This article has been written by Michel Lüscher with the support of Jonathan Jorden, based on the original text in German from Michel's blog server-talk.eu.

Error "The cluster group could not be found" in Virtual Machine Manager

This article describes how a failed VM in Virtual Machine Manager can be repaired. This troubleshooting, also called "Notes from the field," should also show how a problem can be analyzed in VMM. The situation: A job or change on a virtual machine managed by SCVMM failed and the change was not successful.

Such a situation can occur for example when a clustered virtual machine (HAVM) will be exported on one Hyper-V host and re-imported on another host. In Hyper-V there is the option to use the same ID for the virtual machine again. But when a virtual machine is added to the failover cluster it automatically creates a new and unique ID. VMM relies on the #CLUSTER-INVARIANT# information. A virtual machine, even when exported and re-imported, can be clearly identified based on this description. Basically, with a Failover Cluster this behavior does not work (yet). The job log in VMM shows the following error message:

> **Error (12711)**
> VMM cannot complete the WMI operation on server MyDamagedVM.intra.server-talk.eu because of error: [MSCluster_ResourceGroup.Name="dced5bf8-493b-49b7-8295-ee079d008b1f"] The cluster group could not be found.
> (The cluster group could not be found (0×1395))
>
> **Recommended Action**
> Resolve the issue and then try the operation again.

The virtual machine in this example called "MyDamagedVM" is represented in Virtual Machine Manager with the status Failed. The already started VM will run without limitations, however it will not be possible to change anything on this VM. Even more, the function "Repair" will fail too…

Since SCVMM stores all information in a SQL Database, it can happen that an attribute was not (yet) updated. Many issues with old information can be addressed with the "Refresh virtual machine configuration" action in Failover Cluster Management which is also the prefered action to resolve a problem like we face here. In PowerShell, the cmdlet would look similar to this:

```
PS> Import-Module FailoverClusters
PS> Get-ClusterResource -c "hst-hyperv" | where {$_.ResourceType.Name -eq "SCVMM
MyDamagedVM Configuration"} | Update-ClusterVirtualMachineConfiguration
```

But in the case where the problem cannot be resolved with a simple refresh, the failed status will remain. To analyze a missfunction in VMM it's important to collect "traces." Jonathan Jordan has published an article "SCVMM Tracing made easy!" on his blog desribing how to collect the VMM traces.

00005619 44.84210205 [2344] 0928.09D8::08/13-14:15:53.110#04:WsmanAPIWrapper.cs(968): WSMAN: URL: [http://hst-hyperv03.intra.server-talk.eu:80] Verb: [GET], resource: [http://schemas.microsoft.com/wbem/wsman/1/wmi/root/mscluster/MSCluster_ResourceGroup?Name=dced5bf8-493b-49b7-8295-ee079d008b1f]
00005620 44.84257126 [2344] 0928.09D8::08/13-14:15:53.110#04:WsmanAPIWrapper.cs(544): HostSessionCache: elements for [S-1-5-21-560624862-1488677923-1988559177-2101-hst-hyperv03.intra.server-talk.eu]: [100]
00005621 44.88131332 [2344] 0928.09D8::08/13-14:15:53.157#04:ResourceGroup.cs(141): MSCluster_ResourceGroup Get http://schemas.microsoft.com/wbem/wsman/1/wmi/root/mscluster/MSCluster_ResourceGroup?Name=dced5bf8-493b-49b7-8295-ee079d008b1f failed : [5013]
00005622 44.88223267 [2344] 0928.09D8::08/13-14:15:53.157#04:ResourceGroup.cs(141): Microsoft.Carmine.WSManWrappers.WSManException: VMM cannot complete the WMI operation on server hst-hyperv03.intra.server-talk.eu because of error: [MSCluster_ResourceGroup.Name="dced5bf8-493b-49b7-8295-ee079d008b1f"] The cluster group could not be found.
00005623 44.88223267 [2344]
00005624 44.88223267 [2344] Resolve the issue and then try the operation again.

Looking into the traces, there are no prior problems or errors which could provide more details on the cause of the issue with the failed virtual machine. This means that either there is really a problem with the Virtual Machine Cluster resource or the VMM Database has a problem. How can this problem be resolved?

