

# 网络攻防实训平台

## 使用手册

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我校网络攻防实训平台，是面向网络安全、信息对抗及相关专业建设的现代化综合实训平台。本平台集理论教学、实验模拟、技能实训与竞赛演练于一体，构建了覆盖漏洞挖掘、渗透测试、安全防护、应急响应等全流程的实战教学环境，旨在培养学生的网络安全实战能力与攻防对抗素养。



## 1 学习广场

“学习广场”模块是本平台面向学生个体学习进程管理的个性化中心，整合“我的排课”“我的课程”“我的习题”及“我的作业”四大功能，实现学生个人学习任务的集中组织与进度跟踪。

### 1.1 我的排课

按时间顺序清晰展示学生所属班级的课程安排，包括理论课、实验课等日程信息，由教师进行安排发布。

The screenshot shows the 'My Schedule' section of the platform. At the top, there are tabs for '我的课程' (My Courses), '我的习题' (My Exercises), and '我的作业' (My Assignments). The main area displays a dark blue header with the text '我的课表' (My Schedule) and statistics: '0门' (0 courses) and '0秒' (0 seconds) for cumulative study time. Below this, a message says '暂无排课信息' (No scheduling information available). On the left sidebar, there are links for '我的课程' (My Courses), '我的习题' (My Exercises), and '我的作业' (My Assignments).

## 1.2 我的课程

集中呈现学生已选的课程列表，实时展示各课程学习进度、章节完成状态及待学内容，方便学生延续学习。

The screenshot shows the 'My Courses' section of the platform. At the top, there are tabs for '我的课程' (My Courses), '我的习题' (My Exercises), and '我的作业' (My Assignments). The main area displays a dark blue header with the text '我的课程' (My Courses), '14门' (14 courses), and '18天8小时11分59秒' (18 days 8 hours 11 minutes 59 seconds) for cumulative study time. Below this, a message says '暂无排课信息' (No scheduling information available). On the left sidebar, there are links for '我的课程' (My Courses), '我的习题' (My Exercises), and '我的作业' (My Assignments). The main content area lists three courses: 'PHP 编程基础' (PHP Programming Foundation) at the初级 (Beginner) level, 'SQL注入漏洞' (SQL Injection Vulnerability) at the初级 (Beginner) level, and '文件上传' (File Upload) at the中级 (Intermediate) level. Each course card includes a thumbnail, the course name, level, completion status, and the last study time.

The screenshot shows the 'Penetration Testing Essential Tools (Experiment Edition)' course page. It includes a brief history of penetration testing, course difficulty (Intermediate), and chapter sections like 'Common Browser Plugins' and 'Scanner Tools'.

## 1.3 我的习题

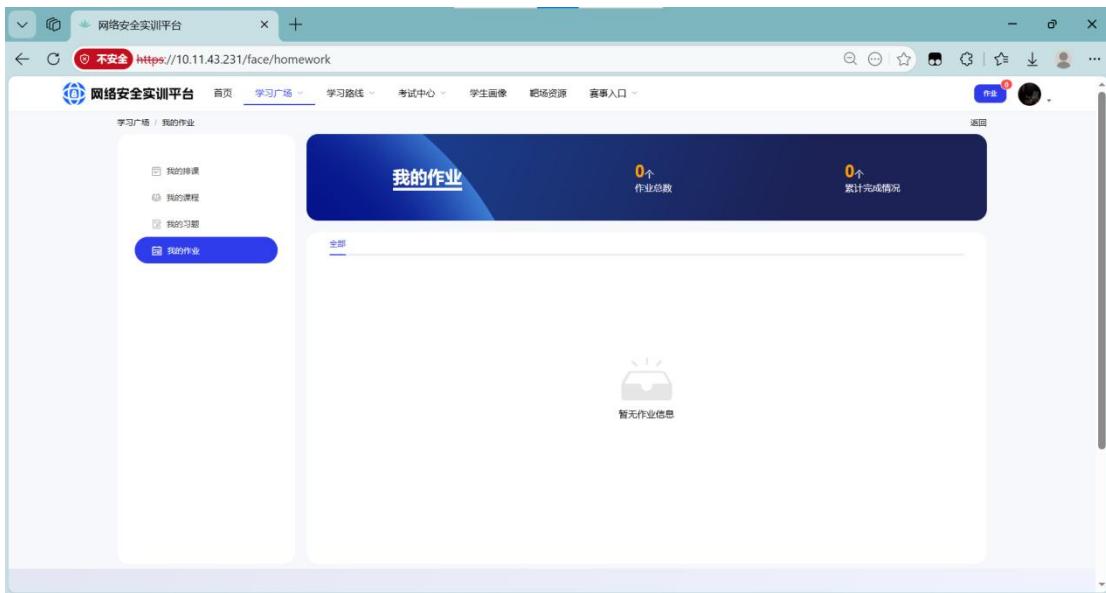
汇总与本学习阶段相关的练习题目，支持按课程、知识点分类查看与作答，并记录练习历史与正确率，助力巩固所学。

