

# ByStar Federation of Autonomous Libre Services

## Overview of Concepts and Models

ByStar

E-mail: <http://www.by-star.net>

<http://www.by-star.net/PLPC/180011>

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# About This Document

- This document is web published as PLPC-180011 at:  
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- It is available in PDF Article format at:  
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- It is available in PDF Presentation format at:  
<http://www.by-star.net/PLPC/180011/articleEn.pdf>

This document is also available in Farsi/Persian.  
French and Arabic translations are in the works.

## Part I

# Ills and Contours of the Cure

# Part 1: Ills and Contours of the Cure

## 1 Problem: Dominance of Internet By Large Corporations

- Deal Made: Free-of-Charge Service - Targeted Advertising
- Ramifications Of The Deal
- Internet Application Services Today: Ill Directed
- Causes For Concern

## 2 Solution: Autonomous Libre Services

- We Need To Be Very Multi-Dimensional and Inter-Disciplinary
- General Contours Of The Cure
- A Model Inversion: From Industrial to Convivial
- Our Goal

## 3 What Are ByStar Libre Services

- Libre Services: A non-proprietary Model
- From Free Software To Libre Services
- From Software Wars To Service Wars

## 4 Challenges of the Libre Services Model

- Model's Track Record and Limitations
- What Is ByStar

# Deal Made: Personal Info - Targeted Advertising

In A Blink Of An Eye

American Public Made a Deal with American Corporations.

## Free-of-Charge People Got:

Email (Personal Messages)  
Calendar, Address Book, ...  
Content Publication  
Facebook Webpage & "Friends"

## American Corporations Got:

Semantic Analysis of Email  
Spying with consent  
Logs and Trail Analysis  
Behavior Cross References

# Ramifications Of The Deal

- A New Currency Has Been Created: Personal Information, Privacy, Autonomy
- An Established Business Model that Translates Personal Information into Targeted Advertising
- The Debit Side of this New Currency is Humanity
- Americans got there with no discussion of long term social consequences. No discussion of Sociology, Social Psychology, Morality.
- Mr. Zuckerberg (Founder of Facebook) Has Done More Harm To The Human Race Than Anybody Else His Age.
- And He Was Celebrated As “Person Of The Year” (Time Magazine).
- America is mostly an Economic Society.
- And now this American Disease is spreading through out the world.

# Internet Application Services Today:

## Ill Directed

- The wrong model: proprietary, owned and controlled
  - Ownership oriented to the Service Provider
  - Non-transparent software
  - User information owned and controlled by the proprietary Service Provider
- Structurally incoherent
  - Ad hoc: no overarching engineering design
  - Driven by short-term business expedience and profit
  - Functionally uncoordinated

## Causes for Concern

- Networks are societal resources and their usage model must not be left to free markets and business.
- The Internet is today controlled by large corporations, and critical civil liberties are being compromised.
- Current Copyright and Patent laws are in conflict with nature and are harming humanity.
- As first generation engineers we have a responsibility to safeguard the societal welfare.

The goal of this project is to:

Liberate Internet Services



# We Need To Be Very Multi-Dimensional

In Order To Get It Right

We Need To Consider Ramifications Of:

Software As Service  
and  
Service As Software  
and  
the Software-Service Continuum

In ALL Dimensions:  
Philosophical, Societal, Engineering, Economic and Business

Is All Within Our Scope.

# General Contours Of The Cure

## ByStar Federation of Autonomous Libre Services

- The Full Scope of Internet Services: Star “\*” in ByStar means everything
- Fully Libre: Complete rejection of so-called Western IPR
- Autonomous When Possible – Usually End-To-End
- Federated Based on Autonomous – Central only when required

Paving the way towards: The Convivial and Halaal Quadrant

We Are Proposing:

A Model Inversion For All Of Internet Services

From Industrial To Convivial

With Huge  
Economic and Societal Ramifications

- Full Spectrum Internet Services:  
Functionally Equivalent to What Exists  
hotmail, yahoo mail, google mail – Facebook, LinkedIn –  
youtube, search
- Full Software Service Continuum – (Service, Desktop,  
Notebook, Handheld)
- Focused on User Autonomy and Privacy
- Purely Based on Libre Software
- A New Radical Model but Fully Evolutionary

This We call:

ByStar (By\*) Federation of Autonomous Libre Services

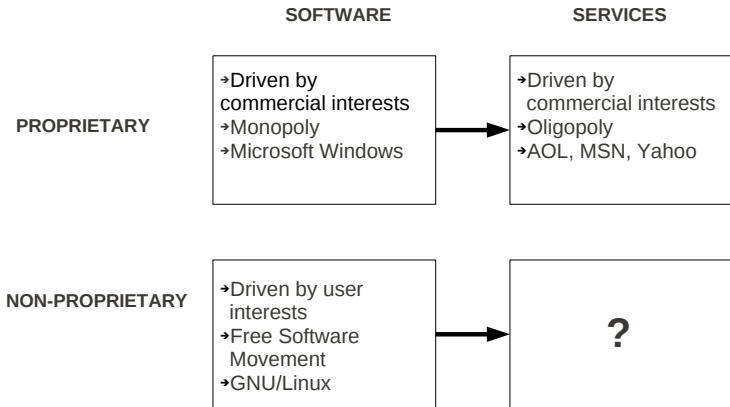
# Libre Services:

A non-proprietary Model for delivery of Internet services

A non-proprietary Model  
for  
delivery of Internet services

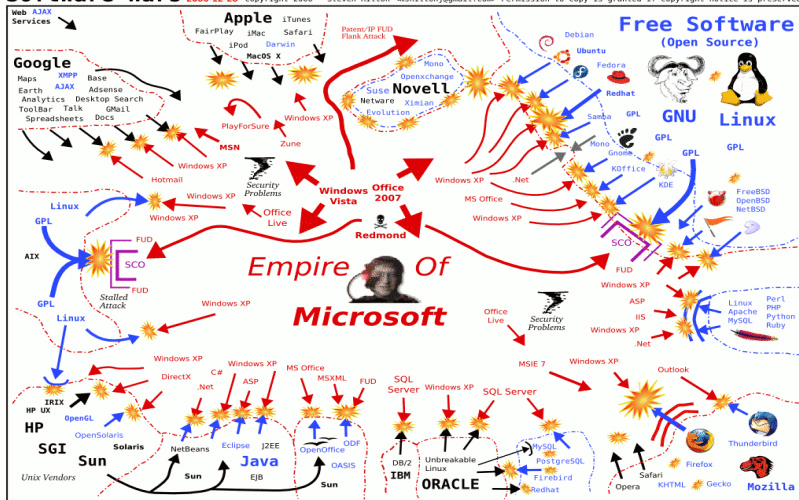
Free Software Ideology For Internet Application Services

# From Free Software To Libre Services



# From Software Wars To Service Wars

Software Wars [http://mshiltonj.com/software\\_wars/](http://mshiltonj.com/software_wars/) All trademarks are property of their respective owners. Inspired by Andy Tai <http://atai.org/> 2006-12-28 Copyright 2006 - Steven Hilton -mshiltonj@gmail.com- Permission to copy is granted if copyright notice is preserved.



