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Cornell University

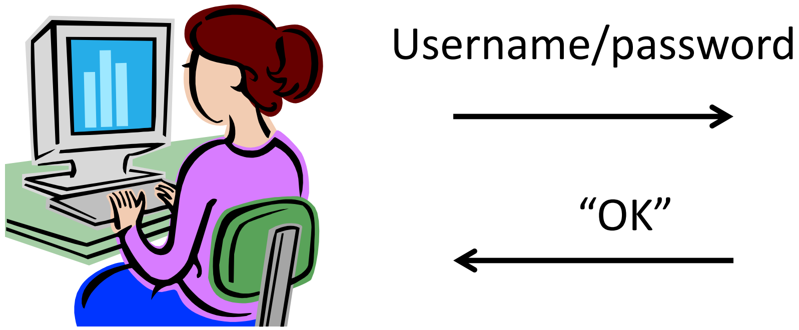
Drupal SSO

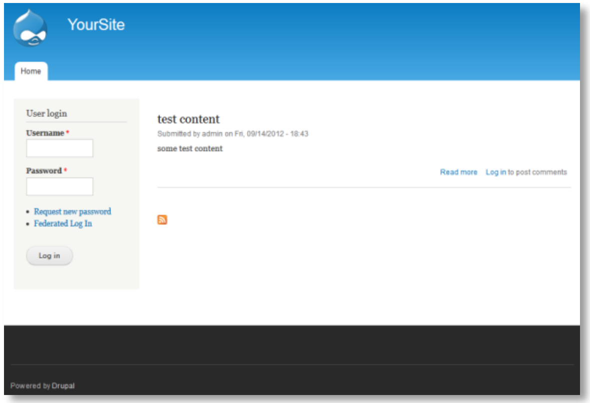
Topics:

- Authentication / Authorization
- SimpleSAMLphp
- LDAP

Drupal SSO

Authentication: “Local”





User login

Username *

Password *

- Request new password
- Federated Log In

test content

Submitted by admin on Fri, 09/14/2012 - 18:43

some test content

Read more Log in to post comments

Powered by Drupal

Pros

- Works out of the box

Cons

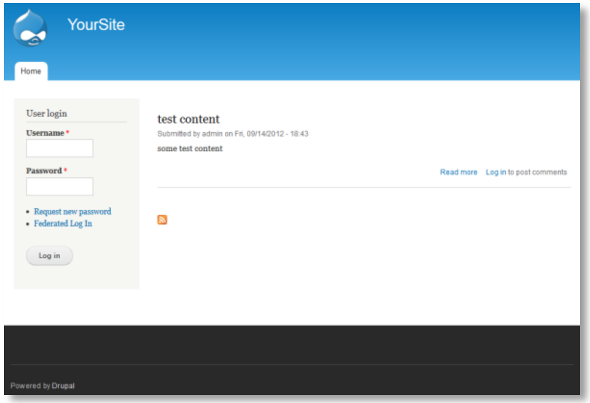
- Separate credential
- Need to worry about storing password ☹

Drupal SSO

Authentication: “Pass through” (NOT RECOMMENDED)

Username/password →

← “OK”



User login

Username *

Password *

- Request new password
- Federated Log In

test content

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some test content

Username/password ↘

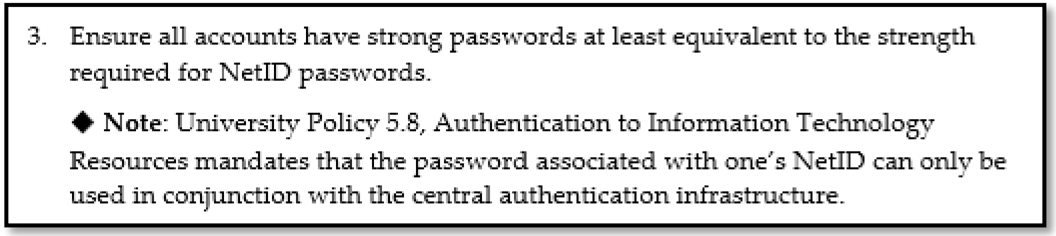
CornellAD

Pros

- Integrates with external authentication

Cons

- Violates Cornell Policy 5.10 (for NetIDs)

