



Modernizing Legacy Integrations with Oracle Integration Cloud Services (OICS)

Orientation and Lessons Learned

Agenda

- Introduction to OICS
- OICS with the Oracle E-Business Suite
- Use cases
- EDI Killer Features
- Security Concerns
- Licensing, subscription and Costs
- Summary and Q&A

Mike Miller



Senior Solution Architect, Syntax

- Over 25 years of working with enterprise software and information security technologies
- Experience with enterprise software implementation and support, cloud operations, and executing compliance and risk management programs.
- A CISSP, Certified Information Systems Security Professional
- Oracle ACE Associate



Syntax

- Syntax was founded in 1972 in Montreal, Canada, and is celebrating 50 years in the ERP space
- Syntax provides full-stack, full-lifecycle Cloud Managed Services and Application Managed Services focused on leading ERP solutions such as JD Edwards, Oracle E-Business Suite, and SAP
- Syntax is cloud agnostic and supports both public and private solutions, including AWS, Azure, OCI, and Syntax Enterprise Cloud®
- Our ERP solutions include an array of value-add services, including our monitoring and automation platform, CxHub customer experience portal, security management, and enhanced security
- Syntax is a global company with offices and data centers in the Americas, Europe, and Asia

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Expertise in
JD Edwards EnterpriseOne
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Expertise in
Oracle E-Business Suite
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Expertise in
JD Edwards Applications
to Oracle Cloud
in North America

ORACLE | Service
Partner

Expertise in
Oracle E-Business Suite
Applications to Oracle Cloud
in North America

ORACLE | Service
Partner

Expertise in
CSPE: Oracle Cloud Platform -
Oracle E-Business Suite
Applications to Oracle Cloud
in North America

Gartner Magic Quadrant



Product News, Technical Solutions

Seven times in a row: Oracle named a Leader in 2024 Gartner Magic Quadrant for Integration Platform as a Service

February 22, 2024 | 4 minute read



Jürgen Kress

Director Product Management



Deepak Arora

Vice President, Product Management, Oracle

7 times a Gartner® Magic Quadrant™ Leader in iPaaS

We're happy and thankful to our customers, partners, and teams for being named a Leader seven times in a row by Gartner in the 2024 Magic Quadrant for integration platform as a service (iPaaS). Gartner recognizes Oracle as a Leader based on our Completeness of Vision and Ability to Execute in this report and a Leader in the 2023 Gartner Magic Quadrant for Data Integration Tools.

<https://blogs.oracle.com/integration/post/seven-times-in-a-row-oracle-named-a-leader-in-2024-gartner-magic-quadrant-for-integration-platform-as-a-service>

Gartner Report



Strengths

- **Business model innovation:** Oracle is out-innovating the market with respect to emerging enterprise needs such as sovereign clouds. This is particularly valuable to customers in countries with stringent regulatory and data privacy requirements as mandated by law. Allowing third parties to private label OCI and operate completely isolated regions is highly differentiated in the market for CIPS. This also helps promote the sovereign cloud needs in regions such as Europe and the Middle East.
- **Multicloud architectures:** Oracle is building compelling multicloud offerings leveraging its heritage in mission-critical database and data warehousing technology. Multicloud architectures, where one workload spans multiple cloud providers, are central to OCI's vision and its future offerings that live within and alongside providers such as AWS and Azure. These approaches to deploying and operating workloads in the cloud are unique critical capabilities for providers in this market.
- **Market responsiveness:** Oracle continues an impressive year-over-year pace of feature velocity that brings it closer to the market leaders in terms of hyperscale cloud capabilities. If the pace continues, Oracle will meet or exceed some of the providers in the Leaders quadrant in terms of capabilities within the foreseeable future.



Source: Gartner (January 2023)

<https://www.gartner.com/doc/reprints?id=1-2BFV0YLG&ct=221019&st=sb>



Oracle Integration Cloud Services

What is OICS? What is it not?

Oracle Integration Solutions



Golden Gate

- Oracle Golden Gate is a real-time data integration and replication tool for high-availability requirements.
- It enables the replication of data across heterogeneous databases and systems with minimal latency

ODI

- Commonly deployed for bulk-loading data warehouses to connect multiple types of database environments
- Offers rich ELT capabilities to transform large loads of data periodically and incrementally

SOA Suite

- Comprehensive tool for designing, deploying, and managing service-oriented architecture (SOA) applications and complex integrations
- Requires experienced developers to build and maintain

OICS

- A cloud-native (only) SaaS integration solution ideal for citizen and power business users to deploy prebuilt integrations, adapters, and low-code/no-code tools for rapid integration development.
- Can convert SOA licensees to use for OICIS

Oracle Integration Cloud Services (OICS)



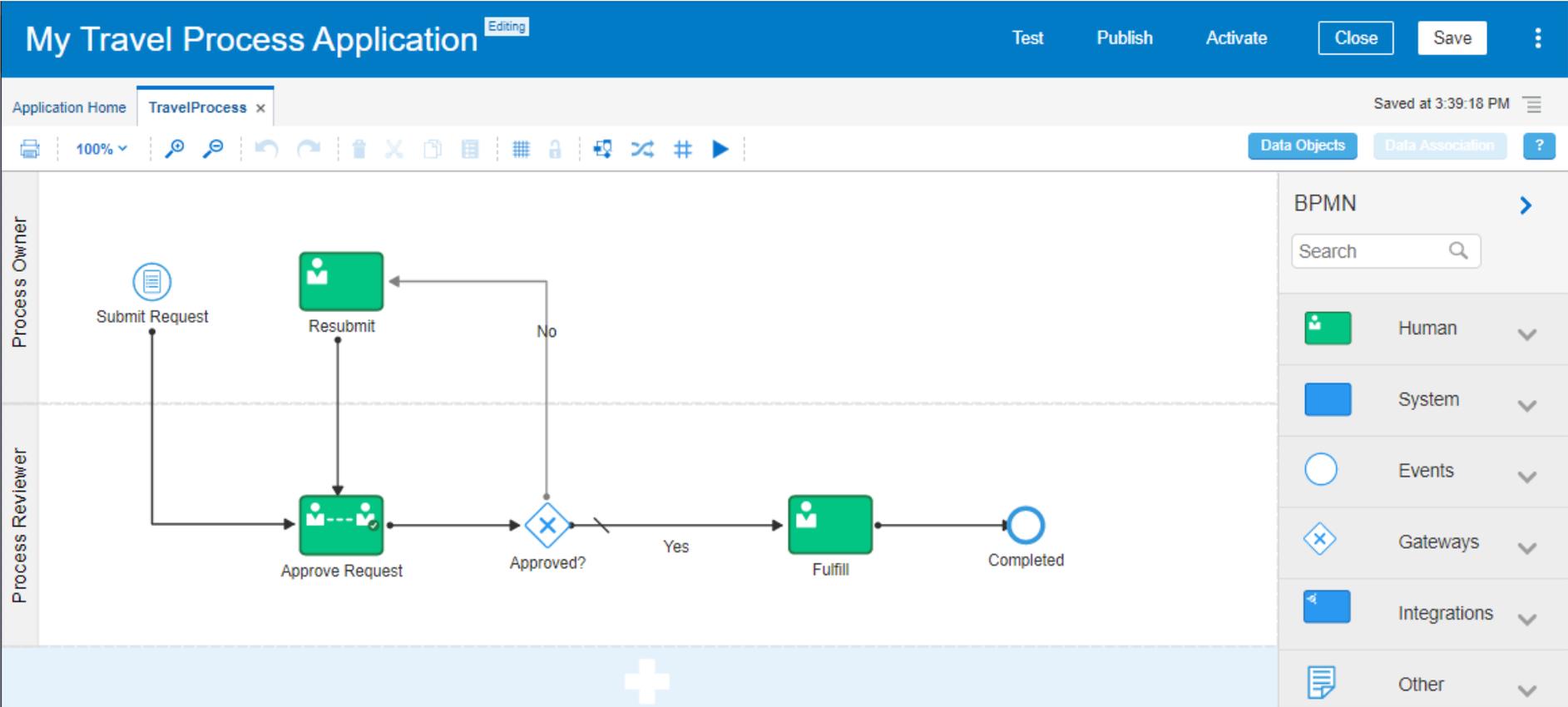
Cloud-based integration platform from Oracle that enables you to connect your applications, data, and devices, both on-premises and in the cloud. With OIC, you can create integrations quickly and easily without the need to install and maintain any software

Key Features

- OIC is a SaaS solution hosted and maintained by OCI
- Simple user interface for an All-in-One design to build, operate and monitor business processes (integrations)
- Protected by cutting-edge security - OCI provides top-tier security, including physical protection, OS security, and virtualization layer security, as well as tenant isolation
- Supports a wide range of applications with prebuilt application adapters
- Includes monitoring, machine learning, and powerful analytics tools
- Overall benefit is fast deployment and lower costs, and easier maintenance

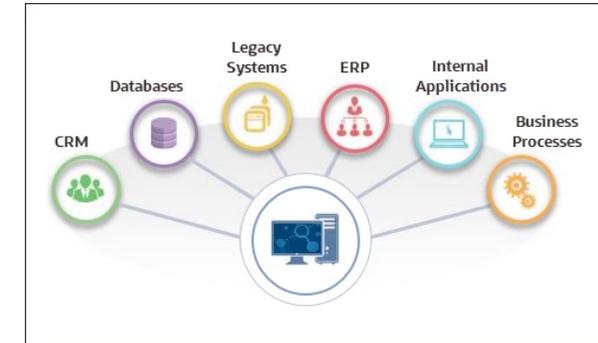
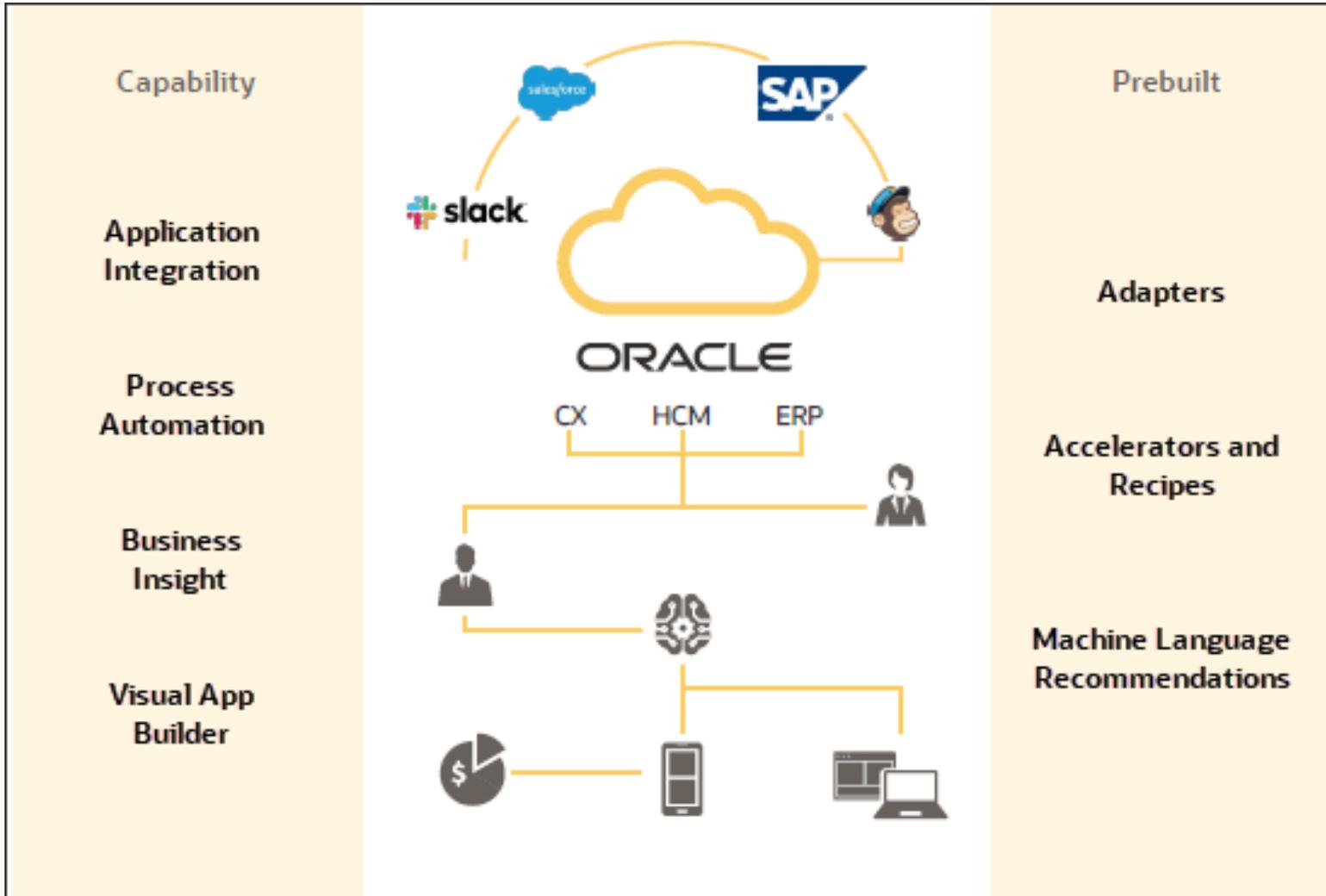
OIC is a logical extension of EBS' Integrated SOA Gateway

#1 Takeaway for Today: OICS Is A Process Builder



Process definition is the first step any integration

Oracle Integration Cloud Services Is Many Things



Not a single
function
integration
solution

Prebuilt Connectors For “Low Code” Integrations



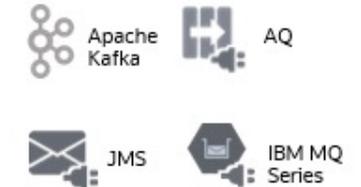
ERP Connectivity



HCM Connectivity



Enterprise Messaging



CX Connectivity



Database Connectivity



Technology Connectivity



Productivity and Social Connectivity



RPA Connectivity



OICS Accelerators vs. Recipes



Learn About Differences Between Accelerators and Recipes

Accelerators are run-ready business integrations or technical patterns that you can configure and activate. **Recipes** are templates or samples that give you a head start.

