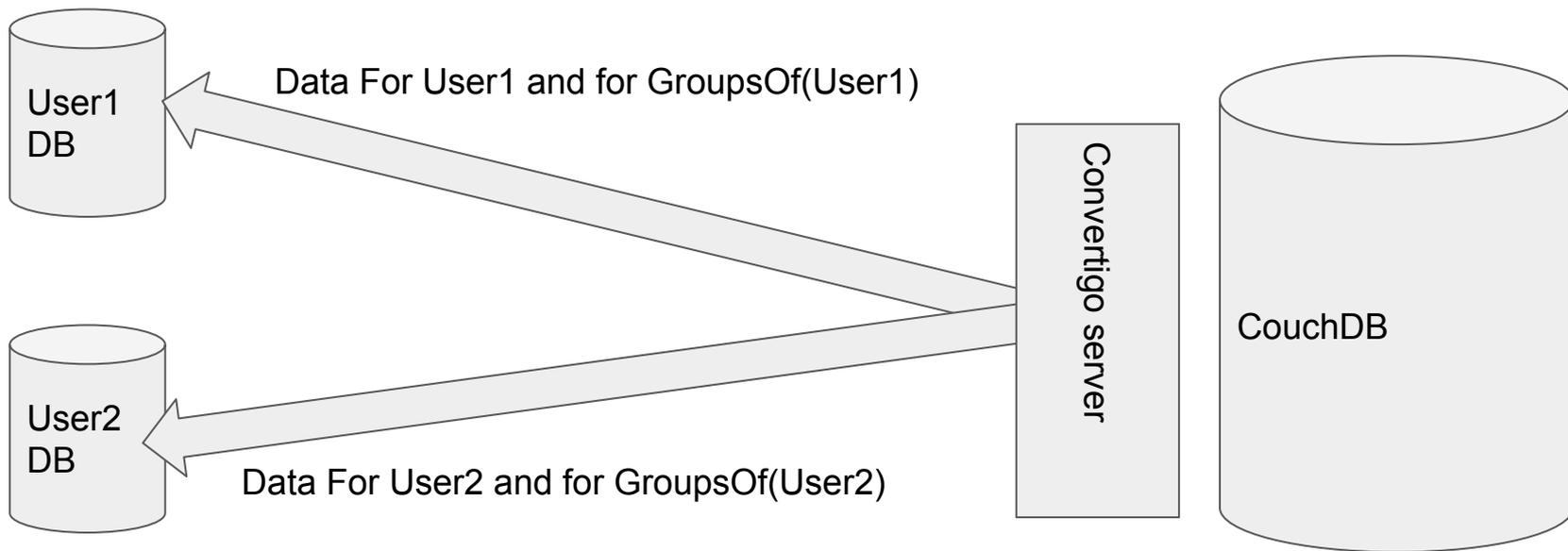# Convertigo FullSync Groups

Group management for Convertigo FullSync

FullSync Group feature

- Have FullSync documents shared within same user groups
- Be able to tag a document to belong to a group
- Have users to belong to one or several groups

User1 DB

Data For User1 and for GroupsOf(User1)

Convertigo server

CouchDB

User2 DB

Data For User2 and for GroupsOf(User2)

Data model

Will be replicated on mobile device only if :
- Step SetAuthenticatedUser("User1") has been executed for this session
- Or Step SetAuthenticatedUser("AnyOtherUser") has been executed and that that "AnyOtherUser" belongs to "GroupA"

