



The Power of We™

Private overlay of enterprise social data and interactions in the public web context

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Enterprise social software

What are the problems?

- 4 Poor adoption
- 4 Privacy threat
- 4 No persistence
- 4 Fragmentation

How to solve them?

1. Integration of existing behavior
2. Separation of data and application
3. User in control of her data

What is Living Content?

In this talk...

1. What is the problem?
2. What are the use cases?
3. What is living content?
4. What does the project do?
5. What are the challenges?

What are the use cases?

Web Annotations

Private data in the context of public web pages

Virtual Presence

And messaging on any third-party web page

Enhance Page

By injecting presence, click-to-call or enterprise profile

Enhance Apps

Using user and data-centric application model

Use cases: web annotations

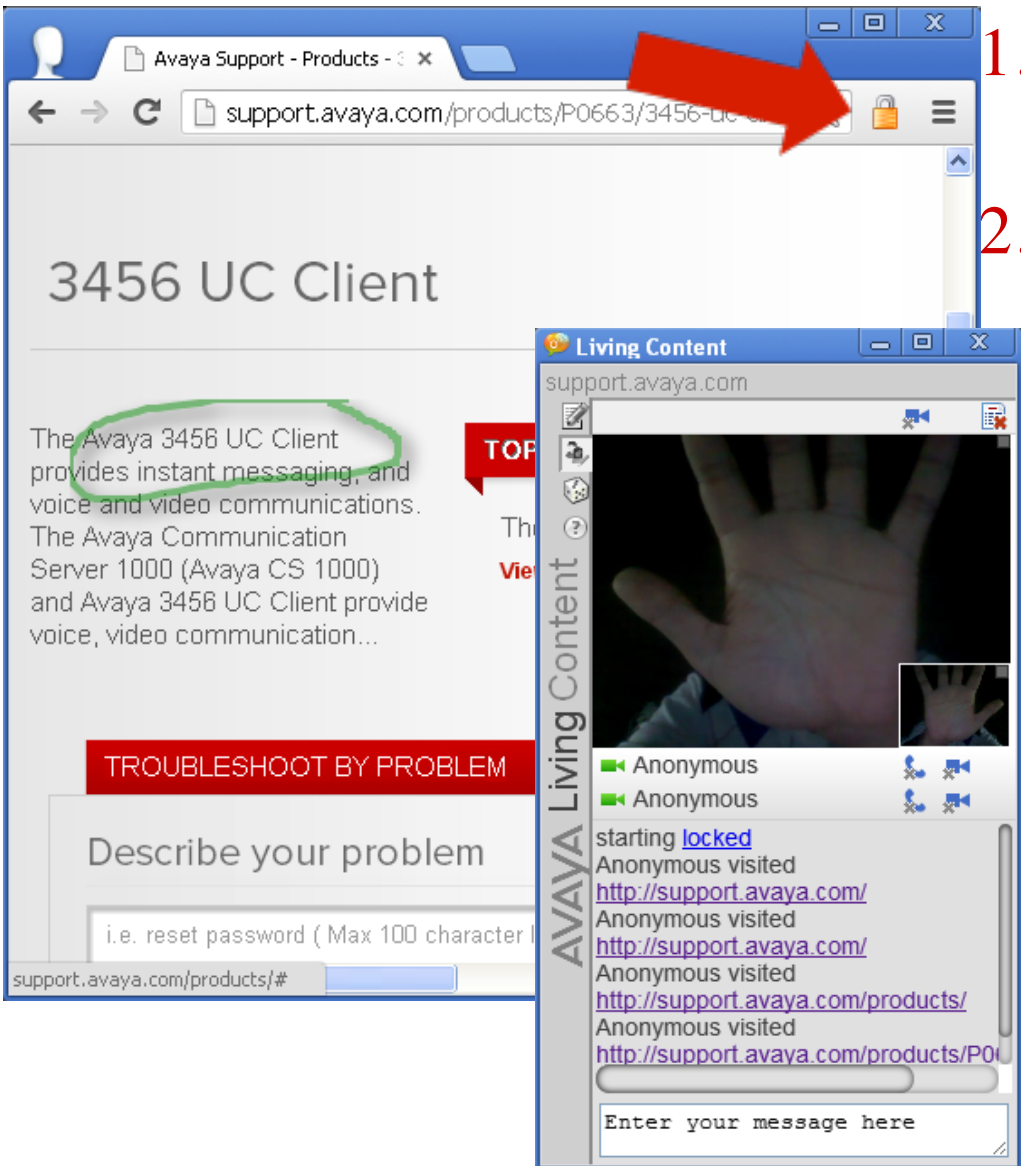
private social data on public web – data remains private

