

The By* Family of Libre Services

A non-proprietary model for
delivery of Internet services

<http://www.neda.com/PLPC/110013>

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Free Protocols Foundation—<http://www.freeprotocols.org/>

Neda Communications, Inc.—<http://www.neda.com/>

Causes for Concern

- Networks are societal resources and their usage model must not be left to free markets and business.
- The mobile 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

Internet Application Services Today: Problems and Concerns

- 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

The Many Dimensions of By* Libre Services

- *Libre Services model: philosophy, morality, legality*
 - Libre Services Collaborative Development Framework
-
- By* Libre Services: Vision
 - By* Libre Services: Features and Capabilities
 - By* Libre Services: Engineering Development and Deployment
 - By* Libre Services: Open Business Plan
 - By* Libre Services Spearhead: Libre Texting / WhiteBerry
 - By* Libre Services: Participation

In English “Free” is ambiguous: We need the word “Libre”

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

When we say “free” we will always mean Libre:
freedom of action

Nature at work:

Non-material constructs flourish when free from ownership

Beyond Free Software

- We have won the Free Software battle

Proprietary Software Already Lost

We Demonstrated Two Things:

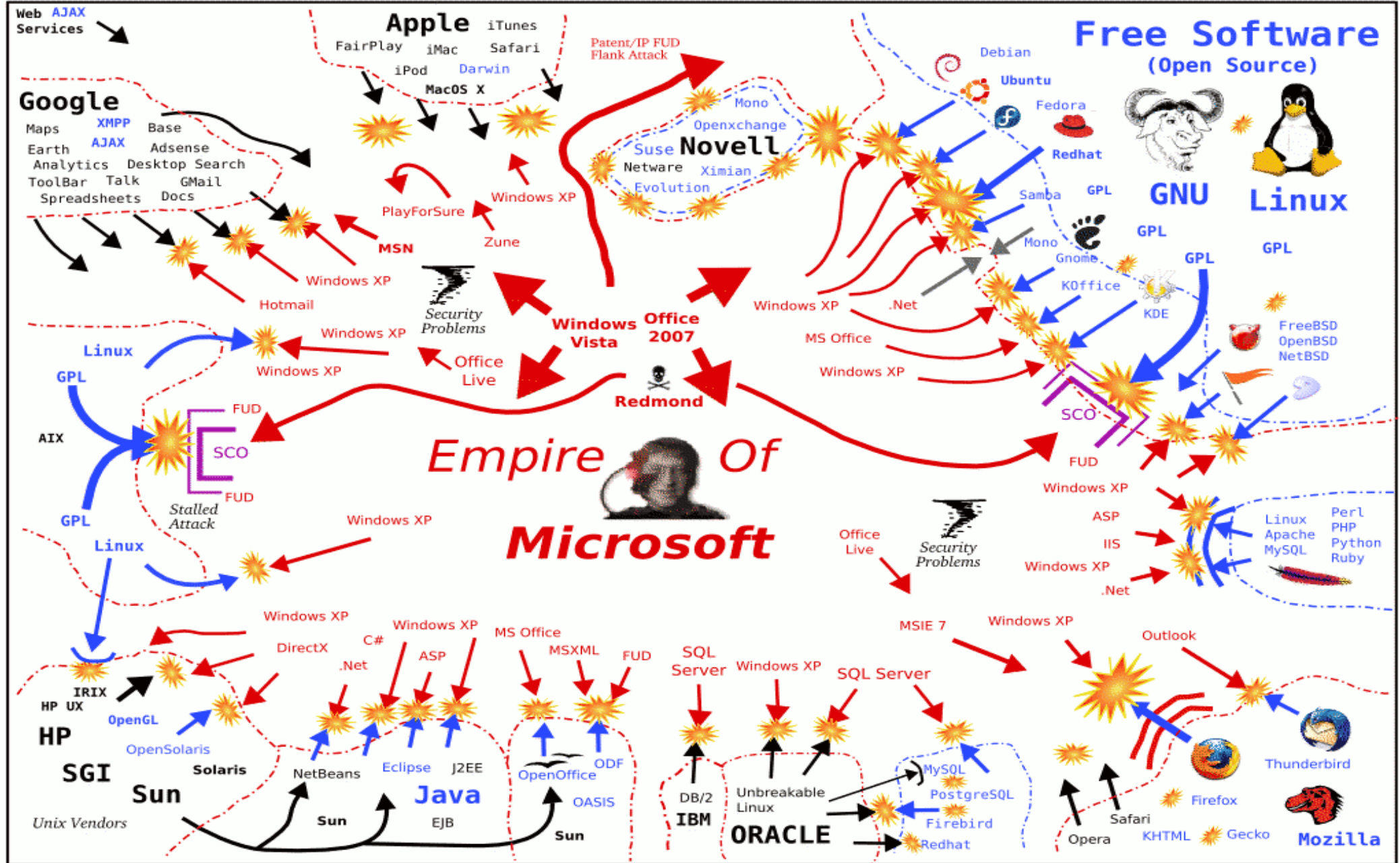
- 1) Model: Free/Libre is Superior to Proprietary
- 2) Implementation: GNU/Linux is Superior to Windows

