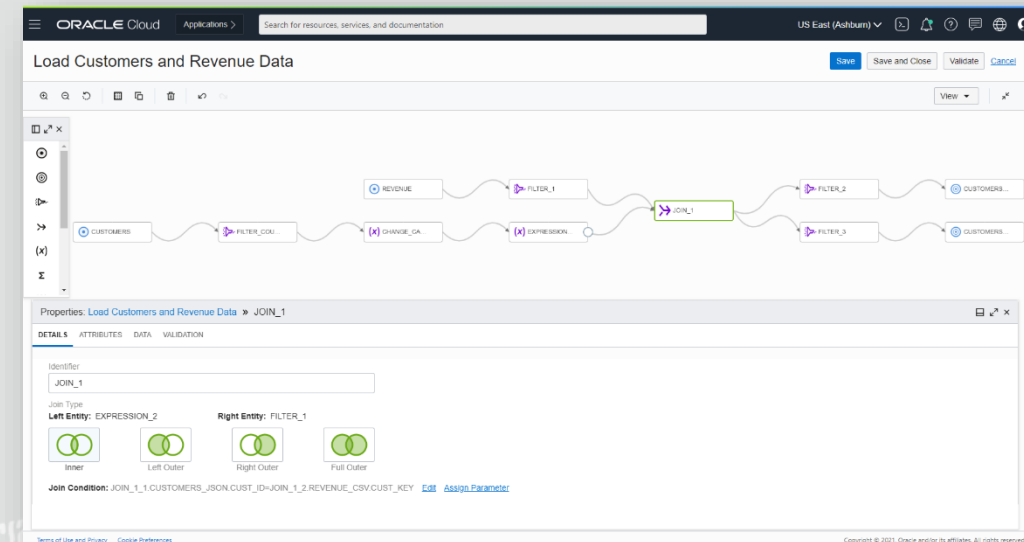


Oracle Cloud Infrastructure (OCI) Data Integration

A cloud native, serverless ETL service for integrating, transforming, and moving data within the OCI ecosystem

- Graphical, code-free designer
- Interactive Data Preparation and Profiling
- Schema evolution protection
- Powered by Spark ETL or E-LT Push-Down



Key Use Cases

Data Integration for Data Lakes & Data Science

Efficiently load and transform data at scale into Data Lakes used for data science and analytics purposes

Data Integration for Data Marts and Analytics

Efficiently load and transform data at scale into Data Marts or Data Warehouses (e.g. Autonomous Data Warehouse) used for analytics purposes

