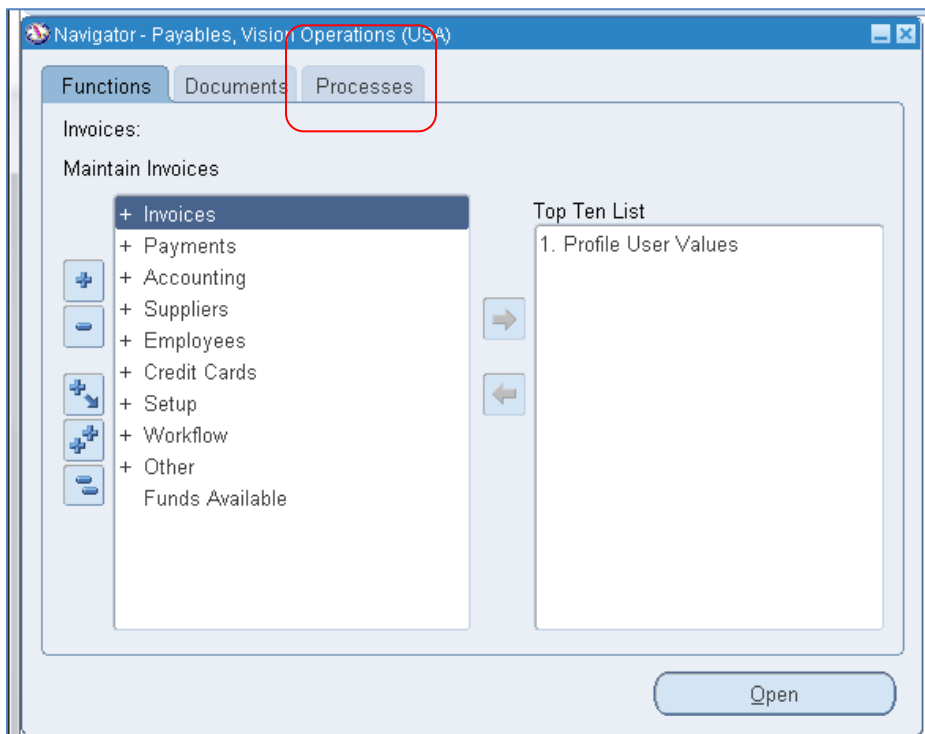


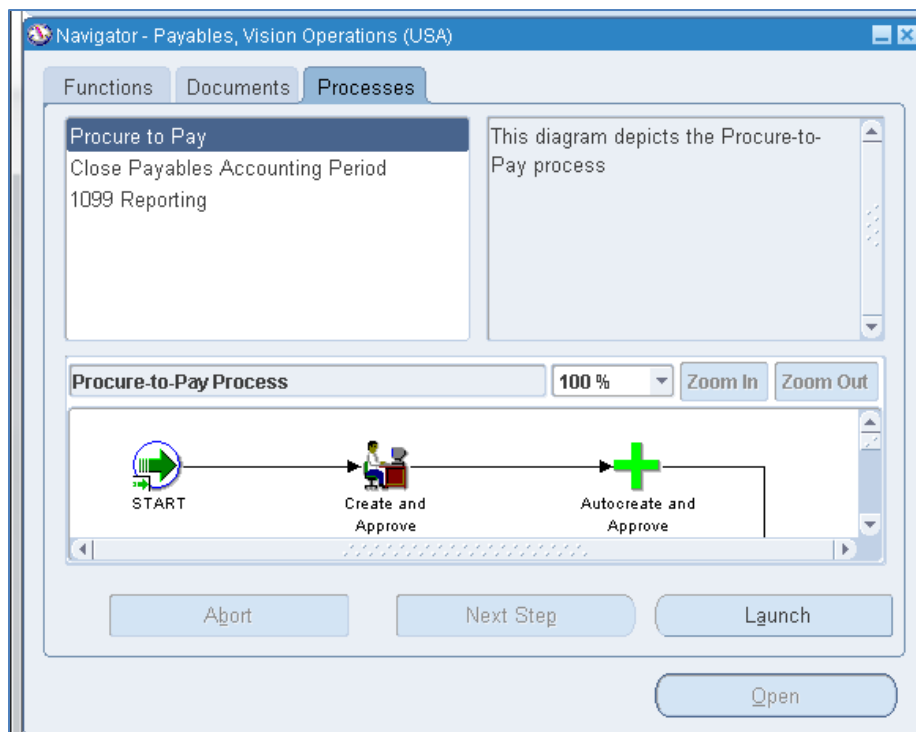
Risks and Recommendations Related to AZN Menus

AZN menus were introduced by Oracle around 11.5.3 to help provide for a more rapid implementation to the SMB business segment. They provide users with a graphical depiction of a process flow and the ability access the functions directly from the graphical navigation.

