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DEISA
**DISTRIBUTED EUROPEAN INFRASTRUCTURE FOR
SUPERCOMPUTING APPLICATIONS**

European Community Sixth Framework Programme
RESEARCH INFRASTRUCTURES
Integrated Infrastructure Initiative

Dissemination Annual Activity Report

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RE	Restricted to a group specified by the consortium (including the Commission	
CO	Confidential, only for members of the consortium (including the Commission Services)	

1 Introduction

1.1 Executive Summary

This document is the deliverable DN2-11 Annual Activity Report of the DEISA N2 Dissemination activity.

The main objective of the DEISA N2 Dissemination activity is to distribute general information on the project operation, and to contribute to the transfer of know-how and experience resulting from the deployment of the research infrastructure. The N2 Dissemination activity acts in coordination with the global project management and in close co-operation with the User Support Service Activity and all other DEISA activities.

During the 3rd project year from May 2006 to April 2007 the main activities carried out by the N2 Dissemination activity have been:

- DEISA events: 2nd DEISA Symposium on May 4 – 5, 2006 in Bologna, Italy and the preparation for the 3rd DEISA Symposium on May 21 – 22, in Munich, Germany. Participation to the organisation of the three DEISA training sessions (funded from the eDEISA project's budget) on July 3-5, 2006 in Paris, France, on October 23-25, 2006 in Jülich, Germany and on March 7-9, 2007 in Barcelona, Spain,
- Awareness creation and production of dissemination material, and
- Attendance events, in particular SC2006 and ISC2006

In this document the outcome of these activities carried is reported. The distribution of this deliverable covers DEISA partners and the Commission Services.

1.2 References and Applicable Documents

<List all external documents referenced in this document>

[1] <http://www.deisa.org>

[2] DEISA Dissemination Plan, DEISA_DN2-2_v1.0.doc

1.3 Document Amendment Procedure

The initial document amendment procedure is via communication between members of the NA2 team. The document is then submitted for review to the DEISA Executive Committee and an Executive Committee appointed DEISA reviewer. The document is then amended according to the comments received from the Executive Committee and the appointed reviewer. It is subsequently re-submitted to the DEISA Executive Committee for submission to the EU.

1.4 List of Acronyms and Abbreviations

Term/Acronym	Definition
DDT	DEISA Dissemination Team
DECI	DEISA Extreme Computing Initiative

2. NA2 Dissemination activity

The objectives of the NA2 Dissemination activity are defined in the deliverable DN2-2 DEISA Dissemination Plan. Four deliverables were due and submitted during the 3rd project year.

Table 1: NA2 Deliverables

Deliverable	Contractual date of delivery	Actual date of delivery
DN2-8 Proceedings of DEISA International Conference	PM25-36	30.5.2007
DN2-9 DEISA educational workshops	PM30	30.5.2007
DN2-10 2nd DEISA brochure on project achievements	PM31-36	30.5.2007
DN2-11 Annual activity report	PM36	30.5.2007

A team consisting of at least one member from each partner site carries out the tasks that were defined in the DN2-2 deliverable. The means of communication of the dissemination team are regular videoconferences and electronic correspondence. During the 3rd project year there were 7 videoconferences.

Table 2: Videoconferences of the DEISA Dissemination Team

Date	Purpose
24.5.2006	DEISA Symposium Results & Feedback, DEISA training session and DECI call promotion
14.6.2006	Feedback of the DEISA review meeting
20.9.2006	Implementation of a number of strategic decisions taken by the Executive Committee at the July 10 meeting in Paris.
25.1.2007	Organisation and dissemination of the DEISA Symposium, Barcelona training promotion
22.2.2007	Organisation and dissemination of the DEISA Symposium
22.3.2007	DEISA Symposium, DEISA video
19.4.2007	DEISA Symposium, DEISA video

During the 3rd project year the editorial board was formed to edit dissemination texts (website, newsletter, brochure folder), and to allocate the work of writing articles to external journals and magazines to a wider group of people than at the moment. The editorial board has been active especially during the autumn, when the new version of the DEISA brochure folder was produced.

3. Activities carried out

A variety of approaches have been exploited to raise awareness of the DEISA project and the interest of new potential users. The DEISA dissemination channels used can be classified in categories presented in Table 3.

Table 3. DEISA dissemination channels

Dissemination channel	Description
DEISA web site	Basic dissemination channel for both general public, DEISA users and DEISA partners. Dissemination material downloadable through the website: electronic newsletter, brochures and flyers. DEISA Primer, DEISA Symposium and Training registrations pages.
Email actions	Distribution of 5 electronic newsletters Promotion of the three DEISA training sessions, and the 3 rd DEISA Symposium (electronic invitation cards)
Events	<ol style="list-style-type: none">1. 2nd DEISA Symposium, 4-5 May, 2006, Bologna, Italy, organized by the consortium2. Three DEISA training sessions: 3-5 July, 2006, Paris, France, 23-25 October, 2006 Jülich, Germany; and 7-9 March, 2007, Barcelona, Spain.3. Events in different disciplines, where DEISA partner is an active participant giving a speech and / or demonstration: SC06, ISC20064. Events organized by DEISA partners with some visibility for the DEISA project: 15th Summer School on Parallel Computing, CINECA5. Events organized by the European Commission and other EU funded projects: IST2006, Helsinki, EGEE Workshop on Management of Rights in Production Grids in the HDPC 2006 conference, June 19th, 2006, Paris.
Publications	Articles published in publications, magazines, newspapers and Internet portals.

To support the dissemination actions different types of dissemination material have been produced: 5 electronic newsletters, new version of the brochure folder, 15 posters and a new version of the video.

