BOINC Volunteer Community in Mainland China

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BOINC Workshop 2013, Grenoble, France

分布式计算论坛
Distributed Computing Forum in Chinese

Current situation
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Activities
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Suggestions
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Current situation

China, its potential

- Ranked 12 in BOINC total credit world position, with low BOINC adoption rate
- Boosting economics $\Rightarrow$ potential in computational power
- Emerging research projects in BOINC
- Mature volunteer community (Team China, http://www.equn.com/)

Statistics from BOINCstats, retrieved on 10 Aug 2013

Current situation   Activities   Suggestions
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Current situation

Team China

- **Largest BOINC volunteer community in Mainland China**
  Ranked 8 in all teams
- **Good communication**
  Ranked 6 in BOINC Pentathlon 2013
- **Established infrastructure**
  A forum, a wiki, several IM groups, several social network accounts
- **Active contributors**
    - An active community (~ 100 posts per day on forum)
    - Regular and spontaneous knowledge sharing (wiki, translations, tutorials, hardware technology, popular science writings, etc.)
    - Regular competitions (the Herculean group)

  Statistics from BOINCstats, retrieved on 10 Aug 2013

Current situation
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Current situation

Our wiki

Community composition

- Young members (high school students, undergraduates)
  knowledge sharing
- Academics (PhD candidates, researchers, developpers)
  thinking tank
- Core members (IT professionals, hardware maniacs, middle class)
  main contributors, experience sharing

All play important roles in different aspects.
Of course categories overlap...

Current situation
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Activities

China, its obstacles

- **Language barrier**
- Ignorance and disrespect towards science
- Shortsighted self-centered pragmatism
- Xenophobia
- Anti-governmental thinking

The flesh is willing but the mind is weak.
But we are working on it.

Translations

Translations break language barrier.

- BOINC software translation (client, server side)
- News translation
- Contribution to our wiki
- Document translation (popular science, technical details, etc.)
- Technical tutorials

A subforum is dedicated to the organization of translations.

Current situation
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Activities

Popularizing BOINC

There are **human beings** behind crunching machines.
An audience, a strategy.

- **General public**
  BOINC for public welfare: finding drugs, basic research, Chinese research
  Mass media coverage, social media

- **Hardware maniacs**
  BOINC as a benchmark: torture test, CPU and GPU performance
  Hardware sites, cooperation with hardware e-commerce

- **Science lovers**
  BOINC for research: participate in real science
  Popular science writing

Mostly sporadic. We are still rather unexperienced.

Current situation
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Grassroot projects

Not only we **help** volunteer computing projects, we also **hold** them.

- **PISegment** (2006 - 2007)
  Held by Jianan Hao, aimed at computing the two thousand trillion-th (2×10^{15}) binary digit of π

- **Graceful Tree Verification** (2008 - 2010)
  Held by Wenjie Fang, aimed at verifying a long-standing conjecture in combinatorics

- **RamseyX** (2013 - now)
  Held by Zizheng Tai, Peiqi Yang *et al.*, aiming at improving lower bounds of Ramsey numbers

Our community support them not only in computational power, but also technically, financially and morally.

Current situation
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Activities

More peripheral effort

We do much more than crunching.

- Technical support in native language
- Moral support for Chinese projects
- Community bonding
- Hardware sharing

And we are trying to do even more.

- Inter-team communication (via competitions and news diffusion)
- Communicating volunteers' needs on BOINC software

Current situation
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Suggestions

Help is needed

We can do better if projects and developers can support us.

- Better optimization and open source
- Better translation framework for BOINC server side
- More scientific information, preferably on multiple levels
- Frequent status update, more transparency
- More detailed document for BOINC server side
- etc...

Current situation
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Suggestions

Thank you for your attention!

中国分布式计算总站
Distributed Computing Information in Chinese

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English section in our forum:
http://www.equn.com/forum/forum-46-1.html