

Application Integration at the University of Málaga

Victoriano Giralt

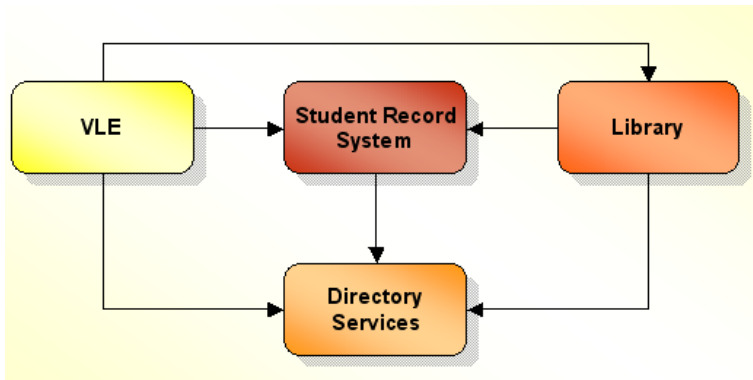
Central ICT Services
University of Malaga

Advanced EuroCAMP
Budapest
November 18th 2009

? ? ? ?
? ? ?
? ? ?

An ideal

Enterprise Application Integration for Universities



Central ICT clustered apps

Tools for collaborating

The screenshot shows the 'Miduma' web application interface. At the top left, the name 'Miduma' is written in a handwritten-style font. In the top right corner, there is a logo for 'Uma' (Universidad de Málaga) and the text 'SERVICIO CENTRAL DE INFORMÁTICA'. Below the header, there is a navigation bar with a dropdown menu, a 'Ir a grupo' button, a 'Volver a inicio' button, and a 'Cerrar sesión [ipm]' button. The main content area is titled 'Ciencias' and contains two links: 'Información sobre el grupo' and 'Eliminar grupo'. Below this, there is a section titled 'Aplicaciones disponibles' which lists several applications with their respective icons and 'administrar' links: 'Wiki', 'Blog', 'Foro', 'Consigna', and 'Sympa'. At the bottom of the page, there is a copyright notice: '©2009 Servicio Central de Informática - Universidad de Málaga'. In the bottom right corner, there is a circular logo for 'RSIETS' (Red de Servicios de Informática de la Universidad de Málaga).

Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list
- Web Forum



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list
- Web Forum
- Chat



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list
- Web Forum
- Chat
- Web file sharing



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list
- Web Forum
- Chat
- Web file sharing
- ...



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

- Group management
- Wiki
- Blog
- Mailing list
- Web Forum
- Chat
- Web file sharing
- ...

all of them sharing the same credentials



Central ICT clustered apps

Tools for collaborating

We want to provide tools for groups to work together

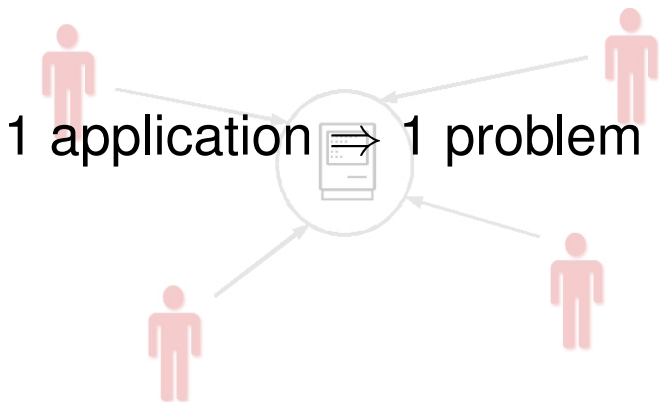
- Group management
- Wiki
- Blog
- Mailing list
- Web Forum
- Chat
- Web file sharing
- ...

all of them sharing the session



The platform application

a cure for our problems



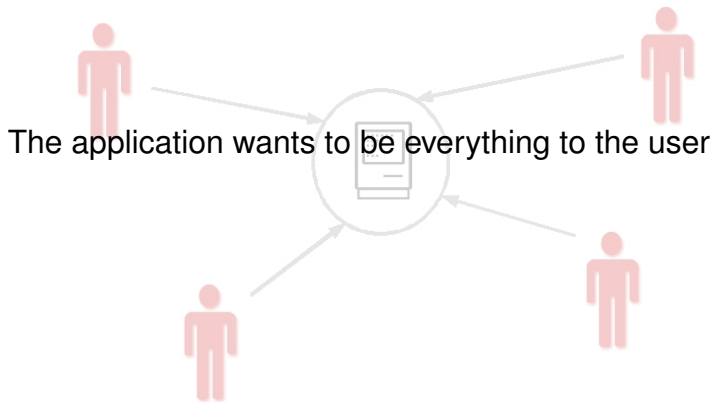
Application centric

the paradigm of the monolithic platform



Application centric

the paradigm of the monolithic platform



The feature race

and endless rush to nowhere



Severe case of kitchen sink syndrome



The platform application

a cure for our problems?

