TFCC / TCDP / TCPP / TCSA
and Proposal for a new
TC on Scalable Computing (TCSC)

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http://www.ieeetfcc.org

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Problem(s)

- TFCC → tabled since 2002
  - It was on hold due overlap issues
  - Opposition to gaining TC status from TCPP and TCDP (and somewhat TCSA)
- TCSA → non-existent for a few years before 2002 → waiting for the overall situation to clear

Road to a Solution

- Early solution proposal $\rightarrow$ creation of a Council $\rightarrow$ turned out to be premature.

- Conference calls involving TCDP, TCPP, TFCC and TCSA Chairs.

- Possible intermediate solution has been worked out

- History and data first

TFCC Introduction

- TFCC created in 1999 to cover cluster computing research, development, and education.

- TFCC activities
  - professional events
  - publications
  - regional programs
  - guidelines for educational programs
  - WWW site / portal
  - bi-annual newsletter

Scope and Events

- TFCC covers all aspects of clusters, clusters of clusters and the grid

- Three major annual events:

  - International Conference on Cluster Computing – started in 1999.

  - International Symposium on Cluster Computing and the Grid (CCGrid) – started in 2001.

  - International Workshop on Grid Computing – started in 2000.

Intl. Cluster Computing Conf.

- Cluster 1999, Melbourne, Australia, Dec 1999, 105 delegates.
- Cluster 2000, Chemnitz, Germany, Nov 2000, 161 delegates.
- Cluster 2001, Newport Beach, California, Oct 2001, 304 delegates.
- Cluster 2002, Chicago, Sep 2002, 283 delegates.
- Cluster 2003, Hong Kong, China, Dec 2003, 176 delegates.
- Cluster 2004, San Diego, California, 2004, expect 250+ delegates.
- Cluster 2005, Boston.
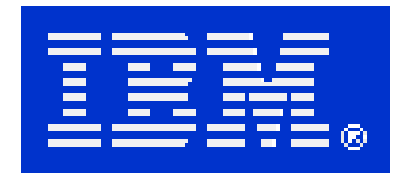- Cluster 2006, proposal from Barcelona.

IEEE/ACM CCGrid

- CCGrid 2001, Brisbane, Australia, May 2001, 165 delegates
- CCGrid 2002, Berlin, Germany, May 2002, 250 delegates.
- CCGrid 2003, Tokyo, Japan, May 2003, May 11-16, 2002, ~300 delegates.
- CCGrid 2004, Chicago, USA, April 2004, 200+ delegates.
- CCGrid 2005, Cardiff, UK, May 2005.
- CCGrid 2006, Singapore.
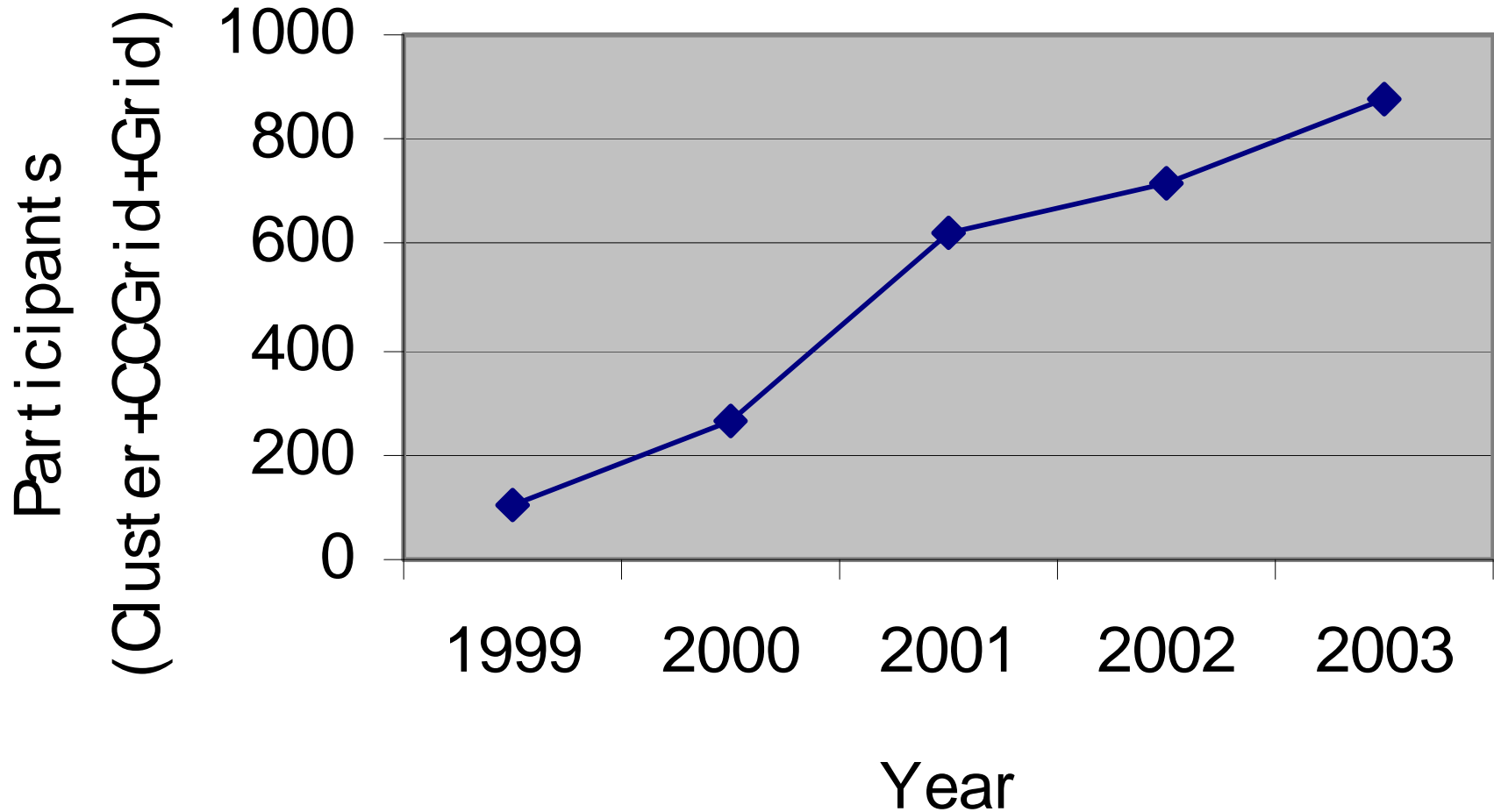- CCGrid 2007, proposal from Brazil.

