

*AASHTOWare BrDR 7.5.0*

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*Getting Started*

*Getting Started with Active Directory in BrDR*

## Getting Started with Active Directory in BrDR

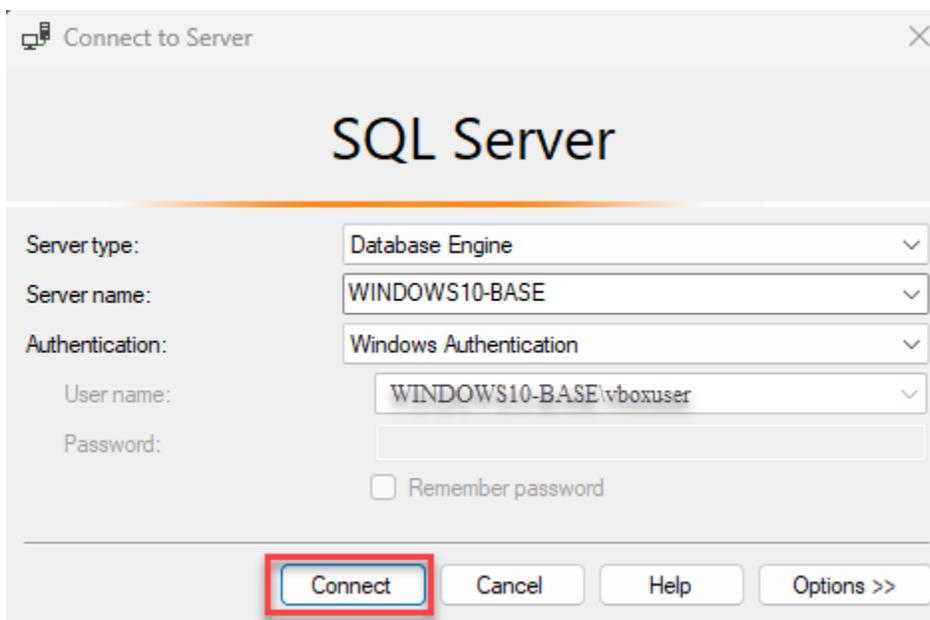
### Topics Covered:

- Manage user permissions in SQL Server
- Manage users inside of BrDR
- Connect to BrDR using a Active Directory User

### Manage user permissions in SQL Server

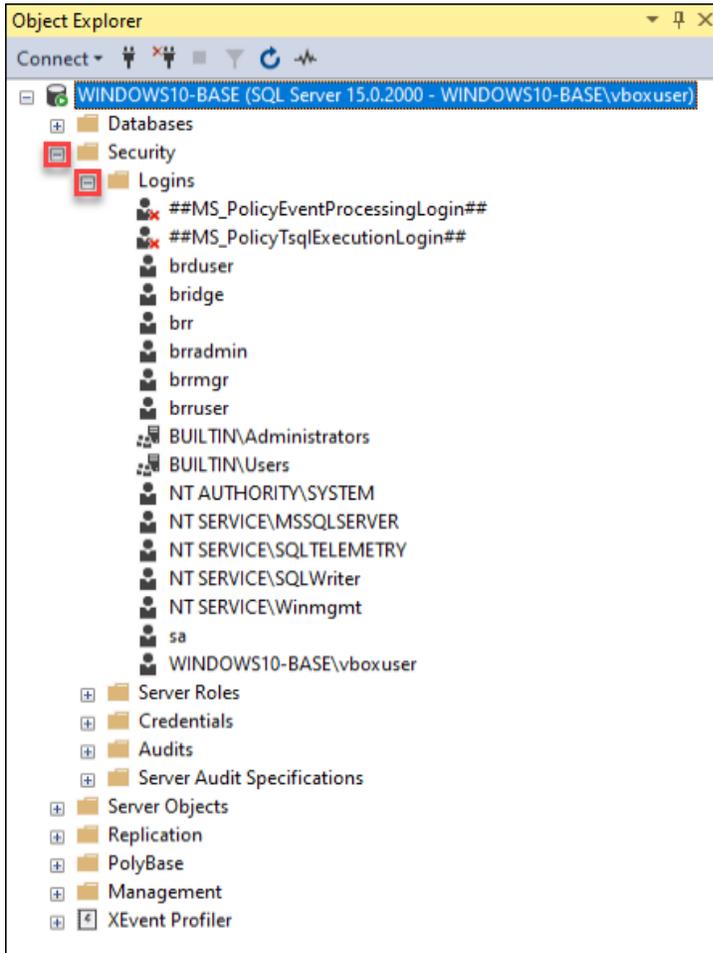
#### Individual User

First ensure that the latest versions of SSMS and SQL Server are installed. Please refer to our other guide covering that topic if needed. Then start SSMS. On the **Connect to Server** window as shown below, the **Server Name** should match the name of the desired computer or host server. Click **Connect**.