Free Software is Just the Tip of the Iceberg

This Same Power Has A Lot More To Offer

From Software Wars to Service Wars

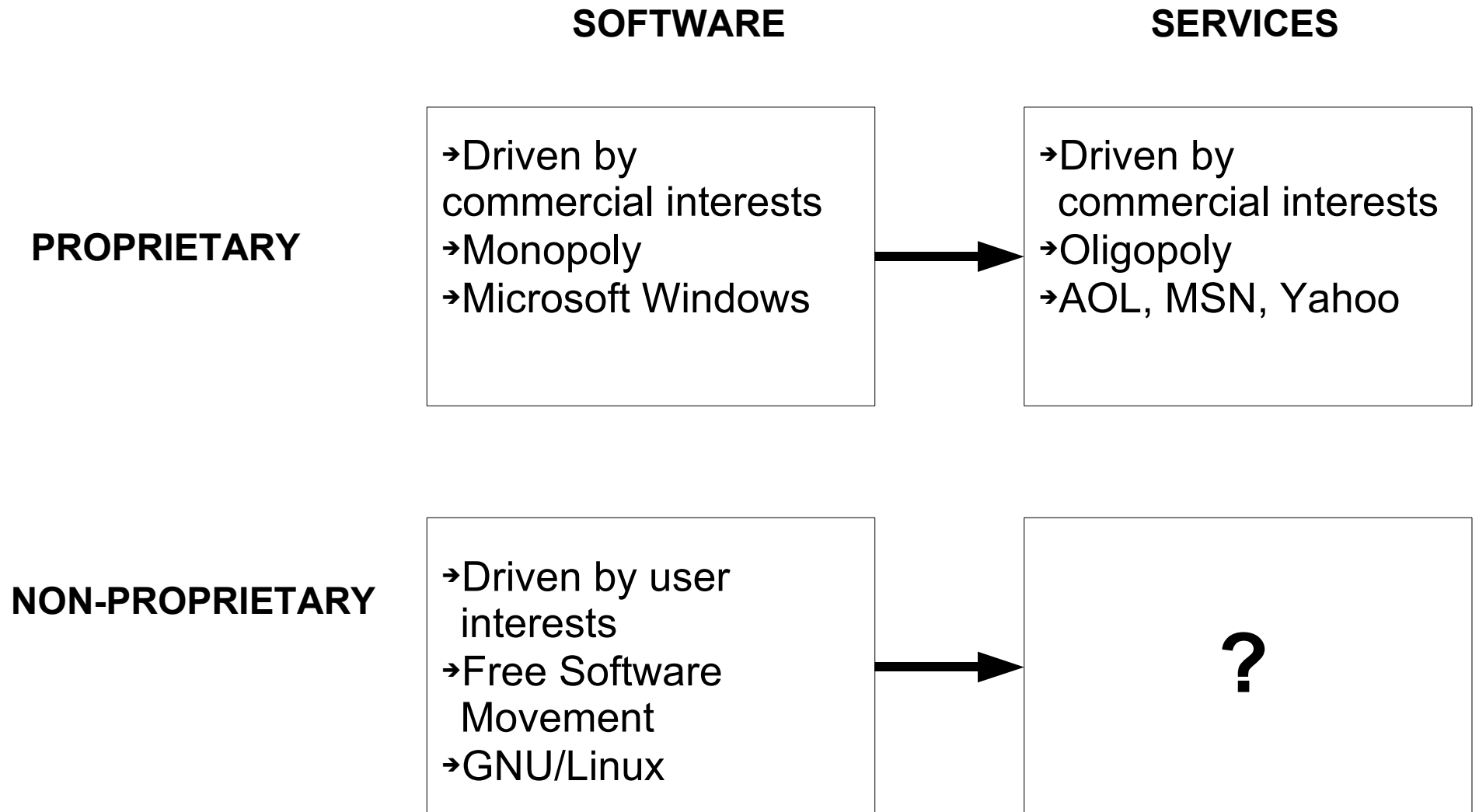
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Libre Services

