



Command with Code

A Technical Solution for the JFACC to Fight Tonight!

Lt Col Mike “Swingline” Stamat

The “hot wash”





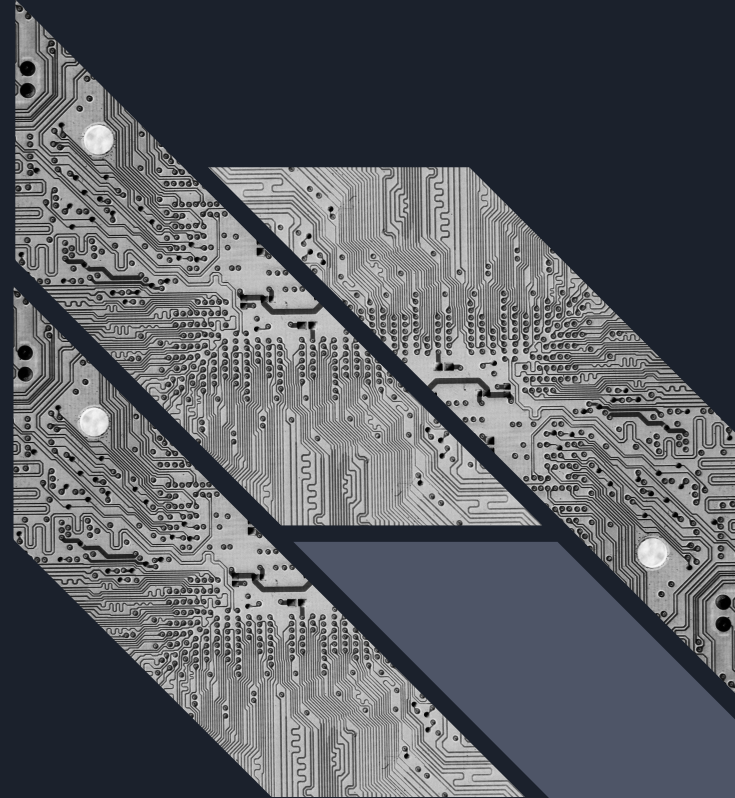
Change the plan... change the terrain.





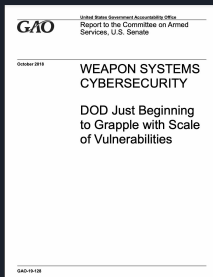
“I don’t care so much if a computer dies,
but I do care if it lies.”

Dr. Kamal Jabbour
Air Force Research Laboratory

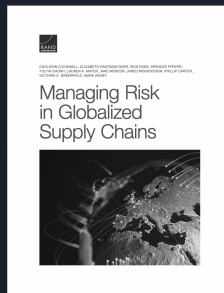


Risk

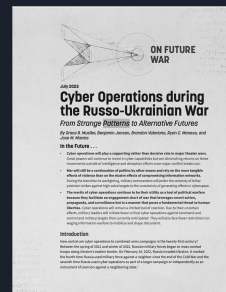
When the conflict begins, our warfighting capabilities will become warfighting liabilities.