The screenshot shows the 'My Practice' section with a summary of 0 completed practice questions and 0% accuracy rate. It also lists categories like 'My Courses' and 'My Assignments'.

## 1.4 我的作业

统一展示教师布置的课后作业与实验报告任务，支持在线提交、

查看批改结果与评语，实现作业闭环管理。



该模块以学习者为中心，通过集成化、可视化的方式呈现学习全貌，帮助学生高效规划学习时间、跟进任务进度、巩固知识技能，提升自主学习效率与效果。

## 2 学习路线

“学习路线”模块是本平台系统化规划学习路径、明确培养方向的核心导航体系。该模块整合“职业体系”“竞赛专项”“学习方向”及“全部课程”四个子模块，为学生提供从目标定位到知识落实的全流程指引。

### 2.1 职业体系

围绕网络安全行业岗位需求，梳理对应技能图谱与能力路径，帮助学生明确职业发展方向。



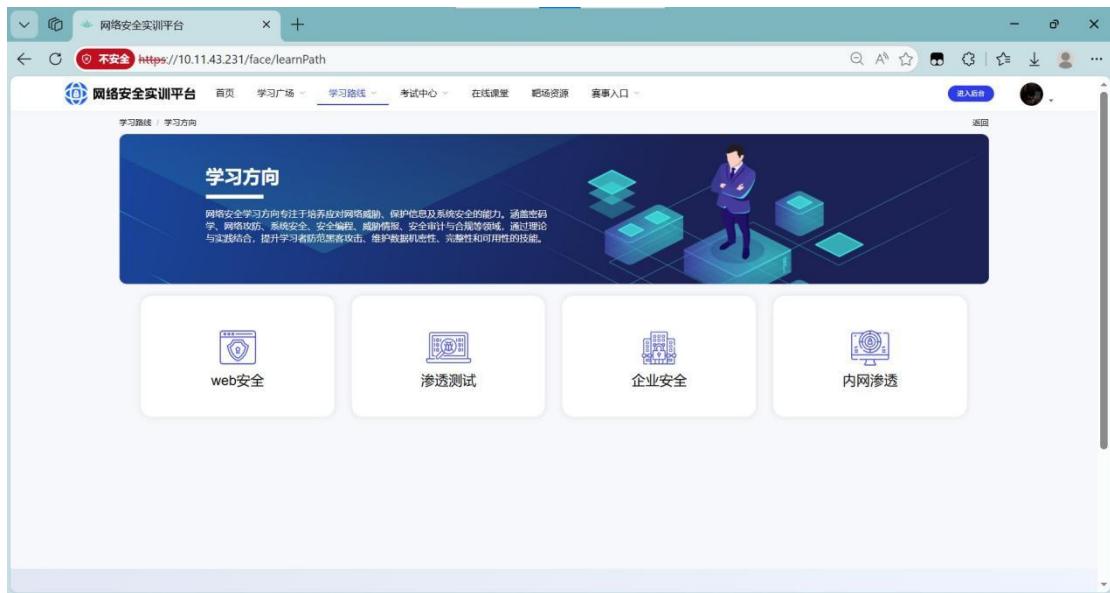
## 2.2 竞赛专项

针对 CTF 竞赛提供阶段化训练路线、专项赛题与备赛资源，支持以赛促学。



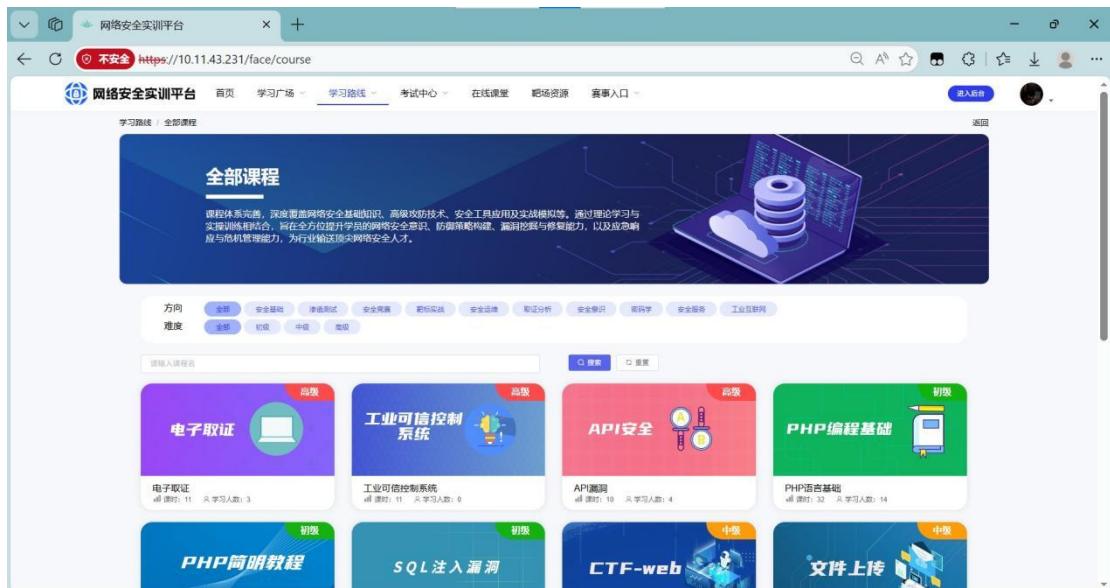
## 2.3 学习方向

根据安全技术分支定制差异化学习序列，便于学生聚焦专项能力提升。



## 2.4 全部课程

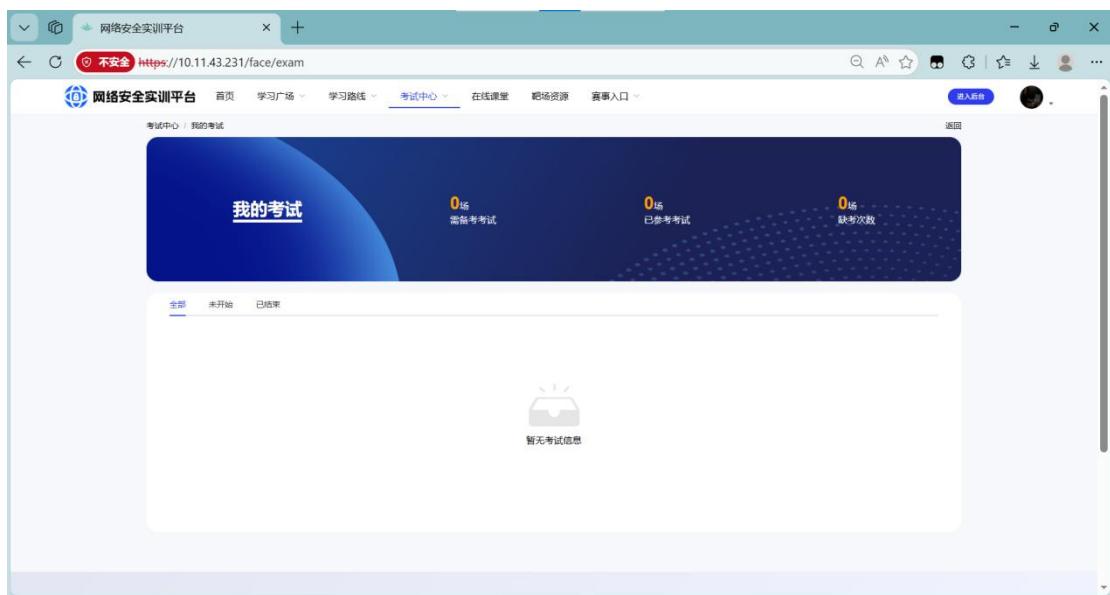
汇总平台所有课程资源，支持按类别、难度、热度等进行检索与筛选，方便学生自主选课学习。



