

THE  
NATIONAL  
ARCHIVES

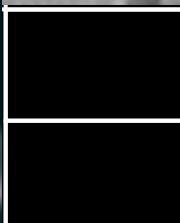


# The Vision

:: Project Omega



Adam Retter  
Project Omega Architect  
(Consultant)  
23 October 2023



# In the Before Times

< November 2019



EVOLVED BINARY

## Project Definition

**Project objectives** To extract, transform, and load The National Archives catalogue (15 million record descriptions) from a relational database (SQL Server) into a new native XML database. To then develop a minimum viable product application layer consisting of a set of API based catalogue data management functions to search, select, add, export-edit-import and delete data from the catalogue. We imagine the application layer being developed using the XML technology stack (XQuery, XSLT, XProc, Schematron, XSpec). We imagine the API will support data encoded using EAD3 (<https://www.loc.gov/ead/>). We expect database and application to be cloud hosted using AWS.

**Defined method of approach** The project will be in two stages:

1. Information gathering stage - resulting in recommendations for the direction of the rest of the project
2. Development stage - resulting in a pilot model implementing the chosen recommendation from the first stage.

**Project scope** Omega represents a pilot project to investigate the viability of alternative solutions to the current SQLServer systems. As such a complete system is out of scope for this project as are the following:

# **Phase 1**

:: Develop the Vision and Recommendations

**November 2019 to June 2020**

# **Phase 2**

:: Develop a Pilot Implementing the Recommendations

**January 2021 to November 2023**



EVOLVED BINARY

THE  
NATIONAL  
ARCHIVES

**TNA-CMP20/1**

The first  
Vision Document  
~ June 2020

PROJECT OMEGA



## Catalogue Model Proposal

[TNA-CMP20/1]

Prepared for: Jone Garmendia, The National Archives

Prepared by: Adam Retter, Evolved Binary  
adam@evolvedbinary.com

17 June 2020

Proposal version: 1.0.4



© The National Archives, 2020  
This information is licensed under the Open Government Licence v3.0.  
To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/>.



Page 1 of 104

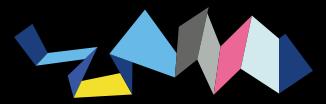
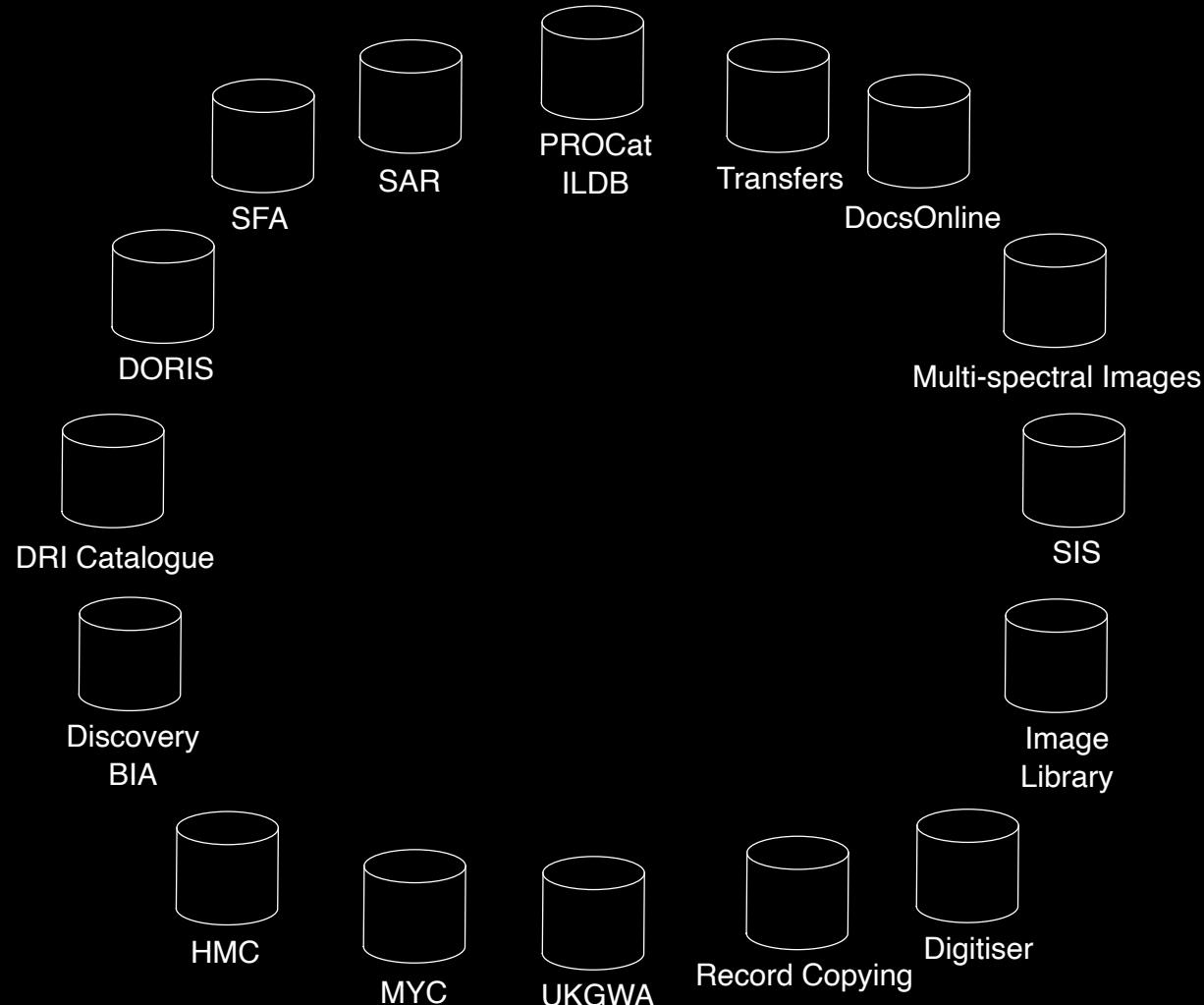
# What is the Vision?

