

HTCondor Workshop Autumn 2022



Report of Contributions

Contribution ID: 1

Type: **not specified**

User data access and challenges

Wednesday, 12 October 2022 09:50 (25 minutes)

To complement grid production workflows, the National Analysis Facility (NAF) at DESY aims to provide individual users with an easy way without hurdles to process their data fast.

Since users are used to plain file paths, a number of storages are mounted as network mounts on the NAF HTCondor nodes. But with users showing a wide range of access patterns, we encountered occasionally problems with mounts and file access affecting the cluster stability.

To better understand the interplay between users, kernel and file system clients, we are now working on extending our monitoring. With the already available detailed event monitoring on the storage instances, we are going to add a complementary status overview of the execution side with the aim of a consolidated view the of storage and compute clusters.

Desired slot length

15

Speaker release

Yes

Primary authors: SEVER, Krunoslav (Deutsches Elektronen-Synchrotron DESY); FLEMMING, Martin (Deutsches Elektronen-Synchrotron (DESY)); HARTMANN, Thomas (Deutsches Elektronen-Synchrotron (DE))

Co-author: BEYER, Christoph

Presenters: BEYER, Christoph; HARTMANN, Thomas (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Workshop Session

Track Classification: HTCondor user presentations

Contribution ID: 2

Type: **not specified**

Introduction to the HTCondorCE

Tuesday, 11 October 2022 14:00 (30 minutes)

Speaker release

Desired slot length

Presenter: LIVNY, Miron

Session Classification: The HTCondor CE

Contribution ID: 3

Type: **not specified**

Token Transition Status and Discussion and CE future

Tuesday, 11 October 2022 14:30 (20 minutes)

Presenter: LIN, Brian Hua (University of Wisconsin - Madison)

Session Classification: The HTCondor CE

Contribution ID: 4

Type: **not specified**

APEL Accounting and HEP Score

Tuesday, 11 October 2022 14:50 (20 minutes)

Presenter: FISCHER, Max (Karlsruhe Institute of Technology)

Session Classification: The HTCondor CE

Contribution ID: 5

Type: **not specified**

Day to Day maintenance of a CE

Tuesday, 11 October 2022 15:10 (20 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: The HTCondor CE

Contribution ID: 6

Type: **not specified**

A Refreshing talk – Tokens and the CE

Tuesday, 11 October 2022 16:00 (20 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: The HTCondor CE

Contribution ID: 8

Type: **not specified**

HTCondor at CERN

Thursday, 13 October 2022 14:00 (20 minutes)

Speaker release

Desired slot length

Presenter: JONES, Ben (CERN)

Session Classification: Workshop Session

Contribution ID: 9

Type: **not specified**

Session Wrap Up

Tuesday, 11 October 2022 16:20 (30 minutes)

Speaker release

Desired slot length

Presenter: LIVNY, Miron

Session Classification: The HTCondor CE

Contribution ID: **10**

Type: **not specified**

Introduction and Requirements / Goals for capabilities and security

Wednesday, 12 October 2022 14:00 (30 minutes)

Presenter: LIVNY, Miron

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 11

Type: **not specified**

HTCSS Threat Models - What are we protecting and why

Wednesday, 12 October 2022 15:20 (15 minutes)

Speaker release

Desired slot length

Presenter: THAIN, Gregory

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 12

Type: **not specified**

Securing an HTCondor System with IDTOKENS

Wednesday, 12 October 2022 16:05 (40 minutes)

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 13

Type: **not specified**

WLCG Tokens / SciTokens Functionality in HTCSS

Wednesday, 12 October 2022 14:30 (30 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 14

Type: **not specified**

TOFU - Trust on First Use Mechanism

Wednesday, 12 October 2022 15:00 (20 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 16

Type: **not specified**

Session Wrap up

Wednesday, 12 October 2022 16:45 (20 minutes)

Speaker release

Desired slot length

Presenter: LIVNY, Miron

Session Classification: Certificates, Tokens, and Identity: Past, Present, and Future

Contribution ID: 17

Type: **not specified**

Introduction and Story of the Access Point

Thursday, 13 October 2022 09:00 (20 minutes)

Presenter: LIVNY, Miron

Session Classification: The HTCSS Access Point Story

Contribution ID: 18

Type: **not specified**

Bring Your Own HPC Capacity Demo

Thursday, 13 October 2022 09:20 (30 minutes)

Speaker release

Desired slot length

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: The HTCSS Access Point Story

Contribution ID: 19

Type: **not specified**

Direct Attachment of Execution Point to Access Point

Thursday, 13 October 2022 09:50 (15 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: The HTCSS Access Point Story

