ORACLE®

PROCUREMENT
CLOUD

Oracle Cloud Procure to Pay
Co-existence and Integration Options

Release 13

ORACLE®

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Executive Overview

Modern procure to pay solutions help organizations streamline requisitioning, purchasing, receiving, invoice and payment processes while helping to enforce negotiated savings, broaden end user adoption, and protect business interests. While many organizations are moving their entire financial, procurement, and project management systems to Oracle Cloud, there are cases where companies are looking to run their procure to pay processes with Oracle Cloud while maintaining their existing financial systems. This paper is designed to guide you through adoption choices for procure to pay in the cloud with considerations of how to integrate with your existing financial solutions. With the right integration approach you can successfully deploy Oracle Cloud and achieve the benefits of modern business processes.

Introduction

As part of your Oracle Cloud implementation for procure to pay, you will need to evaluate how these solutions will work with your existing financial systems and the different integration options available to you. The approach you take will depend on your business requirements, processes, capabilities of your existing systems and configurations. Oracle Cloud provides flexible options for inbound and outbound integration that you can leverage during your implementation.

This paper provides an overview and guide for the most typical integration options for the procure to pay business processes. The first option is a full procure to pay process in Oracle Cloud with direct integration to your existing general ledger. This option allows you to manage from requisition through payment and is the most straightforward by reducing the amount of master data such as supplier information, payment terms, etc. that will need to be kept in sync. The second option is to manage the business process from requisition through invoice matching in Oracle Cloud and manage payments from your existing payables system. This option has a number of limitations to consider, but does allow companies to leverage specific bank formats or government reporting requirements that may have already been developed in your existing systems. The rest of this paper provides considerations for the two integration approaches, describes the available integration technologies, and refers you to additional sources of information. With a successful co-existence strategy, you can gain the benefits from Oracle Cloud and start building business benefits as quickly as possible.

Getting Started with Integration

Before embarking on any integration project, you should analyze your current procure to pay business processes and assess the options that make the most sense for your organization. The first step is to use a processed-based approach to understand where the payment process will occur between Oracle Cloud procure to pay and your existing financials systems. For each integration area, you should evaluate both the frequency and volume of information needed to be synchronized. In addition, you should take into consideration your future process state,

the impacts it will have to the integration, and whether certain integrations could become obsolete or need to be re-worked.

Some complexities are unavoidable when implementing systematic integration. For example, you must consider exception cases and error-handling, error recovery, and adaptability to changing or extended data models. The right strategy can mitigate unnecessary investments in building integration and simplify your overall strategy.

Other System Considerations

For any integration project you will need to assess the inbound/outbound integration capabilities of your current systems. The integration approach you use will be dependent both on the integration technology of Oracle Cloud solutions as well as your existing systems.

Over time, additional Cloud integration technologies and web services will become available. The integration approach for procure to pay is to support generic input and output methods that other systems can utilize according to the technologies available in those source applications. For example, most financial systems have ways to load transactions from external systems. In most cases it should be possible to map the information generated from Oracle Cloud into an appropriate input format.

Cloud Technical Reference Manuals

Oracle Financials Cloud Documentation Library and Procurement Cloud Documentation Library include books that cover getting started, implementing, administration, use, security and development of Cloud Financial and Procurement Applications. The development books cover File Based Data Import (FBDI), SOAP Web Services, and Tables and Views. These books replace what was formerly known as Oracle Enterprise Repository (OER). These development books contain links to relevant templates for FBDI as well as any other relevant information developers need to integrate or co-exist with Cloud Applications. Oracle expects that new assets will become available over time.

Examples of the types of assets that you can discover under the development books:

web services

file-based data integrations

view objects

interface table definitions

sample templates

Integration Methods

Cloud applications are built with Oracle's Application Development Framework (ADF) and provide many methods of integration with other applications including: ADF Services (commonly referred to as Web Services), Spreadsheet Integration, File Based Data Import, and Reporting Tools.
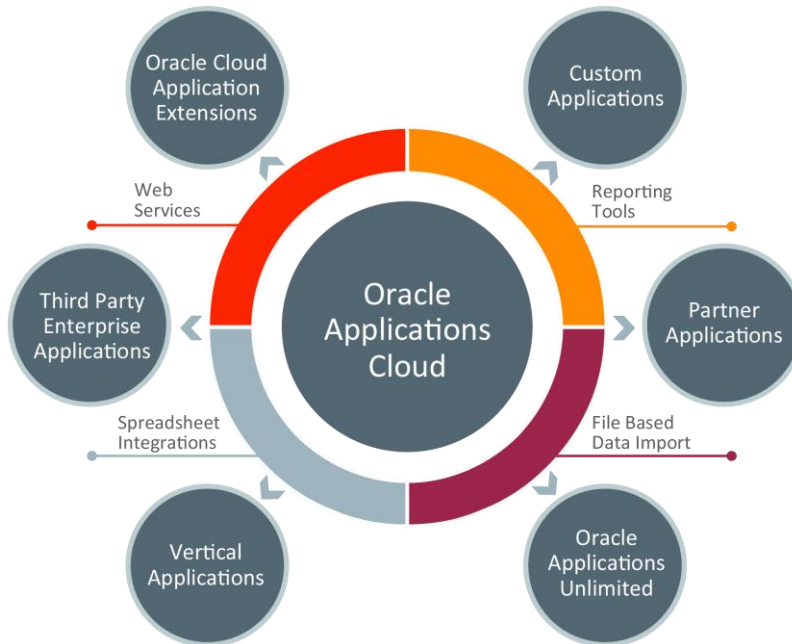
Figure 1. Integration Methods for Cloud Applications.

