<u>Data Quality</u> <u>Development Services</u> <u>OLTP</u>

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SSIS Blog

Helpful information and examples on how to use SQL Server Integration Services.

SSIS Catalog Access Control Tips

Ke Yang 19 Mar 2012 11:02 PM

SSIS 2012 introduces significant improvements in how SSIS packages are deployed, configured and managed in a centralized SSIS catalog. The SSIS catalog corresponds to a user database, called SSISDB. You can secure the SSIS objects in the SSIS catalog (folders, projects, environments, operations/executions) using a combination of SQL security and security capabilities provided by SSIS. Months back, a friend asked on how to set SSIS catalog access control in a real world scenario. I'd like to share our thoughts here, see if it helps!

Briefly, consider below cases:

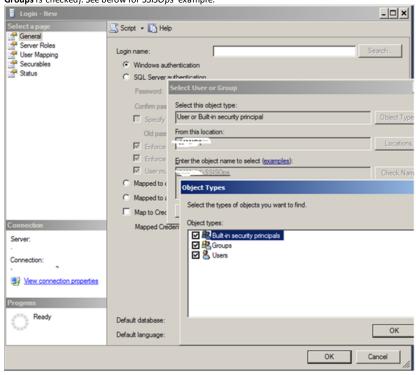
- 1. To allow a login to be able to read/execute only one project, but not able to access other objects (projects or environments) in a folder where the project is in:
 - a. Map it to a member of the SSISDB database role -- public. (This leverages SQL security mechanism.)
 - b. Grant it Read to the folder, and grant it Read/Execute to the project. (This uses SSIS Catalog security mechanism.)
- 2. To allow a login (user or group) to be able to read/execute all projects in a folder:
 - a. Map it to a member of the SSISDB database role -- public.
 - b. Grant it Read/Execute/Read Objects to the folder.
- 3. To allow a login to be able to do anything on SSISDB:
 - a. make it a member of the SSISDB database role -- ssis_admin.

If you already get it, you can stop the reading here :-) Otherwise, let us take a real world scenario for example. Consider below requirements:

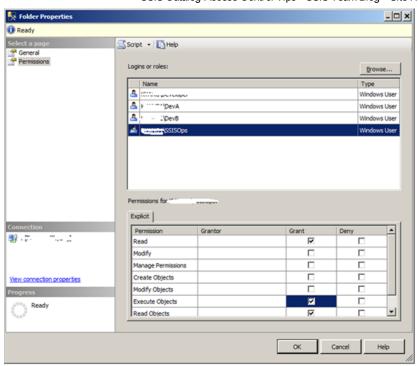
- Two groups of developers (Group DevA and DevB) and they must not be able to see each other deployed projects; DevA can
 only run packages in ProjectA, DevB can only run packages in ProjectB.
- 2. One group of SSIS operators (Group SSISOps) that can run packages in projects deployed by developers in both group DevA and DevB.
- 3. One group of SSIS administrators (Group SSISAdmins) that can do anything.

Below, we'll take steps to apply Case 1 to DevA and DevB, apply Case 2 to SSISOps, and apply Case 3 to SSISAdmins.

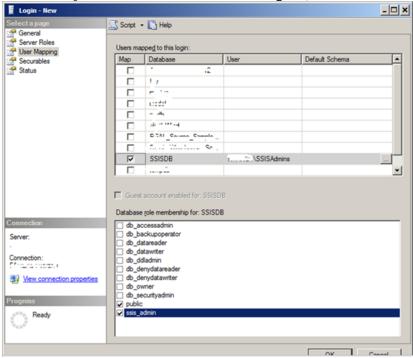
Create SQL Server Logins for the groups DevA, DevB, SSISOps (Note: make sure when you add the group, under Object Types –
Groups is checked). See below for SSISOps' example.



- a. Under User Mapping, click the checkbox for SSISDB.
- b. Map the login to be a member of **public** role.
- $2. \ \ \, \text{Right-click on each folder where the projects are in.}$
 - a. Choose Permissions.
 - b. Add *DevA*, *DevB*, grant **Read** permission. (**Note**: if you grant **Read Objects** permissions, then *DevA* and *DevB* would be able to read all projects/environments under this folder, which is not desired in this scenario.)
 - c. Add SSISOps, grant Read and Execute and Read Objects permissions. See below for SSISOps' example.



- 3. Right-click on each project.
 - a. Choose Permissions.
 - b. Click **Browse**, select *DevA* for *ProjectA*, select *DevB* for *ProjectB*.
 - c. Grant Read and Execute to the login.
- 4. Create a SQL Server Login for Group SSISAdmin.
 - a. Under **User Mapping**, click the checkbox for SSISDB.
 - b. Make sure this login is a member of the SSISDB database role ssis_admin, see below:



That's it!



Comments



19 Mar 2012 11:30 PM

Koen Verbeeck

Great blog post, thanks.

7 May 2012 6:50 PM



catalog

Your blog is great, SSIS when did it start? Is this the best way to start making different catalogs?



8 May 2012 8:56 AM

Ke Yang

What do you mean by "SSIS when did it start?"?

We support an in-stock catalog, SSISDB. To have different catalogs you may want to (and mean to) have different instances.



1 Jul 2013 4:11 AM

lack

I have followed step 2 to allow a login (user or group) to be able to read/execute all projects in a folder (although I have only allowed Read and ReadObjects permissions as I just want the user to be able to view).

The problem is I cannot view anything in [catalog].[executions] or [catalog].[operations].

I can see rows from packages, folders etc. but not executions or operations

Any clues how I can view [catalog].[executions] etc?