Where Would You Like 100,000 Users to Go Today?

Bdale Garbee
HP Linux CTO

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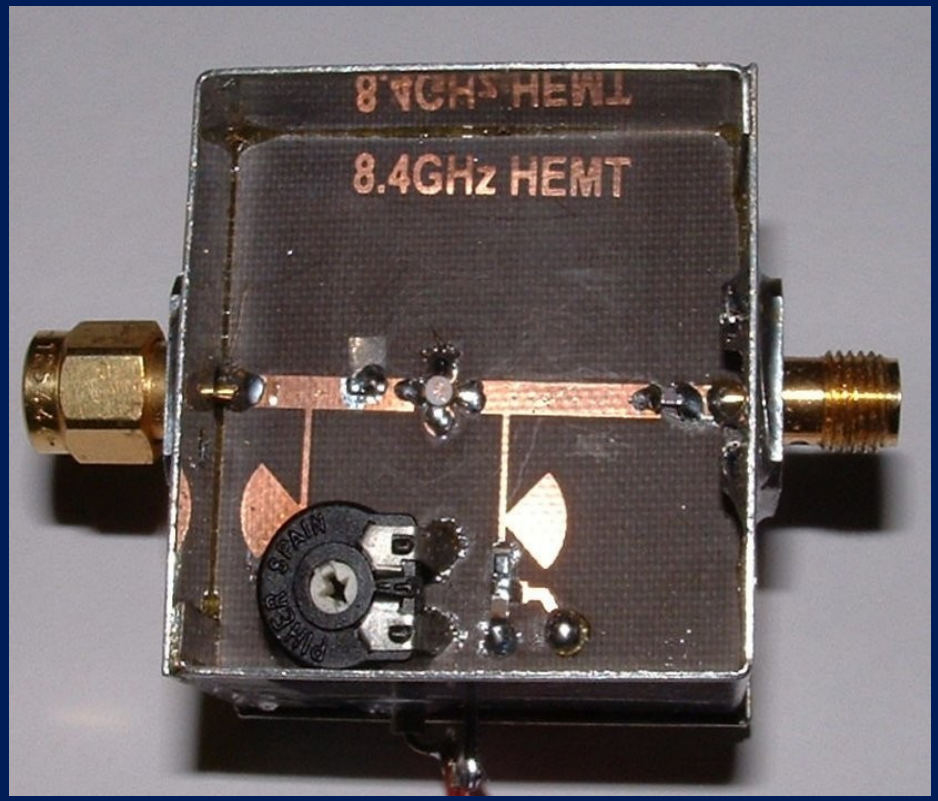
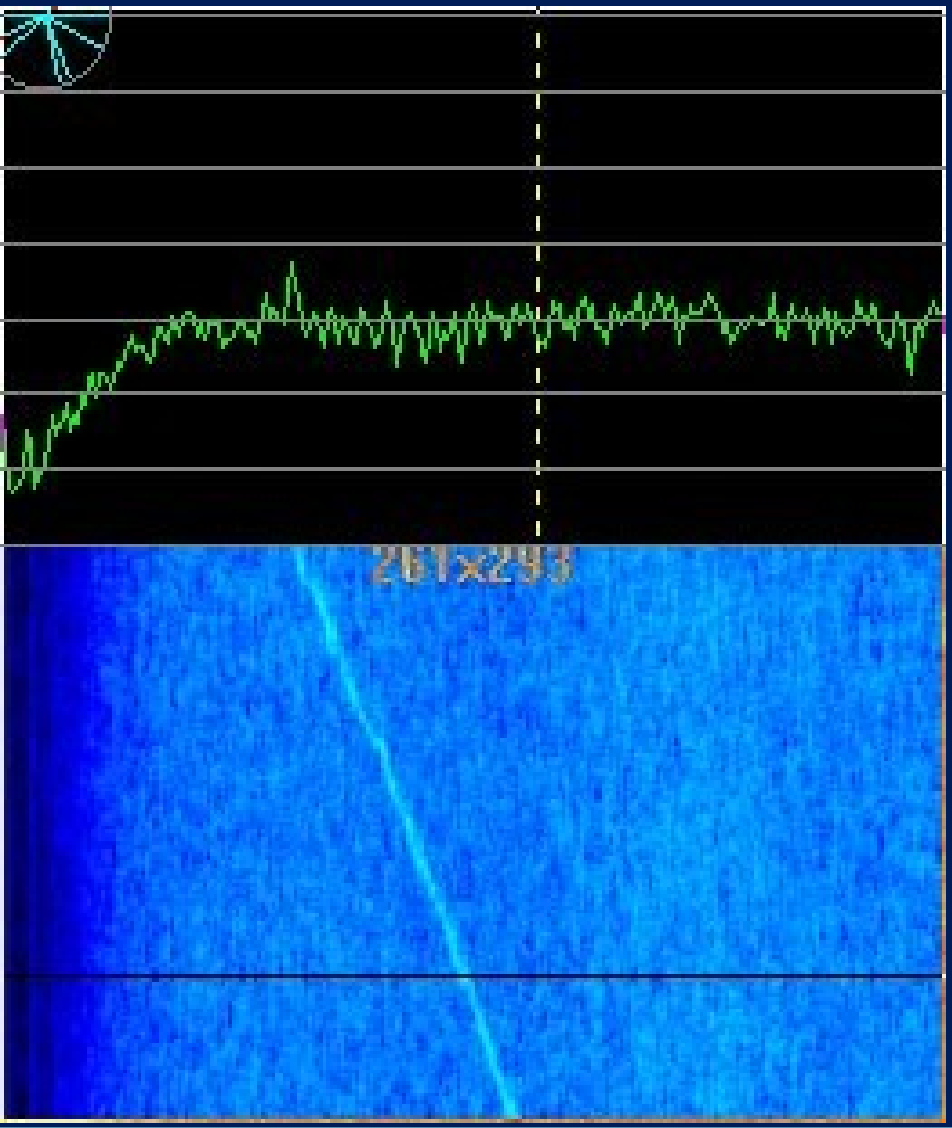
Mars?

