



Corporate Citizenship & Corporate Affairs

# World Community Grid

## Some interesting things we been doing this past year

- Increase Throughput
  - **Redundancy Elimination**
  
- ‘Addictive Computing’ – Attract, Retain and Entertain Members
  - **Team Challenges**
  - **Widget**
  - **Emails**
  - **Badges**
  - **Coming soon - Badge enhancements**
  - **Coming soon – Plateau's/Certificates**
  - **Coming soon – Personal Event Feed**
  - **Coming soon – Facebook Application Upgrades**

## Redundancy Elimination

- We have a lot of work to be processed for our five active projects
- In order to increase the amount of work completed on the grid, we are moving to minimize the number of replicas distributed while also providing high confidence in the validity of the results returned
- Two of our projects, Discovering Dengue Drugs – Together and FightAIDS@Home are now using this new technique. The average number of replicas for each workunit has dropped from 2.3 to 1.2

# Redundancy Elimination

- How does this work
  - **Two new fields in project config xml file:**
    - `single_validation_check_percent` – Assigns the % of results that are validated on their own that will be randomly sampled (i.e marked inconclusive and another copy sent out)
    - `single_validation_max_error_rate` – The max error\_rate of a host that is allowed to participate in single validation
  - On scheduler request, while a result is assigned to a host, then if `min_quorum = 1` for the workunit, then check to see if the `host.error_rate <= single_validation_max_error_rate` if it is, then proceed. If not, then modify the workunit record to generate an additional copy and require a quorum of 2
  - On validation, call new method in custom validator called `check_one`. Projects should

# Redundancy Elimination

- How does this work - continued
  - On validation, call new method in custom validator called `check_one`.  
Recommendations:
    - Include in the result file, some computation (preferably one that is actually part of the research application itself) that can be quickly checked at the server to confirm that the computation proceeded as expected
    - Make sure that this is based on data sent for the workunit so that a member doesn't return the same result file repeatedly
    - We include 5 minute test of a known computation that we check as well. We use this for testing the correct processing of the workunit as well as for credit determination

# Team Challenges

- Any team captain can create a challenge
- Either open to all team or just a few specific invited teams
- Keep on most results returned, cpu time contributed or points earned
- Not part of standard BOINC

## Team Challenge Detail

Challenge Name: **THE 200 MILLIONTH RESULT RACE**

Created By: [World Community Grid](#)

Open Challenge?  Yes

Start Date: 08/01/2008

End Date: 08/25/2008

Challenge Type: Results Returned

Late Entrants Allowed? Yes

Statistics Last Updated: 09/08/2008 23:59:59 (UTC) [9 hour(s) ago]

### Scoreboard

Team Name	Current Score
<a href="#">UserFriendly.Org</a>	72,180
<a href="#">L'Alliance Francophone</a>	36,507
<a href="#">Dutch Power Cows</a>	31,684
<a href="#">France</a>	25,588
<a href="#">Fansub for Research</a>	20,273
<a href="#">Rechenkraft.net</a>	14,816
<a href="#">Christians</a>	14,008
<a href="#">Minnesota Crunchers</a>	12,269
<a href="#">MyOnlineTeam</a>	10,502
<a href="#">BitBenderTech</a>	10,329
<a href="#">Bulgaria</a>	8,160

# Widget

- A bit of HTML that can be placed on any website (within a iframe)
- Can show team or user stats (or none) – lots of choices
- Future Enhancement – Image version for use in email or forum signatures
- Not part of standard BOINC (but some BOINC stats provide something similar)

**Download**

- ▶ Spiel
  - Fanseiten Kit
  - Hintergründe
  - Videos

Spiel herunterladen

Spielhilfe

world community grid.