## Beyond Free Software

We have won the Free Software battle

Proprietary Software Already Lost

We Demonstrated Two Things:

- 1 Model: Free/Libre is Superior to Proprietary
- 2 Implementation: GNU/Linux is Superior to Windows  
(More Convivial)

But Now The Game Has Changed –  
Software has mostly become Service.

Limitation and Challenges:

Software is inherently collaborative and cumulative.  
(naturally absorbs energy) Service is inherently remote and  
isolated. (but that can be changed)

Service is inherently remote and isolated.  
(but that can be changed – When Service Is Software)

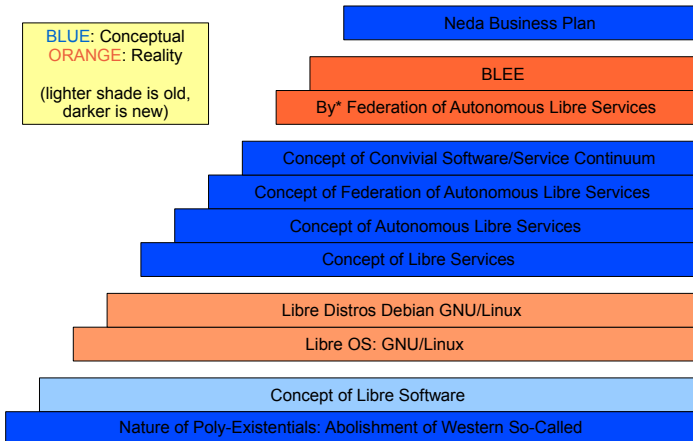


# What Is The ByStar Family

- By\* is a coherent framework for enabling complex interactions among people, businesses and information.
  - Small and Medium Businesses: ForSMB.net
  - Individuals: ByName.net, ByAlias.net, ByMemory
  - Places and Events: ByWhere.net, ByEvent.net
  - Information: ByTopic.org
  - For Interactions: ByInteraction.net

# Layering of Concepts and Results

BLUE: Conceptual  
ORANGE: Reality  
  
(lighter shade is old,  
darker is new)



- Language, Definitions, Models and Concepts
- ByStar Federation of Autonomous Libre Services
- Joining ByStar, Obtaining ByStar Software and Using ByStar
- Engineering Design of ByStar
- ByStar Vertical Slices (Feature Families)
- Economic and Business Dimensions of ByStar
- Societal, Inter-Societal, Social and Legal Ramifications
- Collaborative and Guardianship Framework

## Part II

# Language, Definitions, Models and Concepts

# Part 2: Language, Definitions, Models and Concepts

## 6 Concepts and Definitions Summary

## 7 Some Vocabulary

- Language: Globish, Not American or British English
- Definition: Free / Libre
- Nature Of Poly-Existentials

## 8 Some Definitional Criteria

- Libre Services: Definitional Criteria
- Autonomous Libre Services
  - Autonomous Libre Services: Definitional Criteria
  - Autonomous Libre Services: Degrees of Trust and Autonomy
  - ByStar Autonomous Libre Services
- Federated Libre Services
  - Federated Libre Services: Definitional Criteria
  - Types Of Federated Libre Services

## 9 Some Modeling Concepts

- Operation in the For-Profit and Non-Proprietary Quadrant
- Software - Service Continuum – Where Proprietary Looses
  - Protocols Hour Glass – Note Convergence in the Middle
  - ByStar Hour Glass – Importance of Convergence in the Middle
  - Service Dealer, Lerner, PDA Continuum

# Concepts and Definitions Summary

- Globish vs English
- Libre Vs Free
- Libre Services
- Autonomous Libre Services
- Federation of Autonomous Libre Services
- Nature of Poly-Existentials
- The Non-Proprietary, For-Profit Quadrant
- Tools For Conviviality
- Responsibilities of Professions and Health of Society
- Societal End-To-End Argument vs Rise of the Middle
- Rejection of Americanism, East vs West
- Halaal and Haraam

## Language: Globish, Not American or British English

- The Audience for these concepts is global (Chinese, Iranians, Brazilians, Europeans and also Americans)
- ByStar belongs to Humanity – Not Any Particular Society (In contrast to Facebook, LinkedIn, Google, MSN, ...)
- This is in Globish – A limited sub-set of English that has already forked off from American/British English)
- Examples: Libre and Gratis (Not Free), Convivial, Halaal

## Definition: Free / Libre

In English "Free" is ambiguous:

- 1 Free can mean Libre: free as in freedom of action
- 2 Free can mean Gratis: free as in zero monetary cost

English/Globish needs the word "Libre".

In this document, we generally avoid the word free.

In compound usage (e.g., Free Software), When we say "free" we will always mean Libre:

Nature at Work:

Poly-Existentials flourish when  
libre from restrictions and ownership



# Nature Of Poly-Existentials

- So Called Western IPR is in conflict with Nature
- What Are Poly-Existentials:
- Multi-Possessability
- Ownership is a one-to-one relationship
- An Ownership Mistake With Ramifications Broader than Slavery
- Pointer to PLPC – Full title in box

# Libre Services: Definitional Criteria

- 1 The service must consist entirely of open-source & free software components
- 2 The service must be based entirely on patent-free protocols
- 3 The integration software must consist entirely of free software

Hence the entire service is reproducible and modifiable based on access to source code

# Autonomous Libre Services: Definitional Criteria

- 1 Service Transparency – Libre Services: Definitional Criteria
- 2 Service Portability – Libre Services: Definitional Criteria
- 3 Data Portability (from hosting/provider to hosting/provider)
- 4 Non-Retention of Data (by host/provider)
- 5 End-To-End Non-Restrictivity

# Autonomous Libre Services: Degrees of Trust and Autonomy

- User Owned – Provider Managed
  - Libre Shared Hosting Subscriber SLA, AUP
  - Libre Shared Hosting Advertisement SLA, AUP
- User Owned – User Managed
  - Libre Center Co-location / Dedicated Hosting
  - Cloud Based Hosting
  - At User Premise – your own machine and dedicated IP Address

While All Is Supported, The Guarantee of “At User Premise” option should always be maintained.

