Software Problem Solving Cheat Sheet

v0.1 Florian Roth, June 2018

Inspection Points			
1	Error Message	Does the error point you to a config / setting to solve the problem?	
		Does a Google search of the error message provide a solution? (known issue)	Copy the exact message, enclose in " and check the first 10 results
2	Restart	Does a program / service / system restart solve the problem?	Close program, kill program via task manager, restart service, reboot system
3	Log	Does the service / system log contain more and useful information?	Windows Eventlog, or logs in /var/log
4	Rights	Could the problem be caused by access rights problems?	Permissions of program and data that the program needs access to, check your own rights
5	Network	Could the problem be caused by connection problems?	Internet connection, dns resolution, firewall config, connection tests via command line (e.g. with ncat), dump network traffic
6	Path	Is the right interpreter / runtime environment installed?	Program versions (python, java, VC++), Environment variables (PATH, CLASSPATH, GOPATH etc.)
7	Trial & Error	Does a reduced setup solve the problem?	Minimal configuration, remove ballast, reduce complexity
8	Replace	Does changing the browser, system, hardware, environment help?	Different browser, virtual machine, network (VPN), cable
9	Security Function	Does a security program interfere with the execution?	Deactivate Antivirus, SELinux, local Firewall, AppLocker, Proxy Filter
10	Reinstall	Does a remove & reinstall of the software solve the problem?	Backup config (often the config remains on the system)

A. How does ...? Before asking a colleague or superior on how to follow an inspection point, try a Google search. Include all necessary keywords which is the operating system, the service or program and the operation, e.g. "debian apache restart" "check windows application log" "redhat capture network traffic" "linux check access rights .ssh folder" B. Include all information If the problem can't be solved, compose a problem report that contains all necessary information including: the setup, version numbers, the exact error message, your tests and the results (attach big files or listings as attachments and not inline)