VMM Database

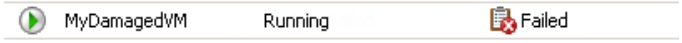
Since VMM uses a SQL database, attributes can also be changed manually. However, the "Virtual Machine Manager" service must be stopped in order to avoid inconsistency in the database. This can be done by executing the following command in an elevated command prompt, without the quotes: "net stop VMMService". To reset the status of the failed virtual machine the following SQL Query must be executed in SQL Server Management Studio. IMPORTANT!! Changes to the VMM database are implemented at your own risk. Make sure to have a valid backup before touching the database.

```
UPDATE VirtualManagerDB.dbo.tbl_WLC_VObject SET ObjectState = '0' WHERE ObjectState = '107'
```

or

```
UPDATE VirtualManagerDB.dbo.tbl_WLC_VObject SET ObjectState = '0' WHERE Name = 'MyDamagedVM'
```

After the VMM service has been started again, the virtual machine will show up as “running”. But, is this status really consistent?



Not really… This status will change back to “Failed” as soon as some change is executed. This means to us, back to square 1.

Virtual Machine Cluster Resource Group

It seems that VMM was right and there is really a problem with the Cluster Resource Group. To dig deeper into that, we have to compare the ID of the High Available Virtual Machine (HAVM) from the cluster configuration with the ID stored in the VMM database. The information from a cluster is stored in its registry in the hive "HKLM\Cluster\Groups\." For each VM a separate key named with the ID is created. For the failed VM "MyDamagedVM" the registry looks like this example:

Key: HKLM \ Cluster \ Groups \ dced5bf8-493b-49b7-8295-ee079d008b1f

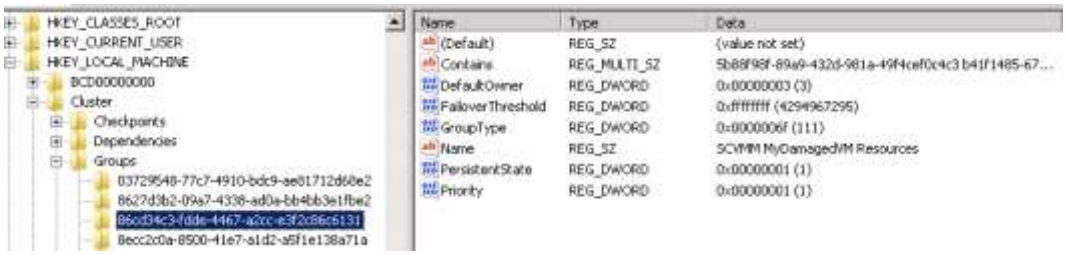
Now go back to the SQL Server Management Studio to compare this information with the ID stored in the VMM database. This information is available in the table called "tbl_WLC_VMInstance" under "VMResourceGroupID". By comparing the two IDs the problem can be identified… the values are different.

This shows the wrong value in the SQL Database ('dced5bf8-493b-49b7-8295-ee079d008b1f'):

INF-SQL01.Vir...WLC_VMInstance

VMResourceGroupID	VMResourceGroup	VMResource
a4d0b81c-c2f9-498b-b958-28a981812fdd	SCVMM srv-tfs01 Resources	SCVMM srv-tfs01
dced5bf8-493b-49b7-8295-ee079d008b1f	SCVMM MyDamagedVM Resources	SCVMM MyDamagedVM
d6241dde-b068-4635-ac74-a7f961566d21	SCVMM inf-rds01 Resources	SCVMM inf-rds01

and here the correct value in the Failover Cluster configuration ('8627d3b2-09a7-4338-ad0a-bb4bb3e1fbe2'):



To correct the "MSCluster_ResourceGroup.Name" the following SQL query has to be executed to update the wrong value with the correct one (make sure the VMM service has been stopped):

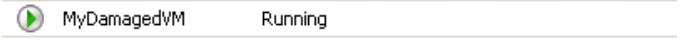
```
UPDATE VirtualManagerDB.dbo.tbl_WLC_VMInstance SET VMResourceGroupID = '8627d3b2-09a7-4338-ad0a-bb4bb3e1fbe2' WHERE VMResourceGroupID = 'dced5bf8-493b-49b7-8295-ee079d008b1f'
```

After running the SQL query, the mistake has been corrected in the VMM database:

INF-SQL01.Vir...WLC_VMInstance

VMResourceGroupID	VMResourceGroup	VMResource
a4d0b81c-c2f9-498b-b958-28a981812fdd	SCVMM srv-tfs01 Resources	SCVMM srv-tfs01
8627d3b2-09a7-4338-ad0a-bb4bb3e1fbe2	SCVMM MyDamagedVM Resources	SCVMM MyDamagedVM
d6241dde-b068-4635-ac74-a7f961566d21	SCVMM inf-rds01 Resources	SCVMM inf-rds01

Once the VMM service has been started again the virtual machine still shows as "Failed." But this time, with the right Cluster Resource Group associated the "Repair" function works perfectly.



Further Information

- Microsoft TechNet: Backing Up and Restoring the VMM Database
- Microsoft TechNet: Update-ClusterVirtualMachineConfiguration