Overview

There is a known problem when configuring DPM 1.7.0-6 (in glite release update 46) using YAIM with a configuration that sets DPNS_BASEDIR to a value different from the default value of "home". This page describes a workaround for the problem and is specific to version 1.7.0-6. The problem described is not present in previous DPM versions and is fixed in later versions.

Background

DPNS_BASEDIR is a YAIM configuration variable which can be set in the YAIM configuration script, usually called site-info.def. The purpose of the DPNS_BASEDIR variable is to allow an installation specific base path to be defined for the DPM's name space. e.g.

/dpm/site.edu/home/ops

In the above the "site.edu" is the site name (sometimes called the "domain") whereas "home" is the base directory which can be modified by DPNS_BASEDIR. The reason for changing the base directory is that if you have several DPMs which would logically fall under the same domain their name spaces can be separated by specifying a DPNS_BASEDIR other than "home", e.g. "storage", in one of them. It is recommended that the name spaces of separate DPMs should not overlap.

Most often DPNS_BASEDIR is not set, or is left with the default value of "home". In that case there is no problem and no workaround is necessary.

The problem

In DPM 1.7.0-6, which is a DPM release with the following RPMs:

* glite-yaim-dpm-4.0.4-1. * DPM-interfaces-1.7.0-6sec

a non standard setting of the DPNS_BASEDIR is not propagated correctly. Specifically the component responsible for producing the information to be published in the information system always treats the base directory as "home". The result is that when users use tools like lcg_utils the tool will use the default "home" base, or possibly fail to recognise the SE at all. In both cases the tool will of course fail to do the action the user wanted. (For reference this bug is reported in the glite bug tracking database as bug #49369).

The workaround

The workaround should be applied after installing or upgrading the RPMs and can then be done before or after running YAIM.

The workaround is to replace the information provider, which is a python script installed on the DPM head node at:

/opt/lcg/bin/dpm-listspaces

with the version attached to this page. After replacing the dpm-listspaces with the attachment use a convenient text editor (e.g. vi) to edit the second line of the script:

dpns_basedir_default="home"

and change home to the chosen DPNS_BASEDIR name. Be sure that after downloading, replacing the file and editing it remains executable e.g.

chmod a+x /opt/lcg/bin/dpm-listspaces

as necessary. The update and modification will allow the information to be published and correctly state the SE base name. The content of the information system may take a couple of minutes to be updated.

In case of any further difficulty please contact hep-service-dpm@cernNOSPAMPLEASE.ch.

-- DavidSmith - 30 Apr 2009

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