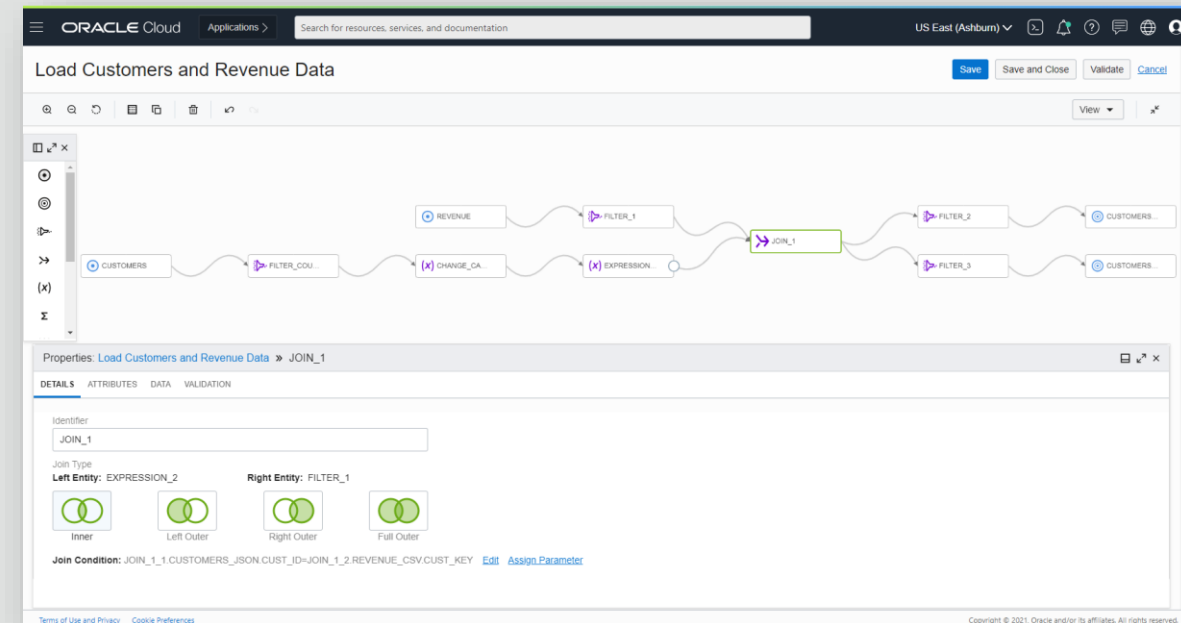
Maximize Developer Productivity

No Code Data Flow Design

- Powerful graphical editor for building Data Flows
- Visually preview data with Data Explorer
- Parameterize Data Flows for maximum flexibility

Benefits

- Empowers developers to innovate faster
- Simplified ETL design and maintenance
- Powerful and flexible data integration transformations



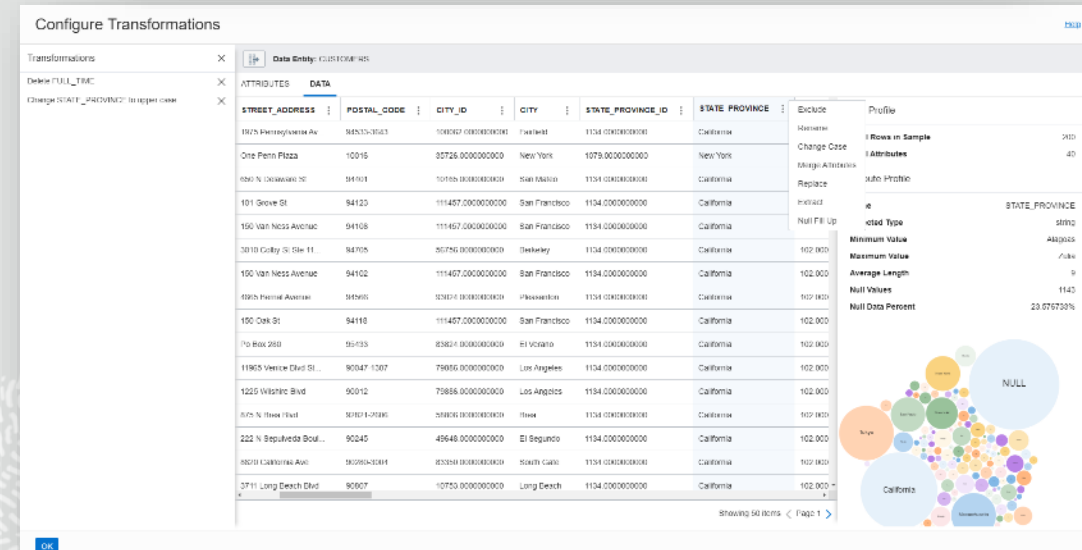
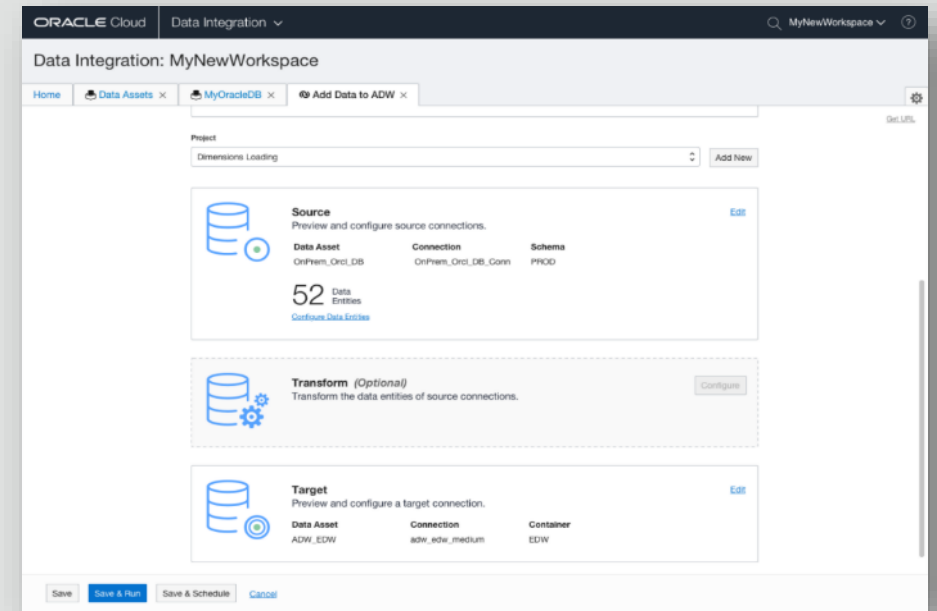
Easily Move and Integrate Your Data

