UNIVERSITY
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SYSTEM ADMINISTRATORS GROUP LIST MANAGER – VERSION 1.4

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Group List Manager

Version 1.4 July 18, 2012

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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 on-campus 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.

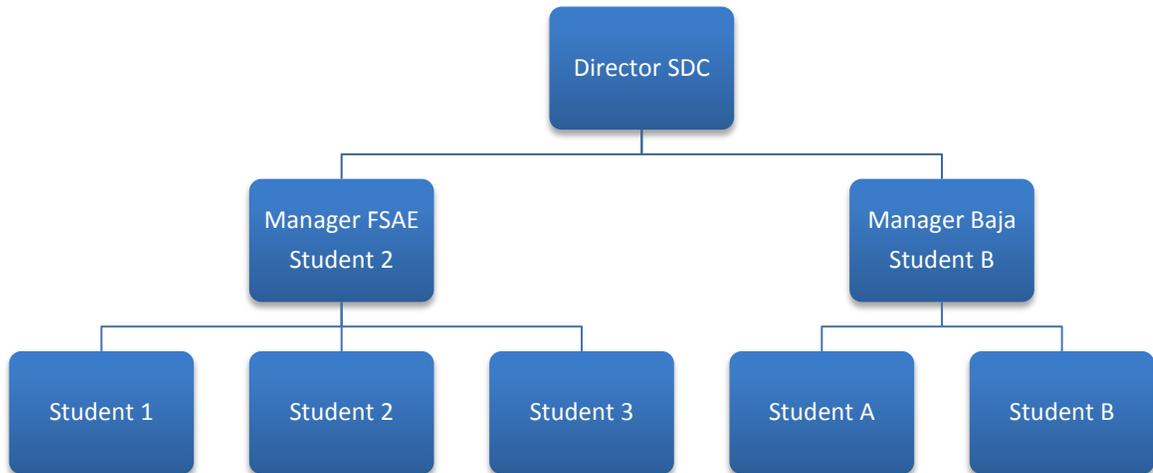The following illustration will make it easier:

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.

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).

Figure 3 - Groups

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 you are in.

Group	Comment	
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.

Club: TestEngClubTest

Existing members

Daniel Delattre (daniel3)
Erick E Engelke (erick)

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.

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.
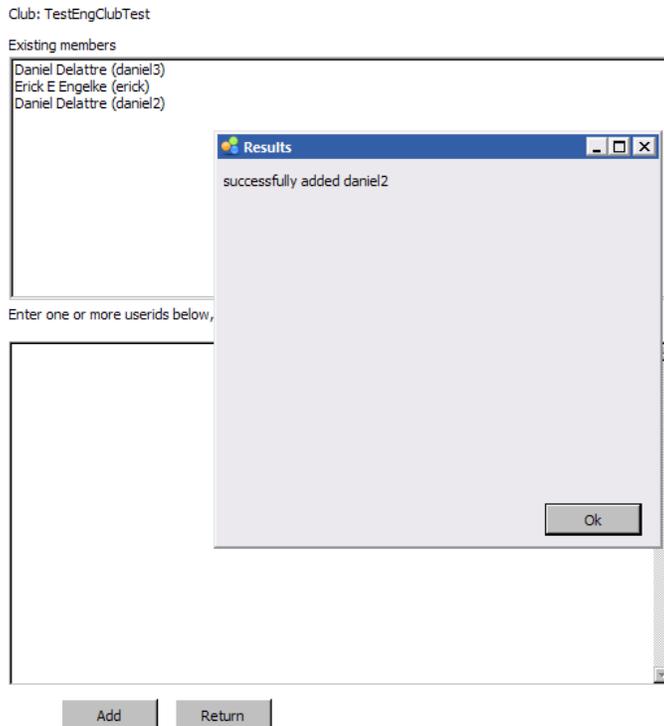
Figure 7 - Added a member

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!

