

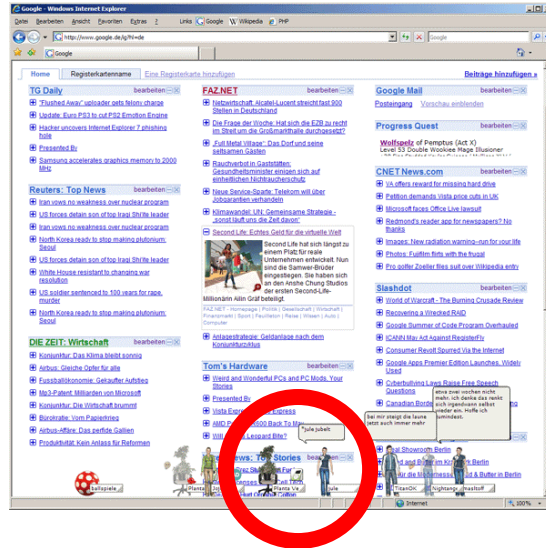
Virtual Presence

... with XMPP
... and beyond

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What is Virtual Presence?

- meet people on Web pages
- chat, VoIP, collaborate
- talk, flirt, trade, equip, play, fight, live ...
- do what they do in the real world, e.g. ignore each other



What is behind it?

- a graphical Jabber chat client
 - a Jabber network
 - a URL mapping scheme
 - avatars, animations, bells and whistles
 - much spare time
 - a dream
-
- anyone may join without being registered with a large IM network (AOL, MSN, Skype, ...)
 - anyone can run a VP client and choose a trusted server to walk on the Web with a rich and animated avatar
 - VP will not be fragmented by technical and administrative measures like the IM world

General Concept



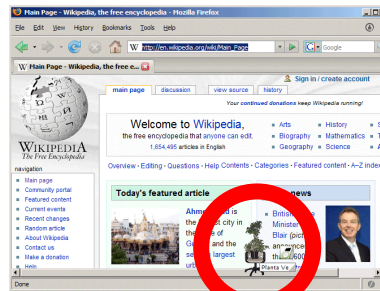
regex

Mapping Rules
XEP-151

0acd465bbb0ec47c393eee1b4ae069f228dde142@location.virtual-presence.org

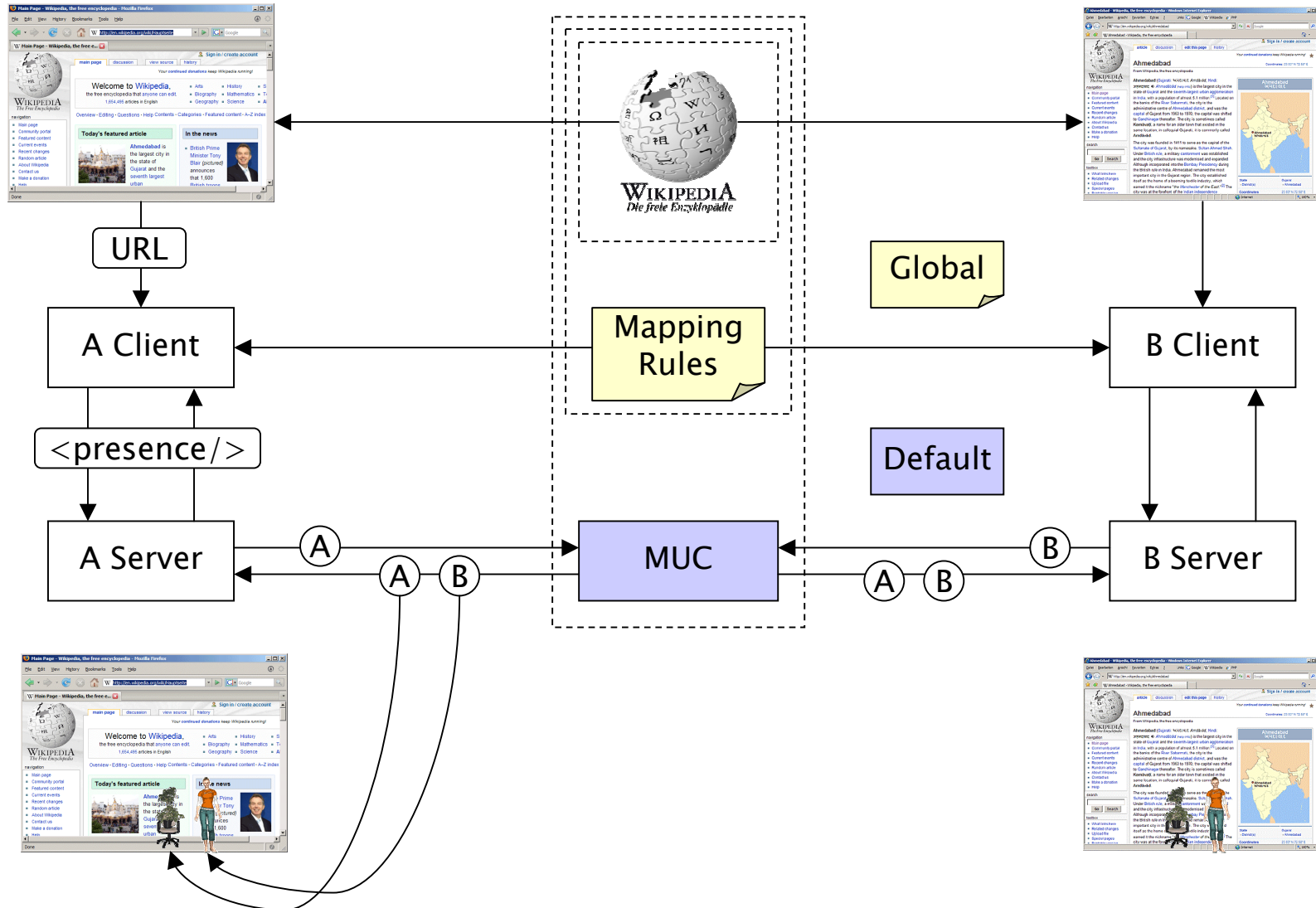
<presence to="...

