Crabserver with glideins @ UCSD

Architecture at UCSD (Late Binding based System)

- CRABSERVER (glidein-2.t2.ucsd.edu)

Glidein-WMS

- Gfactory (glidein-1.t2.ucsd.edu)

- Collector (glidein-collector.t2.ucsd.edu)

- Frontend (glidein-frontend.t2.ucsd.edu)

- Generic Communication Broker (glidein-gcb-1.t2.ucsd.edu)

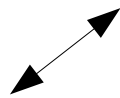- JobMon: Detailed user Monitoring System (glidein-mon.t2.ucsd.edu)

  - Work in progress ..

From client or CMS User point of view (Use the following in the crab.cfg):

  scheduler = glidein
  server_name = ucsd

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CRABSERVER

- **Local MySQL Database**
- **Command Manager**
    - *Interpret commands and dispatch to the components*
- **Crabserver Worker**
    - *All submission acitivities*
- **TaskTracking**
    - *keep info about task under execution*
    - *inform notification service*
    - *generate report about the task*
- **TaskLifeManager**
    - *remove the dropBox after the task is finished*
    - *manage space in the dropBox*
    - *contact notification service at the end of task*
    - *manage the lifetime of the task*
- **JobTracking**
    - *Check the status of the task/Job*
    - *Query interval, Jobs to poll, Poll interval etc.*
- **GetOutput**
    - *Get output operations requested by the JobTracking*

Proxy delegation service
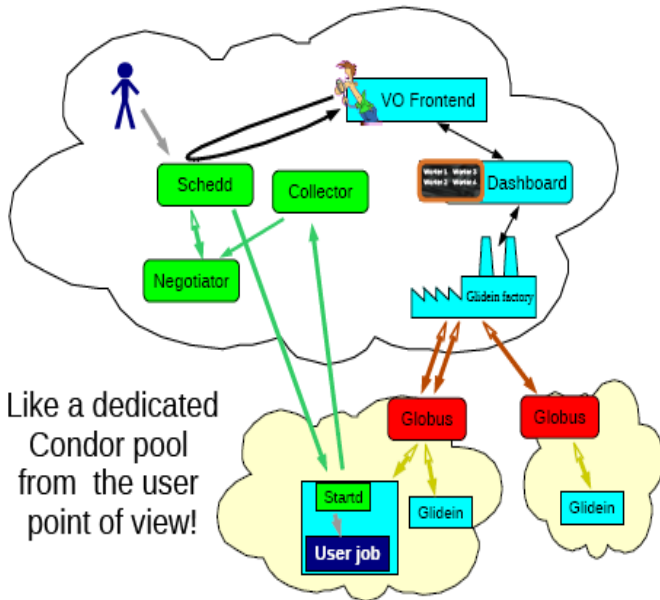- myproxy.cern.ch

Gridftp server

Glide-in WMS

GUMS + PRIMA

GUMS + glexec

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glideinWMS architecture

Schematic view

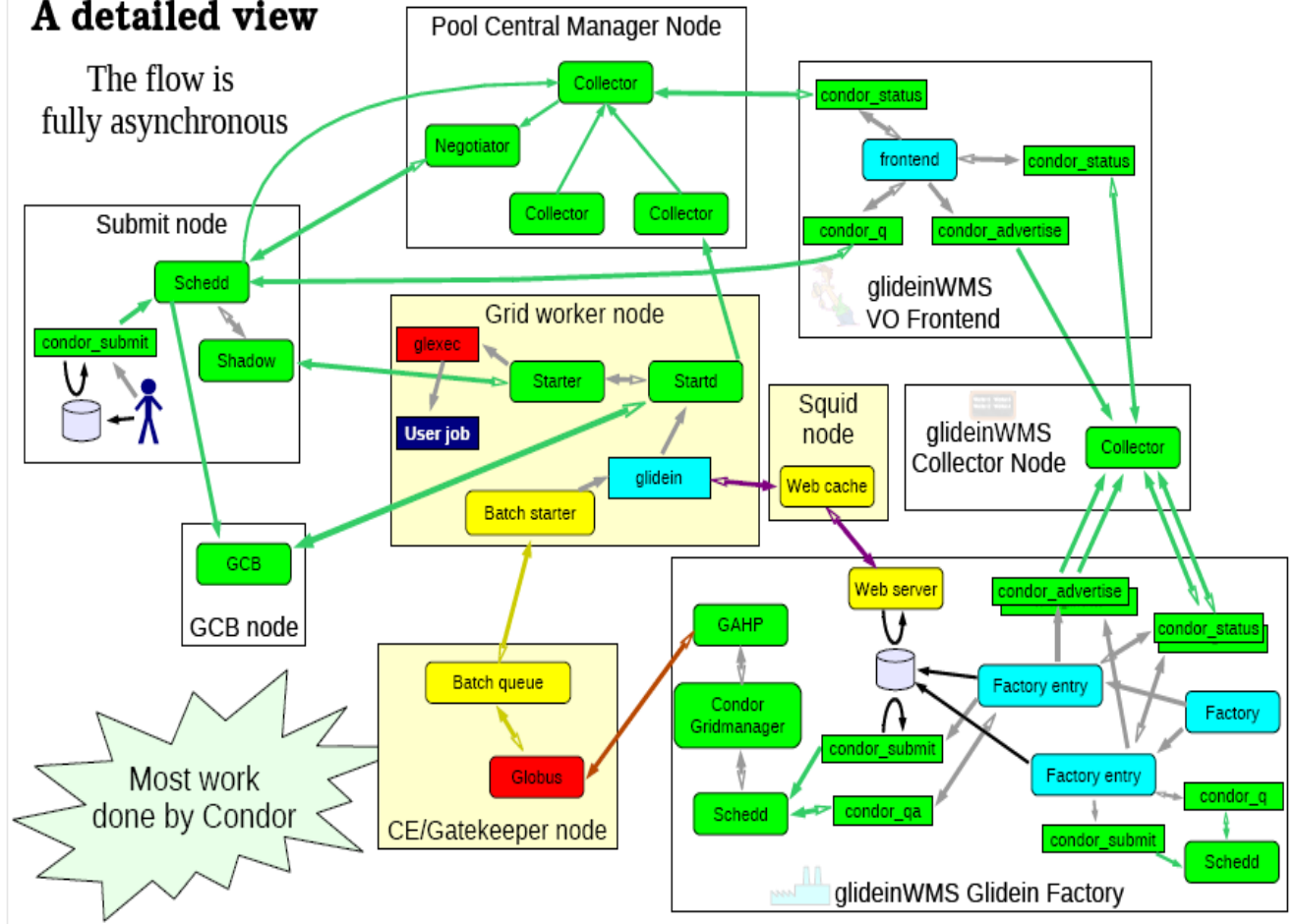Like a dedicated Condor pool from the user point of view!

