How to test replication on two hyper-V servers (one is a replica of the other)

Have you ever wonder "I have enabled replication and it looks like everything is in progress, but how do I know that I am truly protected",?

At a high level, Hyper-V Replica supports three types of Failover:

- Test Failover
- Planned Failover
- Unplanned Failover

Test Failover (TFO)

1.What is Test Failover?

Test Failover is an operation initiated on your replica virtual machine which allows you to test the sanity of the virtualized workload without interrupting your production workload or ongoing replication.

2. When should I use Test Failover?

Think of Test Failover as an ability to non-disruptively simulate your recovery procedure in an isolated network. You should initiate this operation if you wish to:

- Run minimal tests to validate if your replication is on track
- Train your personnel on what is to be done in case of a disaster.
- Test the recovery plan that you have built to test your preparation when disaster does strike.

3. How should I use this feature?

TFO is performed on the replica virtual machine by right-clicking on the VM and choosing the Test Failover operation (either from the Hyper-V Manager or from the Failover Clustering Manager)
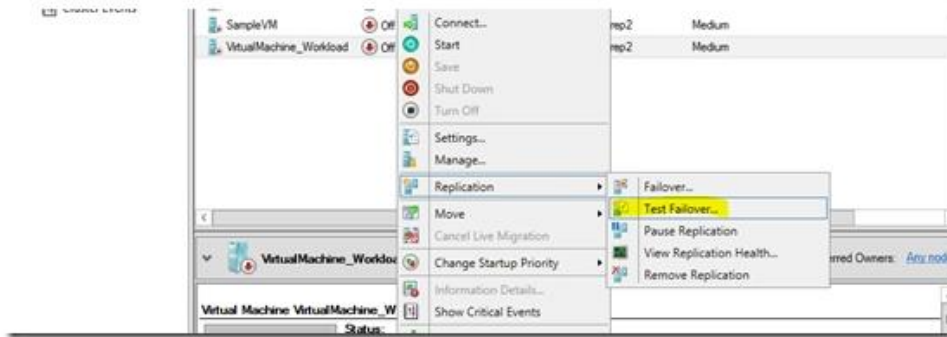
You are given a choice to pick one of the available recovery points.

After this, a NEW virtual machine is spun up on the replica site. The name of the new virtual machine is the name of the replica virtual machine with " - **Test**" appended. In our example, it would be *VirtualMachine_Workload – Test*

The TFO virtual machine should then be started in an isolated network and client tests can be run against the same to validate replication. You can pre-assign a network and an IP address using the guest IP address injection feature. Once satisfied that replication is kosher, you should do **"Stop Test Failover"** on the Replica virtual machine, which will clean up the duplicate virtual machine.

Since Test Failover does NOT impact your production workload and does NOT impact your ongoing replication, it is recommended that you perform TFO regularly. There are a couple of mechanisms which help you track the frequency of this event – BPA rules and replication health.