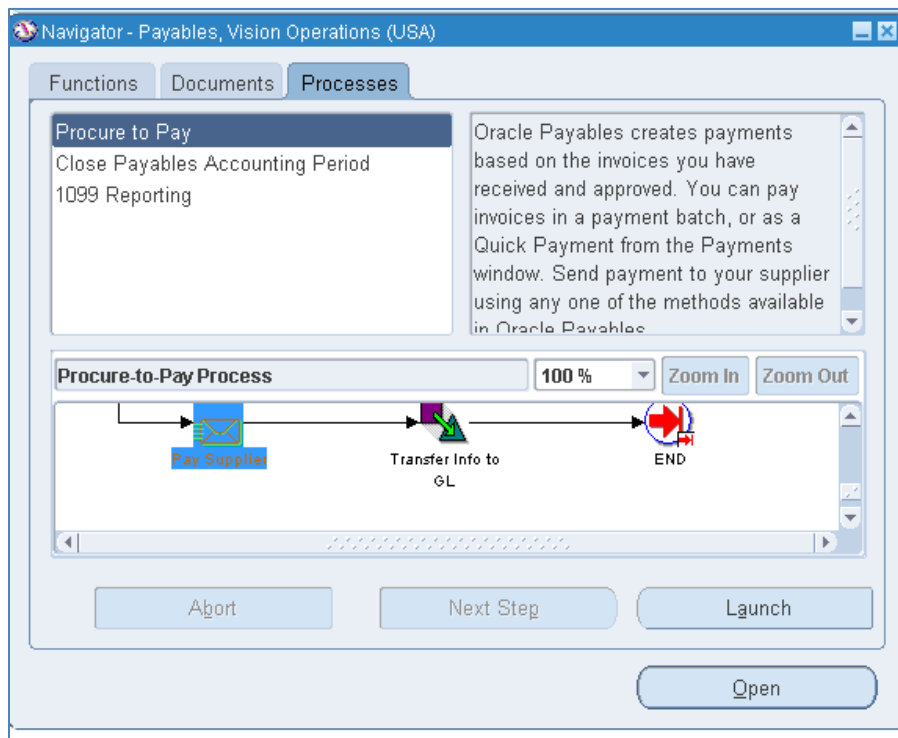
When an AZN menu is contained in a menu, the Processes tab appears on the Navigator as follows:



When a user clicks on the Processes tab they see this:



If they click on one of the icons, it launches the form. For example:



When I click on the Pay Supplier icon, it takes me to this form:

| Type | Operating Unit | Trading Partner | Supplier Number | Supplier Site | Trading Partner Address |
|-------|-------------------|-----------------|-----------------|---------------|-------------------------|
| Quick | Vision Operations | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Number | Date | Amount | GL Date | Payment Amount |
|--------|------|--------|---------|----------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Description: _____

Invoice Overview

The AZN menus provide another way for a user to navigate to certain functions. Here is the menu associated with the above Responsibility:

Menu: AP_NAVIGATE_GUI12 View Tree...