Legend:

- Condor process
- glideinWMS process
- Grid software
- System software
- glideinWMS domain
- Grid domain (OSG, EGEE and NorduGrid tested)

A detailed view

The flow is fully asynchronous

Pool Central Manager Node

Submit node

Grid worker node

Squid node

glideinWMS VO Frontend

glideinWMS Collector Node

GCB node

Most work done by Condor

CE/Gatekeeper node

glideinWMS Glidein Factory

For more details see http://www.uscms.org/SoftwareComputing/Grid/WMS/glideinWMS/doc.html

Crabserver with glideins @ UCSD

JobMon: *(thanks to Subir Sarker, INFN)*

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JobRobots using Crabserver @ UCSD

JOB DETAILED VIEW

total: 25987 (seeing 0 to 50)

[prev 50] [next 50]

num	JobId	Site	Grid Status	ExitCode	IdInTask	NEvReq	NEvProc	Submitted	Started	Finished	Task	IP	Target
1	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/1	T2_BE_IIHE	DONE	0	1	642	642	2009-02-23 00:10:14	2009-02-23 00:40:50	2009-02-23 00:50:55	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
2	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/10	T2_BE_IIHE	DONE	8001	10	0	0	2009-02-23 00:10:15	2009-02-23 00:42:41	2009-02-23 00:42:50	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
3	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/100	T2_BE_IIHE	DONE	0	100	642	642	2009-02-23 00:10:21	2009-02-23 01:04:58	2009-02-23 01:13:48	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
4	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/11	T2_BE_IIHE	DONE	0	11	642	642	2009-02-23 00:10:15	2009-02-23 00:42:39	2009-02-23 00:53:43	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
5	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/12	T2_BE_IIHE	DONE	8001	12	0	0	2009-02-23 00:10:15	2009-02-23 00:42:41	2009-02-23 00:42:53	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
6	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/13	T2_BE_IIHE	DONE	0	13	642	642	2009-02-23 00:10:15	2009-02-23 00:43:19	2009-02-23 00:53:43	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
7	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/14	T2_BE_IIHE	DONE	0	14	642	642	2009-02-23 00:10:15	2009-02-23 00:43:40	2009-02-23 00:55:11	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
8	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/15	T2_BE_IIHE	DONE	8001	15	0	0	2009-02-23 00:10:15	2009-02-23 00:43:39	2009-02-23 00:43:49	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
9	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/16	T2_BE_IIHE	DONE	0	16	642	642	2009-02-23 00:10:15	2009-02-23 00:44:02	2009-02-23 00:57:06	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
10	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/17	T2_BE_IIHE	DONE	8001	17	0	0	2009-02-23 00:10:15	2009-02-23 00:46:35	2009-02-23 00:46:46	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
11	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/18	T2_BE_IIHE	DONE	0	18	642	642	2009-02-23 00:10:15	2009-02-23 00:46:19	2009-02-23 00:58:27	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
12	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/19	T2_BE_IIHE	DONE	8001	19	0	0	2009-02-23 00:10:15	2009-02-23 00:46:17	2009-02-23 00:46:28	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
13	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/2	T2_BE_IIHE	DONE	0	2	642	642	2009-02-23 00:10:14	2009-02-23 00:40:50	2009-02-23 00:51:00	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
14	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/20	T2_BE_IIHE	DONE	0	20	642	642	2009-02-23 00:10:15	2009-02-23 00:46:19	2009-02-23 00:58:06	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE
15	https://glidein/00d2173d96cb6bc45c1271ee10ca54017f665126/21	T2_BE_IIHE	DONE	0	21	642	642	2009-02-23 00:10:15	2009-02-23 00:46:22	2009-02-23 00:59:01	belforte_crab_0_090223_010949	193.190.247.140	44_Selected_SE

Entertaining about ~25k JobRobot jobs !!!

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Issues, problems, feedback to - t2support@physics.ucsd.edu