



# EDS Administration Guide

Release 2019.0



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# Overview

At Symitar, a Jack Henry & Associates, Inc. division, we are committed to offering the best software solution in the market today. As a customer, you need to know that the company you are partnering with has competence in the development and implementation of that software. Our goal is to ensure that you are completely satisfied after your implementation of Episys Data Store (EDS).

This *EDS Administration Guide* is a supplemental document to *EDS Help* documentation. The purpose of this document is to assist administrators with EDS operations and maintenance. The intended audience for the document is IT staff members and EDS administrators. This guide is not intended to train credit union staff about SQL Server® technologies, but rather it is intended to leverage those technologies. There are numerous training resources available on the web, many at no cost.

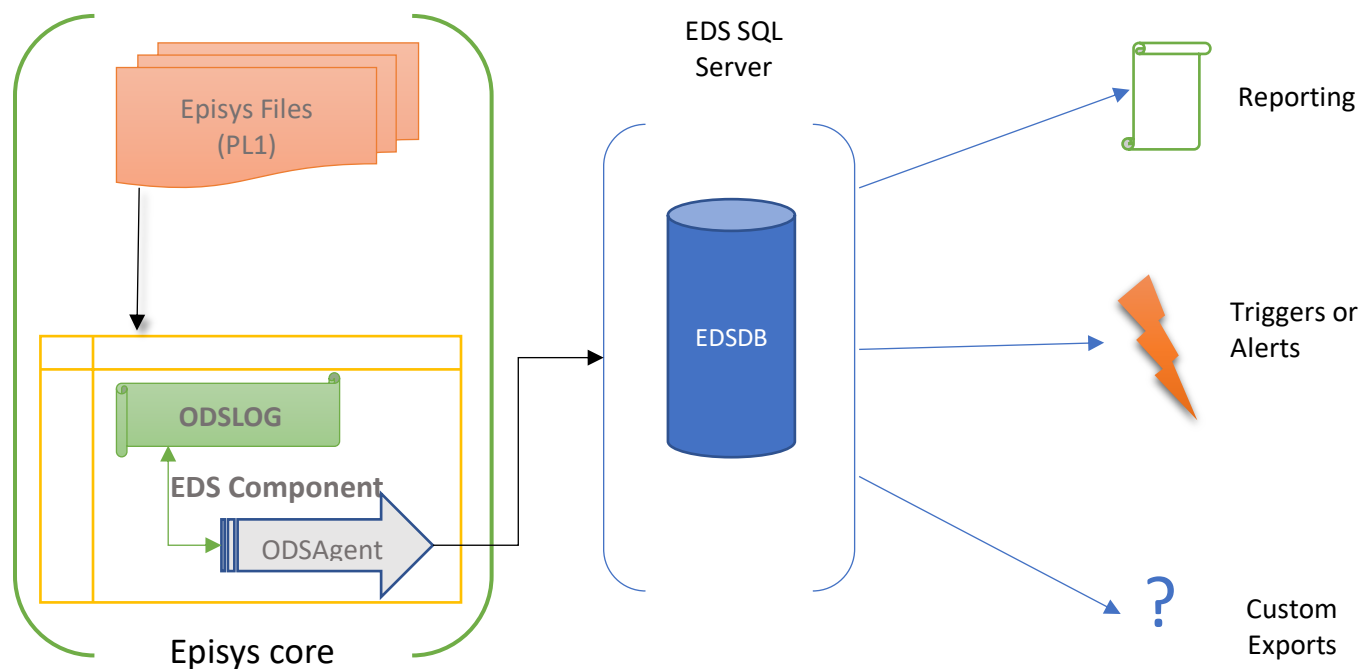
# General System Design

Episys Data Store™ (EDS) is an optional add-on product for Episys® customers. It inserts a near-real-time copy of the Episys database into a SQL Server® database. EDS is developed using Episys core processes and standard Microsoft® technology. Episys core processes use the ODS agent to move data from Episys to the SQL Server. Microsoft employs SQL Server Reporting Services (SSRS) for reporting.

## Introduction to Overall Data Flow

See *Basic EDS Process* the following diagram for basic data movement from Episys to the EDS SQL server.

### Basic EDS Process



When a file maintenance activity occurs in Episys, the event is logged in the ODSLOG file. The ODSLOG file holds the data until it can be sent to the SQL Server. The Java™ agent uses sockets to transfer the data to the EDS SQL server. Once the data is in the SQL server, it can be accessed by various methods.



## EDS Database

EDSDB has multiple schemas to help organize the tables and views.

### dbo Schema

The dbo schema contains Episys equivalent tables with the following six additional EDS fields:

- **OdsKey:** Surrogate primary key for a row in the ODS table
- **OdsCreateDateTime:** System date and time when a row was inserted into ODS
- **SymDate:** Current SYM date when entered into ODSLOG
- **SystemCreateDateTime:** System date and time when entered into ODSLOG
- **OdsDeleteFlag:** Determines whether the entity was deleted from source database
- **OdsRecordCreationDate:** System date and time when entered into ODSLOG
- **SYM:** SYM that provided the data (to differentiate from original EDS load SYM and the SYM for changed records coming from Episys)

Table names formatted with mixed case, e.g., MemberGroup, provide help file descriptions, system data types, and configuration data. Table names starting with P\_\* contain data from the Episys Parameter Manager or Default Manager work areas. The dbo schema is the default schema for the SQL Server. If a schema is not specified in a query, the query processor will look for the table in the dbo schema.

### Report Schema

The report schema contains dbo equivalent tables and views with the following three additional EDS fields. The fields are:

- **Rowversion:** Differentiates newly inserted or modified records; use this value to troubleshoot data issues
- **OdsCreateDate:** System date when a row was inserted into ODS; computed column derived from the **OdsRecordCreationDate** field
- **EntityID:** Allows support of foreign keys for hierarchical parent/child relationships

The tables in the report schema are more aware of and dependent on the relationships between entities than the tables in the dbo schema. All report tables have primary key and foreign key relationships built in. As a result, report schema tables contain only the latest records from the dbo schema tables.

### EDS Schema

The EDS Schema contains static system calculated data types. These data types are defined in *Episys eDocs*.

## Purge Schema

The purge schema consists of the following tables: FieldCalc, Settings, TableStat and WorkerLog.

The purge event runs and removes records that are outside the standard retention, which is 10 days. EDS always retains one item per record if the table is not classified as a transaction table, even if it is outside of the standard retention. This ensures that each record is represented in the EDS database when no changes have been posted.

## Database Table Purge Processing

Periodic purging still occurs. However, the behavior has substantially changed from previous releases.

The following changes occurred in EDS Release 2019.0:

- The [Purge].TableSettings table is obsolete; the [SymMgmt].ManagedTable table is the central store for managing purge behaviors.
- There is no longer a debloat process.

## The Table of Managed Tables

A managed table is a table in the EDS database through which functional data passes; EDS manages the contents of this table. The [dbo].ACCOUNT and [Report].ACCOUNT tables are examples of managed tables.

The [SymMgmt].ManagedTable table contains a row for each managed table. The structure of this table is as follows:

Column	Data Type		Key	Meaning
TableId	int	NOT NULL	PK	Uniquely identifies the table
SchemaId	int	NOT NULL	*FK	Identifies the schema of the table
TableName	sysname	NOT NULL		The name of the table within the schema
RetentionPolicy	smallint	NOT NULL		A code for the retention policy; 0 = none
RetentionDays	smallint			The number of days to retain rows in the table before purging, if the retention policy is 1 Must be > 0 if not NULL
IndexMaintDays	smallint			The interval in days before running index maintenance on table indexes
UpdateStatsDays	smallint			The interval in days before updating table statistics, if the <b>UpdateStatsEnabled</b> setting is non-zero
IsPostInsertSource	bit	NOT NULL		If true, this table can be a source of PostInsert work
ContentionWeight	numeric(6,3)	NOT NULL		Reserved for future use

Column	Data Type		Key	Meaning
MergeToTableId	int		FK	If the contents of this managed table are merged into another managed table, this column contains the TableId of the latter table
KeyRule	varchar(4)			Reserved for future use
CalcDailyTotals	bit	NOT NULL		If non-zero, daily totals should be calculated for this table
SerializePostInsert	bit			If equal to 1, perform PostInsert processing at the SERIALIZED level of isolation Consider NULL the same as zero in this column; only has meaning for the target table of a PostInsert
PurgeProc	sysname			The multi-part name of the stored procedure to call to purge rows from this table Must not be null if RetentionPolicy = 1.
LastPurge	datetime	NOT NULL		The last time this table was purged
LastIndexMaint	datetime	NOT NULL		The last time indexes on this table were maintained

The only columns in the table that a client should consider changing are RetentionPolicy, RetentionDays, IndexMaintDays, and UpdateStatsDays. The UpdateStatsDays column is only pertinent if EDS is managing the update of database statistics; we recommend letting the SQL Server take over that function.

For convenience, the [SymMgmt].vwManagedTableInSchema view resolves the schema name of each table.

## Retention Policy

For EDS 2019.0, the valid values of this column are as follows:

Value	Meaning
0	This table will not be purged
1	This table will be purged; the rows eligible for purge, by age, are found by selecting those rows that are older than the RetentionDays days value column, as determined by the OdsCreateDateTime column of the table in question

## Schema-Specific Purge Rules

The majority of managed tables are in the [dbo] and [Report] schemata. The rules for purging are slightly different in the two schemata.


In the [dbo] schema, the comparison is entirely based on the value of the OdsCreateDateTime column of any row. If the row is older than the RetentionDays value, the purge process will delete the row.

