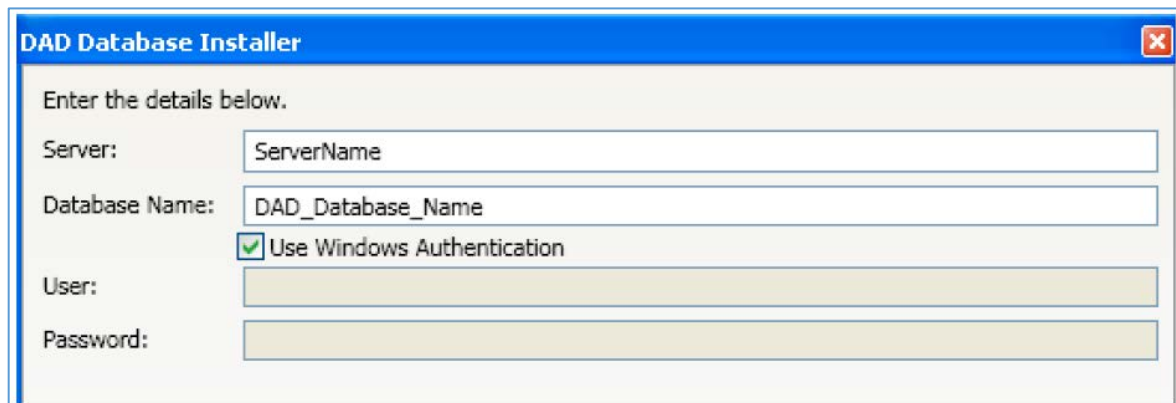## Introduction

There are two types of authentication methods that DAD supports:

- *SQL Authentication* - accounts are created and managed by SQL server.

- *Windows Authentication* - accounts are created and managed as part of the Windows Domain

Windows authentication is the recommended choice. It can involve more setup initially, but saves the users having to remember another login and password, and is easier to maintain. SQL Security also requires the SQL Server to have mixed mode authentication set, which is not the default setting.

The DAD Database is set to use one of the methods depending on the login option selected in the DAD Database installer.

If the default "Use Windows Authentication" is ticked then it is setup for Windows authentication. If a user and password is provided, then the database is setup for SQL Security.

This can be changed at any time by running the following command on the DAD database.

To setup the database for SQL Security (Creates. the SQL DAD user) run

Exec spSetupDatabase

To setup the database for Windows Authentication (Adds the BUILTIN\USER account) run

Exec spSetupDatabaseTrusted 1

Windows Authentication

When a database is setup for Windows Authentication, the SQL Server account BUILTIN\Users is added to the DAD database with full rights. This is a special server account which will allow all users to log into the database with those rights.

No further action is needed, however to customise the rights so only certain users can login, or different users have different rights then the following 4 steps will be needed.

1. Create the Windows Group

The IT department will need to create a Windows group with all the relevant windows login added. Not all of these logins have to be added as DAD users.

2. Add the Windows Group as a Login in SQL Server and grant database access

The SQL Administrator will then need to add the windows group as a login to the SQL Server, and give it access to the DAD database with the 'DADUser' role. To do this, open SQL Management Studio and connect to the DAD server.

On the tree on the left, expand through <Server Name>, Security, right click on Logins, and select 'New Login'.

