



HORSE PLINKO
CYBER CHALLENGE
Season 2 • Fall 2024

Onboarding Packet

International Horse Plinko League - Cybersecurity Interns

Introduction

Welcome, new cybersecurity hires (and by "cybersecurity hires," I mean "unpaid interns"), to the International Horse Plinko League (IHPL)!

As the CEO of the International Horse Plinko League, it is my pleasure to welcome you to our great company. It's certainly an interesting time to join us! You may know of the IHPL for our revolutionary product, Plinko Sauce, a miracle fluid with applications in medicine, archeology, paleontology, acupuncture, surgery, plumbing, modern warfare, medieval warfare, computing, topology, and fishing. It's already been widely lauded as "the second asbestos" in certain regulatory circles! Recently, IHPL's R&D team has uncovered new and interesting applications for our magical mixture - in rocket science, no less!

Due to global supply chain issues, difficulty sourcing the many and expensive ingredients for Plinko Sauce, rampant piracy, and global warming, our Plinko Sauce production has hit an all-time low. We need *you* to escort the last tankers full of Plinko Sauce to our island fortress so that our scientists can complete the project they're working on. This is of utmost importance to the company - this experiment could make or break the IHPL as a global superpower, and we *need* to assure that the Plinko Sauce arrives safely and on time.

Opposing you will be our old enemies, the [Horse Liberation Front](#). They're recently resorted to what they refer to as "[privateering](#)," and attacking our vessels when on the sovereign seas. This has resulted in significant loss of corporate profits, terribly delayed projects, and a distinct lack of increased global horse plinking.

We'll be counting on you to keep our Plinko Sauce delivery on time and our ships in shipshape shape.

Keep on plinking!



Harrison Keating
CEO of the International Horse Plinko League
Ph.D. (Practitioner of Horse Dropping), University of Helsinki

Who's Who

Here's the list of who to know, who to avoid, and who to contact for support.



You are the **Blue Team**. You, as a new (or returning) International Horse Plinko League intern, are trying to keep the IHPL's services and infrastructure safe from the Red Team's attacks.



The **Horse Liberation Front** is the **Red Team**. Throughout the engagement, they will be attempting to break into - and take offline - your network in an effort to free the horses and sink your ships. They will leave no ship unscathed and no service untested, so be thorough in hardening your systems! It may be unwise to contact them directly during the competition; we do **not** recommend negotiating with cybercriminals.



The **Black Team** supports the technical aspects of the competition – the network, machines, and other infrastructure. Think of them as your IT support. They are here to answer technical questions and solve problems, so don't hesitate to ask them for technical help during the competition.



White Team consists of the competition officials. They handle scoring, rule compliance, inject grading, and the like. Think of them as HR or Legal. Contact them to resolve any rule ambiguities or to ask questions. *When in doubt, ask the White Team for help.*



The **C-Suite** are members of the Black and White Team that are executives of the International Horse Plinko League. They will introduce themselves during the opening ceremony. They (and a few others) may interact with your team in-character throughout the competition – these interactions will not be scored. We hope you enjoy networking with our senior executives!

The last *four* (Red, Black, and White Teams, as well as the C-Suite) will be collectively referred to as "competition organizers." Organizers will be wearing team-colored Horse Plinko-branded shirts and/or IHPL company IDs to differentiate themselves. The last *three* (Black and White Team, with the C-Suite) may also be referred to as "staff of the International Horse Plinko League."

If you need a member of a specific team, you can ping them on Discord in your team channels, or raise your hand in the room.

Scenario

Rules

We want to ensure that everything runs smoothly, so please follow all the rules below:

1. **Do not attack infrastructure.** WiFi connections, our virtualization platform OpenStack, scoring agents, scoring platforms, and other competition infrastructure are *explicitly* out of scope. Additionally, do not touch the environments of other teams. If you are found to be attacking or interfering with another competition team, *you will be instantly disqualified*.
2. **Stay in scope.** Only interact with assets that are explicitly in-scope for your team. In-person, in-character interactions with staff of the IHPL (that is, *not* Red Team) are out of scope, and are merely for immersion and fun. Scope will be explained in further detail [here](#).
3. **Do not exfiltrate company data.** You are not allowed to copy data from the competition environment to your personal device.
4. **Respect time-out periods.** During any official breaks, you are not allowed to interact with your environment. Your environment will be automatically closed during these periods. Meet with sponsors, network with others, and relax.
5. **You can use the Internet...** tools or scripts that are non-AI, publicly available, **and** free are fair game. Paid tools are not. Searching for information you do not know is encouraged, and may even be necessary! Printed reference materials are also permitted.
6. **...but you cannot plagiarize or use AI tools.** Submitting injects with information copied verbatim from the Internet is strictly prohibited. Additionally, utilizing any AI tools in any capacity (including ChatGPT, Claude, Gemini, and Bing Chat) is prohibited.
7. **Please report issues.** If you have a problem during the competition, please contact either White Team or Black Team. You will *not* be penalized for reporting any issues.
8. **Please be nice to everyone.** Do not be rude to the Red Team, Black Team, White Team, or fellow Blue Team members. Do not attempt to social engineer competition organizers; what you say to White or Black Team will not be shared with the Red Team.
9. **Have fun!** The ultimate goal is to learn, so please show good sportsmanship throughout the competition, even when things are tough.
10. **We reserve the right to disqualify any individual or team** that we, in our sole discretion, hold to be too experienced for the level of difficulty targeted in this beginner-oriented competition. If in doubt, reach out.

Failure to comply with the above rules will lead to disqualification¹. For any clarification on the rules, please ask a White Team member.

¹ And yes, failing to have fun is a disqualifiable offense. We take our fun *seriously* at the IHPL.

