

Automating the Procure to Pay Process or “Garbage at the Speed of Light”

Paul Cyphers
SolutionBeacon

Abstract: The Procure to Pay Business Process provides numerous opportunities for automating the processing of data accurately, efficiently and promptly. Just as the old adage goes, “garbage in, garbage out” we are now facing, in light of technical advances, “garbage at the speed of light”. With our advanced systems we can process data through advanced protocols changing from interfaces and the workflows of the pre 2000 transactional processes to a host of XML and web services oriented processes. In Oracle we can use BPEL for generating and transfer data using XML and APIs due to increased tools that help in the execution of that data transfer and automation. For years Oracle has advocated automating the PTP cycle though these various methods but it wasn’t until recently with the introduction of the Oracle BPEL product, other XML protocols and web services that a full automation cycle became more realistic. This presentation provides functional and technical users the understanding on how to further automate the data being generated and processed as part of the Procure to Pay process.

It’s All about the Data, Automating to Accelerate

In the Procure to Pay Business Process there are numerous opportunities for automating the processing of procurement data. Although is important to map out the process for automation, the more important part is the processing of data accurately, efficiently and promptly. As the old programming adage goes, “garbage in, garbage out” we are now dealing, in the age of technological advances, with “garbage at the speed of light”. With our advanced information technology systems we can now automate the processing of data. What has happened however is there are now more options to accomplishing this feat thus requiring a higher level of understanding of what these protocols are and how they can integrate into the overall process. The purpose of this paper is help both functional and technical users of the system an understanding of the importance of this alternatives in generating and processing as part of automating the Procure to Pay process.

These protocols have changed over the last ten years from interfaces and workflows of the pre 2000 transactional processes to a host of XML and service oriented processes. These protocols have been greatly enhanced since the year 2000 and have enabled many business processes to be greatly enhanced through automation. Through the use of various XML technologies in various formats the various methods of data processing has changed dramatically. The deployment of BPEL now allows for data generation and transfer wile also coupling web service interfaces. This allow for data to be transferred using XML and the increasing number of APIs, now there are more tools that help in the execution of this data transfer. Although much of this automation has been around for years through various techniques such as EDI and processing programs via concurrent requests there is new face to automating the Procure to Pay cycle. For years Oracle Corporation has been advocating automating the PTP cycle though these various methods but it wasn’t until recently with the introduction of the Oracle BPEL product and other XML protocols that the automation cycle became more robust.

For those readers not familiar with these various tools there will be a short discussion regarding these tools. BPEL stands for Business Process Execution Language and this particular tool combines business process and XML data manipulation. It starts with a process design and then adds the code and data capture that allows for data to be generated/captured and then transferred to the appropriate data tables. This takes the data that’s been captured or generated and moves immediately to the corresponding tables so that it can used immediately as opposed to waiting for an interface to run at the predetermined time. The second protocol is the web services protocol that provides a service that transfers data using the Oracle API that publishes the data in the appropriate format that transfers to a standard format, such as XML, that can be transferred to other systems as needed. In the past this was primarily accomplished by EAI tools that moved data through a messaging layer that passed that data to the appropriate system. An example of this new protocol is Oracle’s XML gateway that passes the data to other systems using the XML protocol. There still exists the traditional methods of updating data using traditional SQL programs executed through the concurrent manager. This supports batch processing and traditional programs that can be run in traditional formats of updates on a scheduled basis. The final protocol focuses on the deployment of automation

tools that assist in the processes and programs. All of these protocols can perform many of these data processes in similar fashions but each has their specific at which they excel.

Business processes have for a long time been an integral and important part of leveraging and managing ERP applications. All the major applications (Oracle, JD Edwards, PeopleSoft and SAP) have spent a great deal of time mapping business processes to the software processes. During the later 1990s there was an extensive movement towards standardizing an execution language that could be deployed over multiple applications. Oracle now utilizes Business Process Execution Language (BPEL) in the execution of these processes within and across multiple applications to meet business requirements. With the addition of other major applications to the Oracle product line, there is a need to understand how this impacts the integration of applications for the future. The presentation provides an overview of what BPEL is and what it currently does, along with an understanding of how this impacts the integration through Fusion Middleware and Oracle’s future Fusion software. Also included is a demo of how the Oracle BPEL tool can be deployed to integrate and orchestrate applications using the various components of service oriented architecture(SOA).

Although most business process can be automated there are significant opportunities in the Procure to Pay cycle. This is the reason this area was chosen as the focal point of this paper. With many of the new modules be brought into the procurement suite that even further makes this end-to-end process. Because purchasing is common to most companies, regardless of industry, and often is the most outward facing this process is well suited for automation. Although there are more complex processes in certain industries purchasing is the most common and often has many of the same components regardless of the industry focus. Because many of the processes are somewhat standard there have been numerous applications of automation in this end-to-end process. The primary component to be automated is the transfer of data from other systems to the primary systems. Often these are supplier systems provide EDI transactions, supplier punch-out, buyer exchanges, catalog uploads and contract information. This information is fed into the system and updates the information for immediate use. This information is then used to build purchasing documents like requisitions and purchase orders. At any time this information may be provided to the supplier for additional information such as quotes and contract updates. Once these documents are created there are a series of events that can be executed from the approval of the document to the actual communication of the document to the supplier through a broad range of transmission protocols.

The following table outlines the various steps in the business process and the corresponding opportunities for automation. We have found that there are certain approaches for automation that work better in the procure to pay cycle. For example, updating master files is well suited for a BPEL process, where updating catalogs is ideal for an automation tool, executing scheduled standard processes is best done by concurrent manager and finally transfer bulk data between systems can be accomplished using a custom interface. Although you can accomplish most of these activities using any one of these protocols it is best to seek the protocol that is optimal for that particular business process step. These optimal approaches are italicized in the table below:

Business Process	Business Process Management	Enterprise Service Bus	Batch Processing	Automation Opportunities
	BPEL, Workflow	Interfaces, Data Synchronization	Concurrent Managers	Scheduling & Validation
% of Automate	10%	30%	50%	90%
Suppliers and Employees	<i>Single and Immediate Manual Update</i>	Transfer data between instances	Nightly Updates	
Price and Catalog Updates	Individual Price Updates and Notification	Pass information between systems	EDI 832 Update Interface of uploads	<i>Scheduled updates, notification and validation</i>
Requisitioning	Routing and Approvals	Updating of information between systems	<i>Requisition Import Batch</i>	Automation of Quotations Scheduling and Validation Alternate Approval

