

INSPUR HPC Development

-Industrial Perspective of China

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2. Introduction of INSPUR HPC
3. Being A Responsible HPC Company

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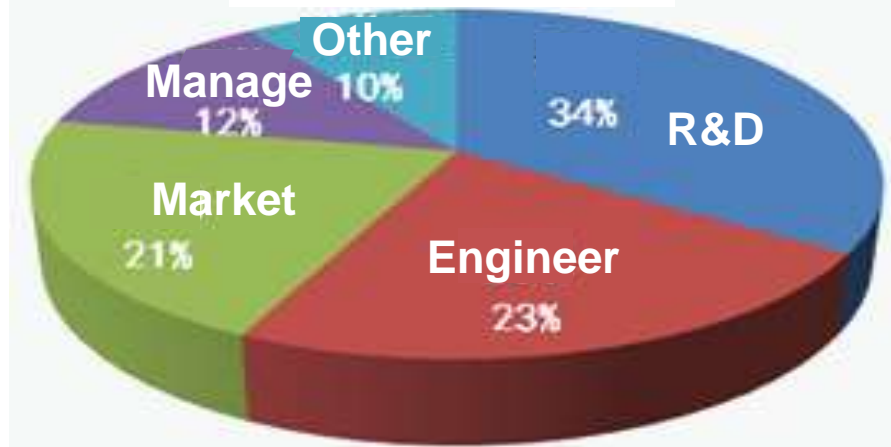
Introduction Of INSPUR Group

A leading IT company since 1945

Employees >11K



Turnover of INSPUR group



Three Stocks

INSPUR Soft (600756)
Shanghai shares

INSPUR Info (000977)
Shenzhen shares

INSPUR International (596.HK)
Hong Kong shares

Introduction Of INSPUR Group



IT experiences > 60 years



1945-1980 Mainframe

1980-1995 Personal computer

1945, Taichang instrument plant (Shanghai)

1960, educational instrument plant (Jinan)

1970, transistors served at Dongfanghong No.1 satellite

1983, 1st Chinese PC at P.R.C

1990, 1st Beep-Pager with 1st standard at P.R.C

1993, 1st station with 10 CPU at P.R.C



1995-2010 Internet

2010--Cloud

2007, large-scale industrialized production of LED lighting

2007, SKL of high-end server & storage technology founded

2008, high-end fault-tolerant servers have been developed

2009, massive storage technology has been explored

2010, Cloud computing was selected as next step

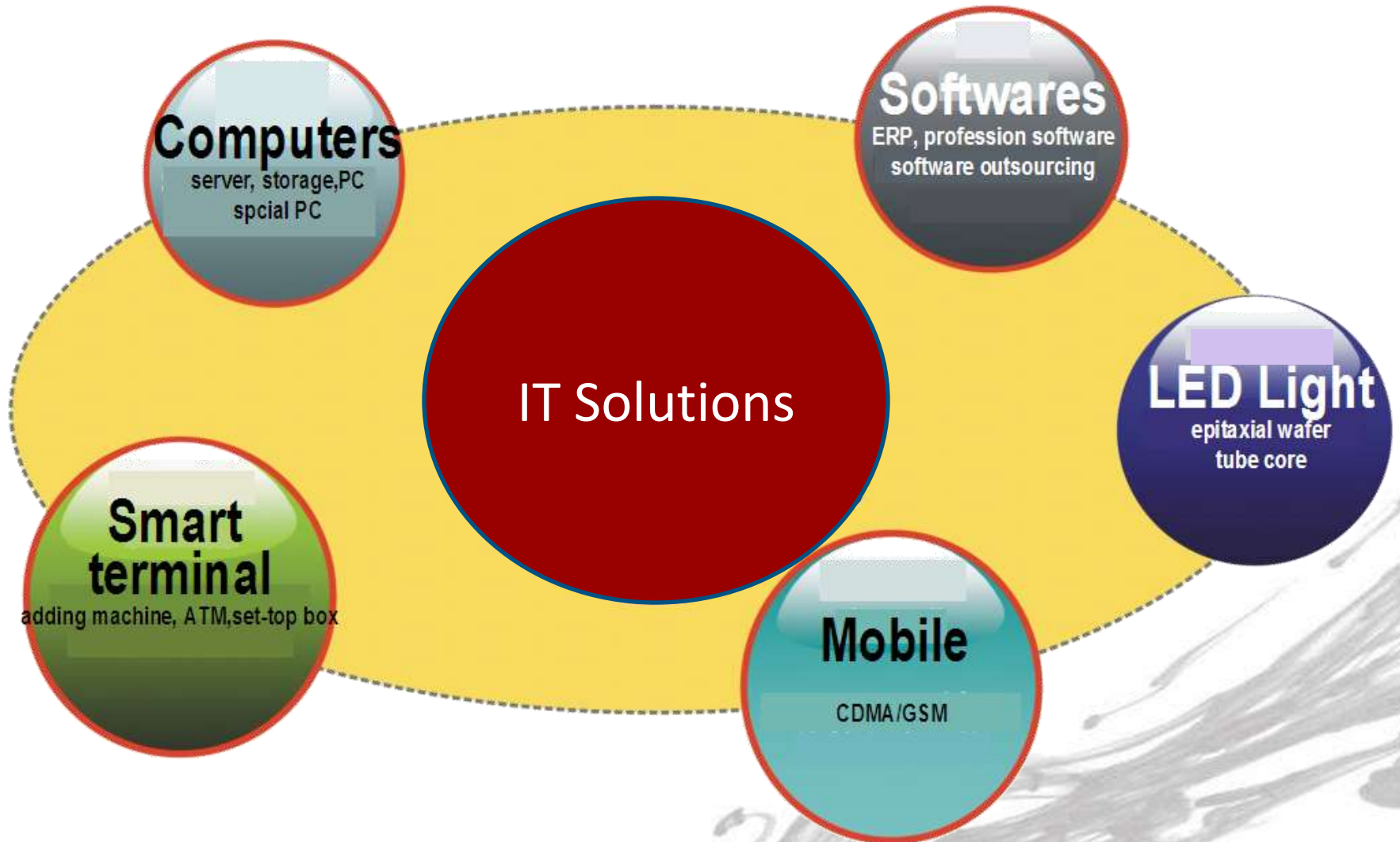
2011, we released the "sea of clouds" container data center

