UMA Control™ bridge
User Experience

Exploring Visualization Techniques to Enhance Privacy
Control UX for User-Managed Access

Newcastle University

Domenico Catalano
and the Smart Team

Domenico Catalano
and the Smart Team

UMA Control bridge

UMA Control bridge concept:

- UMA Control bridge is designed to adhere to the user-centric identity paradigm in order to give to the user the capabilities to control what information will be revealed for what purpose and with which parties.
- UMA Control bridge provides a primary user interface for control Resources, Connections, Apps and Requesters.
- UMA Control bridge dashboard provides mainly statistic information about Connections, % shared data for requesters, and a world access view.
- UMA Control bridge incorporates a single view of these main controls, including a notification bar for new access requests and an Access history button.
- Access History button provides a fast historical list of items related to access requests to the authorizing user's information/resources.
- The number of task in the user interaction model is based on 3-steps to get access to specific view, excluding optional view.
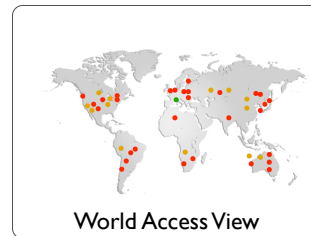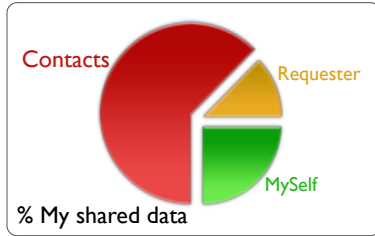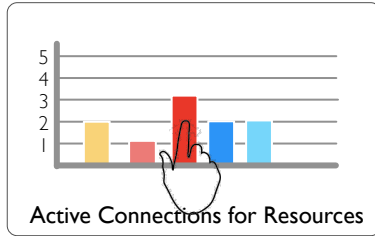
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Welcome Domenco Catalano | Logout

Hello Domenico

Control bridge

✉ 2 new requests

Protected Resource

Privileged App

Connections

Contacts

Control bridge

Notification Access requests

Active Connections for Resources

% My shared data

Contacts   Requester

MySelf

World Access View

> Control Resources and shared data

View Details

> Control Connections

View Details

> Control Applications

View Details

> Control Requesters (Contacts, MySelf, third party)

View Details

Access History

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Notification Access requests

Active Connections

Personal Data

Host   Futurebank.Com
Type: Biographical
Privacy Impact: High
Registered: 01/29/2010
Connections: University, Friend, Family

...quester

...elf

World Access view

❯ Control Resources and shared data   View Details

❯ Control Connections   View Details

❯ Control Applications   View Details

❯ Control Requesters (Contacts, MySelf, third party)   View Details

Access History

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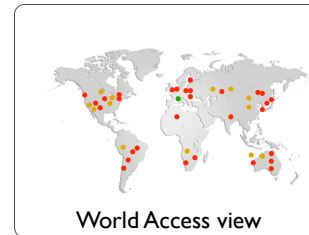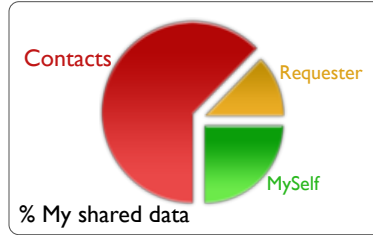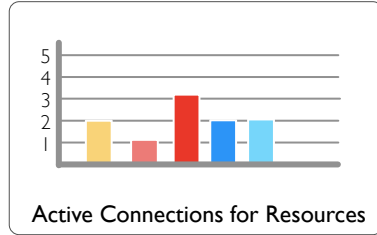
Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Notification Access requests

Active Connections for Resources

Contacts   Requester

MySelf

% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

View Details

❯ Control Requesters (Contacts, MySelf, third party)

View Details

Access History

http://smartam.net/am/data

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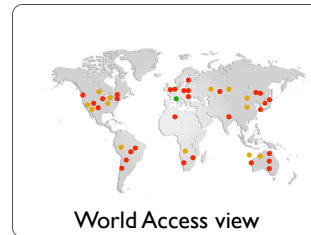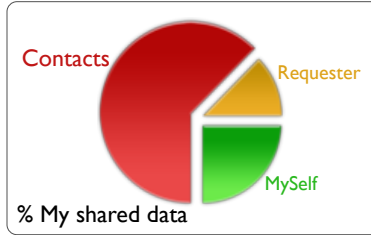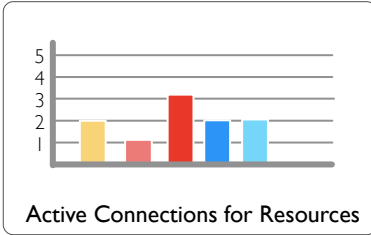smartam. resources – secure data...