- Individual (Named, Living) – [ByName.com](#) - [ByName.net](#)
- Individual (Alias, Living) – [ByAlias.com](#) - [ByAlias.net](#)
- Individual (Minor) – [ByFamily.com](#), [ByFamily.net](#)
- Individual (Named, Deceased) – [ByMemory.com](#) - [ByMemory.net](#)
- Individual (Information) – [ByAuthor.net](#), [ByAuthor.com](#)
- Families – [ByFamily.com](#), [ByFamily.net](#)
- Small/Medium Businesses – [BySMB.net](#), [ForSMB.net](#)  
Domain is usually redirected to business's domain
- Locations: [ByWhere.net](#)

All of These ByStar Autonomous Services are available as Shared Hosting, Dedicated Hosting, Colocation and ByStar Appliances.

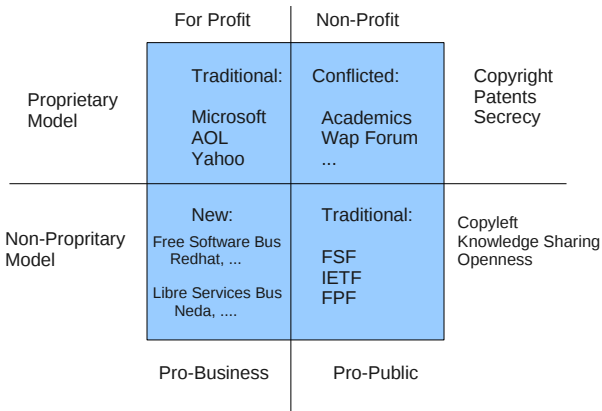
# Federated Libre Services: Definitional Criteria

- 1 Service Transparency – Libre Services: Definitional Criteria
- 2 Service Portability – Libre Services: Definitional Criteria
- 3 Public Data Designated By Autonomous Libre Service
- 4 Safeguards of Private Data and Non-Retention of Data on command
- 5 Logs confidentiality and transparency
- 6 Based on Facilitation of End-To-End Interactions

# Types Of Federated Libre Services

- Content Republishers
  - Proprietary Examples: Youtube
  - ByStar Domains: ByTopic.org, ByContent.org
- Collaborative Content Production
  - Existing Examples: Wikipedia, sourceforge, Ancestry.com
  - ByStar Domains: BySource.org, ByBinary.org, ByAuthor, ByFamily.com (genealogy)
- Personal Interaction Facilitators
  - Proprietary Examples: Facebook, Likedin, eharmony, Yahoo!Dating
  - ByStar Domains: ByInteractions
- Trade Facilitators
  - Proprietary Examples: Craigslist, ebay, Amazon
  - ByStar Domains: ByInteractions
- Search Engines
  - Proprietary Examples: Google, Bing
  - ByStar Domains:

# Operation in the For-Profit and Non-Proprietary Quadrant





# Software - Service Continuum – Where Proprietary Looses

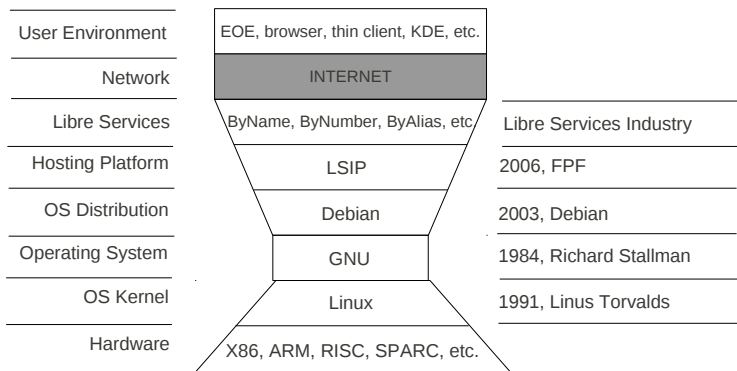
Service, Desktop, Laptop, PDA Continuum Free/Libre  
everywhere

Hour Glass= Diversity on Top – Diversity at the Bottom –  
Cohesion and Convergence in the middle

Consistent OS: Linux everywhere Consistent GUI: Gnome  
everywhere Consistent Applications: Emacs, ... everywhere  
Deep, Broad and Consistent Integration through Free Software  
and Libre Services



# ByStar Hour Glass – Importance of Convergence in the Middle



# Service, Desktop, Laptop, PDA Continuum Libre everywhere

- Consistent OS: Linux everywhere
- Consistent GUI: Gnome everywhere
- Consistent Applications: Emacs, ... everywhere

Deep, Broad and Consistent Integration through Free Software and Libre Services

# Societal End-To-End Argument vs Rise of the Middle

- Interactions Amongst People/Businesses and Information Could Be:
  - 1 Direct – End-to-End
  - 2 Central – Middle-Controlled
- End-To-End vs Middle-Controlled Architectures have both Engineering and Societal Ramifications
- Today's Industrial Internet Application Services are generally Central and Middle-Controlled.
- The Convivial ByStar Libre Services are generally End-To-End and Middle-Light.
- The End-To-End model is Autonomy and Privacy Friendly
- The Middle-Controlled model is Hostile to Autonomy and Privacy

# The Engineering End-To-End Argument

- End-to-end Arguments in System Design  
<http://web.mit.edu/Saltzer/www/publications/endtoend/endtoend.p>
- Rethinking the design of the Internet: The end to end arguments vs. the brave new world  
[http://www.csd.uoc.gr/~hy558/papers/Rethinking\\_2001.pdf](http://www.csd.uoc.gr/~hy558/papers/Rethinking_2001.pdf)
- The Rise of the Middle and the Future of End-to-End.  
<http://www.ietf.org/rfc/rfc3724.txt>
- Tools for Conviviality - Ivan Illich  
[https://clevercycles.com/tools\\_for\\_conviviality](https://clevercycles.com/tools_for_conviviality)

## Engineering End-To-End Summary

*The most important benefit of the end to end arguments is that they preserve the flexibility, generality, and openness of the Internet. Movement to put more functions inside the network jeopardizes that generality and flexibility as well as historic patterns of innovation. A new principle evident already is that elements that implement functions that are invisible or hostile to the end to end application, in general, have to be “in” the network, because the application cannot be expected to include that intermediate element voluntarily.*

## ByStar End-To-End Philosophy

- Make Services Autonomous Whenever Possible (peer-to-peer oriented)
- Invest and Focus on End-to-End communications facilities amongst Autonomous Libre Services
- When a Federated Service functions as an intermediary, limit its role to the bare essential of hooking the two ends. Thereafter, communications can be end-to-end.