What to Expect

The Horse Plinko Cyber Challenge is a cyber defense competition. You and three of your peers will be tasked with defending a small business network of Linux and Windows machines. These systems will contain services that are critical for keeping IHPL's Plinko Sauce tanker ships functional. This could be anything from a web site to an email server to industrial manufacturing and fabrication equipment - you can find the full listing in the "[Scored Services](#)" section. The HLF (Red Team) will actively attempt to take your services offline. You will need to secure your vulnerable systems and fend off their attacks (see <https://plinko.horse/resources> for tips). Additionally, you will be tasked with "injects," which are business tasks related to your duties, requiring a written submission via the scoreboard. You will get points both for keeping services online and for completing injects, and these points will be shown on the scoreboard.

The team with the highest score wins!

What Changed from HPCC1?

Overall, the competition is shorter; service uptime is now more critical per-minute. We have migrated to a new scoreboard and scoring engine, and moved inject notification and submission from a dedicated Discord channel to your scoreboard account. Since you are working in a completely different environment, the network topology, box names, OSs, and scored services will be completely different.

Scoring Breakdown

Your team gets points for (1) keeping your team's services online and (2) completing injects (both accurately and on-time). The score weights are as follows:

Category	Percentage
Service Uptime	65%
Injects	35%

If you ever need to fully revert your box, you will be penalized by losing points equal to 20 minutes of service uptime for that box².

² If the events that caused you to need your box to be reverted were completely outside your control, due to a violation of Red Team's [scope](#), and/or due to the actions of White Team or Black Team, you will not be penalized for requesting a reset.

Competition Environment

Required Software

Before continuing, please ensure the following programs are installed on your computer. This will make accessing your environment possible:

Program	Windows	macOS	Linux
RDP Client	Remote Desktop Connection	Download	remmina
SSH Client	ssh in PowerShell	ssh in Terminal	
Modern Web Browser	Chrome or Firefox are recommended.		
Word Processor	Google Drive, Microsoft Word, or OnlyOffice are recommended.		

Required Hardware

You will need to bring a laptop capable of running the software listed above and connecting to a WPA2-Enterprise wireless network (if you can connect to UCF-WPA2, you are fine). Devices will NOT be provided, so make sure to bring a charging cable!

The Official Competition Discord

Most official communication of schedule announcements will be handled through the Official Competition Discord. You can ping the White Team role for rules clarifications, inject questions, and general help, and you can ping the Black Team role for technical assistance. This is simply an *additional* vector for help—you will still be able to interact face to face with the members of White and Black Team who are staffing the event.

The team channel(s) assigned to you will be visible to White Team and Black Team only—Red Team will be unable to see any information you share with your team over your designated team channels. There WILL be a specific channel for interacting with the Red Team; this channel will be accessible to all teams competing. We advise not putting your passwords there.

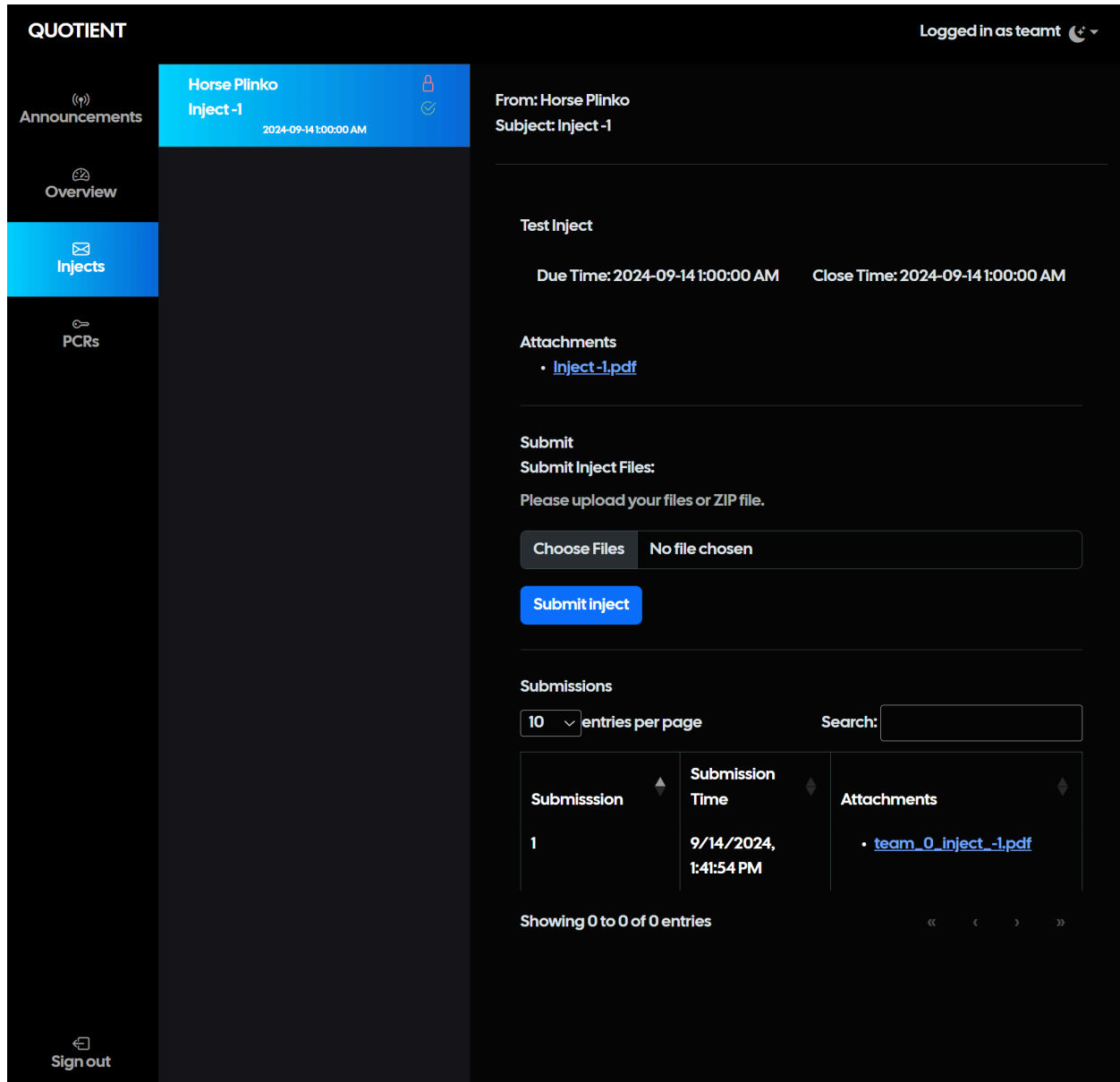
Announcements

Announcements with important scheduling information, default credentials, and more may be sent to you via the official competition Discord and/or the scoreboard.