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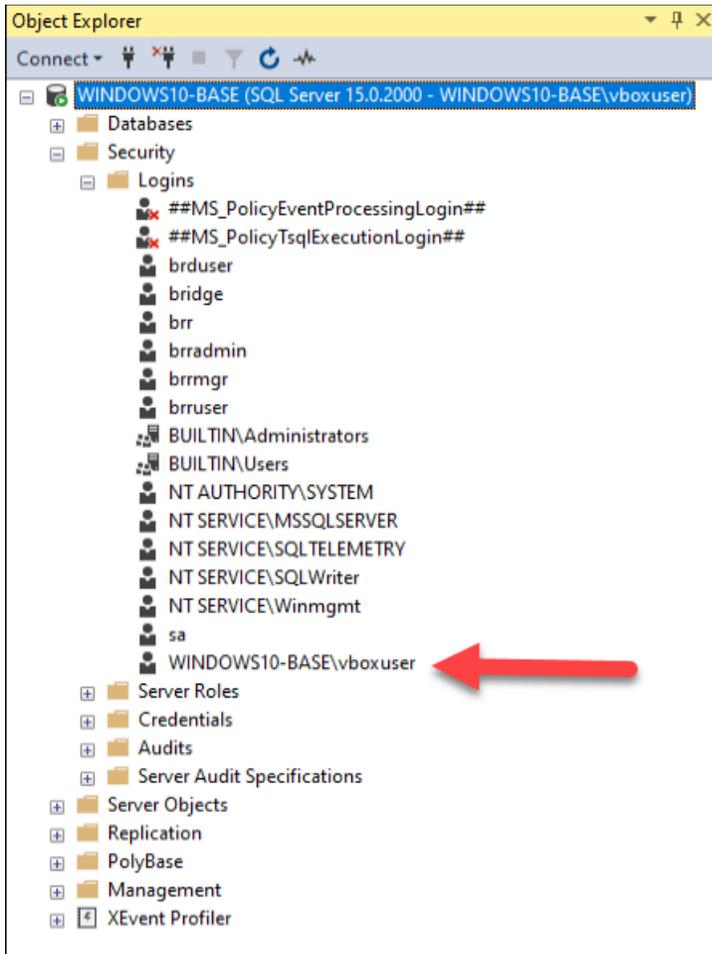
Once the connection to the desired instance of SQL Server has been established, click the plus signs next to **Security** and then next to **Logins** to see a list of logins.



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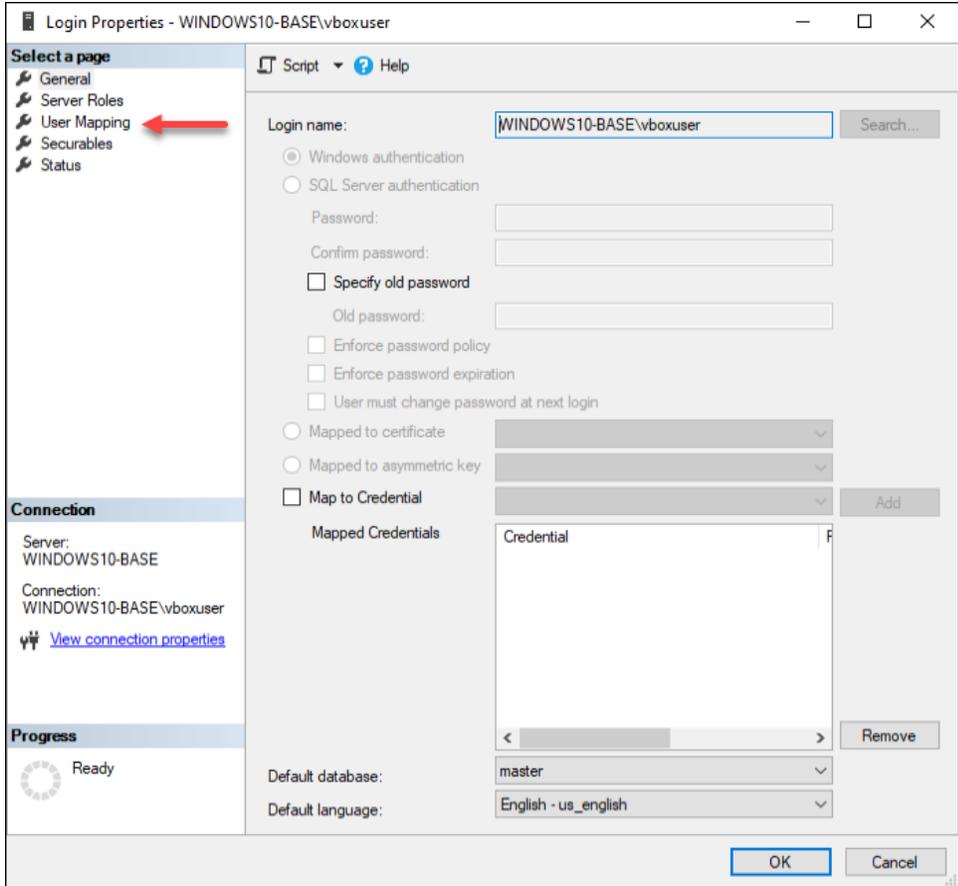
Next find the desired Windows user. This should be the name of the local machine or domain followed by a backslash followed by the windows username. Once found please double click on that login.

If the desired login is not found, you will need to add that login. To create a new login, right-click the Security folder, point to New, and select Login.