User Menu Name: AP_NAVIGATE_GUI12

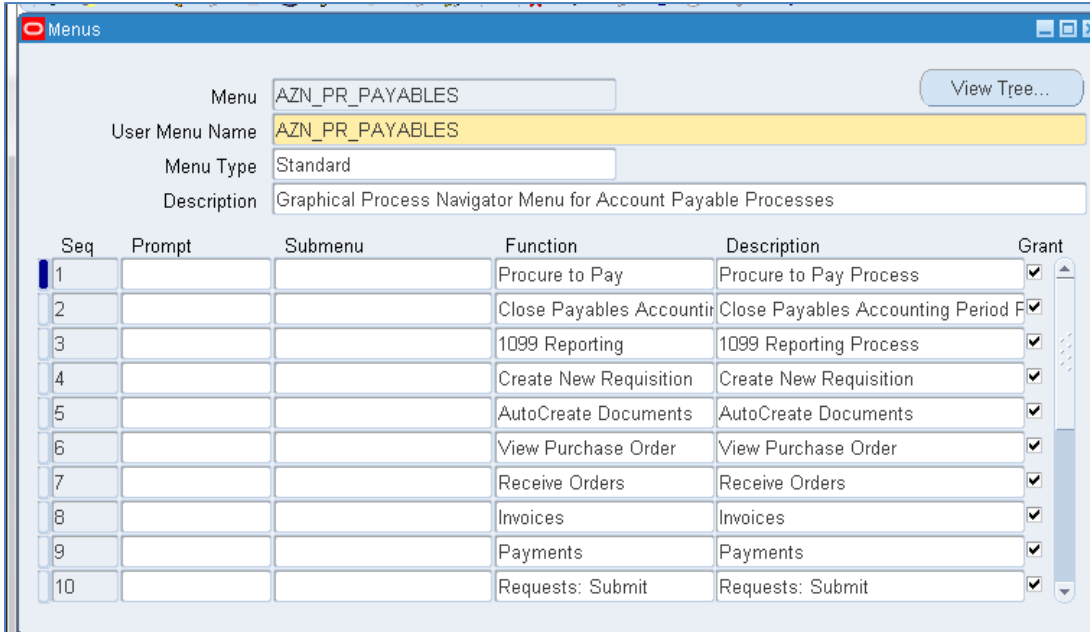
Menu Type: Standard

Description: AP Navigate Menu

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------------------------|-------------------------|-----------------------------------|-------------------------------------|
| 10 | Other | FND_OTHER 4.0 | | Other | <input checked="" type="checkbox"/> |
| 11 | | AZN_PR_PAYABLES | | Accounts Payable Processes in Gra | <input checked="" type="checkbox"/> |
| 12 | | AP_PO_VIEW_PURCHA | | | <input checked="" type="checkbox"/> |
| 13 | | | Bank Account Access: Si | | <input checked="" type="checkbox"/> |
| 14 | | AP_POS_INV | | | <input checked="" type="checkbox"/> |
| 15 | | Supplier Information Mana | | | <input checked="" type="checkbox"/> |
| 16 | | View Supplier Information | | | <input checked="" type="checkbox"/> |
| 17 | | CE Bank Home Page Mer | | | <input checked="" type="checkbox"/> |
| 18 | | CE Bank Search Home P | | | <input checked="" type="checkbox"/> |
| 19 | | PO Order Tab | | | <input checked="" type="checkbox"/> |

The AZN_PR_PAYABLES menu is a 'hidden' menu in that it has no prompt. However, it is what 'triggers' the system to display the Processes tab that we illustrated earlier.

Here is the AZN_PR_PAYABLES menu:



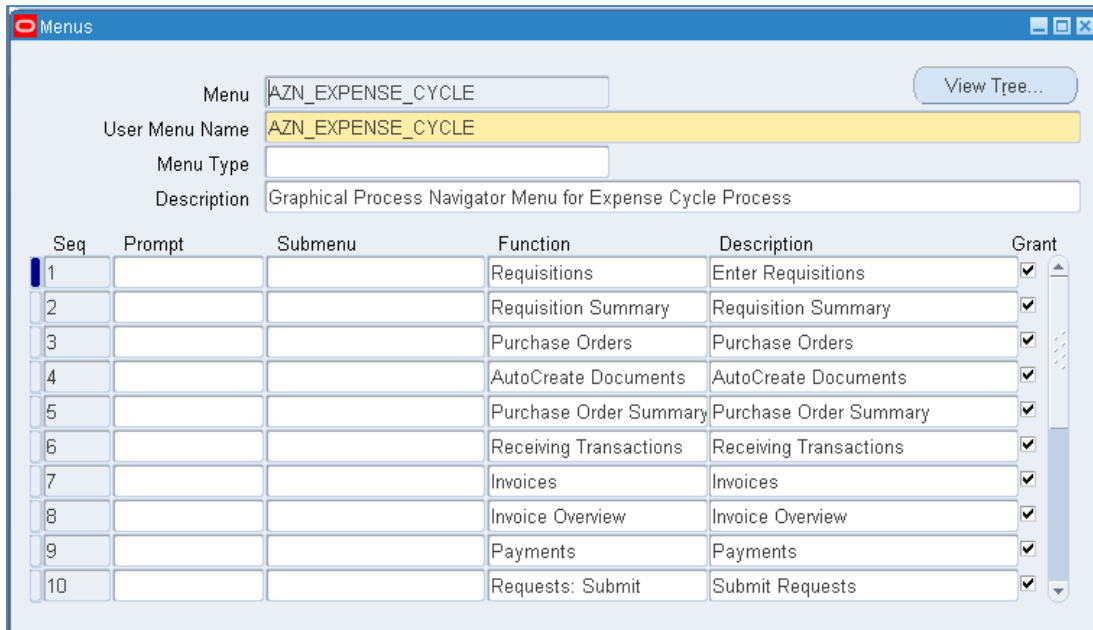
| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------|---------------------------|------------------------------------|-------------------------------------|
| 1 | | | Procure to Pay | Procure to Pay Process | <input checked="" type="checkbox"/> |
| 2 | | | Close Payables Accounting | Close Payables Accounting Period F | <input checked="" type="checkbox"/> |
| 3 | | | 1099 Reporting | 1099 Reporting Process | <input checked="" type="checkbox"/> |
| 4 | | | Create New Requisition | Create New Requisition | <input checked="" type="checkbox"/> |
| 5 | | | AutoCreate Documents | AutoCreate Documents | <input checked="" type="checkbox"/> |
| 6 | | | View Purchase Order | View Purchase Order | <input checked="" type="checkbox"/> |
| 7 | | | Receive Orders | Receive Orders | <input checked="" type="checkbox"/> |
| 8 | | | Invoices | Invoices | <input checked="" type="checkbox"/> |
| 9 | | | Payments | Payments | <input checked="" type="checkbox"/> |
| 10 | | | Requests: Submit | Requests: Submit | <input checked="" type="checkbox"/> |

