NOTE: All time is in Eastern Time. Adjust accordingly for local time.
Capture the Flag:
Ethical Hacking Cybersecurity Competition

The Mid-Atlantic Gigabit Innovation Collaboratory (MAGIC) sponsors student programming to enhance workforce development for technology companies, particularly in the cybersecurity industry. MAGIC events are positioned as entry-level beginner events to appeal to the widest possible population of high school and college students. Using an innovative challenge based experiential learning approach, the goals of the events are to build a connected tech ecosystem, to give young people opportunities to acquire and demonstrate new skills, and to expose them to potential employers.

The Capture the Flag (CTF) events are based on content originally developed by the cybersecurity professionals at Johns Hopkins Applied Physics Lab and further extended and modified by MAGIC. The content consists of a sets of puzzles that require using various hacking tools, coding skills, and just plain puzzle solving to find the answers, which are short strings of code called “flags”. Once located, the flags are entered into a scoreboard, which keeps a tally for all teams. The team with the most points at the end of the timed competition wins.

flag{this_is_a_10_pt_flag}

MAGIC simultaneously holds events in multiple host locations using a cloud-based software platform. This format enables an enlarged pool of competitors, increased reach of exposure to potential employers and expands promotional potential for sponsoring organizations. Recent events featured participants in host locations around the world~ in Maryland, North Carolina, Idaho, Ecuador, and Estonia, with live streaming on YouTube, Facebook updates, Instagram stories, and live Tweets during the competition. Sponsors also participated in interviews during the event, and promotional spots were inserted into the live stream. Host locations pay a one-time licensing fee per event and location, depending on number of teams.
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Checklist, Prior to Event Day (all Eastern Time; adjust accordingly for local time)

7 weeks before event on a Monday by noon:
_____ Register your location on MAGIC’s website.
_____ Email info@magicinc.org your logo in high resolution vector format for t-shirts.
_____ Email info@magicinc.org your site’s promo video (3 min. max) for approval.
_____ Within 2 business days of submitted Host Location Sign-up you will be emailed an invite to MAGIC’s CTF Slack channel.
_____ Adjust schedule to reflect local time. All documents are in Eastern Time; adjust accordingly for local time and daylight savings.

7 weeks before event on Wednesday at noon:
_____ Event registration is live! Begin promotion to students to register for event. You will receive a weekly update on how many students have registered for your location.

3 weeks before event on a Monday by noon:
_____ Fill out the online Coaches Contact Form.
Within 2 business days of submitted Coaches Contact Form.
_____ Coaches will be invited to MAGIC’s CTF Slack channel.
_____ Test your site’s network and Wi-Fi to verify that guests can access Remote Desktop.

2 weeks before event on a Monday:
_____ Location licensing fee must be received if mailing in a check or money order.
_____ Distribute local press release (optional).

3 days before event at noon:
_____ Event registration closes for competitors!

2 days before event by noon:
_____ You will be emailed the following:
_____ Student Sign-in Form
_____ Puzzle Prompt Form to be shared with coaches. DO NOT give to students.
_____ The final number of laptops or computers needed for students without their own.
_____ Site and team specific CTF Team Instructions.
_____ Re-distribute local press release with specifics on students and sites (optional).

1 day before event:
_____ Site will have received MAGIC t-shirts in the mail for each competitor.
_____ Check internet/Wi-Fi and verify that guests can access Remote Desktop.
_____ Set up as much as possible for event, see checklist items for EVENT DAY.
Checklist, EVENT DAY
(all Eastern Time; adjust accordingly for local time and daylight savings)

PRIOR to 10:30am ET on EVENT DAY,
_____ Finish room set up (tables, outlets, screens, etc).
_____ Put out food, drinks, and t-shirts.
_____ Double check internet/Wi-Fi and verify that guests can access Remote Desktop.
_____ Have Puzzle Prompt Form for coaches. Collect after event. **DO NOT** share with students.
_____ Place CTF Team Set Up Form and CTF Scoreboard Account at each team’s table.
_____ Make copies of the 3 Page Walk-in Registration Form, Ethical Hacking Pledge and Media Release Form for walk-in participants.
_____ Continue monitoring Slack for communications.
_____ Send the link for your live feed (optional) over Slack indicating your location name.
_____ Set up a monitor/screen to display the main event’s live video from an extension of this link: [https://www.carrollmediacenter.org/](https://www.carrollmediacenter.org/) Actual link will be sent over Slack by 10:30am.
_____ Set up a monitor/screen to display the scoreboard from this link: [http://scoreboard.ctfmagic.org/scoreboard](http://scoreboard.ctfmagic.org/scoreboard)

11:00am ET on EVENT DAY
_____ Doors open for student check in. Use the Student Sign-in Form to verify attendees.
_____ Take a horizontal photo of each team holding their Team Picture Form. Send over Slack.