*A non-proprietary model
for
delivery of Internet services*

Proprietary vs. Non-Proprietary; Software vs. Services

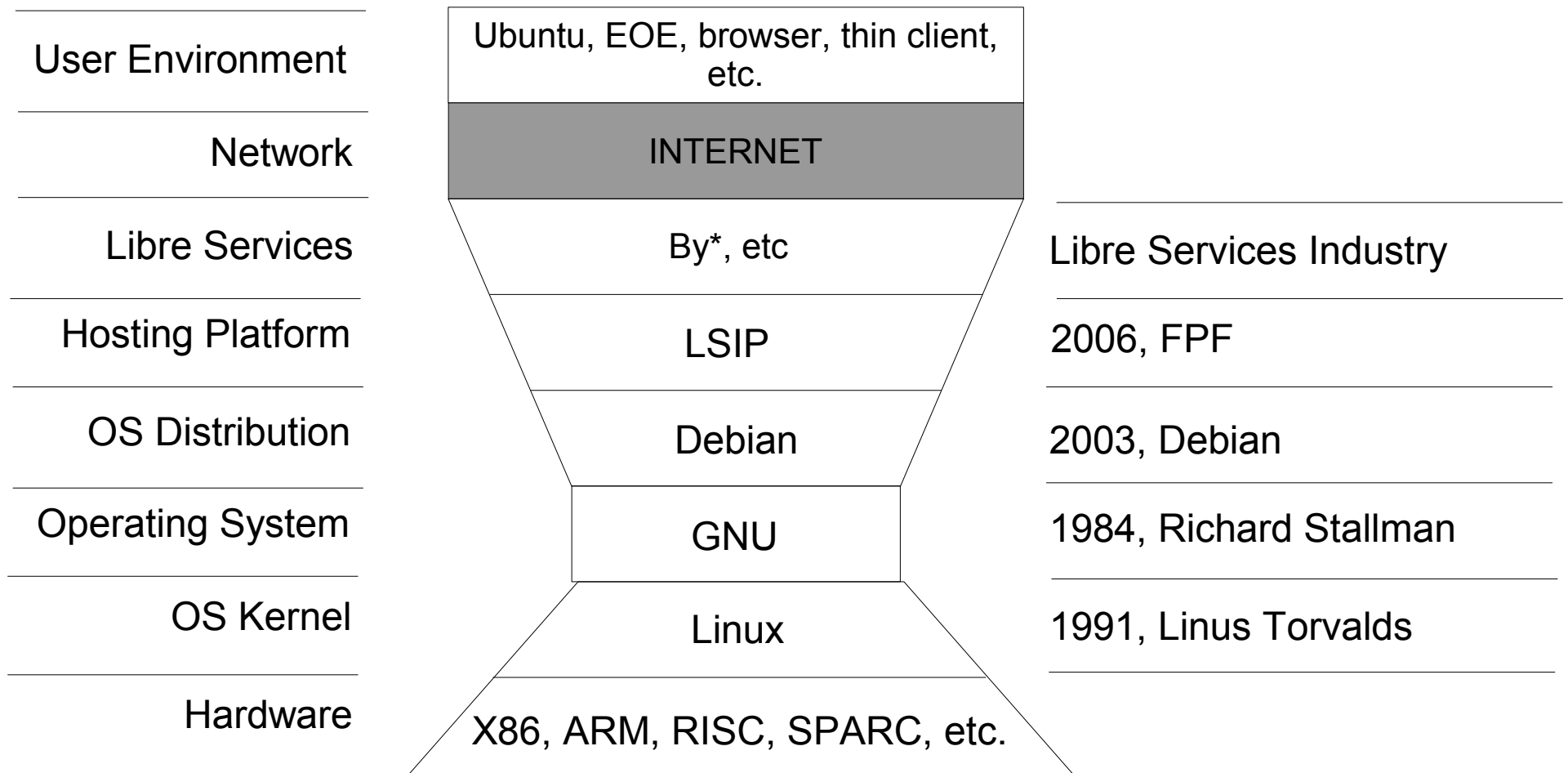


Libre Services: Definitional Criteria

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*

Extension of Free Software into Libre Services

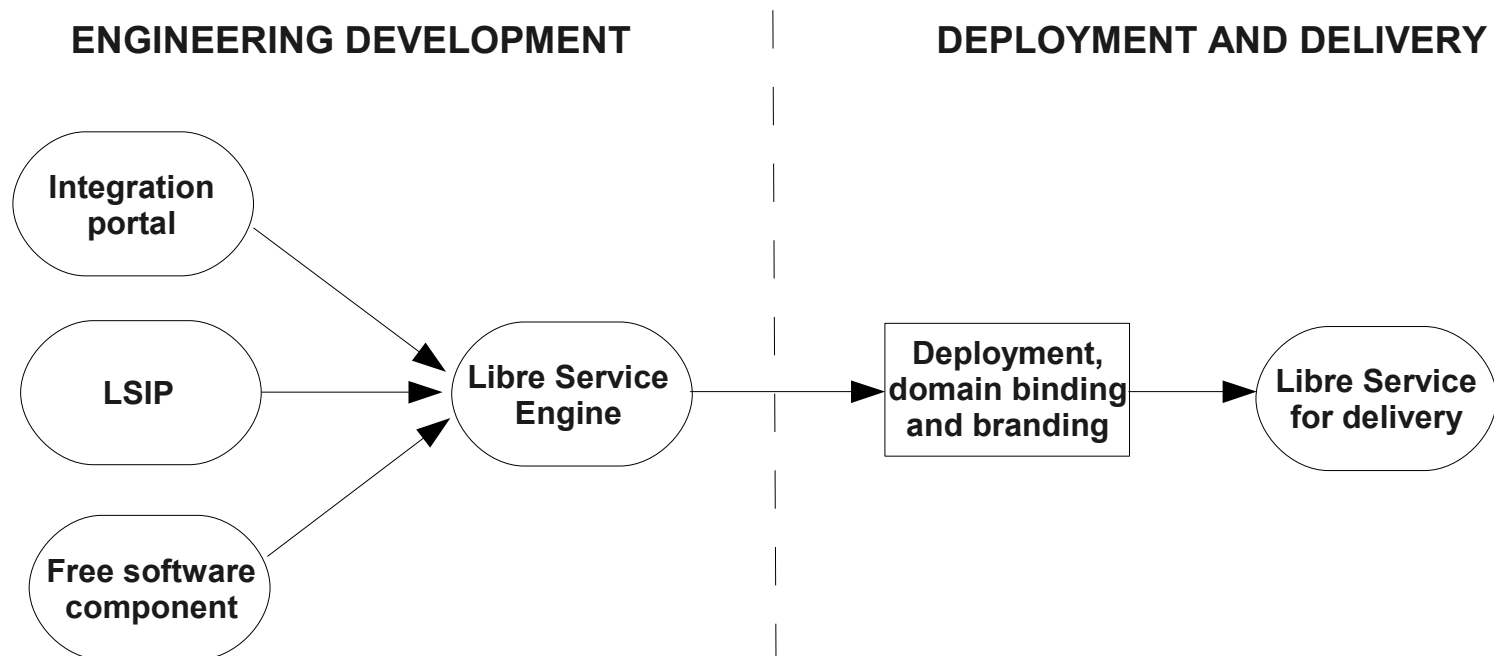


Libre Services Engines

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

Transformation of Free Software into Libre Services



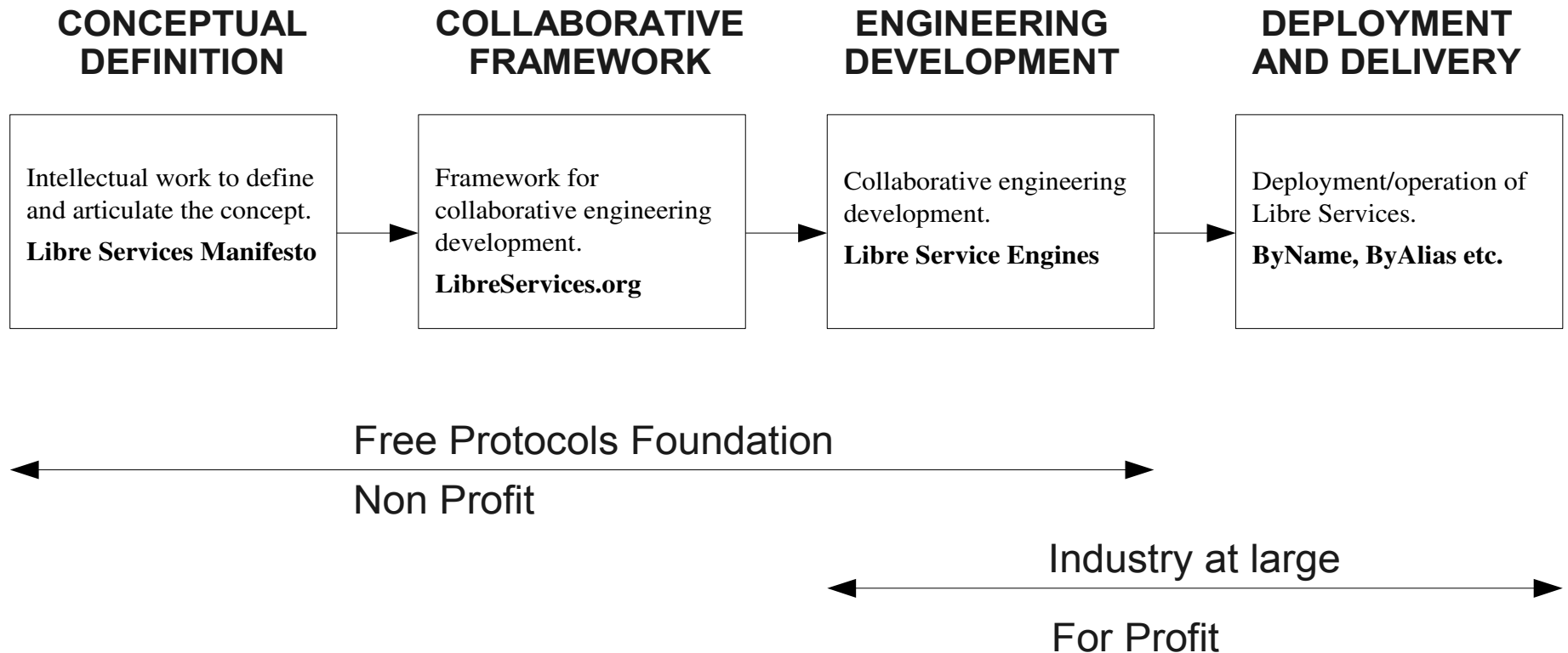
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- Libre Services model: philosophy, morality, legality
- *Libre Services Collaborative Development Framework*



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Non-Profit and For Profit: Roles and Responsibilities



For Profit and Non-Proprietary: the Right Paradigm for Non-Material Constructs

	For Profit	Non-Profit	
Proprietary Model	Traditional: Microsoft AOL Yahoo	Conflicted: Academics Wap Forum ...	Copyright Patents Secrecy
Non-Proprietary Model	New: Free Software Bus Redhat, ... Libre Services Bus Neda,	Traditional: FSF IETF FPF	Copyleft Knowledge Sharing Openness
	Pro-Business	Pro-Public	

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→ *By* Libre Services: Vision*

- By* Libre Services: Features and Capabilities
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What is the By* 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

By* Naming principles

Take full advantage of the Domain Notation depth.

mohsen.banan.1.byname.net

forRent.1-98008-5765-05.bywhere.net

Design Big

Implement Gradually

By* Services Overview

Service Type	Service Name	Description
For business	www.BySMB.com www.ForSMB.com	Internet services for small-to-medium businesses.
For individuals	www.ByName.net www.ByName.com	ByName provides a complete set of Internet services for the individual user.
	www.ByNumber.net www.ByNumber.com	A similar set of services to ByName, but based on a numerical ID assigned to the user instead of the user's name.
	www.ByAlias.net www.ByAlias.net	A similar set of services to ByName, but based on an alias instead of the user's real name.
	www.ByMemory.net www.ByMemory.com	Services for preserving the memory of deceased persons.
For places and events	www.ByWhere.net	Services relating to physical locations.
	www.ByEvent.net	Services relating to events.
For information	www.ByTopic.net	Services for publication of information organized by topic
For making things happen!	www.ByInteraction.net	ByInteraction enables transactions involving persons, business, places and things.