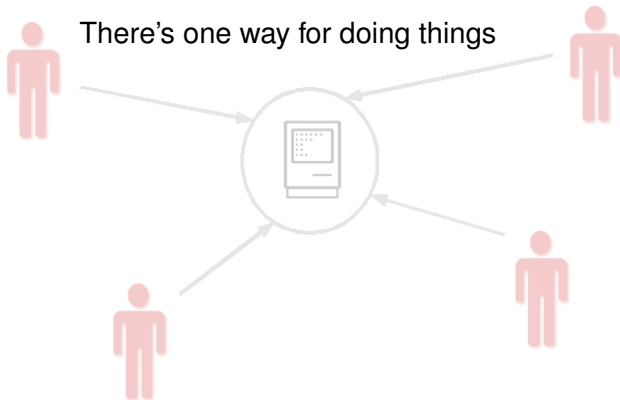


Applications have an attitude



The platform application

a cure for your problems?



The platform application

a cure for your problems?



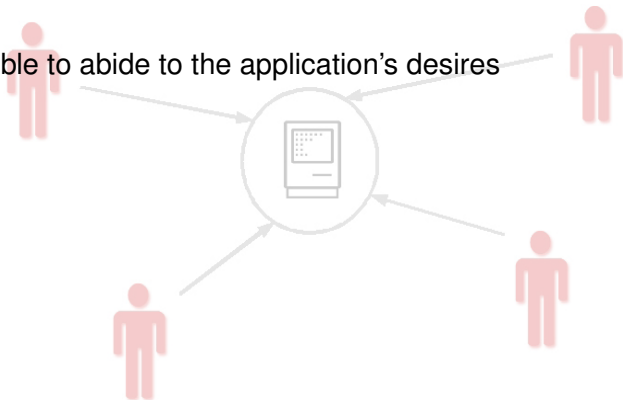
There's one way for doing things



Provisioning

bending processes to *the attitude*

It is possible to abide to the application's desires

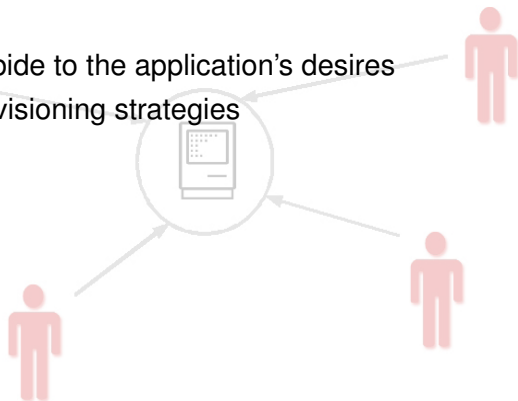


Provisioning

bending processes to *the attitude*

It is possible to abide to the application's desires

- Devising provisioning strategies



Provisioning

bending processes to *the attitude*

It is possible to abide to the application's desires

- Devising provisioning strategies
- Using not much extended technologies



Provisioning

bending processes to *the attitude*

It is possible to abide to the application's desires

- Devising provisioning strategies
- Using not much extended technologies
- Reciting obscure incantations



Provisioning

bending processes to *the attitude*

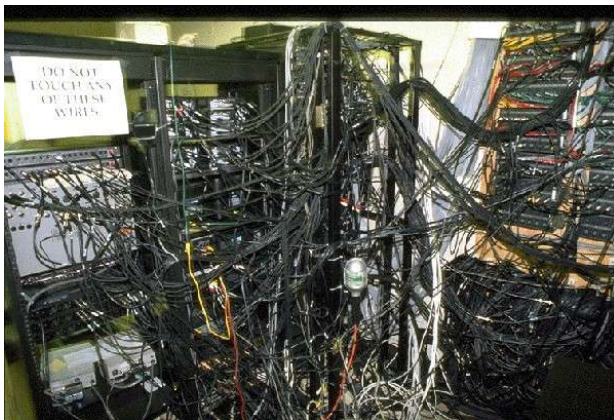
It is possible to abide to the application's desires

- Devising provisioning strategies
- Using not much extended technologies
- Reciting obscure incantations
- ...



Provisioning

bending processes to *the attitude*



The institution

hostage to the application



personal tribute to Ingrid Betancourt



Users with previous experiences

they bring expectations



Are we doomed?

what can developers and sysadmins do?