# Ivan Illich's Concept of Convivial Tools

*Tools are intrinsic to social relationships. An individual relates himself in action to his society through the use of tools that he actively masters, or by which he is passively acted upon.*

*To the degree that he masters his tools, he can invest the world with his meaning; to the degree that he is mastered by his tools, the shape of the tool determines his own self-image. Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision. Industrial tools deny this possibility to those who use them and they allow their designers to determine the meaning and expectations of others. Most tools today cannot be used in a convivial fashion.*

# Convivial Software

- Unix/GNU Vs Microsoft Windows
  - Unified file model, pipe, small dedicated progs, ...
- Emacs vs Vi
  - buffers, major-modes, minor-modes, key-maps, frames, windows, regions,
- qmail vs sendmail
  - complete separation of queuing and spooling from submission, delivery and protocols.

Enable the tool user to be creative and expressive

## East vs West – Rejection of Americanism

- Global Scope – Can't be dominated/dictated by Western Values
- East vs West Fundamental Distinctions:
  - East: More Society Oriented
  - West: More Individual Oriented – More Economically Driven

# Responsibilities of Professions and Health of Society

- What Does “Profession” Mean? It also includes Societal Responsibility.

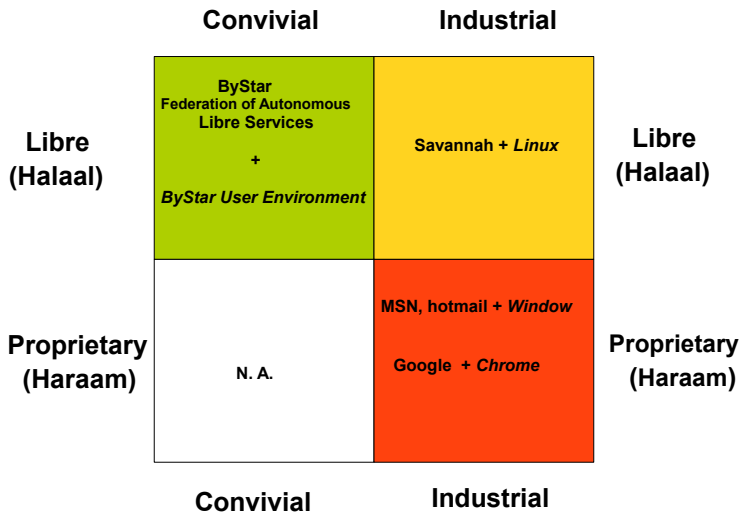
# Halaal and Haraam – Ethics of Software and Service

- Halaal means Moral/Ethical – Okay to do/consume
- Haraam means Immoral/Unethical/Harmful – Should Not Be Done/Consumed

## Defining Halaal Software/Internet Service:

- 1 Is A Perpetual Transparent Modifiable Poly-Existential – Equivalent of “Free Software”
- 2 Its Use Has Been Endorsed By The Engineering Profession
- 3 Its Use Has Not Been Prohibited By Ethicists (Sources of Emulation)

# Halaal and Convivial Software Quadrant



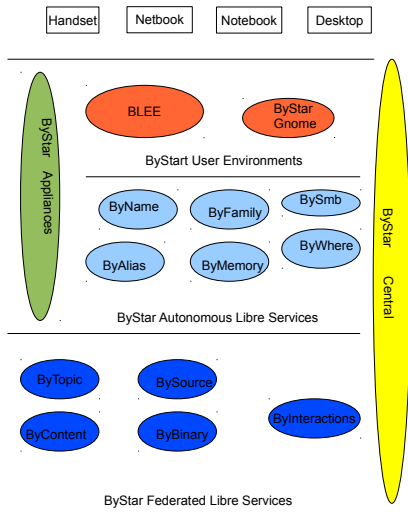
## Part III

# By\* Federation of Autonomous Libre Services

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  - Libre Services Supporting Organizations
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  - By\* Features and Capabilities
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- 14 Where We Are Today
  - ByStar Services Current Status
  - ByStar Instance Examples



# ByStart Entities



# ByStar Registered Domains

## Organizational Domains

neda.com – freeprotocols.org – by-star.net

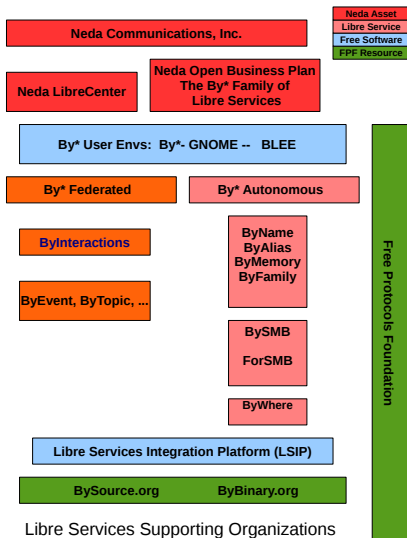
## Autonomous Domains

ByName.net ByName.com – ByAlias.net ByAlias.com –  
ByMemory.com ByMemory.net ByFamily.com ByFamily.net  
ByWhere.net

## Federated Domains

BySource.org ByBinary.org – ByContent.net – ByTopic.net

# Libre Services Supporting Organizations



Libre Services Supporting Organizations

# Libre Services Engines More Than LAMP

- Rudimentary Manifestations
  - LAMP
    - Linux - Apache - MySQL - Perl/PHP/Python
  - Savannah and Savane
  - Wikipedia and Mediawiki
  - Can we do better than that?
    - Expand it
    - Formalize it
    - Make it be cumulative

## By\* Features and Capabilities

- A named entity domain - Owned by the entity
  - A public website: My Internet
  - An expanded website for friends: My Extranet
  - A private portal: My Intranet
- By\* Libre Self-Publication Facility
- By\* Libre Texting
- Email, e-fax, etc.
- Blog, photo gallery, GeneWeb, etc.