Introduction Of INSPUR Group

International business > 20 countries



Introduction Of INSPUR Group



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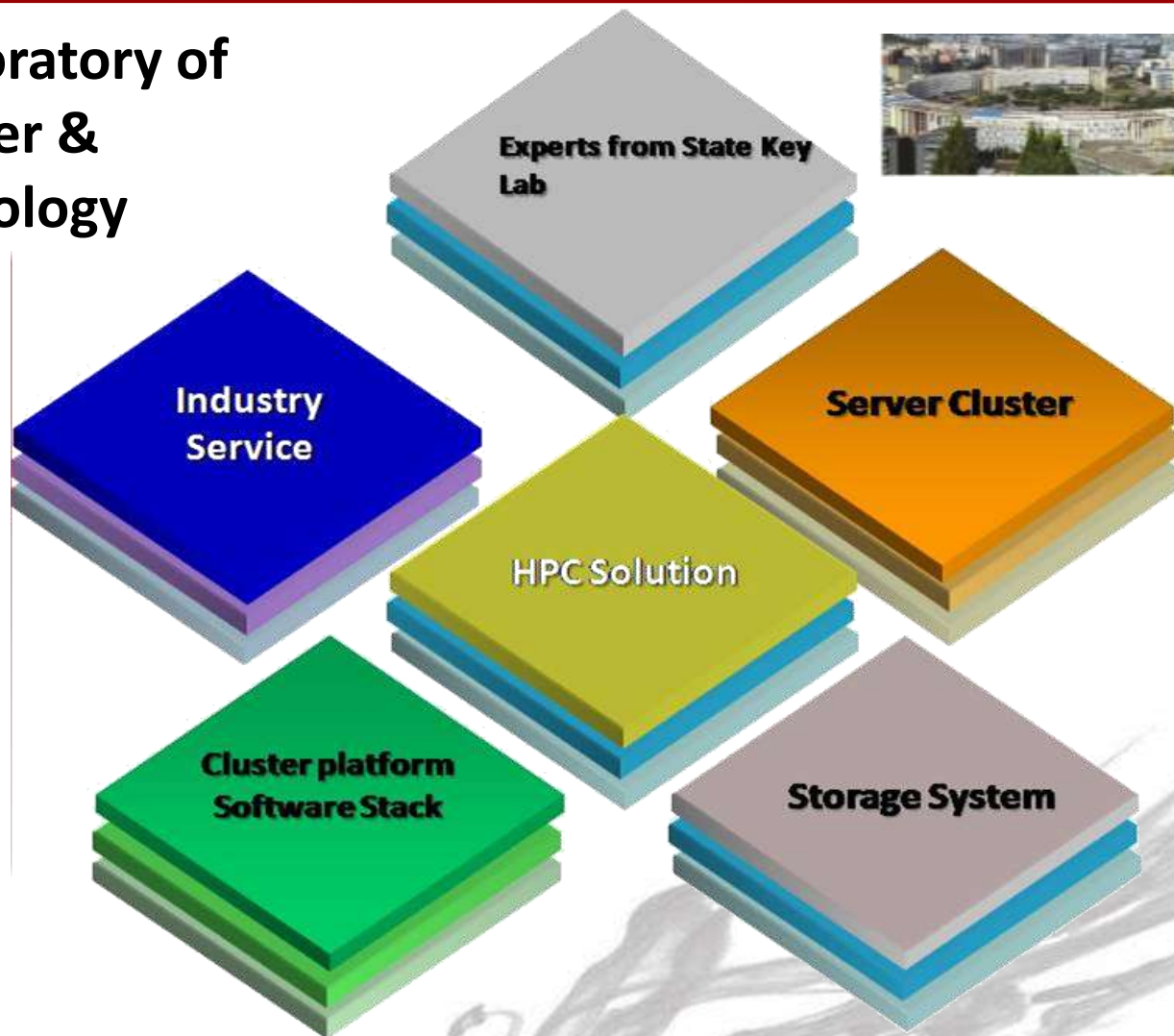
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Introduction Of INSPUR HPC

