

Engineering Computing | Erick Engelke & Daniel Delattre

Group List Manager

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What is Group List Manager?

Group List Manager is a web based tool that makes it easy for Nexus groups to manage their own membership list.

This means that a select group of **managers** can maintain the **membership** list of a specific oncampus security group within the Nexus domain. This security group list can then be used to allow access to specific resources within Nexus.

A prime example is allowing access to specific lab computers to a group of users. Another example would be allowing a group access to print to a specific printer without any charge.

The group managers themselves are part of a manager security group, specific to their own group. These manager groups are administered by a local permanent University of Waterloo employee (this can be a local staff member or a faculty member, etc.). This will allow for easy maintenance and updates, if group managers change over time.

The following illustration will make it easier:



Figure 1 - Hierarchy example

In this example the Director SDC is the permanent employee who can update the Manager FSAE and Manager Baja groups.

Each of the managers will be able to update their own membership list with students, who in turn will have access to specific computers, and will also be able to print to specific printers in the Student Design Centre.

How do I get access?

The Group List Manager Web based tool is accessible from the following address:

https://enggroup.uwaterloo.ca

You will have to log in with your usual Nexus / UW credentials.

Group List Manager

	Login to Nexus		
Userid			
Password			
	Login		

Figure 2 - Login

Once you are logged in, group managers will see a list of groups they can manage. If you don't see your group(s), and you are a group manager, you will have to contact your local group administrator for your group managers (e.g. Director SDC).

Group	Cor	nment		Ę
TestEngClubTest	Kiln	nadough		
•				•
1 row				
Select a group above, then	press Add or Dele	te below to change m	emberships.	
Manuel Income	Additions	Delate Harris	Languit	
view Users	Add Users	Delete Users	Logout	



If a regular member of a group logs on to the system they will be able to see which group(s) they belong to.

If the user does not see the group they are supposed to belong to, they will need to contact their respective Group Manager(s). The Group Manager(s) can add the user to their group.

Groups	vou	are	in.
	,		

Group	Comment	E\$
TestEngClubTest	Kilmadough	
1 row		
Logout		

Figure 4 - Group membership

Viewing group members

Once logged in, select the group you want to view and click on the View Users button.

ub: TestEngClubTest				
Existing members				
aniel Delattre (daniel3) rick E Engelke (erick)	1			

Click below to return to the main display.

Return

Figure 5 - Viewing members

This will show you a list of current existing members in the specified group.

To return to the main screen, please click on the Return button.

Adding group members

Once logged in, select the group you want to add members to and click the Add Users button.

Club: TestEngClubTest	
Existing members	
Daniel Delattre (daniel3) Erick E Engelke (erick)	
Enter one or more userids below, then press Add to add those users.	
	*
	Y
Add Return	

Figure 6 - Adding members

This will show you a list of current existing members in the specified group.

The second window will allow you to enter one or more Nexus / UW user ID's of people you want to add to your group member list.



Club: TestEngClubTest		
Existing members		
Daniel Delattre (daniel3) Erick E Engelke (erick) Daniel Delattre (daniel2)		
	Results	
	auccost lly added dapiel?	
	successionly added damerz	
Enter one or more userids below,		
		Ok
Add P	eturo	
Aug N	- curri	

Figure 7 - Added a member

Once you click Add, the user ID's will be verified and if the user exists in Nexus it will be added to your group.

Note: Each time when you add a user, that particular user will receive an e-mail!

added to group TestEngClubTest

World Wide Web Owner [www@ecserv18.uwaterloo.ca]
To: Daniel Delattre
This is an automated note sent on behalf of
daniel1@uwaterloo.ca to say that your account
has been added to the Nexus group:
 TestEngClubTest

Figure 8 - Email added a member

To return to the main screen, please click on the Return button.

Deleting group members

Once logged in, select the group you want to delete members from and click the **Delete** button.

