



# Bring the WLCG federation Home

*Extending your trust options beyond bottom-up identity  
by collaborating with global Research and Scholarship*

*With support from the Authentication and Authorization  
for Research and Collaboration project*



*Trust Anchor Distribution evolution supported by EGI ENGAGE*



# You all remember the bad old days ...



NATIONAAL INSTITUUT VOOR KERNFYSICA EN HOGE-ENERGIEFYSICA

Guest/ students form (please)

1. This form is completed in connection with:  work experien  otherwise, via



Fermilab

For Office Use Only

ID:	Action:	ID Exp:	
Insurance:	Medical:	Safety:	
Computer:	Stkrn:	Family:	
NON-473:	Sensitive:	Verifier:	Date:

CERN/User Registration

## CERN COMPUTER CENTRE - US

<http://cern.ch/it/documents/ComputerUsage/CompA>

To be returned to the User Registration box at the en completed by a user who requires a computer accou Department, and is not yet registered in another gro

### To be completed by the User :

It is MANDATORY to provide the following inform treated confidentially and only be used for ensuring

Supply name as registered by the Users' Off

FAMILY NAME(S): .....

FIRST NAME(S) : .....

SEX [M] [F] BIRTHDATE: Day ..... Month ..... Year .....

HOME INSTITUTE/FIRM: .....

NATIONALITY: ..... \*CERN SUPERVISOR.....

\*CERN DEPARTMENT: . . . . \*CERN ID NUMBER (as on CERN card).....

**To be completed by the Group Administrator:**

Name:

SWIETZER	JOHN	JAMES
----------	------	-------

Last First Middle

University or Institution Name:

Telephone:

FLORIDA STATE UNIVERSITY	850-644-XXXX
--------------------------	--------------

Experiment/Department:

Exp. / Dept.	Spokesperson	Home Institution Contact	Contact Telephone
D0	WOMERSLEY/WEERTS	SHARON HAGOPIAN	850-644-4777



David Groep  
Nikhef  
Amsterdam  
PDP & Grid



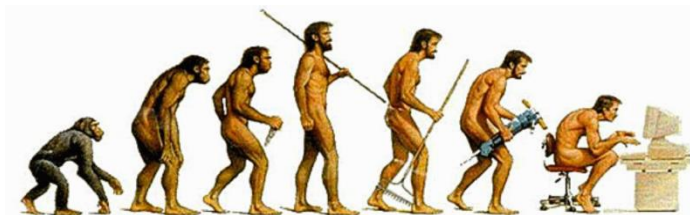


# Evolution of Trust – from 1995 to 2020?



1. Every institute trusts only its own database
  - you can trace everyone, but you get to manage all the accounts
  - passwords are all over - *and users pick the same everywhere*
2. Distributed global trust – independent third parties
  - identification and identity vetting by CAs, a limited number but accessible to all users everywhere on their own initiative
3. Easing trust building – mixing assurance from different places
  - extend identification by *also* leveraging your home organisation

# Evolving for 2020!



4. Getting to distributed global trust for open innovation, open science, open to the world
- how far can we push federated authentication?
  - A single account for all your services, single sign-on for everything: from data analysis to wikis, and from file sending, and date picking to expense claims