On the form that opens enter the full Windows name as the Login Name (including domain) and leave as Windows authentication. The default database can also be changed to the DAD database.
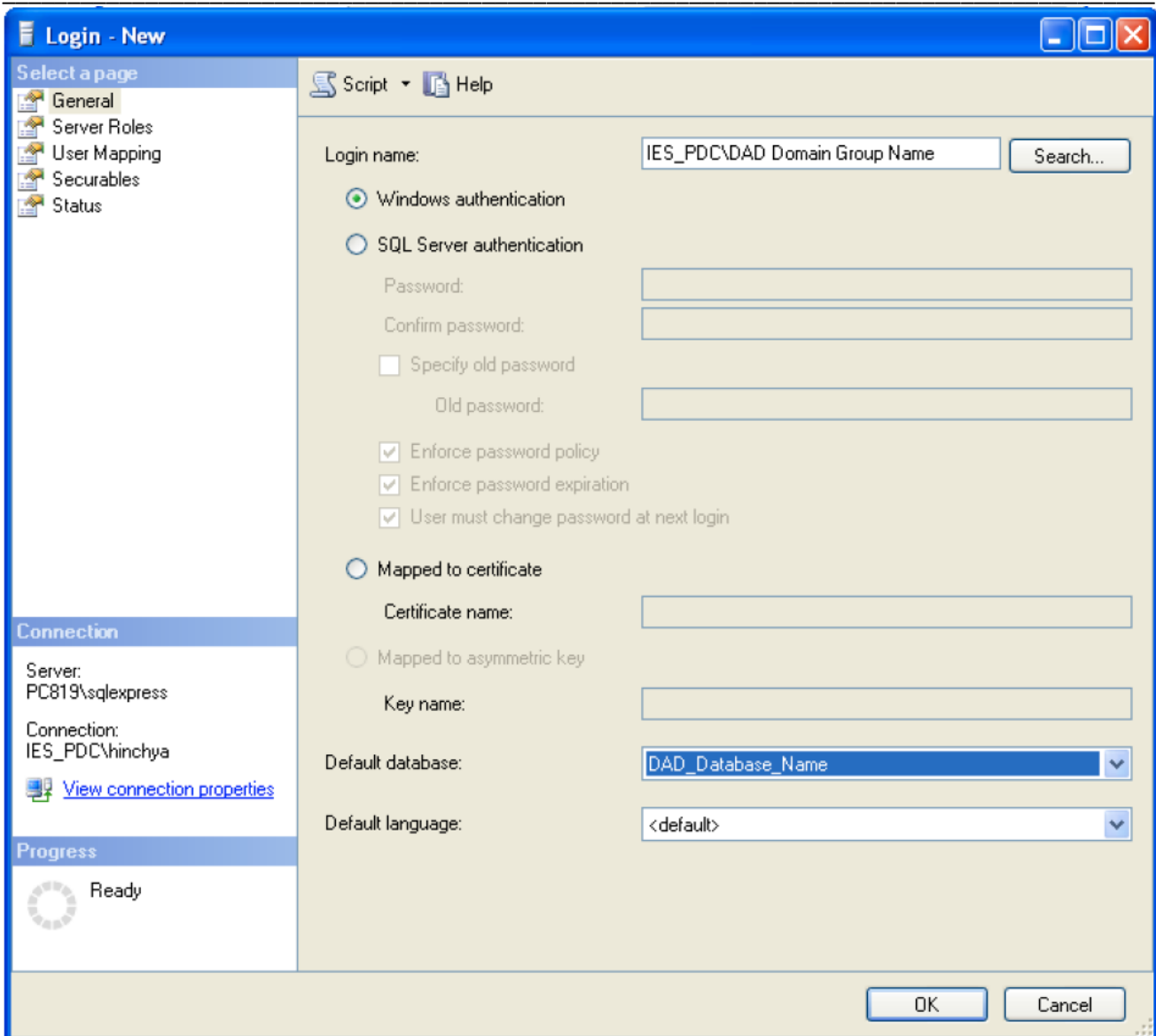
Select User Mapping on the left. Check the box to the left of the database name, and in the box below, select the DADUser database role.
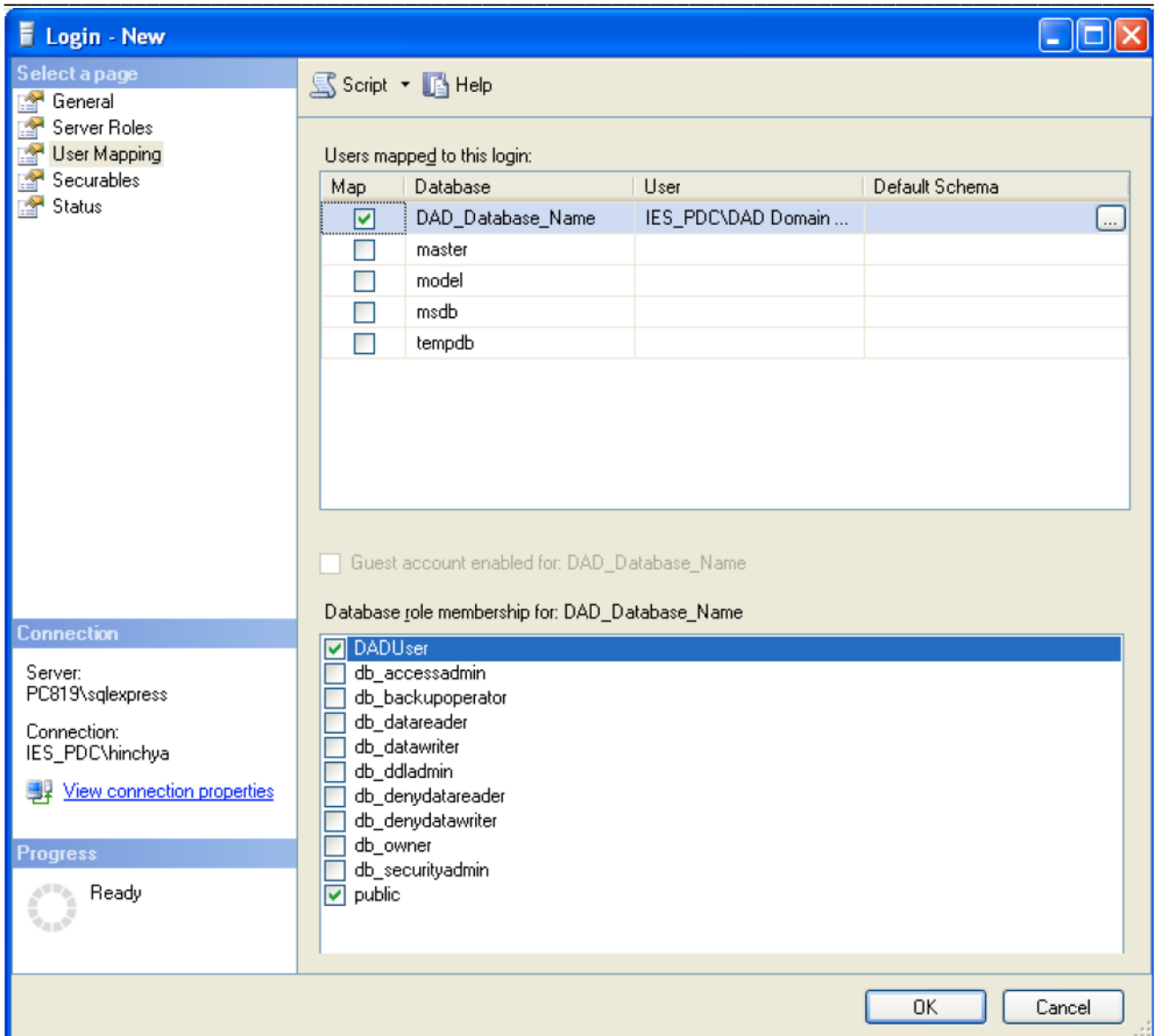
Click OK to save the login.

