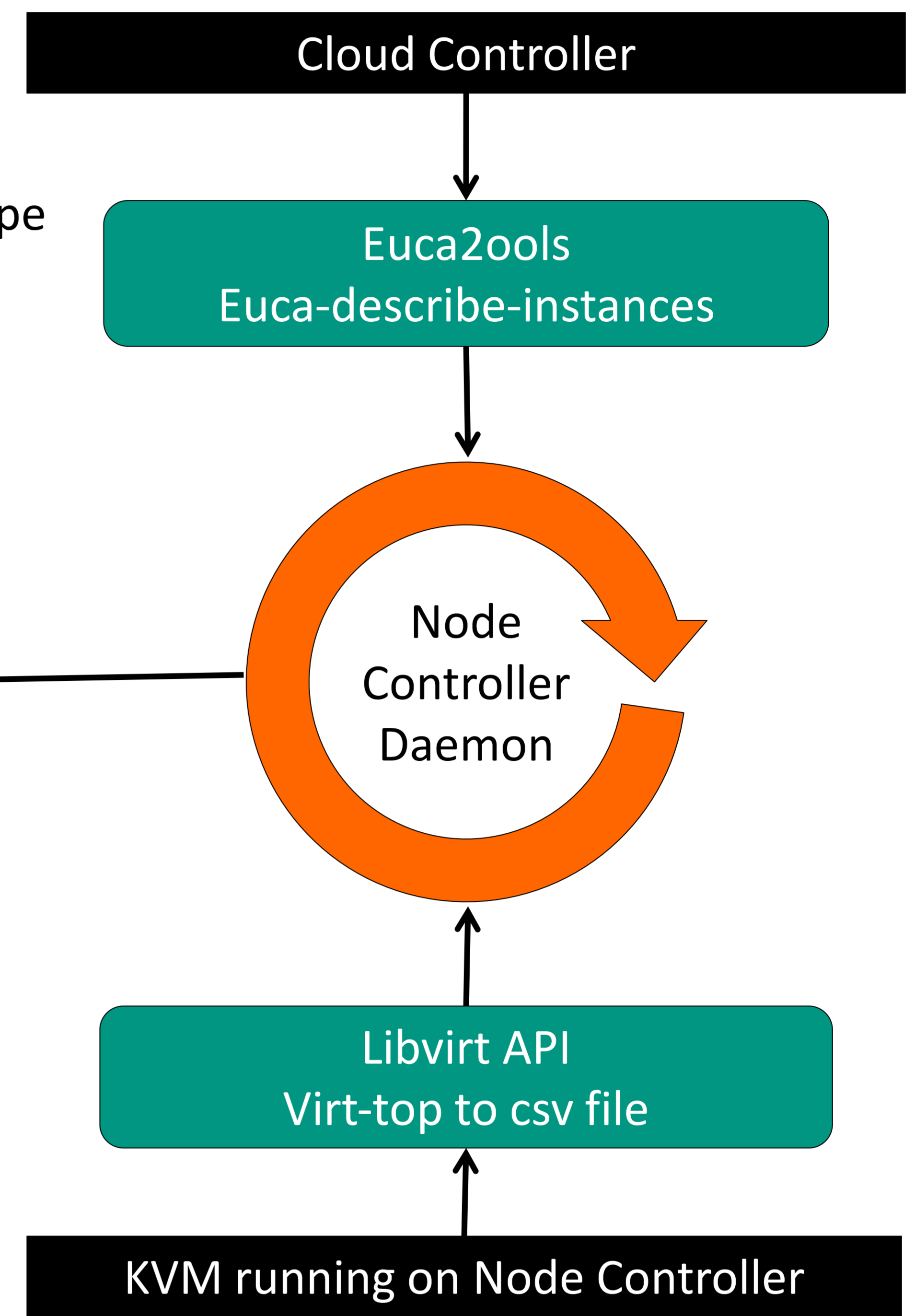