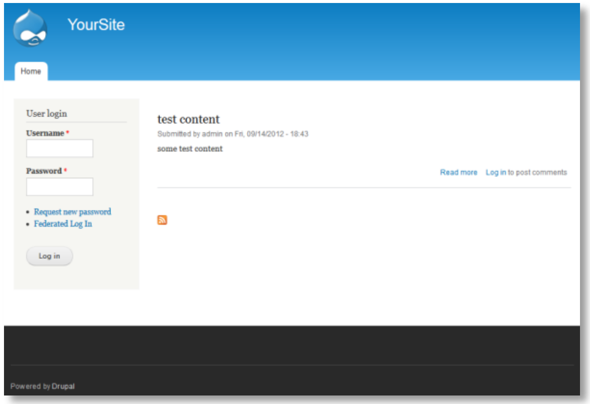


3. Ensure all accounts have strong passwords at least equivalent to the strength required for NetID passwords.

   ◆ Note: University Policy 5.8, Authentication to Information Technology Resources mandates that the password associated with one’s NetID can only be used in conjunction with the central authentication infrastructure.

Drupal SSO

Authentication: CU WebAuth



YourSite

User login

Username *

Password *

- Request new password
- Federated Log In

test content

Submitted by admin on Fri, 09/14/2012 - 18:43

some test content

Read more   Log in to post comments

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"OK"

Username/password

"OK"

CU WebAuth

Pros

- Uses Campus SSO

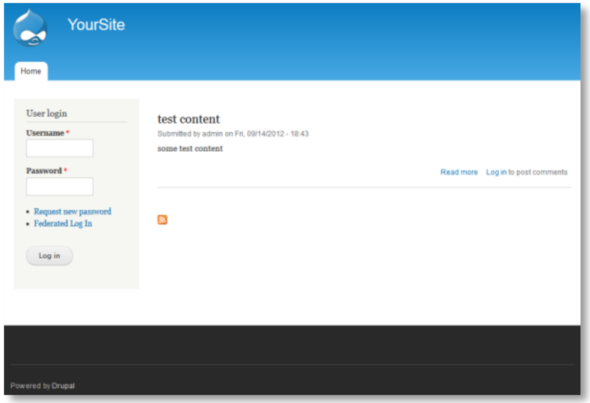
Cons

- Requires Apache module

Drupal SSO

Authentication: SimpleSAMLphp

“OK”

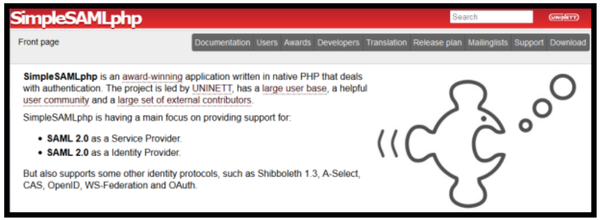


test content

Submitted by admin on Fri, 09/14/2012 - 18:43

some test content

“OK”



SimpleSAMLphp is an award-winning application written in native PHP that deals with authentication. The project is led by UNINETT, has a large user base, a helpful user community and a large set of external contributors.

SimpleSAMLphp is having a main focus on providing support for:

- **SAML 2.0** as a Service Provider.
- **SAML 2.0** as a Identity Provider.

But also supports some other identity protocols, such as Shibboleth 1.3, A-Select, CAS, OpenID, WS-Federation and OAuth.

Username/password

“OK”

CU WebAuth

Pros

- Uses Campus SSO
- Only requires PHP

Cons

- Does not protect non-code resources
- Some complexity to configure
- Does not handle Weill Cornell IDs

