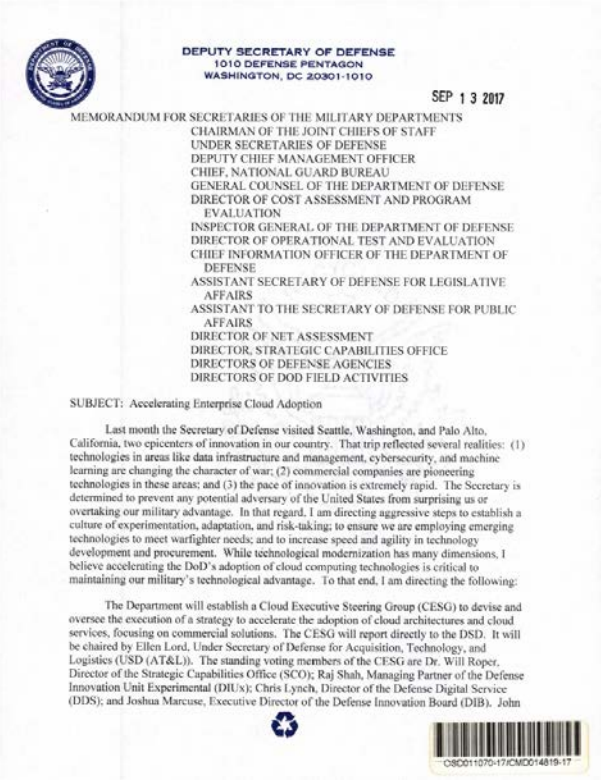
DEFENSE INFORMATION SYSTEMS AGENCY
The IT Combat Support Agency

Cloud Intro

Mr. John Hale
Chief, DISA Cloud Portfolio
May, 2018

Deputy Secretary of Defense Memo



DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

SEP 1 3 2017

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DEPUTY CHIEF MANAGEMENT OFFICER
CHIEF, NATIONAL GUARD BUREAU
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
DIRECTOR OF COST ASSESSMENT AND PROGRAM EVALUATION
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR OF OPERATIONAL TEST AND EVALUATION
CHIEF INFORMATION OFFICER OF THE DEPARTMENT OF DEFENSE
ASSISTANT SECRETARY OF DEFENSE FOR LEGISLATIVE AFFAIRS
ASSISTANT TO THE SECRETARY OF DEFENSE FOR PUBLIC AFFAIRS
DIRECTOR OF NET ASSESSMENT
DIRECTOR, STRATEGIC CAPABILITIES OFFICE
DIRECTORS OF DEFENSE AGENCIES
DIRECTORS OF DOD FIELD ACTIVITIES

SUBJECT: Accelerating Enterprise Cloud Adoption

Last month the Secretary of Defense visited Seattle, Washington, and Palo Alto, California, two epicenters of innovation in our country. That trip reflected several realities: (1) technologies in areas like data infrastructure and management, cybersecurity, and machine learning are changing the character of war; (2) commercial companies are pioneering technologies in these areas; and (3) the pace of innovation is extremely rapid. The Secretary is determined to prevent any potential adversary of the United States from surprising us or overtaking our military advantage. In that regard, I am directing aggressive steps to establish a culture of experimentation, adaptation, and risk-taking; to ensure we are employing emerging technologies to meet warfighter needs; and to increase speed and agility in technology development and procurement. While technological modernization has many dimensions, I believe accelerating the DoD's adoption of cloud computing technologies is critical to maintaining our military's technological advantage. To that end, I am directing the following:

The Department will establish a Cloud Executive Steering Group (CESG) to devise and oversee the execution of a strategy to accelerate the adoption of cloud architectures and cloud services, focusing on commercial solutions. The CESG will report directly to the DSD. It will be chaired by Ellen Lord, Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)). The standing voting members of the CESG are Dr. Will Roper, Director of the Strategic Capabilities Office (SCO); Raj Shah, Managing Partner of the Defense Innovation Unit Experimental (DIUx); Chris Lynch, Director of the Defense Digital Service (DDS); and Joshua Marcuse, Executive Director of the Defense Innovation Board (DIB). John