Web Services

A web service provides a standardized way of integrating two web-based applications. A web service is a program that can be accessed remotely using different XML-based languages. ADF Services simplify integration by enabling XML data exchange between different applications and different platforms. On-premise implementations can access the Enterprise Manager and tailor the available web services for inbound/outbound integration. But for areas where there are no web services currently available, generating OTBI or BI Publisher reports that can be used for integration may suffice depending on what is being integrated.

Spreadsheet Integration

Spreadsheet integration through ADFi or other methods enables the use of familiar spreadsheet tools such as Excel. ADF Desktop Integration (ADFdi) is part of the ADF framework and enables desktop integration with MS Excel spreadsheets to manage large volume data uploads into Cloud Applications. The integration provided with ADFdi includes interactivity that enables web picker to search for valid values, perform validation during data entry, display error messages, and immediately submit transactions directly from Microsoft Excel.

File Based Data Import

File Based Data Import (FBDI) is another option for getting information into Cloud applications. For applications deployed in the public cloud, in the absence of a delivered web service, the currently available option is file based integration to transfer files to a location that the source system can consume. The process of using FBDI is quite

simple: download an excel template that identifies all of the fields, populate the spreadsheet with data from the external system, save the file as a .csv file type, upload the file, and run processes to transfer the data to the interface tables and import into the various applications. All of the data is validated during import to insure its integrity. External data can be extracted and formatted into a source file for transfer and import into Oracle Cloud applications. The FBDI process can be automated using the Financial Utility web service as described in detail within the External Data Integration white paper.

Reporting Tools

Reporting tools can be used to extract data from Cloud applications for further analysis and import data into external systems via XML, Excel or other file types. Oracle Transactional Business Intelligence (OTBI) Reporting can be used to extract data for import into your external systems. Oracle Transactional Business Intelligence provides the ability to build custom queries on transactional data, and the output can be downloaded to Excel. You can configure an Oracle Business Transaction Intelligence (OTBI) report or BI Publisher report and generate it based on your organization's specific requirements.

Outbound Integration Events

You can now configure integrated systems to subscribe to and consume purchase order events. This provides a quick and efficient method of integration. The following events are available to you:

1. Purchase order implemented
2. Change order implemented
3. Purchase order finally closed
4. Purchase order reopened

Review the Overview of Outbound Events in Purchasing whitepaper for more details

The following screen captures illustrate this feature.
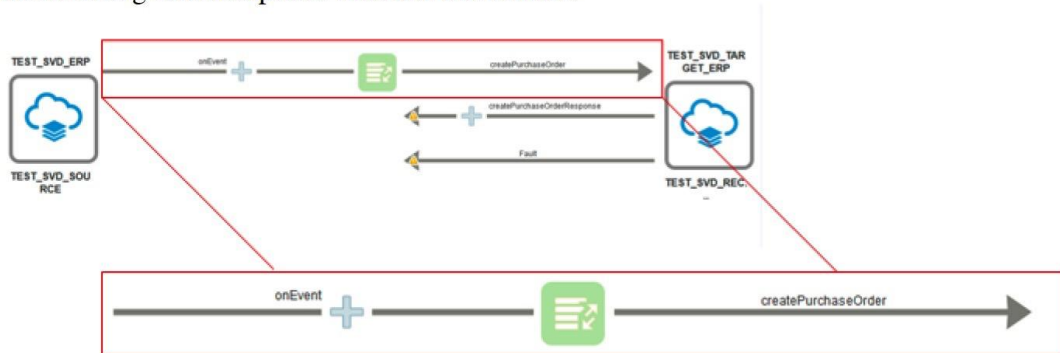
ICS Integration allows system to subscribe to and consume purchase order events

Financials Data Extract

The Financials Data Extract empowers business enterprises with the capability to extract financials data from the Oracle ERP Cloud and seamlessly integrate it with the on-premises systems, legacy systems, and other cloud systems. The seeded financial data extracts were introduced in R12.

The data extracts are provided in a XML or CSV format for end-user review and direct automated integration with other systems. One very common business scenario in practice is to leverage the extract capabilities to directly import the data files extracted from the Oracle ERP Cloud to legacy or third-party partner systems.

Users can extract incremental data, all data and create custom extractions if needed. These data extracts are performed as scheduled processes in Cloud Financials and the seeded extracts that are supported starting in R12 include Payables Transactions and Payments can be used to support co-existence scenarios.

For more information on refer to Oracle Support Document 2303683.1 (Using Seeded Data Extract Services for Oracle ERP Financial Cloud)

Procure to Pay – General Ledger Integration

In this approach, the complete procure to pay flow is executed in the Oracle Cloud and the journal entries generated from the procure to pay transactions are exported from the Oracle Cloud to the on-premise financial system as a journal batch to be posted in the on-premise ledger. The Create Accounting process has an option to generate the entries and transfers Subledger Accounting (SLA) journals to a formatted data file on Oracle Universal Content Management (UCM) instead of transferring the entries to the Oracle Cloud General Ledger. Figure 2 below shows the high-level flow.