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 (ctrl left click), then press the Delete key to delete their memberships to the group.
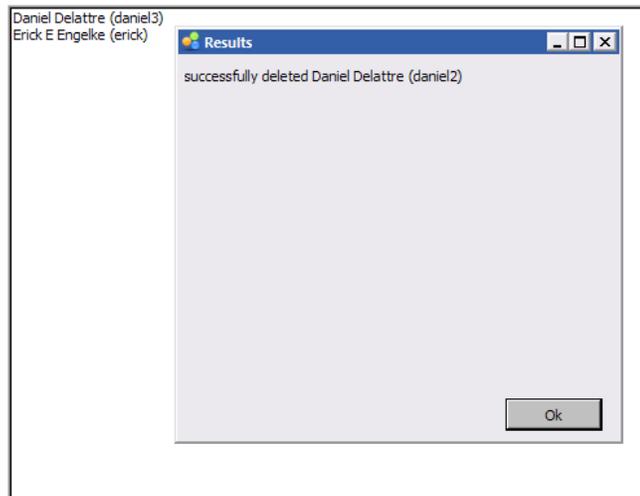
[Delete]   [Return]

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: TestEngClubTest

Members

Daniel Delattre (daniel3)
Erick E Engelke (erick)

Results   _ □ ×

successfully deleted Daniel Delattre (daniel2)

