

# IlabServiceBroker Database

[IlabServiceBrokerDatabase.htm - uqlpayne 22 Aug 2013]

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## Requirements

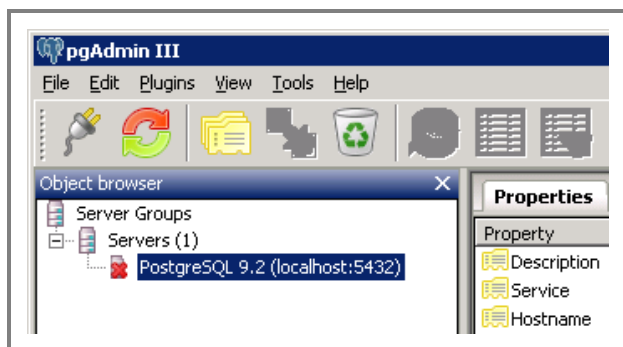
- PostgreSQL 9.2 is installed and running.
- The *UQ-iLab-ServiceBroker-Java* GitHub repository has been downloaded as a ZIP file from:

<https://github.com/uqlpayne/UQ-iLab-ServiceBroker-Java>

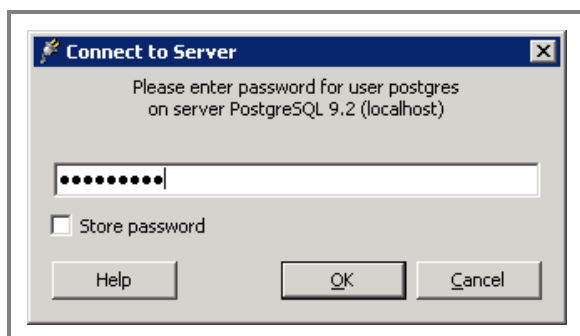
## PostgreSQL pgAdmin III

- Run the PostgreSQL *pgAdmin III* program.

In the *Object browser* panel, right-click *PostgreSQL 9.2 (localhost:5432)* and select *Connect* from the popup menu to display the *Connect to Server* window.

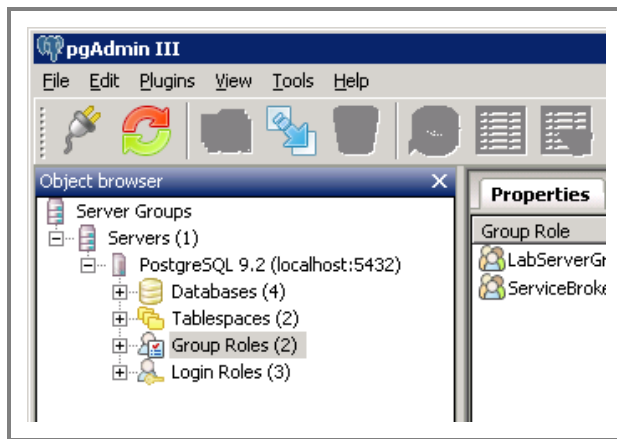


Enter the password for the user *postgres* and click the *OK* button.

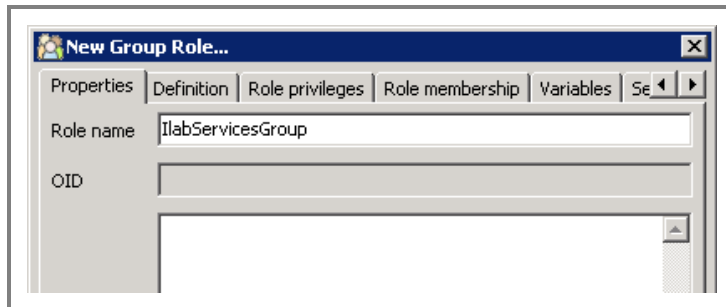


## Create Group Role

- In the *Object browser* panel, right-click *Group Roles* and select *New Group Role...* from the popup menu to display the *New Group Role...* window.



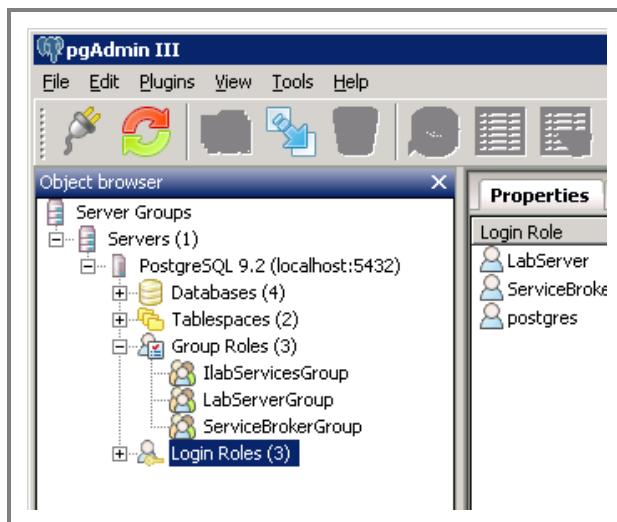
For *Role name*, enter `IlabServicesGroup`.



