

# Digital Business Ecosystem

A photograph of a hackathon or workshop in progress. Several people are seated around long wooden tables, focused on their laptops and electronic components. The room is brightly lit by large windows that look out onto a lush, tropical garden with palm trees and colorful flowers. The atmosphere is one of intense concentration and collaboration.

What is in it for  
hackers?

DBE could make  
everybody in the  
business of free  
software happier

Users, hackers,  
documentation authors,  
companies, ...

A photograph taken from inside the cockpit of a biplane. A young man with light brown hair and a beard is seated in the front seat, wearing a black flight helmet with a communication system and a dark leather jacket over a tan scarf. He is looking slightly to his left. His hands are on the control yoke, which features a red lever. The cockpit has a large, multi-paned glass canopy through which the sky and the upper wing of the plane are visible. The background outside shows a hilly landscape below.

Henri  
Bergius

<http://bergie.iki.fi>



NEMIN

Free Software  
consultancy

# Helsinki Finland



PHP

OSCOM

# Midgard CMS

TownPortal

AirQuake

FSFe

AJAX

Linux  
Greenhouse

OpenPsa

GeoRSS

Microformats

# DBE in nutshell:

Java-based P2P network of  
interconnected business  
applications

Fachhochschulgesellschaft  
Salzburg

ISUFI

IBM

Trinity  
College

TUC MUSIC

Soluta.net

Imperial College  
London

Waterford Institute of  
Technology

Hermia

Nemein

University of  
Birmingham

CENSIS

Forschungszentrum  
Informatik

University of  
Surrey

London School of  
Economics

Sun

Institute of  
Technology of  
Aragon

Intel

University of  
Central  
England

Yukatan

T6



Part of 16 billion € Framework Project 6

# Making small business more efficient



A photograph showing a large audience of people seated in rows, facing left. They appear to be at a conference or lecture. The background is a plain, light-colored wall.

“An ecosystem of networked small companies can evolve and adapt faster and more safely than the huge corporations”

# Technology stack

- Execution Environment
  - Java ServENT (Server-Client) for running the DBE services
  - Networking using Fada's scale-free P2P network
- Evolutionary Environment
  - Tools for connecting services and analyzing health of the network
- Service Factory
  - DBE Studio: development tools for creating DBE services using Eclipse



# Service discovery with DBE

When signing on, each DBE node contacts a local ROOT node, tells it about its services and requests list of services needed

The ROOT node gives a list of 5 nodes providing the service

Node then contacts each of these, and receives list of 5 other nodes

Quickly the node knows about all other nodes and services

And all of this happens with minimal need of the ROOT node

# DBE in practice

OpenPsa – Task Projektinhallinta

[http://bergie/bergie\\_openspa/projects/task/ce7610bb46c27255b3f95a785fdft](http://bergie/bergie_openspa/projects/task/ce7610bb46c27255b3f95a785fdft)

**Henri Bergius | all groups**

**Projektinhallinta**  
Task status: Ongoing  
2006-08-30 - 2006-11-30

**Booked times**

- 30/08/2006 08-16: work for task Projektinhallinta ( Antti Laukkanen)

8 of 1 planned hours booked in calendar. Schedule resources.

**Hours**

[Create hour report](#)

Date	Hours	Invoiceable	Approved	Invoiced	Reporter	De
2006-08-20	5				Bergius, Henri Test	
2006-08-30	3				Bergius, Henri Kahvinjuontia paskanjuhant	
2006-08-30	5				Bergius, Henri Harri ettei n	
2006-08-31	2.5				Bergius, Henri test	
2006-09-12	3				Asiakas, Antti Anttikin käytt	

**Agreement**  
Web-hotelli (Webbejä)

**Manager**  
 Henri Bergius

**Resources**  
 Henri Bergius Antti Laukkanen  
 Antti Asiakas

**Contacts**

Antti Asiakas  
Ostopäällikkö, Oy Asiakas Ab

**Nemein Oy**  
Consultant Partner  
<http://www.nemein.com/>

**User account** berbie

**Digital Business Ecosystem**

DBE ServiceID:  
2e48cb9fd47665d536b6665d210ebe72  
never synchronized

OpenPsa is a free  
management software  
suite

Built on top of  
LAMP + Midgard and  
DBE



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Image © 2006 NASA  
Image © 2006 TerraMetrics



© 2005 Google



In Germany:  
We need a  
Maemo applet

© 2006 Europa Technologies  
Image © 2006 NASA  
Image © 2006 TerraMetrics

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DBE search:  
python maemo

In Germany:  
We need a  
Maemo applet





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Image © 2006 NASA  
Image © 2006 TerraMetrics



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In Brasil:  
I'd like to hack  
for GNOME

DBE search:  
python maemo

In Germany:  
We need a  
Maemo applet

DBE profile:  
gnome python  
gtk maemo rss





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In Brasil:  
I'd like to hack  
for GNOME

In Germany:  
We need a  
Maemo applet

I have these time  
slots available...

