Migrating Exaquantum/ARA Databases

KB-0052-23

Document Summary	
Article Type	Knowledge Base
Products Affected	Exaquantum/ARA Migration
Versions Affected	All versions of Exaquantum/ARA
Function Affected	Exaquantum/ARA
Available Resolution	N/A
Audience	System Integrators and Administrators
Summary	How to perform basic configuration when migrating ARA databases to a new server.
Review Date	Document to be reviewed before March 2024

Blank Page

Table of Contents

Chapter 1 Introduction

The purpose of this document is to show System Integrators and Administrators the configuration and SQL permissions of the ARA databases, after a migration or a new installation of an old server.

1.1 Audiences

This guide is intended for System Integrators and Administrators.

Chapter 2 Restoring Old ARA Databases

As per standard installation and migration procedures you Install Exaquantum before ARA.

When migrating the ARA databases from one server to a new server. It is expected that the Exaquantum data is already restored and all online archives accessible and working before ARA is installed.

Exaquantum is required to have stopped as per standard procedure to install the ARA application. It is advisable to Stop Exaquantum when making any changes to the SQL databases and permissions.

It is a requirement if you are upgrading Exaquantum/ARA that the older version of Exaquantum/ARA server and website are uninstalled using the MS programs and features application.

To restore the ARA databases follow the below steps:

1. Log on as the local administrator

2. Open SQL Server Management Studio from start programs on the desktop of the server

3. Once connected expand the databases folder

4. Select tasks and backup on QApplicationData and QApplicationConfig databases

5. Save backups to another location, avoid using the default location if a backup schedule is already in place

6. Right click on the databases below and select tasks then choose delete

7. Tick Close all connections then select delete

8. Once deleted right click on databases folder and select tasks and then select restore

9. Restore databases QApplicationData and QApplicationConfig to the new server
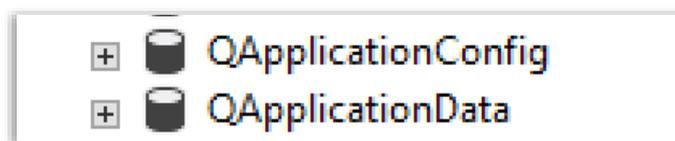
Note: The restoration of databases for ARA is not common as the first update job after restoring the databases is a full refresh and it will truncate the current data in QApplicationData and QApplicationConfig.

2.1 SQL Security

There may be a requirement to edit the current security configuration of SQL studio to remove or add users. QARAAdminGroup and QARAViewGroup are created and added to SQL during the install of Exaquantum/ARA.

1. Expand the Security folder in SQL studio

2. Expand the users folder and locate the QARAAdminGroup and QARAViewGroup accounts
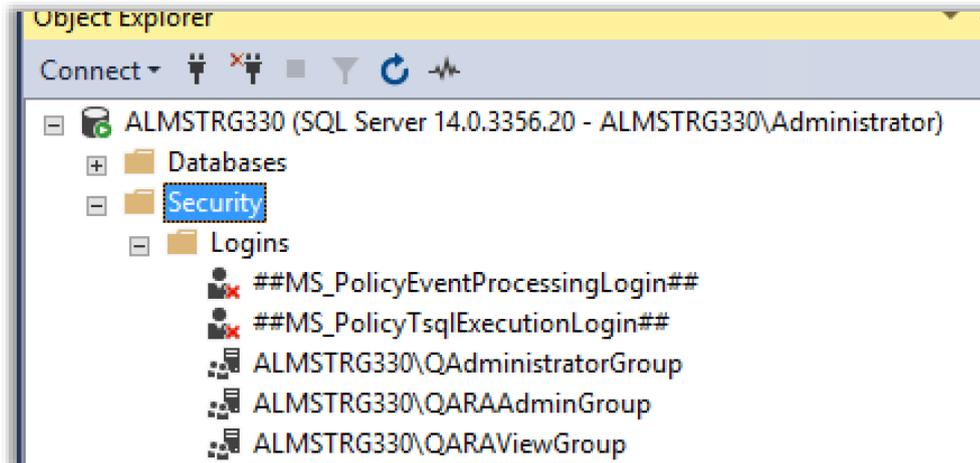
Make sure the QARAAdmin and QARAViewGroup are showing with the correct server name for new server.

If migrating from old server to a new server remove any other group related to ARA with old server name for these two ARA groups.

Chapter 3 ARA Group permissions

Once the databases are restored, the users and groups from the old system may still be logged in the security folder, for each of the databases. The permissions will need to be edited if the old users and groups exist.