IN ORDER TO SUPPORT THIS FLOW, THE FILE WILL NEED TO BE MANUALLY EXPORTED FROM UCM AND IMPORTED INTO YOUR ON-PREMISE APPLICATION. YOU WILL HAVE TO DO SOME DEVELOPMENT AND STAGING OF THE DATA PRIOR TO IMPORTING INTO YOUR ON-PREMISE SYSTEM.
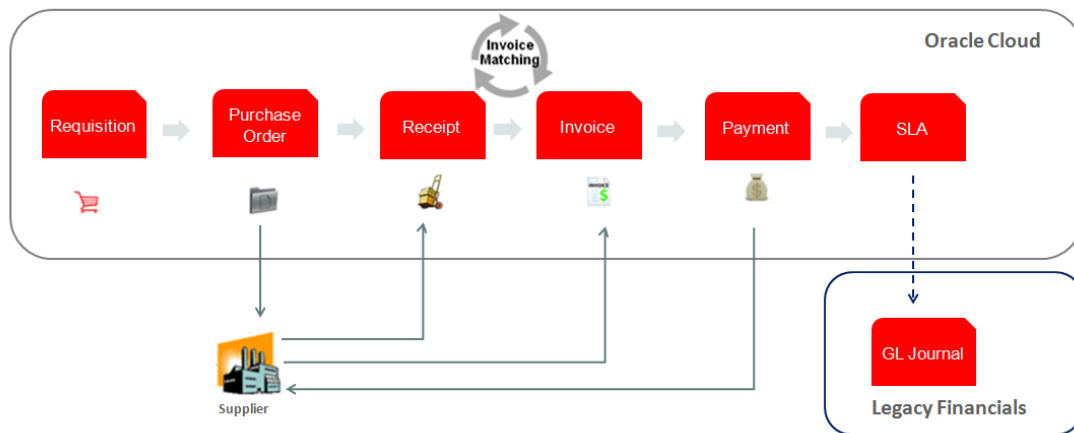

Figure 2. Procure to Pay in the Cloud integration to General Ledger

The procure to pay flow should include the following modules in the Oracle Cloud implementation:

- » Oracle Cloud Procurement
  - Purchasing Cloud Service
  - Self Service Procurement Self Service (optional)
- » Oracle Cloud Financials
  - Payables
  - Cash Management
  - Asset Management

This approach assumes that employee expenses are not part of the on-premise financial system. If expenses is currently managed on-premise, you will need to either migrate expense management to Oracle Cloud Expenses or add expense reports to set of transaction that need to be integrated into the Oracle Cloud. All invoicing and payments should be processed in the Oracle Cloud when you utilize this approach.

PROCURE TO PAY IMPLEMENTATIONS THAT INCLUDE BUDGETARY CONTROL, ENCUMBRANCE ACCOUNTING, OR PROJECT ACCOUNTING ARE NOT SUPPORTED BY THE APPROACHES DISCUSSED IN THIS WHITE PAPER.

SLA to GL Integration – Detailed Considerations

In order to generate the files in UCM in Cloud Financials, you will need to perform several setups. First you will need to set the XLA_ENABLE_TRANSFER_TO_EBS_GL profile option to yes. This can be found in Manage Administrator Profile Values task in Setup and Maintenance. Next you will have to go to Manage Subledger Application task, select the ledger(s) and then set the Transfer to radio button to Oracle EBS GL. Once this setup is done, whenever the Create Accounting batch process is run with "Transfer to GL" set to "Yes", the Create Accounting Process will write the journals to a file in UCM. In order to ensure that the journals are transferred correctly users should always use the batch Create Accounting Process in the Scheduled Processes window to transfer to the GL. Implementation developers will need to develop a solution that would extract the file from UCM, convert and format the data as needed and then import the formatted data into the target on-premise financial system's GL interface. We recommend using the Create Accounting Process so that transactions will be marked as interfaced within the Oracle Cloud, and there will be no risk of exporting duplicate transactions. Utilizing one of the other integration methods such as BI Publisher reports or web services may not protect against exporting duplicate transactions.

The Create Accounting batch process is run by executing or scheduling Create Accounting from the Scheduled Processes UI. If Create Accounting is run utilizing the online process, i.e. from the Invoice Action dropdown menu when entering or updating an invoice in Cloud AP, the journals will be sent to the Oracle Cloud GL for processing NOT the UCM file for export. The online process runs Create Accounting for that specific invoice and the batch process generates the SLA journals for all eligible invoices. If the online process is accidentally executed, the invoice(s) will have to be credited, posted to the Oracle Cloud GL to remove the entries, reentered and then run the Create Accounting batch process. The option to run the online process is based on role security so not all users will have this option, for example, the AP Manager has the option to run the online process but not the AP Specialists role. A custom role can be created to remove the function from the AP Manager or, preferably, train the AP Managers to only run Create Accounting from the work area or, best practice, have the Create Accounting process scheduled to run periodically so users would not have to run the process as part of the normal business process flow. The frequency will depend on how often the GL transactions need to be sent to and updated in the on-premise financial system's GL.

P2P Process Details

Depending on the customer's procurement process, either a purchase requisition is entered in the Oracle Cloud, submitted, approved and converted to purchase order (PO) or a PO is entered in the Oracle Cloud and approved. When the goods and services are delivered, the supplier issues an invoice. If there is a 3-way or 4-way match, the receipt is recorded in the Oracle Cloud against the PO. Once the receipt has been recorded (if needed), the supplier invoice is entered and matched against the PO or receipt. If the invoice is not related to a PO then it is entered without matching to a PO. Payments are initiated in the Oracle Cloud against the invoices that are due for payment based on the payment date of the payment batch. The payments are issued and processed in the Oracle Cloud. Throughout this flow, the Create Accounting process is run generating the SLA journals that are passed to UCM and onto the on-premise financial accounting system GL for posting.

