It is possible to use VM nodes as targets for jobs in a batch system. The following is an example of having SLC3 and SLC4 running alongside each other in the client nodes of a PBS/Torque batch system.

In the illustration, oplaslim12-2 and oplaslim12-3 are VMs running on the Xen host oplaslim12, and similar for oplaslim13. In the PBS node list, each VM node is specified, and the OS installed - slc3 or slc4 - is specified as a 'property' after the hostname, e.g. 'oplaslim12-2 slc3'

One routing queue (queue_type = Route') is created and one execution queue (queue_type = Execution') per physical machine. If a physical machine is an n-way machine, then the max number of jobs in its execution queue is set to n.

In addition to Torque, Maui needs to be installed. In the Maui config file, /usr/local/maui/maui.cfg, the following is entered.

```
NODESETPOLICY ONEOF
NODESETPOLICY ONEOF
NODESETATTRIBUTE FEATURE
NODESETDELAY 0:00:00
NODESETLIST oplaslim12-2 oplaslim12-3
NODESETPOLICY ONEOF
NODESETATTRIBUTE FEATURE
NODESETDELAY 0:00:00
NODESETLIST oplaslim13-2 oplaslim13-3
```

Now the execution environment can be selected with the -l parameter, e.g. ’pbs_sub -l slc3...’ and the job will be executed on an slc3 node.

-- Main.hbjerke - 22 Jan 2007