Injects

Injects will be released throughout the competition. They account for 35% of your team's score. Injects will introduce a scenario, and provide you a task to complete, usually either making changes to, or gathering information about, your boxes and environment.

Injects look like this³ and are available within the scoreboard (scoreboard.plinko.horse within the competition environment):



The screenshot shows the 'QUOTIENT' interface for the 'Horse Plinko Inject-1' competition. The left sidebar contains navigation links: Announcements, Overview, Injects (selected), and PCRs. The main content area displays the inject details, including the title 'Horse Plinko Inject-1' with a timestamp of '2024-09-14 1:00:00 AM'. Below this, the 'Test Inject' section shows the 'Due Time' and 'Close Time' as '2024-09-14 1:00:00 AM'. The 'Attachments' section lists 'Inject-1.pdf'. The 'Submit' section prompts the user to 'Submit Inject Files' and 'Please upload your files or ZIP file.', with a 'Choose Files' button and a 'No file chosen' status. A 'Submit Inject' button is also present. The 'Submissions' section shows a table with columns for 'Submission', 'Submission Time', and 'Attachments'. The table currently displays one submission, '1', with a submission time of '9/14/2024, 1:41:54 PM' and an attachment 'team_0_inject_-1.pdf'. The bottom of the page shows 'Showing 0 to 0 of 0 entries' and a 'Sign out' button.

QUOTIENT Logged in as teamt

Announcements

Overview

Injects

PCRs

Sign out

Horse Plinko Inject-1 2024-09-14 1:00:00 AM

From: Horse Plinko
Subject: Inject-1

Test Inject

Due Time: 2024-09-14 1:00:00 AM Close Time: 2024-09-14 1:00:00 AM

Attachments

- [Inject-1.pdf](#)

Submit

Submit Inject Files:

Please upload your files or ZIP file.

Choose Files No file chosen

Submit Inject

Submissions

10 entries per page Search:

Submission	Submission Time	Attachments
1	9/14/2024, 1:41:54 PM	team_0_inject_-1.pdf

Showing 0 to 0 of 0 entries

³ Development version, not final or indicative of end product. Inject template subject to change. Terms and conditions apply.

Injects include a PDF with the full description of the task, and each will show up in its own tab in the Injects page. Injects are submitted by uploading a specifically named file before the inject's deadline and clicking "Submit inject." Only the last file submitted before the deadline will be scored, so if you need to make a correction, you can re-submit up until the deadline for that inject.

Late submissions (up to an hour past the deadline) will still receive 50% credit! Want to win? Make sure you do the injects!

Accessing Your Environment

During the competition, you will need to sign in to the competition Wi-Fi network for your room, named either "IHPLCorporate_Green", "IHPLCorporate_Purple", or "IHPLCorporate_Yellow" depending on the room you are competing in. Each team member will have their own Wi-Fi login, which will be provided to you via an announcement in the official competition Discord on the day of the competition.

If you are not signed in to the "IHPLCorporate-Green", "IHPLCorporate-Purple", or "IHPLCorporate-Yellow" network, you will not be able to access your environment!

Once you are logged in to the official competition network, you will have **two** ways of accessing the virtual machines that your team needs to manage (sometimes called "boxes"): console access via the OpenStack portal, and SSH/RDP.

Your credentials for the OpenStack portal will be distributed to you in a Discord message at the beginning of the competition.

OpenStack

OpenStack (also sometimes called Horizon) is a cloud portal where you can manage your boxes directly via a web interface. This includes accessing information such as your boxes' hostnames and IP addresses. You can also start, stop, and restart your boxes from the OpenStack portal.

Finally, and perhaps most importantly, you can access a box's console directly on OpenStack. Console access to a box is the virtual equivalent of physical access with a monitor and keyboard - this means that if your box cannot be accessed over the network (either due to your actions, or due to those of malicious actors), you can still access your box via OpenStack. If the console is not functioning properly, request support from a Black Team member. You might need to request a box revert, which is covered in [Scoring Breakdown](#).

SSH and RDP

SSH is **Secure SHell**, a way of logging in to a computer via the network. SSH can use a variety of methods of authentication, such as passwords and public keys. *We advise Plinkterns to read up on these, as it will be useful during the competition.* SSH is a text-only protocol, so you'll only have terminal access via the session. Your default credentials are below; “**t**” will be your team number:

Hostname	IP	Username	Password
sonar.plinko.horse	172.16. t .5	plinktern	HPCCrulez!
mast.plinko.horse	172.16. t .30	plinktern	HPCCrulez!
cargo.plinko.horse	172.16. t .40	plinktern	HPCCrulez!

RDP is **Remote Desktop Protocol**, a way to remotely access Windows machines. RDP usually supports password authentication, using an existing Windows account to log in to the device. RDP supports a graphical component, so you'll be able to see the desktop via the program. Your default credentials are below:

Hostname	IP	Username	Password
helm.plinko.horse	172.16. t .10	plinktern	HPCCrulez!
sails.plinko.horse	172.16. t .20	plinktern	HPCCrulez!

Both of these methods can be used from your personal computer as long as it is connected to the competition network.