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Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Notification Access requests

Active Connections for Resources

Contacts
Requester
MySelf
% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

View Details

⌄ Control Requesters (Contracts, mySelf, third party)

Search Requester 🔍➕ | Bo |

Q⊸ Google

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Hello Domenico

Control bridge

📧2 new requests

Alice Anderson
Facebook Contact list
Active from 6th July, 2011 **Suspend**

Protected Resource
Privileged App
Connections
Contacts
Control bridge

view by: Resources | **Connections**
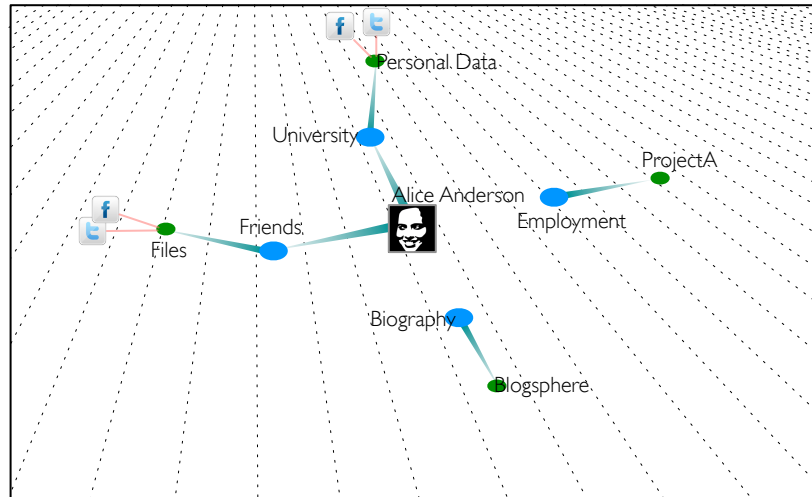
Connections View

> University
View Details
Revoke Connection

> Friends
View Details
Revoke Connection

Back

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Welcome Domenco Catalano | Logout

Hello Domenico

Control bridge

Alice Anderson
Facebook Contact list
Active from 6th July, 2011   **Suspend**

▶2 new requests

view by: Resources | **Connections**

Protected Resource

Privileged App

Connections

Contacts

Control bridge

Connections View

▼ University   Revoke Connection

Personal Data
Bank of Future

Allowed Actions:
✓ View document

Show Privileged App
Show History

▶ Friends   View Details
Delete Connection

Back

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Alice Anderson
Facebook Contact list
Active from 6th July, 2011   **Suspend**

view b...esources | **Connections**

⊹ Connections View

⌄ University   Revoke Connection

📁 Personal Data
Bank of Future

Allowed Actions:
✓ View document

Privileged Apps for this Connection
[Twitter] [Facebook] [in]   Hide Privileged App
                                                   Show History