Considerable time has been spent on the preparation of events (dissemination material, communications, and assistance in the organization). In this report the results of the 2nd DEISA Symposium that took place on May, 4 – 5, 2006 are reported. Furthermore the preparation work for the 3rd DEISA Symposium that will be held on May, 21 - 22, 2007 will be reported as it has required a major investment of both human and financial resources during PM 30 - 36.

4. Dissemination material

4.1 DEISA website

There have been 7 815 different visitors to Deisa.org in the period of May 1, 2006 till April 30, 2006 (information for August is missing due to changes in the tag settings). This means on average over 710 different visitors a month. During the year different dissemination actions and other activities carried out by the consortium have affected positively and significantly to the number of visitors to the site. In Figure 1, some of these activities have been put in context with the website statistics:

- 2nd DEISA Symposium (May 4–5, 2006) and its advertisement
- 2nd DECI call from June – July 2006
- 1st DEISA training (July 3-5, 2006) and its advertisement
- DEISA Newsletter 03/2006, distributed on August 11
- DEISA Newsletter 04/2006, distributed on September 27
- 2nd DEISA training (October 23-25, 2006) and its advertisement
- DEISA Newsletter 01/2007, distributed on February 9
- 3rd DEISA training (March 7-9, 2007) and its advertisement
- DEISA Newsletter 02/2007, distributed on March 26
- DEISA Newsletter 03/2007, distributed on April 27
- DEISA Newsletter 01/2006 distributed on January 5
- 3rd DEISA Symposium WebPages launched on February 9 and the symposium advertisement began
- 4th DEISA training advertisement.

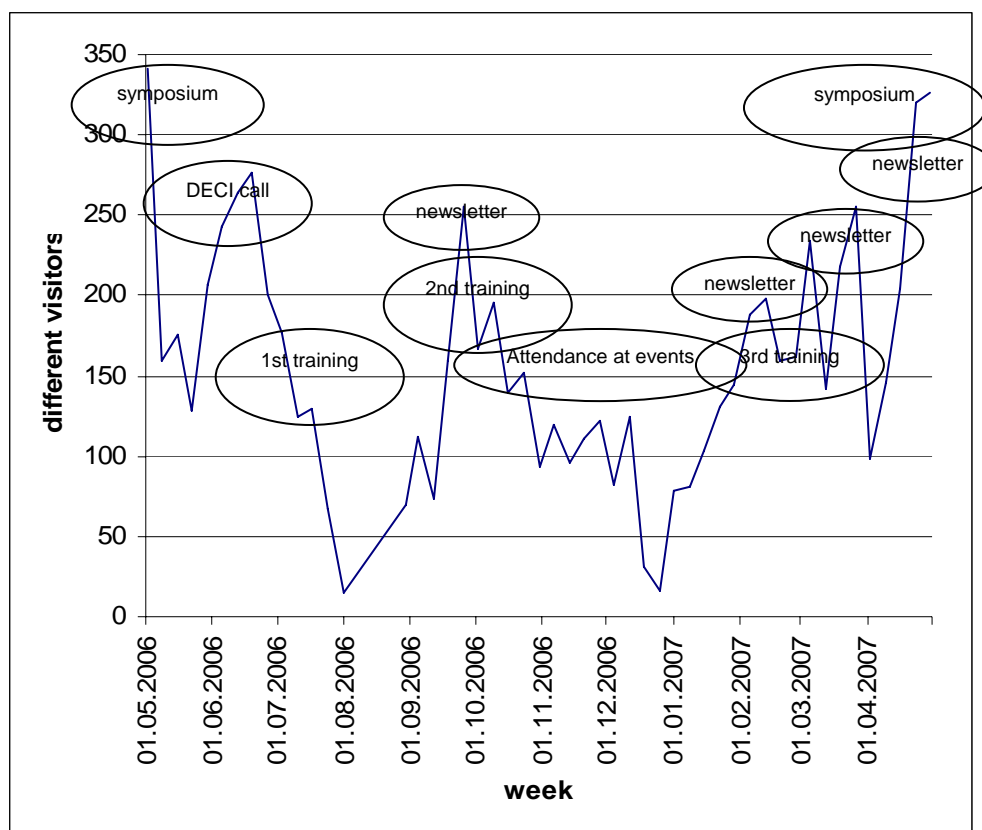


Figure 1: Number of different visitors to the DEISA website www.deisa.org in a week from May 2006 to April 2007

The DEISA website has been regularly updated since December 2002. The last updates have been made on April 30, 2006. During the 3rd project year there have been some major inclusions to the website:

- Updates on the scientific projects –section presenting the DECI initiative: list of on-going projects in 2006 – 2007, and results from the 2005 – 2006 <http://www.deisa.org/applications/>
- DEISA Primer has been updated twice, version 1.3 in June 2006, version 1.4 in March 2007 <http://www.deisa.org/userscorner/primer/primer.php>
- The 3rd DEISA Symposium pages http://www.deisa.org/news_events/deisa_events/munich_symposium.php
- The DEISA training sessions' pages http://www.deisa.org/news_events/deisa_events/current_training.php

Encouraged by the 2nd DEISA review recommendations DEISA dissemination team has investigated and implemented ways to improve DEISA website's search engine ranking. The search engine ranking is based on different factors:

- number of web sites that have a link to the deisa.org
- how highly reputed these sites are
- how close to the main page of a website the link to the deisa.org is located
- when a search is executed, how often deisa.org is selected / visited among the list of result
- how often, and to which amount the content of the website is renewing
- the URL addresses of the website should indicate the content of that page
- In addition, some not so clean ways to improve search engine ranking exist, to which we in DEISA are not willing to engage with. Moreover if for example Google finds out that these techniques have been used, it may exclude a website from its service entirely.