Services

Mediawiki

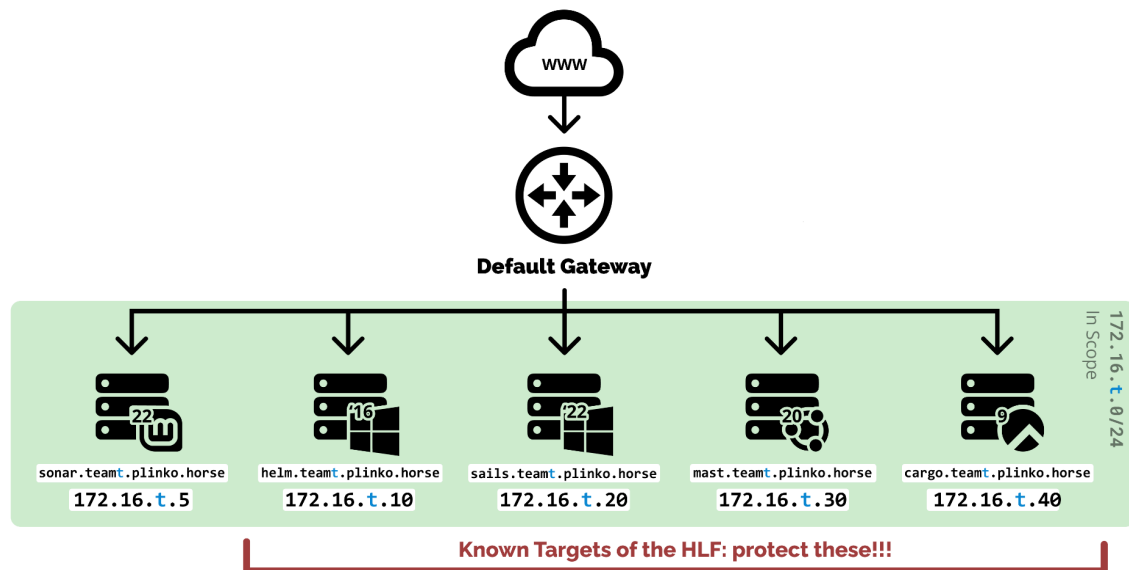
There will be 2 accounts on the MediaWiki instance on the sails box:

- PlinkoMaster:plinkosauce
- Dr.Ravy:plinkularity

MySQL

The default login to MySQL is hkeating:hkeating.

Network Diagram



Scope

"Scope" refers to what you, the Blue Team, are responsible for and allowed to interact with. All the virtual machines in the 172.16.t.0/24 subnet are *explicitly* in scope for Blue Team - thus, all the machines in the green area of the network diagram are in scope. This means you can make modifications to them, interact with them, and generally do whatever you see fit to those boxes. All of your boxes are in scope for you.

Certain things are "out of scope" for you, which means you CANNOT modify them. This includes things like competition infrastructure, the networks of other teams, and the Red Team. To be clear: anything that the Red Team puts in YOUR boxes, you can remove, but you cannot attack them back and attempt to interfere with the ability of their tools to function *in general*. Removing a malware implant from your box is fine, as is blocking the C2 server it calls back to, but hacking into or disabling the C2 server is strictly prohibited.

The Red Team also has scope defined for *them*: All of your boxes on the Network Diagram (except Sonar) are in scope for Red Team and may be attacked during the competition (except during meal breaks, when *everything* is out of scope for Red Team and Blue Team alike).

Red Team will *not* physically touch you, your machines, or the competition infrastructure, so you won't have to worry about unplugged cables or other physical sabotage. However, that doesn't mean they will not attempt to bribe you, broker deals with you in person, or attempt to convince you to defect to their side. The IHPL does *not* advise making deals with terrorists but does not expressly forbid it either.

Scoreboard Access

The scoreboard can be accessed at scoreboard.plinko.horse while on the competition network. This lets you check your team's score checks, modify scoring users, and submit [injects](#).

On the "Overview" page, you will be able to see a table with all your services, their status over the last 10 minutes (passing or failing the check), and, at the bottom of the page, useful information about the checks that are currently failing. If a check is failing, you can click on the name of the service to view logs that will tell you at what part the check is failing (such as a wrong HTTP response code or a bad password for SSH check). These logs are very helpful during the competition.

Overview
Service Uptime (7:10:00 PM)

cargo-ftp	cargo-ssh	helm-dns	helm-ssh	mast-sql	mast-ssh	soils-custom	soils-web
98%	3%	98%	96%	99%	99%	98%	99%

Service Status

	7:10:00 PM	7:08:56 PM	7:07:53 PM	7:06:49 PM	7:05:46 PM	7:04:43 PM	7:03:42 PM	7:02:41 PM
cargo-ftp	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
cargo-ssh	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
helm-dns	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
helm-ssh	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
mast-sql	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
mast-ssh	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
soils-custom	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
soils-web	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢

SLAs

Round #	Service Name	Penalty
---------	--------------	---------

Modify Scoring User (Password Change Requests)

Certain score checks (covered [below](#)) require an automated login to the hkeating account on one of the boxes your team is responsible for. For this, they need an accurate password. If you change the password for the user involved in the score check, you will need to also change the password that the scoreboard uses to log in as that user.

To change the password used for a particular score check, log in to the scoreboard (scoreboard.plinko.horse) while on the competition network and click the PCR's tab. From here, you can either view your current credentials or use the "Submit PCR" box to change passwords on a given box. To do this:

1. Under Cred List, select the credential to change. It'll be in the format of `box_name.credlist`.
2. Enter a new username and password in the format `username,password` (no space before or after comma).
3. Click "Submit PCR."

Password Change Requests

Submit PCR

Cred List:
cargo.credlist

`new_username,new_password`

Submit PCR

View state of credentials

Cred List:
cargo.credlist

• blackteam,blackteam

Scored Services⁴

SSH (helm 172.16.t.10, mast 172.16.t.30, cargo 172.16.t.40)

The Helm Windows box (172.16.t.10) and both Linux boxes (172.16.t.30 and 172.16.t.40) need to allow the hkeating user to log in via SSH.