In the [Report] schema, for tables that are proper summary tables, the comparison also considers the OdsDeleteFlag column. Only those rows that meet the age criterion and that have the value in the OdsDeleteFlag column equal to 1 will be deleted.

Most tables in the [Report] schema, except the following, are summary tables:

- The various FMHISTORY tables



- 
- Transaction tables, such as LOANTRANSACTION and SAVINGSTRANSACTION
  - ATMDIALOG and CDMDIALOG

These exceptions contain individual rows as transferred from Episys. Due to the nature of the entities they represent, they cannot be merged when stored.

### Number of Days to Keep Data

The [dbo] tables contain raw data transferred from the Episys ODS agent. There can be many rows for any entity represented in the table. You only need to keep these rows long enough to support their reliable transfer to the [Report] tables. We recommend two days.

The [Report] tables collect, and except where otherwise indicated, summarize the current state of the various entities. As changes arrive in the [dbo] tables, EDS merges these into the corresponding [Report] tables. A retention of 40–45 days allows you to have an overlap early in the next month, where the prior month is complete.

**Note:** There will be rows in [Report] tables more than these many days old, provided they are not marked deleted. Such rows will have the OdsDeleteFlag column equal to 0. The row must be kept as long as it is not marked deleted, regardless of how old it is, to provide a complete picture.

### SymMgmt Schema

The SymMgmt schema contains required table mappings and filter rule settings for tables in the EDS schema. These tables are primarily used by the EDS Database Manager to perform maintenance functions.

### Episys Upgrades

EDS handles Episys upgrades automatically with a small update from the Symitar Solutions team after Episys is formally released. EDS lags Episys release cycles by a short period to provide time to test changes and create a patch to support any database changes. When new fields are created in Episys, EDS leverages the change once the appropriate EDS release is available. Service packs and hot fixes are provided for breaking changes in Episys, should they occur.

**Important:** To prevent data transfer failures, open a case to notify Symitar Solutions Support approximately two weeks before your planned Episys release date.

### Updating Episys Help File Formats

Part of the EDS process involves the loading of Episys help files. If you make updates to the Episys help file formats, you must also update the ARCU.HELPPFILE.EXTRACT.CTL Episys extract control file, which is located in the Episys help files folder. Failure to make the appropriate changes to the extract control file will result in incorrect help file extract data that negatively affects your EDS data and reports.

You will need to provide EDS Support with client work request (CWR before they can provide assistance with custom help file formats and extract control files.

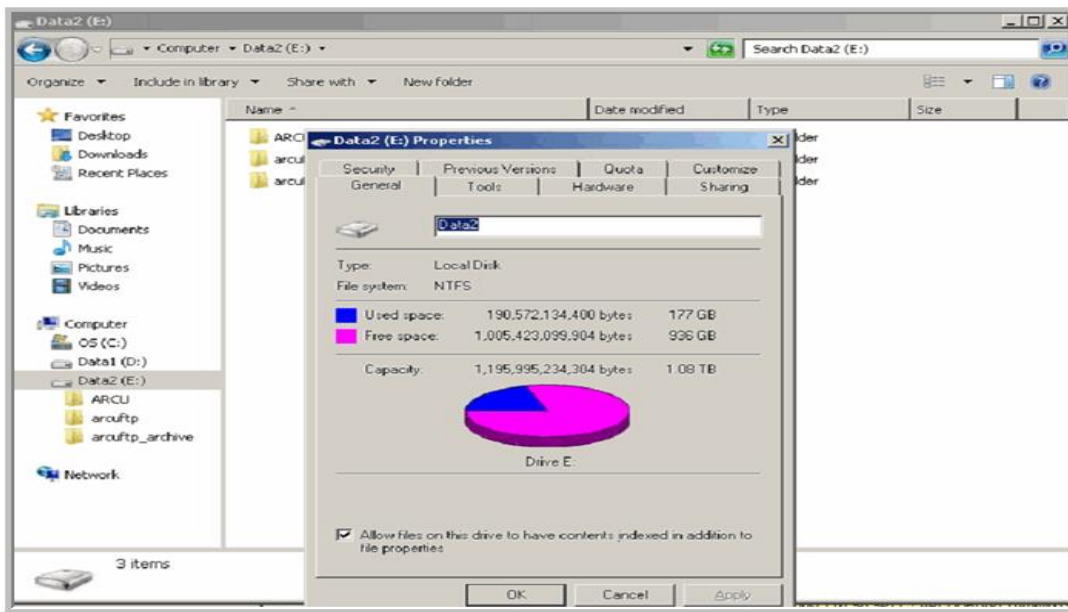
# Recommended Monitoring

EDSDB uses space on the hard drive, which can be monitored two different ways.

## Monitoring Space

Available disk space should be monitored monthly (if space is running low, monitor weekly).

To monitor space, open Windows® Explorer®, right-click the drive that stores the EDS directory, and click **Properties**. It is considered a risk to have less than 20% of free space. In addition, old, unneeded archive files should be deleted.



If using a SAN, it will likely have monitoring software that can automatically notify administrators when a drive is almost full. We recommend setting this up to also monitor drive space.


The *Support Information* page in the EDS portal is available to provide monitoring information on total space and free space.

To access Support Information, follow these steps:

1. Click the **Pages Icon**  
A window opens with portal page icons.
2. Click the **Support Information** icon.  
You will be directed to the *Category Designer* page.

The following information is available on the *Category Designer* page:

- Client information

- Support Information

ClientSymitar Solutions

Symitar # 0

Installed products

Name	Version	Installed
EDS	2017.0	8/3/2017 12:00:00 AM

Server Information

Processor:

Total RAM:

Available RAM:

Intel64 Family 6 Model 47 Stepping 2

8191 MB

2827 MB

Configuration Settings

Web Server:

Database Server:

Report Server Path:

Report Builder Path:

localhost

SDCASYMSOLEDS01.jhacorp.com

http://SDCASYMSOLEDS01.jhacorp.com/ReportServer

ReportBuilder/ReportBuilder\_3\_0\_0\_0.application

Hard Drive Information

Drive C:

Total Space - 99 GB

Free Space - 60 GB

39% Full

Drive D:

Total Space - 119 GB

Free Space - 12 GB

90% Full

# Recommended Maintenance

Servers should be maintained according to the policies and procedures set up by the credit union regarding regular server maintenance.

## SQL Server® Maintenance

EDS Support will not provide general SQL or SQL Server assistance or disaster recovery (DR) guidance. System and SQL Server backups are normal administrative processes that should be performed by your financial institution's system administrators. If you need to restore the SQL Server and the appropriate backups have been performed, EDS should be recovered without issues.

If for some reason a restore does not recover the EDS database, you will need to provide EDS Support with a client work request (CWR) before they can provide assistance.

If you need to perform any maintenance on the SQL Server that will cause the server to be unavailable, you must suspend the data from transferring from Episys to SQL server. If you use the **Suspend** option in the Episys symop tool, Episys will still create logs but the tool will not send the data to the SQL Server. After the maintenance on the SQL Server is complete, you will use symop to turn the EDS agent on.

## Suspend the Transferring of Data from Episys to EDS SQL Server

Suspending data from Symop suspends the transmission of data from Episys to EDSDB but all activity is still captured in the log files.

```
root@sdcaqas8p33 #symop
```

```
Operator Control 04/05/16 09:37:22
```

### Disk Usage

```

/      Megabytes Used:      216.9 Left:      320.0 40% Used (LF)
/usr   Megabytes Used:      2927.2 Left:      1233.6 70% Used (LF)
/var   Megabytes Used:      345.3 Left:      594.2 37% Used (LF)
/tmp   Megabytes Used:       6.8 Left:      1067.0 1% Used (LF)
/home  Megabytes Used:       0.5 Left:      133.7 0% Used (LF)
/admin Megabytes Used:       0.4 Left:      133.8 0% Used (LF)
/opt   Megabytes Used:      283.1 Left:      253.8 53% Used (LF)
/var/adm/ras/livedump
      Megabytes Used:       0.4 Left:      268.1 0% Used (LF)
Disk 0 /SYM Megabytes Used:  8035.4 Left:    18875.2 30% Used (LF)
Filesystems marked (LF) support Large Files over 2 GB
Filesystems marked (SF) support Small Files up to 2 GB
```

```
Operator Id :*****
```

> REST

04/05/16 09:37:45 RESTART

(0) None	
(1) Restart WordPerfect	
(2) Stop Audio and Home Banking	(3) Restart Audio and Home Banking
(4) Stop ATM Network	(5) Restart ATM Network
(6) Stop BSC	(7) Restart BSC
(8) Restart All Synch Lines (includes ATM Networks and BSC)	
(9) Restart Operator Console Program	
(10) Stop Credit Retrieval	(11) Restart Credit Retrieval
(12) Stop Pager Software	(13) Restart Pager Software
(14) Stop Home Banking Modem	(15) Restart Home Banking Modem
(16) Stop SymConnect	(17) Restart SymConnect
(18) Stop SymConnect Client	(19) Restart SymConnect Client
(20) Stop UPS Software	(21) Restart UPS Software
(22) Stop Auto Batch Software	(23) Restart Auto Batch Software
(24) Restart Internal System Level Services	
(25) Restart Internal Sym Level Services	
(26) Stop SymXchange	(27) Restart SymXchange
(28) Stop SymConnect Dialog	(29) Restart SymConnect Dialog
(30) Stop Episys DBMS	(31) Restart Episys DBMS
(32) Stop Parameter Server	(33) Restart Parameter Server
(34) Restart Discovery Service	(35) Restart System Front Controller
(36) Restart System Security Server	(37) Restart System Event Bus Server
(38) Restart Web Console	
(39) Stop UX Services	(40) Restart UX Services
(41) Stop MCW Monitor Program	(42) Restart MCW Monitor Program
(43) Stop EDS Service	(44) Restart EDS Service

Restart Selection [00] :43

(0) Suspend Service

(1) Terminate Service

Choice :1

Gathering SYMs with EDS Service license . . .