该模块通过结构化的学习路径设计，帮助学生清晰定位、科学规划、循序渐进地提升专业技能与实战素养，实现从入门到精通的体系化成长。

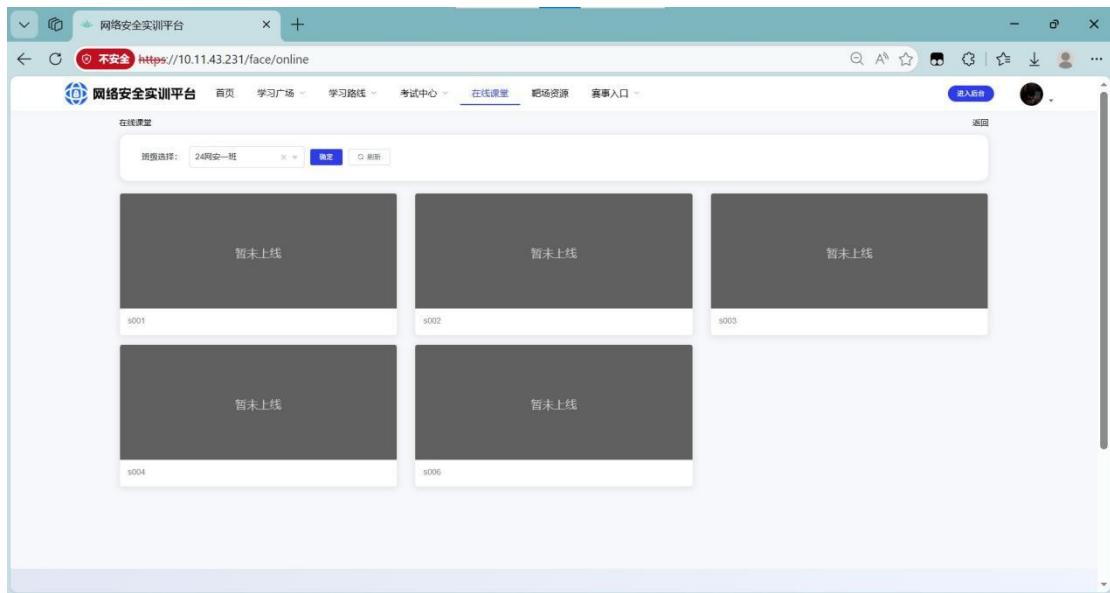
## 3 考试中心

考试中心模块由老师组卷出题、发布考试，学生进行答题。



## 4 在线课堂（教师端）

用于课堂实训环节的组织与管理。教师可通过该模块创建并管理在线课堂，实时查看班级内每位学生的登录状态、实验进度及操作动态，实现对课堂实训过程的全程可视化管理。



## 5 学生画像（学生端）

本模块是平台基于学习过程数据构建的学生综合能力与学习状态可视化分析系统。



## 6 靶场资源

集中管理理论题库、实操题库、赛事资料等学习资源，支持分类

检索与下载，助力学生拓展学习与备赛。

The screenshot shows the 'Target Resource' section of the Network Security Practice Platform. It features a grid of cards representing different security topics:

- 数据安全理论题库 (Data Security Theory Questions): 3人做过 (3 people solved), icon of a lock.
- 强网杯 (Strong Network Cup): 59届 (59th edition), 0人做过 (0 people solved), icon of a trophy.
- web安全实操 (Web Security Practical Operations): 0人做过 (0 people solved), icon of a database.
- SQL注入理论题库 (SQL Injection Theory Questions): 61人做过 (61 people solved), icon of a database with clouds.
- 文件上传漏洞 (File Upload Vulnerability): 0人做过 (0 people solved), icon of a document.
- xss理论题库 (XSS Theory Questions): 13人做过 (13 people solved), icon of a question mark.
- 文件包含实操题 (File Inclusion Practical Operations): 0人做过 (0 people solved), icon of a document.
- 文件包含漏洞 (File Inclusion Vulnerability): 12人做过 (12 people solved), icon of a document.
- CSRF漏洞 (CSRF Vulnerability): 0人做过 (0 people solved), icon of a person.
- SSRF漏洞 (SSRF Vulnerability): 0人做过 (0 people solved), icon of a person.