Current Status

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

Instance Examples

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

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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.

Service, Desktop, Laptop, PDA Continuum

Free/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

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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)

Libre Services Integration Platform (LSIP)

Mohsen BANAN -- <http://mohsen.banan.1.byname.net/>

Neda Communications, Inc. -- <http://www.neda.com/>
<http://www.neda.com/PLPC/>

CopyLeft – Verbatim Copying Permitted

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

- Fully Automated Installation and Regeneration
- Distribution Independence
 - Currently Supported: Debian, Ubuntu, Solaris
- Persistent Host Abstraction – Profile Definitions
- Site Description – Multi-Site Support
- Software Components Consistency Framework
- Names and Address Administration

LSIP: Features

- Consistent Host Updates / Verification
- Service Provisioning
- Service Management
- Host/Site Monitoring

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 Adopted Software Components

- WEB
 - apache, zope, plone, interchange, tomcat, jetspeed
- Mail
 - qmail, ezmlm, imp, squirrelmail, spamassassin, courier imap
- Data Bases
 - mysql, postgres

LSIP Adopted Software Components

- DNS: djbdNS
- Security: ferm, snort, tripwire
- Monitoring: nagios, mrtg
- Software development Support
 - cvs, subversion, gnats
- Disk Facilities
 - rsync, samba, sshfs

Getting LSIP Scripts

- `wget http://www.bysource.org/lsip/lpGenesis.sh`
- `./lpGenesis.sh`
 - Just respond to the prompts
- **Anonymous CVS:**
 - `cvs -d :pserver:anoncvs@cvs.bysource.org:/rep1
checkout -d osmt public/osmt`

LSIP CopyLeft License

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

LSIP Documentation

- Mostly Self documented with “Roadmap” modules.
- Libre Platform Genesis Process:
 - <http://www.neda.com/PLPC/110101>
- LSIP Design and Implementation Notes (Draft)
 - <http://www.neda.com/PLPC/110501>

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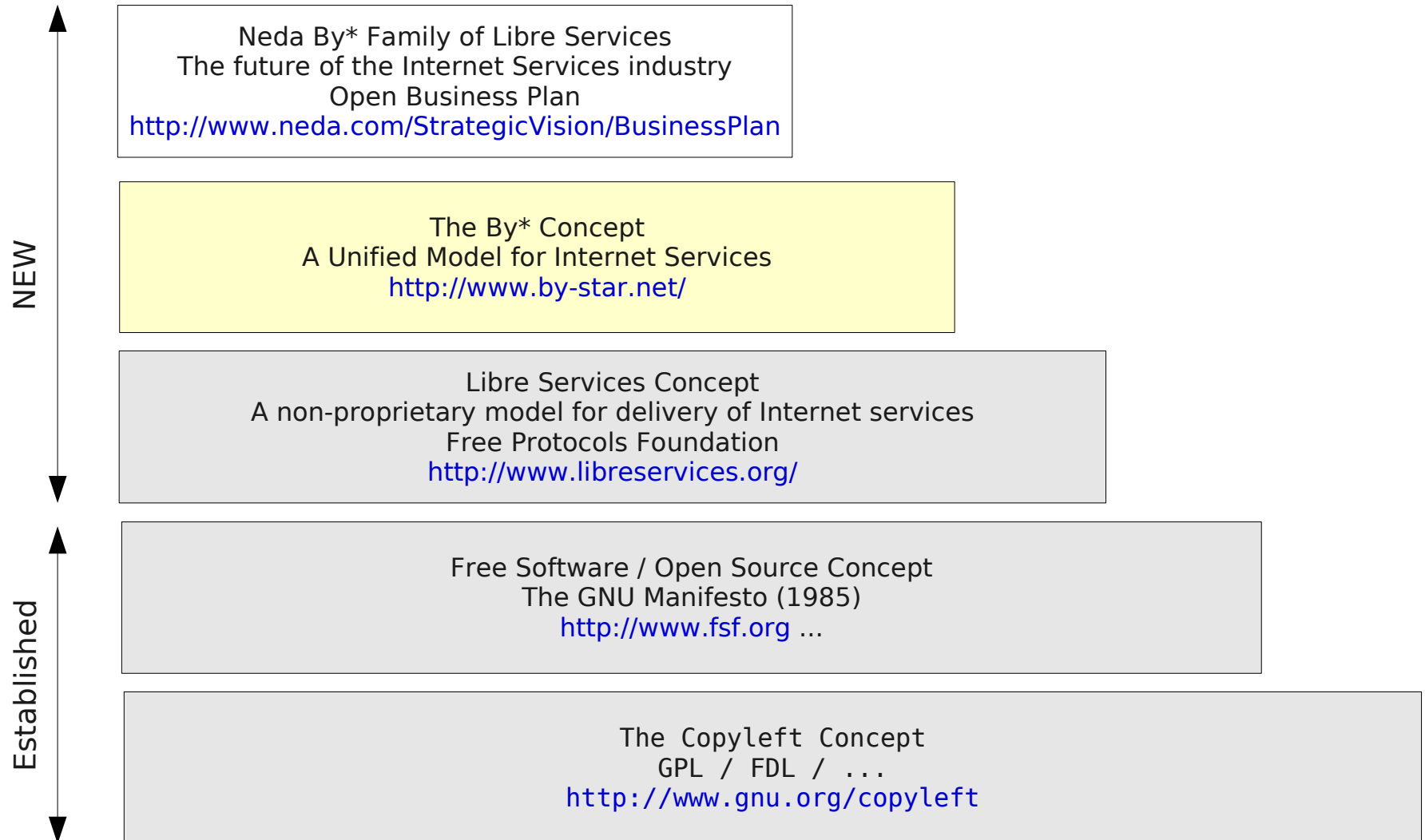


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The Neda Open Business Plan

- <http://www.neda.com/StrategicVision/BusinessPlan>
- Open Business Plan – Available to All
- Broad audience: engineers, academics, investors
- Jujitsu on patents and copyright
- Engineers start here:
<http://www.neda.com/StrategicVision/Participating/Engineering>
- Investors start here:
<http://www.neda.com/StrategicVision/Participating/Investment/StartHere>

Conceptual Foundations



Above All:
This is a Model Play

The (so-called) Intellectual Property Rights model
is in conflict with nature

The Libre Services model:
Total rejection of patents and copyright

A huge business opportunity

The Source of the Force The Heart of the Matter

Software and Internet Services are
non-material constructs.

As such they flourish when liberated from
the restrictive intellectual property regime.

*If you don't get this,
you will not be a key participant*

The Traditional Business Model for Software and Services

- Exit-strategy oriented
- 20% real, 80% Ponzi scheme
- Redistribution of wealth just as good as creation of wealth. Spin-and-flip, pump-and-dump the norm.
- Intellectual Property Rights an integral part of the game
- Cooked up behind closed doors: more scheme than plan
- In 1998 Nasdaq at **1900**; in 2000 up to **5000**; in 2008 down to **1500**
- Driven by the DotCon artist (who thinks he's a businessman!)

