Charter and Bylaws for the Southeast Collegiate Cyber Defense Competition and Board of Advisors

Article I Name

This charter establishes the Southeast Collegiate Cyber Defense Board of Advisors (SECCDC BoA) which shall be solely responsible for planning and operation of the Southeast Collegiate Cyber Defense Competition (SECCDC).

Article II Purpose & Goals

Section One:

"The mission of the Collegiate Cyber Defense Competition (CCDC) system is to provide institutions with an information assurance or computer security curriculum a controlled, competitive environment to assess their student's depth of understanding and operational competency in managing the challenges inherent in protecting a corporate network infrastructure and business information systems.

CCDC Events are designed to:

- Build a meaningful mechanism by which institutions of higher education may evaluate their programs.
- Provide an educational venue in which students are able to apply the theory and practical skills they have learned in their course work
- Foster a spirit of teamwork, ethical behavior, and effective communication both within and across teams
- Create interest and awareness among participating institutions and students.

CCDC competitions ask student teams to assume administrative and protective duties for an existing "commercial" network – typically a small company with 50+ users, 7 to 10 servers, and common Internet services such as a web server, mail server, and e-commerce site. Each team begins the competition with an identical set of hardware and software and is scored on their ability to detect and respond to outside threats, maintain availability of existing services such as mail servers and web servers, respond to business requests such as the addition or removal of additional services, and balance security needs against business needs. Throughout the competition an automated scoring engine is used to verify the functionality and availability of each team's services on a periodic basis and traffic generators continuously feed simulated user traffic into the competition network. A volunteer red team provides the "external threat" all Internet-based services face and allows the teams to match their defensive skills against live opponents" (source: http://nationalccdc.org/history.html).

The mission and objectives of the SECCDC mirrors that of the national CCDC.

In an effort to help facilitate the development of a regular, national level cyber security exercise, the Center for Infrastructure Assurance and Security at the University of Texas at San Antonio hosted the first Collegiate Cyber Defense Competition (CCDC) for the Southwestern region in May 2005.

In June 2005, members of the Kennesaw State University's Center for Information Security Education recognized the value of the program, hosting the first SECCDC at KSU in 2006, to provide a regional competition to recognize the best team in the Southeast, and to work to sponsor that team to a National competition to be developed by UTSA.

While similar to other cyber defense competitions in many aspects, the SECCDC, as part of the CCDC, is unique in that it focuses on the operational aspect of managing and protecting an existing network infrastructure. While other exercises examine the abilities of a group of students to design, configure, and protect a network over the course of an entire semester, this competition is focused on the more operational task of assuming administrative and protective duties for an existing "commercial" network.

Teams are scored based on their ability to detect and respond to outside threats, maintain availability of existing services such as mail servers and web servers, respond to business requests such as the addition or removal of additional services, and balance security needs against business needs.

The SECCDC is a regional competition of the National Collegiate Cyber Defense Competition (http://nationalccdc.org)

Section Two:

SECCDC and the SECCDC BoA shall abide by, operate within and support established National Collegiate Cyber Defense Competition policies in accordance with applicable State and Federal Laws

Article III Membership

Section One: SECCDC Participation

In order to foster the objectives noted earlier, all processes will be undertaken in way to maximize transparency and facilitate open and complete access to SECCDC records, event data and communications.

Participation in the Southeast Regional Cyber Defense Competition is open to all 2-year and 4-year academic institutions in the states listed in the competition web site (infosec.kennesaw.edu/SECCDC). Only teams officially sponsored by these institutions may participate in the competition.

If a number of institutions apply to participate in the annual event that exceeds the host institutions ability to support, acceptance will be based on the following priorities:

- 1. Institutions who have successfully fielded a team in the previous year
- 2. Public 4-year academic institutions with established and published degree programs (including concentrations or specializations) in information or computer security.
- 3. Public 2-year academic institutions with established and published degree programs (including concentrations or specializations) in information or computer security.
- 4. Other 4-year academic institutions.

Institutions wishing to compete in the SECCDC must submit a letter of intent to the host institution as described in Section Three: Key Dates of Article VI. Conduct of the SECCDC.

