**Back up and Restore Automation**

**Prerequisites**

1. Powershell V3.0 or above. (If your source system running PS V2.0, install PS V.30 by

going https://www.microsoft.com/en-us/download/details.aspx?id=34595 )

**(One time set up only (Source SQL Server EC2))**

1. Install the AWS PowerShell Module

Get-AWSPowerShellVersion => to check if AWS-Powershell installed

https://aws.amazon.com/powershell/ => Link to download and install (no restart required)

1. Download Re-Platforming Assistant script

git clone <https://github.com/kranthi225/MSSQLUpgrad>

1. Create an AWS User Profile and add to the AWS SDK Store
2. Create an IAM Instance Profile Role
3. Open the [Amazon RDS console](https://console.aws.amazon.com/rds), and then choose Option Groups in the navigation pane. Choose Create Group, and enter the name, description, engine, and engine version of your server. Then, choose Create.
4. Select the option group that you created, and then choose Add Option. Choose "SQLSERVER\_BACKUP\_RESTORE". It's a best practice to create a new IAM role and then choose Add Option, so that your IAM role has the required privileges. Choose your S3 bucket, or create a new S3 bucket. Then, choose Apply Immediately and Add Option.

**Backup from On-Prem to RDS**

./backup\_script.ps1 -Server LETSFILL -Username LETSFILL -Password LETSFILL -source LETSFILL -restore\_db\_name LETSFILL

**Example:**

./backup\_script.ps1 -Server ec2-54-166-249-219.compute-1.amazonaws.com -Username sa -Password sqlserver -source C:\Backup\ -restore\_db\_name xyz

**Backup and Restore from On-Prem to RDS**

**Syntax:**

./backup\_restore\_script.ps1 -Source\_Server LETSFILL -Source\_Username LETSFILL -Source\_Password LETSFILL -source\_path LETSFILL -restore\_db\_name LETSFILL -Target\_Server LETSFILL -Target\_Username LETSFILL -Target\_Password LETSFILL

**Example:**

./backup\_restore\_script.ps1 -Source\_Server ec2-54-166-249-219.compute-1.amazonaws.com -Source\_Username sa -Source\_Password sqlserver -source\_path C:\Backup\ -restore\_db\_name xyz -Target\_Server sqlserver.cmha3vurzm78.us-east-1.rds.amazonaws.com -Target\_Username sqlserver -Target\_Password sqlserver

**Limitations:**

* You can't back up to, or restore from, an Amazon S3 bucket in a different AWS Region than your Amazon RDS DB instance.
* We strongly recommend that you don't restore backups from one time zone to a different time zone. If you restore backups from one time zone to a different time zone, you must audit your queries and applications for the effects of the time zone change.
* Native backups of databases larger than 1 TB are not supported.
* RDS supports native restores of databases up to 16 TB. Native restores of databases on SQL Server Express are limited by the MSSQL edition to 10 GB or less.
* You can't do a native backup during the maintenance window, or any time Amazon RDS is in the process of taking a snapshot of the database.
* On Multi-AZ DB instances, you can only natively restore databases that are backed up in full recovery model.
* Calling the RDS procedures for native backup and restore within a transaction is not supported.
* Native backup files are encrypted with the specified AWS Key Management Service key using the "Encryption-Only" crypto mode. When you are restoring encrypted backup files, be aware that they were encrypted with the "Encryption-Only" crypto mode.