OSD011070-17/CMD014819-17

- **Sep 13th, 2017 by Deputy Secretary of Defense**
- **Creates the Cloud Enterprise Steering Group (CESG)**
- **Two phase approach**
  - **Phase 1: Resolve acquisition issues around DoD consuming commercial cloud**
  - **Phase 2: "Rapidly transition" DoD Components and/or Agencies to cloud**
- **Creates regular reporting process of status**

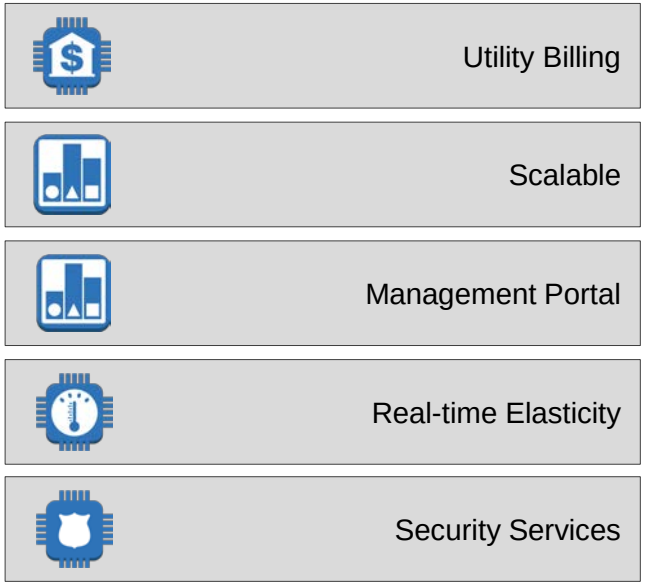
What is cloud?

The National Institute of Standards and Technology's (NIST) defines cloud in NIST Special Publication 800-145

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction

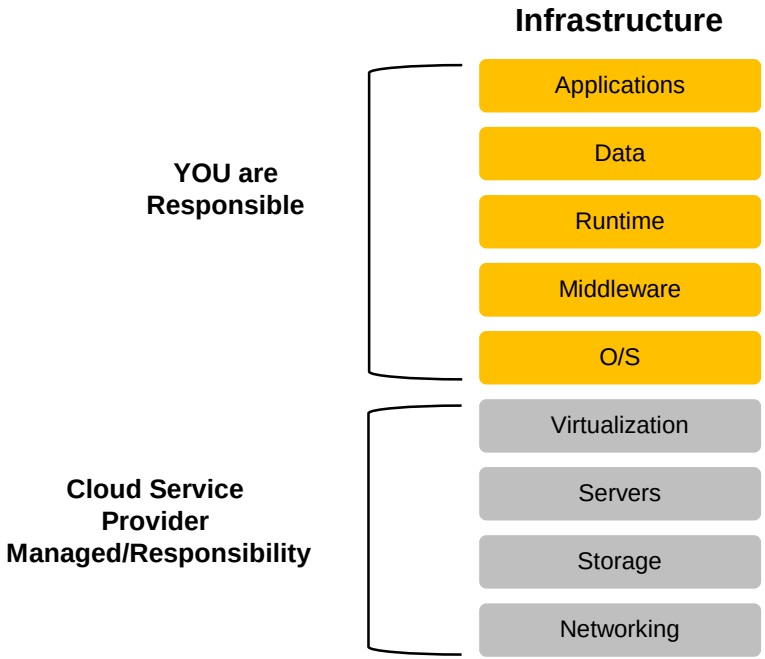
What is cloud? (Cont.)