IEEE/ACM Grid Workshops

- Grid 2000, Dec 2000, Bangalore, India, 105 delegates.
- Grid 2001, Nov 2001, Denver, Colorado, held in conjunction with SC 2001, 150+ delegates.
- Grid 2002, Nov 2002, Baltimore, MD held in conjunction with SC 2002, 150+ delegates.
- Grid 2003, Nov 2003, Phoenix, AZ held in conjunction with SC 2003, 400 delegates.
- Grid 2004, Nov 2004, Pittsburgh, held in conjunction with SC 2004.

Some external sponsors of TFCC events

Attendance Growth in TFCC Events

Started: Cluster'XY Grid'XY CCGrid'XY

TFCC
IEEE Task Force on Cluster Computing

- Introduction
- Technical Areas
- Education
- Book Donation
- Conferences
- Membership
- Press Articles
- Newsletter
- Annual Reports
- Regional Activities
- Executive Committee
- Advisory Committee
- Service Awards
- TopClusters Project
- CC Archive
- www.ieeetfcc.org
- Mirrors: AU & UK
- Contact Details

IEEE
TFCC

Welcome to the
IEEE Computer Society Task Force on Cluster Computing!

Invitation: CCGrid 2005 and Cluster 2004, and Grid 2004 events.

The TFCC is an international forum promoting cluster computing research and education. It participates in helping to set up and promote technica...   ...sis, development and implementation o...   ...environments, application tools and utilities...

TFCC Web site:
http://www.ieeetfcc.org

The TFCC spons...   ...tional programs, as well as help co-ordinate academic, funding agency, and industry activities in the above areas. The TFCC organizes annual conferences and hold a number of workshops that would span the range of activities sponsored by the Task Force. In addition, TFCC publishes a bi-annual newsletter to help IEEE/Computer Society members keep abreast of the events occurring within this field.

For latest updates in cluster computing, please check out our TFCC newslettter at: http://www.clustercomputing.org/.

Done   Internet

Technical Areas and Leaders

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Technical Areas

The TFCC's technical areas (but not limited to) and its coordinators are listed below. Please contact respective coordinators or TFCC chairs if you have any comments links to be added.