Here's a comparison of accelerators and recipes.

Accelerators	Recipes
A business accelerator provides an end-to-end business process or use case (for example, marketing to lead, hire to retire, or concept to launch). A technical accelerator provides a common technical solution (for example, sending alerts on failures). They are meant to be called by another integration.	A recipe is a sample or template that gives you a head start.
Managed and supported by the producer	Not supported
Configurable and extendable	Fully editable in the Oracle Integration designer
Upgrades provided by producer	Can't auto-upgrade to new versions
Configurator in Oracle Integration and as native SaaS	Configurator in Oracle Integration
Paid offering (as decided by producer)	Always free

<https://docs.oracle.com/en/cloud/paas/application-integration/find-recipes.html>

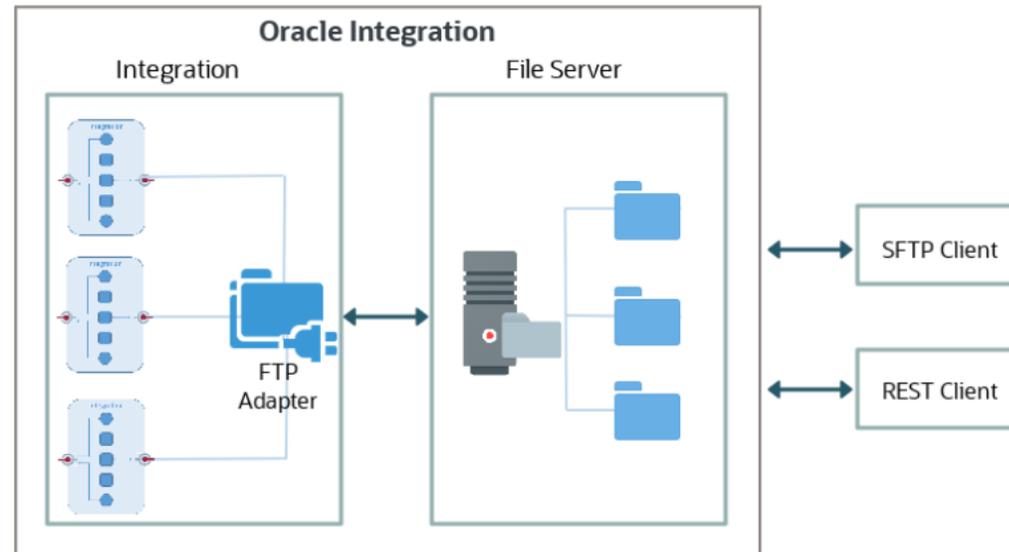
The number of prebuilt solutions has grown significantly in the last year to over 160+

The screenshot displays the Oracle Integration 3 interface. At the top, it shows the breadcrumb 'Home / Cloud / Cloud Platform / Integration 3' and the title 'Oracle Integration 3'. Below the title is the section 'Recipes and Accelerators'. There is a search bar and a 'Category' dropdown menu set to 'All'. A notification indicates '164 items'. The main area contains a grid of nine recipe cards. Each card has a title and a brief description, along with icons for configuration and activation. The recipes include: 'Attach files to Salesforce records', 'Automate file transfer from an FTP server to EPM Cloud', 'Calculate total balance', 'Concatenate messages', 'Create Box folders for ServiceNow incidents', 'Create Box folders for Zendesk organizations', 'Create JIRA issues for ServiceNow incidents', 'Create Jira issues for project tasks in NetSuite', and 'Create SAP ERP orders for closed opportunities in Salesforce'.

OICS Includes An Embedded File Server



Use **File Server** to store files or transfer real-time data among applications securely. File Server provides an embedded Secure File Transfer Protocol (SFTP) server within Oracle Integration, so you can focus on building integrations without needing to host and maintain a separate SFTP server.



OCIS Enables B2B With EDI



Use B2B to securely and reliably exchange business documents between your back-end applications and trading partners.

Oracle Integration Generation 2

B2B: Enable Business-to-Business E-commerce

Use B2B for Oracle Integration to securely and reliably exchange business documents between your back-end applications and trading partners.

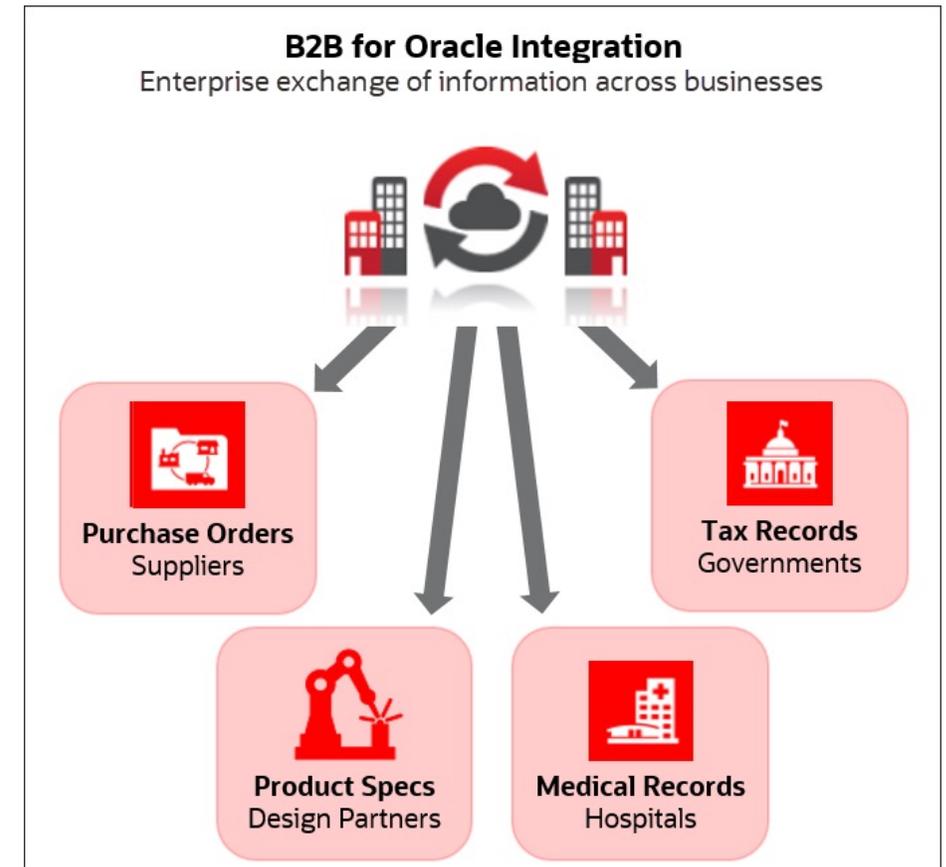
Discover B2B for Oracle Integration

- What is Electronic Data Interchange (EDI)?
- What is B2B for Oracle Integration?
- What business protocols are supported?
- What transport protocols are supported?
- What usage patterns does B2B for Oracle Integration support?

Develop B2B Flows in Oracle Integration

- Parse an inbound EDI document
- Transform an inbound EDI message
- Process an inbound EDI batch file using the stage file action
- Generate outbound EDI from an application message

EDI Included!



OICS Scheduler

Delivered with a scheduler by default



Define recurrence

Simple iCal

Frequency

Every hour(s) Minute(s) ×

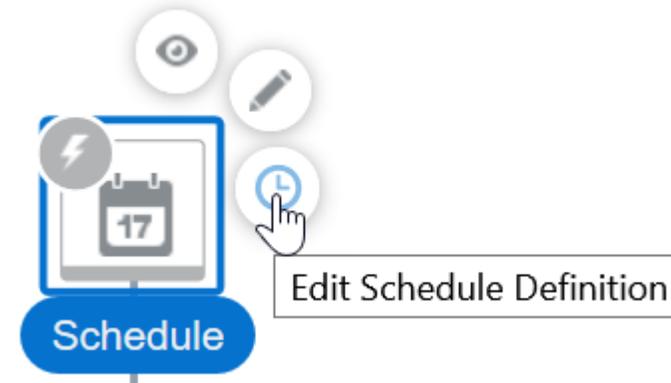
This schedule is effective:

From 22-01-2021 12:00:00 AM

Until Never (repeat indefinitely)

Time zone

You must start up the schedule for these settings to take effect



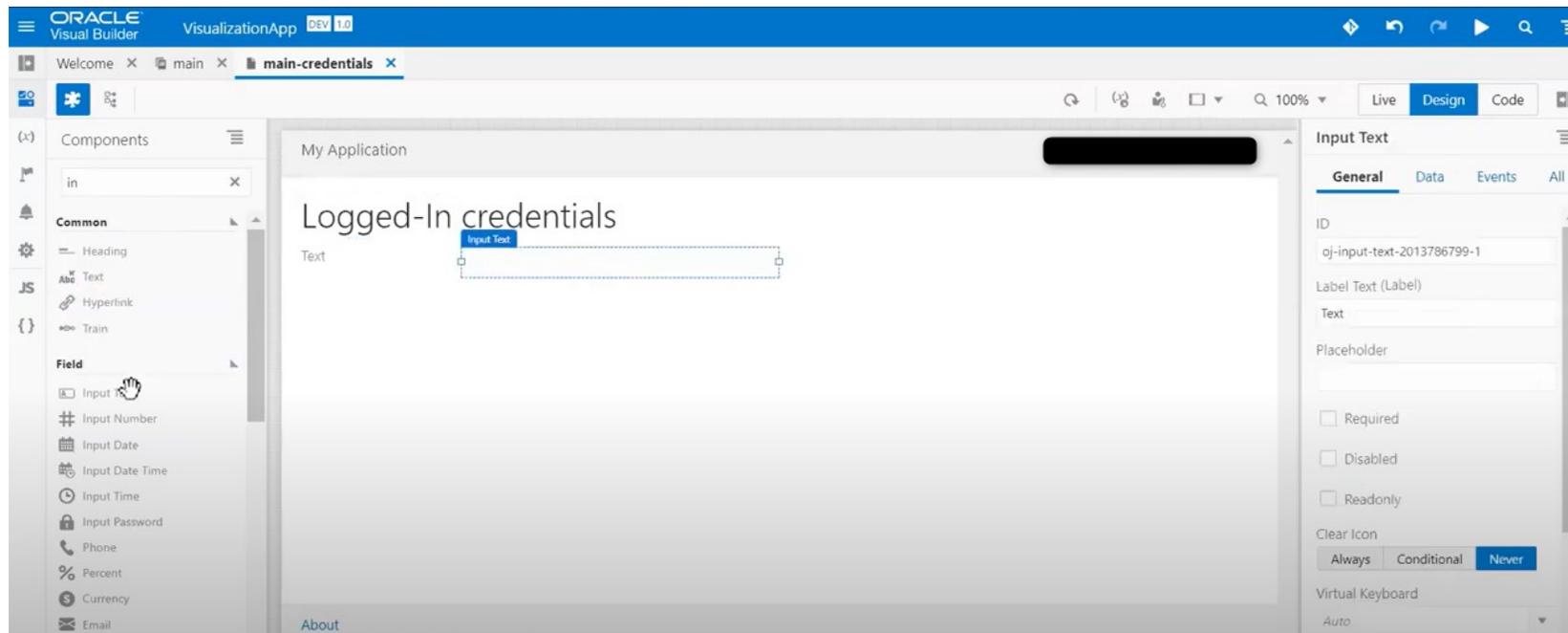
Frequencies:

1. Only Once
2. Hours and Minutes
3. Days
4. Weeks
5. Months
6. Day of every Week & Week of every Month
7. Day of every Month
8. Months of every Year
9. iCal Expressions

Visual Builder



Low code developer GUI to build OICS integrations and Mobile Applications. Not the same as Visual Builder Studio which is more complete dev env with Git and issue tracking



<https://www.ateam-oracle.com/post/difference-between-vbvbcvs-vs-vbs#:~:text=VB%20Studio%20combines%20Visual%20Builder's,developer%20and%20lifecycle%20management%20tools.>

Low Code Integration



Create Integration - Select a Style/Pattern

How would you like to build your integration? Select a style/pattern to use.