Most of these factors were already applied to the DEISA website. Based on these findings, the DEISA website's search engine ranking has been improved by:

- introducing a link to the DEISA website in as central location as possible in the partner centers' websites
- updating the DEISA website as frequently as possible.

Now, when making for instance a Google search with words "supercomputing grid Europe", "supercomputing Europe", "DEISA" the DEISA website has top positions.

In the near future new content for the DEISA website will be introduced, such as introduction to different services provided and developed by the Service Activities. A search engine will be applied to the DEISA website, and usability of the site will be further improved.

4.2 Brochure folder and posters

The 2nd DEISA brochure folder (deliverable DN2-10) on DEISA project achievements and on eDEISA project activities has been produced in January 2007. Both old and new version of the brochure folder have been distributed to scientific and industrial contacts defined by the DEISA partners at events and locally (see table 4 for details). A web version of the brochure is available at www.deisa.org.

Table 4: Distributed brochures

Event	Number of brochure folders distributed
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ISC2006, Dresden, Germany	40
SC06, Tampa USA	150
DEISA Symposium	135
DEISA training sessions	110
SARA Annual Supercomputing User day, Amsterdam (14-12-2006)	30
Local distribution	300

4.3 DEISA video presentation

A new version of the DEISA video with DECI focus has been produced for the 3rd DEISA Symposium. The video contains a general presentation of DEISA, its activities, and future plans. The DEISA Extreme Computing Initiative (DECI) plays a central role in the video: it contains simulations and short interviews of scientists that have benefited for DEISA resources.

4.4 EU's eInfrastructure projects' common dissemination work

DEISA has actively participated to the EU's eInfrastructure projects' common dissemination work. As a result of this activity *A guide to European flagship e-Infrastructure projects* has been published, and an e-Infrastructure projects' DVD on under work. The guide is distributed by DEISA members in opportune events, such as the upcoming 3rd DEISA Symposium.

5. Awareness creation

5.1 Publications

The DEISA consortium introduces articles to scientific and technical publications. In addition, articles about DEISA are featured in the publications and newsletters of DEISA partners. During the 3rd project year some 34 articles about DEISA have been written by the DEISA Consortium (see Tables 5 and 6 for details).

Table 5: Major publications during the 3rd project year

Name and issue of the publication	Author(s): Title of the article
Praxis Der Informationsverarbeitung Und Kommunikation	H. Lederer and S. Heinzel: DEISA - paving the way towards an integrated European HPC Infrastructure
Accepted by CLADE 2007 at HPDC16	H. Lederer et al: Hyperscaling of Plasma Turbulence Simulations in DEISA
Accepted by German eScience Conference 2007 (GES 2007)	D. Frank and T. Soddemann: Interoperable job submission and management with GridSAM, JMEA, and UNICORE
Accepted by German eScience Conference 2007 (GES 2007)	J. Reetz, T. Soddemann, B. Heupers, J. Wolfrat : Accounting Facilities in the European Supercomputing Grid DEISA
Clade 2006 Workshops, held in conjunction with the 15th International Symposium on High Performance Distributed Computing (HPDC-15)". Appeared as booklet and conference CD, June, 19th 2006, Paris, France	Ph.Andrews, M.Buechli, R.Harkness, R.Hatzky, Ch.Jordan, H.Lederer, R.Niederberger, A.Rimovsky, A.Schott, Th.Soddemann, V.Springel, Exploring the Hyper-grid idea with grand challenge applications: The DEISA-TERAGRID interoperability demonstration.
the 14th NASA Goddard, 23rd IEEE Conference on Mass Storage Systems	P. Andrews, C. Jordan, H. Lederer: Design, Implementation, and Production Experiences of a Global

and Technologies, IEEE 2006.	Storage Grid
Computers Parallel Computing 32, 325-330 (2006)	R. Hatzky (RZG): Domain Cloning for a Particle-in-Cell (PIC) Code on a Cluster of Symmetric-Multiprocessor (SMP)
Concurrency Computat.: Pract. Exper., DOI 10. (2006), 1002/cpe	T. Soddemann, Science Gateways to DEISA
12th Internat. Euro-Par Conf., Dresden 2006, in: Lecture Notes in Computer Science, eds: W. Nagel et al., accepted	T. Soddemann, : Job Management Enterprise Application,
IEEE Computer Society -The ACM Digital Library, ISBN 0-7695-2734-5, Washington, DC, US, 2006	T. Sloan, R. Menday, T. Seed, M. Illingworth, A. Trew, DESHL – standards based access to a European supercomputing infrastructure
German e-Science, Electronic publication: http://www.ges2007.de/fileadmin/papers/jreetz/GES_paper105.pdf	Accounting Facilities in the European Supercomputing Grid DEISA.
CLADE 2007 at HPDC16	H. Lederer et al: Hyperscaling of Plasma Turbulence Simulations in DEISA
German eScience Conference 2007 (GES 2007)	D. Frank and T. Soddemann: Interoperable job submission and management with GridSAM, JMEA, and UNICORE,
German eScience Conference 2007 (GES 2007)	J. Reetz, T. Soddemann, B. Heupers, J. Wolfrat : Accounting Facilities in the European Supercomputing Grid DEISA
2nd UNICORE Summit 2006 in conjunction with EuroPar 2006, Dresden, Germany, to appear	L. Clementi, M. Rambadt, R. Menday, and J. Reetz, UNICORE Deployment within the DEISA Supercomputing Grid Infrastructure
ISGC 2007, Taipei, Taiwan, Symposium proceedings will be published by Springer-US after April 2007	M.Rambadt, R.Breu, L.Clementi, Th.Fieseler, A.Giesler, W.Gürich, P.Malfetti, R.Menday, J.Reetz, A.Streit: Experiences with Using UNICORE in Production Grid Infrastructures DEISA and D-GRID
ISGC 2007, Taipei, Taiwan, Symposium proceedings will be published by Springer-US after April 2007	R.Niederberger, P.Malfetti, A.Schott, A.Streit: DEISA: cooperative extreme computing across Europe
Combustion and Flame (March 2007), submitted.	R. Gonçalves dos Santos, M. Lecanu, S. Ducruix, O. Gicquel, E. Iacona and D. Veynante: Coupled Large Eddy Simulations of Turbulent Combustion and Radiative heat transfer
Third European Combustion Meeting ECM 2007, Chania, Crete (April 2007). Proceedings from the Third European Combustion Meeting 2007.	R. Gonçalves dos Santos, S. Ducruix, O. Gicquel, D. Joseph, M. El Hafi and D. Veynante: Large Eddy Simulation Including Radiative Heat Transfer ,
accepted for presentation at ParCFD 2007, May 21-24, Antalya Turkey.	H. Klimach, S. Roller, J. Utzmann and C.-D. Munz: Parallel coupling of heterogeneous domains with KOP3D using PACX-MPI,
Accepted for Presentation at Parallel CFD 2007 May 21-24, Antalya Turkey	H. Klimach, J. Utzmann, S. Roller und K.-D.r Munz: Parallel Coupling of Heterogeneous Domains with KOP3D using PACX-MPI,

