How do I move my Exaquantum system from one domain to another?

This question involves moving the entire set of Exaquantum computers from one domain to another. If you are moving just the clients or just the server then a different procedure is required. This procedure also assumes that only one domain is going to be used for all machines and that all computers are going to be moved from OLDDOMAIN to NEWDOMAIN.

The procedure depends on several factors, all of which should be determined before the change is made. These factors are:

Location of quantumuser account. This account runs Exaquantum services and processes and is needed by both server and clients. It will either be a single domain account or a local account on ALL computers
Location of Exaquantum user groups. There are 4 Exaquantum usergroups, used for determining roles within an Exaquantum system. These groups will exist either locally on the Exaquantum server or on the Domain.
Location of RBNS Groups. These are additional groups used optionally to control access to certain tags. They are located either locally on the server or on the domain.
Client accounts. These are accounts used mainly to log onto client applications from user's PCs. In a domain environment, these accounts are typically members of the domain.
Membership of all groups. Exaquantum groups will have membership set to allow various roles. This membership needs to be replicated in the new domain if domain groups are used. Additionally, local groups can also contain domain accounts and these must be reflected once the domain change is made.
Existence of a Web server. If used, this can be combined with the data server or on a separate computer.
Ownership of SQL Server objects. SQL Server databases and SQL Server jobs have owners. If these objects are owned by the domain quantumuser account that is no longer going to be used then they could become inaccessible and so will need to be altered.
It should be noted that although the above may seem complex, in fact a default installation of Exaquantum will not need to cater for all of the above, the factors are included for completeness. A default installation will in fact only need to cater for the client account location.

Expected Configurations

There are two likely configurations in a domain environment. These are:

Default Configuration - Local user groups, local quantumuser account, domain client accounts.
Special Configuration - The quantumuser account is on the domain. User groups may be local to the server or also on the domain

The actions required for the two configurations vary and they are treated separately below, starting with the Default Exaquantum configuration which has local users and groups.

If your configuration varies from the above, consult your Yokogawa Support Channel providing details of your configuration.

Case 1 - Default Configuration

This is the installation configuration that Exaquantum installation creates from new. The following actions are required to migrate this configuration to a new domain.

Pre-migration Actions:
Confirm the location of the quantumuser account (used for Exaquantum processes) is a local account on the Exaquantum server.
Confirm the location of the four Exaquantum user groups is local to the Exaquantum server<

Confirm the location of any additional groups for RBNS configuration is local.
Make a note of all members of these groups that are from the OLDDOMAIN. This may be individual's client accounts or domain groups that contain the individual accounts.

Determine if a separate Web Server is used on the system.
TAKE A FULL BACKUP OF ALL EXAQUANTUM DATABASES

Migration Procedure:
Step 1 - On the NEWDOMAIN, create any accounts and groups that are required. These will be those that were discovered to exist on the OLDDOMAIN when the pre-migration actions were run. This is an IT function outside the scope of Exaquantum support but is required before the migration proceeds.

Step 2 - If there is a separate Web Server, use the Exaquantum service manager to stop the Services.

Step 3 - Stop Exaquantum on the data server using the Exaquantum service manager. Wait until it stops.

Step 4 - Move the Server into the NEWDOMAIN. This is an IT function that will will require domain admin rights and will also require a reboot.

Step 5 - When the server restarts, add any user accounts or groups from the NEWDOMAIN into the correct local groups on the server to match the previous group membership.

Step 6 - Open the Exaquantum service manager and verify that Exaquantum starts correctly. Check the Application and System Event logs for any errors.

Step 7 - Once the Data server starts, migrate the separate Web Server if used as per Step 4 and Step 6.

Step 8 - Once both servers are working, all clients can be migrated using the same procedure as Step 4.

Step 9 - Check functionality of the client computers. Since nothing has changed on the computer, no problems are envisaged although it is quite likely that the account logging onto the computer will be a new account (from NEWDOMAIN) and so the server manager tool from the Exaquantum start menu may need to be accessed to reset the server name.

If any errors are encountered or if there are any problems with the above steps, contact your local support representative.

Case 2 - Special Configuration

This configuration is adapted from the default since it uses a domain based quantumuser account. Although the basic principles are the same as for a Default Configuration, there are some changes required since the quantumuser account is located on a domain. The Exaquantum usergroups may be located on the domain or locally on the Exaquantum server.

Pre-migration Actions:
Confirm the location of the quantumuser account (used for Exaquantum processes) is on the OLDDOMAIN.
Determine the location of the four Exaquantum user groups. They could be either on the OLDDOMAIN or local to the Exaquantum server.

Determine the location of any additional groups for RBNS configuration. They could be either on the OLDDOMAIN or local to the Exaquantum server.
Make a note of all members of these groups. This may be individual's client accounts or domain groups that contain the individual accounts.

Determine if a separate Web Server is used on the system.
Determine the owner of the Exaquantum databases in SQL server and also the SQL Server jobs. Use SQL Enterprise Manager for this task.

TAKE A FULL BACKUP OF ALL EXAQUANTUM DATABASES

Migration Procedure:
Step 1 - On the NEWDOMAIN, create any accounts and groups that are required. These will be those that were discovered to exist on the OLDDOMAIN when the pre-migration actions were run. This is an IT function outside the scope of Exaquantum support but is required before the migration proceeds.

Step 2 - Using SQL Enterprise Manager on the Exaquantum server, change the owner of any objects that are owned by OLDDOMAIN\quantumuser. They can be changed to the SA user if available.

Step 3 - Still in the Enterprise Manager, if using domain based QUserGroup, delete the OLDDOMAIN\QUsergroup login from the Security > Logins folder.

Step 4 - If there is a separate Web Server, use the Exaquantum service manager to stop the Services.

Step 5 - Stop Exaquantum using the Exaquantum service manager. Wait until it stops. If Exaquantum service is set to start automatically, change this to manual.

Step 6 - Move the Server into the NEWDOMAIN. This will require domain admin rights and will also require a reboot once complete.

Step 7 - When the server restarts, run QDCOMCnfg.exe from the Yokogawa\Exaquantum PIMS\System folder. Enter the correct information which will depend on the location of the groups and quantumuser account. Take care when specifying the locations in the window. Also take care to choose data server or combined server as appropriate. When you have correctly specified the locations, click OK and wait. You should receive a message saying the DCOMCnfg process is complete. This process also applies the SQL Login settings to reflect your group.

Step 8 - Open the Exaquantum service manager and make sure that Exaquantum starts correctly. View the Application and System Event logs for any errors. You can then set Exaquantum service back to automatic if required.

Step 9 - Once the Data server starts, migrate the separate Web Server if used as per Step 6 and Step 7. Note that QDCOMCnfg is different for webservers.

Step 10 - Once both servers are working, all clients can be migrated using the same procedure as Step 6. QDCOMCnfg must be run to reflect the NEWDOMAIN\quantumuser account.

Step 11 - Check functionality of the client computers. Since nothing has changed on the computer, no problems are envisaged although it is quite likely that the account logging onto the computer will be a new account (from NEWDOMAIN) and so the server manager tool from the Exaquantum start menu may need to be accessed to reset the server name.

If any errors are encountered or if there are any problems with the above steps, contact your local support representative.