> Friends   View Details
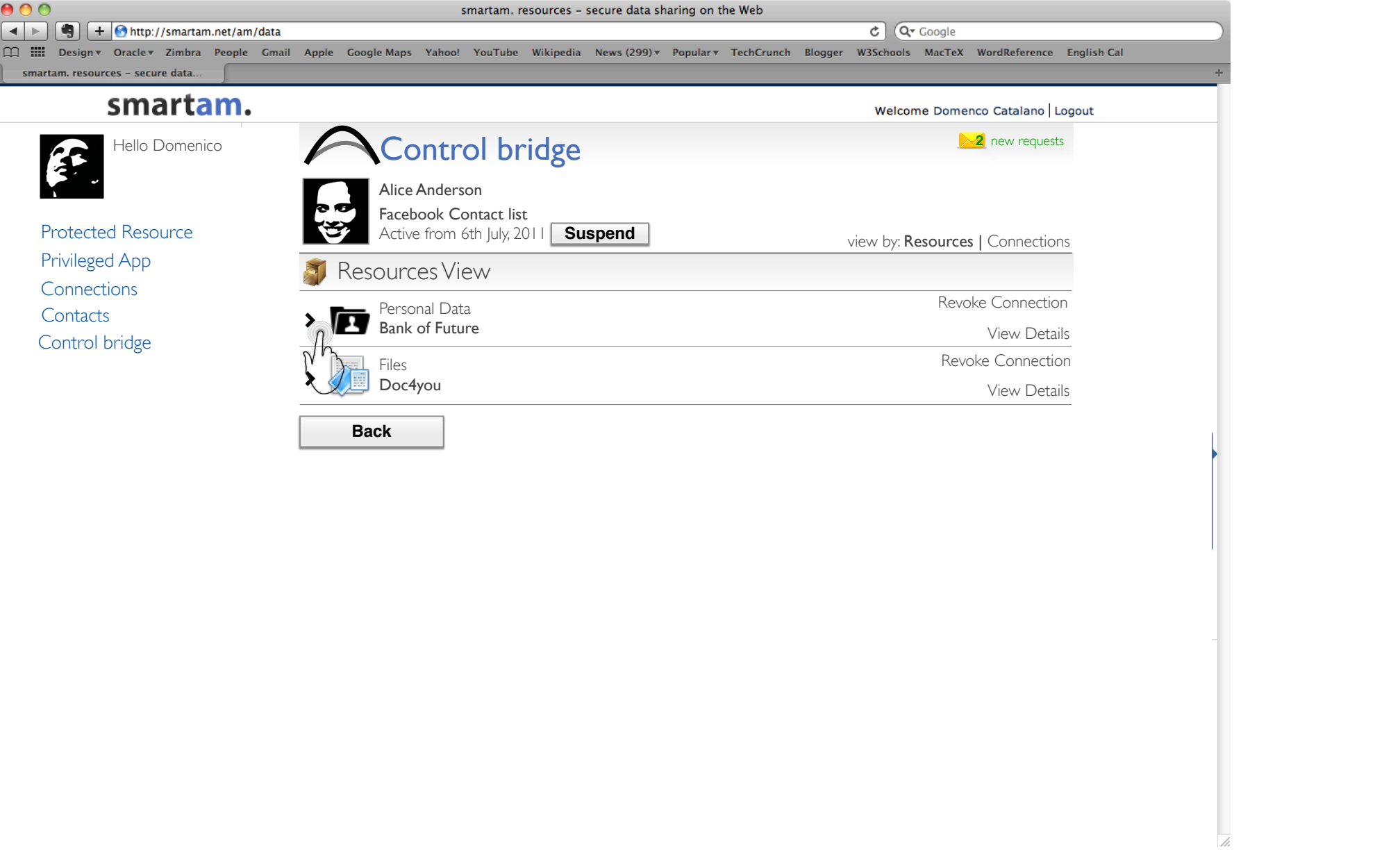   Delete Connection

Back

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smartam. resources – secure data...

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Alice Anderson
Facebook Contact list
Active from 6th July, 2011   **Suspend**

