Management of Rights in a Heterogeneous Environment

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Condor has to work …

> … in local environments (both submission and execution)
> … in global/grid environments
> … on and across many OS platforms and versions
> … on the fly (glide-ins) and deployed as root
> … with resource based usage policies
> … with time limited proxies/certificates
> … private data

Therefore, Condor supports …

> … a suite of authentication methods

> … client-server negotiation to select authentication method

> … monitoring and propagation of renewals

> … mutual authentication of software modules

> … "private" communication channels

> … encrypted file access on Windows

> … inclusion of access rights in resource allocation (matchmaking) decisions

Concerns/issues

> No (formal) threat model
> Not enough attention to the quality of our "right management" software
> Too much code running as root
> Too much delegation
> Too little separation between "pay-load" and "agent" trust
> Too many "right management" "experts"/developers/middleware
> Mapping from local to global identity
> Support for hierarchical identity spaces