

Adding

Productivity  
Profitability  
Simplicity  
Creativity

to

Datability

# System Center 2012 R2 VMM Best Practices

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MVP – System Center Cloud and Datacenter Management



# 1. Installation

- Dedizierten Service Account verwenden
- Distributed Key Management über das Active Directory
- VMM Bibliothek auf separates Laufwerk legen
  - Am besten iSCSI LUN aus dem SAN
- BITS Port nicht auf dem Standard Port 443 belassen, besser Port 8500 nehmen

# VM Template Deployment schlägt fehl

Error (2912)

An internal error has occurred trying to contact the VMMLibraryServer server: NO\_PARAM: NO\_PARAM.

WinRM: URL: [http://VMMLibraryServer:5985], Verb: [INVOKE],  
Method: [GetError], Resource:  
[http://schemas.microsoft.com/wbem/wsman/1/wmi/root/microsoft/bits/BitsClientJob?JobId={5C82A14B-ACAB-489E-9ACA-2CDA4FB0C56B}]

Unknown error (0x80072f0d)

# VM Template Deployment schlägt fehl

- Mögliche Ursachen

1. Standard BITS Port 443 wird von einem anderen Dienst benutzt
2. SCVMM Self-Signed Certificate ist korrupt/fehlerhaft

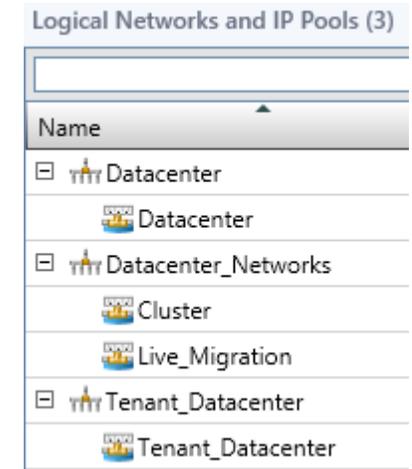
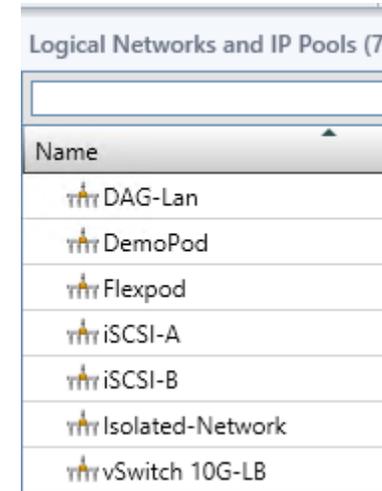
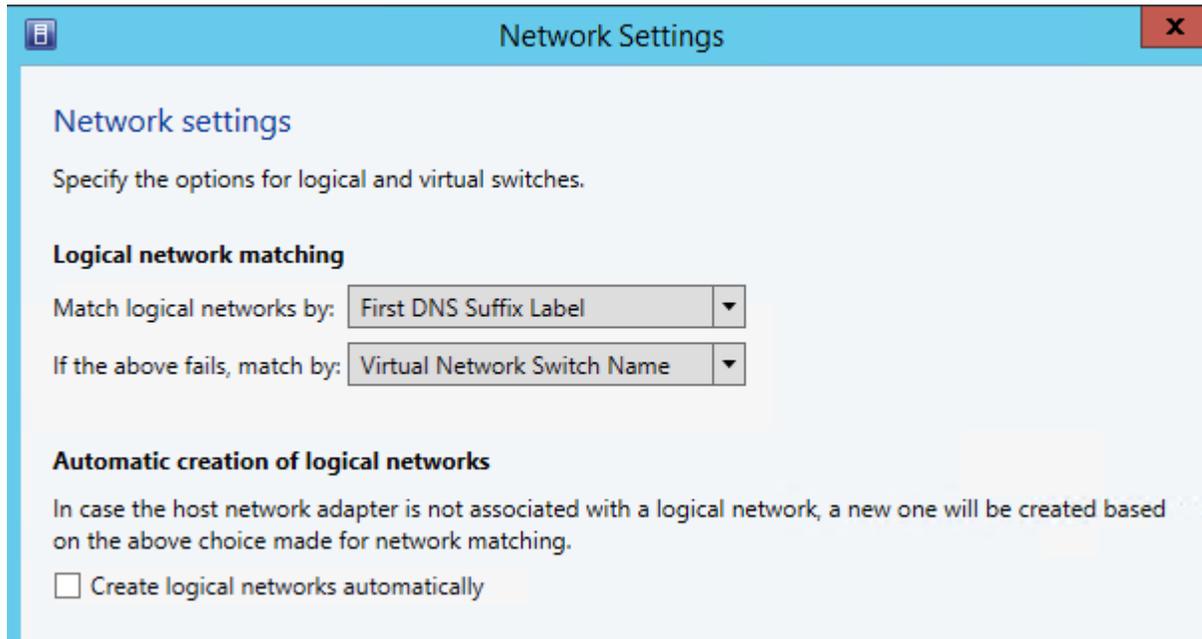
- Lösungen