State Key Laboratory of
High-end Server &
Storage Technology



Easy
HPC



Application examples of HPC



Cloud computing



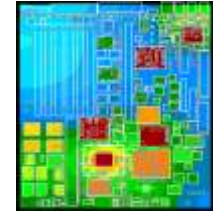
GPU cluster



Video rendering



Gene information



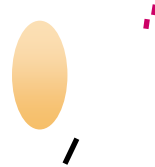
Chip design



Industrial design



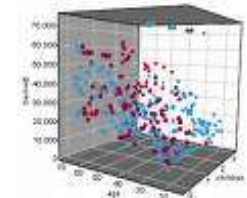
Enterprises informatization



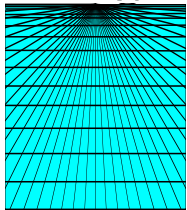
Aerospace



Defense & military



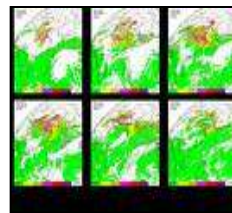
Data mining



Numerical calculation



Commercial manufacture



Weather forecast



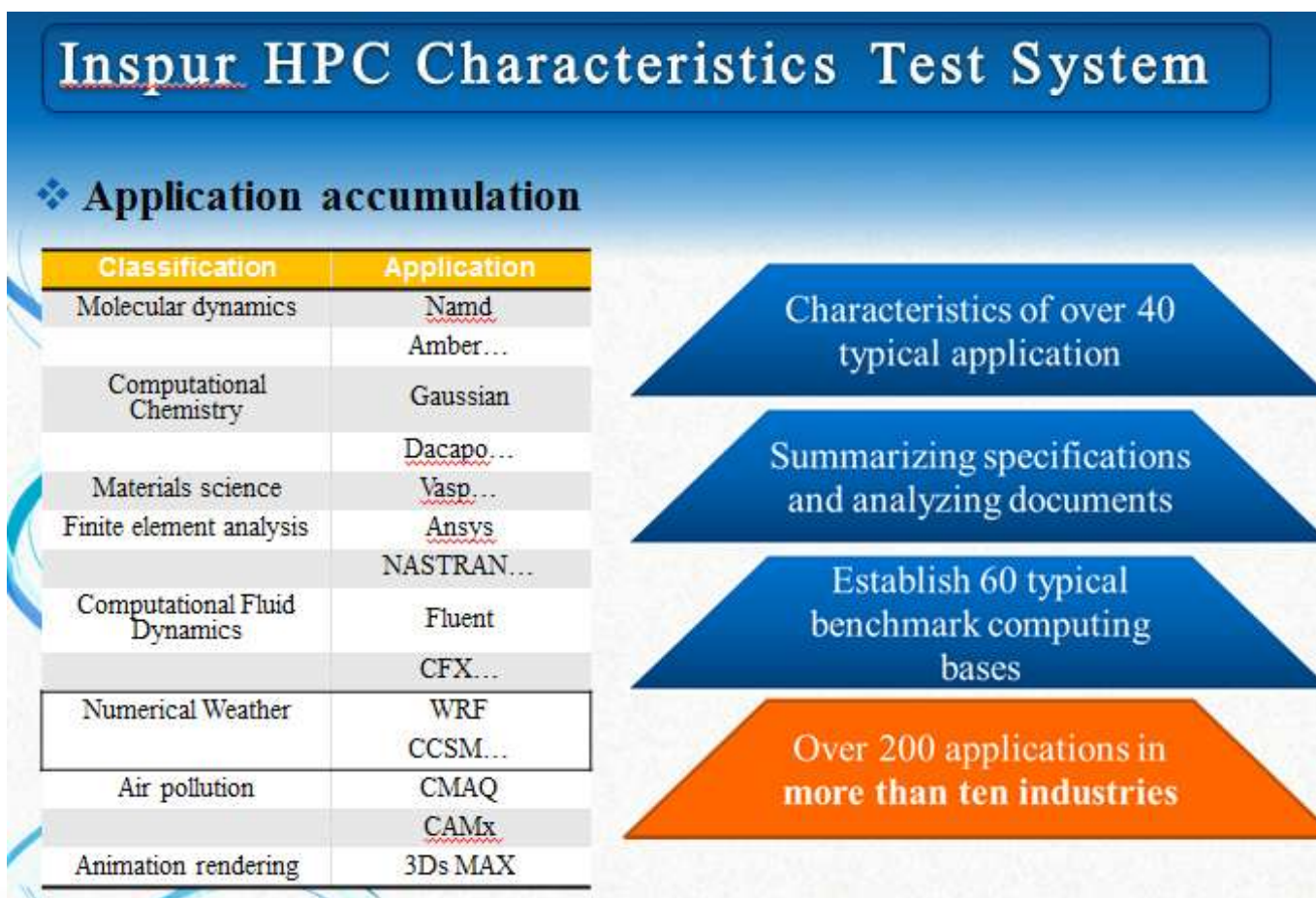
Petroleum exploration



Life science

Application of INSPUR HPC

Analyze 300+ professional software and set up the example database for 40+ typical applications.



Software-Cluster Management (Cluster Engine)



User

Administrator

Scientific workflow promotes the science research

Supercomputer system management Easy to manage

Remote Visit

Live data analysis

Unified Port: Job Scheduling, Resource monitor

Smart job schedule

Easy to Use

Live trend monitor

Statistic analysis of resource using and bottleneck detection

Customized interface

Automatic Job Scheduling

Results exhibition

Comprehensive monitor, quick point lock

Integrated profession tool



