GlideinWMS - Bug #5955

Frontend overprovisioning multicore glideins

04/17/2014 04:26 PM - Igor Sfiligoi

Status:	Closed		**Start date:**	04/17/2014
Priority:	High		**Due date:**	
Assignee:	Parag Mhashilkar		**% Done:**	0%
Category:	Frontend		**Estimated time:**	0.00 hour
Target version:	v3_2_7		**Spent time:**	0.00 hour
First Occurred:			**Stakeholders:**	
Occurs In:				

Description

The Frontend logic for calculating the number of glideins to requests assumes one job per glidein;
which may not be true for multicore glideins.

This results in requesting too many glideins, especially when there are only a few matching jobs in the queue.

Related issues:

Related to GlideinWMS - Bug #2441: Accounting issues for new glidein types	**New**	**01/31/2012**

History

#1 - 07/08/2014 09:18 AM - Parag Mhashilkar

- Target version changed from v3_2_6 to v3_2_7

#2 - 07/28/2014 03:01 PM - Burt Holzman

- Priority changed from Normal to High

#3 - 07/30/2014 02:56 PM - Parag Mhashilkar

Talked to Igor about this issue as this affects/needs coordination with the operations.

Proposal (Draft)

- Entry should be configured with GLIDEIN_CPUS and it should be advertised as part of the glidefactory classad. GLIDEIN_CPUS can be a numeric value or auto. This scheme works well with numeric value but not auto. In case of auto, there is no good way of identifying the info unless we assume a number.

- Frontend uses GLIDEIN_CPUS from the glidefactory classad. If not available, or set to AUTO assumes 1.

- Frontend looks for RequestCpus in the jobs classad to determine the cpus requested. If not specified, assumes 1.

- When frontend tries to figure out the sites for every job, we request glideins at sites that provide N+ cpus only.

- Frontend tries to figure best number of glideins it should request per entry in this case and makes the request accordingly.

Known Issues

- There is no costing and all the sites are treated equal.

#4 - 08/21/2014 11:20 AM - Parag Mhashilkar

- Status changed from New to Feedback

- Assignee changed from Parag Mhashilkar to Marco Mambelli

I am done with my testing and this should be good for review. Changes are in the branch v3/5955

#5 - 08/25/2014 03:07 PM - Marco Mambelli

- Assignee changed from Marco Mambelli to Parag Mhashilkar

Feedback sent (in short ready to be committed)

#6 - 08/27/2014 10:57 AM - Parag Mhashilkar

- Status changed from Feedback to Resolved

Merged into respective branches.

#7 - 10/15/2014 10:16 AM - Parag Mhashilkar

- Status changed from Resolved to Closed