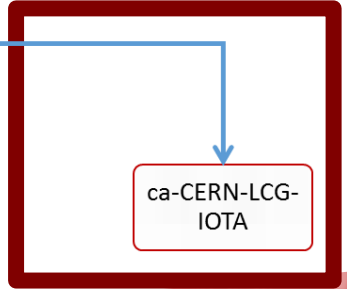
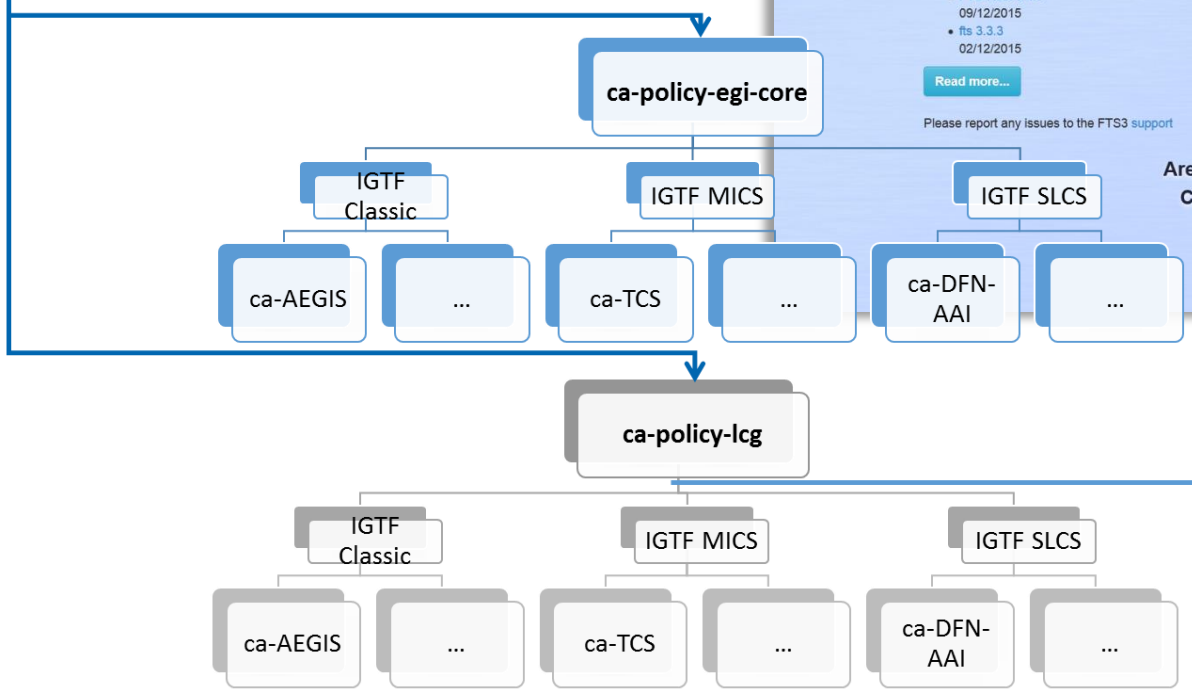
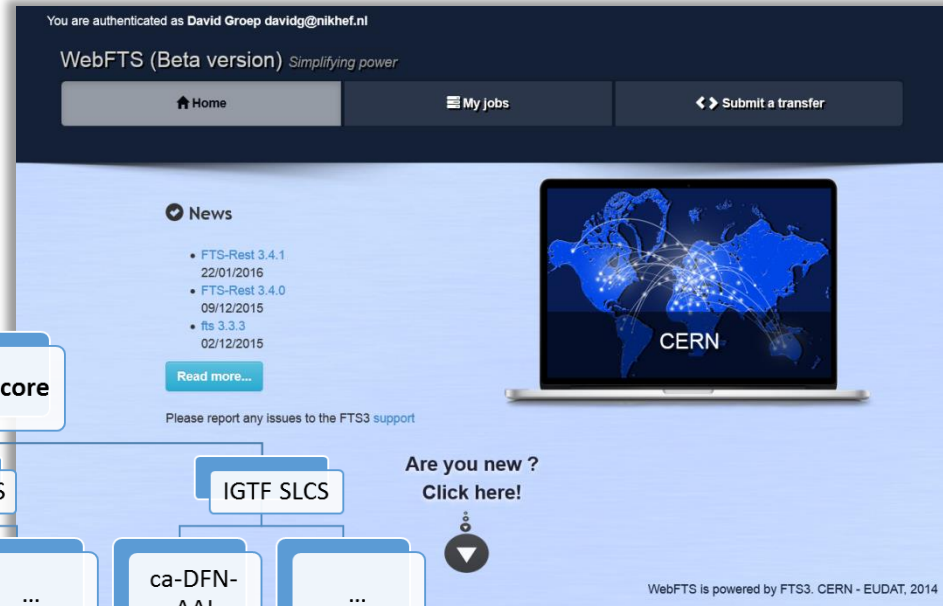
## But ... institutions vary a lot

- is your home university ready to identify you to the world?
- does it even want to tell WLCG who you are?
- ready to help you already today? Or does it need work?
- is it ready to help the others, sites and operators, in case of incidents?

# #1: Leverage the CERN User Office

Your trusty CA distribution as of next month:  
**now with the CERN LCG IOTA CA supporting the WebFTS pilot**

'lcg-CA'  
or explicit  
configuration



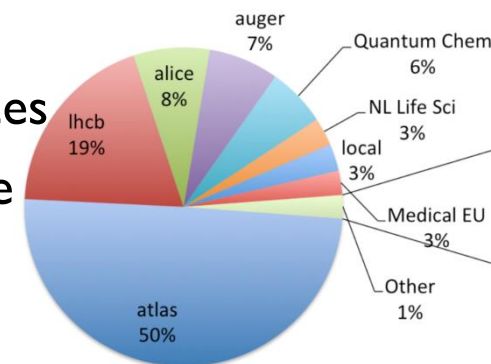
David Groep  
Nikhef  
Amsterdam  
PDP & Grid

# More than a pilot – a new way of life!



## wLCG leverages major open science infrastructures

- it must work alongside more dynamic communities on the same infrastructure **without** separating services
- besides the ‘CERN LCG IOTA CA’ there will be more generic identity providers from all over the world
- services must be able to trust *just-a-unique-name* CAs for *only highly-managed* VOs like LCG, but *not* for other VOs



## This needs a decision in software – on CA+VO combination

- this software is getting there for many areas
- you all should encourage software providers to implement
- and deploy such new software in production ASAP

```
/* Read in file into buffer */
if (fopen(absfile, "r") != NULL) {
    fread(buffer, 1, BUFSIZ, f);
    fclose(f);
}

/* Find a record key */
while ((line = fgets(buffer, BUFSIZ, f)) != NULL) {
    /* Skip empty lines */
    if (line[0] == '\n')
        continue;

    /* Find end of key */
    for (pos1=0;
         line[pos1]!='\0' && line[pos1]!='#' &&
         line[pos1]!=' ' && line[pos1]!='\t';
         pos1++);
}
```

David Groep  
Nikhef  
Amsterdam  
PDP & Grid



# Open Science, Open to the World? Ready?



Old innovations now just seem a given: think of eduroam™

## On the way...it may be bumpy!

- Federated access means you'll *rely on your institute a lot more*
- Some things become easier (web) others more complicated (CLI)
- Meanwhile, there'll be lot of bridging and new things to learn



But: aligning with the world will bring usability benefits, and enable scenarios that for next years' students will be their 'natural habitat'!



# But What Should I Do??



1. Ask your home organisation to join or opt-in to eduGAIN still no federation? In an eduGAIN country? Ask your local IT to join the national federation, or set up identity management!

2. Ask them to **release attributes** there's a basic set that is needed, called "Research and Scholarship" they should join that scheme

3. Ask them to **collaborate in incident response** and tell us so by joining the SirTFi programme – it's self-asserted, and we will trust them if they say so – but it means that sites and response teams know they're able to act OK