Here is the menu extracted so you can see the details of the functions provided:

| <u>Seq</u> | <u>Prompt</u> | <u>Submenu</u> | <u>Function</u> | <u>Description</u> |
|------------|---------------|--|----------------------------------|--|
| 1 | | | Procure to Pay | Procure to Pay Process |
| 2 | | | Close Payables Accounting Period | Close Payables Accounting Period Process |
| 3 | | | 1099 Reporting | 1099 Reporting Process |
| 4 | | | Create New Requisition | Create New Requisition |
| 5 | | | AutoCreate Documents | AutoCreate Documents |
| 6 | | | View Purchase Order | View Purchase Order |
| 7 | | | Receive Orders | Receive Orders |
| 8 | | | Invoices | Invoices |
| 9 | | | Payments | Payments |
| 10 | | | Requests: Submit | Requests: Submit |
| 11 | | | Payment Batches | Payment Batches |
| 12 | | | AP Accounting Periods | AP Accounting Periods |
| 13 | | | Suppliers | Suppliers |
| 14 | | AP_APXINWKB_MENU | | |
| 15 | | Supplier Information Management (Buyer View) | | |

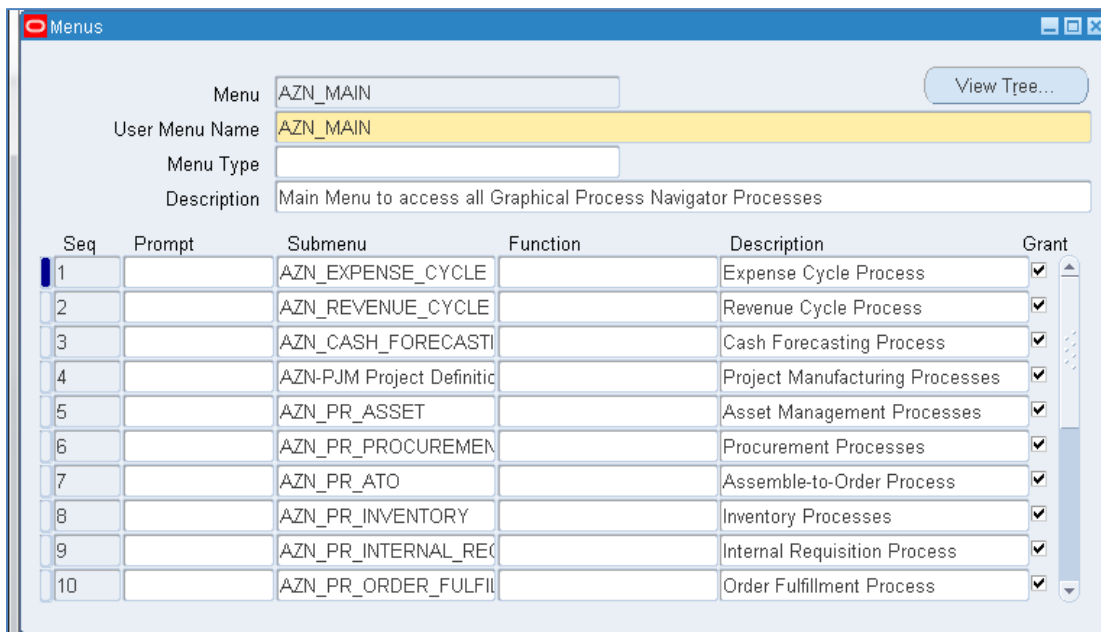
This submenu contains most functions necessary to process all transactions within the and accounts payables department. Generally, a user having this many significant functions is in violation of various segregation of duties conflicts.

