



Open Science Grid

OSG Site Configuration

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OSG Site Administrator Meeting



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Overview

- Basic Configuration
- Site specific customization
- Migrating old configurations
- Under the hood
- Future directions
- Discussion



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Basic Configuration

- Done by the `configure-osg.sh` script
- Requests information on various settings
- Exact information required given at :
<https://twiki.grid.iu.edu/twiki/bin/view/ReleaseDocumentation/PreparingComputeElement>



Site specific customization

- Configuration file provided to set site specific environment variables
- `$VDT_LOCATION/monitoring/osg-local-job-environment.conf`
- File will be sourced in all incoming job's environment



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```
#!/bin/sh
```

```
# You can edit this file to set environment variables that will be
# propagated to jobs. This file has a very strict format of
# VAR=VALUE
# It might look like a Bourne shell script, but it's not. You cannot use
# export. For example, see the following lines (yours, of course, will
# not start with a hash sign (#) indicating a comment:
#
# JOB_TMP=/share/tmp      # Good, JOB_TMP will be defined
# export TMP              # Ignored, TMP will not be in the environment
# export JOB_FOO=/share/tmp # Ignored, JOB_FOO will not be in the environment
#
# ***** IMPORTANT *****
#
# The attributes from the osg-job-environment.conf will also end up in the
# job environment so there is no need to duplicate the settings
# in that file.

http_proxy=http://squid-proxy.domain.name

export http_proxy
```

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Migrating old configurations

- OSG 0.6 and later provide a mechanism to obtain data from an existing installation
- Set `$OLD_VDT_LOCATION` before doing `pacman install` and running `configure-osg.sh`
- Will **not** save old site specific settings if migrating from an installation earlier than OSG 0.6



Under the hood

- `Configure-osg.sh`: ~2000 lines of shell script
- Queries admin for information, does basic validation and then calls underlying vdt configuration scripts
- If something goes wrong, script will print error message and exit with a return code of 1



Configuration files

- All files in `$VDT_LOCATION/monitoring`
- `osg-attributes.conf` -- all settings except for gip settings
- `osg-job-environment.conf` -- environment variables that will appear in job environments
- `osg-local-job-environment.conf` -- cluster specific environment variables that system administrators can set up
- `gip-attributes.conf` -- attributes that gip sets up

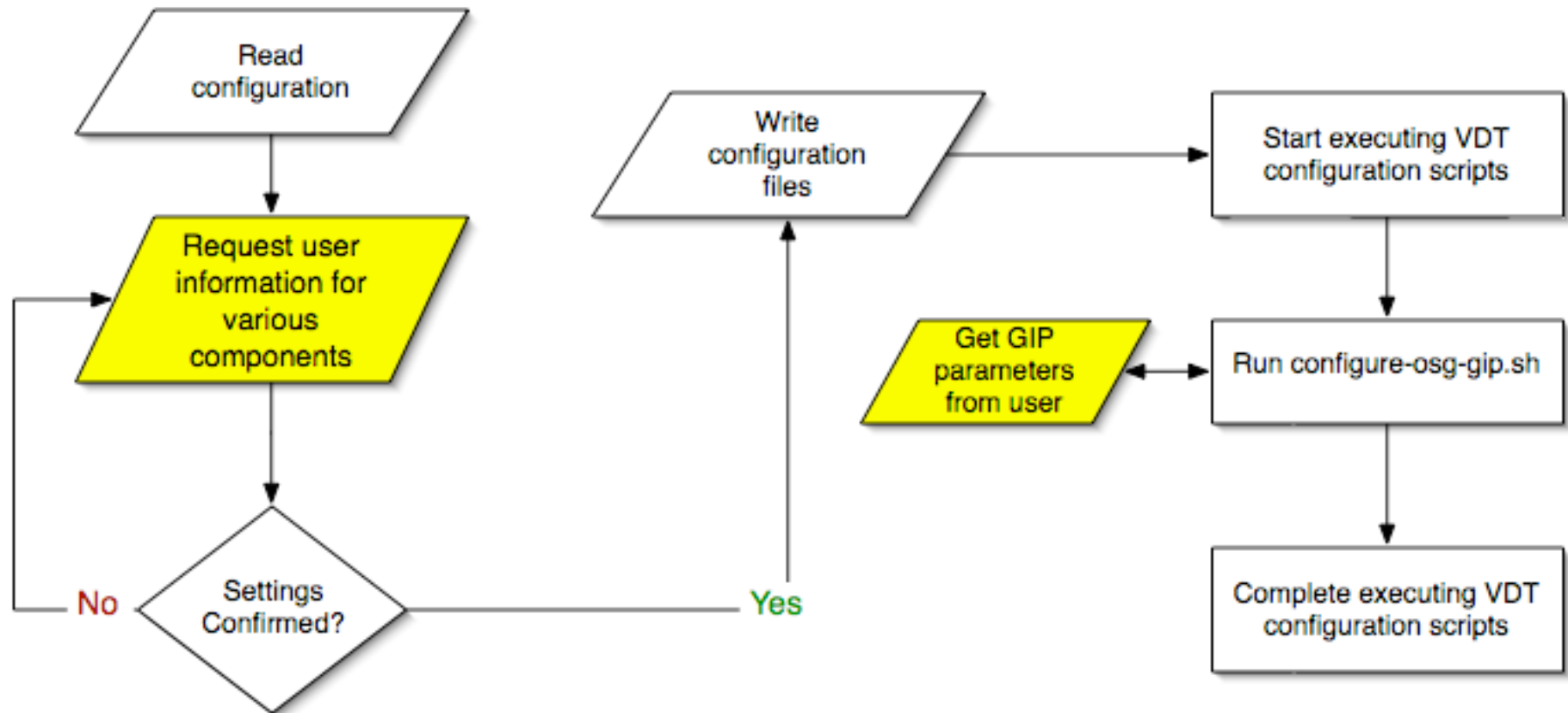


Other pertinent files

- `sudo-setup.txt` -- created by `configure-osg.sh` if `ws-gram` is enabled, contains lines that should go into the `sudoers` file
- `osg-user-vo-map.txt` -- created by `gums-host-cron`, needed by `configure-gip` for setup
- `Gums.template` -- template file for `gums` configuration



configure-osg.sh structure





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Future Directions

- Better error checking and validation?
- Validation mode?
- Text file input?
- Web interface for configuration/validation?
- Better maintainability for script?



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Questions or comments?

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