



**ORACLE®**

**Oracle Policy Automation:  
Tips for polishing your 10.3 rulebase**

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# Introduction

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- **Intended audience** – This deck is aimed at people who work with OPA rulebases. It is assumed the reader has already had OPA training and is familiar with using OPA.
- **Purpose** – The purpose of this deck is to provide ideas and suggestions for polishing your rulebases, and to direct you to the relevant Oracle Policy Modeling Help articles.
- **Software version** – This version of this slide deck was prepared for Oracle Policy Modeling 10.3
- **Acronyms**
  - ▶ **OPA** – Oracle Policy Automation
  - ▶ **OPM** – Oracle Policy Modeling
  - ▶ **OWD** – Oracle Web Determinations
- **File paths** – Instructions in this deck assume OPM is installed to the default location (C:\Program Files\Oracle), and that your rule project is set up in the default location (C:\projects\\)

# Tips for polishing your rulebase

## ■ Substitution and Sentence Generation

- ▶ Name Substitution
- ▶ Gender Pronoun Substitution
- ▶ Second Person Sentence Generation
- ▶ Substituting Names in Headings and Labels on Screens

## ■ Screen Configuration

- ▶ Screen Labels – Question Screens and Summary Screen
- ▶ Hiding/displaying Summary Screen Elements

## ■ User Input

- ▶ Default Values for Attributes on OWD Screens
- ▶ Validating User Input on OWD Screens (Event rules)
- ▶ Validating User Input on OWD Screens (Properties file)

## ■ Improving the Decision Report

- ▶ Automatic Generation of Structural Elements
- ▶ Grouping Connectors and Intermediate Attributes
- ▶ Trimming Decision Reports

## ■ Enhancing Web Determinations

- ▶ Data Review Screen\*
- ▶ Progress Stages\*\*
- ▶ Hiding the Status Bar\*\*
- ▶ Changing the OWD Banner (image)\*
- ▶ Changing the OWD Banner (text)\*
- ▶ Configuring the OWD Labels\*
- ▶ Commentary/Help Text\*
- ▶ Document Generation using BI Publisher Desktop\*\* (*new in 10.3*)

## ■ Language Support

- ▶ Adding a Verb to the Default Verb List
- ▶ Adding a Translation Layer\*\* (*new in 10.2*)
- ▶ Language of Standard OWD Labels\*\*
- ▶ Configuring Locale Selection Screen (heading)\*\*
- ▶ Configuring Locale Selection Screen (list)\*\*
- ▶ Writing Rules in other Languages other than English\*

**Note:** Double asterisk\*\* indicates new features in OPM 10.x Single asterisk\* indicates features which have changed since 9.x

## messages.<locale>.properties

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- Some tips in this deck refer to the *messages.<locale>.properties* files. This slide describes where to find these files in the default project structure.
- **What is it?** *messages.<locale>.properties* are useful configuration files which allow the rule author to easily define some elements of OWD such as default OWD labels and buttons.
- The specific *messages.<locale>.properties* file for your rule project is dependent on the Project Language, e.g.
  - ▶ If Project Language is “English”, the applicable configuration file is ***messages.en.properties***
  - ▶ Some languages have additional region specific versions, e.g. ***messages.en-GB.properties*** for British English
  - ▶ Default location: *C:\projects\<project name>\Release\web-determinations\WEB-INF\classes\configuration\****messages.<locale>.properties***

## appearance.properties

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- Some tips in this deck refer to the *appearance.properties* files. This slide describes where to find this file in the default project structure.
- **What is it?** *appearance.properties* is a useful configuration file which allows the rule author to define elements of the OWD interface such as whether to hide/display the save/close/restart buttons, the progress stages, etc. It also specifies some elements of the look and feel, such as the body background colour, body text colour, etc.
- The default location of the *appearance.properties* file is:
  - ▶ *C:\projects\\Release\web-determinations\WEB-INF\classes\configuration\appearance.properties*

# Substitution and Sentence Generation



# Name Substitution

- Name substitution personalizes the interview for a more user-friendly experience
- Collect person's name at start of interview, then substitute name in later questions, e.g.
  - ▶ “Does the person have medical insurance?” becomes “Does Homer have medical insurance?”
- Particularly important when using entities, e.g.
  - ▶ Asking “Is the child a full-time student?” is not helpful if there are multiple children in the family – to which child is the question is referring?
  - ▶ More useful to display “Is Bart a full-time student?”, “Is Lisa a full-time student?”, etc.
- Substituted name automatically appears in attribute text on summary screen, question screen, decision report
- Use string concatenation if first and last name collected separately, but need to be combined for the purpose of name substitution

## OPM Help articles

- Text Substitution Principles
- Change the text of an interview question or sentence:
  - ▶ Substitute the actual value of a variable for its text
  - ▶ Set up substitution
- Combine multiple text strings into a single text variable

# Gender Pronoun Substitution

- May be used in combination (or in isolation) with name substitution to personalize the interview for a more user-friendly experience, and to provide more natural language text
- Collect gender for gender pronoun substitution

In combination with name substitution, “Has the applicant submitted the applicant’s tax return?” becomes “Has Homer submitted his tax return?”