				Routings
Purchase Orders	Routing and Approvals	Updating of Open Order Price Information	<i>Execution of Transmission</i>	<i>Updating Tax Information Scheduling Transmission, and Validation</i>
Items	<i>BPEL process for new items</i>	Updating prices	Propagate to other systems	Validate Item Information and Prevention of Duplicates Automate Activation
Inventory Transactions	NA	<i>Transaction Updates</i>	Batch Processing	Schedules Transactions
RFID	Process Steps	<i>Real Time Information</i>	Batch Downloads	<i>Update Information</i>
Processing Invoices	Manual – Markview	Update and transfer information between systems	<i>Electronic Invoices</i>	Workflow Price Variance Process Holds Process Invoices Import Invoices Payment Batch
Projects Fixed Assets Human Resources	Setting up new information and updates, control transactions	<i>Transferring data real time between systems</i>	Batch processing and execution of programs	<i>Automation and validation Handles multiple dependencies</i>
Reporting		Populate Data Store	Execute Batch Updates and Request Processes	<i>Populate, Validate and Synchronization of Data Store Load and Execute Reports</i>
Month End Close				<i>Close Processes</i>
Tools	BP Tools	seeBeyond	Oracle	Automation Tool Customization

Data Generation

In the Procure to Pay Process there are numerous points at which data is generated into master files like suppliers, items, catalogs and purchasing documents. These are come from external source data and needed to generate in a timely efficient manner. This data often needs to be passed between multiple departments so that all information can be updated and accurate. For example when a supplier is created often the supplier needs to provide information, purchasing needs to add specific information while accounts payable adds additional information. Since AP is often the owner they then collect all this data and entered into the application. The challenge is making sure this data is accurate and is propagated into various feeder systems. These feeder systems need accurate information to be able to function and provide accurate and timely data to the system of record. Thus generation and maintenance of data is a critical function of the procure to pay process requiring careful attention otherwise it will provide data problems of exponential magnitude that impact everyone downstream in the process.

In the generation of date it is important to have a defined process for capturing and proliferating the data. Many companies have defined forms and procedures for this process but they have not automated the process. Generally they complete a W-9 form and at best forward the information or document in an email to the appropriate data administrator. Although this is a process it does not maximize the data collection process and transmitting data to the various systems. Currently most companies have the information entered into Oracle accounts payable and then interface the data to the appropriate systems. This can often take several days and often requires multiple updates.

Often duplicate information can be created which then creates an extensive cleanup effort. It is important to get the data correct the first time and provide it as quickly as possible to the end user.

BPEL Process

One of the new method and tools for managing flow of data is the use of BPEL. By defining the business process and then automating it through this approach, data can be captured and then disseminated into the various systems. This is exceptionally effective when master files information need to be updated and then that information transferred or updated in other files. In many situations there can be more than one place that needs updates for items, employees, and suppliers.

The BPEL approach takes the information entered either into master files and using an XML interface file the data can be taken and populated to the other tables either through interfaces or web services. Either was the information is passed through interface tables and populated into the corresponding system. This process can be instantaneous or a schedule based on the requirements of the business users. Additional steps can be added for approvals and data transfer with validation. In this process the data is systematically updated and processed to assure accuracy and timely processing of data generated in support of the various integrated systems. This however is just the first application of using the BPEL process.

Web Services

Although the concept of web services has been around for a number of years with EAI tools the ability for smaller companies to execute this technology has been limited due to cost and resources. EAI tools have been expensive and often required significant head count to maintain programs and data. With the advent of SOA the web services approach breaks down the process into reusable services that can be reused and reduces then amount of coding that interfaces requires. With enterprise applications becoming more complex and the vast amount of third party software being used, this architecture promotes the flexibility and adaptability needed to efficiently integrate modules and applications together to promote timely and accurate transfer of data within and between systems.

In the PTP process this means that data can transferred on more timely basis, if not immediately, for importing requisitions into purchase orders, creating and modifying purchase order information using EDI/XML protocols, importing Data from RF devices in turn updating multiple systems, and finally speeding up the process between purchasing and payables thus eliminating timely information for realizing discounts, reducing manual efforts/workarounds, and increasing the throughput of receiving and invoicing data.

Often these approaches can help to streamline the process and facilitate the efficient processing of the purchasing data. From creating and maintaining suppliers, to updating catalogs, importing requisitions, processing purchasing data, electronically processing receiving data and then facilitating the processing of inventory data the procure to pay process can be automated from end to end.

Data Hubs

Because of the importance of the master data files and the importance of this information to the functioning of not only the source of record also to other systems is why Oracle has developed the concept of data hubs. A data hub provides a repository of master files information that can be centralized for accuracy and cleansing for data consolidation. This consolidation has all the information in one location and although may be larger in size reduce the overall maintenance and management of the master file. This also allows the information synchronizes the data between the various systems.

By providing an easy-to-use single point of entry for all requisitions, iProcurement encourages requesters to use it every time. As former maverick spenders are drawn into using the system, iProcurement guides their purchasing choices and captures detailed information on their spending. So not only are your policies automatically enforced, your spend data is available for advanced analysis that will yield future savings opportunities

Oracle iProcurement ensures that the prices and terms of your supplier agreements save money in every order.. Once requisitions are approved, the intelligent Workflow can automatically place the requested goods and services on purchase orders and issue them to suppliers. Oracle iProcurement supports print, fax, and email order delivery. To drive down costs further, customers may choose to use advanced electronic transaction delivery via EDI or XML using the Oracle Supplier Network. From requisition to fulfillment, Oracle iProcurement drives transaction overhead down.

Requisition Import Process

Use the Requisition Import process to import requisitions from other Oracle or non-Oracle systems. Work in Process, Master Scheduling/MRP, Order Management, and Inventory (as well as custom systems) can provide requisition information for the Purchasing requisition interface table. For example, drop-ship orders from Order Management and Kanban orders from Inventory are sent to the requisition interface table and converted into requisitions. Requisition Import creates a requisition line and one or more requisition distributions for each row it finds in the interface table. It then groups these lines on requisitions according to parameters you define below.

You can set the profile *PO: Release During ReqImport* to create releases each time you run the Requisition Import process. Purchasing automatically creates (and optionally approves) the releases for all blanket-sourced, approved requisitions as part of the Requisition Import process, not just those created by the Requisition Import run. You can place requisitions you imported on purchase orders just as you would any other requisition. Purchasing automatically sources your requisition line to a blanket agreement or catalog quotation number if the supplier for the item is in the Approved Supplier List and if sourcing rules are set up for the item. Each requisition you create using Requisition Import enters Purchasing with the approval status that was specified when the row in the interface table was created. Buyers can quickly create standard purchase orders, planned purchase orders, blanket releases, RFQs, and Oracle Sourcing negotiations from any available standard (not internal) purchase requisition lines.

