Bill Presentment Architecture : A Flexible Invoicing Solution : Let's Get Those Bills Paid On Time !

JYOTI NAGARAJAN

NORDSTROM INC.

Introduction

This presentation gives an insight into Oracle's Bill Presentment Architecture in R12. It describes setups that can be accomplished by an end user with minimal technical assistance, with the focus on interaction with various Oracle modules to retrieve billing data, and offers tips for implementing all the functionality needed for a full-fledged invoicing solution. It also shares industry best practice invoicing formats and explains the flexibility of various delivery options available out-of-the-box.

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1   DOCUMENT PURPOSE

This document provides the necessary guidance for using Bill Presentment Architecture Feature of Oracle.

The target audience for this document is Functional Implementers and Implementation Consultants for Oracle EBusiness Suite applications.

2   UNDERSTANDING BPA

2.1   Overview

1. Oracle Bill Presentment Architecture is a bill presentment tool that helps to create and present comprehensive and more-customer-focused invoices that increase the likelihood and timeliness of payment.

2. BPA provides the architecture to retrieve billing data from multiple data sources, including transaction flexfields and other data not interfaced and stored in Oracle Receivables. This means that the physically presented bill is no longer limited to information contained within Oracle Receivables. BPA provides template-based configuration of online and printed bills, thereby giving the ability to select the content of the bill, choose the layout design, display parent billing lines and drilldown details, and then set up the assignment of these billing templates by defining rules based on criteria. Oracle BPA is part of the Oracle E-Business Suite, an integrated set of applications that are engineered to work together.

3. BPA provides all the invoice specific functionality needed for a full-fledged invoicing solution from Applications

2.2   Framework And Illustration

BPA helps bypass the complex coding and customization traditionally associated with creating customer or industry centric invoices. It can help lower the cost of doing business while increasing the efficiency of billing and collections groups. Using an intuitive, easy-to-use portal page, we can graphically design the content and layout of the invoices, as well as dictate the source of billing data.

By following a simple five-step process, we can create a customized billing template, and preview it with actual transaction data.

1. **Create Template to present bills**
2. **Template Assignment**
3. **View online bills**
4. **Register Data Sources**
5. **Print BPA invoices**

Each of these steps are indicated below with appropriate screenshots

2.2.1   Create Template To Present Bills

The next step is to design billing templates for each transaction class, choosing the layout and content to determine how the billing data should appear in an online or printed bill. We can design custom templates or use the default invoice template provided by Oracle

The following screenshots illustrate the steps to create a custom bill template

Template Management > Templates > Create Template: General Information

ORACLE Bill Management

Home Logout Preferences Help Personalize Page Diagnostics

Template Management | Template Assignment | Print Management | Configuration

Templates | Content Items | External Templates

General Information — Primary Page Design — Details Page Design — Print Setup — Preview

Create Template: General Information

* Indicates required field   Cancel Save Step 1 of 5 Next Finish

* Template Name: HL Custom Invoice Template
Template Description: HL Custom Invoice Template
Transaction Class: Invoice
Primary Data Source: Oracle Receivables
Supplementary Data Source: None
Tax Format: Oracle Receivables Tax Printing Option

Cancel Save Step 1 of 5 Next Finish

Define a template name for a specific transaction class and primary data source as shown in above screenshot

Template Management > Templates > Create Template: Primary Page Design

General Information — Primary Page Design — Details Page Design — Print Setup — Preview

Create Template: Primary Page Design

Template HL Custom Invoice Template II   Cancel Save Back Step 2 of 5 Next Finish

⊞ Show Icon Legend

Header

Select Content and Layout

Lines and Tax

Footer

To design the primary page of the template, use 'Select Content and Layout' icons for the three blank content areas: Headers, Lines and Tax, and Footer

Using the icons, we can perform additional operations like splitting the content areas horizontally and vertically; moving swapping or duplicating the content items and layout; and updating properties like spacing, width and labels

Primary Page Design > Header > Select Content and Layout - I

General Information — Primary Page Design — Details Page Design — Print Setup — Preview

Primary Page Design: Select Content and Layout

Template HL Custom Invoice Template   Content Area Header   Cancel Apply

Content

Select available content items to add to the content area. Use the reorder icons to specify the content order.

