
6. *Threads:* blah
7. *Callbacks:* blah
8. *Messaging:* blah
9. *Execution:* blah

[picture of packages and dependencies, messaging and transport, etc.]

#### ConstantFolding

#### Pipelining

#### Partitioning

#### Placement

#### GPU Resources (OpenCL, CUDA subpackages)

#### Threads

#### Callbacks

#### Messaging

#### Execution

# Dependencies

CogResourceSerializationERS

# Development Plan

#### coding standards

#### compiler, build tools

#### order

#### testing

#### Compiler / Debugger changes