The original rule generically refers to “the applicant”

The screenshot shows a web interface for 'Web Determinations'. It includes a navigation bar with 'Summary | Data' and 'Save | Save As | Load' buttons. Below this is a breadcrumb trail: 'Personal Details | Citizenship Status | Tax Return | Car'. The main section is titled 'Tax Return' and contains the question 'Has Homer submitted his tax return?' with a red asterisk next to it. There are two radio buttons: 'Yes' (which is selected) and 'No'. A 'Submit' button is located at the bottom right of the form.

## OPM Help articles

- Change the text of an interview question or sentence:
  - ▶ Substitute a gender pronoun for a text variable
  - ▶ Collect the gender of a person
- See also the articles for *Name Substitution* on the previous slide

the applicant has satisfied the documentation criteria if  
the applicant has submitted the applicant's tax return

## Second Person Sentence Generation

- Similar concept as name substitution, but sentences/questions generated in second person rather than third person

ORACLE Web Determinations

Summary | Data Review | Save | Save As | Load

Rulebase: training-Monday.LD

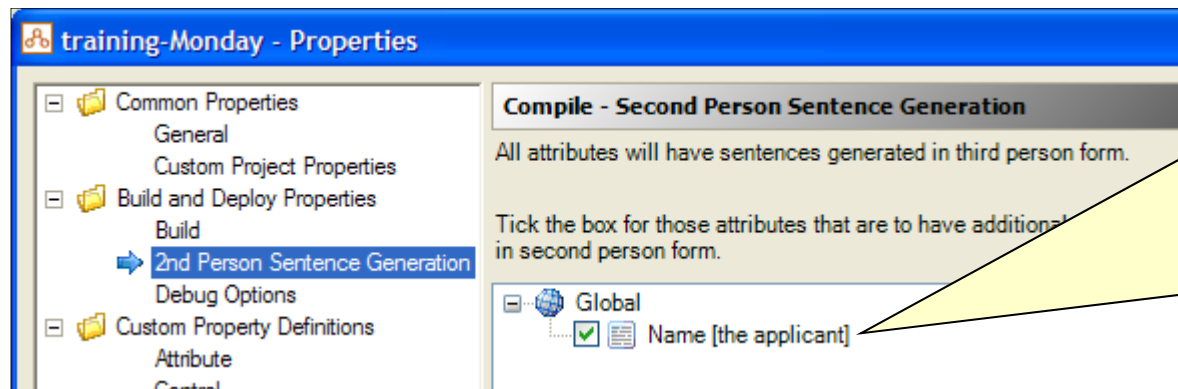
Health Insurance | Personal Details | Citizenship Status | Tax Return

### Health Insurance

Do you have health insurance? \*  Yes  No

Submit

**Example:** Instead of “Does the applicant have health insurance?” it displays as “Do you have health insurance?”



To activate, **first set up regular name substitution**, then select the variable in the Project Properties:

OPM File menu | Project Properties | Build and Deploy Properties | **2nd Person Sentence Generation**

# Substituting Names in Headings and Labels on Screens

- Variable values such as the person's name can be substituted into screen headings and labels
- Requires name substitution to be set up first
- Not limited to substituting the person's name, can substitute other values too, e.g. could substitute the person's name and age so that the screen heading appears as "School Details – Bart, aged 10 years"

## OPM Help article

- Change the text of an interview question or sentence:
  - ▶ Substitute an attribute value into the text on screens

The screenshot shows the Oracle Web Determinations interface. At the top, it says "ORACLE Web Determinations". Below that are tabs for "Summary" and "Data Review". There are also "Save" and "Save As" buttons. A breadcrumb trail shows "Health Insurance" > "Personal Details" > "Citizenship Status" > "Tax Return" > "Car". The main heading is "Homer's Car". Below the heading is the question "Does Homer own a car?" with a red asterisk. There are two radio buttons: "Yes" (selected) and "No". A "Submit" button is at the bottom right.

**Example screen heading:**  
"Homer's car" instead of "Car"

**Note:** Substitution does not apply to Progress Stages. If using substitution in screen headings which appear in Progress Stages, put the screen in a subfolder to avoid headings such as "%app\_Name%'s Car" appearing in Progress Stages.

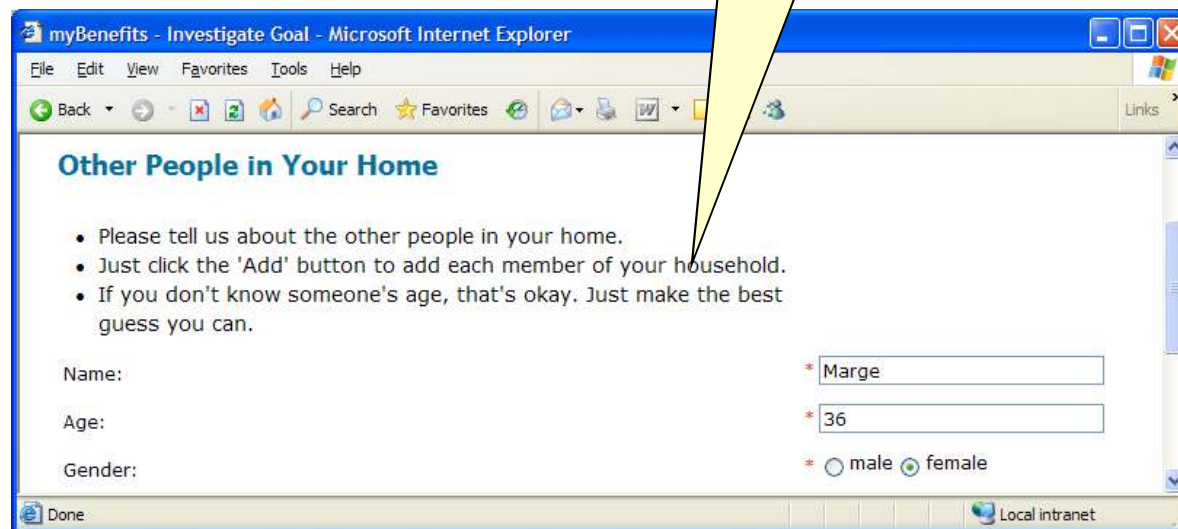
# Screen Configuration



# Screen Labels – Question Screens and Summary Screen

- Labels can be added to provide context
- Labels can be used as additional headings and subheadings on the screen
- Labels can include raw text, as well as HTML links