Drupal SSO

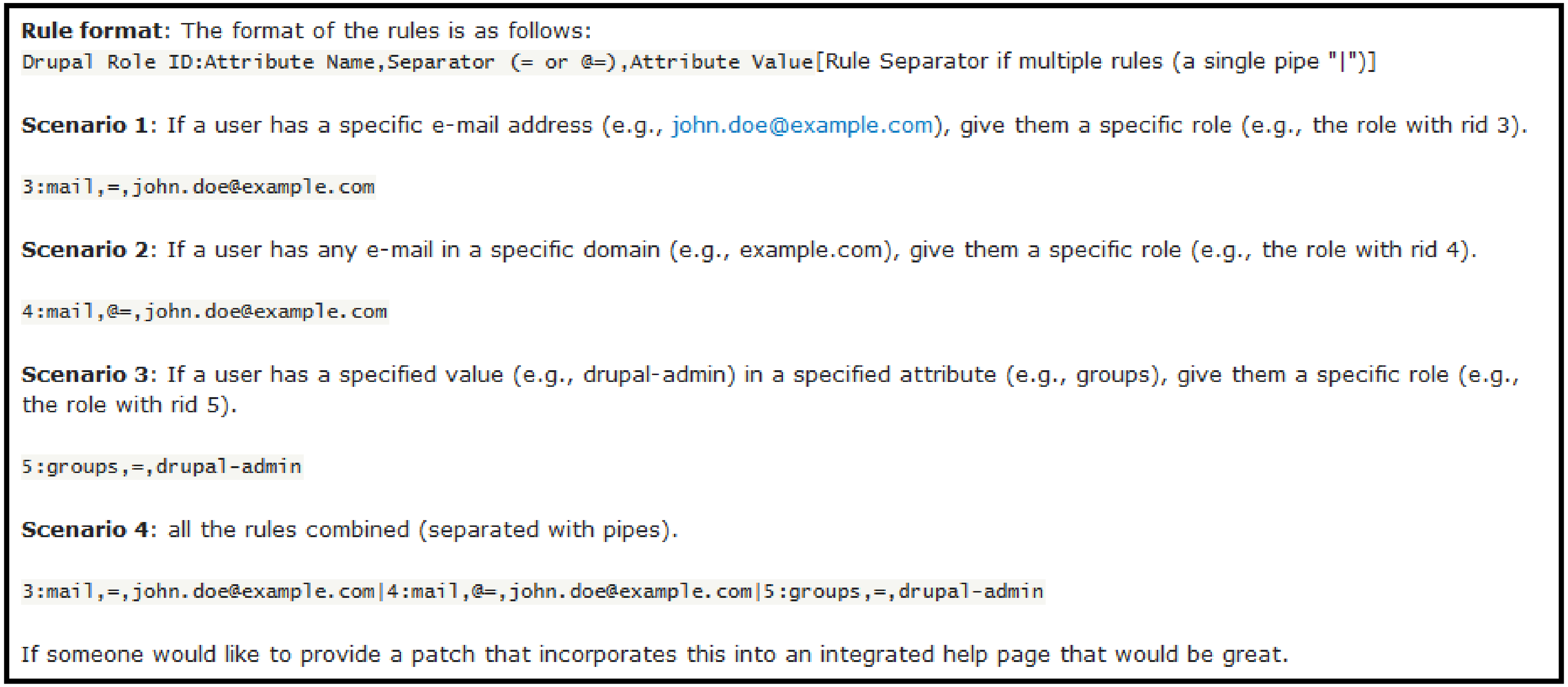
Authorization: SimpleSAMLphp

How to: https://confluence.cornell.edu/x/igEkD

Drupal SSO

Authorization: SimpleSAMLphp

http://drupal.org/node/1931394



Rule format: The format of the rules is as follows:

`Drupal Role ID:Attribute Name,Separator (= or @=),Attribute Value`[Rule Separator if multiple rules (a single pipe "|")]

Scenario 1: If a user has a specific e-mail address (e.g., john.doe@example.com), give them a specific role (e.g., the role with rid 3).

```
3:mail,=,john.doe@example.com
```

Scenario 2: If a user has any e-mail in a specific domain (e.g., example.com), give them a specific role (e.g., the role with rid 4).

```
4:mail,@=,john.doe@example.com
```

Scenario 3: If a user has a specified value (e.g., drupal-admin) in a specified attribute (e.g., groups), give them a specific role (e.g., the role with rid 5).

```
5:groups,=,drupal-admin
```

Scenario 4: all the rules combined (separated with pipes).

```
3:mail,=,john.doe@example.com|4:mail,@=,john.doe@example.com|5:groups,=,drupal-admin
```

If someone would like to provide a patch that incorporates this into an integrated help page that would be great.