**gpotato:**  
10,311,411 Points

[Join World Community Grid today!](#)

## System Requirements

System	Standard
CPU	Pentium III
RAM	128 MB
VGA	GeForce 2

- ▶ DirectX 9.0 or better required
- ▶ Recommended Graphic Driver should be installed
- ▶ You can download recommended drivers below

## Full Game and Patches

- ▶ Download Flyff client file from one of the mirrors

GAMONA Download

GameGuard Folder Download

MMORPG-Planet Download

## Driver Download

ATI Graphic Driver

# Emails

- Automated emails to reach out to members
- Once registered, if they have not attached a device in three days we send an email letting them know and point them to the installation directions as well as help FAQs
- Once they are registered and have a device attached, if they have not earned credit in 21 days, we send an email letting them know. We offer pointers on things to check and how to increase usage of their computer
- Once they first earn credit, we send them a congratulations and thank you email
- 60 days after the last result returned by a member, we send an email inviting them to return. About 10% of members who left return after receiving this email – many had simply forgot they were participating and received a new laptop. These happily rejoin

# Badges

- A icon that is 'earned' once a user contributes 14 days of cpu time to one of our projects
- Displayed on the member information page and next to their name in the forums
- Not part of standard BOINC

Author	
astrolab Advanced Cruncher	<b>Re: FA@H Single Redundancy Change</b>
We shall never surrender Joined: Jul 9, 2008 Posts: 56 Status: Offline Project Badges:	and away we go!
    	[Sep 2, 2008 4:54:12 PM]  

Statistics	clemsontiger
Total Run Time (y:d:h:m:s) (Rank)	176:000:20:32:50 (#20)
Points Generated (Rank)	148,257,939 (#14)
Results Returned (Rank)	237,650 (#24)
Avg. Run Time Per Calendar Day (y:d:h:m:s)	0:307:08:56:26
Avg. Run Time Per Result (y:d:h:m:s)	0:000:06:29:15
Average <a href="#">Points</a> Per Hour of Run Time	96.16
Average <a href="#">Points</a> Per Calendar Day	709,368.13
Average <a href="#">Points</a> Per Result	623.85
Avg. Results Per Calendar Day	1,137.08
Last Result Returned ( <a href="#">UTC</a> )	09/09/2008 00:05:33 [9+ hour(s) ago]
Device Installations	1,070
Registered Member Since	02/14/2008
Project Badges	    

# Badge Enhancements

- Gold, Silver and Bronze badges at different levels of contribution
  - Not yet released

## My Statistics

Welcome back **knreed**  
Registered Member Since: Mar 12, 2007 9:34:55 PM

Statistics By Projects					
Project	Points Generated	Results Returned	Total Run Time	Results In Progress	Badges Earned
AfricanClimate@Home	8,598	14	0:017:20:46:31		
Discovering Dengue Drugs - Together	50,740	278	0:043:21:55:09		
FightAIDS@Home	108,546	510	0:094:19:09:51	<a href="#">3</a>	
Genome Comparison	16,047	133	0:009:16:08:01		
Help Conquer Cancer	26,929	76	0:049:07:09:50		
Human Proteome Folding - Phase 2	19,611	120	0:026:09:56:37		
Nutritious Rice for the World	18,348	644	0:014:20:39:49		

## Other upcoming enhancements

- BOINC already has certificates, but we don't so we will add them
- Certificates will be earned when a member reaches a certain 'plateau' (based on runtime contributed)
- We will also add a 'personal event feed' which is a history of when a member reaches certain milestones or does certain things
  - **Registration**
  - **Join a team**
  - **Earn a certain level of a badge**
  - **Reach a plateau**
  - **Available on website and via RSS**
- We know have projects that finished running and are starting to publish papers on the results and have completed post processing of data. We will be starting to revise our website to start to emphasize what has been accomplished so far – naturally using it as a lead in to why someone should join and contribute now

# Facebook

- We have an existing app created by a summer intern in 2007. It was a good start but not integrated with data that can be pulled from the website
- A group of volunteers within IBM is now enhancing the application
- New version will evolve to show badges, plateau's and personal event feed. It will also pull data from our website rather than requiring members to manually input
- The personal event feed will be able to publish into the members facebook news feed