AutoCreate provides you with the features you need to satisfy your automatic document creation needs. You should be able to:

- . With a minimum number of keystrokes you can create new standard or planned purchase orders, blanket releases, RFQs, quotations, and if Oracle Sourcing is enabled, draft buyer's auctions or sourcing RFQs.
- . Add to existing blanket releases, planned purchase orders, standard purchase orders, RFQs, and quotations
- . Review all approved requisition lines before placing specific requisition lines on a purchase order or RFQ
- . Review RFQ headers, lines, and shipments before creating a quotation from a specific RFQ
- . Collect all requisition lines that meet a certain set of criteria that you establish
- . Split one requisition line into several requisition lines
- . Consolidate multiple like requisition lines into single purchase order lines
- . Review or change your purchase orders, quotations, or RFQs immediately after creation
- . Use document security to control whether buyers can add to certain document types
- . Specify foreign currency details during auto creation.
- . Review requisition lines by currency type inspection, transfer, and internal delivery. You can use these features to control the quantity, quality, and internal delivery of the items you receive.

Automatic Release Generation

You can minimize purchase order administrative costs by automatically creating releases for both manually entered and imported requisitions. Purchasing provides you with the features you need to satisfy the following basic needs. You should be able to:

- . Automatically create a release when you source your items from a single supplier using a single blanket purchase agreement.
- . Specify for each blanket agreement whether you want to create approved releases automatically, create releases automatically but require manual approval, or require the use of the AutoCreate Documents window to create releases.
- . Run the Create Release process automatically as part of the Requisition Import process.

When you are defining your sourcing rules and Approved Supplier List entries, you can also define how you want your releases generated. Automatic Release automatically converts approved requisition lines to approved blanket purchase releases based on the sourcing rules and Approved Supplier List entries. Automatic Release/Review automatically converts approved requisition lines to blanket releases. Buyers can then review and modify these releases before approving them. Release Using AutoCreate lets buyers use the AutoCreate Documents window to collect, review, and optionally modify requirements before creating and approving their releases. You can define a different release generation method for each item and supplier. For frequently purchased items, you can set up Purchasing to automatically create and approve releases. For expensive or critical items, you can let Purchasing create the releases, while you review and approve them in a separate step. For infrequent purchases, your buyers can take more control by using the AutoCreate Documents window to combine requests. You must set up a suggested blanket purchase agreement in the Approved Supplier List window so that Purchasing can use the price and ship-to information when it is generating releases against the agreement.

The Create Releases process generates releases when the following criteria are met:

- The requisition is sourced to an approved blanket purchase agreement that is not on hold
- The Approved Supplier List entry for the item, supplier, and agreement must be active, and the Release Generation method must be Automatic Release or Automatic Release/Review in the Approved Supplier List window
- The source agreement is still active and the release will not put the agreement over the amount limit
- The release amount must be greater than the minimum line release amount
- The supplier on the source agreement is active and not on hold
- The requisition line is Approved (and Reserved, if requisition encumbrance is active)
- The requisition line is not cancelled, closed, or already on a purchase order
- The line type of the requisition line is quantity based

Note: If the release generation method in the Approved Supplier List window is Automatic Release or Automatic Release/Review, then the Create Releases process creates the release. If the release generation method is Release Using AutoCreate, then the PO Create Documents workflow tries to create the release; if it cannot, then you must use the AutoCreate Documents window to create the release. If the release generation method is Automatic Release, the process sets the status to Approved and updates the action history. Otherwise, the process sets the status to Incomplete and updates the notifications. Purchasing automatically creates releases for requirements entered by any source: Work in Process, Master Scheduling/MRP, Inventory Planning, purchase requisitions, or external systems. Automatically generated releases use the price retrieved by sourcing, which is price break sensitive but does not consider the quantity already released against the blanket purchase agreement.

The Create Releases process creates a release for each source blanket purchase agreement, with a release shipment for each requisition line and a release distribution for each requisition distribution. If release archiving is set to Approve, the process updates the archive table for the release, shipments, and distributions. If you've set up a tax defaulting hierarchy in the Tax Defaults region of the Purchasing Options window, the appropriate tax codes automatically default onto the release shipments created by the Create Release process. You can determine how often purchasing creates releases by using the Submit Requests window to set the Create Releases process to run automatically at any frequency you desire. You can also use the Submit Requests window to run the process manually. Optionally, you can set the profile PO: *Release During ReqImport* to create releases each time you run the Requisition Import process. For example, when you implement planned orders as requisitions in the MRP Planner Workbench, you can automatically create the releases at the same time you create the requisitions. As part of the Requisition Import process, Purchasing automatically creates (and optionally approves) releases for *all* blanket-sourced, approved requisitions, not just those created by the Requisition Import run.

Data Integration

Besides the generation of master data there is also the need to integrate data between systems. Often this data that is generated or entered into the system of record or subsystem that must update the other system. Through the use of web services executed by the BPEL process this data can update the necessary corresponding systems. This integration of data is important is keeping the systems updated and this up [dated information available to users who

might not have access to the system of record and rely on these updates for transactional and informational needs. This integration is important because users rely on this information to make decisions and keep key stakeholders informed. This integration can data many forms. It can be coded interface that updates the corresponding tables on a regular basis or it can executed using a number of methods. It can be a scheduled concurrent request that executes programs, through a scheduling tools that executes based on certain events or can be again part of business process that is executed using the BPEL tool. It is important to know which tool to use and how best the requirements can be met. In the chart we introduced these various approaches but would like to discuss them further at this point between data integration and data transfer sections of this paper.

Data Transfer

Due to disparate systems there is data that needs to be imported and transferred between these systems. Keeping data timely and accurate is paramount to this data transfer and drives the degree of data transfer. Keeping data in sync between systems promotes accuracy and efficiency. This however is not accomplished without effort and a variety of approaches. Although nightly interfaces have been common practice for years because of performance reasons they however often are more of a hindrance than an advantage. Because of this many companies are looking at ways to make this more timely and efficient in data processing. The business driver behind this is the business cannot wait 24 or 48 hours to have master data updated. They need it know if not yesterday. Below is a discussion of the two approaches and the business justification for both.

Interfaces

Interfaces are necessary requirements for passing data back and forth between systems. Thee were however cumbersome, performance inhibiting and often time challenged. Traditionally these have been done with code and passed information through an API between systems. Either because the code was inefficient or vast amounts of data were being transferred they tended to be run in off hours in order to reduce impact on performance. This however was problematic because it meant users were unable to access data for a minimum of 12 hours and often 48 hours if problems occurred. If you need to create a purchase order or update receiving or invoice information these can often delay the process and can cause missed opportunities for discounts or manual workarounds. Granted interfaces have their place and are good for passing information unilaterally between systems they are limiting and should be deployed only when the requirements are met through a programmatic approach. In the past few years a different approach has been developed for the future.

