

Oracle SCM Cloud B2B Collaboration Strategy

Oracle Business Brief

January, 2021, Version 4.0
Copyright © 2021, Oracle and/or its affiliates
Public

Disclaimer

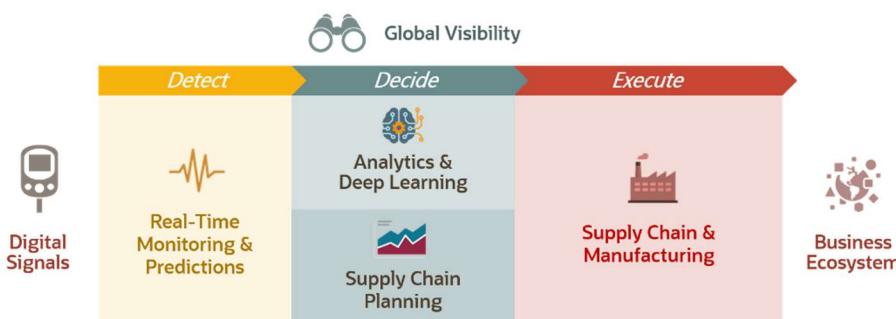
This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this confidential material is subject to the terms and conditions of your Oracle software license and service agreement, which has been executed and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced or distributed to anyone outside Oracle without prior written consent of Oracle. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

This document is for informational purposes only and is intended solely to assist you in planning for the implementation and upgrade of the product features described. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described in this document remains at the sole discretion of Oracle. Due to the nature of the product architecture, it may not be possible to safely include all features described in this document without risking significant destabilization of the code.

Overview

Over time, our focus as supply chain professionals has changed. We once implemented supply chain automation to improve efficiency – reducing inventory and resource costs. Then we worked to improve product quality, enabling six sigma and total quality management. Then as competitive pressures increased, we integrated product development processes, optimized supply and outsourced production to become more agile.

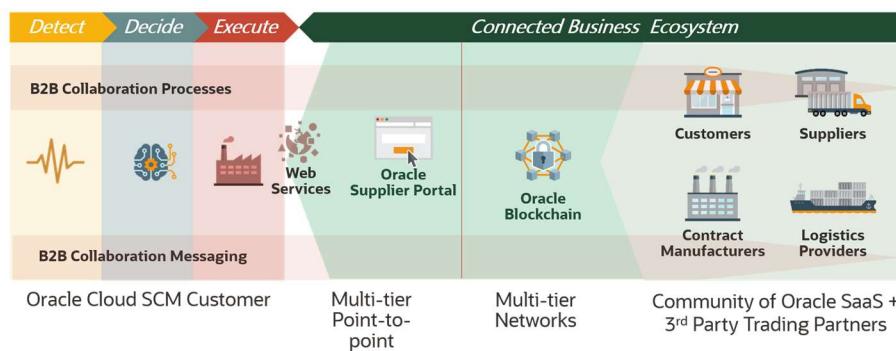
Now we're in the digital era, in which the markets we serve, the products and services we offer and the way we deliver them are all being transformed at the same time. We still need to continue to be efficient, maintain our dedication to quality, and promote agility, but that's no longer enough. To succeed, we need a more intelligent supply chain that supplements core supply chain functionality with real-time visibility and access to external data sources.



Oracle Supply Chain Management: Insight and Collaboration

An essential part of any intelligent supply chain is the ability to have immediate access to external data sources, then use the additional information provided by these external data sources to make better decisions.

This is accomplished by establishing a comprehensive, connected business ecosystem where information can be seamlessly and efficiently shared across all partners in the ecosystem.



Oracle's Connected Business Ecosystem

Business Ecosystems

Oracle offers several solutions to help you design and implement the most effective business ecosystem for your unique business processes and requirements. These solutions allow you to connect to your trading partners regardless of their size, maturity, mode of communication, or the network they

are on. In addition, if your trading partners are also Oracle ERP/SCM Cloud customers, B2B Messaging is automatically integrated so there is no additional effort to include these trading partners into your business ecosystem.

It is also important to understand that despite the multiple solutions, communication channels and networks used to establish a comprehensive and connected business ecosystem, the true benefit is the underlying business processes that are made more intelligent through better visibility and access to more data.

In some cases you will see the same business processes supported by different business ecosystem solutions. This provides you with flexibility to choose the best solution based on factors such as the size, maturity and technical capabilities of your trading partners. It also allows you to use different solutions for different trading partners.