Club: TestEngClubTest Members

Daniel Delattre (daniel3) Erick E Engelke (erick) Daniel Delattre (daniel2)				
Select one or more users (o group.	trl left click), then pre	ss the Delete key to	o delete their membe	rships to the

Return

Delete

Figure 9 - Deleting members

This will show you a list of current existing members in the specified group.

This window will allow you to select one or more usernames who you want to remove from your group member list.

Club:	Test	tEng	Club	Test
-------	------	------	------	------

Members

Daniel Delattre (daniel3) Erick E Engelke (erick)	🔹 Results	
	successfully deleted Daniel Delattre (daniel2)	
		Ok

Select one or more users (ctrl left dick), then press the Delete key to delete their memberships to the group.

Delete Return

Figure 10 - Deleted a member

Once you click **Delete**, the selected users will be removed from your group.

Note: Each time when you remove a user, that particular user will receive an e-mail!

deleted from group TestEngClubTest

World Wide Web Owner [www@ecserv18.uwaterloo.ca]
To: Daniel Delattre
This is an automated note sent on behalf of
daniel1@uwaterloo.ca to say that your account
has been deleted from the Nexus group:
 TestEngClubTest



To return to the main screen, please click on the Return button.

Current Student Design Centre groups

Name	Managed by	Workstation(s)
EngClub_Baja	EngClub_Baja_Mgr	SDC14
EngClub_CleanSnow	EngClub_CleanSnow_Mgr	SDC13
EngClub_Coop	EngClub_Coop_Mgr	SDC07
EngClub_FSAE	EngClub_FSAE_Mgr	SDC09/SDC10/FSAE001
EngClub_IEEE	EngClub_IEEE_Mgr	SDC03
EngClub_IGEM	EngClub_IGEM_Mgr	SDC05
EngClub_MidSun	EngClub_MidSun_Mgr	SDC12
EngClub_Robotics	EngClub_Robotics_Mgr	SDC01
EngClub_Rocketry	EngClub_Rocketry_Mgr	SDC08
EngClub_UWAFT	EngClub_UWAFT_Mgr	SDC11
EngClub_UWMAV	EngClub_UWMAV_Mgr	SDC06
EngClub_WARG	EngClub_WARG_Mgr	SDC02
EngClub_WATSAT	EngClub_WATSAT_Mgr	SDC04

Questions?

- ✓ Visit <u>http://enggroup.uwaterloo.ca</u> for frequently asked questions.
- ✓ Contact Erick Engelke (<u>erick@uwaterloo.ca</u>) for technical questions
- ✓ Contact Daniel Delattre (<u>daniel@uwaterloo.ca</u>) for set up and Active Directory questions

System Administrators Manual

Setting up Group List Manager

1. Self-Management Overview

How does this work in the back-end and how does it all fit together?

Empowering and entrusting users to keep their own information current is an emerging trend in the dynamic I.T. landscape. We combined several technologies in order to allow the Self-Management of Security Groups.

The main technology used in Active Directory is the **"Managed By"** field in the Group Security Object, as well as **"Manager can update membership list"**. This will give the user the capability to manage a security group Active Directory Object.

As mentioned in the user manual, it is advisable to set up a Super Manager Group who can in turn manage the Group Manager Security Groups. The person(s) who are member of the Super Manager Group should be permanent employees of the University of Waterloo. This will sanction easy updates to the Manager Groups in case Group Managers leave or change. This is definitely the case with student groups.

The problem with the "Managed By" technology is that by default it has to be a single user. We wrote a script that will allow security groups to become the "Managed By" user. This script will allow you to set a specific security group as the responsible manager of another security group.

Please be advised that the **"Manager can update membership list"** needs to be turned on! If this is not turned on, the updates to the security group will not work!

The other technologies used for this Self-Management tool are a webserver (e.g. Apache), PHP scripting language (including LDAP libraries) and a MySQL database.

