

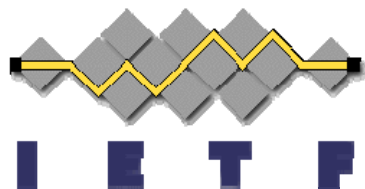
GridHotline 3

通常は会員限定
今回、オブザーバーとして会員参加を
検討されている一般の方も何名か参加

- 【OGFオーバービュー】13:30-13:50 伊藤智(産総研)
OGF20 の概要(OGFの動き(BOF、新設WGなど)、ユースケース紹介など)
 - 【OGSA動向】13:50-14:30 岸本光弘(富士通)
フラグシップアーキテクチャOGSAの状況(OGSA-WGおよび関連するWGの状況)
 - 【技術動向】14:30-15:10 小島功(産総研)
データ関連ワークショップ(Data Management, Semantic Web 2.0、DAI ユーザグループ会など)
- 休憩10分
- 【コミュニティ動向】15:20-15:50 松井学(日本IBM)
EGEE、その他Enterprise 関連(EGEE, Grid Means Business Workshop, gLiteなど)
 - 【話題提供】15:50-16:20 西克也(ベストシステムズ)
日本のグリッドスタートアップ
 - 【ドキュメント状況概説】16:20-16:50竹房あつ子(産総研)
OGF ドキュメント HPC Profile 関連
 - ・HPC Basic Profile, Version 1.0
 - ・JSDL HPC Profile Application Extension, Version 1.0
 - ・OGSA™ Basic Execution Service Version 1.0

グリッド技術の標準化

- OGF (Open Grid Forum)を中心に、Webサービス関連のフォーラム標準団体にて推進



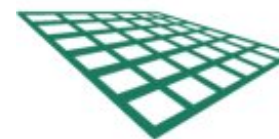
歴史



<http://www.ggf.org>

- 1998年、ハイパフォーマンスコンピューティングコミュニティ内に誕生
- 2001年、欧州・アジアグリッド活動と統合
- 現在52のグループ、81の仕様書

Enterprise
Grid Alliance



<http://www.gridalliance.org>

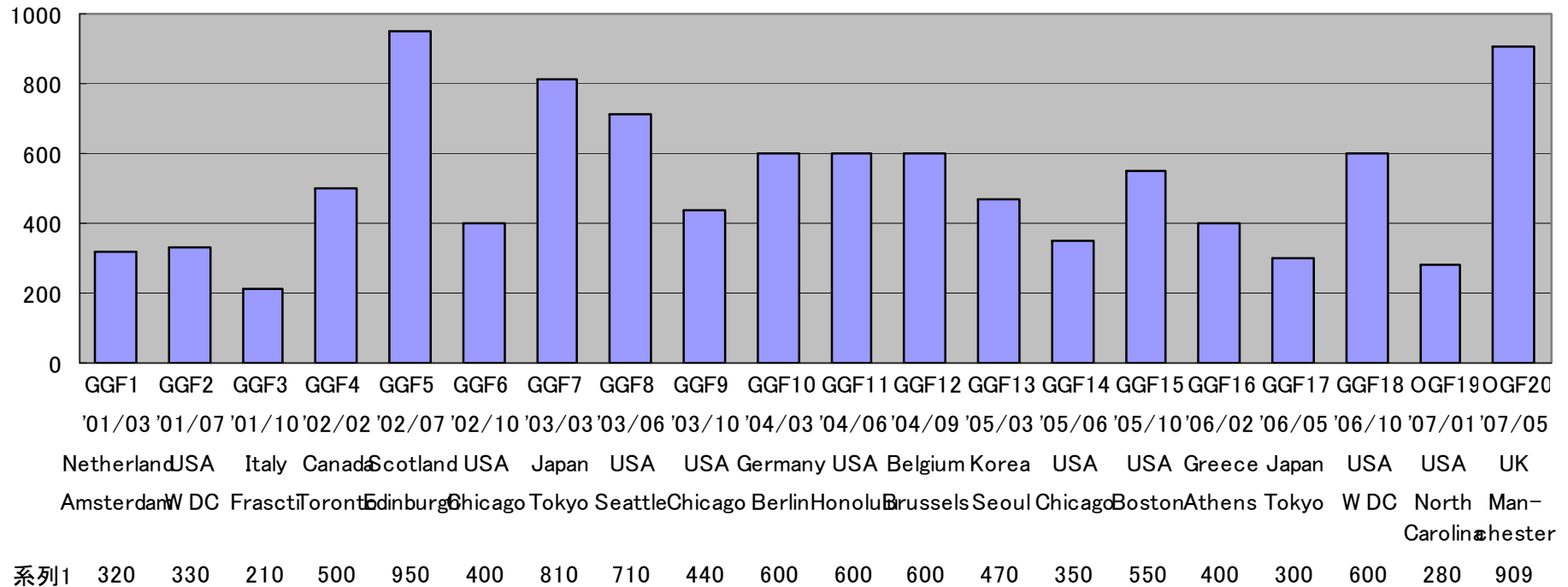
- 2004年、企業データセンターコミュニティ内に誕生
- エンドユーザー組織においてグリッドの認知が向上
- 現在5つのグループ、いくつかの重要な仕様書

