## BigBlueButton, Legacy DCO Connect, & Adobe Connect/DCO II Comparison

Background: The Defense Information Systems Agency (DISA) has publicly stated they intend to replace Defense Connect Online (DCO) with an open source based solution they refer to as Defense Collaboration Services (DCS). This document compares the DCS web conferencing component, BigBlueButton, with DCO Connect and Adobe Connect/DCO II capabilities to the best of our knowledge.

Common Features	Big Blue Button	Legacy DCO Connect	DCO II Connect / Adobe Connect
1. Persistent rooms & content between sessions; 'always-on' reservationless rooms	$\bigcirc$		
2. Backstage/Presenter-only area	$\bigcirc$		
3. Ability to have multiple presenters & hosts in room at same time	$\bigcirc$		
4. Bandwidth efficient sharing of content	$\bigcirc$		
5. CAC enabled			$\bigcirc^1$
6. Does NOT require Java on user workstations	$\bigcirc^2$		
7. Telephony & VTC integration	$\bigcirc$	$\bigcirc$	
8. Ability to transfer files of various formats (i.e. 'File Share Pod')	$\bigcirc$		
9. Interactive recordings	$\bigcirc$		
10. Custom pod support	$\bigcirc$		
11. Pre-recorded video and audio support (without low quality screenshare)	$\bigcirc$		
12. Animations supported in uploaded PowerPoint presentations	$\bigcirc$		
13. Ability to drag and drop presentations, imagery, and rich media assets to share pod	$\bigcirc$		

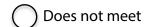
<sup>&</sup>lt;sup>1</sup>CAC integration expected rollout in Q2 CY15



<sup>&</sup>lt;sup>2</sup>BigBlueButton requires Java 7 Update 51 for screensharing

Common Features (continued)	Big Blue Button	Legacy DCO Connect	DCO II Connect / Adobe Connect
14. Simultaneous sharing of screens, slides, or content			
15. Editable recordings	$\bigcirc$		
16. CAC enabled, but not required to host sessions			
17. Ability to index and anonymize recordings			
18. Various levels of security for screensharing (desktop, window, app)			
19. Whiteboarding over video & paused screenshare			
20. Breakout rooms			
21. Reports on meeting usage, attendance, & interactivity			
22. Real-time engagement tracking & engagement dashboard			
23. Host content for on-demand consumption by users			
24. No admin rights required for screensharing plugin			
25. Preparing mode	$\bigcirc$		
26. Support for upload of rich media file types (MP4, SWF, etc.)			
27. Recordings: ability to start and stop in room without having to pre-specify in setup			
28. MSFT Outlook integration			





Mobile	Big Blue Button	Legacy DCO Connect	DCO II Connect / Adobe Connect
1. Robust mobile app for Android & iOS	$\bigcirc_3$		
2. Ability to fully host session and drive content from mobile app			
3. Ability to see shared content in mobile app			
4. Ability to deliver & track on-demand content on mobile devices			4
5. Mobile app offered on DISA Mobile Application Store			

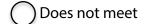
<sup>&</sup>lt;sup>3</sup>Very limited BigBlueButton & Mconf apps available on Google Play store (i.e. no content view) <sup>4</sup>Captivate authored HTML5 content, hosted on DCO Cloud Connect content library

eLearning	Big Blue Button	Legacy DCO Connect	DCO II Connect / Adobe Connect
1. Industry-leading tools to quickly author and deploy training content			5
2. Curricula and learner management		$\bigcirc$	
3. Learner tracking and reporting			
4. Live virtual and on-demand training		$\bigcirc$	
5. Customizable course catalogs and landing pages			
6. Ability to host content (including rich media) for on-demand consumption, with interaction tracking & scoring	$\bigcirc$	$\bigcirc$	
7. Customizable event landing pages, automated registration/lead-up/follow-up communications	$\bigcirc$	$\bigcirc$	

Meets

Maturity & Scale	Big Blue Button	Legacy DCO Connect	DCO II Connect / Adobe Connect
1. Support for up to 1,500 participants in a room	$\bigcirc_{e}$		
2. Technology recognized by analysts as industry leader		7	7
3. SIPR capable			
4. Greater than version 1.0 core products	$\bigcirc_8$		
5. Hosted in Amazon GovCloud, very good server/enclave performance & well refined routine maintenance	$\bigcirc$	$\bigcirc$	
6. Developed in US	$\bigcirc$		
7. Robust support organization, user engagement team, & mobile training team	$\bigcirc$		
8. Same tool used by tactical forces (part of USMC & Army tactical server suite); existing trained personnel throughout DoD	$\bigcirc$	9	9
9. Enterprise use & deployment by thousands of large scale commercial companies	$\bigcirc$	N/A	
10. Failover / COOP capable	$\bigcirc$		





<sup>&</sup>lt;sup>6</sup>DCS' BigBlueButton stated max attendee per room is 250. <u>https://disa.deps.mil/disa/org/ES7/DCS/SitePages/Home.aspx</u>

<sup>&</sup>lt;sup>7</sup>Gartner Magic Quadrant for Web Conferencing 2013, Forrester Wave Web Conferencing 2013.

<sup>&</sup>lt;sup>8</sup>BigBlueButton latest release is 0.9x (<a href="http://bigbluebutton.org/history">http://bigbluebutton.org/history</a>) & underlying streaming engine Red5 is 1.0 (<a href="http://www.red5.org">http://www.red5.org</a>)

<sup>&</sup>lt;sup>9</sup>Over 150 separate implementations of Connect throughout DoD, including in the Army combat unit tactical stack (Battlefield Common Server Suite – BCCS) & USMC tactical stack (Tactical Collaborative Work Suite – TCWS)