



# **Globus related standards: Past, present and future**

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**Steve Tuecke**

Deputy Director, Computation Institute

University of Chicago and Argonne National Laboratory



## Globus Toolkit

Build the Grid



Components for building  
custom grid solutions

[globustoolkit.org](http://globustoolkit.org)

## Globus Online

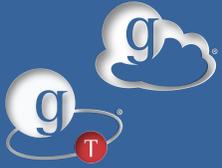
Use the Grid



Reliable file transfer  
Software-as-a-Service

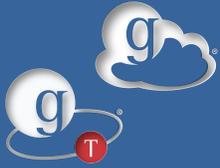
[globusonline.org](http://globusonline.org)

[www.globustoolkit.org](http://www.globustoolkit.org)



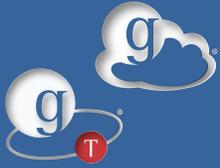
## Past

- **Globus team co-authored many standards:**
  - X.509 Proxies (IETF RFC 3820)
  - GridFTP (OGF GFD.20)
  - OGSF (OGF)
  - WSRF (OASIS)
- **And on other standards working groups:**
  - JSDL (OGF)
  - WSDL (W3C)
- **Globus has also used many other standards**
  - X.509, SSL, SAML, XACML, http, WS-I, ...



# Present

- **Globus Toolkit current uses**
  - X.509, X.509 proxy, SSL, GridFTP, http, etc.
  - Not WS-I & WSRF
- **Globus Online also uses Web standards**
  - OAuth, OpenID, SAML (InCommon)
  - REST API: HTTP(S), XML, JSON
- **Lessons learned**
  - Must be cognizant of commercial interests
  - OGF standards should focus on research scope of use
  - Standards should follow tech maturation, not lead it
  - Many (most?) standards driven outside standards orgs



# Future

- **Globus adoption of standards is driven by**
  - Customer demand from the research community
  - Does it solve the problem
  - Cost and complexity of solution
  - Funding
- **Case studies**
  - GridFTP extensions to be more firewall friendly
  - BES
  - Web standards (e.g. REST, AJAX, OAuth, etc.)