- **One Canonical Catalogue System for the entire organisation**
  - Contains *everything* we know *about* our assets (e.g. records)
  - Provides services to the organisation
  - Scales and adapts with the organisation
  - Follows the principles of Open Government
- **A Catalogue that can:**
  - Hold metadata of Physical, Digital, and Hybrid
  - Support Redactions, and Surrogates
  - Support taxonomic classification
- **A new Catalogue Management System that:**
  - Replaces PROCat, and Authority Files Editor
  - Replaces SAR
  - Provides Taxonomy Editorial
- **Utilise appropriate modern standards and technology**



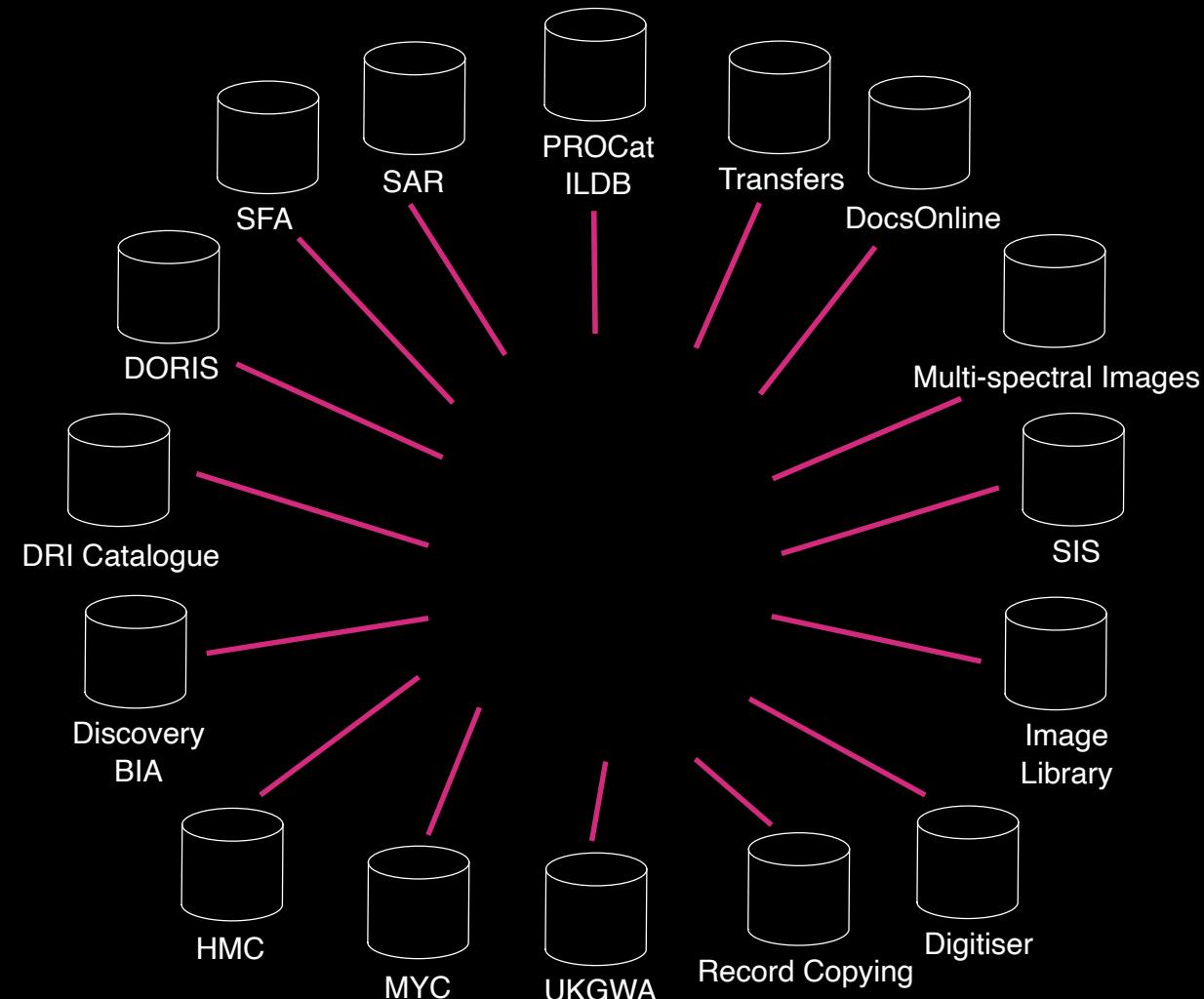
EVOLVED BINARY

# One Catalogue System



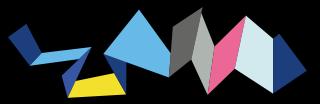
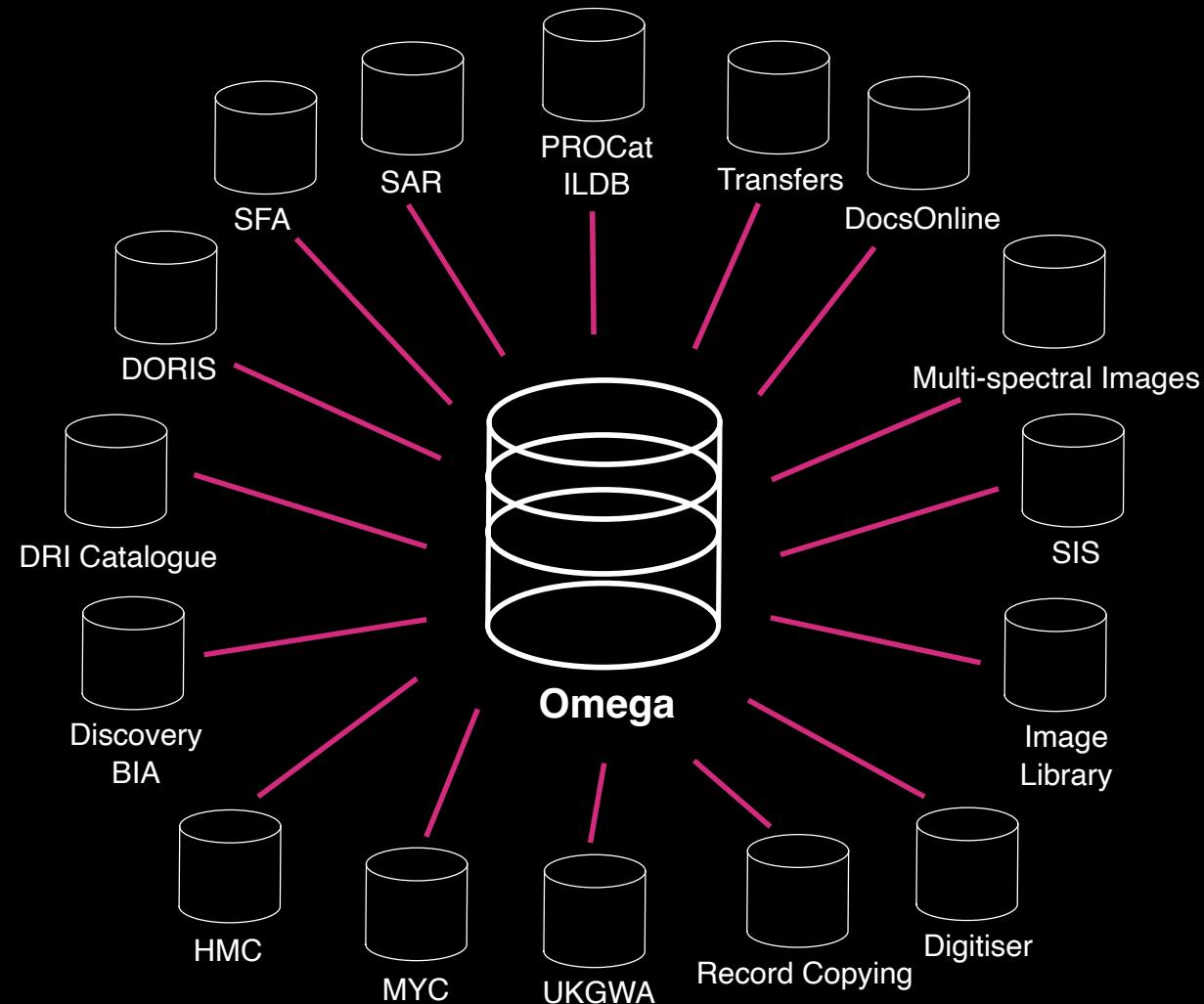
EVOLVED BINARY

