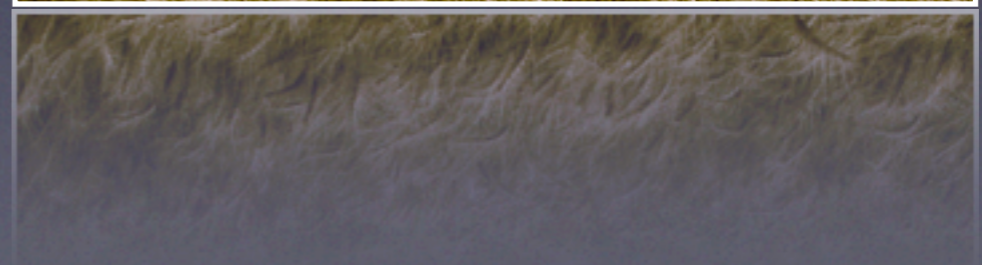


# Web Authentication with Shibboleth

A view from the Flat East

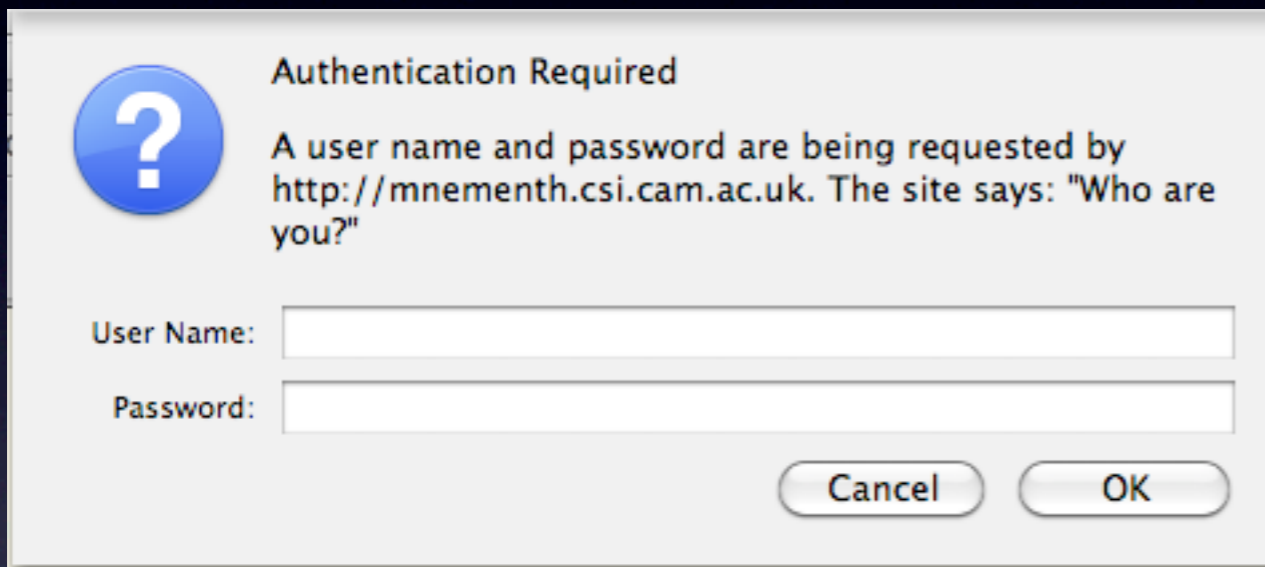
Jon Warbrick  
Computing Service  
University of Cambridge  
[jw35@cam.ac.uk](mailto:jw35@cam.ac.uk)





Once upon a time there was the web...

...and then sites started to want to identify their visitors



**Authentication Required**

A user name and password are being requested by <http://mnementh.csi.cam.ac.uk>. The site says: "Who are you?"

User Name:

Password:

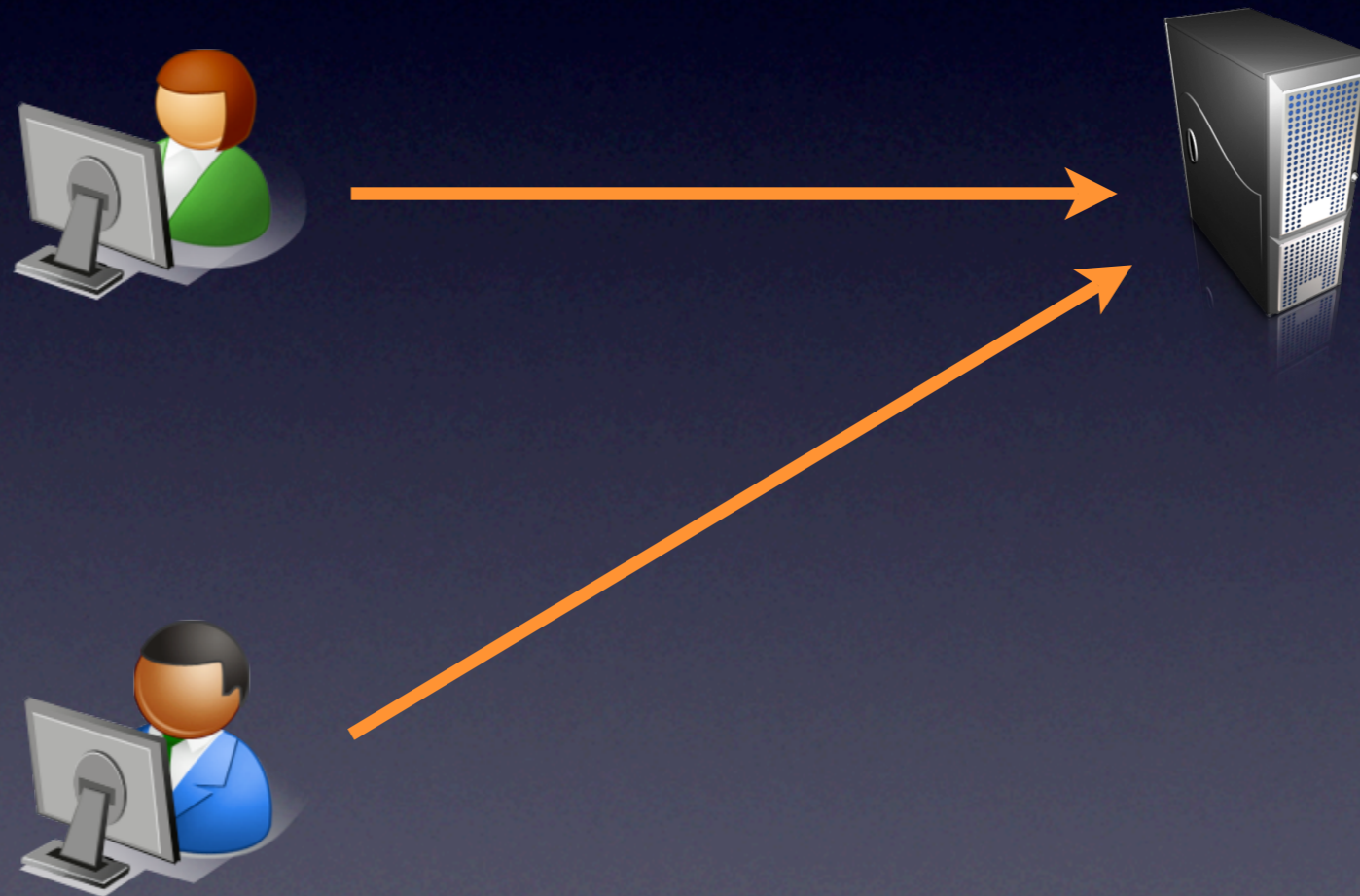
Cancel OK

```
<Location /basic>  
  AuthType Basic  
  AuthName "Who are you?"  
  require valid-user  
</Location>
```

