

VIRT Techno 18/19

The assessment for Virtualization Methods & Techniques (VIRT Techno) will be based on a number of small papers you need to create. For each paper you

- Research a subject
- Create (program and script) a demo in which you show the subject
- Write a small paper explaining the subject
- Include your code (such that someone could use your code to reproduce the experiment)

A 'small' paper must be complete, correct, clear and concise and contain complex code and relevant references. It is perhaps 500 words long and has 50 lines of code and five references. Length is less relevant than the seven c's and two r's mentioned here.

You may cooperate with others, but your papers and the assessment are individual. You must understand what you have created in every detail

In the table below, subjects are listed with three degrees of complexity. You must create:

- Three papers covering 'simple' subjects (*) **and**
- Two papers covering 'moderate' subjects (* *) **and**
- One paper covering a 'hard' subject (* * *)

(so six papers in total)

Subjects

Complexity	Title
*	Linux IP-tables
*	Libvirt
*	UnionFS
*	Nmap-script
*	Password-strength
*	SHODAN.io
*	Wigle.net
*	XKCD
*	Command injection
*	Rubber ducky
* *	Namespaces (CGroups)
* *	Scheduling (CFS)

* *	Vulnerable Script Library Detection (webpage)
* *	Post Exploitation Script
* *	Diffie Hellman
* *	PKI
* *	Buffer Overflow
* *	Slow Loris
* *	Privilege Escalation
* *	WiFi
* *	SDN/NV
* *	Docker
* *	Vagrant
* *	Provisioning
* *	VPC (Azure/AWS)
* * *	Site Fingerprinting
* * *	OSINT (+legal)
* * *	Rainbow Tables
* * *	Wannacry