FIAM

Federated Identity is coming to our rescue



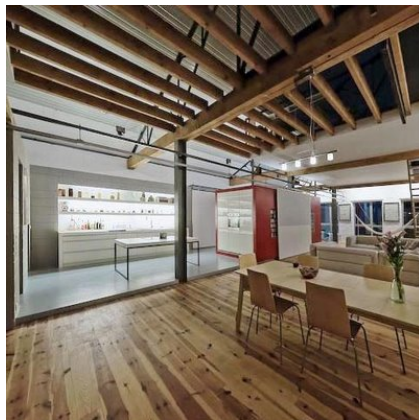
Old model

rooms and walls



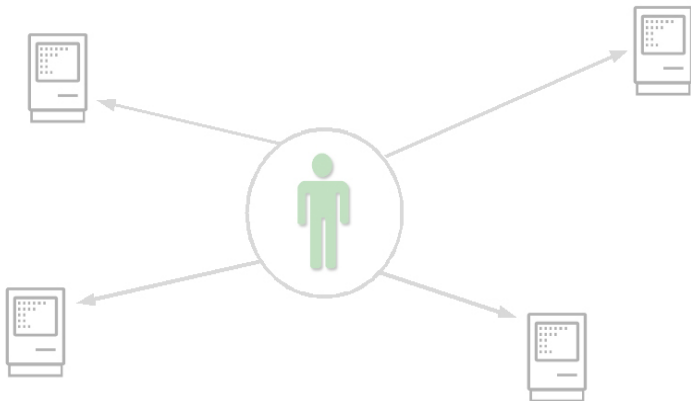
New model

an open seamless space



User centric

use the identity to put the user in control



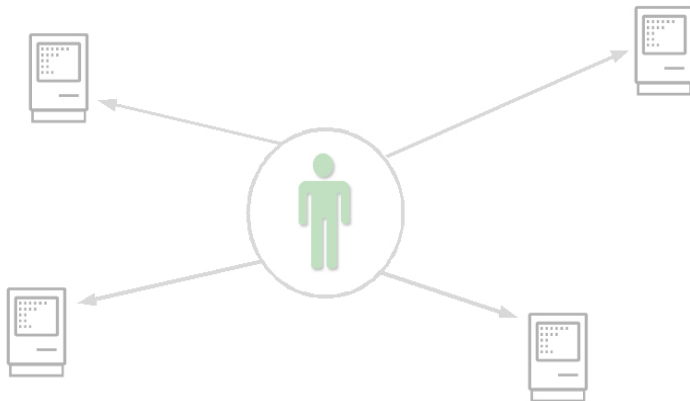
User centric

use the identity to put the user in control



Requirements

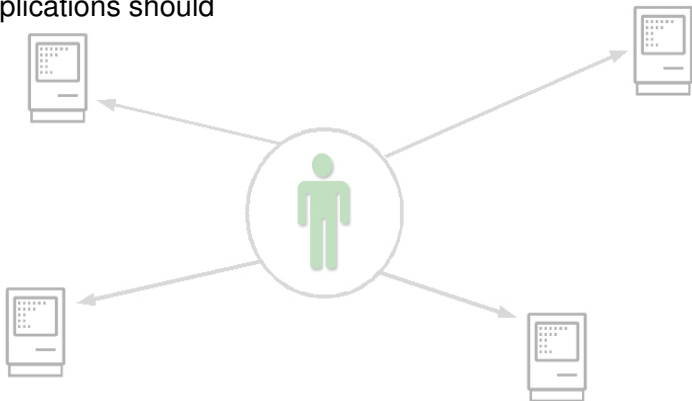
to follow the traced path



Requirements

to follow the traced path

Our applications should

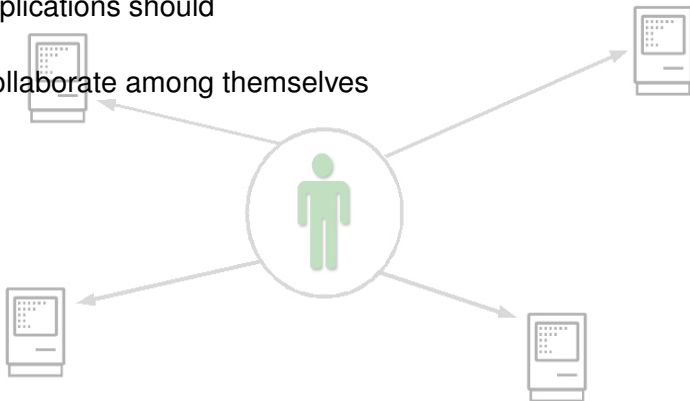


Requirements

to follow the traced path

Our applications should

- Collaborate among themselves

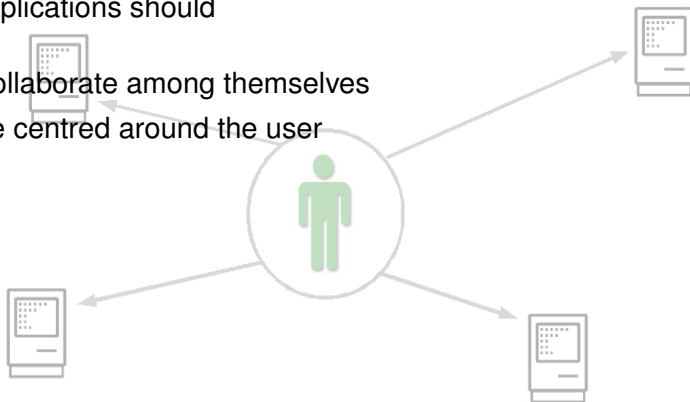


Requirements

to follow the traced path

Our applications should

- Collaborate among themselves
- Be centred around the user

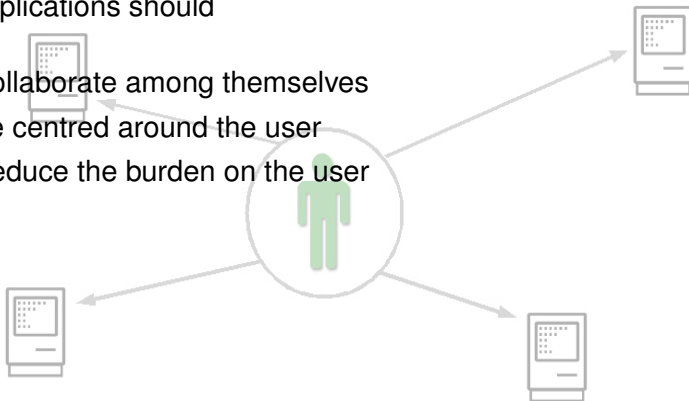


Requirements

to follow the traced path

Our applications should

- Collaborate among themselves
- Be centred around the user
- Reduce the burden on the user