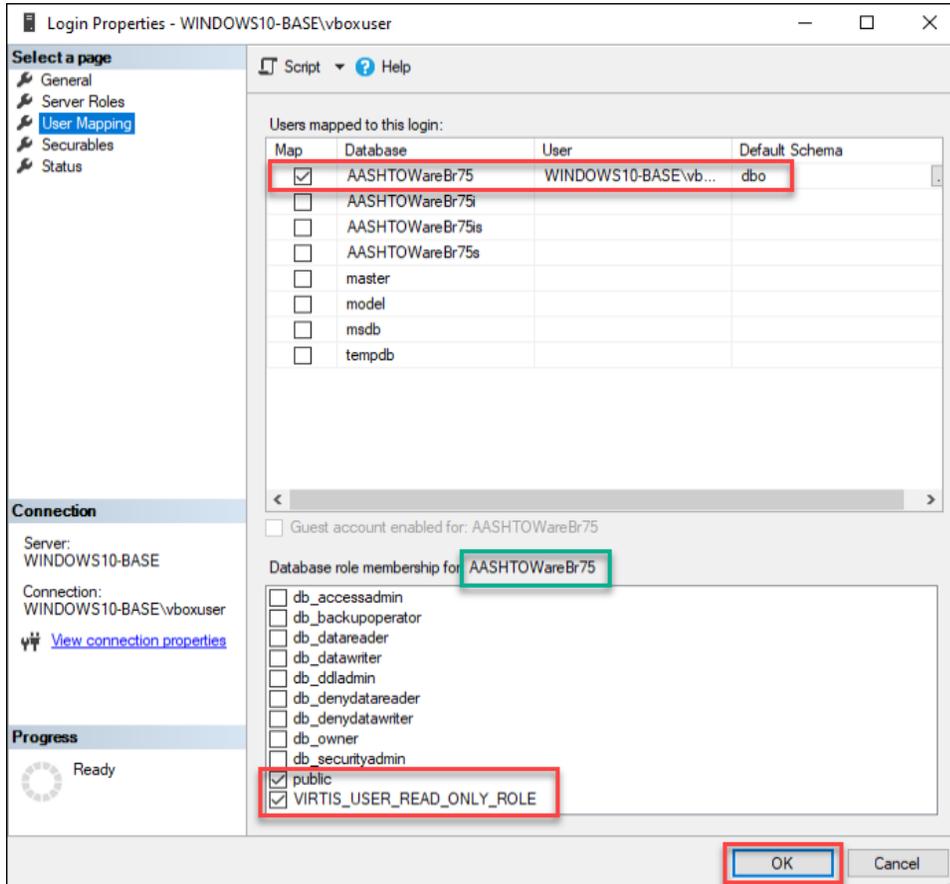
Next click the **User Mapping** page.

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## Getting Started with Active Directory in BrDR

Next click the **Map** checkbox next to the desired **Database**. Also check the **VIRTIS\_USER\_READ\_ONLY\_ROLE** checkbox. Note that it says the name of the intended database in the place of the green box. Repeat this process for each desired database that the user should have access to. Then click **OK**.



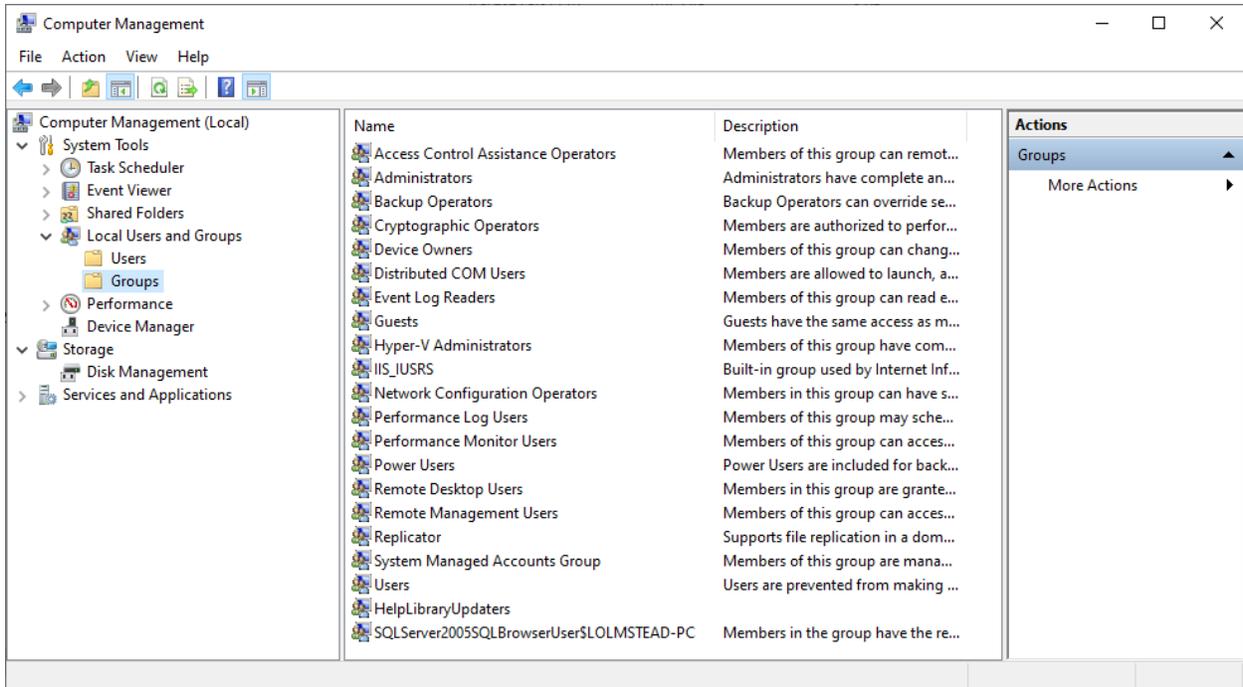
Once this action has been performed for each desired user and database to which access is required, exit SSMS and continue to the **Managing users inside of BrDR** chapter of this guide.