3. Add Users via DAD

If you now login into DAD, and select the Database Details button and then go to the Users
Management tab, the windows group will be visible "IES User" in the example below. If the group is
expanded all windows users in it will be displayed. The empty box to the left means that the user
has not been added to the database.
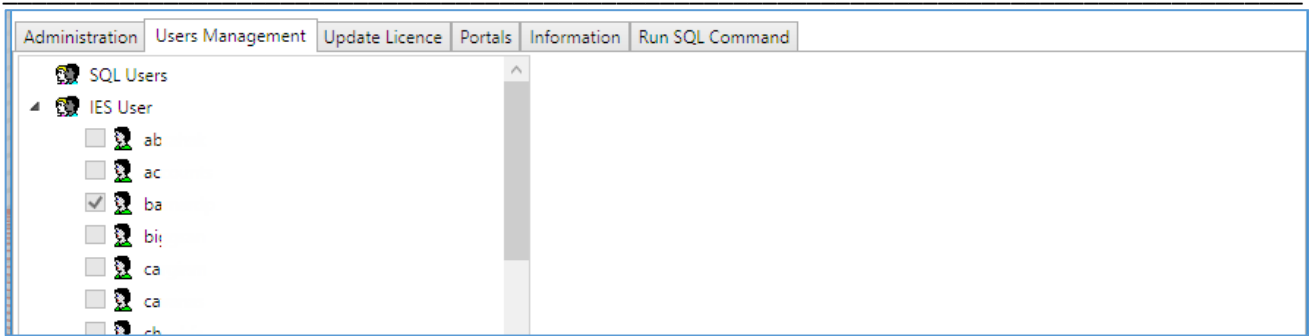
To add a user, right click and "Add user to database". This will allow the user access. To change the user rights, click again on the user and the right hand table will populate.