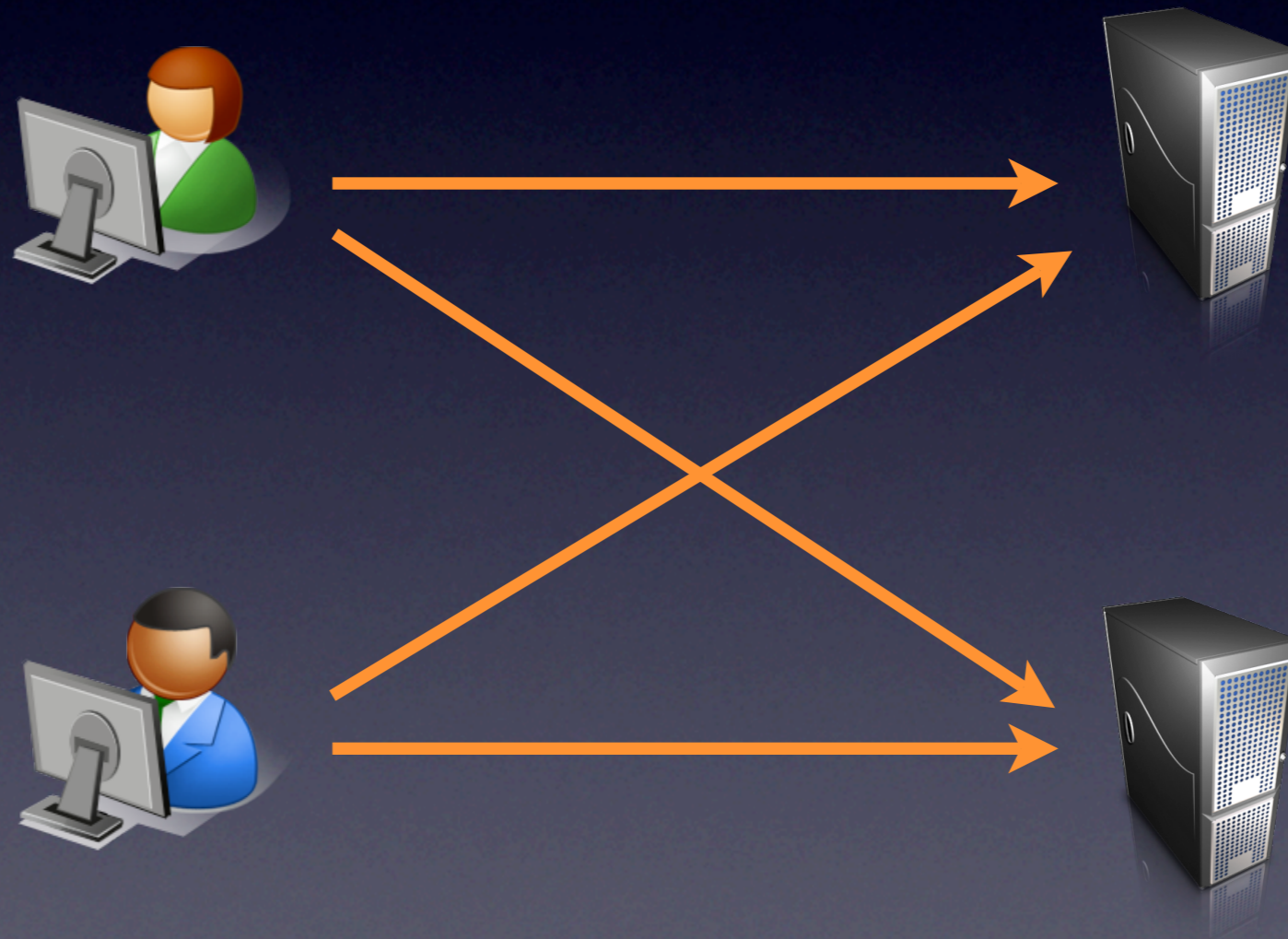
# To each site its own users



# To each site its own users

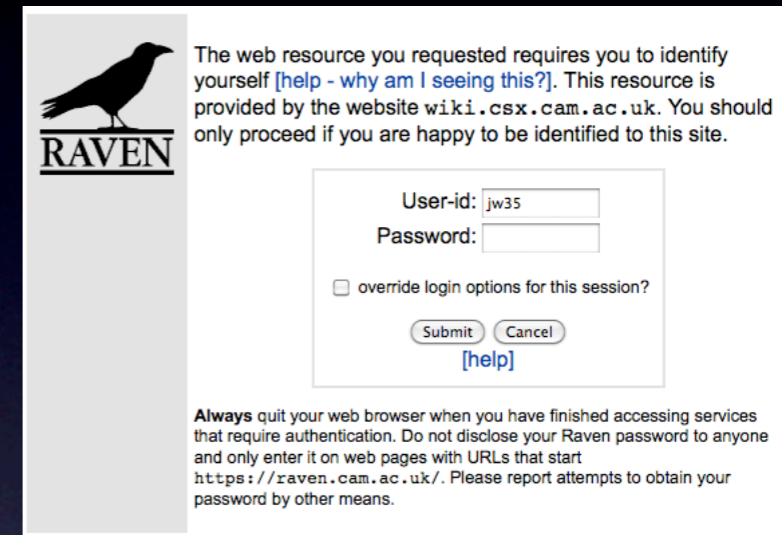


# To each site its own users



# Organization-wide SSOs

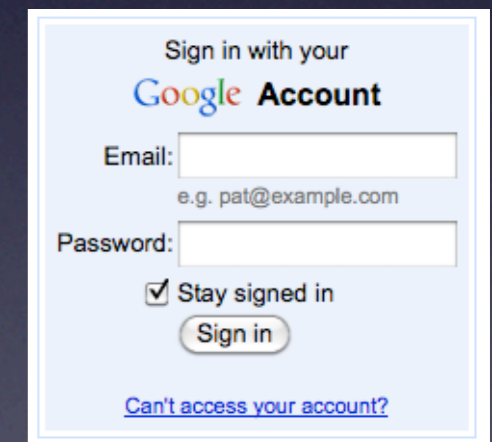
- University of Cambridge Raven
- Oxford WebAuth
- Classic Athens (R.I.P.)
- Google
- etc, etc, ...