2006年6月、統合完了。2006年9月、OGFとしてスタート

OGF20参加者

参加者 900人超

▶GGF5(950人)に続く参加者数



GridWorld
GridWorld
GlobusWorld
EGEE

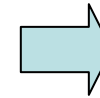
Asia Grid
Summit

GridWorld
2006
Grid
Consortium Japan
グリッド協議会

OGF ドキュメントのタイプ

GGF Document (GFD)
Grid Working Drafts (GWD)

GWD-I
GWD-E
GWD-C
GWD-R



GFD-I
GFD-E
GFD-C
GFD-R
GFD-R-P

(Proposed Recommendation)

Informational or Experimental

▶ Purpose: To Inform the community

✦ 相互運用性のテスト結果、プロトコルや仕様の具体的実装 など

Community Practice

▶ Purpose: To Influence the community

✦ GGF ドキュメントプロセス、グリッド運用・手順・サポートのベストプラクティス など

Recommendations Track

標準仕様

▶ Purpose: Define a standard

✦ プロトコル、API、オブジェクト、アーキテクチャの仕様 など

OGFドキュメント

GFD-I	57
GFD-E	11
GFD-C	9
GFD-R-P	26
GFD-R	0

- 2007年8月17日現在 103のドキュメントを発行済み
- GFD-R-P (Proposed Recommendation)
 - ▶ Open Grid Services Infrastructure (OGSI)
 - ▶ GridFTP: Protocol Extensions to FTP for the Grid
 - ▶ GridFTP v2 Protocol Description
 - ▶ A Hierarchy of Network Performance Characteristics for Grid Applications and Services
 - ▶ BytelO Specification 1.0
 - ▶ BytelO OGSA™ WSRF Basic Profile Rendering 1.0
 - ▶ Distributed Resource Management Application API Specification 1.0
 - ▶ Configuration Description, Deployment, and Lifecycle Management (CDDL) SmartFrog-Based Language Specification
 - ▶ Configuration Description, Deployment, and Lifecycle Management (CDDL) Component Model v 1.0
 - ▶ Configuration Description, Deployment, and Lifecycle Management (CDDL) Deployment API
 - ▶ CDDL Configuration Description Language Specification, Version 1.0
 - ▶ A GridRPC Model and API for End-User Applications

OGFドキュメント(2)

- GFD-R-P (Proposed Recommendation)
 - ▶ Job Submission Description Language (JSDL) Specification, V1.0
 - ▶ OGSA™ Basic Execution Service Version 1.0
 - ▶ Application Contents Service Specification 1.0
 - ▶ Web Services Data Access and Integration - The Core (WS-DAI) Specification, Version 1.0
 - ▶ Web Services Data Access and Integration - The XML Realization (WS-DAIX) Specification, Version 1.0
 - ▶ Web Services Data Access and Integration - The Relational Realisation (WS-DAIR) Specification, Version 1.0
 - ▶ OGSA™ WSRF Basic Profile 1.0
 - ▶ OGSA™ Basic Security Profile 1.0 - Core
 - ▶ OGSA™ Security Profile 1.0 - Secure Channel
 - ▶ Usage Record - Format Recommendation
 - ▶ Resource Namespace Service Specification
 - ▶ WS-Naming Specification
 - ▶ Web Services Agreement Specification (WS-Agreement)
 - ▶ Information Dissemination in the Grid Environment - Base Specifications