DNS (helm 172.16.t.10)

The DNS server needs to have the below A record that resolves to the specified host:

sails.plinko.horse -> 172.16.t.20

Having DNS records mapping your other hosts to DNS names is helpful but not scored.

RDP (sails 172.16.t.20)

The sails box (172.16.t.20) needs to be able to be logged into via RDP with the hkeating user.

HTTP (sails 172.16.t.20)

The MediaWiki site needs to return a "200 OK" response at the root of the website, and additionally maintain certain strings present in the page for Dr. Ravy (to verify that the wiki is functional and not just returning a blanket 200 response). The box will be running Apache as a web server.

MySQL (mast 172.16.t.30)

The hkeating user needs to be able to log in to MySQL and see the user table in the "my_wiki" MySQL database on the mast box (172.16.t.30), and verify that certain high-importance users are present in this table.

FTP (cargo 172.16.t.40)

The anonymous user needs to be able to log in and read the file ImaHorse.jpg currently stored in the /var/ftp directory of the box. The files need to be intact (verified by file name correlated to file hash). The box will be running vsftpd.

⁴ Scored services not final and subject to change without warning up to date of competition. No refunds will be issued due to changed score checks.

Interacting With Your Services

Here at the International Horse Plinko League, we want to make sure that you are well-prepared and can interface with the various services we use. This is a basic primer; we highly recommend you search through each technology and learn how to use them proficiently and protect them from the HLF.

SSH

SSH is a way to administer a machine remotely via command line. It is the management method of choice for Linux servers (it can be used with Windows as well, but this is much less common). When logging in with SSH, you have the choice of logging into the remote system with username and password or username and private key.

You can use the SSH client on your laptop (Windows/MacOS/Linux will come with it) in the command line to log into your systems.

```
voraci0us@voraci0us:~$ ssh plinktern@172.16.22.5
The authenticity of host '172.16.22.5 (172.16.22.5)' can't be established.
ED25519 key fingerprint is SHA256:2PYldUsx10KY43ajcTXLfHuM6Ewb/6TmAiAfzBX7lCE.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '172.16.22.5' (ED25519) to the list of known hosts.
plinktern@172.16.22.5's password:
Last login: Thu Oct  3 19:34:53 2024 from 198.18.1.230
plinktern@sonar:~$
```

DNS (Domain Name System)

DNS maps IP addresses to domain names. All communication over the Internet is done via IP addresses, but these addresses are a pain to remember - imagine typing in 42.250.217.206 every time you want to visit Google. Domain names are human-readable names like `google.com` that are much easier to use.

You can use the command line tool **nslookup** (available on both Linux and Windows) to send queries over the network to a DNS server. In the screenshot below, we use the “server” command to set 172.16.20.10 as the DNS server we are sending the query to. Then we simply type the domain name we want to query `sails.plinko.horse` and you can see the resolved IP address 172.16.20.20.

```
Command Prompt - nslookup
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

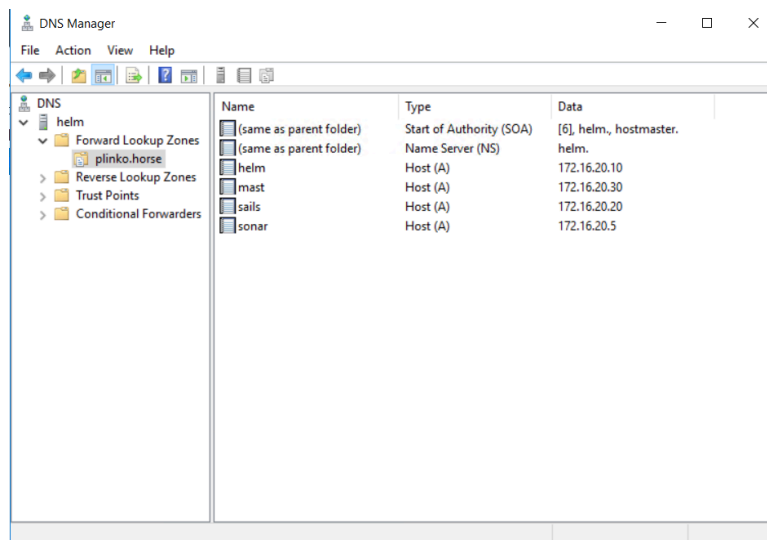
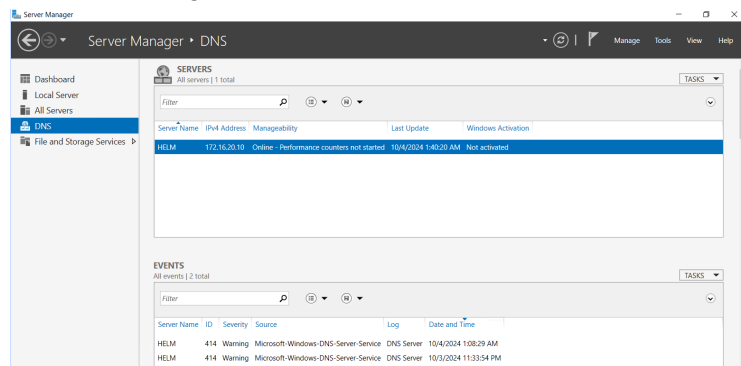
C:\Users\plinktern>nslookup
Default Server: UnKnown
Address: 100.100.53.53

> server 172.16.20.10
Default Server: [172.16.20.10]
Address: 172.16.20.10

> sails.plinko.horse
Server: [172.16.20.10]
Address: 172.16.20.10

Name: sails.plinko.horse
Address: 172.16.20.20
```

If you have a Remote Desktop or console session on your DNS server (Helm), you can see DNS records in the DNS Manager application. This can be accessed in Server Manager → Tools → DNS Manager.

