

eJDS - Delivering scientific eJournals freely to developing countries

Hilda A. Cerdeira, Enrique Canessa, Carlo Fonda ejds@ictp.trieste.it









the **abdus salam** international centre for theoretical physics









CERN, Geneva 9-13 Dec 2003



www.ejds.org

Free electronic Journals Delivery Service (eJDS)

In the second second

And gives equal opportunities for all to retrieve information.



eJDS allows scientists to search and download selected scientific articles using **e-mail only** or via **Web/e-mail gateways**

Developing world scientists have access to a much wider range of current scientific information and findings than ever before.

Publishers are able to reach researchers without financial or technical means to access information from their journals in a timely fashion.





Regional States and S scientific knowledge between developed and developing countries facilitating the involvement of scientists in developing countries in scientific endeavors.

(1) and

scaling and a functione singularity at to, we use Eqs. (1), (3), (18

 $G(t) = A + B(to - t)^{\alpha} + C(to - t)^{\beta} \cos\left(2\pi\beta \ln(to - t) + \psi\right)$

 $C \equiv \sqrt{270} M$, $\beta \equiv \pm \pi \sqrt{2} c^{k}$, $\psi \equiv 2\pi \ln 0 M^{+1}$





eJDS is based on low-cost www4mail open source information technologies



www4mail.org





Important scientific publishing companies and societies provide the **e-Contents for free**

🥥 Elsevier

American Physical Society

World Scientific

Optical Society of America

and others

www.ejds.org

This successful model runs since January 2002 and is being expanded to other disciplines beyond physics. The eJDS Team



Hilda A. Cerdeira



Enrique Canessa



Clement E. Onime

Carlo Fonda

Quantifying the Digital Divide: PingER/eJDS project















the **abdus salam** international centre for theoretical physics









The PingER/eJDS project of the Abdus Salam ICTP in Italy and SLAC in the USA aims to monitor sites in developing countries.



😤 Results from PingER illustrate the extent of the Digital Divide in terms of Internet performance to identify which developing regions are catching up, keeping up, or falling behind and the magnitude of the differences in performance between

developed regions and developing regions.





The end-to-end active monitoring information is freely available at www.ejds.org

😰 it helps to create further awareness of the lack of infrastructure,

😤 is essential to catalog and understand critical needs, allocate resources and optimize/improve performance,



🙊 is useful for a better distribution of money resources.



Much work still needs to be done to extend the PingER/eJDS monitoring to more countries within Africa.



Promoting Open Source and Capacity Building

















the **abdus salam** international centre for theoretical physics











For more than a decade, efforts have been made towards the advancement of human resources and capabilities in the field of ICT to support science and research in developing countries.

The spin-off S&T Collaborium Initiative started in January 2000 www.collaborium.org

Two Open Round Tables on Developing Countries Access to Scientific Knowledge have been

organized in 2002

and 2003.

Developing Countries Access to Scientific Knowledge:

> the Digital Divide 23 - 24 October 2003

Quantifying

Developing Country Access to On-line Scientific Publishing

Sustainable Alternatives Trieste, 4 - 5 October 2002

Our training in ICT and Open Source

We do on-site "tailored" training upon request,

for scientific, academic and governmental institutions in Developing Countries,

for free (with support of donors and local resources)

with the help our volunteers, experts in many fields of ICT.





Few topics from our trainings Open Source, open formats Linux basics and installation System and users admin in Unix TCP/IP Networking setup and admin Ethernet cabling, WiFi, IP routing Network services setup and admin Firewalls and network security Apache, Squid and Web technologies HTML and beyond: dynamic web, XML, PHP, Java, Smil, databases, ... www4mail, e-mail servers, webmail ScientificTalk, MathML, multimedia

Training and Research

- 2000: NUMAPS in Jos, Nigeria
- (1) 2000: Andean ITS Workshop in Lima, Peru
 - 2000: Linux Training in Bucharest, Romania
- (III) "Low-Bandwidth Communication Tools for Science" E. Canessa and C. Onime - Linux Journal 75, July 2000
- (1) 2001: Web Capacity Workshop in Merida, Venezuela
- (1) 2002: Networking for Development in Djèrègbé, Benin
 - 2002: Web Enabling Technologies for Scientists in Trieste
 - "Virtual Laboratories Strategies for Development" E. Canessa, C. Fonda and S.M. Radicella, CODATA Journal 2002



(1) 2003: Open Source and Web Technologies for Development in Abuja, Nigeria



Example of On-site Training

Abuja, Nigeria, 2-6 June 2003 Open Source and Web Technologies for Development

un p

ALCENTRE FOR THEORETICAL

NTDA, ABUJA, NIGERIA

CALICIPI INCISTE HALT.

and - 6th Januar, 2003

HATIONAL INFORMATION TECHNOLOGY DEVELOPMENT AGENCY, (HITDA) ABUJA, HIGHLA

45 participants (12 females, 32 males) from public and private sector and academic/research.

8 lecturers from Italy, Nigeria and Ghana.

Lab from 9 AM to 8 PM, 5 full days of activity.

3 Linux CDs + 1 CD with lecture notes given to all the participants, everything is on the web.

The eJDS Team at the



the **abdus salam** international centre for theoretical physics

thanks you for your kind attention!