もうじき(Proposed Recommendation)に

▶ A Simple API for Grid Applications (SAGA)

OPEN FORUM | OPEN STANDARDS

▶ HPC Basic Profile, Version 1.0



Grid
Consortium Japan
グリッド協議会

ドキュメントの状況（前回からの差分）

今年度に入って12のドキュメントが完成

- GFD.113 (GFSG) -I
 - ▶ Technical Strategy for the Open Grid Forum
- GFD.110 (INFOD-WG) -R
 - ▶ Information Dissemination in the Grid Environment - Base Specifications
- GFD.109 (OGSA-Naming-WG) -R
 - ▶ WS-Naming Specification
- GFD.108 (OGSA-BES-WG) -R
 - ▶ OGSA™ Basic Execution Service Version 1.0
- GFD.107 (GRAAP-WG) -R
 - ▶ Web Services Agreement Specification (WS-Agreement)
- GFD.106 (OGSA-WG) -I
 - ▶ OGSA™ EMS Architecture Scenarios, Version 1.0
- GFD.105 (DRMAA-WG) -E
 - ▶ N1(TM) Grid Engine DRMAA 1.0 Implementation - Experience Report
- GFD.104 (DRMAA-WG) -E
 - ▶ GridWay DRMAA 1.0 Implementation - Experience Report
- GFD.103 (DRMAA-WG) -E
 - ▶ Condor DRMAA 1.0 Implementation - Experience Report
- GFD.102 (GRIDRPC-WG) -E
 - ▶ Interoperability Testing for The GridRPC API Specification
- GFD.101 (GFS-WG) -R
 - ▶ Resource Namespace Service Specification
- GFD.100 (OGSA-HPCP-WG) -I
 - ▶ HPC Job Scheduling: Base Case and Common Cases

