



NORDUGRID

*Grid Solution for Wide Area
Computing and Data Handling*

ARC-CE token support plans

Aleksandr Konstantinov
on behalf of NorduGrid collaboration

ARC token support

Current state - user tools

- Implementation is preliminary
- CLI tools and API follow “*WLCG Token discoverability specifications*”
 - BEARER_TOKEN, BEARER_TOKEN_FILE, etc.
- No integrated token generation or retrieval
- Support for user authentication using tokens in HTTP-based communication protocols
 - Bearer token in HTTP Authorization header
 - EMI-ES (SOAP)
 - HTTP REST

ARC token support

Current state - CE

- Support for self-sufficient tokens only
 - Identity tokens
 - JWT access tokens
 - Must conform to “WLCG Token Profile”
- No hardcoded claims processing algorithms
 - User is authorized according to claims specified in configuration file – currently **subject, issuer, audience, scope** and **group**
 - Internally user is tracked/identified by **issuer+subject** pair
- No support for using tokens for data staging

ARC token support

Current state - CE

- CE configuration example

```
[authtokens]
```

```
# Enable token processing
```

```
[authgroup:wlcgtokens]
```

```
# Assign wlcg members to internal authorization group
```

```
authtokens=* https://wlcg.cloud.cnaf.infn.it/ * * /wlcg
```

```
[mapping]
```

```
# Map wlcg token holders to pool of local UNIX accounts
```

```
map_to_pool=wlcgtokens /etc/grid-security/pool/tokenpool
```

```
[arex/ws/jobs]
```

```
# Authorize wlcg token holders access to CE
```

```
allowaccess=wlcgtokens
```

ARC token support

Future plans

- Token retrieval integration and automation in user tools
- Data staging with tokens
 - WLCG unification specs/profiling would be of great help
- More flexible processing of token claims on CE
- Better control over acceptable tokens
- Integration of token support into RuntimeEnvironments (RTEs)
 - As replacement of X.509 credentials
 - New possible scenarios

ARC token support

Questions?