Contribution ID: 20

Type: **not specified**

Scheduling at the Access Point

Thursday, 13 October 2022 10:05 (20 minutes)

Presenter: THAIN, Gregory

Session Classification: The HTCSS Access Point Story

Contribution ID: 21

Type: **not specified**

Introduction and Story of the Execution Point

Friday, 14 October 2022 09:00 (30 minutes)

Speaker release

Desired slot length

Presenter: LIVNY, Miron

Session Classification: The HTCSS Execution Point Story

Contribution ID: 22

Type: **not specified**

Why Wrappers are Evil

Friday, 14 October 2022 09:30 (30 minutes)

Presenter: THAIN, Gregory

Session Classification: The HTCSS Execution Point Story

Contribution ID: 23

Type: **not specified**

Running jobs inside containers with the new Container Universe

Friday, 14 October 2022 10:00 (20 minutes)

Speaker release

Desired slot length

Presenter: THAIN, Gregory

Session Classification: The HTCSS Execution Point Story

Contribution ID: 24

Type: **not specified**

Job Isolation

Friday, 14 October 2022 10:20 (20 minutes)

Speaker release

Desired slot length

Presenter: THAIN, Gregory

Session Classification: The HTCSS Execution Point Story

Contribution ID: 25

Type: **not specified**

Worker nodes with GPUs

Friday, 14 October 2022 11:10 (20 minutes)

Speaker release

Desired slot length

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: The HTCSS Execution Point Story

Contribution ID: 26

Type: **not specified**

SSH to Job: How it works and why it sometimes doesn't

Friday, 14 October 2022 11:30 (20 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: The HTCSS Execution Point Story

Contribution ID: 27

Type: **not specified**

Support for Job Checkpoints

Friday, 14 October 2022 11:50 (20 minutes)

Speaker release

Desired slot length

Presenter: FREY, James (University of Wisconsin Madison (US))

Session Classification: The HTCSS Execution Point Story

Contribution ID: 28

Type: **not specified**

Wrap Up

Friday, 14 October 2022 12:10 (20 minutes)

Presenter: LIVNY, Miron

Session Classification: The HTCSS Execution Point Story

Contribution ID: 29

Type: **not specified**

Whats new in HTCSS? Whats coming up?

Tuesday, 11 October 2022 09:40 (20 minutes)

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: Workshop Session

Contribution ID: **30**

Type: **not specified**

Pointers to other HTCondor references

Tuesday, 11 October 2022 09:30 (10 minutes)

Presenter: THAIN, Gregory

Session Classification: Workshop Session

Contribution ID: 31

Type: **not specified**

How OSG Increases Goodput with Elasticsearch

Tuesday, 11 October 2022 11:00 (30 minutes)

Speaker release

Desired slot length

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: Workshop Session

Contribution ID: 32

Type: **not specified**

Whirlwind Tour of all Condor Tools

Tuesday, 11 October 2022 10:00 (30 minutes)

Presenter: THAIN, Gregory

Session Classification: Workshop Session

Contribution ID: 33

Type: **not specified**

The HTC/HTCSS Data Story

Wednesday, 12 October 2022 09:00 (25 minutes)

Speaker release

Desired slot length

Presenter: THAIN, Gregory

Session Classification: Workshop Session

Contribution ID: 35

Type: **not specified**

Wrap Up

Thursday, 13 October 2022 10:55 (20 minutes)

Presenter: LIVNY, Miron

Session Classification: The HTCSS Access Point Story

Contribution ID: 37

Type: **not specified**

Submitting sets of jobs

Wednesday, 12 October 2022 09:25 (25 minutes)

Presenter: TANNENBAUM, Todd (University of Wisconsin Madison (US))

Session Classification: Workshop Session

Contribution ID: 38

Type: **not specified**

Exploitation of network-restricted resources at the Barcelona Supercomputer Center by CMS

Tuesday, 11 October 2022 11:30 (20 minutes)

This contribution describes a number of actions and novel solutions introduced by the Spanish CMS community in order to facilitate the inclusion of BSC resources into the CMS computing infrastructure for their use by the collaboration. In particular, new HTCondor developments that allow condor daemons to interact via shared filesystems.