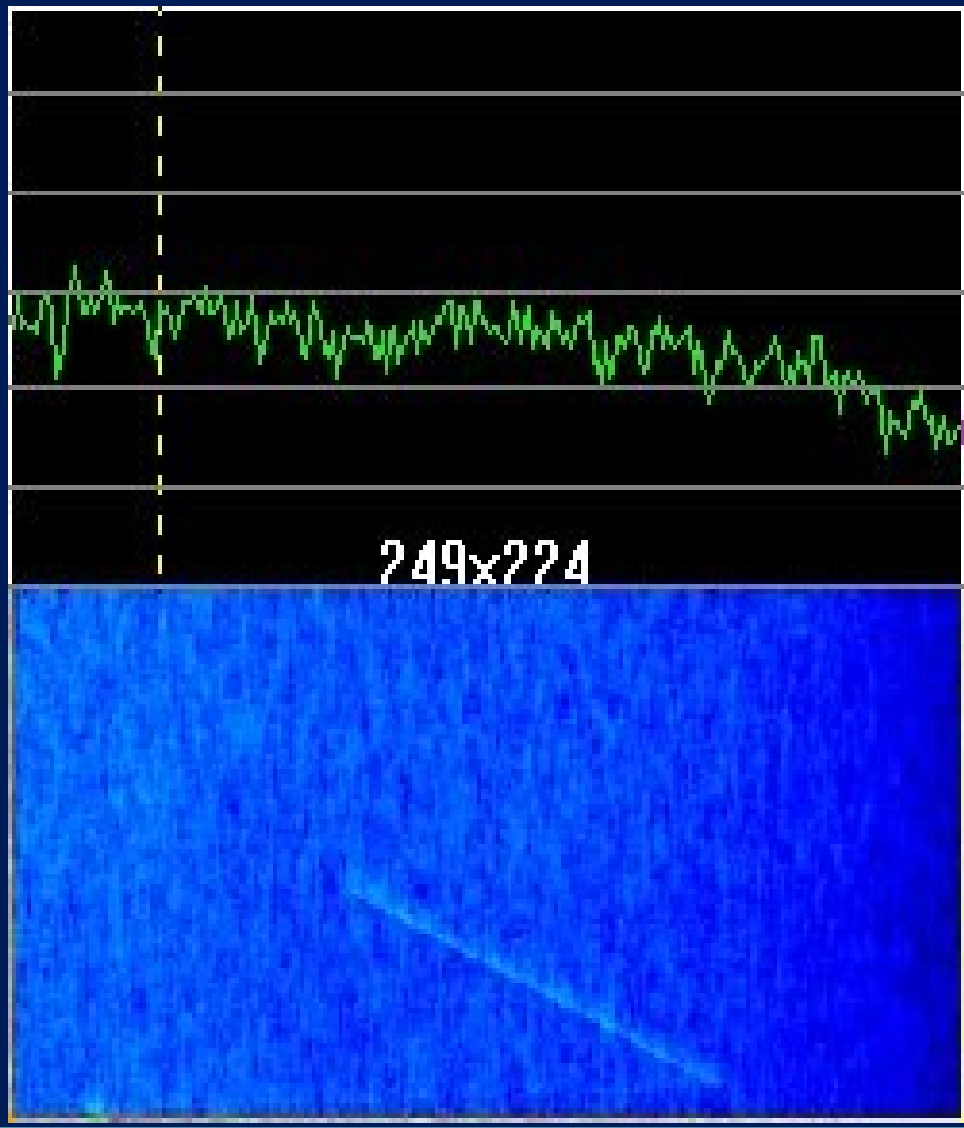
Direct Reception of Signals from Mars

- G3WDG successfully receiving signals from Mars...
  - Mars Odyssey and Mars Express both heard directly
  - 3m dish, 0.8dB noise figure, 84k system noise temperature



Mars Odyssey, and... Mars Express...





Objectives

- Try something a little different ... well, ok, maybe not all that different...
- Report on some very exciting things I've seen during my travels to speak about Linux around the world
- Share my conjectures about underlying motivations
- In the process, perhaps you'll come to understand why I remain so undauntably optimistic about the future of Free Software and the positive impact that our collected work is having.

Commons

- The dictionary says that a “Commons” is:
  - A public pasture ground
  - A piece of open land for recreational use in an urban area
- Governments as caretakers of various commons.
- The provisions of licenses like the GPL, and the community development model that they encourage, create a commons for software.
- The Tragedy of the Commons
  - an idea at least as old as Aristotle
  - popularized by Garrett James Hardin, 1915-2003
  - assumes that the resources of the commons are limited
- The Free Software commons has no such limitations!

Community

- The dictionary defines “community” as:
  - A body of people having common rights, privileges, or interests, or living in the same place under the same laws and regulations.
  - Of common character, likeness, frequency
- The Internet enables the formation of a new class of communities that could not previously exist.
  - People with common interests or values
  - Potentially broadly geographically distributed
- Inability to participate in the growing society of Internet-enabled communities is a fundamental problem, often called the “digital divide”

On my first trip to Brazil...

- A startling thing happened when I walked onto the vendor floor at the Forum International Software Livre...
- A representative of the city government handed me a CD, the label of which said “Porto Alegre GNU/Linux”, with four interesting logos on it:
  - Debian-RS
  - The City of Porto Alegre
  - The State of Rio Grande do Sul
  - The Country of Brazil
- Several thousand copies have been distributed to citizens of the region (3000 at FISL 2003 alone!).

- The former governor of this state is now the president...

Extremadura

- A region in the South-West of Spain, near the Portugese border, with a population of about one million people.
- One of the poorest regions in Spain, facing difficult economic challenges.

- A place where 80,000 Linux desktop computers have been deployed, one for every two students in the public school system!