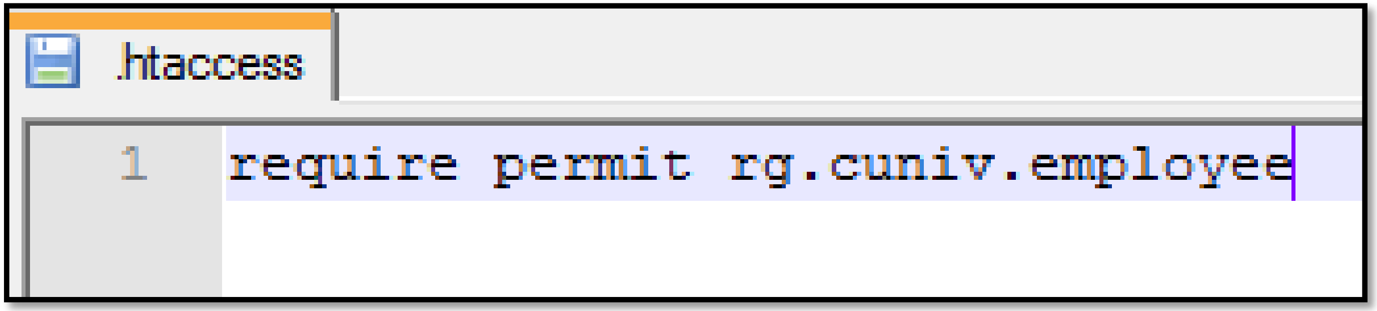
Drupal SSO

Authorization

- Previous examples are suitable to on-campus/off-campus/cloud
- LDAP examples will only work from on-campus

Drupal SSO

Authorization: CU WebAuth



```
require permit rg.cuniv.employee
```

Restricts all access to Cornell Employees
Restriction is enforced by web server (Apache HTTPD or MS IIS)

Pros

- Uses CornellAD
- Can protect non-code resources

Cons

- Applies a “blanket” to entire site

Drupal SSO

Authorization: Drupal LDAP

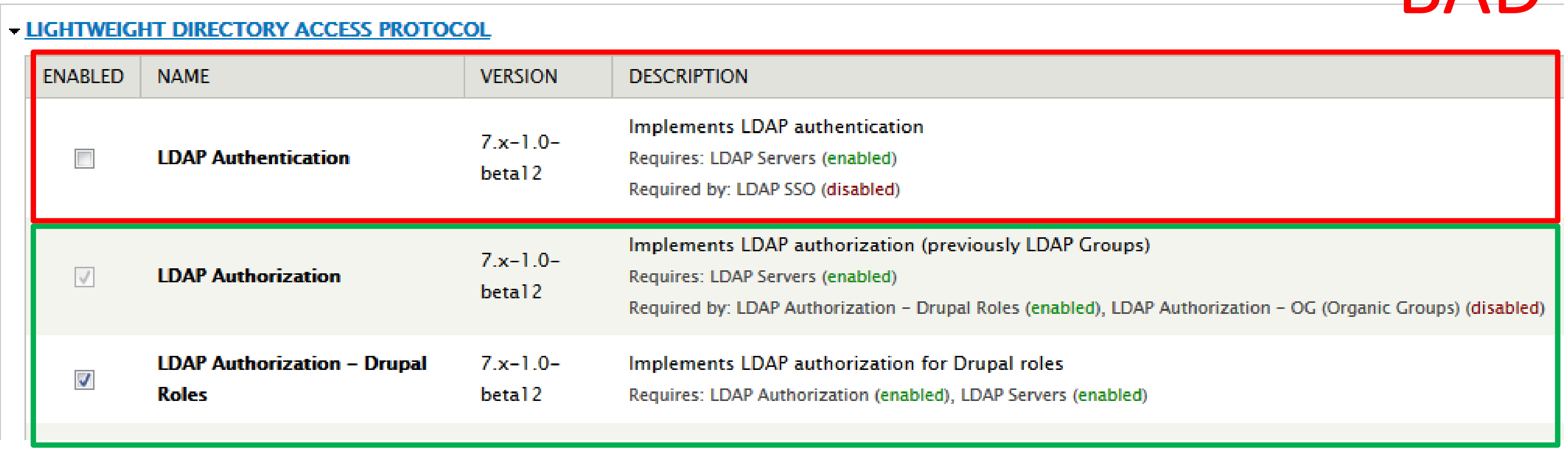
- Requires a CornellAD HoldingID (contact Identity Management)

Drupal SSO

Authorization: Drupal LDAP

"LDAP Authentication" is an example of "pass through" authentication and is NOT RECOMMENDED

