



Comenius University Bratislava Faculty of Mathematics, Physics and Informatics

THESIS ASSIGNMENT

Name and Surname: Matúš Bucher

Study programme: Computer Science (Single degree study, bachelor I. deg., full

time form)

Field of Study: Computer Science Type of Thesis: Bachelor's thesis

Language of Thesis: English **Secondary language:** Slovak

Title: Analysis of reverse shell techniques and possible countermeasures

Annotation: Analyze both established and novel methods for creating a reverse shell

(making the shell accessible through an open network port) using

software and resources commonly available in standard operating system

installations (such as interpreters for various scripting and other

languages, network utilities, etc.). For each method considered, design

and implement a specific use case, and perform appropriate tests. Describe possible countermeasures. Evaluate the minimum necessary

resources and configurations required for each method.

Supervisor: Ing. Dušan Bernát, PhD.

Department: FMFI.KI - Department of Computer Science

Head of

prof. RNDr. Martin Škoviera, PhD.

department:

Assigned: 30.10.2024

Approved: 31.10.2024 doc. RNDr. Dana Pardubská, CSc.

Guarantor of Study Programme

Student	Supervisor