(0) All Syms

(1) SYM 500

Choice :1

>

> EXIT -- Exit out of symop

## Restart the Transferring of Data from Episys to EDS SQL Server

The following example shows how to restart a data transfer from Episys to EDS

```
root@sdcaqas8p33 #symop
```

```
Operator Control 04/05/16 09:37:22
```

### Disk Usage

```

/      Megabytes Used:      216.9 Left:      320.0  40% Used (LF)
/usr    Megabytes Used:     2927.2 Left:     1233.6  70% Used (LF)
/var    Megabytes Used:     345.3 Left:     594.2  37% Used (LF)
/tmp    Megabytes Used:       6.8 Left:    1067.0   1% Used (LF)
/home   Megabytes Used:       0.5 Left:     133.7   0% Used (LF)
/admin  Megabytes Used:       0.4 Left:     133.8   0% Used (LF)
/opt    Megabytes Used:     283.1 Left:     253.8  53% Used (LF)
/var/adm/ras/livedump
        Megabytes Used:       0.4 Left:     268.1   0% Used (LF)
Disk 0 /SYM Megabytes Used:   8035.4 Left:   18875.2  30% Used (LF)
Filesystems marked (LF) support Large Files over 2 GB
Filesystems marked (SF) support Small Files up to 2 GB
```

```
Operator Id :*****
```

```
> REST
```

```
04/05/16 09:51:51 RESTART
```

```

(0) None
(1) Restart WordPerfect
(2) Stop Audio and Home Banking
(3) Restart Audio and Home Banking
(4) Stop ATM Network
(5) Restart ATM Network
(6) Stop BSC
(7) Restart BSC
(8) Restart All Synch Lines (includes ATM Networks and BSC)
(9) Restart Operator Console Program
(10) Stop Credit Retrieval
(11) Restart Credit Retrieval
(12) Stop Pager Software
(13) Restart Pager Software
(14) Stop Home Banking Modem
(15) Restart Home Banking Modem
(16) Stop SymConnect
(17) Restart SymConnect
(18) Stop SymConnect Client
(19) Restart SymConnect Client
(20) Stop UPS Software
(21) Restart UPS Software
(22) Stop Auto Batch Software
(23) Restart Auto Batch Software
(24) Restart Internal System Level Services
(25) Restart Internal Sym Level Services
(26) Stop SymXchange
(27) Restart SymXchange
(28) Stop SymConnect Dialog
(29) Restart SymConnect Dialog
(30) Stop Episys DBMS
(31) Restart Episys DBMS
(32) Stop Parameter Server
(33) Restart Parameter Server
(34) Restart Discovery Service
(35) Restart System Front Controller
(36) Restart System Security Server
(37) Restart System Event Bus Server
(38) Restart Web Console
(39) Stop UX Services
(40) Restart UX Services
(41) Stop MCW Monitor Program
(42) Restart MCW Monitor Program
(43) Stop EDS Service
(44) Restart EDS Service
```

```
Restart Selection [00] :44
```

```
Gathering SYMs with EDS Service license . . .
```

```

(0) All Syms
(1) SYM 500
```

```
Choice :1
```

```
Running on primary host
```

```
> EXIT -- Exit out of symop
```

**Note:** When restarting the EDS service after using the **Suspend** option or restarting the EDS service while the EDS service is still running, you may see the following error:

```
Starting EDS in SYM XXX
odsLogManagerStartF[12]: EDS Log Manager failed to start in SYM XXX: not found
```

This error occurs because symop is attempting to restart the odsLogManager service, but the service is already running.

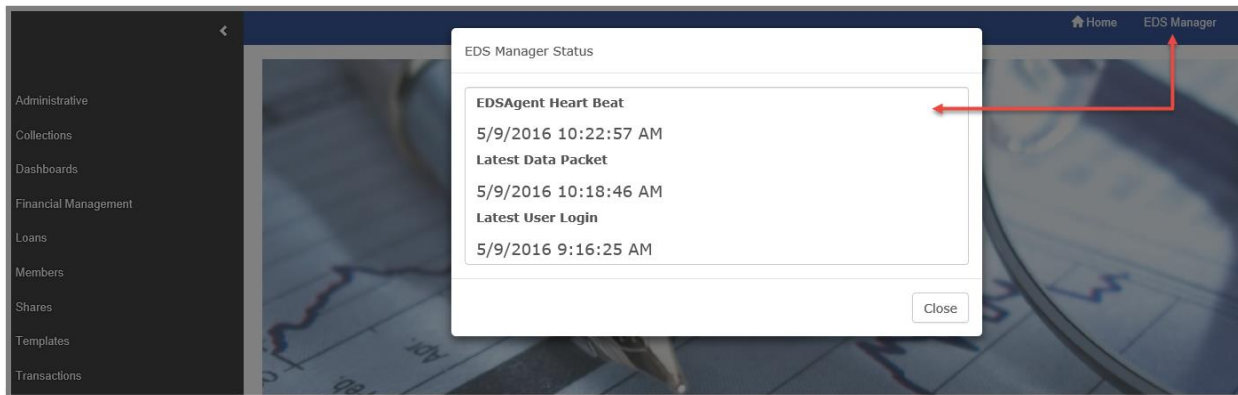
If you receive this error, perform the following steps:

1. Exit out of symop
2. Type **USERS ODS** to ensure that the odsLogManager service is running for the SYM.
3. Type **USERS ods** to ensure the odsAgent service is running for the SYM.

If both services are running, then everything is working as expected. If one of the services is not running, open a Support case with Symitar Solutions.

## EDS Manager

EDS Manager reports the data transfer status from Episys to the EDS SQL server database. This feature is located on the user menu tool bar of the EDS portal. When you click the icon, a pop-up screen appears along with the following information: EDSAgent Heart Beat, Latest Data Packet, and Latest User Login.



**EDSAgent Heart Beat** is a message from the OdsAgent informing the EDS SQL server that it is still running. If the last time stamp is more than an hour ago, report the problem by opening a Symitar Solutions Support case.

**Latest Data Packet** displays the last time data was received from Episys and helps determine that the OdsAgent is processing data.

**Latest User Login** displays the last time a user logged in to Episys.





## EDS Database Manager

EDS Database Manager is a service that maintains the EDSDB tables. The service runs at specified intervals depending on the settings in the SymMgmt.ManagedTable.

**Note:** This service must be running to implement the functions above. If the service is turned off, the integrity of the data will be lost.

- Log name: EDSDatabaseManagerService
- EDS Database Manager Log location: <installation drive>\EDS\Logs

## Deletion of Old Log Files

Symitar recommends that you delete old log file once every quarter, or more often if needed. Old log files may use resource space unnecessarily and should be deleted.

## Failover Instructions for EDS on Episys

The EDS service only runs on the primary Episys server. These services do not run on a secondary server (or non-primary node). Once the secondary server transitions to primary, EDS services will run as part of the normal start up services.

Since the EDS log queues are not replicated in real-time to the secondary servers, the ODSLOG and OdsLogMarker files in the /SYM/SYMXXX directory need to be copied to the new primary server when a failover occurs. Failure to do so can result in missing data in the EDS SQL server. In all cases, the EDS SQL Server will still be updated with new transactions as they occur on the new primary server.

## Transitioning EDS from Primary to Secondary during a Failover


During a failover, you may need to move EDS from the primary to the secondary server. Following is a list of prerequisites you will need to complete first:

- Ensure that appropriate licenses are set up on the secondary server.
- Ensure that /SYM/CONFIGURE/ODSLOG.CFG is present on the secondary server (this should be copied as part of nightly COPYCONFIG).
- Ensure that /SYM/SYMXXX/LOCAL\_CONFIGURE/odsAgent.properties is present on the secondary server (this should be copied as part of nightly COPYCONFIG).

Follow these steps when you need to perform a failover:

1. Stop the ODSLogManager and OdsAgent on the current primary host (if the system is brought to a soft down, this would automatically happen).
  - a. Type **symop**
  - b. Enter your password.
  - c. Type **REST**.



- 
- d. Select the **Stop EDS Service** option.
    - e. Select the **Terminate Service** option.
    - f. Type **Exit**.
  2. From the SYM directory where EDS is running, copy the following files from the old primary host to new primary host. Delete them from the old primary host once you are done copying.
    - a. Use FTP to transfer /SYM/SYMXXX/ODSLOG to /SYM/SYMXXX/ODSLOG (if it exists).
    - b. Use FTP to transfer /SYM/SYMXXX/ODSLOG\_CC to /SYM/SYMXXX/ ODSLOG\_XXX (1 – N) (if it exists) and ODSLOG files ODSLOG\_XXX(1-N).001, ODSLOG\_XXX(1-N)..002, and ODSLOG\_XXX(1-N)..003
    - c. Use FTP to transfer /SYM/SYMXXX/OdsLogMarker to /SYM/SYMXXX/OdsLogMarker; OdsLogMarker.001, OdsLogMarker.002, OdsLogMarker.003
    - d. Type **rm ODSLOG\*** from the old primary host.
    - e. Type **rm OdsLogMarker** from the old primary host.
  3. Perform the failover if it is a planned failover; otherwise, skip this step.
  4. Start ODSLogManager and ODSAgent on the new primary host (if the system is brought up, this would automatically happen).
    - a. Type **symop**.
    - b. Enter your password.
    - c. Type **REST**.
    - d. Select the **Restart EDS Services** option
    - e. Type **Exit**.
  5. Type **USERS ODS** (this ensures that OdsAgent is running on the new primary host and displays the 4 ODSLogManager processes, if it is running).
  6. Type **USERS ods** (this displays the OdsAgent process if it is running).