The Business Model for By* Libre Texting

- For profit: *real* profit, *creation* of wealth
- Non-proprietary: patent-free and copyleft
- Open and transparent Business Plan
- Based on the Libre Services model
- Driven by Internet engineers

Our Principal Sustainable Advantage

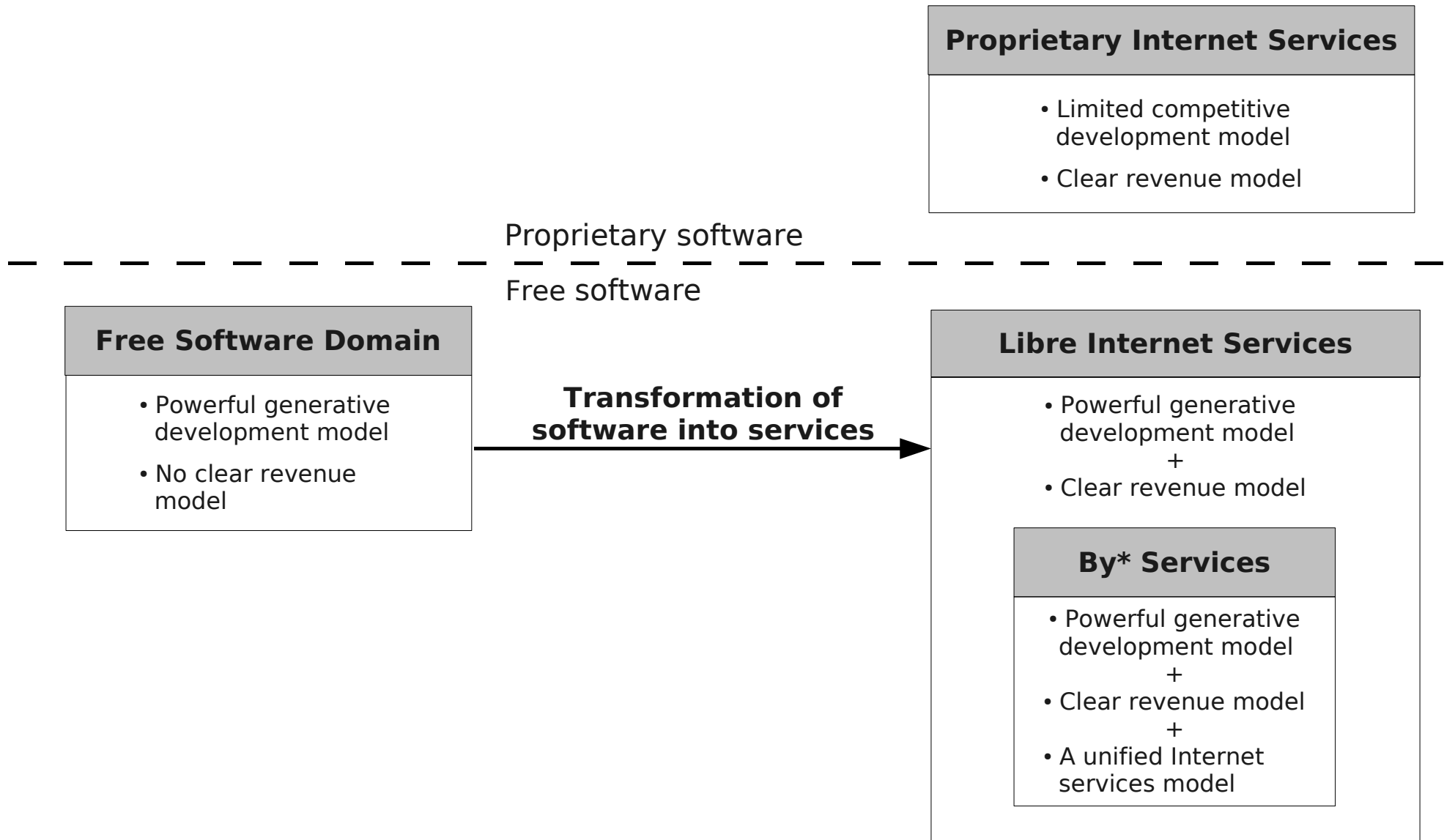
Lots of Coherent Established Assets

+

A complex business model based on
rejection of patents and copyright

Software engineers are best suited to lead this

From Free Software to Libre Services with a Clear Revenue Model



Start with By* Libre Texting

- The demand is there
- We have all the assets
- The time is right

*Then expand the scope
to the full By* Libre Services*

Execution and Revenues: Clear and Straightforward

Execution

- Device: Linux PDAs, *in place*
- Service: By*, *in place*
- Mobile network: *in place*
- Software: Libre/Free, *in place*
- Public spectrum: *in place*
- Plan: Well developed, *in place*

Revenues

- Individual: subscription
- Corporate: software as service
- Products: CPE+service
- Vertical integration

Revenue Table

	Pre-By* revenues	BySMB / ForSMB	ByName.net ByNumber.net ByAlias.net ByMemory.net	ByName.com ByNumber.com ByAlias.com ByMemory.com	ByWhere ByInteraction	ByEvent ByTopic By* user environments	Registrar	Libre Engines, WhiteBerry
Hosting		B						F
Subscriber Services			C					F
Advertising				D	D			
Transaction fees					D			
Franchising		E	E	E	E			
Website development & customization		B	C					
Deployment & software consulting			C					F
Registration processing fee							E	
Software licenses								F
Colocation	A							
Consulting	A							
No revenues				C		E		

