AMEing for Journal Approval Using Job Approval Levels

Jan L Cooper, *Niveus Consulting LLC*
Roxann Welch, *LKQ Corporation*

Abstract

Using AME for Journal Approval provides tremendous flexibility. Although we tried several approaches, approver groups within AME became very maintenance intense as employees terminated or change positions.

Our approach was to reduce maintenance and increase mobility by using the employee supervisor hierarchy and job approver levels to determine approval limits.

Our presentation will walk you through why we chose this approach and the steps needed to implement this simple but effective approval hierarchy including reporting for audit purposes.

How it all began….

The best thing about Oracle Approvals Management (AME) for Journal Approval is it provides tremendous flexibly. The worst thing? When your client tests the extent of your flexibility along with AME's!

Our initial mission was pretty simple, implement Oracle Journal Approval and have it go up the management chain until it reaches the top limit of approval by Journal Batch amount. This was simple enough to use the standard Oracle Workflow for journal approval, setting a system profile to follow the management chain, setting approval limits, setting up employees and supervisors, test, done!

If only it were that simple. Right about when we thought we were done, AME was released for journal approval. And that opened the door for complexity, for now we needed to have approvals by line amount and maybe by journal category along with definitely, by journal source. And what about having the approval go to the direct supervisor for review and approval then jumping the management chain to the final approver? Oh, and did we forget to mention that we have 123 general ledger users that flow into 22 different hierarchical branches for journal approval? And some users need self approval up to their limits and others don't. And some of our manual journal entries won't require journal approval at all.

And so, during this whirling dervish of ever changing requirements, accounting department reorgs and other project demands, we built a prototype of our AME model using various attributes, conditions, action types and approver groups. And each rendition got shot down as too complex. Why? Because not only would we have to maintain users in system administration under users and link them to their HR person record, we also had to maintain users in at least one, if not more, approver groups within AME. So for every department reorganization, termination, hire etc. we would have to modify at least the employee's HR record and all of the AME approver groups impacted, and in some cases the FND User record as well.

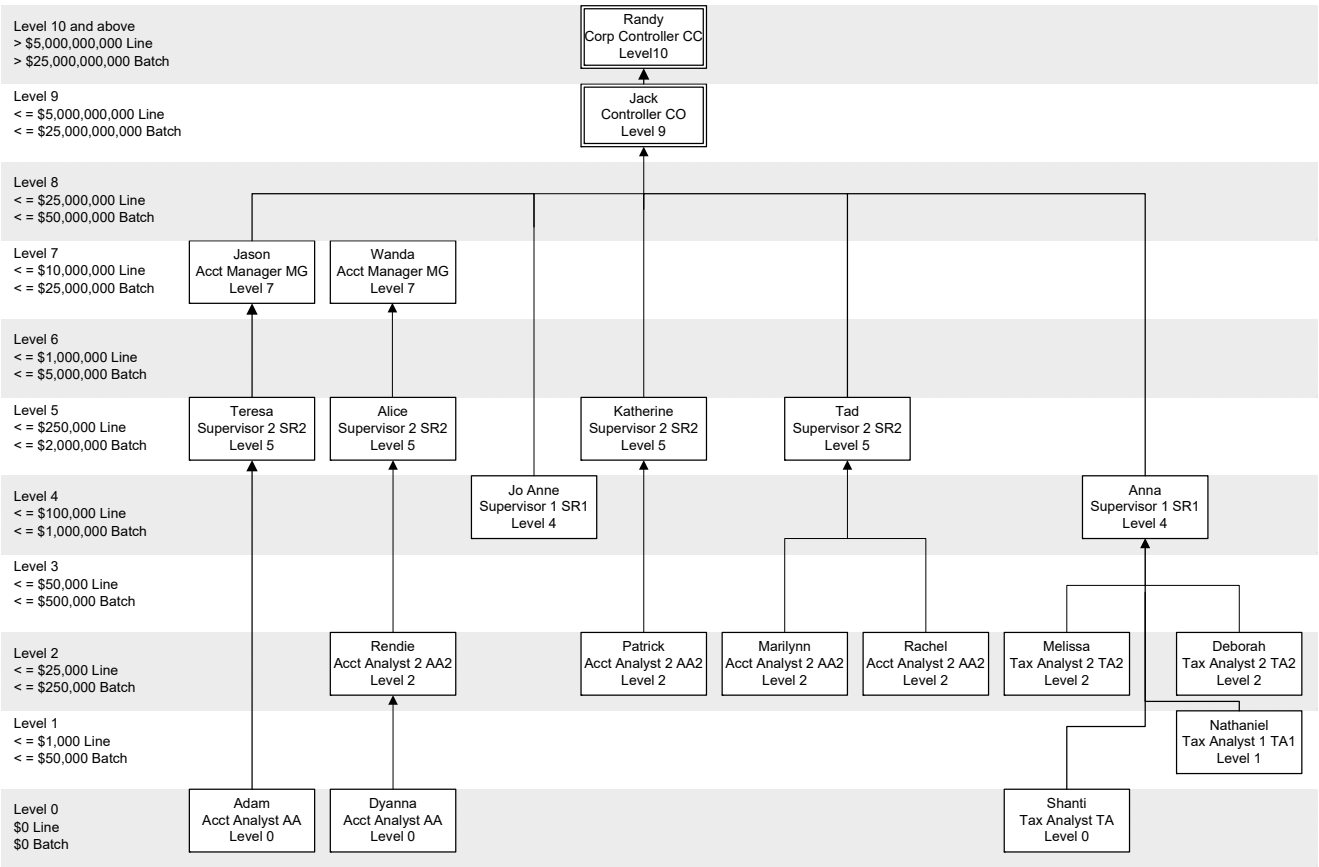
Back to the drawing board we went and through many white board renditions we determined the simplest, easiest way to maintain approval levels was to use Approval Authorities linked to Jobs in Human Resources, and assigned to employees. This now gave us the flexibility to assign different limits to the same user based on the attributes and conditions within an AME rule. We also set up several new journal sources and limited access to those sources through Web ADI and responsibilities to provide further control over what sources required approvals and which did not.

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Our Design

Our design has 10 levels of approval, and approval limits are at both the journal line and journal batch levels. Our process reviews the journal batch total, both debits and credits, first. If it passes those rules it then reviews the journal line amounts, both debits and credits.

To get our approval hierarchy we use the supervisor in the HR employee record along with the HR Job Approval Authority.



All journal entries that are within a user's line and batch approval limit, can be self approved.

Any journal entry that exceeds the user's line and/or batch approval limit will go to their direct supervisor for review and, if within the supervisor's line and batch approval limit, approval.

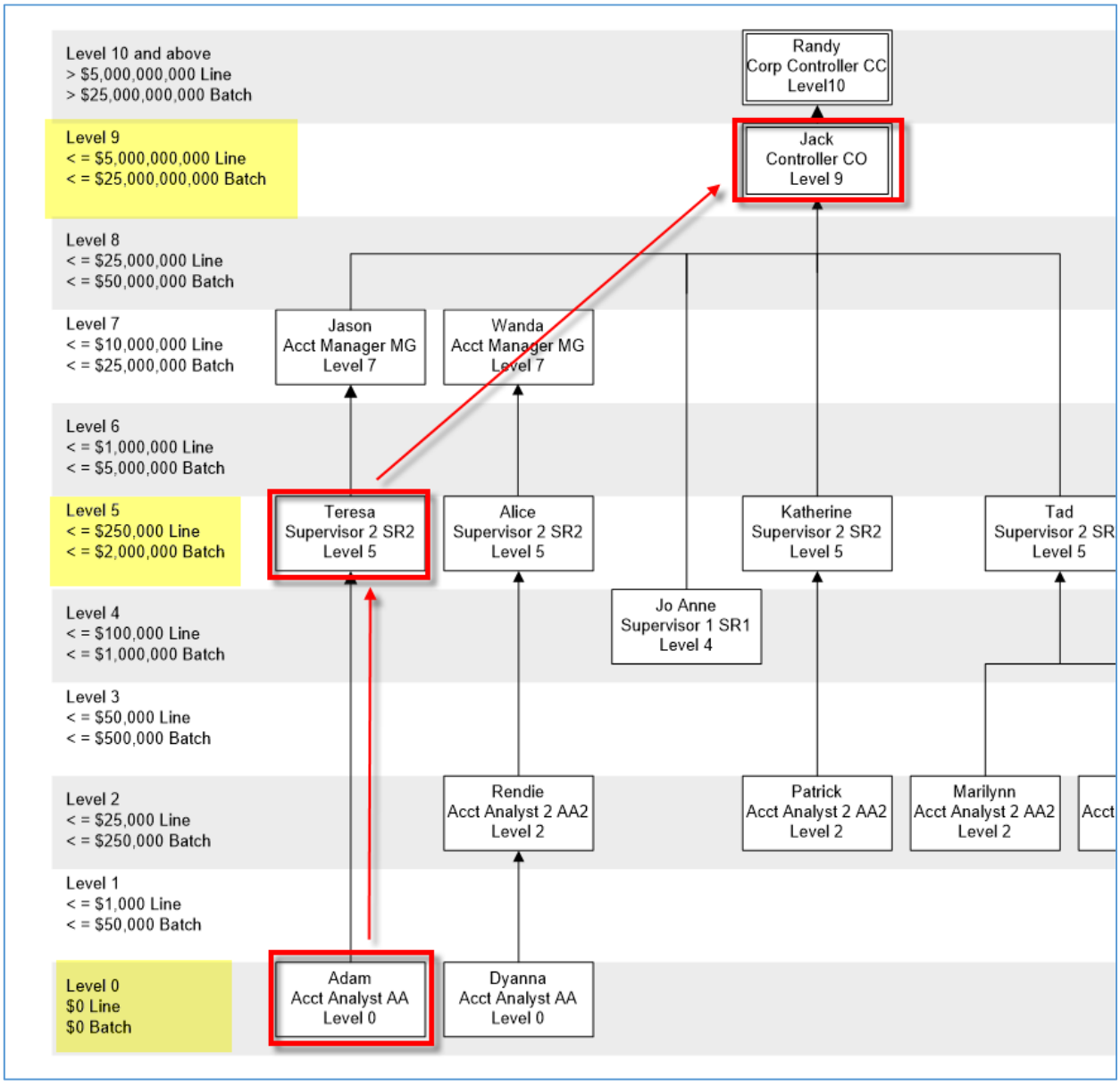
If the journal entry line or batch amount exceeds the supervisor's limits, the approval notification then goes directly to the final approver, bypassing all other levels.

Simplified Hierarchy for this white paper:

Copyright ©2017 by Jan L. Cooper and Roxann Welch

As an example of our process flow, Adam, who has a $0 line and batch limit, enters a journal entry with a line amount of $11,000,000, the journal entry will go to his direct supervisor, Teresa.

Teresa will review and when she approves it, it will go directly to Jack for approval, bypassing Jason.



Copyright ©2017 by Jan L. Cooper and Roxann Welch

Understanding Approvals Management components and how they fit together….

Approvals Management has 4 components: Attributes, Conditions, Actions and Approver Groups. Each of these components when combined make a Rule.

Attributes

Oracle defines an attribute as "Attributes are business variables with a single value for a particular transaction."

Our definition was a bit more straight forward: What fields do we want to use in our rules to determine which journal entries require approval and which fields will we be basing our limits on?

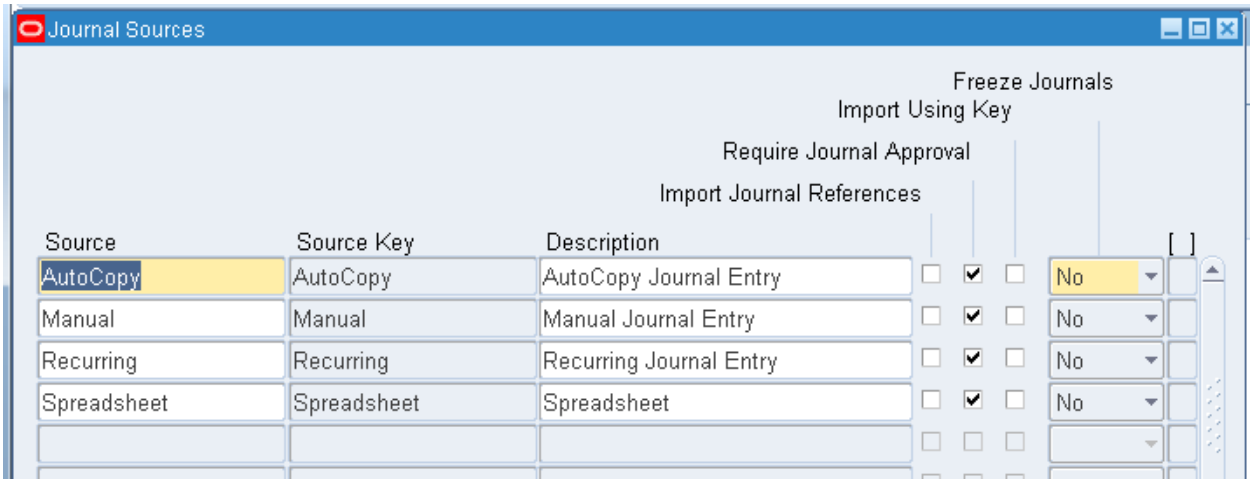
We chose to use the Oracle seeded attributes for journal line debits and credits, GL_JOURNAL_LINE_DEBIT_AMOUNT and GL_JOURNAL_LINE_CREDIT_AMOUNT, which will allow us to trigger approval based on the currency amount on a single journal line. The process reviews debits and credits separately.

We also chose to review the batch total for approval using the GL_BATCH_RUNNING_TOTAL_DEBIT and GL_BATCH_RUNNING_TOTAL_CREDIT. These will allow us to trigger approval limits based on the total journal batch amount, again reviewing both debits and credits separately.

In our company we enter single journal entries, so a batch is synonymous with a single journal entry.

Be aware that Journal Approval allows unbalanced journal entries to be approved regardless of currency, whereas posting will not allow an unbalanced journal entry to be posted. Due to this, our approval amounts for batches must look at both the debit and credit to ensure we capture all totals for journal approval.

Finally we chose to use the Journal Source in the GL_JE_SOURCES table through a custom attribute, rather than building our sources for approval within standard attributes and conditions. This allows us to see in one place which journal sources require approval. This can be found at General Ledger Super User: Setup → Journal → Sources.