# One Catalogue System



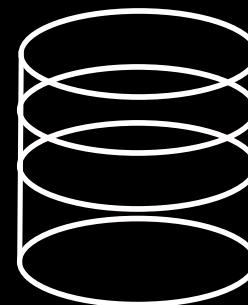
EVOLVED BINARY

# One Catalogue System



EVOLVED BINARY

# One Catalogue System

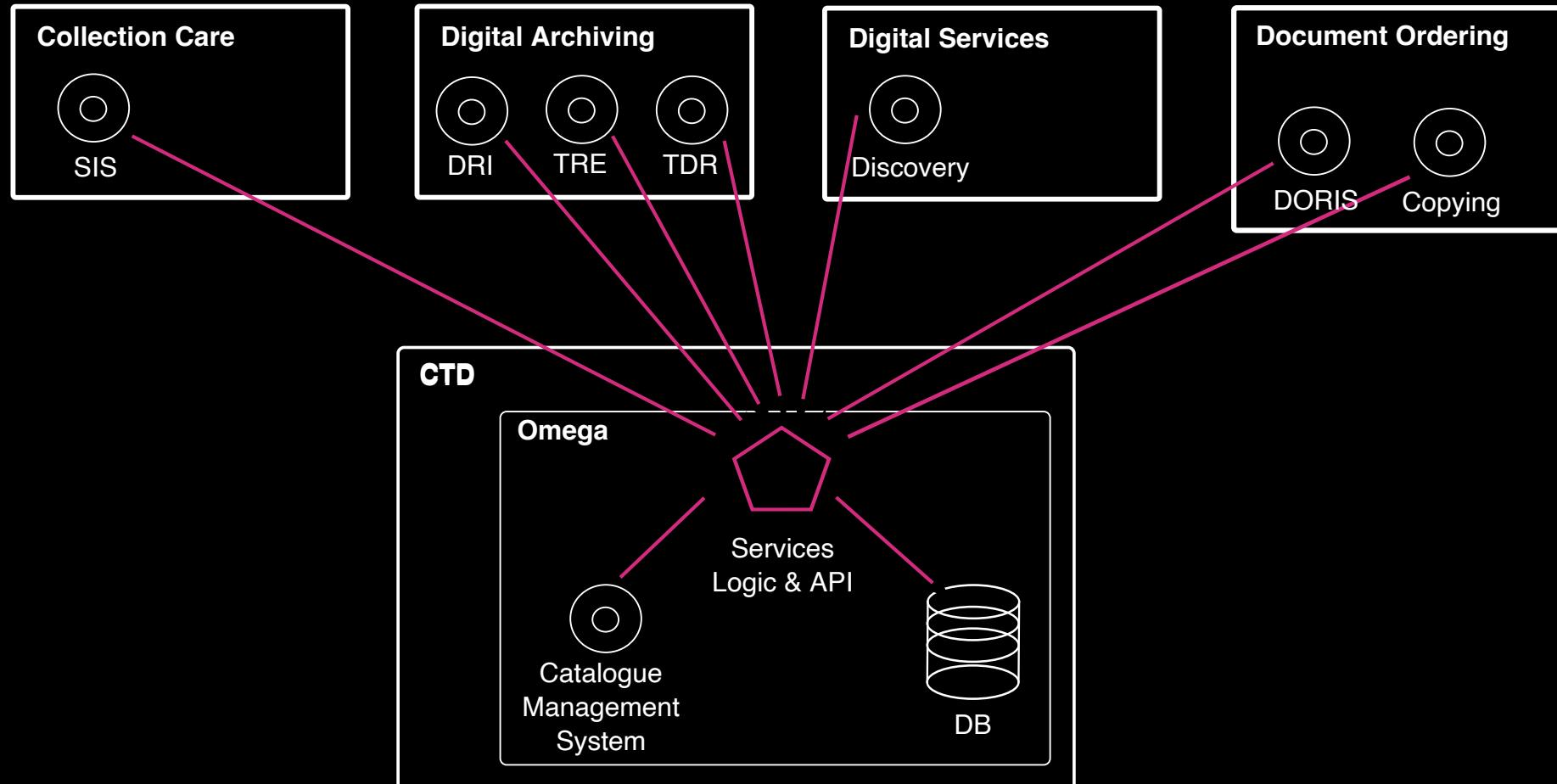


Omega



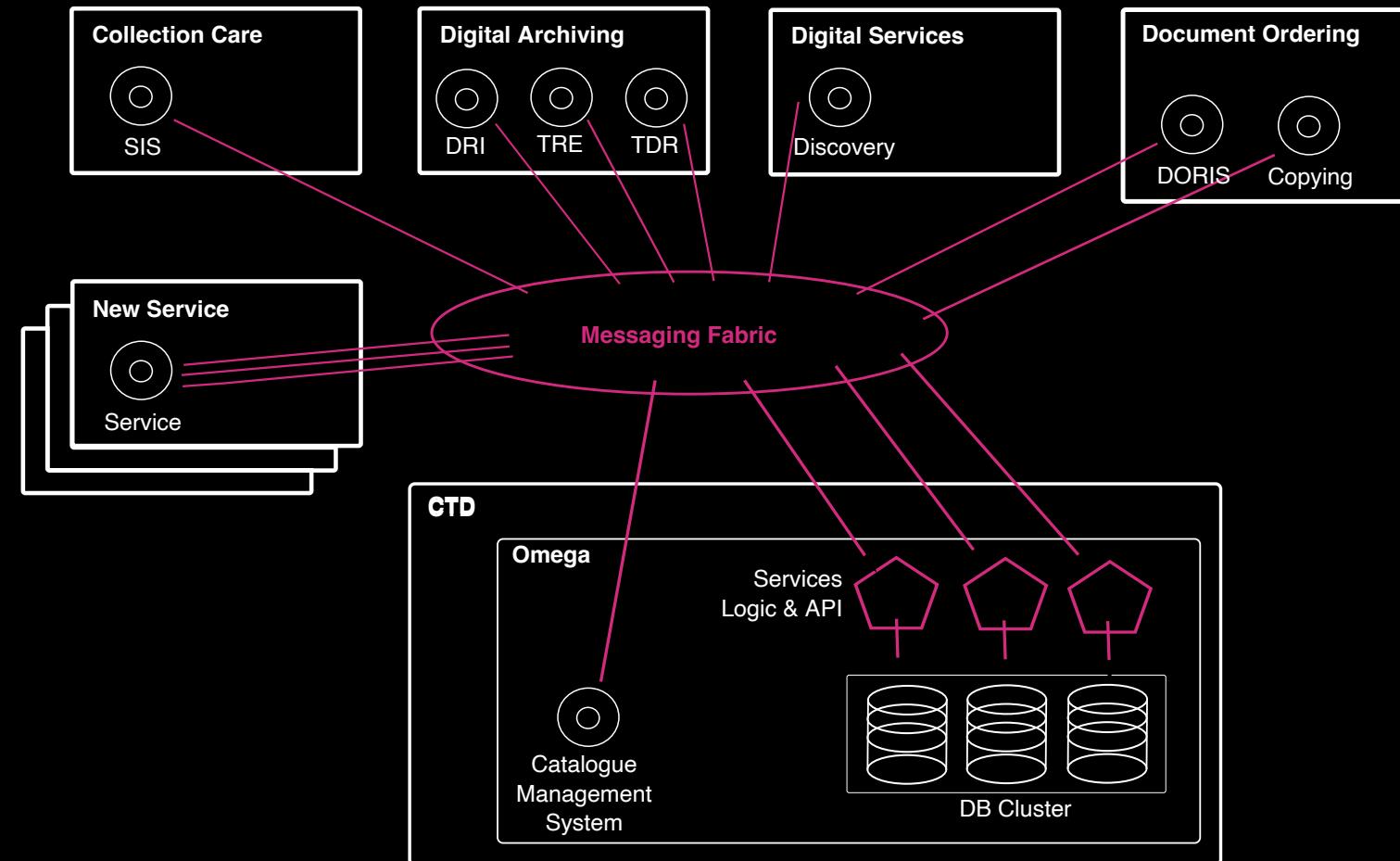
EVOLVED BINARY

# Provide Services to the Organisation



EVOLVED BINARY

# Scale and Adapt with the Organisation



EVOLVED BINARY

# Follow the Principles of Open Government

- **Transparent Government**
  - Permit multiple narratives
  - Preserve every change
  - Track and preserve provenance
- **Open Government**
  - The Catalogue is a “Public Record”
  - Archive it and provide Access to it
    - Publish it as Linked Data
  - Permit the user to “Time Travel”
    - How Government manages its records may be insightful!



EVOLVED BINARY

# Why should we do this?

- Today:
  - Paper Catalogue System
  - 20+ years old
  - Frequent crashes and problems
  - Unsupport(ed/able)
- We have 16+ Catalogue Systems
  - Large IT cost to operate
  - Wasted staff time through replicated effort
  - Data is *mostly* silo'd, disconnected, and duplicated
