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Application of cloud technologies for learning Desktopgrid Systems

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Currently Desktopgrid Systems gain popularity. For this reason, it becomes urgent question of the training of specialists in this field. Training of specialists in this field involves practical exercises. Practical training requires the creation of educational infrastructure.

Application of cloud computing technologies to create educational infrastructure allows to automate the process of creating, deploying and configuring layouts educational servers. For practical training on grid systems of personal computers within the Faculty of Computational Mathematics and Cybernetics Lomonosov' s Moscow State University was introduced cloud technology Xen Cloud Platform. To automate the configuration of IP-addresses and domain names of virtual machines used mechanism for dynamically assigning IP-address and domain name for MAC-address of the virtual machine. MAC-address is set by means of educational infrastructure creating a new virtual machine instance.

Further development of the training involves the use of cloud infrastructure to create educational infrastructures of various types. First, is use to create a training for other implementations of Desktopgrid Systems. Second, is the use of cloud infrastructure to create virtual clusters of various types. Third, is the use of cloud technologies for learning technology service grid systems.

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