<presence from="1...



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Architecture



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We Use

- Jabber/XMPP core as transport protocol
- ejabberd as connection aggregator, MUC as VP server
- custom client
- XML and regex for the URL mapping

```
<location match='^(https?://((w)+([0-9]*)\.?)?([^\./]+\.[^\./]+))($|/.*$)'\>  
  <service>xmpp:location.virtual-presence.org</service>  
  <name hash="SHA1">\5</name>  
</location>
```

- XMPP extensions
 - avatar position, user data
- HTTP/XML based storage for character data

```
<identity digest="123">  
  <item contenttype="avatar" digest="456" src="http://mypage.com/avatar.xml"/>  
  <item contenttype="properties" digest="789" mimetype="text/plain">  
    Nickname=MyName  
  </item>  
</identity>
```

Beyond XMPP

- Jabber is a great protocol for VP
 - thanks to the inventors, devs, and ...
- We use it as the transport protocol
 - no fancy features, just messaging
 - standards, interoperability, experience
 - solutions for the C10K problem
- Missing
 - avatars and more for end user "bells and whistles"
 - ease of use for consumers
- Other networks and protocols
 - VP needs a chat system (can be Jabber)
 - any chat server can be a VP server (MUC is a good one)
 - URL mapping is open to other networks (MS)
- I hope that XMPP will become the default VP protocol

Beyond Avatars

- JPEG/PNG/GIF images
- animated GIF for walk/talk and emotes (/dance)
- we are going to add:
 - 3d avatars
 - game avatars (your MMOG character always with you)
 - 3d objects (from living room chair to shop counter)
 - interaction between avatars and objects (NPCs, bots)
 - interaction between avatars and the page
- we will extend the space in front of the page
- there are different directions possible
 - game like: quests, MUD, skilling, fighting
 - business oriented: adding FOAF features
 - flirt: dating w/o an expensive dating site

Reality and Theory

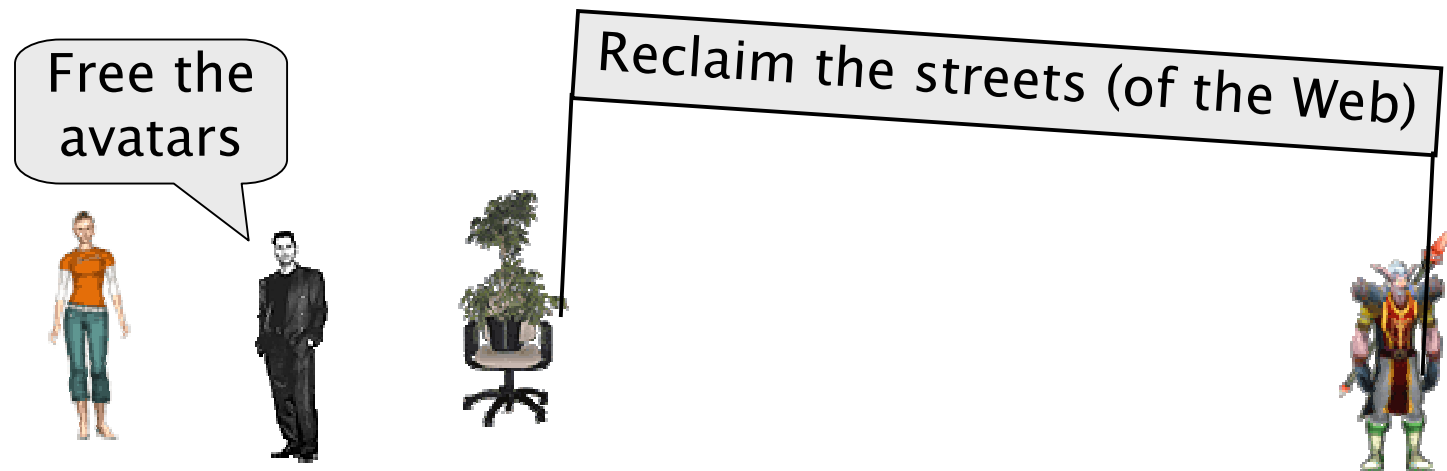
- Reality:
 - we run a single server where users create a VP account
 - to make it simple and make it work on all Web pages
- Theory:
 - our server just happens to be the first server of a distributed system
 - anyone can program a client and connect
- Reality
 - there is only one such client with avatars (Win)
 - all XMPP clients can connect
 - `lms.virtual-presence.org` provides all URL mapping rules
- Theory:
 - web sites can provide their own rules
 - domestic authority
 - public and private spaces

The End

beta started 3 months ago
5000 accounts
200 concurrent

<http://www.virtual-presence.org/>

<http://www.webmobs.de/manifesto.html>



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