**Note:** If the OdsAgent is not running, open a help desk case.

### Additional Notes

Since there is disparity between data on the primary and secondary hosts (due to business-level replication rather than data-level replication), these disparities will show up on the EDS SQL database if both the primary and secondary hosts are updating the same SQL database.



## EDS Operational Instructions

Episys EDS service does not have any dependency; however, Symitar recommends that you start with the EDS service as soon as possible to ensure that all data is capture and transferred to the EDS SQL database.

### AIX® Commands to Verify EDS Service is Running

You can use these commands to verify if EDS service is running.

- # USERS ODS  
This command displays the PL1 ODSLOGMANAGER process ID. If this command does not return a process ID, then the ODSLogManger is not running. Proceed to the next section, called Steps to Start EDS Service on Episys.
- # USERS ods  
Displays the PL1 odsAgent and ODSLoader process IDs. If this command does not return a process ID, then the odsAgent is not running. Proceed to the next section, called Steps to Start EDS Service on Episys.

### Starting EDS Service on Episys

Starting the EDS Service will start the OdsAgent and OdsLogManager processes. Using this option will start data transferring from Episys to EDS SQL database and start the logging of Episys transactional and file maintenances events.

1. Type **symop**.
2. Enter your password.
3. Type **REST**.
4. Select the **Restart EDS Services** option
5. Select **SYM Option** (EDS is running on primary host)
6. Type **Exit**.

**Note:** When restarting the EDS service after using the **Suspend** option or restarting the EDS service while the EDS service is still running, you may see the following error:

```
Starting EDS in SYM XXX
odsLogManagerStartF[12]: EDS Log Manager failed to start in SYM XXX: not found
```

This error occurs because symop is attempting to restart the odsLogManager service, but the service is already running.

If you receive this error, perform the following steps:

1. Exit out of symop.
2. Type **USERS ODS** to ensure that the odsLogManager service is running for the SYM.

- 
3. Type **USERS ods** to ensure the odsAgent service is running for the SYM.

If both services are running, then everything is working as expected. If one of the services is not running, open a Support case with Symitar Solutions.

## Suspending EDS Service on Episys

Suspending the EDS service shuts down the OdsAgent process and stops data transferring from Episys to EDS SQL database; however, Episys automatically continues to log ODSLOG transactional and file maintenances events.

Follow these instructions to suspend EDS service on Episys:

1. Type **symop**.
2. Enter your password.
3. Type **REST**.
4. Select the **Stop EDS Service** option
5. Select the **Suspend Service** option
6. Select **SYM** Option
7. Type **Exit**.

**Note:** When restarting the EDS service after using the **Suspend** option or restarting the EDS service while the EDS service is still running, you may see the following error:

```
Starting EDS in SYM XXX
odsLogManagerStartF[12]: EDS Log Manager failed to start in SYM XXX: not found
```

This error occurs because symop is attempting to restart the odsLogManager service, but the service is already running.


If you receive this error, perform the following steps:

1. Exit out of symop.
2. Type **USERS ODS** to ensure that the odsLogManager service is running for the SYM.
3. Type **USERS ods** to ensure the odsAgent service is running for the SYM.

If both services are running, then everything is working as expected. If one of the services is not running, open a Support case with Symitar Solutions.

## Stopping EDS Service on Episys

Stopping the EDS Service shuts down the OdsAgent and OdsLogManager processes and stops data transferring from Episys to EDS SQL database and Episys stop logging Episys transactional and file maintenances events.

- 
1. Type **symop**.
  2. Enter your password.
  3. Type **REST**.
  4. Select the **Stop EDS Service** option
  5. Select the **Terminate Service** option
  6. Select **SYM** Option
  7. Type **Exit**.

## Security Service Settings

During the installation, you are asked to provide security setup information. If you want to change the names of your authorized user group, security administrators' group, or Active Directory (AD) prefix, please open case with EDS Support and the technician will assist you with the changes.

- Authorization Group default: **Authorized EDS Users**
- Administration Group default: **Sym Solutions Security Admins**
- Network Group Prefix default: EDS



# Other Administration and Security Administration Tasks

EDS administrators and EDS Security administrators are tasked with maintaining Menu Designer, adding reports to the portal, setting up portal and report security groups, and assigning users or Active Directory (AD) groups to the security groups and setting up SSRS security groups and assigning users or AD groups for SQL permissions.

## Menu Designer

Any user that has permission to use Menu Designer can add, edit, or delete menus and reorganize reports. Only a user who is designated as a security administrator will be able to assign group-level security when menus are added or changed. If the user is not a security administrator, they will receive a successful message with this reminder:

Your changes were saved but will not be visible to users until your Security Administrator has explicitly given your group access via the Portal Security Manager.

The security administrator is required to revisit and update group security settings for changed or added menus. EDS recommends that users with menu designer privileges be designated as security administrators.

For additional information on Menu Designer see **EDS > Help > Pages Icon > Menu Designer** (various topics).

## Report Manager


Any user who has permission to use Report Manager can add, remove, or modify reports or external links on the portal. If the user adding the report or link to the portal is a security administrator who is assigned to the “Sym Solutions Security Admins” domain or the AD group you designated as the security admin group, the administrator will be able to assign role security when the report or link is added. If a report is added by a user who is not a security administrator, the user will not have the option to assign security, and the security administrator will need to update security accordingly. ARCU recommends that users who add reports or links to the portal are designated as security administrators.

**Note:** If a report is removed from Reporting Services before deleting the report from the ARCU portal, and a user has selected the report as a favorite, the user must add the report back in to Reporting Services and remove it from the portal. Always delete the report from the portal first.

For additional information on Report Manager see **EDS > Help > Pages Icon > Report Manager > various topics**.

## Security Manager

During implementation, you will be asked to create or specify an active directory group to be used as “Sym Solutions Security Admins” and all users or AD groups assigned to this group will have security manager permissions. Security Manager is a feature that allows financial institutions to grant users access to menus,



reports, and portal pages and functions. The security service uses Windows® network credentials, eliminating the need for separate user IDs and passwords. Portal user security is group-based; all users within a group will have the same permissions. Permissions for any group to access an individual report, a set of reports, or pages in the portal can be granted or denied.

Security uses a two-step approach; first it verifies that the user is authorized to access the portal, and second, it verifies that the user is assigned to a security group.

The first authorization occurs during installation, when you are asked to create an active directory called "Authorized EDS Users" and any user who will access Symitar Solutions products must be assigned to this domain. And the second authorization occurs after verification that the user is authorized to access the portal, when the user verifies that they are in at least one security group, then the security service provides access to the menus, reports, and pages as per group security.

A user may be added to one or more security groups and will assume permissions of all groups to which user is assigned. AD groups may be used for security. If using AD groups, you will be asked for the prefix of your groups, i.e., EDS, SYM, etc., and those groups will be available to assign to security groups.

Following are some key bullet points regarding portal and group security. For additional information on Security Manager see **EDS > Help > Pages Icon > Security Manager** (various topics).

- EDS has one default user group, EDS Administrator, which has all page, menu, and report permissions. The EDS User group is intended for ARCU/EDS staff when logging in to work Support cases. Support recommends not modifying the permissions of these groups.
- Any other security groups added during implementation can be renamed or deleted, although EDS Reader and EDS Writer are intended as security groups for developers
- Only users assigned to the Sym Solutions Security Admins AD group or the group you designated as the security administrator's group, have access to Security Manager (even if the user's group has Security Manager portal page permissions).
- The EDS User group should be assigned to the EDS administrators group.
- Users may be assigned to multiple groups; you may want to consider creating groups for portal pages permissions and groups for report permissions and then assigning users to those groups accordingly.
- If a security group is not enabled, users within the group will not have group permissions.
- There is no limit to the number of security groups that can be created.
- If setting up an individual to act solely as the security administrator, Symitar recommends that you train a back-up person to handle security requests when the administrator is out of the office.