2010年までの標準仕様の開発ロードマップ

Recommendationの実装報告

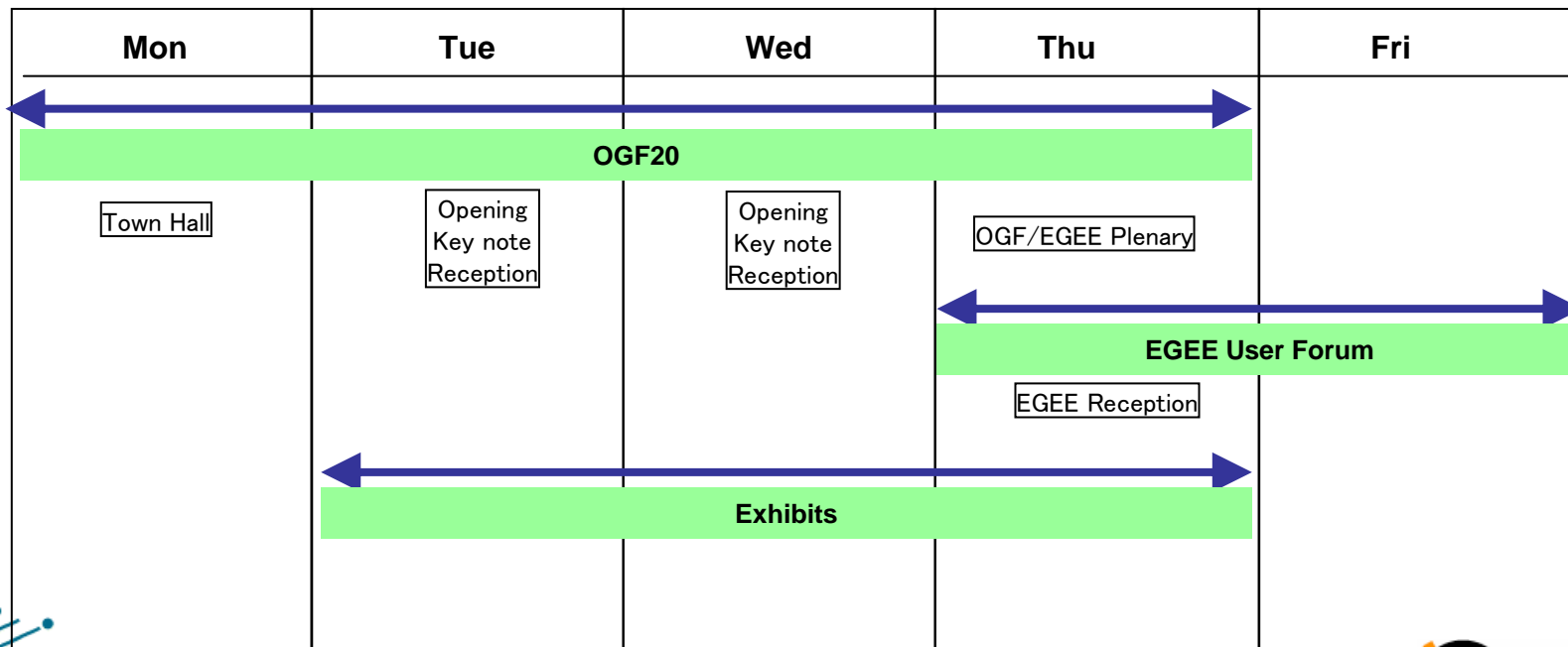
本日のドキュメント紹介

Public コメント受付中

- Grid **Network Services** Use Cases from the eScience Community
INFO GHPN-RG 27 Aug, 2007
- 2nd International Workshop on **Campus and Community Grids**
INFO PGS-RG 10 Sep, 2007
- Execution Environment and **Basic Execution Service** Model in
OGSA™ Grids
INFO OGSA-WG 10 Sep, 2007
- Guidelines for **Information Modeling** for OGSA™ Entities
INFO OGSA-WG 10 Sep, 2007
- **PBS/Torque DRMAA** 1.0 Implementation – **Experience Report**
EXP DRMAA-WG 10 Sep, 2007
- Distributed Resource Management Application API Specification 1.0
REC **DRMAA**-WG 8 Oct, 2007
- Grid **Certificate Profile**
CP CAOPS-WG 8 Oct, 2007

OGF20

- May 7-11, 2007 @ Manchester, UK
- OGF20/EGEE 2nd User Forum 併催
 - ▶ GGF16のギリシャ以来欧州での開催
- Exhibits : 数十の企業、研究所などが展示



EGEE

● EGEE (Enabling Grids for E-Science in Europe)