12:00pm ET on EVENT DAY
_____ Live stream of main event begins. Everyone to watch and prepare for competition!

12:30pm ET on EVENT DAY
_____ Distribute a unique CTF Team Instructions Form right at 12:30pm to each team.

3:30pm ET on EVENT DAY
_____ Competition Ends! If you have a main event winning team, email the first and last names of the winners and the email address for each member immediately at the conclusion of the competition to ksamuelson@magicinc.org so they can receive their Amazon gift card.

4:00pm ET on EVENT DAY
_____ Live stream of main event ends.

Tuesday after event:
_____ Distribute local press release announcing winners (optional).
_____ Scan signed Student Sign-In Forms to info@magicinc.org
_____ Scan any 3 Page Walk-in Registration Form, Ethical Hacking Pledge, and Media Release Form to info@magicinc.org
_____ Email photos of event to info@magicinc.org
SCHEDULE AND SLACK

Schedule
Date/Time (all ET; adjust accordingly for local time)
Saturday, April 18, 2020 from 11am to 4pm

11:00am Doors Open for Student Check-In
12:00pm Live Coverage Begins
12:30pm Competition Begins
3:30pm Competition Ends
4:00pm Live Coverage Ends

Slack
The Primary Point of Contact, the Main Technical Lead, Coaches, and Person on Video (optional) will need access to Slack for communicating with the Main Arena. All locations are required to become proficient using Slack (a real time messaging and document exchange web service) to communicate in preparation for and during the competition.

Your team will be added to MAGIC’s CTF Slack channels within 2 business days of your location signing up. Slack will be used to communicate leading up to the event and during the competition. This will be your primary way to communicate with us on the day of the event. You will want to have at least one person available to monitor Slack throughout the event as this is where we will make announcements if there are any issues.

MAGIC’s slack workspace is https://wearemagic.slack.com
To find out more about Slack, visit https://slack.com/
LICENSING FEE

Host locations pay a one-time licensing fee per event and location, depending on the number of teams.

**$500 per physical location:**
- MAGIC t-shirt provided for each student
- Up to 5 teams (20 students max.)
- Teams appear on MAGIC’s CTF main event scoreboard
- Prizes provided by MAGIC

**$1,000 per physical location:**
- MAGIC t-shirt provided for each student
- Up to 10 teams (40 students max.)
- Teams appear on MAGIC’s CTF main event scoreboard
- Prizes provided by MAGIC.

**Library systems** please contact Kim Samuelson at ksamuelson@magicinc.org for special pricing terms and discount registration codes.

Please Register via our website.
You can pay via the website with a credit card or defer payment and MAGIC will Invoice you the registration amount.
SCOREBOARD AND PRIZES

Scoreboard
This is the link to view the scoreboard [http://scoreboard.ctfmagic.org/scoreboard](http://scoreboard.ctfmagic.org/scoreboard) The scoreboard will be updated in real time as teams find flags. It can be displayed on a computer screen, projector, or monitor large enough for all of your participants to view. Be sure to view the scoreboard from a web browser because a live feed of the main event could display an older visual of the scoreboard.

Prizes
If a team from your location wins, MAGIC will email their prize to them in the form of Amazon gift cards. The top 3 teams competing will be awarded prizes in the amounts listed below for each member of the team. Please send the team name, first and last name of the winners and the email address for each member of your site’s winning teams immediately at the conclusion of the competition to arupp@magicinc.org so that we can email the winners their prizes.