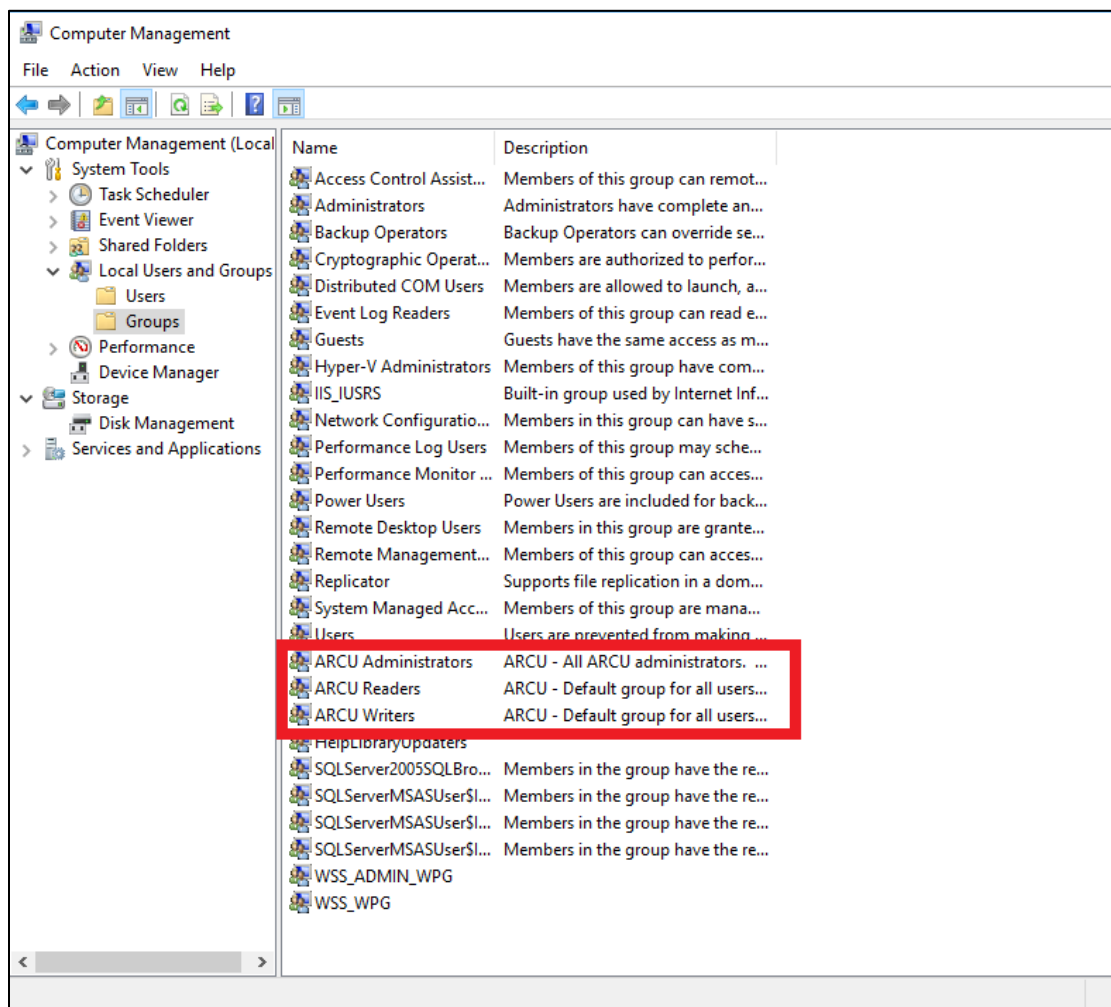
## SQL SSRS Permissions

Permissions to the databases are not granted via Security Manager; Security Manager only controls permissions to portal pages, menus, and reports.

EDS is installed with the following default local groups on the database server. These local groups are used to configure security on the SQL database and within SQL Server Reporting Services, with each group having its own set of permissions.

- EDS Administrators
- EDS Readers
- EDS Writers

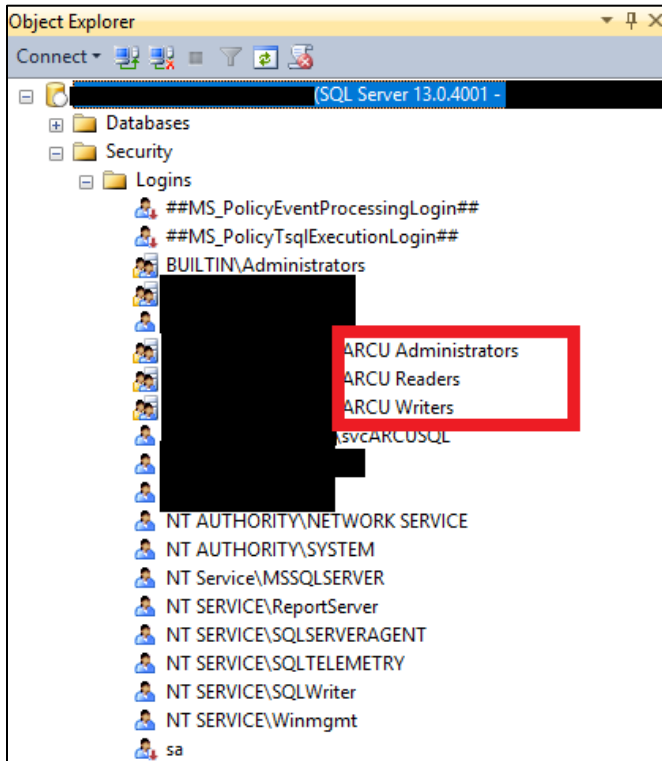
#### ARCU screen shot



## SQL Server Permissions

The permissions within the Database Instance can be viewed within SQL Server Management Studio by connecting to the instance in question and drilling down from the instance level to **Security > Logins** as shown in the following image:

#### ARCU screen shot



## EDS Administrators Local Group Permissions

### Server roles

- public
- sysadmin

### User mapping and database roles

- EDS
- public
- EDS Writers and EDS Readers group permissions

### Server roles

- public

### User mapping and database roles

- EDS
- public

## SQL Server Reporting Services Permissions

There are two sets of permissions defined for SSRS using the local groups: site security permissions and folder security permissions.



Site security dictates who has access to the SSRS site (which is separate from the EDS portal) and what type of access they have on the site. Folder security dictates everything else related to SSRS.

## Site Security Permissions

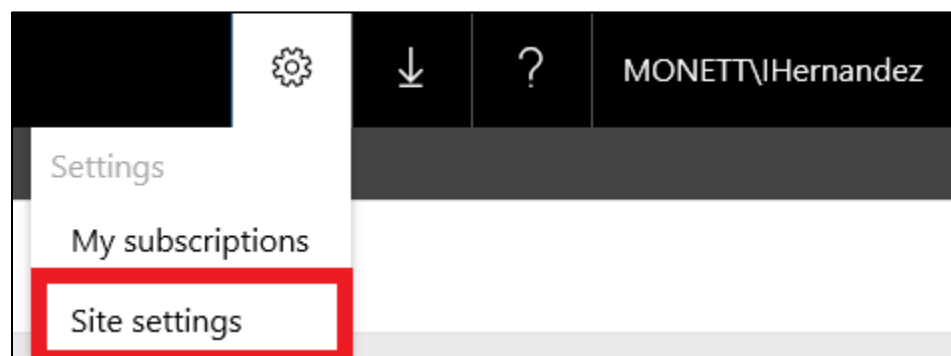
These permissions can be viewed by navigating to the SSRS site, something similar to the following:

[http://<Fully\\_Qualified\\_Domain\\_Name>/reports](http://<Fully_Qualified_Domain_Name>/reports)

Once at the SSRS site, in the top right corner there is a site setting option, or on the newer version of SSRS a gear icon that presents a drop-down list that you can where you can select site settings:

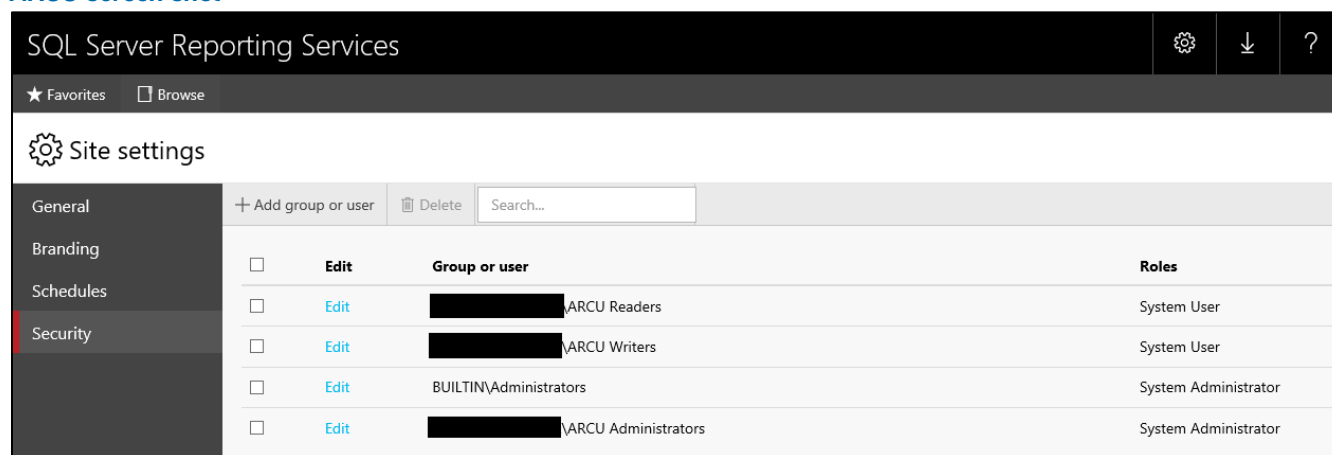


Or



On the site settings page, on the left there are four links; Security is the last one.

### ARCU screen shot



The previous screen is where you define site security. There are only two site security roles defined by default:

<input type="checkbox"/>	Role	Description
<input checked="" type="checkbox"/>	System Administrator	View and modify system role assignments, system role definitions, system properties, and shared schedules.
<input type="checkbox"/>	System User	View system properties, shared schedules, and allow use of Report Builder or other clients that execute report definitions.

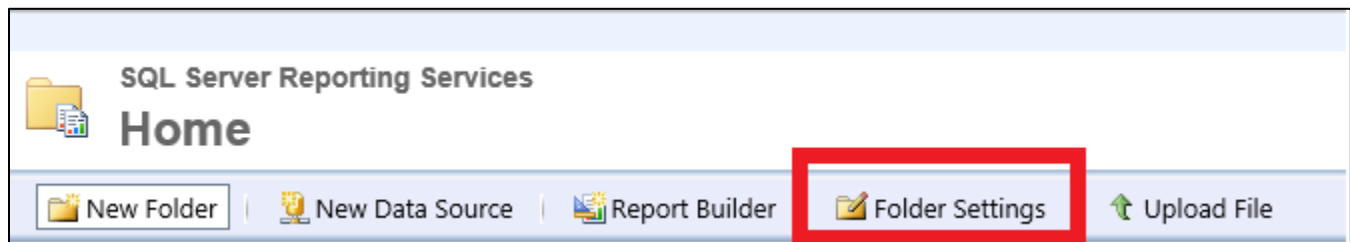
The EDS Administrators local group is defined as system administrators and the EDS Readers and EDS Writers local groups are system users.