The screenshot shows the Raven login interface. On the left is the Raven logo, which features a silhouette of a raven perched on a branch above the word "RAVEN". To the right of the logo is a text box containing the following text: "The web resource you requested requires you to identify yourself [help - why am I seeing this?]. This resource is provided by the website `wiki.csx.cam.ac.uk`. You should only proceed if you are happy to be identified to this site." Below this text is a login form with two input fields: "User-id:" with the value "jw35" and "Password:". Below the password field is a checkbox labeled "override login options for this session?". At the bottom of the form are two buttons: "Submit" and "Cancel", and a link "[help]". Below the form is a warning: "Always quit your web browser when you have finished accessing services that require authentication. Do not disclose your Raven password to anyone and only enter it on web pages with URLs that start `https://raven.cam.ac.uk/`. Please report attempts to obtain your password by other means."

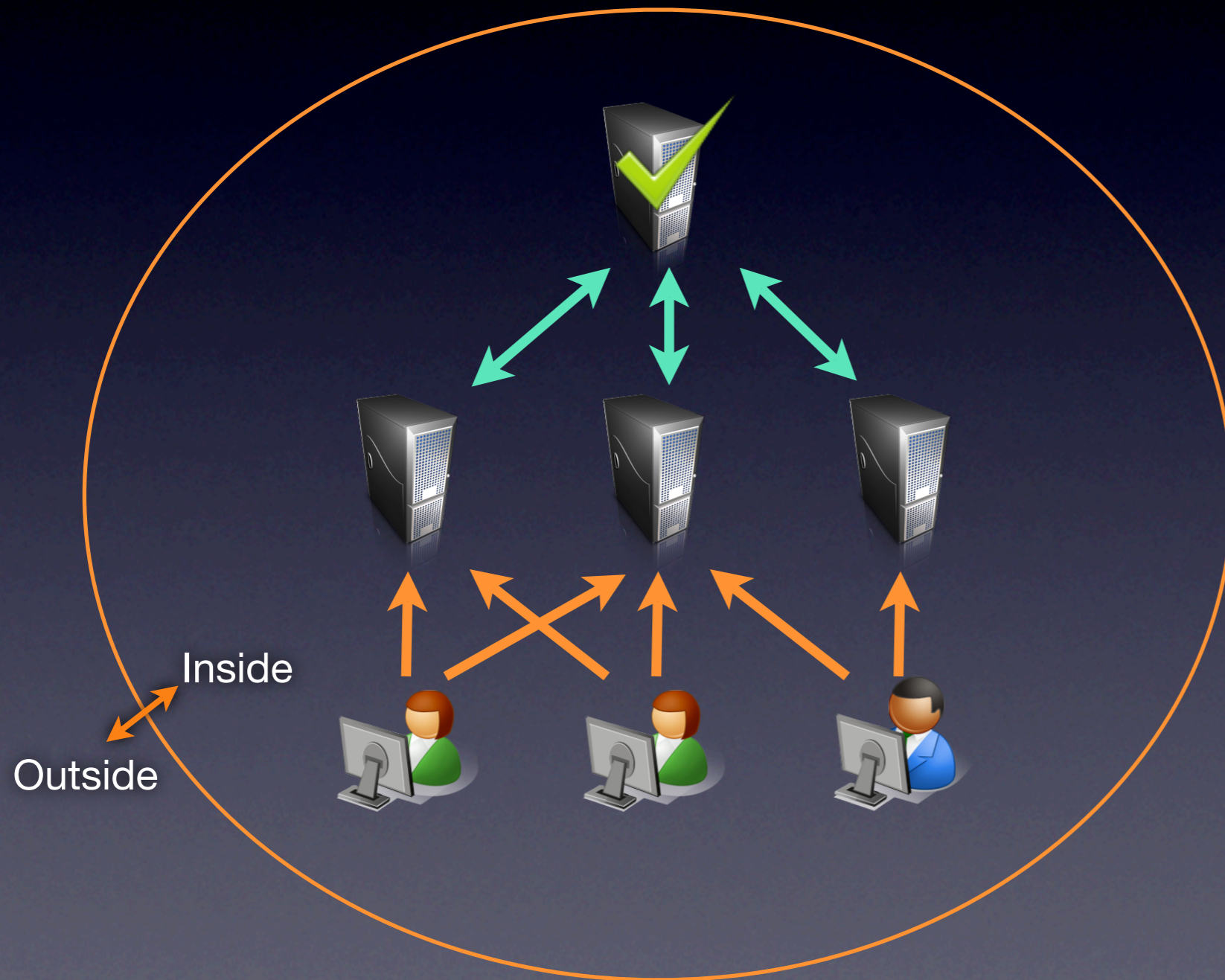


The screenshot shows the "University of Oxford Single Sign-On Login" page. The title is "University of Oxford Single Sign-On Login". Below the title is the text: "The service you have requested is accessed via the University of Oxford Single Sign-On system." In the center is a login form with two input fields: "Username:" with the value "e.g. abcd0123" and "Password:". Below the password field is a link "Forgotten password?". At the bottom of the form are two buttons: "Login" and "Help". Below the form is the text: "Please enter your [Oxford username](#) and password then click the "Login" button." Below this is the text: "Not yet activated? [[Activate a new account](#)]" and a link "[I don't know what to do!](#)". At the bottom left is a link "[Oxford University Computer Usage Rules and Etiquette](#)".