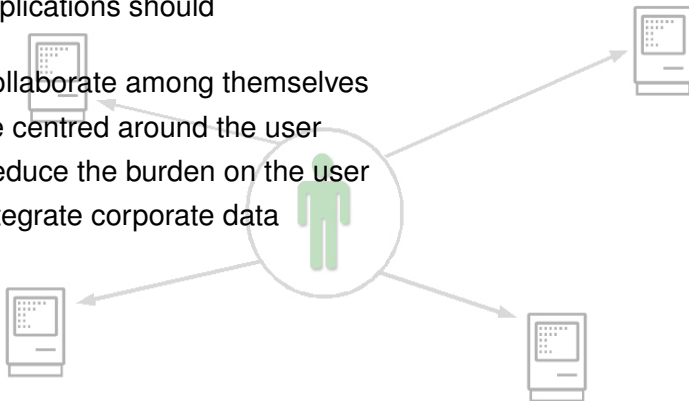


Requirements

to follow the traced path

Our applications should

- Collaborate among themselves
- Be centred around the user
- Reduce the burden on the user
- Integrate corporate data

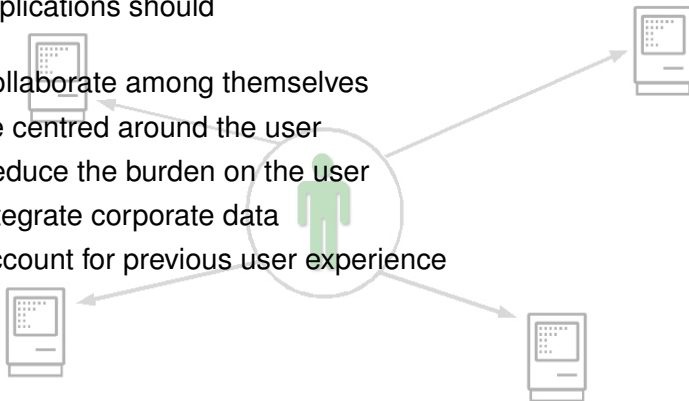


Requirements

to follow the traced path

Our applications should

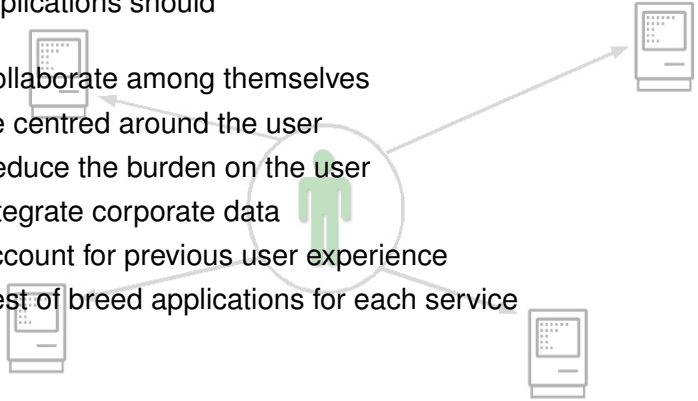
- Collaborate among themselves
- Be centred around the user
- Reduce the burden on the user
- Integrate corporate data
- Account for previous user experience



Requirements

to follow the traced path

Our applications should

- Collaborate among themselves
 - Be centred around the user
 - Reduce the burden on the user
 - Integrate corporate data
 - Account for previous user experience
 - Best of breed applications for each service
- 

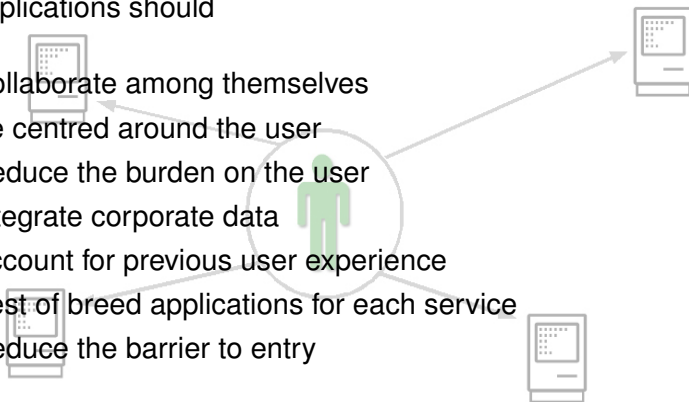


Requirements

to follow the traced path

Our applications should

- Collaborate among themselves
- Be centred around the user
- Reduce the burden on the user
- Integrate corporate data
- Account for previous user experience
- Best of breed applications for each service
- Reduce the barrier to entry