By default, EDS configured folder security on the root level, which is the home page of the SSRS site. All folders are then configured to pull the security from the parent folder.

On the SSRS home page, there is a **Manage Folder** link, which is where the folder security is defined.

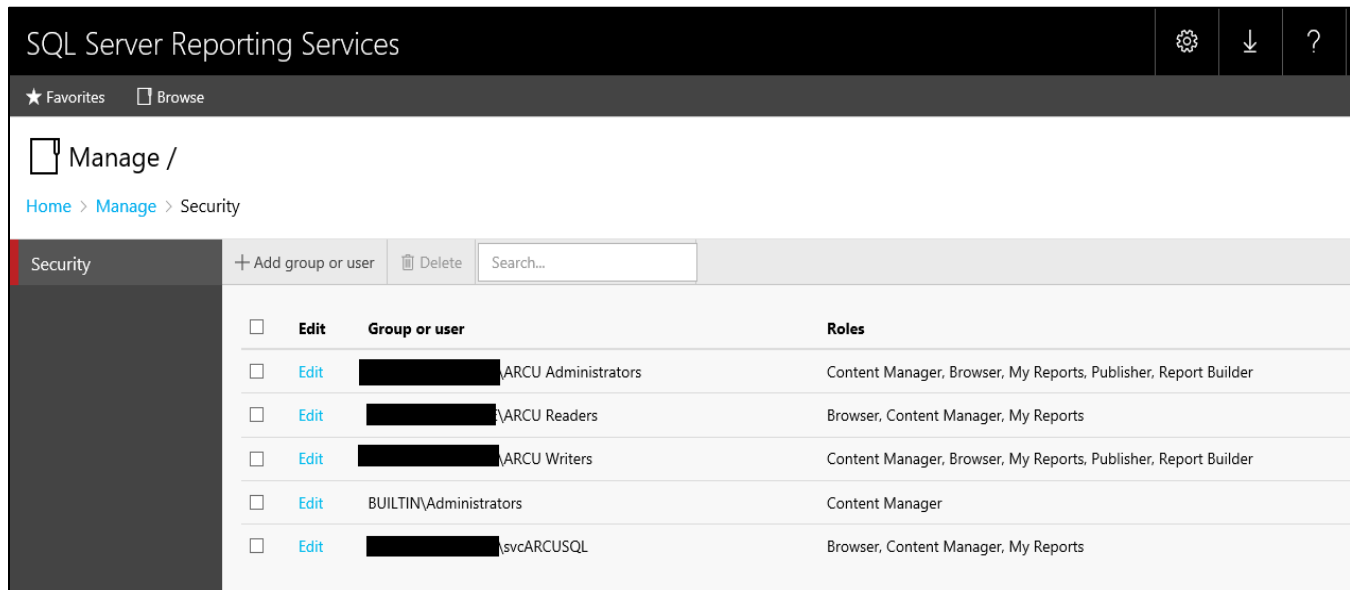


On older versions of SSRS you will click the **Folder Settings** icon:



The default folder security defined with EDS is shown in the following image.

#### ARCU screen shot



And the default roles are as follows:

☐

**Role**

**Description**

☒

Browser

May view folders, reports and subscribe to reports.

☒

Content Manager

May manage content in the Report Server. This includes folders, reports and resources.

☒

My Reports

May publish reports and linked reports; manage folders, reports and resources in a users My Reports folder.

☒

Publisher

May publish reports and linked reports to the Report Server.

☒

Report Builder

May view report definitions.

Apply

Cancel

Delete role assignment

# SQL Server Reporting Services Features

SQL Server Reporting Services offers some report delivery features that may be beneficial for financial institutions to employ, such as shared schedules, caching, snapshotting, and subscriptions. The following is high-level information on the features.

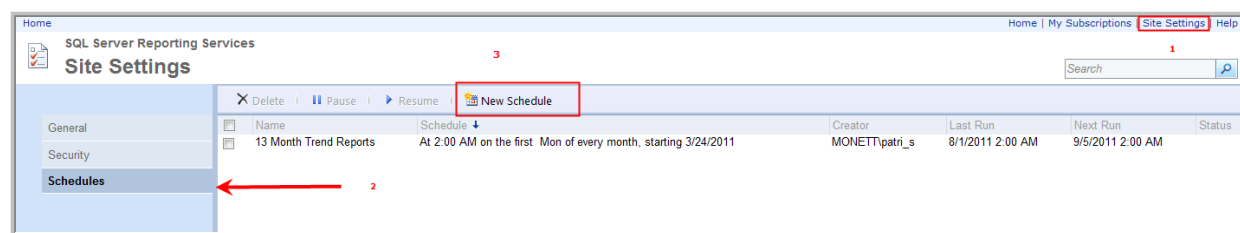
## Schedules

Financial institutions that take advantage of optional Reporting Services features, such as caching and snapshotting, should consider creating schedules that can be shared by reports.

## Creating a Shared Schedule

To create a shared schedule, follow these steps:

1. From SQL Server Reporting Services, select **Site Settings**.
2. Click **Schedules**.
3. Click **New Schedule**.



Suggested times to run shared schedules: beginning of day, mid-day, etc. Reports may be assigned to the schedule or datasets. For example, you may choose to create a job that caches shared parameters frequently used in custom report to increase report performance.


## Assign Reports to Shared Schedules

Reports are assigned to a shared schedule on a report-by-report basis. When configuring the report, you will select whether the report should be cached or whether you should take a snapshot of it, and you will determine the shared schedule to use.

## Caching A Report

Caching allows for temporary storage of frequently used data and is beneficial for large reports that may take more than a minute to build.

1. From SQL Server Reporting Services home page, select a report and expand the folders as necessary.
2. Click the drop-down arrow and select **Manage**.
3. From the pane on the left, click **Cache Refresh Options**.  
If this is the first time caching is set up, the screen will be blank;

- 
4. Click the **New Cache Refresh Plan** button, and at the message asking you if you want to enable caching for this report, click **OK**.
  5. Enter a description for the Cache Refresh Plan; the report selected was a daily report and a good description is “Daily Cache Report Start.”
  6. Click **Shared Schedule and select your daily start schedule** radio button, and then click **OK**.
  7. From the pane on the left, click **Processing Options**.

### Assigning the Report to a Shared Schedule

1. Click the **Cache a temporary copy of the report. Expire copy of report on the following schedule** radio button.
2. Click the **Shared schedule** radio button.
3. Click the drop-down arrow, and select **Schedule**.
4. Click **Apply**.

### Assigning the Report to a Report-Specific Schedule


1. Click the **Cache a temporary copy of the report. Expire copy of report on the following schedule** radio button.
2. Click the **Report specific schedule** radio button.
3. Click **Configure**.  
When the screen opens, enter the schedule details.
4. Click **OK**.
5. Click **Apply**.

## Snapshots

Snapshots provide historical storage of reports and are beneficial for reports that do not allow the user to select a date. Use the History properties page to schedule report snapshots to be added to report history and to set limits on the number of report snapshots that are stored in report history.

### Taking Snapshots of a Report

1. From the SQL Server Reporting Services home page, select a report and expand the folders as necessary.
2. Click the drop-down arrow and select **Manage**.
3. From the pane on the right, click **Snapshot Options**.
4. Select **Schedule and retention**.
  - To assign the report to a shared schedule, follow these steps:

- 
- a. Select the **Use the following schedule to add snapshots to report history** check box.
  - b. Select the **Shared Schedule** check box.
  - c. Click the drop-down arrow and select **Schedule**.
  - To assign the report to a report-specific schedule:
    - a. Select the **Use the following schedule to add snapshots to report history** check box.
    - b. Select the **Report specific schedule** check box.
    - c. Click **Configure**. When screen opens, enter the schedule details.
    - d. Click **OK**.

5. Click **Apply**.

## Assigning Reports to a Shared Schedule

Reports are assigned on a report-by-report basis, and it is inconvenient to open each report and review them individually to identify if report is being cached or retained as a snapshot. To see a list of all reports assigned to a shared schedule, follow these steps:

1. From SQL Server Reporting Services home page, click the **Site Settings** menu.
2. From the pane on the left, click **Schedules** in the left-hand pane
3. Click the schedule name.
4. From the pane on the left of the schedule setup screen, click **Reports**.

The screen displays all reports assigned to the shared schedule.

5. Repeat the process for other shared schedules.

## Subscriptions

The administrator may set up report subscriptions for users once the server has been configured for email delivery. Email subscriptions provide fields that are familiar to email users (for example, **To**, **Subject**, and **Priority** fields). Set up an **Include Report** field to embed or attach the report, and an **Include Link** field to include a URL to the report. Set up a **Render Format** field to choose a presentation format for the attached or embedded report. For more information about how to specify these options, search SQL Server Books Online for the topic "How to: Subscribe to a report."

**Note:** In SSRS, the user who creates the subscription is the owner of it. If that user account ceases to exist, the subscription will stop working. EDS will send a `Subscription Failed Alert` message when a subscription fails.