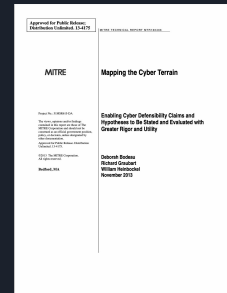
GAO



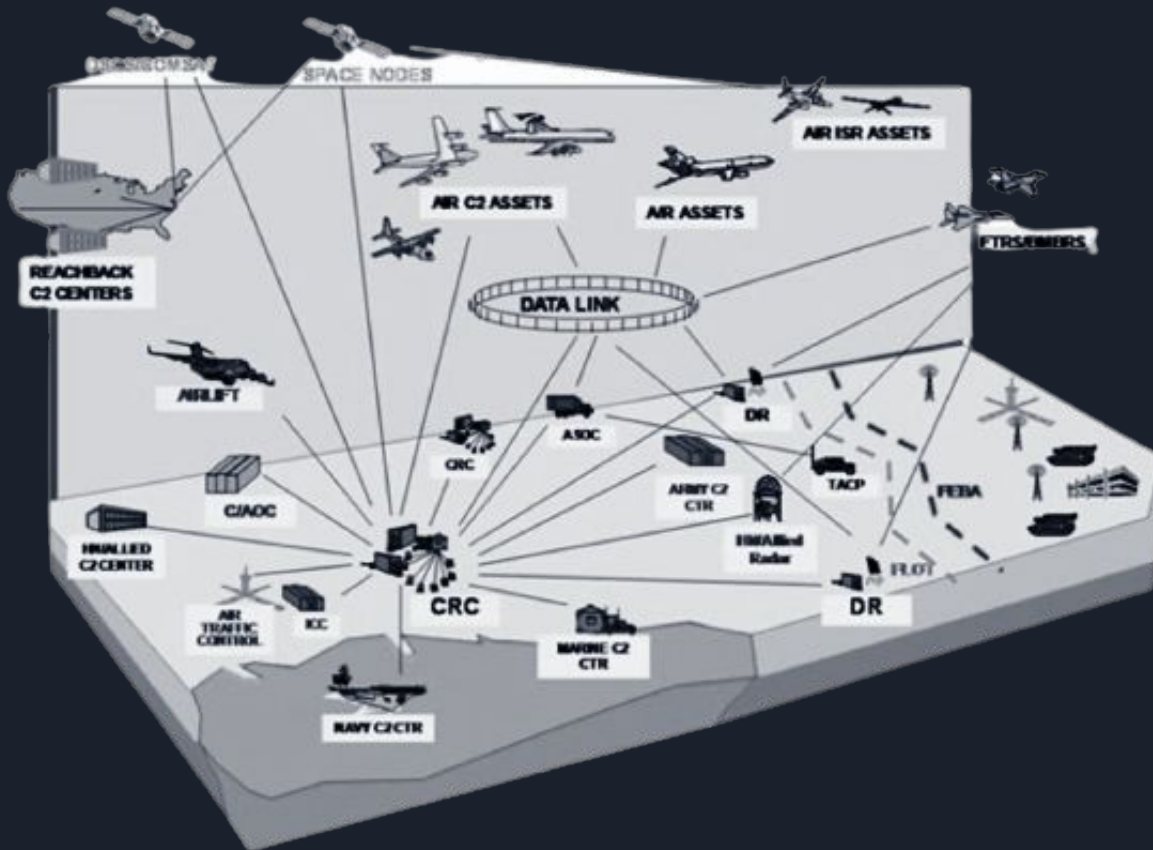
RAND



CSIS



MITRE



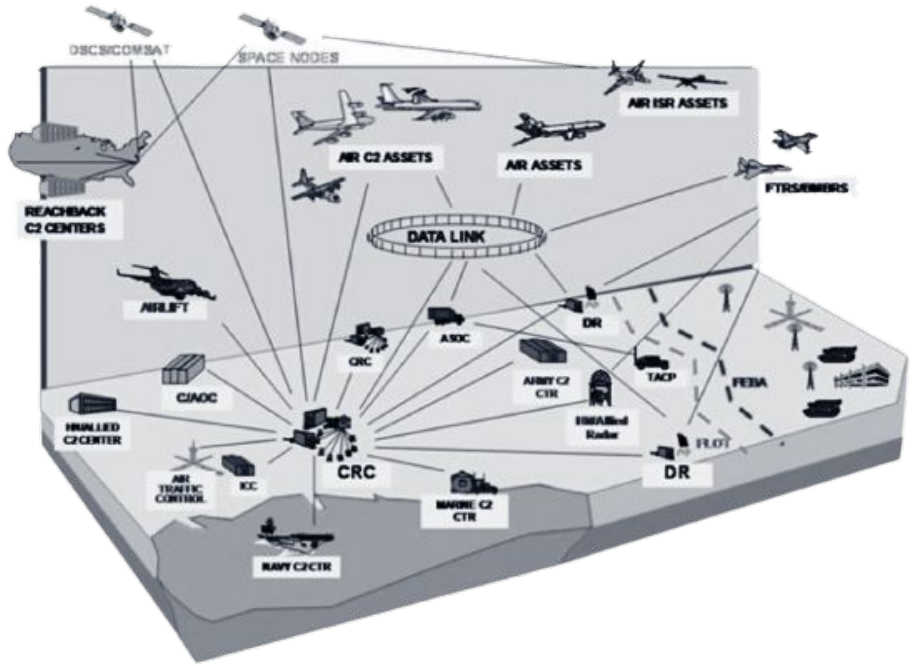
Maintaining information advantage.

