

Memory Dimensioning in PLs in a Live SAPC

Ericsson Service-Aware Policy Controller

Operating Instructions

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1 Memory Dimensioning in PLs in a Live SAPC Introduction

This instruction explains the steps to fulfill the memory dimensioning.

1.1 Prerequisites

This section provides the prerequisites, which must be addressed before using the procedure.

Conditions

The following conditions must apply:

- The operator must be familiar with the cloud orchestrator used.
- The SAPC accessible. The OAM virtual IP address (VIP_OAM) to access the SAPC is known.
- For CEE, the new flavor has to be created before the execution of the procedure.



2 Memory Dimensioning in PLs in a Live SAPC Procedure

2.1 General Procedure

To change the memory size of a Payload, do the following steps.

2.1.1 Lock the PayLoad

Steps

1. To access the system, execute the following command:

```
External Machine> ssh sapcadmin@<OAM VIP>
```

2. SC-<X>:~> **cmw-node-lock PL-<X>**

For further information, refer to [SAPC Troubleshooting Guide](#).

2.1.2 Stop PL Virtual Machine

Steps

1. On your cloud orchestrator, select a PL-X previously locked.
2. Power off the PL-X.

2.1.3 Resize the PL Memory

Increase the memory size of the PL-X following the procedure according to your cloud orchestration, [Memory Dimensioning in PLs in a Live SAPC Procedure in OpenStack](#) on page 3, or [Memory Dimensioning in PLs in a Live SAPC Procedure in VMware](#) on page 4.

2.1.4 Start PL Virtual Machine

Steps

1. On your cloud orchestrator, select the PL-X from the SAPC previously powered off.
2. Power on the PL-X.



2.1.5 Unlock the Payload

Steps

1. Execute the following command to unlock the PL-X: `SC-<X>:~ # cmw-node-unlock PL-<X>`

2.1.6 Run Health Check

Steps

1. Check that there are not errors, run `sudo sapcHealthCheck` command.

`SC-<X>:~ # sudo sapcHealthCheck`

2.2 Memory Dimensioning in PLs in a Live SAPC Procedure in OpenStack

This procedure is executed when the cloud orchestrators Atlas/Director or ECM are used.

2.2.1 Log in OpenStack

Steps

1. Connect by SSH to the host running the OpenStack controller node.

2.2.2 Resize VM with New Flavor

Steps

1. Check the PL VM identifier running `nova list` command and check the 10-GB flavor with `openstack flavor list` command.
2. Execute the following command to change the flavor from a VM: `openstack server resize --flavor <new_flavor_id> <pl_vm_id>`

2.2.3 Confirm Memory Size



Steps

1. Execute the following command to confirm the Payload memory size:
`openstack server resize --confirm <pl_vm_id>`

2.2.4 Update Configuration for Scalability

2.2.4.1 Update Configuration in Atlas/Director

The SAPC stack must be updated to secure a later scalability procedure. The procedure is executed from a machine (Atlas or Director) where the Heat API is available.

Steps

1. Edit SAPC HOT parameter file with new flavor. The `SAPC_<version>_params.yaml` contains the name of the flavors used on the SAPC stack.
2. Execute the following command to update stack with new flavor configuration.

```
<atlasvm># heat stack-update -f SAPC_cxp9032849_7r2e61/  
SAPC_<version>.yaml -e SAPC_cxp9032849_7r2e61/Resources/  
EnvironmentFiles/SAPC_<version>_params.yaml -r <stack_name>
```

2.2.4.2 Update Configuration in ECM

For ECM, the flavor has to be changed on the database.

Steps

1. Log in ECM DB (Granite Inventory).
2. Find the VM identifiers of the PLs. For each PL, follow next steps:
3. Right-click the VM, click **Modify Selected Virtual Machine**.
4. Edit the flavor on **VM Attributes** writing the new one with the proper value.
5. Delete old flavor on **Virtual Machine Hardware Definition** and add the new one.

2.3 Memory Dimensioning in PLs in a Live SAPC Procedure in VMware

This procedure is executed when the VMware cloud orchestrators vCloud Director or vCenter are used.



Steps

1. Log in the cloud orchestrator GUI.
2. Right-click the powered off PL-X from the SAPC on your orchestrator.
3. Click configuration.
4. Upgrade the memory.

For vCloud Director, click **Hardware** tab and update **Memory** value to 10 GB.

For vCenter, update **Memory** value to 10240 MB.

After this procedure, if a scale-out is needed, follow the Scale-Out OPI selecting 10 GB of memory when deploying.