First prize: $100 Amazon gift card for each team member, up to 4 team members
Second prize: $50 Amazon gift card for each team member, up to 4 team members
Third prize: $25 Amazon gift card for each team member, up to 4 team members

While a live video stream is not required, we would like a horizontal photo of each team holding a filled out Team Picture Form. They should use the team name that they registered on the scoreboard for the Team Picture Form. Please send these pictures over Slack prior to 12:00pm ET. We will use these pictures throughout the live video. Also, if a team from your site places in 1st, 2nd, or 3rd, we would like to show a photo of the team holding the 1st, 2nd, or 3rd place CTF Winners Sign. Please send these over Slack prior to the end of the competition.
PRIMARY POINT OF CONTACT AND MAIN TECHNICAL LEAD

The number of people you will need to have a successful event varies depending on the size of your event. At a minimum MAGIC suggests having 4 people to execute this program:
(1) Primary Point of Contact
(1) Main Technical Lead
(2) Coaches

MAGIC asks for cell phone numbers so we can have direct contact during the event, when your desk phone will likely be unavailable.

**Primary Point of Contact**
Responsibilities:
- Primary liaison with MAGIC
- Recruiting and vetting 1-2 local coaches for every 3 to 5 teams
- Recruiting and vetting local volunteers to help with:
  - student participation
  - site logistics
  - marketing and sponsors (optional)

**Main Technical Lead**
Responsibilities:
- Ensuring the network works and that you can connect to remote servers via remote desktop
- Securing laptops
- Monitoring connection during competition
- Troubleshooting as needed throughout competition
- Communicating tech issues with (or establishing a tech person to communicate with) MAGIC during the competition over Slack

**Coaches** (see COACHES p.9 for more information)
1-2 coaches for every 3 to 5 teams per location.

**Person on Video (optional if desired)**
Responsibilities:
- Setting up and monitoring cameras for live feed to be shared with the Main Arena in Westminster, MD.
- Communicating about live video with MAGIC during the competition over Slack.
COACHES

1-2 coaches for every 3 to 5 teams.

Please secure your coaches three weeks before the event and fill out the online Coaches Contact Form. Coaches do not have to be cybersecurity experts. However, having an understanding of Kali Linux will be very helpful. People with experience in coding, network administration, cybersecurity, computer science in general, and educators comfortable with cultivating autodidactic learning and problem solving all make excellent coaches.

A Puzzle Prompt Form will be sent to the Primary Point of Contact and the Main Technical Lead that can be given to coaches on the day of the event to assist with guiding students who get stuck on puzzles during the competition. **DO NOT** give the Puzzle Prompt Form to students. Be sure to collect and destroy the Puzzle Prompt Form after the event.

Within 2 business days of submitting the online Coaches Contact Form, your site will be emailed a coach specific website. This resources can be used by your Coaches, the Primary Point of Contact, and the Main Technical Lead. The website will help your team understand what the students will be accessing during the event.
Checklist SITE LOGISTICS

Site Logistics Staff/Volunteer Assignments:
- Site set up: _______________________________
- Student sign-in: _______________________________
- Volunteer, parents, and other guest sign-in: _______________________________
- Distribution of promotional items (t-shirts): _______________________________
- Food and Drinks: _______________________________
- Social Media (optional): _______________________________

Site Setup
- Sufficient outlets for each laptop/computer
- Extension and power cords
- One 6-8 ft table for each team, people monitoring slack, food/drinks, and sign-in
- Chairs for participants, volunteers and any spectators
- Laptops for students who need to borrow
- Wi-Fi with sufficient capacity
- Adequate broadband
- Food and drinks (optional)
- Student sign-in form
- Volunteer sign-in sheets
- Screens for scoreboard(s) and main event’s live video
- Cameras for live feed (optional)

Snacks and Beverages
Providing snacks and beverages during the event helps to make the experience more enjoyable for the participants. We encourage all sites to offer snacks and drinks based on their location and number of participants. The Main Arena will be having pizza! Just remember that snacks that melt or are sticky are not ideal for keyboards.

Timing
Please use a cell phone clock for all timing—it is synced to an atomic clock and will be more accurate than a wall clock or laptop clock. There could be a lag in the video feed, so rely on your cell phone clock for when to start the competition 12:30pm and when to stop the competition 3:30pm.
COMPETITORS

Student Recruitment
If this is your first time hosting the event, the best way to get students to register for the event is to work with school representatives to promote the event, visit classrooms in your community, and encourage them to sign up. Most students will sign up in the last week prior to the event. MAGIC suggests having a team of people who will reach out to high schools, colleges, and student clubs, as well as, promoting your event on social media. You will receive a copy of our flyer for the event. You can use this or create your own!

