

# Cyber Grand Challenge

## Event Information for Finalists

July 25, 2016



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Defense Advanced Research Projects Agency  
675 North Randolph Street  
Arlington, VA 22203



## 1. OVERVIEW

This document provides competitor information and logistical guidance to Cyber Grand Challenge (CGC) finalists participating in the Cyber Grand Challenge Final Event (CFE) on August 4, 2016 at the Paris Hotel and Convention Center in Las Vegas, Nevada.

## 2. SCHEDULE OF EVENTS

*All events located in the Paris Hotel and Convention Center*

*Times listed in Pacific Time (PT)*

### WEDNESDAY, AUGUST 3, 2016

12:00 pm – 2:00 pm	Teams Check In	Versailles Room 1
4:00 pm – 5:00 pm	Captains Meeting	Versailles Room 1

### THURSDAY, AUGUST 4, 2016

9:00 am	CFE Computation Begins	Team Area, Paris Ballroom
1:30 pm – 3:30 pm	VIP Brief and Tour	Paris Ballroom
4:00 pm – 5:00 pm	Captains Meeting	Versailles Room 1
5:00 pm – 8:00 pm	CFE Live Event	Paris Ballroom

### FRIDAY, AUGUST 5, 2016

10:00 am – 11:00 am	Award Ceremony	Paris Ballroom (Rivoli)
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## 3. PRIZE PAYMENT

Bank account information collected during the Cyber Grand Challenge Qualification Event (CQE) will be used to transfer prize funds to first, second, and third place winners. If bank information needs to be changed, email [cybergrandchallenge@darpa.mil](mailto:cybergrandchallenge@darpa.mil) no later than 5:00 pm ET on June 15.

## 4. SYSTEM AUTONOMY

The final downtime window for competitor HPCs will start on Thursday, July 28. During this window, the HPC array will be moved for the final time onto the CFE stage. In the best case, competitor access to the HPC array will be restored after the stage move, and DARPA/CGC will make every possible effort to restore access during this time. As rapid HPC movement involves irreducible risk, **the possibility exists that competitor HPC access will not be restored prior to CFE computation.** As a result, it is *imperative that each CRS boot “ready to compete”* prior to the start of the final downtime window.

### 4.A ACCESS GOAL

DARPA/CGC will make every possible effort to re-establish competitor HPC access after system relocation at 1500 Pacific Time, August 1<sup>st</sup>, 2016. Note that the re-establishment of access will not modify access in any way; VPN access via current IP addresses will be restored; no physical provisioning of access to competitors will be provided by DARPA/CGC. This access may be delayed or rendered impossible for many reasons; see the CGC FAQ, A168.

### 4.B DISCONNECTION

Competitor HPC access, if available, will be terminated at 1500 Pacific Time, August 3<sup>rd</sup>, 2016. The cabling required to facilitate this connection will be withdrawn from the air gapped CGC

infrastructure and certification of the air gap will commence. After disconnection, CRSs may be challenged to multiple competitions, only one of which will be the CFE. Competitor CRSs will not receive special notification that CFE has begun.

#### **4.C RECONNECTION**

Competitor HPC access will be restored pending verification of the CFE scoring result. An unlikely delay in score verification will create a delay in restoration of access. This access will terminate when DEFCON closes on Sunday, August 7<sup>th</sup>, 2016.

#### **4.D DATA DOWNLOAD**

DARPA/CGC expects that the creation of a CFE Technical Paper compliant with section 3.2.4 of the CGC Rules necessary to receive prizes will require bulk competitor download of data from HPCs post-event. To facilitate this process, DARPA/CGC will provide onsite personnel capable of bulk data copy to mass storage devices, allowing each team to download data prior to the breakdown and transition of the DARPA cloud on Sunday, August 7<sup>th</sup>, 2016.

### **5. COMPUTATION OF CFE**

CFE will be computed beginning the morning of Thursday, August 4 and continuing into the CFE live event beginning at 5:00 pm PT. Invitations to attend computation are extended to team members that have registered and received a team badge. Note that computation of CFE will not be open to the general public and press, but just team members.

### **6. SYSTEM RECOVERY**

Hardware may fail during the computation of CFE. Hardware failures will not cause an automatic CFE stoppage; A CFE stoppage will occur at the sole discretion of the DARPA CGC Program Manager (PM) In the event of a hardware failure determined by the DARPA CGC PM to be catastrophic, DARPA/CGC may attempt to engage in disaster recovery of your CRS. If teams present DARPA/CGC with sealed CRS installation media, including installation instructions, DARPA/CGC may make a best-effort attempt at system recovery in the event of a catastrophic failure. No additional rights to the software on the media are granted to the government and all media will be securely destroyed following CFE computation. The presentation of system recovery media to DARPA/CGC is optional. In the event of a CRS system recovery event, no competitor assistance will be required or allowed. DARPA/CGC referees will make a best effort at recovery independently. The greater the degree of uncertainty and difficulty present in the installation instructions and process, the greater the chances of CRS system recovery failure.

