C2110 *UNIX and programming*

Lesson 1 / Module 3

PS / 2020 Distance form of teaching: Rev2

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WOLF cluster

- ➢ **Classroom 1.18**
- ➢ **University traffic light**
- ➢ **Structure**
- ➢ **Rules of usage**
- ➢ **Administrators**
- ➢ **Creating account, password change, forgotten password**

Classroom 1.18

➢ **Classroom with 23 PCs**
➢ **Arranged in a computing cluster**

Safety!

Basic information:

https://wolf.ncbr.muni.cz

The classroom is freely accessible to students working on projects at NCBR, as well as to students who are taught in the classroom during a given semester..

University Traffic Light

0
Nulové nebo zanedbatelné riziko

Computer room 1.18 is accessible to students.

1
Výskyt nákazy bez komunitního přenosu

- -
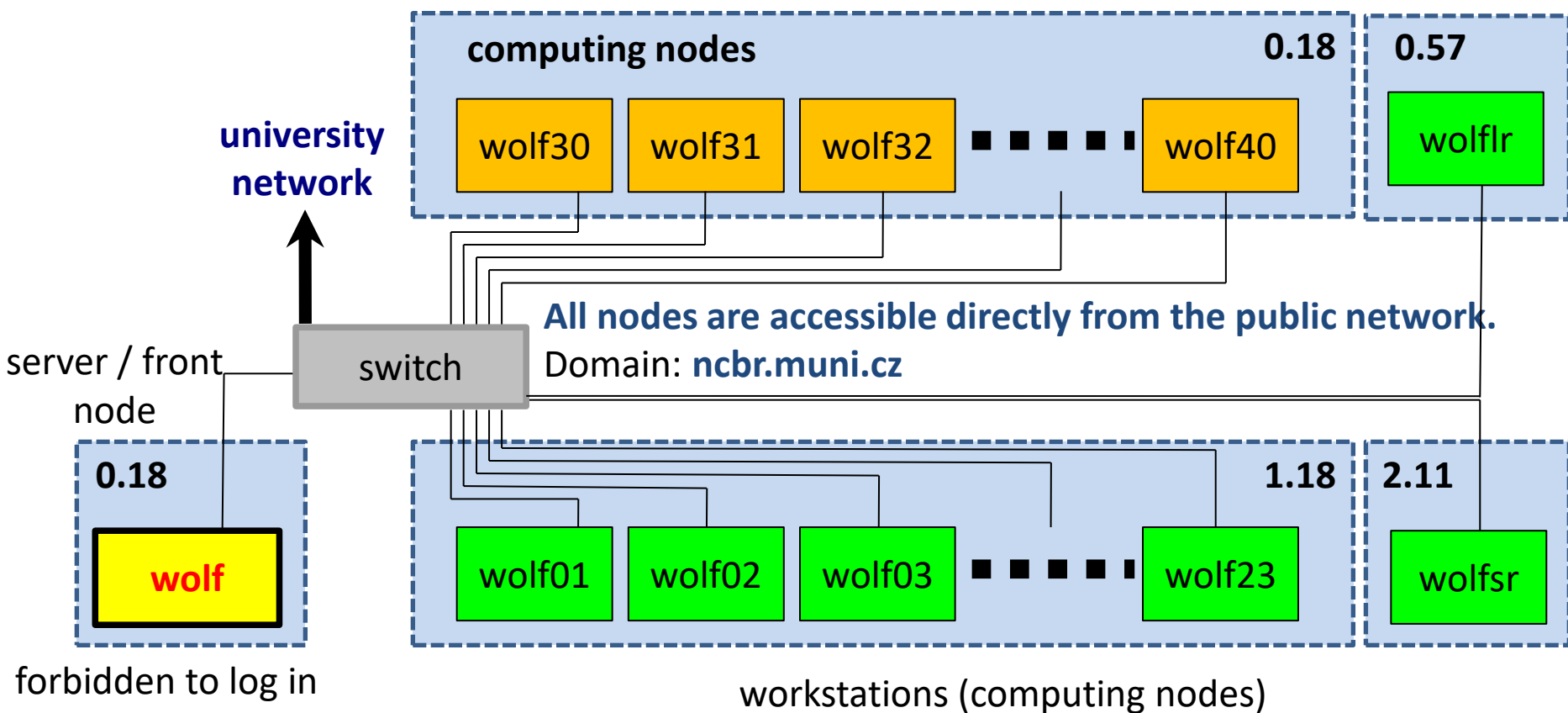
2
Počínající komunitní přenos

Computer room 1.18 is inaccessible to students.