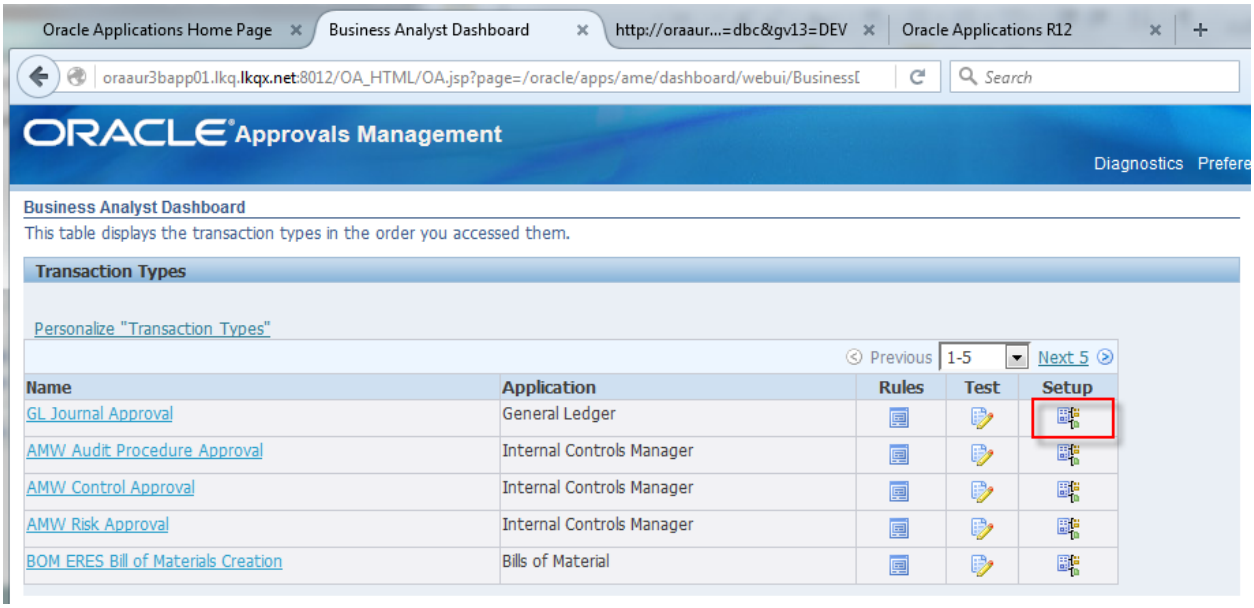


In order to use the Journal Source table we had to create a custom attribute as follows:

Approvals Management Business Analyst: Business Analyst Dashboard

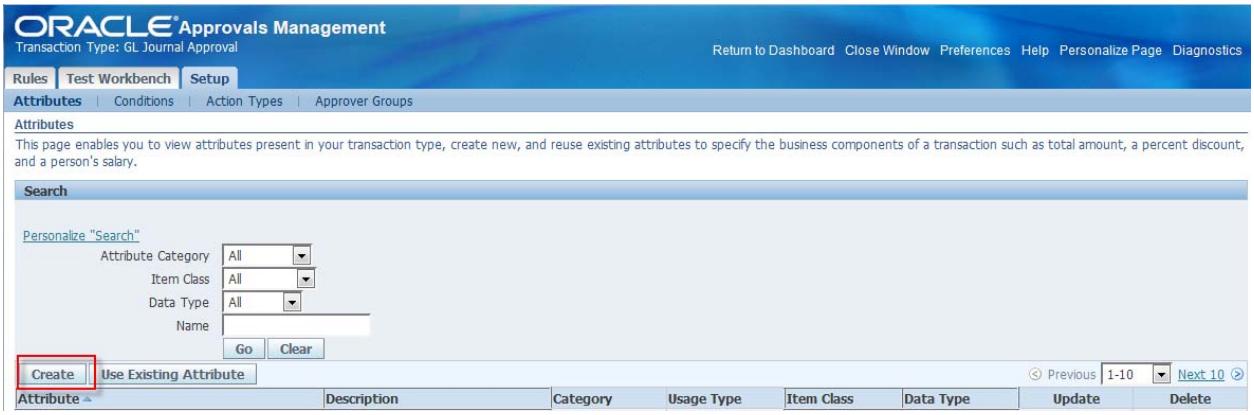
Find the GL Journal Approval transaction type.

Copyright ©2017 by Jan L. Cooper and Roxann Welch



Press the **Setup** icon for the GL Journal Approval transaction type.

Define LKQ_GL_JOURNAL_REQUIRES_APPROVAL Attribute

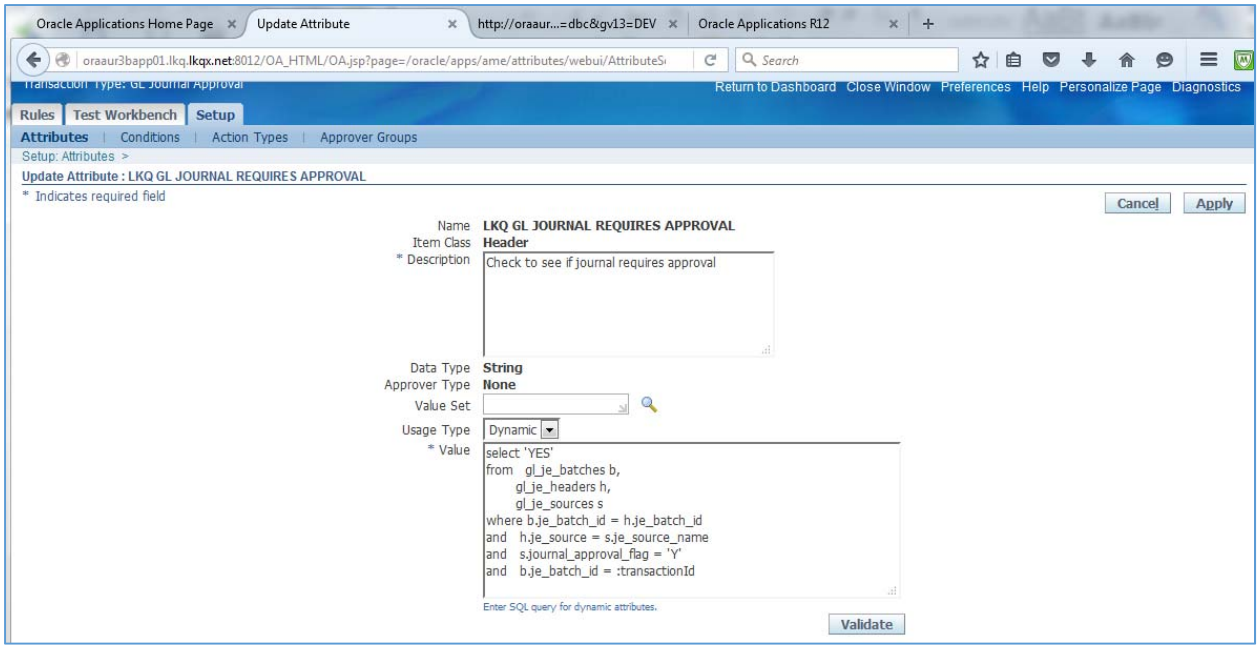


Press the **Create** button to add a new attribute.

We are creating this attribute to look at the Journal Source table and the Journal Approval flag on the source.

Alternately, we could have created a Condition using the Journal Source attribute but then would have multiple places to review which Journal Sources require approval.

Copyright ©2017 by Jan L. Cooper and Roxann Welch



Enter the following values:

Name – LKQ_GL_JOURNAL_REQUIRES_APPROVAL
Item Class – Header
Description – Check to see if journal requires approval
Data Type – String
Approver Type – None (System will fill the field with the word None after the Apply button is selected)
Value Set - <leave blank>
Usage Type – Dynamic
Value – paste in the value below:

```
select 'YES'
from   gl_je_batches b,
       gl_je_headers h,
       gl_je_sources s
where b.je_batch_id = h.je_batch_id
and   h.je_source = s.je_source_name and   s.journal_approval_flag = 'Y'
and   b.je_batch_id = :transactionId
```

Conditions

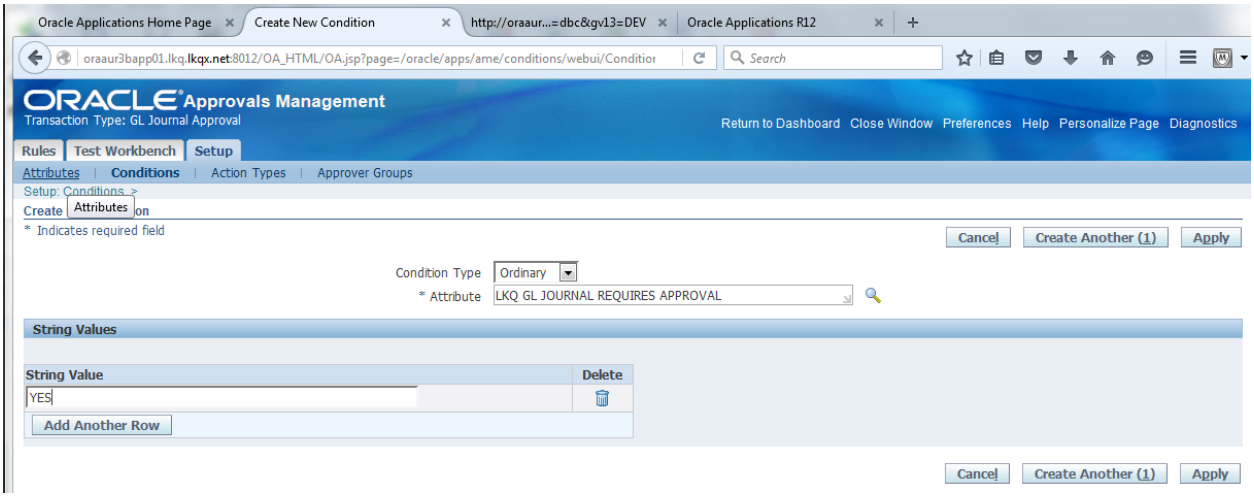
Oracle defines a condition as “The if part of an approval rule consists of zero or more conditions. A condition is a statement that is either true or false, for a given transaction”.

Really, all it’s saying is if an attribute is in this condition do this or don’t do that.

In our case our condition for Journal Sources, based on the code we entered when creating the custom attribute was, if the Journal Source has the Require Journals Approval field set to ‘Yes’ then the rule this attribute and condition is in, applies.

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Define **Condition** - LKQ_GL_JOURNAL_REQUIRES_APPROVAL is Yes



Enter the following values:

Condition Type – Ordinary
Attribute – LKQ_GL_JOURNAL_REQUIRES_APPROVAL
String Value – YES
Press the **Apply** button.

We next need to define our conditions for the GL_JOURNAL_LINE_DEBIT_AMOUNT, GL_JOURNAL_LINE_CREDIT_AMOUNT, GL_BATCH_RUNNING_TOTAL_DEBIT and GL_BATCH_RUNNING_TOTAL_CREDIT attributes.

Our approval thresholds were determined by our Accounting Team and consisted of the following table which includes HR job codes, approval levels and currency limits. Our line and batch limits are the same regardless of whether they are a debit or a credit.

Please note, we could have used the less than or equal to expression in our conditions but since the users originally provided us with limits having a lower and upper range and had intended to use both, we built our conditions using that premise. As the users changed the requirements the basic ranges did not change. We left the lower limits for two reasons, one, because the users may chose to go back to having the journals go to every person in the hierarchy where the lower limits would be applicable and two, these had been thoroughly tested and we didn't have time to go through another testing phase.

Using the following table we'll build our conditions for our journal lines and batches.

Job Title	HR Job Code	Approval Level	Line Limit	Batch Limit
Accounting Analyst Tax Analyst	AA TA	0	= $ 0	= $ 0
Account Analyst 1 Tax Analyst 1	AA1 TA1	1	<= $1,000	<= $50,000
Account Analyst 2 Tax Analyst 2	AA2 TA2	2	<= $25,000	<= $250,000
Account Analyst 3	AA3	3	<= $50,000	<= $500,000
Supervisor 1	SR1	4	<= $100,000	<= $1,000,000
Supervisor 2	SR2	5	<= $250,000	<= $2,000,000

Copyright ©2017 by Jan L. Cooper and Roxann Welch

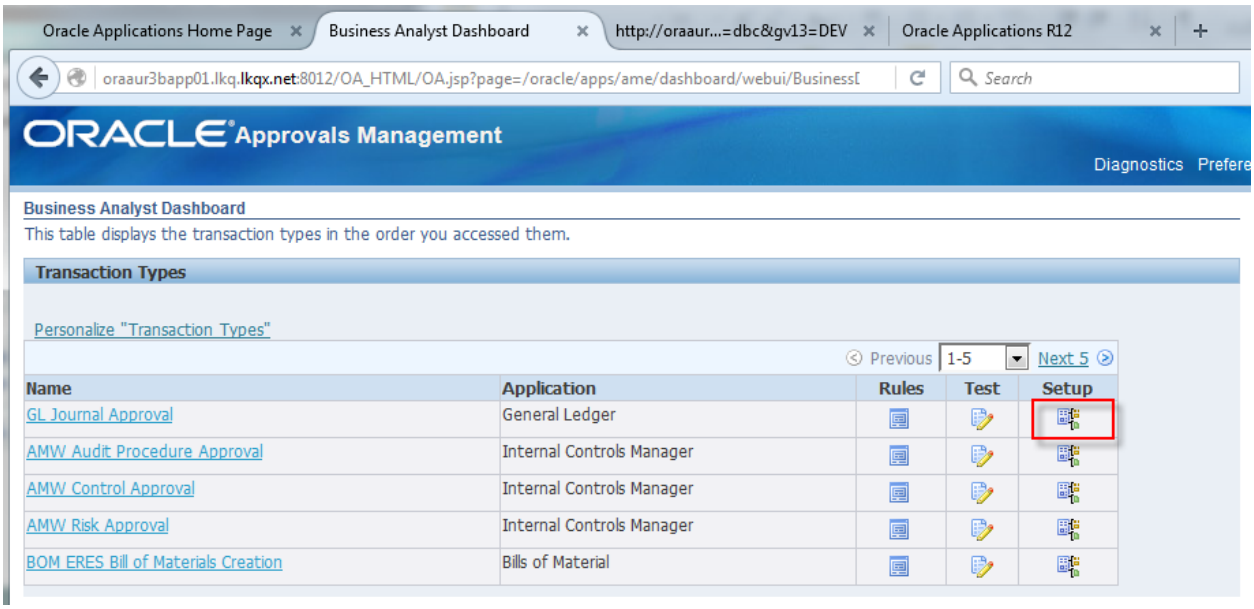
Job Title	HR Job Code	Approval Level	Line Limit	Batch Limit
Supervisor 3	SR3	6	<= $1,000,000	<= $5,000,000
Manager	MG	7	<= $10,000,000	<= $25,000,000
Assistant Controller	AC	8	<= $25,000,000	<= $50,000,000
Controller	CO	9	<= $5,000,000,000	<= $25,000,000,000
Corporate Controller	CC	10	> $5,000,000,000	> $25,000,000,000

Conditions: GL_JOURNAL_LINE_CREDIT_AMOUNT

Define the condition used in the journal approval process.

Approvals Management Business Analyst > Business Analyst Dashboard

Find the GL Journal Approval transaction type.

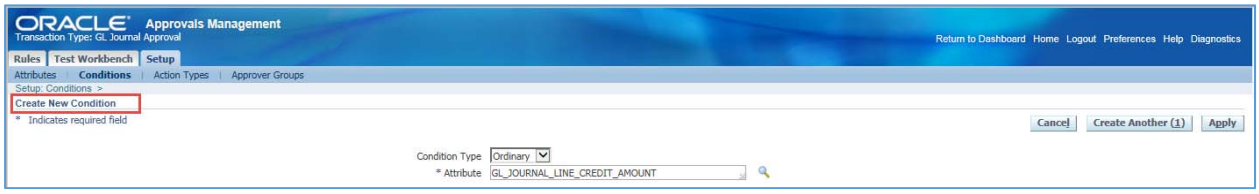


Press the **Setup** icon for the GL Journal Approval transaction type.

Click on the **Conditions** tab.

Then click on the **Create** button.