Air Operations Center



Problems...

A platform doesn't just use the network—it is the network.

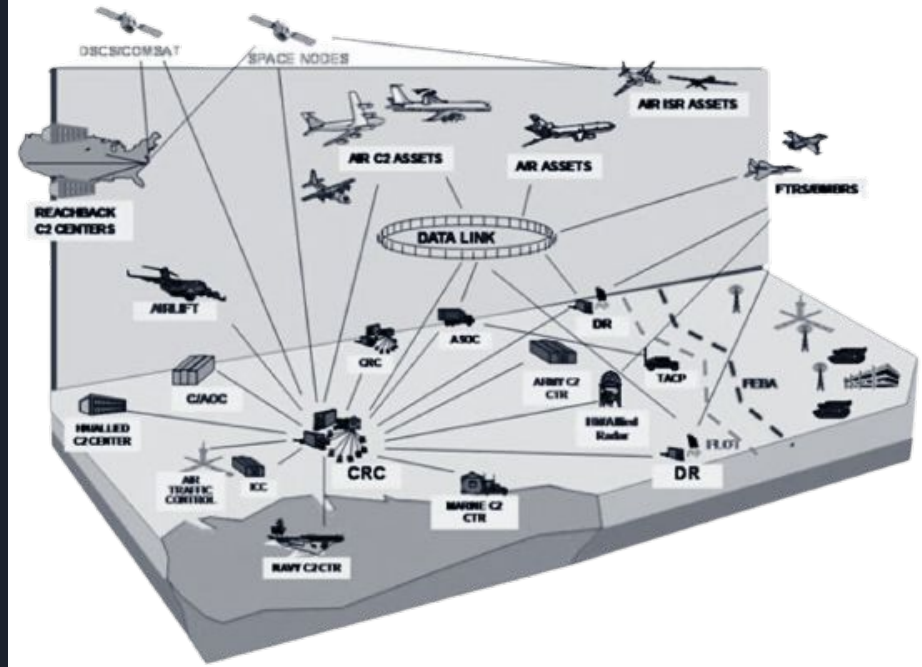


Problems...

Interdependent

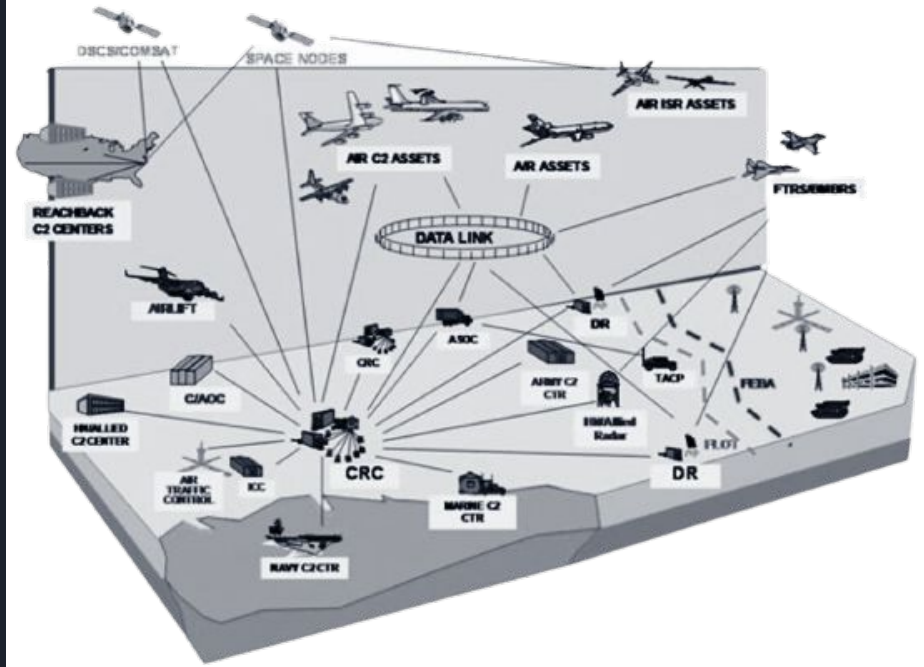
or

Independent?