Table 6: Articles in corporate magazines or newsletters

Name and issue of the publication	Author(s): Title of the article
CERN Courier, November 2006	Lederer H. (RZG): Symposium focuses on scientific supercomputing
EPCC News No. 57, Summer 2006.	T. Sloan (EPCC): DESHL v3 released!,
Tietoyhteys, 2/2006	Fagerholm J., Värttö S. (CSC): DEISA suurten töiden resurssina
CSCNews, 2/2006	Värttö S. (CSC): Discussions on the future of the European research infrastructures
CSCNews, 3/2006	Scalable parallel applications at DEISA training
ZAM aktuell No. 146, July 2006	Streit A. (FZJ): DEISA: 2. Projekt-Review
Notizie dal CINECA	Voli M. (CINECA): Il progetto DEISA al lavoro
CSCNews, 4/2006	Hanke C. (CSC): Working at CSC as a visiting scientist
CSCNews, 4/2006	Räsänen P. Järvinen H. (Finnish Meteorological Institute): Stochastic sub-grid scale parametrizations for Coupled Earth

	System Models
ZAM aktuell No. 152, March 2007	Streit A. (FZJ): DEISA-Symposium (in German),
CSCNews, 1/2007	A new guidebook on e-Infrastructure projects
CSCNews, 1/2007	Värttö S. (CSC): Finns benefit from the European supercomputing resources
CSCNews, 1/2007	DEISA Events – Spring '07

5.2 Electronic newsletter

During the 3rd project year five issues of the DEISA electronic newsletter were released:

- DEISA Newsletter 03/2006, distributed on August 11
- DEISA Newsletter 04/2006, distributed on September 27
- DEISA Newsletter 01/2007, distributed on February 9
- DEISA Newsletter 02/2007, distributed on March 26
- DEISA Newsletter03/2007, distributed on April 27.

The size of the newsletter has been modified to 2 pages, and they are release more frequently, every 1.5 to 2 months, when news material is available. More frequent release of newsletters became possible during the reporting period, since DECI scientific projects' results and final reports became available. In each newsletter results of one scientific project are presented and current DEISA developments are reported. There are over 600 subscribers to the electronic newsletter. Newsletters are also distributed locally by all partners to about 6200 email contacts. In the period of May 1, 2006 to April 30, 2007 there have been 711 different visitors to the newsletter page at http://www.deisa.org/news_events/newsletter.php (information for August is missing due to changes in the tag settings). Figure X shows, how website traffic on the newsletter page has been increased in the periods of newsletter releases.

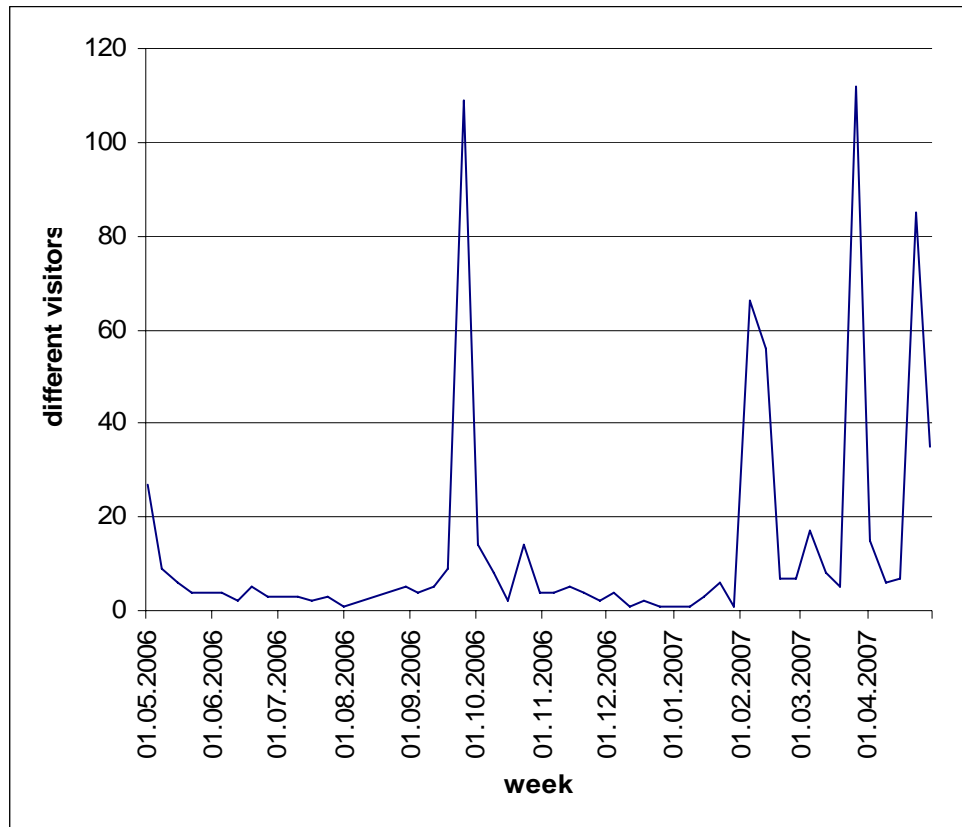


Figure 2: Different visitors at the newsletter pages



Figure 3: Cover pages of the electronic newsletters produced during the 3rd project year