The remainder of this whitepaper will focus on collaborative business processes enabled by Oracle business ecosystem solutions.

Supply Chain Collaboration

Oracle Cloud Supply Chain Collaboration is a product that supports multi-tier collaboration with trading partners across multiple business processes. These B2B Collaboration Processes are:

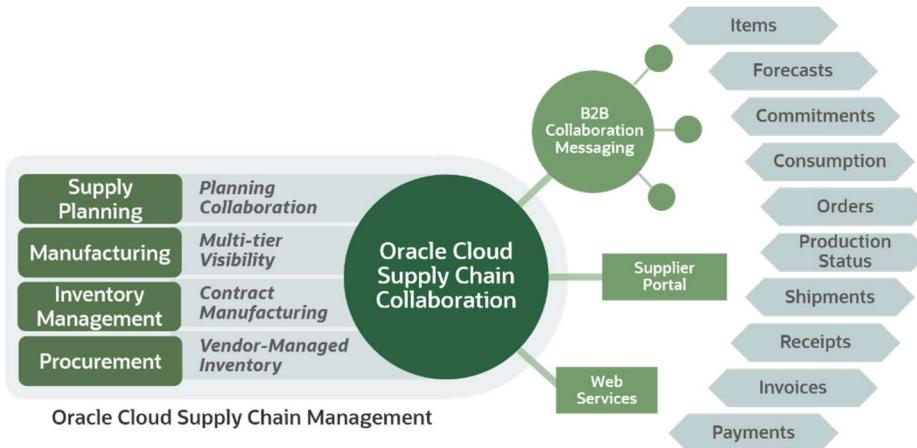
- Planning Collaboration: Offers ability to share order forecasts and receive commits from suppliers and contract manufacturers
- Multi-tier Visibility: Digitally synchronizes upstream supply from multiple tiers of external organizations to provide holistic visibility across tiers of your supply chain ensuring quick action against upstream supply disruptions
- Contract Manufacturing: Provides visibility to production progress updates from contract manufacturers and seamlessly integrates them into manufacturing cloud as transactions
- Buy-Side VMI: Empowers the suppliers to manage the replenishment quantities to keep the enterprise facilities in stock

Business Ecosystems

A comprehensive, connected business ecosystem enables collaboration with trading partners using a variety of solutions and technologies.

Supply Chain Collaboration

Oracle business application that provides complete, end-to-end management of business processes across multiple tiers and multiple trading partners in your supply chain.

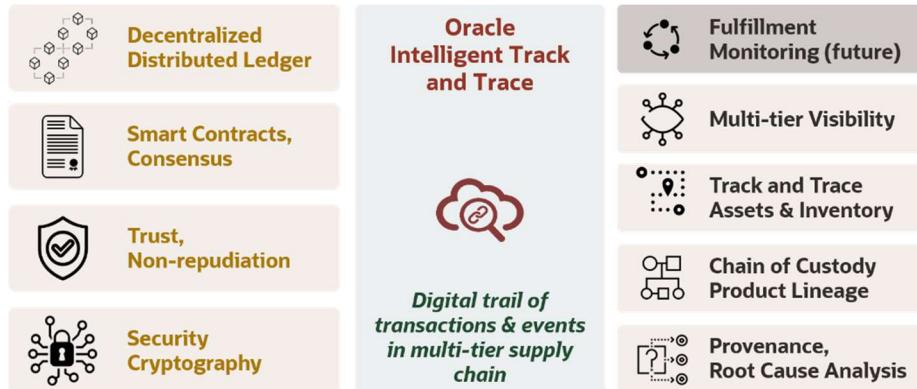


Oracle Cloud Supply Chain Collaboration

Supply Chain Collaboration leverages Oracle's business ecosystem to send and receive collaborative information with trading partners across multiple tiers in your supply chain, resulting in greater visibility, greater efficiency and better decision making.

Oracle Intelligent Track & Trace (Blockchain)

Oracle Intelligent Track and Trace is a B2B Collaboration Process that addresses the challenges of managing complexities in a global network of trading partners by leveraging Oracle Blockchain technology.



Oracle Intelligent Track and Trace

Prebuilt business flow templates and prebuilt integrations form a multi-tier network that connects Customers, Manufacturers, Suppliers, Carriers and 3rd Party Logistics Providers.

As with Oracle Supply Chain Collaboration, Oracle Intelligent Track and Trace also leverages components from Oracle's connected business ecosystem including B2B Messaging and Web Services.