Style: **Orchestration**
Pattern: **Map Data**
Drop trigger and invoke onto a blank canvas
Select

Style: **Template**
Pattern: **Map Data**
Drop trigger and invoke onto an empty template
Select

Style: **Template**
Pattern: **Publish To IC**
Connect your trigger to send messages to IC
Select

Style: **Template**
Pattern: **Subscribe To IC**
Add invokes to receive messages from IC
Select

Cancel

Configure Oracle Sales Cloud Endpoint

Configure the Operations to Perform in the Target Oracle Sales Cloud Application
Select the business object or service and operation to use for the target integration.

Basic Info | **Operations** | Summary

Browse by: Services

Select a Service

- AbsenceCaseService
- AccountService**
- ActionsService
- ActivityAppointmentService
- ActivityService
- ActivityTaskService
- AddressService
- AreasORResponsibilityService

Select the Operation to Perform on the Business Object/Resource or Service

createAccount

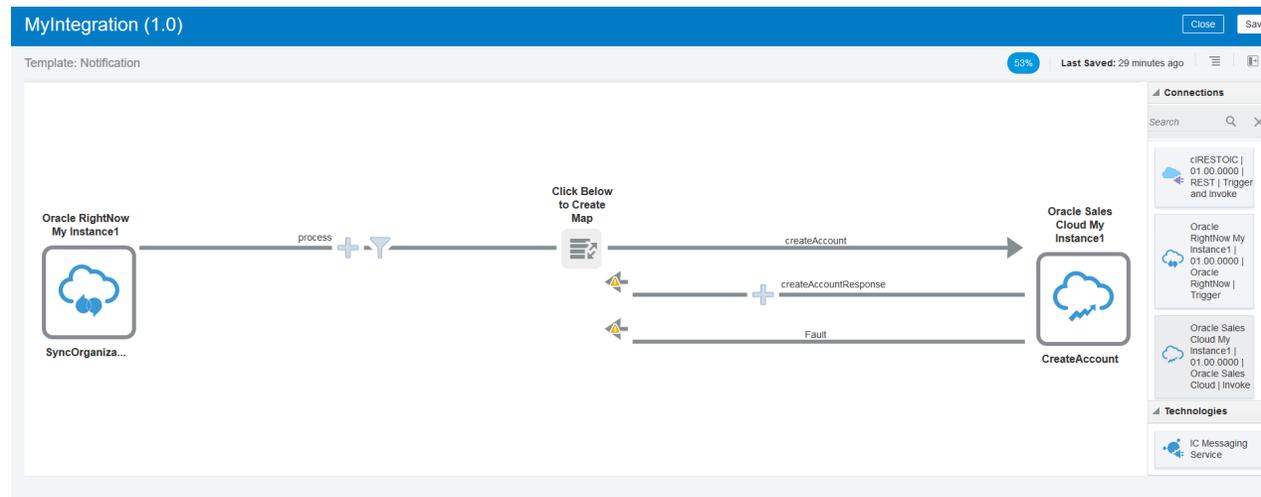
Lifecycle: Active

ORACLE Integration Cloud

process to createAccount MyIntegration (1.0)

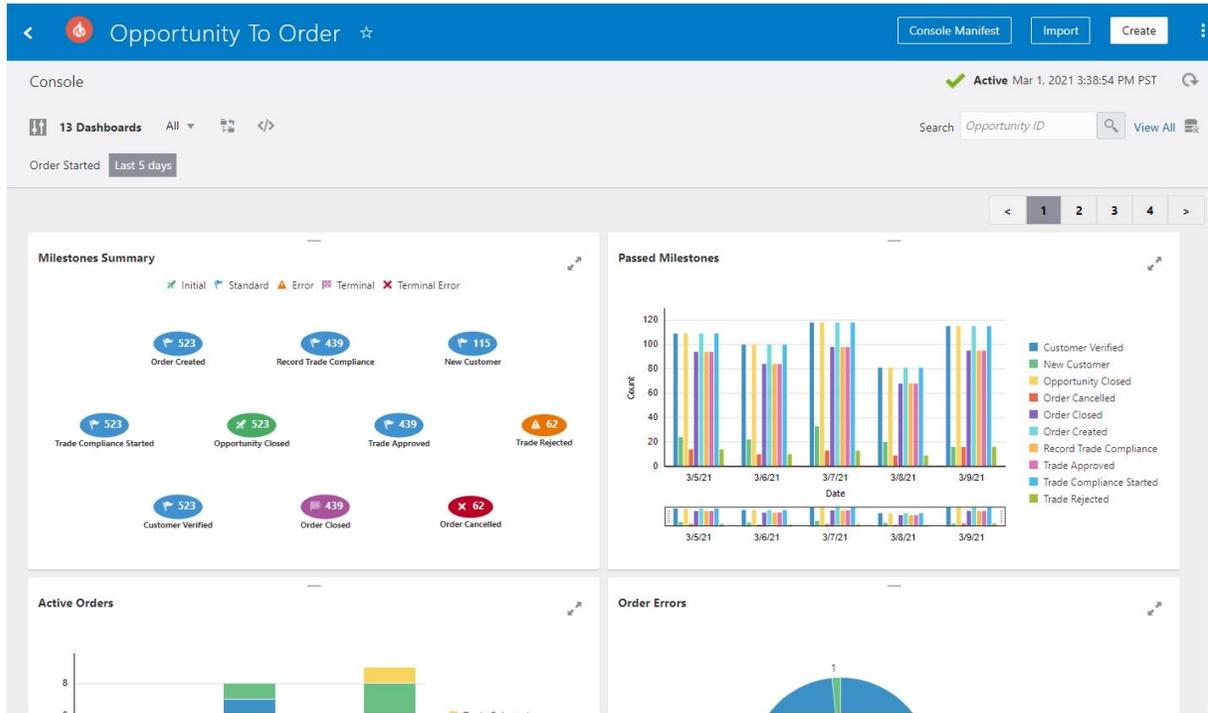
Map

Source	Target
process	createAccount
Organization	PartyId
ID	PartyNumber
LookupName	SourceSystem
CreatedTime	SourceSystemReferenceValue
UpdateTime	OrganizationName
Addresses	UniqueNameSuffix
Banner	PartyUniqueName
CRMModules	Type
OrganizationCustomFields	OwnerPartyId
ExternalReference	OwnerPartyNumber
FileAttachments	OwnerEmailAddress
Industry	OwnerName
NameIDHierarchy extends Industry	PrimaryContactPartyId
NameIDReadyOnlyID extends Industry	PrimaryContactPartyNumber
Login	PrimaryContactSourceSystem
Name	PrimaryContactSourceSystemReferenceValue
NameFulgana	PrimaryContactName
NewPassword	PrimaryContactEmail
Notes	
NumberOfEmployees	

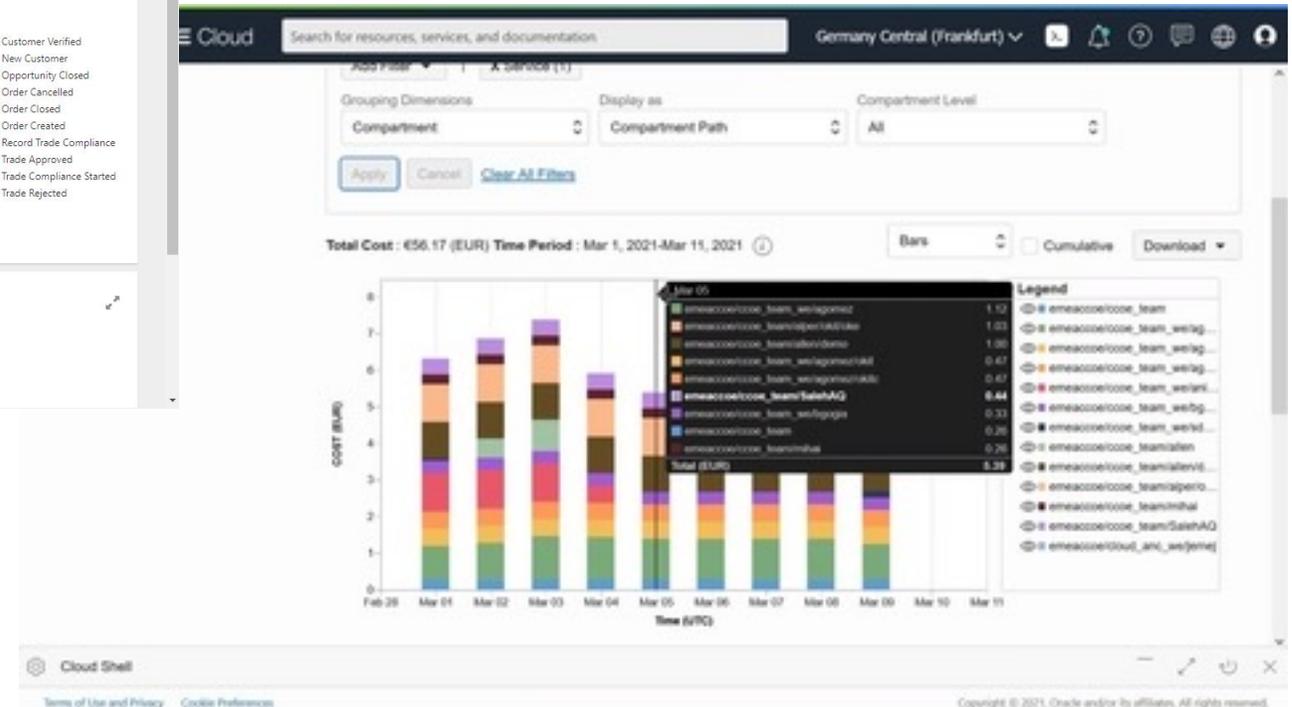


https://www.oracle.com/webfolder/technetwork/tutorials/obe/cloud/ic/ic_create_end_end_integration/obe-ic-creatingnewintegration/index.iccreatenewintegration.html

OICS Integration "Process" Insights



Visualizes metrics in real-time and recommends actionable insights into processes and integration flows as well as forecasts consumption





OICS with EBS

How does it work?