E-business best practices demand that companies electronically integrate with everyone, everywhere during all hours of the day. Information must flow quickly, efficiently, and seamlessly throughout the global supply chain. To accommodate seamless information flow in an ever expanding trading partner base requires an application integration infrastructure that is flexible enough to accommodate the integration requirements of any and all applications that must integrate with the Oracle E-Business Suite. Oracle XML Gateway is the XML message enabler for the Oracle E-Business Suite. XML is key to an integration solution because it standardizes the way in which data is searched, exchanged, and presented thereby enabling interoperability throughout the supply chain. Oracle XML Gateway provides a single integration framework for you to conduct e-business using XML standards with everyone on your global supply chain. EDI transactions and XML messages are two forms of electronic messaging based on their respective standards. EDI transactions are more batches oriented while the XML counterpart is event-based, real-time, and tend to be based on a single transaction. Oracle e-Commerce Gateway integrates with the Oracle E-Business Suite to extract or import ASCII flat files. A third party EDI Translator is required to map the flat file data between the Oracle E-Business Suite and the EDI standard of choice such as ASC X12 or EDIFACT. Oracle XML Gateway integrates with the Oracle E-Business Suite to create or consume XML messages based on application business events. Oracle XML Gateway creates or consumes standards compliant XML messages without the use of a translator.

In the PTP process this means that data can transferred on more timely basis, if not immediately, for importing requisitions into purchase orders, creating and modifying purchase order information using EDI/XML protocols, importing Data from RF devices in turn updating multiple systems, and finally speeding up the process between purchasing and payables thus eliminating timely information for realizing discounts, reducing manual efforts/workarounds, and increasing the throughput of receiving and invoicing data.

Receipts

Purchasing provides you with the features you need to satisfy your receipt, inspection, transfer, and delivery needs. You should be able to:

- Use routing controls at the organization, supplier, item, or order level to enforce material movement through receiving. For example, you can require inspection for some items and dock-to-stock receipt for others.
- Define receiving tolerances at the organization, supplier, item, and order level, with the *lowest* level overriding previous levels. You can define tolerances for receipt quantity, on-time delivery, and receiving location. You can assign looser tolerances to low-value items that you consume at high volumes. You can set enforcement options to ignore, warn the user, or reject transactions that violate the tolerances.
- Use blind receiving to improve accuracy in the receiving process. With this option, the quantity due for each shipment does not show and quantity control tolerances are ignored. Also, the quantity is not visible in view windows or in reports. However, if you choose to have visible receiving, then your receiving staff can see the quantity due.
- Use Express Receipt to receive an entire purchase order with a few keystrokes. You can exclude certain lines for express transactions.
- Use Advance Shipment Notices (ASNs) to enter receipts in the Enter Receipts window, reducing data entry time.
- Use the Cascade function to distribute a given quantity of an item from a single supplier across multiple shipments and distributions. This function is enabled by a Receiving Options checkbox, Allow Cascade Transactions, and is available only when you have specified a source and an item in the Find Receiving Expected Receipts window.
- Specify match approval levels. You can specify two-, three-, and four-way match approval levels on a purchase order line. Purchasing uses receiving and inspection information to ensure that you only accept and pay for the items you order, receive, or inspect. Choose the three-way match approval level if you want to receive items before you allow payment. Choose the four-way match approval level if you require inspection and acceptance of receipts before authorizing payment.
- Print the receiving and inspection documentation you need. For example, you can print Receipt Travelers. Also, you can prepare for incoming receipts by printing the Expected Receipts Report to help you identify items and quantities you expect to receive. You can use this report to plan your work, identify receipts satisfying an urgent demand, and control unexpected receipts. Finally, you can produce summary and detail receiving transaction reports by item, supplier, purchase order number, and/or receiving date range.
- Import receipts from other Oracle Applications, other non-Oracle systems, bar-coded and other electronic receiving sources, and advanced shipment notices (ASN).
- Track, update, and record the receipt of intransit and inter-organization shipments.
- Enter different types of receipt transactions based on your organization's needs. For example, you should be able to record in one transaction a direct receipt of inventory items into inventory.
- Record receipt of unordered items based on your item, supplier, or organization defaults. For example, if your organization does not allow receipt of unordered items, you should not be able to enter a receipt unless it is matched to an order shipment.

Receiving Transaction Processor

Use the Receiving Transaction Processor to process your pending or unprocessed receiving transactions. How the Receiving Transaction Processor handles these transactions depends on the processing mode, which is a profile option that you can set at the site, application, responsibility, and user levels. In On-line processing mode, Purchasing calls the Receiving Transaction Processor when you save your work. In Immediate processing mode, when you save your work, the receiving forms call the Receiving Transaction Processor for the group of transactions you have entered since you last saved your work. Note that this is a specific group of transactions. Transactions belonging to other groups (for example, those entered by another user in Batch processing mode) are not included. In Batch processing mode, the receiving forms insert transaction information into the receiving interface tables. These transactions remain in the interface table until you run the Receiving Transaction Processor. The receiving

forms take into account all pending transactions, but Purchasing does not update the transaction history, source documents, and supply information until the transactions are processed.

You can set Standard Report Submission parameters to run the Receiving Transaction Processor at specified intervals so that your pending transactions are processed as often as required. The Receiving Transaction Processor performs the following functions:

- Validates Advance Shipment Notice (ASN) and Advance Shipment and Billing and Notice (ASBN) information in the receiving open interface
- Derives and defaults values into the receiving interface tables (For example, if a particular value or field is not received, the receiving open interface tries to derive the value using defaulting and derivation rules.)
- Creates receipt headers for intransit shipments
- Creates receipt lines for all receipts
- Maintains transaction history information
- Maintains lot and serial transaction history
- Accrues uninvoiced receipt liabilities

Payment on Receipt

Payment on Receipt enables you to automatically create standard, unapproved invoices for payment of goods based on receipt transactions. Invoices are created using a combination of receipt and purchase order information, eliminating duplicate manual data entry and ensuring accurate and timely data processing. Payment on Receipt is also known as Evaluated Receipt Settlement (ERS) and Self Billing. You can automatically create invoices with multiple items and distribution lines, and include tax. You define which supplier sites participate in Payment on Receipt and enforce matching rules to ensure the proper payments are made to the suppliers. Payment on Receipt builds invoices with the following information:

- Determined by multiplying the Quantity received by the Purchase Order Item Unit Price.
- Defaulted from the purchase order payment terms or from the supplier site payment terms, depending on your Oracle Payables setup.
- Based on Tax Codes on each purchase order shipment, or the default tax hierarchy in Payables.