- **In reality, cloud is:**



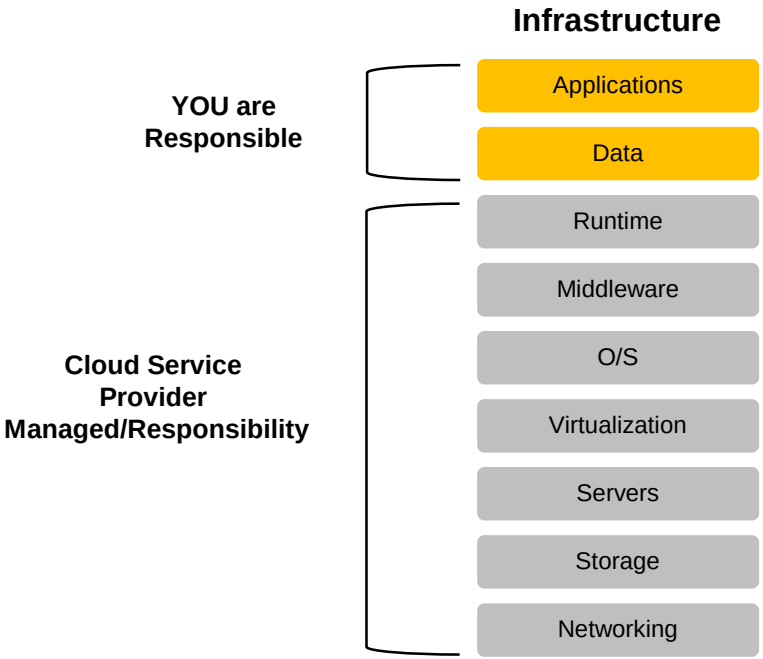
Cloud Models

Infrastructure as a Service (IaaS)



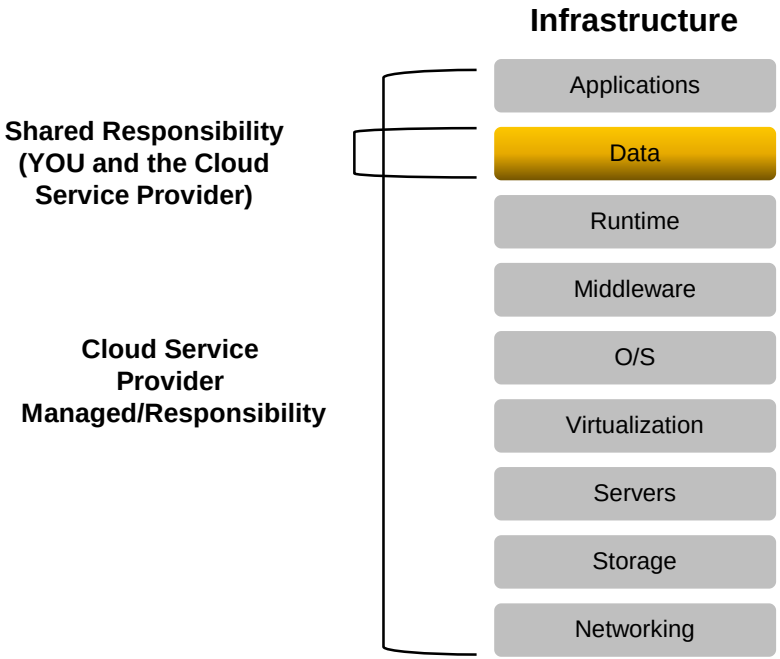
Cloud Models (Cont.)

Platform as a Service (PaaS)



Cloud Models (Cont.)