Example labels



The screenshot shows a Microsoft Internet Explorer browser window displaying a web page titled "myBenefits - Investigate Goal". The page content includes a heading "Other People in Your Home" followed by three bullet points: "Please tell us about the other people in your home.", "Just click the 'Add' button to add each member of your household.", and "If you don't know someone's age, that's okay. Just make the best guess you can." Below the text are three form fields: "Name:" with the value "Marge", "Age:" with the value "36", and "Gender:" with radio buttons for "male" and "female", where "female" is selected. A yellow callout box labeled "Example labels" points to the form fields.

## OPM Help articles

- Create, modify or delete a question screen:
  - ▶ Add labels to question screens
- Change how interview data is summarized and reviewed:
  - ▶ Add a label to the summary screen

# Hiding/Displaying Summary Screen Elements

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- It is common to hide/display screen elements based on logic
- Examples:
  - ▶ Display additional labels at the end of the Web Determinations interview (but have the labels hidden initially)
  - ▶ Display different additional labels depending on the value of particular determinations
  - ▶ Display a goal to investigate at the start of the assessment, but then hide it at the end
- Achieved through the use of visibility attributes

## OPM Help article

- Hide, display and disable an interview screen element:
  - ▶ Control the visibility of summary screen elements

# User Input



# Default Values for Attributes on OWD Screens

- Can set default values for any attribute on an OWD question screen
  - ▶ Defaults can be a specific value, or can be dynamically determined based on data collected on previous OWD screens
- Reduces amount of typing/clicking required to complete an interview

## OPM Help articles

- Customize user input options
  - ▶ Specify a default value for an input
  - ▶ Specify a dynamic default for an input

myBenefits - Investigate Goal - Microsoft Internet Explorer

File Edit View Favorites Tools Help Address Links

### Income and Resources

#### Income (monthly)

Income from wages and salary: \* \$0.00

Income from tips: \* \$0.00

Income from self-employment: \* \$0.00

Net income from boarders/lodgers: \* \$0.00

Unearned income: \* \$0.00

Child support: \* \$0.00

#### Resources

What is the value of the household's resources? \* \$0.00

Done Local intranet

All currency values defaulted to \$0 on this OWD screen. User only needs to edit fields for which they have income. Reduces data entry.

## Validating User Input on OWD Screens (Event rules)

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- **Error event** and **Warning event** rules should be used if there is conditional logic associated with the validation, e.g.
  - ▶ Display the message “Please check the dates of birth as you have indicated that your date of birth is after your child’s date of birth” if the applicant’s date of birth > the child’s date of birth
- **Error event:** Error message is displayed and user is prevented from continuing the investigation until the situation which triggered the error is no longer present
- **Warning event:** Warning event is displayed, but user is able to click past and continue the investigation

### OPM Help articles

- Validate user input using errors and warnings
  - ▶ Write an error event rule
  - ▶ Write a warning event rule

## Validating User Input on OWD Screens (Properties file)

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- Validation with regular expressions and min/max can be done in the Properties file
  - ▶ Error message text may be configured in the Properties file on a per attribute basis
- Use **min/max values** if there is no conditional logic associated with triggering the error, e.g.
  - ▶ 'the person's age' field could have a minimum allowable value of 0 and a maximum of 120
- Use **regular expressions** to validate the format of an input such as an email address, an SSN, a TFN, a NINO or a PHN, e.g.
  - ▶ `^[0-9]{3}-?[0-9]{2}-?[0-9]{4}$` is a basic SSN validation – allows for NNN-NN-NNNN and NNNNNNNNNN

### OPM Help articles

- Validate user input using errors and warnings
  - ▶ Specify minimum and maximum values
  - ▶ User regular expressions