Ok

Select one or more users (ctrl left click), 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
```

Figure 11 - Email deleted a member

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 http://enggroup.uwaterloo.ca for frequently asked questions.
- ✓ Contact Erick Engelke (erick@uwaterloo.ca) for technical questions
- ✓ Contact Daniel Delattre (daniel@uwaterloo.ca) 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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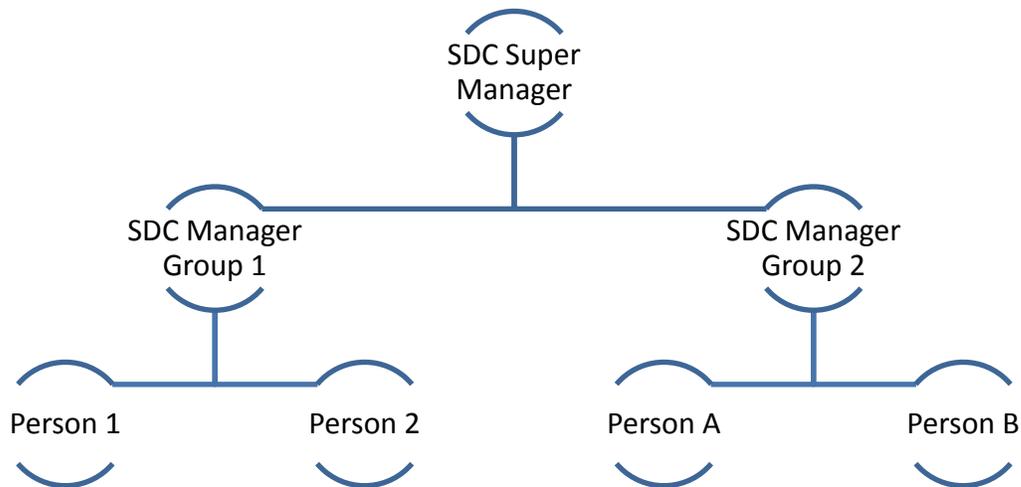### 3. Current Set Up for Student Design Centre student teams

Figure 12 - Hierarchy example

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.