On a monthly basis, the bank will send out the bank statements and the customer will reconcile their bank statements utilizing Cash Management in the Oracle Cloud. Receivables transactions will be reconciled separately on the on-premise financial system. See Figure 3 below.
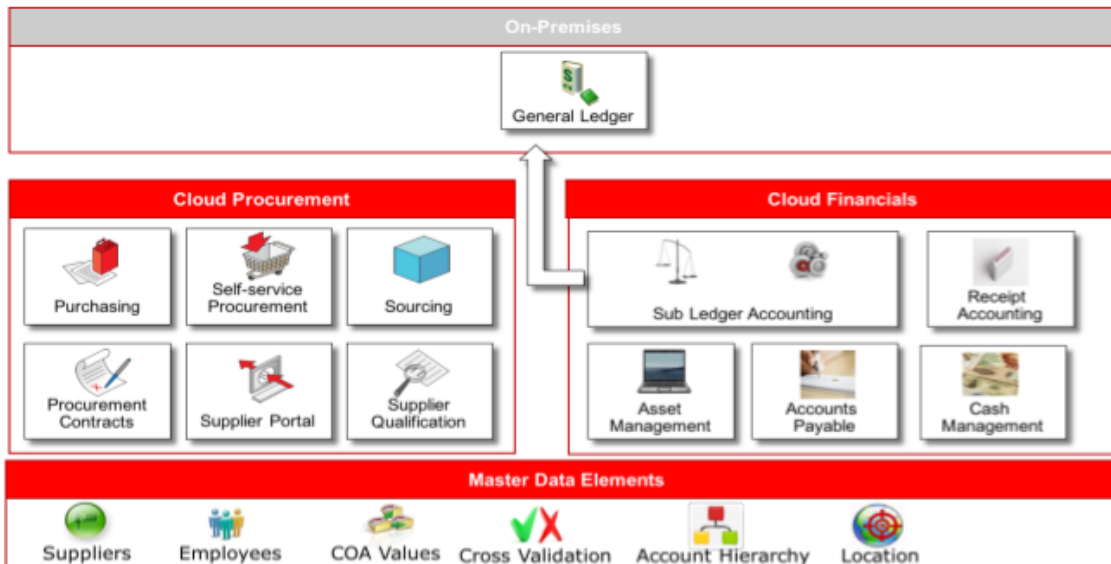

Figure 3. SLA to GL Flow Integration Diagram

Overall, this approach will allow for the most accurate portrayal of purchasing and payables because all the relevant data resides in the Oracle Cloud in one system. Users can take advantage of Oracle Cloud's superior ad hoc reporting capabilities and built in dashboards.

Fixed Assets Integration Considerations

If the Oracle Cloud SLA to on-premise financial system GL integration approach is utilized, all invoices will be entered and processed in the Oracle Cloud. In this approach since all invoicing is handled in the cloud, POs and Invoices related to Fixed Assets (FA) will also be processed in the Oracle Cloud. Processing FA in the Oracle Cloud will ensure consistency in the SLA journals to GL interface so that only journal entries are interfaced between the two systems.

Procure to Pay – Accounts Payable Invoice Integration

In this approach, the procure to pay process would be executed in the Oracle Cloud through the point of validating the invoices. Once the invoices have been matched and validated, the user could generate a payment batch to

select the newly created, unpaid invoices. The invoices from the payment batch could be exported from the Oracle Cloud and imported into the on-premise financial system's Payables module as regular open invoices that do not have reference to purchase orders. An export data file report would need to be built to extract the unpaid invoice information from the Oracle Cloud using BI Publisher (BIP) and write the data to UCM. That file can then be used to populate the invoices in the on-premise financial system. Note that you do not have to do a payment batch to group invoices for export it is just a suggestion since the Cloud Payables Payment Process Request allows for specific selection criteria and grouping of invoices. You could just use BIP to generate the export.

Another way to export invoices would be to use the new Financials Extract. This is a new feature and would need to be fully tested but an extraction strategy would need to be in place to incrementally extract the invoices prior to payment in Oracle Cloud. There may need to be additional processing of the invoices in the extract file prior to importing the data into the on-premise financial system's Payables module.

THERE IS A KNOWN ISSUE WITH FINANCIAL EXTRACTS FOR PAYABLES TRANCACTIONS AND PAYMENTS WHERE, BY DEFAULT, THE GL ACCOUNTS ARE NOT BEING EXPORTED FOR THE LIABILITY, EXPNESE AND CASH ACCOUNTS. BUG 25976258 HAS BEEN LOGED FOR THIS ISSUE

Whatever process you chose to use just be aware of the risk of pulling an invoice more than once and make sure you have a strategy in place to address any duplication.