Teams
Teams consist of 2 to 4 students. This event is targeted for entry level students from middle school, high school, and college with little to no experience in technology or cybersecurity. However, nontraditional students are encouraged to participate so long as they are entry level. Entry level means that a student has not competed in or won another CTF events other than MAGIC’s event. Students just need an interest in cool technology, learning new skills, or preparing for a career in technology (plus curiosity and persistence!).

T-Shirts
MAGIC will mail a t-shirt for each competitor to your host location prior to the event. Be sure to email ksamuelson@magicinc.org one site logo in high resolution vector format by the deadline listed on the checklist to be included on the t-shirt.
REGISTRATION AND TECHNOLOGY

Registration

Registration will open seven weeks prior to the event on a Wednesday at 12:00pm. There is no cost to participants for this event.

Each individual must register through MAGIC's website. Each individual will be required to sign an Ethical Hacking Pledge and a Media Release Form as part of their online registration.

Event registration will close on the Wednesday prior to the event at 12:00pm.

By 12:00pm on the Thursday prior to the event, you location will be emailed a Student Sign-in Form with the names of all participants. Please use the Student Sign-in Form on the day of the event to verify attendees.

If you are able to take walk-in registrations on the day of the event, please obtain the pertinent contact information with a completed and signed 3 Page Walk-in Registration Form, an Ethical hacking Pledge, and a Media Release Form.

Please scan a copy of these completed forms on the Tuesday after the event to ksamuelson@magicinc.org

Technology

Please be prepared to provide laptops for your participants who do not own their own laptop. At the time of registration, we request that participants let us know if they need a laptop. We will update you on the number of laptops needed throughout the registration period and send you the final number of laptops requested by location on the Thursday before the event.

Laptops must have Remote Desktop software installed. Remote Desktop is the software used to connect to the virtual machines that host the competition content. This software is automatically installed on Windows machines. For Mac users, download Microsoft Remote Desktop from the App Store (free).

Be sure to test on the network the students will be accessing to ensure they can access the remote desktop. Some schools, libraries, and businesses allow staff access, but prevent the public from accessing it. Be sure to test on the network that the students will be using.

An internet connection of at least 50 Mbps up/down will be necessary to participate. If you intend on streaming live video (optional), then at least 100Mbps up/down is ideal.

Each site must have their Main Technical Lead or another appointed tech person on site or on call to assist if there are technical issues at your location.
VIDEO PRODUCTION

Live Production (MAIN EVENT)
The main event’s live video will be viewable from an extension of this link: https://www.carrollmediacenter.org/. Actual link will be sent over Slack by 10:30am on the day of the event. The main event will be covered live and streamed online and broadcast on Carroll County’s local Public Access Channel, from the Community Media Center of Carroll County in Westminster, MD. Coverage will begin at 12:00 PM. This live production will incorporate interviews and footage from the Main Arena, pre-recorded and live MAGIC sponsor spots, and ongoing snippets of YouTube live feeds from participating host locations.

Please have a computer screen, projector, or monitor large enough for all of your participants to view the live production. The beginning and end of the live production is the most important part for contestants to view as we will go over how the competition works in the beginning and announce the winners at the end. It can be muted or turned very low during other times.

YouTube Live Local Video (Optional)
When you register as a host location, you will need to know if you have the ability to provide a YouTube live video of your physical location. As a host location, you have the opportunity to showcase your students in the live streaming and locally broadcasted program produced from the Main Arena in Westminster, Maryland, by MAGIC and the Community Media Center of Carroll County. All you have to do is setup a live stream to Youtube Live. MAGIC will coordinate a test of your location’s YouTube live feed to ensure your video stream will be usable for the live production. Please note- it can take upto 24 hours to set up YouTube if you have not used it before.

YouTube live stream will be periodically added into the main event’s live production. Since anyone involved in the event could appear in the live stream they must fill out a release form.

You will share the link to your live feed over Slack on the morning of the event. Be sure to include the name of your location when you share it over Slack.

While a live video stream is not required, if a team from your site wins or places in the main event, we would like to show the team on the live stream. If a live video stream is not possible, we ask that you send us photo of the winning team holding the attached 1st, 2nd, or 3rd place CTF Winners Sign and email it to ksamuelson@magicinc.org or over Slack.