If an institution that does not meet the above criteria wishes to compete, their acceptance will be based on the number of eligible teams submitting letters of intent that are otherwise eligible. Should additional team slots be available after all eligible teams are accepted, an institution may be approved by the general BoA membership by a simple majority vote.

Section Two: SECCDC BoA Membership

Membership in the SECCDC BoA is open to one primary voting faculty or staff advisor and one secondary non-voting faculty or staff member for institutions that have successfully fielded teams to a SECCDC regional event in at least one of the preceding two events. The membership roster will be updated annually immediately following the regional competition. In the event that a member's institution does not successfully field a team within the two consecutive years, they will be removed from the roster, two years and one day after they last successfully fielded a team.

The official means of communications between BoA members shall be the SECCDC-Adv list service hosted by Kennesaw State University (KSU). While an institution may request that more than one faculty member be listed on the list service, only one faculty member will serve as a voting member.

The SECCDC and SECCDC BoA shall not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, sex, marital status, disability or status as a U.S. Veteran.

An institution's voting member is required to respond to SECCDC communications in a timely manner and actively support SECCDC efforts. Membership may be revoked for any actions

119 deemed inappropriate when a motion to revoke membership is supported by a simple majority of 120 the SECCDC BoA officers plus a ¾ majority vote by the general membership. 121 122 Proxies for voting shall be submitted to the Chair in writing or private electronic communications 123 prior to a vote. Proxies must be specific to the vote at hand. A separate proxy is required for each 124 item voted upon. 125 126 Article IV Officers 127 Section One: Roles and Responsibilities 128 1) Chair The chief executive officer of the SECCDC BoA shall be the designated as the chair. 129 130 Responsibilities of the chair include: 131 Preside over all meetings whether face-to-face or virtual 132 Issuing formal communications of the SECCDC 133 Coordinating the efforts of the SECCDC BoA and its officers 134 Coordinating with National CCDC and serving as a Liaison between the SECCDC BoA and 135 the National CCDC. 136 Coordinating the selection of the annual SECCDC regional host institution. Assisting the SECCDC regional host with the development of the SECCDC in compliance 137 138 with National CCDC policies and practices. 139 Certify the results of the annual SECCDC regional competition, and report the winning 140 institution to the National CCDC executive board. 141 2) Vice-Chair 142 143 The secondary executive officer of the SECCDC BoA shall be designated as the vice-chair. Responsibilities of the vice-chair include: 144 145 Preside over meetings in the absence of the Chair 146 Coordinate SECCDC promotions and publicity of events 147 Audit SECCDC host institution financial reports Co-certify the results of the annual SECCDC regional competition 148 149 150 3) Regional SECCDC Host Coordinator 151 152 153 a secondary non-voting member may be selected to serve as the host coordinator.

The tertiary executive officer of the SECCDC BoA shall be designated as the regional SECCDC host coordinator. In the event that the host institution is represented by an officer of the SECCDC, Responsibilities of the regional host include:

Preside over the upcoming annual SECCDC event.

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- Work with KSU Faculty to coordinate facilities and a network infrastructure capable of providing independent rooms for up to 10 teams.
- Coordinate the development of a opposition force "red team," a conference judging "white team" and conference support administration "gold team".
- Solicit and collect applications for teams to compete in the SECCDC.
- Solicit and collect sponsors and donations to support the SECCDC.
- Organize and provide travel and lodging information for the SECCDC.
- Distribute preliminary competition information.
- Conduct the SECCDC and submit the results to the SECCDC BoA chair for certification.
- Coordinate meals and refreshments during the event for the participants.
- Coordinate all associated SECCDC event components to include name badges, trophies for the top 3 teams, and all needed materials.
- Draft and submit a post event report to the SECCDC Executive Committee detailing the conduct of the event and expenditure of finances in accordance with the appropriate section below.

Section Two: Officer Appointments, Elections and Removals

In order to provide long-term continuity and leadership for the SECCDC, the Chair shall be a joint appointment with whoever is the current Director of the Kennesaw State University Center for Information Security Education. The Vice-Chair shall be elected bi-annually from the eligible membership.