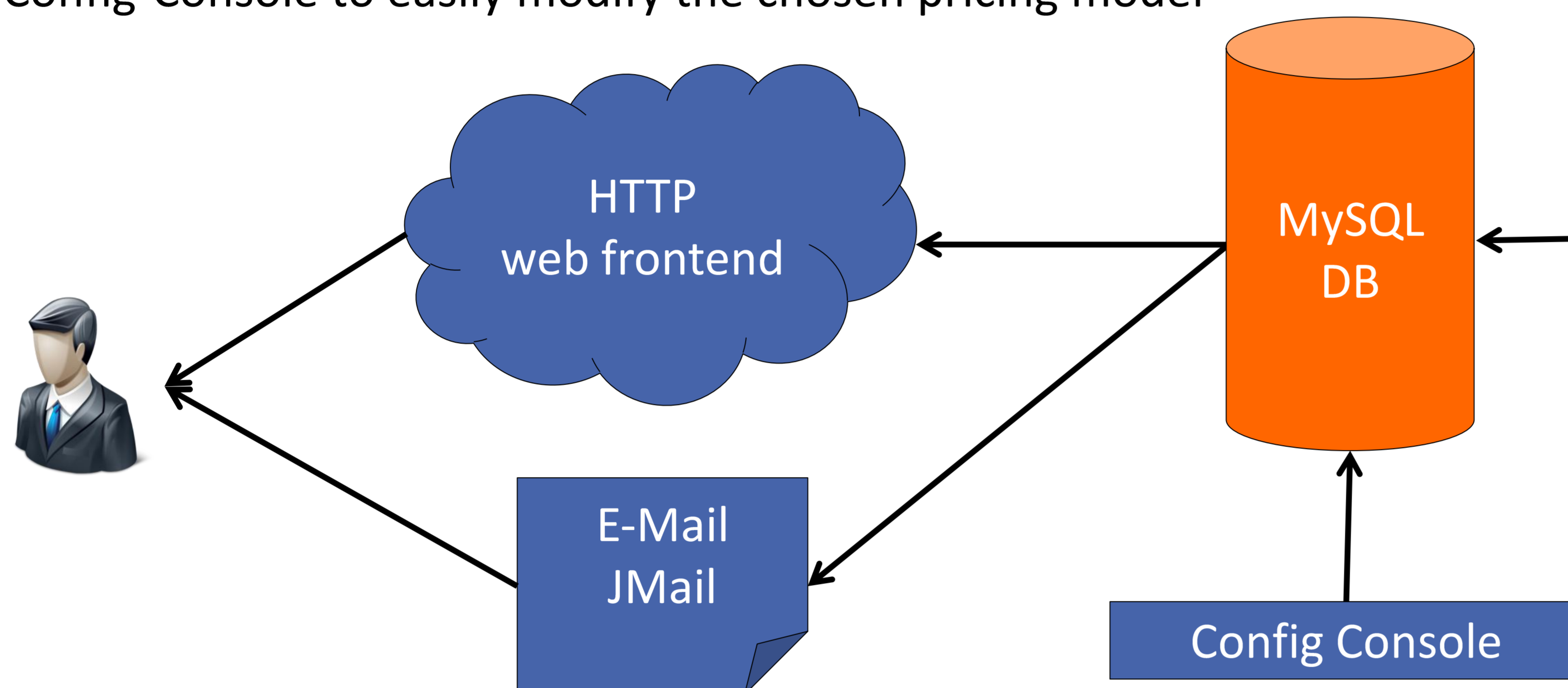


