



Fact-Sheet UNICORE WS - UUDB

Context

- UNICORE Grid Middleware component
- Component for Authorization

Description

- Web Services-based UNICORE User DataBase (WS - UUDB)
- Also named as UNICORE Authorization Service (UAS) – name is DEPRECATED!
- Developed during the European UniGrids project
- One WS-UUDB can be the authorization service for several UNICORE Virtual Sites (VSites)

Architecture

- java:RPC service running under TomCat, Deployment via WSDD file
- Uses plug-in functionality of the UNICORE Network Job Supervisor (NJS)
 - njs.properties: uudb.class_name = org.unigrids.fzj.uas.service.client.UASClient
 - njs.properties: uas.service.endpoint = <https://uashost:port/path...>
 - njs.properties: uas.gcid = unique_identifier, for instance a hostname, e.g. zam288:4444
- The parameter gcid maps one NJS (Virtual Site) to one specific entry in the UUDB (key, role, etc)
 - The same information (key, role, etc.) can be used for different NJS (Virtual Sites)
- NJS uses the UUDB interface of the com.fujitsu.arcon.njs.interface.UUDB class
- NJS is adapted by a Client that uses WS calls to access the WS-based UUDB
- Client is inherited from the abstract com.fujitsu.arcon.njs.interface.UUDB class
- Basic Web Service calls are used, NOT Web Service Resource Framework (WS-RF) compliant
- UUDB Web Service main class: org.unigrids.fzj.uas.impl.UASEngine
- One entry (UASEntry) in the WS-based UUDB consists of
 - securityToken : String // public key of user/NJS in pem format
 - gcID : String // id of VSite (hostname:port), e.g. zam288:4444
 - role : String // User, Administrator, NJS, TRUSTED_NJS
 - xlogin : String // basic UNIX login
 - projects : String[] // further differentiation
- The WS-based UUDB offers the following methods:
 - addSecurityToken(...) // add a public key
 - removeSecurityToken(...) // remove a public key
 - updateSecurityToken(...) // exchange public keys or other information (role, etc.)
 - listUAS(...) //
 - checkSecurityToken(...) //
- There is also an admin tool implemented for administration of the WS-UUDB
- The status of the UUDB is currently saved in a physical XML file (name and location configurable)

Links

- <http://www.unicore.eu>

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Pictures/Images