During the install of ARA the user QARAViewUser with the groups QARAAdminGroup and QARAViewGroup will be automatically created, if it does not already exist. This user is employed by Reporting Services RDB and OLAP connections for access to all ARA data.
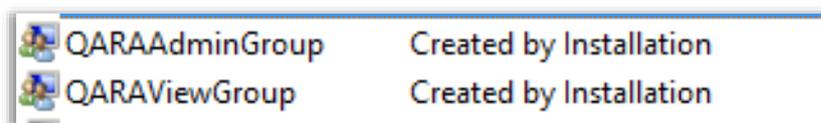
To edit the ARA database permissions follow the below steps:

1. Open SQL studio

2. Select QApplication data or QApplication Config database

3. Select the security folder

4. Expand Users folder
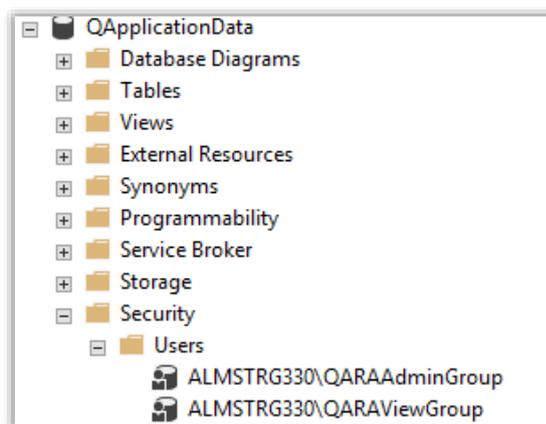
Ensure both QARAAdminGroup and QARAViewGroup are listed under the Users folder. If not, add them as required.

If you are migrating from a different server remove any users or groups that have old server name.

Chapter 4 ARA User Mappings

It may be a requirement to check the User Mapping of each group on the databases in SQL server to assign the QARAAdminGroup and QARAViewGroup correct memberships.

Right click on each group in turn.
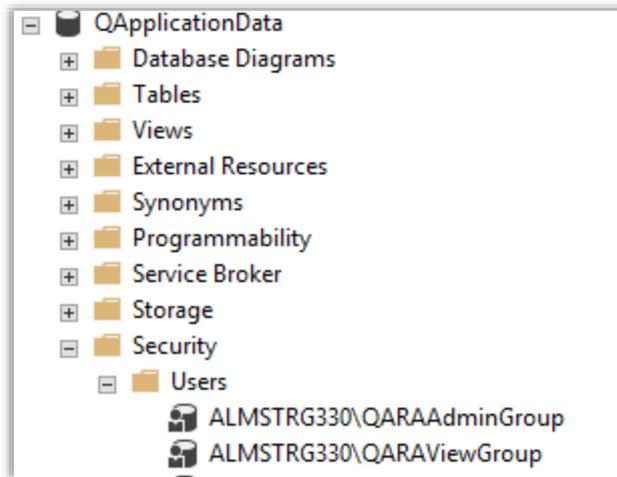
1.   Select properties
2.   Then select user mappings
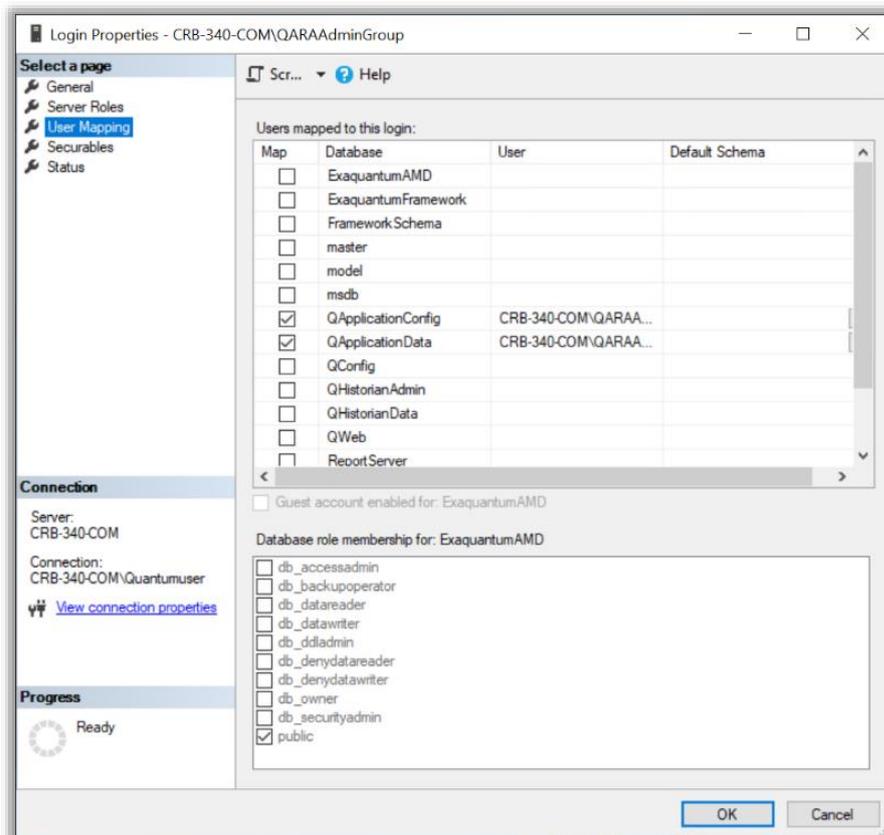
3. For the ARAAdminGroup make sure the following databases are selected
    a. QApplicationConfig
    b. QApplicationData
4. Make sure the following membership is selected
    a. db_owner