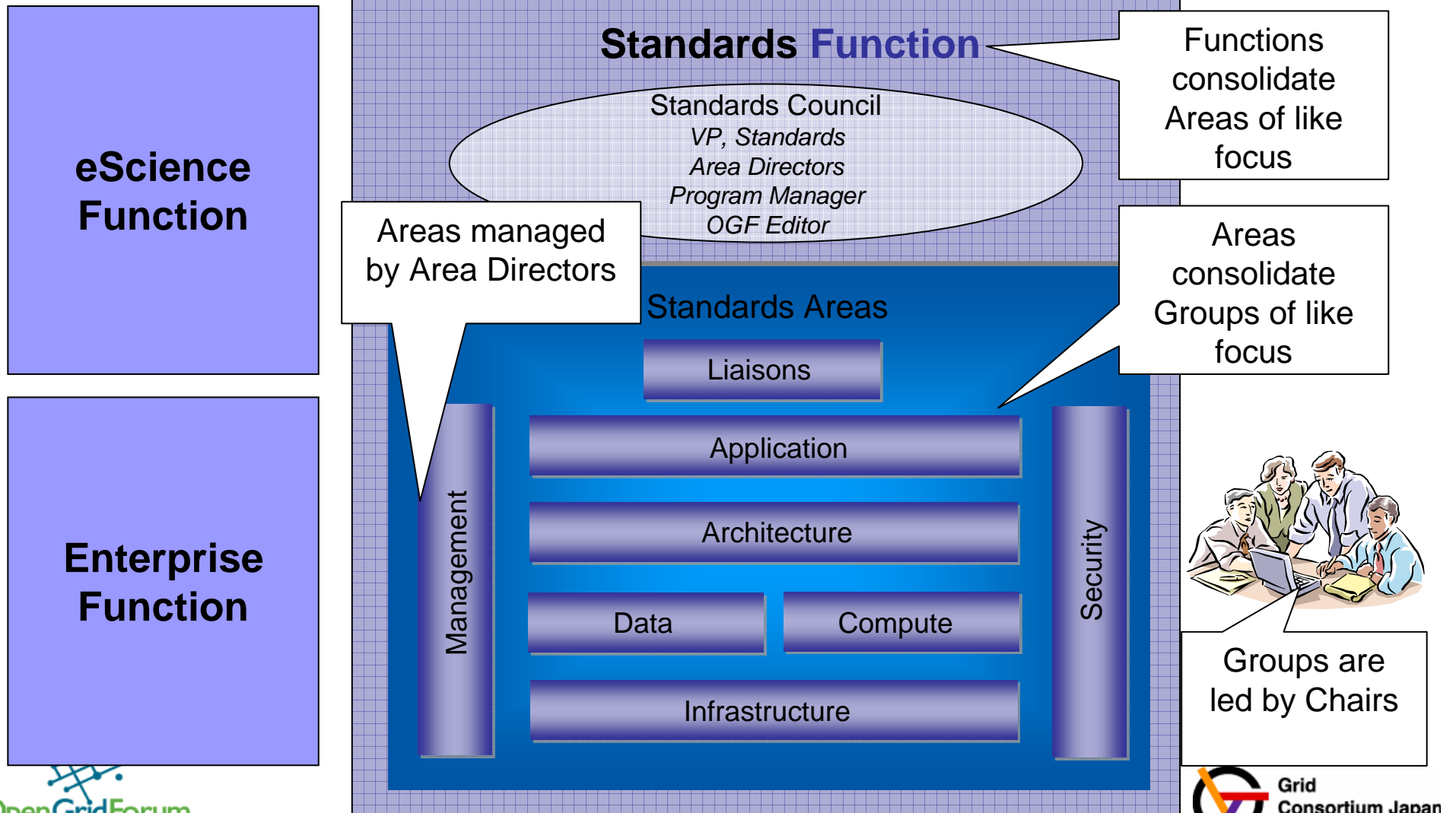
- ▶ 2004年3月に終了したEUのデータグリッドプロジェクトEDGの活動を受け継ぎ、2004年4月から開始された27ヶ国以上が参画するEUの新しいグリッドインフラ構築プロジェクト
- ▶ 目的：学者が1日24時間グリッドインフラ上のサービスを受けられるグリッド環境を構築すること
- ▶ 主要な取組み：ロバストかつセキュアなグリッドネットワークの構築、ユーザに信頼できるサービスを提供するためのミドルウェアの継続的な改良と保守、科学だけでなく産業分野へのユーザ拡大と必要なサポートやトレーニングの拡充
- ▶ <http://eu-egee.org>

松井氏より gLite について報告

- ▶ Data Management Convener: Dr. Peter Kunszt (CSCS)
- ▶ Experience with Application Domains Massimo Lamanna (CERN)
- ▶ Users in the wider Grid community - from science to business
Conveners: Bob Jones, Frank Harris
- ▶ Workflow Convener: Dr. Charles Loomis
- ▶ Interactivity & Portals - Conveners: Dr. Peter Kacsuk
- ▶ User/VO Community Support - Conveners: David Colling
- ▶ CB Meeting

会員限定報告書に
報告あり

Functions/Areas/Groups/Chairs



eScience/Enterprise Functions

eScience Functions (15Groups)