This will show the available rights broken down into sections. After ticking the relevant rights, click "OK" to save the changes.
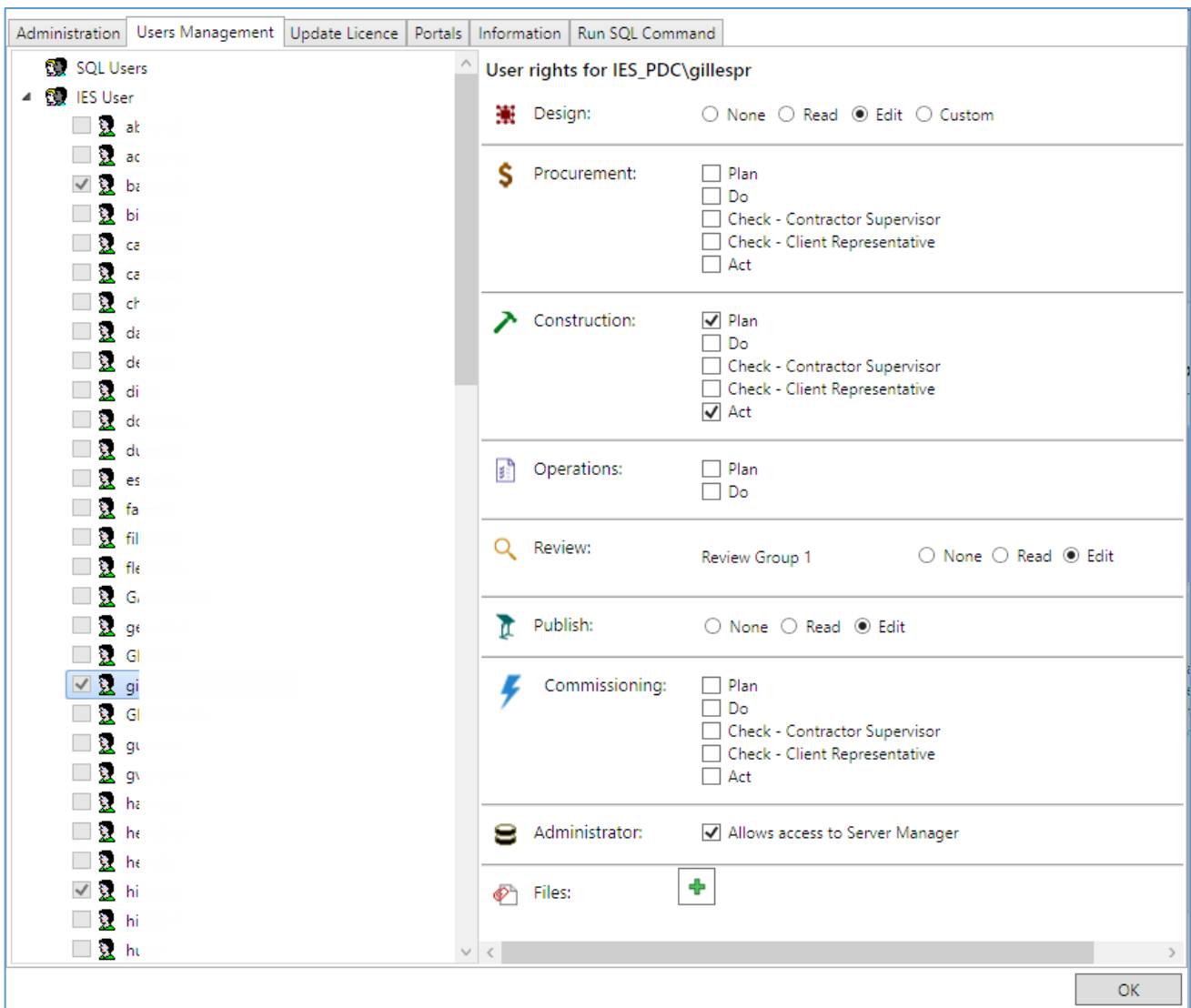
Repeat this step 3 for all users. There are options to copy a user's assigned rights, and paste it to another user via the right click which can speed up adding many users.