BAD



LIGHTWEIGHT DIRECTORY ACCESS PROTOCOL

ENABLED	NAME	VERSION	DESCRIPTION
☐	**LDAP Authentication**	7.x-1.0-beta12	Implements LDAP authentication Requires: LDAP Servers (enabled) Required by: LDAP SSO (disabled)
☑	**LDAP Authorization**	7.x-1.0-beta12	Implements LDAP authorization (previously LDAP Groups) Requires: LDAP Servers (enabled) Required by: LDAP Authorization - Drupal Roles (enabled), LDAP Authorization - OG (Organic Groups) (disabled)
☑	**LDAP Authorization - Drupal Roles**	7.x-1.0-beta12	Implements LDAP authorization for Drupal roles Requires: LDAP Authorization (enabled), LDAP Servers (enabled)

Good

Pros

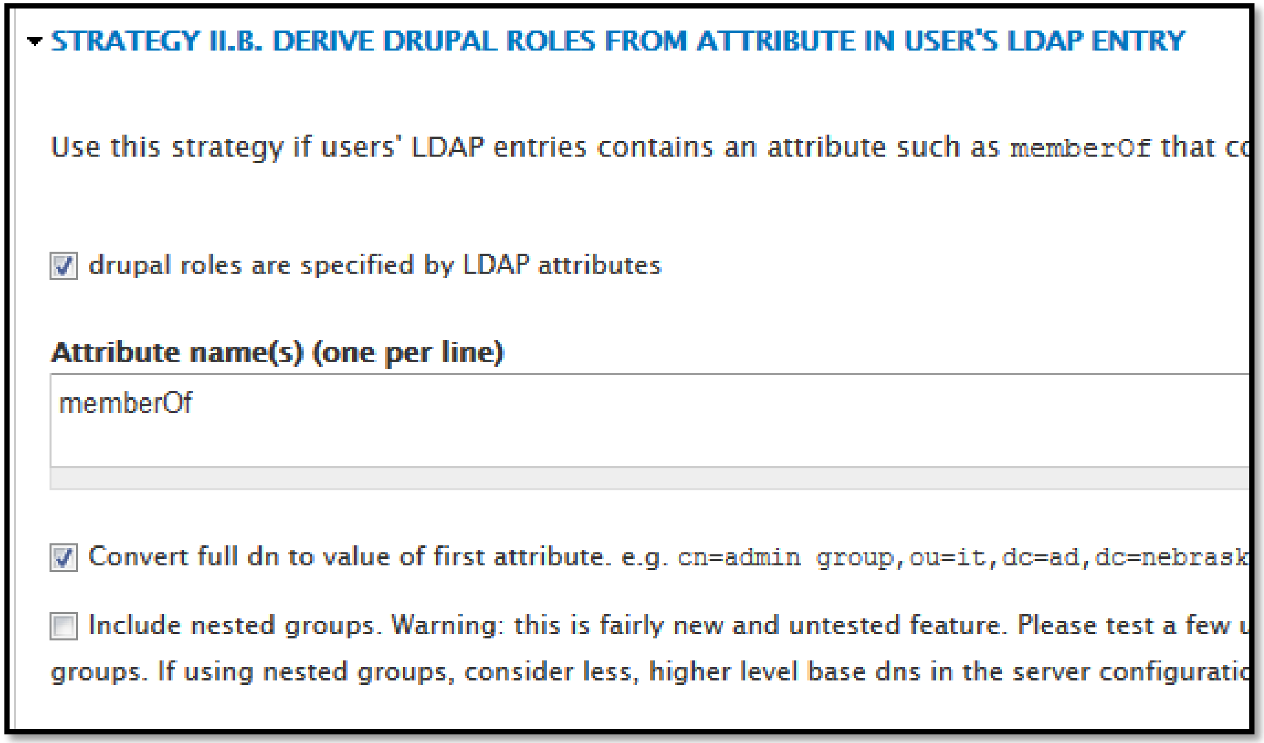
- Uses CornellAD

Cons

- Only applies application authorization
- Only works on Cornell campus

Drupal SSO

Authorization: Drupal LDAP



▾ STRATEGY II.B. DERIVE DRUPAL ROLES FROM ATTRIBUTE IN USER'S LDAP ENTRY

Use this strategy if users' LDAP entries contains an attribute such as `memberOf` that co

☑ drupal roles are specified by LDAP attributes

Attribute name(s) (one per line)