Match Payment on Receipt Invoices to Purchase Orders or Receipts

When Payment on Receipt runs, it automatically performs invoice matching to the purchase order or receipt, depending on which Invoice Match Option was chosen in the purchase order Shipments window. (The Invoice Match Option on the shipment defaults from the Supplier Sites window, but you can change it on the shipment.) If matching invoices to receipts, Payment on Receipt uses the exchange rate information on the receipt. If matching invoices to purchase orders, Payment on Receipt uses the exchange rate information on the purchase order.

Purchase Order Matching

- Optionally require purchase order matching
- Perform two-, three- and four-way purchase order matching
- Pay on receipt (ERS) or advance shipment notice
- Automatically create debit memos for returned items
- Match at purchase order shipment, distribution, or receipt level
- Match credit and debit memos to purchase orders
- Automatically record variances
- Set tolerances to automatically manage variances

Automate invoice processing by leveraging out-of-the-box automation, including electronic data interchange (EDI), XML messages, and Evaluated Receipt Settlement (ERS). Allow your suppliers to enter and inquire on their own purchase order matched invoices using self-service functionality provided through Oracle iSupplier Portal.

Invoice Approval Functionality

The Invoice Approval Workflow automates your invoice approval process. Based on rules you define (using the Approvals Management Application), the workflow determines if an invoice needs approval, who the appropriate approvers are, and in what order approvers should approve payment of the invoice. The workflow then sequentially asks each approver in the approval list to approve invoices online. For example, you can define a rule so invoices over \$100,000 require CFO approval and then CEO approval. If you use Invoice Approval Workflow, then every invoice that requires approval must be approved before you can pay it. Payables indicates that an invoice requires approval by setting the value in the *Approval status* field in the Invoices window to *Required*. When you use this feature, all invoices require approval, with the following exceptions. Payables sets the *Approval status* of the following invoices to *Not Required*:

- Expense Reports imported through the Payables Expense Report Import Program (because these expense reports have already been through an approval process)
- Recurring Invoices if the recurring invoice template did not have the *Approval Workflow Required* option enabled (because recurring invoices are often approved in advance)
- Invoices that existed before you enabled the feature
- Invoices that the Invoice Approval Workflow process determined did not require approval according to the rules you set up in Oracle Approvals Management. You can set up your system to request and receive approval through the approver's email or through the approver's Oracle Workflow Notifications Workflow web page, or both. You can review the approval status of an invoice that is being processed by the Invoice Approval
- Workflow in the following ways:
 - Invoice Approval History window.
 - Invoice Approval Status Report.

This new workflow has been introduced at an optimal time, in the wake of Enron and other corporate scandals, when many organizations are reviewing their organizational controls. Here are two common Applications' scenarios into which this new workflow might be used:

With Purchase Order Matching

Many organizations which have implemented both Purchasing and Payables push most of their procurement approval controls back to the Purchase Order or Requisition stage. This means that when supplier invoices are entered into Oracle, they can be "matched" to the approved Purchase Order and need no further approval to be paid. The only invoices excluded from PO matching, are likely to be charges which are hard to pre-determine like utilities and taxation payments. Such implementations commonly set a system option to *Hold Unvalidated Invoices*. Organizational approval for these unmatched invoices is then typically recorded in the system via the release of invoice holds by a senior Payables user with access to the required window. To process and document these approvals, sites typically forward the actual invoices (in hard copy) to the relevant Cost Centre manager who reviews and signs them before the system data entry is done. This paperwork is then retained for audit purposes.

Without Purchase Order Matching

Sites which do not use Oracle Purchasing typically extend the type of processing described for unmatched invoices in the previous section, to all invoices. In the past there has been no possibility of automating this invoice approval process, however, the new workflow provides that possibility. Potential benefits include the following:

- Demonstrably objective application of approval rules (i.e. automated).
- Audit documentation stored in soft copy.
- Automatic redirection available if first approver is unavailable.

Approval and Validation

The new invoice approval workflow is not meant to replace validation. The 'old' approval process (now called validation) must be run prior to the invoice approval workflow. *Validation* as it is now called is still the process that will place holds on invoices and automatically create tax distributions and invoice price variance calculations. The

new approval process allows additional system constraints to be applied to an invoice before it's approved for payment.

Data Reporting

One the key advantages of developing an automated PTP process is that it processes that data in a timely manner so that data is in the right place this providing accurate reporting. Automation moves the data at the right time to the next step in the process thus making the data not only accurate but at the right status especially in the areas of accruals. Often is a close schedule requires cut offs and some manuals intervention but with proper rules and automation the information should be in the right status so that reports can be run shortly after the cutoffs are scheduled. Through the use of automations tools these conditions can be checked to make sure these statuses are correct. Problems with some of the converted data, a lack of sufficient training, inadequate procedures and system controls soon caused the balance in the purchasing accrual account to balloon to an unreasonable amount. Steps were taken early on to correct this but only seemed to exacerbate the problem. They have blanket purchase orders with hundreds of lines and thousands of releases. They use 3 way matching and match invoices to receipts (a feature that is fairly new to the Oracle applications). The typical balance at month-end of the uninvoiced receipts is between 6 and 8 million dollars. After a few months accounting personnel noticed that the account balance was growing. It appeared that more money was going in than was coming out. At one point the account balance was over 15 million dollars. The uninvoiced receipts report was mushrooming (2,500 plus pages and counting) and nobody understood why. Things were so bad that the Uninvoiced Receipts Report could not be trusted and what was worse there was no way to substantiate the balance in the Purchasing Accrual account to management and auditors. Not until they took a systematic approach to understand the problem was the account brought back into control. Some of the steps they took to accomplish these included revising procedures in the receiving, purchasing, and payables departments, rethinking some of the system controls and using custom reports and queries to find and isolate the problematic transactions. Corrective actions were taken to purchase orders and invoices with problems. The end result to all this is an account whose balance is reasonable and substantiated. The balance in the account is reasonably close to the total of the Uninvoiced Receipts Report. They have procedures in place to monitor receiving activity and to ensure that invoices are matched to the correct receipts. This area of functionality is seldom researched. It tends to lie in the edges of the expertise of purchasing and financial experts and doesn't get the attention it deserves. If you are looking for some guidance on controlling and understanding your Purchasing Accrual account, you should attend this presentation.

Purchasing departments need accurate information in many different formats but the underlying is to give sufficient information to make effective decisions based on comprehensive analysis. This analysis often requires vast amounts of data obtained from variety of resources. Because each industry has unique needs these reports often are custom with complicated joins of numerous sets of data. Obtaining this data often requires adequate planning and a robust set of tools. Since many of Oracle's reports are not adequate to provide the information required several tools are now avails that assist in meeting these needs. XML Publisher combined with Discoverer provides a complimentary full spectrum environment to meet all business reporting needs.