Collaboration Messaging Framework (CMK)

Collaboration Messaging Framework (CMK) is a centralized B2B Collaboration Messaging solution that provides a single integration point between Oracle SCM,

ERP and Procurement Cloud and other B2B solutions required for automated, end-to-end exchange of business information between trading partners.

Multiple business processes can be implemented using B2B Messaging and CMK is always adding support for new business processes. Currently, supported business processes include:

- Procure-to-Pay
- Order-to-Cash
- Supply Chain Collaboration
- e-Invoicing

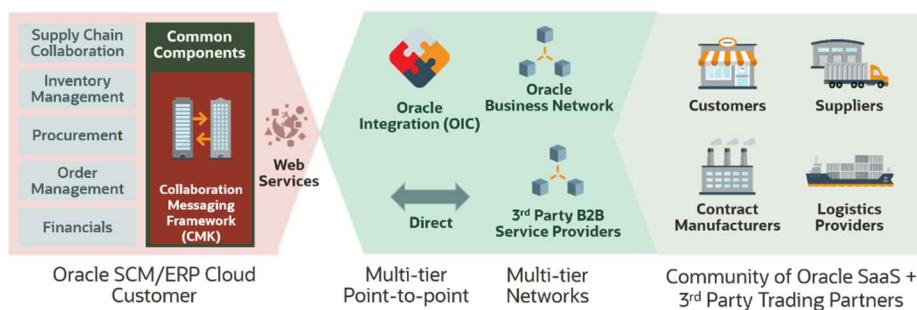
Key features provided by CMK include:

- Centralized B2B Trading Partner Management
- Support for Standard Data Formats and Delivery Methods
- Pre-Built B2B Messages
- Monitor B2B Message Processing. Analyze and Resolve Errors
- Multiple Configuration Options to manage Message Processing and Data Mapping

B2B Messaging

B2B Messaging is the automated exchange of business information between trading partners using standardized interfaces and data formats.

Oracle's Collaboration Messaging Framework (CMK) enables B2B Messaging for Oracle SCM, ERP and Procurement Cloud.



B2B Process using Collaboration Messaging Framework

Use CMK if you need to communicate with trading partners using a standard data format such as EDI, OAGIS, cXML, UBL, etc.

CMK should also be used if you need exchange of information between trading partners to be completely automated with built-in features to monitor and control message processing, manage B2B trading partners and/or work with other B2B Solutions and Service Providers.

Multiple Connectivity Channels

There are connectivity channels supported by CMK to exchange B2B messages with trading partners so you have flexibility to select which channel(s) best suits your and your trading partner's needs. Channels include:

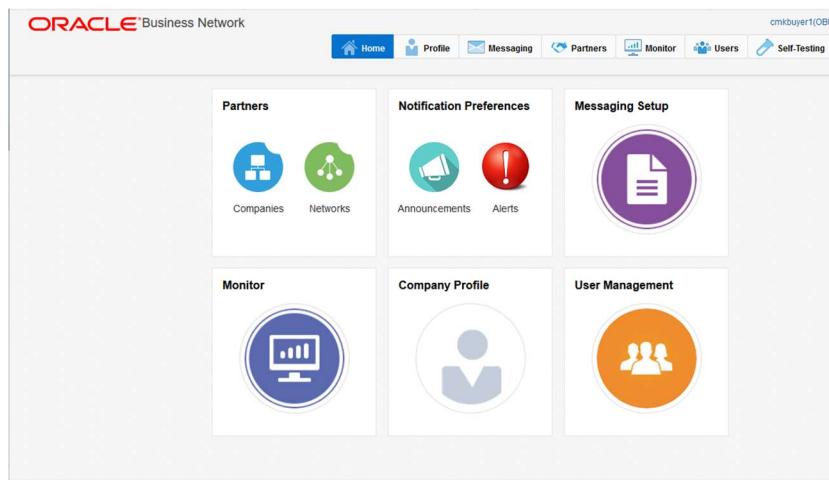
- **Direct Connection.** Configure CMK to send/receive B2B messages directly to trading partners. This works well for a small number of trading partners that can process one of the pre-built B2B data formats provided by CMK.

- **3rd Party B2B Service Providers.** These solutions serve as an intermediary between CMK and trading partners. They add value by providing a trading partner network (including trading partner onboarding), EDI Translation and mapping services, as well as other related B2B services. This is a good option for organizations that want to outsource B2B, need some of the value-add services provided by these 3rd Party B2B Service Providers or have an existing relationship with a 3rd Party B2B Service Provider. Oracle has established strategic partnerships with several B2B Service Providers that have pre-built integration with CMK. Details can be found on [Oracle Cloud Marketplace](#).