理论题如下

The screenshot shows a specific theory question page for 'Data Security Theory Questions'. The page includes:

- A header with tabs: 首页 (Home), 学习广场 (Learning Square), 学习路线 (Learning Path), 考试中心 (Exam Center), 在线课堂 (Online Classroom), 靶场资源 (Target Resources), and 赛事入口 (Competition Entrance).
- A breadcrumb navigation: 靶场资源 / 数据安全理论题库.
- A 'Resource Summary' section with the title '数据安全理论题库'.
- A 'Resource List' section containing a list of questions:

  - ①国家积极开展数据安全治理、数据开发利用等领域的国际交流与合作，参与数据安全相关国际规则和标准的制定。下列说法正确的是\_\_\_\_\_。
  - ②下面哪个不是生成树的优点\_\_\_\_\_。
  - ③制定《网络安全审查办法》的目的包括\_\_\_\_\_。
  - ④个人信息处理者应当公开个人信息保护负责人的\_\_\_\_\_，并将个人信息保护负责人的姓名、联系方式等报送履行个人信息保护职责的部门。
  - ⑤制定《网络安全审查办法》的目的不包括\_\_\_\_\_。
  - ⑥实施《网络安全审查办法》的理念包括\_\_\_\_\_。
  - ⑦《中华人民共和国网络安全法》规定，网络用户利用网络服务实施侵权行为的，权利人有权通知网络服务提供者采取屏蔽、\_\_\_\_\_、断开链接等必要措施。通知应当包括构成侵权的初步证据及权利人的真实身份信息。
  - ⑧以下行为符合《网络安全审查办法》的是\_\_\_\_\_。
  - ⑨国家网信部门负责统筹协调\_\_\_\_\_工作和相关监督管理工作。

- A 'Start Test' button at the bottom right of the question list.

实操题如下

The screenshot shows a web browser window with three tabs open: '网络安全实训平台', 'AWD赛制', and 'CTF竞赛平台'. The current page is 'CTF竞赛平台' at the URL <https://10.11.43.231/face/bank/25>. The page title is '网络安全实训平台' with a sub-section 'CTF竞赛平台'. The main content area has a header '资源简介' and a sub-header '资源列表'. Under '资源列表', there is a list of items: 'RFI6', 'RFI1', 'RFI2', 'RFI3', 'RFI4', and 'RFI5'. A blue button labeled '开始做题' (Start Solving) is located to the right of the list.

## 7 赛事入口

支持 CTF 静态解题赛与 AWD 动态攻防赛两种模式。教师可创建比赛、部署赛题，学生可组队参与，平台实时展示排名与攻防动态。

### 7.1 CTF 竞赛

The screenshot shows a web browser window with two tabs open: '网络安全实训平台' and 'CTF竞赛平台'. The current page is 'CTF竞赛平台' at the URL <https://10.11.43.236/index>. The page title is 'CTF竞赛平台'. The main content area features a large banner with the text '网络安全夺旗赛' (Network Security Flag Capture Competition) in white. Below the banner is a large orange button with the text '立即报名' (Register Now). The background of the page is a dark blue map-like pattern.

## 7.1.1 教师（管理员）设置比赛时间、发布试题

The screenshot shows the 'Platform Configuration' section of the CTF Competition Platform's backend. It includes two main panels: 'Competition Configuration' and 'Competition Status Configuration'. The 'Competition Configuration' panel contains fields for competition status (set to '正在进行' - running), current mode (set to '练习模式' - practice mode), and various configuration options like '是否允许登录' (allow login) and '是否开启动态积分' (enable dynamic scoring). The 'Competition Status Configuration' panel contains more detailed settings such as Docker configuration, writeup paths, and team limit configurations.

## 7.1.2 学生组队报名比赛

The screenshot shows the '立即报名' (Register Now) page for students. It features a form for creating a team, including fields for '学校单位名称' (School Unit Name), '队伍名字' (Team Name), '队伍头像' (Team Avatar), '指导老师' (Mentor Name), '老师手机号' (Teacher Phone Number), '队伍介绍' (Team Description), and a '验证码' (Captcha) field. The background has a dark, abstract map-like design.