1. BITS Port auf 8500 legen  
(<http://www.danielstechblog.de/system-center-2012-r2-virtual-machine-manager-ndern-des-bits-ports/>)
2. SCVMM Self-Signed Certificate wiederherstellen

```
1 $credential = Get-Credential
2 Get-VMMManagedComputer -ComputerName "Computername" | Register-SCVMMManagedComputer -Credential $credential
```

# 2. Konfiguration - Netzwerkeinstellungen

- Automatisches Anlegen von Logischen Netzwerken deaktivieren



# 3. Konfiguration – Logische Netzwerke

- Logische Netzwerke vollständig konfigurieren
  - Netzwerkstandorte
  - VLAN & Subnetze
  - Statische IP-Adresspools
- (<http://support.microsoft.com/kb/2915463/en-us>)

The screenshot displays a task in the Hyper-V management console. The task title is "Move virtual machine T00-MSCL-SCSM from s00-hyperv02.global... Completed w/ Info" with a timestamp of "06.01.2014 16:27:27" and the VM name "T00-MSCL-SCSM". Below the title bar, a summary line reads: "Move virtual machine T00-MSCL-SCSM from s00-hyperv02. to s00-hyperv01. using cluster".

The task details are as follows:

- Status: Completed w/ Info
- Command: Move-SCVirtualMachine
- Result name: T00-MSCL-SCSM
- Started: 06.01.2014 16:27:27
- Duration: 00:00:20
- Owner:

The error log contains two entries:

- Error (23801)**  
No available connection to selected VM Network can be found.  
**Recommended Action**  
Ensure host NICs have connection to the fabric network on which VM Network is created.
- Error (23753)**  
The virtual machine or tier load balancer configuration requires an IP pool and there are no appropriate IP pools accessible from the host.

# 3. Konfiguration – Logische Netzwerke

- Logische Netzwerke vollständig konfigurieren

The screenshot shows the 'Datacenter Properties' dialog box with the 'IP address range' tab selected. The 'IP address range' section is active, showing the following configuration:

- Name: IP address range
- Network Site: Specify the range of IP addresses from the subnet to be managed by this pool.
- IP subnet: 10.111.0.0/16
- Starting IP address: 10.111.0.1
- Ending IP address: 10.111.255.254
- Total addresses: 65534

The 'VIPs and reserved IP addresses' section is also visible, with the following text:

You can specify one or more IP addresses from the address range in the IP subnet to use for virtual IP (VIP) addresses or to reserve for other purposes. Use commas to separate multiple Ranges in the format IP1-IP2 are allowed.

IP addresses reserved for load balancer VIPs:

IP addresses to be reserved for other uses:

10.111.0.1-10.111.255.254

Buttons at the bottom include 'View Script' and 'OK'.

The screenshot shows a task log entry for the operation 'Move virtual machine T00-MSCL-SCSM from s00-hyperv01.global... to s00-hyperv02. using cluster'. The task is marked as 'Completed w/ Info' and occurred on 06.01.2014 at 16:32:43. The task name is 'T00-MSCL-SCSM'.

The task details are as follows:

- Status: Completed w/ Info
- Command: Move-SCVirtualMachine
- Result name: T00-MSCL-SCSM
- Started: 06.01.2014 16:32:43
- Duration: 00:00:22
- Owner:

An information message (3525) is displayed, stating: 'Information (3525) No connected IP address pool with remaining IPv4 addresses could be identified to supply an address for the network adapter. Network adapter ID: e29791f8-9ab0-43ed-a5d3-c618d379ffa9'.

# 4. Standard Switch vs. Logischer Switch

## Standard Switch

- Vorteile:
  - Einfach & schnell anzulegen
- Nachteile:
  - Kein zentrales Management
  - Kein zentrales Deployment
  - QoS muss pro VM konfiguriert werden

# 4. Standard Switch vs. Logischer Switch

## Logischer Switch

- Vorteile:
  - Zentrales Management
  - Zentrales Deployment
  - Port Profile, Uplink Port Profile & Port Klassifizierungen
- Nachteile:
  - Initialkonfiguration aufwendiger als beim Standard Switch

# 5. Update Rollups

- Installieren!
  - Das Update Rollup 1 für SC 2012 R2 VMM behebt 13 Probleme.
- Auf Installationshinweise im KB-Artikel achten
  - Ein SQL Skript muss nach der Installation des Update Rollup 1 ausgeführt werden.

# Vielen Dank.

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