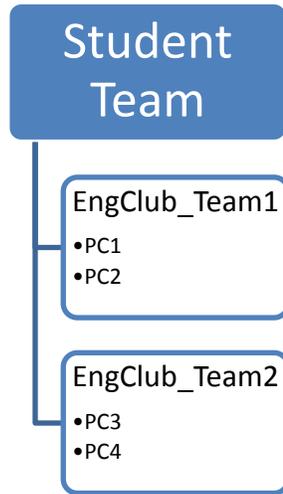
A. **Workstation organization**

Student Team

EngClub_Team1
- PC1
- PC2

EngClub_Team2
- PC3
- PC4

Figure 13 - Typical workstation OU set up

B. **Security Groups organization**

Clubs

EngClub_Team1
- Person1
- Person2

EngClub_Team2
- Person A
- Person B

ClubsMgr

EngClub_Team1_Mgr
- Person 1

EngClub_Team2_Mgr
- Person B

ClubsWks

EngClub_Team1_Wks
- PC1
- PC2

EngClub_Team2_Wks
- PC3
- PC4
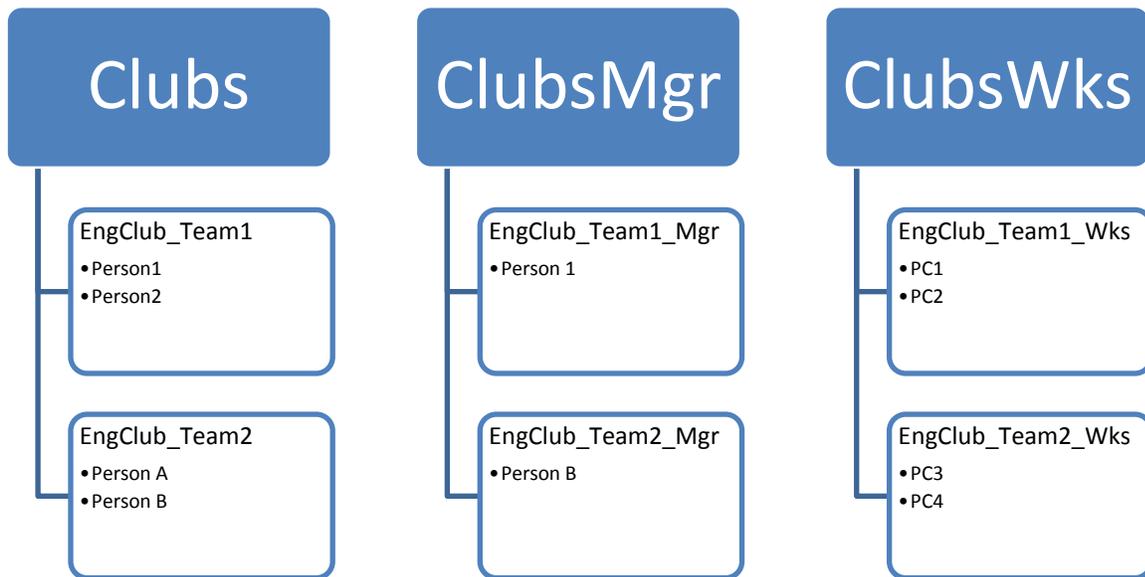
Figure 14 - Typical Security Group OU set up

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).
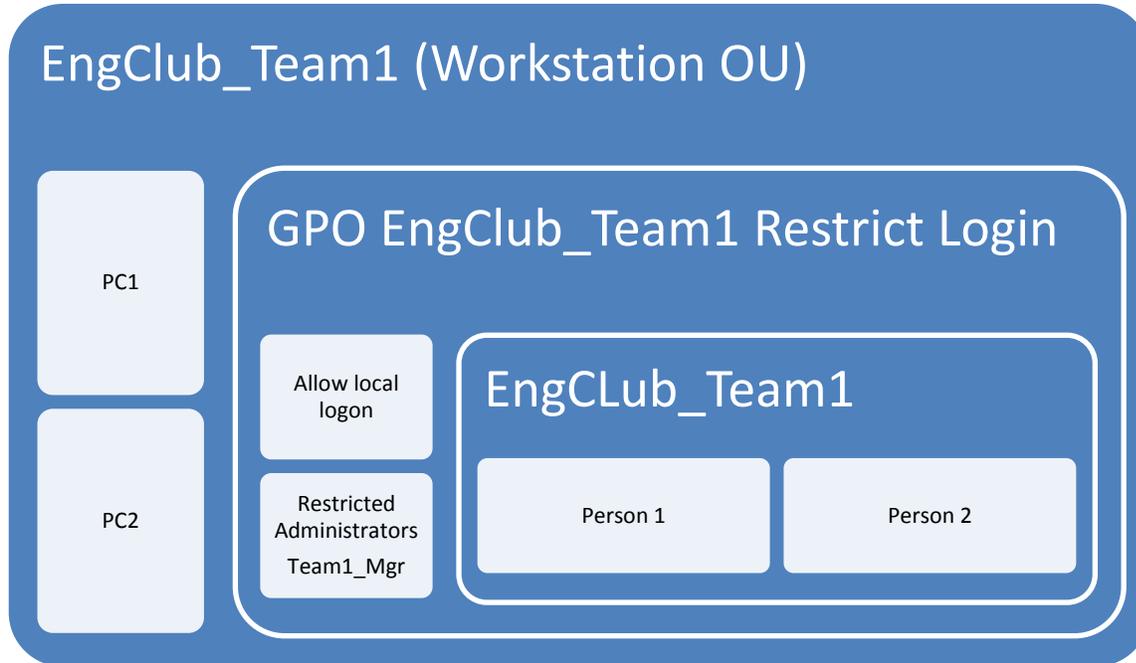