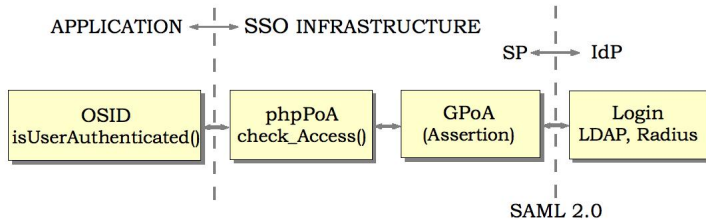
Applications that play together

Centered around the user

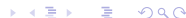
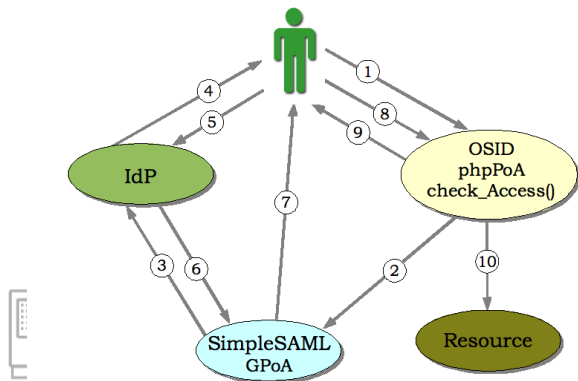