5.3 Attendance at events

DEISA partners have given over x presentations at a variety of events and conferences (see Appendix 1 for details). In the following tables DEISA presence in SC06 and ISC2006 are described.

Table 4: SC06

Event	SC06, Tampa USA
Facts of the event	International Supercomputing Show
Attended by	SARA, RZG, BSC, LRZ
Description of the participation	<p>DEISA was present at the SARA booth with a poster about DEISA, and some slides in a running presentation. Further, SARA gave a demonstration titled "Visualizing 50 Terabyte climate study output using the OptIPuter". Scientists from the Netherlands Centre for Climate Research (CKO/IMAU) are studying earth's climate using large-scale simulations. These simulations, which ran on DEISA HPC infrastructure, have yielded more than 50 Terabyte of output.</p> <p>Prof. P. Coveney, assisted by T.Soddemann, demonstrate job sub-missions via Application Hosting Environment (AHE) to DEISA (site: RZG) and TeraGrid (site PSC). The demos mainly consisted of launching production scientific simulations investigating the molecular dynamics of HIV-1 protease using the NAMD molecular dynamics code. Production runs managed by AHE run between 13 and 17 November 2006. RZG also realised a BOF on Science Gateways, where DEISA was discussed.</p> <p>DEISA was present at the BSC, EPCC and LRZ booths and brochure folders were distributed.</p>
Communications	
Distributed material	150 DEISA brochures folders
Assessment of the attendance at event	Other International Research centers. Perfect opportunity to get closer to the international research centers in HPC.
Preparations	

Table 5: ISC2006

Event	ISC2006, Dresden, Germany
Facts of the event	European Supercomputing Show
Attended by	LRZ, BSC
Description of the participation	DEISA was present at the BSC booth with a poster and brochure folders. At the LRZ folders were distributed, too.
Distributed material	30 DEISA brochure folders.
Assessment of the attendance at event	Other European Research centers. Perfect opportunity to get closer to the European research centers in HPC.

In addition, the following events have been attended by DEISA members in 2006 – 2007 (given presentations and invited talks are listed in Appendix 2):

- OGF17, Tokyo, Japan, May2006.
- OGF 18, Washington D.C., USA, September 11th to 15th, 2006
- EGEE Workshop on Management of Rights in Production Grids in the HDPC 2006 conference, June 19th, 2006, Paris.
- RealityGrid / UK eScience meeting, London, June 1, 2006
- EUROPAR Conference, Dresden, Aug 2006 (UNICORE summit)
- Meetings of the Ad-Hoc-Group for Plasma Theory and Modelling under EFDA, Brussels, March 6, 2006, July 19, 2006 and Sept 25, 2006
- 11th International Conference on Numerical Combustion, May 2006, Granada, Spain:
- European Conference on Computational Fluid Dynamics, ECCOMAS 2006, Egmond aan Zee, The Netherlands, 5-8 September 2006.
- École de combustion, October 5th-11th, Anglet, France.
- Catania Astrophysical Observatory and CINECA organized the Second Advanced Course on Grid and Parallel Computing, Catania 25-29 September 2006.
- SIMAI Meeting, Roma, 15 December 2006.
- 1st meeting of the “Expert Group on High Performance Computing” of EFDA, video conference, April 17, 2007
- ESF Forward Look Workshop, Rome, 23-24 April 2007.

6. DEISA events

The DEISA consortium plans to maintain an annual DEISA event dedicated to the discussion of the scientific and strategic challenges in the area of High Performance Computing, and to assess the impact of the DEISA research infrastructure on computational science in Europe. In this annual report the results of the 2nd DEISA Symposium that took place in May 2006 are reported. Furthermore, the preparation work and the advertisement campaign for the 3rd DEISA are reported.

6.1 2nd DEISA Symposium, Bologna, Italy

The 2nd DEISA Symposium was held in Bologna, Italy, on May 4 -5, 2006. The location was Palazzo Re Enzo, a very central and historical building of Bologna down town.





Figure 4: Pictures from the 1st DEISA Symposium

Twelve speakers, leading experts in their respective fields gave their presentations:

- DEISA Perspectives, Victor ALESSANDRINI
- Chasing the Flames: The Challenge of Modeling Thermonuclear Supernova in 3D, Wolfgang HILLEBRANDT
- End-to-end simulations of the Planck-LFI space mission, Fabio PASIAN
- Computing wall turbulence at experimental Reynolds Numbers, Sergio HOYAS
- Large scale computation for materials and life sciences using DEISA, Peter COVENEY
- The Quest for Solving QCD: Light Quarks with Twisted Mass Fermions, Karl JANSEN
- Use of ensemble climate simulations to detect variations in extreme event statistics, Henk A. DIJKSTRA
- EU e-Infrastructure plans for FP7 – The discussion on a new European Supercomputing policy, Kyriakos BAXEVANIDIS
- EGEE – A Large-Scale Production Grid Infrastructure, Neil GEDDES
- NASA Supercomputing: Impact on Present and Future NASA Missions , Walter BROOKS
- Cray XT3 on the US TeraGrid, Michael LEVINE
- JuBL - Blue Gene/L System – in Jülich, Klaus WOLKERSDORFER

The presentations are available as video registrations and slides at http://www.deisa.org/news_events/deisa_events/bologna_symposium.php.