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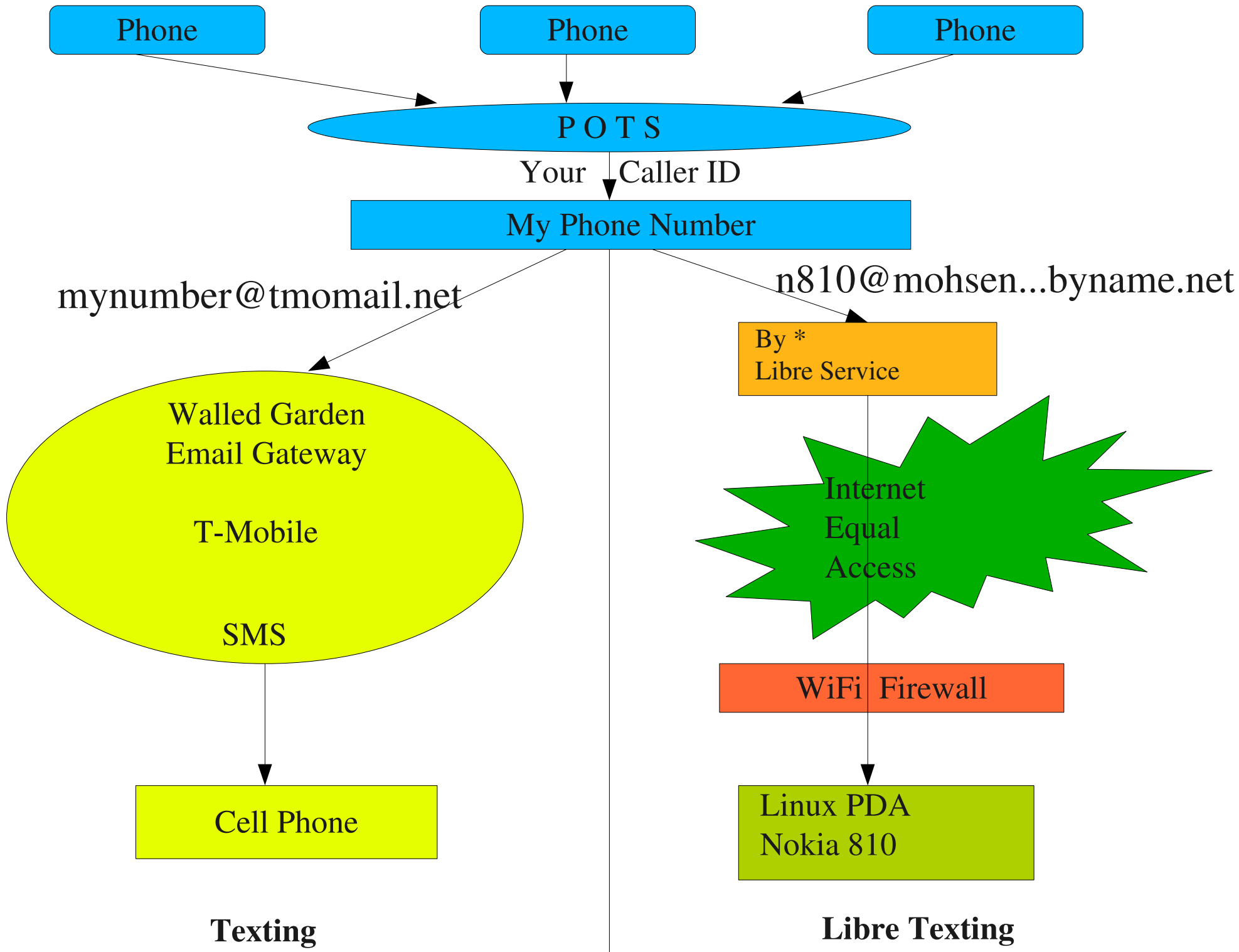


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Our Goal: Liberate Texting

- Break the phone companies' hold
- Make texting a Libre Service
- Break the walled garden: make it end-to-end
- Move it to the for-profit, non-proprietary quadrant

Bring texting into the Internet mainstream



Implementing By* Libre Texting: Scenario: WiFi-Only

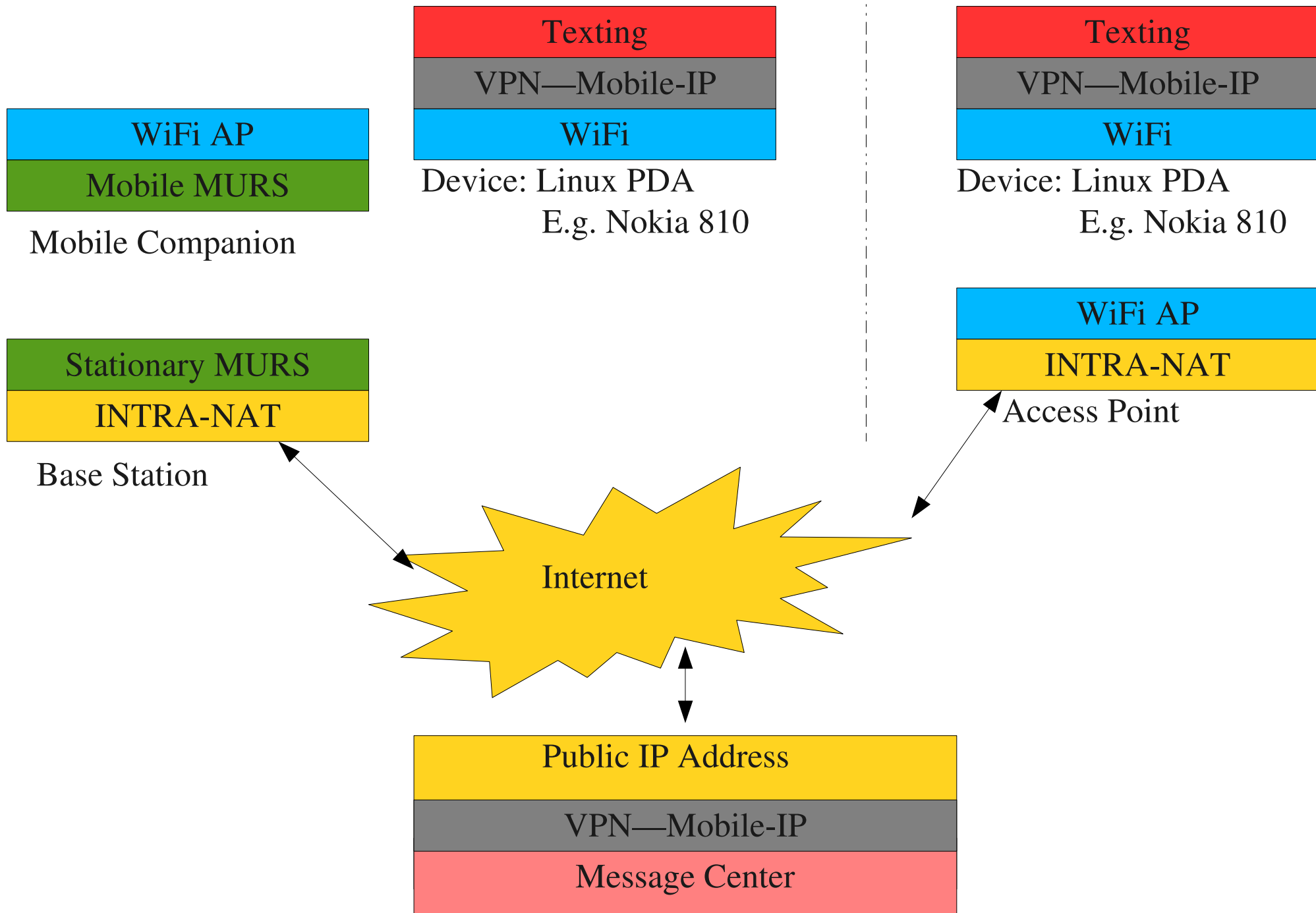
1. Buy a Linux PDA, e.g. Nokia 810
2. Load it with mobile texting software
 - <http://www.bybinary.org/>

Or 1 & 2 combined: buy a preconfigured Nokia 810 texting device

- <http://store.neda.com/>
3. Get a ByName Libre Texting account
 - <http://www.byname.net/>