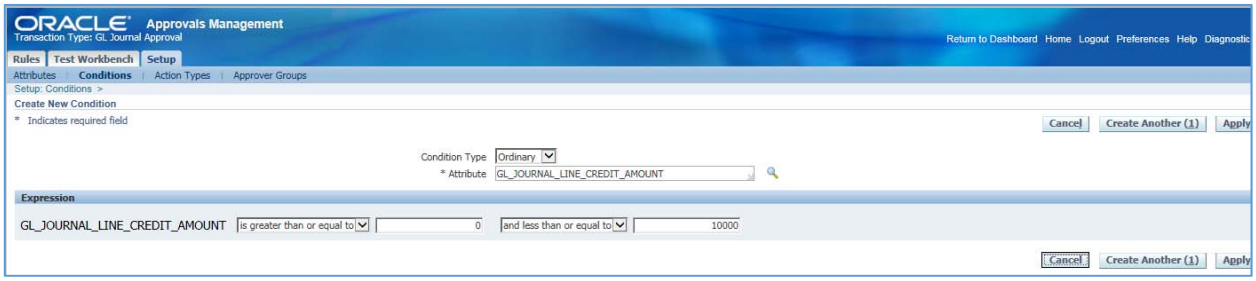
Add the following values under Create New condition:



Condition Type – Ordinary

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Attribute – GL_JOURNAL_LINE_CREDIT_AMOUNT



Enter **Expression** for GL_JOURNAL_LINE_CREDIT_AMOUNT

Is greater than or equal to 0
And less than or equal to 1000

Click on the **Create Another (1)** button.

Continue adding the following conditions for GL_JOURNAL_LINE_**CREDIT**_AMOUNT as follows:

Condition	**Details**			
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	1000.01	And less than or equal to	25000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	25000.01	And less than or equal to	50000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	50000.01	And less than or equal to	100000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	100000.01	And less than or equal to	250000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	250000.01	And less than or equal to	1000000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	1000000.01	And less than or equal to	10000000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	10000000.01	And less than or equal to	25000000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than or equal to	25000000.01	And less than or equal to	5000000000
GL_JOURNAL_LINE_CREDIT_AMOUNT	Is greater than	5000000000.01		

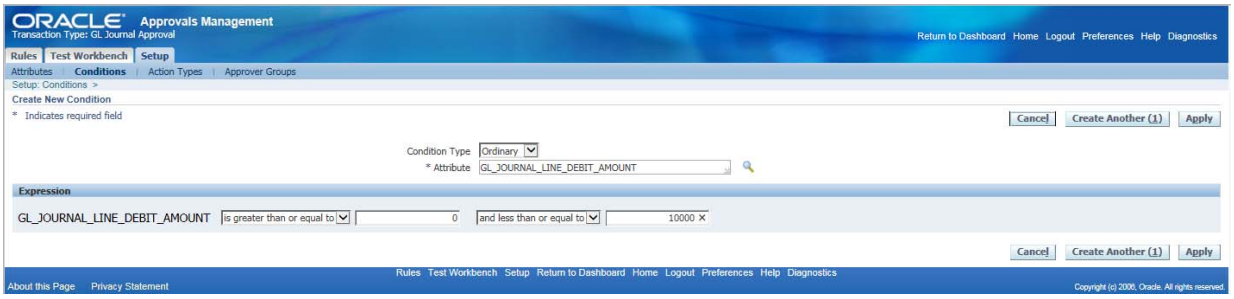
Click on the **Apply** button.

Conditions: GL_JOURNAL_LINE_DEBIT_AMOUNT

Add the following values under Create New condition:

Condition Type – Ordinary
Attribute – GL_JOURNAL_LINE_DEBIT_AMOUNT

 Copyright ©2017 by Jan L. Cooper and Roxann Welch



Enter **Expression** for GL_JOURNAL_LINE_DEBIT_AMOUNT
Is greater than or equal to 0
And less than or equal to 1000

Click on the **Create Another (1)** button.

Continue adding the following conditions for GL_JOURNAL_LINE_**DEBIT**_AMOUNT as follows:

Condition	**Details**			
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	1000.01	And less than or equal to	25000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	25000.01	And less than or equal to	50000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	50000.01	And less than or equal to	100000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	100000.01	And less than or equal to	250000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	250000.01	And less than or equal to	1000000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	1000000.01	And less than or equal to	10000000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	10000000.01	And less than or equal to	25000000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than or equal to	25000000.01	And less than or equal to	5000000000
GL_JOURNAL_LINE_DEBIT_AMOUNT	Is greater than	5000000000.01		

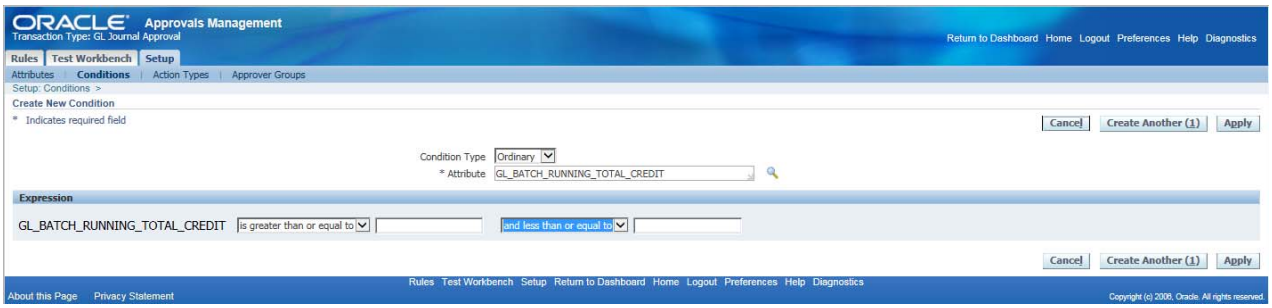
Conditions: GL_BATCH_RUNNING_TOTAL_CREDIT

Add the following values under Create New condition:

Condition Type – Ordinary
Attribute – GL_BATCH_RUNNING_TOTAL_CREDIT

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Then enter **Expression** for GL_BATCH_RUNNING_TOTAL_CREDIT



Is greater than or equal to 0
And less than or equal to 50000

Click on the **Create Another (1)** button.

Continue adding the following conditions for GL_BATCH_RUNNING_TOTAL_**CREDIT** as follows:

Condition	**Details**			
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	50000.01	And less than or equal to	250000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	250000.01	And less than or equal to	500000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	500000.01	And less than or equal to	1000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	1000000.01	And less than or equal to	2000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	2000000.01	And less than or equal to	5000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	5000000.01	And less than or equal to	25000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	25000000.01	And less than or equal to	50000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than or equal to	50000000.01	And less than or equal to	25000000000
GL_BATCH_RUNNING_TOTAL_CREDIT	Is greater than	25000000000.01		

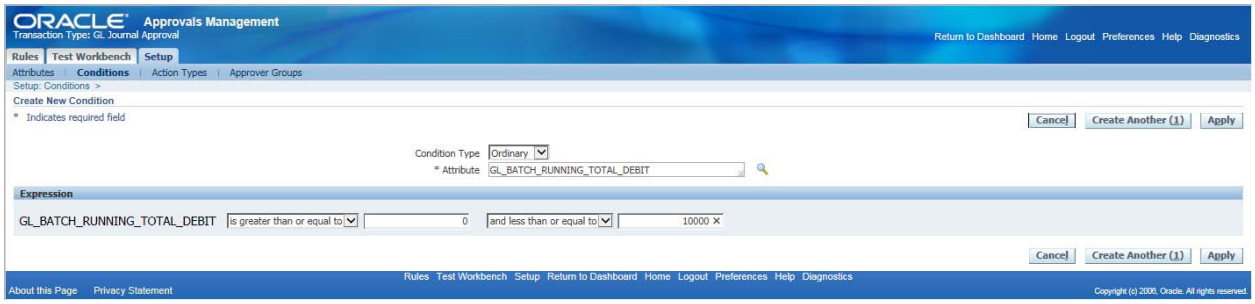
Conditions: GL_BATCH_RUNNING_TOTAL_DEBIT

Add the following values under Create New condition:

Condition Type – Ordinary

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Attribute – GL_BATCH_RUNNING_TOTAL_DEBIT



Then enter **Expression** for GL_BATCH_RUNNING_TOTAL_**DEBIT**

Is greater than or equal to 0
And less than or equal to 50000

Click on the **Create Another (1)** button.

Continue adding the following conditions for GL_BATCH_RUNNING_TOTAL_**DEBIT** as follows:

Condition	**Details**			
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	50000.01	And less than or equal to	250000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	250000.01	And less than or equal to	500000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	500000.01	And less than or equal to	1000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	1000000.01	And less than or equal to	2000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	2000000.01	And less than or equal to	5000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	5000000.01	And less than or equal to	25000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	25000000.01	And less than or equal to	50000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than or equal to	50000000.01	And less than or equal to	25000000000
GL_BATCH_RUNNING_TOTAL_DEBIT	Is greater than	25000000000.01		

Action Type

Oracle defines the Action Type as "An *action* is an instruction to AME to modify a transaction's approval process in the manner you specify. An approval rule's *then* part (its *consequent*) consists of one or more actions."

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

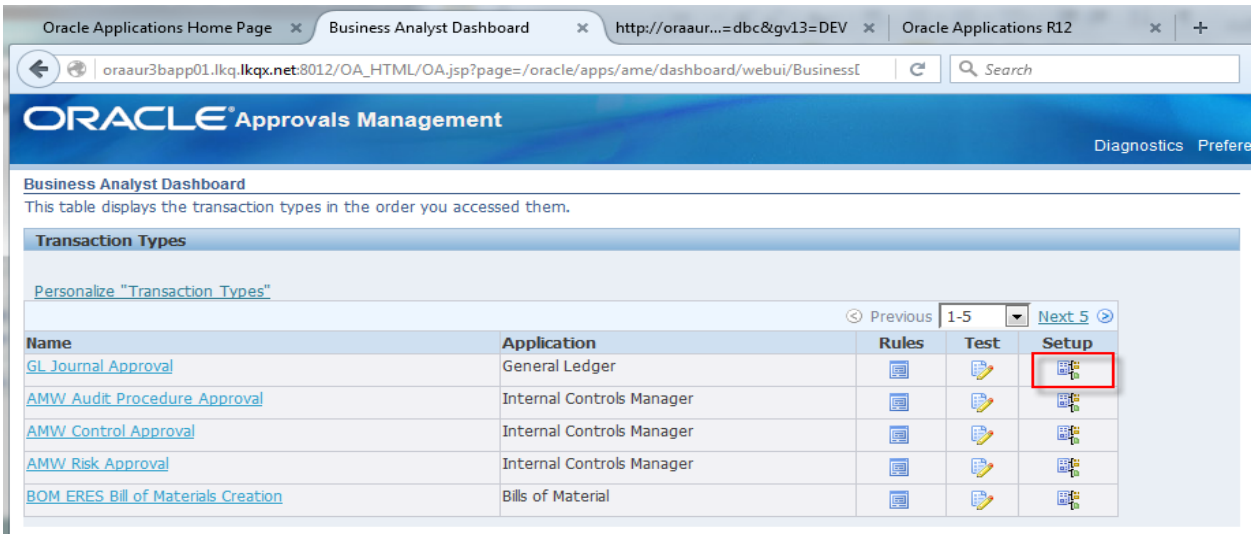
The Action Type is our THEN clause. If our Attribute with its corresponding Condition is true, THEN perform the Action Type.

In our case that Action Type directs the journal approval process to self approve within the user's limits, then if it exceeds the user's limits, send to the immediate supervisor for review and/or approval and finally, if applicable, to the final approver.

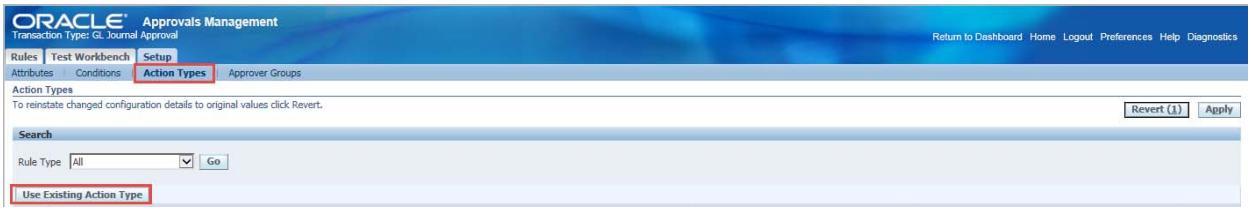
When you go through the next process you'll see that there are Job Level numbers assigned to the actions. These are going to correspond to our HR Job Authority which we will define later in the process.

Define the Action Type used in the journal approval process by going to Approvals Management Business Analyst > Business Analyst Dashboard

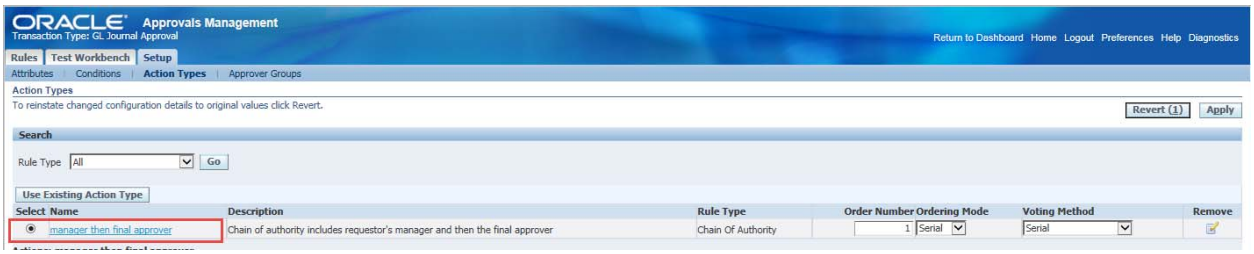
Find the GL Journal Approval transaction type.



Click on the **Action Types** tab.



Then click on the **Use Existing Action Type** button.

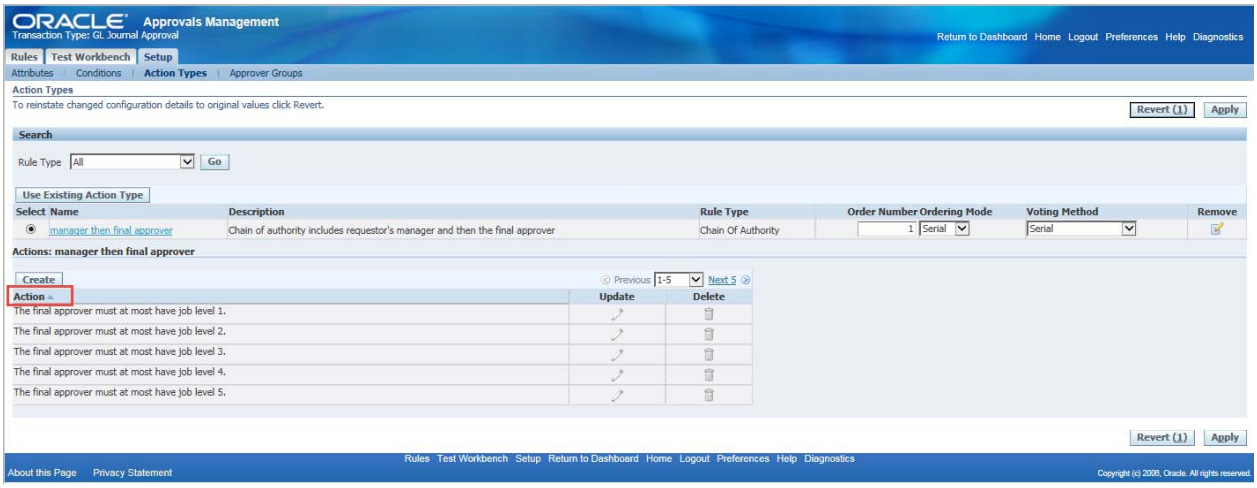


Select the following values:

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name – manager then final approver
Description - Chain of authority includes requestor's manager and then the final approver
Rule Type – Chain of Authority
Order Number – 1
Ordering Mode - Serial
Voting Method – Serial

A list of Actions should appear under the **Action Type** stating: 'The final approver must at most have job level X' and 'The final approver must at least have job level X' with X being a value of 1-10.