2. Disclaimer

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3. Current Set Up for Student Design Centre student teams





In this case we have a SDC Super Manager security group that will manage and update the several SDC Student Teams Managers. For the Student Design Centre this person is the Director.

The Student Team Managers are Faculty of Engineering students who are the lead of team and usually will stay for several terms. Due to the fact that each student is off-campus during their co-op term, we recommend appointing more than one manager.

In case a student leaves the University of Waterloo, the Director can add one or more students to take over as manager.

The Student Team Managers will be able to add or remove themselves, as well as other students to their teams. Each team member will have the privilege to log on to the team computer as well as use certain printers.

However other actions/resources can be made available as well, for instance allowing people access to a specific SharePoint site.

In order to make it easy for System Administrators to update (create / remove) these Manager Security Groups, we recommend you set up the Workstation and Security Groups Organizational Units (OU's) within Active Directory as follows.

A. Workstation organization



Figure 13 - Typical workstation OU set up

B. Security Groups organization





C. Group Policy Organization and settings

In the Student Design Centre setup, each workstation OU has a specific Group Policy attached that will allow a specific group access to the workstation (logon locally), as well as allow the Manager Group administrative privileges over the local workstation (Restricted Groups).



Figure 15 - GPO setup

The following Security Settings are modified in order to make this work:

Computer Configuration/Windows Settings/Security Settings/Local Policies/User Right Assignment

 Allow log on locally : Nexus\EngClub_Team1, NEXUS\OUAdministrators(*)(**), NEXUS\Domain Admins(*), BUILTIN\Administrators(*), Administrators(*)

Computer Configuration/Windows Settings/Security Settings/Restricted Groups

 BUILTIN\Administrators: NEXUS\EngClub_Team1_Mgr, NEXUS\Domain Admins(*), Administrator(*)

(*) These groups/users are required so you can have access as a System Administrator

(**) This is the OU system administrators group for your department. (e.g. NEXUS\OUECAdm for Engineering Computing). Please contact Engineering Computing if you are unsure!!

4. Putting it all together

The **Team 1** Group Policy Object to restrict local logon to **Team 1** Group Members, and allow **Team 1** Group Managers Administrative privileges will be applied to the **Team 1** Workstation OU.



Figure 16 - GPO Restriction

As a system administrator you will have to set the **"Managed By"** field in the Group Security Object, as well as **"Manager can update membership list"**.

Structule Grane Man	Sa anniku Suana	Comer Manager for Franklin
W_EngClub_Super_Mgr	Security Group	Super Manager for Engulu
WEngClub_Baja_Mgr ∰r==club_clus=Coom Mom	Security Group	Engelub BAJA
MEngClub_CleanSnow_IMgr	Security Group	Engliub Cleanshow
RENGCIUD_COOP_Mgr	Security Group	Engliub Coop
Rengclub_FSAc_Mgr	Security Group	Engliub FOAE
	Security Group	Engliub IEEE
REENGCIUD_IGEM_Mgr	Security Group	Engelub IGEM Engelub MidSun
Backub_MidSun_Mgr	Security Group	Engelub Midsun Engelub Dobotics
Republic Robouts_Myr	Security Group	Engelub Roboties
RengClub_RUCKetry_Myr	Security Group	Engelub Rocketry
	Security Group	Engelub UWAFT Engelub UWMAY
	Security Group	Engelub UMMAV Engelub WADIC
	Security Group	EngClub WARG
	Security Group	
EngLiub_FSAE_Mgr Prop	ercies	
General Members Merr	ber Of Managed By Object Security	
<u>N</u> ame: ine	ering Computing/ClubsMgr/_EngClub_Su	iper_Mgr
	Change Properties C	lear
_		
	Manager can update membership list	
<u>O</u> ffice:		
Street:		<u> </u>
		V
ity:		
State/province:		
Country to sign		
Country/region:		
<u>I</u> elephone number:		
Fax number:		
	OK Cancel	Apply