Software as a Service (SaaS)

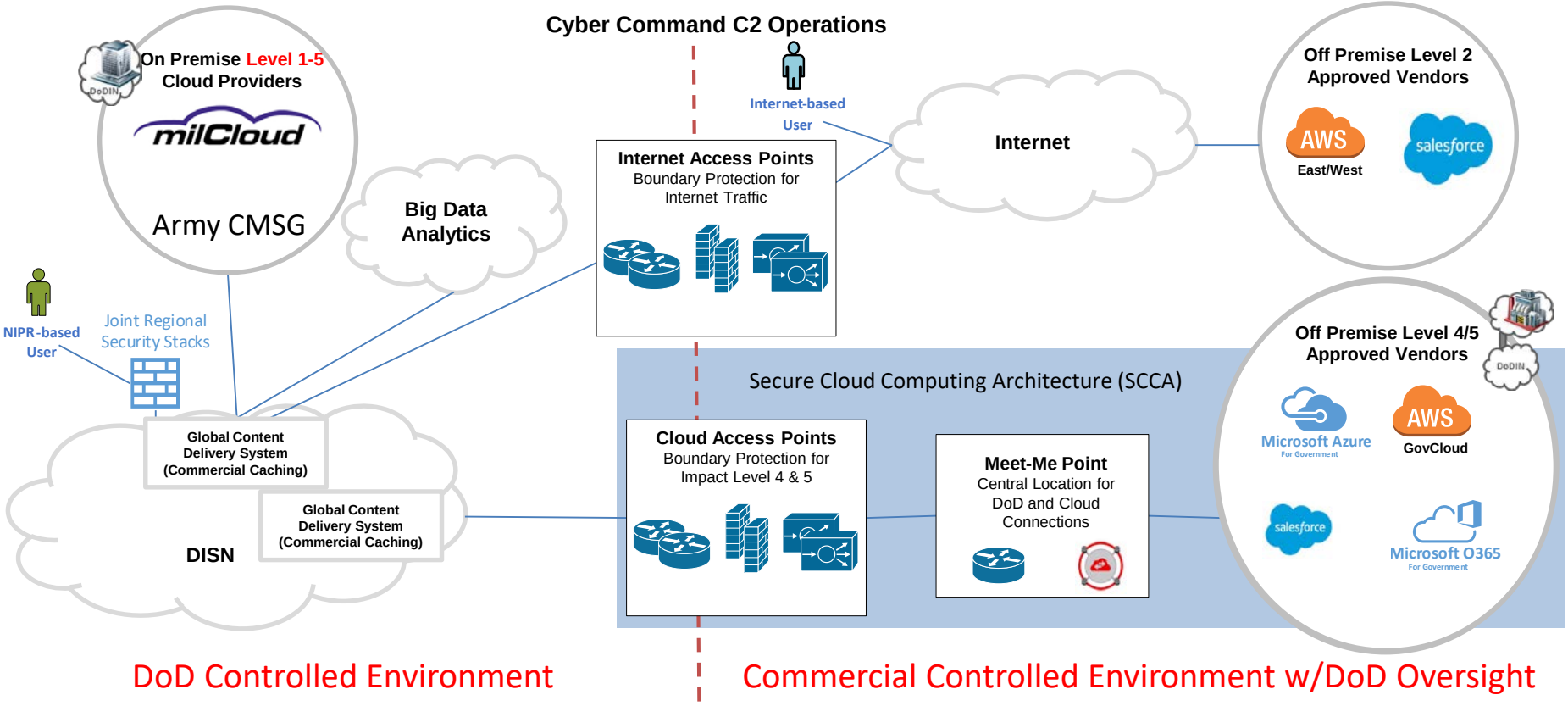


Impact Levels

- **Impact Level 2 (IL2) – Unclassified Data (public data) – requires shared or dedicated infrastructure**
- **Impact Level 4 (IL4) – Unclassified Sensitive Data (FOU, CUI, etc) – required shared or dedicated infrastructure with strong evidence of virtual separation controls and monitoring**
- **Impact Level 5 (IL5) – Unclassified Sensitive Data (NSS, PIAA, HIPA) – required dedicated infrastructure**
- **Impact Level 6 (IL6) – Classified Data (Secret, etc) – required dedicated infrastructure approved for classified informantion**

Unclassified DoD Commercial Cloud Deployment Approach

Vendors named within are approved or under contract to provide specified services to DISA or DOD



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