

JBoss innovation  
AWARD WINNER 2006

JBoss World  
LAS VEGAS 2006

Met@LoGo  
in cooperation with OpenPELGO

Towards an Open Source  
e-Government Solution

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Met@LoGo

1. Introduction
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3. Project Overview
4. Project Design Process
5. Technical Implementation
6. Deployment
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Met@LoGo Introduction

- Diminish the digital divide by improving communication and cooperation capabilities between communities in Latin America and their SMEs by use of ICT
- Generate replicable methodology for the creation of local e-government ICT infrastructures

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Met@LoGo ICT4D

- Information and Communication Technologies for Development
  - ✓ Importance
  - ✓ International consensus
  - ✓ Beyond connectivity
  - ✓ Spectrum

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Met@LoGo ICT4D - Latin America

- Current developments
- European Commission @LIS Program
  - ✓ Alliance for the Information Society
  - ✓ € 77.5 Million (~ US\$ 98 Million)
  - ✓ Extending the benefits of the information society to all citizens in Latin-America
  - ✓ Projects on e-local governance, education and cultural diversity, e-public health and e-inclusion

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Met@LoGo ICT4D - Good Governance

- Goals
  - ✓ Improve Quality of Service
  - ✓ Increase efficiency
  - ✓ Contribute to economic development
  - ✓ Encourage democracy and participation
  - ✓ Create broad access to technology

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## Met@LoGo ICT4D - e-Government

- Related work in e-government
  - ✓ @LIS
    - eGOIA, EMPLEMENT, SILAE
  - ✓ EUMEDIS
- e-government systems in use

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## Met@LoGo Project Objectives

- Diminish the digital divide by providing local governments viable infrastructures and skilled manpower
  - ✓ Replicable methodology
  - ✓ Knowledge transfer
  - ✓ Demonstration of viability
  - ✓ Improve cooperation capabilities

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## Met@LoGo Project Objectives Achieved

- Replicable methodology
  - ✓ Open source licensing
  - ✓ Easily deployable tool-suite
- Knowledge transfer
  - ✓ Training of and support by local partners
  - ✓ Establishment knowledge network between Latin American and European Partners
- Demonstration of viability
  - ✓ Deployment in 14 pilot municipalities
  - ✓ Further development by local partners and OS community
- Improve cooperation capabilities
  - ✓ Support for G2G & G2B communications

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## Met@LoGo Project Profile

- € 3.012 Million (~ \$ 3.83 Million)
- Funded 80% EU / 20% BMZ
- Co-op with 4 Latin American countries
- Deployed in 14 municipalities
- January 1<sup>st</sup> 2004 – August 31<sup>st</sup> 2006
- Project Management
  - ✓ gtz
- Technical Implementation
  - ✓ TUW – InfoSys, Distributed Systems Group

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## Met@LoGo Project Consortium

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## Met@LoGo Project Design Process

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## Met@LoGo Project Design Process

Example of UML Specification Diagram (Columbia)

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## Met@LoGo Technical Implementation

- Requirements
  - Open source licensing
  - Hardware sizing limitation
  - Easily deployable tool-suite
    - CMS portal capabilities
    - Service oriented CRM capabilities
    - Task management
    - Document handling
    - Communications
    - Facilitate transparency

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## Met@LoGo Technical Implementation

Backend Administration

Frontend Information Portal

Frontend Service Features

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## Met@LoGo Architecture – Overall Review

OpenPELGO Workflow Man. (WM) Component

JBoss jBPM Core

Open PELGO Interface

php Java Bridge

Content Man. (CM) Component

Typo3 Core

Eclipse Design

JBPM e-governance Feature Extension

VM Ext. and UI

User Authent. Security

Process

Forms

Messages

G2B Comm.

Action Handlers

Decision Hand.

Deployment

Initialization

Form Task

CRM Ext.

Other Ext.

Statistics/Monit.

JDBC MySQL Connect

Typo3 jBPM CRM

Forms and Document Handling

Task Contrl.

Task Assignm.

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## Met@LoGo Architecture - 3rd Party Comp.

OpenPELGO Workflow Man. (WM) Component

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## Met@LoGo OpenPELGO

- JBoss jBPM as WM Core
  - Open Source
  - Extensibility
  - JPDL (vs. BPEL)
  - Graphical Process Designer
  - Stability
  - Support

OpenPELGO Workflow Man. (WM) Component

JBoss jBPM Core

Open PELGO Interface

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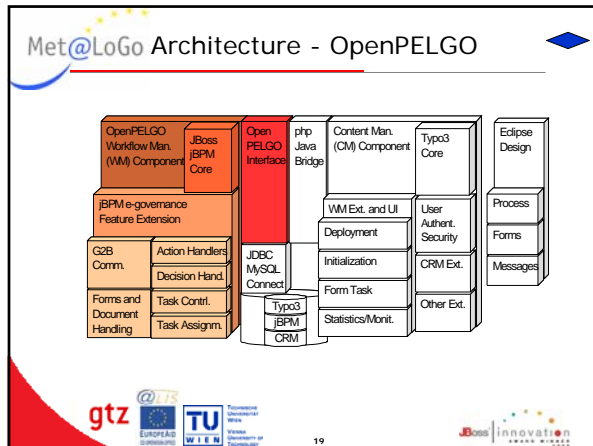
Typo3 jBPM CRM