Checklist for what will be needed to provide local video for the Live Production (optional):
1) You will need a YouTube account. Please note- it can take upto 24 hours to set up YouTube if you have not used it before. Go to YouTube.com and follow their prompts to setup your account for free.
2) Now you just need a camera and a streaming device or computer. Here’s a tutorial from Youtube on how to setup your stream:
https://support.google.com/youtube/answer/2474026?hl=en
Note: To ensure that your stream is high enough quality for the program make sure that you meet these criteria:
   a) HD camera with a resolution of 1080i, 1080p, or 720p.
   b) High quality bandwidth 50 Mbps up/down at least, 100 Mbps is ideal
   c) When setting up your shot:
      i) Keep the subjects in focus and in the center of your frame.
      ii) Avoid looking into lights or windows.
      iii) Keep the camera around eye-level or slightly above.
      iv) Keep the shot stationary (not-moving).
      Here’s an example of an ideal shot:

3) Important: Setup and test your stream before the day of the event! Run your test on the same network that you will use on the day of the event because the network speed will impact your quality. On the day of, set up your equipment 2 hours before start to give yourself plenty of time for last minute troubleshooting and adjustments. If you are streaming on the same network that the students are on then it will be impacted.
4) Collect talent release forms. Since anyone involved in the event could appear in the live stream they must fill out a release form.
5) On the morning of the event, share the link to your live feed over Slack. Be sure to include the name of your location when you share it over Slack.

If you cannot follow these steps then we cannot guarantee that your video will be shown in the live production.
OPTIONAL PROMOTION

Promotional Video Played during Live Production (Optional)

Please submit a promotional video of your location (3 min. maximum) to ksamuelson@magicinc.org by the deadline in the checklist for it to be reviewed and approved to be played during the live production. The live video production will incorporate interviews and footage from the Main Arena, pre-recorded and live MAGIC sponsor spots, and ongoing snippets of YouTube live feeds from participating host locations. Your location’s promotional video has to be approved to be played on Carroll County’s local Public Access Channel 19, thus the reason we need it early. Once approved, it will be played at least one time during the live production.

Marketing (Optional)

You are helping to train the next generation of cybersecurity professionals and we encourage you to promote your location’s participation in this event to your local news outlets and on social media. Use MAGIC’s draft press release to promote your event and one to recognize the winners of the event. You are welcome to create your own release. We ask that you indicate in your release that your host location is part of MAGIC’s (the Mid-Atlantic Gigabit Innovation Collaboratory’s) Capture the Flag Cybersecurity Competition.

Social Media (Optional)

Please post photos and encourage students to post throughout the event.

Use our hashtag #ctfmagic

Tag MAGIC using the following handles

Facebook: @magicwestmd
Twitter: @magicwestmd
Instagram: @magicwestmd
LinkedIn: MAGIC Inc.

Local Sponsors (Optional)

Your site is welcome to obtain local sponsors that you will promote and highlight locally. MAGIC recruits event sponsors that will be highlighted at the Main Arena, on our live stream of the event and on MAGIC’s t-shirts.
The Schedule for Event Day
Door open for students to sign in and set up at 11:00am
Live coverage begins at 12:00pm
Competition begins at 12:30pm (do not hand out CTF Team Instructions until 12:30pm).
Competition ends at 3:30pm

PRIOR to 11am on Saturday
- You will make copies of the attached Puzzle Prompt Forms to hand out to your coaches on Saturday. These are a guide for coaches. DO NOT share these with students. Destroy after event.
- You will make copies and place the attached CTF Team Set Up Form with your location’s Wi-Fi info. at each team’s table for students to use before the event starts to test that they can access their RDP.
- You will make copies and place the attached CTF Team Scoreboard Account Form at each table for each team to create their scoreboard account prior to the competition starting.
- You will print the Student Sign-in Form tab and the Registration tab from the attached Registrations for (Your Location) excel spreadsheet (two tabs in this spreadsheet). Your location has __ people registered. You have __ established teams and __ students that need to be put on a team. Use your best judgement when creating teams. We have included their education level and school to help facilitate that. You have __ students that will need a computer provided to them. You are welcome to adjust this spreadsheet to fit your needs.
- You will make copies of the attached 3 Page Walk-in Registration Form, Ethical Hacking Pledge and Media Release Form for any walk-in participants.
- You will print the attached CTF Team Instructions, but not hand them out yet. You have enough for __ teams. Each one of these forms is UNIQUE.
- You will monitor your Slack channel for communications.
- You will send us your live YouTube video link over Slack indicating your location’s name.
- You will set up a screen/monitor displaying the main event’s live video stream which will be from an extension of https://www.carrollmediacenter.org/. The actual link will be sent over Slack by 10:30am on the day of the event. There will be about a 20 second delay for this to go live. Once the event is started you can lower the volume of the live video. The beginning, any score updates, and the end are the most important times to watch and listen.
- You will have a screen/monitor for the main event’s scoreboard which can be viewed here: http://scoreboard.ctfmagic.org/scoreboard You do not log into this to view it.
((Draft)) Final CTF Email from MAGIC, sent to you on the Thursday prior to the event