### Other info

- <http://en.wikipedia.org/wiki/Regex>

# Improving the Decision Report



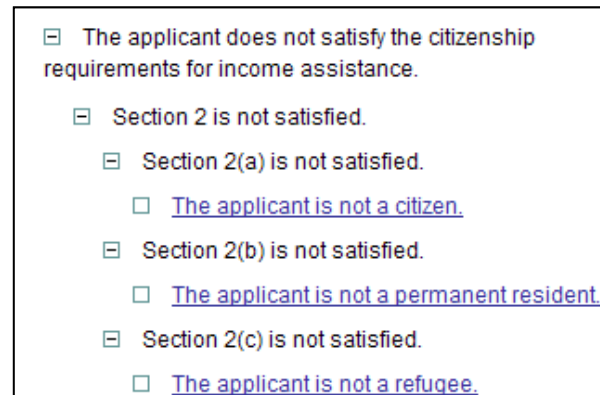
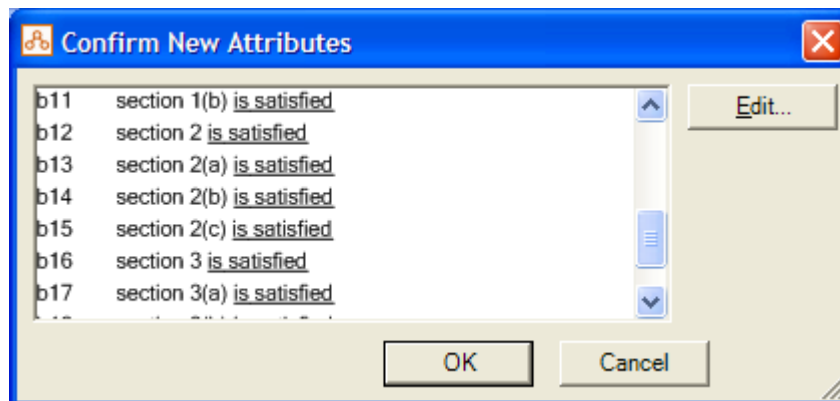
# Automatic Generation of Structural Elements

- Structural elements in legislation (section, paragraph, article, etc.) and policy (chapter, guideline, etc.) can be captured in rules
- OPA can automatically generate the structural attribute
- Default form is “section x is satisfied”, but this can be configured

2    **The applicant satisfies the citizenship requirements for income assistance if**  
 (a)    the applicant is a citizen or  
 (b)    the applicant is a permanent resident or  
 (c)    the applicant is a refugee

## OPM Help articles

- Model the structure of legislation:
  - ▶ Use structural elements to model legislative structure
  - ▶ Use keywords to customize automatic structural attributes



# Grouping Connectors and Intermediate Attributes

- Intermediate attributes can be added instead of using grouping operators
- Even if not strictly required by the logic, intermediate attributes can make the Decision Report more meaningful
  - ▶ These two examples have identical core logic, but example 2 has a more meaningful decision report due to the inclusion of intermediate attributes

## Example 1

**The person is not eligible for the benefit.**

This conclusion is justified on the following grounds:

- [The person's income is \\$35,000.00.](#)

**the person is eligible for the benefit if**  
 the person's income < 3000

## OPM Help article

- Improve the wording of a rule

## Example 2

**The person is not eligible for the benefit.**

This conclusion is justified on the following grounds:

- ☐ The person does not satisfy the income test.
  - [The person's income is \\$35,000.00.](#)
  - ☑ The threshold for the income test is \$30,000.00.

**the person is eligible for the benefit if**  
 the person satisfies the income test  
 the person's income < the threshold for the income test

**the threshold for the income test = 30000**

## Trimming Decision Reports

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- Decision Reports automatically generated based on logic, language and structure of the rules can be extremely verbose
- Can 'trim' Decision Reports using **Silent** and **Invisible** parameters
  - ▶ Silent: Hide all logic nested below the attribute
  - ▶ Invisible: Hide the attribute only
- **Silent** and **Invisible** parameters can be:
  - ▶ Attached at the rule level, so only a particular attribute/branch of logic is affected
  - ▶ Attached to the attribute globally so they apply whenever that attribute appears in a Decision Report

### OPM Help article

- Hide an attribute from a decision report

# Enhancing Web Determinations



## Data Review Screen

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- Data Review Screen displays the questions asked during the interview and the answers provided
- Data Review Screen in OWD is generated from the Screen Order definition in the screens file
  - ▶ Screens in OWD Data Review appear in order defined in 'Screen Order'
- If no 'Screen Order' is defined in the screens file, the screens will appear in a random order in the Default Data Review Screen in OWD

### OPM Help article

- Change how interview data is summarized and reviewed:
  - ▶ Create a data review screen

## Progress Stages

- Displays 'stage' at top of interview screen. Current stage appears in bold.

The screenshot shows the 'ORACLE Web Determinations' application. At the top, there are tabs for 'Summary' and 'Data Review', with 'Data Review' being the active tab. Below the tabs are buttons for 'Save As', 'Load', 'Restart', and 'Close'. The user information 'Rulebase: test2 Locale: en-US User' is displayed. The main content area has three tabs: 'Personal Details', 'Financial Details', and 'Expenses'. The 'Financial Details' tab is selected and its text is bolded. Below the tabs, there are two questions: 'What is the person's monthly income?' with a text input field containing '\$2000', and 'What is the person's bank balance?' with a text input field containing '\$1000'. A 'Submit' button is located at the bottom right of the form.

### OPM Help article

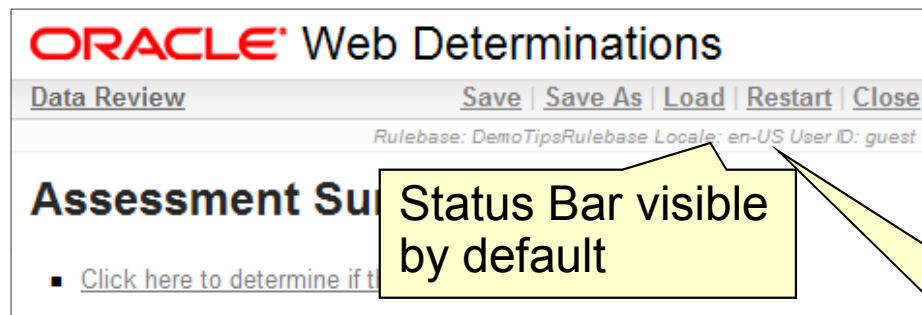
- Test an interview or screen flow
  - ▶ Investigate a goal in Web Determination
    - Progress stages

- Not a navigation tool. Only works if Screen Order has been defined in screens file
- Can turn off in *appearance.properties* file:
  - ▶ `show-progress-stages = false`
- If question screens grouped into sub-folders in the screens file, the subfolders will be used as the progress stages

Progress Stages are visible by default if Screen Order defined.