Press the **Apply** button.

Approver Groups

Oracle defines Approver Groups as they can "either be an ordered set of one or more approvers (persons and/or user accounts) or it can be a list, which is dynamically generated at rule evaluation time."

Since we are using HR Jobs and HR Employee records rather than Approver Groups, we don't need to define this step. One less step and one less place for maintenance is always a good thing!

Defining AME Rules

We're now ready to define our rules. Our first rule, $0 limit doesn't need to be defined as it's our default and is assumed.

If you recall from above, our Action Types state 'The final approver must <u>at least</u> (or at most) have job level X' and Oracle begins the numbering sequence with a 1. We are using the 'at least' action to build the approval limits within all of our rules. So if our action states at least 1, anything below a 1 will not apply and automatically go up the approval hierarchy to the direct supervisor and then final approver.

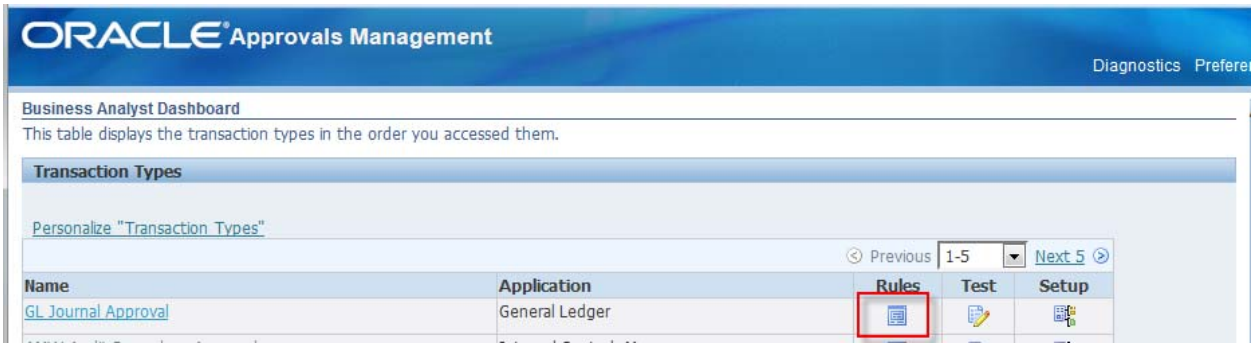
We create a rule for each of our Line and Batch attributes. If we don't and combine GL_JOURNAL_LINE_CREDIT_AMOUNT and GL_JOURNAL_LINE_DEBIT_AMOUNT into one rule it is treated as an AND clause, not an OR. So both of the DEBIT and CREDIT Line amounts must violate the rule for it to be enforced. This then would allow bypassing the Approval Limit controls at the Line level.

As an example, Teresa has a Line Limit of <= $ 250,000 and enters the following journal entry:
Line 1- DEBIT $ 230,000.00
Line 2 – DEBIT $ 30,000.00
Line - CREDIT $260,000.00

A combined rule would state GL_BATCH_RUNNING_TOTAL_DEBIT <= $ 250,000 AND GL_BATCH_RUNNING_TOTAL_CREDIT <= $ 250,000
Although the CREDIT line violates the rule, the DEBIT lines do not resulting in the journal entry being self approved. Creating separate rules avoids this situation as each rule would have to be met to allow self approval.

To define your rules go to Approvals Management Business Analyst > Business Analyst Dashboard

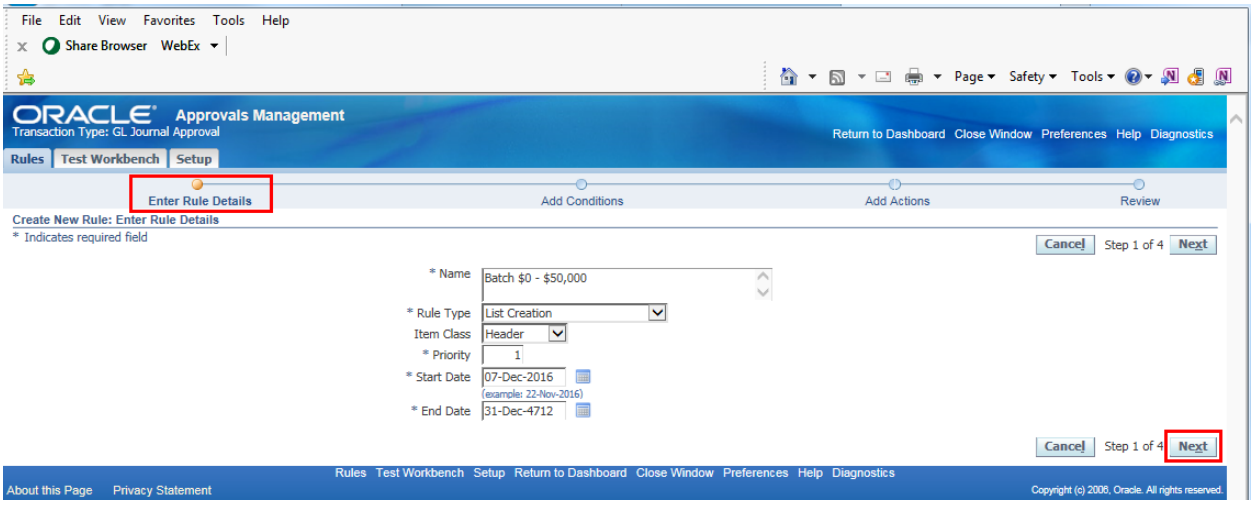
Find the GL Journal Approval transaction type.



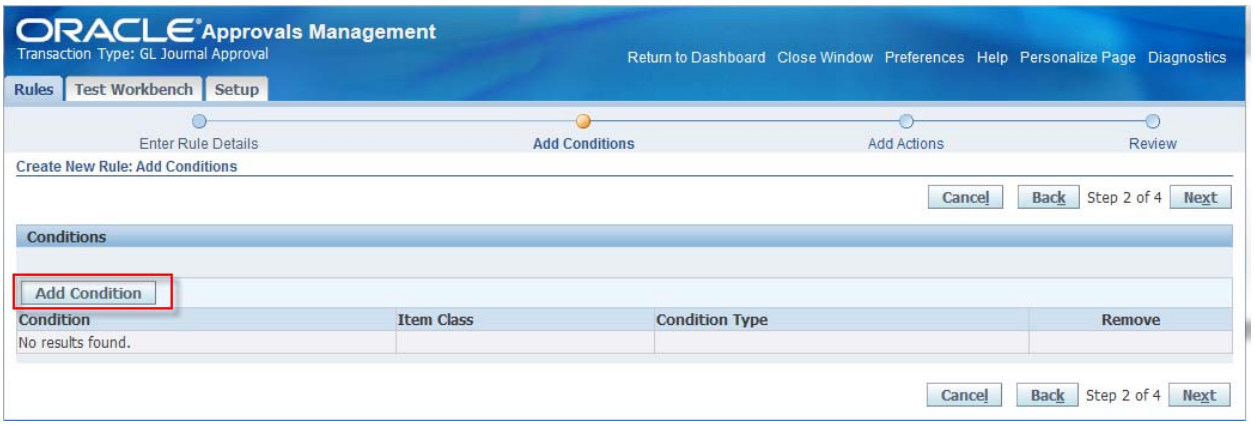
Press the **Rules** icon for the GL Journal Approval transaction type.

Press the **Create** button to add a new rule.

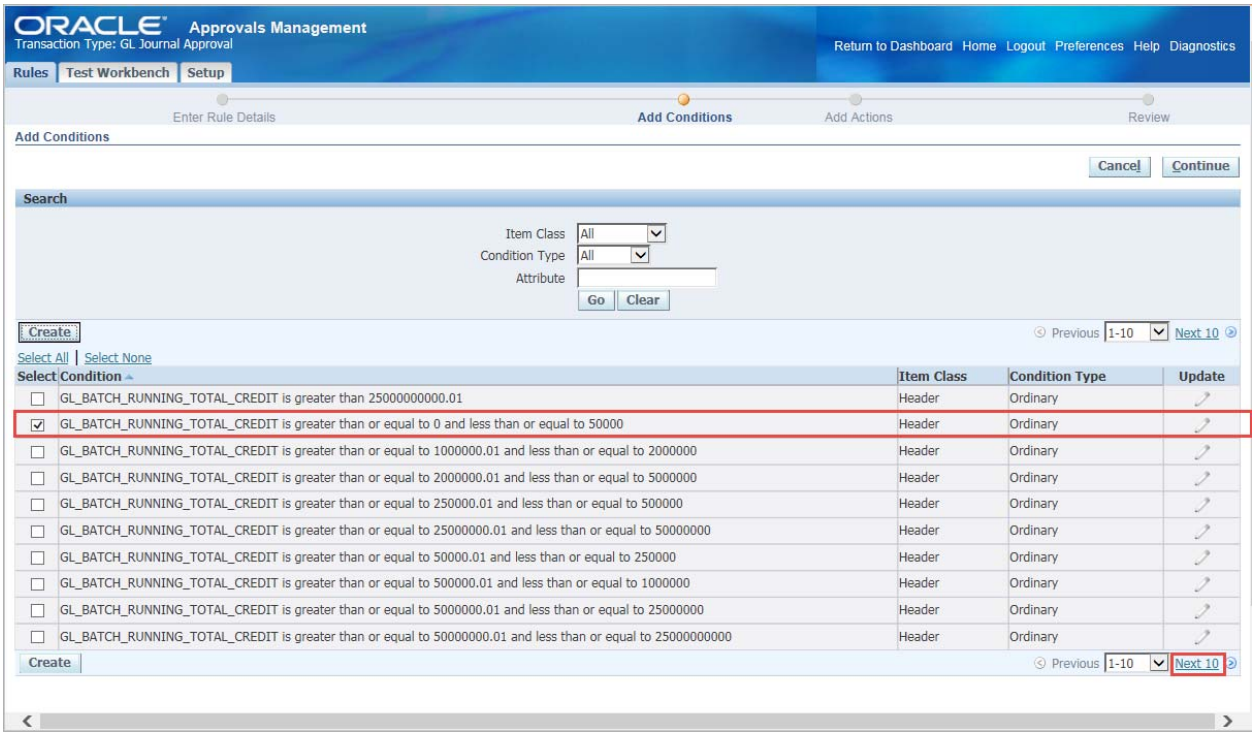
Add the following values:



Name – Batch Credit $0-$50,000
Rule Type – List Creation
Item Class – Header
Priority - 1
Start Date - <current date>
End Date – 31-Dec-4712
Press the **Next** button.



Press the **Add Condition** button.

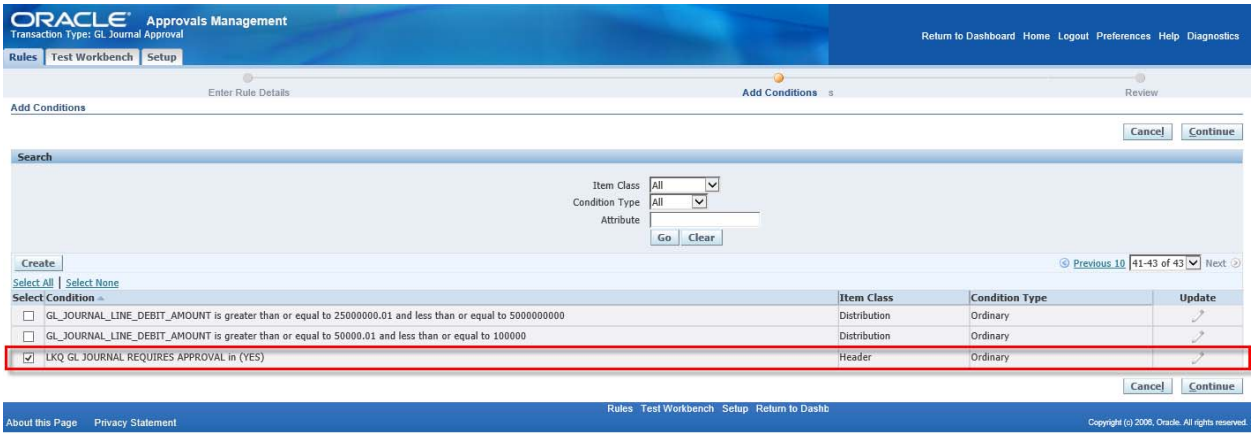


Select the **GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 0 and less than or equal to 50000** condition.

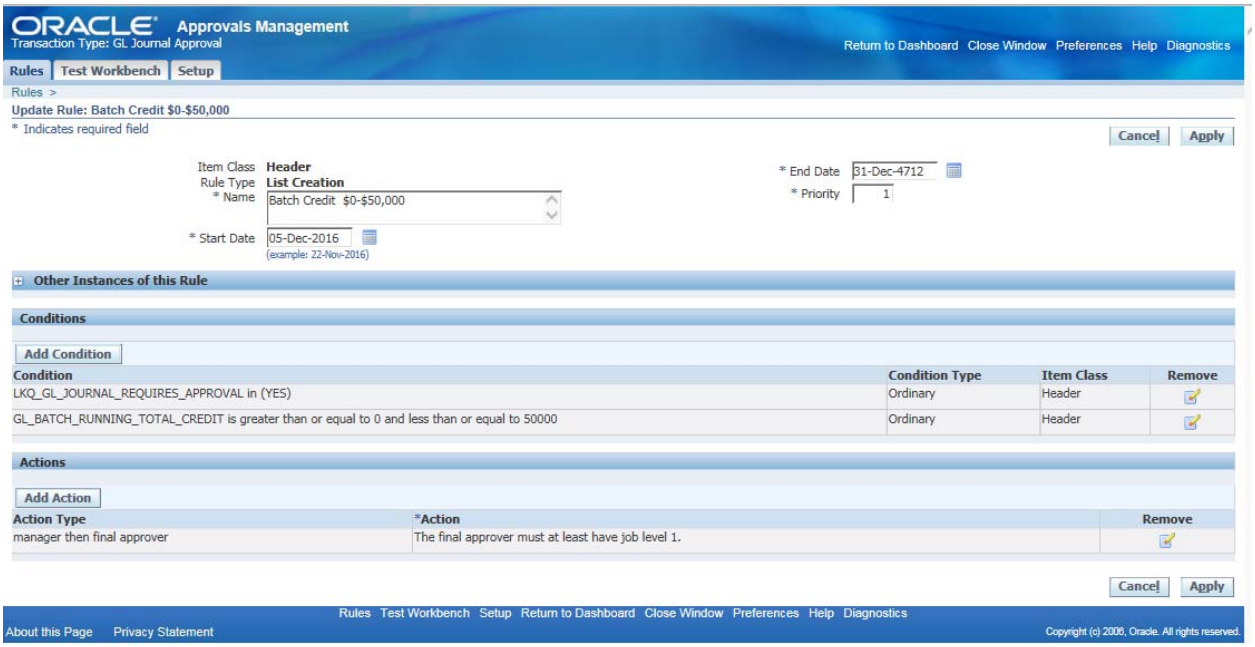
Then press the **Next 10** hyperlink several times until you find **LKQ_GL_JOURNAL_REQUIRES_ APPROVAL is (YES).**

Select the **LKQ_GL_JOURNAL_REQUIRES_ APPROVAL is (YES)** condition.

