AWS Modern Data Platform for SAP Customers

" Citra Solutions has developed a fast start migration for SAP Customers to an AWS Native Solution. Our pre-packaged offering gives you a safe passage away from the traditional approach for analytics on SAP data to a modern and scalable solution."

We provide more flexibility and agility at a lower cost of ownership while still providing the required governance and controls – Our AWS accelerator for SAP customers will get you started in **3 months for $138,000 AUD**

We solve the follow common requirements

For Central IT and Data teams

- Controlled and governed access to data
- Verified central set of core enterprise data
- Lower cost to run
- Lower cost to expand and meet new requirements
- Supports centralised, decentralised and hybrid models
- Open platform provides choice of analytics and data science tools
- Supports SAP data and other data sources including un-structured data

For Business Units

- Reliable performance reporting and metrics
- Access to relevant enterprise data
- Flexibility to create models to solve business unit specific problems leveraging the enterprise data
- Ability to quickly react to business challenges
- Choice of front-end analytics tools
- Combine SAP data with your other data sources
- Enable data science

Support for multiple horizontals with different levels of governance and controls

Data discovery

Business unit agility

Formal performance reporting

Data Discovery Sandpit → Business Unit Specific Data Models → Enterprise Data Models

Explore an idea

Quickly roll it out to a business unit

Turn it into an enterprise grade verified solution

All Organisation are different

We have built a template based on our experience working with a large number of organisations that use SAP ERP over many years; however we appreciate that all organisations are different in their culture, how they operate and maturity level. We are happy to adapt to meet your requirements:

- Your balance of central vs business unit analytics could be different
- Small to medium size organisations might be OK with just a lower cost data lake and the right standards for your analytics tools
- Your priorities could vary depending on you current pain points

We can also provide you with a Data and Analytics Strategy service taking into account your current solution and requirements

Overview of the AWS Lakehouse Approach

Data warehouses like SAP BW haven't been agile or dealt well with new data sources. Data lakes have struggled to handle formal performance reporting. The Lakehouse achieves the best of both. AWS serverless technology make is possible.

Choice of analytics tools

Once your data is in an open platform it is easy to use your choice of analytics tools

360 feedback to operational process's

Use your advanced analytics to update your ERP system: create notifications, update ratings, provide recommendations…

Sandpit, ad-hoc and data scientist areas

Allow data scientists and analysts to create their own models and perform advanced analysis

Data Models

The majority of your management and KPI reports will come off structured data models in the data warehouse. We have template data models for major SAP functional areas

Curated data can be used by business analysts, data scientists and as a base to feed data warehouses. It is catalogued, security tagged and transformed to high performance columnar format.

The data lake transforms raw data from SAP and other sources system into curated data.
Our accelerator includes mappings from technical to business field names and common transformations and table joins for SAP data.

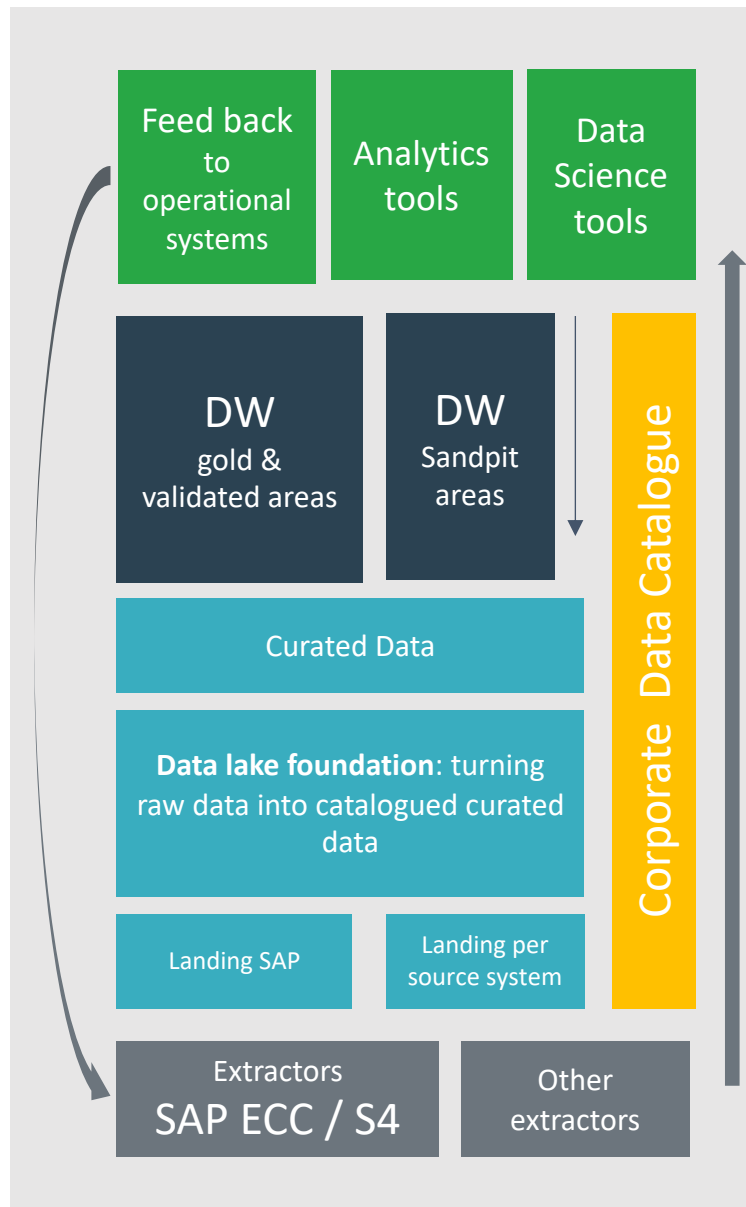Secure **landing zone** per source system