Authentication architecture

mechanism independence

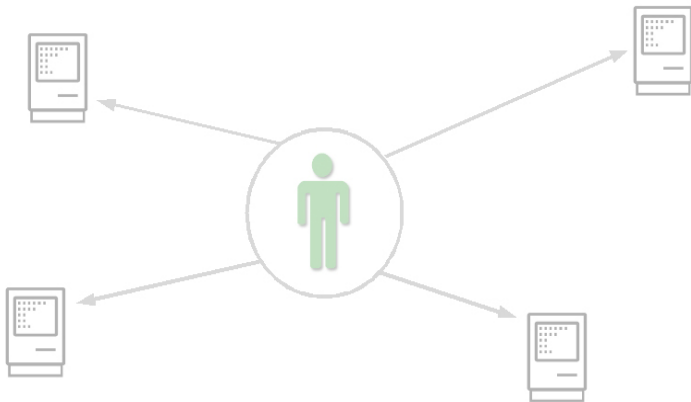


Authentication process



The glue

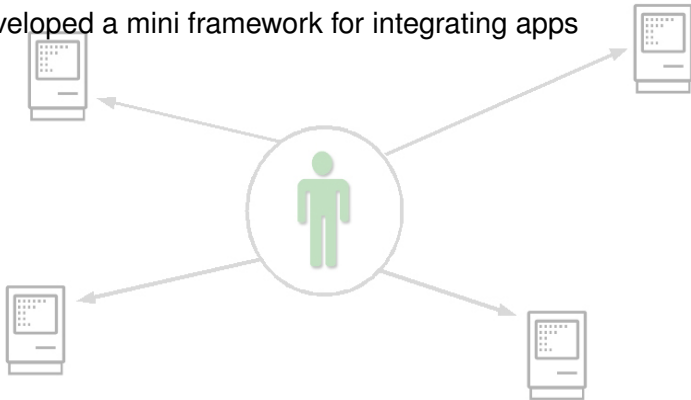
that holds pieces in place



The glue

that holds pieces in place

We developed a mini framework for integrating apps

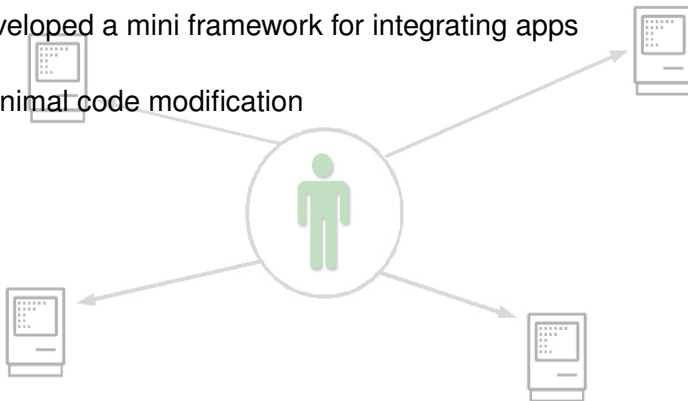


The glue

that holds pieces in place

We developed a mini framework for integrating apps

- Minimal code modification

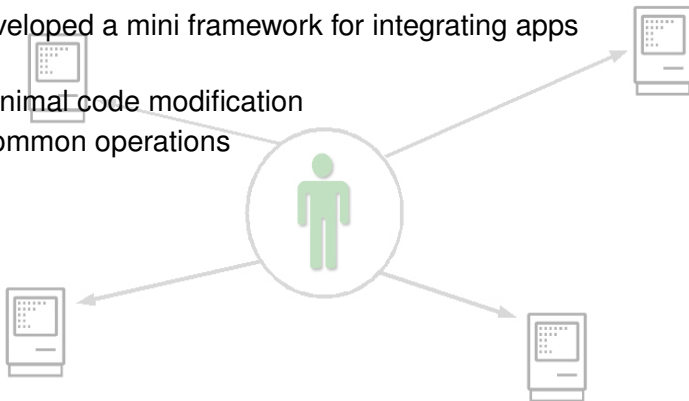


The glue

that holds pieces in place

We developed a mini framework for integrating apps

- Minimal code modification
- Common operations

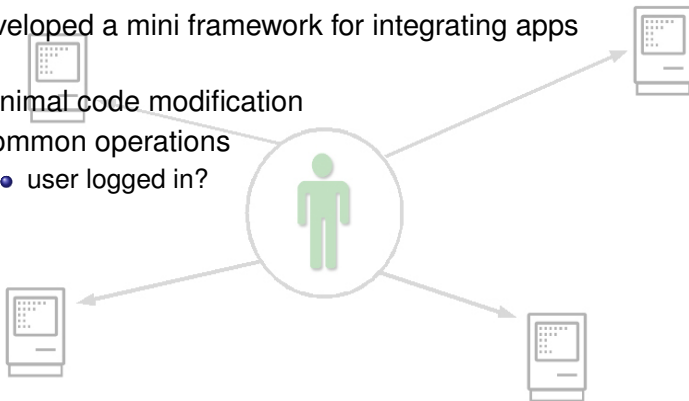


The glue

that holds pieces in place

We developed a mini framework for integrating apps

- Minimal code modification
- Common operations
 - user logged in?

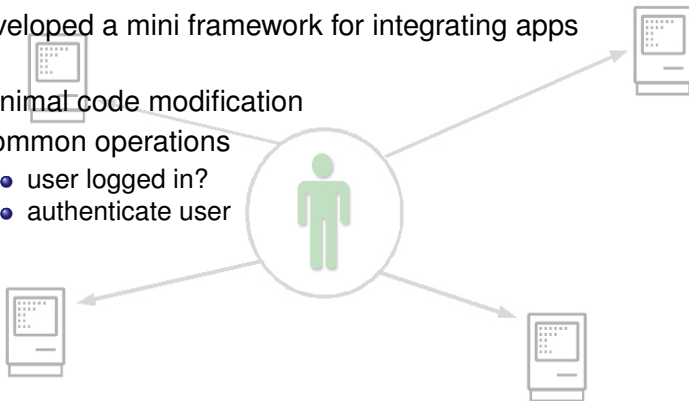


The glue

that holds pieces in place

We developed a mini framework for integrating apps

- Minimal code modification
- Common operations
 - user logged in?
 - authenticate user

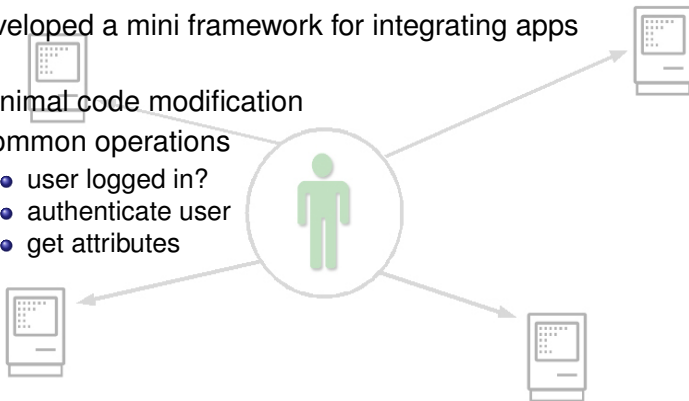


The glue

that holds pieces in place

We developed a mini framework for integrating apps

- Minimal code modification
- Common operations
 - user logged in?
 - authenticate user
 - get attributes