The following script can be run to reassign the owner all subscriptions to the svcEDSSQL service account in order for them to work:

```
USE ReportServer
DECLARE @NewUserID uniqueidentifier,
        @UserName varchar(100) = '<domain>\svcEDSSQL'    --replace <domain> with your user domain
and svcEDSSQL                                     --with
your SQL service account if it is not svcEDSSQL
```

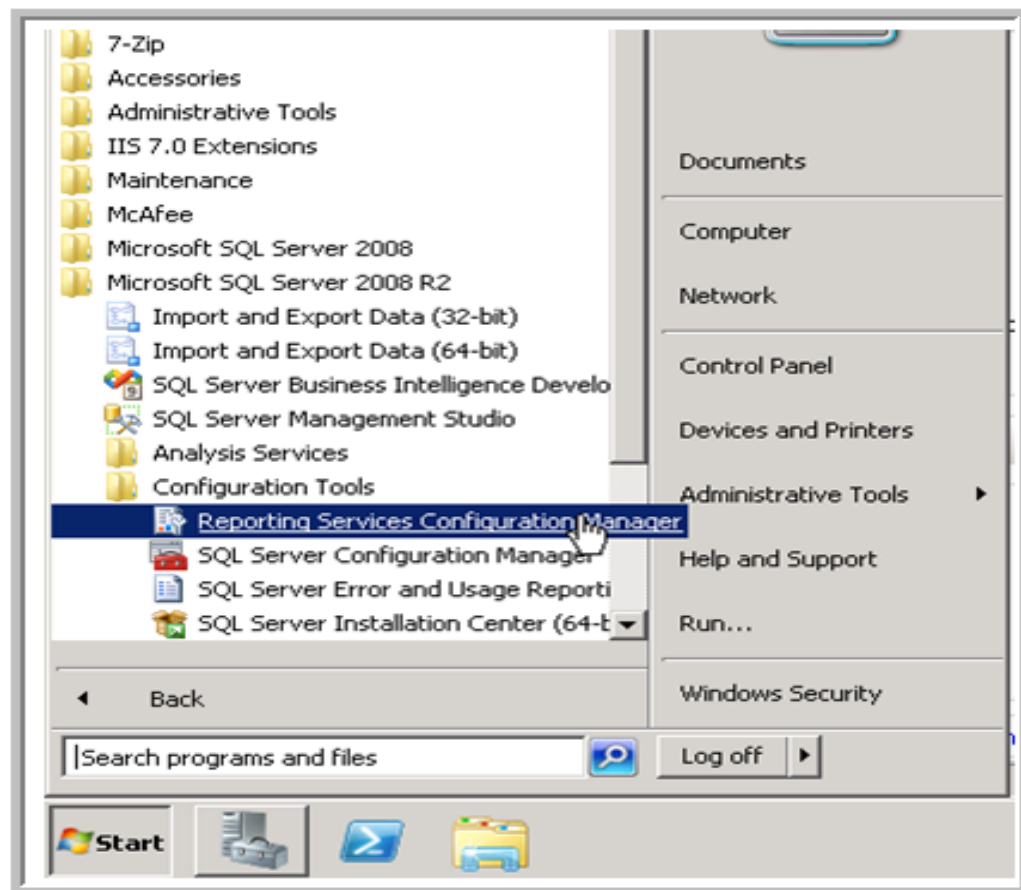
```
SELECT @NewUserID = UserID FROM dbo.Users WHERE UserName = @UserName
update dbo.subscriptions set ownerid = @NewUserID where ownerid <> @NewUserID
```

If a report link is sent to a user or user group, security requires first pass authentication and the user will be directed to the EDS portal.

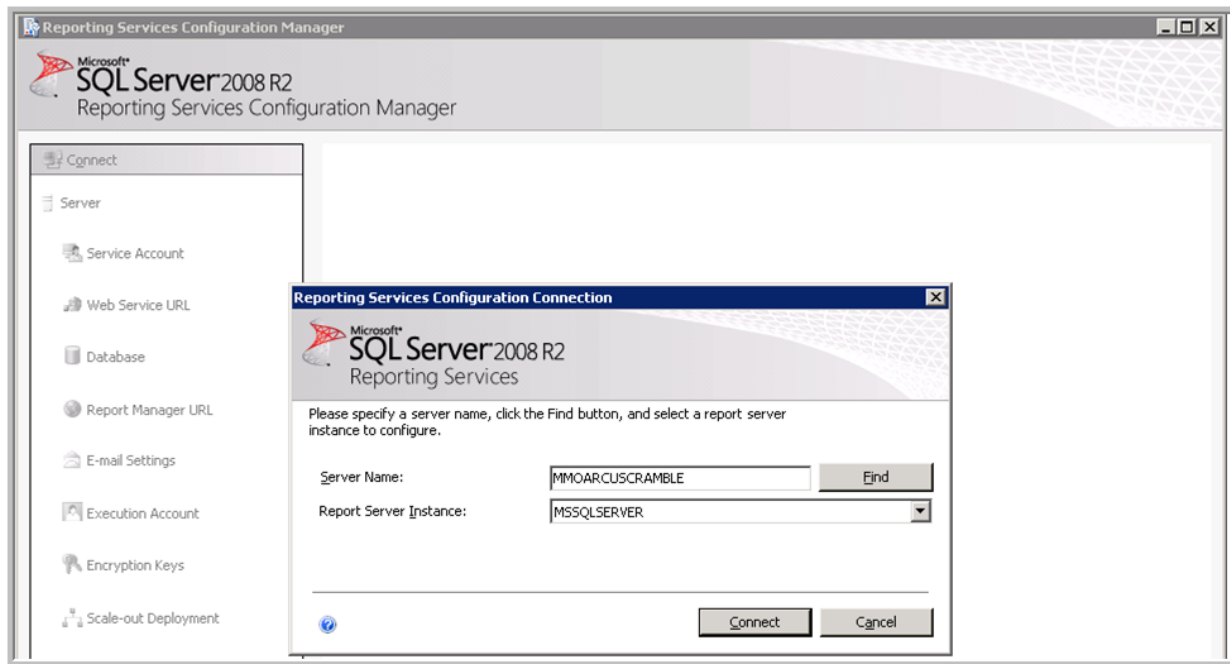
## Configuring the Server

You can configure your server through the Reporting Services interface. Follow these instructions:

1. Open the Reporting Services Configuration Manager.

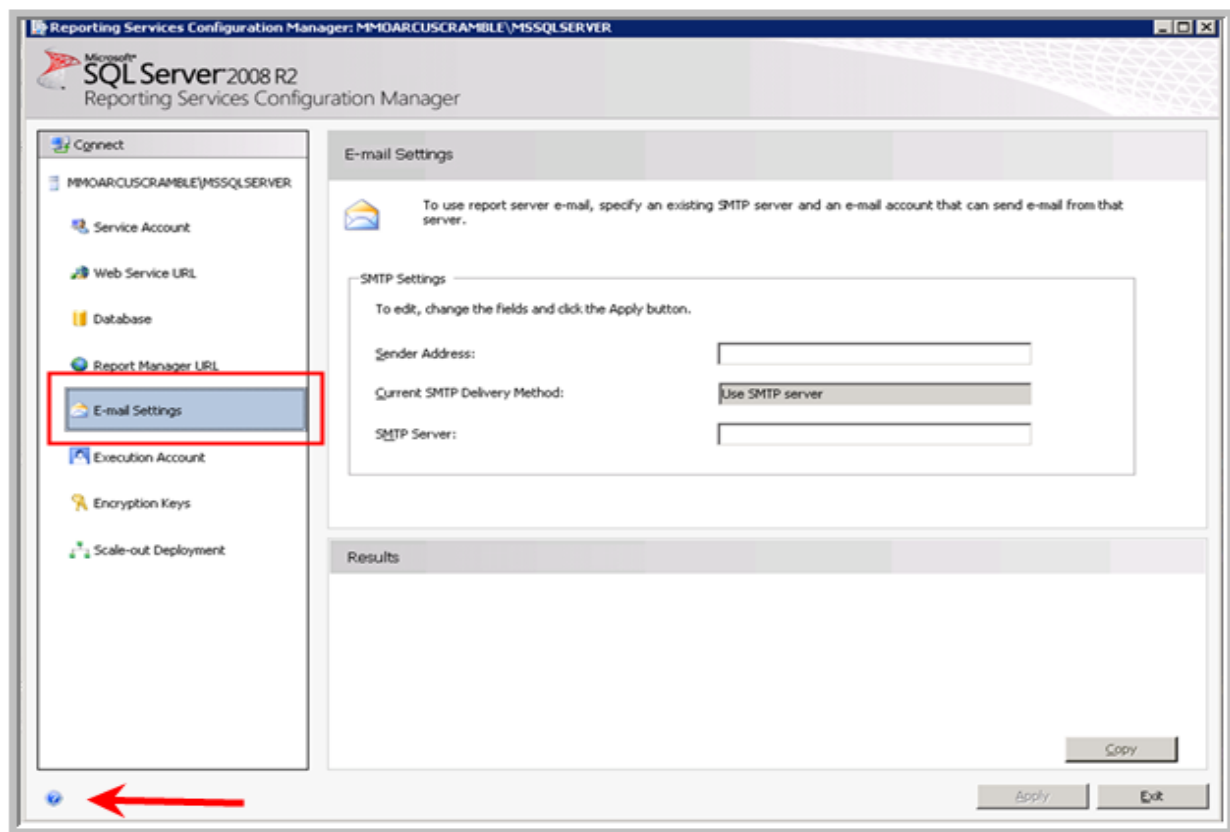


2. Enter the server name.



3. From the *Connect* pane on the left side, click **E-mail Settings**

if you need help with a step or an explanation of a field, you can click the blue question mark at the bottom.