Figure 15 - GPO setup

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.
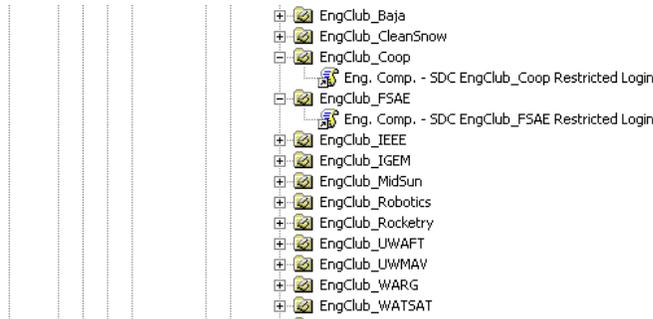

Figure 16 - GPO Restriction

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"**.
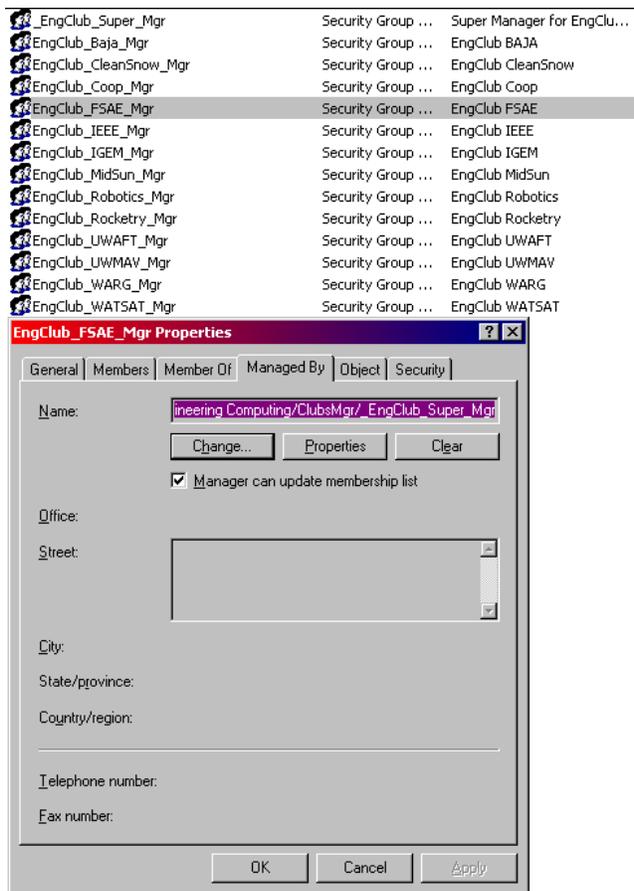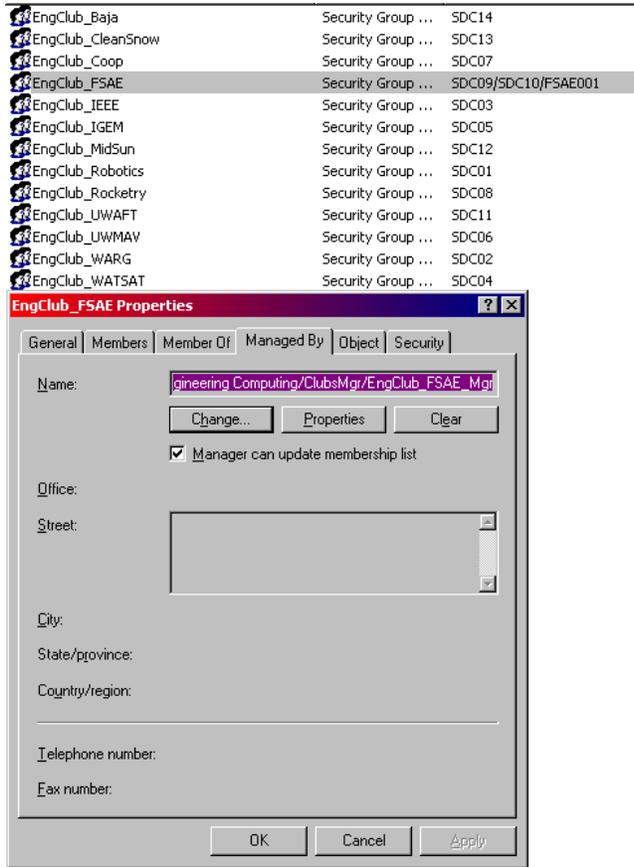

Figure 17 - Managers Groups setting

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.
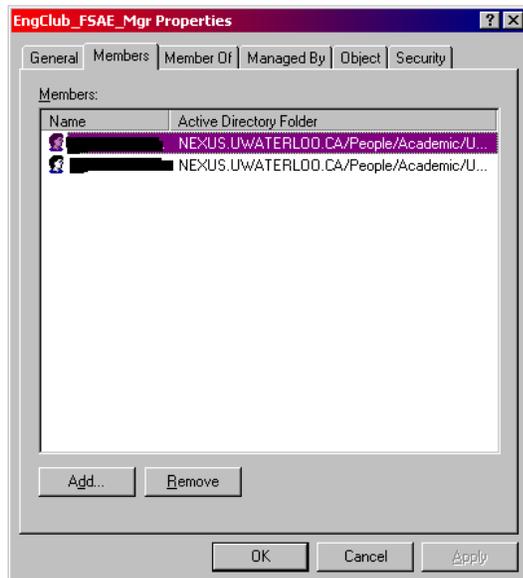
Figure 19 - Group Managers members

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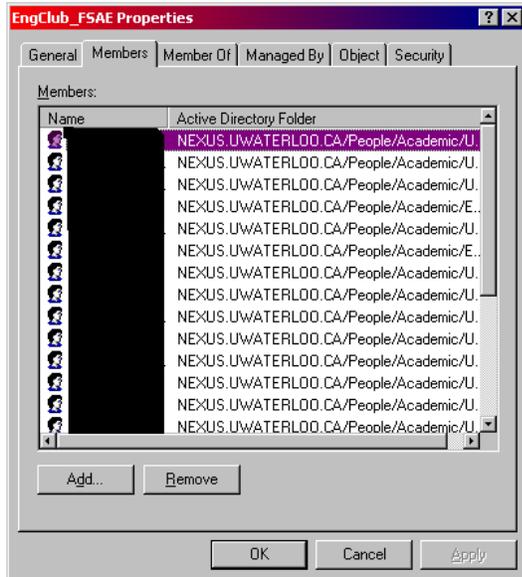

Figure 20 - Group members

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).

5. Table of figures