Role Members
☐ db_accessadmin
☐ db_backupoperator
☐ db_datareader
☐ db_datawriter
☐ db_ddladmin
☐ db_denydatareader
☐ db_denydatawriter
☑ db_owner
☐ db_securityadmin
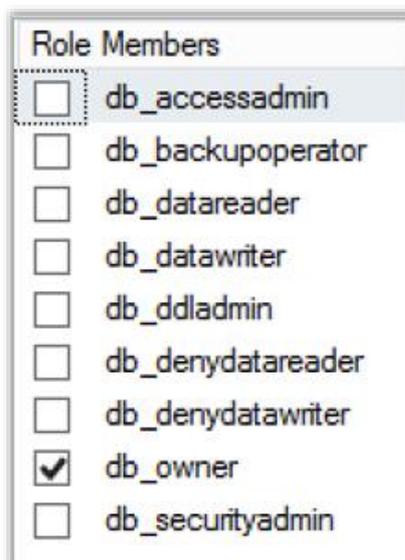
5. For the ARAViewGroup make sure the following databases are selected
    a. QApplicationConfig
    b. QApplicationData
6. Make sure the following membership is selected
    a. db_datareader

Role Members
☐ db_accessadmin
☐ db_backupoperator
☑ db_datareader
☐ db_datawriter
☐ db_ddladmin
☐ db_denydatareader
☐ db_denydatawriter
☐ db_owner
☐ db_securityadmin
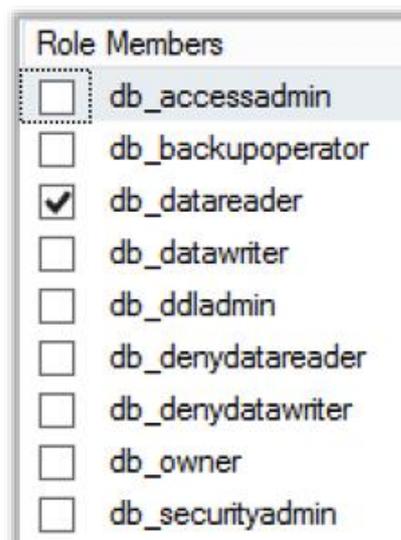
Chapter 5 IIS Settings

IIS webpages are automatically configured on install if you need to edit the IIS settings please take the following steps.

1. Logged on as the local Administrator

2. Open the IIS manger tool to view the websites and application pools

3. Once the IIS application is open select Application pools from options shown under the new server name
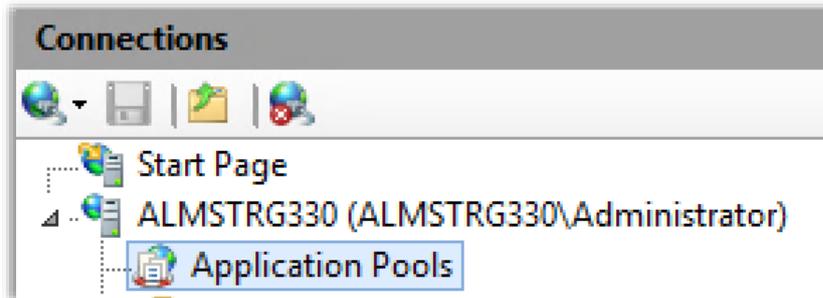
Check the application pool is running with new server name and user.

To edit the application pool:

4. Right click on the application pool

5. Select Advanced settings

6. Select the identity line and the dotted square icon highlighted below

7. Once open add the new server name and user along with password. Select ok to confirm and close window

   a. The above image shows quantumsuer for illustration purposes only

8. Select the server name in top left of IIS window and then select Restart in top right of IIS window to update IIS settings with your changes.

The ARA website should then be available on the configured port.

Chapter 6 Further Reading

For further information please visit the Yokogawa Marex support website or contact YMX at the support@ymx.yokogawa.com email address.

The Yokogawa Marex support website is available at https://ymx.yokogawa.com/support

The Yokogawa Marex Knowledgebase is available at https://ymx.yokogawa.com/knowledge-base

Copyright and Trademark Notices

Highlights

The Highlights section gives details of the changes made since the previous issue of this document.

▪ Summary of Changes

This is Issue 1.0 of the document related to Product Library version 1.0.

▪ Detail of Changes

The changes are as follows:

Chapter/Section/Page	Change