## Hiding the Status Bar

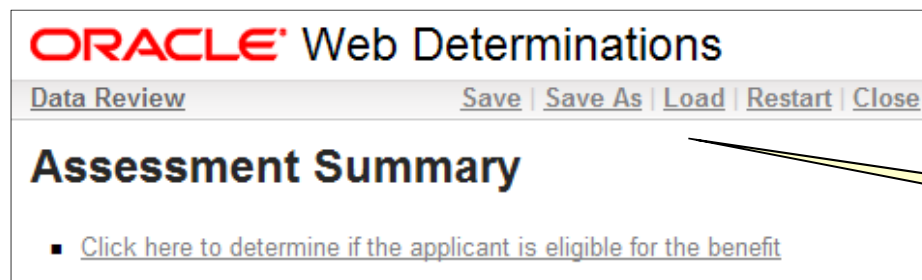
- Status bar appears in top right area of OWD, showing: rulebase name, locale, user id, and case ID (for saved cases) for current session



### OPM Help article

- Change the layout or appearance of interview screens
  - ▶ Show/hide features used for debugging
    - Status bar

- Can hide status bar with setting in *appearance.properties* file:
  - ▶ `show-status-bar = false`



Each element of the Status Bar can be individually hidden/displayed. See # status bar options in *appearance.properties*

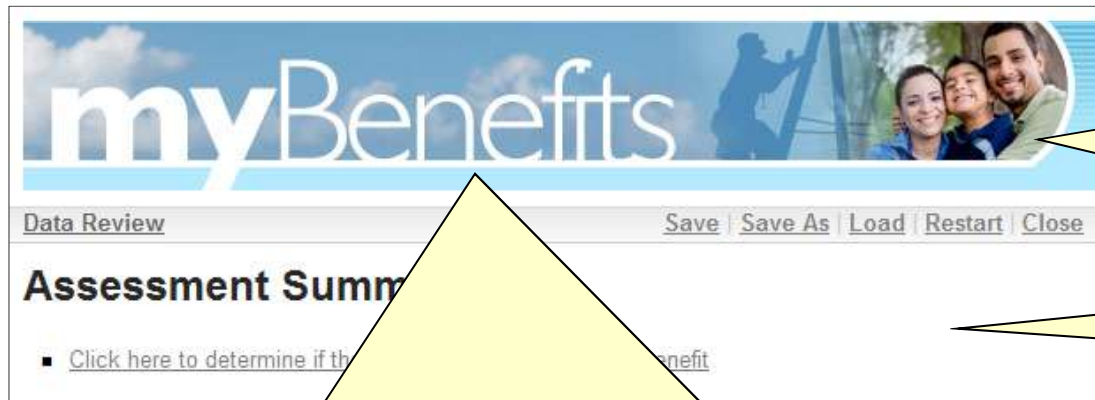
Status Bar hidden

# Changing the Oracle Web Determinations Banner (image)

- Replace the 'Oracle Web Determinations' banner with the customer's logo and name, program name, etc.
- Web Determinations banner is comprised of an Oracle graphic (oralogo\_small.gif) and the text 'Web Determinations'

## OPM Help article

- Customize Oracle Web Determinations
  - ▶ Change the Oracle Web Determinations banner



To **hide** banner image, edit *appearance.properties*:  
`show-header-image = false`

**Build and Run** to see changes in OWD banner

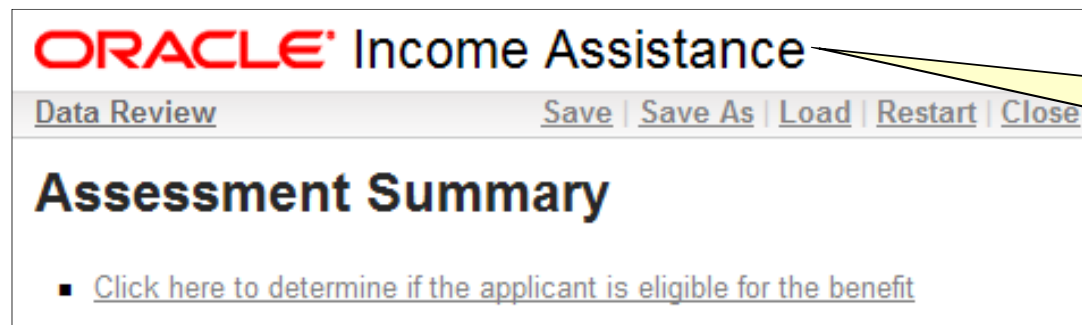
To **replace** 'Oracle' graphic, save new graphic as **oralogo\_small.gif** to default location: `...\<project name>\Release\web-determinations\WEB-INF\classes\images\`  
 Alternatively, edit 'header-image' filename in *appearance.properties* to other filename