Community Affairs	<ul style="list-style-type: none">•Build, Test and Certification of Grid Software Community Group (btc-cg)•Education and Training (et-cg)•Grid Reliability and Robustness RG (gridrel-rg)
Grid Operations	<ul style="list-style-type: none">•Certificate Authority Operations RG (caops-wg)•Grid Interoperation Now Community Group (gin-cg)•Production Grid Services-RG (pgs-rg)
Research Applications	<ul style="list-style-type: none">•Applications Developers and Users RG (apps-rg)•Astronomy Applications RG (astro-rg)•Humanities, Arts, and Social Sciences RG (hass-rg)•Life Sciences Grid RG (lsg-rg)•Particle and Nuclear Physics Applications RG (pnpa-rg)•Preservation Environments RG (pe-rg)
Technology Innovators	<ul style="list-style-type: none">•Grid Computing Environments RG (gce-rg)•Semantic Grid RG (sem-rg)•Workflow Management RG (wfm-rg)

Enterprise Functions (3Groups)

Industry Applications	<ul style="list-style-type: none">•Enterprise Grids Requirements RG (egr-rg)•Storage Networking Community Group (sn-cg)•Telecomm Community Group (telco-cg)
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Community Activity (eScience)

- Computational steering on the Grid
- 2nd International Workshop on Campus and Community Grids, continuing interoperability
- LSG-RG Workshop (Life Science Grid)
- eArts and eHumanities- eScience technologies and methodologies in Arts and Humanities research
- OGC (Open Geospatial Consortium) -OGF Collaboration Workshop
- Public Understanding of eScience
- GIN (Grid Interoperation Now)-I, II
- Evolutions of GRIDs Towards Service Oriented Knowledge Utilities (SOKUs)
- Globus and Community
- Dynamic Service Level Agreements
- The OMII (Open Middleware Infrastructure Institute)-UK Software Release
- The Astronomical Virtual Observatory- Building Operational Services on Pervasive Grids: Standards in Use
- gLite