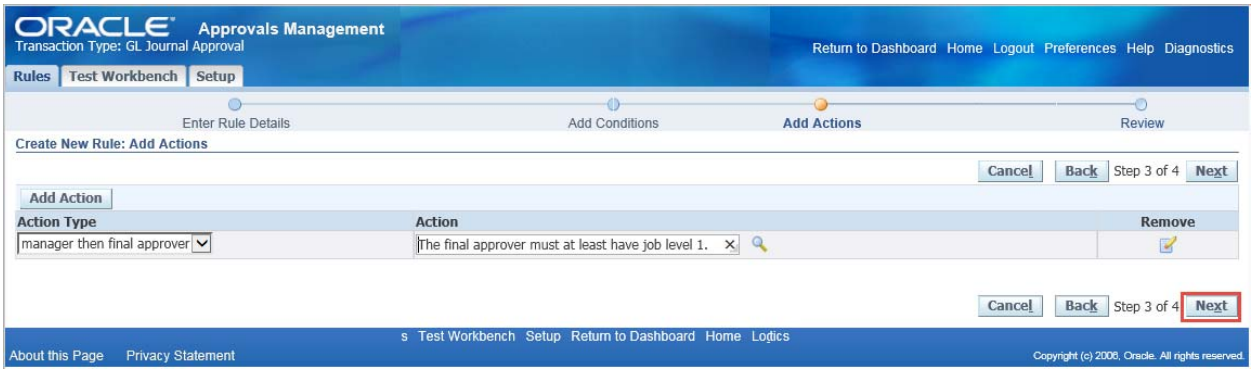
 Copyright ©2017 by Jan L. Cooper and Roxann Welch



Press the **Continue** button.

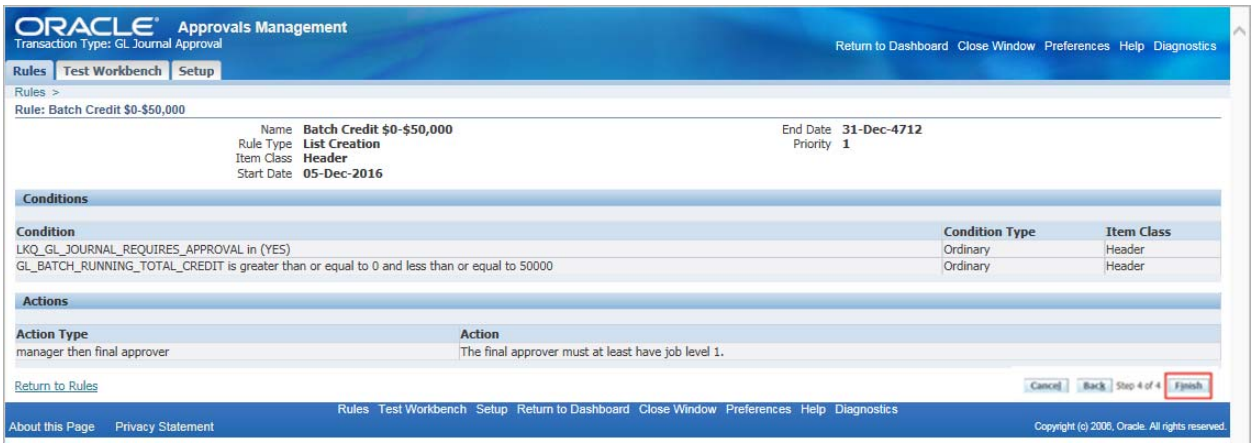


Press the **Next** button.
Enter the following:



Action Type – manager then final approver
Action – The final approver must at least have job level 1.

Press the **Next** button.



Press the **Finish** button.

Repeat for the following rules:

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Batch Credit $0-$50,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 0 and less than or equal to 50000	manager then final approver	The final approver must at least have job level 1.
COMPLETED ABOVE						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $50,000.01 - $250,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 50000.01 and less than or equal to 250000	manager then final approver	The final approver must at least have job level 2.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $250,000.01 - $500,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 250000.01 and less than or equal to 500000	manager then final approver	The final approver must at least have job level 3.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $500,000.01 - $1,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 500000.01 and less than or equal to 1000000	manager then final approver	The final approver must at least have job level 4.

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $1,000,000.01 - 2,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 1000000.01 and less than or equal to 2000000	manager then final approver	The final approver must at least have job level 5.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $2,000,000.01 - $5,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 2000000.01 and less than or equal to 5000000	manager then final approver	The final approver must at least have job level 6.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $5,000,000.01 - $25,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 5000000.01 and less than or equal to 25000000	manager then final approver	The final approver must at least have job level 7.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $25,000,000.01 - $50,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 25000000.01 and less than or equal to 50000000	manager then final approver	The final approver must at least have job level 8.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $50,000,000.01 - $25,000,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than or equal to 50000000.01 and less than or equal to 25000000000	manager then final approver	The final approver must at least have job level 9.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Credit $25,000,000,000.01 and over	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_CREDIT is greater than 25000000000.01	manager then final approver	The final approver must at least have job level 10.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $0-$50,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 0 and less than or equal to 50000	manager then final approver	The final approver must at least have job level 1.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Batch Debit $50,000.01 - $250,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 50000.01 and less than or equal to 250000	manager then final approver	The final approver must at least have job level 2.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $250,000.01 - $500,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 250000.01 and less than or equal to 500000	manager then final approver	The final approver must at least have job level 3.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
atch Debit $500,000.01 - $1,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 500000.01 and less than or equal to 1000000	manager then final approver	The final approver must at least have job level 4.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $1,000,000.01 - 2,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 1000000.01 and less than or equal to 2000000	manager then final approver	The final approver must at least have job level 5.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $2,000,000.01 - $5,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 2000000.01 and less than or equal to 5000000	manager then final approver	The final approver must at least have job level 6.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $5,000,000.01 - $25,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 5000000.01 and less than or equal to 25000000	manager then final approver	The final approver must at least have job level 7.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $25,000,000.01 - $50,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 25000000.01 and less than or equal to 50000000	manager then final approver	The final approver must at least have job level 8.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Batch Debit $50,000,000.01 - $25,000,000,000	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than or equal to 50000000.01 and less than or equal to 25000000000	manager then final approver	The final approver must at least have job level 9.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Batch Debit $25,000,000,000.01 and over	List Creation	Header	{Today's date}	12/31/4712	1	GL_BATCH_RUNNING_TOTAL_DEBIT is greater than 25000000000.01	manager then final approver	The final approver must at least have job level 10.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $0-$1,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 0 and less than or equal to 1000	manager then final approver	The final approver must at least have job level 1.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $0-$1,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 0 and less than or equal to 1000	manager then final approver	The final approver must at least have job level 1.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $1,000.01-$25,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 1000.01 and less than or equal to 25000	manager then final approver	The final approver must at least have job level 2.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $1,000.01-$25,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 1000.01 and less than or equal to 25000	manager then final approver	The final approver must at least have job level 2.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $25,000.01-$50,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 25000.01 and less than or equal to 50000	manager then final approver	The final approver must at least have job level 3.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Line Debit $25,000.01-$50,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 25000.01 and less than or equal to 50000	manager then final approver	The final approver must at least have job level 3.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $50,000.01-$100,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 50000.01 and less than or equal to 100000	manager then final approver	The final approver must at least have job level 4.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $50,000.01-$100,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 50000.01 and less than or equal to 100000	manager then final approver	The final approver must at least have job level 4.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $100,000.01-$250,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 100000.01 and less than or equal to 250000	manager then final approver	The final approver must at least have job level 5.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $100,000.01-$250,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 100000.01 and less than or equal to 250000	manager then final approver	The final approver must at least have job level 5.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $250,000.01-$1,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 250000.01 and less than or equal to 1000000	manager then final approver	The final approver must at least have job level 6.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $250,000.01-$1,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 250000.01 and less than or equal to 1000000	manager then final approver	The final approver must at least have job level 6.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Line Credit $1,000,000.01-$10,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 1000000.01 and less than or equal to 10000000	manager then final approver	The final approver must at least have job level 7.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $1,000,000.01-$10,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 1000000.01 and less than or equal to 10000000	manager then final approver	The final approver must at least have job level 7.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $10,000,000.01-$25,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 10000000.01 and less than or equal to 25000000	manager then final approver	The final approver must at least have job level 8.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $10,000,000.01-$25,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 10000000.01 and less than or equal to 25000000	manager then final approver	The final approver must at least have job level 8.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $25,000,000.01-$5,000,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than or equal to 25000000.01 and less than or equal to 5000000000	manager then final approver	The final approver must at least have job level 9.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Debit $25,000,000.01-$5,000,000,000	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than or equal to 25000000.01 and less than or equal to 5000000000	manager then final approver	The final approver must at least have job level 9.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		
Line Credit $5,000,000,000.01 and over	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_CREDIT_AMOUNT is greater than 5000000000.01	manager then final approver	The final approver must at least have job level 10.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Name	Rule Type	Item Class	Start Date	End Date	Priority	Add Conditions	Action Type	Action
Line Debit $5,000,000,000.01 and over	List Creation	Header	{Today's date}	12/31/4712	2	GL_JOURNAL_LINE_DEBIT_AMOUNT is greater than 5000000000.01	manager then final approver	The final approver must at least have job level 10.
						LKQ GL JOURNAL REQUIRES APPROVAL in (YES)		

HR Jobs

Now that are we have our AME Rules completed we need to link our HR Jobs to our HR employees and our FND User records.

We were not using HR Jobs previous to AME and our HR application is shared. If you are already using HR Jobs you can build your rules based on the Approval Authorities already defined or assign them now, if they haven't been assigned.

The HR Job Authority Level 0 – 10 or above, links to the Job Level in the Action component of our AME rules.

As an example, our Rule: Batch Credit $.00-$50,000 has an Action: The final approver must at least have job level 1. Job Level 1 will correspond to HR Job: Approval Authority 1.

The steps below will explain how to configure HR Jobs assuming HR Jobs have not been configured previously.

Job Flexfield

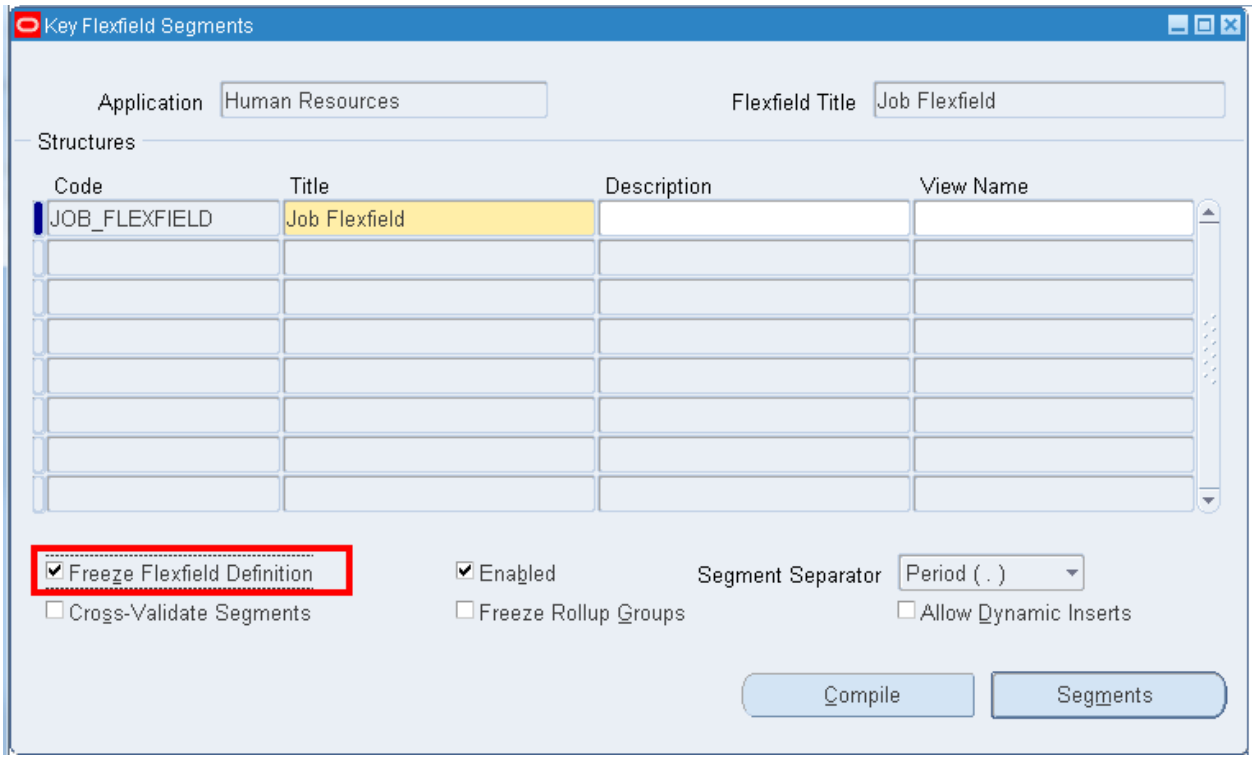
The Job Flexfield must be configured, if it hasn't been already, in order to use Jobs. Care must be taken as this is a key flexfield and doesn't support changes once implemented. If you are not currently using Human Resources but plan to in the future, be sure to coordinate the creation of the Job Flexfield with your Human Resources department.

We have no intentions of implementing Oracle Human Resources in this instance of Oracle. With this information, we decided on a simple, one segment Job value that is freeform, allowing us to use both alpha and numeric characters.

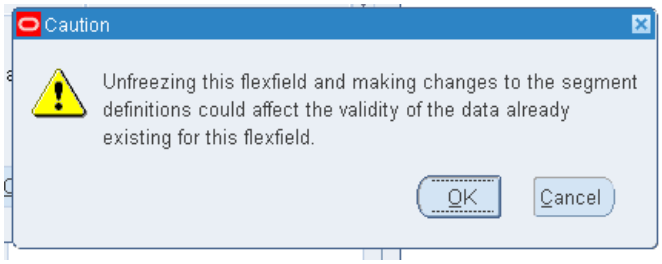
Go to General Ledger Super User > Set Up > Flexfields > Key and query the following:

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Remove the checkmark from the **Freeze Flexfield Definition** field to allow you to make changes to the flexfield.



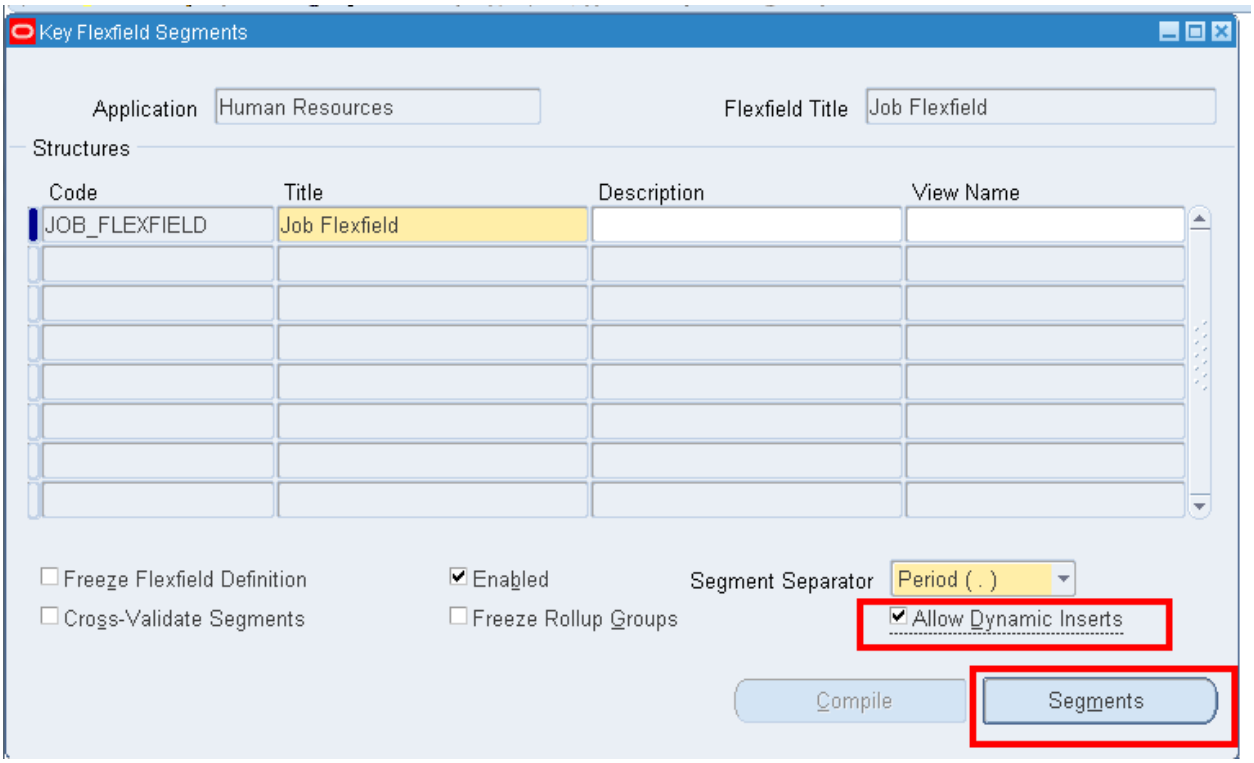
The following message will appear, click on the **Ok** button.