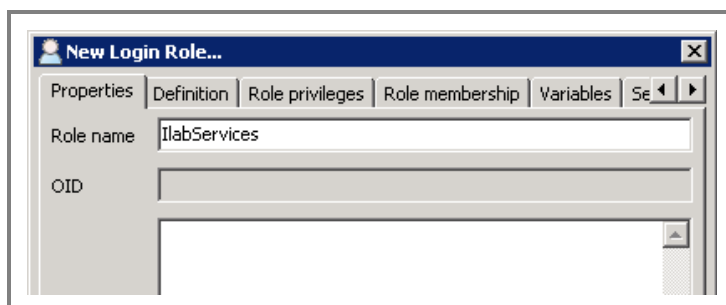
Click the *OK* button to close the *New Group Role...* window.

## Create Login Role

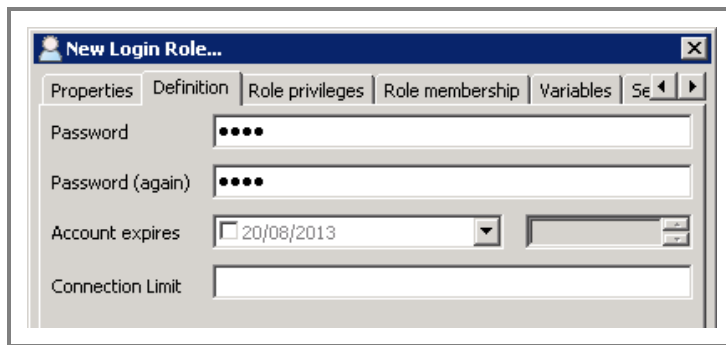
- In the *Object browser* panel, right-click *Login Roles* and select *New Login Role...* from the popup menu to display the *New Login Role...* window.



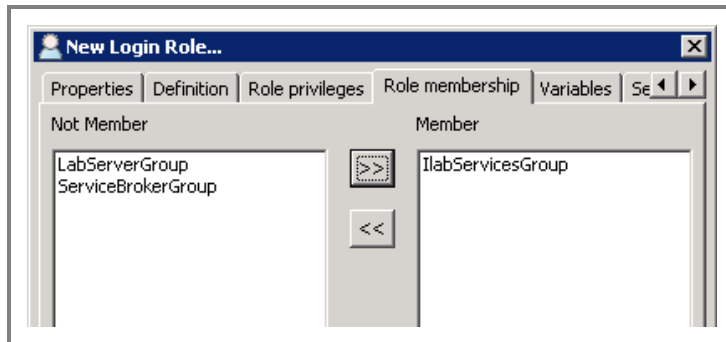
Select the *Properties* tab. For *Role name*, enter `IlabServices`.



Select the *Definition* tab. For *Password* and *Password (again)*, enter `ilab`.



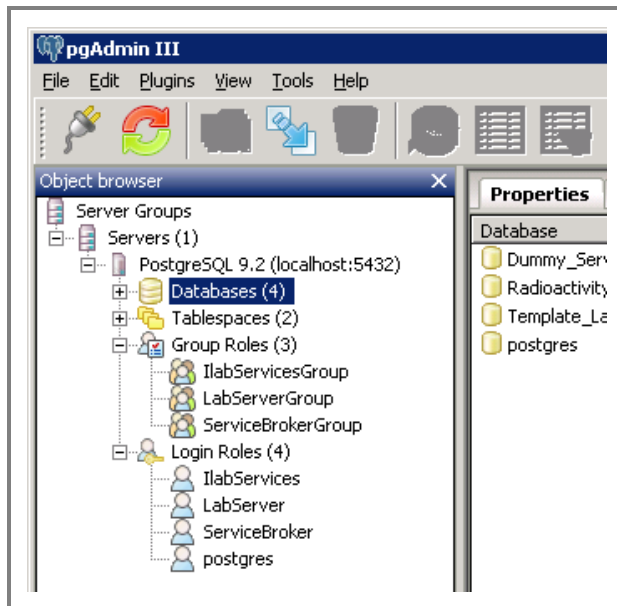
Select the *Role membership* tab. In the left panel under *Not Member*, select *IlabServicesGroup* and click the >> button.