view by: **Resources** | Connections

Resources View

Personal Data   Revoke Connection
Bank of Future   View Details

Files   Revoke Connection
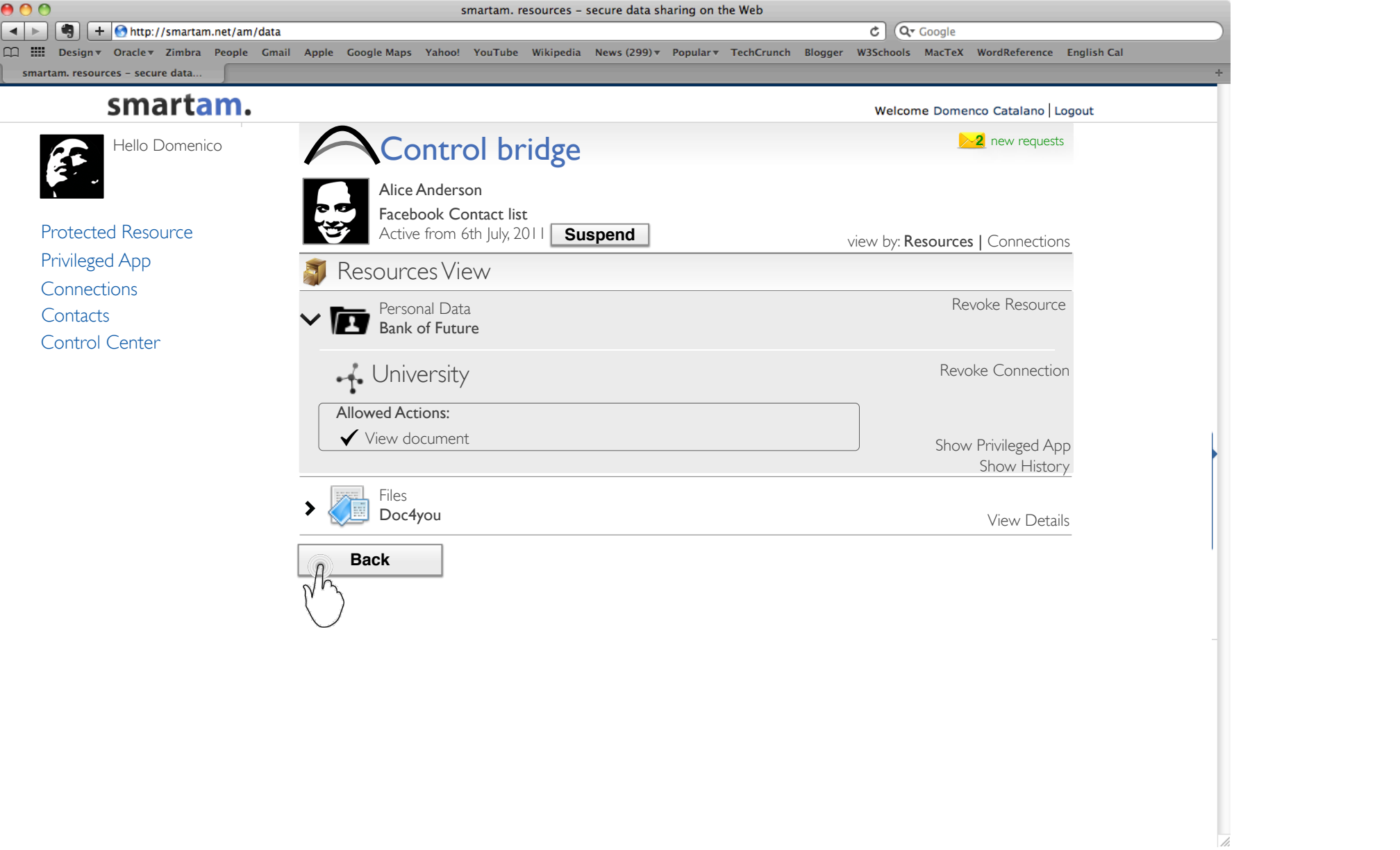Doc4you   View Details

Back

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control Center

Control bridge

✉2 new requests

Alice Anderson
Facebook Contact list
Active from 6th July, 2011   **Suspend**

view by: **Resources** | Connections

Resources View

Personal Data
Bank of Future   Revoke Resource

University   Revoke Connection

Allowed Actions:
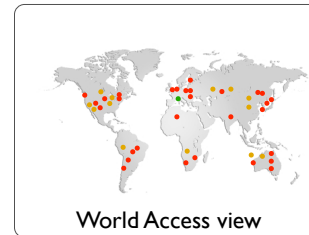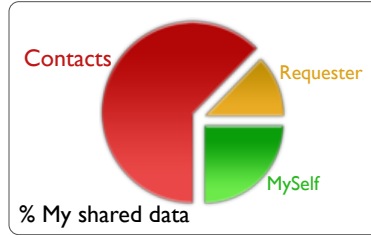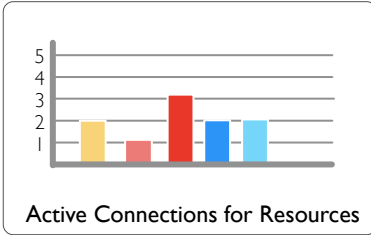✓ View document

Show Privileged App
Show History

Files
Doc4you   View Details

Back

smartam.