Check the box next to the **Allow Dynamic Inserts** field, save.

Copyright ©2017 by Jan L. Cooper and Roxann Welch

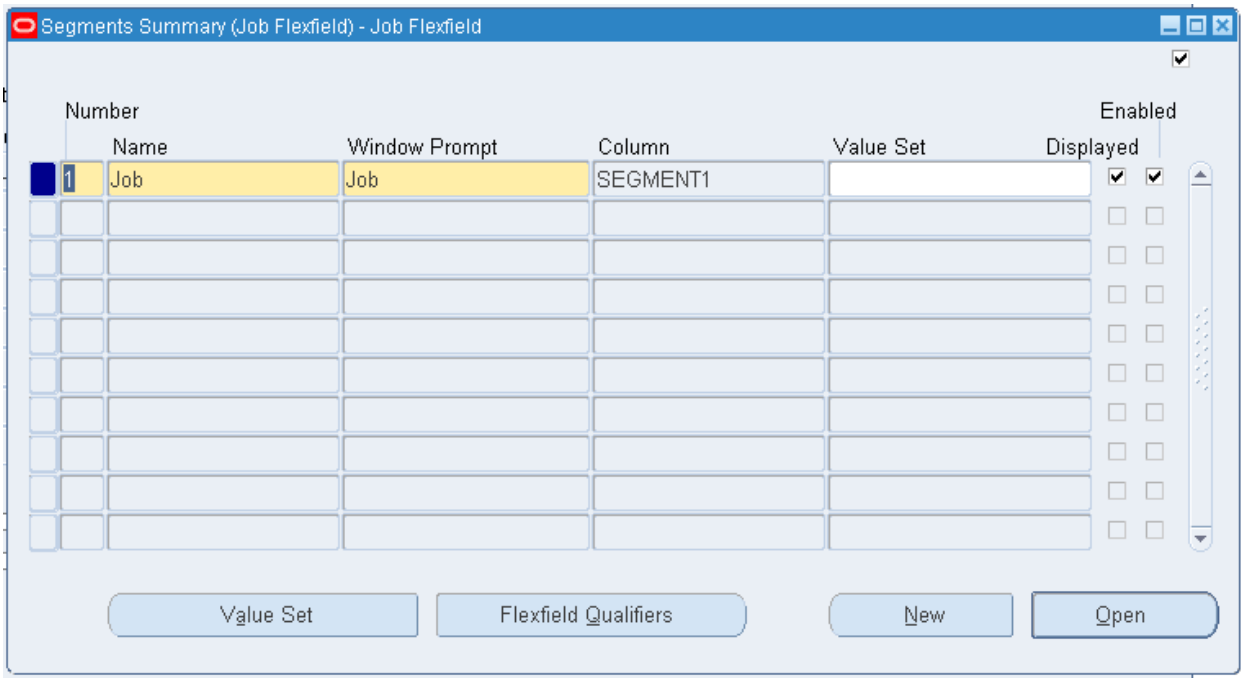
Click on the **Segments** button



Enter the following values:

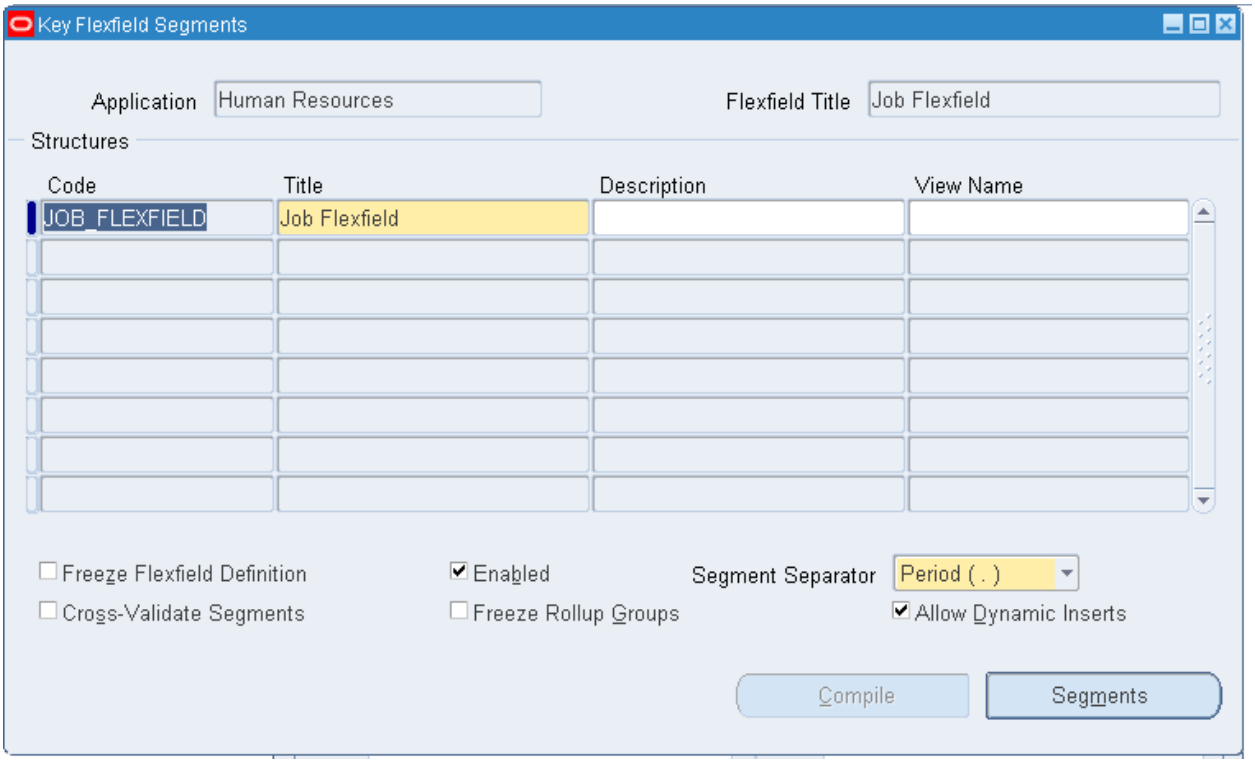
Number – 1
Name – Job
Window Prompt – Job
Column –SEGMENT1
Value Set - <blank>
Displayed – Checked
Enabled - Checked

Copyright ©2017 by Jan L. Cooper and Roxann Welch



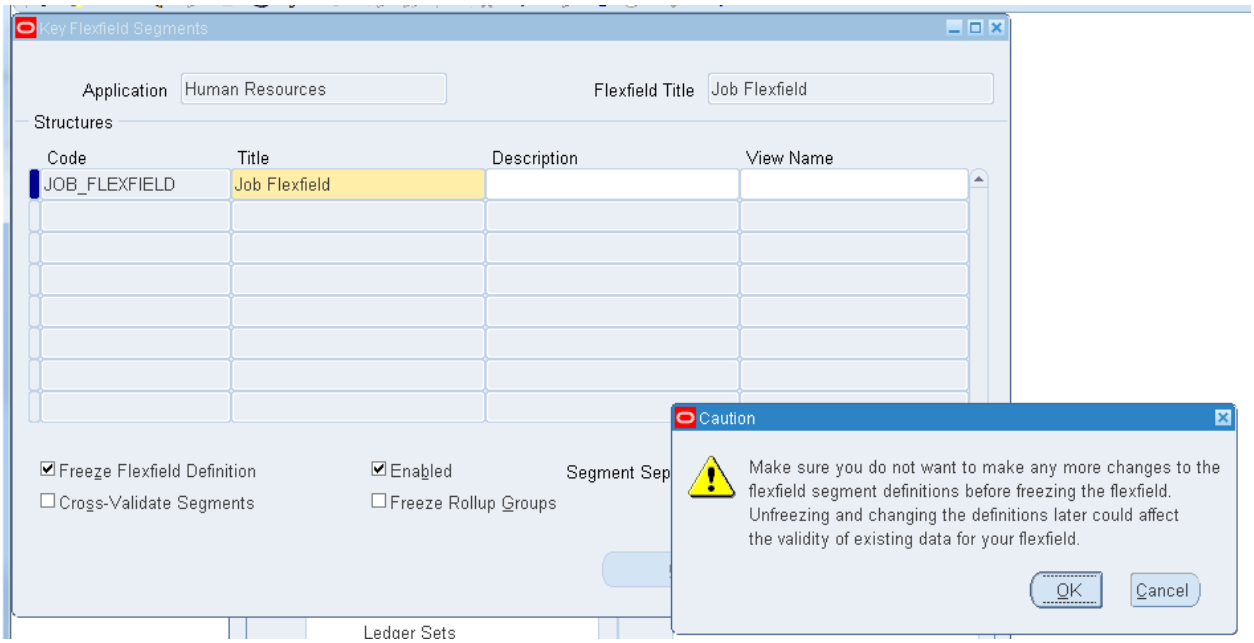
Save.

Close the window.



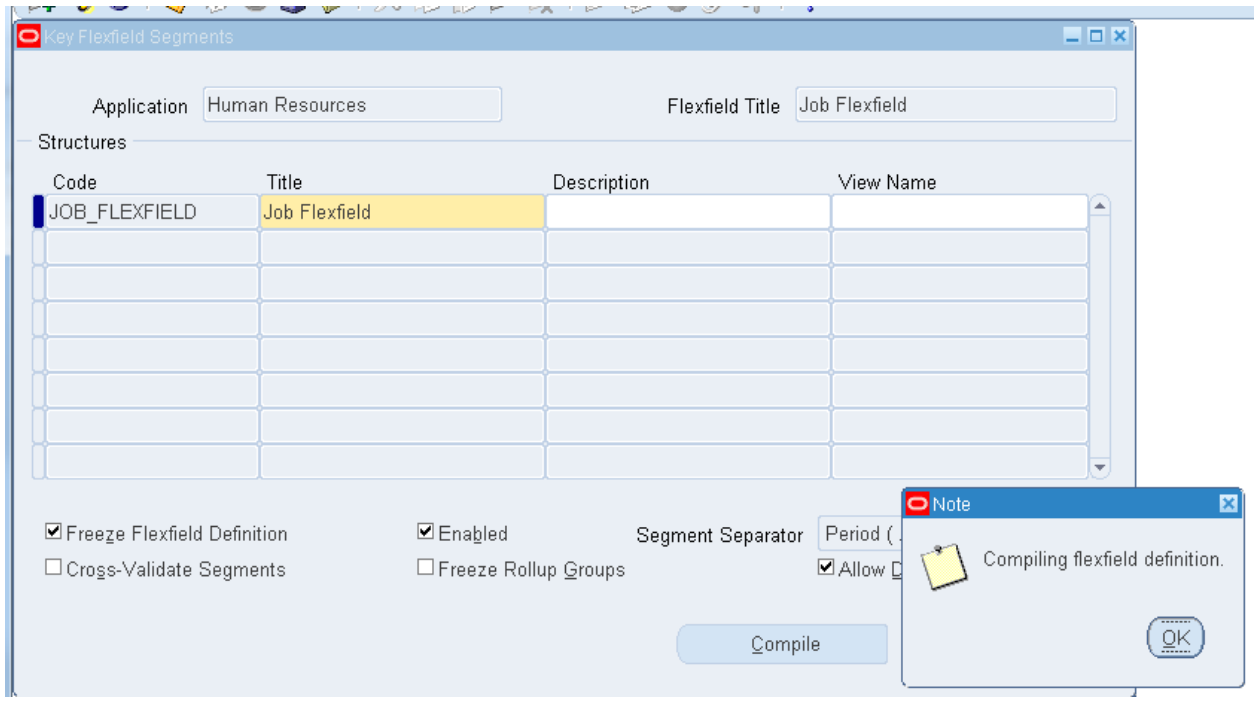
Copyright ©2017 by Jan L. Cooper and Roxann Welch

Check the **Freeze Flexfield Definition** box.



A message will appear, click **OK**.

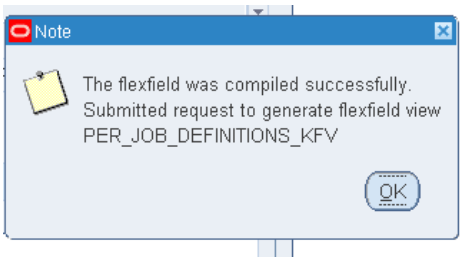
Click the **Compile** button.



A note will appear, click on the **OK** button.

A note telling you your flexfield compiled successfully will appear, click on the **OK** button

Copyright ©2017 by Jan L. Cooper and Roxann Welch



Close the flexfield form.

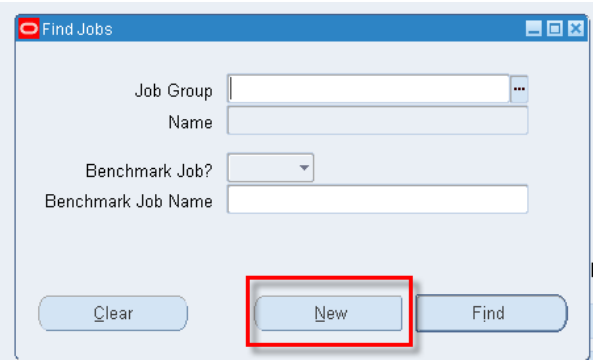
HR Job Values

This is where we actually define the Job values. These are freeform, as we didn't assign a value set to the Job Flexfield Segment 1.

We chose easy abbreviations so we can see, at a glance, the Job and the number preceding the alpha characters as, combined, they indicate what level of approval authority is assigned. An example of our structure is Accounting Analyst 2 is Job value AA2.

