
ATLAS Connect

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Overview

- Overview of ATLAS Connect
 - Infrastructure
 - FAXbox: a transient storage service
 - Usage
 - Flocking from Tier-3 clusters
 - Panda CONNECT queues to non-WLCG resources
 - Continuous unit testing
 - More documentation in the Tier-3 implementation committee folder: <http://bit.ly/1As1tAz>
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Objectives

- Provide services to:
 - Connect Tier-3 sites to additional resources
 - User login service providing a virtual Tier-3 cluster-like processing environment
 - Connect additional (non-WLCG) resource targets to Panda (CONNECT resource group)
 - Leverage simple, robust services
 - HTCondor, Globus, Xrootd, APF, Panda
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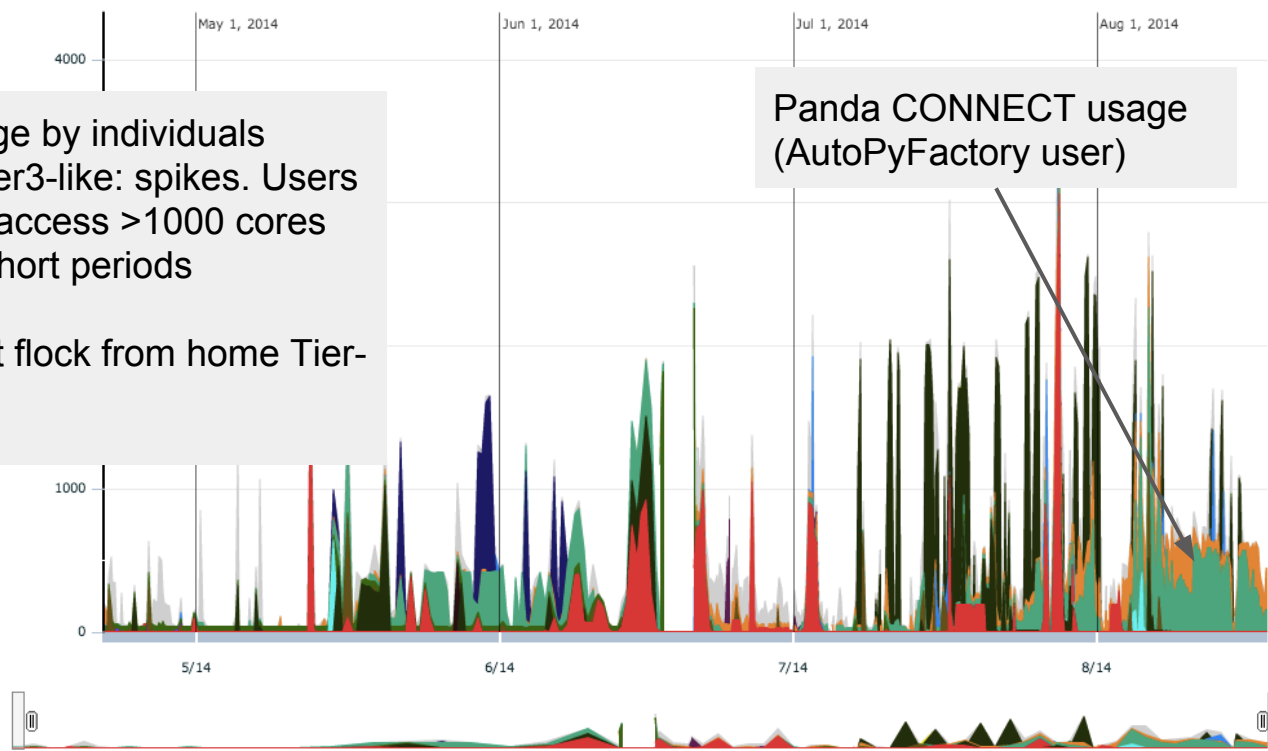
Show: Historical grid usage in all pools

Time Frame: 3 Hours | Day | Week | Month

View as: Area | Line

Usage by individuals is Tier3-like: spikes. Users can access >1000 cores for short periods
Most flock from home Tier-3

Panda CONNECT usage (AutoPyFactory user)



Legend	
■	David Lesny (Illinois)
■	Fred Luehring
■	Samuel Meehan
■	Karol Krizka
■	Christopher Meyer
■	Ilija Vukotic
■	Harinder Singh Baw
■	Peter Onyisi (AtlasC
■	Peter Onyisi (UTexz
■	David Lesny (AtlasC
■	AutoPyFactory
■	Giordon Stark
■	Slot Not Ready
■	Jeff Dandoy
■	Jordan Webster
■	John Allison
■	Hannah Binney
■	yy5295
■	atlasconnect
■	tresreid
■	antonk
■	zihaoj
■	jenkins
■	okumura
■	Unclaimed

Central Infrastructure (@ MWT2)

- VM for the login service, and one VM for the flocking service
 - FAXbox: an RBD on Ceph storage service, shared with OSG Stash.
 - Shared /home and web service
 - Portal and transfer service from Globus
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Distributed resource targets

- Goal is to make the connection lightweight as possible
 - Local site provides a Unix user account
 - We deal with the heterogeneity:
 - IP connectivity, software access, squid, data access
 - Site retains control over priorities
 - Operated by MWT2 staff (w/ OSG web, etc.)
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Flocking from home Tier-3

- Simple to setup a home Tier-3 cluster to optionally flock to additional resources
 - Effort needed for the initial setup on the factory side, troubleshooting, advising
 - Client tool to easily submit “from home” using
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User login service

- A simple sign-up service is available from connect.usatlas.org
 - Authorization through institutional affiliation
 - Responsibility lies with the PI
 - Emulate a Tier 3 login server
 - All the needed tools
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FAXbox

- 90 TB usable on Ceph filesystem (up to 180)
 - Xrootd and http access
 - Gridftp access via Globus Online endpoint
 - POSIX access from login.usatlas.org
 - No sophisticated data management
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Usage examples

Harinder Bawa from CSU Fresno has volunteered to provide usage examples, starting in September

More volunteers needed