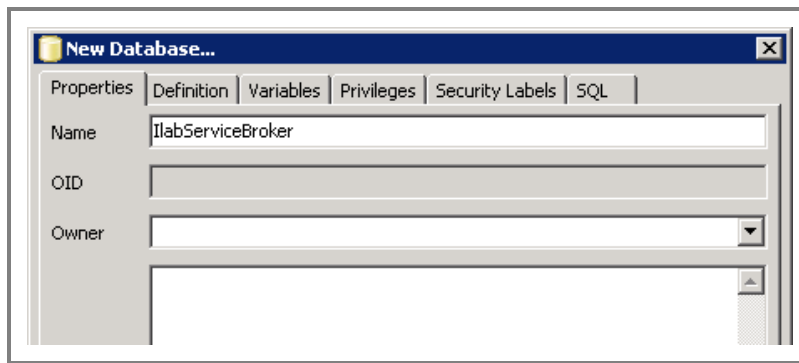
Click the OK button to save the changes and close the *New Login Role...* window.

## Create Database

- In the *Object browser* panel, right-click *Databases* and select *New Database...* from the popup menu to display the *New Database...* window.

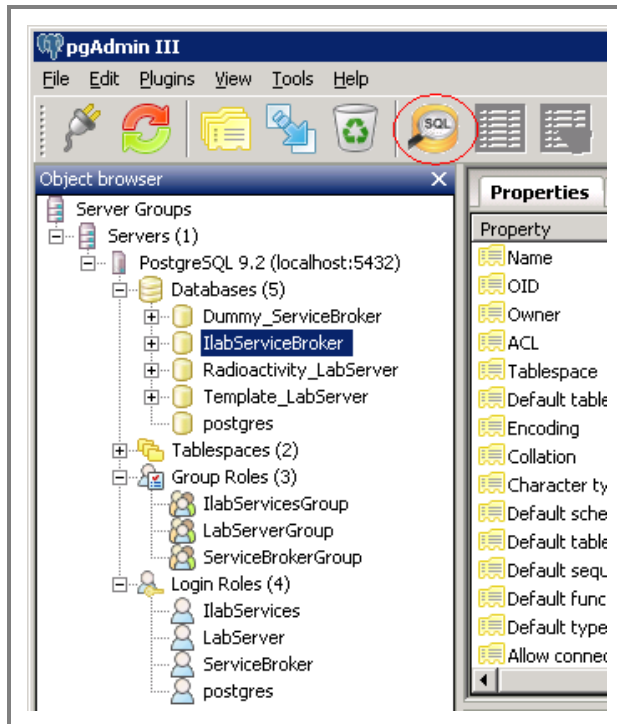


Select the *Properties* tab. For *Name*, enter *IlabServiceBroker*.

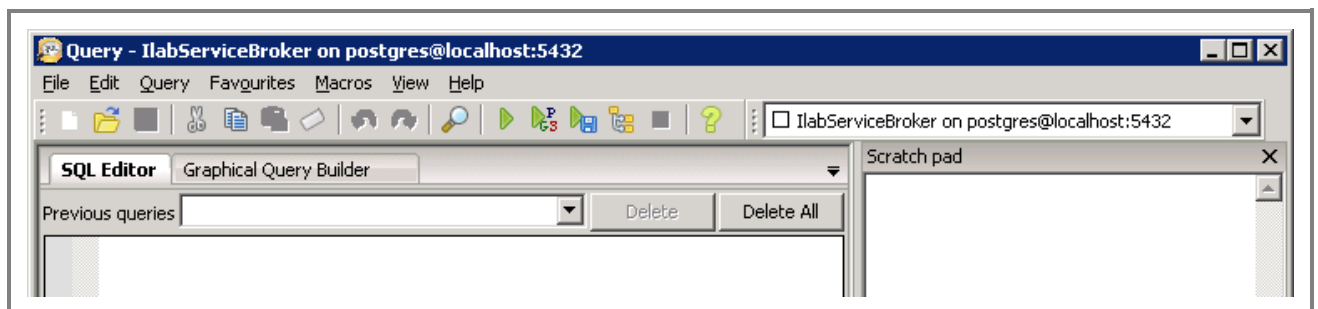


Click the **OK** button to save the changes and close the *New Database...* window.