Guided Tasks

- Tasks simplify the configuration of data integration processes to deliver value quickly
 - Data Loader Task to prepare and transform data sets iteratively using Data Explorer
 - Integration Task to configure & run Data Flows

Benefits

- Boost productivity & load data in a few minutes
- Promote best practices and reuse data flow rules



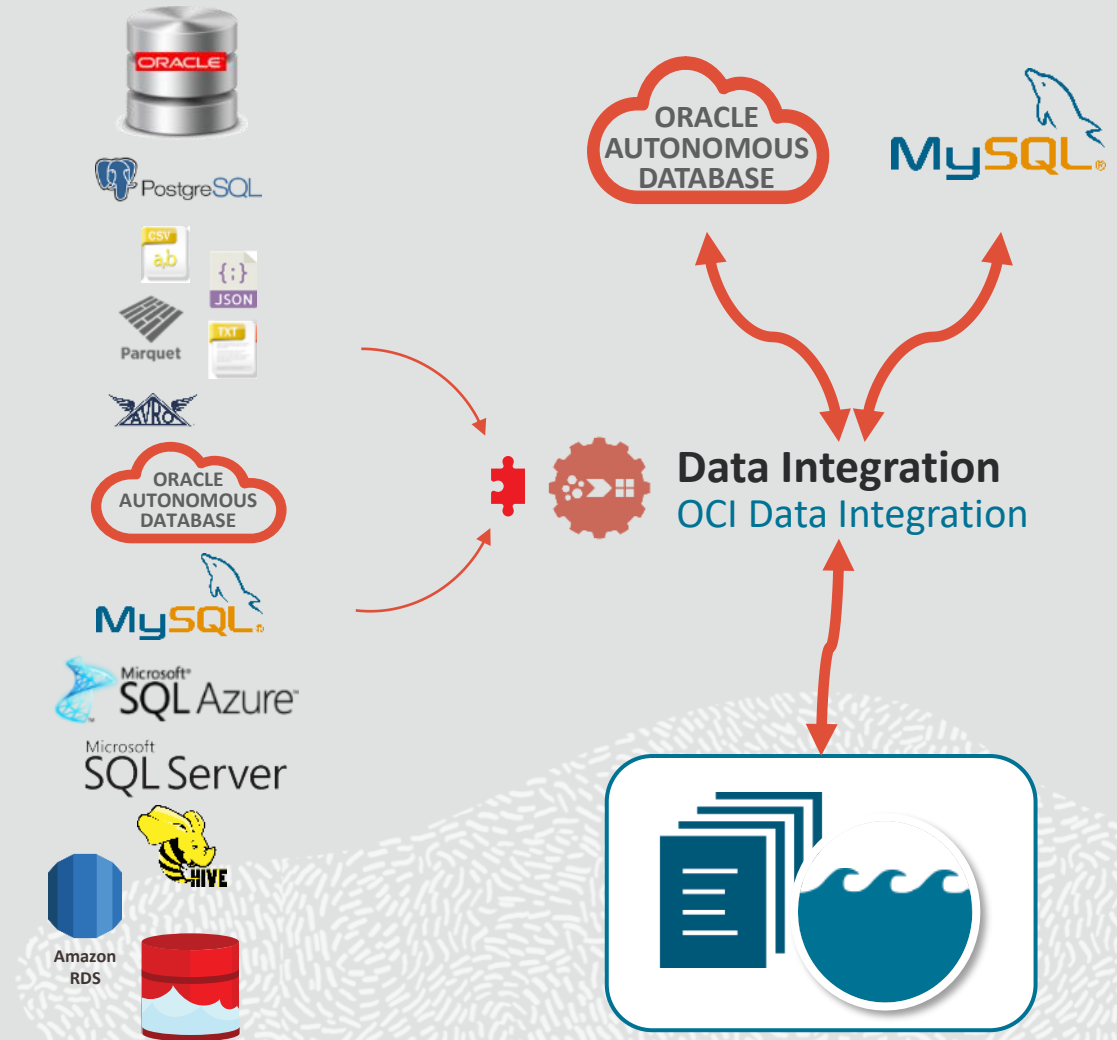
Broad Connectivity

Optimized for Oracle Cloud

- Secure public or private access even on-premises
- Optimized connectivity for
 - Oracle Autonomous Database (ADW/ATP)
 - Oracle Database & Exadata DB Systems
 - Oracle Object Storage: CSV, JSON, Parquet, Avro
 - MySQL / PostgreSQL / Apache Hive
 - Microsoft SQL Server & Azure SQL Database
 - Amazon RDS (MySQL, Oracle, Microsoft SQL Server)
 - Oracle Fusion Applications