3
Narůstající nebo přetrvávající komunitní přenos

Only remote access is allowed (ssh, scp, VNC, X11 export, etc.).

Structure of WOLF Cluster

computing nodes   **0.18**   **0.57**

university network

| wolf30 | wolf31 | wolf32 | ■ ■ ■ ■ ■ | wolf40 | wolflr |

All nodes are accessible directly from the public network.
Domain: **ncbr.muni.cz**

server / front node

switch

0.18   **1.18**   **2.11**

wolf

| wolf01 | wolf02 | wolf03 | ■ ■ ■ ■ ■ | wolf23 | wolfsr |

forbidden to log in

workstations (computing nodes)

Rooms:

0.18 Server room C04 / UKB
1.18 Computer room C04 / UKB
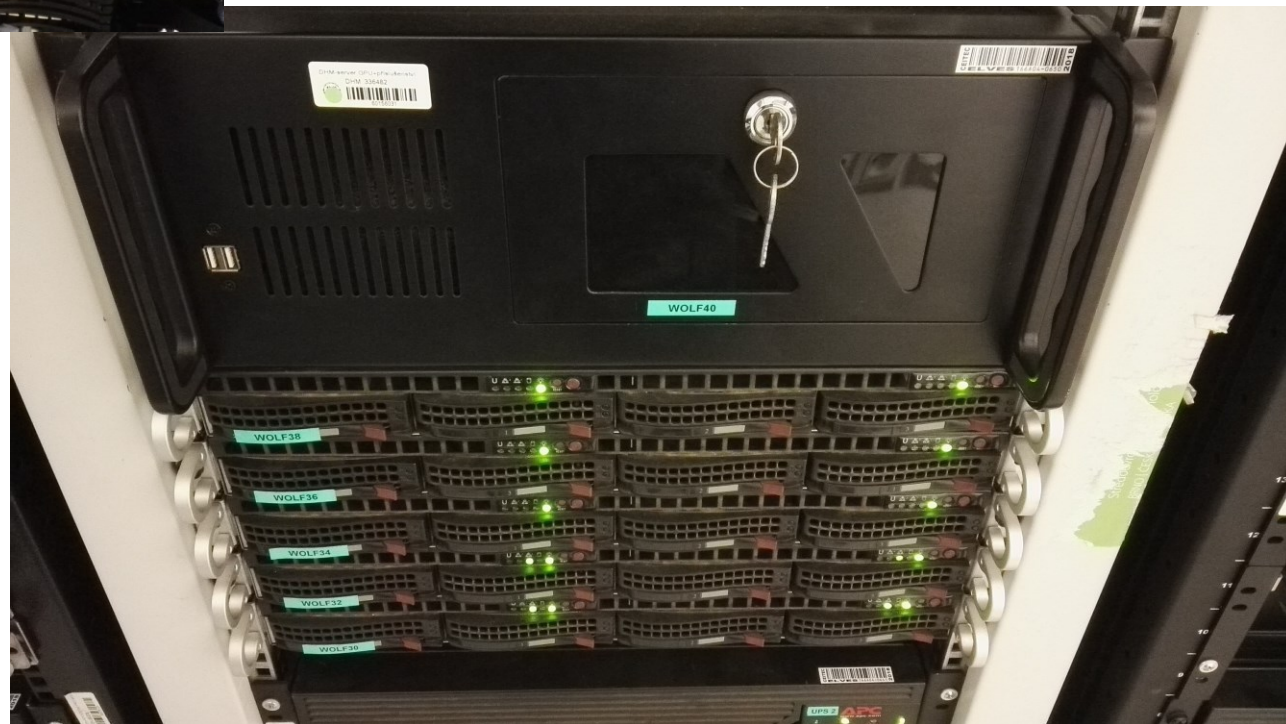2.11 Seminar room C04 / UKB
0.57 Seminar room (library) C04 / UKB

Operating system: Ubuntu 18.04 (Bionic) LTS (http://www.ubuntu.com/)