135 participants attended to the 12 talks proposed by DEISA-users and invited speakers during the two days of the meeting. The posters' area hosted 18 posters each one describing scientific project carried on with DEISA infrastructure mainly in the frame of DECI, including two about DEISA it self. The event was also broadcasted over internet.

The collected feedback proves this symposium to be an overall success. The overall assessment of the symposium was 'very good' 4 (evaluation criteria from 1-5) and over 90% of the respondents felt that the meeting did help to achieve their objectives.

The preparation work and the advertisement campaign for this symposium were already reported in the last year's NA2 Annual Activity Report DN2-7.

6.2 Preparations of the 3^d DEISA Symposium, Munich, Germany

The 3rd DEISA Symposium – Towards Petascale Computing in Europe, will take place in Munich, Germany, on May 21 - 22, 2007. This year, the DEISA Symposium

focuses on the initiatives and strategies being deployed to enhance the outreach of high performance computing in Europe. Thirteen high-level speakers have been invited to give a presentation in the event and around 150 participants are expected.

An amphitheatre at the Bavarian Academy of Sciences and Humanities has been reserved for the DEISA Symposium. In the coffee break area a new version of the DEISA video presentation will be running and there will be also DEISA posters and 11 individual DECI project posters and 4 posters listing all DECI projects exhibited.

The Symposium website www.deisa.org/symposium has been set with registration and practical information pages. By April 25, there have been 663 different visitors to the Symposium website. In addition, all partners advertise the symposium in their own website and customer magazines and an electronic invitation postcard was produced and sent to partner site's targeted contacts. Personal invitation letters has been sent to selected people by the Executive Committee. In addition, the Symposium was announced in the DEISA electronic newsletters 01/2007, 02/2007 and 03/2007, which was sent via email to 6000 contacts. The Symposium has been announced for instance at www.alphagalileo.org, www.hoise.com, HPCwire's weekly bulleting and www.igtw.org.

6.3 DEISA training sessions

Three DEISA training sessions have been organized from the eDEISA project budget during the 3rd project year: July 3-5, 2006 in Paris, France, October 23-25, 2006 in Jülich, Germany and March 7-9, 2007 in Barcelona, Spain. The preparations for the 4th DEISA training sessions to be held in Espoo, Finland in the end of May are under work. DEISA project's N2 dissemination activity has assisted in the realization and dissemination of these events.



Figure 5: 1st DEISA training session in Paris, July 2006



Figure 6: 2nd DEISA training session in Jülich, October 2006

In total 68 scientists from 13 European countries have learned to exploit the European supercomputing environment at the three DEISA training sessions. In addition, 8 scientific speakers and some 13 members of the DEISA staff have benefited from the event.



Figure 7: 3rd DEISA training session in Barcelona, March 2007.

The collected feedback proves the training sessions have been very much appreciated by the participants. The overall assessment of the training sessions was 'very good' 4 (evaluation criteria from 1-5). 98% of the respondents said 'yes' to the question, if the training helped them to achieve their objectives. Concerning the contribution in support to participants' research activities, half of the respondents said that the training had either exceeded or achieved expectations, and other half of the respondents said that the training had had positive contribution to their research activity. 55 participants have answered to the feedback questionnaire.

The main channel of dissemination has been the DEISA website. Webpages have been realized for the upcoming training at <http://www.deisa.org/training>. After the training all presentations and pictures of the training have been made available at the event specific webpages. In addition training sessions have been highlighted in the DEISA website's front page. In total there have been 2239 different visitors to the training related webpages, in the period of June 2006 (establishment of the 1st training pages) to April 2007.

Webpages	Number of different visitors
Upcoming training	702
Paris training	476
Jülich training	503
Barcelona training	439

Table 9: Number of different visitors to the training related webpages, period June 2006 - April 2007

Other means of promotion have been:

- production of the electronic invitation card and its distribution by all the partner sites to their users and usual, appropriate contacts
- direct contacts to current DECI in collaboration with the members of ATASKforce
- Articles in the DEISA eNewsletter, which has over 600 subscribers and which is distributed locally by all partners to about 6200 email contacts:
 - o 1st DEISA training: highly scalable parallel applications, Vol. 2, 2006
 - o New tools from DEISA training, Vol. 3, 2006
 - o DEISA Training session in Jülich, Germany, Vol. 4, 2006

- DEISA Training: Positive Contribution to Research, Vol. 1, 2007
- DEISA Training announce, Vol. 2, 2007
- DEISA Training: First hand experience of the infrastructure, Vol. 3, 2007

DEISA project's N2 dissemination activity has also produced the supporting material for the training sessions: badges, handout covers and feedback questionnaires.

7. DEISA Extreme Computing Initiative

The DEISA Extreme Computing Initiative (DECI) consists of the identification, the enabling, the deployment and operation of a number of "flagship" applications in selected areas of science and technology. These leading, ground breaking applications must deal with complex, demanding, innovative simulations that would not be possible without the DEISA infrastructure, and which would benefit - if accepted - from the exceptional resources of the Consortium. The N2 activity supports the Application Task Force in promoting and raising awareness of DECI calls and projects.

The second call for proposals took place in summer 2006. This call for proposals was very successfully with more than 40 high-quality project proposals received from 12 European countries, of which 23 projects were retained. The third call for proposals was launched on April 30, 2007.

