



Course Title:	Linux Operating System Basics
Course Description:	<p>First steps with Linux. You will get an operating system concept and construction overview. You will also be able to get first experience with the 100 most important shell commandos for configuring, adapting and interacting with the operating system itself or components of it. Also first automations with shell scripting will solve given problems in your simulated daily business as a Linux System Administrator.</p>
Course Content:	<ol style="list-style-type: none">1. OS: Introduction to the <i>Linux</i> world.2. Kernel: The core of the operating system (OS): handling memory management, process management and hardware communication.3. Shell: The command-line interpreter (CLI/terminal) that translates your commands into actions the kernel can understand.4. Storage: Filesystem: a hierarchical structure for organizing files and directories on a storage medium.5. Permissions: Controls who can read, write, or execute files and directories.6. Packaging: Install, update, and remove software/applications from a repository using tools like apt, dnf or rpm.7. Network: OSI model, TCP/IP (IPv4 and IPv6), routing, secure connections (SSH/SCP) and CURL to call API's.8. Installation: A going through OS setup/config (server vs. desktop).9. Distributions: Overview, comparison and history.10. Automations: Shell scripting with the usage of cron.
Requirements:	A personal computer/notebook and a good internet connection.
Course Teacher:	Schmucki ICT, Marco Schmucki (ICT Senior System Engineer)
Course Length:	5 days (Mo. - Fr.) / around 35h in total (7h per day)
Course Location:	Online (also in-class at an education or office location possible)
Course Price:	SFr. 2'450.- / per student (min. 5 people)