

DUTY LIST FOR THE SPD SHIFTER IONS PROGRAM

DO NOT REMOVE FROM ACR

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INTRODUCTION

When you arrive in counting room you should check the shifter plan with the previous ITS shifter. In case no plan has been defined, collect all the possible information in the control room from the Shift Leader or the Period Run Coordinator. Check in the "Current Shift Crew" big panel who are the on-call experts for the SPD and note down their phone numbers.

DURING THE SHIFT

During the shift (all the 8 hours!) you should be "active" in the counting room doing the following things:

1. Follow the LHC activities on OP Vistars (link in the web browser in the SPARE desktop). It is important to look at the messages written in the left bottom part of this page. To follow LHC activities helps the On-Call for the short term plan.
 2. Follow the ACR activities and the status of ALICE detectors.
 - **After Physics Injection:** SPD is moved to READY state.
 - **SAFE:**
 - the SPD has to be moved to BEAM_TUNING from central DCS;
 - **SuperSAFE:**
 - the SPD has to be moved to BEAM_TUNING from central DCS;
 3. Collect all the important information one by one and note them down (on a text file, for example) in order to write the official report at the end of your shift.
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ON THE SPD DESKTOP

1. DCS SPD:

- check the SPD_DCS panel and in case one HS goes in ERROR state (red color), open the HS panel clicking on it and look at the temperature trending (only DSS).

2. DCS PIT + TRIGGER: in the pitFedStatus panel, under the tab “Monitor counters”

- the indicator “Phases Alignment Service” should always be GREEN. If it turns red just click on the RESTART button below the indicator.
- every time “SPD Data Taking” indicator is GREEN then “Check Phases” indicator has to be GREEN.
If Check Phases is RED, check the status of the Phases Alignment Service → if the Phases Alignment Service is green, the data taking has to be stopped and restarted (CALL THE EXPERT BEFORE TAKING THIS DECISION!!).
- check the OSMB, OSH1, OSH2, OSH3, OSH4, OSPF, OSBK trigger rate. NOTE: the rate depends on the activities going on, report the rate and the type of activity in which you measured it. Have a look in DCS screen in the ACR (“LHC BEAM DATA”) to the “V0 A and C” rate.

3. MONITORING: SpdMood

- verify that it is connected to the partition used in the data-taking. If a partition is running put “=Partition_Name” (for instance =PHYSICS_1). Minimal setting of plots to look at, from SPD_MOOD Setup (remember to press AU-UP):
- Global Displays:
 - Pix Mult: pixel multiplicity per event (the results are strictly correlated to the data taking condition, in case of doubts contact the on-call)
 - BCmod4: here you see the relative phases in which the collisions occur
 - Missing FO corresponding to the BCmod4 columns that are populated (see above)
- FastOR Displays: Ratio of Missing FastOR (show All eq)
- Cons Error Displays: Router errors vs. error code
(Error 15 IMPORTANT!! REMEMBER TO PRESS **RESET ALL** AFTER THE START OF A NEW RUN - Errors 16, 17, 20 can be tolerated)

4. WEBSITE & FAQs: Link to the SPD webpage with the detailed shift instructions:

<http://aliceinfo.cern.ch/SPD/DetectorOperation/RunInfo/GeneralInstruction.html>

Look at the FAQs!! Some problems are already solved here!!

BEFORE RUNNING OUT

Write the shifter report on the electronic log-book

1. choosing **EOS Type**, tagging SPD as subsystems, using *SPD Night/Day/Evening report* in the title (useful for DB filter)
2. summarizing the relevant activities for ALICE or LHC (physics run, important central problems).
3. write down the important information for the sub-system:
 - **trigger rate** for different cluster for the SPD

Here you can find an example of the report (a text file remains opened in the PC to be modified).

```
*****
* LHC                                                                 *
* 08:00 Stable beam                                                 *
* Physics 25b_16_16_16, Fill 1287, I(B)=2.29+12, E=3500GeV        *
* 08:54 Adjust, machine studies                                     *
*                                                                 *
* ALICE                                                            *
* 08:00 - 09:00 ALICE short runs                                   *
* 09:54 SuperSafe                                                *
* 13-16 Access, no beam                                           *
*                                                                 *
* SPD                                                              *
* WARNING: Phases not aligned, pressed the button, went OK       *
*                                                                 *
*                                                                 *
* RUN STATISTICS                                                  *
* -----*
* Time | Run | | RATES |
* -----*
* hh:mm | # | Type| OSMB | OSH1 | OSH2 | OSH3 | OSH4 | OSPF | OSBK | VO A&C |
* | | | Hz | Hz | Hz | Hz | Hz | Hz | Hz | Hz | Hz |
* -----*
* 08:15 | 129654 | P | 1200 | ... | ... | ... | ... | ... | ... | ... |
* -----*
* 10:35 | 129659 | P | 1250 | ... | ... | ... | ... | ... | ... | ... |
* -----*
* 11:30 | 129666 | P | 1000 | ... | ... | ... | ... | ... | ... | ... |
* -----*
*****
```

HOW TO START THE SYSTEM FROM SCRATCH

SPD

- SPD DCS: `rdesktop -a16 -g2580x980 alispdon001 &`
Log in with your NICE username and password; the User Interfaces opens automatically; then log in with the spd username.
If the interfaces closes, you can restart it from the Start menu → `SpdUserInterface.exe`
- PIT CONTROL PANELS: from the same machine as the SPD control: `alispdon001`
From the Start menu → PIT ON; log in with the spd username.
- SPDMOOD: `ssh spd@aldaqbl210A`, then type `SPDmood.exe &`
- AMORE: `ssh spd@aldaqbl210A`, then type `amoreAgent`

For any **suggestions or comments** to improve this guide, please write to:

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