- A model for successful large-scale Linux deployments in government and education that many hope to duplicate.

LinEx

- There was nothing “quick” or “easy” about how the government of Extremadura went about this deployment!
  - 5 years, designing and implementing comprehensive plans
- LinEx is the Debian-derived Linux distribution created in Extremadura as a key component of their Technology Literacy Plan, and the Educational Technology Network project started in 1998.
- Beyond traditional localization, interface menus apply local dialect and idiom...

- In addition to 80,000 desktops deployed in the schools, over 20,000 live-run CDROMs have been distributed to ordinary citizens!

Andalucia

- The region of Spain including Seville
- Planning an Extremadura-like massive Linux deployment
- Building a Debian-derived distribution of their own, starting with LinEx and using Metadistros.
- www.guadalinex.org
- Over 30,000 CDROMs deployed to ordinary citizens, in advance of the planned educational and government office deployments...

- And other regions of Spain, like the Canary Islands, are watching and planning similar deployments...

Debian?

What is Debian?

- 'The Debian Project is an association of individuals who have made common cause to create a free operating system.'

- More specifically, Debian:
  - is one of the most popular GNU/Linux distributions
  - runs on the most architectures
  - is a completely open volunteer organization
  - is quite international
  - is the largest GNU/Linux distribution
  - works with companies to develop and maintain software
  - is Focused on Freedom
  - is well represented in the Free Software world

Evolution of the Debian Community

- Ian Murdock's Debian Manifesto attracted people excited by the idea of Free Software to join the project
- The Social Contract and associated Debian Free Software Guidelines articulated the core set of shared values of the growing Debian community. Acceptance of these values became a criteria for acceptance into the community.
- As the community continued to evolve, a constitution was drafted to clarify roles and responsibilities, and to provide for conflict resolution and decision making.

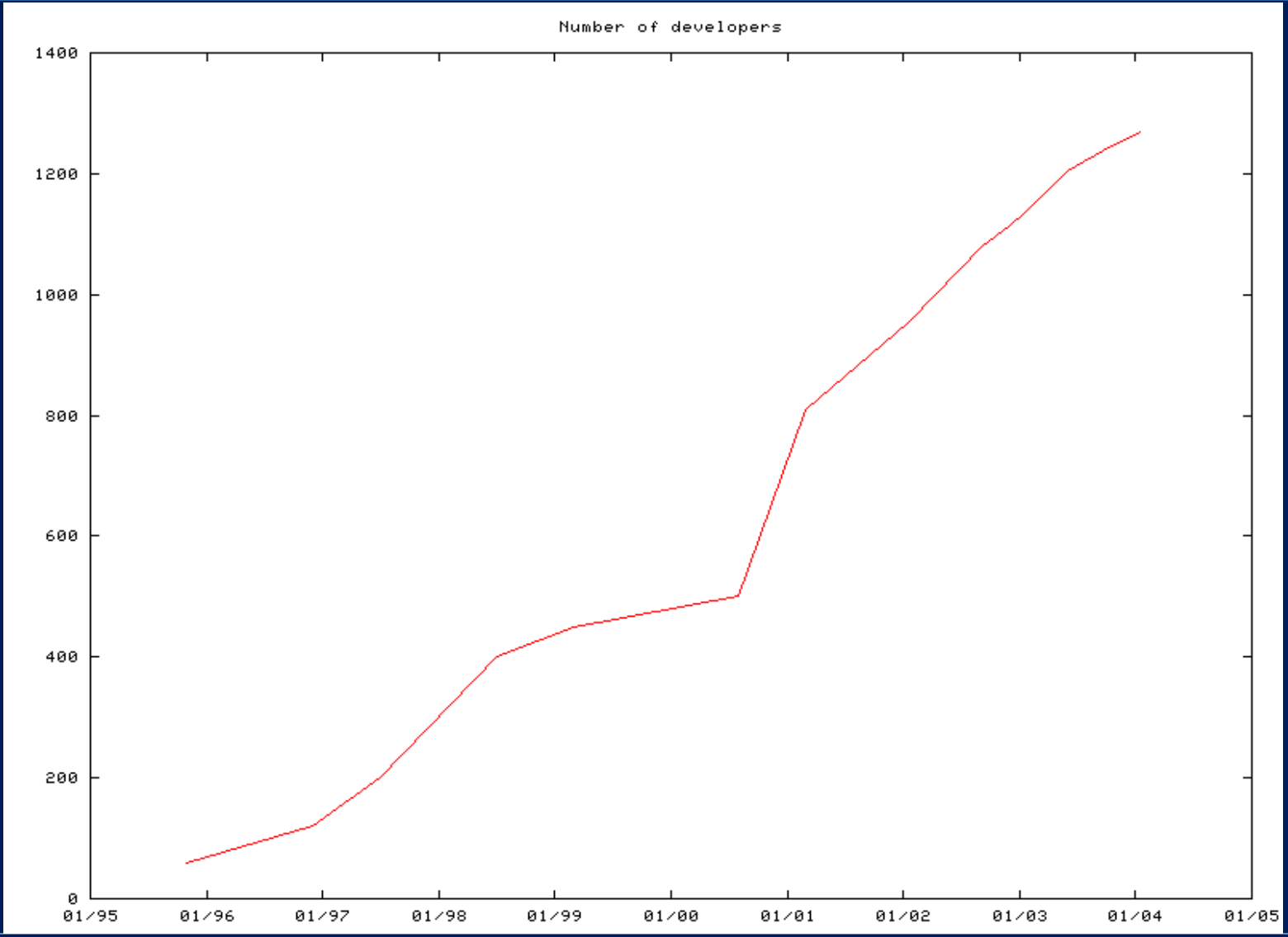
- The Debian community continues to evolve, but the results already speak for themselves...

