Remote Condor

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Overview

- What is "Remote Condor"?

- Why you may want to use it?

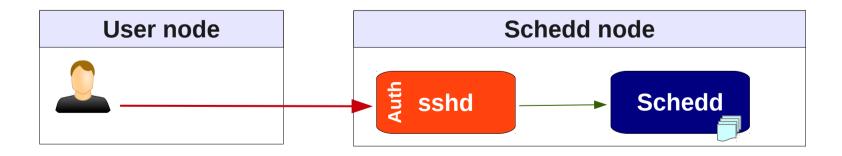- Detailed instructions

- Live demo

What is "Remote Condor"?

- In simple words
  - **Condor over SSH**
- Available from the Condor contrib sections as **RCondor**

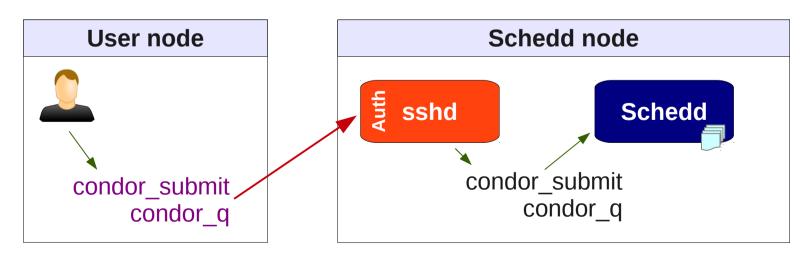   https://condor-wiki.cs.wisc.edu/index.cgi/wiki?p=RemoteCondor

RCondor Commands

- Rcondor provides wrappers for several common Condor command line tools

  - condor_submit, condor_q, etc.

- Looks like local to user
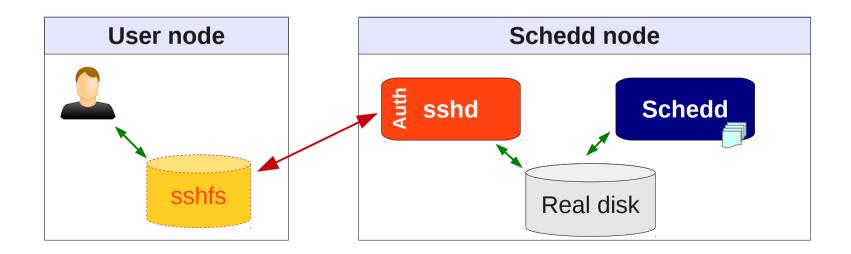
  - In reality, they are executed on the remote node

File handling

- ## Of course, you need access to files
  - ### e.g. JDL, input and output files
- ## Using SSHFS for this
  - ### A popular FUSE file system

Why should you care about it?

- There definitely are alternatives
  - e.g. remote submission and Condor-C

- However, "Remote Condor"
  - Ties nicely with existing auth mechanisms (SSH)
  - No servers to run locally
  - Wifi friendy
  - Easy to install and configure

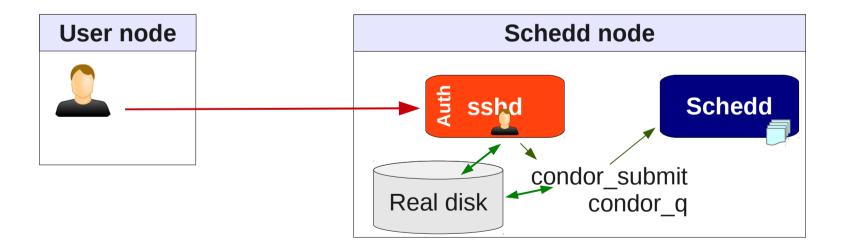Compared to installing
a personal Condor instance

Compared to manual ssh...

- Of course, one can always tell users to explicitly ssh into the schedd node

Compared to manual ssh...

- Of course, one can always tell users to explicitly ssh into the schedd node

- But "Remote Condor" makes it more user friendly

  - Looks and feels completely local

    - And if set up by the sys admin,
      users may even be unaware of the disguise

  - Plus, it can transparently work with GUIs

Remote Condor

Install and configuration instructions

Installation

- **Get Condor SRC tarball**

- **Go into**
  `src/condor_contrib/rcondor`

- **Run**
  `make prefix=/your/location install`

Configure

- ## Per-user configuration in
  `$HOME/.rcondor/rcondor.conf`

- ## Contains 3 lines
  `USR_HOST = user@host`
  `LOCAL = mountpoint`
  `REMOTE = dir`

- ## Helper config tool
  `rcondor_configure user@host:dir mountpoint`

Public key auth strongly preferred (e.g. ssh keys or krb5)

SSH coordinates

SSHFS coordinates

Start work session

- Since you probably don't want to always mount the remote disk

  - Start the work session with `rcondor_mnt`

  - This will make the mount for you

- You are now ready to use Condor

Use Condor

- **All files are accessible in the LOCAL tree directory**

  - Use ls, cp, etc.

  - Or your favorite GUI

- **Standard cmdline syntax**
  ```
  condor_submit my_submit.jdl
  condor_q 12.34
  ```

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Live Demo

Acknowledgments

- ## This work is partially sponsored by

  - the US National Science Foundation under Grants No. OCI-0943725 (STCI) and PHY-0612805 (CMS Maintenance & Operations)

    and

  - the US Department of Energy under Grant No. DE-FC02-06ER41436 subcontract No. 647F290 (OSG).