Data Source View Oracle Receivables : Invoice Header View Go

Available Content Items
- Operating Unit Name
- Outstanding Balance
- Outstanding Balance With Tokens
- Payments and Credits
- Primary Sales Rep Name
- Purchase Order Number
- Purchase Order Revision
- Remaining Charges
- Remaining Freight
- Remaining Line Amount
- Remaining Tax

Move
Move All

Selected Content Items
- Bill To Customer Name
- Bill To Address Formatted
- Ship To Customer Name
- Ship To Address Formatted
- Remit To Address Formatted
- Transaction Number
- Billing Date
- Shipping Date

Fig a. Content Area -> Header

Primary Page Design > Header > Select Content and Layout - II
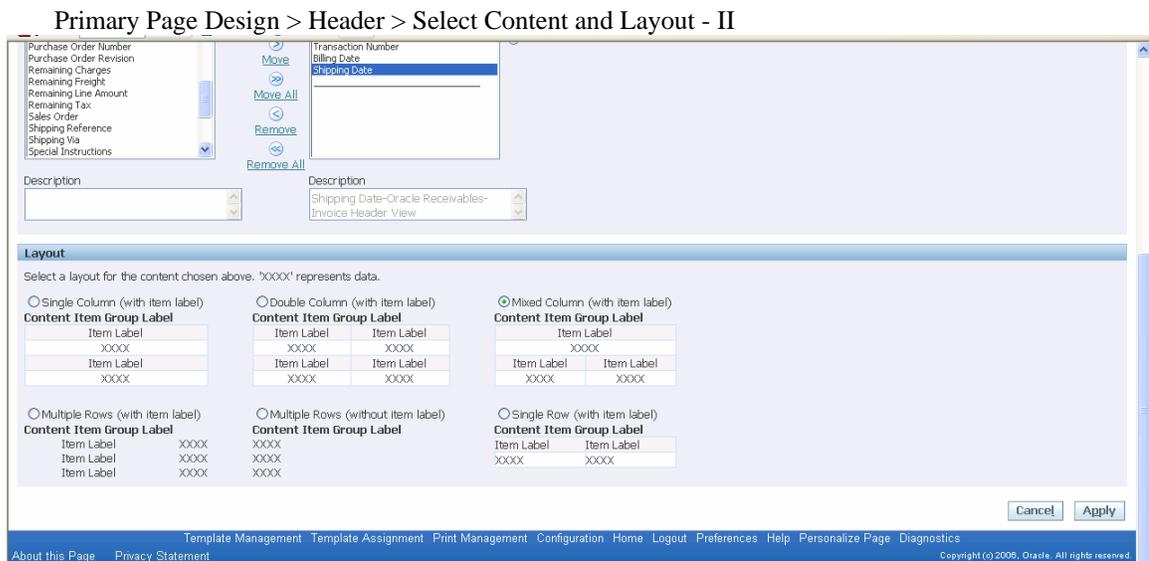
Primary Page Design > Lines and Tax > Select Content and Layout
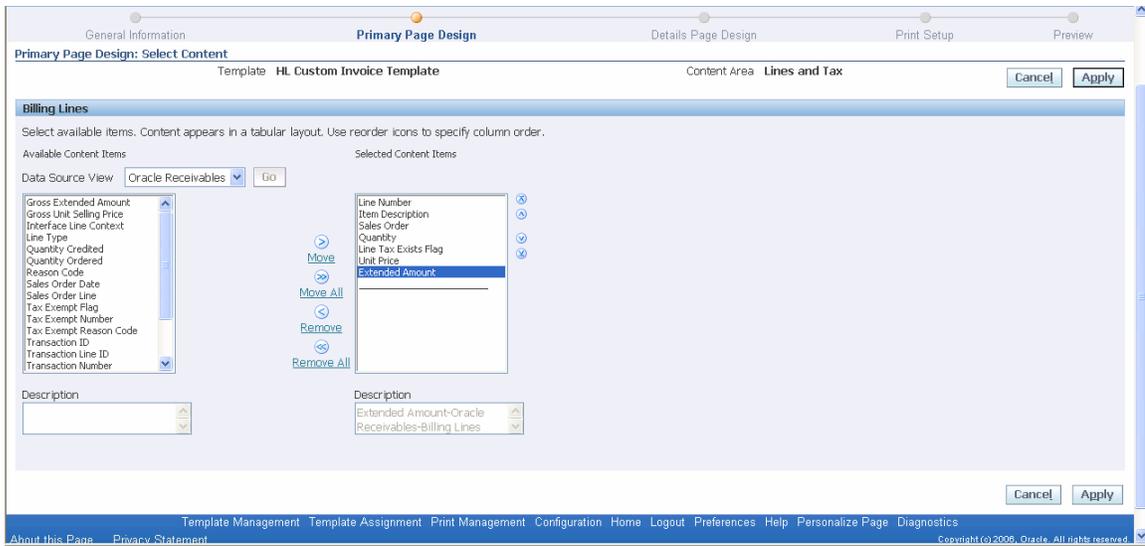
Primary Page Design > Footer> Select Content and Layout
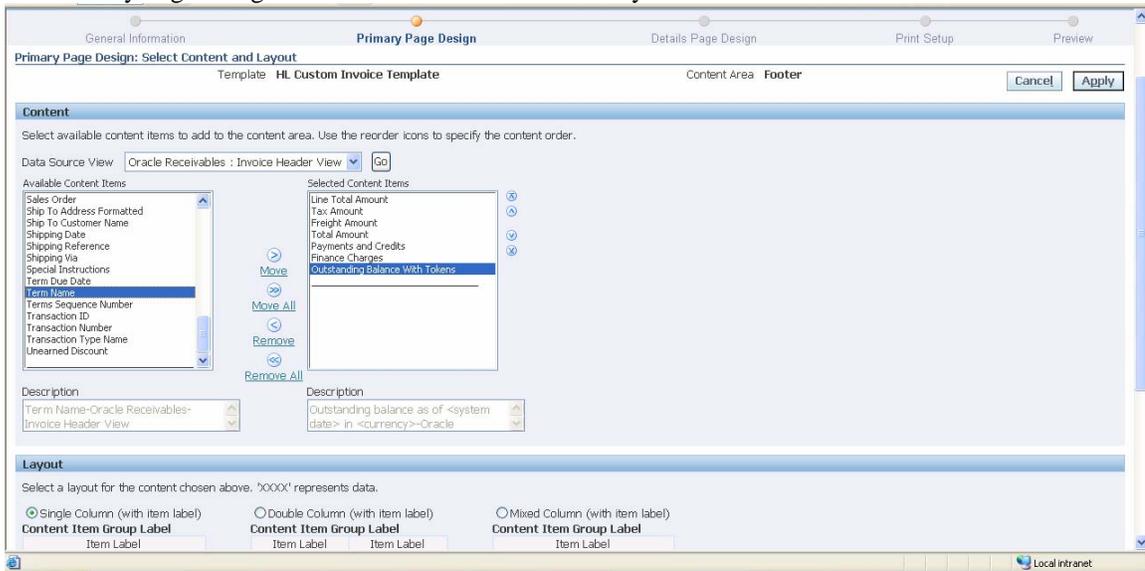
Once the content and layout for each section is selected, the Invoice template will appear as given below:

Header						
Bill To Customer Name						
<Bill To Customer Name>						
Bill To Address Formatted			Ship To Customer Name			
<Bill To Address Formatted>			<Ship To Customer Name>			
Ship To Address Formatted						
<Ship To Address Formatted>						
Remit To Address Formatted			Transaction			
<Remit To Address Formatted>			<Transaction Number>			
Billing Date						
<Billing Date>						
Shipping Date						
<Shipping Date>						

Lines and Tax

Item Num	Description	Sales Order Number	Quantity Shipped	Tax	Unit Price	Extended Amount
<Line Number>	<Item Description>	<Sales Order>	<Quantity>	<Line Tax Exists Flag>	<Unit Price>	<Extended Amount>

Footer

SubTotal		
<Line Total Amount>		
Tax		Shipping
<Tax Amount>		<Freight Amount>
Total		
<Total Amount>		
Payments and Credits		Financial Charges
<Payments and Credits>		<Finance Charges>
Outstanding balance as of <system date> in <currency>		
<Outstanding Balance With Tokens>		

Template Management > Templates > Create Template: Print Setup

General Information   Primary Page Design   Details Page Design   **Print Setup**   Preview

Create Template: Print Setup

Template **HL Custom Invoice Template**   Cancel Save Back Step 4 of 5 Next Finish

Enter page dimensions in whole numbers or decimals.
* Indicates required field

Page Setup

Page Setup	A4		* Right Margin	0.5
Unit of Measure	Inches		* Left Margin	0.5
* Paper Height	11.69		Page Number	Top Left
* Paper Width	8.27		Font	Arial
* Top Margin	0.5		Font Size	10pt
* Bottom Margin	0.5			

Header Options

Header Display   ⦿ Primary Header first page
                 ○ Primary Header every page
                 ○ Primary Header first page, Secondary Header all other pages

Footer Options

Footer Display   ⦿ Primary Footer last page only
                 ○ Primary Footer every page

Cancel Save Back Step 4 of 5 Next Finish

Template Management Template Assignment Print Management Configuration Home Logout Preferences Help Personalize Page Diagnostics
About this Page   Privacy Statement   Copyright (c) 2006, Oracle. All rights reserved.

