DSC : Assignement 2

Assignment 2: X509 Certificate Authority Creation and Use The tools needed in this assignment are installed in nightmare.cs.uct.ac.za. They should also be installed in the honours lab workstations. Create your own certificate authority using grid-ca-create. Â This should have a Common Name that includes your own name, such as âRobâs CAâ. It should have an Organizational Unit called âTestingâ and an Organization of âGridâ. Documentation for how to used the simple CA tools can be found here: http://toolkit.globus.org/toolkit/docs/latest-stable/admin/install/appendix.html#simpleca-install The CA will be created in $HOME/.globus/simpleSA . Given that you will not have permission to write to the system directory you will need to install configuration files and certificate hashes into your own directory space. For this make a directory called certificates in your .globus directory. Then unpack the CA distribution file created when you created the CA and copy the files from this to .globus/certificates . Also set the following environment variables: Â Â X509_CERT_DIR to $HOME/.globus/certificates and Â GRID_SECURITY_DIR to $HOME/.globus/simpleCA Next request an X509 certificate for yourself using this CA (see grid-cert-request). Then use the CA to sign the certificate request (grid-ca-sign) and place the your user certificate in your .globus directory. At this point you should be able to create a proxy certificate using grid-proxy-init . You can used grid-proxy-info to examine the proxy certificate created. Copy the output of this into a file that you should include in with what you hand in. Now create a host certificate for a machine of a name of your choice and use your CA to sign it. Now create a service certificate for an ldap service to run on the host for which you created a certificate for above. Again sign this. Finally create a tar file including the output from grid-proxy-info, and the signed host and service certificates. This tar file should be uploaded to vula. Â