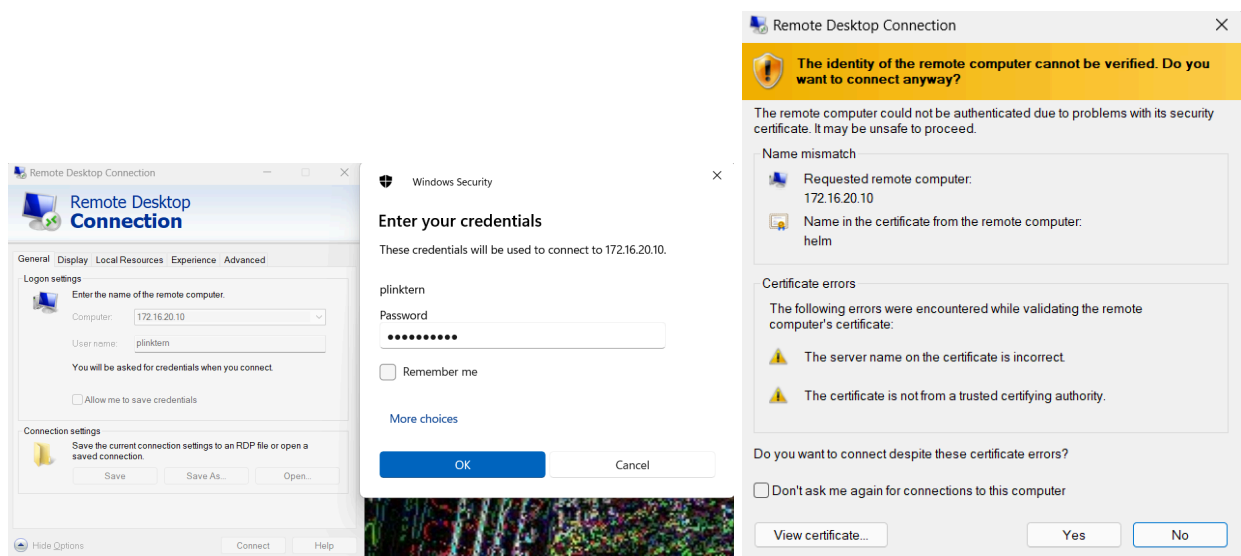


RDP

RDP is a way to administer a machine remotely with a GUI (graphical user interface). It is typically used only on Windows systems.

You will need an RDP client to connect to RDP. In Windows, you can use “Remote Desktop Connection”. If you are running MacOS or Linux on your laptop, you can use another RDP client like Remmina.

When you connect, you will need to provide the IP address of the system you want to RDP into, along with the username and password. You will need to click “yes” to accept the machine’s certificate.



Now you are logged in, and can interact with the GUI just like a console!

HTTP (Mediawiki)

HTTP is the protocol that the web runs on! Your web browser (Firefox, Safari, Chrome, etc) sends HTTP requests to the web server (<https://plinko.horse>, etc), which sends HTTP responses back. The default port for HTTP is 80.

Your web server on Sails is running a web application called Mediawiki. This is the same platform that Wikipedia runs on.

To access Mediawiki, visit **Sails** in your web browser via IP address `http://172.16.t.20` or the DNS name `http://sails.teamt.plinko.horse`, `t` being your team number. This will pull up the website.

← → ↻ ⓘ Not secure | sails.team5.plinko.horse/index.php/Main_Page



[Main page](#)
[Recent changes](#)
[Random page](#)

▼ Tools

- [What links here](#)
- [Related changes](#)
- [Upload file](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Page information](#)

Page [Discussion](#)

Main Page

Welcome to the internal IHPL Corporate wiki!

Here you can find information on our staff, our mission, and our *secrets*.

Staff [\[edit\]](#)

- CEO [Harrison Keating](#)
- CTO [Caleb Sjostedt](#)
- CFO [J Money](#)
- COO [Josh Walsworth](#)
- CISO [Jeffrey DiVincent](#)
- Senior Science Analyst [Dr. Ravy Gordon](#)
- Site Manager [Tao](#)

Mission [\[edit\]](#)

- [Our beginnings](#)
- [Plinko Sauce](#)
- [Horse Plinko](#)
- The [Island Retreat](#)

FTP

FTP is a file sharing protocol. You can think of it as a primitive OneDrive or Google Drive - files can be stored in a central location and accessed over the network.

Normally, you would log into an FTP server with a username and password. On your “cargo” system, anonymous authentication is enabled. This allows anyone to access the FTP share without having to log in.

Anonymous FTP shares do not require a login to access. They use the special username anonymous and any password.⁵

⁵ Yes, *any* password

```
C:\Users\CyberLab>ftp 192.168.151.82
Connected to 192.168.151.82.
220 (vsFTPD 3.0.5)
200 Always in UTF8 mode.
User (192.168.151.82:(none)): anonymous
331 Please specify the password.
Password:
230 Login successful.
```

Windows and most *nix distros have a CLI FTP client by default.

```
C:\Users\CyberLab>ftp 192.168.151.82
Connected to 192.168.151.82.
220 (vsFTPD 3.0.5)
200 Always in UTF8 mode.
User (192.168.151.82:(none)): anonymous
331 Please specify the password.
Password:
230 Login successful.
ftp> dir
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-r-xr-xr-x    1 0      0          4 Feb 01 19:16 howdy.txt
226 Directory send OK.
ftp: 70 bytes received in 0.00Seconds 35.00Kbytes/sec.
```

You can also get a GUI client like FileZilla client (available on Linux/Mac/Windows) if you prefer.

MySQL

MySQL is a database. This is a structured way for data to be stored. Data is organized into tables with rows and columns, much like a spreadsheet. You can connect to a MySQL database and make SQL queries to create/destroy databases or tables, or add/remove data in a table.

A common use for MySQL databases is to store data for web applications. For example, your Mediawiki web application on **Sails** uses the MySQL database on **Mast**. Mediawiki stores posts, users accounts, and more in the database.