Problems...

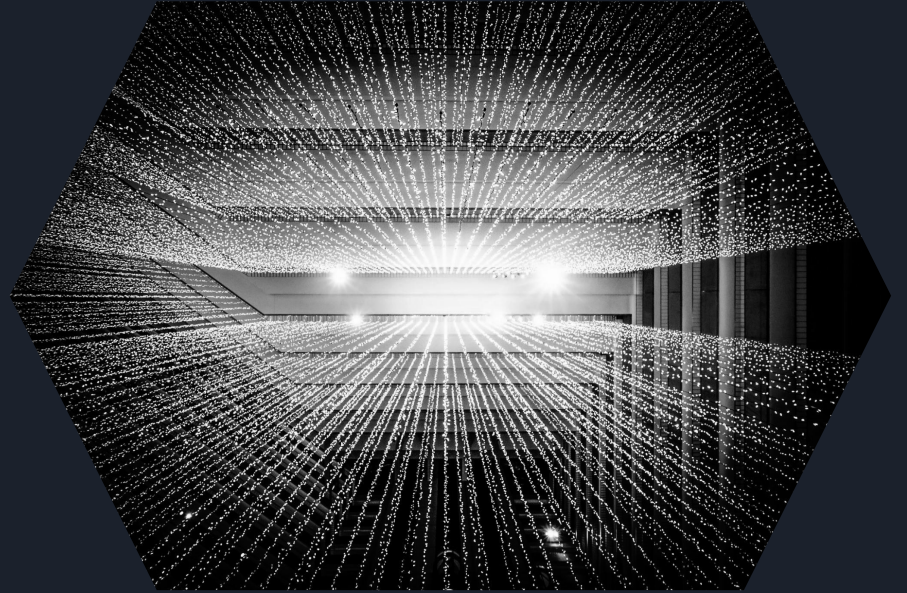
Sharing the risk.





An approach...

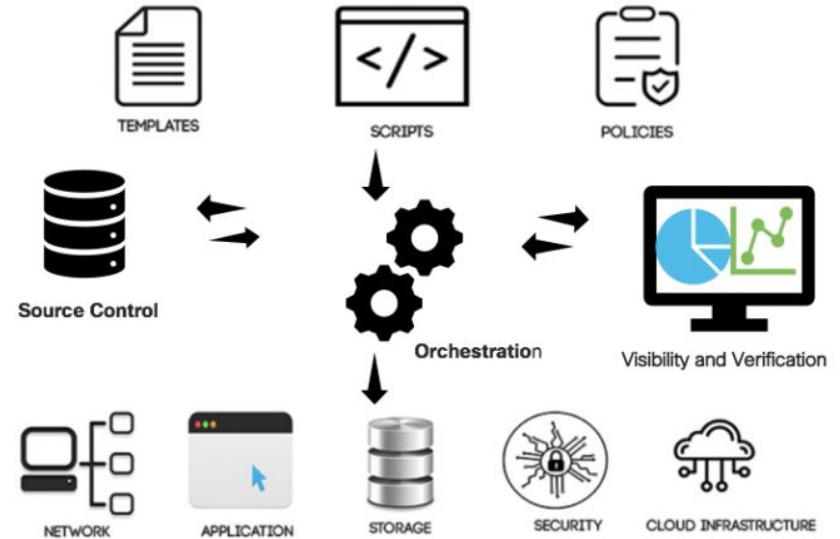
Infrastructure-as-Code (IaC)



The process of building and maintaining computer systems like software.

Automation...

The objective is to change quickly and safely.