Welcome Domenco Catalano | Logout
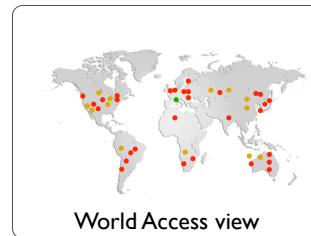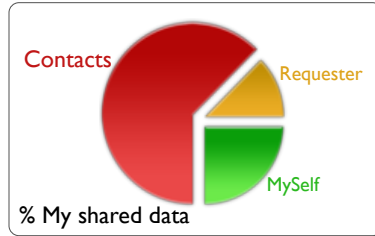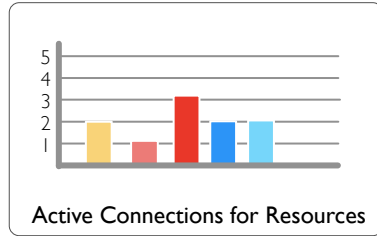
Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

📧 2 new requests

Notification Access requests

Active Connections for Resources

Contacts   Requester

MySelf

% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

View Details

❯ Control Requesters (Contacts, MySelf, third party)

View Details

Access History

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Welcome **Domenco Catalano** | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉ **2** new requests

Notification Access requests

Active Connections for Resources

Contacts
Requester
MySelf

% My shared data

World Access view

∨ Control Resources and shared data

Search Resource 🔍➕ | Bo |

Personal Data
Bankfuture.com

Files
Doc4you.com

› Control Connections
View Details

› Control Applications
View Details

› Control Requesters (Contacts, MySelf, third party)
View Details

Access History

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Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