Customers and Prospects will gain insight into Oracle's new Business Intelligence strategy and its comprehensive portfolio of products, including Data Warehousing, Business Intelligence Platform, and Business Intelligence Applications. This presentation will help learn how Oracle's next-generation BI tools and solutions can enable your customers to:

- Derive insight from heterogeneous historic and real time data sources to drive strategic decision making, deliver continual business process improvements, and promote alignment across the enterprise.
- Gain complete, consistent, up-to-the-minute insight that can be embedded into normal daily activities.
- Empower everyone in the enterprise through role-based insight.
- Leverage existing investments and immediately gain business insight across Oracle E-Business Suite, Siebel, PeopleSoft, and SAP applications.
- Leverage Oracle Fusion Middleware as the open technology foundation for business intelligence.
- Gain faster time to value with pre-built BI Applications.

Oracle Daily Business Intelligence monitors contract utilization and compliance and lays the ground work for finding new opportunities.

Discoverer

Discoverer is a powerful ad-hoc reporting tool designed so that all levels of users can quickly and easily create reports and analyze data without writing complex code.

XML Publisher

XML Publisher provides a mechanism to deliver intricate printable documents with rich formatting using simple template structures and XML data. Learn how to combine these technologies to provide quality, publishable reports for a multitude of purposes. The days of a single report file containing data, layout and translation are gone. XML Publisher separates the data, layout and translation into three distinct objects. Customers now have huge flexibility in their reporting architecture, single data sources can support multiple layouts and consequently single layouts can now support multiple translations. There is no longer the need for expensive consulting fees to build reports in a complex reporting tool. The process of creating reports becomes much simpler:

- Data - the IT department can concentrate on what they know best - extracting the company data from their systems.
- Layout – business consultants now have familiar desktop tools to create the layouts they want to build rather than having to describe them to an engineer
- Translation – XML Publisher uses an industry standard translation format (XLIFF) that can be updated by a local company office or sent to a commercial translator.
- At runtime XML Publisher brings these three reusable pieces back together to create the final output for the end user.

XML Publisher can accept and format any well formed XML data. This means that XML Publisher can be integrated into any database, application or process that can generate XML whether that be a database, an ERP application or a Web service to format output and deliver to consumers. XML Publisher also allows you to bring data in from multiple data sources into a single output document.

XML Publisher allows users to create the layout formats using familiar desktop tools such as MS Word, Excel and Adobe Acrobat; plug-ins to these applications make the creation of layouts even simpler for the user. These template formats are all open standards meaning the customer is not locked into using them. XML Publisher uses the Extensible Stylesheet Language Formatting Object (XSL-FO) as the underlying technology. There are many editors on the market that allow the user to visually create these templates and potentially any RTF editor can be used to create the layouts too.

RTF Templates – these templates provide the user complete freedom to create the exact layout they want. All of the expected report features are supported in these templates such as tables, forms, boilerplate blocks, conditional formatting, page totals and page breaks. In addition to this the user can embed special fonts into the template to support barcodes, check printing, etc in the final output. For more detail on the template features [click here](#).

PDF Forms – just about every government in the world expects companies to communicate with them in a specific format, namely PDF. XML Publisher allows the user to download these forms from the government, map the data fields therein to your data source and you are done. At run-time, XML Publisher will merge your data into the PDF form and effectively fill it, the government gets back the exact format they gave you but with your data inside.

Excel – every financial analyst wants to get their data in an Excel format and carry out modeling exercises on it. The Excel template allows them to do just this. The user can build complex modeling scenarios using pivot tables, charts, etc in Excel as a template. At runtime XML Publisher merges the data into the sheet and once opened in Excel the modeling scenarios are rendered based on the incoming data.

eText – communicating in a B2B world currently requires most likely one of two formats: Electronic Funds Transfer (EFT) most commonly used to move funds from bank to bank to pay suppliers, etc or Electronic Data Interchange (EDI) used to communicate everything from an invoice to a student record. XML Publisher supports both of these

formats, using another RTF template format the user can quickly build a template that formats data into the EFT or EDI format. These can include complex calculations, string manipulations, etc.

Rich set of report features

- High fidelity formatting
- Charting
- Multiple objects in one report
- Multiple tabular reports and a full range of charting options
- High degree of report interactivity (filter, sort, hide column)
- Conditional formatting
- Ease report template creation
- A broad range of formulas and functions out of box

Multiple Formats

XML Publisher supports multiple output formats including:

PDF – these are pixel perfect documents that can be secured at runtime using a password, encryption and even a digital signature

RTF – this format allows users to open the file in their word processing application for further editing or collaborative updates.

HTML – a classic online format, reports can be generated and delivered to a web server for users to view online. Interactivity can be built into the reports allowing users to drill down to other linked reports.

Excel – the ability to open a report output in Excel for many financial consultants is priceless. They are now able to use native Excel functionality to complete analysis on the generated data.

Delivery Anywhere

XML Publisher is able to deliver your documents to multiple delivery channels in a secure and rapid fashion to the familiar destinations, email, fax and printer. In addition it can also deliver output via HTTP, FTP and WebDAV opening a world of possibilities to integrate XML Publisher into other document management systems.

Improve Business Relationships through Enhanced Supplier Management

Shared services functionality promotes best practices and efficiencies in your growing enterprise. It allows you to provide worldwide payment processing from a single service center that supports your global operations. It provides you the tools to ensure that your payment policy is consistent and is enforced globally. The global payment process owner can determine policy and set it centrally. Oracle Payables promotes accountability and visibility for any deviation.

Supplier management allows one to automatically create supplier records from external sources, manage suppliers, including merge and purge functionality, set limits and apply payment holds at supplier level, record refunds to ensure complete history of supplier activity, review current balances on-line, review and audit supplier information and control duplicate records and provide self-service inquiry of invoice and payment status using Oracle iSupplier Portal

Leverage integration with Oracle iSupplier Portal to reduce administrative costs and improve supplier relationships with a simple, easy-to-use Web-based interface that allows suppliers to enter and check the status of their own invoices. Since Oracle iSupplier Portal ensures that only valid amounts on approved purchase orders can be invoiced, this feature eliminates invoice holds and reconciliation issues. Flexible invoice, payment, communication, and reporting options allow you to establish a process that meets the needs of your enterprise and its trading partners. All of these features help you to optimize relationships with your suppliers and enhance their contribution to your bottom line.

Take advantage of seamless integration with other related Oracle E-Business Suite products includes:

Oracle Purchasing, which offers automated invoice creation with Evaluated Receipt Settlement (ERS), Advanced Shipping and Billing Notice (ASBN), and Automatic Debit Memos from Return to Supplier Transactions (RTS).

Oracle Property Manager and Lease Management, which allow you to upload approved property lease and equipment charges for hands-off, expeditious processing and payment.