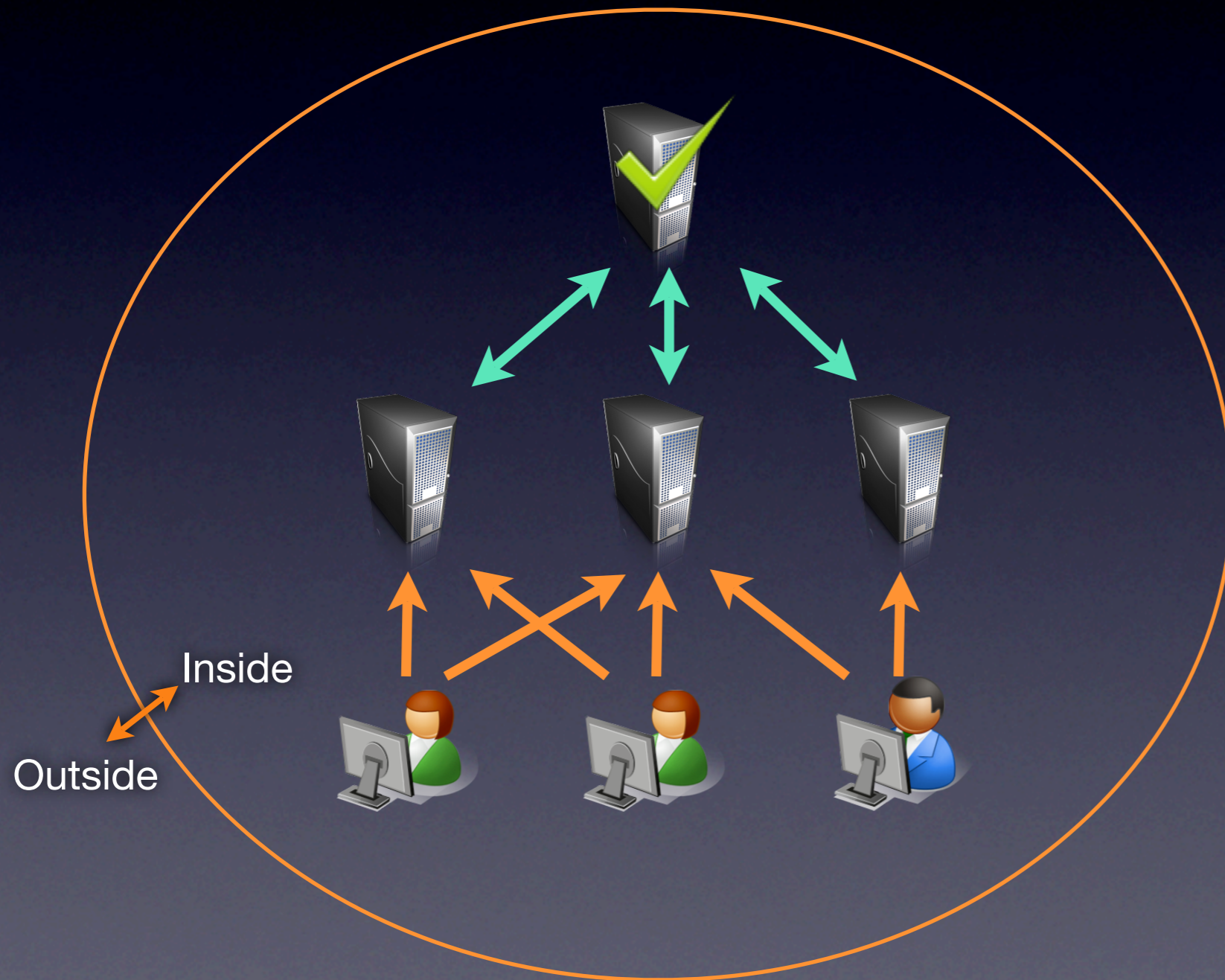
The screenshot shows the "Sign in with your Google Account" page. The title is "Sign in with your Google Account". Below the title is an "Email:" input field with the value "e.g. pat@example.com". Below the email field is a "Password:" input field. Below the password field is a checkbox labeled "Stay signed in" which is checked. Below the checkbox is a "Sign in" button. At the bottom is a link "[Can't access your account?](#)".

# Great for the institution





# Great for the institution



Not so good for anything outside

# Two elephants

- Data protection
- Trust



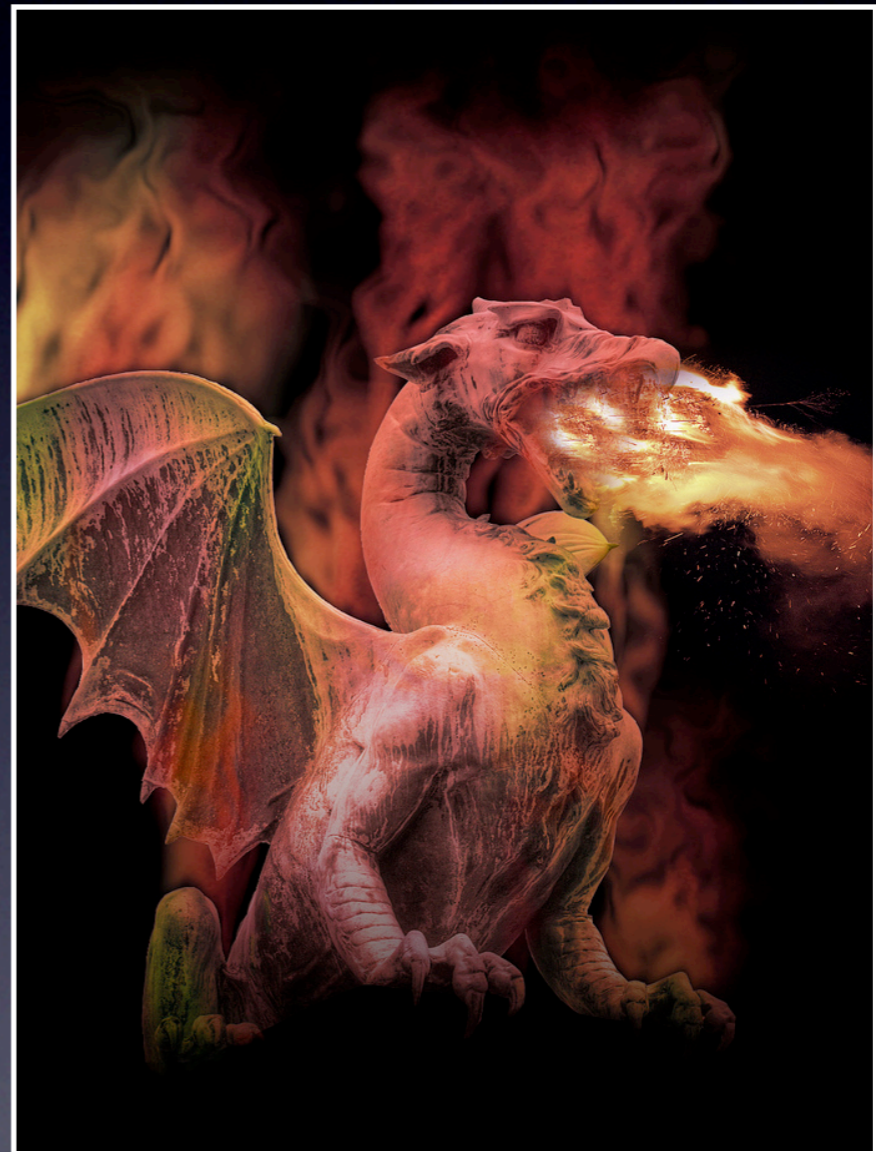
# Enter the Griffin

- AKA Shibboleth
- A Web Auth system designed to support (though not to require)
  - multiple IdPs
  - inter-organization use
  - privacy and anonymity
  - multiple attributes