## Changing the Oracle Web Determinations Banner (text)

- “Web Determinations” banner text is defined in “application-name” configuration line of *messages.<locale>.properties* file.
- To remove the heading, use this setting:
  - ▶ `show-application-name = false`
- To amend the heading, use this setting, e.g.
  - ▶ `application-name = Income Assistance`

### OPM Help article

- Customize Oracle Web Determinations
  - ▶ Change the Oracle Web Determinations banner



**Build and Run** to see changes in OWD banner

# Configuring the Oracle Web Determinations Labels

- Standard out-of-the-box OWD label text can be modified with the *messages.<locale>.properties* file, e.g.
  - ▶ Save As, Load, Restart, Close, Yes, No, Submit, Add Instance, [Why?]
  - ▶ See *messages.<locale>.properties* file for full list
- Generally will not need to edit these labels for demos, but configuration options are there if needed

## OPM Help article

- Customize Oracle Web Determinations
  - ▶ Configure the Oracle Web Determinations labels

The screenshot shows the Oracle Web Determinations interface. At the top, it says "ORACLE Web Determinations". Below that, there are navigation links: "Summary", "Data Review", "Keep this data", "I want to see my saved cases", "Reboot", and "Get outta here". A status bar indicates "Rulebase: test2 Locale: en-US User ID: guest". The main content area displays the label "Happy" and the question "Is the person happy?". There are two radio buttons: "Definitely yes" and "Absolutely not". At the bottom, there is a button that says "Click here if you dare".

**Build and Run**  
to see changes  
to out-of-the-box  
OWD labels

## Commentary/Help Text

- Commentary is context-sensitive help text
- Commentary can be per screen, per question, or per word within a question
- Configure style of commentary display in *appearance.properties* file:
  - ▶ `use-session-frameset=true` → commentary in a frame
  - ▶ `use-session-frameset=false` → commentary in pop-up

### OPM Help articles

- Create, Update or Delete Interview Help
- Localize Interview Help

- Create public names for all base attributes before generating commentary
- Help text can also be attached to labels

Click "Age:" and the commentary window opens up

**Why is this question being asked?**

Age is a relevant factor in the assessment of some benefits.

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**Your details**

- Please tell us a little bit about you. Feel free to use a nickname or your initials.

Name: \*

Gender: \*  male  female

Age: \*

U.S. citizen or qualified alien? \*  Yes  No

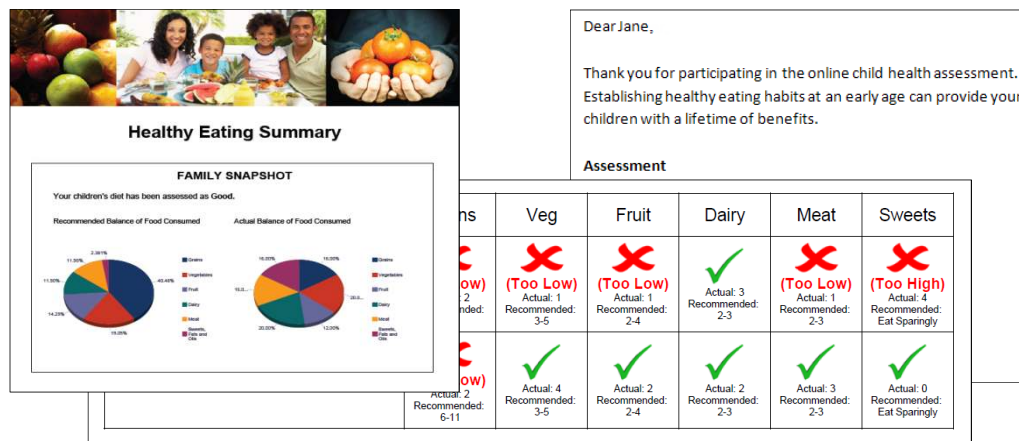
Blind or permanently disabled: \*  Yes  No

# Document Generation using BI Publisher Desktop

- Generate documents from OWD interviews, e.g. letters, claim forms, assessment notices
- Available formats: PDF, RTF, HTML, Excel
- Documents may include text, images, graphics, charts, etc.
- **Note:** Requires installation of BI Publisher Desktop. This is a separate Oracle product. It is not part of Oracle Policy Modeling.

## OPM Help articles

- Overview: The process of creating an interview document
- Create, update or delete an interview document
- Develop a template for an interview document
- BI Publisher code for Oracle Policy Modeling



# Language Support



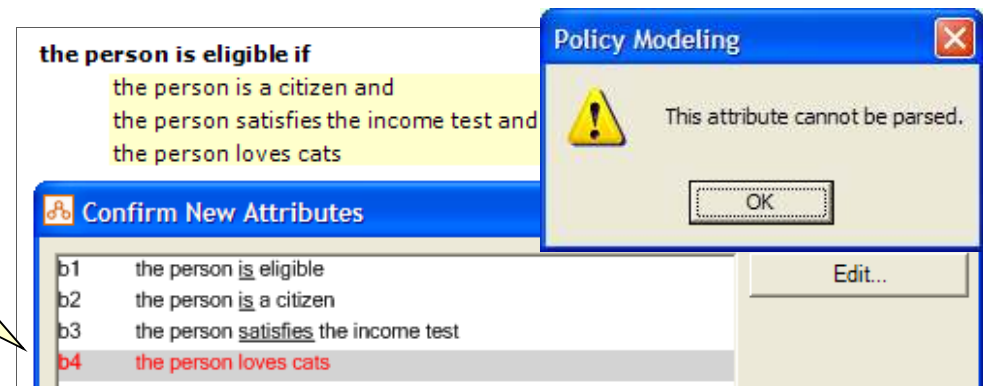
## Adding a Verb to the Default Verb List

- Default verb list for project is based on 'project language' selected when creating the project.
- Majority of verbs found in public sector source material are in the default verb list
- Occasionally you may need a new verb
- If there's a statement which won't parse properly, it's a sign the statement's operative verb may not be in the verb list

### OPM Help article

- Configure the list of recognized verbs

b1, b2 and b3 have the verb underlined. b4 appears in red and has no verb underlined because 'love' is not in the default verb list. If you click 'Edit' on it, you'll be told it cannot be parsed.