At 11:00am on Saturday
-The doors open for students to sign in, fill out any needed forms, and get set up. Students will follow the CTF Team Set Up Forms that are on their tables to test that they can access RDP and use the CTF Team Scoreboard Account Form to register their scoreboard account.
-You will take a horizontal photo of each team holding a filled out Team Picture Form, using the team name they registered on the scoreboard account. Send these pictures over Slack prior to 12:00pm.

At 12:00pm on Saturday
-The live stream of main event begins. Everyone is to watch and prepare for competition!
Watch it from an extension of this link: https://www.carrollmediacenter.org/ The actual link will be sent over Slack by 10:30am on the day of the event. There will be about a 20 second delay for this to go live. Once the event is started you can lower the volume of the live video. The beginning, any score updates, and the end are the most important times to watch and listen.

At 12:30pm on Saturday
-You will distribute one of the UNIQUE CTF Team Instructions to each team at 12:30pm to start the competition. Do not distribute these prior to 12:30pm. We will count down on the live video stream and everyone will start at the same time. Once the event is started you can lower the volume of the live video. The beginning, any score updates, and the end are the most important times to watch.

3:30pm on Saturday
-Competition Ends! If you have a winning team, email the first and last names of the winners and the correct email address for each member immediately at the conclusion of the competition to arupp@magicinc.org so they can receive their Amazon gift card. Please also take a photo of the winning team holding the attached 1st, 2nd, or 3rd place CTF Winners Sign, send it over Slack.

4:00pm on Saturday
-Live stream of main event ends.

Tuesday after event:
-Scan signed Sign-In Forms, 3 Page Walk-in Registration Forms, Ethical Hacking Pledges, and Media Release Forms to info@magicinc.org
-Email photos of the event to info@magicinc.org
WELCOME TO MAGIC’S CAPTURE THE {FLAG...}

CTF TEAM SETUP

Connect to WiFi
Network:
Password:

Verify your RDP Access
1. From your computer, launch your RDP (Remote Desktop) client.
2. Enter TEST.CTFMAGIC.ORG and connect.
3. Verify you see a login screen similar to the one below.

4. Click Cancel. You’re all set!
When the competition starts, teams will be provided a form with access information for the event.

Stuck? Questions?
We have loads of coaches and mentors walking around at the event that are here to help.
Setup Your Scoreboard Account

The scoreboard is where you will enter the flags you capture for each exercise. It is also where you may obtain hints should you need a little direction. Your team will only create one account. The Scoreboard may be accessed by one or more team members using the team account.

1. From your Computer, browse to http://scoreboard.ctfmagic.org
2. Select Register to create an account.
3. Enter your team name. It is case-sensitive. The team Name you enter will appear on the scoreboard.
4. Select your location.
5. Create a password. It is case-sensitive.
6. Select Register.
7. The scoreboard will open. If needed, you can re-login to the scoreboard using the account you created.
8. You will not be able to enter flags until the competition begins at 12:30pm ET; adjust accordingly for local time.
9. To view the full scoreboard, browse to: http://scoreboard.ctfmagic.org/scoreboard

If you haven’t already, be sure to use the CTF Team Setup form to verify that you can access RDP.

Stuck? Questions?
We have loads of coaches and mentors walking around at the event that are here to help.
(DRAFT!!!) CTF TEAM INSTRUCTIONS (DRAFT!!!)

CTF TEAM INSTRUCTIONS

Distribute 1 to each team on Event Day at 12:30PM
(ET; adjust accordingly for local time)

Access CTF Team Desktop

The CTF Team Desktop is a Kali Linux system that will provide access to all of the exercises for this competition.
1. From your computer, launch your RDP (Remote Desktop) client.
2. Enter your team’s assigned computer name (below) and connect.
3. Login using the username and password provided.
4. Your DEmktop should appear with the MAGIC background below. Please ask for assistance if you are not able to access this desktop.