Here are some screen shots of other AZN menus:



Menu: AZN_EXPENSE_CYCLE
 User Menu Name: AZN_EXPENSE_CYCLE
 Menu Type:
 Description: Graphical Process Navigator Menu for Expense Cycle Process

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------|------------------------|------------------------|-------------------------------------|
| 1 | | | Requisitions | Enter Requisitions | <input checked="" type="checkbox"/> |
| 2 | | | Requisition Summary | Requisition Summary | <input checked="" type="checkbox"/> |
| 3 | | | Purchase Orders | Purchase Orders | <input checked="" type="checkbox"/> |
| 4 | | | AutoCreate Documents | AutoCreate Documents | <input checked="" type="checkbox"/> |
| 5 | | | Purchase Order Summary | Purchase Order Summary | <input checked="" type="checkbox"/> |
| 6 | | | Receiving Transactions | Receiving Transactions | <input checked="" type="checkbox"/> |
| 7 | | | Invoices | Invoices | <input checked="" type="checkbox"/> |
| 8 | | | Invoice Overview | Invoice Overview | <input checked="" type="checkbox"/> |
| 9 | | | Payments | Payments | <input checked="" type="checkbox"/> |
| 10 | | | Requests: Submit | Submit Requests | <input checked="" type="checkbox"/> |



Menu: AZN_MAIN
 User Menu Name: AZN_MAIN
 Menu Type:
 Description: Main Menu to access all Graphical Process Navigator Processes

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------------------------|----------|---------------------------------|-------------------------------------|
| 1 | | AZN_EXPENSE_CYCLE | | Expense Cycle Process | <input checked="" type="checkbox"/> |
| 2 | | AZN_REVENUE_CYCLE | | Revenue Cycle Process | <input checked="" type="checkbox"/> |
| 3 | | AZN_CASH_FORECASTI | | Cash Forecasting Process | <input checked="" type="checkbox"/> |
| 4 | | AZN-PJM Project Definitic | | Project Manufacturing Processes | <input checked="" type="checkbox"/> |
| 5 | | AZN_PR_ASSET | | Asset Management Processes | <input checked="" type="checkbox"/> |
| 6 | | AZN_PR_PROCUREMENT | | Procurement Processes | <input checked="" type="checkbox"/> |
| 7 | | AZN_PR_ATO | | Assemble-to-Order Process | <input checked="" type="checkbox"/> |
| 8 | | AZN_PR_INVENTORY | | Inventory Processes | <input checked="" type="checkbox"/> |
| 9 | | AZN_PR_INTERNAL_REC | | Internal Requisition Process | <input checked="" type="checkbox"/> |
| 10 | | AZN_PR_ORDER_FULFIL | | Order Fulfillment Process | <input checked="" type="checkbox"/> |

Menus

Menu: AZN_PR_ASSET View Tree...

User Menu Name: AZN_PR_ASSET

Menu Type:

Description: Graphical Process Navigator Menu for Asset Management Process

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------|---------------------------|--------------------------------|-------------------------------------|
| 1 | | | Asset Management | Asset Management Process | <input checked="" type="checkbox"/> |
| 2 | | | Mass Retirements | Mas Retirements | <input checked="" type="checkbox"/> |
| 3 | | | Depreciation Projections | Depreciation Projections | <input checked="" type="checkbox"/> |
| 4 | | | What-If Depreciation Anal | What-If Depreciation Analysis | <input checked="" type="checkbox"/> |
| 5 | | | Run Depreciation | Run Depreciation | <input checked="" type="checkbox"/> |
| 6 | | | Mass Changes | Mass Changes | <input checked="" type="checkbox"/> |
| 7 | | | Mass Transfers | Mass Transfers | <input checked="" type="checkbox"/> |
| 8 | | | Mass Revaluations | Mass Revaluations | <input checked="" type="checkbox"/> |
| 9 | | | Assets:Unit Adjustments | Unit Adjustments to Assets | <input checked="" type="checkbox"/> |
| 10 | | FA_MAIN | | Granting Access to Asset Forms | <input checked="" type="checkbox"/> |

Menus

Menu: AZN_PR_GL View Tree...