You can log into the MySQL database yourself and look around! First log into your **Mast** system via console or SSH. Then run the following command in the terminal.

```
mysql -u {username} -p
```

- {username} should be filled in with the username you have as a mysql user (see above for default login).
- -u specifies the user
- -p specifies that you are using a password, without the -p it will try to sign you in with no password

It will then prompt you to provide your password to login and give you a MySQL shell. You can tell by the `mysql>` in the prompt.

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 21
Server version: 5.7.23-log MySQL Community Server (GPL)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> _
```

From here, you can use SQL commands to view or edit the MySQL databases and tables. Here is a good [cheatsheet](#) of different commands.

```
mysql> exit
Bye
plinktern@mast:~$ _
```

To leave the service type exit in the command prompt.

Event Information

Team and Day Assignments

Everyone competing in the Horse Plinko Cyber Challenge has already created an account on hr.plinko.horse, which will be used to check in to your specific run the day of the competition and view your team assignment and competition day. You will be assigned to the team you specified in your profile if possible, or, if no team was specified, a random team. **Your current team assignments and a list of teammates can be viewed on hr.plinko.horse.**

Location and Directions

The Horse Plinko Cyber Challenge will be held at the University of Central Florida. Check-in will take place in BA1-119 (the auditorium in the Business Administration building down the hall from the Lockheed Martin Cyber Innovation Lab). Please note that this is an exclusively in-person event.

Friday

The general KnightHacks check-in will occur on Friday, October 4th at ENG2-102 starting at 5:00 pm. There will also be a dedicated check-in line for Horse Plinko competitors at the Hack@UCF GBM on Friday at 5:30pm, located at BA-119. You may check in at either location. **You must check into KnightHacks on Friday at one of these locations in order to compete in the Horse Plinko Cyber Challenge.** Failure to check in may result in your seat being vacated. If you expect this to be an issue, please contact an organizer for accommodations.

Day of Competition (Saturday *or* Sunday)

You will need your KnightHacks lanyard and Horse Plinko wristband at all times!



shuga__
via Discord



INTERNATIONAL
HORSE PLINKO
L E A G U E

Your Employee Profile



Name	Jeffrey DiVincent
Employee ID	caed86d7-fc00-4355-a0b8-81c30f881234
Email	ciso@plinko.horse

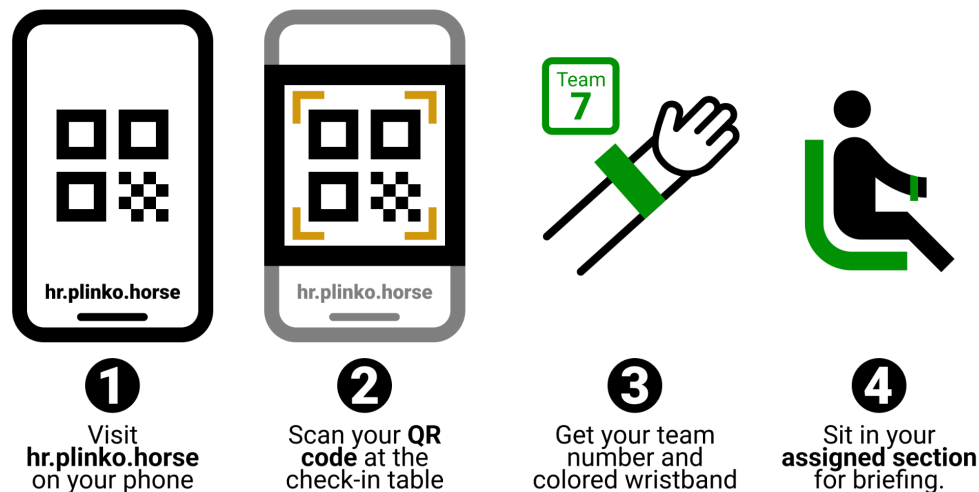
KnightHacks inten

ds to enforce

attendance strictly, and the KnightHacks lanyards combined with Horse Plinko wristbands will identify you as a Horse Plinko competitor. We cannot help you if you do not have proper identification to be in the building.

Day-of check-in will start at 2:15 PM on Saturday and 8:45 AM on Sunday in BA-119, located in the Business Administration 1 building. **Doors will close 20 minutes after check-in begins.** During check-in, a competition organizer will scan your employee QR code (located on the hr.plinko.horse portal). This will mark you as present and assign you your team number (if you do not have it already) and competition room. You will also receive a colored wristband corresponding to where you will sit in the auditorium and your competition room.

Check-in Procedure

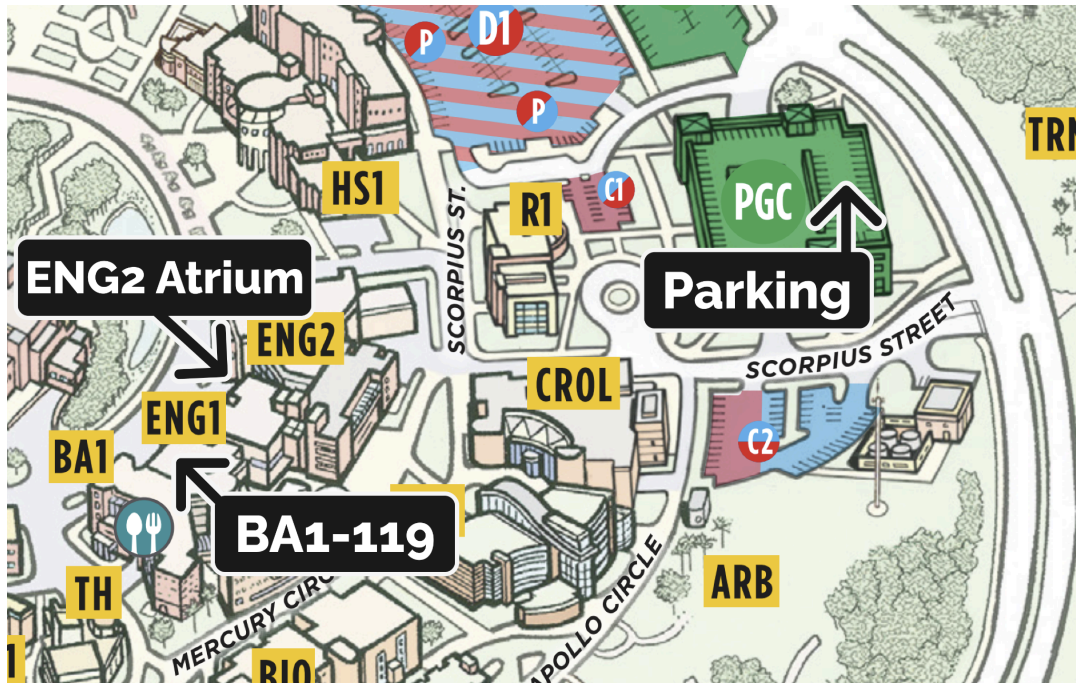


Your QR Code will look like this, but with your information instead of our CISO's⁶:

If you are driving to campus, you *must* park in [Parking Garage C](#), or you will be towed by UCF Parking Services. If you do not have a UCF parking permit, you can purchase a daily permit [on the UCF Parking services website here](#). A 24-hour permit is \$8 per day. To get to the event buildings from Parking Garage C, walk west along Scorpius Street, and make a left turn onto Mercury Circle until you reach the path between Engineering 1 and Business Administration 1. Then turn right, go straight until you reach the end of the path, and then turn right once again. You should be at the main entrance of Engineering 1. From here, you can easily walk to the Engineering 2 Atrium (KnightHacks check-in) and the Business Administration buildings (introduction, day-of competition check-in, and sponsor recruiters).

