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NOAA Response to the *DAARWG Report on the NESDIS Common Cloud Framework (NCCF)*

Kenneth S. Casey, PhD, Deputy and Acting Chief, Data Stewardship Division
of the NESDIS National Centers for Environmental Information (NCEI)

Christopher O'Connors, Chief, Ground Services Division of the NESDIS Office
of Common Services (OCS)

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Outline

- Summary of Recommendation Response
- NOAA Actions in Response to Report
- Challenges/Opportunities
- Path forward for future engagement with the SAB



Summary of Recommendation Response

- In Nov 2022, the DAARWG stated their support for NCEI's plan to use commercial cloud resources within the NCCF for the next-generation archive and provided seven specific observations and concerns
- NESDIS agrees with the concerns, provided a detailed response to each, and welcomes the opportunity for more routine interactions with the DAARWG



NOAA Actions in Response to Report

- ✓ • Clarified terminology following Open Archival Information System (OAIS) Reference Model, the ISO standard for digital archives (ISO 14721) and named the new cloud archive system: Open Information Stewardship Service (OISS)
- ✓ • Refined two-year cloud archive development and migration plan
- Developing metrics to measure and track cost performance
- Formalizing AWS “exit strategy” involving NOAA Cloud Utility BPA provision
- Working with CEOS on STAC best practices for eventual NCCF implementation
- Developing a data optimization strategy and updating NCEI netCDF Templates for cloud considerations
- Tracking emerging NOAA Open Source Software policy for eventual sharing of code from the NCCF (but not for the NCCF Infrastructure-as-Code itself)



Challenges/Opportunities

- Once-in-a-career opportunity to build a “Web 3.0” archive from first-principles with a knowledge graph at its core, enabling semantic interoperability, scientific reproducibility, linked open data, and AI/Digital Earth Twins
 - Leveraging the community (e.g., ESIP, AGU Informatics, CEOS) and DAARWG to stay on course



Path Forward and Future Engagement with the SAB

- SAB/DAARWG - More frequent and routine interactions can be useful to help prioritize and track as we navigate the rapidly evolving landscape
- NESDIS would like to target opportunities for DAARWG members to review artifacts from Scaled Agile Framework (SAFe) planning events to provide the best current awareness and hold informal conversations to gain relevant and timely advice from the DAARWG

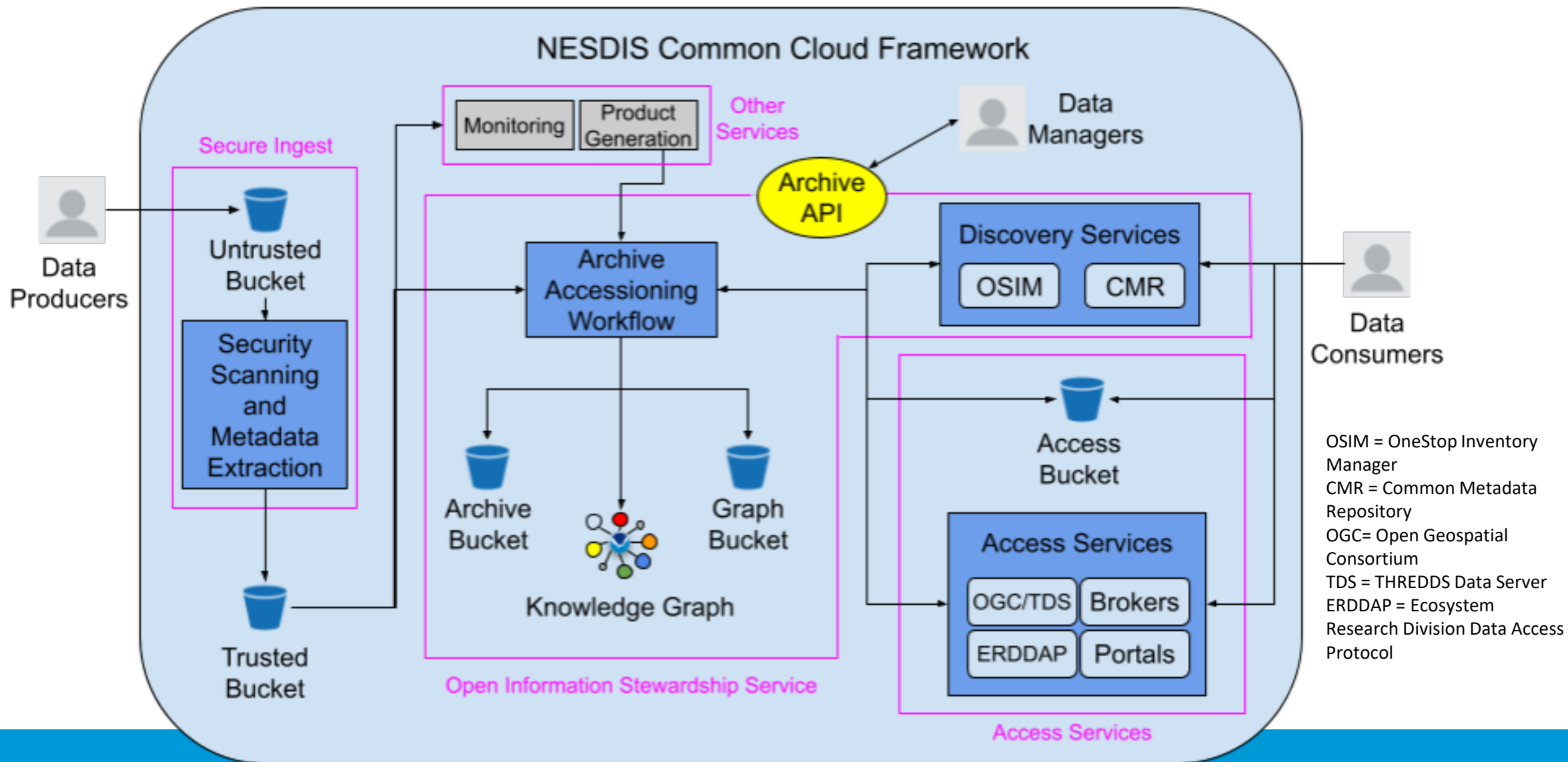


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BACKUP SLIDES



OISS in the NCCF Context





Backup Slides

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