

# presence & the real-time internet

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# presence & the real-time internet

jabber

what is jabber?

open technologies

real-time messaging

presence

powered by  
streaming xml

jeremie miller

1998

tired

4 different im clients

multiple accounts

no interoperability

foster freedom of  
conversation

scratch an itch

open-source messaging  
and presence server

jabberd

january 4, 1999

more than a server

clients

libraries

add-on components

multiple server  
codebases

# client-server architecture

decentralized  
network

# inter-domain messaging

like email

but really fast

with built-in presence

no server spoofing

and no spam

xml wire protocol

standardized  
through ietf

extensible

messaging

and presence

protocol

(xmpp)

rfcs 3920 + 3921

more than protocols

50,000+ servers (?)

40+ million users (?)

clients  
for every platform

libraries  
for every language

deployed worldwide

wall street banks

u.s. government

hp, eds, fedex

orange, bell south,  
sapo, ntt, sun rocket

google, apple, sun,  
live journal

and you

run your own server

write your own  
components

integrate with  
your own systems

build competitive  
advantage

open technologies

this is a good thing

application server for  
the real-time internet

why?

context

message and reply,  
London to Calcutta

1800: 2 years  
(sailing ship)

1914: 1 month  
(steamship)

1950: 1 week  
(airmail)

1980: 2 days  
(overnight mail)

1993: 10 minutes  
(email)

1999: 1 second  
(instant messaging)

half-life of information  
is shrinking

need to build the  
real-time internet

deliver information  
when it's needed

know when people,  
devices, apps are online

presence

“the new dial tone”

boring!

a catalyst for  
interaction

also need  
identity + capabilities

basic in existing  
voice networks (PSTN)

dial tone indicates  
system availability

identity is only  
a number

capabilities are stable  
and minimal

on IP networks,  
more complexity

presence is  
individualized

presence is focused  
(subscriptions)

presence is manifold  
(multiple devices)

identity is more  
complete (vCard++)

capabilities are dynamic  
and multifaceted

not just  
person to person

person to  
application

application to  
application

what can we do  
with presence?

one-to-one IM

groupchat  
(à la irc)

just teen chat, right?

wrong!

trading desks  
(investment banks)

incident rooms  
(capwin)

expert support  
(qunu)

data syndication

real-time RSS  
(just-in-time updates)

atom sync'ing  
(feedmesh)

real-time  
financial modelling

# intelligent workflow processing

energy trading  
(netenergy)

sales / logistics  
(reynolds + reynolds)

network management  
(oracom)

wireless access points  
(sputnik)

configure linksys  
routers (voip provider)

real-time virtual  
collaboration

svg whiteboarding  
(inkboard, etc.)

shared document  
editing (subethaedit)

collaborative  
data objects (mitre)

working together vs.  
powerpoint over email

presence-enabled  
telephony

push to talk  
based on presence

asterisk +  
other PBXs

federate PBXs  
over the net

look ma, no telco!

voip w/presence vs.  
phonetag + voicemail

presence in distressed  
environments

serverless mode  
(zeroconf)

mesh / IP “bubbles”  
(military convoys)

extended presence

geolocation

vehicle tracking  
(trakm8)

first responder systems  
(presence + identity)

# mobile marketing services

mood & activity

tune, video, gaming,  
browsing, blogging

more + stronger  
connections

all with open standards  
(xmpp | sip)

radical innovation  
at the edges

think world wide web,  
not telco

sounds great, huh?

there be dragons!

always-on availability

presence overload

device management

personal privacy

data ownership

technical solutions  
(e.g., automation)

social solutions  
(e.g., etiquette)

give presence,  
get connected

presence-enabled  
connected world

everything is going  
real-time

half-life of information  
is shrinking

we're building the  
real-time internet

whether we know it  
or not

whether we like it  
or not

the best way to  
predict the future...

is to invent it

we're inventing it  
together

join the conversation