**Note:** The first rule doc where you used the previously unknown verb may not immediately pick up the new verb after you've added it to the verb list for the project. To force the rule document to pick up the new verb, do 'strip hidden' on the rule doc, and then re-compile.

## Adding a Translation Layer

- Create one or more translation layers, e.g. rulebase in English, OWD in choice of English, Spanish or French
- Even just a partial translation layer is sufficient to demo the concept. For basic demo-standard translations, can use <http://translate.google.com/>
- Should use a (human) translation expert for translation text for real implementation
- Supports right-to-left display languages, so OWD automatically reversed for Arabic
- Can provide translations for all text, e.g. attributes, headings, labels, list items, validation messages, etc.

### OPM Help article

- Create a new language translation layer for a rulebase

Business Name **Non-profit Organization** Registration Date Estimated Payroll Expense

**Non-profit Organization**

*You will be required to provide proof from the IRS for your section 501(3) status.*

Is the business a non-profit organization with section 501(3) status? \*  Yes  No

English rulebase...

Submit

Nombre del Negocio **Organización sin fines de lucro** Fecha de Registro Gastos de nómina estimada de

**Organización sin fines de lucro**

*Usted tendrá que proveer prueba del IRS para la sección 501(3) estado.*

¿Es el negocio de una organización sin fines de lucro con la sección 501(3)? \*  Sí  No

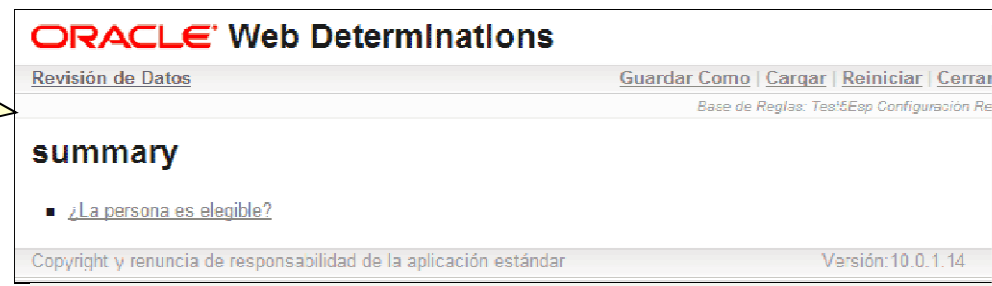
... with Spanish translation layer

Enviar

## Language of Standard OWD Labels

- Standard OWD labels (Close, Restart, Data Review, Copyright, etc.) will display in the Project Language of the rule project if no translation layer exists.

If the rulebase Project Language is Spanish, out-of-the-box OWD look something like this.

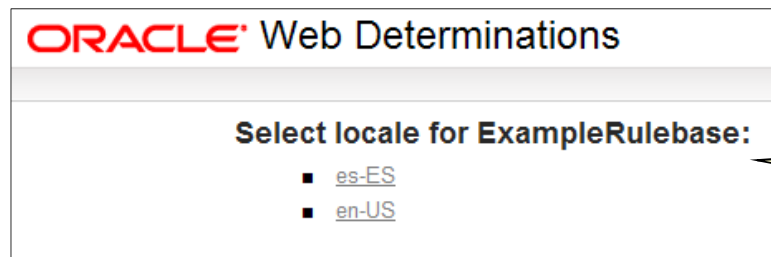


- If translation layer(s) present, OWD labels will display in the language chosen on the locale selection screen, e.g. Spanish labels if you've chosen to run your English-language rulebase with a Spanish translation layer, or English if you've chosen to run it in English.
- Translated OWD label text is defined in the *messages.<locale>.properties* file for the language, e.g. Spanish labels are defined in *messages.es.properties*

## Configuring the Locale Selection Screen (heading)

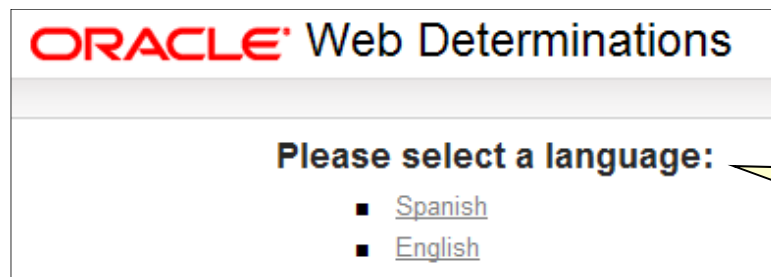
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- Locale selection screen displays when translation layer(s) exist



Default display refers to rulebase name and language code for existing translation layers

- Default display of the locale selection screen can be modified.