- In the *Object browser* panel, under *Databases*, click *IlabServiceBroker* and then click the *Execute arbitrary SQL queries* toolbar button to open a *Query* window.



Check that the *IlabServiceBroker* database is selected in the dropdown list. If not, tables and functions will be created or overwritten in the selected database.



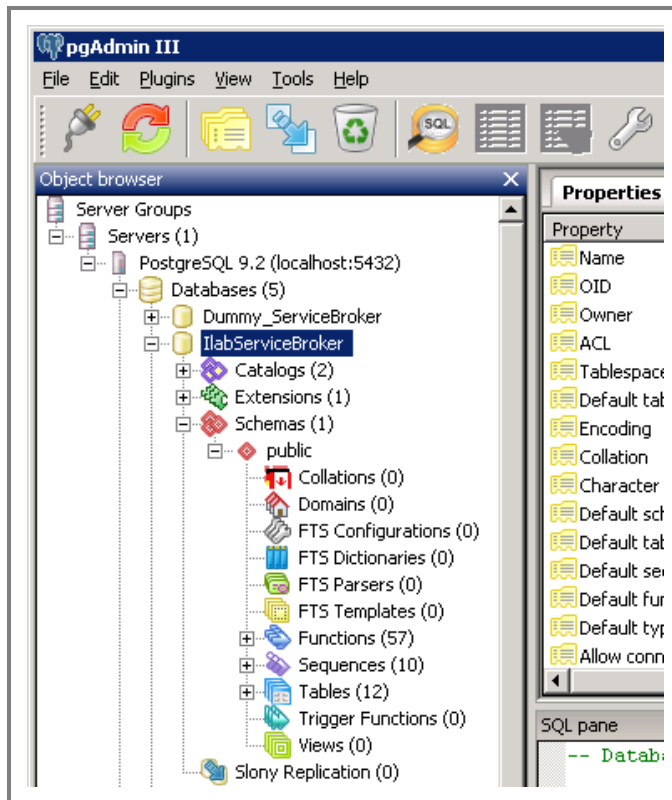
For each of the following SQL scripts in the *UQ-iLab-ServiceBroker-Java/Database/PostgreSQL* folder, in the order shown, execute the query by selecting *Query->Execute* from the menu.

1. *IlabServiceBroker\_Tables.sql*
2. *ProcessAgent\_Tables.sql*
3. *IlabServiceBroker\_Procedures.sql*
4. *ProcessAgent\_Procedures.sql*
5. *IlabServiceBroker\_Defaults.sql*

All queries should complete successfully producing various results in the *Output pane*. Close the *Query* window.

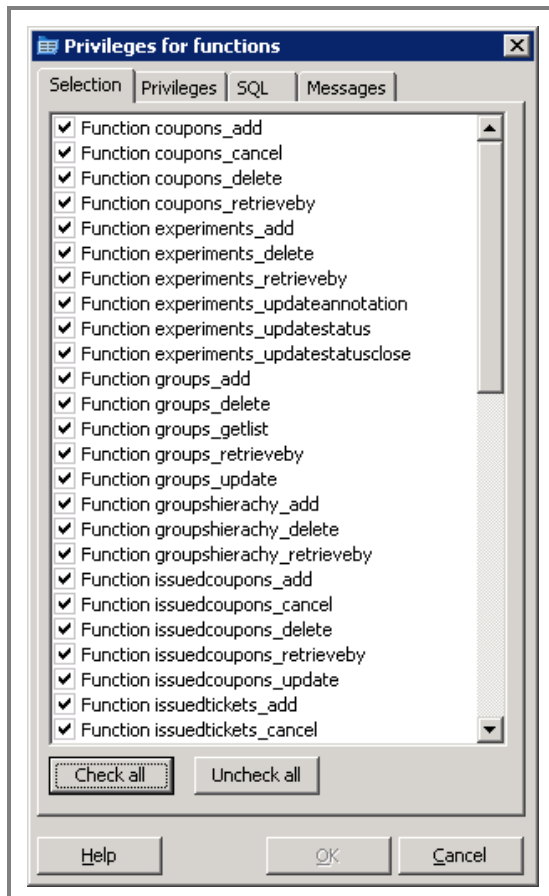
## Update Privileges

- In the *Object browser* panel, expand the *IlabServiceBroker* node and then expand the *Schemas* node. Finally, expand the *public* node so that *Functions*, *Sequences* and *Tables* are visible.