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> In order to be eligible to serve as an officer of the SECCDC BoA, candidates must be the primary or secondary representative of an institution that qualifies for membership in the Board of Advisors.

Election of the vice-chair will require a simple majority vote from the general BoA membership. If

no candidates in a contested election receive a majority of votes, a runoff election will be held

between the two candidates receiving the most votes.

Term of Office

Eligibility

The chair shall be the current Director of the KSU Center for Information Security Education. The vice-chair of the SECCDC BoA shall be elected to a two yearterm.. In the inaugural year, the vice-chair shall be elected to a one year term. Elections will be scheduled to coincide with the conclusion of the National CCDC.

The regional SECCDC host coordinator will be the faculty representative to the BoA from the institution that won the regional event from the past year. If the Chair or Vice-Chair's institution wins the SECCDC, then the *alternate* (primary/secondary) representative from that institution will serve as the Host Coordinator.

A vice-chair may serve up to three consecutive terms at the will of the membership.

The Chair, Vice-Chair and Host Coordinator shall comprise the Executive Committee of the organization. The Executive Committee shall meet in addition to regular organization meetings. The Executive Committee shall appoint such committees as are required to carry out organization goals.

Officer/Advisor Removal

If an officer's institution is removed from the membership roster during their term, the officer will continue to serve the remainder of that term.

An officer may be removed from office upon recommendation supported by a ¾ majority of the general membership if their actions are deemed inappropriate by the membership. The officer shall be permitted to speak before the BoA membership about any charges made concerning his/her performance; however the officer is not permitted to participate in the deliberation of the membership regarding the charges.

Article V. Finances

All monies collected for the SECCDC including sponsorships, registration fees and donations will be collected and dispersed by the host institution coordinator and used to support the event.

Upon conclusion of the annual SECCDC, a financial report showing all monies collected and all expenses incurred will be submitted to the SECCDC BoA Vice-chair for review.

In the event the organization collects funds in excess of expenses, all remaining funds will be expended to purchase materials to benefit the SECCDC and the current year's participants (e.g. consumables, competition gifts or other equipment or materials which may be legally transferred between institutions),

Each institution that participates in the SECCDC will be expected to pay a registration fee to assist in offsetting the expenses associated with the event, to include meals and refreshments for team members. This fee will be agreed to annually by a simple majority vote of the membership.

Article VI. Conduct of the SECCDC

Section One: General

Components for the regional SECCDC will be in compliance with published advisories from the National CCDC. The National CCDC web site will serve as the primary information resource for the host institution coordinator (http://www.nationalccdc.org). All records, files, documents and communications associated with the SECCDC are the intellectual property of the event and subject to review and disclosure upon request of a member institution, or the National CCDC.

Section Two: Location

As the responsibilities and equipment needed to support the SECCDC are very burdensome, the SECCDC will usually be held at Kennesaw State University (KSU), with KSU providing rooms and the networking and computing infrastructure. This arrangement will continue until such time as facilities at Kennesaw State University are no longer available, conduct of the event at KSU is unfeasible, or upon request of the KSU facilities coordinators, at least 6 months prior to any competition.

Should an institution other than KSU strongly desire to host the competition, they must demonstrate capability in a written proposal to the Executive Committee. Permission to host the event may be awarded by the Executive Committee upon a unanimous vote, after a review of the proposal.

Section Three: Rules

Rules will be aligned with the most current National CCDC Rules posted at http://www.nationalccdc.org/rules.html. Each variance from these rules must be reviewed and approved by a majority vote from the membership at least 90 days in advance of the event in order to allow for timely posting as provided below. The host institution must post the final version of the annual rules in a publicly accessible location and distribute to the membership at least 90 days prior to the event.

In the interest of transparency, each team faculty advisor and team member will sign disclosure agreements prior to the event, affirming that <u>ALL</u> information submitted during the SECCDC is open to external review and scrutiny. Any team or member refusing to sign the agreement will not be allowed to compete. Upon completion of the event, a team may request their own files and communications retained by the competition system. All requests received within 90 days of the event will be honored. All team files not requested within 90 days will be destroyed. In the event that a team or institution requests the files from another team, sufficient justification must be provided. This justification will be reviewed by the SECCDC BoA executive committee and honored if appropriate.