会員限定報告書に
報告あり

松井氏より報告

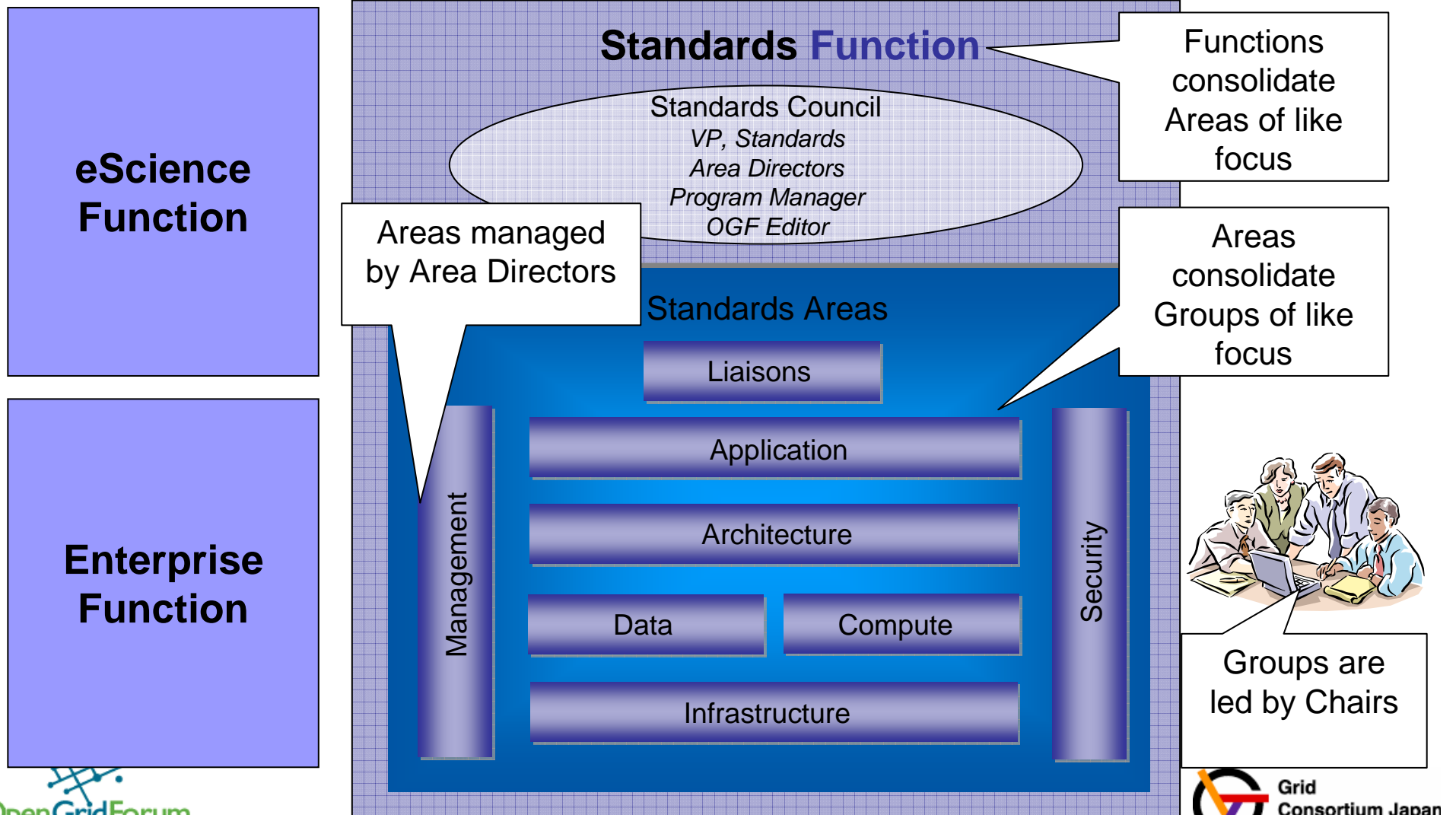
松井氏より報告

Community Activity (Enterprise)

- Grids Mean Business 1: Setting the scene 松井氏より報告
- Grids Mean Business 2: Paths to Adoption
- Grids Mean Business 3: Grid Markets and Service Delivery
- Grids Mean Business: **Security Management** in Grids- A new Challenge?
- Grids Mean Business: **Scaling up** to the Enterprise Level 松井氏より報告
- Grids Mean Business: **Collaborative Grids**
- Grids Mean Business: **Software Licensing**- A way Forward?

- Workshop on **Pharma, Biotech and Life Science** Use of Grids: Enterprise Requirements
- Workshop on **Auto and Aerospace** Firms' Use of Grids: Enterprise Requirements
- Workshop on **Financial Services** Enterprise Requirements 松井氏より報告
- Enterprise Grid - **Best Practices** Workshop

Functions/Areas/Groups/Chairs



Standards Function (37 Groups)

