



DEPARTMENT OF THE AIR FORCE  
WASHINGTON DC

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OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR ACQUISITION WORKFORCE

SUBJECT: Cloud One and DevSecOps

It's okay to have your head in the clouds. In fact, I highly recommend it if you can return your feet to the ground periodically. Big ideas floating there are not aspiration; they're evaporation that—given the right encouragement—can water entire fields of seeds. Watching big ideas germinate and flourish is a career-changing experience all should experience. I hope recent changes in Air Force acquisition give you a taste of how big your possibilities are.

It's all the more fitting our next big pursuit involves digital clouds. Little known fact: we have an Air Force Cloud program called "Common Computing Environment" (CCE). Like Monty Python's Castle Anthrax, it's not a very good name for something commercial industry has shown could "make it rain" for warfighters and taxpayers alike. Unfortunately, the Air Force has a bad habit of making CCE a yearly bill payer, scattering clouds where there could be a storm front.

Our Program Executive Office (PEO) C3I&N, Chief Software Officer (CSO), and developers at LevelUp and Space Camp (who get a huge shout-out for developing their own Continuous Integration/Continuous Delivery pipeline—fantastic!) have been on a mission to supercharge CCE so we can rename, rebrand, and relaunch cloud dominance as foundational to information dominance. I am pleased to announce the cloud formerly known as CCE is back in black as "Cloud One".

Now there are two ways we can approach Cloud One: great for government or just plain great. I am tired of great for government: tired of disaggregated IT systems with undiscoverable data, tired of AWOL analytics and machine learning, tired of the software development ramp being hard, and tired of trailing commercial technology power curves in general. I want to be just plain great—a true digital Air Force capable of connecting, sharing, and learning across all domains—but to get there, we must sync on the Cloud One vision and begin migration.

Here's the "rain dance" to make it happen:

**drop 1:** Move LevelUp and DoD Enterprise DevSecOps Platform (DSOP) to Cloud One within 30 days. Create a process for software teams to access development and production environments at Impact Level (IL) 2, IL4 and IL5. (PEO C3I&N, CSO)

To code at scale, we must create a specialized team (i.e., LevelUP) that excels at developing and operating Infrastructure and Platform as a Service (I/PaaS), especially to facilitate a continuous Authority to Operate (c-ATO) and enterprise licenses across the Air Force. In the future, this "factory" team will provide managed I/PaaS—at multiple classification levels—so that application development teams can focus on coding, deploying, and winning for the warfighter.

To help our software factories achieve IL5, we will make Cloud One a "Digital Air Force Base" (so it can be part of the DoD Information Network) and build Cloud-based Virtual Private Networks, developer-approved endpoints, and a Cloud Security Requirements Guide working with DoD and Air Force CIOs. (CSO, LevelUP).

**drop 2:** Create Air Force-wide contracts for bulk licenses and services within 90 days, including tools/account management, cybersecurity monitoring and assessments, help desk, and site reliability engineering. However, 90 days isn't exactly celerity, so our "Lightning Contracting Challenge" will look for a mechanism to cut this in half. Calling all contracting ninjas! (PEO C3I&N, PEOs, AQC)

**drop 3:** Launch Software Enterprise Services with collaboration, cybersecurity, software, DevSecOps as a Services, and chat tools on Cloud One at IL5 targeting, 15+ services using the DoD hardened containers within 90 days. (PEO C3I&N, PEO Digital/Kessel Run, CSO)

**drop 4:** Create a SECRET offering (i.e., IL6 "Grey Cloud") and SECRET/SAP offering (i.e., "Black Cloud") on Cloud One within 120 days. (PEO C3I&N, CSO working with OSD CIO)

**Cloudburst:** Migrate all Air-Force-managed unclassified development environments to Cloud One, including Kessel Run, Kobayashi Maru, Space Camp, LevelUp, and Bespin. Additionally, pathfinder programs Unified Platform, F-16, F-22, Ground-Based Strategic Deterrent, and B-21 will migrate to DevSecOps-as-a-Service based on acceptable risk to upcoming capability deliveries, and I encourage other programs to volunteer!

Within 90 days, components of the LevelUP DevSecOps-as-a-Service Platform will be available for use in various environments (including Cloud and classified environments) and the fully-managed development platform, within 60 days. The Kessel Run platform will also be available on Cloud One following a timeline that maintains continuity of its current missions. A big thanks to our Kessel Runners for already beginning the migration!

We will work with the very forward-leaning DoD and Air Force CIO teams to c-ATO the Cloud One development/production environments (goal of 30 days) as part of the broader shift to a digital Air Force and Department. This cloudburst will be challenging, but migrated programs will experience significant cost and schedule savings, and new programs, a faster path to coding. Be brave; take a risk on upfront costs; and experience the back-end benefits!

Our second Cloudburst is already contemplating an Air Force mobile app platform as a pathfinder for future cloud native app development as well as a mass migration of our logistics IT systems. If you have a passion for apps, logistics, or Cloud—now is your time to dream big!

I know this is asking a lot—especially buying into I/PaaS upfront with program funds—but we need digital mavericks willing to take a calculated risk to leverage commercial digital technologies, like Kubernetes, that allow us to abstract ourselves from Cloud providers and platforms while coding, at scale, efficiently and securely. The Air Force has defied gravity from the beginning, eschewing earth for the blue and black yonder. Only in the digital domain are our feet still grounded. It is time we put our heads, data, and cutting-edge capabilities in Cloud One so that future Airmen fight with electron speed and lightning bolt power.

And if you're thinking, "Now is not the right time," it never is for those experiencing the future; it always is for those making it. Let's make it!



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