HTMap

High-Throughput Computing in Python, Powered by HTCondor

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Workshop Agenda

1. HTMap Tutorial (~50 minutes)

2. Discussion Break (~20 minutes)

3. Extended Example (~30 minutes)

4. Work Session (optional)

Get the Materials
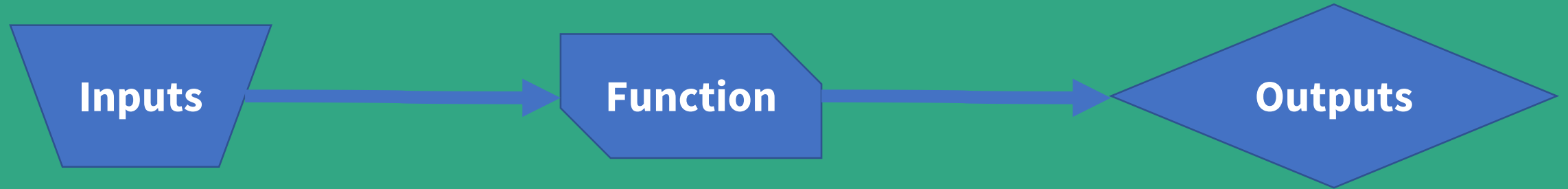
Log in to your submit node

Run:

```
$ git clone https://github.com/CHTC/htmap-workshop-materials
$ cd htmap-workshop-materials
```