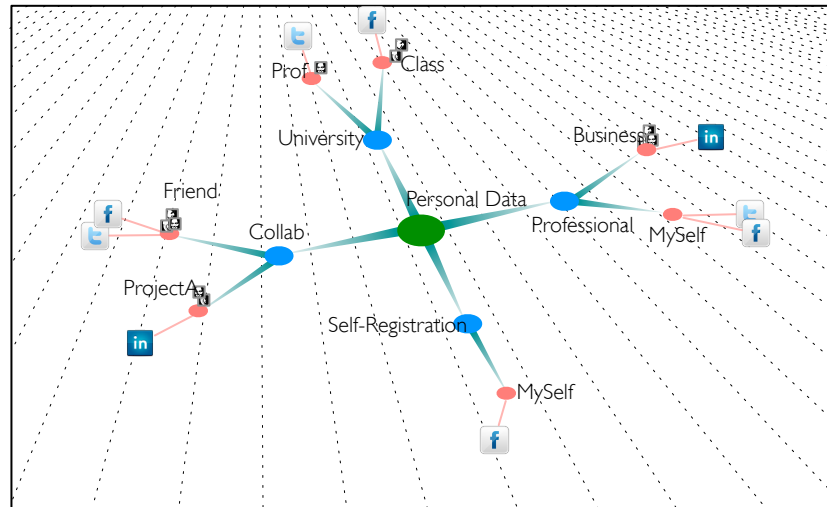✉2 new requests

Files
Doc4you.com
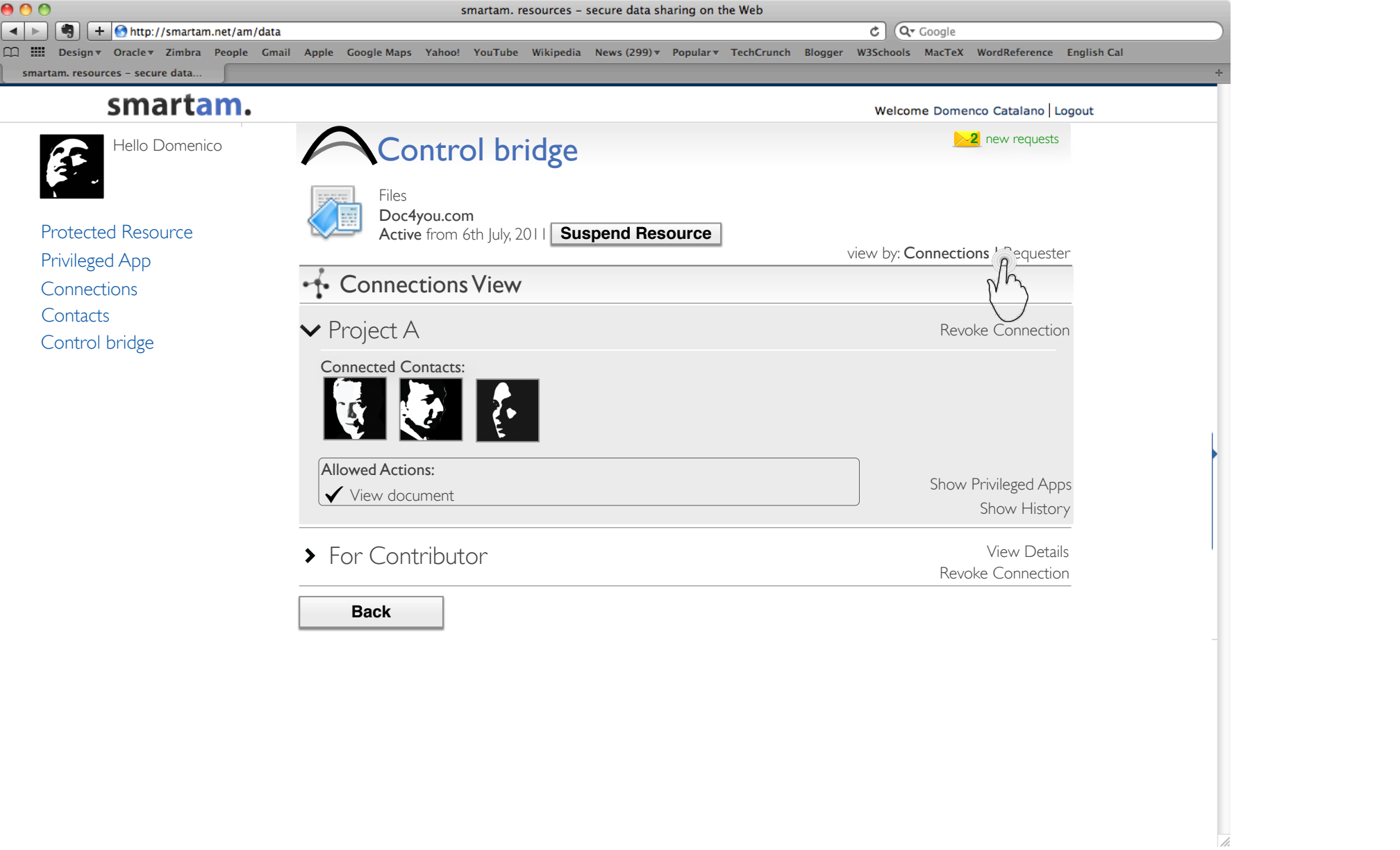Active from 6th July, 2011 | **Suspend Resource**

view by: **Connections** | Requester

⋆ Connections View

❯ Project A 👆

View Details
Revoke Connection

❯ For Contributor

View Details
Revoke Connection

Back

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Welcome **Domenco Catalano** | Logout

Hello Domenico

Control bridge

Files
Doc4you.com
Active from 6th July, 2011   [**Suspend Resource**]

📧2 new requests

Protected Resource

Privileged App

Connections

Contacts

Control bridge

view by: **Connections** / Requester

✛ Connections View

⌄ Project A

Revoke Connection

Connected Contacts:

Allowed Actions:
✔ View document

Show Privileged Apps
Show History

⟩ For Contributor

View Details
Revoke Connection

[**Back**]

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Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