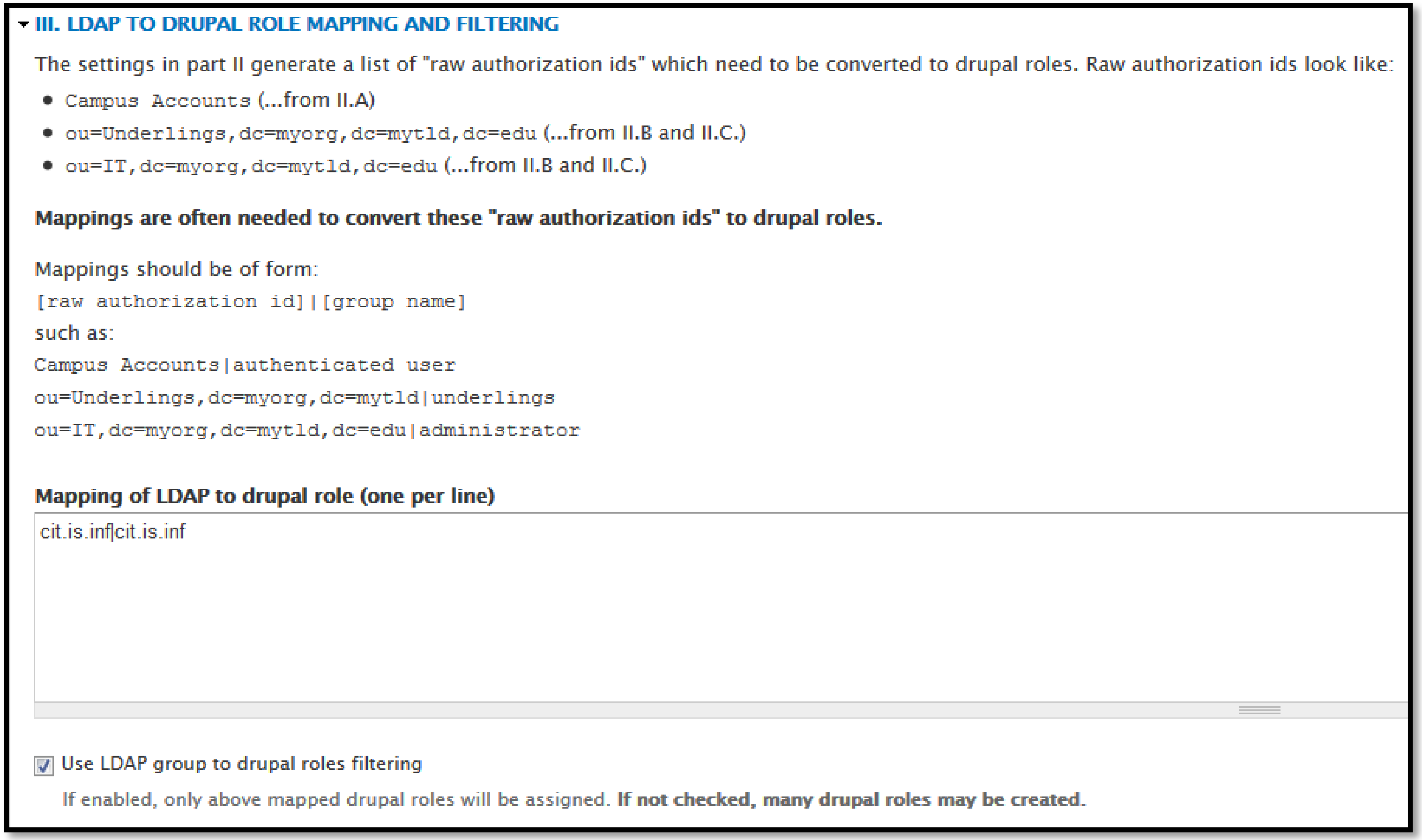
memberOf

☑ Convert full dn to value of first attribute. e.g. `cn=admin group,ou=it,dc=ad,dc=nebrask`

□ Include nested groups. Warning: this is fairly new and untested feature. Please test a few u groups. If using nested groups, consider less, higher level base dns in the server configuratio

Drupal SSO

Authorization: Drupal LDAP



▾ III. LDAP TO DRUPAL ROLE MAPPING AND FILTERING

The settings in part II generate a list of "raw authorization ids" which need to be converted to drupal roles. Raw authorization ids look like:

- `Campus Accounts` (...from II.A)
- `ou=Underlings,dc=myorg,dc=mytld,dc=edu` (...from II.B and II.C.)
- `ou=IT,dc=myorg,dc=mytld,dc=edu` (...from II.B and II.C.)

