**Lab Number: 9 Hyper-V VM’s**

**Student name: Raine**

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| **Section**  **Summary** | Section 9: Managing VMsGoals  * Create a Linux virtual machine (VM) using Hyper-V manager * Create a VM Checkpoint * Replicate the VM * Configure and perform a Live Migration of a VM * Create a VM template using Sys prep utility  Implementation steps  1. Ensure your Virtual machine settings have Intel-VT or AMD-V Virtualisation extensions enabled 2. Use Server Manager to install the Hyper-V server role on both servers    * Link to physical network adapter 3. May need to reset manual IP addresses of servers after Hpyer-V manager installation 4. Create an external virtual switch that is bridged to the physical network card using Hyper-v manager if not done by default 5. Create a Generation 2 virtual machine (VM) using Hyper-v manager    * Connect to your external virtual switch    * Use a Linux ISO file (free download) e.g. Tiny core or Ubuntu 6. Change some settings on the Linux VM and create a VM Checkpoint using Hyper-v manager 7. Replicate the VM on to the other server WS1 using Hyper-v manager    * Enable WS2 as a Replica server in the Hyper-V settings of the VM (Replication configuration)      1. User Kerberos (HTTP) authentication on port 80      2. Use default path to specify a location to store replica files    * On WS1:      1. Select enable replication on the VM in Hyper-V manager      2. Choose the WS2 replica server      3. Specify the replication frequency to be 15 minutes      4. Maintain only the latest recovery point (24 hours)      5. Send initial copy over the network 8. Configure and perform a Live Migration of a VM from WS2 to WS1    * Start the VM on WS2    * Add the Microsoft Virtual System Migration Service to the AD computer properties of WS2    * Enable incoming and outgoing live migrations in the Hyper-V settings of the VM    * Add IP address of both servers    * Ensure the firewall allows this service    * Create folder on WS1 where the VM will be transferred to    * Restart WS1    * On WS1 choose the Move option and choose the option to move to a single location 9. Create a VM template    * Install Sys prep utility (out of box experience, reboot)    * Export the VM in Hyper-V manager and save template to specific location    * Create a VM based on that template |
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| 1 | Cannot configure nested Virtualization for the VM. |
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List At the three most useful Internet resources that you used (provided by the tutor)

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List all (at least three) Internet resources that you found and used that were not provided by the tutor)

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| Problem | Solution |
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