Benefits

- Best in class connectivity for Oracle Cloud
- Expanding set of easy-to-use native adapters



Pipeline & Scheduling

- Design Pipelines to run your Data and AI processes end-to-end with Data Integration tasks along with Data Flow applications and Data Science models invocation
- Create sequential or parallel executions, add conditional links and retry logic to handle errors
- Schedule executions to run hourly, daily, monthly and more

The screenshot displays the Oracle Cloud Data Integration console. At the top, the breadcrumb navigation shows 'Data Integration > TestDev Works... > Projects > My First Project > DW Orchestration Pipeline'. The main area shows a flow diagram for the 'DW Orchestration Pipeline' with tasks: START, DATALOADER..., three parallel INTEGRATION tasks, MERGE_1, another INTEGRATION task, DATA_LOAD..., and END. A 'Properties: DW Orchestration Pipeline' panel is open at the bottom, showing fields for Name, Identifier (DW_ORCHESTRATION_PIPELINE), and Project or Folder (My First Project).

The 'Create Task Schedule' dialog box is shown, titled 'Create Task Schedule: PipelineTask November Release_20201210_184039_561894'. It prompts the user to specify when and how often the pipeline task should run. Fields include NAME (PipelineTask November Release_20201210_184039_561894) and IDENTIFIER (PIPELINETASK_NOVEMBER_RELEASE_20201210_184039_561894). There is a checkbox for 'ENABLE TASK SCHEDULE' which is checked. Below this are two main sections: 'Schedule' with a 'Select' button and 'Configure Task Schedule' with a 'Configure' button. At the bottom are 'Save', 'Save and Close', and 'Cancel' buttons.

More Time to Innovate and Improve Your Business

Schema Drift Protection

- Schema evolution (drift) often invalidates processes, requiring costly manual maintenance
- Rule-based design protects from schema drift by handling schema changes dynamically

Benefits

- Minimize development costs with simpler maintenance
- Free up developer time to get more value from data



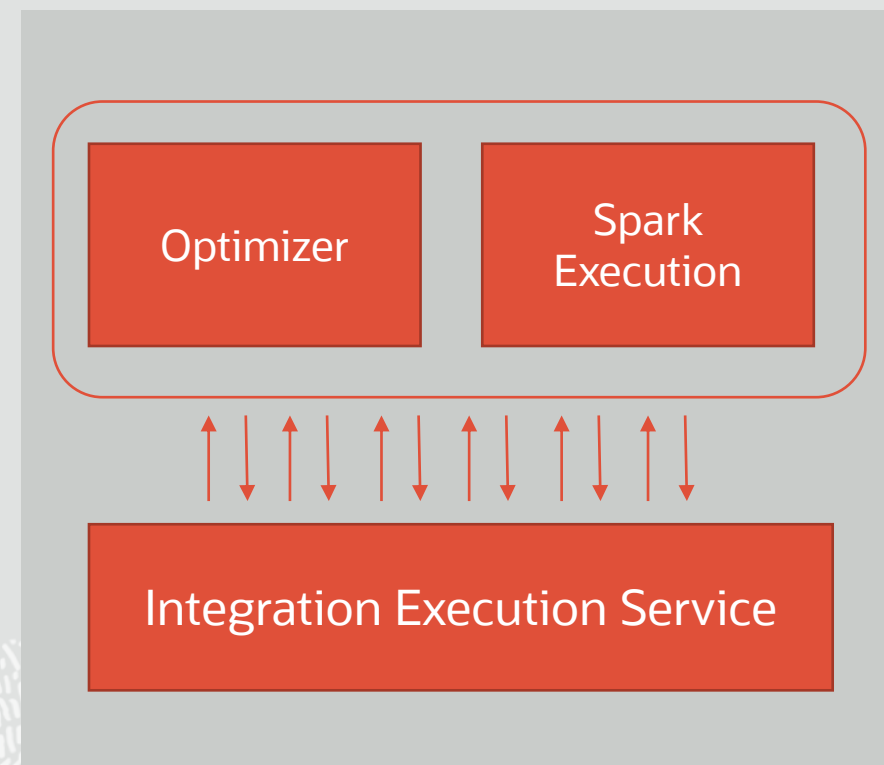
Industry Leading Performance

Powered by Spark ETL or SQL Push-Down

- Supports both ETL and E-LT processing
- Generates executable code for the best engine
 - Spark-based ETL for distributed data processing
 - Push-down optimization for E-LT processing on DBMS engines