There have been 2368 different visitors at the DECI webpages <http://www.deisa.org/applications/index.php> in the period of May 1, 2006 and April 30, 2007. There is a specific sections in the DEISA website <http://www.deisa.org/applications/projects2006-2007/index.php> (386 different visitors) and <http://www.deisa.org/applications/projects2005-2006/index.php> (849 different visitors) listing all scientific projects in 2006 – 2007; and in 2005 – 2006 respectively. An abstract is available for all scientific projects. The available results have been reported in the website, DEISA electronic newsletter, and other opportune media.

Six scientific projects under DECI presented their current status at the 2nd DEISA Symposium in Bologna, on 4 – 5 May, 2006:

- W. Hillebrandt, Supernova project: Chasing the Flames: The Challenge of Modeling Thermonuclear Supernova in 3D.
- F. Pasian, LFI-sim project: End-to-end simulations of the Planck-LFI space mission.
- S. Hoyas, Channel2000 project: Computing wall turbulence at experimental Reynolds Numbers.
- P. Conevey, LIAMS project: Large scale computation for materials and life sciences using DEISA.
- K. Jansen, TMQCD project: The Quest for Solving QCD: Light Quarks with Twisted Mass Fermions.
- H. A. Dijkstra, ESSENCE project: Use of ensemble climate simulations to detect variations in extreme event statistics.

Eleven posters on DECI project results and 4 posters listing all scientific projects will be exhibited in the 3rd DEISA Symposium in Munich, on 21 – 22 May, 2007. A new

version of the DEISA video with DECI focus will be shown for the first time in this symposium.

In the DEISA training sessions 9 DECI projects have presented their results and experience of using DEISA:

- É. Audit, HORIZON project: High Performance Computing and cosmology,
- S. Hoyas, Channel 2000 project: A highly parallel algorithm for computing wall turbulence using 2K processors
- W. Schmidt, FEARLESS project: A new modelling approach for turbulent astrophysical flows
- M. Richter, ICQS project: Improving Quantum Computer Simulations: Deisa project results
- M. Ricci, LCDIS project: Monte Carlo Simulation of a Twisted Nematic Display
- M. Baaden, SNARE project: Membranes under tension: atomistic modeling of the membrane-embedded SNARE complex
- J. Schumacher, Eta2006 project: Resolving the finest structures in turbulence
- T. Kiviniemi, fullfgk project: Gyrokinetic simulations of fusion plasma turbulence,
- A. Hietanen, HDM project: Hot and dense nuclear matter in particle physics and cosmology

The following articles have been published in the DEISA eNewsletter on DECI and individual projects:

- BET: First-Principles and Mixed quantum classical QM/MM Simulations of Biological Electron Transfer (3/2006)
- Simulating Type Ia Supernovae on DEISA (4/2006)
- 2nd Wave of Extreme Computing (1/2007)
- Simulations of Turbulent, Active and Rotating Stars (2/2007)
- The DEISA Extreme Computing Initiative: Call for proposals 2007 (3/2007)
- FEARLESS: A new modeling approach for turbulent astrophysical flows

More frequent publication of DECI articles became possible during the reporting period since project results and final reports became available. Collaboration with the istwg.org – news portal has begun in order to reprint these articles.

All publications by the principal investigators of DECI projects will have DEISA acknowledgements.

8. Dissemination plan for the last 12 months

Table 6: DEISA dissemination plan for the period May 2007 - April 2008

Time	Project month	Activity
May '07	M37	
21. – 22.5.2007		3rd DEISA Symposium, Munich, Germany
30.5. – 1.6.2007		4th DEISA training session, Espoo, Finland
		Support to promote DECI Call for Proposals
June '07		
28. – 29.6.2007		3 rd DEISA review
26.-29.6.2007		ISC2007, Heidelberg, Germany
		Checkpoint for the website evolution
		DEISA e-Newsletter, 04/2007
July '07		
August '07		
		Promotion for the 5 th DEISA training to begin
		DEISA e-Newsletter, 05/2007
September '07		
4.-7.9.2007,		ParCo2007, Jülich, Germany
		Checkpoint for the website evolution
October '07		
		5 th DEISA training, Bologna, Italy
15.-19.10.2007		OGF21, Seattle, Washington
		DEISA e-Newsletter, 06/2007
November '07		
10.-16.11.2007		SC07, Reno, Nevada, The US
		Preparations and promotion of the 4 th DEISA Symposium to begin
		Checkpoint for the website evolution
		Press release
December '07		
		Promotion for the 5 th DEISA training to begin
		DEISA e-Newsletter, 06/2007
January '07		
		Checkpoint for the website evolution
February '07		
		6 th DEISA training session
		DEISA e-Newsletter, 01/2008
March '07		
		Press release
April '07		
		4 th DEISA Symposium
		DEISA e-Newsletter, 01/2008

Appendix 1: The most important presentations of the DEISA infrastructure in public events

