

## TDI Solution Deep Dive

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#### **About me**

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- FRITZ & MACZIOL GmbH Germany
- Working with ICS products since 15 years
- Specialized in IBM Connections and IBM Domino Infrastructure
- Speaker at various events like ENGAGE, ICONUK, ConnectED
- Bavarian, Linux and Scripting Lover, Blogger
  - www.stoeps.de
  - scripting101.org





# **Configure a new TDI Solution Folder**

- Expand \$CONNECTIONS\_ROOT/tdisol/tdisol.tar|zip
  - With 5.0 no special update packages on fix central
  - Updates are directly copied to \$CONNECTIONS\_ROOT/tdisol
- TDI can be installed to any machine in your deployment
  - Often copied to DB2 host
- Check TDIPATH in tdienv.sh
  - export TDIPATH=/opt/IBM/TDI/V7.1.1





### profiles\_tdi.properties

- Main configuration with
  - LDAP Connection parameter
    - Host
    - Bind User
    - LDAP Search & Base
  - Database parameter
    - JDBC Connection string
    - User Credentials
- Dry run:
  - sync\_updates\_show\_summary\_only=true





### profiles\_tdi.properties (2)

- More interesting properties
  - sync\_updates\_hash\_field
  - sync\_store\_source\_url=true
  - sync\_source\_url\_enforce=false
  - sync\_source\_url\_override=false
  - perform\_deletion\_or\_inactivate\_for\_sync=true
  - sync\_delete\_or\_inactivate=inactivate
- Debugging
  - debug\_managers|photos|pronounce|fill\_codes
  - debug\_draft|update\_profile|collect|special





### sync\_updates\_hash\_field

#### Setting in profiles\_tdi.properties

- Possible values
  - uid (default)
  - email
  - guid

## Matching accounts from LDAP and profilesDB are calculated with this value!

- Possible Problems
  - User renaming
  - Reuse of mail address or shortname (uid)





### sync\_updates\_hash\_field=uid

- User is renamed
  - IBM Domino: UID/Shortname is multivalue
  - Microsoft Active Directory: 1. User deactivated, 2. new profile
- User retires
  - Inactivated or deleted user within Profiles
- User hires again
  - User is reactivated
- Other User with same UID hires
  - Will get all data from old user account
  - Splitting of this content is not possible





### sync\_updates\_hash\_field=email

- User is renamed
  - 1. User gets inactivated
  - 2. New profile will be created
- User retires
  - Inactivated or deleted user within Profiles
- User hires again
  - User is reactivated
- Other User with same mail address hires
  - Will get all data from old user account (picture, tags, community membership)





### sync\_updates\_hash\_field=guid

- User is renamed
  - All data synchronize with LDAP
- User retires
  - Inactivated or deleted user within Profiles
  - Within Domino the person document is deleted
- User hires again
  - Newly registered user has new guid
  - New profile
  - Duplicate login data -> no new profile

You can use populate\_from\_dn\_file.bat/collect.dns to sync this, because this always uses the UID for hashing



### profiles\_functions.js

- JavaScript functions used within map\_dbrepos\_from\_source.properties
  - Add function name with curley brackets
  - e.g. uid={func\_map\_to\_db\_UID}
- You can add your own:

```
function function_setnull(fieldname) {
    var result="";
    return result;
}
```

Removes value within peopleDB





## map\_dbrepos\_from\_source.properties

- Mapping of LDAP attribute to peopleDB fields
- value=null
  - peopleDB field is not set
- value=attributename (e.g. email=mail)
- Be careful to not override editable fields of profiles
  - description=null
  - experience=null
- value={functionname}
  - Value is calculated through JavaScript





### Batch-, Shellscripts

Linux AIX - ensure that following files are executable:

- \*.sh
- netstore





#### clearLock.sh

- Running scripts within TDISol generate a lock-file
- When a script is interrupted the lock-file is still present
  - Blocks next run of the script (e.g. sync\_all\_dns.sh)
  - You can use clearLock.sh to remove the lock





### collect\_dns.sh

- Creates collect.dns
  - Contains \$DN of all users which are found through
    - LDAP Search Filter
    - LDAP Base
    - Bind User / Password
- Good starting point for troubleshooting
  - Run collect\_dns.sh
  - Check if missed people are included in collect.dns





### populate\_from\_dn\_file.sh

- Reads from collect.dns
- Adds and updates persons in peopleDB
- Does not deactivate or delete users
- Always hashes on UID
  - Troubleshooting
  - Enable Debugging
  - Add only one or some users to collect.dns and check your logs