Benefits

- Highly efficient execution to process data at scale
- Fully managed serverless runtime

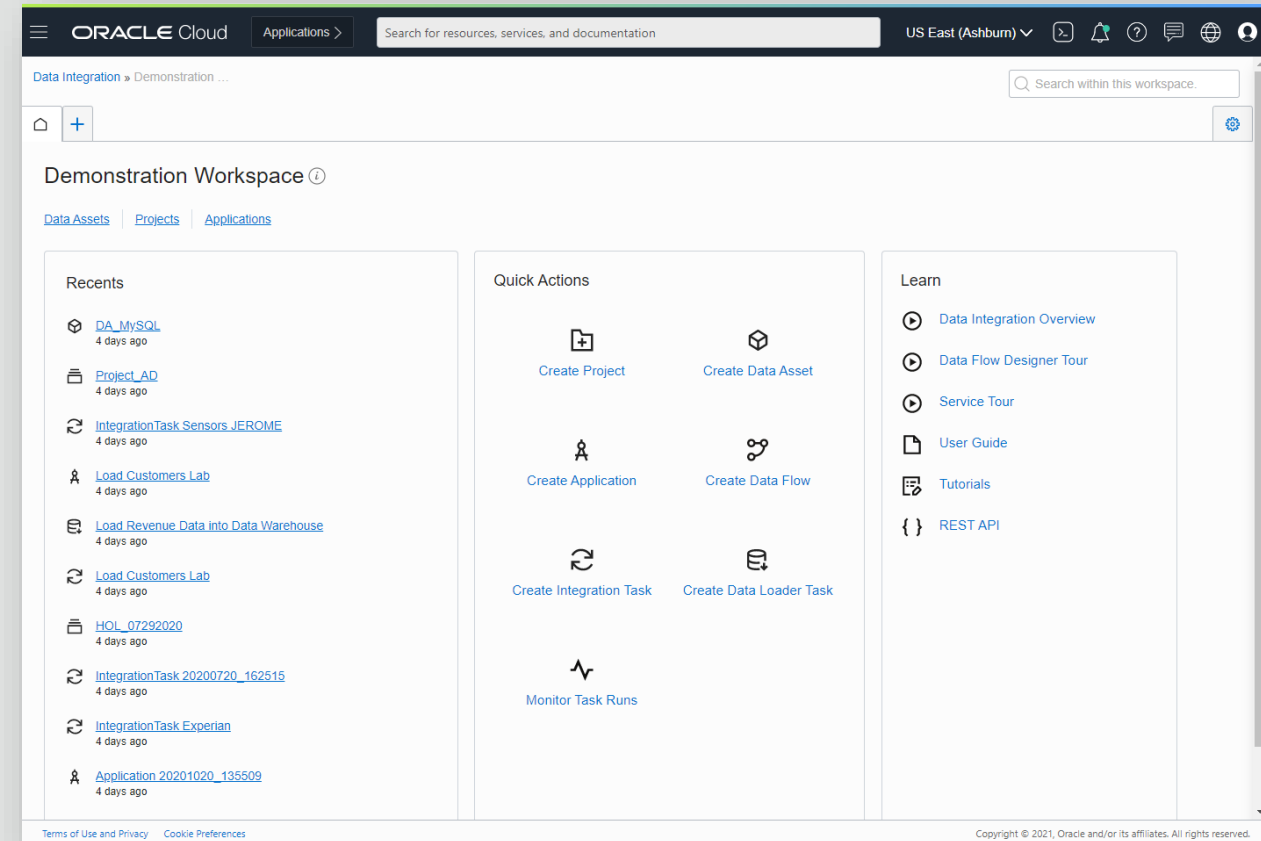


OCI Data Integration User Experience



Home

- Landing page for Data Integration Workspaces
- Quickly create new Data Assets, new Tasks or Data Integration Flows using Quick Actions tile
- Navigate to your Projects, Data Assets and Applications
- Use Recents to go back to items you were working on