The invoices in the Oracle Cloud should then be flagged as paid. The easiest payment method to use for these invoices would be by check since that would require minimal setup. The link to the purchase order would remain in the Oracle Cloud and the on-premise financial system would record payments and the related journal entries for the expenses and payments. Receiving and receipt accounting would be conducted in the Oracle Cloud so all procurement activities would be recorded in the Oracle Cloud and the payment activities will be conducted in the on-premise financial system. Figure 4 below shows the high level flow.
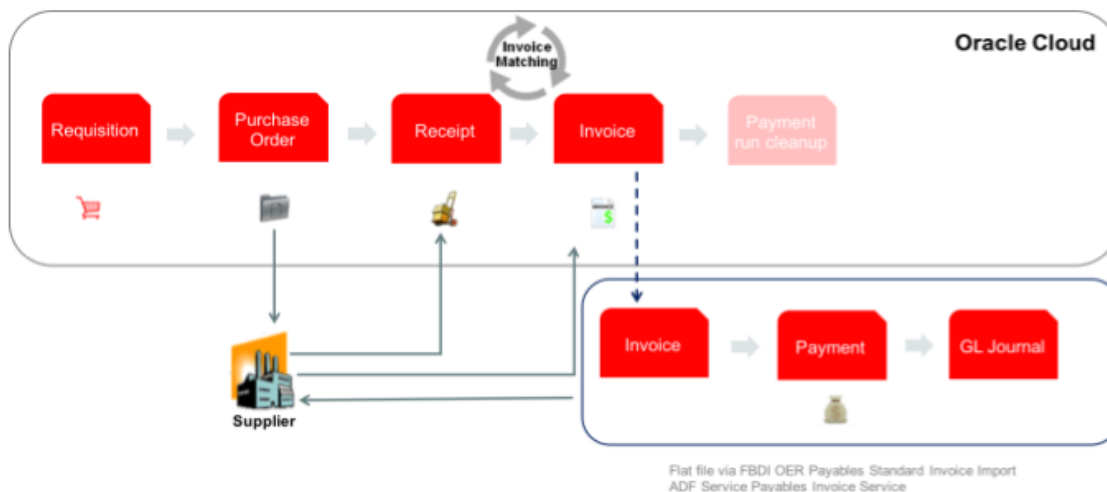

Figure 4. **Accounts Payable Invoice Integration**

The AP Invoice Integration flow should include the following modules in the Oracle Cloud implementation:

- » Oracle Cloud Procurement
  - » Oracle Cloud Financials
    - Payables

AP Invoice Integration Considerations

The new out-of-the-box extract to export the Payables Transaction data from the Oracle Financials Cloud to the on-premise financial system is a new feature and pulls data based on a predefined query so your implementation team will need to review the Financial Extract feature and determine if this meets the data requirements for the integration to the on-premise financial system. If the Extract feature meets the data requirements, the implementation team will need to devise an extract strategy to generate the extracts based on the invoices that have not yet been exported or paid in in Oracle Cloud and may need to perform processing on the extracted data once exported to reduce the risk of duplication in the on-premise financial system.

If not, the implementation team will need to devise a strategy to build the export file using BIP based on the invoices that are ready for payment. Utilizing invoices from the payment due dates will ensure that all new, validated invoices are selected and that all receipts have been entered and completed. Once the invoices are imported into the on-premise financial system, they should be paid by the agreed upon method with the Supplier.

A business process will need to be in place to handle invoices when they need to be updated based on whether it affects the purchase order and the Oracle Cloud invoice or if it is just an adjustment that affects the on-premise financial system's invoice and payment. If the invoice has been fully paid in the Oracle Cloud and is being reopened for payment and/or will be adjusted for any reason, as long as the PO does not need to be modified, this could be addressed in the on-premise financial system only. Changes that affect the PO and/or the invoice that was matched against the PO such as a price change or quantity received changed, etc. will need to be addressed in Oracle Cloud and interfaced to the on-premise financial system.

Since the invoices will be matched in Oracle Cloud, it is assumed that receiving and receipt accounting will be done in the Oracle Cloud and will not be interfaced to the on-premise financial system's GL.

Invoices will be matched to the Purchase Order in the Oracle Cloud Payables module and validated. Once the invoice is validated, it is completed in the Oracle Cloud. Create Accounting is not run on the invoice in the Oracle Cloud.

P2P Process Details

Depending on the customer's procurement process, either a purchase requisition is entered in the Oracle Cloud, submitted, approved and converted to purchase order (PO) or a PO is entered in the Oracle Cloud and approved. When the goods and services are delivered, the supplier issues an invoice. If there is a 3-way or 4-way match, the receipt is recorded in the Oracle Cloud against the PO. Once the receipt has been recorded (if needed), the supplier invoice is entered and matched against the PO or receipt. The Payment batch is initiated in the Oracle Cloud against the invoices that are due for payment based on the payment date of the payment batch. The payment method would be by check since that requires the least amount of setup. The invoices that are pulled for payment can then exported from the Oracle Cloud and imported into the on-premise financial system. Once exported and they have been paid in on-premise financial system the invoices should then be paid in the Cloud Payables.

IMPORTING PAYMENT INFORMATION BACK INTO CLOUD PAYABLES FROM THE ON-PREMISE FINANCIAL SYSTEM **IS NOT SUPPORTED**. THIS MEANS THAT THE PAYMENT INFOMRATION IN CLOUD PAYABLES WILL NEVER REFLECT THE ON-PREMISE PAYMENT INFORMATION.