Netflix: An IaC Success Story

01 A graceful degradation.

02 A painful restoration.

03 Enter the “Chaos Monkey”.

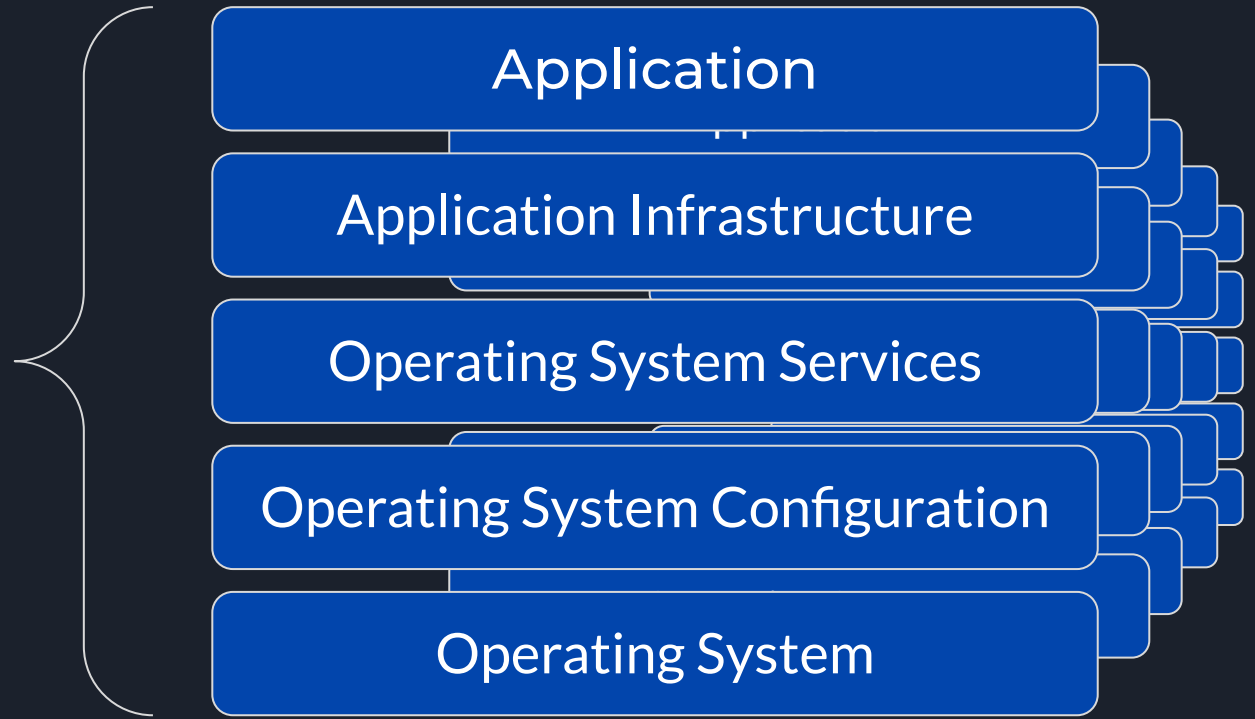




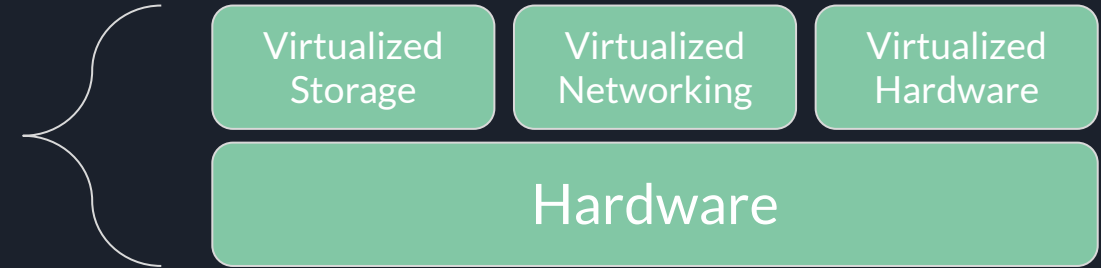
IaC is the “Chinese Menu”