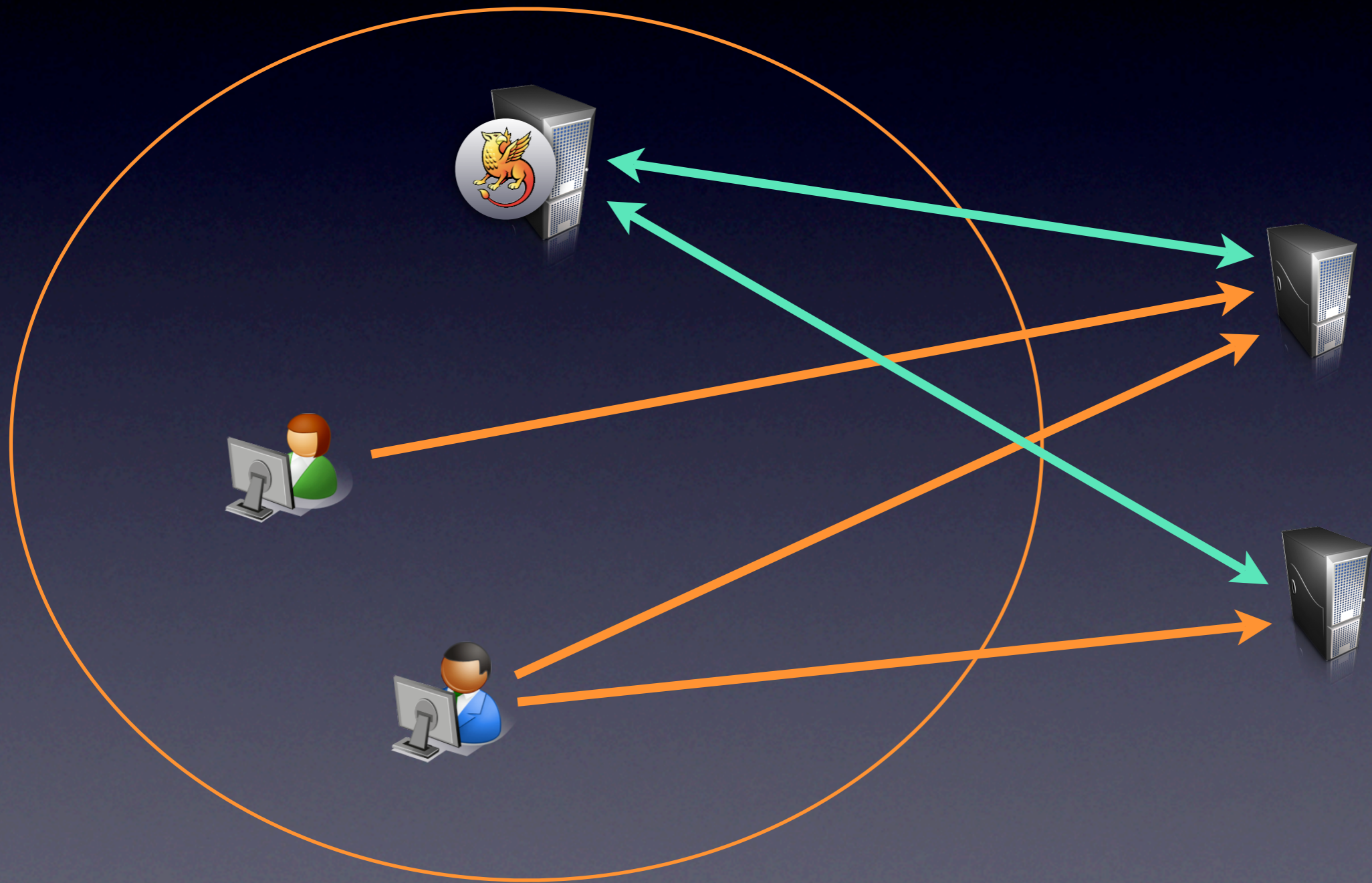
# Myth and Legends

- Shib is only for e-Journals
- *Only* supports anonymity →
- Only supplied by Internet2
- Doesn't do standards
- Is really hard