### 7.1.3 CTF 竞赛详情

The screenshot shows the 'CTF竞赛平台' (CTF Competition Platform) interface. At the top, it displays the competition name '大连科技学院网络安全比赛' (Dalian Jiaotong University Network Security Competition). A progress bar indicates '距离比赛结束: 1天0小时36分24秒' (Time left until competition ends: 1 day 0 hours 36 minutes 24 seconds). Below the title, there are tabs for '比赛详情' (Competition Details), '详细数据' (Detailed Data), 'WRITEUP' (Writeup), and '赛事公告' (Competition Announcements). The main area shows a list of challenges categorized by type: Mobile, Reverse, Pwn, Crypto, IOT, Misc, and Web. Each challenge card includes the challenge name, points (PT), and solved status. For example, '莲花血鸭' (Lily Blood Duck) is a Mobile challenge worth 500 PT, and 'drink\_TEA' is a Reverse challenge worth 500 PT. The sidebar on the left lists categories with their counts: 全部 (All) 0/22, Mobile 0/1, Reverse 0/1, Pwn 0/1, Crypto 0/2, IOT 0/2, Misc 0/3, and Web 0/12.

### 7.2 AWD 竞赛

AWD 竞赛过程可参考 CTF

#### 7.2.1 教师（管理员）设置比赛时间、发布试题

(AWD 竞赛需要点击初始化环境一项)

The screenshot shows the 'AWD竞赛' (AWD Competition) configuration page. The left sidebar includes sections for 后台首页 (Backend Home), 平台配置 (Platform Configuration), 比赛管理 (Competition Management), 项目管理 (Project Management), 系统管理 (System Management), 用户管理 (User Management), 队伍信息 (Team Information), docker管理 (Docker Management), and 竞赛轴案 (Competition Axis Case). The main content area is titled '比赛管理' (Competition Management) and shows the current status as '比赛进行中' (Competition in Progress). It features two main sections: '比赛时间配置' (Competition Time Configuration) and '比赛状态配置' (Competition Status Configuration). In the time configuration section, fields include '比赛模式' (Competition Mode) set to '比赛模式' (Competition Mode), '比赛开始时间' (Competition Start Time) set to '2025-12-23 09:37:04', '比赛结束时间' (Competition End Time) set to '2025-12-23 13:36:43', '比赛主标题配置' (Main Title Configuration) set to '大连科技学院AWD友谊赛', and '比赛副标题配置' (Subtitle Configuration) set to '比赛副标题'. In the status configuration section, fields include '是否允许登录' (Allow Login) set to '是' (Yes), '是否允许注册' (Allow Registration) set to '是' (Yes), '是否允许答题' (Allow Answering) set to '是' (Yes), '是否修改队伍信息' (Modify Team Information) set to '是' (Yes), '是否开启Check功能' (Check Function Enabled) set to '是' (Yes), '是否开启网盘附件' (Cloud Disk Attachment Enabled) set to '否' (No), '加固时长(s)' (Fortification Duration (s)) set to '1200', '每轮时长(s)' (Each Round Duration (s)) set to '600', '初始分数' (Initial Score) set to '1000', and '攻击分数' (Attack Score) set to '100'. There are also '修改' (Edit) buttons for each configuration item.

## 7.2.2 AWD 竞赛详情

The screenshot shows the AWD competition details page. At the top, there are tabs for '比赛详情' (Competition Details), '详细数据' (Detailed Data), and '赛事公告' (Event Announcements). The main title is '大连科技学院AWD友谊赛' (Dalian Jiaotong University AWD Friendship Match). A banner at the top right indicates '距离比赛结束: 3小时56分37秒' (Time left until the match ends: 3 hours 56 minutes 37 seconds).

**本队信息 TEAM INFORMATION**

排名	得分
5	1000

初始分值: 1000 攻击得分: 0 异常扣分: 0 丢失分值: 0

**攻防赛题 GAME DEFENSE QUESTIONS**

题目	类型
week2	Web
FlaskShop	Web

**比赛时间 GAME TIME**

当前轮次	距下一轮还有
0	1038 s

**攻击动态 ATTACK DYNAMICS**

团队/攻击时间 攻击题目

**比赛排名 RANKING**

排名	团队名称	总分
1	ycc	1000
2	bjx897	1000
3	花花	1000
4	小侯	1000
5	tc	1000

Flag: 请输入flag 提交

附:

平台访问地址: <https://10.11.43.231>

CTF 访问地址: <https://10.11.43.236>

AWD 访问地址: <https://10.11.43.237>

(以上网站必须使用校园网访问)