Oracle General Ledger, which speeds the month end close and audit processes.

Oracle Internet Expenses, which shortens the employee reimbursement cycle by automating the entry, approval, audit, invoicing, and payment of expense reports.

Oracle Cash Management, which automates the reconciliation process.

Oracle Approvals Management, which allows for the automatic enforcement of business rules that you specify for a paperless invoice routing and approval process.

Oracle Advance Procurement Suite

The Oracle Advanced Procurement suite leverages the value of Oracle Sourcing by implementing and enforcing purchasing agreements enterprise-wide. Even the best purchasing agreements are worth little unless they are consistently enforced. Oracle Sourcing provides even more savings to your organization when used within the Oracle Advanced Procurement suite by ensuring consistent execution from requisition to payment. Oracle Procurement Contracts drives compliance with built-in tracking of contract deliverables. Oracle Purchasing seamlessly executes agreements negotiated in Oracle Sourcing. Employee self-service requisitions placed in Oracle iProcurement automatically default to preferred suppliers at Sourcing-negotiated prices.

Oracle Sourcing increases the sourcing bandwidth of procurement professionals so they can exploit many more savings opportunities and capture more value from each. Online collaboration and negotiation makes it easy for participants from multiple organizations to exchange information, conduct bid and auction processes, and create and implement agreements. Professional buyers, business experts, and suppliers exchange information online for a more agile and accurate sourcing process. The application also dramatically reduces sourcing cycle time and creates a complete audit trail of supplier commitments. With Oracle Sourcing, your organization can find and exploit saving opportunities that were previously untouched. Because strategic sourcing is traditionally time-consuming and complex, many organizations are not able to source all of their spending for maximum savings.

The time required to prepare bidding packages, issue them, and process responses has traditionally limited how much sourcing each professional could manage, leaving savings on the table. Oracle Sourcing lends structure to the entire sourcing process, greatly reducing the time and effort required to source each demand. Procurement professionals can use templates to quickly create sourcing events such as RFIs, RFQs, RFPs and reverse auctions. Sourcing events may also be created by directly consolidating demand from Oracle Purchasing. Buyers can even use one-click renegotiation to instantly clone expiring agreements into new sourcing events. Oracle Sourcing slashes the manual effort required to execute each sourcing event. So procurement professionals can do more of what they do best – save money.

The knowledge and best-practice that saved money in one sourcing event are often lost when that event ends or an employee departs. Oracle Sourcing allows sourcing professionals to capture best-practice category knowledge for reuse. All of the successful elements from past events can be captured into category-specific templates for RFQs, RFIs and online auctions. Reusable invitation lists bring in the best suppliers. Reusable pricing factors align buying with supplier cost structures for the lowest total cost. Reusable negotiation styles capture knowledge of which event

type and bidding rules will yield the best value. With Oracle Sourcing, your best sourcing knowledge is continually leveraged over time and across the enterprise.

Sourcing professionals know that the lowest price does not always yield the lowest total cost. Oracle Sourcing enables lowest total cost analysis by identifying cost drivers and hidden costs that drive up total cost. Multi-attribute weighted scoring and pricing, including price breaks and price factors, enable procurement professionals to strategically define items and services and effectively negotiate with suppliers. Sourcing also provides configurable scoring criteria to analyze bid supplier strengths and weakness that affect downstream costs. Bids can be scored on any combination of price and buyer-defined criteria such as delivery dates, quality, vendor reliability and financial stability.

Improving sourcing can save companies enough money to return their investment in just one sourcing event. Organizations using Oracle Sourcing often discover that open and transparent competition prompts even incumbent suppliers to offer better prices, terms and conditions. The application also lowers supplier risk by providing clearer requirements and a better exchange of information during the bidding process. Reduced risk allows suppliers to make lower bids. Oracle Sourcing can save you money on demand you already have open today.

Self-Service Requisitioning that Streamlines Buying, Enforces Policy and Slashes Cost

Paper-based procurement processes are not only slow and expensive; they create barriers to enforcing purchasing policy. Oracle iProcurement automates employee requisitioning through a self service web-shopping system. Employees create, manage and track their own orders in an intuitive web interface, while purchasing retains central control. Oracle iProcurement ensures that purchasing policies and preferred pricing agreements are reflected in every transaction. Easy online ordering and self-service tracking and receiving provide better service while reducing routine purchasing inquiries and non-sourced spending. This frees procurement professionals to focus on supplier relationships and strategic sourcing.

Oracle iProcurement lets you control spending by all employees because it is easy for you to implement and for them to use. Oracle iProcurement gives employees an intuitive web-shopping interface that is instantly familiar to anyone who has shopped online. Powerful search features and logically grouped online “stores” lead users to the products and services they need. Requesters can place and track orders from any web browser. This web architecture also allows rapid deployment to every employee because there is no desktop software to install. So your employees have immediate access to the system, and an interface they can use right away.

With Oracle iProcurement, Purchasing departments completely control the products, services and views that employees see; based on organization, responsibilities, and more. The content can be easily loaded into iProcurement and you can use your existing supplier agreements. Users find the items using a configurable category structure or employ the powerful advanced search capabilities. You can provide rich information on the items so employees make informed decisions. Suppliers can also manage content on your behalf. Oracle iProcurement allows users to punch-out to supplier hosted sites, returning for checkout and approval. Additionally, iProcurement’s unique Transparent Punch-Out even allows users to access content from external sites without ever leaving the familiar iProcurement interface. By providing flexible options for user content, Oracle iProcurement gives you unparalleled ability to guide employees to make compliant purchasing choices.

Often an employee needs goods or services that aren’t available in the catalog. With Oracle iProcurement’s Smart Forms, Purchasing can easily gather and organize these non-catalog purchases. Smart Forms are fully-configurable templates that default key information, such as preferred suppliers, category, and price on the request and gather other information needed to validate and execute the order. By associating a contract or agreement with a Smart Form, you can have all approved requisitions automatically placed on purchase orders without buyer intervention. So routine non-catalog orders flow just as efficiently as orders for catalog items.

Oracle iProcurement builds policy enforcement into every transaction, from requisition through payment. Configurable approval management ensures that every purchase receives the correct approvals required by policy for the amount, requester, department, and project. Approvers can be the manager(s) of the employee, but the rules are configurable to allow other groups within the organization to approve. Support for key accounting methods including budget, encumbrance, projects and grants ensure correct fiscal control. Administrators can set up tolerances for commitments against a budget. Requesters can allocate costs to one or more projects or grants and

validate funds availability in real-time. With built-in policy enforcement, routine compliance is improved and exceptions are bubbled up for management by purchasing professionals. Pricing structures in supplier agreements can be so complex that savings from negotiated discounts fail to show up correctly on purchase orders. Oracle iProcurement's solves this problem with a formula-based engine that calculates discounts based on complex price models. Pricing complexity is hidden from end users, who simply see the correctly discounted prices in their shopping carts. So requesters can take advantage of negotiated savings without becoming purchasing experts, and your buying organization never leaves money from negotiated discounts on the table.