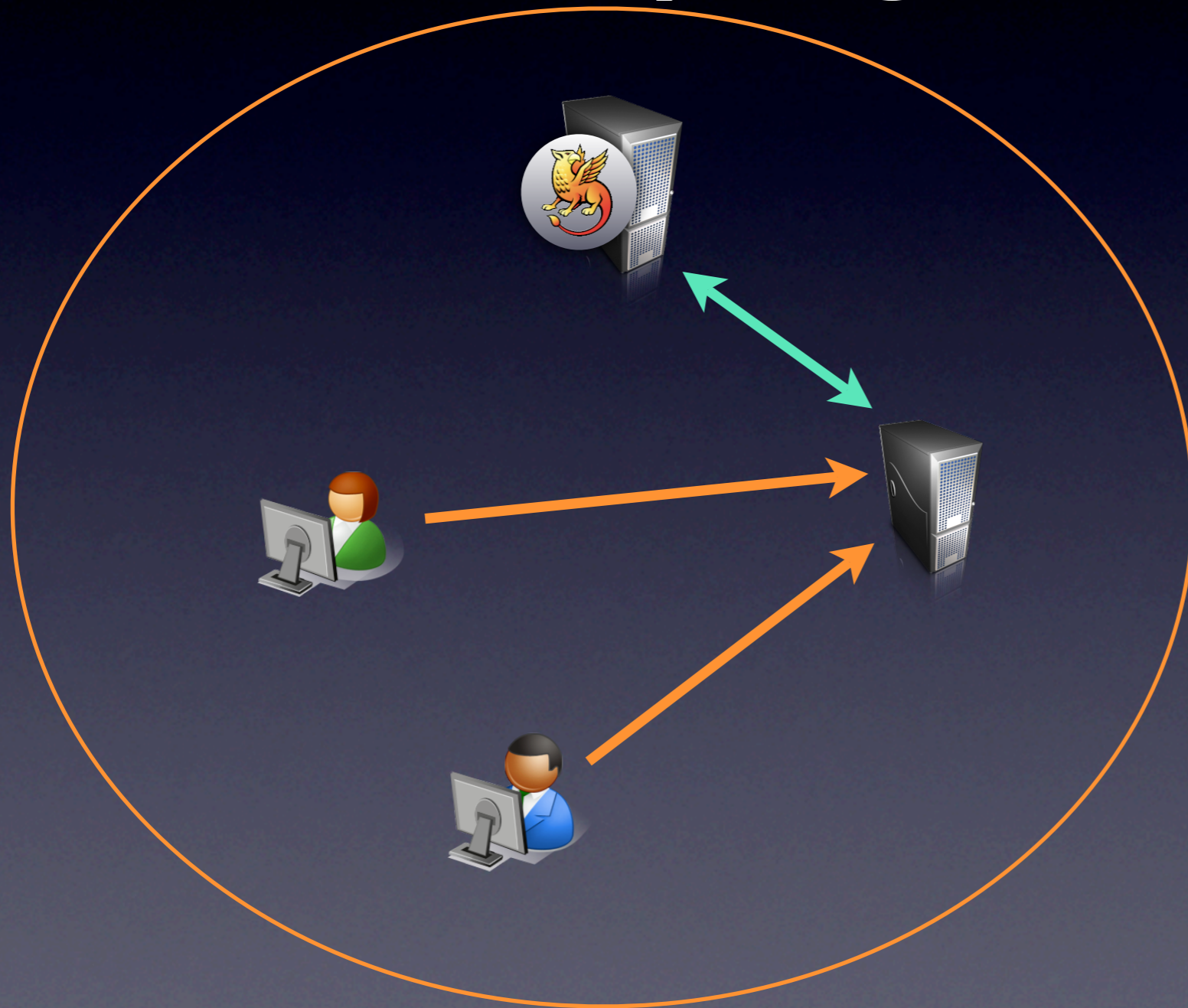


So, what can we do  
with it?

