

Docker Tutorial

Introduction, demos, and hands-on



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Docker Tutorial

- Short summery

A tutorial on the fundamentals of Docker including an introduction, demos, and hands-on exercises
- Targets:
 1. Understand Docker and the Linux container technology
 2. Run containers and commit updates to new images
 3. Understand and build images from Docker files.
 4. Understand and mount Docker volumes.
 5. Know about some Docker networking features.
- New ideas (from feedback):
 1. Gather information on the most important topics for the audience in advance.



Docker Tutorial

- Number of Attendances: 12
- Hands-on exercises (*If any*):
 1. Simple docker run → **completed**
 2. Install software on a container and commit images → **completed**
 3. Build image from a Dockerfile → **completed**
 4. Mount Docker volumes → **Demo completed**
 5. Docker compose → **not completed**
 6. Docker Kitemetic → **not completed**
- Interesting feedback:
 - Informative and useful.
 - Too much in a short time.
 - Too fast.

ELIXIR Registry



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What's new since last all-hands

- New domain (<https://bio.tools>)
- New content (220% size that we had a year ago!)
- New partners
 - SeqWiki, many national-level bioinformatics centres etc.
- Refinement of scientific description (EDAM ontology) and quality of annotation
 - Invited experts from various branches of life science
 - Achieved by organizing events specialising on particular branches of life science (e.g. RNA-only “hackathon”)
 - Enthusiastic responses from the community
 - Efforts will continue throughout next years



Plans for the (nearby) future & Feedback

- Cleanup of core concepts (differences between “available as”, “available at”, “available as a part of”, “I know about X”, “we use X at Y”, “I can help people with Z” are not clear at the moment)
- Docker integration:
 - Starting small - Logos and attributes to make it stand out when browsing and searching
 - Links to the Docker repository, possibility of hosting Dockerfiles
- Import of Metrics & Benchmarking data (covered by ELIXIR Excelerate WP2)
- Support of the Nordic “Identity”

Tutorial IPv6

- Basics of IPv6
- Fears and problems of IPv6



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Session title

- Short summary
- The session handled the biggest differences between Ipv4 and Ipv6 and let the participants test out some of the peculiarities.



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For Tutorials

- Number of Attendances: 1+3
- Hands-on exercises (*If any*):
 1. Tested ping6 link local multicast
 2. Tested link local ssh

Glenna



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Glenna

- Short summery Glenna Team Session Day 2
- Targets:
 1. Introduction to Glenna for new team members
 2. Cloud image Management
 3. Federated Cloud Access
- New ideas (from feedback):
 1. Proxy for federated access of Openstack Clouds
 2. How does one know what is contained in an VM Image
 3. Use proxy IDP in front of OpenStack Keystone

NT1 Team Session Day 2

Discuss various hot issues for our work in the NT1.

- Session targets
 - Long term 24x7
 - KPIs for board reporting
 - Secondary Ganeti setup at Uml
- New ideas
 - Alarms are very rare - we should force periodic (weekly?) drills to ensure NUNOC has the proper competencies.
 - We need to reflect on KPIs during the coming weeks (challenging to boil down all we do into a few KPIs that we feel reflect our ideals).
 - Use secondary Ganeti as contingency plan for fatal (fire) disasters at ØRE.

Plenary - Design Issues for e-Infrastructure Services

Design Issues for Knowledge Infrastructures

Tier-1 Design in 5min

Glenna Design in 5min

Trygve Design in 5min

E3DS Design in 5min



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Plenary - Design Issues for e-Infrastructure Services

- Short summary
- Key note presented an view on knowledge infrastructures and their challenges and opportunities.
- This was followed by short presentations from each NelC program.
- Targets:
 1. Get new (and wider?) perspective on the e-infrastructure work being done in NelC. Achieved, and interesting discussion started, that unfortunately had to be cut short due to time restraint.
 2. Inform NelC staff of design consideration and current status of the other program. Also achieved.

Trygve

Session topics



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Trygve Team Session Day 2

- This session is about technical topics in the Trygve project. The session will also look at the current status of ongoing developments, discussion and planning for next actions.
- Targets:
 - Inputs from Tools registry Tutorial
 - Synergies with ELIXIR Excelerate, esp. the federated EGA idea
 - SFTP Beamer (aka SFTP proxy) development
 - Feedback from the Dockers tutorial
- New ideas (from feedback):
 1. Trygve staff will get access to the tools registry devel sandbox, for suggesting direction for new feature development.
 2. Trygve will investigate f2-auth support in GSIFTPv2.
 3. Multiple suggestions for SFTP Beamer speedup.
 4. Trygve will move to engage in EGA federation in a Trygve extension or followup.
 5. Dockers can be run safely with host FS access using user namespace separation.