

## Faculdade de Ciências e Tecnologia Universidade de Coimbra Departamento de Engenharia Informática

## Assignment #2 Conceção e Desenvolvimento de Infraestruturas Seguras

## Defense, mitigation and remediation strategies

This assignment requires students to write a report (maximum 12 pages) describing a strategy to protect the testbed scenario. The report must address the following points:

- Outline a strategy to provide protection and continuous vulnerability assessment for the testbed scenario – don't forget to enumerate the tools you would select (justifying your choice) and how they would be deployed;
- Propose solutions to fix the vulnerabilities found during the previous assignment. In case they aren't easily fixable (or not fixable at all), you are encouraged to provide a proposal for defending against their exploitation;
- Document the configuration, deployment and evaluation of one countermeasure/tool of your choice. This tool must be able to detect and/or protect against the exploitation of a category of vulnerabilities found in the previous assignment or, in alternative, be able to detect or protect against attack/scouting procedures (like the ones studied in the classes). The evaluation effort must demonstrate the effectiveness of the tool to detect a vulnerability or attack deployed for that purpose.

The paper must be written using the IEEE two-column template, available at: http://www.ieee.org/conferences\_events/conferences/publishing/templates.html. The document structure must follow the writing guidelines recommended for research papers (including an Abstract, Keywords, Introduction, Discussion and Conclusion). The papers can be written in English or Portuguese.

The paper must be submitted in Inforestudante **until the 25th May 2024, at 23:59**. The penalty for academic dishonesty (plagiarism, etc.) will be failure of the assignment.

**Deadline tolerance:** each student has a total tolerance of 10 days to be used in the 2 deliveries planned for practical assignments. This means the first accumulated 10 days of delay (considering all assignments) are not penalized. Late deliveries (over this tolerance) will be subject of a 25% penalty, per day. [51]