Troubleshooting with vm_manager

This section describes the unstable scenarios that can occur while executing Ansible commands on the cluster and which operations should be performed to recover a stable situation.

Ansible command is interrupted

The execution of a *cluster_vm* command can be interrupted for different reasons: crash on the hypervisor, network failure, manual stop of the operation… For the commands that modify the system, the interruption might result in an undesirable scenario, where a fix action will be required:

Command	**How to fix**
create	Re-call the command with the *force* parameter set to *true*.
clone	
remove	Re-call the command.
start	
stop	
create_snapshot	
rollback_snapshot	
remove_snapshot	
enable	
disable	
purge_image	Note: purging snapshots according to number or date is not transactional. In case of interruption only a part of them might be removed. In this case, it is necessary to re-call the transaction.

VM cannot be enabled

Enabling a VM on the Pacemaker cluster might fail if its XML configuration is invalid. Pacemaker will detect it and the VM will remain in a *Stopped* or *Failed* state, triggering a *Timeout* error. The commands that can enable a VM are:

Command	**How to fix**
create	Remove the VM (*), fix the configuration and try creating it again.
clone	
rollback_snapshot	
enable	

(*) Note: Calling the *create* or *clone* commands with the *force* parameter set to *true* will automatically remove the VM before its creation.

“VM is not on the cluster” error

If the VM is not enabled on the Pacemaker cluster there are three commands that will fail with the *“VM is not on the cluster”* error.

Command	**Error message**	**How to fix**
start	VM is not on the cluster.	VM has to be created and enabled on the cluster.
stop		
disable		

Unnecessary action / accessing nonexistent VM, snapshot or metadata

Creating a VM or snapshot that already exists or trying to access a nonexistent VM, snapshot or metadata will fail according to the following errors:

Command	Error message	How to fix
create	VM already exists.	Choose a nonexistent VM *name*.
clone	VM already exists.	Choose an nonexistent VM *name*.
	Error opening image.	Choose an existent VM *name*.
remove	VM does not exist.	Choose an existing VM *name*.
list_snapshots	Error opening image.	Choose an existing VM *name*.
create_snapshot	Error opening image.	Choose an existent VM *name*.
	Snapshot already exists.	Choose a nonexistent *snapshot_name*.
rollback_snapshot	Error opening image.	Choose an existent VM *name*.
	Snapshot does not exist on VM.	Choose an existent *snapshot_name*.
remove_snapshot	Error opening image.	Choose an existent VM *name*.
	Error checking if snapshot is protected.	Choose an existent *snapshot_name*.
purge_image	Error opening image.	Choose an existent VM *name*.
get_metadata	Error opening image.	Choose an existent VM *name*.
	No metadata for image.	Choose an existent *metadata_name*.

Invalid parameter name

Names for VMs, snapshots and metadata keys must only contain letters and numbers without spaces. Additionally, metadata has also reserved keys that cannot be used. In case of not following these rules, the commands *create*, *clone* and *create_snapshot* will fail with the error *"Parameter must not contain spaces or special chars"*.

Command	Error message	How to fix
create	Parameters must not contain spaces or special chars.	Verify VM *name* and metadata *keys*.
clone		Verify VM name and metadata keys (*src_name* and *name* cannot be the same).
create_snapshot		Verify *snapshot_name*.