Accounting-Solution for the Private Cloud with Eucalyptus

Karsten Knese, Christian Baun

- System setup for an accounting solution based on Eucalyptus and Virt-Top
 - Daemon running on each Node Controller (NC) inside the Eucalyptus cluster
 - Daemon collects resource data of each instance
 - Matching those dates with information of Eucalyptus like owner and instance-type
 - Saving all data with current timestamp into database
 - Providing edited data to each owner ether by web frontend or E-Mail
 - Config-Console to easily modify the chosen pricing model



- libvirt provides single point of entry for virtualization software
- Single tool based on libvirt can control multiple hypervisor
- libvirt API supports multiple virtualization solutions:
 - KVM
 - XEN
 - VirtualBox
 - VMware ESX
- Eucalyptus uses libvirt, installed on each NC, to create instances
- Virt-Top monitors the resources of each VM created by libvirt
- Virt-Top collects resource data of each Eucalyptus instance
- Accounting solution is independent from virtualization solution

- Configuration Console for modifying the pricing model in the categories
 - Hardware costs
 - CPU
 - Network traffic
 - Disk I/O
- Flexible pricing model for each category individually as part of the billing

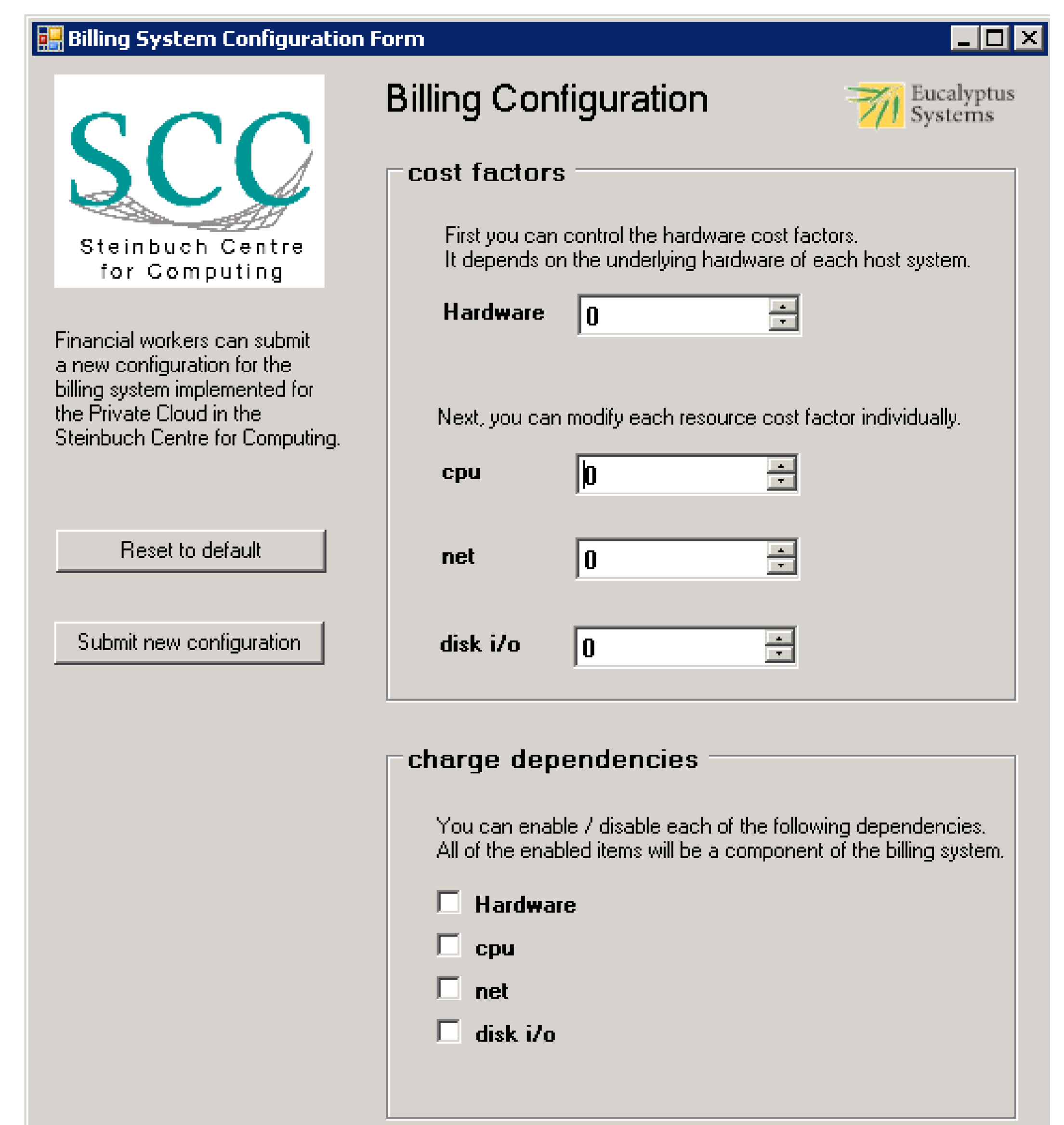
Aktuelle Belastung: 0

Übersicht Ihrer aktuell verfügbaren Instanzen:

id	netRec	netTrans	diskRead	diskWritten	cpuTime	cpuPercentage
i-480D0707	0	0	0	0	70000000	0,011667
i-4CCB0940	23023	630	0	10	120000000	0,023333

Übersicht der nicht zugeordneten Instanzen:

user	id	netRec	netTrans	diskRead	diskWritten	cpuTime	cpuPercentage
UNKNOWN	one-391	23653	0	0	0	220000000	0,043333



The screenshot shows the 'Billing System Configuration Form' for SCC Steinbuch Centre for Computing. It includes sections for 'Billing Configuration' and 'charge dependencies'. The 'Billing Configuration' section has input fields for 'Hardware', 'cpu', 'net', and 'disk i/o', all set to 0. There are 'Reset to default' and 'Submit new configuration' buttons. The 'charge dependencies' section has checkboxes for 'Hardware', 'cpu', 'net', and 'disk i/o', all of which are currently unchecked.