Enter information for the layout of the printed bill in the Print Setup step

Template Management > Templates > Create Template: Preview
Given below are the preview of the default Invoice template provided by Oracle. The default invoice template has been split into two screenshots below for better viewing.

Default Invoice Template - I

Default Invoice Template - II

Template Management > Templates > Search Template

The last template creation step involves marking the template as 'Complete'

2.2.2 Template Assignment

This step consists of:
   a) Defining Rules
   b) Assigning Template to Rule

BPA uses rules to determine which template to use to display online or print a bill. When we define a rule, we specify one or more criteria for content item values. We can create different rules to assign templates to present online bills and printed bills. When we select a bill to view online or print, BPA reviews the rules in the order we specify until it finds a match, and then uses the template associated with the rule to format the bill

Template Assignment > Assignment Rules

Define a rule name and specify the attribute matching criteria

Assign a template to the rule defined in above step
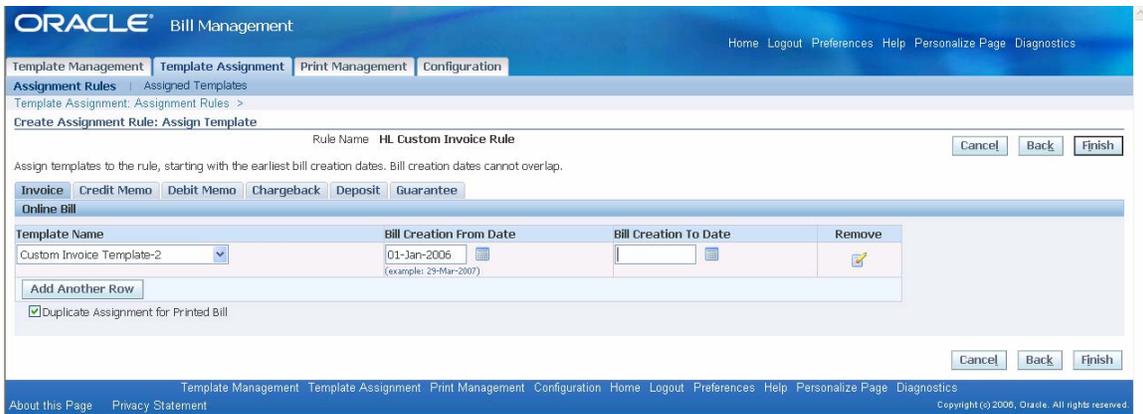
Template Assignment > Assigned Templates
Once the template is assigned to the rule, the screenshot will appear as given below
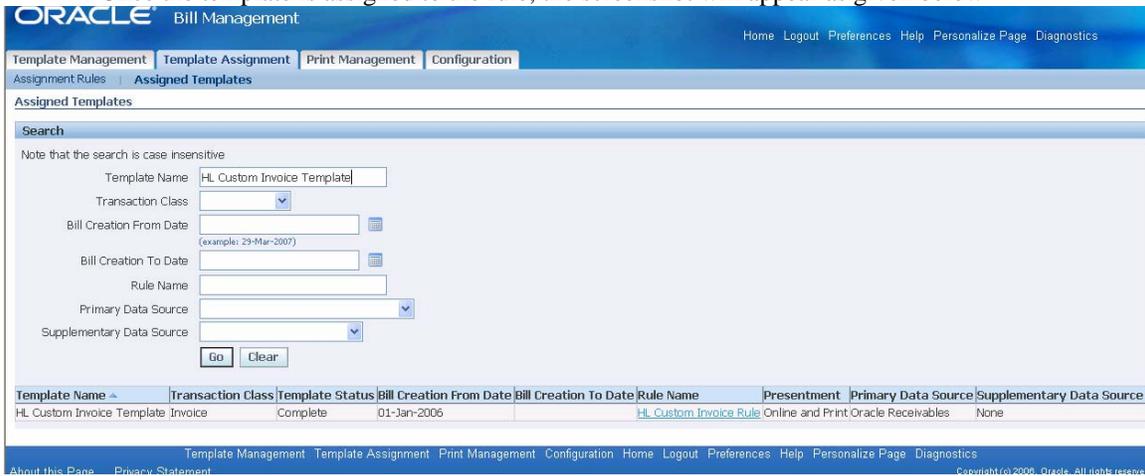
2.2.3 View Online Bills