Go to US HRMS Manager > Work Structures → Job → Description

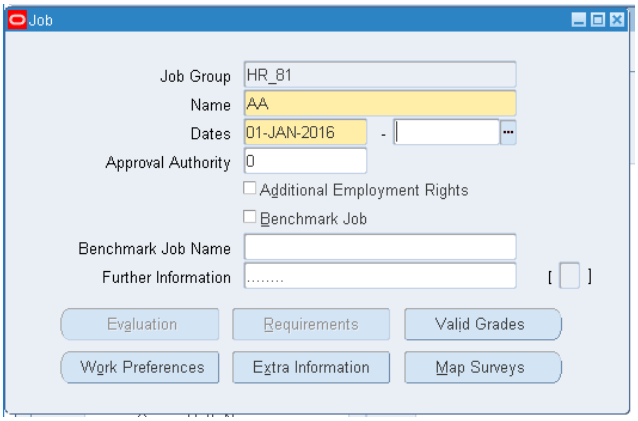
Click on the **New** button



Add the following values:

Job Group – HR_81
Name – AA
Dates - <Current date>
End Date – <blank>
Approval Authority – 0

 Copyright ©2017 by Jan L. Cooper and Roxann Welch



Save. Arrow down and add the following jobs:

Job Group	Name	Dates		Approval Authority
HR_81	AA	<Current Date>	<Blank>	0
HR_81	AA1	<Current Date>	<Blank>	1
HR_81	AA2	<Current Date>	<Blank>	2
HR_81	AA3	<Current Date>	<Blank>	3
HR_81	AC	<Current Date>	<Blank>	8
HR_81	BANK	<Current Date>	<Blank>	0
HR_81	CC	<Current Date>	<Blank>	10
HR_81	CFO	<Current Date>	<Blank>	11
HR_81	CO	<Current Date>	<Blank>	9
HR_81	CT	<Current Date>	<Blank>	0
HR_81	MG	<Current Date>	<Blank>	7
HR_81	ORA	<Current Date>	<Blank>	11
HR_81	SR1	<Current Date>	<Blank>	4
HR_81	SR2	<Current Date>	<Blank>	5
HR_81	SR3	<Current Date>	<Blank>	6
HR_81	SRVP	<Current Date>	<Blank>	12
HR_81	TA	<Current Date>	<Blank>	0
HR_81	TA1	<Current Date>	<Blank>	1
HR_81	TA2	<Current Date>	<Blank>	2

SQL Script to Validate Job Set Up

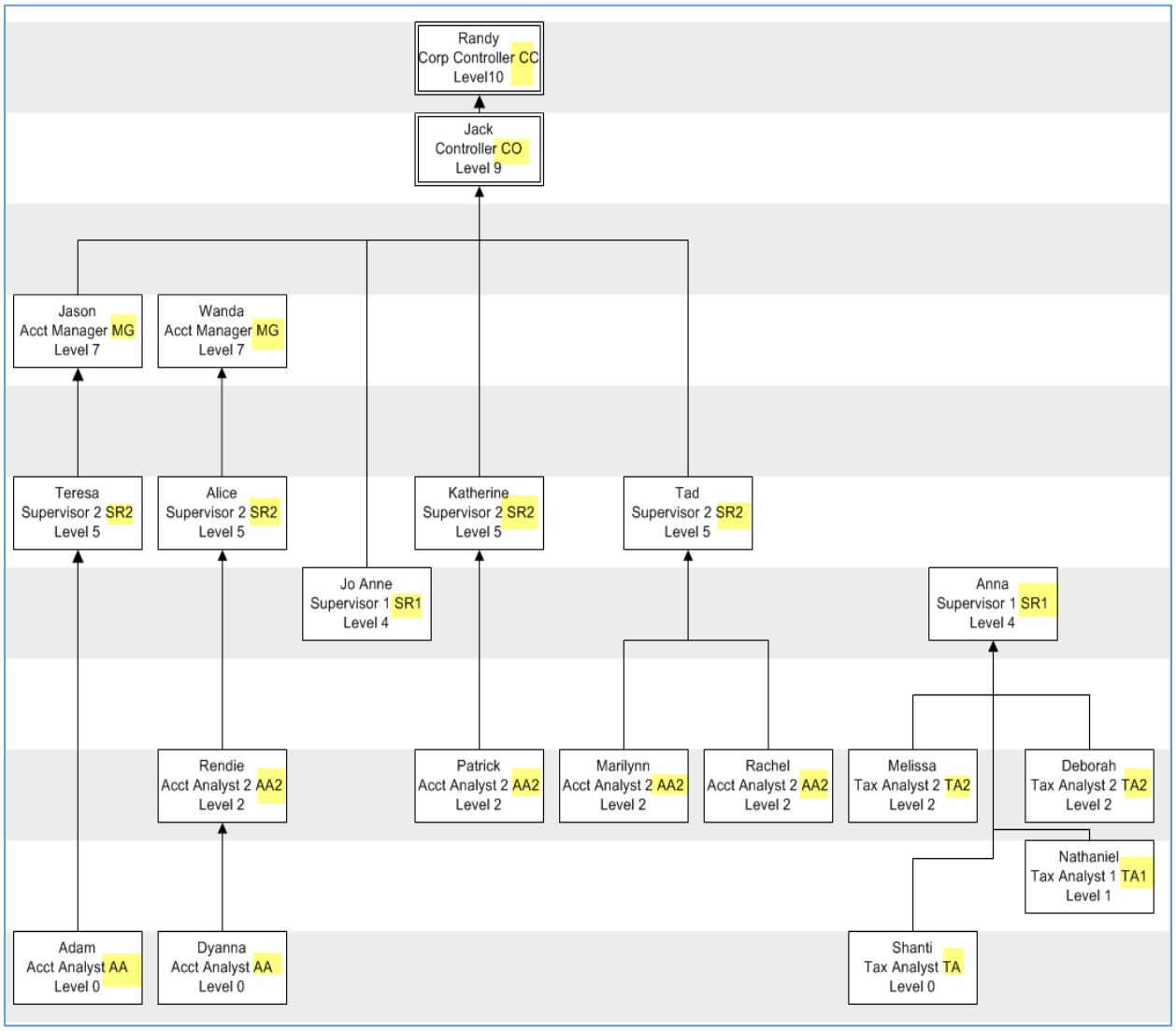
```
SELECT DISTINCT  jo.name "JOB NAME",  jo.approval_authority
FROM hr.per_jobs jo ORDER BY jo.approval
```


Copyright ©2017 by Jan L. Cooper and Roxann Welch

Assigning HR Jobs and Supervisors to Employees

All employees who enter journal entries will be assigned a job. The job is linked to the approval limits in AME through the Approval Authority. If an employee is not set up with a job, the employee will have no approval limit and all journals will go to their supervisor for approval.

Our next step is to assign HR Jobs and Supervisors to HR Employees. In our case, since we're using a shared instance of HR, we use the Employee record in GL to set up employees. This is a much simpler form than using the HRMS form. If you recall from our Simplified company hierarchy, we specified supervisors and the job assignments, which are highlighted in yellow on the chart.



Verify all employees that will be entering journal entries are set up in HR with, at a minimum, the following fields entered: Employee Name, Email *(The email address in the HR record is used by Workflow for Approval Notifications),* Supervisor, Job. Example below.

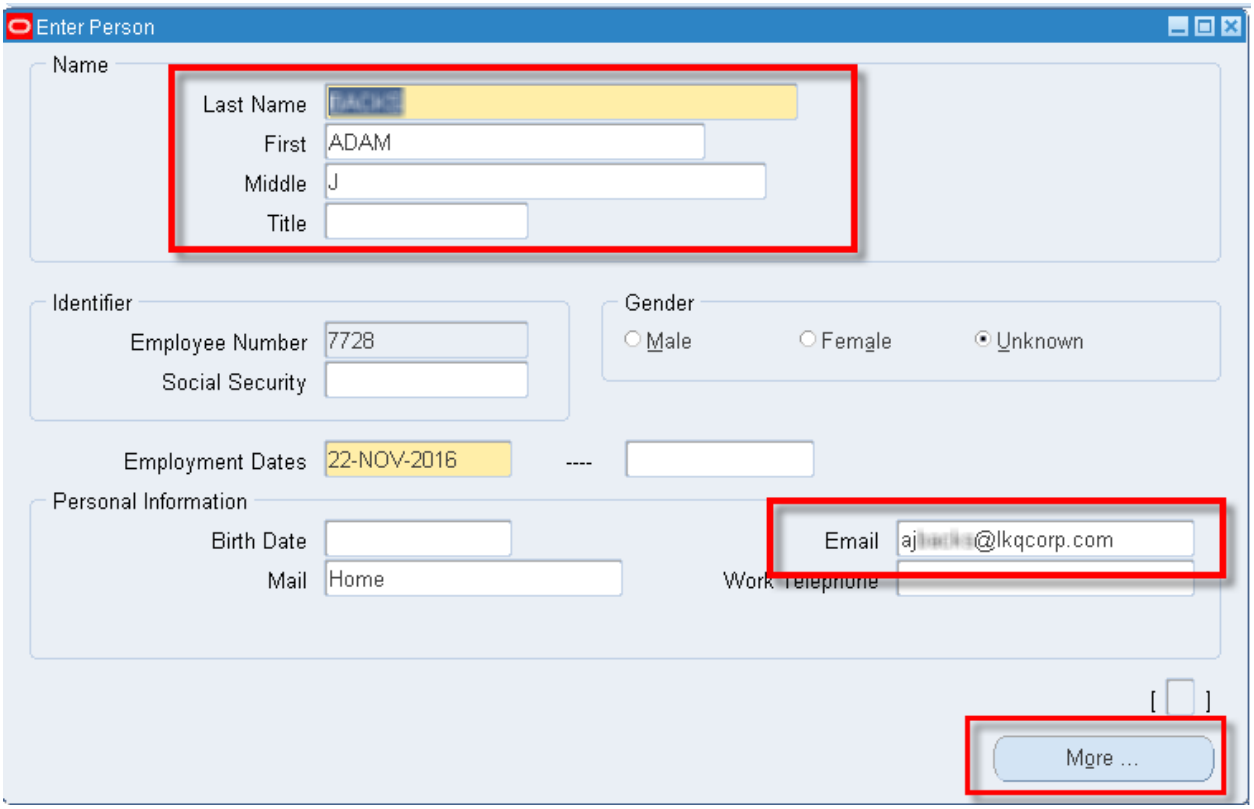
 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Entering an HR Person

Using Adam as an example, we'll enter Adam as an employee. Adam reports to Teresa and is an Accounting Analyst or HR Job: AA.

Go to General Ledger Super > Set Up > Employees > Enter

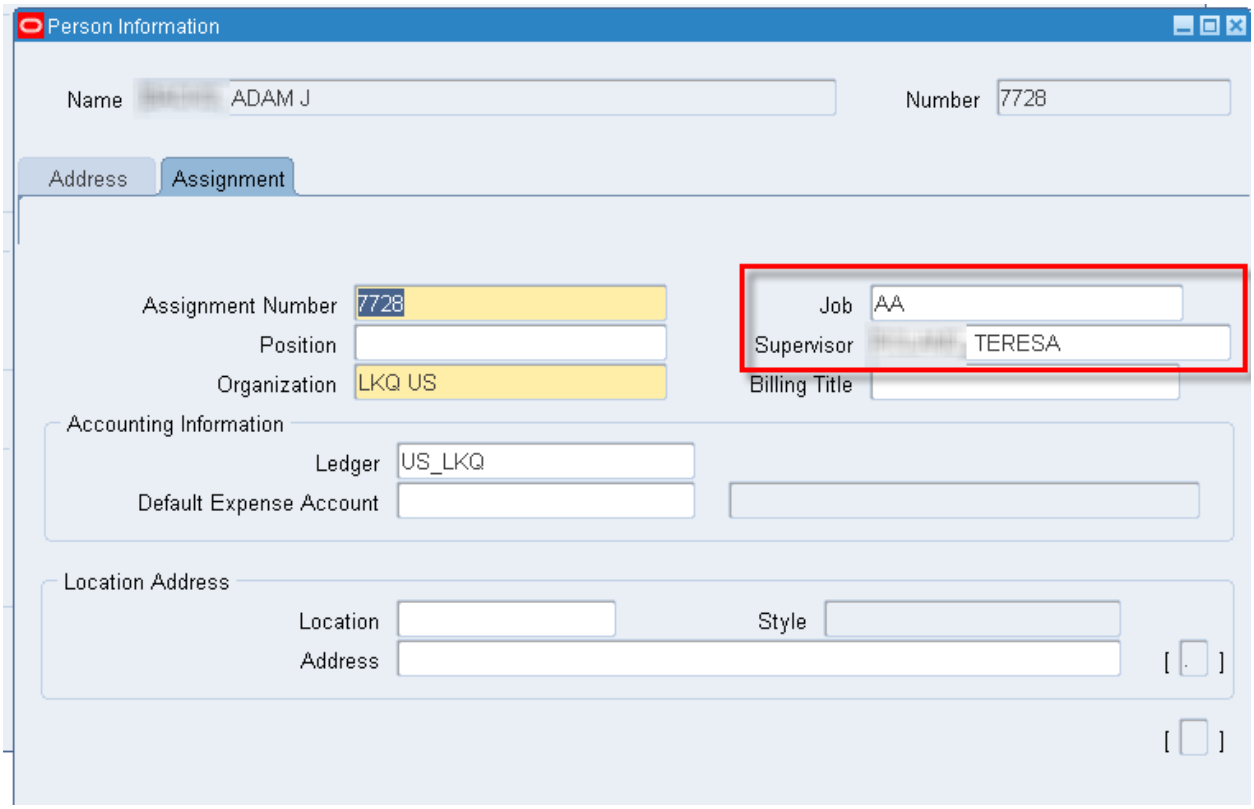
Enter Adam's information and click on the **More** button.



Select the **Assignment** tab

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Enter Adam's **Job**: AA and **Supervisor**: Teresa.



Save. Continue entering employee information until you've completed the hierarchy.

Link HR Employee to User Name

When entering Oracle you enter a user name. In order for the system to know which employee belongs to which user name, we must link the HR record to the FND User record.

Be aware that when linking an employee to a user name, the email address will pass from the employee record to the user record. The email address on the HR record will be used by Workflow to deliver Approval Notifications to the user. If the email is changed in the FND User record it will not be changed in the HR Record.

Go to System Administrator > Security > User > Define

Query the User Name of the employee

In the **Person** field select the correct employee from the list of values.