Network Technologies	Salim Hariri (Arizona, USA)
OS Technologies	Hank Dietz (University of Kentucky, USA)
Programming Environments	Tony Skjellum (MPI Softech, USA)
Parallel I/O	Erich Schikuta (Wien, Austria)
Java Technologies:	Geoffrey Fox (NPAC, Syracuse, USA)
Algorithms and Applications	Marcin Paprzycki, (USM, USA); and David Bader, Uni. of New Mexico, USA.
Analysis and Profiling Tools	Dan Reed (UIUC, USA)
Storage Technologies	Mazin Yousif (IBM, USA)
High Throughput Computing	Miron Livny (University of Wisconsin at Madison, USA)
High Availability:	Ira Pramanick (Sun Microsystems, USA)
Single System Image	Toni Cortes (Universitat Politecnica de Catalunya, Spain)
Performance Evaluation	Jack Dongarra (University of Tennessee at Knoxville and ORNL, USA)
Software Engineering	Peter Luksch (Technical University, Muenchen, Germany)
Education	Barry Wilkinson (UNCC, USA)
Newsletter	Frank Sommers, University of Southern California
Industrial Contact	Rawn Shah (Sun World Journal, USA)

Internet

Regional Activities

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Address http://www.ieeetfcc.org

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TFCC Regional Activities

Africa	Yinong Chen, University of the Witwatersrand, South Africa
Australia	Hong Shen, Griffith University, Brisbane
Canada	Harjinder Sandhu, York University, Toronto
China	Hai Jin, ,HUST, China / Uni of Souther California, USA
Europe	Wolfgang Gentzsch, Genias Software, Germany
Hong Kong	Cho-Li WangHong Kong University, HK
India	Srigurunath Chakravarthi,MPI Software Technology India, Bangalore and R. K. Shyamasundar, Tata Institute of Fundamental Research, Bombay
Israel	Orly Kremien, Bar-Ilan University, Israel
Japan	Yutaka Ishikawa, Real World Computing Partnership
Middle-East	Shahriar Shahhoseini, Iran University of Science and Technology
South America	Ricardo Bianchini, Federal University of Rio de Janeiro, Brazil
Thailand	Putchong Uthayopas, Kasetsart University, Bangkok
Taiwan	Chung-Ta King, National Tsing Hua University, Hsinchu
USA	Daniel S. Katz, NASA Jet Propulsion Lab., California Institute of Technology and Amin Vahdat, University of California @ San Diego.

Book Donation Program

- http://www.ieeetfcc.org/edupromote.html
- Over 1200 copies of books and journals have been donated to faculties all over the world as part of educational promotion programme.
- In co-operation with many international publishers and authors.
- 50% reserved for faculties working in less developed countries.

IEEE Task Force on Cluster Computing Newsletter - Mozilla Firefox

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http://www.clustercomputing.org/

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Newsletter of the IEEE Computer Society's
Task Force on Cluster Computing

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IEEE COMPUTER SOCIETY

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About the TFCC

The IEEE Computer Society's Task Force on Cluster Computing is an international forum promoting cluster computing research and education. It participates in helping to set up and promote technical standards in that area. If you are not already a member, we invite you to join the TFCC.

- ◆ Editor's letter

Contribute

The Newsletter is a collaborative effort of the cluster and high-performance computing community. Your contributions are essential to keep this a vital forum for praticioners in the field. Please use these links to submit information, or find out more about:

- ◆ Conferences, workshops
- ◆ News items, reviews, or articles
- ◆ Comments

March-April, 2004   Vol. 6, No. 1

Windows Clusters
at Cornell
David Lifka
Cornell Theory Center

In May of 2002, the Cornell Theory Center made the strategic choice to design and develop a high-performance computing facility that operates entirely on the Windows platform. This article summarizes Cornell's experience with Windows clusters, and reports on some of the

http://www.clustercomputing.org

Cluster and High-Performance Computing Forums

In conjunction with Artima.com   Post a new topic

Jini and Java grid computing
   1 message
Windows-based cluster computing
   1 message
Cluster/HPC Discussion Forum
   1 message

News and Announcements

From IEEE IASC, The University of Melbourne and Cornell Theory Center

Clusters in the news
[Post news item]

June, 2004

6/7: Appro Showcases Linux And AMD Opteron Processor-based Cluster And Quad Servers At DAC

Appro will be demonstrating the Appro HyperBlade Cluster Solution and the 1U and 4U Quad AMD Opteron processor-based servers at the Design Automation Conference (DAC), in San Diego, CA, booth number 4534.

6/2: Next-generation BIOS Boasts Network, Security Features

...nched a family of ...mware aimed at ...and manageability of ...Cs, notebooks, servers, embedded devices, and the networks that connect them.