# ByStar Appliances – Service As Software

- BACS Autonomous Appliances – Guaranteed Autonomy
- BISP Appliances
- ByStar User Environments – Blee on Debian and Ubuntu
- Re-Branding of ByStar

# ByStar Services Current Status

Service	Status	Comment
<a href="http://www.ByName.net">www.ByName.net</a> <a href="http://www.ByName.com">www.ByName.com</a>	Pre-operational	Major functionality complete and approaching operational deployment. Component of Stage C deployment; in progress.
<a href="http://www.ByNumber.net">www.ByNumber.net</a> <a href="http://www.ByNumber.com">www.ByNumber.com</a>	Pre-operational	Major functionality complete and approaching operational deployment. Component of Stage C deployment; in progress
<a href="http://www.ByAlias.net">www.ByAlias.net</a> <a href="http://www.ByAlias.com">www.ByAlias.com</a>	Limited usage	Major functionality complete. Undergoing usage and usability testing. Component of Stage C deployment; in progress
<a href="http://www.ByMemory.net">www.ByMemory.net</a> <a href="http://www.ByMemory.com">www.ByMemory.com</a>	Operational	Operational with all basic features and functionality. Component of Stage C deployment; in progress
<a href="http://www.BySMB.com">www.BySMB.com</a>	Operational	BySMB functionality is complete and operational, allowing website creation under the custom development model. See By* Instance Examples for active websites. Component of Stage B deployment; complete.
<a href="http://www.ForSMB.com">www.ForSMB.com</a>	Operational	ForSMB functionality is complete and operational, allowing website creation under the self-service model. Component of Stage B deployment; complete.
<a href="http://www.ByWhere.net">www.ByWhere.net</a>	Prototype	Working prototype complete. See By* Instance Examples for demonstration websites. Component of Stage D deployment; future.
<a href="http://www.ByEvent.net">www.ByEvent.net</a>	Concept only	At concept level only, with no functionality yet implemented. Component of Stage E deployment; future.
<a href="http://www.ByTopic.net">www.ByTopic.net</a>	Prototype	Working prototype complete. Complete of Stage E deployment; future.
<a href="http://www.ByInteraction.net">www.ByInteraction.net</a>	Concept only	At concept level only, with no functionality yet implemented. Component of Stage D deployment; future.
<a href="http://www.BySource.org">www.BySource.org</a>	Limited usage	Basic functionality complete. Undergoing usage and usability testing.
<a href="http://www.ByBinary.org">www.ByBinary.org</a>	Limited usage	Basic functionality complete. Undergoing usage and usability testing.

# ByStar Instance Examples

Service Type	Domain Name	Description
ForSMB/BySMB	<a href="http://www.neda.com">www.neda.com</a>	A software development and Internet services company. An extensive and comprehensive website with over 100 pages. Technologies: Jetspeed, Tomcat, Gallery.
	<a href="http://www.NewDinnerware.com">www.NewDinnerware.com</a>	An online store selling fine porcelain tableware. Includes standard e-retail features: shopping cart, checkout, credit card payment. Technology: Interchange
	<a href="http://www.TalkToUS.org">www.TalkToUS.org</a>	A non-profit organization promoting better international understanding. Enables communication via short personal video messages. Technologies: Jetspeed, Gallery, streaming video
	<a href="http://www.PinaMotorsports.com">www.PinaMotorsports.com</a>	An auto repair and specialized auto customization shop. Technologies: Plone/Zope, Interchange, Gallery
	<a href="http://www.Payk.net">www.Payk.net</a>	A non-profit organization for grassroots communication among Iranians. Technologies: Plone/Zope, Gallery
	<a href="http://www.AllMuslimCemetery.org">www.AllMuslimCemetery.org</a>	An Islamic cemetery. Related to ByMemory; many gravesites have associated ByMemory memorials. Technology: Plone/Zope.
	<a href="http://www.LibreServices.org">www.LibreServices.org</a>	A non-profit forum and resource center for development of Libre Services. Technology: Plone/Zope
	<a href="http://www.BySource.org">www.BySource.org</a>	Free Software distribution center
ByMemory	<a href="http://yazdan.1.banan.bymemory.net">yazdan.1.banan.bymemory.net</a>	A memorial site. Includes a genealogy and photo gallery; multilingual. Technologies: Plone/Zope, GeneWeb, Gallery
ByName	<a href="http://mohsen.banan.1.byname.net">mohsen.banan.1.byname.net</a>	A personal website for a professional engineer. Includes a genealogy and photo gallery; multilingual. Technologies: Plone/Zope, blog, GeneWeb, Gallery
ByWhere	<a href="http://info.1-98008-5807-10.bywhere.net">info.1-98008-5807-10.bywhere.net</a>	A ByWhere site used to provide address and driving directions. Technologies: Apache, Gallery
	<a href="http://ForRent.1-98008-5765-05.bywhere.net">ForRent.1-98008-5765-05.bywhere.net</a>	A ByWhere site used to provide house rental information. Technologies: Apache, Gallery



## Part IV

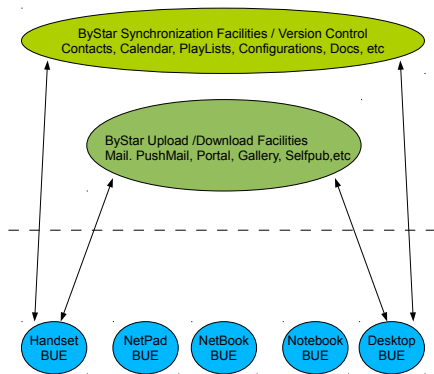
# Joining ByStar, Obtaining ByStar and Using ByStar

# Part 4: Joining ByStar, Obtaining ByStar and Using ByStar

- 15 Interface Model of ByStar User Env and ByStar Services
- 16 ByStar Libre Emacs Environment (BLEE) Model
- 17 Try It On Your Own
  - Getting LSIP Scripts