Or:

```
$ wget https://github.com/CHTC/htmap-workshop-materials/archive/master.zip
$ unzip htmap-workshop-materials-master.zip
$ cd htmap-workshop-materials-master
```
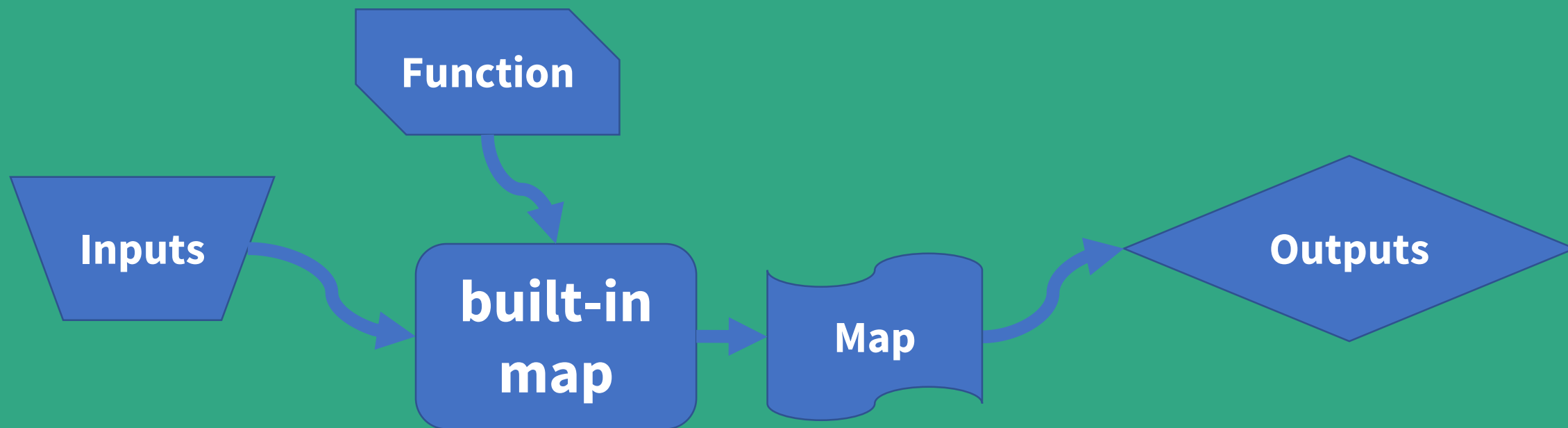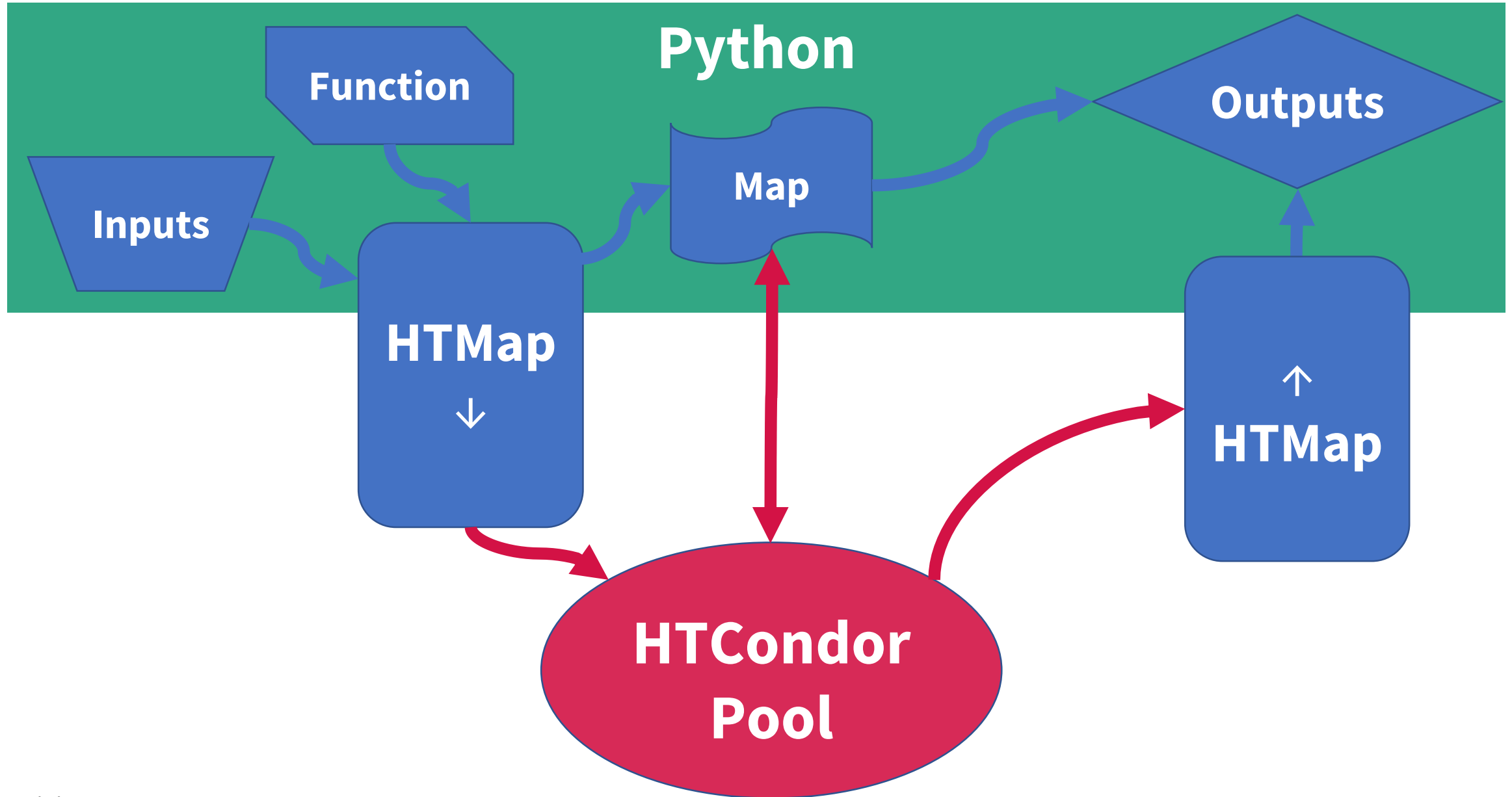
What Just Happened?

What Just Happened?

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Why use HTMap?

Your Work is Already Python-Based

- Run any Python function in the pool with minimal setup

- Use Python to seamlessly set up, execute, and process work

- Hide details of HTCondor where not necessary

Why use HTMap?

You Want to Wrap and Manage Jobs using Python

- Wrapper "scripts" in Python instead of Bash

- Job management in Python instead of condor_*

Tutorial Topics

1. Map Creation and Management

2. Working with Input Files

3. Dealing with Errors

Break!

- Get up and stretch your legs

- Discuss your current workflows with your table-mates

- Discuss how HTMap might be useful in current/future work

- Ask me or helpers questions

Example Project: Book Analysis

Goals

- Work on a more concrete problem

- Write scripts that create maps

- Use Python to find input files

- Use CLI for quick map management

Further Resources

HTMap Documentation

(including more tutorials, API documentation, FAQ, and advanced recipes)

https://htmap.readthedocs.io/

Workshop Materials

(including these slides and canonical solutions to the examples)

https://github.com/CHTC/htmap-workshop-materials

HTMap GitHub Repository

(including issue tracker and source code)

https://github.com/htcondor/htmap

Me!

(including human interaction)

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