



Work package 5 (WP5):

Development of the mClouds system

- **What was done after MECA training event at TU Berlin?**
- Almost all Partners have prepared their local CloudStack installations now!
 - And added HTTPS/SSL encrypted connections to the internet accessible GUI endpoint (CloudStack management server)
 - Some have added additional resources like hard disks (storage space) or additional hosts



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- Partners installations are now connected via CloudStacks region feature
 - An updated region list is maintained in “basecamp”
 - The region settings have been added to almost all local cloud installations
 - Each partner institution has access to the other’s installation by a common “mecaadmin” account

MECA

MicroElectronics Cloud Alliance

www.meca-project.eu/



3 Notifications | Martin Klosek

Project: Default view

MECA-eWorks

Home > Regions >

Viewing Regions

Name	ID	Endpoint	Quickview
MECA-PolITO	1	https://cloudmanager.vsilab.polito.it:6443/client/	+
MECA-eWorks	2	https://212.60.228.60:6444/client/	+
MECA-BME	3	https://152.66.71.179:6444/client/	+
MECA-TUS	6	https://81.161.244.45:8000/client/	+
MECA-UPB-CETTI	7	http://upb.gigaeletronic.ro:8000/client	+
MECA-UNED	8	http://62.204.201.84:8080/client/	+

MECA

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apachecloudstack

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Project: Default view

MECA-eWorks

Regions

- MECA-PolITO
- MECA-eWorks
- MECA-BME
- MECA-TUS
- MECA-UPB-CETTI

Close



+ Add Region

Endpoint	Quickview
https://cloudmanager.vlsilab.polito.it:6443/client/	+
https://212.60.228.60:6444/client/	+
https://152.66.71.179:6444/client/	+
https://81.161.244.45:8000/client/	+
http://upb.gigaeletronic.ro:8000/client	+
http://62.204.201.84:8080/client/	+



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How the regions are managed inside of
CloudStacks MySQL database:

 id	 name	end_point	portableip_service_enabled	gslb_service_enabled
1	MECA-PolITO	https://cloudmanager.vlsilab.polito.it:6443/client/	0	1
2	MECA-eWorks	https://212.60.228.60:6444/client/	0	1
3	MECA-BME	https://152.66.71.179:6444/client/	0	1
6	MECA-TUS	https://81.161.244.45:8000/client/	0	1
7	MECA-UPB-CETTI	http://upb.gigaeletronic.ro:8000/client	0	1
8	MECA-UNED	http://62.204.201.84:8080/client/	0	1
999	Region1-Local-Test	http://172.16.18.1:8080/client/	0	1



Work package 5 (WP5): Development of the mClouds system

- Started and still in progress:
- **MECA global template repository = MGTR**
 - Virtual machine templates are stored on a central server
 - Synchronisation script downloads the templates automatically once per day to each local CloudStack installation
 - For reliability, templates can be divided into smaller junks (for example: template of 5 GB is splitted into 10 junks of 500 MB)
 - Templates can have different versions to be updated automatically in local CloudStack installation
- Successfully deployed at TUS and eWorks, BME and UKIM in progress (see in “basecamp”).
 - Some improvements are required for a higher stability (logging, error handling)
 - After some improvements the script can be rolled out to all partners



Work package 5 (WP5):
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- **Forecast/plans for End of 2017 and 2018**
 - Finish the MECA global template repository (MGTR) to share virtual machine templates across all partner cloud installations
 - Virtual machine template creation
 - Linux + Windows
 - Especially: How to add the right software
 - How to access VM instances over the network for the students?



Work package 5 (WP5):
Development of the mClouds system

- **Forecast/plans for End of 2017 and 2018**
 - Online scheduler for class rooms
 - Dashboard of whole MECA mClouds (similar to single cloud) to see all existing and all available resources update frequently (1x per hour)
 - Security optimization:
 - Maybe IP locks between partner networks
 - Proposal: Application of domain meca-project.eu and official SSL certificate (registered by TUS)