1. Sales team on customer website
2. Sharing business knowledge
3. Job interviewers on the job advertisement web page
4. Overlay on public knowledge

The screenshot shows a web browser displaying an article on TMCnet.com. The article title is "AVAYA News - Avaya Reaches New Goal in Small and Mid-Size Markets with Over 300,000 IP Office Sales". A private annotation is overlaid on the article text, containing the text: "Sales Team: Most of our customers are on old version. We need a good strategy to make them purchase an upgrade. Any suggestions?". The annotation is enclosed in a red border and has a red 'X' in the top right corner. The website header includes "TMCnet.com" and navigation links for "COMMUNITIES", "CHANNELS", "PUBLICATIONS", "EVENTS", and "TECHN". The article content includes a "QUICK LINKS" section with "Subscriptions", "White Papers", "eNewsletters", and "Webinars". A "TRANSITION NETWORKS" logo is visible at the bottom left. A yellow sticky note is partially visible on the right side of the page.

Use cases: virtual presence

connected browsing with multimedia on any web page



1.

Customer support and training

2.

Zero-conf department meetings

Online job interview and candidates queue

Listen to user comments on any owned web page

Use cases: enhance web pages

without modifying files on those web servers

1. Annotate department webpage with lab webcam
2. Interaction in corporate or public social directory
3. Testers and developers coordinate on bug tracker page
4. Collate employee data and profile

The screenshot shows the Avaya POST Corporate Directory page. A private overlay chat window is open, showing a video call with a man. The chat window has a red arrow pointing to the 'Mail To' field in the directory entry below. The directory entry includes fields for Name, Position, Personnel No, Tel, Fax, Cell, VM Addr, Job Family, Reporting, Extension, Mail To, Mailbox, and Mail to Pqr. The 'Mail To' field is highlighted with a red arrow.

Name: Sing	Job Family: PD	Job
Position: (D	Reporting: [redacted]	Virtu
Personnel No	Extension:	Han
Tel: +1 408	Mail To: singh173@avaya.com	
Fax:	Mailbox: singh173@na-west.exch	
Cell:	Mail to Pqr:	
VM Addr:		

The screenshot shows a LinkedIn profile for Kundan Singh, a VoIP researcher and professional. A private overlay chat window is open, showing a video call with a man. The chat window has a red arrow pointing to the profile name 'Kundan Singh' in the 'Viewers of this profile also' section. The profile includes a navigation bar with Home, Profile, Contacts, Groups, Jobs, Inbox (54), and Compar.

Kundan Singh ●
VoIP researcher and professional

Use cases: enhance application

or use cases such as collaborative editing, social wall, ...



Enterprise user profile on social network sites

Co-edit technical documents

Personal wall for social connect

Context driven personal wall

Connect with existing cloud apps

What is living content?

4 A project...

4 A web page...

4 A browser extension...

4

A rich (HTML5) document

can be sent, stored or put on a web site.

4

Allows editing and annotations by viewers

edits and annotations are shared

4

Allows interaction among viewers

interactions are stored

4

Allows branching the document view

with merging and sharing

“Collaboration allows content”

or

“Content allows collaboration”