▨ 2 new requests

Files
Doc4you.com
Active from 6th July, 2011 | **Suspend Resource**

view by: Connections | **Requester**

👤 Requester View

Show Privileged Apps

⊹ Connection: Project A

Allowed Actions:
✔ View document

Show History

Show Privileged Apps

⊹ Connection: For Contributor

Allowed Actions:
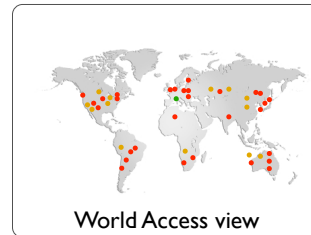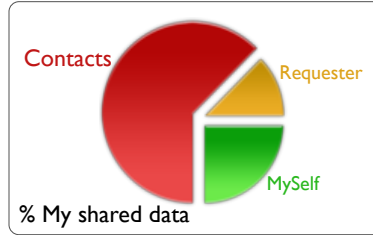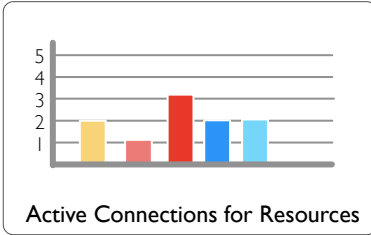✔ Edit document

Show History

Back

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Welcome Domenco Catalano | Logout
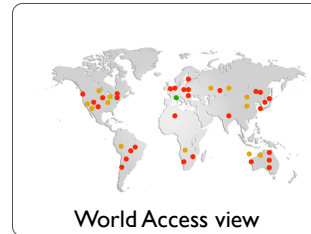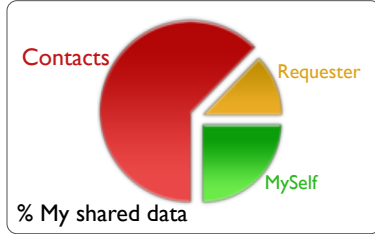
Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Notification Access requests

Active Connections for Resources

Contacts
Requester
MySelf
% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

View Details

❯ Control Requesters (Contacts, MySelf, third party)

View Details

Access History

http://smartam.net/am/data

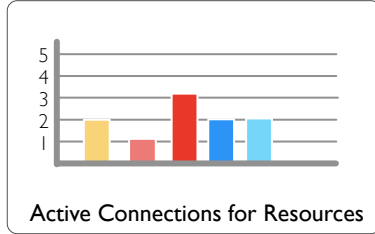smartam. resources – secure data...

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉2 new requests

Notification Access requests

Active Connections for Resources

Contacts   Requester   MySelf
% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

Search Application 🔍➕   Bo

[Twitter] [Facebook] [LinkedIn]

❯ Control Requesters (Contacts, MySelf, third party)