5. Now that you are logged in, you will notice three folders on the desktop, labeled Level_1, Level_2, and Level_3. These aRE the exercises.
6. Begin by opening and reviewing the START HERE file on the desktop.

TEAM INFO

<table>
<thead>
<tr>
<th>Computer Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Account/Password:</td>
</tr>
</tbody>
</table>

Note: Each account may only be used for a single connection. All accounts may be logged in simultaneously. Good job. Attention to detail is very important in this field. Human error is often the key. Act fast and capitalize on this opportunity.
((DRAFT PRESS RELEASE)) MAGIC’s ______ Capture the Flag Cybersecurity Competition

Contact Information:
For Immediate Release:(DATE)

Westminster- On ________ (DATE) from ________ (Local Time) (11am to 4pm) MAGIC will host its ___ Capture the Flag (CTF) competition. MAGIC’s CTF is an ethical hacking cybersecurity competition for entry-level participants at the high school and college level. No prior experience is required and the event is free for participants. The event will be live streamed from the main arena located at the Community Media Center of Carroll County in Westminster, MD. In addition to the main arena, this event will have multiple host locations competing simultaneously throughout the country.

MAGIC provides hands-on technology and entrepreneurial education experiences for entry-level participants to enrich their understanding and interest in technology, as well contribute to tech workforce development. MAGIC’s CTF will feature teams of 2-4 students working their way through a series of cybersecurity puzzles set up in a “jeopardy” style format to find hidden flags to earn points.

MAGIC is working to close the gap of needed cybersecurity professionals by increasing students’ interest in cybersecurity. MAGIC’s CTF events focus on cyber workforce development- skill acquisition, skill development, and eventually job placement. MAGIC has specifically focused its CTF events for entry level participants in an effort to bring new and young individuals into the technology and cybersecurity workforce pipeline.

MAGIC’s CTF will connect communities throughout the the country that have an interest in preparing our region’s workforce for future careers in technology and cybersecurity. Technology talent and high-speed broadband networks are among the two essential ingredients for innovation and growth. The fiber network of the City of Westminster, MD and other participating communities are key points of leverage to attract talent and stimulate economic development. MAGIC’s CTF is sponsored by ______________, _____________,, and the City of Westminster.

To register for the event, see MAGIC’S website, https://magicinc.org/our-events

MAGIC (the Mid-Atlantic Gigabit Innovation Collaboratory) is a non-profit organization headquartered in Westminster, MD with the mission of building a tech ecosystem that creates and nurtures talent, entrepreneurship, and tech businesses, elevating the Westminster gigabit community to lead the Mid-Atlantic region. For additional information about MAGIC, contact Amy Rupp, 443-759-0480, arupp@magicinc.org. Learn more about MAGIC at https://magicinc.org/
((DRAFT PRESS RELEASE ))

Winners of MAGIC’s ______ Capture the Flag Cybersecurity Competition

Contact Information:

For Immediate Release (DATE)

MAGIC is pleased to report that the _____ Capture the Flag (CTF) Cybersecurity Competition held on ____ (date) at the Community Media Center in Westminster, MD was a success and established several new milestones for MAGIC programming. A new record was set for total participants, with over ____ students registered across ____ locations throughout the country.

First place team, Team _______, included _______, ________, and ________ who competed at the ________ (site location). Second place team, _______, included _______, ________, and ________, who competed at the ________ (site location). Third place team, _______, included _______, ________, ________, and ________ who competed at the ________ (site location).

The ________ (site location) competition, sponsored by _______, ________, and ________, had first place team, team ________, which included _______, ________, and ________. Second place team, _______, included _______, ________, and ________. Third place team, _______, included _______, ________, ________, and ________.

Several MAGIC CTF sponsors and partners were on location in Westminster, MD including _______, _______, _______, and ________, as well as numerous other cybersecurity and IT professionals working as volunteer coaches. MAGIC would like to thank Gold Sponsors ________ and ________, Silver Sponsors ________ and ________, Bronze Sponsors ________ and ________ as well as ________ and ________.

The next MAGIC CTF, an entry level ethical hacking cybersecurity competition for high school and college students, will be held ____ (Date). Contact Amy Rupp (arupp@magicinc.org) for further details.