6/2: Quadrics Adds Lower-end Supercomputer Switch

Quadrics, a company that sells networking gear to link lower-end machines into a cluster that acts like a single high-performance computer, has begun selling its newest technology to smaller customers

6/1: Linux Networx Gets Into The Grid Game

The Evolocity cluster solution from Linux Networx can be deployed with grid software from Platform Computing and open source grid standard Globus to help customers make better use of IT resources and run jobs across

Other Activities

- Computing Research Repository on Cluster Computing
  - part of the ACM/Los Alamos e-Print archive
  - http://arxiv.org/archive/cs/intro.html
- TopClusters – joint effort with Top500
  - http://www.ieeetfcc.org/TopClusters
- TFCC Whitepaper
  - http://dsg.port.ac.uk/~mab/tfcc/WhitePaper/

TFCC Membership

- Over 608 registered members (as of a year ago)

- Over 800 members on the TFCC's Open Technical Discussion mailing list <tfcc@clustercompting.org>
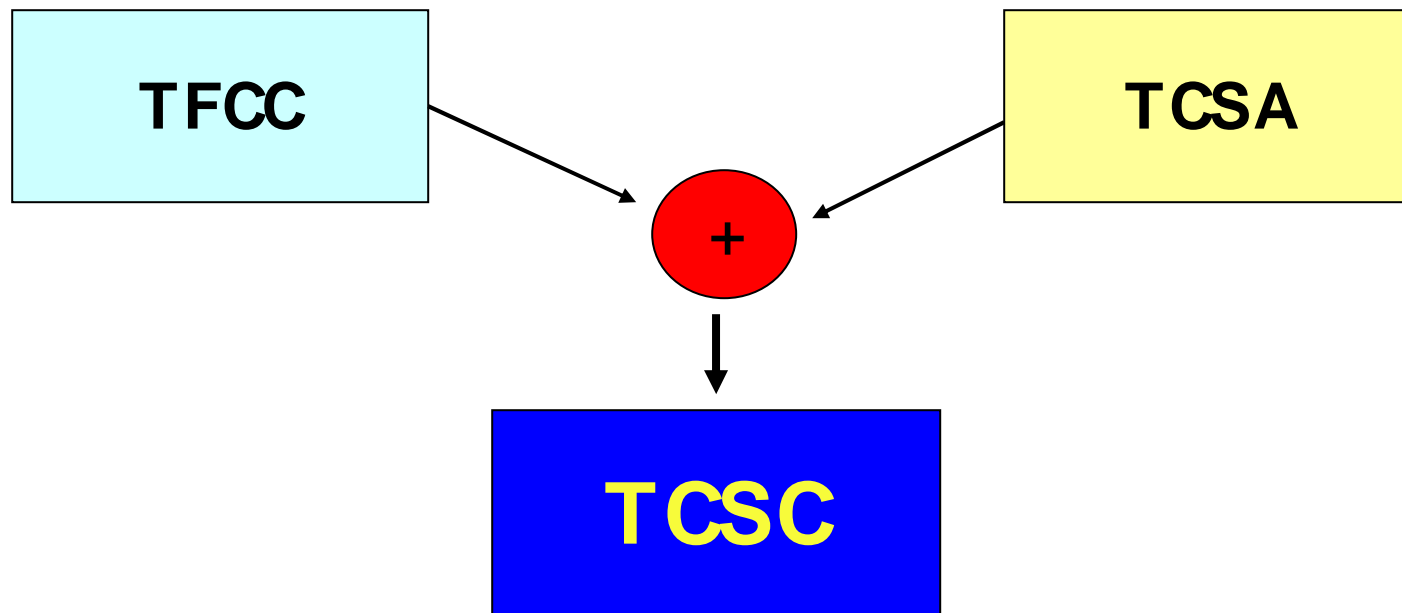
TCSA

- Main conference $\rightarrow$ SC'xx $\rightarrow$ last year 7,500 attendees
- Second conference PARELEC
- Membership 850 - 325 $\approx$ 500
- Executive Committee created in April, 2004
- WWW site created in May, 2004
- Newsletter of SC'xx + other TCSA items send out mid-May 2004

PROPOSAL

- Merger of TFCC and TCSA into

  TC on Scalable Computing (TCSC)

- Merged charter (clusters, grids and supercomputing applications) and activities.

Future

- Details of transition ready for TAB in November.
- Create a Technical Steering Committee (TSE) involving
  - TCSC / TCDP / TCPP
  - IEEE Distributed Systems (online)
  - Transactions PDS
  - Conferences
  - …?
- Future-future → Council