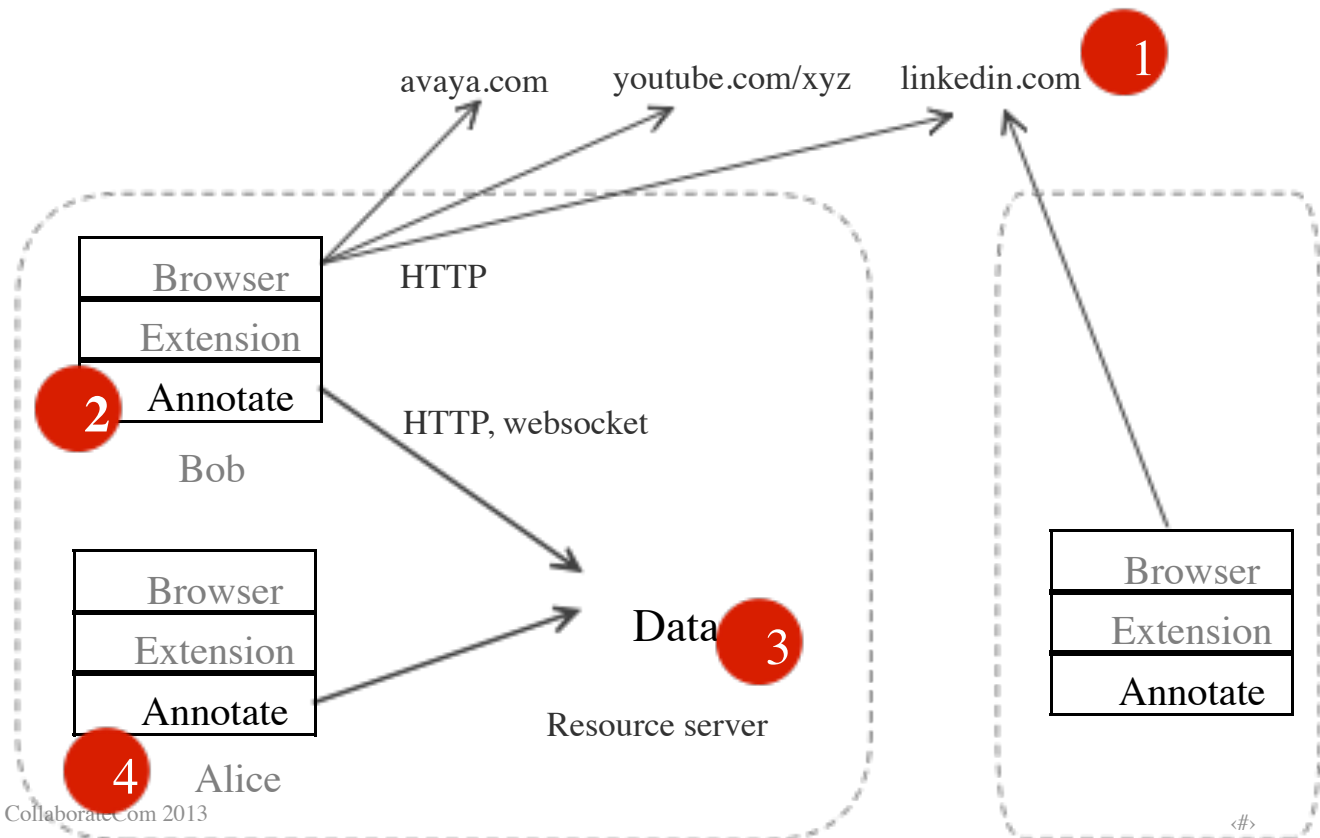
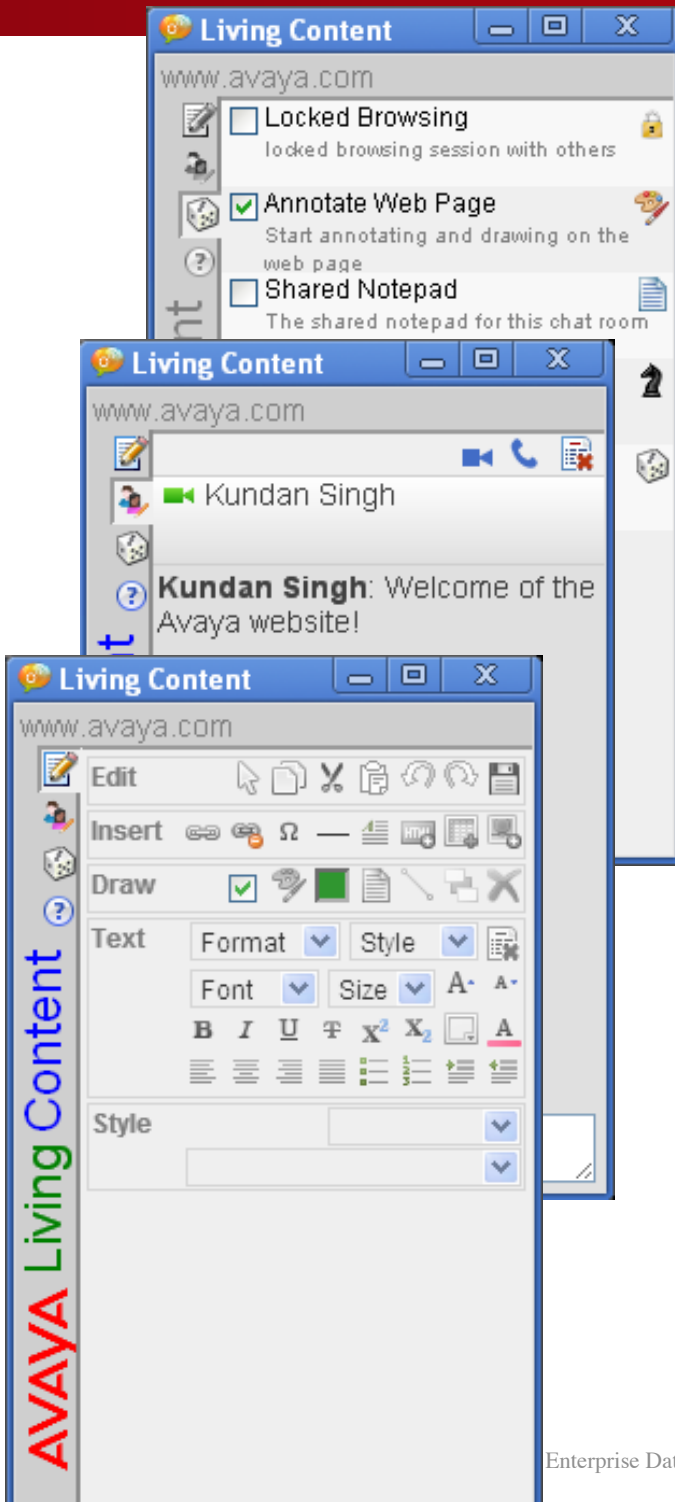
“Go to a place to collaborate”