A Few Debian Statistics

- Debian runs on everything from handhelds to mainframes
- 11 released architectures
  - alpha arm hppa i386 ia64 m68k mips[el] powerpc s390 sparc
- port underway to AMD Opteron
- also working with HURD and BSD kernels
- Debian's technology, policies, and packages form the basis for a rich variety of custom and derived distributions.

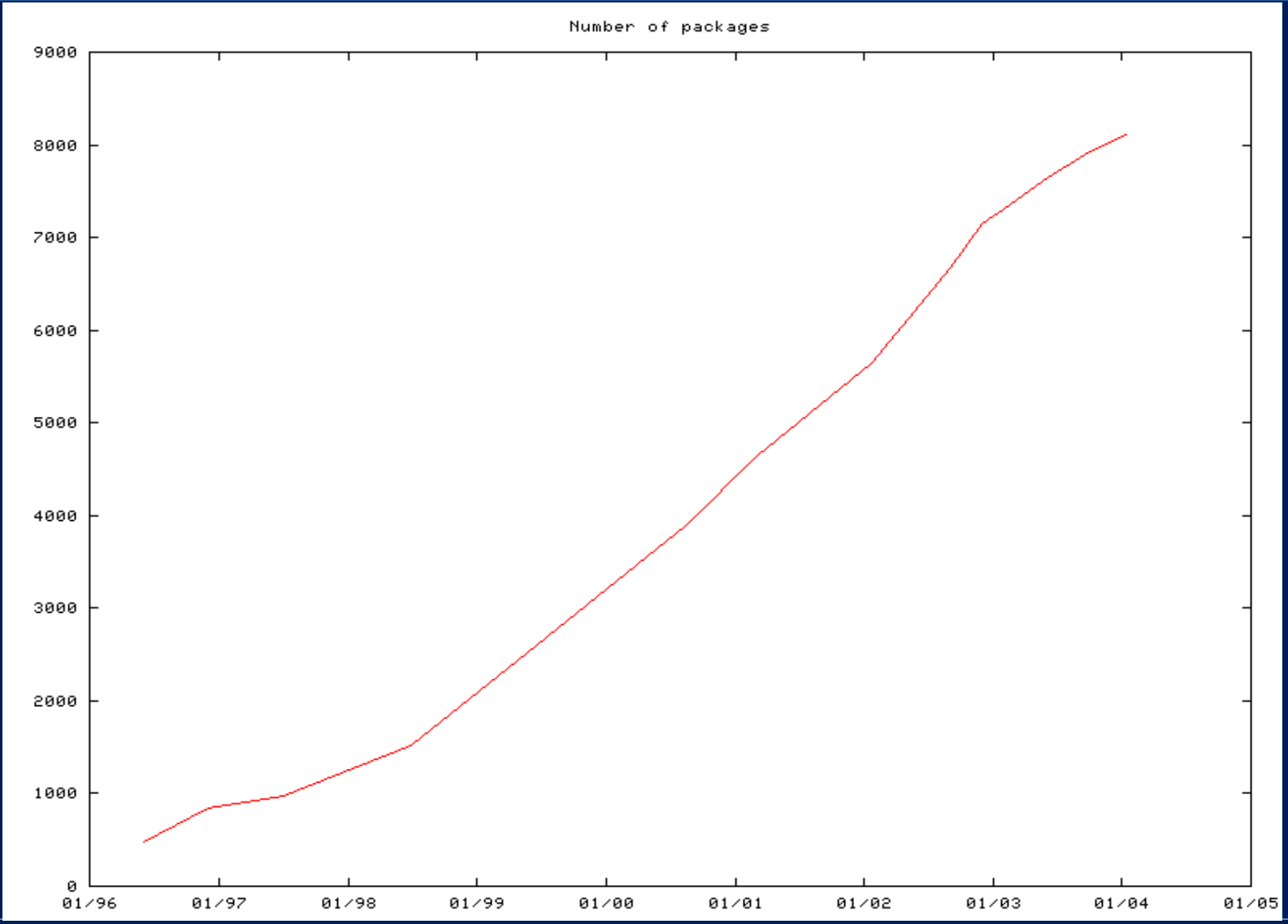
  - 1268 people
  - 8103 source packages
  - 13739 binary packages