Oracle also provides other B2B solutions that can be implemented with CMK. These solutions are Oracle Business Network (OBN) and Oracle Integration (OIC).

Oracle Business Network (OBN)

Oracle Business Network is a free cloud service offered to Oracle customers. It is a network of suppliers that enables automated processing for key Procure-to-Pay B2B messages. OBN provides supplier self-service management and pre-built integration to several Oracle applications including Oracle SCM, ERP and Procurement Cloud, Oracle E-Business Suite and Oracle PeopleSoft.



Oracle Business Network

OBN supports cXML and OAGIS data formats which are primarily targeted for indirect procurement use cases.

Suppliers are responsible for connecting their applications to OBN so some implementation effort is required but if your suppliers are already connected to OBN or if you need a low-cost B2B solution for indirect procurement, this is a very good option.

CMK has also implemented many enhancements to improve integration with OBN. These enhancements streamline setup and configuration so

B2B Messaging Connectivity Channels

CMK is designed to connect directly to trading partners or work with other B2B solutions to establish end-to-end trading partner connectivity.

Oracle Business Network (OBN) and Oracle Integration (OIC) are two B2B solutions that complement CMK for end-to-end B2B messaging.

CMK has also partnered with several 3rd Party B2B Solution Providers to offer pre-built, end-to-end B2B messaging.

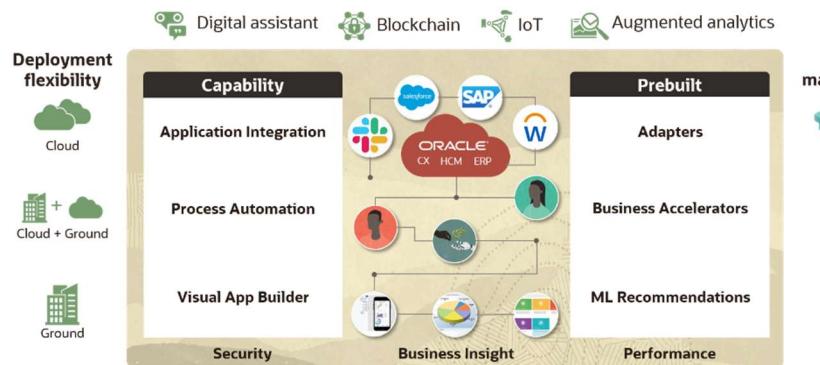
Oracle Business Network (OBN)

OBN is a Cloud B2B network of Suppliers that is tightly integrated with CMK to streamline setup and processing of B2B messages

users can perform both CMK and OBN tasks using a single CMK task flow.

Oracle Integration (OIC)

Oracle Integration offers connectivity to Oracle and non-Oracle SaaS and on-premise applications. It includes run-ready process automation templates and an intuitive visual application builder for web and mobile application development.



Oracle Integration (OIC)

Now, in addition to providing a robust integration solution for any application to application integration use case, Oracle Integration has added B2B to support business to business integration.

Oracle Integration B2B includes EDI standards and EDI translation in addition to the existing mapping and integration functions already available in OIC.

Customers can now implement Oracle Integration B2B with CMK to provide end-to-end EDI processing between Oracle SCM, ERP, Procurement Cloud and external trading partners.

Oracle Integration B2B is a good option if you are looking for an integrated, single vendor EDI solution. It also makes sense if you are already using OIC for other integration use cases involving Oracle SCM, ERP or Procurement Cloud.

Oracle Supplier Portal

Oracle Supplier Portal is a cloud based self-service solution that brings a holistic approach to supplier management by removing communication barriers between you and your suppliers. Suppliers can access agreements, purchase orders, advance shipment notifications, invoices, forecasts, items and other information through a secure, integrated work area.

In some ways, Oracle Supplier Portal is similar to CMK in that both provide a centralized solution to support multiple business processes. CMK uses B2B Messaging to support these business process while Oracle Supplier Portal uses a self-service web interface.