### User Group

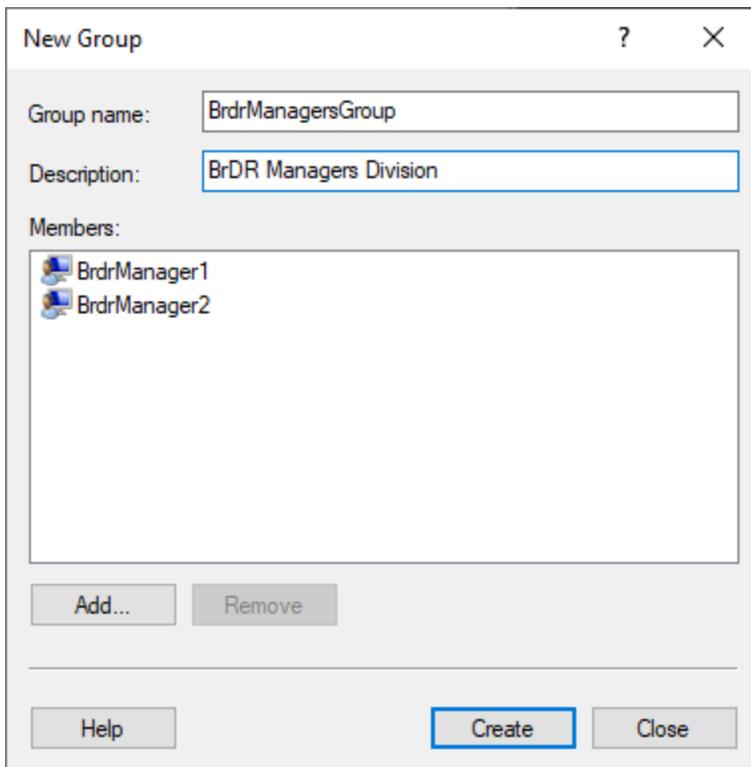
Though this is not a comprehensive guide on the subject, it is also possible to create an active directory user group and to control database access on a per group basis. This solution is like the above-covered process but using Active Directory Groups instead of users. This can affect multiple users at once and allows a much more scalable solution for access management.

From the **Start Menu** type in **Computer Management** and open the application. Expand **System Tools** and **Local Users and Groups** in the **Computer Management** tree.

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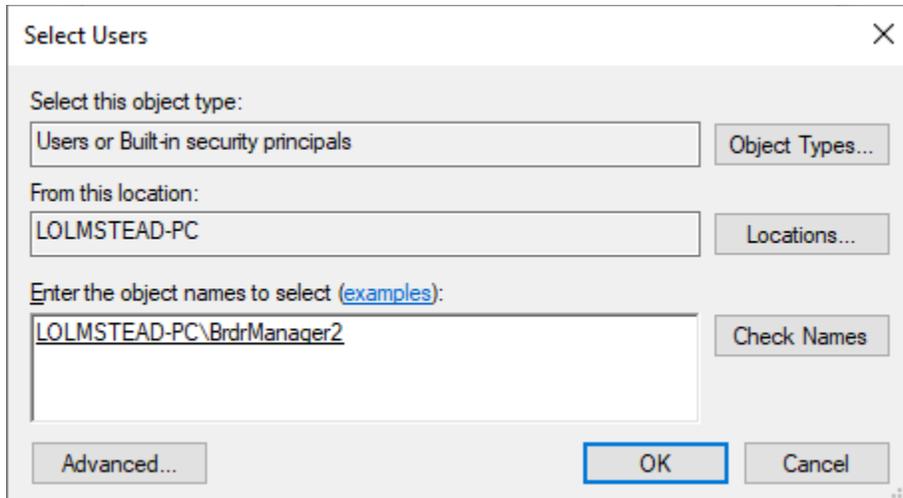
Right click on the **Groups** folder select **New Group...** from the dropdown menu.



Enter the name and description of the group in the fields shown.

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To add members to the group, click the **Add...** button and enter a username in the **Enter the object names to select (example):** text box. Click check names to ensure that the information was entered correctly then click **OK** to continue.



Click the **Create** button on the **New Group** window then click the **Close** button.

Next, open SSMS and expand the **Security** and **Logins** items in the tree. Right click on **Logins** then select **New Login** from the dropdown menu.

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Login - New

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name:  Search...

Windows authentication

SQL Server authentication

Password:

Confirm password:

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential  Add

Mapped Credentials

Credential	Provider
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Remove

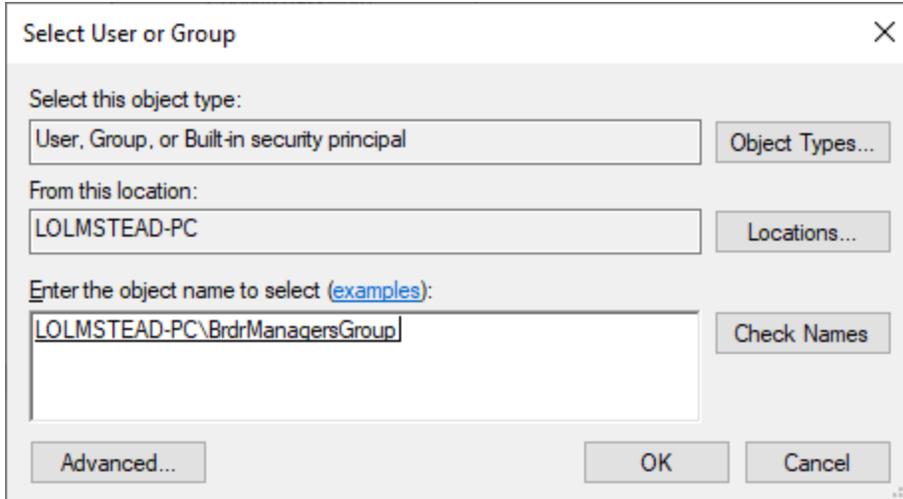
Default database: master

Default language: <default>

OK Cancel

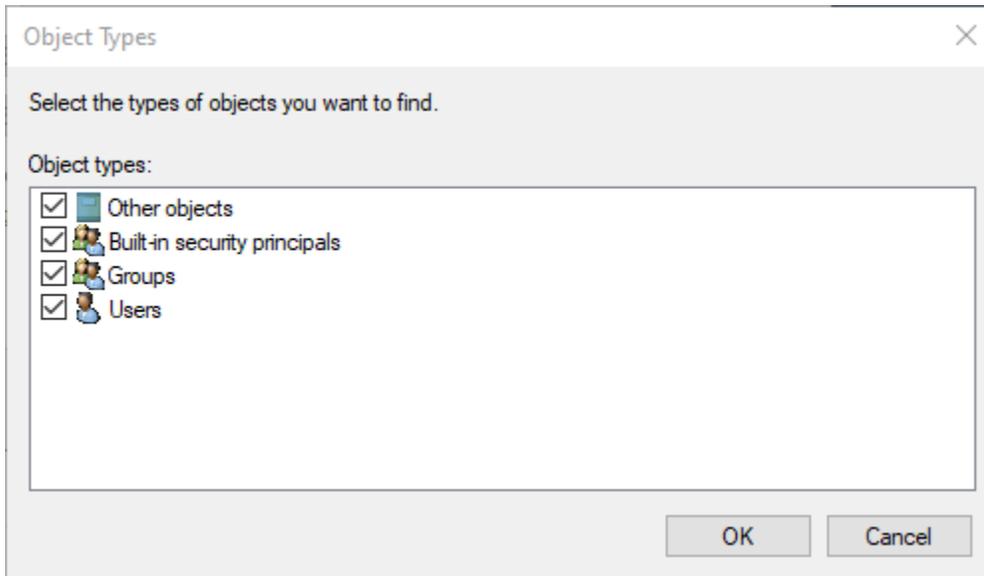
Click the **Search...** button next to **Login name** to open the **Select User or Group** window.

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Enter the name of the group name in the **Enter the object name to select (examples)** text box then click the **OK** button.

If the group does not appear during the search, click the **Object Types...** button and ensure that the **Groups** box is checked.



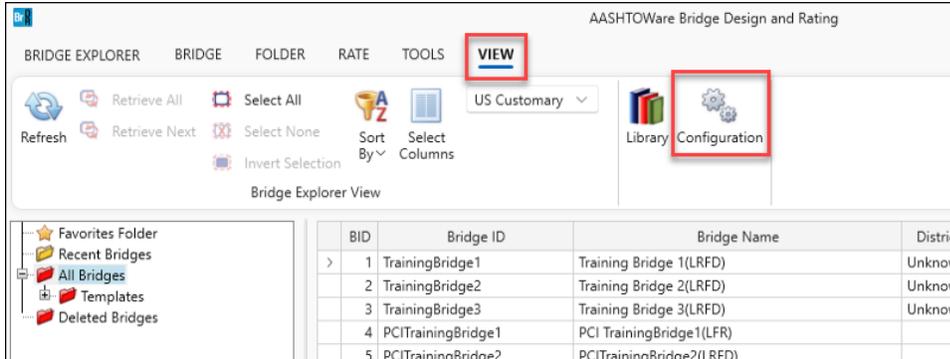
Next, select **User Mapping** and map the group to the appropriate database as was described in the previous section.

Before a group member can login to BrDR, a user account must be created for each group member inside of BrDR as described in the next section.

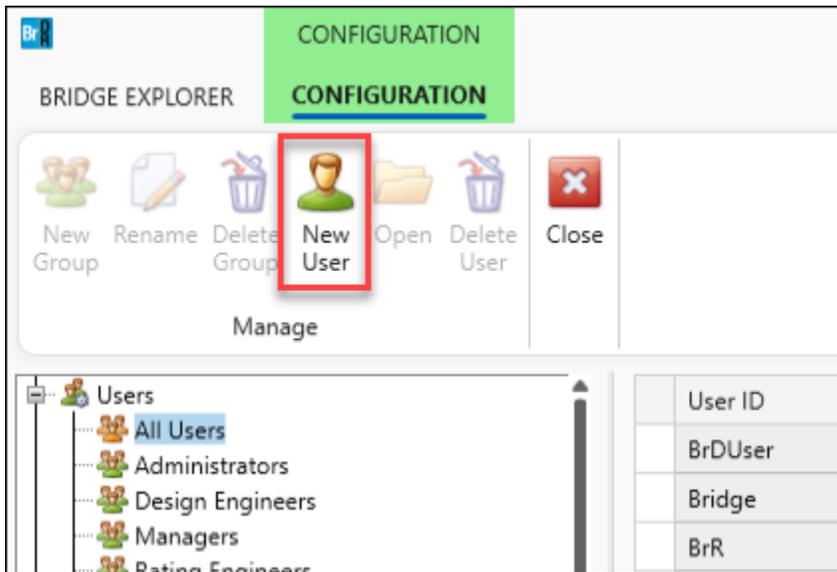
## Getting Started with Active Directory in BrDR

### Managing users inside of BrDR

Once logged into BrDR using an existing administrator user, click the **VIEW** tab in the ribbon then click the **Configuration** button to open the configuration window.