Section Four: Key Dates

The Southeast Collegiate Cyber Defense Competition shall be held between **February 20**th and **March 15**th, unless an alternate date is approved by a majority vote of the BoA membership, in order to provide sufficient time to announce results and allow the winning team time to prepare for the National CCDC.

The host coordinator must distribute a call for participants for the competition no later than *November 15th* of the year preceding the competition.

Institutions wishing to compete in the SECCDC must submit a letter of intent to the host institution no later than **December 15**st of the year preceding the competition. Selected institutions will be notified based on the above priorities and notified no later than **January 1**st of the competition year. Selected institutions must submit their registration fees no later than **January 30**th of the competition year. If for some reason an institution selected determines that it may not be able to compete, it should notify the host coordinator as soon as possible so that an alternate institution may be selected.

The host coordinator must submit a team packet specifying the competition rules and general configurations, for review by the membership no later than **60 days** prior to the competition. Once approved, the team packet will be posted on the competition web site no later than **45 days** prior to the competition.

Section Five: Support Teams

The host institution coordinator will be responsible for soliciting support teams for their event. These teams will be mutually exclusive. These will include at a minimum:

Red Team – the Red team will consist of individuals serving to externally assess and attempt to penetrate the competition teams' systems. Red teams should be selected so as to

challenge but not overwhelm the competition teams' efforts. At the beginning of the annual SECCDC event, the Red team will elect a Captain to serve as the liaison between the Red Team and the White Team for scoring purposes. Red team members should be selected based on personal ability and experience in penetration testing and vulnerability assessment.

White Team – the White team will consist of individuals serving as judges to internally assess and report on the performance of the competition teams. One or more White team members will be assigned to each competition team. No White team member may be assigned to a team from their own institution. At the beginning of the annual SECCDC event, the White team will elect a Captain to serve as the primary scorekeeper for all scored events. White team members should be selected based on their professional experience and should be faculty members or industry professionals.

Gold Team – the Gold team will consist of individual serving as competition coordinators and supervisors. Select members of the Gold Team will be identified as reviewers for challenges and appeals to event activities as outlined in the appeals section below. Gold team members should be selected based on competition and professional experience.

Section Six: Team Packets

The host institution coordinator will develop and publish a team packet including all rules and materials relevant to the competition teams. While all details of the event need not be disclosed, all rules, restrictions, access methods, and permissible materials must be specified, base on the previous year's National Competition.

Section Seven: Configuration and Services

The event systems will be configured in a manner consistent with past SECCDC and CCDC events. While some variation is encouraged to keep the event challenging, the core premise of the configuration is as follows:

A variety of modern operating systems providing a functional but vulnerable network, with either proxied access to the Internet (preferred) or a default route to the Internet enabled.

At least one server providing multiple services to include but not limited to:

Web (static and e-commerce)

Email

Database

Domain Name Services

File Services

Additional services may be specified at the beginning of the competition, or during the competition in an injection.

A method of service assessment must be developed to determine a team's ability to keep the service functional during the competition. This assessment must be conducted frequently, at regular intervals, and have a score commensurate with other categories.

The pre-competition configuration and list of all planned services and method of assessment must be compiled by the host institution coordinator and submitted for approval by the executive committee no later than 60 days prior to the event. This information will not be shared with the membership, until such time as the competition begins.

Section Eight: Injections

The host institution coordinator will also develop injections consistent with past SECCDC and CCDC events. Again, some variation is encouraged to keep the event challenging, while maintain the core premise of real-world business changes to the systems and their configuration.

A method of injection assessment must be developed to determine a team's ability to respond to business requests for services. This assessment must have a score commensurate with other categories.

The list of all planned injections and the method of assessment must be compiled by the host institution coordinator and submitted for approval by the executive committee no later than 30 days prior to the event. This information will not be shared with the membership, until such time as the competition begins.

Section Nine: Incident Response

The host institution coordinator will also organize and conduct an external assessment by a group of Red Team members to assess the relative security of the teams' networks. This should also be consistent with past SECCDC and CCDC events.

