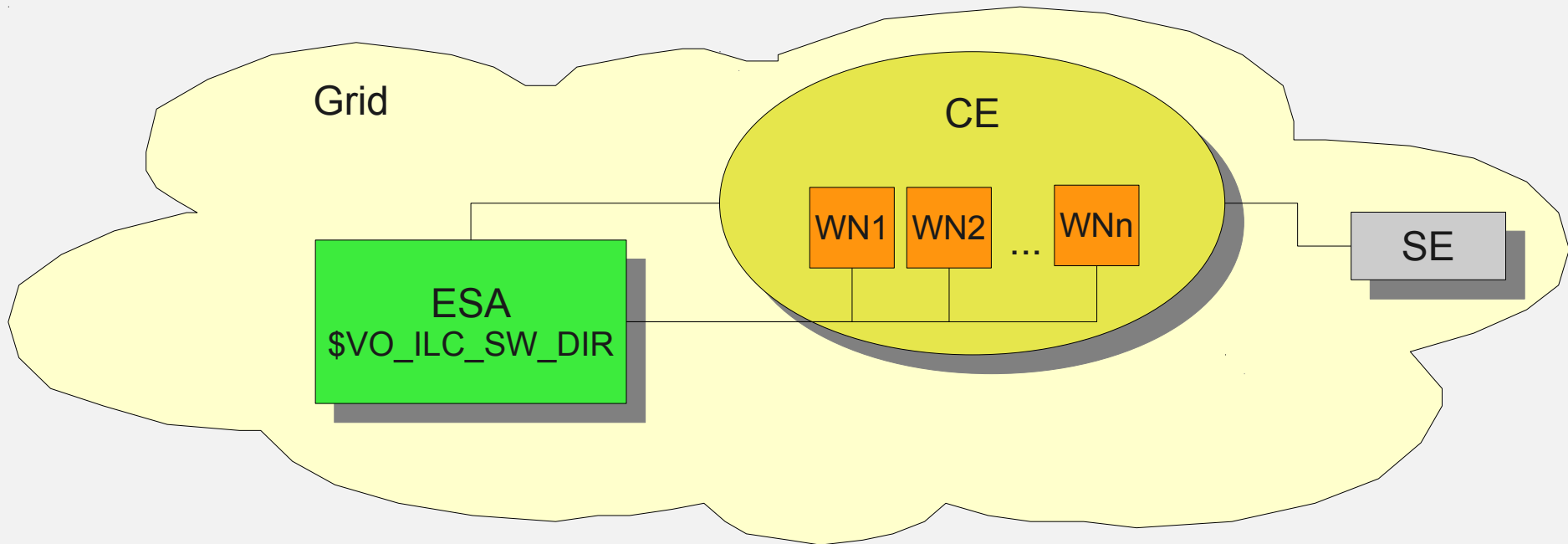# iLCSoft Grid installations

Jan Engels

Desy - IT

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Grid Installation Overview

- iLCSoft reference installations are available on the ESA (Experiment Software Area) for ILC
  - Area is visible to all worker-nodes in a CE
  - Can be referred by the environment variable **${VO_ILC_SW_DIR}**

Using Grid Installations

- Software is located under $VO_ILC_SW_DIR/ilcsoft

- For using ilcsoft versions **previous to v01-11**:

    - source $VO_ILC_SW_DIR/initILCSOFT.sh v01-10

- For using ilcsoft versions **greater or equal to v01-11**:

    - source $VO_ILC_SW_DIR/ilcsoft/$ARCH/init_ilcsoft.sh v01-11

    - where ARCH is:
        - x86_64_gcc41_sl5 # for SL5 64bit or compatible binaries
        - i386_gcc41_sl5 # for SL5 32bit or compatible binaries

- See next slide for an example

Using Grid Installations

- How-to use v01-11 example:

  - source $VO_ILC_SW_DIR/ilcsoft/i386_gcc41_sl5/init_ilcsoft.sh v01-11
  - cp -r $STANDARDCONFIG/current/ .
  - cd current
  - # run a mokka example:
  - mokka-wrapper.sh -M ILD_00 bbudsc_3evt.steer
  - # check previously created lcio output collections
  - anajob bbudsc_3evt.slcio
  - # reconstruct previously simulated events:
  - ln -s $LCFIMOKKABASEDNETS/ILD_00 nets
  - export MARLIN_DLL=libMarlinReco.so:libLCFIVertex.so:libMarlinPandora.so
  - Marlin bbudsc_3evt_stdreco.xml
  - # check lcio output collections from reconstruction:
  - anajob bbudsc_3evt_REC.slcio
  - anajob bbudsc_3evt_DST.slcio

'Hello World' grid job for iLCSoft v01-11

```
# mytest.jdl
VirtualOrganisation = "ilc";
Executable = "myscript.sh";
StdOutput = "out";
StdError = "err";
InputSandbox = {"myscript.sh"};
OutputSandbox = {"out","err"};
Requirements = Member( "VO-ilc-ilcsoft-v01-11", other.GlueHostApplicationSoftwareRunTimeEnvironment);
```

```
#!/bin/sh
# myscript.sh

# use ilcsoft v01-11
. $VO_ILC_SW_DIR/ilcsoft/i386_gcc41_sl5/init_ilcsoft.sh v01-11

export MARLIN_DLL=libMarlinReco.so:libLCFIVertex.so:libMarlinPandora.so
Marlin -x
```

Send job with: glite-wms-job-submit -a mytest.jdl

Infos and testing

- CE's status and their available ilcsoft installations can be checked at
  - http://ilcsoft.desy.de/grid/ilcsoft_overview.html
  - Choose from the "TAGGED" column the appropriate tag for using a certain version of the ilc software when defining the jdl for your job
  - For example, using the tag VO-ilc-ilcsoft-v01-11 will automatically select a CE with ilcsoft v01-11 installed in $VO_ILC_SW_DIR

- It is strongly recommended to perform some sanity tests and gather some debugging information before actually running any grid job !!