- Missing a good Catalogue of Digital Records



# Expected Gains

- **One Catalogue System**
  - Reduced Operational and Licensing Costs (IT)
  - Savings in staff time
  - Consistency across the organisation
- **Unified Assets Metadata**
  - Ability to bridge Physical and Digital
  - New/Multiple systems of arrangement
  - Discover new insights into our records and data
- **Streamline Business Processes**
  - Complete visibility into Accessions/Access process through asset tracking
  - Real-time publication of assets
  - Departmental/System independence through decoupling (messaging)
  - Operational agility
- **New Commercial Opportunities**



# For more information:

- Internal Website - [www.omg.catalogue.nationalarchives.gov.uk](http://www.omg.catalogue.nationalarchives.gov.uk)
  - Online from 2023-10-27
- Project Omega Catalogue Model Proposal (TNA-CMP20/1)
  - <https://cdn.nationalarchives.gov.uk/documents/omega-catalogue-model-proposal.pdf>
- Project Omega - Catalogue Data Model (TNA-OCDM20/1)
  - <https://cdn.nationalarchives.gov.uk/documents/omega-catalogue-data-model.pdf>
- Project Omega - DORIS Analysis (TNA-OCDA22/1)
- Various Articles and Presentations
  - 2021-09-13 - Developing a Pan-Archival Linked Data Catalogue - <https://www.youtube.com/watch?v=iLOQo7412r4>
  - 2021-07-23 - Omega API Initial Talking Points - <https://slides.com/adamretter/omega-api-initial-talking-points>
  - 2021-04-07 - What is a Record? - <https://slides.com/adamretter/omega-what-is-a-record>
  - 2020-05-29 - Omega Catalogue Data Model - <https://slides.com/adamretter/omega-catalogue-data-model>
  - 2020-01-28 - Pan-Archival Cataloguing - <https://slides.com/adamretter/tna-pan-archival-cataloguing>



**Project Omega offers the potential for**

**radical transformation  
and improvement of  
business processes**

**at The National Archives**



EVOLVED BINARY



# Thank you

Adam Retter  
Director  
Evolved Binary  
London, UK

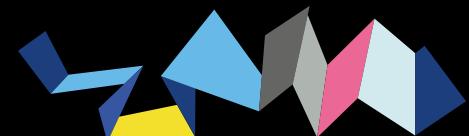
[www.evolvedbinary.com](http://www.evolvedbinary.com)



[adam@evolvedbinary.com](mailto:adam@evolvedbinary.com)



@adamretter



EVOLVED BINARY