It is the responsibility of the Gold Team to ensure that Red Team assessments and penetration testing operations are structured so as to challenge the teams, but not to completely overwhelm the team's ability to function.

A method of incident success and response assessment must be developed to determine a team's ability to respond these external intrusions. This assessment must have a score commensurate with other categories. Incident response may be assessed as a component of injections.

The plan of implementation for the Red Team and the method of assessment for Red Team activities along with competition team incident response actions must be compiled by the host institution coordinator and submitted for approval by the executive committee no later than 30 days prior to the event. This information will not be shared with the membership, until such time as the competition begins.

Section Ten: Scoring

Overall scoring should be balanced between the various components: Configuration, Service Provision, Injection Response and Incident Success (Red Team activities). The scoring system should be consistent with past SECCDC and CCDC events. The overall scoring structure and plan of implementation must be compiled by the host institution coordinator and submitted for approval by the executive committee no later than 30 days prior to the event.

Section Eleven: Conduct of the Event

The conduct of the event should be consistent with past SECCDC and CCDC events.

- Day 1: Teams will report for check-in and pre-configuration activities.
- Day 2: Main competition activities, including red team actions, business injections, and service maintenance requirements.
- Day 3: Team presentations and Awards Ceremony.

The overall conduct of the event should be documented by the host institution coordinator and submitted for approval by the executive committee no later than 30 days prior to the event.

The host institution coordinator will be responsible for coordinating appropriate meals and refreshments.

Section Twelve: Challenges and Appeals

In the event of a challenge to a White or Gold Team action:

Once a White team member has scored an event, the team may only challenge on errors of fact. Errors of fact consist of information reported that is erroneous, or was lost after being delivered to a White team member.

To challenge a score the team captain must document in writing the actions of the team that justify review of the judge score, including affidavits from team members as to the completion of the assigned task and the time of completion.

Challenges will only be accepted if a team reports successful completion of a task, and has demonstrated in their team logs that the action was completed and delivered to the White team judge. If a White team judge has signed off on a team log indicating completion of a task, but the operations center for the event has no record of the task completion, the senior Gold team member present will rule on the challenge.

Challenges must be submitted within 2 hours of posting of scores. In no case will any appeal be accepted or considered once the competition final team scores have been posted and determination of winners has been made.

Appeals are only applicable to the disqualification of an individual or competition team.

In the event an individual or team is disqualified according to competition rules prior to the conclusion of the event, the disqualified individual or team must report to their faculty advisor or sponsor. If the faculty advisor or sponsor feels the disqualification is unfounded, they must submit a written appeal within 2 hours of the disqualification. Disqualified individuals are ineligible for individual awards or team trophies.

In the case of disqualified individuals, all appeals will be reviewed by the competition host coordinator, who may consult additional gold team members as appropriate. The presence of the faculty advisor or sponsor or disqualified individual is not required. All decisions made by the host coordinator with regard to individual disqualifications are final. Disqualified teams are also ineligible for individual awards or team trophies.

In the case of a team disqualification, all appeals will be reviewed by the entire Gold team, with input from the appropriate White Team member, and the faculty sponsor. The faculty sponsor may make the case for reversal of the appeal.

All decisions of the White and Gold teams with regard to competition results are final upon conclusion of the event. At no point during the appeals process will any white or gold team member be permitted to rule on their own prior decision(s).

Article VII. Amendments & Ratification

Amendments to this constitution must be submitted in writing at a regular meeting of the SECCDC BoA. Said amendment(s) will be voted on at a subsequent meeting. In order to adopt the amendment, a vote of 2/3 of the general membership is necessary.

This constitution shall become effective upon approval by a ³/₄ vote of the responding membership. The charter membership will consist of the following institutions, and their representatives:

- Chattahoochee Technical College, GA
- Kennesaw State University, GA
- Mercer University, GA
- Southern Polytechnic State University, GA
- University of Alabama, Birmingham
- University of Louisville, KY
- University of North Carolina, Charlotte
- University of North Carolina, Wilmington
- University of South Carolina
- University of South Florida
- National CCDC Dwayne Williams

This charter and bylaws was adopted on January 1, 2008. Amendments approved March 19, 2010.