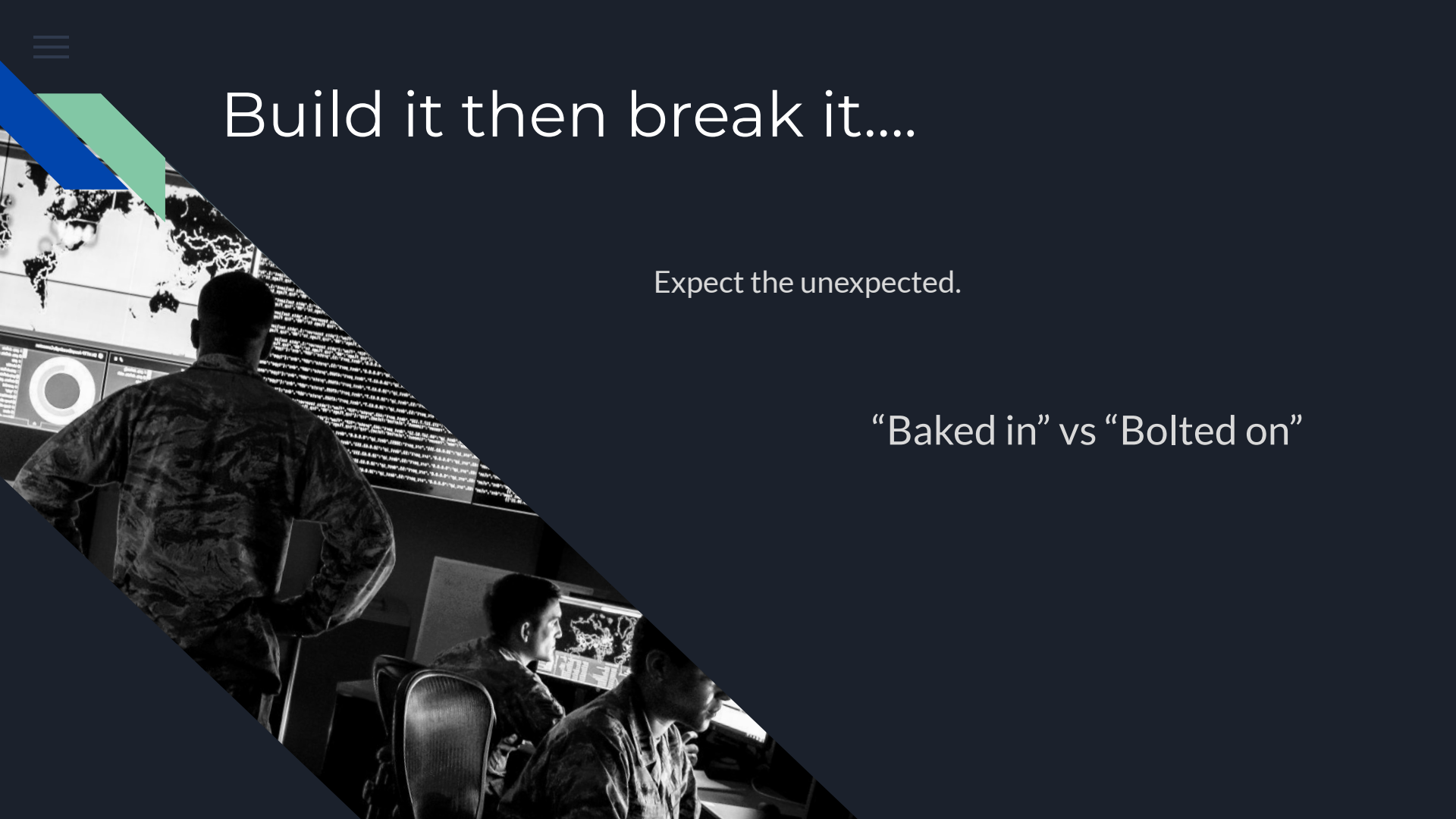


IaC Units



“The Cloud”





Build it then break it....

Expect the unexpected.

“Baked in” vs “Bolted on”

More options for the JFACC

Strategically predictable but operationally unpredictable





Way Forward

01 Publish guidance.

02 Build environments.

03 Develop interfaces.

04 Train personnel.





Questions?