Oracle Integration Cloud Services vs ISG and/or SOA Suite

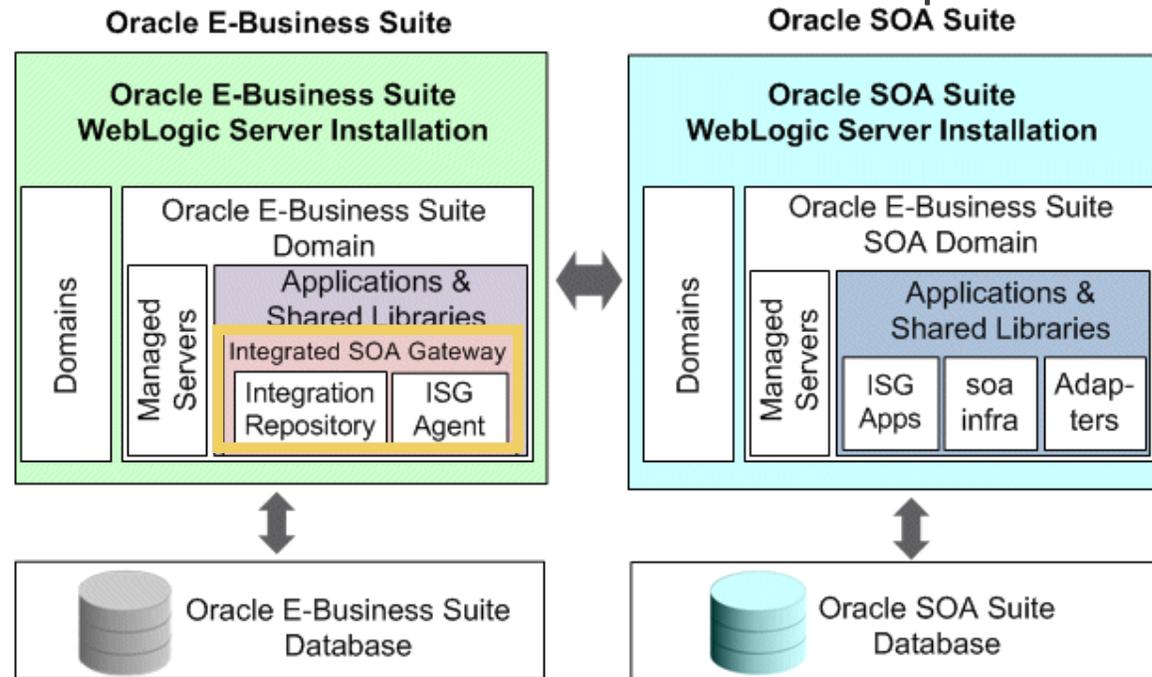


Integrated SOA Gateway

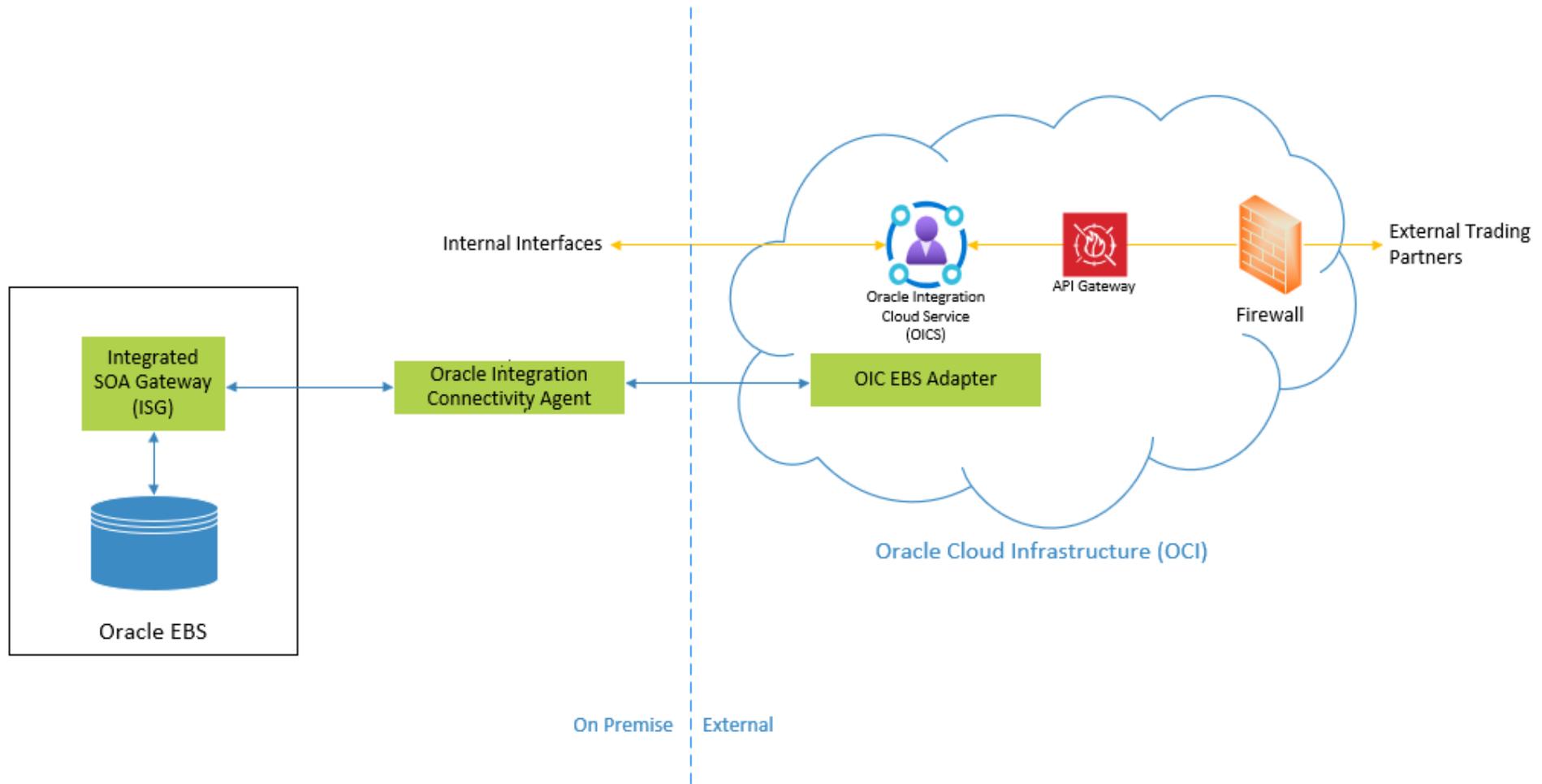
- Free with EBS
- Preinstalled but not configured

SOA Suite @Customer or OCI PaaS

- Additional license along with supporting technology
- Separate technology stack installation



Using Oracle Integration Cloud (OIC) With EBS



EBS Integrated SOA Gateway (ISG)



- Centralized catalog integration interfaces and APIs
 - Delivery by Oracle or custom
 - Free with the standard license of EBS (no extra license required)
- Must be configured
 - Configure Oracle E-Business Suite Integrated SOA Gateway REST Services
 - Configure network access to Oracle E-Business Suite services
 - Deploy the required REST Services in Oracle E-Business Suite
 - Grant the required user privileges
- More information
 - [ISG FAQ](https://support.oracle.com/epmos/faces/DocumentDisplay?id=2110687.1)
<https://support.oracle.com/epmos/faces/DocumentDisplay?id=2110687.1>
 - Installing Oracle E-Business Suite Integrated SOA Gateway, Release 12.2 (Doc ID 1311068.1)

Oracle Integration Repository Administration

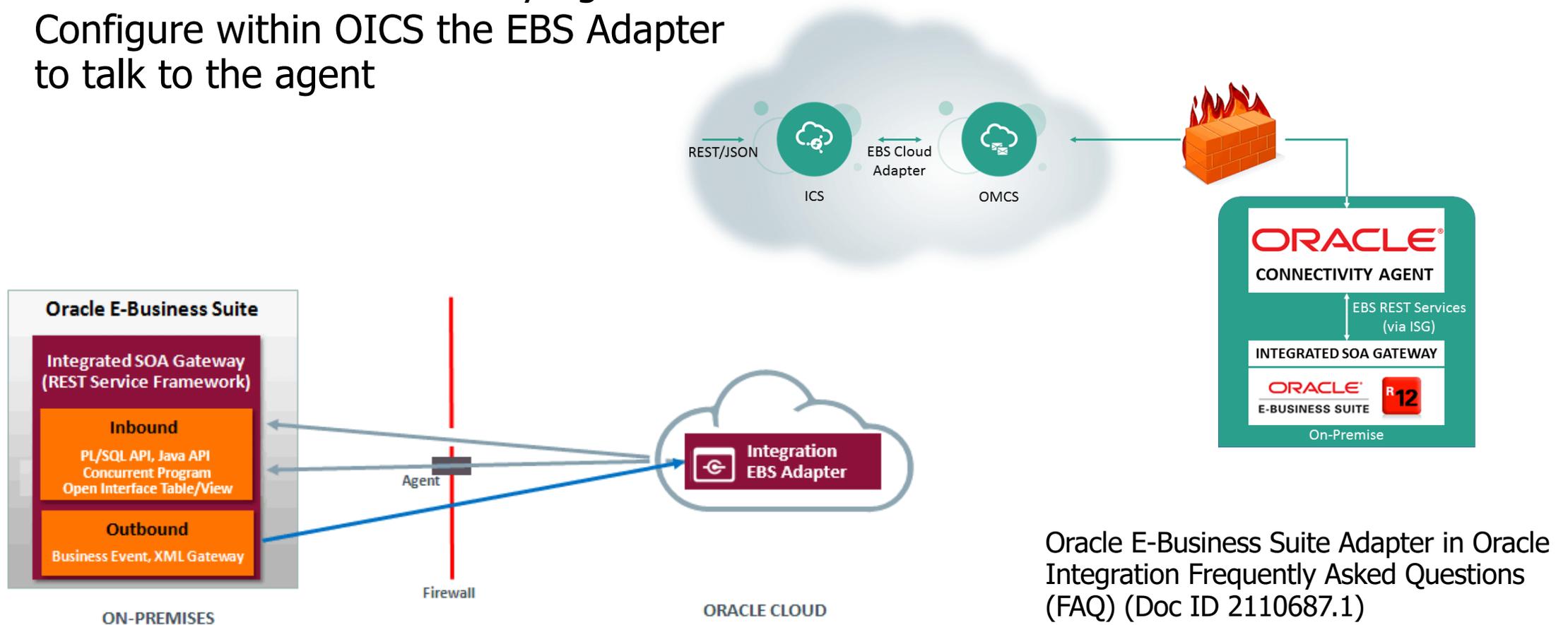
Interface List: Service Contracts

Name	Internal Name	Product	Type	Source	Status	Description
Activate Contract	OKS_ACTIVATE_CONTRACT_PUB	Service Contracts	PL/SQL	Oracle	Active	Provides APIs to perform GA check for contracts which are in Entered Status and submit the contract for approval.
Cascade Attributes	OKS_CASCADE_ATTRIBUTES_P...	Service Contracts	PL/SQL	Oracle	Active	Provides APIs for cascading attributes.
Change Contract Status	OKS_STATUS_CHANGE_PUB	Service Contracts	PL/SQL	Oracle	Active	Provides APIs for changing the contract status.
Coverage List procedure	OKS_CON_COVERAGE_PUB	Service Contracts	PL/SQL	Oracle	Active	Package containing APIs to retrieve Coverage information, specifically apply contract coverings, which retrieves the discount amount for a Business Process, and get_discount_list, which returns all the Business Processes and their respective Price List for a given Contract Line.
Delete Contract	OKS_DELETE_CONTRACT_PUB	Service Contracts	PL/SQL	Oracle	Active	Provides APIs for deleting contract line/subline.

