New OSG PKI Transition Plan

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1 Introduction

This document lays out a transition plan with a list of users (both current OSG users and other identified DOE Grids user communities) who should be invited to try out the new OSG CA and a timeline for their invitation.

The transition phase is expected to start in September 2012 and run through January 2013, after which the DOE Grids PKI stops issuing new certificates and all OSG users will be using the new OSG PKI.

2 The Need for Trusted Agents

Before a user can use the OSG PKI, there must be a Registration Authority Agent (RAA) or Grid Admin (GA) that is authorized to vet request for user or host certificates, respectively, submitted by the user. This means that the establishment of appropriate Trust Agents must precede the use of the PKI by each user group.

3 OSG User Communities and Domains

OSG is composed of VOs and resource providing domains. A list of current OSG VOs can be found at [1] and [2] provides an indication of the size of each VO. A list of domains, as determined by certificates issued by the DOE Grid PKI, can be found in [3].

4 OSG Transition Timeline

We group the users as follows:

- Internal: This group will be made up from PKI developers, GOC staff, other who have been involved with the PKI development and select members of the OSG User Community. This group will start testing nest the end of the

deployment phase (July 20th, 2012) and their experiences will be a major factor in deciding the system is ready to enter Transition Phase.

- First Wave Friendly Users : This group is composed of major stakeholder from the OSG community. This group will start testing the PKI at the start of the Transition Phase (October 1st, 2012). It is expected that within each stakeholder group there will be a self-selection of most tolerant users to test first.

- Second Wave Friendly Users: This group is composed of other large stakeholders within the OSG community and communities currently not formally part of OSG (e.g. ESG, NFC).

- General OSG user community: The entirety of the OSG user community.

Phase	Registration Authority Agents	Grid Admins	User Community
Internal Testing (August)	OSG GOC, Security staff	Open science grid, Indiana, Illinois, and FNAL domains	PKI developers, GOC staff, others involved with PKI development.
Friendly Users, First Wave (September)	ATLAS, CMS, LIGO, other friendly VOs TBD	BNL, wisc.edu, ucsd.edu	Technical and friendly users from major stakeholders.
Friendly Users, Second Wave (October)	NERSC, NFC, TBD	Remaining top ten OSG domains (mit.edu, ultralight.org, chicago.edu, ufl.edu, caltech.edu, unl.edu)	Technical and friendly users from other large stakeholders.
General OSG User Population	Approach remaining VOs by size	Approach remaining domains by size	All OSG PKI users.

5   What are Priorities for Testing during Transition?

Top priority, required to leave Internal User Testing:

- User certificate requests, both web and CSR-based

- Host certificate request, both individually and in bulk

- Revocation required by OSG Security Team
- Auditing of issuance

Low priority, can be addressed later in the Transition process:

- Renewal
- User-requested revocation

6 References

1. Virtual Organization Summary.
   http://myosg.grid.iu.edu/vosummary?all_vos=on&active=on&active_value=1&datasource=summary

2. VOMS Status.
   http://myosg.grid.iu.edu/vovomsstatus?all_vos=on&active=on&active_value=1&datasource=vomsstatus

3. Von Welch. OSG Certificate Usage Analysis. Draft.
   https://twiki.grid.iu.edu/twiki/pub/Operations/DigiCertPlanningDevAndImplementation/OSG-certificate-usage-analysis-3.