Data Flows

- Powerful Data Integration Flow Editor
- Quickly create simple to complex ETL processes with Joins, Filters or Aggregate Functions
- Native schema drift handling
- Immersive Data Xplorer to preview transformation results

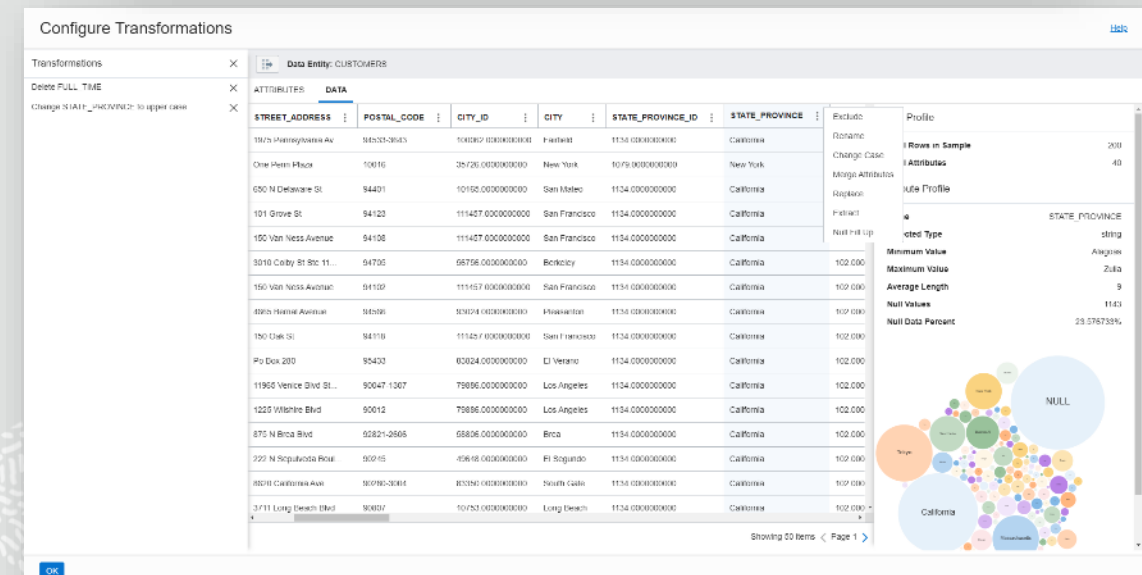
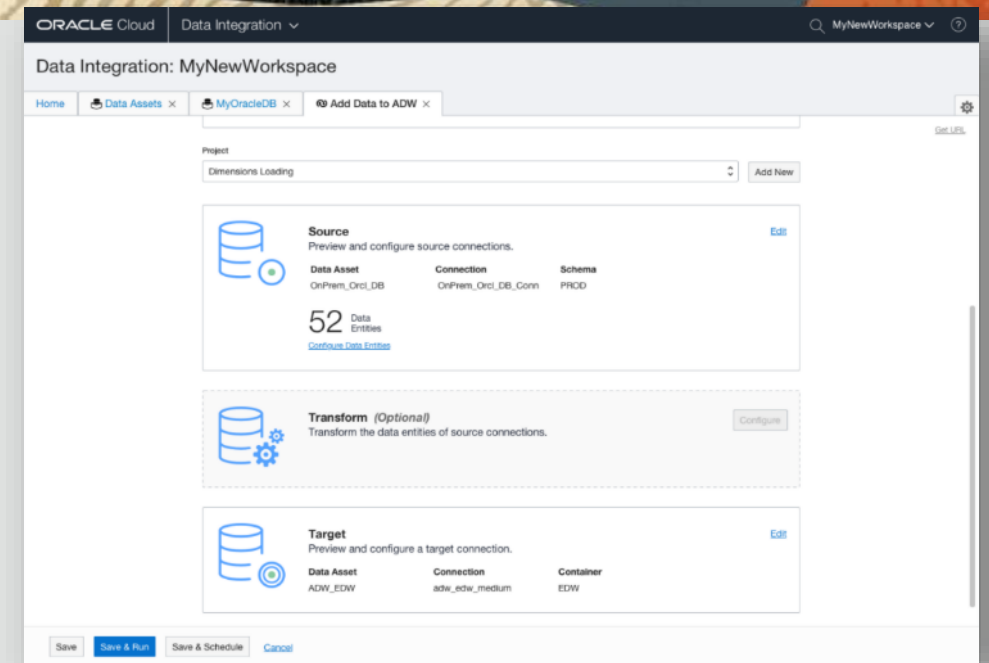
The screenshot displays the Oracle Cloud Data Integration Flow Editor interface. The main workspace shows a data flow process titled "Load Customers and Revenue Data". The process starts with a "CUSTOMERS" source, followed by a "FILTER_COUNTRY" filter, then a "CHANGE_CA" transformation, and an "EXPRESSION" transformation. These lead to a "JOIN_1" join operation. From the join, the flow splits into two paths: one through "FILTER_1" and "FILTER_2" to a "CUSTOMERS" target, and another through "FILTER_3" to another "CUSTOMERS" target. The interface includes a top navigation bar with "ORACLE Cloud" and "Applications" menus, a search bar, and a "US East (Ashburn)" region selector. Below the flow editor, the "Properties" panel for the selected "FILTER_COUNTRY" component is visible, showing tabs for "DETAILS", "ATTRIBUTES", "DATA", and "VALIDATION". The "DATA" tab is active, displaying a table of filtered data with columns for customer ID, last name, first name, and street address. A "Filter Data" section above the table allows for pattern-based filtering and selecting data types. To the right of the table, a "Data Explorer" visualization shows a bubble chart with "California" as the largest bubble and "Massachuse..." as another significant one. The bottom of the interface shows "Showing 50 items < Page 1 >" and a copyright notice for 2021 Oracle.