OICS Connectivity Agent and EBS Adapter



1. Install the OICS Connectivity Agent
2. Configure within OICS the EBS Adapter to talk to the agent



Oracle E-Business Suite Adapter in Oracle Integration Frequently Asked Questions (FAQ) (Doc ID 2110687.1)



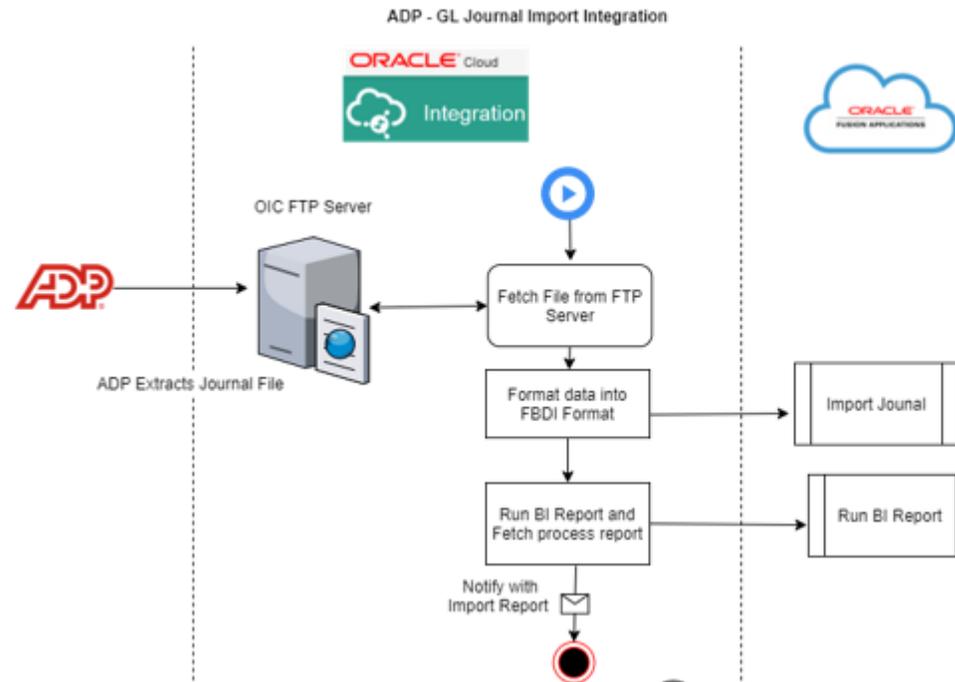
Examples And Case Studies

EBS with OICS

ADP Integration With Oracle E-Business



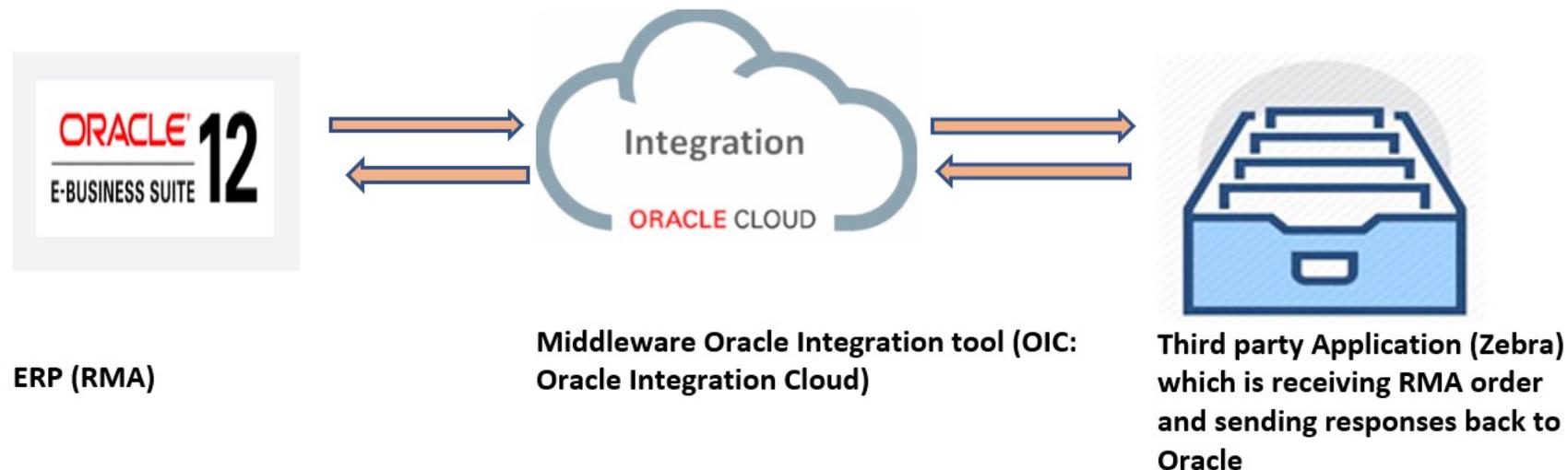
- Prebuilt integration provided for ADP
- ADP is polled for data and loads the content to the OIC sftp server
- Executes Cloud ERP Scheduled Jobs and creates Oracle Business Intelligence reports
- Delivers the reports by email upon completion status of the task



Airline Parts Supplier RMA Integration With EBS



- Real-time data integration between Zebra (3rd party application) and the EBS to send/receive information related to hardware device maintenance requests
- As real-time data is received via OIC integration for device maintenance service requests, the turnaround time has been reduced. Being in the airline industry, this is critical because here they need things to be resolved quickly within defined timelines
- Integration retrieves the valid RMA order and submits a request to Zebra, and RMA status is then received from Zebra and updates the status Oracle EBS.
- In case of



Airline Parts Supplier EBS Order Entry Integration



- Automates the process of sending the shipment details to the operational portal from EBS using OIC Integration
- Integration extracts all the valid shipment numbers and methods for tracking
- In case of any issue, email notifications are sent





EDI Killer Features

OCIS

EDI Features To Note



- 1) A comprehensive set of out-of-the-box: ANSI X12, EDIFACT, custom, REST, RosettaNet, fixed, delivered, XML
- 2) Easy, Fast Trading partner onboarding
 - OCI B2B is based on the 80/20 Principle: Instead of configuring countless “envelopes,” to add a new trading partner, you only need to configure a minimal set of required elements.
 - Flexible translation/lookup/Mapping tables (e.g. where every vendor uses a different code for “red”)
 - Can import from CSV file
 - Can add rows/columns on the fly
 - Can Deploy/undeploy transactions for testing and debugging transactions – with one trading partner at a time
- 3) Comprehensive observability (aka Monitoring) and tracking of transactions
 - Overall health and stability of OCIS fleet
 - Complete lifecycle of 850 PO through to 810 invoice
 - Custom correlation tags mapped to specific elements
 - Can resubmit instead of resending
- 4) High Availability (HA) by default
 - Built on standard OCI Availability Domains within an OCI Region
 - If required: Customer-managed DR in alternate OCI region
 - OCI may soon offer OCI - managed DR solutions for alternate regions

More Information



More here

<https://blogs.oracle.com/integration/>

<https://videohub.oracle.com/tag?tagid=b2b>



RosettaNet Adapter for Oracle Integration
B2B

oic oic 3 oracle integration oracle integration 3 rosettanet adapters b2b

From Sarah Bernau April 7th, 2024 0 13



OCW Workshop: Automate Oracle ERP Cloud
and B2B with Oracle Integration

oracle integration oracle integration 3 oic oic 3 oracle erp cloud fusion applications oracle erp
oracle digital assistant oda digital assistant oracle process automation process automation opa
liveiab oracle liveiab oracle workshop application integration b2b b2b for oracle integration

From Lucero Cortez April 3rd, 2024 0 37



Resubmit: Reprocess or Redeliver B2B
Transactions

oic 3 oic oracle integration oracle integration 3 b2b resubmit reprocess redeliver
transactions messages

From Lucero Cortez April 1st, 2024 0 32



Complete Look at B2B in Oracle Integration

oic oic 3 oracle integration oracle integration 3 b2b trading partners message tracking
redeliver transactions

From Sarah Bernau March 31st, 2024 0 27

- [Complete Look at B2B in Oracle Integration](#)
- [Complete Look at Oracle Integration Observability](#)
- [B2B Tracking in Oracle Integration](#)
- [Use Fixed Length Document Types for B2B](#)
- [B2B REST Protocol in Oracle Integration](#)
- [Configure a B2B Trading Partner Transport](#)
- [Create an XML Schema for B2B](#)
- [Create B2B Trading Partner Agreements](#)
- [Create a Trading Partner in Oracle Integration](#)
- [Create an AS2 Connection to a Trading Partner](#)
- [RosettaNet Adapter for Oracle Integration B2B](#)
- [OCW Workshop: Automate Oracle ERP Cloud and B2B with Oracle Integration](#)
- [Resubmit: Reprocess or Redeliver B2B Transactions](#)

Out of the Box B2B Solutions “Schema”



Schemas

5 schemas

Name	Standard	Version	Type
PO_850_Custom_Schema	X12	4010	850
AA-142	X12	4010	142
RN3A4-PO-Confirmation	RosettaNet	1.0	3A4-PO-Confirmation
RN3A4-PO-Request	RosettaNet	1.0	3A4-PO-Request
SampleSchema	Custom	1.0	SAMPLE

Create B2B schema

What is it called?
The name can be changed later. The identifier can be set only once.

EDIFACT

X12

X12HIPAA

OAG

Custom

RosettaNet

FixedLength

Delimited

Document standard
EDIFACT

Document version
D00A

Document type
APERAK (Application error and acknowledgemen

Create

Elements Can Be Easily Modified



ORACLE

AA-142

Identifier: AA_142, Updated on: 31 Jan 2024, 04:19:40 PM IST

Generate Edit info Save

Segment/Element	Position	Name	Requirement	Usage	Element type
▶ ST	010	Transaction Set Header	Mandatory		
▼ BGN	020	Beginning Segment	Mandatory		
BGN01	1	Transaction Set Purpose Code	Mandatory		ID
BGN02	2	Reference Identification	Mandatory		AN 1/30
BGN03	3	Date	Mandatory		DT 8/8
BGN04	4	Time	Conditional		TM 4/8
BGN05	5	Time Code	Optional		ID 2/2
BGN06	6	Reference Identification	Optional		AN 1/30
BGN07	7	Transaction Type Code	Optional		ID 2/2
BGN08	8	Action Code	Optional		ID 1/2
BGN09	9	Security Level Code	Optional		ID 2/2
▶ N9	025	Reference Identification	Optional		
▶ Loop-N1			Mandatory		
▶ Loop-LX			Mandatory		

Properties

element BGN01

Name: Transaction Set Purpose Code

Element ID: 353

Position: 1

Purpose: Code identifying purpose of transaction set

Requirement: Mandatory

Usage:

Type: ID (Identifier)

Deploy/UnDeploy/Resend



The screenshot shows the Oracle AS2-Partner configuration interface. The page title is "AS2-Partner" and the identifier is "AS2_PARTNER". The "Transports & agreements" tab is selected, showing three sections: Transports, Inbound agreements, and Outbound agreements.

Transports

Transports define how a message is delivered to or received from this trading partner. 4 Jun 2024, 06:48:11 PM IST

Name	Direction / Type	Status	Last updated
AS2Transport	↔ AS2	Deployed	21 Feb 2024, 02:31:01 PM IST

Inbound agreements

Inbound agreements define the conditions for receiving documents from this trading partner.

Name	Document	Status	Backend integration	Last updated
bb-850-4010	X12 4010 850 bb-850	Deployed	aa- AS2 Receive	21 Feb 2024 04:13:31 PM IST

Outbound agreements

Outbound agreements define the conditions for sending documents to this trading partner.

Name	Document	Status	Transport	Last updated
No outbound agreements. Click on the create icon to define outbound agreements.				

Create Lookup Table and Add Columns



The screenshot shows the Oracle Lookups management interface. On the left is a navigation sidebar with options: Design, Integrations, Connections, Events, Lookups, Libraries, Packages, Agents, and Adapters. The main area is titled "Lookups" and shows a search bar and a table with the following columns: Name, Usage, Domains, and Values mapped. The table is currently empty, displaying "No data to display." To the right, a "Create lookup" modal is open, prompting the user to "Enter details" and providing a text area for the Name (marked as Required), a text area for Keywords, and a text area for Description. A red chat icon is visible in the bottom right corner of the interface.

The screenshot shows the Oracle Lookup Table configuration interface. The top header indicates the table is in "Draft" status, updated on 4 Jun 2024, 06:54:29 PM IST, and used in 0 integrations. Below the header, there are two domain selection dropdowns labeled "Domain_Name_1" and "Domain_Name_2", each with an "X" icon to clear the selection. Below these are two rows of input fields for defining the lookup table's structure. At the bottom left, there is a "+ Layout Table" button, and at the bottom right, there is a red chat icon.