Document In Server

- ~c8oAcl="User1"
- c8oGrp="GroupA"
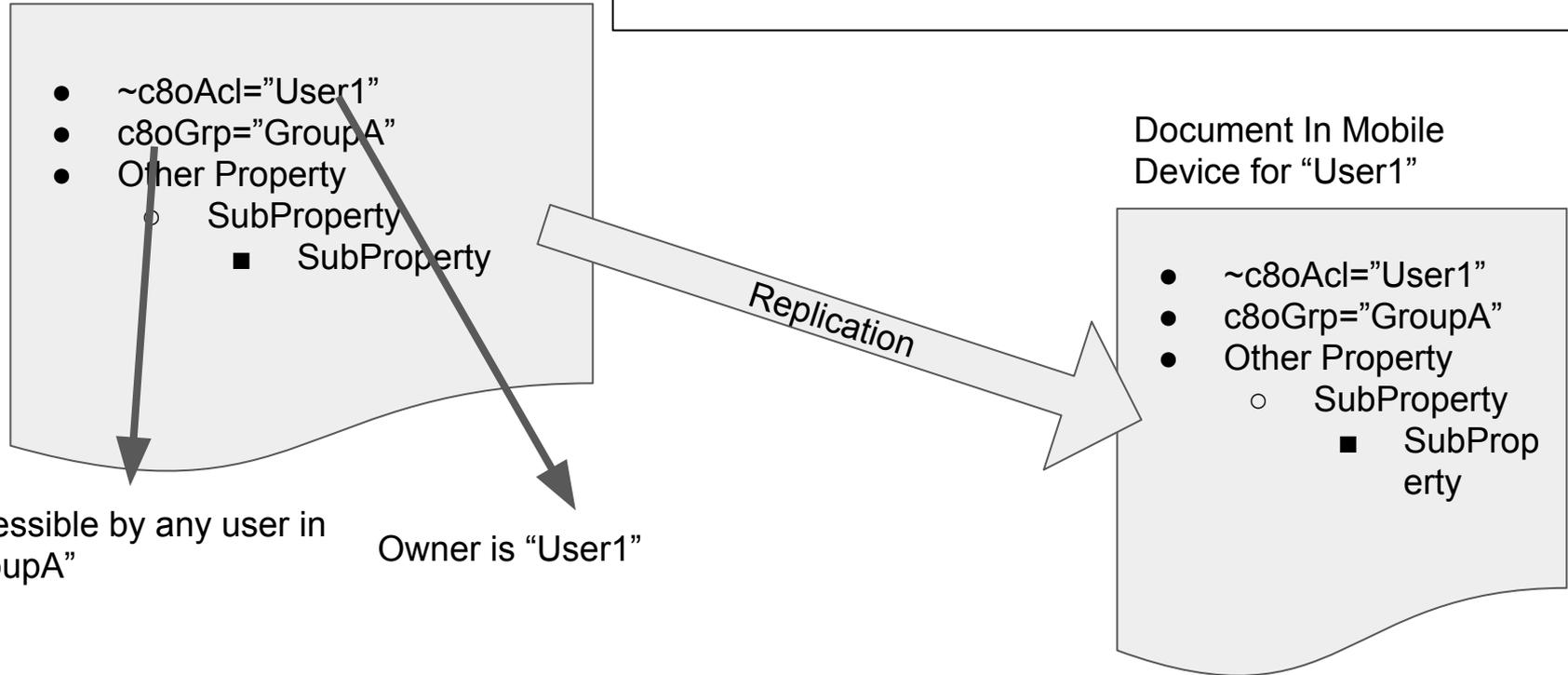- Other Property
  - SubProperty
    - SubProperty

Replication

Document In Mobile Device for "User1"

- ~c8oAcl="User1"
- c8oGrp="GroupA"
- Other Property
  - SubProperty
    - SubProperty

Accessible by any user in "GroupA"

Owner is "User1"

The "c8oGrp" property

If the "c8oGrp" exists in a document, its value can be :

- a simple string : "groupName"
  - the document is owned by "groupName"
- an object : {"groupName1": true, "groupName2": false, "groupName3": "true"}
  - the document is owned by "groupName1" and "groupName3"

Define that a document belongs to group

Simply add a c8oGrp property to that document with the group name.

- This can be done with a PostDocument transaction on the server side
- Can also be made with a PostBulkDocument transaction

When a document is modified on the client side it will be replicated on the server side and the c8oGrp property will remain to the original information.

- Convertigo server will ensure that the current UserID belongs to this group before committing to CouchDB to avoid to modify document's group to an unauthorized group for the current user.

User/Group Management

Simply use some standard Documents in the CouchDB database associating UserID with a Group

- type must be "c8oGrp"
- Add a User in a group means create a document with this structure
- Available Views
  - GetUsersByGroup(Key => Grp)
  - GetGroupsByUser(Key ⇒ User)
- User/group Database is a separate CDB database shared among all projects on a server
- the lib_FullSyncGrp give some basic primitive sequences to handle group management. SetUserInGroup(user, group), RemoveUserFromGroup(user, group), GroupsOf(user), UsersOf(group)

- _id="UUID"
- type="c8oGrp"
- User="User1"
- Grp="GroupA"