

Linux distributions at the European XFEL

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Slides put together by YK, after talking to EXFEL computing people

Current status - 1

- Online resources (managed by EXFEL people, with DESY IT puppet)
 - CentOS 7. Need GPFS client
- Offline resources (integrated into DESY IT managed Maxwell HPC system)
 - CentOS 7. Need GPFS client and NVIDIA support
- Online and Offline should be identical, for software compatibility

Current status - 2

- Control systems:
 - microTCA systems run Ubuntu because of drivers (software: DOOCS or Karabo)
 - Serverside: CentOS 7 currently
 - Minimize number of distributions
 - Some systems need GPFS client
 - before RedHat CentOS decision: Compilation of control software performed on a CentOS 8 test system
- Desktops: Going with Ubuntu DESY Standard
- General Server: CentOS 7
 - Minimize number of distributions

Considerations for future OS landscape

- Where there is Ubuntu today, there will most likely be Ubuntu tomorrow
 - at least anything from the RHEL universe is not under consideration
- Anything with GPFS access (and NVIDIA) needs reliable GPFS module support
 - That would include RHEL and its 100% clones Alma & Rocky
 - That will rule out CentOS Stream
- Current non-GPFS CentOS systems will go with the above distro
 - for consolidation reasons
- If DESY IT choice for CentOS 7 successor is tested and approved, XFEL will join their path for own installations
 - Currently DESY IT planning with AlmaLinux 8

Backup slide: IBM statement on GPFS&Clones

- <https://www.ibm.com/docs/en/spectrum-scale?topic=STXKQY/gpfsclustersfaq.html#linuxclone>

Q2.2:

What is the IBM Spectrum Scale support position regarding *clone* Linux distributions (CentOS, Rocky Linux, ROCKS, White box Linux, etc.) ?

A2.2:

There are many Linux distributions out there. It would not be practical to try to test and support them all. The IBM Spectrum Scale team focuses on testing Enterprise Linux distributions (RHEL and SLES) and Ubuntu. However, there are some popular distributions in the Linux community that are created by essentially building the code from source packages corresponding to one of the enterprise distributions, usually with some cosmetic changes. IBM Spectrum Scale code may be able to work correctly on such a distribution, since it very closely resembles a supported one. However, we do not test IBM Spectrum Scale explicitly on such *clone* distributions, and will not be able to provide support for any problems specific to the use of the latter. If a problem is reported in such an environment, we will investigate it, but if the problem is suspected to be related to the type of distribution used, we may request that the problem be recreated on a supported distribution. Note that other IBM products may have a different support policy. We recommend that a supported distribution is used on NSD servers and other nodes that have SAN connectivity, to make it possible to get support with storage-related issues.