Lifecycle Reporting With Tracking/Observability



ORACLE

bb-850 Save

Identifier: BB_850 Updated on: 21 Feb 2024, 12:00:02 PM IST

Delimiters

Element separator: Asterisk (*)

Subelement separator: Colon (:)

Segment terminator: Tilde (~)

Correlation

Correlation type: Correlation to

Correlation to XPath name: SampTPPONumber

Correlation to XPath expression: Click here to select the correlation xpath expression

- Transaction Set Header
- BEG:Beginning Segment for Purchase Order
 - BEG01:Transaction Set Purpose Code
 - BEG02:Purchase Order Type Code
 - BEG03:Purchase Order Number

Observability **ORACLE**

Track B2B messages

Business messages | Wire messages

Time window: Last 1 hour | Direction: Inbound and outbound | Clear

2 messages

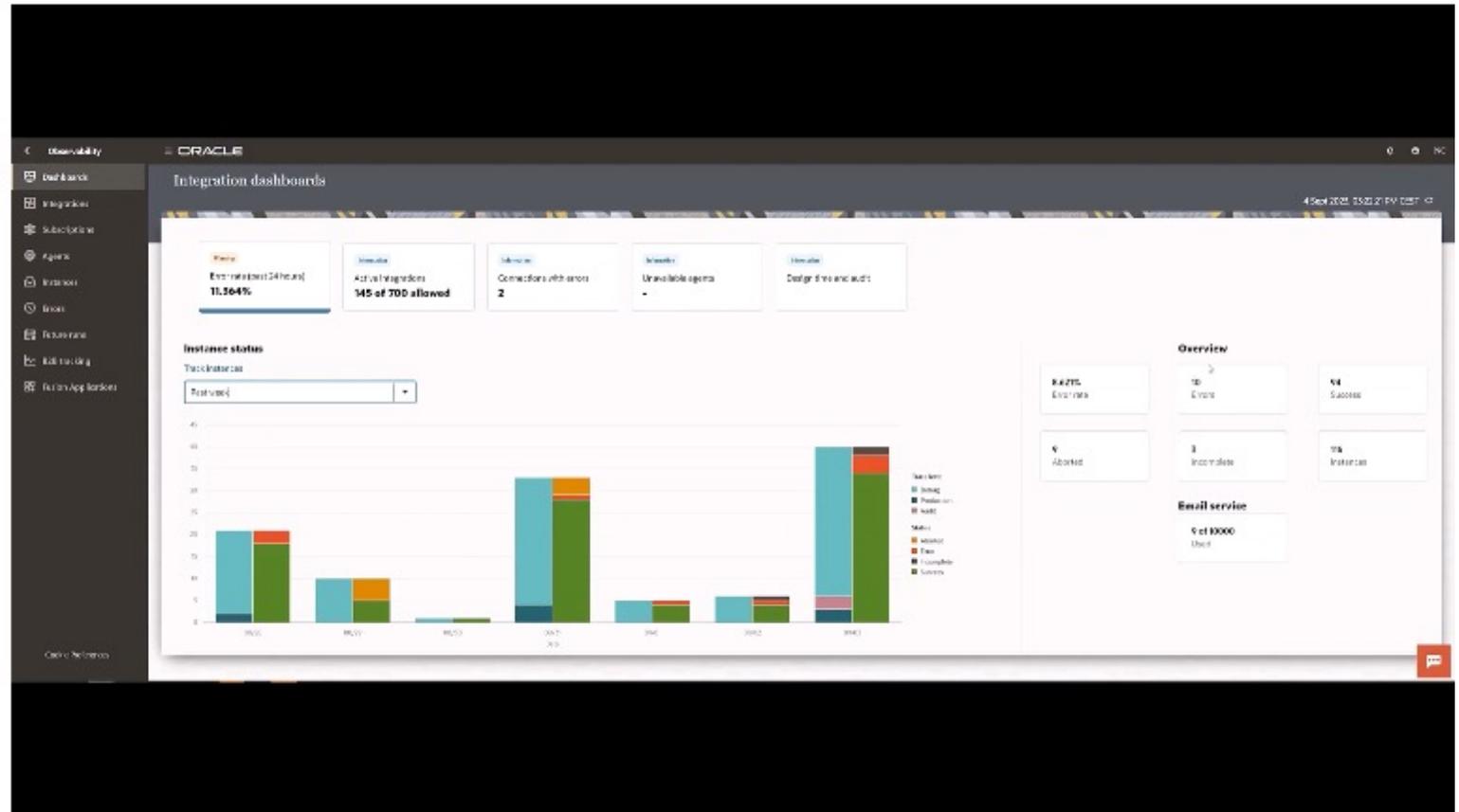
Document	Trading partner	Status
X12 4010 850	Acme	Success
X12 4010 997	Acme	Success

Business message details
Message ID: 0AF4078E8B484EB17C500000E69ABA60

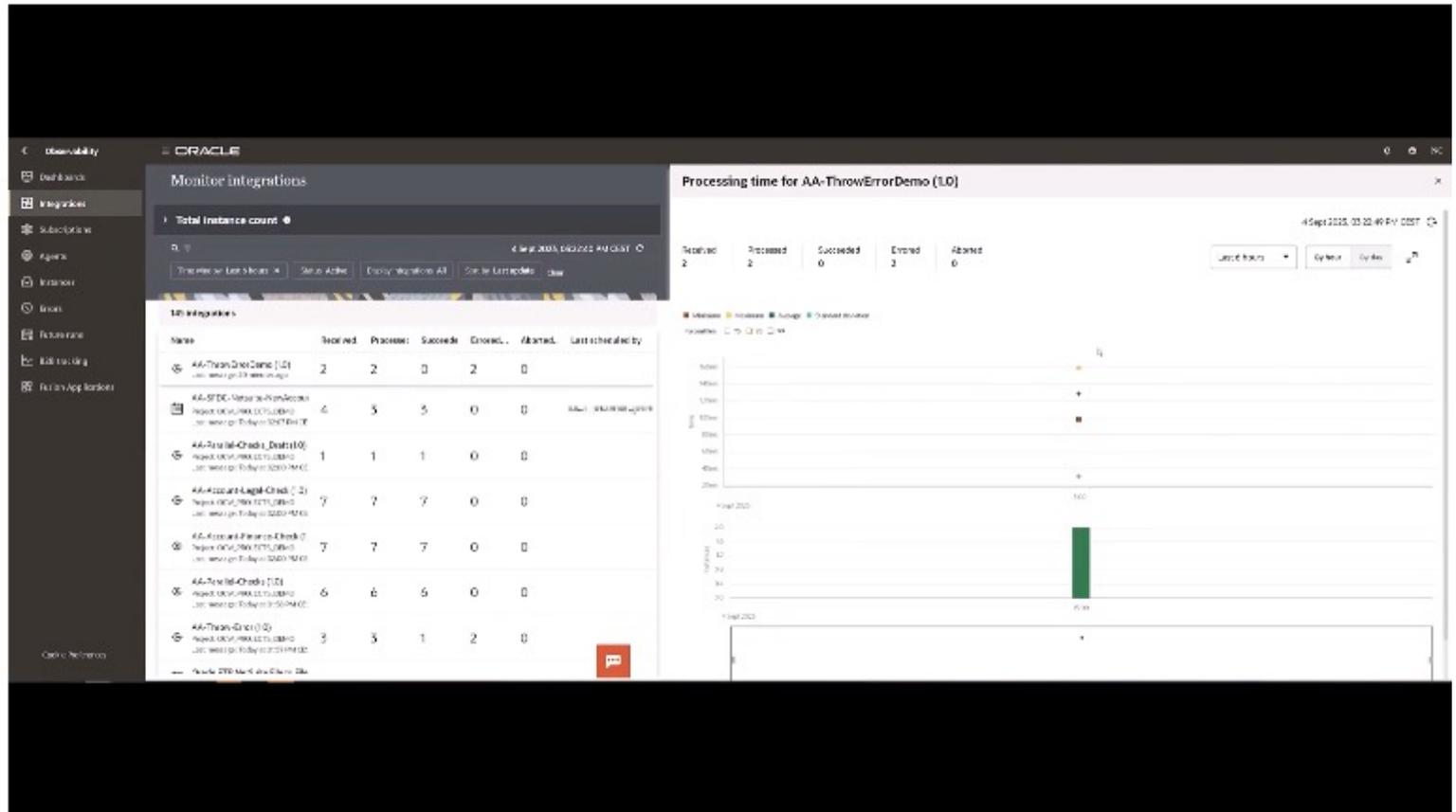
Primary Information

Properties	Message logs	Payloads	Correlations
Business Identifier	Value		
Order Number	GNOrder-1		
Buyer Name	jsmith@acme.com		
Property	Value		
Agreement Name	PartsOrder		
Document id	PO_850_CUSTOM_DOCUMENT		
EDI Interchange Receiver Id	MyCompany		
EDI Interchange Sender Id	ACME		
Group Control Number	1059		