Server and Computing Nodes
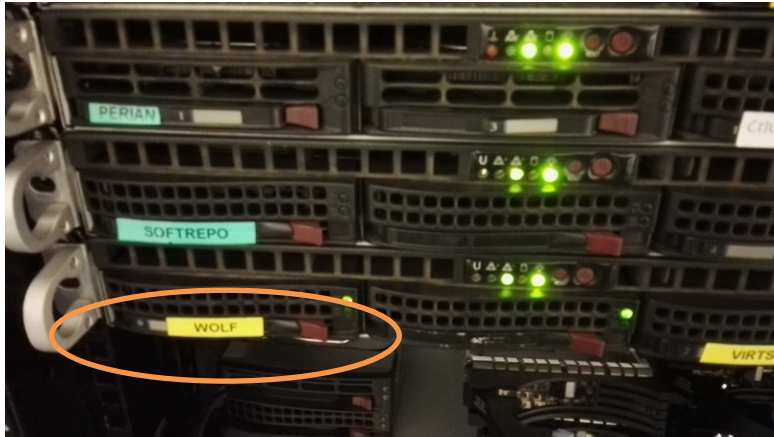
WOLF cluster master server

WOLF cluster computing nodes

Rules of Usage

The WOLF cluster is intended exclusively for teaching purposes or for scientific work within the National Center for Biomolecular Research.

The WOLF cluster is expressly prohibited for use for:
- downloading illegal content (copyrighted work, etc.)
- sending viruses, spam, and similar materials
- breaking the protection of other computers
- read, delete, or change the unprotected contents of other users' files

The rules for using the computer network of Masaryk University:
https://is.muni.cz/auth/do/mu/Uredni_deska/Predpisy_MU/Masarykova_univerzita/Smernice_MU/SM10-17/

The login name and password form the identity of the user and therefore we do not share it with third parties, we do not store or send it (e.g., by e-mail) in unencrypted form!

Rules of Usage …

It is also expressly forbidden on the WOLF cluster:

> ➢ run tasks on the front node (wolf.ncbr.muni.cz)
> ➢ run tasks anywhere in the home directory (especially data-intensive tasks)
> ➢ run tasks on workstations during lessons (unless allowed by the teacher)

Longer-time tasks must be run using a batch system.
More information in C2115 Practical introduction to supercomputing.

Cluster Administrators

Before contacting the administrator, **consult** your problem with your colleague, teacher or supervisor. If you do not resolve the issue, **report the problem to the administrators** (LCC Support) by e-mail to

support@lcc.ncbr.muni.cz

In the report, note:
- ➤ Problem description, command name
- ➤ Username, machine name
- ➤ Copy of error output (complete from command entry)

Details:
https://einfra.ncbr.muni.cz -> User Support

Exercise 1

Prepare a suitable login name and password that you will use to access the WOLF cluster. Choose the login name with the knowledge that it is also an account in the national E-Infrastructure (e.g., you will use the same login details when registering to MetaCentrum). **Please note that the login name cannot be changed after registration. The password must be strong.**

1. Create an account on a WOLF cluster. Account creation is requested here:

https://wolf.ncbr.muni.cz ⟶ Account management

⬇

Group application 'students 2020/2021'

Your identity and student status will be verified before completing the application. **Select Masaryk University for authentication, your identity will then be verified against the MU Information System.** The application itself has TWO parts. The first part is the formal registration to the virtual organization NCBR@MUNI. The second part then registration to the group students.

An account will be created on the WOLF cluster within approximately two hours of the administrator approving the application.

Choosing a Password

> The password should be strong enough. It should contain a combination of letters (lowercase and uppercase), numbers, and special characters.

> When entering the password, we do not use the numeric part of the keyboard, special keys and switches except the Shift key. This avoids the problem of entering the password on other computers.

The default keyboard on a WOLF cluster is English (**EN**).

Change Password

The standard command to change the password in the linux environment is a command **passwd** (man passwd). However, it cannot be used on a WOLF cluster due to the use of an external Perun user account manager (https://perun.cesnet.cz).

To change the password (or reset the password in case you forgot it) you must use the administrator eINFRA profile. More information can be found here:

https://einfra.ncbr.muni.cz -> e-INFRA profile