Oracle Integration (OIC)

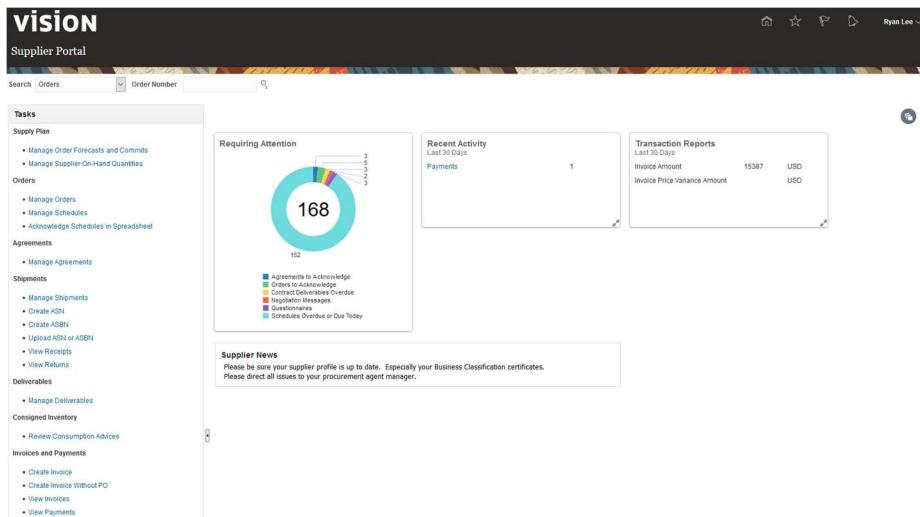
Integration solution that supports EDI and B2B messaging as well as other integration use cases.

Complements CMK for B2B messaging but can also be used to address all other integration use cases including:

- Cloud to Cloud
- Cloud to On Premise

Key business processes supported by Oracle Supplier Portal include:

- Procure-to-Pay
- Planning Collaboration
- e-Invoicing



The screenshot shows the Oracle Supplier Portal dashboard. On the left, there's a sidebar with links for Supply Plan, Orders, Agreements, Shipments, Deliverables, and Invoices & Payments. The main area features a large circular chart titled 'Requiring Attention' with a total of 168 items, broken down into 152 and 16. Below the chart are three boxes: 'Recent Activity' (Last 30 Days: Payments, 1), 'Transaction Reports' (Last 30 Days: Invoice Amount 15387, USD, Invoice Price Variance Amount, USD), and a 'Supplier News' box with a message about updating the supplier profile.

Oracle Supplier Portal

There is no additional license fee for Supplier Portal and implementation/configuration effort is minimal so this is a very easy, low-cost solution for interacting and collaborating with suppliers.

A key factor when considering Oracle Supplier Portal is the speed and frequency required when exchanging information with suppliers. All portal-based solutions require human intervention to log in and execute transactions. Therefore, this may not be the best approach if suppliers need to enter transactions frequently or if you need immediate access to new/updated information.

Oracle Web Services

Public SOAP and REST web services (as well as File-Based Data Import – FBDI) form the foundation for all integration solutions in Oracle Cloud applications, including all of the business ecosystem solutions covered above. These public web services can be implemented by any development or integration framework to connect with trading partners and grow your business ecosystem.

The preferred approach for implementing these public web services would be to use a tool such as OIC which provides SCM and ERP Cloud adapters, making implementation quick and easy.

Using these public web services directly with other development or integration frameworks will require some integration development effort but for small, isolated integration use cases where one of the existing solutions does not fit, it may be appropriate to use this implementation approach as well.

Oracle Supplier Portal

Browser-based interface for Supplier trading partners to view and update business information across multiple business processes.

Documentation for all of these web services can be found using [Oracle Help Center](#).

Conclusion

The new digital era requires all organizations to evolve their supply chains into more intelligent supply chains. Collaboration and visibility with your trading partners is a key requirement toward establishing an intelligent supply chain and creation of a comprehensive and connected business ecosystem is the way to achieve this.

Oracle helps to create your business ecosystem by providing solutions that can adapt to trading partners of any size, maturity, mode of communication, or the network they are on.

These business ecosystem solutions are all focused on enhancing your B2B business processes to achieve better collaboration, visibility and ultimately intelligence to drive better decision-making and efficiency.