Tianhe-1A, #1 worldwide 2010



NUDT and INSPUR : Tianhe-1A, which became the world's fastest supercomputer, with a peak computing rate of **2.507 PetaFLOPS . (Top 500 June 2010)**

Tianhe-2, #1 worldwide 2013



Tianhe-2 (Milkyway-2) Supercomputer

NUDT and INSPUR : Tianhe-2, which has become the world's fastest supercomputer, with a peak computing rate of **33 PFLOPS . (Top500 June 2013)**

CN-Grid II: INSPUR supported 17 Univ,



上海大学
Shanghai University



北京师范大学



华中师范大学
HUAZHONG NORMAL UNIVERSITY



中国科学技术大学
University of Science and Technology of China

Tsinghua University



Peak:

172T

Target:

IPCC AR5

Application:

earth simulation

No. 97 @ top500 Jun. 2011

The first & highest performance cluster in Chinese Universities

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Asia Student Supercomputer Challenge



The banner features a dark blue background with a grid pattern. On the left, there is a stylized map of Asia. The main text reads "Asia Supercomputer Community". Below this, there are two columns of information. The left column is titled "Student Challenge" and includes the ASC 13 logo with "中文" and "English" options, and the ASC 12 logo. The right column is titled "HPC Connection Workshop" and includes HPC@ISC12, HPC@SC12, HPC@ASC13, and HPC@ISC13 logos.