Number of Debian Developers

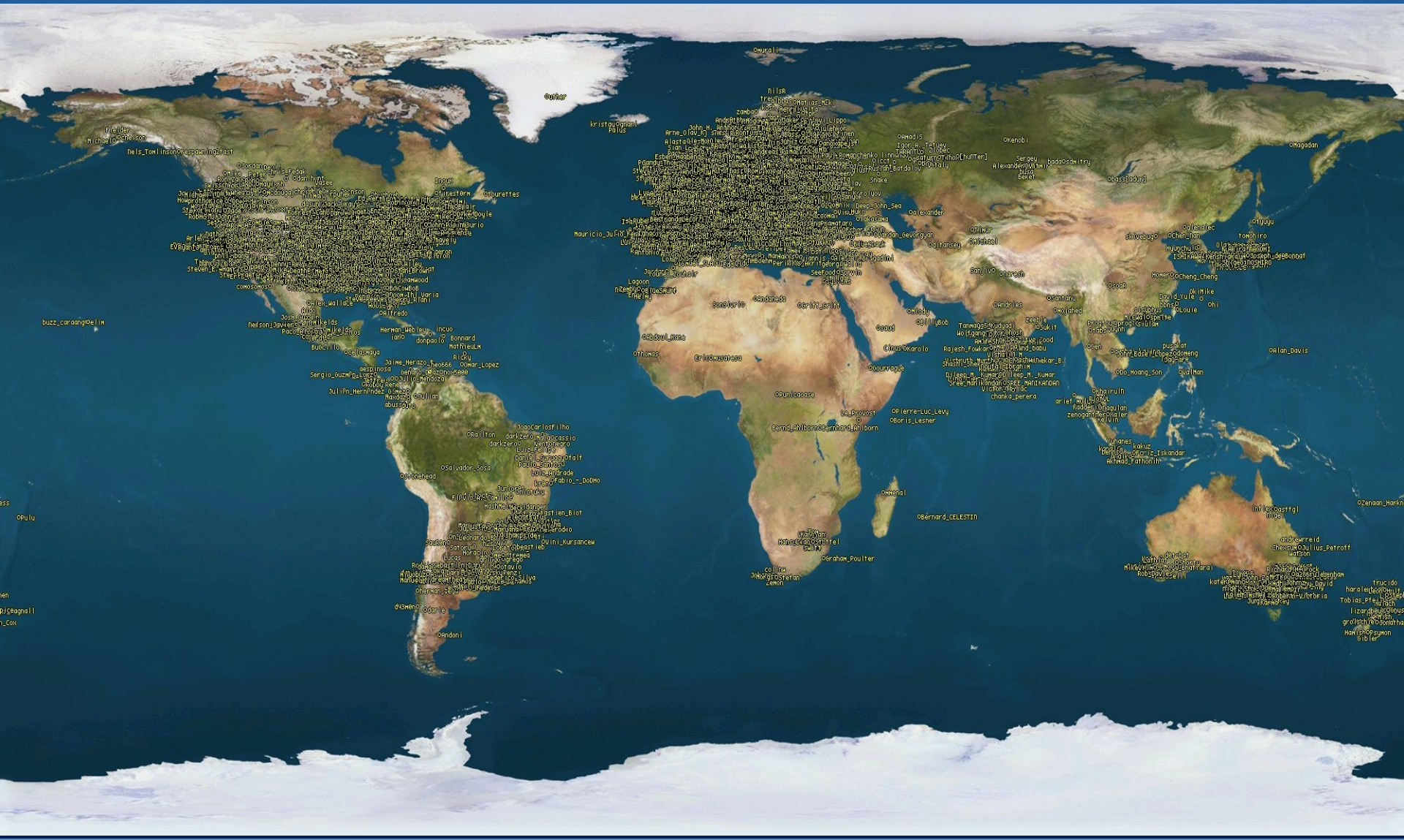


Map of Debian Developers

Number of Debian Source Packages



Map of Debian Users



Recent Awards

- Linux Journal 2003 Readers' Choice Awards
  - Debian won the category of “Favourite Distribution”
- Linux Enterprise Reader's Choice 2003
  - Debian won the category “Best Enterprise Distribution”
- Linux New Media Award 2003
  - Debian won the category “Best Distribution”
  - Along with Knoppix, which is derived from Debian, they received more than 60% of the votes.

So, what does this all mean?

HP's Linux commitment

"The question for us isn't, '*Will Linux dominate the world?* ', but '*What part of the world will Linux dominate?* '"

Carly Fiorina
CEO, Hewlett Packard Company
Linuxworld 2002

Conclusions

- Free Software makes sense to many governments
  - The freedom to pick and choose, and customize/localize
  - Investments
    - Less total cost than proprietary software
    - Local investments in education and building a software industry are better than sending hard currency overseas.
- Successful large-scale public deployments of Linux don't “just happen”
  - Political and economic will are required
  - Big projects take time ... Extremadura started in 1998!
- Many such deployments are now in the discussion and planning stages

More Conclusions

- We should not be surprised that Debian is often chosen
  - Open and inclusive, focus on Freedom
  - Existence proof for the community development model
- The core values associated with Free Software attract strong support.
  - People, hardware, and bandwidth...
  - Direct investment in development, integration, and deployment by governments and educational institutions.
- Debian continues to be one of the most successful volunteer projects ever.
  - Well over 1000 **VOLUNTEERS around the world.**
  - **Delivering real value to meet real world needs.**

To Learn More

- Debian project web site www.debian.org
- HP
  - Linux product information starts at www.hp.com/linux
  - Many HP supported Open Source projects (Debian, Samba, etc) are referenced at opensource.hp.com
- Linux for iPAQ – handhelds.org
- Bdale's talks go online at www.gag.com/~bdale/talks
- www.amsat.org
- www.sucklingfamily.free-online.co.uk/mars_express.htm

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