Figure 17 - Managers Groups setting

uly 18, 2012 SYSTEM ADMINISTRATORS GROUP LIST MANAGER – VERSIO
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<pre>EngClub_Baja</pre>			Security Gr	oup	SDC14	
<pre> EngClub_CleanSnow </pre>			Security Gr	oup	SDC13	
EngClub_Coop			Security Gr	oup	SDC07	
EngClub_FSAE			Security Gr	oup	SDC09/SD	C10/FSAE001
EngClub_IEEE			Security Gr	oup	SDC03	
EngClub_IGEM			Security Gr	oup	SDC05	
EngClub_MidSun			Security Gr	oup	SDC12	
EngClub_Robotics			Security Gr	oup	SDC01	
EngClub_Rocketry			Security Gr	oup	SDC08	
EngClub_UWAFT			Security Gr	oup	SDC11	
EngClub_UWMAV			Security Gr	oup	SDC06	
EngClub_WARG			Security Gr	oup	SDC02	
EngClub_WATSAT			Security Gr	oup	SDC04	
EngClub_FSAE Propert	ies				? >	<
General Members h	lember Of	Managed F	Nu Diect I	Securitu	a	
General Members M	Temper of		o Loplect	Security		1
<u>N</u> ame:	gineering Co	omputing/C	lubsMgr/Eng	;Club_FS	AE_Mgr	
	Change	P	roperties	Cl	ear	
				·		
	I⊻ <u>M</u> anager	r can updal	e membershi	ip list		
<u>O</u> ffice:						
Street:					^	
					T	
<u>C</u> ity:						
State/province:						
Country/region:						
ooginiy/rogion.						
<u>T</u> elephone number:						
Fax number:						
		ОК	Cancel		Apply	

Figure 18 - Members Groups setting

The **Team 1** Group Manager security object will be modified by the SDC Director, who will add a few **Team 1** lead members through the web interface.

EngClub_FSAE_Mgr	Properties ? X
General Members	Member Of Managed By Object Security
<u>M</u> embers:	
Name	Active Directory Folder
	NEXUS.UWATERLOO.CA/People/Academic/U
23	NEXUS.UWATERLUU.LA/People/Academic/U
A <u>d</u> d	<u>R</u> emove
	OK Cancel Apply

Figure 19 - Group Managers members

In turn the Team 1 Group Managers will start adding their Team 1 members (including themselves!) to the Team 1 Members security object.

EngClub_F	SAE Properties	? ×
General	Members Member Of Managed By Object Security	
		1
Member	15:	_
Name	Active Directory Folder	4
2	NEXUS.UWATERLOO.CA/People/Academic/U.	
	. NEXUS.UWATERLOO.CA/People/Academic/U.	
	. NEXUS.UWATERLOO.CA/People/Academic/U.	
	NEXUS.UWATERLOO.CA/People/Academic/E	
2	. NEXUS.UWATERLOO.CA/People/Academic/U.	
2	NEXUS.UWATERLOO.CA/People/Academic/E	
	NEXUS.UWATERLOO.CA/People/Academic/U.	
	NEXUS.UWATERLOO.CA/People/Academic/U.	-
	. NEXUS.UWATERLOO.CA/People/Academic/U.	
1	NEXUS.UWATERLOO.CA/People/Academic/U.	
1	. NEXUS.UWATERLOO.CA/People/Academic/U.	
1	NEXUS.UWATERLOO.CA/People/Academic/U.	
2	NEXUS.UWATERLOO.CA/People/Academic/U.	
9	NEXUS.UWATERLOO.CA/People/Academic/U.	-
Ad	d Remove	
	OK Cancel Acol	,

Figure 20 - Group members

Once this is all set up **Team 1** members will not be able to log on locally to the workstation and use the printer resources.

Team 1 managers will be able to install software locally and fully administer the Team 1 workstation(s).

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