FILTER_2.CUSTOMERS_JSON.CUST_ID	FILTER_2.CUSTOMERS_JSON.LAST_NAME	FILTER_2.CUSTOMERS_JSON.FIRST_NAME	FILTER_2.CUSTOMERS_JSON.STREET
15.0	Erickson	Gracie	630 Nevada St
16.0	Carney	Aurora	150 Serra Ave
17.0	McClure	Wiley	703 Santa Barbara Rd
18.0	Hobbs	Dudley	5401 Snyder Ln



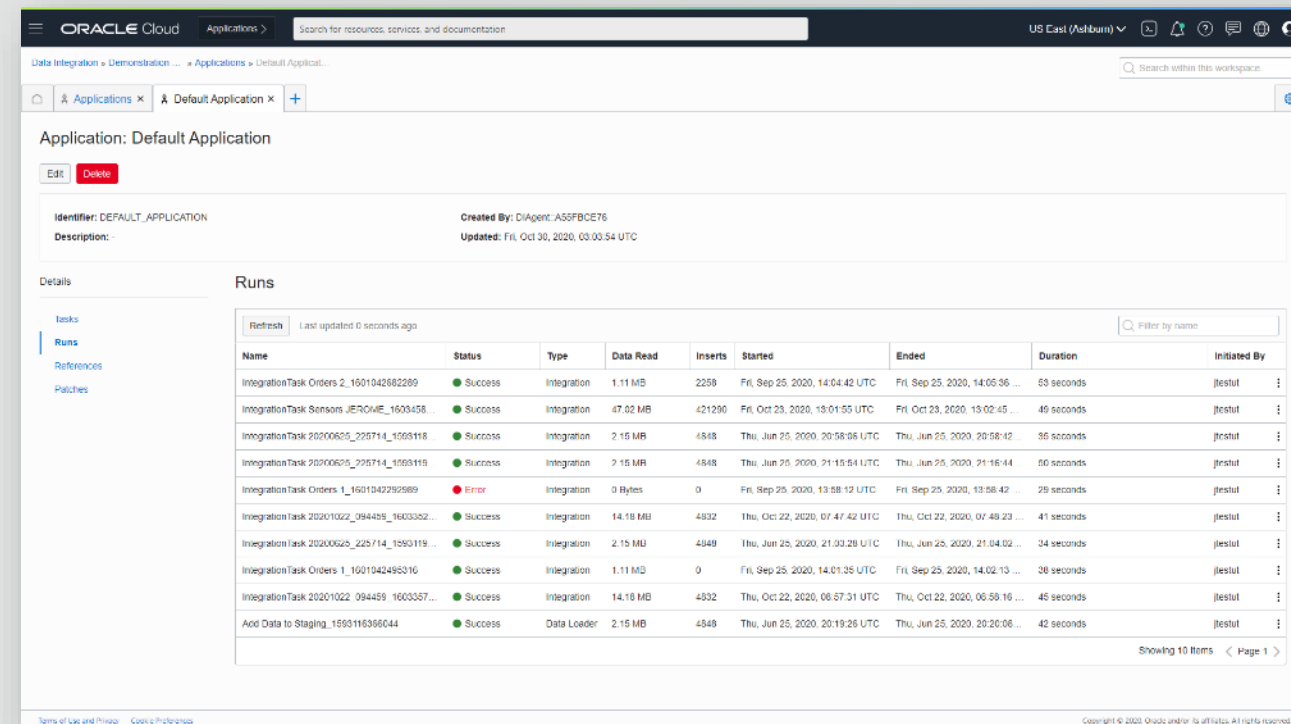
Tasks

- Prepare, Integrate or Load Data easily using Tasks
- Configure processes for Autonomous Databases or Object Storage Data Lakes in a few clicks using powerful data preparation transformations
- Augment Data Integration Flows with advanced parameters



Applications

- Publish Tasks into Applications to execute them
- Iterate on your data integration processes without impacting runtime operations
- Configure your Tasks with runtime configuration
- Monitor your Task Runs



The screenshot shows the Oracle Cloud Applications console for a 'Default Application'. The page includes a search bar, navigation tabs, and a 'Runs' section with a table of task runs. The table has the following columns: Name, Status, Type, Data Read, Inserts, Started, Ended, Duration, and Initiated By. The runs listed are:

Name	Status	Type	Data Read	Inserts	Started	Ended	Duration	Initiated By
IntegrationTask Orders_2_1501042682289	Success	Integration	1.11 MB	2258	Fri, Sep 25, 2020, 14:04:42 UTC	Fri, Sep 25, 2020, 14:05:36 ...	53 seconds	jtestut
IntegrationTask Sensors_JEROME_1603458	Success	Integration	47.82 MB	421290	Fri, Oct 23, 2020, 13:01:55 UTC	Fri, Oct 23, 2020, 13:02:45 ...	49 seconds	jtestut