The B2B Collaboration Processes covered in this whitepaper include:

- Planning Collaboration
- Multi-tier Visibility
- Contract Manufacturing
- Buy-side VMI
- Track and Trace
- Procure-to-Pay
- Order-to-Cash
- e-Invoicing

Each of these business processes are enabling using several Oracle business ecosystem solutions including:

- Supply Chain Collaboration
- Oracle Intelligent Track and Trace
- B2B Messaging / Collaboration Messaging Framework (CMK)
- Oracle Business Network (OBN)
- Oracle Integration (OIC)
- Oracle Supplier Portal
- Oracle Public Web Services

	Supply Chain Collaboration	Oracle Intelligent Track and Trace	B2B Messaging	Oracle Business Network	Oracle Integration	Oracle Supplier Portal	Oracle Public Web Services
B2B Collaboration Process							
Planning Collaboration	X	-	X	-	-	X	X
Multi-Tier Visibility	X	-	X	-	-	X	X
Contract Manufacturing	X	-	-	-	-	X	X
Buy-side VMI	X	-	-	-	-	X	X
Track and Trace	-	X		-	-	-	X
Procure-to-Pay	-	-	X	X	X	X	X
Order-to-Cash	-	-	X	-	X	-	X
e-Invoicing	-	-	X	-	X	X	X

Selecting the right solutions to meet your unique requirements depends on a number of factors and Following is a summary of the options covered in this whitepaper

Oracle Supply Chain Collaboration

Key Features	<ul style="list-style-type: none"> Pre-built business processes <ul style="list-style-type: none"> Planning Collaboration Multi-tier Visibility Contract Manufacturing Buy-Side VMI Multiple Integration Options (B2B Messaging, Supplier Portal, Web Services)
Implementation Considerations	<ul style="list-style-type: none"> Pre-built, pre-integrated solution for specific collaborative business processes

Oracle Intelligent Track and Trace

Key Features	<ul style="list-style-type: none"> Pre-built business process Pre-built integration across Oracle Cloud products Based on Oracle Blockchain technology
Implementation Considerations	<ul style="list-style-type: none"> Adaptable to support multiple use cases across a number of different industries

Collaboration Messaging Framework (CMK)

Key Features	<ul style="list-style-type: none"> Automated, standards-based B2B message processing Pre-built integration with Oracle SCM, ERP, Procurement Cloud products Consolidated B2B message setup, configuration, validation, processing, and management Pre-built B2B messages using standard data formats
Implementation	<ul style="list-style-type: none"> No license/subscription fees

Considerations	<ul style="list-style-type: none"> Multiple Implementation Options (Direct Connection, OBN, OIC, 3rd Party B2B Service Provider)
----------------	--

CMK with Direct Connection to Trading Partners

Key Features	<ul style="list-style-type: none"> N/A
Implementation Considerations	<ul style="list-style-type: none"> No additional software/services required Set up required for each trading partner connection Trading Partner must support CMK native data format or create their own maps

CMK with 3rd Party B2B Service Provider

Key Features	<ul style="list-style-type: none"> Existing Network of Trading Partners EDI support and mapping to additional data formats Trading Partner Onboarding services Other value-add B2B services
Implementation Considerations	<ul style="list-style-type: none"> Additional license/subscription fee Solution and Support from two different vendors Pre-built integration with CMK ⁽¹⁾

⁽¹⁾ Applies to strategic partners with a CMK listing on Oracle Cloud Marketplace

CMK with Oracle Business Network (OBN)

Key Features	<ul style="list-style-type: none"> Existing Network of Trading Partners Supplier self-service registration and management Pre-integrated with CMK
Implementation Considerations	<ul style="list-style-type: none"> No additional license/subscription fees Targets indirect procurement use case Procure-to-Pay B2B messages cXML or OAGIS 7.2.1 data formats

CMK with Oracle Integration (OIC)

Key Features	<ul style="list-style-type: none"> Multi-purpose integration solution with EDI capabilities Integrates with any Oracle or non-Oracle solution
Implementation Considerations	<ul style="list-style-type: none"> Additional license/subscription fees ⁽²⁾ Single solution for all integration use cases

⁽²⁾ Oracle Integration for SaaS SKU available

Oracle Web Services

Key Features	<ul style="list-style-type: none"> Library of web services are standards-based and public
Implementation Considerations	<ul style="list-style-type: none"> Preferred implementation (if CMK or Oracle Supplier Portal are not appropriate) is OIC with Oracle SCM and ERP Cloud Adapters Non-OIC implementation requires integration development resources

Connect with us

Call **+1.800.ORACLE1** or visit **oracle.com**. Outside North America, find your local office at: **oracle.com/contact**.

 blogs.oracle.com

 facebook.com/oracle

 twitter.com/oracle

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0120

Disclaimer: This document is for informational purposes. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described in this document may change and remains at the sole discretion of Oracle Corporation.