# delete\_or\_inactivate\_employees.s h

- copy samples/delete\_or\_inactivate\_employees.in to TDISOL
- Format of delete\_or\_inactivate\_employees.in

\$dn:cn=Christoph Stoettner,ou=users,o=stoeps
uid:stoeps

- Deletes or inactivates the user
- Last idea during troubleshooting
- After this sync\_all\_dns mostly synchronizes the user



### sync\_all\_dns.sh

- Create new users
- Update users
- Delete or inactivate users
- You should schedule a job to run this regularly!
- Check employee.adds, employee.error, employee.updates, employee.deletes, employee.skip after run
- Synchronize users based on sync\_updates\_hash\_field





## Dump photos and pronounce to file

- You can export through dump\_photos|pronounce\_to\_files.sh
- Save a file with value of uid and matching photo|pronounce
- But you can use it too, if you already have photos of your users
  - Copy them to a folder
  - Rename them to uid.jpg
  - Create the matching script (use dump\_\*.sh)
  - Load the photos with load\_photos\_from\_files.sh





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### fill\_\*.sh

- Some values within map\_dbrepos\_from\_source.properties need extra data
  - Stored in additional tables within peopleDB
- You can add this content with the fill\_\*.sh scripts
- You have to copy samples/\*\_sample.csv to TDISOL





### Country

- isocc.csv is Source file for fill\_country.sh
  - isocc.csv only contains small country isocodes
  - e.g. us;United States or de;Germany
  - So if you do not sync small written Isocodes to Prof\_CountryCode -> no Country is displayed
  - Create a script within profiles\_functions.js to get only small char
  - Extend isocc.csv with more values which are stored in your LDAP Country field





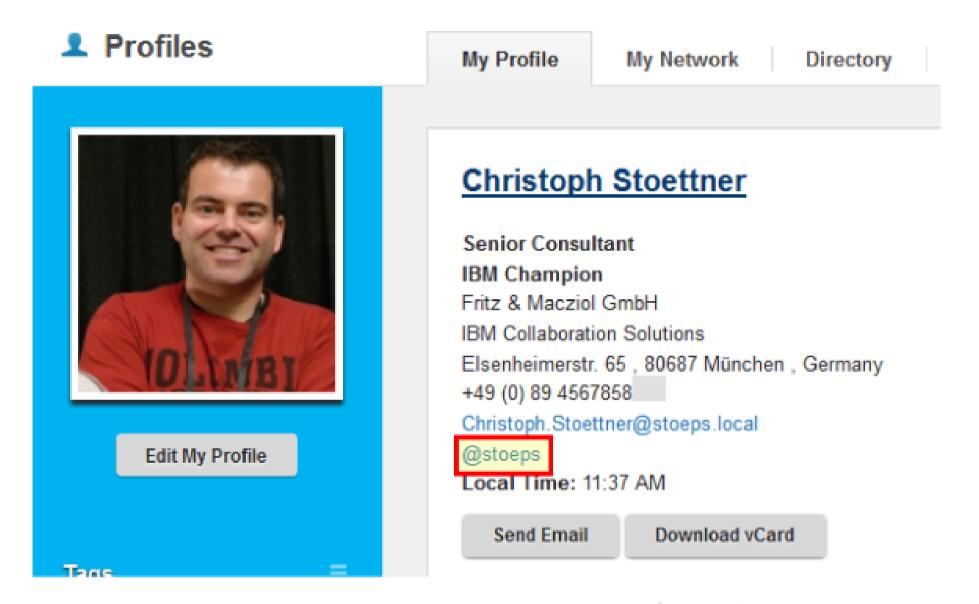
# DepartmentInfo, Worklocation, OrganisationInfo, EmployeeType

- Like country following fields use additional tables:
  - deptinfo
  - orginfo
  - workloc
- So e.g. the value of workloc is not displayed, if empinst.workloc is empty

WM; 5 Technology Park Drive;; Westford; Massachusetts; 01886 LM; On the Way to Kimballs;; Littleton; Massachusetts; 01460 CC; PO BOX2; Blue Sky BLVD; Coronado; California; 92118 RN; Tropicana Hotel; Casino Row; Reno; Nevada; 89501



### **Example Profile**



Only TwitterId and Colors are customized





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### Debugging

- Enable debugging parameters within profiles\_tdi.properties
  - e.g. debug\_managers=true
- Activate global debug in etc/log4j.properties
  - Change log4j.rootCategory=INFO, Default
  - log4j.rootCategory=DEBUG, Default