User Menu Name: AZN_PR_GL

Menu Type: Standard

Description: Process Navigator Menu for General Ledger Processes

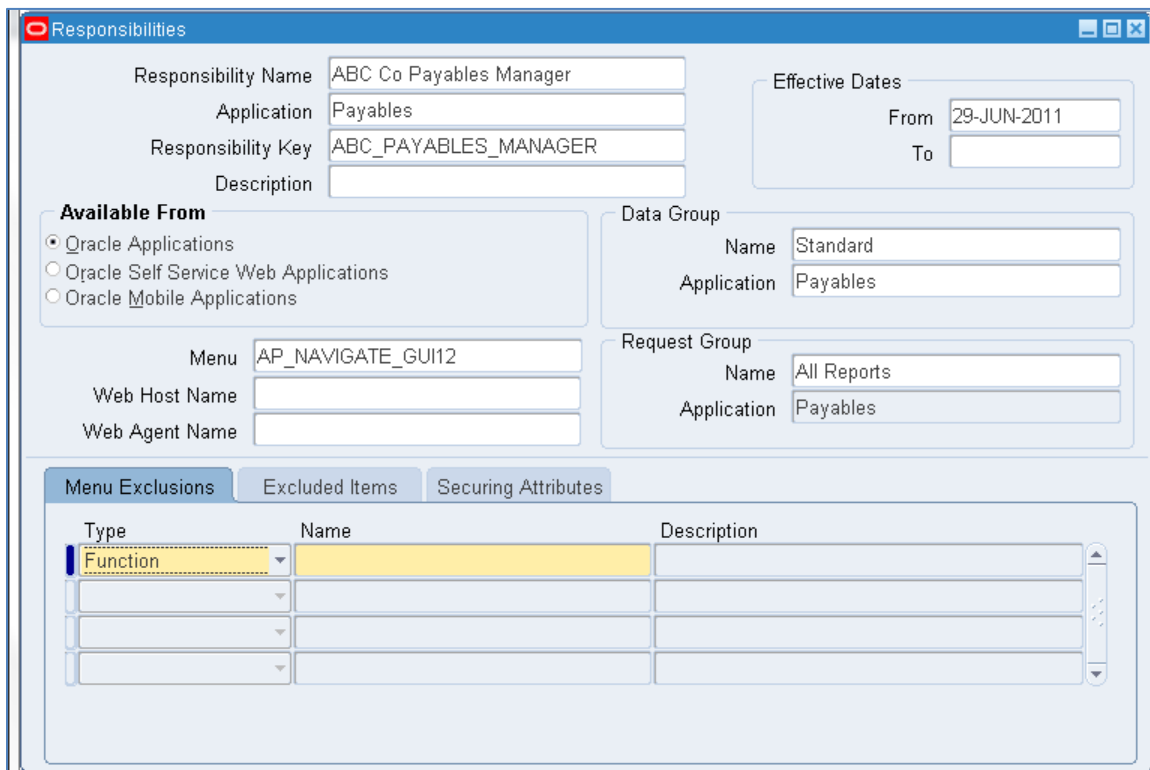
| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------|---------|---------------------------|------------------------------------|-------------------------------------|
| 1 | | | Entering Journals | Journalling Process | <input checked="" type="checkbox"/> |
| 2 | | | Subledger Import Process | Subledger Import Process | <input checked="" type="checkbox"/> |
| 3 | | | Period Close-Subsidiary C | Period Close - Subsidiary Company | <input checked="" type="checkbox"/> |
| 4 | | | Period Close-Parent Com | Period Close - Parent Company Proc | <input checked="" type="checkbox"/> |
| 5 | | | Define Financial Reports | Define Financial Reports Process | <input checked="" type="checkbox"/> |
| 6 | | | Revaluations | Revaluations Process | <input checked="" type="checkbox"/> |
| 7 | | | Translations | Translations Process | <input checked="" type="checkbox"/> |
| 8 | | | Enter Budgets | Enter Budgets Process | <input checked="" type="checkbox"/> |
| 9 | | | Consolidation Workbench | Consolidation Workbench | <input checked="" type="checkbox"/> |
| 10 | | | Define Content Set | Define Content Set | <input checked="" type="checkbox"/> |

Here is a list of Known AZN Menus from a 12.1.2 environment:

AZN_CASH_FORECASTING, AZN_EDR_ERES_PROCESS, AZN_EXPENSE_CYCLE,
 AZN_MAIN, AZN_PJM_PRJ_DEF, AZN_PR_ASSET, AZN_PR_ATO, AZN_PR_CLASSIFY_TO_COUNT,
 AZN_PR_GL, AZN_PR_GL_G, AZN_PR_GMD, AZN_PR_GML, AZN_PR_INTERNAL_REQUISITION,
 AZN_PR_INVENTORY, AZN_PR_MAIN, AZN_PR_OE, AZN_PR_ORDER_FULFILLMENT, AZN_PR_PAYABLES,
 AZN_PR_PAYABLES_G, AZN_PR_PHYSICAL_INVENTORY, AZN_PR_PROCUREMENT,
 AZN_PR_PROPERTY_MANAGER, AZN_PR_RECEIVABLES, AZN_PR_RECEIVABLES_G,
 AZN_REVENUE_CYCLE