WiFi++

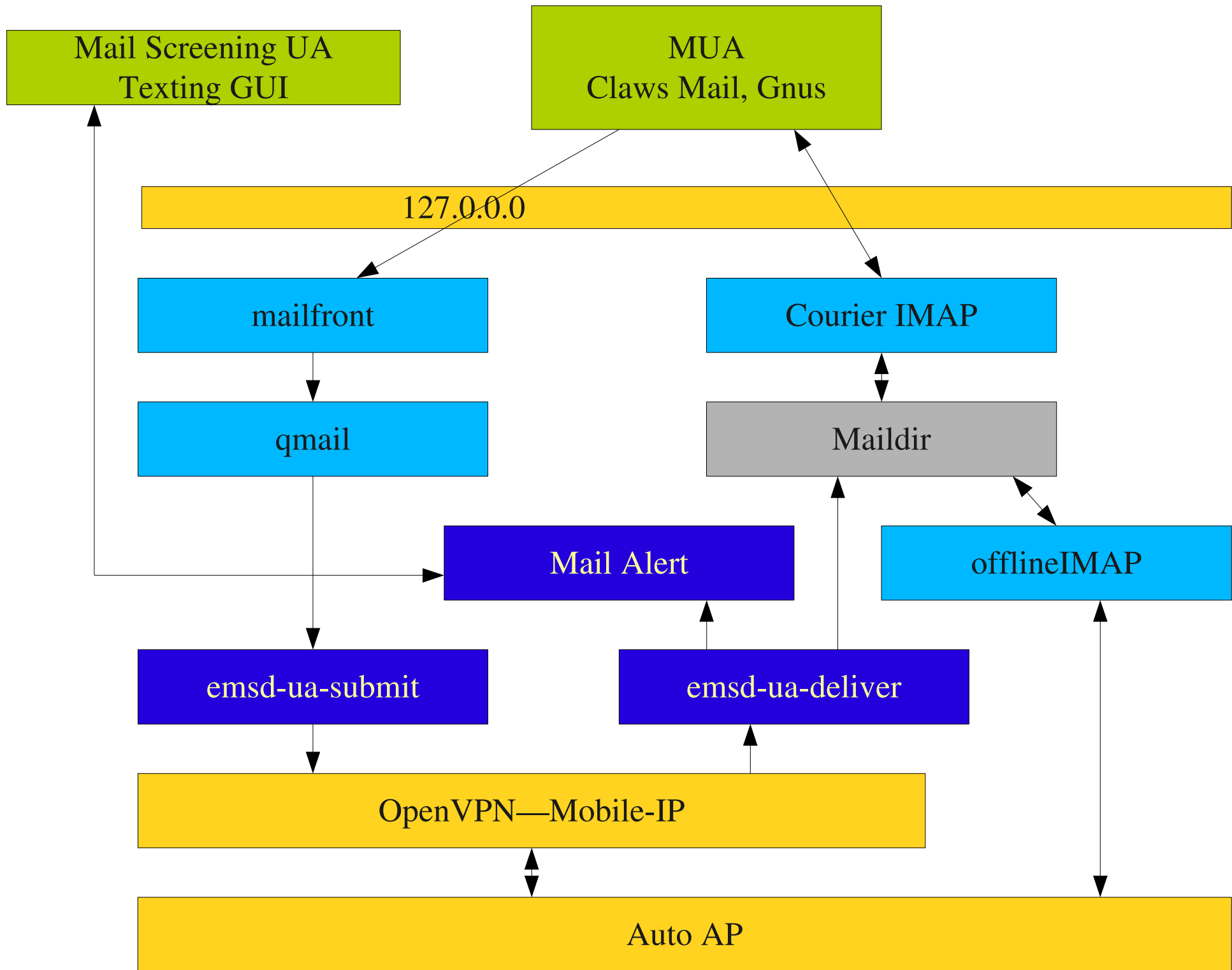
WiFi Only

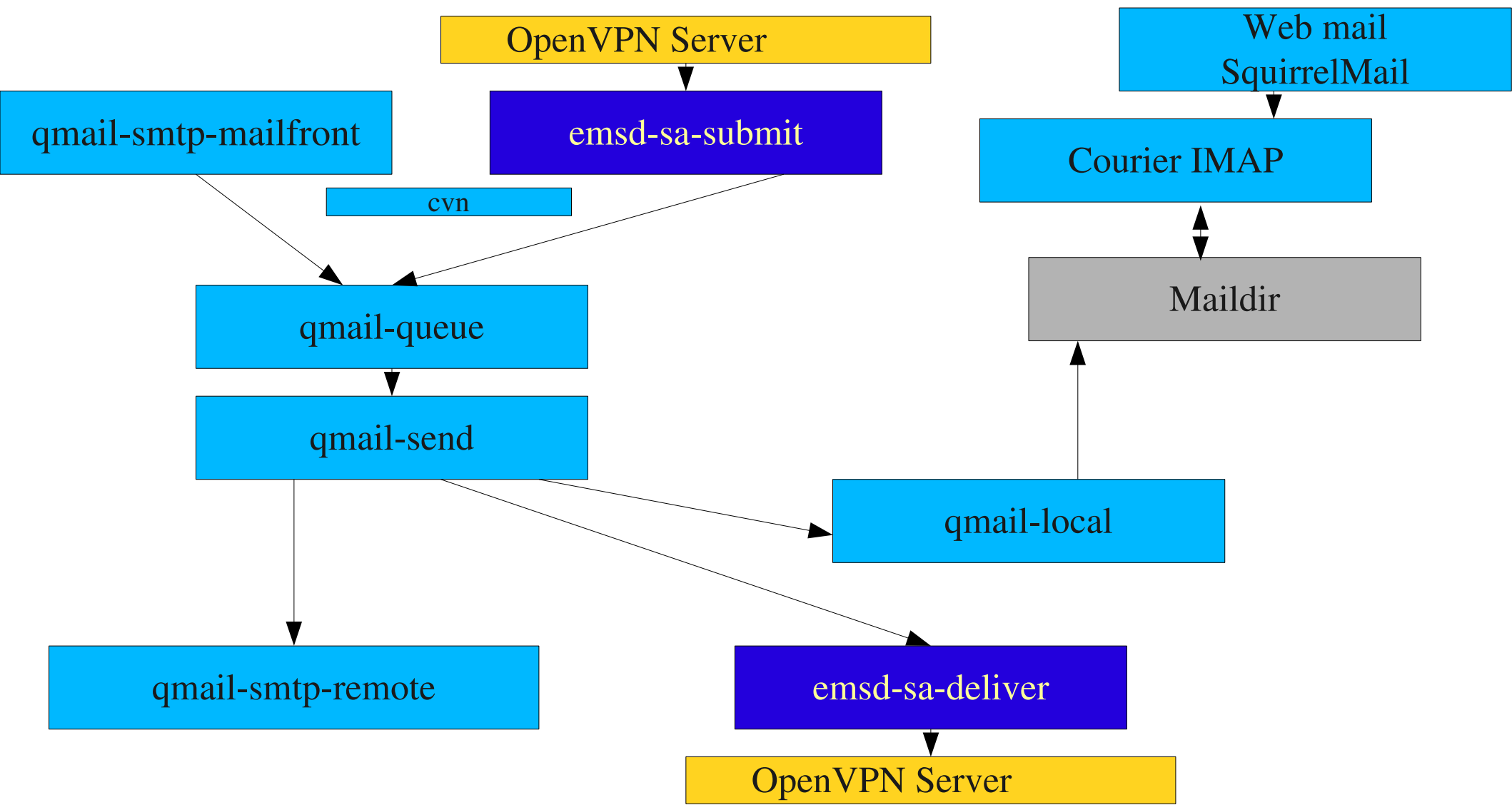


WiFi++ Network Overview

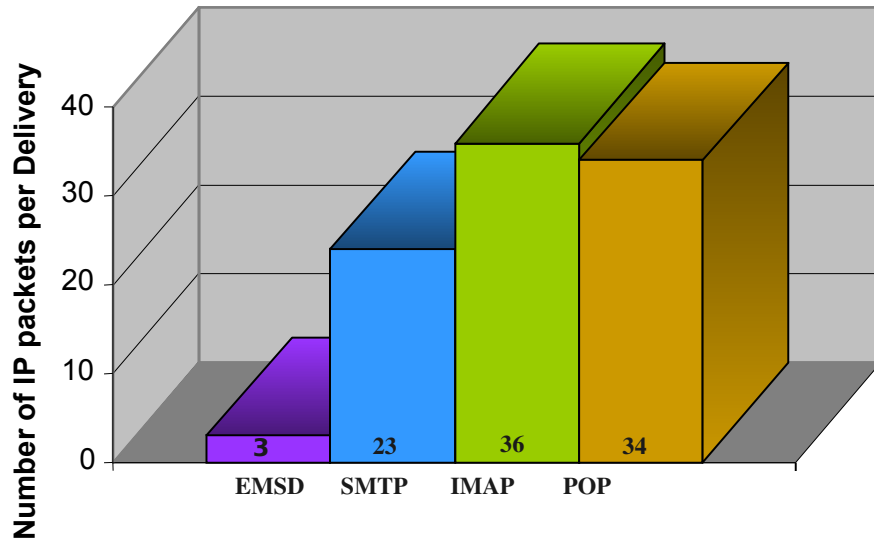
Libre Texting: Parts List

- Network
 - Public spectrum (unlicensed)
 - Existing Mobile and wireless networks
- Device
 - Hardware: Linux PDAs (N-810, Mobile Internet Device)
 - Software: Free/Libre -Linux (Maemo, Ubuntu MID)
- Server and Service
 - Free/Libre server software
 - Competitive Libre Texting services
- Protocols
 - Efficient push-enabled patent-free protocols





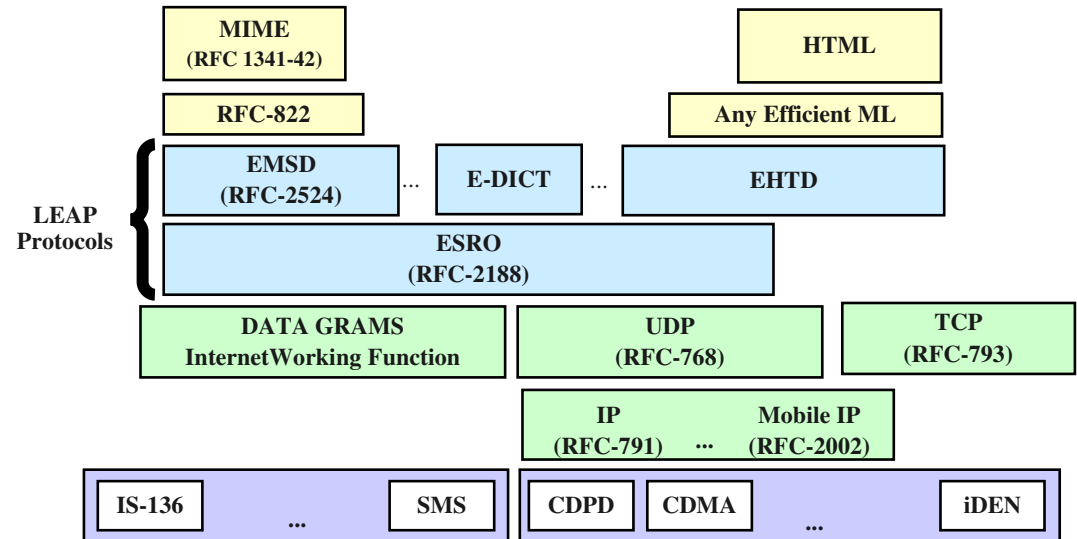
What is EMSD?



Bandwidth Efficiency

• Efficiency Benefits:

- Efficient use of carrier network
- Lower costs per minute of use
- Longer battery life
- Reduced latency for user access



LEAP is a family of protocols:

- **ESRO: Efficient Short Remote Operations**
- **EMSD: Efficient Mail Submission & Delivery**
- **EHTD: Efficient Hyper Text Delivery (in progress)**
- ...

• Technical Attributes:

- Technical excellence
- Ideal for wireless & mobile applications
- Native IP & wireless-IP
- Truly open & patent-free
- RFC published

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This is big and we are small, but lots is in place

- EMSD protocols
- By* Libre Services
- Leadership of the Libre Services movement
- Fully committed to Libre: GNU/Linux everywhere
- Our own Data Center: LibreCenter.net
- Our own wireless network (MURS, WiFi)
- Well-developed Business Plan