IntegrationTask 20200625_225714_1559118	Success	Integration	2.15 MB	4848	Thu, Jun 25, 2020, 20:58:06 UTC	Thu, Jun 25, 2020, 20:58:42 ...	36 seconds	jtestut
IntegrationTask 20200625_225714_1559119	Success	Integration	2.15 MB	4848	Thu, Jun 25, 2020, 21:15:54 UTC	Thu, Jun 25, 2020, 21:16:44 ...	50 seconds	jtestut
IntegrationTask Orders_1_1601042292989	Error	Integration	0 Bytes	0	Fri, Sep 25, 2020, 13:58:12 UTC	Fri, Sep 25, 2020, 13:58:42 ...	29 seconds	jtestut
IntegrationTask 20201022_094459_1603362	Success	Integration	14.18 MB	4532	Thu, Oct 22, 2020, 07:47:42 UTC	Thu, Oct 22, 2020, 07:48:23 ...	41 seconds	jtestut
IntegrationTask 20200625_225714_1593119	Success	Integration	2.15 MB	4949	Thu, Jun 25, 2020, 21:03:29 UTC	Thu, Jun 25, 2020, 21:04:02 ...	34 seconds	jtestut
IntegrationTask Orders_1_1601042495016	Success	Integration	1.11 MB	0	Fri, Sep 25, 2020, 14:01:35 UTC	Fri, Sep 25, 2020, 14:02:13 ...	38 seconds	jtestut
IntegrationTask 20201022_094459_1603357	Success	Integration	14.18 MB	4532	Thu, Oct 22, 2020, 06:57:31 UTC	Thu, Oct 22, 2020, 06:58:16 ...	45 seconds	jtestut
Add Data to Staging_1593116366044	Success	Data Loader	2.15 MB	4848	Thu, Jun 25, 2020, 20:19:25 UTC	Thu, Jun 25, 2020, 20:20:06 ...	42 seconds	jtestut



Vision

Broad Connectivity

- SaaS Apps
- Heterogeneous Cloud Databases
- Big Data
- More on-premises data sources

Enterprise Class

- Breadth of ETL operators
- Lifecycle management / CICD
- OCI ecosystem integration

Performance & Scalability

- Scale in & out
- Advanced hybrid execution

Intelligence & Innovation

- Guided Machine Learning based integrations
- Data exploration
- Integrated data quality & profiling
- Streaming