Generalizing Email Messages Digests

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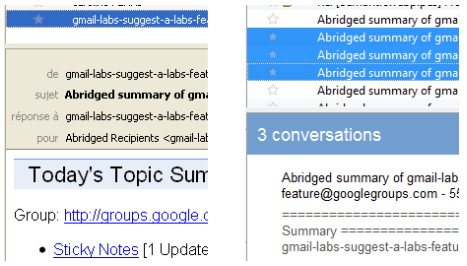
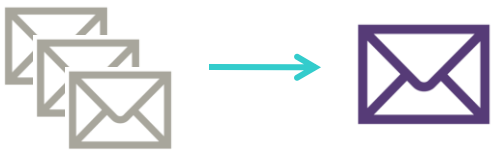
MOTIVATION



- Users receive useful emails.. ..they want to read them ***but not now***
- *Email digest* is an existing technique to compile *N* emails into *1* email
- Existing email clients don't generate digests, only mailing lists systems

GOAL



- Creating meaningful email digests for any set of user-selected messages
- Keeping an email centric interface
- Compliant with email standards and thus resulting in a regular email

CHALLENGES

- Extracting data and task from emails
  - semi-structured headers
  - plain text body
  - others: attachments, contacts, etc.
- Aggregating data and embedding compact visualizations
- Setting up a flexible system to support and include new visualizations

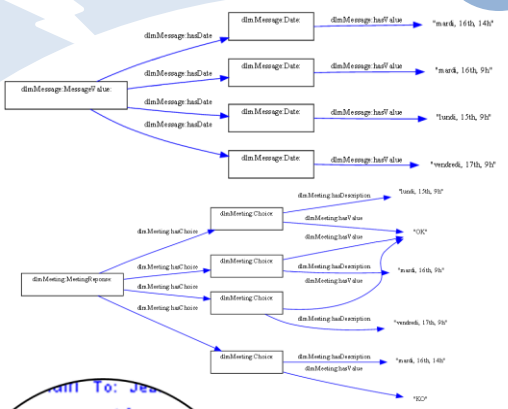
..In other words dealing with existing email clients and facing the diversity of email usages

1

Email selection by users in their email client

Remote processing

2



Data & Task extraction

- NLP, dictionary, contacts, ..
- Tasks are predefined using ontologies
- RDF graph format to store and enable data interoperability

3

Aggregation & Interoperability

- Basic (sum, average, etc.) and advanced aggregations (abstraction, etc.) techniques
- Augmented with semantic data and reasoning

4

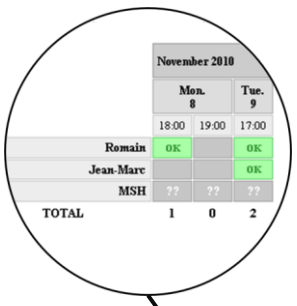
Visualization templates

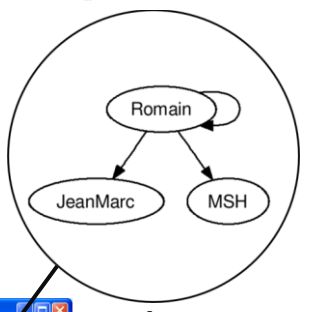
- Separation of data and presentation
- Flexible way to extend visualizations design
- Include external web services

5

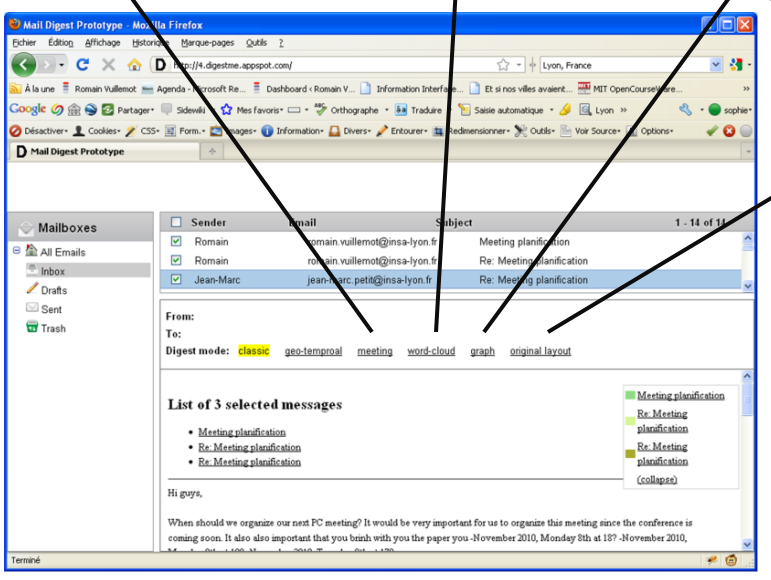
Visualization & interaction

- Digests are generated on a tier server as a web service and transferred back in email clients
- Digests results in RFCs-compliant emails
- Users can reply, forward and/or archive them





Digests



DEMOs

- Live GWT webmail http://digestme.appspot.com/
- Thunderbird add-on

PERSPECTIVES

- Support more data and tasks
- Setup a collaborative template design system

ACKNOWLEDGEMENT

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