Discussion of Risks and Recommendations

Based on our experience, more often than not, users aren't aware of the Processes tab. The fact that it just 'magically' appeared is part of what we refer to as upgrade risk. Upgrade risk refers to the risk that new functions and submenus are added to users' access when patches are applied. This happens when standard menu and standard sub-menus are used to develop their security which is the case in about 99% of all E-Business Suite implementations. Most system integrators use this approach to developing security:



| Type | Name | Description |
|----------|------|-------------|
| Function | | |
| | | |
| | | |
| | | |

Instead of using the standard Payables Manager responsibility, they will set up a custom responsibility ABC Co Payables Manager, but use the same top level menu "AP_NAVIGATE_GUI12." This leaves companies exposed to Upgrade Risk and AZN menus are a symptom of the underlying cause.

Where this is the case, we recommend a two-stage process.

The first step: for all responsibilities check to see if there is one or more AZN menu contained within that responsibility. This is easy done as follows:

Responsibilities

Responsibility Name: ABC Co Payables Manager
 Application: Payables
 Responsibility Key: ABC_PAYABLES_MANAGER
 Description:

Effective Dates: From 29-JUN-2011 To

Available From

Oracle Applications
 Oracle Self Service Web Applications
 Oracle Mobile Applications

Data Group: Name Standard Application Payables

Request Group: Name All Reports Application Payables

Menu: AP_NAVIGATE_GUI12
 Web Host Name:
 Web Agent Name:

Menu Exclusions | Excluded Items | Securing Attributes

| Type | Name | Description |
|------|-------|-------------|
| Menu | %AZN% | |
| | | |
| | | |
| | | |

Change the exclusion type to Menu and type %AZN% in the name field as shown above and press the tab key to search where a menu contains AZN. Here are the results. Here is the results for this menu:

Responsibilities

Responsibility Name: ABC Co Payables Manager
 Application: Payables
 Responsibility Key: ABC_PAYABLES_MANAGER
 Description:

Effective Dates: From 29-JUN-2011 To

Available From

Oracle Applications
 Oracle Self Service Web Applications
 Oracle Mobile Applications

Data Group: Name Standard Application Payables

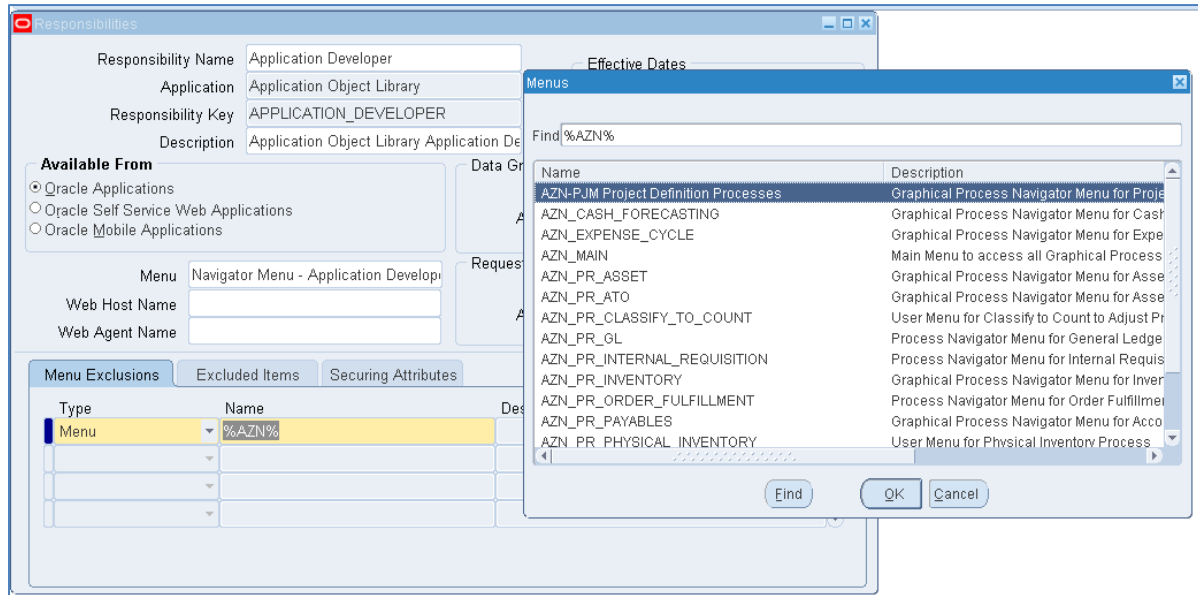
Request Group: Name All Reports Application Payables

Menu: AP_NAVIGATE_GUI12
 Web Host Name:
 Web Agent Name:

Menu Exclusions | Excluded Items | Securing Attributes

| Type | Name | Description |
|------|-----------------|--|
| Menu | AZN_PR_PAYABLES | Graphical Process Navigator Menu for Account P |
| | | |
| | | |
| | | |

However, for other responsibilities such as Application Developer which has the AZN_MAIN menu, you will receive a lot more results:



Exclude all AZN menus.