Monitoring/ Observability



Monitoring/ Observability

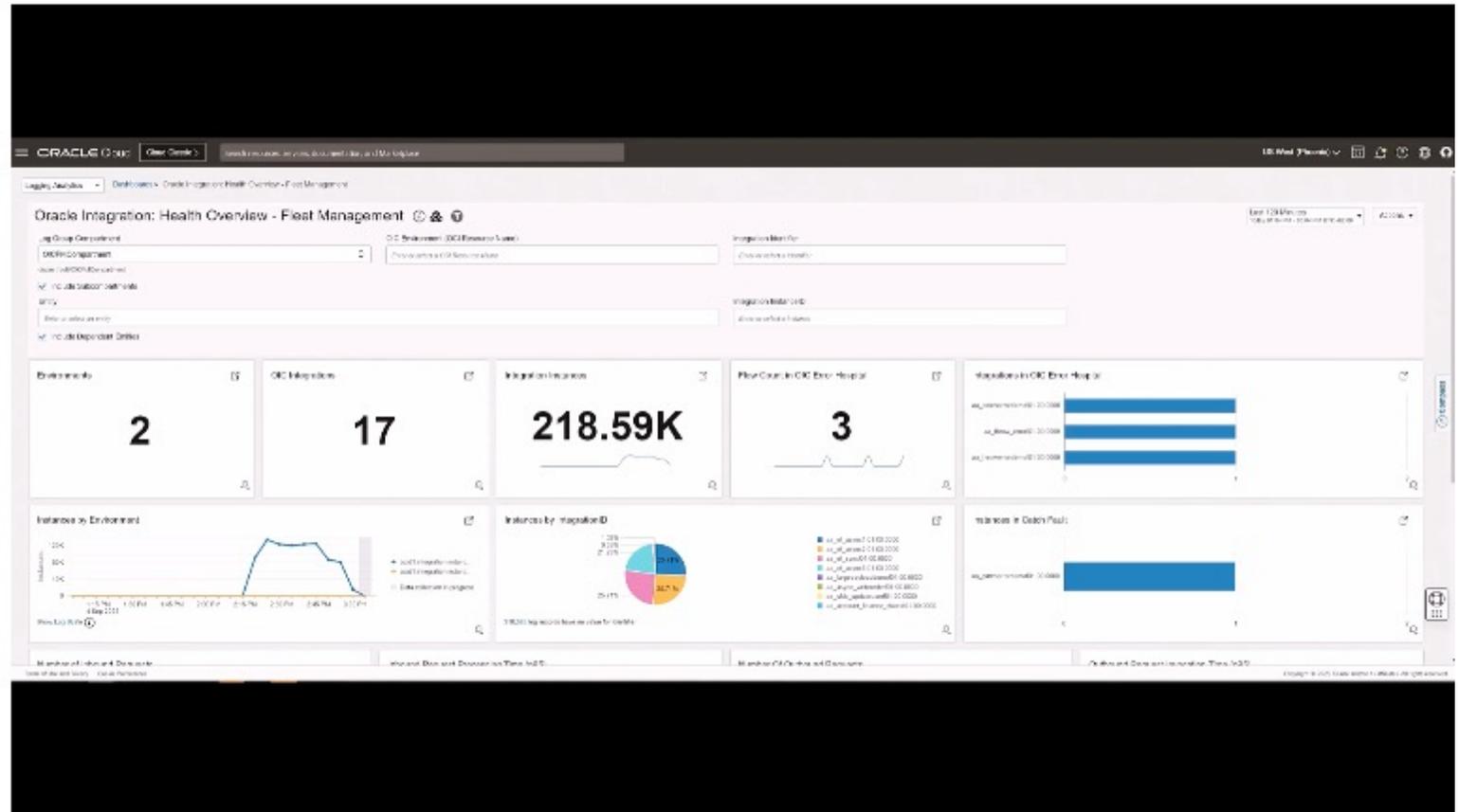


Send OIC Logs To OICS Logging Analytics

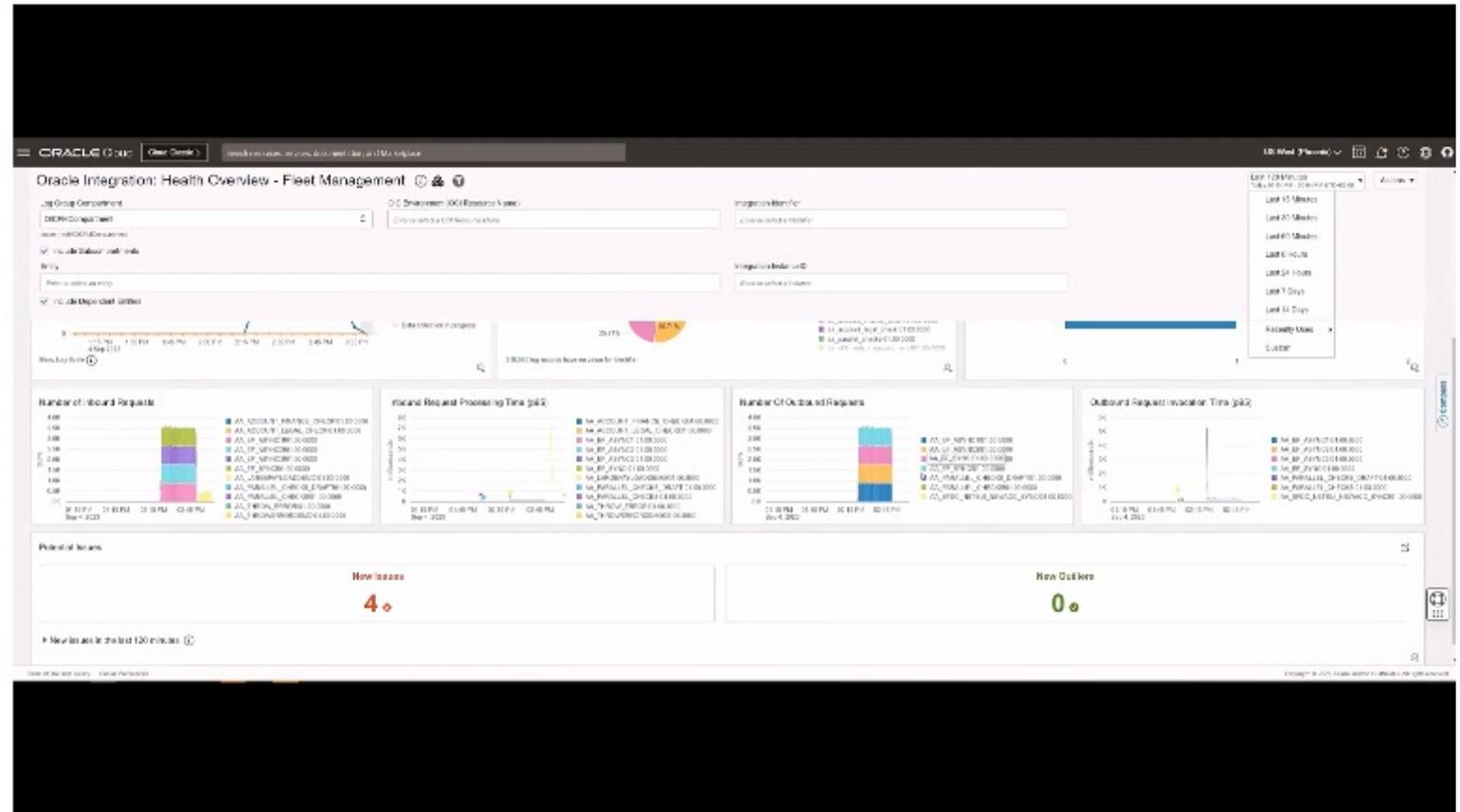


The screenshot displays the Oracle Cloud Logging Analytics interface. On the left, there is a navigation menu with options like 'Event', 'Event Sources', 'Logs', 'Log Groups', 'Agent Configuration', 'Storage Configuration', and 'Jobs'. The main area is titled 'Search' and contains a search bar with a filter 'All Logs with Healthcheck logging agent (using OCI IAM Roles)'. Below the search bar, there are fields for 'Custom Filter', 'Event Includes', 'Filter by Date', and 'Fields include'. A 'Show Results' button is visible. Below the search area is a bar chart showing the number of log items per minute for the date Sep 11, 2023. The chart shows four bars of varying heights, with the highest bar on Sep 11, 2023. Below the chart, there is a table of log entries with columns for 'Timestamp', 'Type', and '4FS Message'. The table shows several entries with timestamps from Sep 11, 2023, and messages related to 'Integration logging metadata'. At the bottom right, there is a '4FS Message' column with a search icon and a 'Show Results' button.

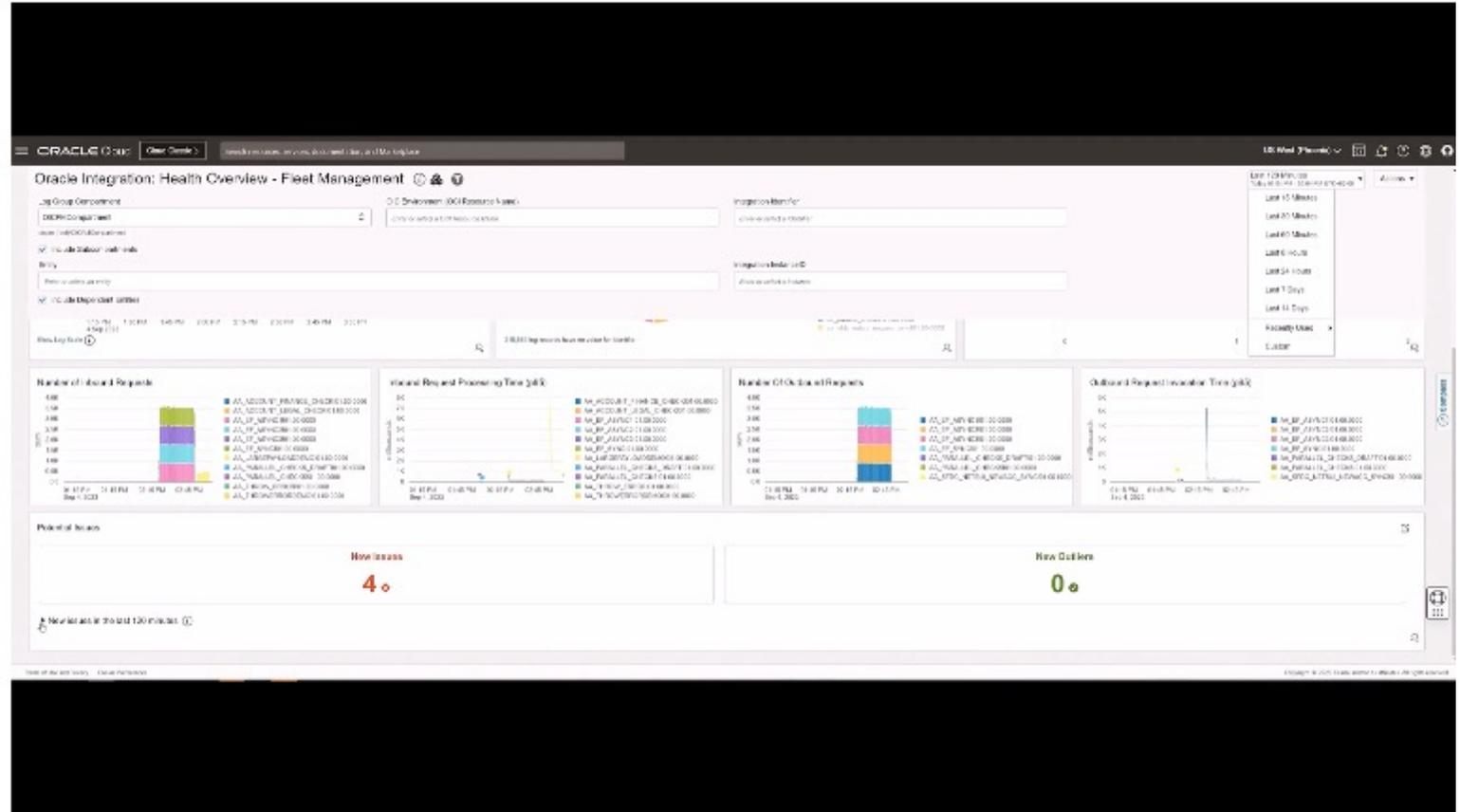
OCI Health Overview Dashboard



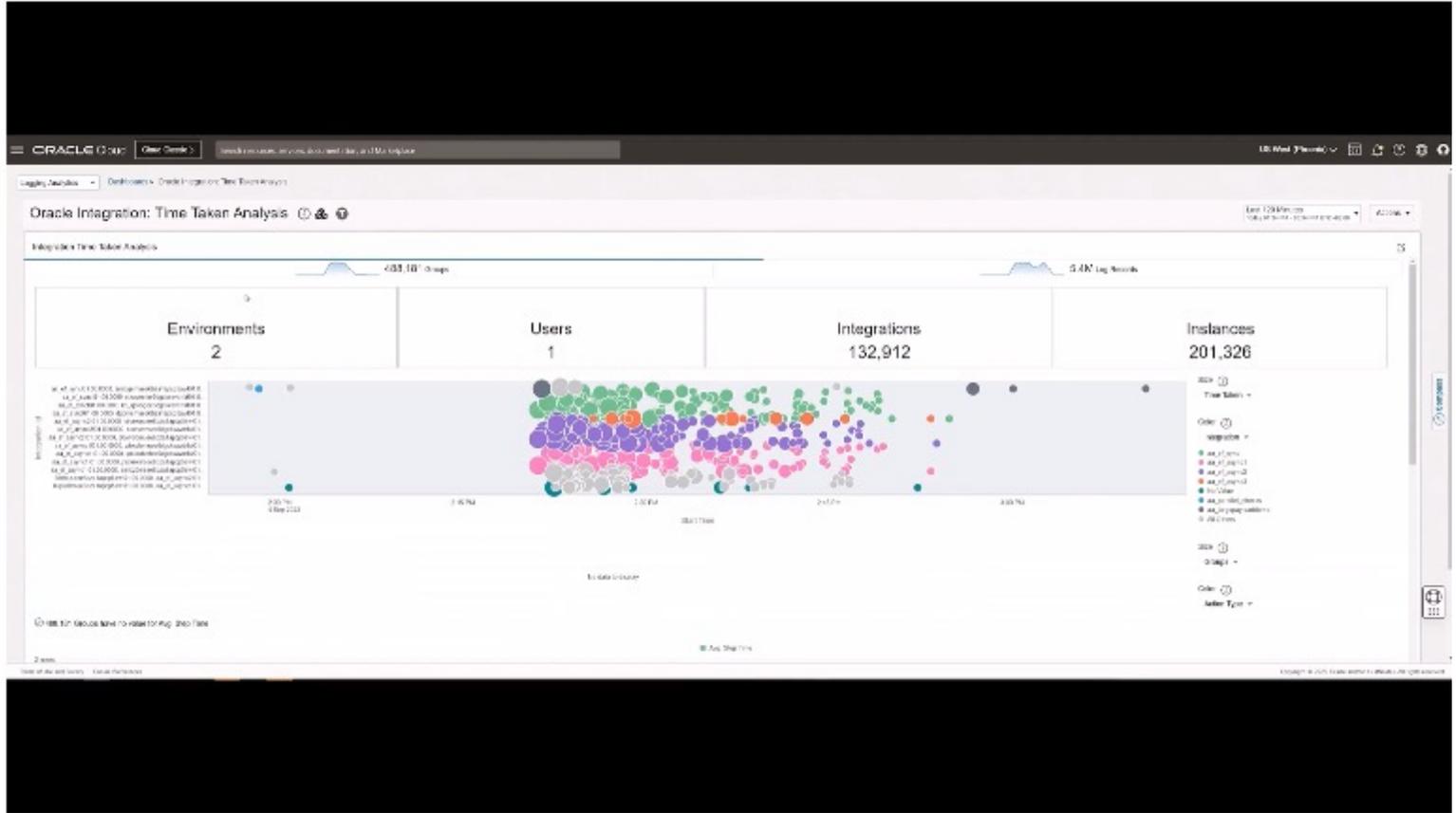
Inbound/ Outbound Timings



Potential Issues (Outliers)