Efficient ABAP and ODP based extractor solution to extract data out of your SAP ECC or S/4 HANA system that work on base tables and CDS views.

Greater functionality and freedom	Lower operating costs
Data security & compliance	Validated catalogued data

Diagram

Feed back to operational systems	Analytics tools	Data Science tools	
DW gold & validated areas	DW Sandpit areas		Corporate Data Catalogue
Curated Data			
Data lake foundation: turning raw data into catalogued curated data			
Landing SAP	Landing per source system		
Extractors SAP ECC / S4	Other extractors		

What is included

Why is it important

Setup SAP ECC extract process

We set up the extract of data for the two selected functional areas plus put in place a framework that enable additional data to be extracted and processed though the data lake with no or minimal development.

Provides a highly efficient way to extract data from your SAP ECC system without have to setup each extractor. Enables close to real time delta extract of transaction using SAP's ODP framework

Setup AWS Data lake foundation

We install the AWS data lake formation plus the additional items listed below in either your own AWS account or an AWS account managed by Citra Solutions

The ASW data lake foundation provides the foundation of a data lake able to handles both structured and un-structured data and process raw data through to curated data utilising efficient serverless functions

Additional Data Lake foundationalist including Delta Lake

In addition to the standard Staging engine we add a pre processing and curation engine. The the curation engine we include meta data lookup of reference data and Delta lake fluxionality for identifying changed records and create a change log for efficient upstream delta loads

Extends the metadata driver processing so addition data can be added to the data lake without have to code or build transformation for each new 'table'. Delta lake functionality allow for delta and change logs to be calculated reduction the processing costs in the data lake and data warehouse

End user data catalogue visualisation, searching and request access to data.

We provide a business user focused front end to the extensive data catalogue and data lineage information available across the AWS lake house. User can: search for available data, see business and technical information on the data, see if they have access to the data and request access.

Empowers business users to find the data they require, increase understanding f the data by the business users and reduces duplication. With out this they have to ask a technical resource

Redshift Data Warehouse Data Models

Redshift provides the data warehouse layer for structured perform and and management reporting. We provide template data models for Finance and one other major SAP functional area.

The template data models accelerate the build of the data warehouse and included learning over multiple SAP projects. They are designed to work together. We have template models for most major SAP functional area's

Separate horizontals for Centrally controlled data, business unit and sandpit area's

We setup serrated central enterprise area, one business unit area and a sandpit area it the data lake and data warehouse, these 'horizontals' can adjusted to meet your requirements

Most originations will require a separation of their central controlled enterprise data, Business unit specific solutions and sandpit areas, with the ability to apply different controls to each. Our template put this in place from the start

Reports and visualisations

10 reports of visitations on top of the provided SAP functional area using either AWS QuickSight or MS PowerBI

Provides a starting point for your analytics. You can easily recreate additional reports or work with Citra Solutions.

Landscapes and Security

Development, Test and Production environments with CD/CI pipeline for transporting changes
Security controlling access to data row level access within data sets. Common solution for providing access based on organisational units. Logical and physical separation of data to been requirements of Government and sensitive enterprise data.