The second phase of the recommendation is something you may want to do in conjunction with your R12 upgrade or a major testing cycle. You will want to re-build menus to reduce upgrade risk. There are a variety of different options in establishing new menus in order to reduce risk as follows:

1. Establish a new custom top level menu, but use standard sub-menus, then exclude the same functions as you would have if you had used the standard top-level menu. This may look something like this:

Menus

Menu: JTH_AP_NAVIGATE_GUI12 View Tree...

User Menu Name: JTH_AP_NAVIGATE_GUI12

Menu Type:

Description:

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|--------------|----------------------|----------|-------------|-------------------------------------|
| 10 | | AP_INVOICE_GATEWAY | | | <input checked="" type="checkbox"/> |
| 20 | Invoices | AP_INVOICES_GUI12 | | | <input checked="" type="checkbox"/> |
| 30 | Payments | AP_PAYMENTS_GUI12 | | | <input checked="" type="checkbox"/> |
| 40 | Accounting | AP_ACCOUNTING_GUI12 | | | <input checked="" type="checkbox"/> |
| 50 | Suppliers | AP_SUPPLIERS_GUI12 | | | <input checked="" type="checkbox"/> |
| 60 | Employees | AP_EMPLOYEES_GUI12 | | | <input checked="" type="checkbox"/> |
| 70 | Credit Cards | AP_MAINTAIN_CREDIT_c | | | <input checked="" type="checkbox"/> |
| 80 | Setup | AP_SETUP_GUI12 | | | <input checked="" type="checkbox"/> |
| 90 | Workflow | AP_WORKFLOW_GUI12 | | | <input checked="" type="checkbox"/> |
| 100 | Other | FND_OTHER 4.0 | ... | | <input checked="" type="checkbox"/> |

In this approach, the menus and functions not needed for this role would have to be excluded at the Responsibility level. Overall, this reduces risk when compared to using the AP_NAVIGATE_GUI12 as the top level menu, but there is still considerable risk – particularly with the Setup menu. Even if you exclude some sub-menus and functions that are not applicable for the role, Oracle may add new sub-menus and functions when patching. A good example of this is in the R12 upgrade patches, Oracle added the SLA setup submenu

2. A second approach would be to build a custom menu with just the submenus that are applicable for the role. That might look like this:

Menus

Menu: JTH_AP_MANAGER View Tree...

User Menu Name: JTH_AP_MANAGER

Menu Type: App Pref Menu Container

Description:

| Seq | Prompt | Submenu | Function | Description | Grant |
|-----|------------|---------------------|----------|-------------|-------------------------------------|
| 1 | | AP_INVOICE_GATEWAY | | | <input checked="" type="checkbox"/> |
| 2 | Invoices | AP_INVOICES_GUI12 | | | <input checked="" type="checkbox"/> |
| 3 | Payments | AP_PAYMENTS_GUI12 | | | <input checked="" type="checkbox"/> |
| 4 | Accounting | AP_ACCOUNTING_GUI12 | | | <input checked="" type="checkbox"/> |
| 5 | Suppliers | AP_SUPPLIERS_GUI12 | | | <input checked="" type="checkbox"/> |
| 9 | Workflow | AP_WORKFLOW_GUI12 | | | <input checked="" type="checkbox"/> |
| 10 | Other | JTH_REQUESTS | ... | | <input checked="" type="checkbox"/> |
| | | | | | <input type="checkbox"/> |
| | | | | | <input type="checkbox"/> |
| | | | | | <input type="checkbox"/> |

This approach significantly reduces risk because it eliminates various menus that are not applicable to this role (AP Manager). In particular, the removal of the SETUP menu reduces a significant amount of risk.

3. A third option is the development of all custom sub-menus. This is not illustrated due to the time it would take to build such menus. If all custom sub-menus were used, the risk that a patch would add functionality that was not appropriate is minimal.

Contact: Feel free to contact the author, Jeffrey T. Hare, CPA CISA CIA, at jhare@erpra.net with further questions or comments related to this subject.