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3 Page Walk-in Registration Form
Capture the Flag

Email Address:______________________________________________________

First Name:__________________________________________________________

Last Name:___________________________________________________________

Hometown:___________________________________________________________

Education Level:_______________________________________________________

Full Name of School:___________________________________________________

City of School:________________________________________________________

State of School:_______________________________________________________

Emergency Contact Full Name: _________________________________________

Emergency Contact Telephone Number: ________________________________

Sign and scan to  info@magicinc.org
10 Principles of Ethical Hacking

1. I will respect others and not use information to harm another person or organization.
   ● Network and/or computer use should always be used in a respectful manner for the greater good.
   ● I will respect the privacy and dignity of Internet users. I will not use, copy, or delete another user’s files, folders, or passwords. I will not use the Internet for inappropriate or illegal use.

2. I will be honest, ethical, moral and true to my word while using my technical skills.
   ● I will report any illegal activity or threatening material I come across.

3. I will treat others online and in digital environments as I would want to be treated.
   ● I will not use any digital network to harm the reputation of, harass, or threaten others.

4. I will be courageous in the face of adversity and continually challenge myself.
   ● I will keep my technical skills up to date and continue to learn.
   ● I will persevere even when the challenges are difficult or seemingly impossible.

5. I will strive to have a positive attitude and be civil at all times.
   ● I will have patience and understanding when technology breaks, problems are difficult, and teamwork is challenging.

6. I will approach every digital task with passion, conviction and persistence.
   ● I will acknowledge my computer and networking privileges and use these privileges to enhance learning and to benefit all.

7. I will work to reach my full potential while applying hacking techniques.
   ● I will perform services only in areas I am competent in.
   ● I will rely upon other qualified professionals for assistance in matters that are beyond my area of expertise.
   ● I will do my best to thoroughly examine and analyze all evidence, and will not withhold any of my findings.

8. I will take full responsibility for my digital actions and their consequences.
   ● I will refrain from doing harm, vandalizing, or destroying hardware, software or networking access.
   ● I will always acknowledge my errors and will not distort or alter the facts.
   ● I am to be committed to the integrity of hacking, and will avoid situations where I might contribute to the wrongdoing of others.

9. I will be thankful for and generous with my time and talents by sharing with other users.
   ● When I am able, I will assist any individual who is in need of tech support or guidance at appropriate times.

10. I will be humble and always act with integrity. I will not seek fame or fortune but use my skills to understand, be alert and keep the public safe from harm.

I’ve read and agree to abide by these principles of ethical hacking.

Talent Name: ____________________________________________
(Printed)

Talent Signature: _________________________________________

Sign and scan to info@magicinc.org
Media Release Form

I hereby consent to the use of my name, likeness, picture, and/or voice by the Mid-Atlantic Gigabit Innovation Collaboratory, Inc. (MAGIC) for broadcast, promotion, direct exhibition, and subsidiary purposes.

Such uses will not be made as direct endorsement of any product or service. I hereby indemnify you and your licensees respecting any claim arising from my actions or statements on the program. No compensation will be received in exchange for permissions granted herein.

Name: ____________________________________________
(Printed)

Signature: _________________________________________

Phone: ___________________ Email: ____________________________

Date: ______________________

Program: _______________________________________

Parents/Legal Guardian
I decree that I am the parent/guardian of __________________________
Who is a minor and that I hereby authorize, approve, and agree to the contract signed by him/her as stated above.

Parent/Guardian: _______________________________________

Date: ______________________

Sign and scan to info@magicinc.org

PO Box 517 Westminster, MD 21158 - www.magicinc.org
### (draft) Student Sign-in Form (draft)

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Signature</th>
<th>Team Name</th>
<th>T-Shirt Size</th>
<th>Computer Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>Rupp</td>
<td></td>
<td>Coders1</td>
<td>M</td>
<td>Yes</td>
</tr>
<tr>
<td>Chris</td>
<td>Jones</td>
<td></td>
<td>Coders1</td>
<td>L</td>
<td>Yes</td>
</tr>
<tr>
<td>Kim</td>
<td>Rogers</td>
<td></td>
<td>Needs Team</td>
<td>L</td>
<td>No</td>
</tr>
<tr>
<td>Sara</td>
<td>Wilson</td>
<td></td>
<td>Needs Team</td>
<td>S</td>
<td>No</td>
</tr>
</tbody>
</table>

Scan to info@magicinc.org