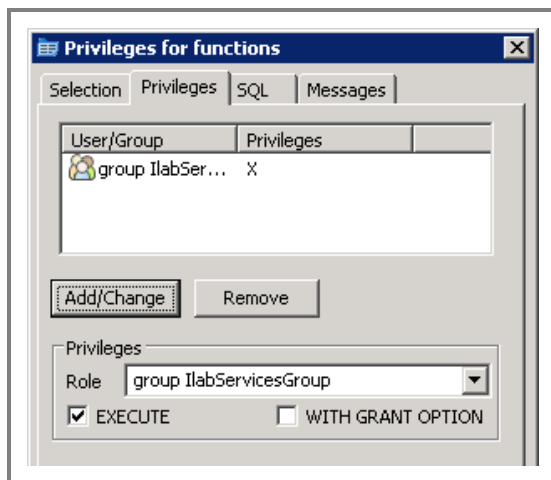
Right-click *Functions* and select *Grant Wizard...* from the popup menu to display the *Privileges for functions* window.

Select the *Selection* tab and click the *Check all* button.

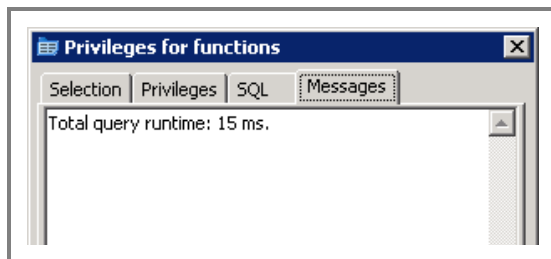


Select the *Privileges* tab. In the *Privileges* field, select *group IlabServicesGroup* from the dropdown list and check *EXECUTE*.

Click the *Add/Change* button.



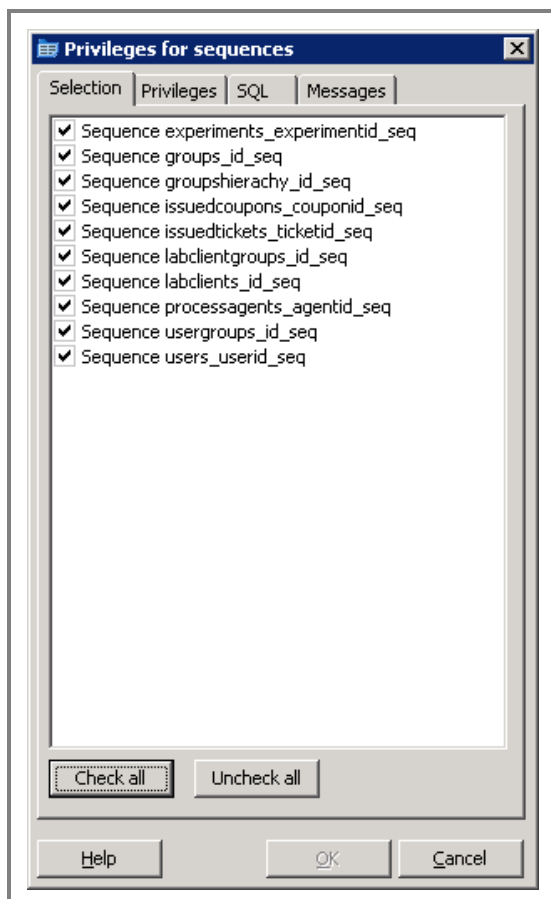
Click the *OK* button to save the changes.



Click the *Done* button to close the *Privileges for functions* window.

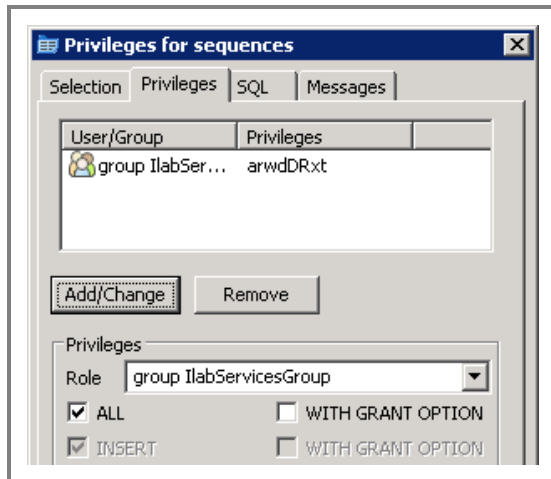
- In the *Object browser* panel, right-click *Sequences* and select *Grant Wizard...* from the popup menu to display the *Privileges for sequences* window.