The invoices are imported as unpaid invoices that are not related to any PO. Once the import is complete, the invoices are accounted, processed for payment and paid based on their payment method agreed upon by the supplier. See Figure 5 below.
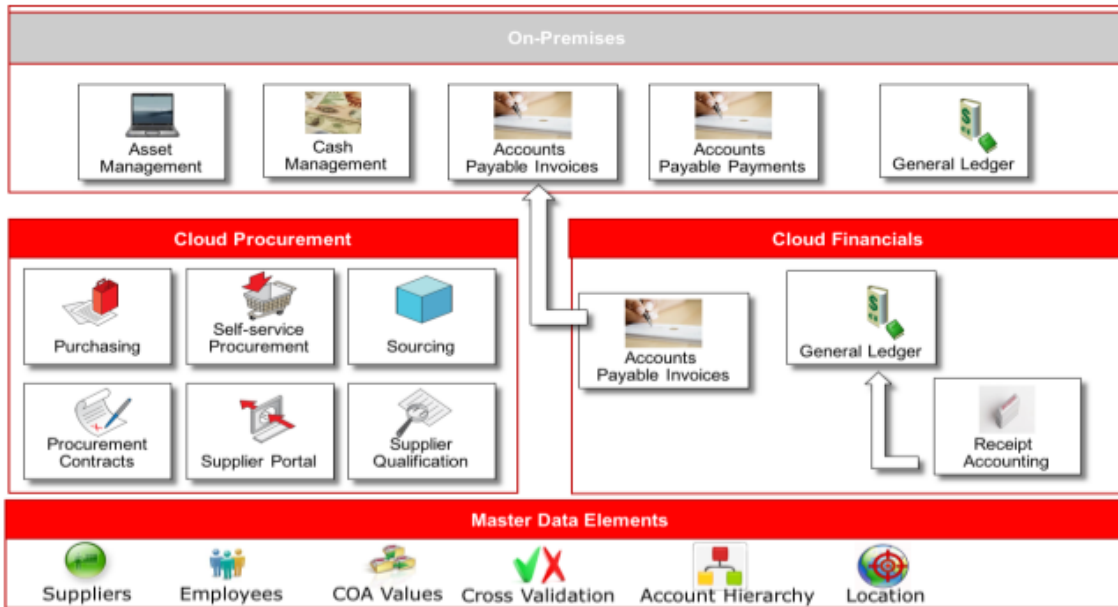

Figure 5. AP Invoice to AP Invoice flow Integration

Fixed Assets Integration

If the AP Invoice to AP Invoice approach is utilized, invoices are sent to the on-premise financial system for accounting and payment. Utilizing this approach, FA should be processed in the on-premise financial system. Processing FA in the on-premise financial system will ensure consistency in the invoice interface so that only invoices are interfaced between the two systems.

Identifying Reference Data

Reference data such as item and supplier information is the supporting information necessary for Procure to Pay to be able to function according to the customer's business process. Reference data is typically maintained on a periodic basis and should be kept in sync with the source system of record. The integration methods used for reference data really depend on the type of organization, business needs, approach and deployment method (i.e., public cloud, private cloud or on-premise). For some organizations, reference data with a large volume and frequency of changes may require building direct system to system integration to keep information synchronized

Suppliers

Integration of supplier information is subject to the same considerations detailed in the opening paragraphs of this document. You must have a good knowledge of the volume and frequency of change for reference data like suppliers. Depending on the volume and frequency of change, you may find that it is preferable to manually maintain your data in cloud rather than build and manage integration with your existing system. In defining your supplier data integration strategy for an Oracle Sourcing Cloud, Oracle Procurement Contracts Cloud and/or Oracle Supplier

Qualification Management Cloud co-existence deployment, the first consideration will be to determine which system will maintain the supplier source of truth; cloud or an existing transaction system. The answer to this question will impact your integration strategy. The table below summarizes the high level integration options.

If you choose to maintain your existing transactional system as the source of truth for supplier information, you will need to load and update supplier information into Oracle Public Cloud. Of course, manual entry through the UI is always available for creating and updating suppliers. For bulk data loading of supplier information, File Based Data Import (FBDI) is the method available for Oracle Public Cloud. Loading data with FBDI can be executed as a manual process or if an automated integration is the required solution the FBDI process can be automated using the ERP Integration web service. Details about this web service are available in the Using External Data Integration Services white paper. You can find the spreadsheet template for loading supplier information in Oracle Help Center. Oracle Cloud supports the supplier import processes outlined in Table 4 below.

TABLE 4. SUPPLIER IMPORT

INTEGRATION AREA	INTEGRATION OPTION	INTEGRATION METHOD
Suppliers	Import and update supplier information including profile and organization details.	FBDI
Supplier Addresses	Import and update supplier address information including location and communication details.	FBDI
Supplier Sites	Import supplier site information including generic site information such as site name, site purposes, alternate site name as well as site-specific purchasing, receiving and invoicing terms and conditions.	FBDI
Supplier Site Assignments	Import site assignments representing client business units that are the recipient of procurement services from the supplier site. Details imported can include tax and accounting information.	FBDI
Supplier Contacts	Import and update contacts of the supplier responsible for coordinating procurement activities with the buying organization.	FBDI
Supplier Business Classifications	Import and update business classification details including certification and agency information that establish diversity qualifications of the supplier.	FBDI
Supplier Products and Services Categories	Import and update products and services category information representing what the buying organization can expect to procure from the supplier.	FBDI

In addition to the traditional use of importing new supplier data, Oracle Procurement Cloud supports updates to existing suppliers through the supplier import process. Mass updates can be made to supplier data using this feature. Changes to one or many suppliers can be easily handled through our import process rather than having to update these details manually through the application.