Time Taken Over Time





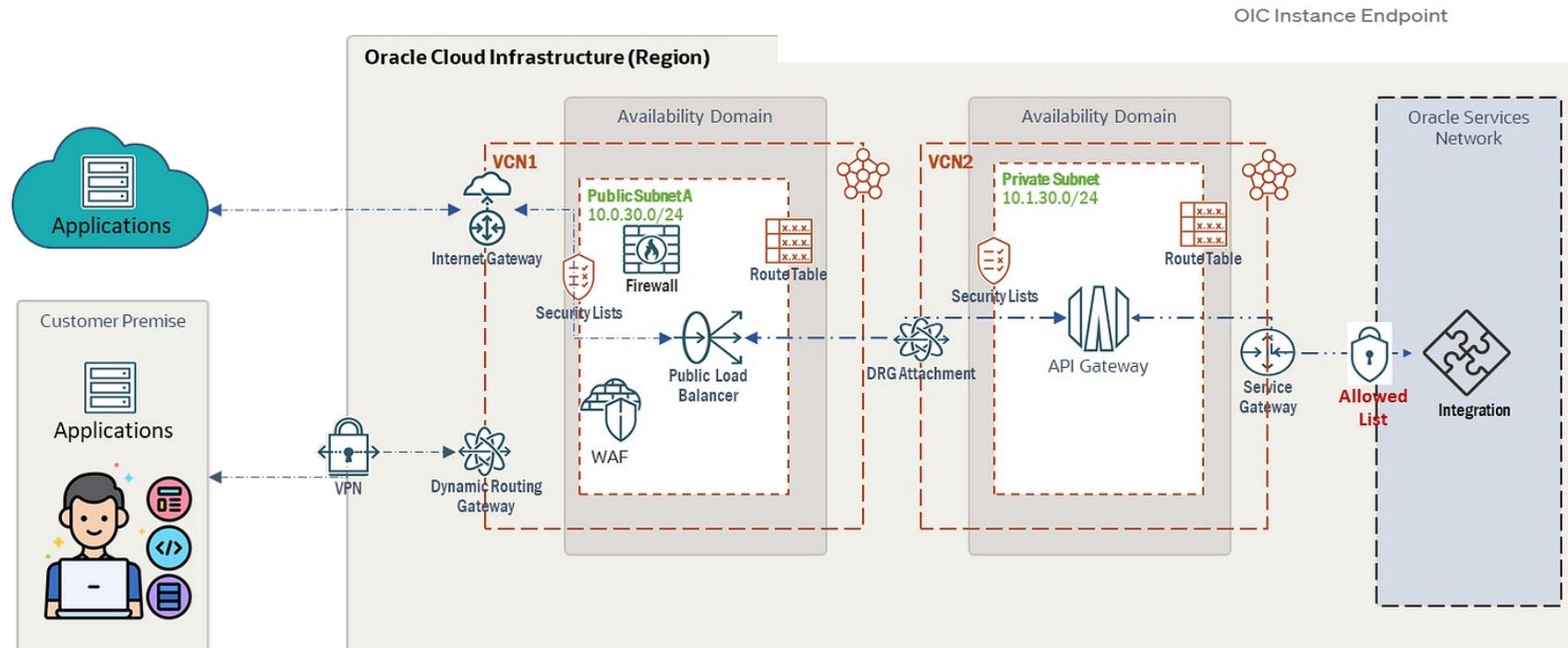
Security Considerations

First Things First

OIC Deployment



<https://<OICInstanceName>-OCITenancyNamespace-OCIRegion.integration.ocp.oraclecloud.com:443>



By default OIC instances are provisioned on the Public cloud, i.e., for anyone who invokes an Integration in OIC, the traffic comes via Public Internet

- Incoming traffic should be analyzed by WAF & Firewall
- Analyzed traffic should be passed to a Load Balancer whose backend should be a Private API Gateway
- Private API Gateway should have OIC as the backend. APIGW allows traffic only from Load Balancer
- Allowed List/Network Access on OIC as shown above will have APIGW IP only

Encryption



- **Incoming Data:** Encryption of data interfacing to OIC is the client's responsibility, and if any transformations are required on data and decryption is required, then a private key is to be shared by the client
- **Staging Data:** Once the data is interfaced in OIC, it can be encrypted using PGP encryption, where OCI stores the keys in OCI Vault to use them for encryption. In OIC, we can encrypt data at the data field level and file level
- **Outgoing Data:** Data outbound to OIC can be encrypted using PGP encryption which the end user will be decrypted using the private key
- **Message-Level Encryption (MLE)** Is a security technique used to protect the confidentiality and integrity of a message during transmission. This reference architecture demonstrates how to use OCI Vault to achieve MLE in OIC: <https://docs.oracle.com/en/solutions/oic-message-level-encryption/index.html#GUID-383E7800-9BC3-4F31-AD8D-C3D8CE5A1FEB>

OIC Roles



Oracle Integration	Description
ServiceAdministrator	A user with the ServiceAdministrator role is a super user who can manage and administer the features provisioned in an Oracle Integration instance.
ServiceDeveloper	A user with the ServiceDeveloper role can develop the artifacts specific to the features provisioned in an Oracle Integration instance. For example, in Integrations the user can create integrations, and in Processes the user can create process applications and decision models.
ServiceMonitor	<p>A user with the ServiceMonitor role can monitor the features provisioned in an Oracle Integration instance. For example, the user can view instances and metrics, find out response times, and track whether instance creation completed successfully or failed.</p> <p>This role provides privileges for users with limited knowledge of Oracle Integration, but with high-level knowledge of monitoring it. This user role does not grant permissions to change anything.</p>
ServiceDeployer	<p>A user with the ServiceDeployer role can publish the artifacts developed in a feature.</p> <p>This role is not applicable for the Integrations feature.</p>
ServiceUser	<p>A user with the ServiceUser role has privileges to utilize only the basic functionality of a feature such as access to the staged and published applications.</p> <p>For example, in Integrations the user can navigate to resource pages (such as integrations and connections) and view details, but can't edit or modify anything. The user can also run integrations and start process applications.</p>
ServiceInvoker	<p>A user with the ServiceInvoker role can invoke any integration flow in an Oracle Integration instance that is exposed through SOAP/REST APIs or a scheduled integration. See Run an Integration Flow. A user with ServiceInvoker role cannot:Navigate to the Oracle Integration user interface or perform any administrative actions in the user interface.</p> <p>Invoke any of the documented Oracle Integration REST APIs. See About the REST APIs.</p>
ServiceViewer	<p>A user with the ServiceViewer role can navigate to all Integration resource pages (for example, integrations, connections, lookups, libraries, and so on) and view details. The user cannot edit any resources or navigate to the administrative setting pages.</p>



Licensing, Pricing and Syntax Managed Services

OCIS Economics

Pricing Depends on OICS Edition



- **Standard** includes Integration (SaaS Integration Adapters, Technology Adapters, and Scheduled File Transfer) and Visual Builder.
- **Enterprise** instance includes all the standard features plus On-Premise Application Adapters and Process Automation.

Regardless of which edition you choose, Oracle handles cloud and database management, backup, restore, and other administrative tasks for you

Standard vs Enterprise



Capability	Available in Standard edition	Available in Enterprise edition
Integration	Yes	Yes
Visual Builder	Yes	Yes
Standard adapters	Yes	Yes
Enterprise adapters*	No	Yes
Process	No	Yes
B2B**	No	Yes
Integration Insight	No	Yes +
File Server	Yes +	Yes +
Embedded recipes and business and technical accelerators	Yes +	Yes +

*Enterprise adapters include Oracle E-Business Suite Adapter, Oracle JD Edwards EnterpriseOne Adapter, Oracle Siebel Adapter, and SAP Adapter.

OICS Pricing



Integration			
Product	Comparison Price (/vCPU) *	Unit price	Unit
Oracle Integration Cloud Service - Standard	—	\$0.6452	5K Messages per hour
Oracle Integration Cloud Service - Standard - BYOL	—	\$0.3226	20K Messages per hour
Oracle Integration Cloud Service - Enterprise	—	\$1.2903	5K Messages per hour
Oracle Integration Cloud Service - Enterprise - BYOL	—	\$0.3226	20K Messages per hour

- When an OIC instance is created, by default, a message pack of 1 is selected
 - You will be charged 1 msg pack/hour for the new instance – *whether the message pack is being used or not.* (31 days x 24 hours = 744 hours in a month)

BYOL SOA Licenses to OICS



BYOL Cloud Services		
Oracle Integration Cloud Service – Standard – BYOL	B89643	20,000 Messages Per Hour
Oracle Integration Cloud Service – Enterprise - BYOL	B89644	20,000 Messages Per Hour

Conversion Ratios:

- For each supported Processor license You may activate up to 2 OCPUs, which is 40,000 messages per hour of the above referenced BYOL Cloud Services. For every 25 supported Named User Plus licenses. You may activate 1 OCPU of the above referenced BYOL Cloud Services, which is 20,000 messages per hour.

Any of the following supported program licenses may be aggregated to meet the conversion ratio above.

For Oracle Integration Cloud Service – Standard - BYOL
Oracle SOA Suite for Oracle Middleware AND Oracle Weblogic Suite AND applicable application adapter(s) (if being used)

For Oracle Integration Cloud Service – Enterprise - BYOL
Oracle SOA Suite for Oracle Middleware AND Oracle Weblogic Suite AND Oracle Unified BPM Suite AND applicable application adapter(s) (if being used)

https://www.oracle.com/contracts/docs/paas_iaas_universal_credits_3940775.pdf?download=false

Migrate SOA Suite B2B Artifacts To OICS



Which B2B Artifacts Can Be Migrated

Before beginning migration, it is important to understand which B2B artifacts in Oracle SOA Suite can be migrated to Oracle Integration.

Can Be Migrated	Cannot Be Migrated
<ul style="list-style-type: none">• Host profile• Trading partners (properties, contacts, identifiers)• Transport protocols (AS2, REST, FTP, RosettaNet)• Inbound and outbound agreements• Agreement parameters• Transport connections• Transport template integrations• Schemas and schema parameters (EDI, OAG, custom, and RosettaNet)• Documents and document parameters (EDI, OAG, custom, and RosettaNet)	<p>The following artifacts are ignored if included in the exported ZIP file.</p> <ul style="list-style-type: none">• SOA connections / endpoints• SOA composite applications• SOA security configurations• HL7 document protocol• The following delivery/transport protocols:<ul style="list-style-type: none">○ AS1○ AS4○ ebMS,○ MLLP○ Generic-AQ○ Generic-JMS○ Genaric-Email○ Generic TCP○ Generic MFT

Migrate by creating export files of B2B artifacts that consists of one or multiple ZIP files

<https://docs.oracle.com/en/cloud/paas/application-integration/integration-b2b/migrate-b2b-artifacts-oracle-soa-suite-oracle-integration1.html>

Message Packs and Messages



- One (1) message pack is a unit of 5,000 messages per hour
 - With BYOL 20,000 messages per hour
- OICS has a minimum of one (1) message pack
 - 31 days for std \$480
 - 31 days for enterprise \$960
- Message is a unit of measure for the size of the integration payload or number of concurrent integration developers
- Outbound messages are NOT counted
- Max 10MB XML message payload size
- Max file size 1GB for files and attachments

Component	Unit of Measure	Messages
Integration	Payload increments of 50,000 kb	1
Visual Builder GUI	1 concurrent development/admin user	100
Process GUI	1 concurrent development/admin user	400
Integration Insights GUI	1 transaction	1

REST/SOAP/Events Integration Message Examples



Example	Inbound Payload	Outbound Payload	Message Count
1	47kb		1
2	51kb		2
3	67kb		2
4	107kb	50kb	3

OICS Costs



One-Time Costs

- Provision OCI tenancy
 - Network, compartments, security policies, logging, API Gateway, and monitoring
- EBS tasks
 - Configure ISG
 - install OICS connectivity agent
- OCI tasks
 - Provision Integration Cloud Services
 - Configure OICS EBS adapter
 - Build integrations

On-Going Costs (Monthly)

- OCI consumption (e.g., OICS) and tenancy management
- Monitoring (and reSubmittign) and reporting



Summary

OICS Is Market Leader For A Reason

Summary



- Take the Gartner Magic Quadrant announcement seriously
- Use to create from scratch or from Prebuilt integrations, integrations that can be combined in different ways and built into graphical workflows
 - External applications and B2B
 - On-premise applications
Scheduled Jobs
 - File Transfers
- Seriously consider if you need to modernize your EDI/B2B solution
- Take security seriously
- If you have SOA Suite, seriously evaluate OIC. Bring licenses and significant cost savings.
- Consider a managed service for OIC
 - Development assistance and monitoring
 - Pay in arrears with a 36-month rate sheet lock
- More information
 - <https://blogs.oracle.com/integration/>



Q&A

Mike Miller

Michael.Miller@syntax.com



Thank You For Attending!

Please complete the session
survey in the conference app.