Next click the **New User** button as shown below.



Next fill in the information below in the fields shown in the red box. Note that the **Username** shown in the **UserID** field must exactly match the windows username (including the computer/domain name). Assign the new user to the appropriate group. For this tutorial we are using the Administrators group. The **First Name** and **Last Name** fields are required. The **User is Active** checkbox must also be checked for the user to have access.

## Getting Started with Active Directory in BrDR

User: New User

User is active

User ID: DomainName/Username

First name: FristName

Last name: LastName

Phone 1:

Phone 2:

Fax:

Address:

City:

State:

Zip:

Email 1:

Email 2:

Member of

Administrators

Not a member of

Design Engineers

Managers

Rating Engineers

Routing Engineers

<<

>>

To add the user as a member of the **Administrators** group, highlight the **Administrators** group name on the right-hand side. Then click the << button shown in the below image in a red box. If this step is missed and the rest of the guide is carried out completely, it could result in a user that is able to login to BrDR but upon logging in has no access privileges and cannot view any bridges. Existing users group membership can be altered by logging back in as an existing administrator user and altering the new user(s) **Membership**.

Member of

Not a member of

Administrators

Design Engineers

Managers

Rating Engineers

Routing Engineers

<<

>>

Save

Close

Then click **Save**.

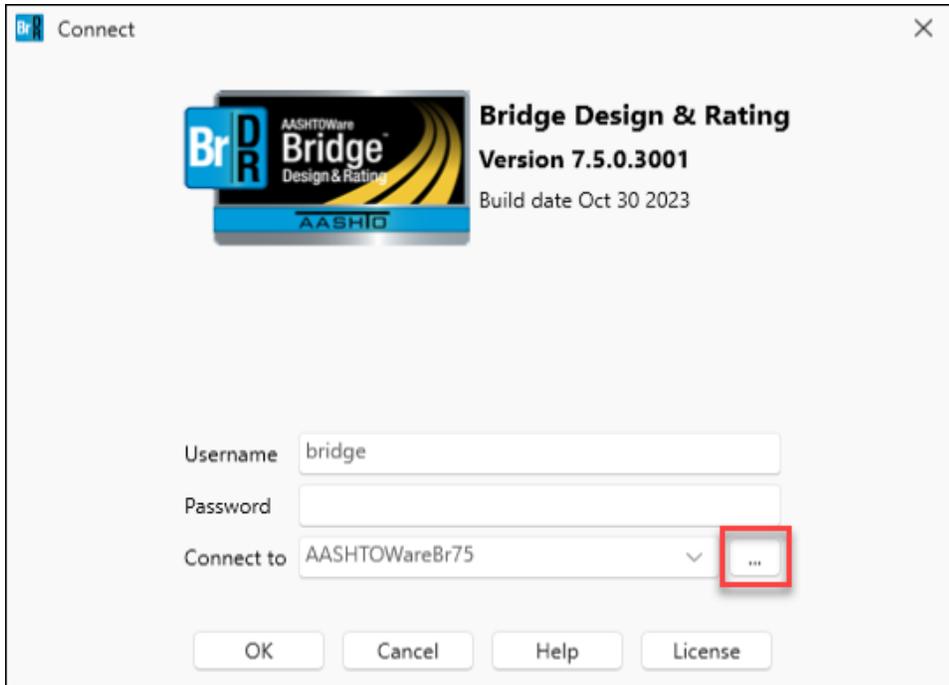
Please note, if the Groups feature is being used, a BrDR user account must be created for each member of the group.

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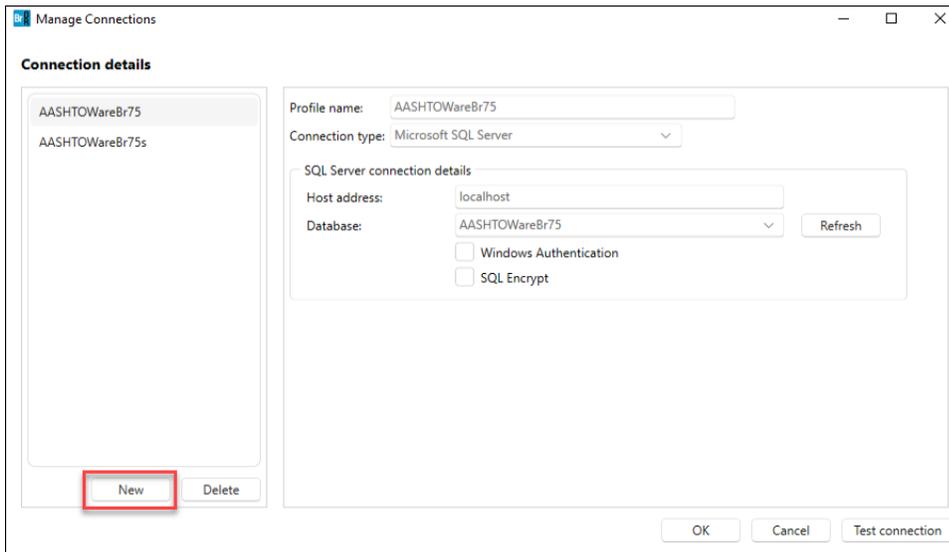
Connect to BrDR using a Active Directory User

Connecting to SQL Server

From the **Connect** window, please click the ellipse shown in the red box.