or

“Collaborate where ever you are”

How does it work?

- 4 A browser extension
- 4 Chat room and data context per web page or website
- 4 Conversation window



Demonstration

What just happened in the demo video?

- 4 Browser extension, resource server, WebSocket
- 4 Virtual presence, real-time multimedia interaction (WebRTC), text chat and file sharing
- 4 Web annotations, web context, co-editing
- 4 Enhance third-party web sites, presence, click-to-call
- 4 Personal wall, video presence and sharing

What are the important concepts?

1. Separation of data from application
 - Resource application model
 - App-logic runs in the browser
 - Data storage is separately maintained and controlled
2. Generic browser extension to link context with data
 - Pluggable app framework
 - Individual app-logic launched on demand
 - Annotate, interact, presence, notepad, co-browse, ...
3. Application mash-ups at the data level
 - Data produced and consumed by independent unrelated apps
 - Ask permission from the user instead of the app
 - Resource connectors to legacy apps where needed

What are the challenges?

- 4 Keeping app logic in the browser
- 4 User interface dynamic layout
- 4 Security, privacy, access control and groups
- 4 Enterprise policies to social data
- 4 Bootstrapping social profile
- 4 Context from content and visitor
- 4 Secondary web of annotations and interactions
- 4 Interoperating with existing systems
- 4 ... **Many more questions are answered in the detailed paper**

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What is the take-home message?

Enterprise social software

- 4 Poor adoption
- 4 Privacy threat
- 4 No persistence
- 4 Fragmentation

Solution

1. Integration of existing behavior
2. Separation of data and application
3. User in control of her data

Thanks to HTML5 (WebSocket, WebRTC, etc.)

seemingly complex communication scenarios and app-logic can run entirely in the browser