Select the *Selection* tab and click the *Check all* button.

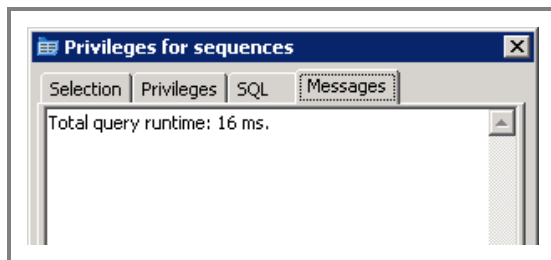


Select the *Privileges* tab. In the *Privileges* field, select *group IlabServicesGroup* from the dropdown list and check *ALL*.

Click the *Add/Change* button.



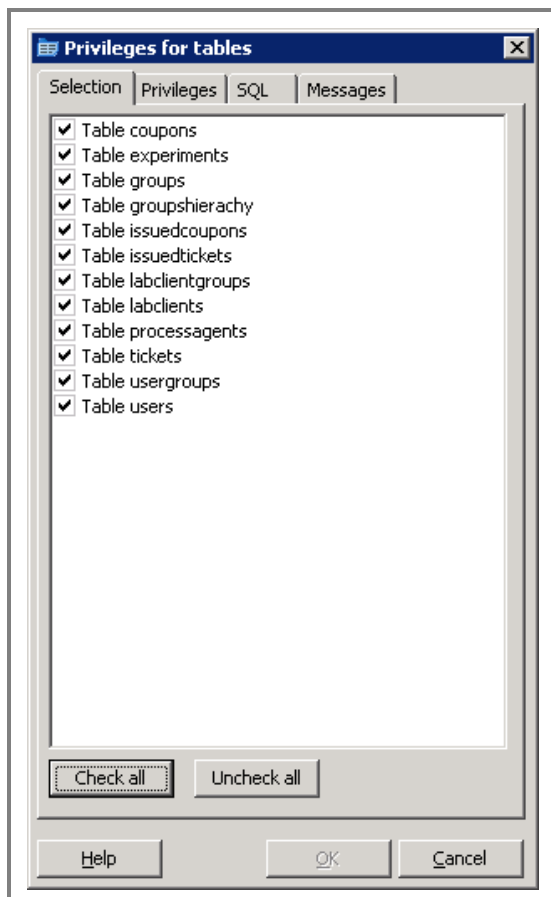
Click the *OK* button to save the changes.



Click the *Done* button to close the *Privileges for sequences* window.

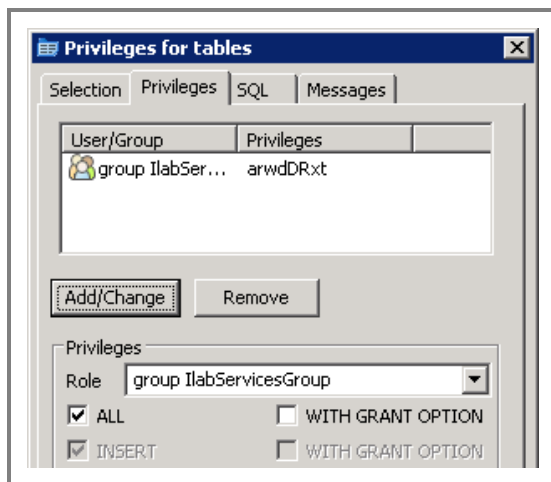
- In the *Object browser* panel, right-click *Tables* and select *Grant Wizard...* from the popup menu to display the *Privileges for tables* window.

Select the *Selection* tab and click the *Check all* button.

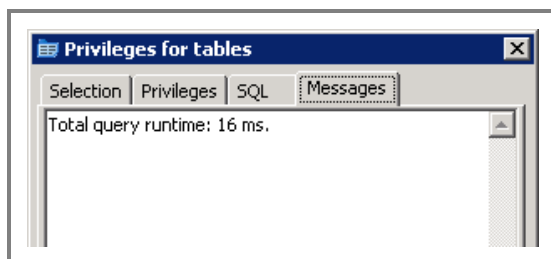


Select the *Privileges* tab. In the *Privileges* field, select *group IlabServicesGroup* from the dropdown list and check *ALL*.

Click the *Add/Change* button.



Click the *OK* button to save the changes.



Click the *Done* button to close the *Privileges for tables* window.

## What's Next

The *ExperimentStorage Database* tutorial (see [ExperimentStorageDatabase.pdf](#)).