View Details

Access History

http://smartam.net/am/data
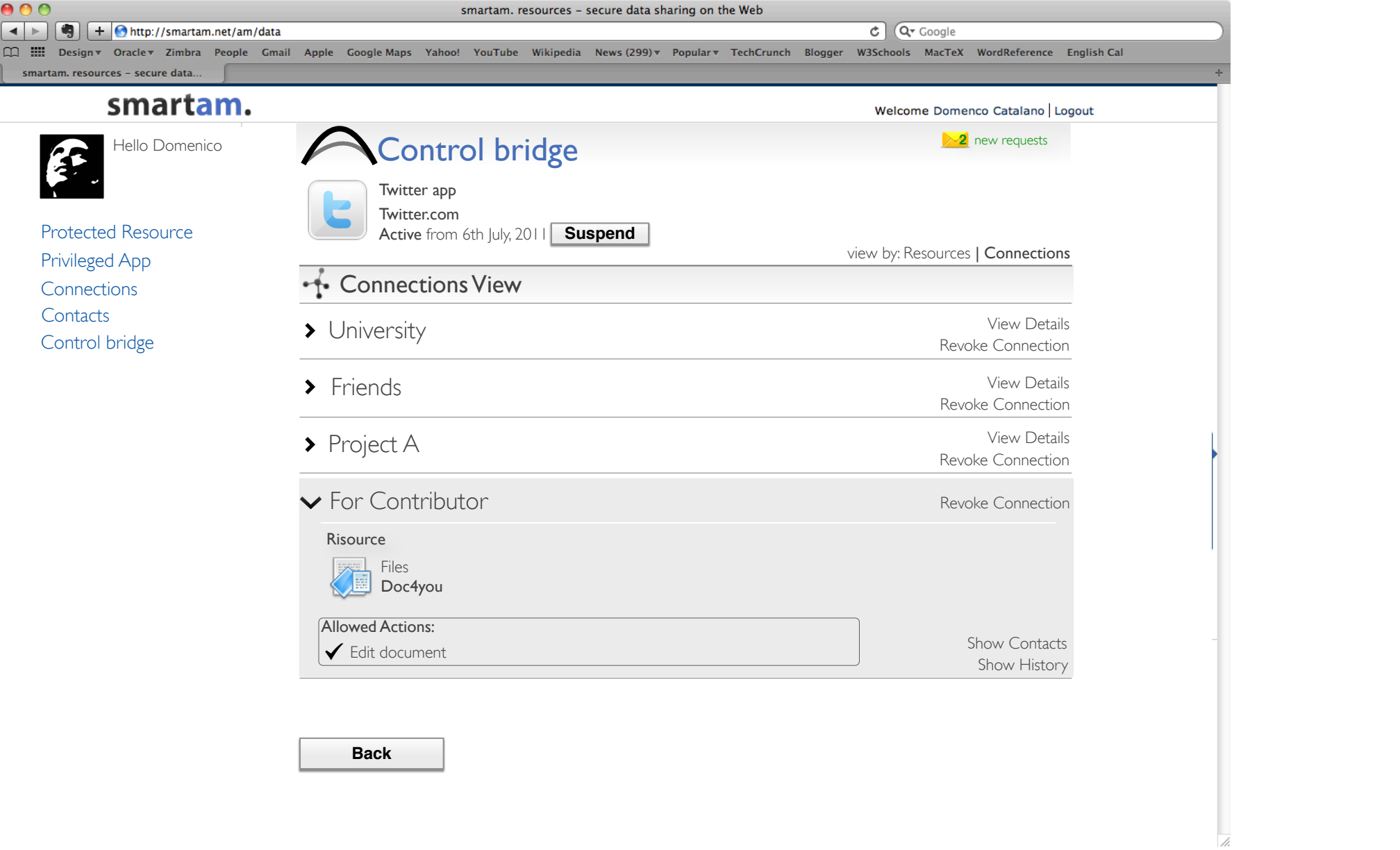
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Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

📧 2 new requests

Twitter app
Twitter.com
Active from 6th July, 2011 | **Suspend**

view by: Resources | **Connections**

✛ Connections View

> University

View Details
Revoke Connection

> Friends

View Details
Revoke Connection

> Project A

View Details
Revoke Connection

⌄ For Contributor

Revoke Connection

Risource

Files
Doc4you

Allowed Actions:
✓ Edit document
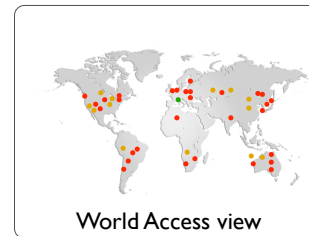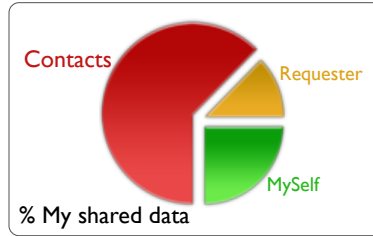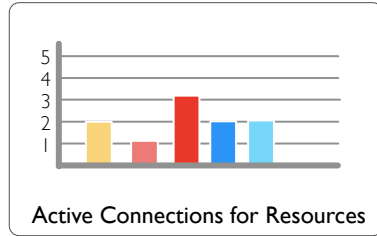
Show Contacts
Show History

Back

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Welcome Domenco Catalano | Logout

Hello Domenico

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Control bridge

✉ **2** new requests

Notification Access requests

5
4
3
2
1

Active Connections for Resources

Contacts
Requester
MySelf

% My shared data

World Access view

❯ Control Resources and shared data

View Details

❯ Control Connections

View Details

❯ Control Applications

View Details

❯ Control Requesters (Contacts, MySelf, third party)

View Details

Access History

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Welcome Domenco Catalano | Logout

Hello Domenico

Control bridge

2 new requests

Protected Resource
Privileged App
Connections
Contacts
Control bridge

Access History

Id	Date	Requester	App	Resource	Connection	Status
0001	07/07/2011	Alice Anderson	Facebook	Personal Data	University	Success

Back