



NextGRID and Standards Development Organizations

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NextGRID Architecture

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NextGRID Background

- Grid Research Changed Two Years Ago
 - Standards basis is now the assumed norm
- Paradigm Shift
 - Cutting edge research on top of standards
 - Cutting edge research in Standards Development
 - This was not without its trials.
- Increasing Pressure for Industrial Involvement
 - Shorter timescales
 - Impact assessments (Standards input helps a lot)
 - Exploitation strategies

NextGRID Approach

- Build on OGSA
 - Essentially OGSA Base Profile
 - NextGRID contributed significantly to OGSA profiles to obtain a normative basis.
 - Plus some NextGRID specifics
- Explore How Far OGSA Can Go
- Feedback Ideas
- Remain Open to Novel Approaches
 - New ideas needn't go via standards.
 - Non-standard specifications can be studied.



Grid Foundations

SYSTEMS
MANAGEMENT

GRID
COMPUTING

UTILITY
COMPUTING

Services

OGSA Self Mgmt

OGSA-EMS

WS-DAI

Information

WSDM

Discovery

GGF-UR

???

VO Management

Privacy

Trust

GFD-C.16

Grid
Foundations

NPP

Unified Model

SSP

Handel.Net

SAML/XACML

WS-Security

WSRF

WSN

WS-Addressing

HTTP(S)/SOAP

WSDL

X.509

Data Transport



NextGRID's Input to SDO

- OGSA Base Profile
 - Both strategy and content
- Testing the Limits
 - WS-Addressing Security Problems
 - Experiments in unexplored corners of HTTP
 - Mechanisms for dynamics not supported by WSDL 1.1 or WSDL 2.0
 - BEPL Limitations
- Involvement in SDO
 - ADs, SDO WG chairs, and members



What Next in NextGRID

- Biting the Resource Model Bullet
 - Integration of CIM into the Grid world?
- Dynamic Web Services
 - Construction & extension of running services
 - Composition of existing running services
- Service Level Agreements
 - Structure
 - Term languages