Save

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

Users

User Name: AJACCOUNTANT
Password:
Description:
Status: Active

Password Expiration
- Days: 60
- Accesses
- None

Person: ADAM J
Customer:
Supplier:
E-Mail: aj s@lkqcorp.com
Fax:

Effective Dates
From: 08-SEP-2016
To:

Direct Responsibilities | Indirect Responsibilities | Securing Attributes

Responsibility	Application	Description	Security Group	Effective Dates From	Effective Dates To
US - Nashville - General Ledg	General Ledger	TASK0240729	Standard	08-SEP-2016	
US - Nashville - Fixed Asset	Assets	TASK0240729	Standard	08-SEP-2016	
US - Nashville - Payables Inq	Payables	TASK0240729	Standard	08-SEP-2016	
US - Nashville - Web ADI Use	Web Applications Des	TASK0240729	Standard	08-SEP-2016	
US - Nashville - Report Mana	Report Manager	TASK0240729	Standard	08-SEP-2016	

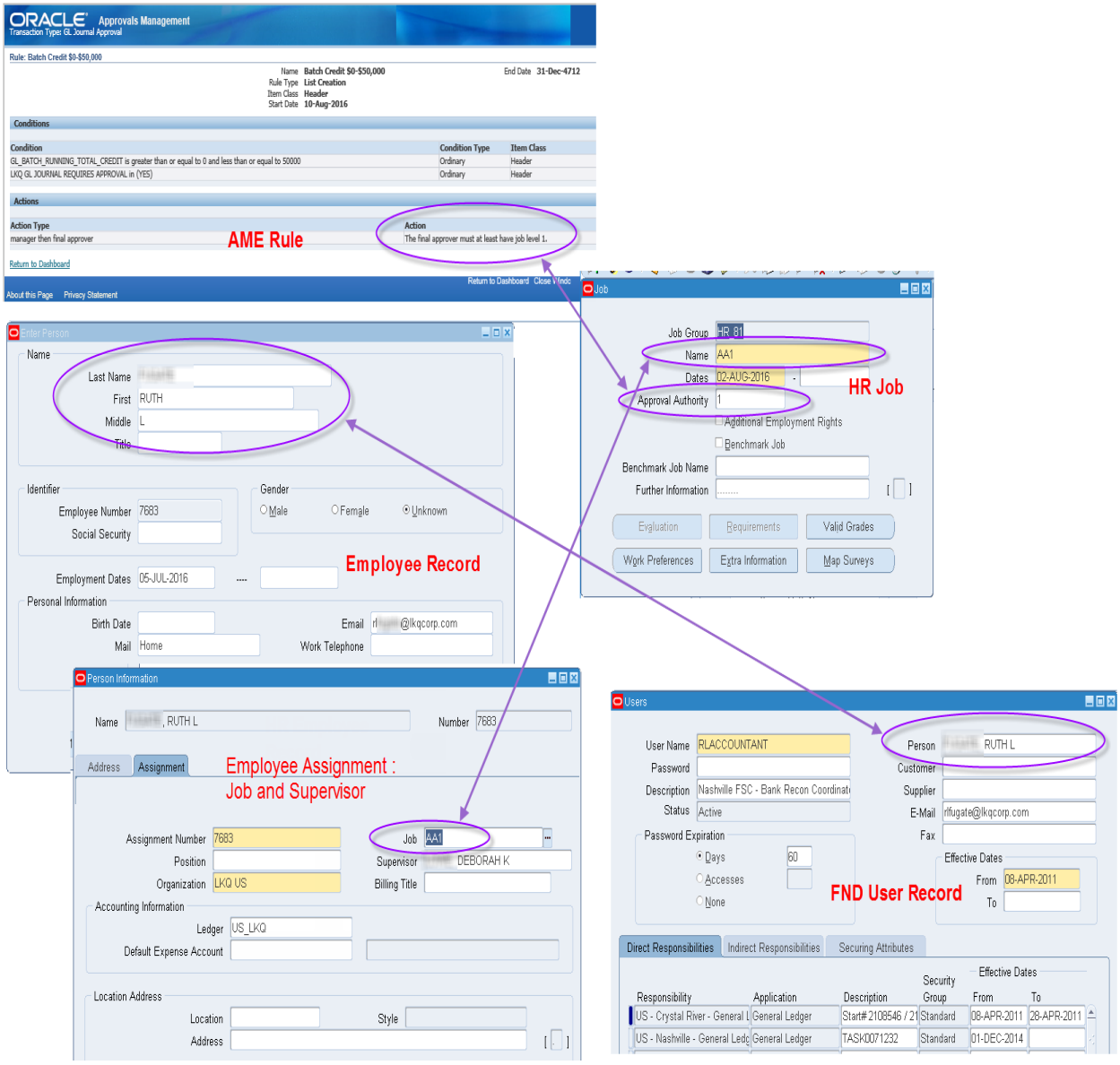
Tying It All Together

As you can see in the following diagram on the next page, AME Rules link to HR Jobs, HR Jobs link to HR Employees and HR Employees link to FND Users.

We now have the flexibility in AME to change an Approval Limit by changing our action type within the rule. If we add additional attributes such as approval limits by Journal Category or if we decide to have different limits by Source, Category, Ledger or Currency, we can change the rules without have to reassign or realign Approver Groups.

In the normal course of business as an employee's job and supervisor changes, we simply change the HR record for the affected employee rather than in both HR and AME Approver Groups.

Copyright ©2017 by Jan L. Cooper and Roxann Welch

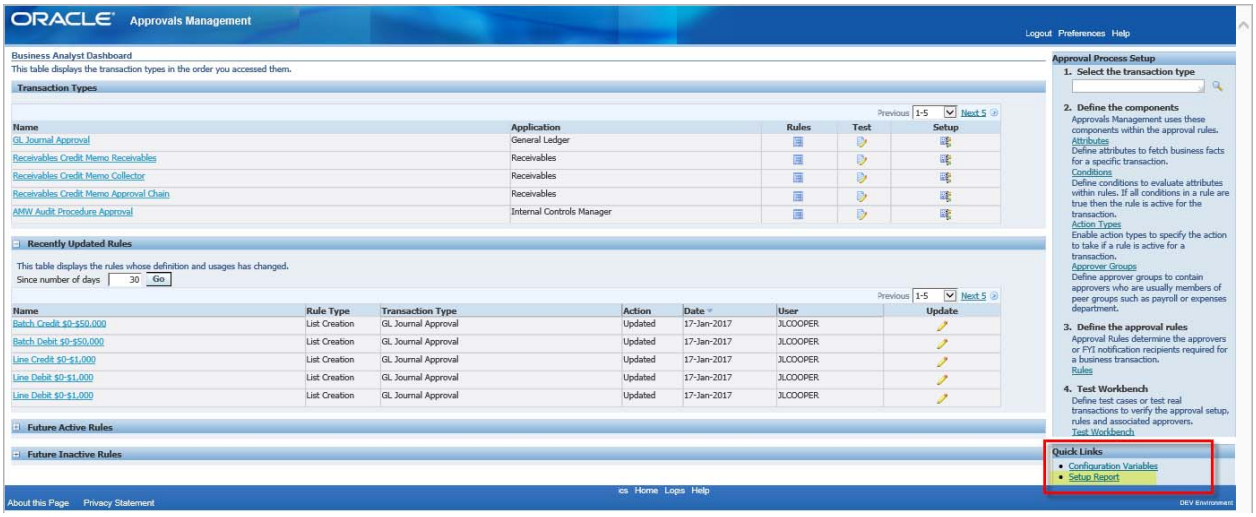


Copyright ©2017 by Jan L. Cooper and Roxann Welch

Reporting for Audit Purposes

Oracle provides a standard printable report of the AME Set Ups. This can be found by going to the Approvals Management Business Analyst > Business Analyst Dashboard.

In the bottom right corner is a link for the Set Up report. Run the report for Transaction Type: GL Journal Approval and a full AME Set Up report will be created showing all Oracle defaults as well as your custom attributes, conditions, action types, approver groups and rules.



Setup Report

Transaction Type **GL Journal Approval** Go

Details

Transaction Type Key	Application Name	Internal Id
GLJOURNAL	General Ledger	-461

Mandatory Attributes

Attribute	Usage Type	Value/Query
ALLOW_DELETING_RULE_GENERATED_APPROVERS	Static	False
ALLOW_REQUESTOR_APPROVAL	Static	True
AT_LEAST_ONE_RULE_MUST_APPLY	Static	False
EFFECTIVE_RULE_DATE	Static	
EVALUATE_PRIORITIES_PER_ITEM	Static	False
REJECTION_RESPONSE	Static	Stop all processing
REPEAT_SUBSTITUTIONS	Static	False
USE_RESTRICTIVE_ITEM_EVALUATION	Static	False
USE_WORKFLOW	Static	False
WORKFLOW_ITEM_KEY	Static	
WORKFLOW_ITEM_TYPE	Static	

Attributes

Attribute	Description	Item Class	Type	Value/Query
ALLOW_EMPTY_APPROVAL_GROUPS	whether to allow approval groups to have no members	Header	Boolean	true
TOP_SUPERVISOR_PERSON_ID	Person ID of the top person in the HR supervisory hierarchy	Header	Number	
TRANSACTION_REQUESTOR_PERSON_ID	Person ID of person initiating transaction, if any	Header	Number	select fu.employee_id from gl_je_batches GJB, fnd_user fu where je_batch_id = :transactionId and fu.user_id = GJB.created_by
SUPERVISORY_NON_DEFAULT_STARTING_POINT_PERSON_ID	Person ID of non-default supervisor approver for the supervisory-level approval type	Header	Number	
GL_BATCH_PERIOD	GL Batch Period	Header	String	SELECT GJB.DEFAULT_PERIOD_NAME FROM gl_je_batches GJB WHERE GJB.je_batch_id = :transactionId
GL_JOURNAL_CATEGORY	Journal Category	Line Item	String	SELECT GJC.user_je_category_name FROM gl_je_headers

Copyright ©2017 by Jan L. Cooper and Roxann Welch

Additionally, you'll need a report that shows your employees, email addresses, supervisors, jobs and approval authorities as well as creation date and last updated dates. The following query can be created into a report to accommodate your audit needs.

USER_NAME	LAST_NAME	FIRST_NAME	MIDDLE_NAMES	EMAIL_ADDRESS	NAME	APPROVAL_AUTHORITY	SUPERVISOR_NAME	LAST_UPDATE_DATE	CREATION_DATE
EA		ESPERANZA	(null)	ea @1kqcorp.com	CO	9	MARTIN	23-JAN-17	31-DEC-08
AM		ABBY	(null)	am d@1kqcorp.com	AA	0	JR, THOMAS E	30-JAN-17	09-JUN-16
ME		MARGARET	E	me n@1kqcorp.com	AA	0	JASON L	08-DEC-16	08-DEC-16
TM		THERESE	M	tm sh@LKQCORP.com	AC	8	), RANDALL K	23-JAN-17	22-APR-15
AJ		ADAM	J	aj @1kqcorp.com	AA	0	TERESA	08-DEC-16	08-DEC-16
JA		JO ANN	(null)	ja a@1kqcorp.com	SR1	4	R, WANDA	17-SEP-14	31-DEC-08
TB		THOMAS	J	tb @key-stone.com	AC	8	N, JACK	23-JAN-17	27-MAY-14
GX		GLADYS	(null)	gx @1kqcorp.com	AA2	2	ANNA C	29-JAN-17	22-JUL-16
TL		TINA	L	tl t@1kqcorp.com	AA	0	JAN M	30-JAN-17	30-JAN-17
NX		NATHANIEL	P	nx on@1kqcorp.com	TA1	1	ANNA C	23-JAN-17	23-DEC-15
BB		BRYAN	B	bb s@1kqcorp.com	AA1	1	, SARAH J	23-JAN-17	24-OCT-14
AM		ANGELA	R	an n@1kqcorp.com	AA1	1	LISA C	12-DEC-16	12-DEC-16
ED		EDWARD	(null)	ed @1kqcorp.com	SR1	4	I, KATHERINE G	23-JAN-17	04-APR-11
MA		MARILEE	(null)	ma n@1kqcorp.com	AA1	1	RENDIE N	08-DEC-16	08-DEC-16
ER		ERIK	R	er r@1kqcorp.com	AA2	2	BREANN	08-DEC-16	08-DEC-16
SX		STACY	L	sx lkqcorp.com	SR2	5	LISA C	23-JAN-17	12-APR-16
LX		LEELA	(null)	lx agai@1kqcorp.com	AA2	2	JONATHAN R	08-DEC-16	08-DEC-16
MS		MICHAEL	S	ms @1kqcorp.com	CFO	11	DOMINICK	27-MAR-14	31-DEC-08
MR		MARIA	R	mr on@1kqcorp.com	AA1	1	RENDIE N	08-DEC-16	08-DEC-16
MJ		MARTIN	(null)	mj rd@1kqcorp.com	CO	9	), RANDALL K	23-JAN-17	06-SEP-12
DF		DEBORAH	F	df kqcorp.com	AA3	3	ANNA C	23-JAN-17	10-DEC-15

```
SELECT DISTINCT
  us.user_name,
  peo.last_name,
  peo.first_name,
  peo.MIDDLE_NAMES,
  peo.email_address,
  jo.name,
  jo.approval_authority,
  peo1.full_name "SUPERVISOR_NAME",
  peo.last_update_date,
  peo.creation_date
FROM
  hr.per_all_people_f peo,
  hr.per_all_people_f peo1,
  hr.per_all_assignments_f asg,
  hr.per_jobs jo,
  applsys.fnd_user us,
  hr.PER_PERIODS_OF_SERVICE ps
WHERE
peo.person_id          = asg.person_id (+)
AND peo.person_id        = us.employee_id (+)
AND asg.job_id          = jo.job_id
AND peo.business_group_id = 81
AND asg.supervisor_id     = peo1.person_id (+)
AND peo.person_id = ps.person_id
and ps.actual_termination_date is null
AND peo.last_update_date  =
  (SELECT MAX(last_update_date) FROM hr.per_all_people_f peo2 WHERE peo.person_id = peo2.person_id  )
ORDER BY    peo.last_name,    peo.first_name,    jo.approval_authority
```

 Copyright ©2017 by Jan L. Cooper and Roxann Welch

About the Authors

Jan L. Cooper, CPA, MBA

Jan L. Cooper is a Senior Functional Oracle Applications Consultant and President of Niveus Consulting LLC. Ms. Cooper has over 35 years of solid accounting experience and over 20 years of Oracle full life cycle hands-on implementation experience, including full life cycle implementations of Oracle Release 12.1, Cloud R12, R12 upgrade and R12 post implementation/upgrade support. She has strong multi-org and multi-currency experience and has completed several global implementations involving the Global Accounting Engine/Multiply Ledgers/Operating Units and NLS functionality. She is 30% technical with a solid understanding of the underlying application tables and data process flows.

Ms. Cooper is proficient in the full suite of Oracle EBS financial modules including General Ledger, Payables, Receivables, Approvals Management, Payments, Purchasing, Assets, e-Business Tax, Cash Management, Internet Expenses, iReceivables, Inventory, and Order Management.

Jan Cooper has authored articles for various publications including "Multi-Org Made Easy", OAUG INSIGHT, and "Financial Software Implementation Needn't be a Nightmare for Your Clients", Insight, The Magazine of the Illinois CPA Society. Ms. Cooper has also written the chapters on Multi-Org and Workflow for the Macmillan Computer Publishing "QUE" series book Special Edition: Using Oracle Applications.

Ms. Cooper has given over 20 presentations throughout the nation on various Oracle applications topics including multi-org, workflow, AME (Approvals Management), FSG's (Financial Statement Generator) and effective implementation strategies. Ms. Cooper was an active member in the OAUG Communications Committee for 8 years, and is a member of the North Central Oracle Applications Users Group. She is a Licensed Certified Public Accountant and has a Masters Degree in Business Administration.

Roxann Welch

Roxann Welch has worked for LKQ Corporation for 16 years. During this time she's held a variety of roles within the accounting department. In 2008, LKQ implemented Oracle EBS R12 and from implementation until 2015, Roxann was an accounting superuser working with Oracle General Ledger, Global Intercompany, Web ADI, Report Manager and Cash Management.

In 2015 Ms. Welch moved to the Oracle Application Support Team and is now responsible for supporting Oracle General Ledger, Receivables, Fixed Assets, Cash Management, Property Management, and Report Manager. She has been instrumental in the implementation of Approvals Management for Journal Approval, is proficient in Oracle Workflow and is currently a key member of a team tasked with rolling out a centralized Oracle Receivables model companywide.

LKQ Corporation

LKQ Corporation (Nasdaq: LKQ), an S&P 500 company, is a leading provider of alternative and specialty parts to repair and accessorize automobiles and other vehicles. LKQ is a leading distributor and marketer of specialty aftermarket equipment and accessories in North America, the largest distributor of mechanical and collision alternative parts in the United Kingdom, and the largest distributor of mechanical parts in the Netherlands. LKQ has operations in North America, Europe, China and Taiwan offering its customers a broad range of replacement systems, components, equipment and parts to repair and accessorize automobiles, trucks, recreational and performance vehicles.

 Copyright ©2017 by Jan L. Cooper and Roxann Welch