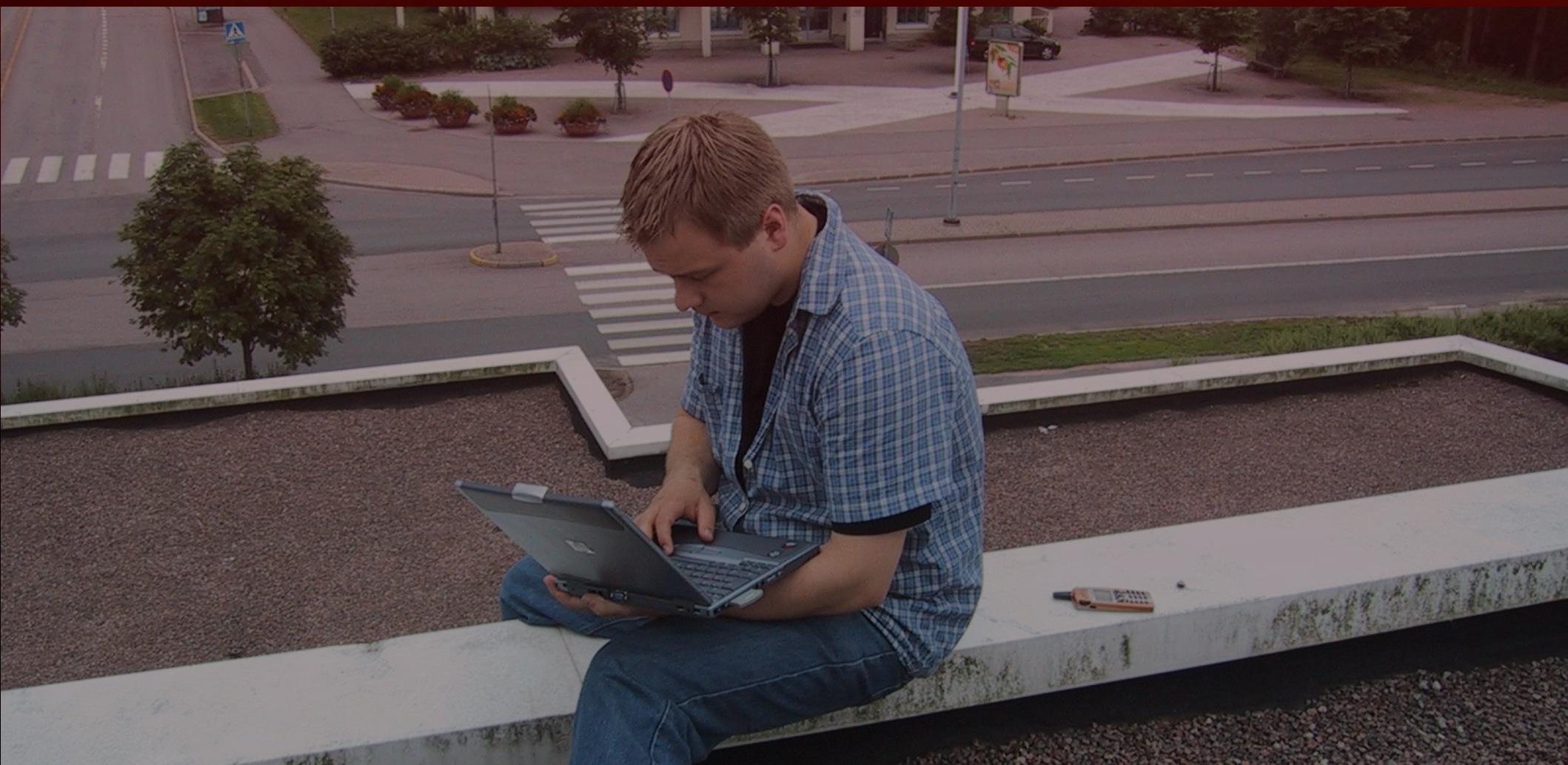
Perfect, let's  
start



# Key points

- You control your data
- True P2P, no middle men
- Your calendar and their project management system talk directly
- ...and finally,

You can run the whole operation  
on your laptop



# DBE in Brasil: Get started!

- Install Midgard,  
OpenPsa and DBE
- Integrate your own  
applications
- Educate local  
software business  
about DBE and P2P





# WSIS 2005

“Minister of Culture of Brasil, Gilberto Gil confirmed that the initiative fits with the Brasilian approaches in ICT as enabling instrument for empowering the local culture and e-business”

# Anybody from Debian?

We could make DBE easier  
by packaging it

# Java is now 100% free

Go out and explore!



A person in a dark room, seen from the side, holding a glowing red stick or laser pointer.

# DBE links

DBE project site  
[www.digital-ecosystem.org](http://www.digital-ecosystem.org)

Planet DBE (blogs)  
[www.nemein.com/planet-dbe](http://www.nemein.com/planet-dbe)

Swallow (DBE ExE)  
[swallow.sourceforge.net](http://swallow.sourceforge.net)

“DBE” community in Orkut!