⁶ It is safe to show this QR code and employee ID because only competitor QR codes are valid. Please do not try to check in with this.

Public transportation is also available to the University of Central Florida via Lynx. Check your favorite maps app, such as Apple Maps, Google Maps, or the Transit app, for more details.



Schedule

We recommend you arrive early for both check-ins: the KnightHacks Hackathon check-in on Friday, and the check-in for your run of Horse Plinko on Saturday or Sunday. Once the doors close, check-in closes.

Check-in - 10/4

5:00 - 7:30 pm: KnightHacks check-in begins, located in the Engineering 2 building in ENG2-102. **This is mandatory for all Plinkterns.** You will not be able to compete if you do not check in. By checking in, you agree to the [MLH Code of Conduct](#) and [MLH Contest Terms](#).

5:30 pm: Onboarding briefing, located in BA1-119. This briefing will cover everything you need to know about the competition and then some (optional).

Saturday Run - 10/5

2:15 pm: Check in starts outside BA-119.

2:35 pm: *Check-in closes!* Introduction presentation, migration to competition rooms, and network testing.

3:30 pm: Competition begins!

6:30 pm: Dinner break begins. Environment will close, and Red Team will be inactive.

7:15 pm: Dinner break ends. Competition resumes.

8:30 pm: Competition ends. Final grading.

9:00 pm: Winners announced and prizes distributed.

Sunday Run - 10/6

8:45 am: Check in starts outside BA-119.

9:05 am: *Check-in closes!* Introduction presentation, migration to competition rooms, and network testing.

10:00 am: Competition begins!

1:00 pm: Lunch break begins. Environment will close, and Red Team will be inactive.

1:45 pm: Lunch break ends. Competition resumes.

3:00 pm: Competition ends. Final grading.

3:30 pm: Winners announced and prizes distributed

Photo Release

A photo release is a part of the [MLH Contest Terms](#), and accordingly, you may be photographed as a part of the event. If you would prefer not to be photographed, we can attempt to make the photographers aware and have them avoid taking photos with you in it, but we cannot make a guarantee.

Prizes

Thanks to our amazing [sponsors](#), we were able to obtain prizes for first, second, and third place for each team member, for each run of HPCC! These will be revealed and awarded at the Closing Ceremony at the end of each day's competition.

Other Events

Throughout the weekend, we will be providing other cybersecurity events that are open for all Horse Plinko Cyber Challenge competitors.

- **Workshops** will be hosted in cooperation with our sponsors and KnightHacks. Many of these workshops will help further prepare you for HPCC. Please check the KnightHacks Hacker's Guide for a complete list of workshops being offered.
- **Recruiters from our sponsors** and sponsors from KnightHacks will be tabling throughout the event in the Business Administration building. While some sponsors are not strictly cybersecurity-focused, they may still be hiring for cyber or cyber-related roles! Please bring copies of your resume to share with our sponsors.
- All Horse Plinko Cyber Challenge participants are still eligible to compete in, and demo a project for, **KnightHacks**. For more information, please check the KnightHacks Hacker's Guide.
- **SunshineCTF** is a Jeopardy-styled capture-the-flag competition running from October 19th at 10:00 am to October 21st at 10:00 am. *This event is two weeks after HPCC*, but we recommend participating, as it's run by some of the same people running Horse Plinko! For more information, visit sunshinectf.org.

Thanks to our generous sponsors!

We appreciate the dedication of our sponsors to fostering the next generation of IHPL's (unpaid) cyber talent!

If you are interested in working outside of the IHPL in the cyber field, we would recommend checking out the organizations below!

They will be tabling throughout Horse Plinko weekend in the Business Administration Building. Ask a White Team member for directions if needed.

Platinum



<https://www.lockheedmartinjobs.com>

The ThreatLocker logo consists of the word "THREATLOCKER" in a large, bold, blue, sans-serif font. The letter "O" in "LOCKER" is replaced by a blue circular icon containing a white padlock symbol.

<https://www.threatlocker.com/company/careers>

Silver



<https://darkwolfsolutions.com/join-the-pack>



<https://sandia.jobs/?q=ccd>



<https://ctfd.io>



<https://www.guidepointsecurity.com/careers/>

Bronze



<https://navalnuclearlab.energy.gov/careers/>