Date	Event or conference	Speaker (Affiliation): Title of the presentation
Model for listing 2.5.2005	Model for listing Meeting of the Computing Center Heads in Northrhine- Westfalia, Bommerholz, Germany	Model for listing A. Streit (FZJ): Grid Computing – Experiences from Testbeds and Production Environments
May 2006	South-African-EU workshop on Grid infrastructures, Johannesburg,	Victor Alessandrini (IDRIS): DEISA: Middleware strategies
10-11.4.2006.	eIRG Workshop, Linz, Austria	Victor Alessandrini (IDRIS): Presentation: “HPC Perspectives in Europe”
6.6.2006.	DEISA –Engine informal Project meeting, Prague, Czech Republic,	R. Niederberger (FZJ): The next generation DEISA infrastructure.
17.10.2006.	Meeting of the Helmholtz- Gemeinschaft, Berlin	Stefan Heinzel (RZG): Presentation: “DEISA and GPFS”
20.10.2006	Meeting of the ZKI- Arbeitskreis at LRZ in Garching	A Schott (RZG): Zum Stand des europaweiten globalen Filesystems GPFS in DEISA
19.6.2006	EGEE Workshop on Management of Rights in Production Grids, session Experiences from Major Production Grids in the HDPC 2006 conference, Paris	Denis Girou (IDRIS): Presentation: “The DEISA Infrastructure”
18-19.10.2006	EuroCAMP, Malaga,	Jules Wolfrat (SARA): DEISA requirements for federations and AA
June 2006	CLADE 2006 workshop, Paris	Lederer H. (RZG): Exploring the hyper-grid idea with grand challenge applications: The DEISA-TERAGRID interoperability demonstration,
August 2006	Workshops at Euro-Par 2006, Dresden	H. Lederer, T. Soddemann (RZG): Job Management Enterprise Application
1.-3.6.2006	Nordic Grid Neighbourhood conference, Helsinki	P. Malfetti (CINECA): Presentation: DEISA, Technologies and design principles
28.9.2006	Advanced course on Parallel and Grid Computing, Catania.	Sanzio Bassini (CINECA). The DEISA infrastructure for Grid Computing
30.5.2006	Validation-IV Workshop, Jülich, Germany	Achim Streit (FZJ): Competence in e-Science and Grid at FZJ
10.10.2006	DV-Fachseminar	Michael Rambadt (FZJ): UNICORE und DEISA: vom Projekt zur Produktion
4.-7.7.2006	ESDA 2006, Torino -	E. Ribaldone (CRF), M. Casella, G. Scantamburlo, R. Tregnago (CRF) Computational aeroacoustic of buffeting phenomena coming from an open sunroof
May 2006	COCORAPHA meeting, Orsay, France.	Gilles Grasseau (IDRIS: Coupling technology and DEISA presentation” and “2D Coupling at low Rayleigh number
7.7.2006	Curtin Business School, Curtin University of Technology, Perth Australia	T. Sloan (EPCC: Standards based access to a European supercomputing infrastructure.
19.7.2006	Networking for	T. Sloan (EPCC): DEISA and EGEE: Continental Grids for

Date	Event or conference	Speaker (Affiliation): Title of the presentation
	eResearch, Curtin Business School, Curtin University of Technology, Perth Australia	eScience".
11.-14.7.2006	Questnet 2006 Networking for e-Research, University of the Sunshine Coast, Australia.	T. Sloan (EPCC), Presentation: "Standards based access to a European supercomputing infrastructure".
4.-15.9.2006 -	15th Summer School on Parallel Computing, CINECA	Presentation: Description to the DEISA project and infrastructure within the frame of course.
18.9.2006	NL Grid tutorial	J. Wolfrat (SARA), Presentation: Introduction to grids (including DEISA)
20.10.2006	ZKI supercomputer meeting of German computing centers	A. Schott (RZG): Zum Stand des europaweiten globalen Dateisystems GPFS in DEISA
16.10.2006	Astronomical Data Analysis Software & Systems (ADASS) XVI Tucson -USA)	Simulating the Planck Mission on a Distributed Computing Architecture. The DEISA and EGEE experiences
November 2006	Helmholtz Community, Berlin	S. Heinzl (RZG): DEISA - The European HPC Grid
16.11.2006	Annual IT meeting of Max Planck Institutes, Berlin	J. Reetz (RZ): Grid Computing: UNICORE und weitere Werkzeuge im Grid
8.-9.1.2007	Journées EGEE-France, Clermont-Ferrand, France	D. Girou (IDRIS): DEISA overview: project status, strategies and perspectives
5.-9.2.2007	SPXXL Winter Workshop, Maui, USA	J. Docter (FZJ): FZJ Site Report
17.-18.2.2007	15th HPC User Group Meeting, Mainz, Germany	K. Wolkersdorfer (FZJ): FZJ Site Report
26-29.3.2007	ISGC 2007, Taipei, Taiwan	M.I Rambadt (FZJ): Experiences with Using UNICORE in Production Grid Infrastructures DEISA and D-GRID"
29.3.2007	ISGC 2007, Taipei, Taiwan	M. Rambadt, R. Breu, Th. Fieseler, A. Giesler, R. Menday, A. Streit, L. Clementi, J. Reetz, Ralph Niederberger (FZJ): DEISA - cooperative extreme computing across Europe
29.1. – 2.2. 2007	19th Open Grid Forum, Chapel Hill, North Carolina, USA	M. Illingworth (EPCC): Java Bindings in DEISA Project', SAGA CORE API - Language Bindings,
8.2.2007	PFLDnet 2007 Workshop, Marina del Rey, CA, US	R. Niederberger (FZJ): Transport Protocols and applications - Do they match? - Application examples from DEISA, VIOLA. Phosphorus and D-Grid
19.2.2007	Grid API for Financial Services Meeting, London, UK	T. Sloan (EPCC): Standards Based Access to European Supercomputing Infrastructure
26.-27.3.2007	6th Teraflop Workshop	Henk Dijkstra (KNMI): presentation: Ensemble SimulationS of Extreme weather events under Nonlinear Climate changeE (ESSENCE)
2.- 4.4.2007	A course organized by the Department of Mathematics of Torino and CINECA, Torino	G. Erbacci (CINECA): Introduction to Message-Passing programming on parallel systems (DEISA presented).
16.-18.4.2007	6th HLRS/hww Workshop on Scalable Global Parallel File Systems	Thomas Bönisch (HLRS): DEISA: Distributed European Infrastructure for Supercomputing Applications
24.4.2007	Data Center up-to-date	Thomas Bönisch (HLRS): Hinter den Kulissen eines Höchstleistungsrechenzentrums

Date	Event or conference	Speaker (Affiliation): Title of the presentation