



Red Cell Rules of Engagement

Version 1.0



Purpose of this Document

This specification serves as a guide for Red Cell activities in support of Cyber Defense Exercise 2015 (CDX 2015).

Document Revision History

Version	Change Description	Change Owner	Date
1.0	FIRST DRAFT	Jonathan Bristow, Capt, USAF	31 Oct 2014

1.0 Red Cell Rules of Engagement

- 1.0.1 The following Rules of Engagement are binding on all members of the CDX 2015 Red Cell. Members will be expected to sign a statement acknowledging that they have read and understood these Rules of Engagement.

1.1 Definitions

- 1.1.1 **Active Attack:** Any Red Cell activity which involves direct interaction with Blue Cell hosts or systems. Active attacks include (but are not limited to) running exploits, sending malicious content and performing active port scanning.
- 1.1.2 **Passive Attack:** Any Red Cell activity which does not involve direct interaction with Blue Cell hosts or systems, specifically including passive packet capture.
- 1.1.3 **Denial of Service (DoS) Attack:** Any Red Cell activity which degrades the performance of Blue Cell hosts or systems, whether deliberately or inadvertently. DoS attacks include bandwidth flooding, service flooding or the shutdown/reboot of Blue Cell systems.

2.0 CDX 2015 Red Cell Policy

2.1 *Red Cell shall be impartial in its attacks against Blue Cell teams.*

- 2.1.1 If Red Cell attempts a given attack technique against one Blue Cell team, it must make a good-faith effort to attempt the same attack technique against all Blue Cell teams. This is especially true if the attack technique was successful and resulted in a scoring penalty against any Blue Cell team. Red Cell members shall coordinate their efforts to ensure that all Blue Cell teams are exposed to a substantially similar challenge.

2.2 *Red Cell members may not attack the Scoring Service (RubberNeck) or the Confidentiality/Integrity Scoring Service (TokenAgent) to include any services, programs, accounts and/or communication paths used by them. Red Cell may alter the actual token files consistent with their intended use, but may not alter any of the other files, directories, etc. associated with TokenAgent.*

- 2.2.1 Any Red Cell member identified as doing such will immediately be banned from participating in any CDX activities and asked to leave CDX HQ. The two services are the

core of the CDX exercise and they must stay operational!

2.3 *Red Cell members shall not perform any Denial of Service (DoS) attacks between the hours of 2200 and 0900 the following morning.*

2.4 *Red Cell members shall not perform any Denial of Service (DoS) attacks that involve packet flooding or resource exhaustion.*

2.5 *Red Cell members shall cease active attacks against any Blue Cell host or network if directed by White Cell.*

2.6 *Red Cell members shall not perform any active or passive attack during times when the Red Cell has been specifically directed to stand down.*

2.6.1 Included, but are not limited to:

- Before STARTEX.

2.7 *Red Cell shall not attempt to compromise any user account that has been specifically placed off-limits by White Cell.*

2.8 *Red Cell members shall not target any IP address or Fully Qualified Domain Name (FQDN) which has been specifically placed off-limits by White Cell.*

2.8.1 Including, but are not limited to:

- Any IP address of the form 10.1.xx.1 (Blue Cell head-end routers)
- 10.1.10.105 (RubberNeck server)
- 10.1.10.45 (Scoring server)
- 10.1.10.110 (Token server)
- Any IP address of the form 10.1.11.xx (DMVPN monitoring hosts)
- Any IP address of the form 10.1.200.xx (Core DMVPN network addresses)
- Restricted list as specified by White Cell

2.9 *Red Cell members shall not make any use of the Remote Desktop Protocol (RDP) TCP port 3389 on Gray Cell user workstation hosts within any*



BLUENET. This port is reserved for Gray Cell remote administration use only.

2.10 Red Cell members shall document all successful active attacks.

2.10.1 Each documented event must include, at a minimum, the wall-clock time and date, a description of what action was taken and a description of the results. All Red Cell documentation must be in a form that can be captured for after-action analysis. The preferred procedure is to post the attack information on the Red Cell Wiki.



3.0 Red Cell Member Acknowledgement

- 3.0.1 I acknowledge that I have studied the *CDX 2015 Red Cell Rules of Engagement*. Further, I understand that any failure to follow these instructions or the instructions of the CDX Leadership as it pertains to Red Cell activities may have a serious and negative effect on CDX 2015 and may result in my early exit from the exercise.

Name (Last, First): _____

Organization: _____

Signature: _____

Date: _____