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## 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 encryped 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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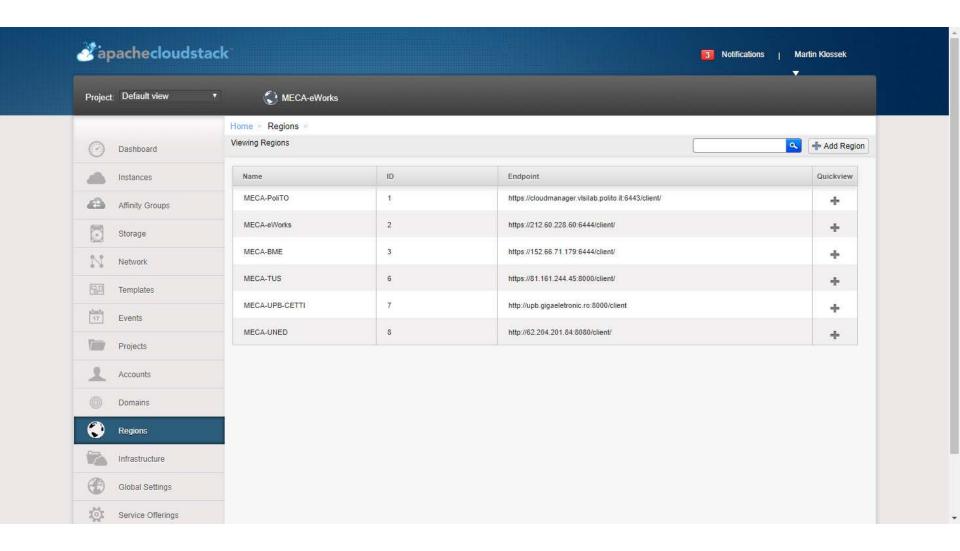


## Work package 5 (WP5): Development of the mClouds system

- 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" acount

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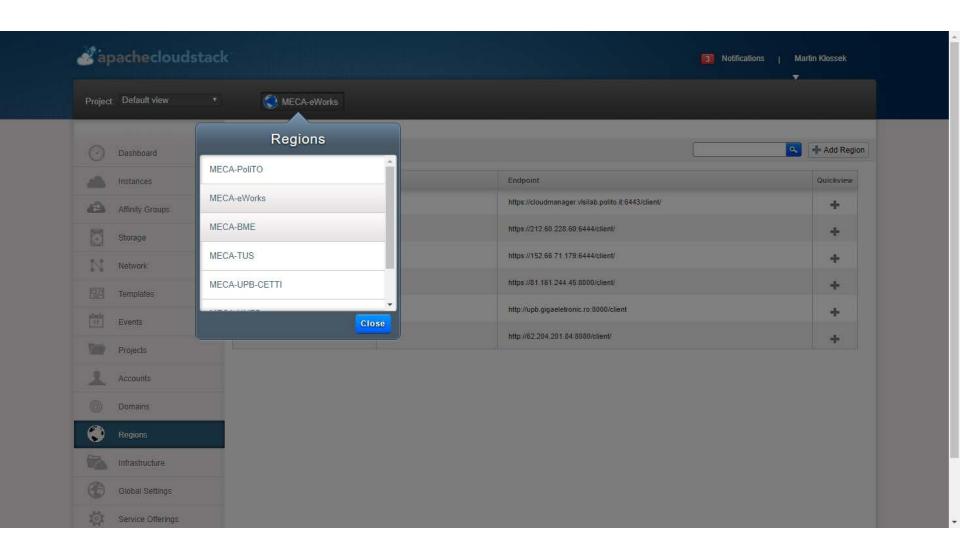




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## Work package 5 (WP5): Development of the mClouds system

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/dient/	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/dient	0	1
8	MECA-UNED	http://62.204.201.84:8080/client/	0	1
999	Region 1-Local-Test	http://172.16.18.1:8080/dient/	0	1

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#### 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

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

# 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?

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## 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)