“Daily Usage Email”

## Summary

This document explains the process of setting up the Daily Usage Email.The purpose of this SSIS package is to send email notifications containing usage data to an email account.

## Provided database structure

**Database: ILM\_PROFILE**

**Table –** **ActionHistory\_PasswordProfile** RecordID (int, not null) //The identifying characteristic for this table. //As new records are added, this is increased incrementally.

ActionDTM (datetime, not null) //The time the action took place.

TargetID (varchar(50), null) //The target on which the action took place. //Currently PROFILE, DOMAIN.COM, or NULL

**Table –** **ConfigurationParameter** ParameterName (PK, varchar(100), not null)

//The name of the parameter. //Ex: NoReplyFromEmailAddress

ParameterValue (varchar(max), not null) //The current value of the parameter. //Variable depending on purpose of parameter. Ex: donotreply@domain.com.

ParameterDesc (varchar(1000), null) //Text description of the purpose of the parameter.

LastChangeLoginID (varchar(32), null) //The AD name of the account that last changed this parameter. //Ex: domain\firstname.lastname, or domain!serviceacctname

LastChangeDTM (datetime, null) //The DTM that this parameter was changed.

**Table –** **EmailTemplate EmailDescription** (PK, nvarchar(255), not null) //Descriptive name of the email message.

Subject (nvarchar(255), not null) //The subject line of the email message.

Body (nvarchar(max), not null) //The body of the email. //Contains references to records mentioned above.

## Requirement

The purpose of this SSIS package is to send email notifications containing usage data stored in a transactions table to an email account. The content of the email, email address, and other variables will be read from several SQL tables.

Email notifications will be sent to an email address stored in the below SQL location. ILM\_PROFILE\ConfigurationParameter.ParameterValue where ParameterName = ILMAdministratorEmailAddress.

The subject and body of the email will be stored in the below SQL location. ILM\_PROFILE\EmailTemplate.Subject and Body where EmailDescription = AMSUsageReport.

The body of the email will reference the number of records stored in the below SQL location. ILM\_PROFILE\ActionHistory\_PasswordProfile

For each execution of the SSIS package, the following will be completed.

The number of records will be counted for each of the following criteria. ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = PROFILE and ActionDTM is during the previous day. ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = DOMAIN.COM and ActionDTM is during the previous day.

An email, described below, will be sent that references the two record counts.

Template Email Information: To: %ConfigurationParameter.ParameterValue where ConfigurationParameter.ParameterName = ILMAdministratorEmailAddress%

From: %ConfigurationParameter.ParameterValue where ConfigurationParameter.ParameterName = NoReplyFromEmailAddress%

Subject: %EmailTemplate.Subject where EmailTemplate.EmailDescription = AMSUsageReport%

Body: %EmailTemplate.Body where EmailTemplate.EmailDescription = AMSUsageReport%

Template Email Body: ILM Team, Below is the usage report for AccessManager during %Yesterday’s Date; [Month Day, Year format]%. Profile Registration: %Count of records in ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = PROFILE and ActionDTM is yesterday’s date%. Password Reset: %Count of records in ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = DOMAIN.COM and ActionDTM is yesterday’s date%.

## Assumptions:

* The credentials used to execute SSIS package has following permissions:
  + Read permission on ILM\_PROFILE database
  + execute permission on SP Get\_SSIS\_DailyUsageEmail\_CurrentValue.
  + Read/write permission on the SSIS root folder that is set using “SSISFolderRoot” parameter in configuration file
  + Following folder structure exists on called server SSISFolderRoot\Logs
* The value corresponding to %EmailTemplate.Body where EmailTemplate.EmailDescription = AMSUsageReport% always contain text like :
  + %Yesterday’s Date; [Month Day, Year format]%.
  + %Count of records in ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = PROFILE and ActionDTM is yesterday’s date%
  + %Count of records in ILM\_PROFILE\ActionHistory\_PasswordProfile where TargetID = DOMAIN.COM and ActionDTM is yesterday’s date%.

These text are directly replaced with the actual value.

* Email addresses ,whom the emails will be sent, are separated by comma (,) or semi-colon (;).

## Related Objects:

***SSIS\_DailyUsageEmail\_ConfigFileFullPath*** (System environment variable):

It holds absolute path of the configuration file.

***SSIS\_DailyUsageEmail.dtsConfig*** *(*Configuration File):

It sets various variables before each SSIS package execution.

***Get\_SSIS\_DailyUsageEmail\_CurrentValues***(SQL Stored Procedure):

It is used to fetch the email usage data.

***SSIS\_DailyUsageEmail.dtsx*** (SSIS package):

It’s used to send the email. It uses all other objects to fulfill the task.

## Configurable parameters via SSIS\_DailyUsageEmail.dtsConfig:

|  |  |  |  |
| --- | --- | --- | --- |
| Sno. | Parameter Name | Parameter Desc | Default Value |
| 1 | **\Package.Variables[User::cmSOURCEDBName].Properties[Value]** | The Database name from where the email usage data will be fetched | ILM\_PROFILE |
| 2 | **\Package.Variables[User::cmSOURCEInstance].Properties[Value]** | The Database Server name from where the email usage data will be fetched | <Replace with Actual Value> |
| 3 | **\Package.Variables[User::i16LogRetentionDays].Properties[Value]** | log file retention days.E.g. files older than 7 days will be deleted automatically by SSIS | 7 |
| 4 | **\Package.Variables[User::sEmailPassword].Properties[Value]** | Password used to connect smtp email server | <Replace with Actual Value> |
| 5 | **\Package.Variables[User::sEmailPort].Properties[Value]** | Port on which smtp server is listinig | 25 |
| 6 | **\Package.Variables[User::sEmailServer].Properties[Value]** | Email server name | Smtp.domain.com |
| 7 | **\Package.Variables[User::sEmailUser].Properties[Value]** | User that is used to connect to the email server | <Replace with Actual Value> |
| 8 | **\Package.Variables[User::SSISFolderRoot].Properties[Value]** | SSIS root folder to locate log files.e.g d:\SSIS | <Replace with Actual Value> |

## Solution

1. Create a system environment variable “SSIS\_DailyUsageEmail\_ConfigFileFullPath”. Put the full path of the configuration file as its value e.g. “D:\SSIS\Configs\SSIS\_DailyUsageEmail.dtsConfig”
2. Change values in configuration file “SSIS\_DailyUsageEmail.dtsConfig*”* as per requirement and replace text ‘Replace with Actual Value’ with actual values.
3. Put the Configuration file SSIS\_DailyUsageEmail.dtsConfig*”* on the location specified in environment variable “SSIS\_DailyUsageEmail\_ConfigFileFullPath”.
4. Create the stored procedure ***Get\_SSIS\_DailyUsageEmail\_CurrentValues***in database ILM\_PROFILE.
5. Schedule the SSIS package “SSIS\_DailyUsageEmail.dtsx” in Opalis or similar.

If you want to use SSIS package that is using basic authentication to connect to SMTP server then use the SSIS package placed under folder “SSIS For Basic Authentication”. Basic authentication uses particular user and password. The values of this user and password can be configured via configuration file.

And if you want to use current user authentication then use the SSIS package placed under folder “SSIS For Current User Authentication”.

1. Here you go; The SSIS package will start sending the emails.

## Troubleshooting

Check the log file generated on each execution of the SSIS package. To get location of the log file check the values specified in configuration file (SSIS\_DailyUsageEmail.dtsConfig).