

HTCondor / ARC CE Workshop

Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome

Monday, February 29, 2016 2:30 PM (30 minutes)

Presenter: LIVNY, Miron

Session Classification: HTCondor presentations and tutorials

Contribution ID: **1**

Type: **not specified**

HTCondor at PIC

Contribution ID: 2

Type: **not specified**

HTCondor Pool Basics

Monday, February 29, 2016 4:40 PM (1 hour)

Summary

Basic admin tutorial:

- Architecture of a HTCondor pool
- What components run in a pool?
- How is HTCondor configured?
- What happens when I submit a job?
- ClassAds

Primary author: TANNENBAUM, Todd (Univ of Wisconsin-Madison, Wisconsin, USA)

Presenter: KNOELLER, John

Session Classification: HTCondor presentations and tutorials

Contribution ID: 3

Type: **not specified**

Interacting with HTCondor: Python and ClassAd Basics

Contribution ID: 4

Type: **not specified**

Ask The Experts, Part I

Monday, February 29, 2016 5:40 PM (30 minutes)

Presenters: PUERTAS GALLARDO, Antonio (European Commission DG JRC); JONES, Ben (CERN); PERALTA, Jordi (Anima ITS); FLIX MOLINA, Jose (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)); JOUVIN, Michel (Laboratoire de l'Accelérateur Lineaire (FR)); LIVNY, Miron (University of Wisconsin-Madison)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 5

Type: **not specified**

HTCondor User Experience: LIGO

Contribution ID: 6

Type: **not specified**

Matchmaker Policies: Users and Groups

Tuesday, March 1, 2016 10:40 AM (50 minutes)

Summary

Symmetric matchmaking basics. Fairshare. Hierarchical groups and quotas. Negotiator-based preemption

Presenters: FREY, James (Unknown); MILLER, Zach

Session Classification: HTCondor presentations and tutorials

Contribution ID: 7

Type: **not specified**

HTCondor at CERN

Tuesday, March 1, 2016 11:30 AM (30 minutes)

Presenter: JONES, Ben (CERN)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 8

Type: **not specified**

HTCondor Policies: Job and Machines

Tuesday, March 1, 2016 9:00 AM (50 minutes)

Presenter: TANNENBAUM, Todd (Univ of Wisconsin-Madison, Wisconsin, USA)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 9

Type: **not specified**

HTCondor Experiences at CMS

Contribution ID: **10**

Type: **not specified**

HTCondor Python Bindings

Wednesday, March 2, 2016 9:00 AM (30 minutes)

Presenters: BOCKELMAN, Brian Paul (University of Nebraska (US)); KNOELLER, John

Session Classification: HTCondor presentations and tutorials

Contribution ID: 11

Type: **not specified**

HTCondor: CMS Experience

Tuesday, March 1, 2016 1:30 PM (30 minutes)

Presenter: KHAN, Farrukh Aftab (National Centre for Physics (PK))

Session Classification: HTCondor presentations and tutorials

Contribution ID: 12

Type: **not specified**

HTCondor at DESY

Tuesday, March 1, 2016 2:30 PM (30 minutes)

Presenter: BEYER, Christoph (DESY HH)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 13

Type: **not specified**

Security Basics

Tuesday, March 1, 2016 2:00 PM (30 minutes)

Presenter: MILLER, Zach (UW Madison)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 14

Type: **not specified**

Best Practices for Building Submit Nodes

Tuesday, March 1, 2016 3:00 PM (30 minutes)

Summary

How to maintain a well-run submit host. Best practices for hardware, OS / HTCondor configuration, guidance for users with large-scale workflows.

Presenter: BOCKELMAN, Brian Paul (University of Nebraska (US))

Session Classification: HTCondor presentations and tutorials

Contribution ID: 15

Type: **not specified**

Best Practices - Monitoring

Tuesday, March 1, 2016 4:00 PM (30 minutes)

Summary

Command-line tools for metrics. condor_gangliad basics. Defining your own metrics. Preview of updated CondorView.

Presenter: TANNENBAUM, Todd (Univ of Wisconsin-Madison, Wisconsin, USA)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 16

Type: **not specified**

Putting your job in a box: HTCondor, Docker, and containers

Wednesday, March 2, 2016 9:30 AM (30 minutes)

Presenter: KNOELLER, John

Session Classification: HTCondor presentations and tutorials

Contribution ID: 17

Type: **not specified**

Networking in HTCondor

Contribution ID: **18**

Type: **not specified**

Ask The Experts, Part II

Tuesday, March 1, 2016 5:30 PM (30 minutes)

Presenter: TANNENBAUM, Todd

Session Classification: HTCondor presentations and tutorials

Contribution ID: **19**

Type: **not specified**

HTCondor Experiences at GRIF

Wednesday, March 2, 2016 10:30 AM (30 minutes)

Presenters: PHILIPPON, Guillaume (CNRS - LAL); PHILIPPON, Guillaume (Unknown)

Session Classification: HTCondor presentations and tutorials

Contribution ID: 20

Type: **not specified**

Advanced Pool Management - Best Practices

Wednesday, March 2, 2016 11:00 AM (30 minutes)

Presenters: KNOELLER, John; MILLER, Zach

Session Classification: HTCondor presentations and tutorials

Contribution ID: 21

Type: **not specified**

What's New? What's Coming Up?