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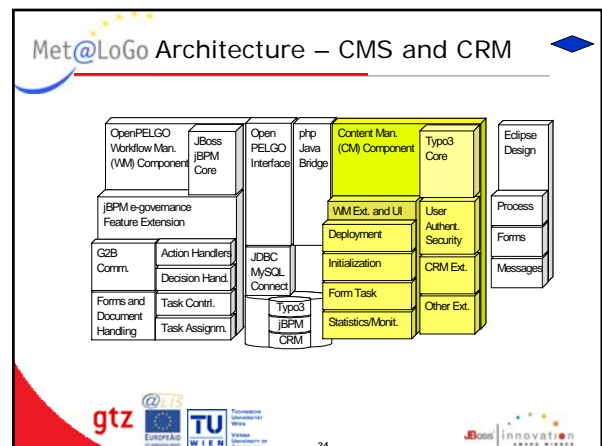
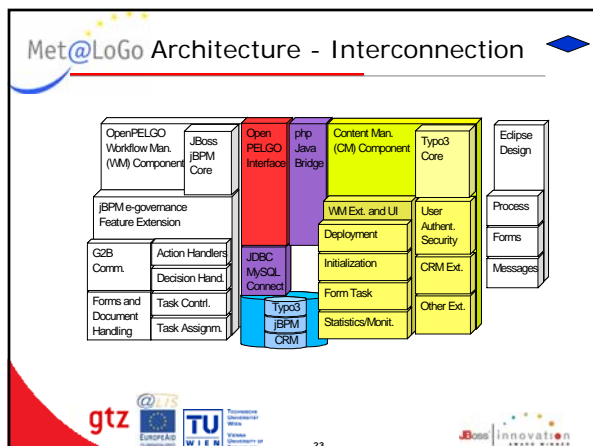
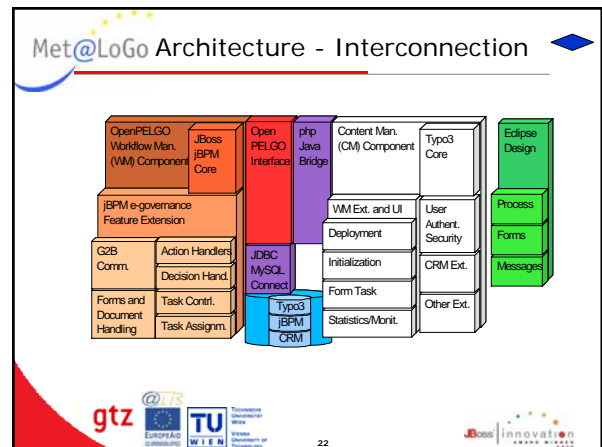


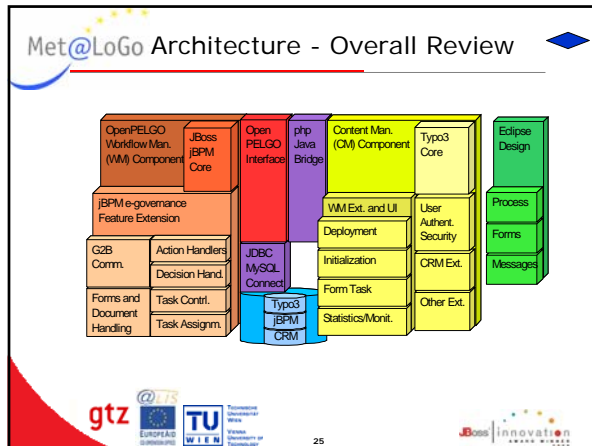
### Met@LoGo OpenPELGO

- Modular architecture based on jBPM
- e-Gov specific feature extensions
  - ✓ Task management
  - ✓ Administrative service features
    - Document Handling
    - Communication module
- Accessible through OpenPELGOInterface
  - ✓ java interface providing access to e-Gov features for various CMSs, CRMs, applications or devices

### Met@LoGo OpenPELGO

- Customized Task management
  - ✓ Task Controllers
  - ✓ Task Assignment Handlers
- Administrative service features
  - ✓ Document handling
    - xForms XML specification
    - PDF and certificates on demand
    - Logical Decision Handler
  - ✓ Communication module
    - e-mail, SMS, fax, telephone notifications





### Met@LoGo Graphical Environment

- Typo3 user interface implemented as extensions accessing OpenPelgoInterface
- User management and security handling
- Process deployment and statistical monitoring extensions

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### Met@LoGo Graphical Environment

- jBPM Eclipse Graphical Process Designer
  - ✓ Emphasis on ease of process design
  - ✓ Integration of customized feature

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### Met@LoGo Deployment

- Deployment phase
  - ✓ Ongoing in 14 Pilot Municipalities
  - ✓ Training for and support by local partners
  - ✓ 2<sup>nd</sup> Met@LoGo Conference
- Sustainability and replication
  - ✓ Development community participation
  - ✓ Easily deployable tool-suit

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## Met@LoGo Deployment

- Challenges
  - ✓ JBoss jBPM Graphical Process Designer
  - ✓ Interplay of various Open Source components across different environments and languages
  - ✓ Migration of current systems

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## Met@LoGo Conclusion

- Diminish the digital divide by improving communication and cooperation capabilities between communities in Latin America and their SMEs by use of ICT
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## Met@LoGo Discussion

Questions?

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- For further information:
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