Ensure at least 1 user has the "Administrator" right which allows access to this form.

4. Remove the BUILTIN\Users user

After adding all the users, remove the BUILTIN\Users SQL user. This will restrict the logins to the ones you specified in Step 3.

To do this, open Management studio.

Expand the tree on the left through

<Server Name> - Databases - <Database Name> - Security – Users

Right click on BUILTIN\Users and delete. This will remove this user from the database.

To re-add this user use Management studio or run the command

Exec spSetupDatabaseTrusted 1

SQL Authentication

In SQL Authentication, a SQL User is created and added to the DAD database. When you login with this user, then you can add more SQL Users. This user is (by default)
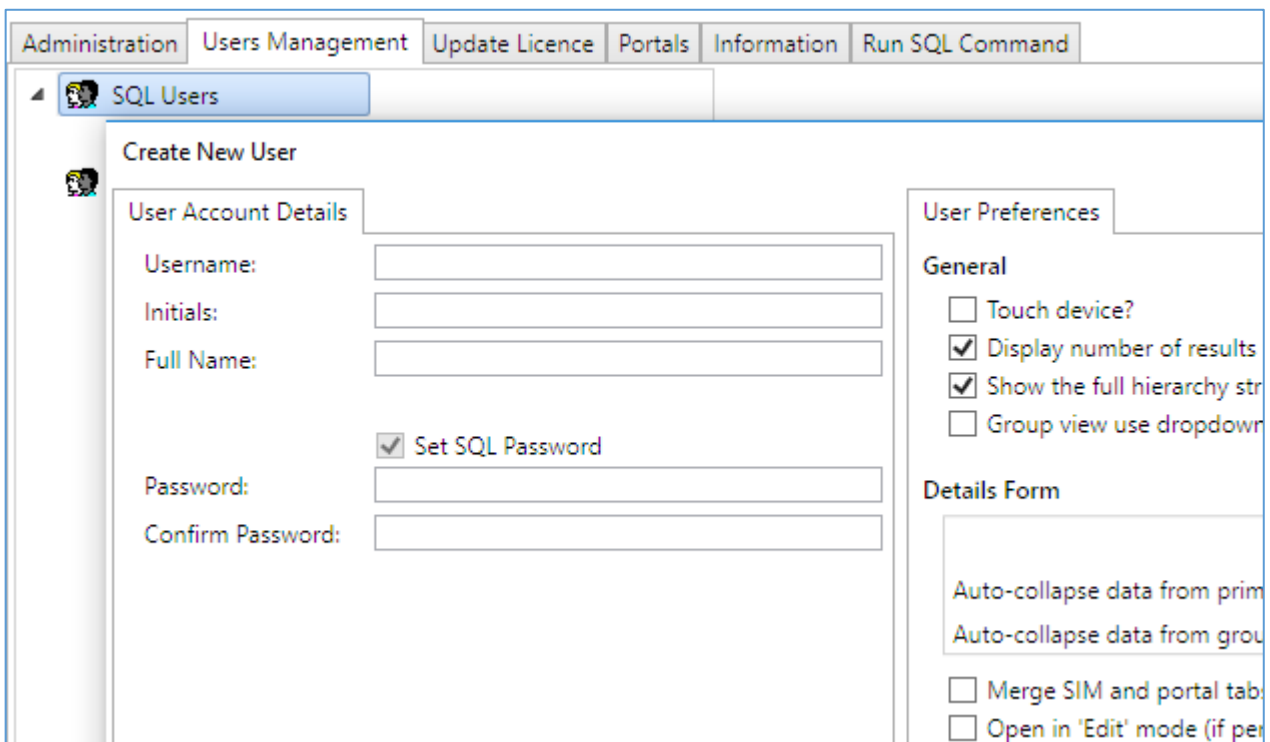
> Name: DAD

> Password: dadpw1!

This user is just an administration user. To create other SQL Users log into DAD using the name and password above.

From the Database Details button, select Users Management.

Right-click on SQL Users, and create each user by completing the form shown below. The password must be complex enough to meet SQL security, and can be changed afterwards.