Wednesday, March 2, 2016 11:30 AM (30 minutes)

Presenters: TANNENBAUM, Todd (Univ of Wisconsin-Madison, Wisconsin, USA); TANNENBAUM, Todd

Session Classification: HTCondor presentations and tutorials

Contribution ID: 22

Type: **not specified**

HTCondor-CE Overview and Architecture

Wednesday, March 2, 2016 1:30 PM (30 minutes)

Presenter: BOCKELMAN, Brian Paul (University of Nebraska (US))

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 23

Type: **not specified**

Submitting Jobs to the HTCondor-CE

Contribution ID: 24

Type: **not specified**

Integration with EGI Middleware

Wednesday, March 2, 2016 2:30 PM (30 minutes)

Presenter: STEERS, Iain Bradford (CERN)

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 25

Type: **not specified**

HTCondor Information System

Wednesday, March 2, 2016 3:00 PM (30 minutes)

Presenter: BOCKELMAN, Brian Paul (University of Nebraska (US))

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 26

Type: **not specified**

Grid Universe Overview

Wednesday, March 2, 2016 4:00 PM (30 minutes)

Presenter: FREY, Jaime

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 27

Type: **not specified**

Integrating HTCondor with Arc

Wednesday, March 2, 2016 2:00 PM (30 minutes)

Presenter: LAHIFF, Andrew David (STFC - Rutherford Appleton Lab. (GB))

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 28

Type: **not specified**

Distributed Resource Management

Contribution ID: 29

Type: **not specified**

Different ways of running ARC for ATLAS computing

Thursday, March 3, 2016 9:00 AM (30 minutes)

Presenter: NILSEN, Jon Kerr (University of Oslo (NO))

Session Classification: ARC CE presentations and tutorials

Contribution ID: **30**

Type: **not specified**

Concepts of the ARC CE - part 2

Thursday, March 3, 2016 10:30 AM (30 minutes)

Presenter: NILSEN, Jon Kerr (University of Oslo (NO))

Session Classification: ARC CE presentations and tutorials

Contribution ID: **31**

Type: **not specified**

Moving from Cream CE to ARC CE

Thursday, March 3, 2016 1:30 PM (45 minutes)

Presenter: LAHIFF, Andrew David (STFC - Rutherford Appleton Lab. (GB))

Session Classification: ARC CE presentations and tutorials

Contribution ID: 32

Type: **not specified**

ARC roadmap

Thursday, March 3, 2016 2:15 PM (30 minutes)

Presenter: NILSEN, Jon Kerr (University of Oslo (NO))

Session Classification: ARC CE presentations and tutorials

Contribution ID: 33

Type: **not specified**

Tech preview: Setting up ARC with Python-based backend

Thursday, March 3, 2016 4:00 PM (1 hour)

Presenter: ANDERSEN, Martin Skou (University of Copenhagen (DK))

Session Classification: ARC CE presentations and tutorials

Contribution ID: **34**

Type: **not specified**

End-of-day discussion

Thursday, March 3, 2016 5:00 PM (1 hour)

Session Classification: ARC CE presentations and tutorials

Contribution ID: 35

Type: **not specified**

Effective HTCondor-based monitoring system

Tuesday, March 1, 2016 4:30 PM (30 minutes)

The CMS experiment at LHC relies on HTCondor and glideinWMS as its primary batch and pilot-based grid provisioning systems. Given the scale of the global queue in CMS, operators found it increasingly difficult to monitor the pool to find issues and fix them. Operators had to rely on several different webpages, with several different levels of information and sifting tirelessly through logs in order to monitor the pool completely. Therefore, coming up with a suitable monitoring system was one of the crucial items before the beginning of Run 2 to ensure early detection of issues and to give a good overview of the whole pool.

Our new monitoring page (cms-gwmsmon.cern.ch) utilizes the condor classAd mechanism to provide a complete picture of the whole submission infrastructure in CMS. Monitoring page includes useful information from HTCondor schedulers, central manager, glideinWMS frontend and factory. It also incorporates information about users and tasks making it easy for operators to provide support and debug issues.

Primary author: BALCAS, Justas (California Institute of Technology (US))

Co-authors: BOCKELMAN, Brian Paul (University of Nebraska (US)); KHAN, Farrukh Aftab (National Centre for Physics (PK)); LETTS, James (Univ. of California San Diego (US))

Presenter: BALCAS, Justas (California Institute of Technology (US))

Session Classification: HTCondor presentations and tutorials

Track Classification: HTCondor presentations and tutorials

Contribution ID: **36**

Type: **not specified**

Configuring HTCondor for ATLAS Multicore

Tuesday, March 1, 2016 9:50 AM (20 minutes)

Configuring ARC/Condor for ATLAS Multicore

This talk will cover the specific measures used at the Liverpool grid site to provide multicore job slots for ATLAS using an ARC CE in front of a CONDOR batch system.