Internal users and external customers can view bills online using Oracle Receivables, Oracle iReceivables, Oracle Collections or other calling application. When a user selects a transaction number, the assignment engine in BPA determines which template to use to display the bill. When viewing a bill, all the features and functionality of BPA's Interactive Preview, such as drilldown to transaction details are available to the user.

Navigate to Template Management section and select the template we wish to interactively preview.
Click on Interactive preview icon

Select the transaction number and click on Online Preview icon

The screenshot given below shows a preview of the online bill

2.2.4 Data Retrieval

- Register Oracle applications and third-party data sources and their corresponding database views and content items
- Support Oracle Receivables transaction flexfields
- Retrieve billing data from multiple data sources at runtime
- Pre-defined data sources include Oracle Receivables, Oracle Service Contracts, and Oracle Order Management

Data Sources

Register Data Source

Search Context Code

Register Data Source

Register Data Source – Confirmation

Synchronize Data Source

Synchronize Flexfield Content Items

Register View

Search and Select View

Register View: General Information

Register View: Parameters and Content Items

Confirm View Registration
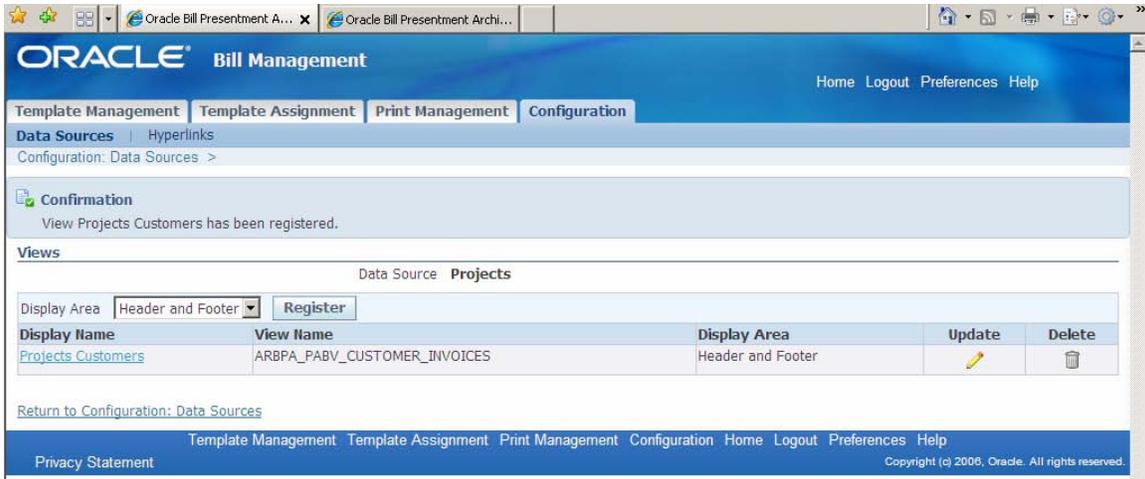
Enable Data Source
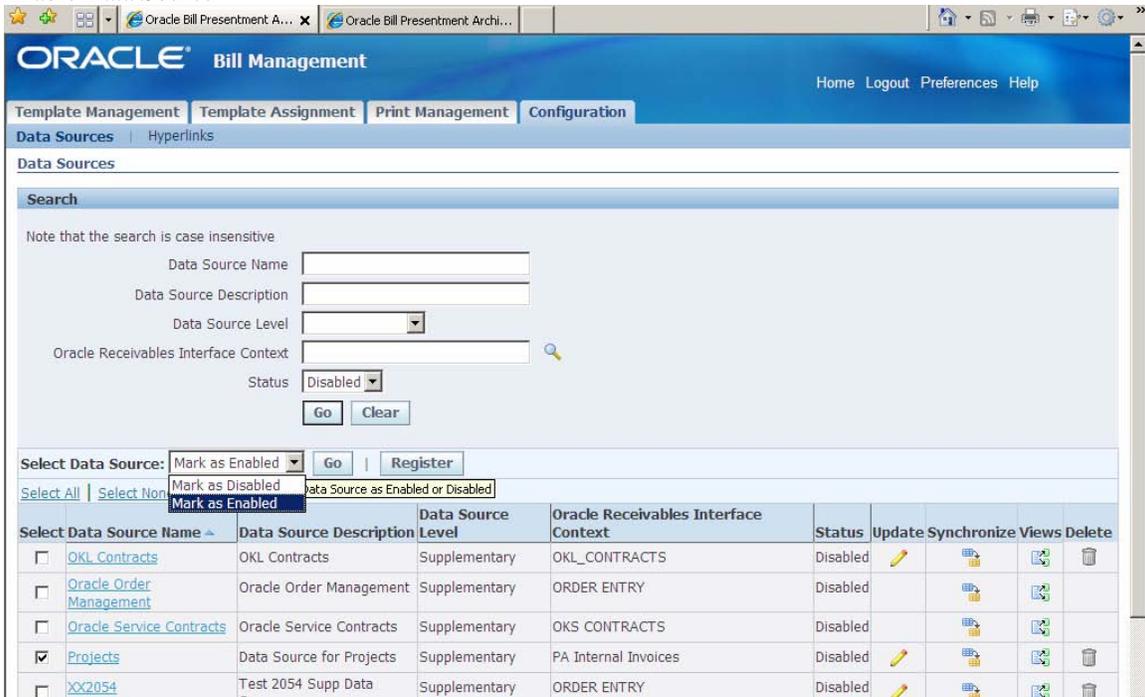
2.2.5 Print BPA Invoices