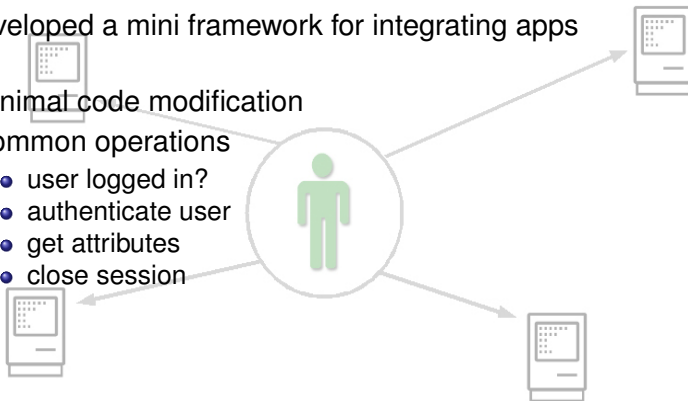


The glue

that holds pieces in place

We developed a mini framework for integrating apps

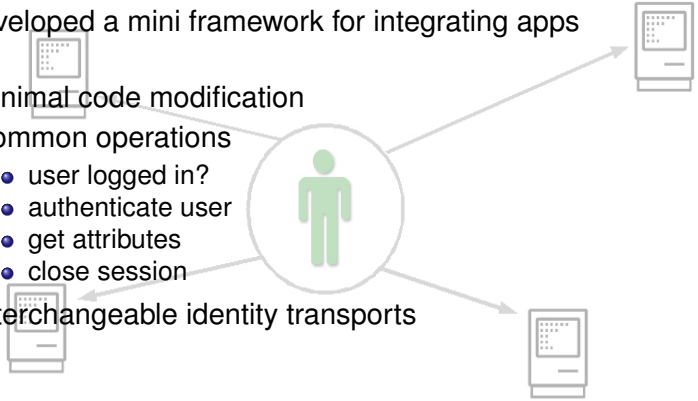
- Minimal code modification
- Common operations
 - user logged in?
 - authenticate user
 - get attributes
 - close session



The glue

that holds pieces in place

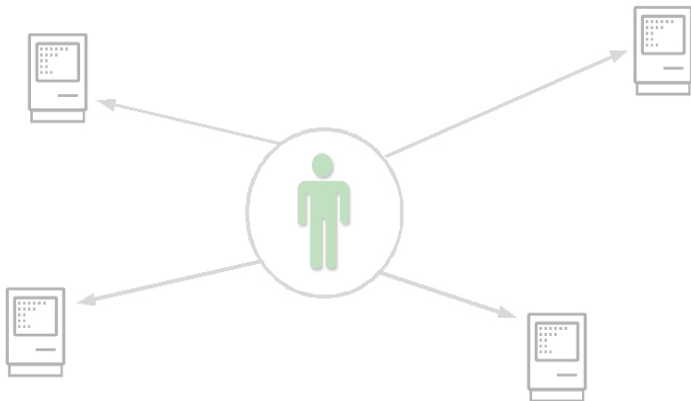
We developed a mini framework for integrating apps

- Minimal code modification
 - Common operations
 - user logged in?
 - authenticate user
 - get attributes
 - close session
 - Interchangeable identity transports
- 