Summary

- Head node configuration
- Workernode configuration
- Provision for scheduling and draining
- Performance
- Alternatives

Primary author: Mr JONES, Stephen (Liverpool)

Presenter: Mr JONES, Stephen (Liverpool)

Session Classification: HTCondor presentations and tutorials

Track Classification: HTCondor presentations and tutorials

Contribution ID: 37

Type: **not specified**

HTCondorCE in DIRAC

Wednesday, March 2, 2016 5:00 PM (30 minutes)

Recently support for the HTCondorCE computing elements was added to the DIRAC grid software.

This presentation will discuss first experience of the ILC VO with running DIRAC pilots and payloads on HTCondorCE instances at CERN and various OSG grid sites, and will present issues and solved issues and possible improvements.

Primary author: SAILER, Andre (CERN)

Presenter: SAILER, Andre (CERN)

Session Classification: HTCondor and the Grid presentations and tutorials

Track Classification: HTCondor Compute Element (CE) presentations and tutorials

Contribution ID: 38

Type: **not specified**

Data analysis in gravitational wave research

Monday, February 29, 2016 3:25 PM (35 minutes)

This presentation describes a sketch of the gravitational wave detector LIGO. It introduces concepts of match filtering in analyzing experimental data and outlines the required computational resources and one realization - the Atlas computing cluster, respectively the HTCondor framework. Finally, results of the experiment are presented.

Primary author: FEHRMANN, Henning (MPI für Gravitationsphysik)

Presenter: FEHRMANN, Henning (MPI für Gravitationsphysik)

Session Classification: HTCondor presentations and tutorials

Track Classification: HTCondor presentations and tutorials

Contribution ID: 39

Type: **not specified**

HTCondor deployment & plans in PIC

Monday, February 29, 2016 3:00 PM (25 minutes)

Short talk to explain about the HTCondor testbed and deployment plans at PIC Tier1.

Primary author: FLIX MOLINA, Jose (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)

Co-authors: ACOSTA SILVA, Carlos (Universitat Autònoma de Barcelona (ES)); CRUZ, Ricard (PIC)

Presenter: FLIX MOLINA, Jose (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)

Session Classification: HTCondor presentations and tutorials

Track Classification: HTCondor presentations and tutorials

Contribution ID: 43

Type: **not specified**

Networking in HTCondor

Tuesday, March 1, 2016 5:00 PM (30 minutes)

Learn how HTCondor navigates the twists and turns of modern networks, filled with firewalls, private networks, and multiple protocols. Topics will include CCB (Condor Connection Broker), shared port, and IPv4/6.

Primary author: FREY, Jaime

Presenter: FREY, Jaime

Session Classification: HTCondor presentations and tutorials

Track Classification: HTCondor presentations and tutorials

Contribution ID: 45

Type: **not specified**

HTCondor-CE and CERN

Wednesday, March 2, 2016 4:30 PM (30 minutes)

Presenter: STEERS, Iain Bradford (CERN)

Session Classification: HTCondor and the Grid presentations and tutorials

Contribution ID: 46

Type: **not specified**

Concepts of the ARC CE - part 1

Thursday, March 3, 2016 9:30 AM (30 minutes)

Presenter: NILSEN, Jon Kerr (University of Oslo (NO))

Session Classification: ARC CE presentations and tutorials

Contribution ID: 47

Type: **not specified**

Migration from a CREAM/Torque cluster to ARC/Condor at the Liverpool T2

Thursday, March 3, 2016 11:00 AM (1 hour)

This talk will cover the specific measures used at the Liverpool grid site to provide multicore job slots for ATLAS using an ARC CE in front of a CONDOR batch system.

Presenter: JONES, Stephen (Liverpool University)

Session Classification: ARC CE presentations and tutorials

Contribution ID: 48

Type: **not specified**

PIC Welcome

Primary author: DELFINO REZNICEK, Manuel (Universitat Autònoma de Barcelona (ES))

Track Classification: Miscellaneous

Contribution ID: 49

Type: **not specified**

PIC welcome

Primary author: DELFINO REZNICEK, Manuel (Universitat Autònoma de Barcelona (ES))

Contribution ID: **50**

Type: **not specified**

PIC welcome

Monday, February 29, 2016 4:30 PM (10 minutes)

Primary author: DELFINO REZNICEK, Manuel (Universitat Autònoma de Barcelona (ES))

Presenter: DELFINO REZNICEK, Manuel (Universitat Autònoma de Barcelona (ES))

Contribution ID: **51**

Type: **not specified**

Feedback session

Wednesday, March 2, 2016 5:30 PM (30 minutes)

Contribution ID: 52

Type: **not specified**

PIC visit instructions

Thursday, March 3, 2016 7:00 PM (20 minutes)

<https://goo.gl/maps/5zJUgw36c6G2>

Presenter: FLIX MOLINA, Jose (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)