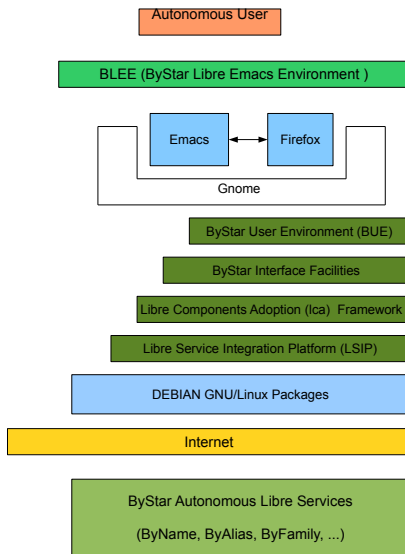
# Interface Model of ByStar User Env and ByStar Services

ByStar Autonomous Service Environment (BASE)



ByStar User Environment (BUE)

# ByStar Libre Emacs Environment (BLEE) Model



## Try It On Your Own

### By\* Service Environment:

- 1- Create Your ByName Account  
<http://www.ByName.Com>
- 2- Receive Your Passwd In Email
- 3- Use It With A Browser

### By\* User Environment:

- 1- Get A Laptop/Desktop/Netbook
- 2- Install Debian or Ubuntu On It
- 3- Obtain and Run `bystarGenesis.sh`
- 4- Use the Acct/Pass from (SE-2)
- 5- Marry your BUE with your Service
- 6- Fireup Blee and Enjoy

# Getting LSIP Scripts

## Example

```
wget http://www.bysource.org/lsip/lpGenesis.sh ./lpGenesis.sh
```

Just respond to the prompts.

## Example

Anonymous CVS:

```
cvs -d :pserver:anoncvs@cvs.bysource.org:/rep1 checkout -d  
osmt public/osmt
```

## Part V

# Engineering Design of ByStar

## 18 ByStar Design Principles

- General Nature of Under, At and Above Distro Activities
- The ByStar Over Distro Development Model
- Design Big, Implement Gradually
- Main Design Principles
- Major Software Components

## 19 Software To Service Aggregation

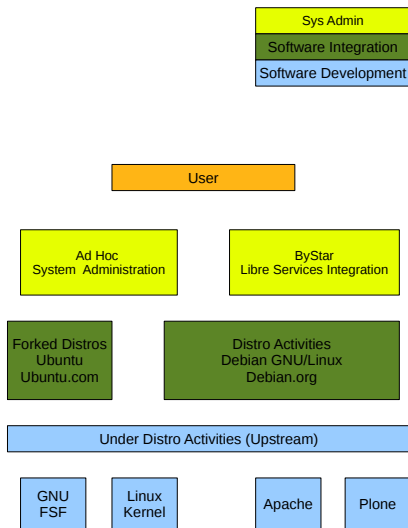
## 20 By\* Naming principles What Is ByStar

## 21 Libre Service Integration Platform

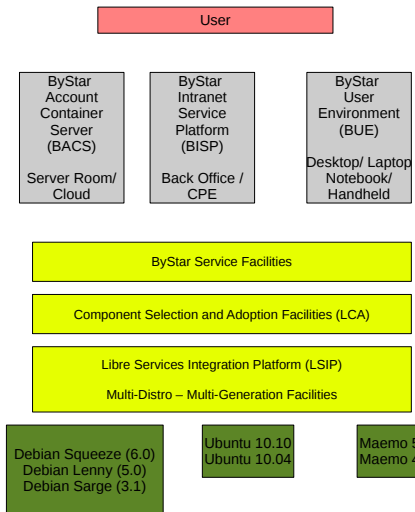
- LSIP Features
- Design and Implementation Notes
- LSIP Documentation



# General Nature of Under, At and Above Distro Activities



# The ByStar Over Distro Development Model



# Design Big, Implement Gradually

Design Big, Implement Gradually  
Autonomous First  
Convivial Design

# Main Design Principles

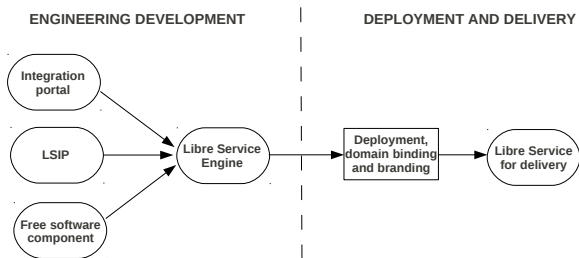
- Purity of Debian GNU/Linux Platform
- Linux Account is Central for Everything
- Virtual Domains for everything are tied to accounts
- Main Criteria For Component Selection is Conviviality
- On top of Debian, LSIP - ByStar - BUE Layering is generally rigid

# Major Software Components

## By\* Libre Services: Software Components

- Debian GNU/Linux
- Base: djbdns, daemontools, ucspi, multilog, ...
- Mail: qmail, courier, spamassassin, ezmlm, ...
- Web: apache, zope, plone, ...
- Misc: postgres, mysql, Interchange, ...
- Glue: Libre Services Integration Platform (LSIP)

# Software To Service Aggregation



# By\* Naming principles What Is The ByStar Family

Take full advantage of the Domain Notation depth.

- `mohsen.banan.1.byname.net`
- `forRent.1-98008-5765-05.bywhere.net`

# Libre Service Integration Platform

## Problem Domain of LSIP

- How do you efficiently manage/administer/support a cluster of 20 or more Linux boxes?
- Consistency of software and system
- Consistent Tools
- Naturally enforced discipline
- Host and Site Abstraction



# LSIP Features

Currently Supported: Debian, Ubuntu, Maemo, Solaris

- Persistent Host Abstraction
- - Profile Definitions Site Description
- - Multi-Site
- Support Software Components Consistency Framework  
Names and Address Administration
- Consistent Host Updates / Verification Service Provisioning  
Service Management Host/Site Monitoring

# Design and Implementation Notes

## Design and Implementation Notes

- Mostly implemented in bash/ksh scripts
- Consistent Administration of Software Components enforced through seed modules.
- Large Systems Administration Library
- Software Component Adoption Framework (lca)

# LSIP Documentation

Mostly Self documented with "Roadmap" modules. Libre  
Platform Genesis Process:

<http://www.neda.com/PLPC/110101>

<http://www.neda.com/PLPC/110501>

LSIP Design and Implementation Notes (Draft)