Mappings are often needed to convert these "raw authorization ids" to drupal roles.

Mappings should be of form:

```
[raw authorization id]|[group name]
```

such as:

```
Campus Accounts|authenticated user
ou=Underlings,dc=myorg,dc=mytld|underlings
ou=IT,dc=myorg,dc=mytld,dc=edu|administrator
```

Mapping of LDAP to drupal role (one per line)

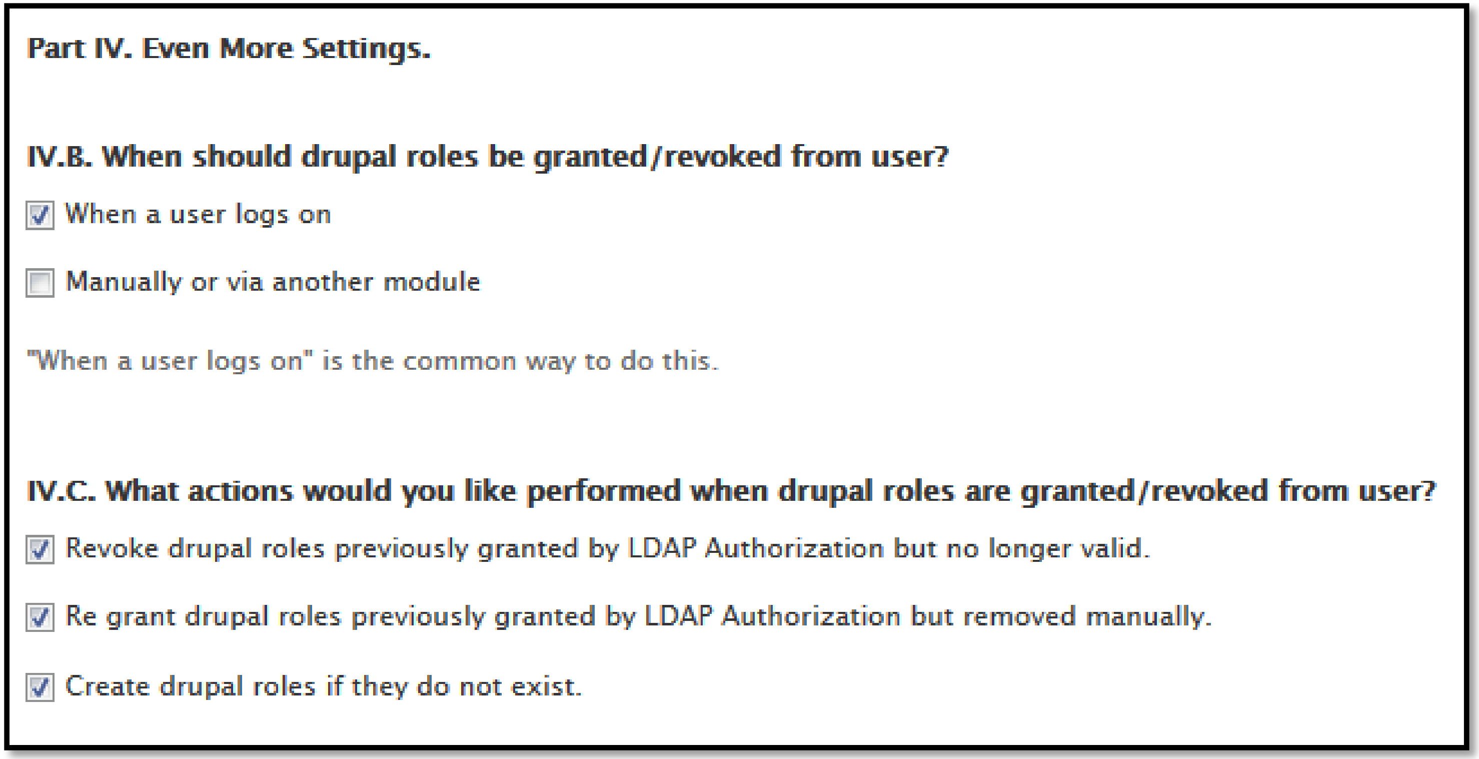
```
cit.is.inf|cit.is.inf
```

☑ Use LDAP group to drupal roles filtering

If enabled, only above mapped drupal roles will be assigned. **If not checked, many drupal roles may be created.**

Drupal SSO

Authorization: Drupal LDAP



Part IV. Even More Settings.