System recovery media will be accepted either in person at the Captain's Meeting on Wednesday, August 3, or via mail through Monday, July 25 and must be addressed to:

DARPA I2O  
Attn: Cyber Grand Challenge  
675 North Randolph Street  
Arlington, VA 22203-2114

Materials received after the above deadlines will be disposed of in a secure manner.

System recovery media must:

- Be self-contained on optical media, e.g. DVD or Blu-Ray disc
- Contain easy-to-locate, easy-to-read installation instructions

System recovery media may:

- Be encrypted with a passphrase only provided to DARPA/CGC during a disaster

## **7. TEAM ATTENDANCE**

Team attendance at CFE is optional. A CRS that has been programmed to compete autonomously without human assistance may compete on its own. Team members are invited to witness the performance of their respective CRS live with other competitors, and DARPA/CGC encourages attendance by all teams.

## **8. TEAM CAPTAINS**

Teams attending CFE must identify a single Captain to DARPA/CGC on the Team Registration Form. Captains will be given a unique identifier that may be transferred amongst badged team members at the teams' discretion. Captains are invited to attend Captains' Meetings with DARPA/CGC prior to and during CFE. In the event that finalists are interviewed on camera during the live event, DARPA/CGC will coordinate with Captains to confirm team personnel willing to be interviewed. Interviews are completely optional.

## **9. CFE LIVE EVENT**

The CFE live event will be open to the public from 5:00 pm to 8:00pm PT on Thursday, August 4.

Team seating is for badged team members only. This restriction ensures press outlets and DARPA/CGC officials accurately identify the authors of CRS technology and distinguish them from the general public. Team sponsors, supporters, sales representatives, friends, family and other guests are welcome to attend the live event and watch in the general audience.

A time-scale delta exists between CFE computation and the CFE live event. As a result, the data-mining and visualization outputs required to interpret the results of CFE will be presented to the CFE audience on a compressed time scale. End of compute will dove-tail with the end of the live event, allowing live observation of the final result. Finalists will have the opportunity to witness CFE computation in its entirety. No CFE computation will take place out of sight of competitors. CFE computation will take place inside a physical, observable air gap. No person except CFE referees and the DARPA CGC PM may cross this air gap nor will any wireless devices or communications be allowed to cross the air gap. Event data will leave the air gap via an observable data diode. All event data will be released into the public domain.

A document certifying the autonomous operation of CFE will be presented during the event itself. All personnel involved in constructing, hosting, refereeing, and managing Cyber Grand Challenge will sign this document. Competitors are also invited to sign this document.

## **10. AWARD CEREMONY**

The Award Ceremony will be held at the beginning of DEF CON on Friday, August 5 at 10:00 am PT in the Rivoli Room. DARPA/CGC will announce the CGC prize winners and recognize the parties responsible for building and competing in CGC. All finalist team members are encouraged to attend

and reserved seating will be provided to badged team members. The event is open to the public and DEF CON registration is not required to attend.

### **11. TEAM CHECK IN AND EVENT BADGES**

Team members who wish to receive team badges for CFE and access restricted team areas must be listed on the CFE Team Registration Form and must provide a photo through this form. Badges for team members will be provided at onsite check in on Wednesday, August 3 from 12:00 pm to 2:00 pm PT in Versailles Room 1.

Team registration forms will be emailed separately and must be returned via email to [cybergrandchallenge@darpa.mil](mailto:cybergrandchallenge@darpa.mil) by 5:00 pm ET on Friday, July 1.

### **12. HOTEL ROOM BLOCK**

DARPA/CGC has arranged a room block for teams at Paris Las Vegas. Two rooms per team may be reserved, and teams are responsible for booking and paying for their rooms.

Room reservations must be made by 5:00 pm ET, July 1, 2016. Teams must provide the name(s) used to reserve the room on the Team Registration Form. The reservation link will be emailed separately and may not be distributed beyond its immediate recipients.

Paris Las Vegas  
3655 Las Vegas Boulevard South  
Las Vegas, NV 89109  
1-702-946-7000  
<https://www.caesars.com/paris-las-vegas>