For you to Evaluate: All our Cards on the Table

- Neda Open Business: 2009 By* Libre Services
- Libre Services Manifesto [PLPC-100105](#)
- ByStar full picture [PLPC-110004](#)
- Unsolicited Proposal [PLPC-110005](#)
- By* Libre Texting [PLPC-110012](#)
- Operation Whiteberry [PLPC-100006](#)
- LEAP Manifesto [PLPC-100012](#)

Join Us!

Make it Happen in a Big Way

- Engineering community: Ideas, code, integration
- Business community: Buy into the Libre model, take the code, partner up, deploy the services
- Investment community: Financing
- Academic community: Ideas, code, integration, analysis, discussion
- Funding NGOs: Grants
- Government: Grants
- Society: Usage, testing, dialogue, awareness
- Media: Articles, analysis, discussion

Current Active Projects

- Sophisticated access point selection
- Qmail/EMSD integration
- Mail alert
- Linux PDA ports: Android, ZipIt
- EMSD and ESRO enhancements
- Texting GUI
- Mobile IP
- Public spectrum AirLink

Neda By* Open Business Plan – PLPC-110002

Texting

By* Libre
Texting
Service

By* Libre
Texting
Device

Google
Yahoo
MSN

By*
ByName, ByAlias
ByMemory, BySMB

By*
Gnome
EOE

By*
PDA
Env

ByEntity/By* Libre Engine
PLPC-110502

By*Libre
User Environment

By* Libre Services -- PLPC-110001

Libre Services Integration Platform PLPC-110501

Libre Platform Genesis Process PLPC-110101

Libre Services -- PLPC-100102

Microsoft
Windows

Maemo

Ubuntu

Debian

Debian GNU/Linux Packages

GNU/Linux

Non-Free

Free Software