As of release 9, the system supports update on the following entities:

» Suppliers
» Supplier Addresses
» Supplier Contacts
» Supplier Business Classifications
» Supplier Products and Services Categories

As of release 11, the system supports update on the following entities:

» Supplier Sites
» Supplier Site Assignments

Delete is supported on the following entities:

» Business Classifications
» Contact Addresses
» Supplier Products and Services Categories

The import template supports an action, "Update", which should be used to perform both changes and deletes to the supplier profile data. Within a single load, existing supplier records can be updated as well as new supplier records created for simplified ongoing maintenance of supplier information. Import and update also supports the mass upload of supplier profile, supplier site, and business classification attachments.

TABLE 5. INBOUND SUPPLIER WEB SERVICE

INTEGRATION AREA	INTEGRATION OPTION	INTEGRATION METHOD
Suppliers	Import and update supplier information including profile and organization details.	Inbound Web Service
Supplier Addresses	Import and update supplier address information including location and communication details.	Inbound Web Service
Supplier Sites	Import supplier site information including generic site information such as site name, site purposes, alternate site name as well as site-specific purchasing, receiving and invoicing terms and conditions.	Inbound Web Service
Supplier Site Assignments	Import site assignments representing client business units that are the recipient of procurement services from the supplier site. Details imported can include tax and accounting information.	Inbound Web Service
Supplier Contacts	Import and update contacts of the supplier responsible for coordinating procurement activities with the buying organization.	Inbound Web Service
Supplier Contact Address	Import and update addresses of contacts of the supplier responsible for coordinating procurement activities with the buying organization.	Inbound Web Service
Supplier Business Classifications	Import and update business classification details including certification and agency information that establish diversity qualifications of the supplier.	Inbound Web Service
Supplier Products and Services Categories	Import and update products and services category information representing what the buying organization can expect to procure from the supplier.	Inbound Web Service

In addition to FBDI based loading, there is a comprehensive Inbound Supplier Web Service that facilitates data transfers from external supplier data sources into the Supplier Model profile. The web service allows you to create new suppliers, as well as update or delete attributes in existing supplier profiles. This provides a real-time synchronization of the supplier records in external applications with Fusion Supplier Model. This service absorbs any supplier profile change event and propagates it to the Oracle Fusion Supplier master. The supplier entities that the web service covers are Supplier, Supplier Address, Supplier Site, Supplier Site Assignment, Supplier Contact, Supplier Contact Address, Supplier Business Classification and Supplier Products and Services Category.

This service recognizes a predefined format of XML payload, which when published by the external system, will serve as an input for this service. Therefore, this requires configuration to ensure the external system publishes the payload in the given XML format. The payload covers all the supplier attributes provided as a standard in the Oracle Fusion Supplier Model application.

The service is equipped with all the validations imposed on supplier attributes through the supplier import process, thereby maintaining high-quality supplier data.

Further implementation information is available at Supplier Web Service on the Oracle Help Center.

Another choice is to use Oracle Cloud as the system of record for supplier data. A customer might choose this approach if the cloud supplier master better meets their requirements for managing supplier information to assist in developing the increasingly strategic value of supplier relationships. The requirement is to get supplier data from Oracle Cloud into your existing systems.

TABLE 5. SUPPLIER EXPORT

INTEGRATION AREA	INTEGRATION OPTION	INTEGRATION METHOD	NOTES
Suppliers	Export all Supplier Information including: Supplier, Address, Supplier Site, Site Assignments, Contacts, Business Classifications, Products and Services	Supplier Sync Service Reporting Tools	Some supplier attributes not supported for export in reporting tools. Detail information available at:

Outbound integration for publishing supplier data from Oracle Procurement Cloud to your existing systems is supported by a web service; Supplier Sync Service. The Supplier Sync Service can publish supplier information updates to your existing systems. This enables your existing systems to use the Oracle Cloud as supplier source of truth that maintains all supplier profile information. Near real-time synchronization of supplier information allows your existing systems to leverage cloud supplier information to drive other procurement transaction flows. The Supplier Sync Service can provide data for creation or update of supplier information and is dependent on the integration capabilities of your existing systems. Detailed information can be found at Supplier Outbound Synchronization Service Whitepaper on My Oracle Support.

Another option to export supplier data from cloud is reporting tools. Oracle Cloud reporting tools can be used to create an output file containing structured supplier information (based on the attributes that are currently available for supplier data). This output file can then be used to import supplier data into your existing transaction systems.

Items

Similar to other types of reference data, you should consider the volume, use, and frequency of change for your purchasing items and categories to determine the appropriate integration approach.

You can load purchasing item categories into catalogs using ADFDi for your cloud or on-premise deployment. For item integration, you have several options and it depends on the level of automation that your organization requires and how you have deployed your cloud application. For public cloud, you can load data into the interface tables via UCM (Universal Content Manager). The different integration options for items are outlined in the table below.

TABLE 6. ITEMS INTEGRATION OPTIONS

INTEGRATION AREA	INTEGRATION OPTION	INTEGRATION METHOD	NOTES
Items	Microsoft Excel (ADFdi) through Item Batch	Spreadsheet	Available in Product Hub for on premise or public cloud
Items	CSV file (pre-defined format) upload via secure FBDI	File	Available in public cloud only
Items	CSV/XML file (any format) upload through Item Batch	File	Available on premise or public cloud
Items	Oracle Product Hub Portal: suppliers load items through supplier portal,	Web Service	Available with Oracle Product Hub

Procurement is deployed with the Product Model product, unless the you have the Product Hub product which has expanded functionality. The Product Model does not have the option for Item Batches. For on premise implementation, you can load directly into interface tables. With only the Product Model, the option is to import through the interface tables using ESS jobs. Here is the process for Product Model cloud customers:

- Download template spreadsheet for interface table (OER)

- Load data into spreadsheet for items

- Use ESS job to upload the spreadsheet to the USM folders

- Use ESS job to load interface tables from file in UCM

- Use ESS Import job to trigger import from interface tables to production tables.