Applications	<ul style="list-style-type: none"> •Distributed Resource Management Application API WG (drmaa-wg) •Grid Checkpoint Recovery WG (gridcpr-wg) •Grid Information Retrieval WG (gir-wg) •Grid Remote Procedure Call WG (gridrpc-wg) 	<ul style="list-style-type: none"> •Simple API for Grid Applications Core Working Group (saga-core-wg) •Simple API for Grid Apps RG (saga-rg)
Architecture	<ul style="list-style-type: none"> •OGSA Naming Working Group (ogsa-naming-wg) •Open Grid Services Architecture WG (ogsa-wg) 	<ul style="list-style-type: none"> •Reference Model Working Group (rm-wg)
Compute	<ul style="list-style-type: none"> •Grid Resource Allocation Agreement Protocol WG (graap-wg) •Grid Scheduling Architecture RG (gsa-rg) •Job Submission Description Language WG (jsdl-wg) •OGSA Basic Execution Services WG (ogsa-bes-wg) •OGSA High Performance Computing Profile WG (ogsa-hpcp-wg) •OGSA Resource Selection Services WG (ogsa-rss-wg) 	
Data	<ul style="list-style-type: none"> •Data Format Description Language WG (dfdl-wg) •Database Access and Integration Services WG (dais-wg) •Grid File System Working Group (gfs-wg) •Grid Storage Management WG (gsm-wg) •GridFTP WG (gridftp-wg) 	<ul style="list-style-type: none"> •Info Dissemination WG (infod-wg) •OGSA ByteIO Working Group (byteio-wg) •OGSA Data Movement Interface WG (ogsa-dmi-wg) •OGSA-Data Working Group (ogsa-d-wg)
Infrastructure	<ul style="list-style-type: none"> •Grid and Virtualizaion Working Group (gridvirt-wg) •Grid High-Performance Networking RG (ghpn-rg) 	<ul style="list-style-type: none"> •Network Mark-up Language Working Group (nml-wg) •Network Measurements Working Group (nm-wg)
Liaison	<ul style="list-style-type: none"> •Standards development organizations Collaboration on networked Resources Management (scrm-wg) 	
Management	<ul style="list-style-type: none"> •Application Contents Service WG (acs-wg) •Configuration Description, Deployment, and Lifecycle Management WG (cddlm-wg) •OGSA Resource Usage Service WG (rus-wg) 	<ul style="list-style-type: none"> •Usage Record WG (ur-wg) •Glue Schema Working Group (glue-wg)
Security	<ul style="list-style-type: none"> •Firewall Issues RG (fi-rg) •OGSA Authorization WG (ogsa-authz-wg) 	<ul style="list-style-type: none"> •Levels of Authentication Assurance Research Group (loa-rg)

Group の新設と消滅(2007/3以降の変更)

● 新設

- ▶ Build, Test and Certification of Grid Software Community Group (btc-cg)
 - ⊗ a platform for exchange and gather best practices on the topic of build, test and certification of Grid software
- ▶ **Reference Model** Working Group (rm-wg)
 - ⊗ common language when describing grids
- ▶ **Glue Schema** Working Group (glue-wg)
 - ⊗ abstract information model (attributes and attribute semantics, the relationship between the attributes)
- ▶ Grid and **Virtualization** Working Group (gridvirt-wg)
 - ⊗ complementary and highly synergistic in maximizing the yield of an IT infrastructure
- ▶ **Network Mark-up Language** Working Group (nml-wg)
 - ⊗ standardised network description ontology and schema, facilitating interoperability between different projects
- ▶ **Levels of Authentication Assurance** Research Group (loa-rg)

会員限定報告書に
報告あり

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報告あり

● 消滅

- ▶ GGF Process WG (ggf-proc-wg)
- ▶ Grid Benchmarking RG (gb-rg)
- ▶ Advanced Collaborative Environments RG (ace-rg)
- ▶ Appliance Aggregation RG (appagg-rg)
- ▶ User Program Development Tools for the Grid RG (updt-rg)
- ▶ Trusted Computing Research Group (tc-rg)

BOF

- LoA-RG
 - ▶ グリッドにおける「認証の保証レベル」について検討
 - ▶ プログラム上はBoFとなっているが、正式なグループとして今回第一回目
- Service Level Terms for OGSA-BytelO and OGSA-BES
 - ▶ OGSA-BytelO および OGSA-BESにおけるService Levelに関する記述方法
- BoF-Software Licensing for Grids
 - ▶ グリッド環境で利用するソフトウェアのライセンスに関して、共通的な問題意識を共有し、その解決を図る
- BoF-Remote Instrumentation Services in Grid Environment (RISGE)
 - ▶ グリッド環境内の実験装置への遠隔アクセス
- BoF on ETSI-OGF MoU and ETSI GRID STF call for experts
- Workshop on heuristics for implementating semantic knowledge yardsticks (Ad-hoc BOF)
- Worker Node Environment (Ad-hoc BOF)

今後の予定

● OGF21

- ▶ October 15-19, 2007
- ▶ Grand Hyatt Seattle
- ▶ Seattle, Washington

● OGF22

- ▶ February 26-29, 2008
- ▶ Cambridge, MA (Boston Area)

● OGF23

- ▶ first week of June, 2008
- ▶ Europe (Barcelona, Spain or Darmstadt, Germany)

● OGF24

- ▶ Asia