Modify the heading in the ***messages.<locale>.properties*** for the project's base language:  
LocaleSelectionTitleInfoMessage  
=Please select a language:

# Configuring the Locale Selection Screen (language list)

- To display the language name (e.g. English) rather than the language code (e.g. en-US) on the locale selection screen, edit the loop in *locale\_selection\_screen.vm*



- **Example:**

- ▶ **Original loop code**

```
#foreach($locale in $locales)
    <li><a name="{locale.value}" href="{locale.value}">{locale.key}</a></li>
#end
```

- ▶ **Modified loop code**

```
#foreach($locale in $locales)
    #if($locale.key.equals("en-US"))
        <li><a name="{locale.value}" href="{locale.value}">English</a></li>
    #elseif($locale.key.equals("es-ES"))
        <li><a name="{locale.value}" href="{locale.value}">Español</a></li>
    #else
        <li><a name="{locale.value}" href="{locale.value}">Another one</a></li>
    #end
#end
```

Locale selection screen template location:  
*..\Release\web-determinations\WEB-INF\classes\templates\locale\_selection\_screen.vm*

If using non-English characters, make sure the .vm file is saved with UTF-8 encoding, otherwise the characters may not display correctly, e.g. Español will display as Espa[]ol

# Writing Rules in Languages other than English

- Many languages out-of-the-box for rule authoring
  - ▶ Rapid Language Support tool can be used to develop non-syntactic parser for any other language
- Change language of rule authoring toolbar:
  - ▶ OPM: Tools | Options | Environment | General | Authoring UI Language



- Function reference in other languages, e.g.

Syntax	Description
<b>det är inte sant att</b> <attr>	Operator used to return true if attribute has a value which is false
<var> <b>är säker</b>	
<b>det är säkert antingen</b> [eller inte] <attr>	Operator used to return true if attribute has a value which is not uncertain

## OPM Help articles

- Write rules in other languages
- Select the user interface language for rule authoring
- Language specific considerations
- Localized function references

## Other info

- Rapid Language Support User Guide (*C:\Program Files\Oracle\Policy Modeling\help\opm\OPARLS User Guide.pdf*)

# **OPA** Documentation and Further Information



# OPA Help Guides

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- [Oracle Policy Modeling Help](#), including:
  - ▶ Rule authoring, configuring screens, defining interviews, debugging, testing and preparing for deployment.
  
- [Oracle Policy Automation Developer Help](#) for runtime components, covering:
  - ▶ Oracle Web Determinations – deploy web-based interactive interviews, and extend, customize and integrate as needed
  - ▶ Oracle Determinations Server – high performance SOAP-based web service for fully auditable determinations and calculations
  - ▶ Oracle Determinations Engine – Java and .NET API for low-level control over integration of decision-making into applications

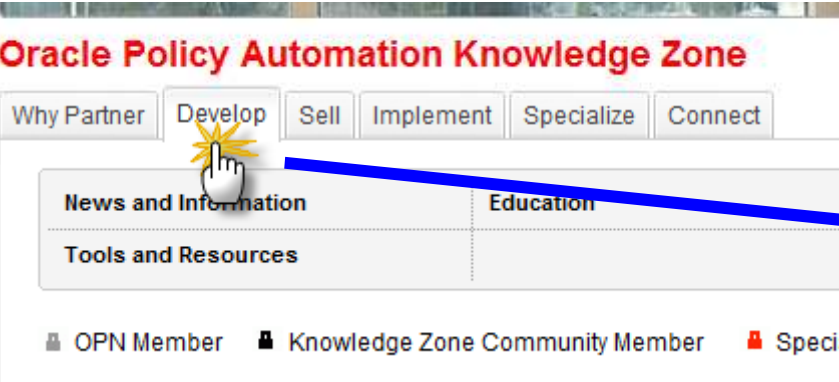
# Oracle Technology Network

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- **Oracle Policy Automation on the Oracle Technology Network:**  
<http://www.oracle.com/technetwork/apps-tech/policy-automation/overview/index.html>
  - ▶ Oracle Policy Automation product downloads
  - ▶ Oracle Policy Automation system requirements
  - ▶ Oracle Policy Automation installation guides
  - ▶ Oracle Policy Automation datasheets, tutorials and whitepapers
  
- **Ask questions about OPA on the OPA OTN forum:**  
<https://forums.oracle.com/forums/forum.jspa?forumID=828>

# Oracle Partner Network

- [OPA Knowledge Zone](#) on the **Oracle Partner Network**
- “Develop” tab → scroll down to “Education” section for GLPs (Guided Learning Paths) and OPA Specialist Assessments



**Oracle Policy Automation Knowledge Zone**

Why Partner | **Develop** | Sell | Implement | Specialize | Connect

News and Information | Education

Tools and Resources

OPN Member | Knowledge Zone Community Member | Specialist

- [Competency Center](#): Leverage this unparalleled enablement to implement Oracle solutions.
- OPA Guided Learning Paths:
  - [Sales GLP](#)
  - [PreSales GLP](#)
  - [Implementation GLP](#)
  - [Support GLP](#)
- OPA Assessments:
  - [OPA 10 PreSales Specialist](#)
  - [OPA 10 Sales Specialist](#)
  - [Implementation Specialist](#) Check the Exam [Study Guide](#)
  - [OPA Support Specialist](#)

Test your knowledge!

- Note that some content on the OPA OPN site is only accessible to registered Oracle partners and Oracle staff