General Ledger

General Ledger data needs to be set up in Cloud to use Procure to Pay co-existence. Similar to other types of reference data, you should consider the volume, use, and frequency of change for your GL data to determine the appropriate integration approach. General Ledger data can be imported from the on-premise financial system utilizing Oracle Data Relationship Management (DRM). Pre-built integrations with the on-premise financial system and Cloud Financials help construct and maintain corporate standard chart of accounts across multiple local charts simplifying coordination across instances. Application templates included with Oracle general ledgers allow quick loading of hierarchy attributes and segments on a scheduled or on-demand basis. DRM is available on both public and private cloud.

General Ledger also offers FBDI spreadsheets to integrate Chart of Account values and hierarchies. FBDI can be used to create or update existing records. To load the journals, FDBI and ADFdi spreadsheets are available for use. Utilizing these integrations features.

TABLE 4. GENERAL LEDGER INTEGRATION OPTIONS

Integration Area	Integration Option	Integration Method	Notes
General Ledger	COA Values	DRM / FBDI	Using Hyperion Data Relationship Management

			Dependent on volume and frequency of update/add/change, manually maintain GL COA values in on-premise financial system and Cloud system.
General Ledger	Account Hierarchy	DRM / FBDI	Using Hyperion Data Relationship Management Dependent on volume and frequency of update/add/change, manually maintain GL COA values in on-premise financial system and Cloud system.
General Ledger	Journals	Web Services FBDI & ADFdi	Utilizing the co-existence model with Apps Unlimited Interface Table available for on-premise and private Cloud.

Additional Reference Data

Additional reference data needs to be set up in Oracle Cloud to use Procure to Pay co-existence. The setups should be done regardless of which approach is used since POs and Invoices will be entered for both approaches. The additional reference data includes: HR Users, GL Cross Validation Rules, Business Units, Terms (Freight, Payment, etc.), Unit of Measure, Locations, etc. You need to assess the volume and frequency of changes and updates to reference data in order to determine the best integration method. As a general rule, reference data can be maintained within Cloud Applications and will typically have low volume/change that can be manually maintained. The tables below address integration options and setup and maintenance options for both of the approaches.

TABLE 5. ITEMS INTEGRATION OPTIONS

Setup Area	Setup Option	Method	Notes
General Ledger	CV Rules	Manual / Excel	Can import from on-premise financial system utilizing spreadsheets if you want to utilize the same rules as on-premise financial system. You can upload cross validation rules using Rapid implementation spreadsheet. To uptake Cloud Features and utilize account hierarchies manually setup in the Cloud Applications
General Ledger	Legal Entity	FBDI	FBDI import if available to import from on-premise financial system
General Ledger	Calendar	Manual	Cloud calendar setups are minimal.
Common Applications Configuration	Ledger	Manual	
Common Applications Configuration	Business Units	Manual	
Common Applications Configuration	Location	Web Services / Manual	Web services available to import from on-premise financial system Dependent on volume and frequency of update/add/change, manually maintain terms

			in source and Cloud systems
HCM	Employees	Web Services	Can Integrate utilizing out of the box web services Dependent on volume and frequency of update/add/change, manually maintain items in source and Cloud systems.
Payables	Payment Terms	Web Services / Manual	Web services available to import from on-premise financial system Dependent on volume and frequency of update/add/change, manually maintain terms in source and Cloud systems
Payables	Payment Methods	Manual	For SLA to GL integration – all of the possible payment methods must be configured For AP Invoice to AP Invoice Integration – only need to setup Check for cloud
Payables	Banking Information and Payment Files		For SLA to GL integration will require all Banking information to be configured including payment files For AP Invoice to AP Invoice integration Banking information will need to exist to support invoice validation.
Procurement	Unit of Measure	Manual	Setup parallel UOM in Cloud Manually maintain UOM in source system and Cloud
Cloud Tax	Tax Setups	Manual	Web services are available but should manually configure to uptake Cloud Features
Fixed Assets		Manual	For SLA Journal to GL integration Oracle Cloud will support FA For AP Invoice to AP Invoice integration on-premise financial system will support FA, however some asset setups will need to be done to support entering FA related invoices
Cash Management		Manual	For GL to GL integration Oracle Cloud will support Cash Management For AP Invoice to AP Invoice integration on-premise financial system will support Cash Management

Conclusion

This paper provides recommendations based on technologies and web services available at the time of publication. Please consult the Oracle Procurement Cloud and Financials Cloud Development Documentation for the latest available web services, import/export processes, and other integration assets.

Additional Resources

Oracle provides many resources to help with integration options.   Please reference the resources below for additional information.

TABLE 5: ADDITIONAL RESOURCES

Title	Type	Description
Strategic Procurement Cloud Integration Options	White Paper	Overview of integration options and considerations for Sourcing, Procurement Contracts and/or Supplier Qualification Management in the Cloud
External Data Integration Options for Oracle Cloud	White Paper	Import and extract data from Oracle ERP Cloud

Integrated Cloud Applications & Platform Services

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