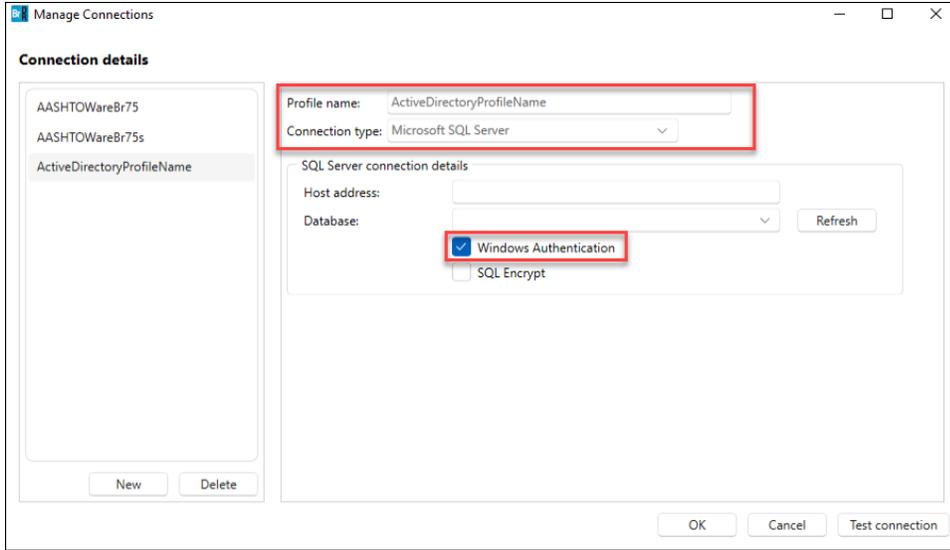


From the **Manage Connections** window, start by clicking the **New** button shown below.

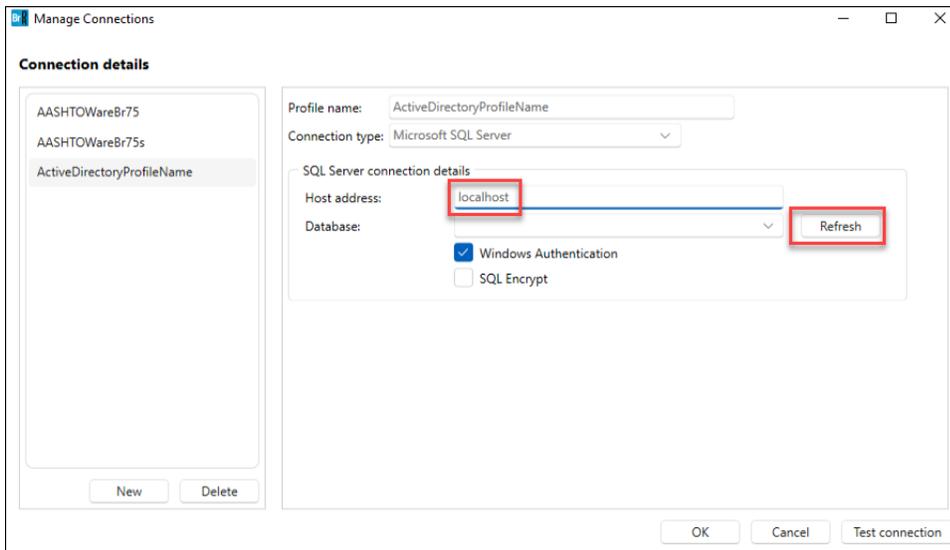


Change the **Profile Name** to something appropriate. Select the appropriate **Connection Type** and ensure that the **Windows Authentication** checkbox is checked as shown below.

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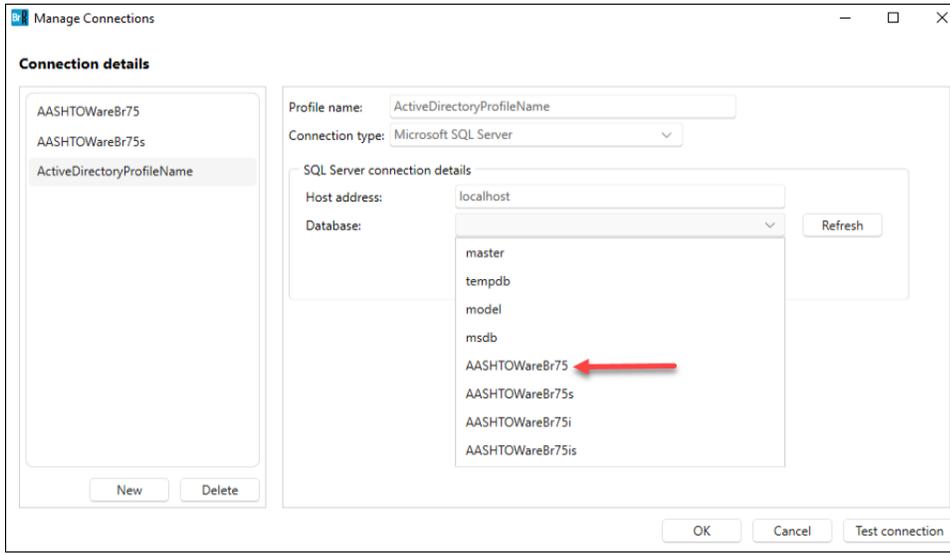


Next please enter the appropriate host address into the **Host address** textbox and click the refresh button.