BPA provides the flexibility to print a single transaction or batch of transactions through the print management tab or alternatively by launching the BPA transaction print program from Forms-based applications such as Oracle Receivables. BPA generates a PDF file for printed bills as shown in the screenshot below:
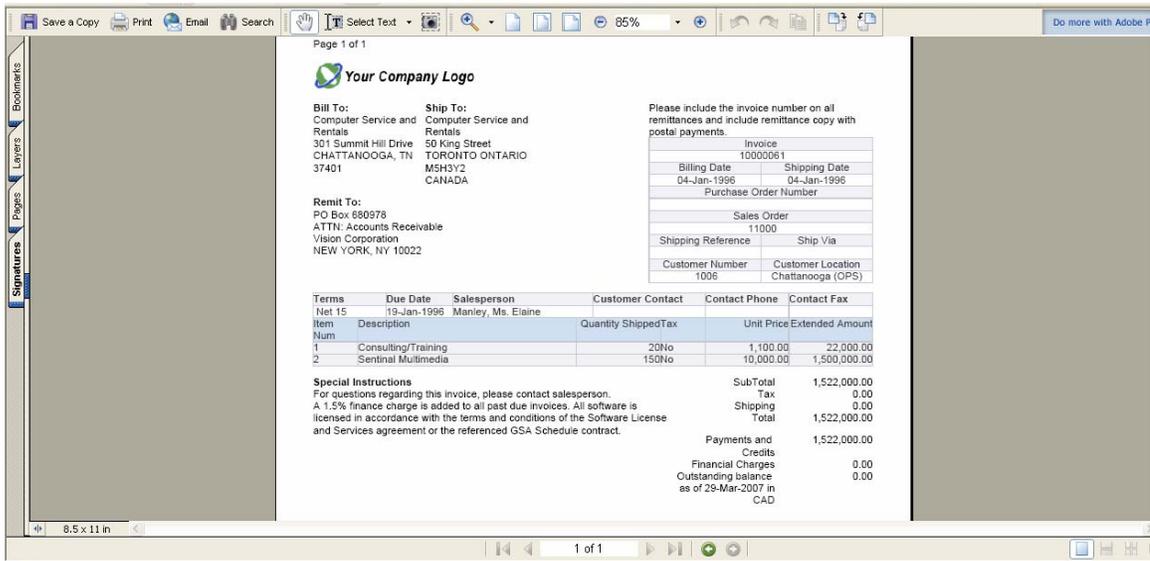
2.2.6   Delivery Options

Invoice Print BPA Master program generates one PDF file for each group of invoices and stores it as the output file of the concurrent program. The PDF file can be saved and emailed as attachment to the Customers

3   Configuration Items

3.1   Define Profile Options

This section lists the profile options that are used to specify how BPA controls access to and processes data:

AR: BPA Detail Access Enabled
Determines whether a user can access the details page of an online invoice. If set to Yes, user can access the details via the billing lines hyperlink. If set to No, no hyperlink is displayed. Default is set to Yes.