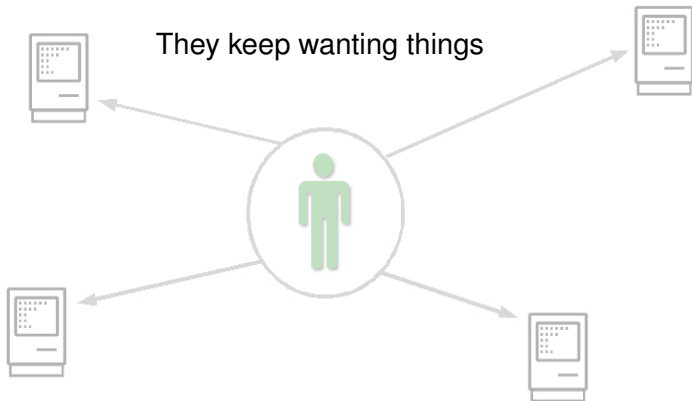
Again

Applications tend to have *attitude*



Again

Applications tend to have *attitude*



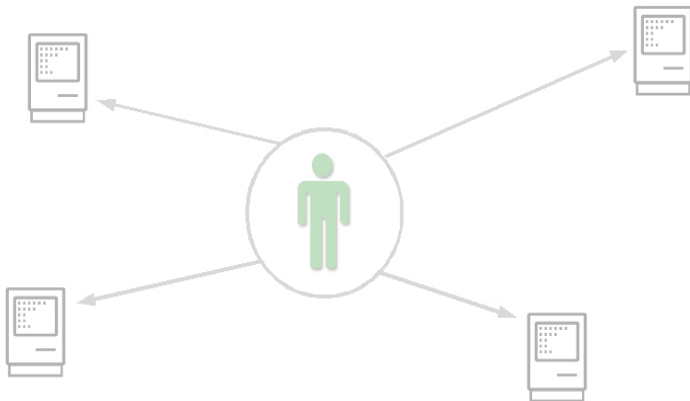
Again

Applications tend to have *attitude*



Issues

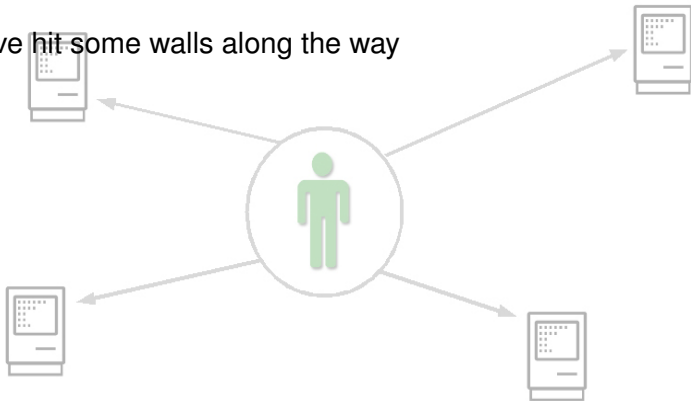
we have found in our quest



Issues

we have found in our quest

We have hit some walls along the way

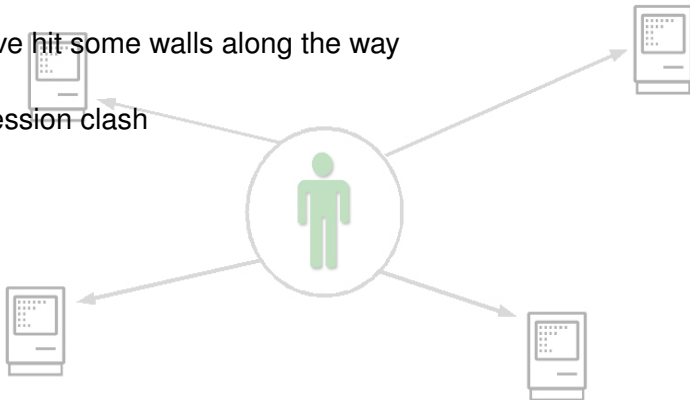


Issues

we have found in our quest

We have hit some walls along the way

- Session clash

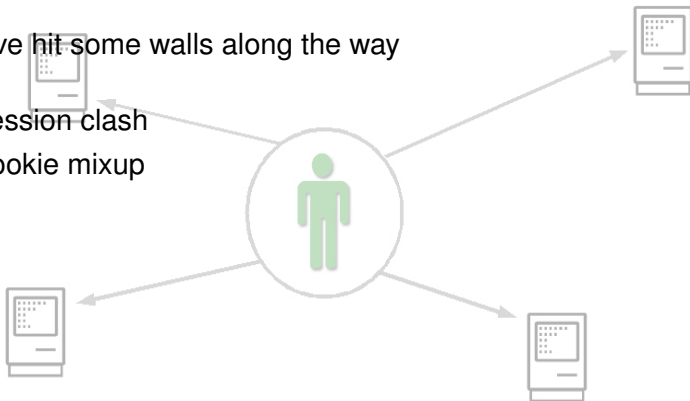


Issues

we have found in our quest

We have hit some walls along the way

- Session clash
- Cookie mixup

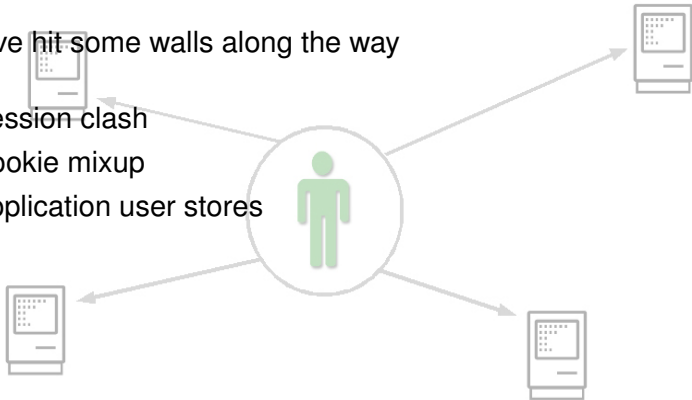


Issues

we have found in our quest

We have hit some walls along the way

- Session clash
- Cookie mixup
- Application user stores

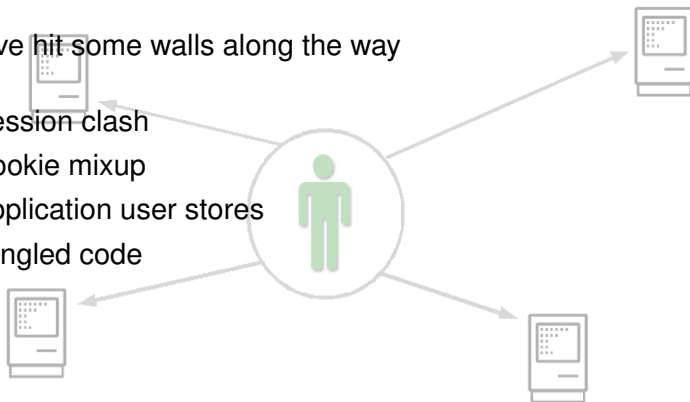


Issues

we have found in our quest

We have hit some walls along the way

- Session clash
- Cookie mixup
- Application user stores
- Tangled code



Issues

we have found in our quest

We have hit some walls along the way

- Session clash
- Cookie mixup
- Application user stores
- Tangled code
- ...



Things

to make our apps play together



Things

to make our apps play together

We desperately need



Things

to make our apps play together

We desperately need

- User decoupling



Things

to make our apps play together

We desperately need

- User decoupling
- External authorization



Things

to make our apps play together

We desperately need

- User decoupling
- External authorization
- Forget about provisioning



Things

to make our apps play together

We desperately need

- User decoupling
- External authorization
- Forget about provisioning
- Proper group management



Things

to make our apps play together

We desperately need

- User decoupling
- External authorization
- Forget about provisioning
- Proper group management
- Collaboration management:
Virtual Environments → Collaborative Organizations



Things

to make our apps play together

We desperately need

- User decoupling
- External authorization
- Forget about provisioning
- Proper group management
- Collaboration management:
Virtual Environments → Collaborative Organizations
- Logout that really works



Ideas anyone?

Thank you