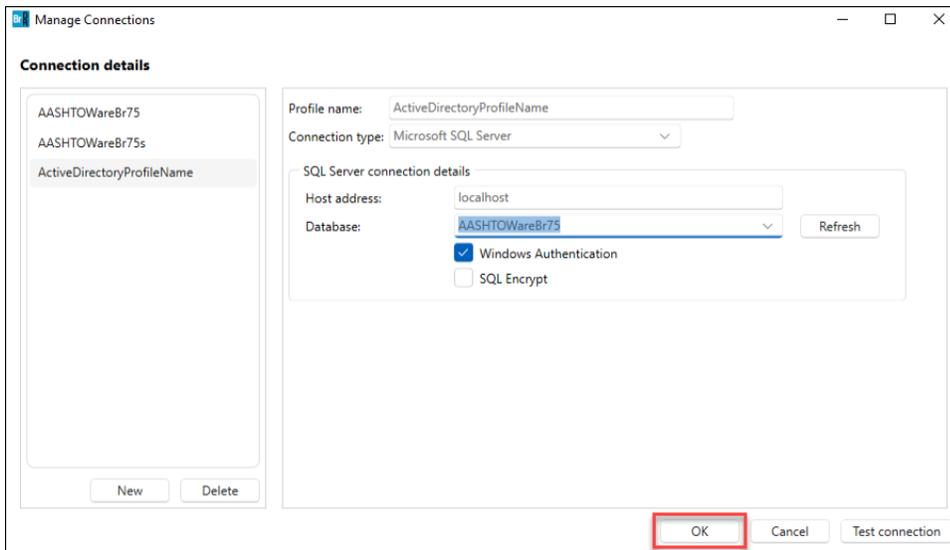


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This will refresh and open the **Database** dropdown menu. Select the desired database.

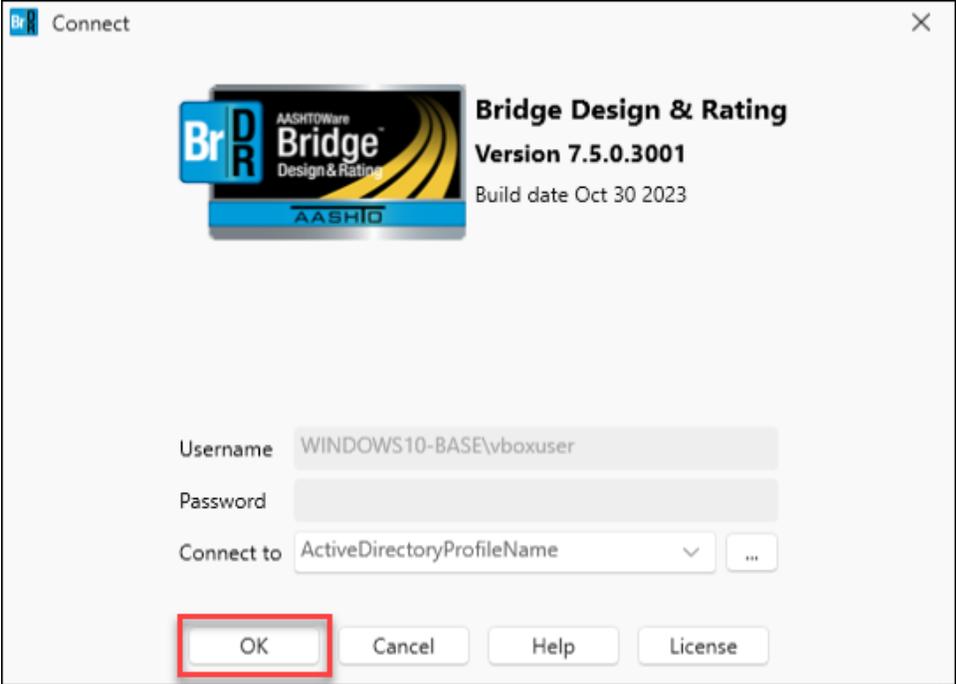


Click **OK**.



Now from the Connect screen select the Profile name entered previously in the Connect to select menu. Note the windows user following the name of the computer/domain name. This **Username** must exactly match the **User ID** entered in the **Managing users inside of BrDR** portion of this guide as well as the **Manage SQL Server User Permissions** portion of this guide. If any of those values do not match, BrDR will fail to launch. If that happens, please refer to those portions of this guide. Finally, note that both the username and password are greyed out and the password field should appear to be blank, this is expected behavior since these fields are being managed automatically for the user via the integration with Active Directory. Click **OK** to connect to BrDR.

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### [Connecting to BrDR using Azure Active Directory](#)

A user can also connect to BrDR using Azure Active Directory.

If the user is currently logging in using Active Directory, selecting the **Windows Authentication** option in the **Manage Connections** window will automatically populate the Username field with the current user's Active Directory login information.

Configuration of Azure Active Directory is beyond the scope of this tutorial.