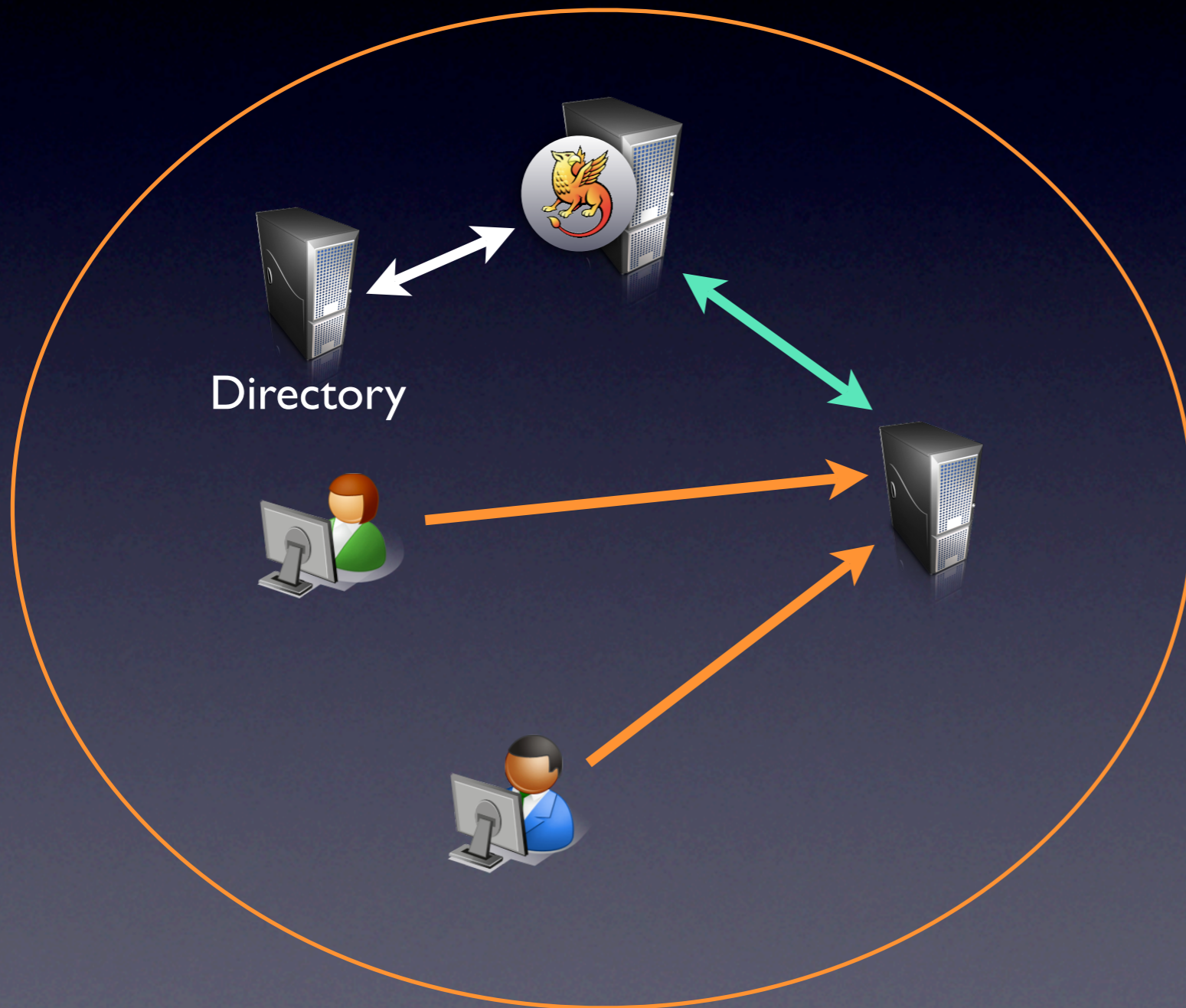
# E-Journals



# Standard web server plugins

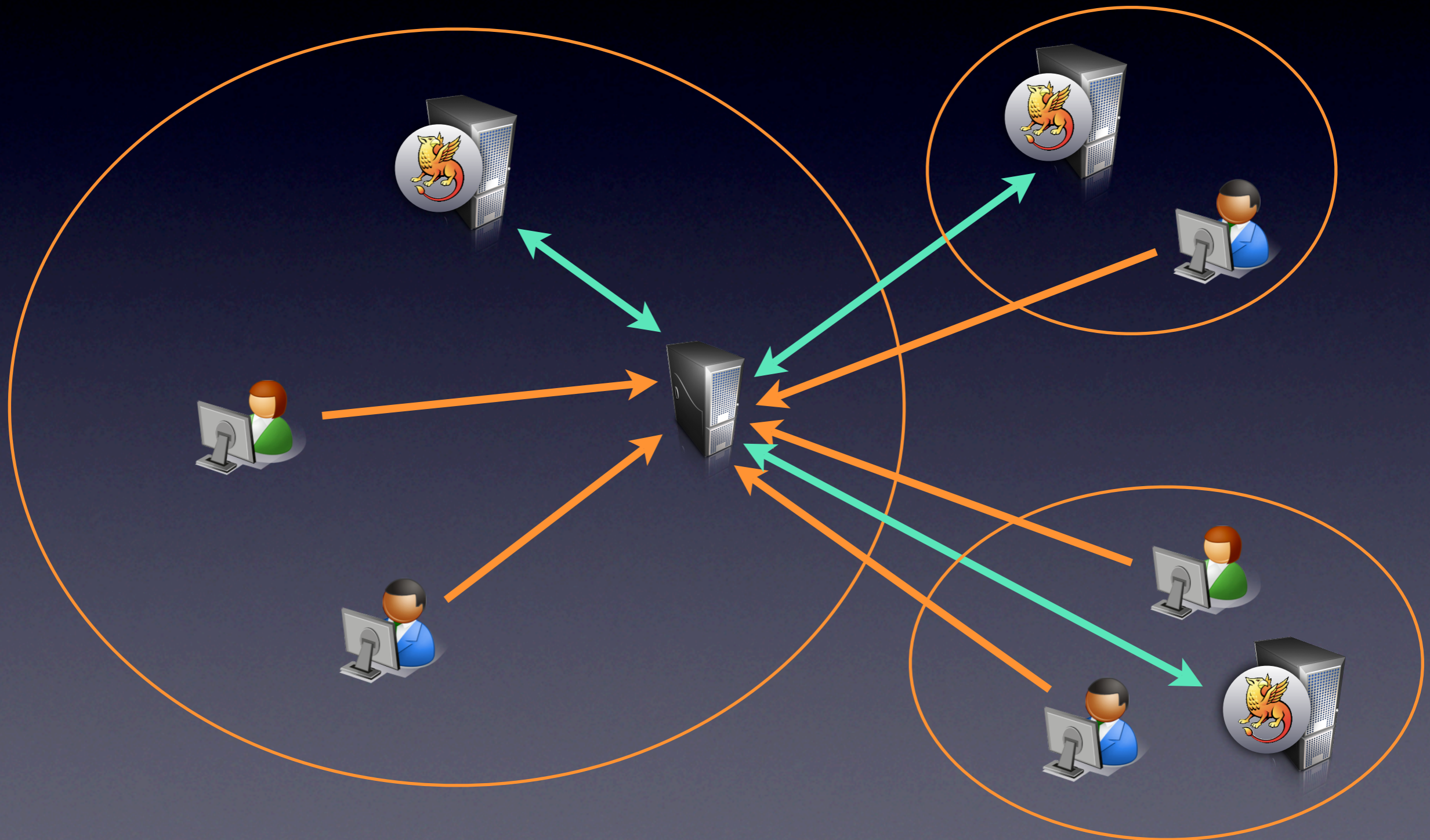


# Authorization decisions

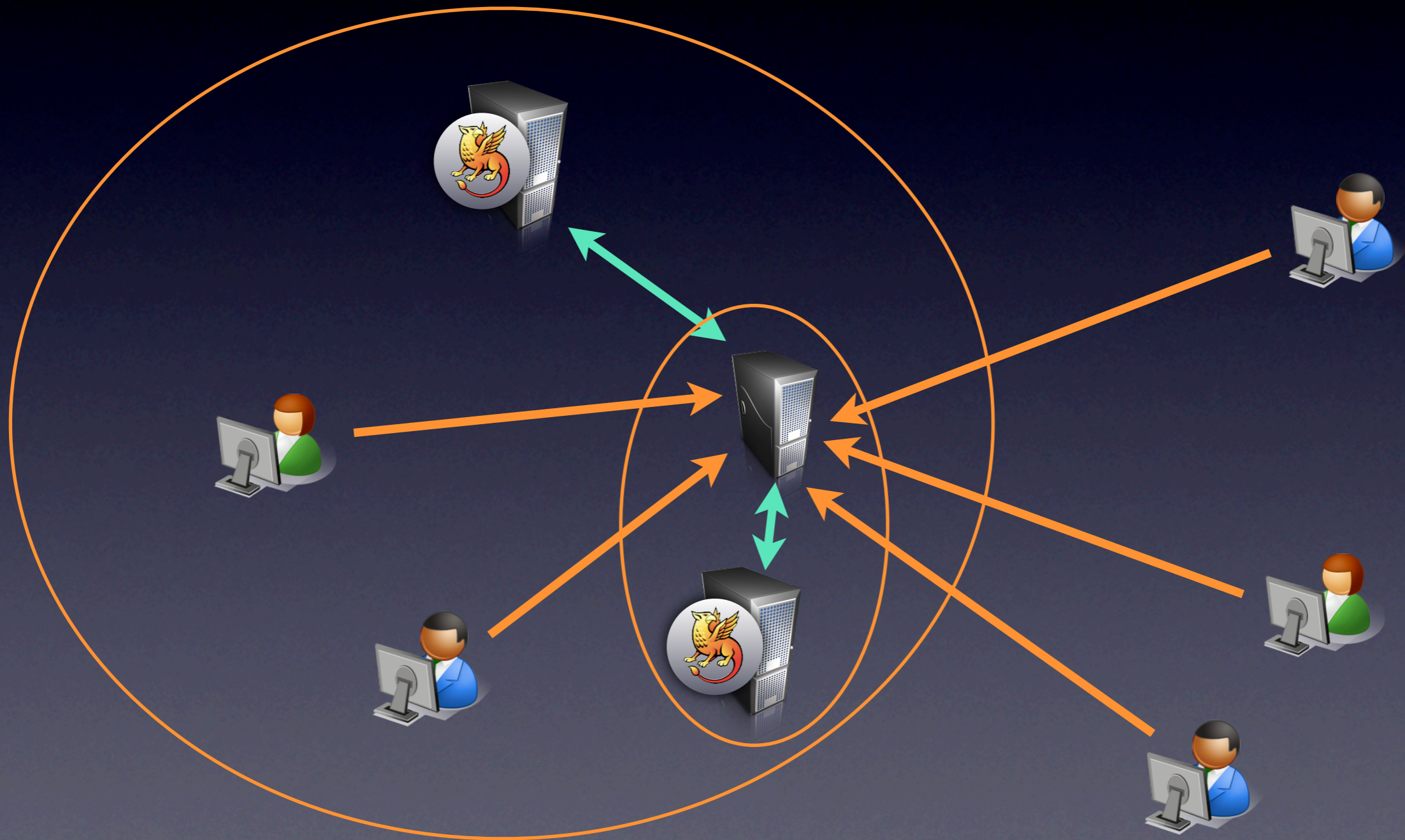




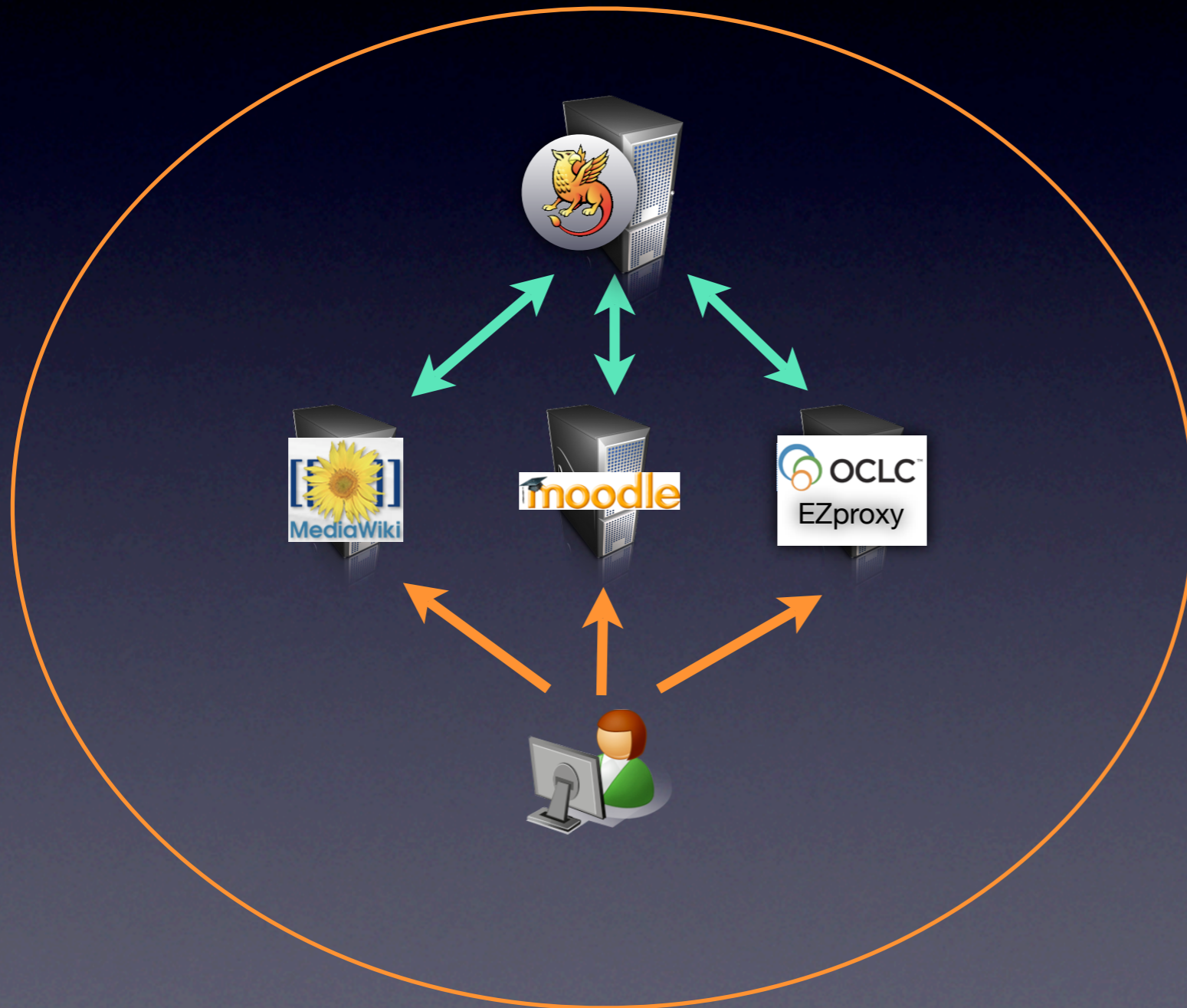
# Other people



# Other people, take 2



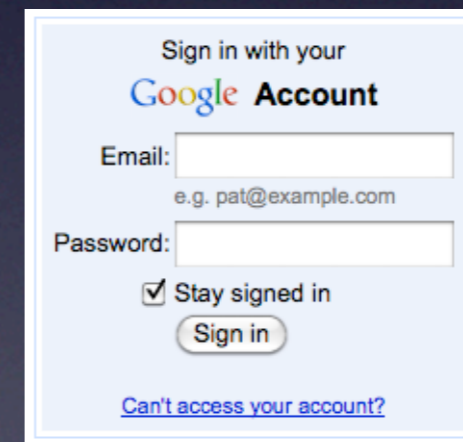
# Existing software



# VHS vs. Betamax



Facebook Connect



Google Friends Connect

# Thanks for listening...

- There may be questions...
- ...including perhaps ‘Why “Shibboleth?”’





“On the Internet, nobody knows you are a dog...”





“On the Internet, nobody knows you are a dog...”

...but sites often want to know that you are the same dog as last time”







# Credits

- ‘In the Field’, Julian Wearne, <http://www.flickr.com/photos/ikaink/4184787380>
- Mosaic screen shot courtesy of NCSA/University of Illinois <http://www.ncsa.illinois.edu/News/Images/>
- two elephants, Timo Heuer, <http://www.flickr.com/photos/upim/293676365/>
- Fire Breathing Mythical Dragon, Wili Hybird, <http://www.flickr.com/photos/walkadog/3484426248/>
- “On the Internet”, by Peter Steiner, page 61 of July 5, 1993 issue of [The New Yorker](#), (Vol.69 (LXIX) no. 20). Reproduced only for academic discussion, evaluation, and research.
- “Same dog as before”: [“Tofu, online trust, and spiritual wisdom”](#) from the Pushing Strings” blog by Eve Maler.