Desired slot length

Speaker release

Yes

Primary author: FLIX MOLINA, Jose (CIEMAT - Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Co-authors: DELGADO PERIS, Antonio (CIEMAT - Centro de Investigaciones Energéticas Medioambientales y Tec. (ES)); PEREZ-CALERO YZQUIERDO, Antonio (Centro de Investigaciones Energéticas Medioambientales y Tecnológicas); ACOSTA SILVA, Carles (PIC); Mr PINEDA, Esteve (UAB); Ms VILLALONGA, Irene (UAB); HERNANDEZ CALAMA, Jose (Centro de Investigaciones Energéticas Medioambientales y Tecno)

Presenter: FLIX MOLINA, Jose (CIEMAT - Centro de Investigaciones Energéticas Medioambientales y Tec. (ES))

Session Classification: Workshop Session

Track Classification: HTCondor user presentations

Contribution ID: 39

Type: **not specified**

Welcome

Tuesday, 11 October 2022 09:00 (10 minutes)

Presenter: BEYER, Christoph

Session Classification: Workshop Session

Contribution ID: 40

Type: **not specified**

Introduction and House keeping

Tuesday, 11 October 2022 09:10 (20 minutes)

Presenter: Mr FRONZE', Gabriele Gaetano (INFN Torino (IT) and LIGO-Virgo-Kagra Collaboration (US/IT/JP))

Session Classification: Workshop Session

Contribution ID: 41

Type: **not specified**

Managing batch Workers using the HTCondor StartD

I will explain how we uses the functionality in the HTCondor Start Daemon to manage and monitor our batch worker nodes

Speaker release

Desired slot length

Presenter: BREW, Chris (Science and Technology Facilities Council STFC (GB))

Session Classification: Workshop Session

Contribution ID: 42

Type: **not specified**

Phasing Out GSI Authentication in the CMS Submission Infrastructure

Tuesday, 11 October 2022 16:50 (20 minutes)

The CMS Computing Submission Infrastructure group manages and exploits a set of HTCondor pools to satisfy the experiment computing needs. The biggest of those pools, the so-called CMS Global Pool, currently aggregates nearly 400k CPU cores dynamically from pledged and opportunistic WLCG resources.

Historically, authentication among the diverse components of the infrastructure used the Grid Security Infrastructure (GSI), based on identities and X509 certificates. However, more modern authentication standards based on capabilities and tokens have emerged over the years. The CMS Submission Infrastructure group is in the process of phasing out the GSI part of its authentication layers in favor of IDTokens and Scitokens. In this contribution we will report on the current status of this migration, and our plans for the final GSI phase out.

Desired slot length

Speaker release

Yes

Primary authors: PEREZ-CALERO YZQUIERDO, Antonio (Centro de Investigaciones Energéticas Medioambientales y Tecnológicas); KIZINEVIC, Edita (CERN); KHAN, Farrukh Aftab (Fermi National Accelerator Lab. (US)); KIM, Hyun Woo (University of Texas at Arlington); MASCHERONI, Marco (Univ. of California San Diego (US)); ACOSTA, Maria (Fermi National Accelerator Laboratory); TSIPINAKIS, Nikos (CERN); HALEEM, Saqib (National Centre for Physics (PK))

Presenter: TSIPINAKIS, Nikos (CERN)

Session Classification: Workshop Session

Track Classification: HTCondor user presentations

Contribution ID: 43

Type: **not specified**

Wrap up and Goodbye

Friday, 14 October 2022 12:30 (20 minutes)

Presenter: BREW, Chris (Science and Technology Facilities Council STFC (GB))

Contribution ID: 44

Type: **not specified**

Gravitational-Wave Computing - Needs and Trends

Wednesday, 12 October 2022 10:50 (25 minutes)

An Idiosyncratic Airing of Grievances, Condor-Style

Desired slot length

Speaker release

Yes

Primary author: COUVARES, Peter (LIGO Laboratory / Caltech)

Presenter: COUVARES, Peter (LIGO Laboratory / Caltech)

Session Classification: Workshop Session

Track Classification: HTCondor user presentations

Contribution ID: 45

Type: **not specified**

Multi tenancy with htcondor

Wednesday, 12 October 2022 11:15 (25 minutes)

At final we have a large unifed cluster.

4 years ago there were three clusters sharing the same infrastructure (network and data center).
A dedicated cluster per team.

We decided to join forces and recreate a large cluster to better utilize the resources.

Docker volumes able us to share compute resources and allow different storage access per team.

In addition for that we are able to go further using docker networks and iptables. it allow us to share phisycal network without the risk of data leaks between teams.

We will discuss about the challenges that we currently facing different job sizes, small pool for fast response and negotiation cycle.

Desired slot length

Speaker release

Yes

Primary author: HANDELMAN, David

Presenter: HANDELMAN, David

Session Classification: Workshop Session

Track Classification: HTCondor user presentations

Contribution ID: 46

Type: **not specified**

Elemento's AtomOS and the path to the true Cloud

Thursday, 13 October 2022 14:20 (20 minutes)

Presenter: Mr FRONZE', Gabriele Gaetano (INFN Torino (IT) and LIGO-Virgo-Kagra Collaboration (US/IT/JP))

Session Classification: Workshop Session