## Part VI

# ByStar Vertical Slices (Feature Families)

- 22 ByStar Vertical Slices
  - List of Vertical Slices
- 23 ByStar Email / Messaging Vertical Slice
  - gmail ByStar Server Architecture
  - gmail ByStar User Agent Architecture
- 24 CMS / Plone Vertical Slice
- 25 Self Publication Vertical Slice
  - ByStar Content Publication Model
  - ByStar Content Publication Workflow
  - ByStar Content Publication Architecture
- 26 Auxiliary Vertical Slices
  - ByStar Music Vertical Slice
  - ByStar Music Vertical Slice

# ByStar Vertical Slices

- Functionality's that span
  - ByStar User Environment
  - ByStar Autonomous Libre Services
  - ByStar Federated Libre Services

# List of Vertical Slices

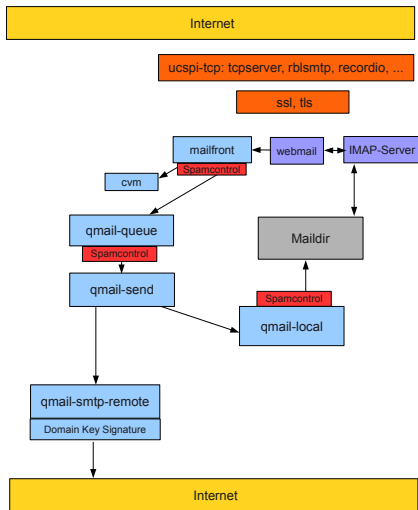
- Primary Vertical Slices
  - Email / Messaging (qmail) ByStar Vertical Slice
  - CMS / Plone ByStar Vertical Slice
  - Self Publication Vertical Slice
  - Integrated Public Key Infrastructure
- Auxiliary Vertical Slices
  - Music (Audio) Vertical Slice
  - Photo / Video Gallery
  - Genealogy
  - eFax/Scanning Document Management Service
  - VoIP

## ByStar Email / Messaging Vertical Slice

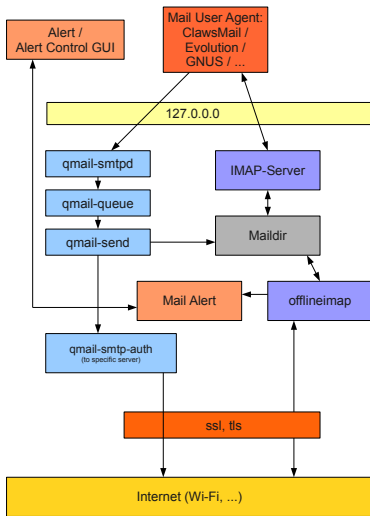
- qmail based
- Single Domain, Multi-Address. Multi-Mailbox Model
- Gnus under Blee
- embedded MTA on User Environment
- Libre Texting, Push Email
- NOTYET, qmail figures come after this.



# qmail ByStar Server Architecture



# qmail ByStar User Agent Architecture



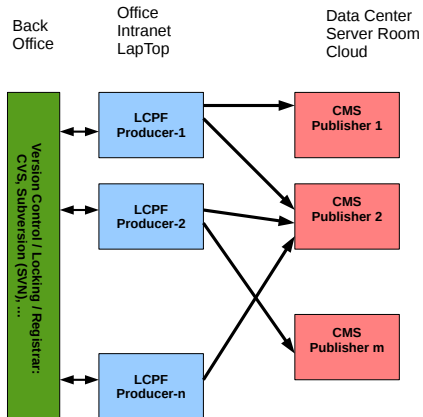
# CMS / Plone Vertical Slice

- ploneProc.sh

## Self Publication Vertical Slice

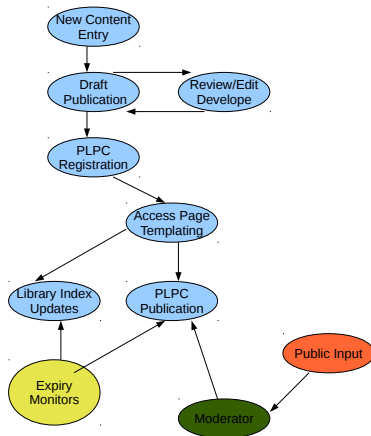
- More Info at: <http://www.neda.com/PLPC/110506>
- Adopted Components: TeX, XeTeX, tex4ht, Plone
- ByStar Modules: lcntProc.sh, Libraries
- In Blee: Menu Supported
- Supporting Autonomous Services: ByName, ByAlias, ByMemory
- Supporting Federated Services: ByContent, ByTopic

# ByStar Content Publication Model



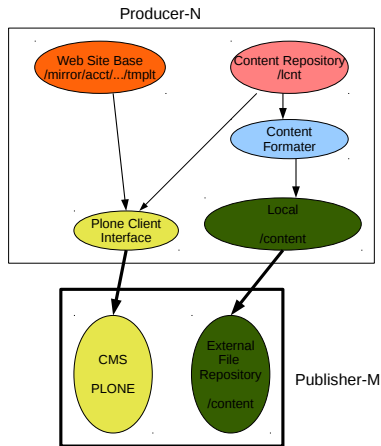
Libre Content Publication -- Model

# ByStar Content Publication Workflow



Libre Content Publication – Work Flow

# ByStar Content Publication Architecture



Libre Content Publication Facilities – Architecture

## Other Vertical Slice

- ByStar Music
- ByStar Photo/Video Gallery
- ByStar Genealogy
- ByStar Fax/Scanning (Document Management System)
- ByStar VoIP



# ByStar Music Vertical Slice

- Adopted Components: mpd, mpc, mplayer, emms
- ByStar Modules:
- In Blee: Menu Supported
- Supporting Autonomous Services: ByName, ByAlias, ByMemory
- Supporting Federated Services: ByContent

## ByStar Photo/Video Gallery Vertical Slice

- Adopted Components: mpd, mpc, mplayer, emms
- ByStar Modules:
- In Blee: Menu Supported
- Supporting Autonomous Services: ByName, ByAlias, ByMemory, BySMB