## Creating a Subscription

To create a subscription, follow these steps:

1. Go to SQL Server Reporting Services and select a report.
2. Click the drop-down arrow and select **Subscribe**
3. Select the delivery option, schedule, and parameter values.
4. Click **OK**.

## Enter Parameter Values

Use when you are subscribing to a report that has parameters. This option is available only for parameterized reports. When subscribing to a parameterized report, you can specify the parameter values that are used to create the version of the report that is delivered through the subscription. If you do not specify a value, the default value is used.



# Updating the Logo/Image on EDS Reports

EDS prebuilt reports are delivered with the Symitar logo. The credit union can change the logo to provide a customized look to all reports. The information below provides the specifications and instructions for customizing the report logo:

1. Use the following information to create a PNG image:

- **Filename:** ReportLogo.png
- **Image Size in Pixels:** Width: 237 Height: 92

**Note:** The image will be resized to fit the space, but to preserve the image quality, try to create it similar to the default image's size.

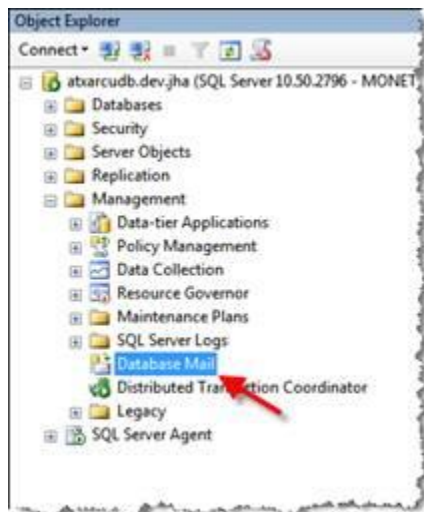
2. Save a copy of your new image file on the EDS web server in the c:\EDS\Client Specific folder. If the Client Specific folder does not exist, create it. When upgrades are applied, the entire portal will be replaced. Storing your image here ensures that it is not lost and that it can quickly be re-installed.
3. On the web server go to the C:\inetpub\wwwroot\EDS\Images directory. Make a copy of the current ReportLogo.png file, and save it in the same directory (C:\inetpub\wwwroot\EDS\Images). This gives you something to restore if your image does not work.
4. Save your ReportLogo.png file in the C:\inetpub\wwwroot\EDS\Images directory.

All reports should now display your new logo.

# Updating SQL Mail Server

Use the following Instructions to change or update your mail server IP address:

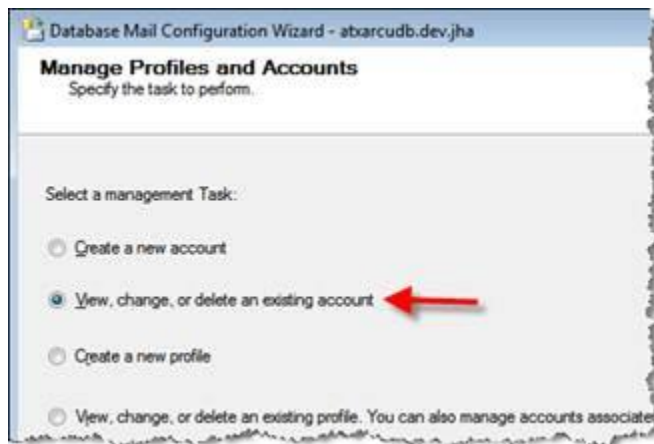
1. In SQL Server Management Studio, click **Management** folder to expand it, and then click **Database Mail** to open it..



2. On the *Welcome to Database Mail Configuration Wizard* screen, click **Next**..
3. Select **Manage Database Mail accounts and profiles**, and then click **Next**.



4. Select **View, change, or delete and existing account**, and then click **Next**.



5. Change the value entered in the **Server Name** field. You can use IP or name.
6. Apply the changes and close the wizard.



# Changing Passwords

The following sections provide instructions for changing EDS passwords. EDS Support recommends opening a case and working with the technician to ensure all changes are made correctly.

## EDS IDs

Four IDs are used by EDS or the EDS Support/Install team.

- SymitarSolutions
  - Used for testing the EDS portal
  - A domain ID with *no* special permissions at the domain
  - Full admin rights on the EDS server
- svcEDSSQL
  - Owns the SQL server services (sql server, ssas, ssrs, etc.)
  - Contained on all the EDS connections inside Reporting services
  - Runs the EDS Windows services
  - Runs the IIS application pool for EDS
  - Domain ID with no special domain security
- svcEDSSSRSEXec
  - Reporting Services Execution account
  - Domain ID with no special domain security
- EDSAgentTransfer
  - Used by Episys ODS agent
  - Local user ID
  - Read and write rights in the EDSDB database

## Password Changes

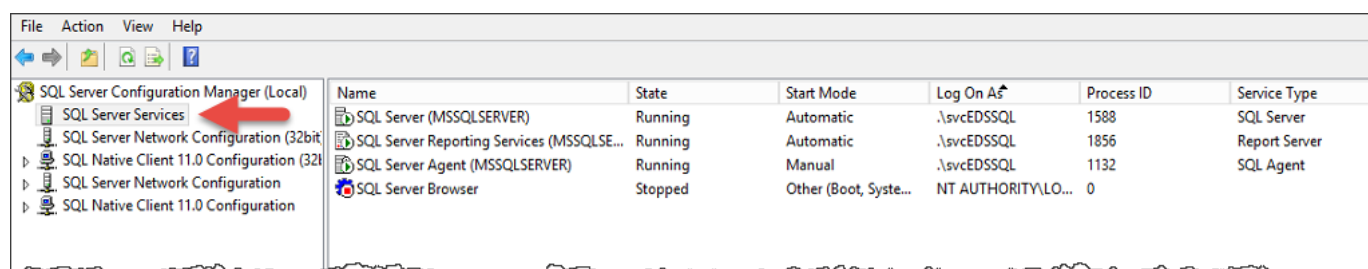
### Symitar Solutions

The password on this account can be changed without affecting the EDS system. Since the EDS support team uses this ID for support, maintenance, etc., if you change this password, ***please notify the Symitar Solutions Support team.***

## svcEDSSQL

### Updating the SQL Server Services

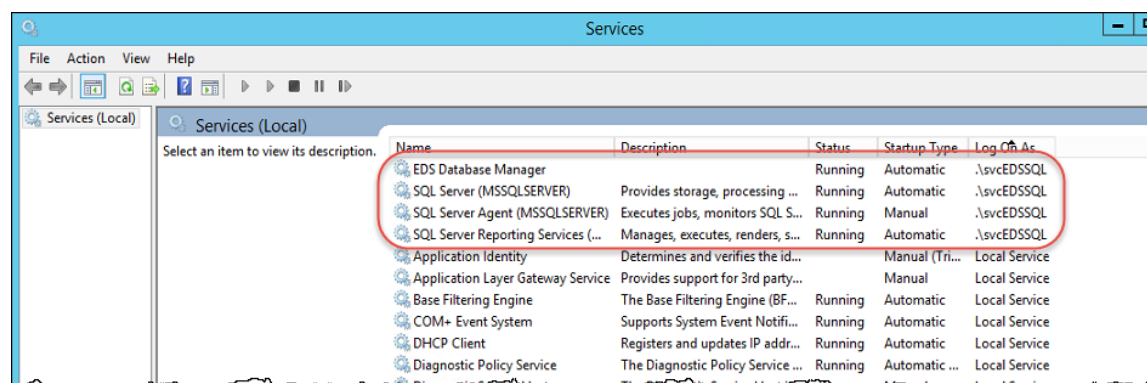
1. From Start/Microsoft Sql Server 2012 R2/Configuration Tools, open the SQL Server Configuration Manager.
2. Once in SQL Server Configuration Manager, select **SQL Server Services**.



3. Repeat the following steps for each service listed on the right hand side:
  - a. Right click the service
  - b. Select **Properties**.
  - c. In the **Password** and **Confirm Password** field, enter the new password.” fields
  - d. Click **Apply**.
  - e. If the service is running, click **Restart**; otherwise, skip to the next step.
  - f. Click **OK**.


### Updating the EDS Windows Services

1. From Start/Administrative Tools, open Services.



### Updating SQL Server Reporting Services

1. From Start/Microsoft Sql Server 2012 R2/Configuration Tools, click to open **Reporting Services Configuration Manager**.

- 
2. When prompted for a server, click **Connect** (this should already be pointing to the EDS SQL Server),
  3. From the left side of the screen, select **Service Account**.
  4. In the **Password** field, enter the new password, and then click **Apply**.
  5. If you experience any trouble restarting Report Services after updating credentials, follow these steps:
    - a. From the left side of the screen, select **Encryption Keys**.
    - b. From the main window, select **Change**.
    - c. When prompted, click OK.

## svcEDSSSRSExec

1. From Start/Microsoft Sql Server 2012 R2/Configuration Tools, open Reporting Services Configuration Manager.
2. When prompted for a server, click **Connect** (this should already be pointing to the EDS SQL Server).
3. From the left side of the screen, select **Execution Account**.
4. In the **Password** and **Confirm Password** fields, enter the new password.

**After updating the password in Reporting Service Configuration Manager, follow these steps:**

1. From the top, left side of the screen, click the server name.
2. From the main window, click **Stop**.
3. Click **Start**.
4. Confirm that SSRS has started the backup.

## EDSAgentTransfer

Changing this password will affect the transferring of data from Episys to SQL Server. Since the EDS agent uses this ID, ***please notify the Symitar Solutions Support team before changing the password.***