AR: BPA Attachment Update Enabled
Controls whether attachments are updateable on BPA online bills. If set to Yes, the customer can view, add, or delete an attachment when viewing the online invoice. If set to No, the customer can only view the attachment. No default is set for this.

OIR: Bill Presentment Architecture Enabled
Determines whether iReceivables will use BPA to present invoices. If set to Yes, the BPA bill is displayed from iReceivables. If set to No, the standard iReceivables bill is displayed. Default is set to Yes.

HZ: Enable DQM Party Search
Set this option to enable DQM searching for customers in Interactive Preview. If this is not set, DQM search will not work properly for customer search. No default is set for this.

AR: BPA Print Attachment Category
To print attachments with printed bills, configure the AR: BPA Print Attachment
Category profile option. While printing a transaction the profile option triggers printing associated PDF attachments that match the specified document category. This applies to both internal and external templates. We can set this profile option at the site, application, responsibility, and user level.

4   Key Features

BPA provides extensive abilities and flexibility to design an online bill that best suits the customer and the company. Some of the features of BPA are-

1. *Retrieve Billing Data from Any Source*
    BPA provides flexibility to incorporate billing information into invoices from any source, not just Oracle Receivables. With access to all pertinent information, customers can more quickly understand and pay their bills.

2. *Template Management*
    Allows billing personnel to create multiple billing templates based on customer need using the user-friendly Template Management UI.
    - Layout design and content item selection
    - Option to print summary lines with or without child lines
    - Flexible tax formatting, including itemization and summarization
    - Page setup capability for printed bills

- Flexible header and footer format design for printed bills

3. *Interactive Preview*

   Interactive preview feature helps to preview the template [in online preview and print preview mode] using any transaction in Oracle Receivables.

4. *External Template Upload*

   Supports invoice printing using external customer-provided templates.
   - Upload of PDF or RTF templates
   - Support of uploading files in multiple languages
   - Mapping of external file field names to BPA content items
   - Option to display itemized tax

5. *Template Assignment*

   Supports assignment of billing templates to different customers or customer categories based on user-defined criteria.
   - Ability to define assignment rules and order them by preference
   - Rules applied based on ordering and bill creation dates
   - Choice of different assignments and ordering for online and printed bills
   - Default templates and assignment rule provided

6. *Invoice Batch Printing*

   Supports batch printing of invoices.
   - Batch print request submission and monitoring via BPA User Interface
   - Batch print request submission and monitoring via Oracle Receivables
   - Generation of printed invoice in PDF format

7. *Drilldown Capability*

   Provides progressive drilldown capability from billing lines to billing details, as well as drilldown from any hyperlinked attribute on the online bill.

5   Benefits

In Summary the key benefits of the BPA functionality are listed below

1. *Expedite Payment and Improve Cash Flow*

   The invoice designs we create can be assigned to particular customers or particular transactions. This format consistency will help customers process their bills quickly. To efficiently address disputes, billing personnel, receivables clerks, and collectors can view bills in Oracle iReceivables, Oracle Receivables, or Oracle Collections, in the same format the customer sees.

2. *MLS enabled*

   BPA is MLS-enabled. Templates can be created using any available session language. When printing bills, BPA selects the appropriate template file based on language associated with customer's address

3. *Template for transaction classes other than Invoice*

   BPA supports template creation for invoices, credit memos, debit memos, chargebacks, guarantees and deposits. Oracle provides seeded templates for the above mentioned transaction classes

4. *Flexibility to incorporate Company logo*

   Custom images and messages can be incorporated in BPA templates

5. *Access to Attachments*
   Provides ability to view, add, update and delete attachments from BPA online bills

6. *Incorporate hyperlinks on online invoices*
   BPA supports creation of hyperlinks and associating them to any content presented in wer online bill, including in the billing lines or in the detail lines. Links can be generic, such as access to a company home page, or they can be transaction-specific, such as access to the actual sales order listed on the bill.

7. *Grouping of billing lines*
   For Oracle Service Contracts bills, we can provide summarized billing lines for customers who desire less detail than is stored in Oracle Receivables.

8. *Restrict access to details information*
   BPA enforces security control on the level of billing details external users are allowed to view online