Services Procurement

Although most organizations spend a large share of total budget on services, few have the same visibility into service costs as they do for goods and materials. For even the most efficient enterprises, service spending can be a thicket of unsourced buying, lost savings opportunities, and limited oversight from the Purchasing department. Oracle Services Procurement brings full Purchasing oversight to services. By managing services procurement with step-by-step online processes, your organization can save money on both simple and complex categories such as general business services and contingent labor. Oracle Services Procurement helps you source and manage services for maximum savings.

Oracle Services Procurement helps you create better agreements with preferred suppliers, directs spending to those suppliers and lowers processing costs through close supplier collaboration. Establishing and maintaining master agreements with services vendors is critical to realizing bottom-line savings. With Oracle Services Procurement, you can define all aspects of your business arrangement on service contracts; including appropriate rates, terms, job information and more. Optionally, you can utilize Oracle Sourcing to collaboratively negotiate terms with potential vendors. Once the master agreement is in place, Oracle Services Procurement ensures that all purchase orders fully reflect the latest information in order to drive compliance throughout the organization. Even the best master agreements are wasted unless users consistently order services through preferred suppliers. Oracle Services Procurement's requisition process directs users to preferred suppliers right from the initial request, funneling orders to preferred suppliers so that service spend is sourced to the correct supplier at negotiated rates every time. For each type of services need, you can create an approved vendor list that may contain one or multiple approved suppliers. When placing a request, the application displays the latest rate information, enabling the employee to make an informed decision and set budget appropriately. For a unique request, you may choose to allow the employee to suggest a new supplier. Oracle Services Procurement ensures that adequate spending checks are in place. Approval rules are configurable, typically requiring approval from the employee's management and possibly other groups as appropriate. Services requests can be placed against open projects and their budgets.

For organizations that require that ample funds be available and reserved prior to approval, Oracle Services Procurement provides all the necessary checks. Once the request is authorized, employees can track the spend amount against submitted invoices to see remaining budget. Contingent workers can fill out integrated Oracle Time and Labor timecards online to indicate work performed. The system automatically updates the purchase order based on approved timecards and other invoices, providing advance warning before spending runs over budget.

Oracle Services Procurement eliminates over-billing with comprehensive invoice matching and tracks deliverables and contractor time online to ensure that what you pay for is what you get. Studies suggest that the majority of all service invoices contain errors. Services Procurement eliminates billing problems with multiple invoicing and reconciliation methods, reducing costly overcharges and manual effort. Supplier invoice accuracy is assured by matching to the original purchase order and/or service receipts. You can use the contractor-entered timecards to act, once approved, as a service receipt. Optionally, you can use Services Procurement's self-billing capability to auto-generate a supplier invoice based on approved timecards. For more complex work activities, costs are automatically charged to projects based on project information from the matched purchase order. Self-billing increases processing efficiency, reduces billing errors and allows you to take advantage of early payment discounts.

Oracle Services Procurement lowers processing costs, reduces order turnaround and improves service levels via online collaboration with your suppliers. Suppliers can receive orders through a variety of mechanisms, from a web portal or electronic messaging to fax and email. If candidate screening is required for contingent workers, suppliers and requisitioners collaborate and determine the best resource. Through Oracle iSupplier Portal, suppliers can track all aspects of the order and can invoice directly. As business needs change, the employee and the supplier may request changes to the order. Online tracking and change management frees procurement professionals from the

burden of routine inquiries and change requests. Supplier performance is captured, measured, and made available to suppliers to help them improve their service to you.

For more complex services needs, you can use Oracle Services Procurement in conjunction with Oracle Procurement Contracts to track deliverables online, ensuring that services are delivered as promised. You can assign any deliverable on your service order to internal and external owners, who are notified when deliverables come due. Suppliers can update the status of a deliverable online and include supporting attachments. The buying company approves all supplier deliverables, enabling you to pay only for services that have been completed as promised. Gain full visibility into your service spending, and a complete view of both goods and services expenditures in from one integrated procurement solution.

With Oracle Services Procurement, you can track the entire service cycle with online access to the detailed history of each order. Employees can view the status of service requests and drill to supporting details such as purchase orders, timecards and invoices. Users may also initiate changes to service requests, which generate automatic notifications to suppliers. With advance notice of changes, suppliers can provide more responsive service and your buying organization incurs fewer penalties or cost premiums for expedited service. With Oracle Services Procurement, the complete history, status and cost of every service order is just a click away.

Improving supply base performance is just as vital for services as it has always been for goods and materials. You need the proper tools, metrics and processes to monitor, track and publish service supplier performance. With Oracle Services Procurement, delivery of services is tracked to completion. Suppliers can monitor their on-time performance for individual service requests through the portal, ensuring proper feedback to the supplier. For contingent labor, hiring managers can enter in contractor performance data at the end of each assignment. This information can be shared throughout the enterprise. So other hiring managers can view prior performance information to select the best contractors for each job.

Resource and Project Management

- Resource portal
 - Contractor performance tracking
 - Automatic budget threshold alerts
- Automatic alerts for assignment nearing completion
- Timecard summary and details

Service Receipt and Time Tracking

- Online self-service contractor timecards
- Multiple receipt types
- Automatic purchase order compliance
- Timecard approval routing approval
- Auto receipt generation based on approved timecards

Solution Summary

If your Procure-to-Pay (P2P) processes are manual, paper-based, and/or time-intensive, then you could be saving as much as 20% on total procurement costs. Procurement streamlines, optimizes and automates the entire Procure-to-Pay process. It enables organizations to source for best value, monitor and improve supplier performance, integrate buyer/supplier processes and eliminate paper. How can you reduce process costs, decrease costs of materials and services, and optimize supplier relationships? Integrating with core business processes, the four major e-Procurement components: Sourcing, *i*Procurement, *i*Supplier Portal and Services Procurement, allow organizations to embrace supplier relationship management strategies, complete automation and integration, and offer real-time visibility and communication capabilities throughout all tiers of the supply chain. Make sure you design, set up, test and deliver a procurement system that integrates with Oracle eBusiness Suite and automates and supports Procure-to-Pay processes: Sourcing, *i*Procurement and *i*Supplier Portal, and Services procurement. You can integrate, centralize, track and report on data related to: identifying suppliers, obtaining product/service information, negotiating contracts, creating purchase requests that can be routed for approval, obtaining approvals, issuing purchase orders to suppliers and fulfilling requests, with a receipt when necessary.