## Part VII

# Economic and Business Dimensions of ByStar

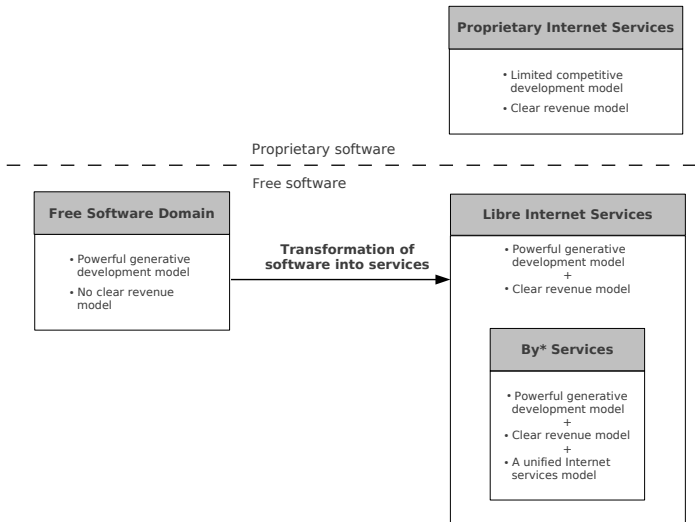
## 27 The Libre Services Revenue Model

- ByStar Supply Chain Model

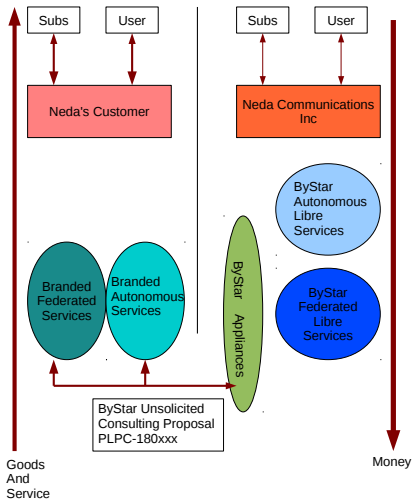
## 28 Marketing Strategy

- Marketing Messages (West and East)
- Marketing Strategy: Broad Philosophical Hell Raising
- Elevator Story
- Our Principal Sustainable Advantage

# The Libre Services Revenue Model



# ByStar Supply Chain Model



# Marketing Strategy

- On The Side of User
- Jusitsu

# Marketing Messages (West and East)

## United States, West – Key Marketing Messages

- 1 Autonomous Services vs Corp Owned Services
- 2 Convivial Model vs Industrial Model
- 3 Engineering vs Business
- 4 Libre vs IPR Regime
- 5 Preservation of Freedom, Privacy and Autonomy

## East, Rest of the World – Key Marketing Messages

- 1 Societal Autonomy, Assertion of Sovereignty
- 2 Rejection of American Hegemony – Through the Libre Alternative



# Marketing Strategy: Broad Philosophical Hell Raising

## Rejection of Western Copyright and Patent Law:

Nature of Poly-Existentials

Abolishment of the so-called Western IPR Regime

PLPC-xxx

## Preservation of Privacy and Autonomy:

Direct attack against proprietary competitors.

## Public Sector Challenges:

Solicit Governmental Support.

We use the existing Internet Service Provider Characteristics of:

- Proprietary and Closed
- Disregard for Privacy and Autonomy

as a Marketing vehicle to promote our functionally equivalent services which we call ByStar Libre Service.

The scope of ByStar is ALL Internet Services. The equivalent of MSN, AOL, Facebook, Linkedin, ... All combined.

This is possible with a model inversion (from Proprietary to Libre) which brings the collaborative and cumulative characteristics of Free Software to Libre Services.

# Our Principal Sustainable Advantage

Lots of Coherent Established Assets + A complex business model based on rejection of patents and copyright + Rare fitness to execute this particular model.

Software engineers are best suited to lead this

## Part VIII

# Societal, Inter-Societal, Social and Legal Ramifications

# Part 8: Societal, Inter-Societal, Social and Legal Ramifications

- 29 Identifying the Tear Points – (1) East, (2) Software-Service Continuum
  - Proprietary Market Insignificance is Libre Opportunity –  
Eg: Perso-Arabic Script
  - LSIP Copyleft License

# Collaborative Development Framework

- 1 East – Conviviality, Halaal and Libre are more Eastern. The West is too deeply committed to IPR and pure economic models and self.
- 2 Software-Service Continuum – Transparent Software and Transparent Service permits continuity of Service and Software. This is where the proprietary model looses.

# Proprietary Market Insignificance is Libre Opportunity – Eg: Perso-Arabic Script

- See Perso-Arabic Document

# LSIP Copyleft License

LSIP CopyLeft License Afero GPL V3 License LSIP is  
Open-Source and Free Software Dual Licensed if needed



## Part IX

# Framework For Participation, Collaboration and Guardianship

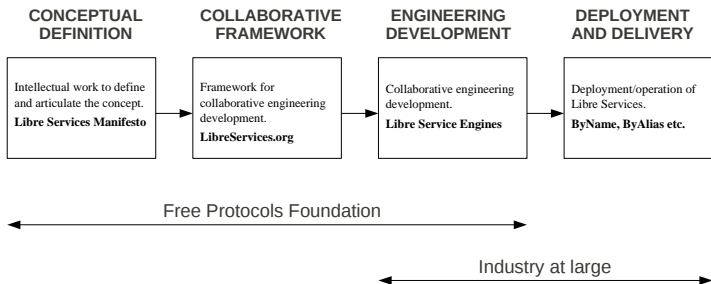
# Part 9: Framework For Participation, Collaboration and Guardianship

- 30 Collaborative Development Framework
  
- 31 The Collaborative Model From Concept To Service Delivery
  - Spread The Word
  - Key Documents

# Collaborative Development Framework

- Working Together ...

# The Collaborative Model From Concept To Service Delivery



# Spread The Word

- I don't Own By\* Libre Service – You Don't Own By\* Libre Services
- We All Own By\* Libre Services
- Use It As You Wish – Make It Be What You Want
- Stay Autonomous
- Spread The Word

# Key Documents

- Neda Open Business:
- By\* Libre Services Libre Services Manifesto PLPC-100105
- ByStar full picture PLPC-110004
- Unsolicited Proposal PLPC-110005
- By\* Libre Texting

# Colophon

- Produced with Halaal Software and Halaal Internet Services.
- It uses LaTeX, beamer, ByStar, Blee, Emacs, ...

# Colophon

- Totally Libre and Copyleft
- No proprietary software used in preparation, presentation and communication of this information
- Slides prepared with beamer-latex
- Presented using Ubuntu-Debian-GNU-Linux and Maemo on PDA
- Served as an Autonomous Libre Service using Debian, Apache, Plone, ...



# Questions/Comments/Discussion