Asia
Supercomputer
Community

Student Challenge

HPC Connection Workshop

ASC 13 中文
English

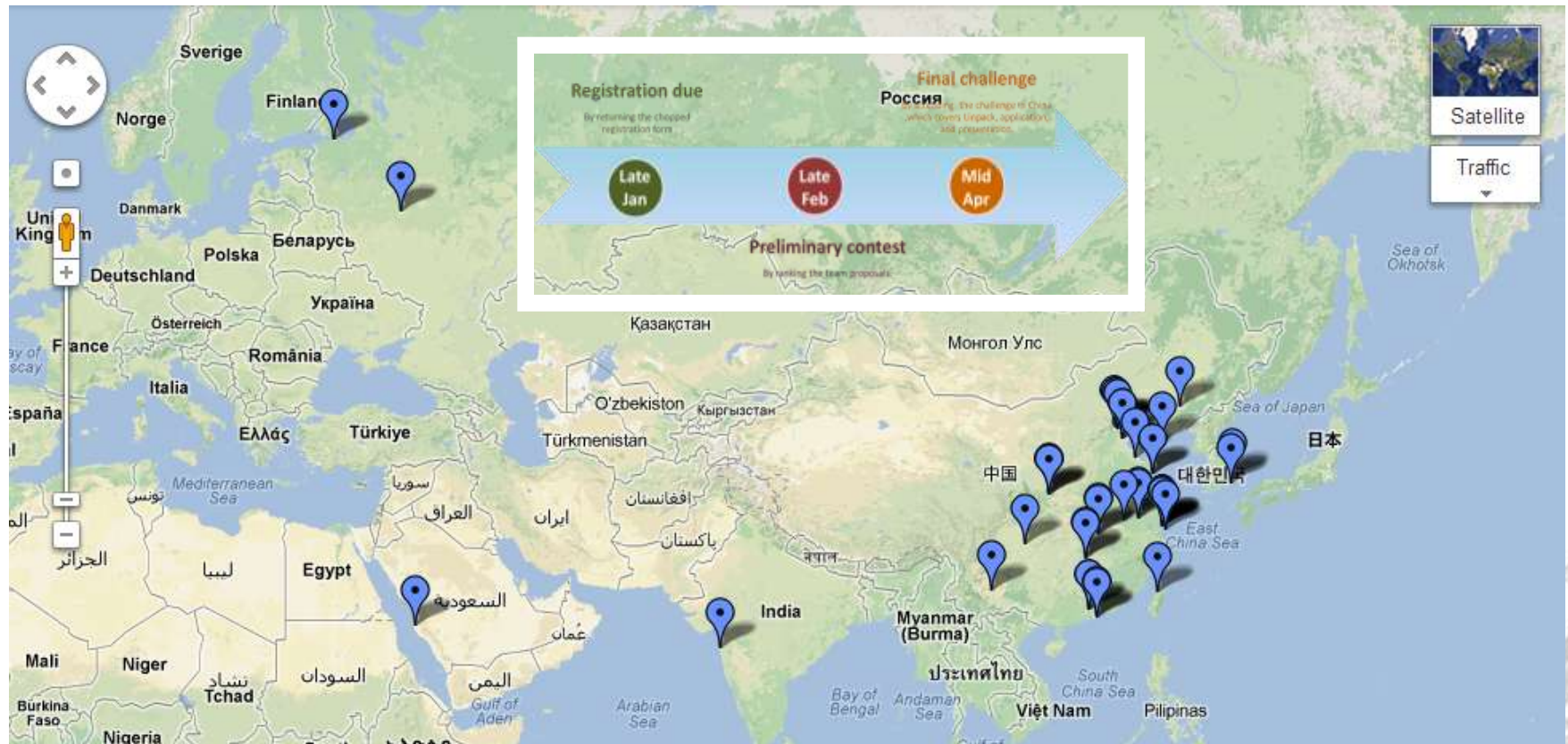
ASC 12

HPC@ISC12 HPC@SC12

HPC@ASC13 HPC@ISC13

The fundamental approach to promote HPC is enlarging the community

The First Asia Challenge – ASC13



43 teams participated into the ASC13
40 experts served as the judges and consultants

ASC13 Background

1. SC&ISC

Two most influential events on supercomputer.
SC leans to US; ISC leans to EU.
Asia has not totally engaged yet.



2. Chinese Ministry



3. Asian Scientist

40 well-known scientist and experts are included in the committee

Student Cluster Challenge

Opportunities for University

- ✓ **public exposure**
- ✓ **showing university culture**
- ✓ **training ability demonstration**
- ✓ **attracting international talents**

Opportunities for Student

- ✓ **intense hands-on training**
- ✓ **true cases study**
- ✓ **acquainting with international peers**
- ✓ **exposure to higher education organization**
- ✓ **exposure to job providers**



Thank You

INSPUR For HPC Innovation

***inspur* 浪潮**

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