IV.B. When should drupal roles be granted/revoked from user?

☑ When a user logs on

□ Manually or via another module

"When a user logs on" is the common way to do this.

IV.C. What actions would you like performed when drupal roles are granted/revoked from user?

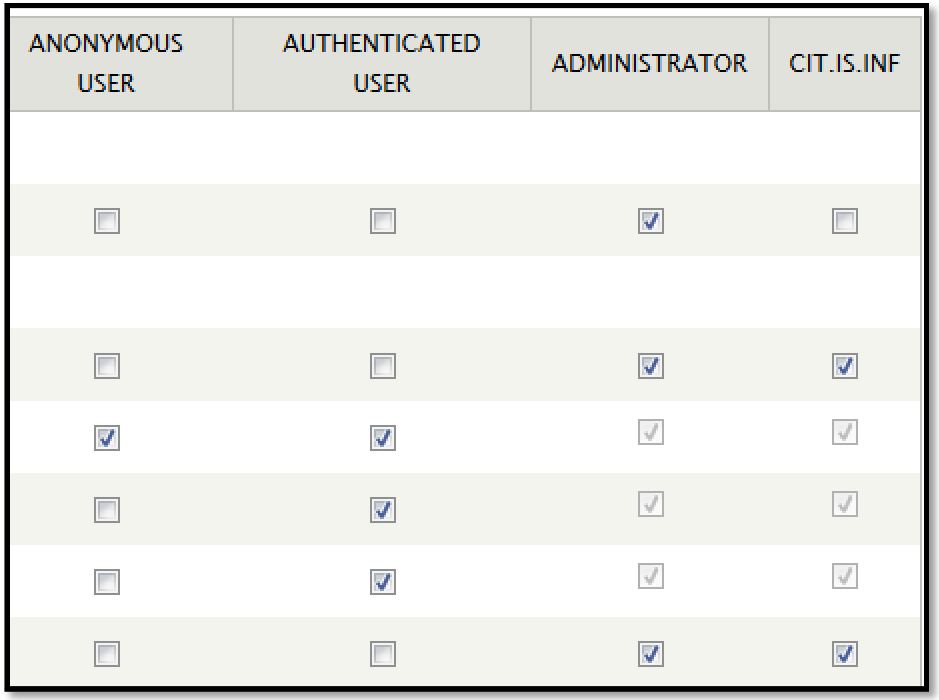
☑ Revoke drupal roles previously granted by LDAP Authorization but no longer valid.

☑ Re grant drupal roles previously granted by LDAP Authorization but removed manually.

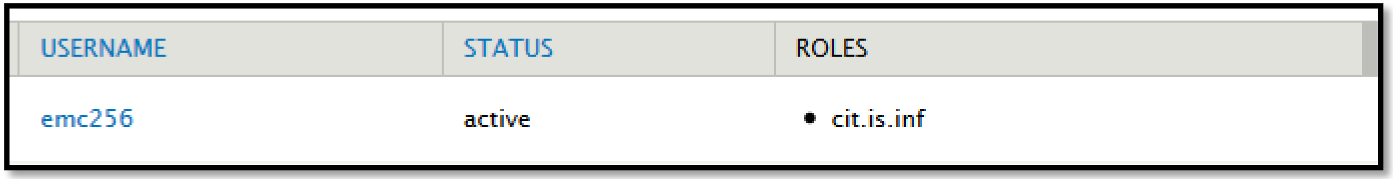
☑ Create drupal roles if they do not exist.

Drupal SSO

Authorization: Drupal LDAP



ANONYMOUS USER	AUTHENTICATED USER	ADMINISTRATOR	CIT.IS.INF
□	□	☑	□
□	□	☑	☑
☑	☑	☑	☑
□	☑	☑	☑
□	☑	☑	☑
□	□	☑	☑



USERNAME	STATUS	ROLES
emc256	active	• cit.is.inf

Drupal SSO

Authorization: Other Options

- Manually map IDs to roles
- Custom code / mapping