

Oracle Fusion Cloud HCM and SCM

**Extending Redwood Applications
for HCM and SCM Using Visual
Builder Studio**

25A



Contents

Get Help i

1 Overview of Redwood Application Extensions 1

Overview of Redwood Application Extension	1
Express Mode in VB Studio	3
Comparison of Express Mode, HCM Experience Design Studio, and Page Composer	4
Examples of Configuration and Extension, and the Tools to Use	6
Set Up Visual Builder Studio	10

2 Working with Configure Fields and Regions 11

Field and Region Display Control	11
Hide or Show a Region	12
Hide or Show a Field	13
Make a Field Read-Only	14
Hide or Show a Developer Descriptive Flexfield Segment	16
Hide or Show an Extensible Flexfield Context	16

3 Working with Field Validations 19

Validate Field Values	19
Author Validation Messages	20

4 Implementing Defaulting and Validation Rules for HCM Redwood Pages 21


Guidelines for Implementing Defaulting and Validation Rules	21
Document Records	21
Employment	22
Individual Compensation	24
Person	30
Salary	31
Talent Management	35
Workforce Structures	41

5	Working with Page Properties	45
	Customization of Processes Using Page Properties	45
	Connections Profile Extension	46
	Control Display of Tabs in My Journeys	46
	Control Display of Additional Attributes in Personal Payment Method Details	48
	Control Display of Guided Journey Based on User Roles	48
6	Adding Your Own Content in Redwood Pages	49
	Add Your Own Content in Redwood Pages	49
	Guided Journeys Configuration Using Page Properties	49
	Nudges Configuration Using Page Properties	51
	Add Your Own Content in Review Employee Resources	52
7	Modifying User Interface Text	55
	How You Modify User Interface Text	55
8	FAQs	57
	Branding	57
	Express Mode and Business Rules	57
	Delivered Rules for HCM Redwood Pages	58
	VB Studio	58
	Page Composer and Transaction Design Studio	59
	Support	60
	Migration and Patching	60

Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

Get Help in the Applications

Some application pages have help icons  to give you access to contextual help. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. If the page has contextual help, help icons will appear.

Get Support

You can get support at [My Oracle Support](#). For accessible support, visit [Oracle Accessibility Learning and Support](#).

Get Training

Increase your knowledge of Oracle Cloud by taking courses at [Oracle University](#).

Join Our Community

Use [Cloud Customer Connect](#) to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, suggest [ideas](#) for product enhancements, and watch events.

Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the [Oracle Accessibility Program](#). Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to oracle_fusion_applications_help_ww_grp@oracle.com.

Thanks for helping us improve our user assistance!

1 Overview of Redwood Application Extensions

Overview of Redwood Application Extension

Redwood applications provide a comprehensive set of features designed to meet a wide range of business requirements. But you can still make changes to your application to best fit your specific business needs.

The primary objectives of this guide are to:

- Help you understand how effectively you can leverage Oracle Visual Builder Studio (VB Studio) functionalities within the Redwood application, thereby streamlining your experience.
- Guide you on how to identify the extensible elements of a page and the corresponding tools to use.

Refer to [VB Studio documentation](#) for detailed instructions on using specific VB Studio features.

Note: Express mode is the only mode supported by HCM, SCM, and Procurement.

Terminology

Here are some terms to familiarize yourself with before you start extending your pages:

Common

These terms are common across Oracle Fusion Cloud Human Capital Management (HCM) and Oracle Fusion Cloud Supply Chain & Manufacturing (SCM).

- **Advanced Mode:** An advanced interface in VB Studio where more technical users are presented with all features to tailor Oracle Cloud Applications. This isn't supported by HCM, SCM, and Procurement.
- **Autocomplete:** Generic term to designate the functionality to default and validate field values. It's product agnostic.
- **Built-in Rule:** An Oracle-delivered rule, including localization rules, available for a page.
- **Business Rules:** A feature of Express Mode in VB Studio used to personalize Redwood pages including defaulting and validating field values. Business Rules is page-based.
- **Customization and Extension:** Changes made by a functional administrator at design time that apply at the site level.
- **Dynamic Container:** A predefined area in a page used to display various types of content. A container can be extended to rearrange the existing content, and to add new content.
- **Express Mode:** A simple-to-use interface in VB Studio where functional administrators are presented with only the capabilities they need to tailor Oracle Fusion Cloud Applications pages.
- **Extension Rule:** A rule created within your extension. It corresponds to custom rules in Transaction Design Studio.
- **Initial Field Values and Field Values**
 - Initial Field Value is stored in the database. The initial field value doesn't change for a transaction.

- Note that the initial field values are page and region-specific. For example, in HCM in the Change and Correct Employment Details processes, the initial field values are available for the assignment attributes but not for salary attributes.
 - o Field value is the value cached in a page, which may already have been modified by a rule or user.
 - o Initial field values and field values can be used in conditions and rule logic.
 - o For example, an HR Specialist reduces an employee's working hours from 40h to 20h. In this case,
 - Initial field value is 40
 - Field value is 20
- **Page Property:** A property value used to control application page behavior. A functional administrator can modify the property value at design time in VB Studio. Each page property has a designated name, description, and type established by Oracle, which can be a number, string, boolean, or array.
- **Personalization:** Changes made by end users to pages at run time that apply only to themselves and persist for that user each time they sign in to the application. Personalization includes changes based on user behavior (such as changing the width of a column in a table), changes the user chooses to save, such as search parameters, or composer-based personalization, where an end user can redesign aspects of a page.
- **UI Element:** An action button, tab, filter, sort by, table, or any other element of a Redwood page that can be extended depending on the use of the page property. Refer to the page property label and description to understand the role of a page property on a page and the possible values it can take.
- **VB Studio:** VB Studio is a robust application development platform designed to effectively plan and manage work throughout all stages of the application development life cycle.

HCM

These terms are specific to HCM.

- **Autocomplete Rules:** A feature of HCM Experience Design Studio used to default and validate field values in responsive pages. Autocomplete Rules is based on business object.
- **Built-in Rule:** An Oracle-delivered rule, including localization rules, available for a page. It corresponds to delivered rules in Transaction Design Studio.
- **Business Rules:** A feature of VB Studio used to control the display of regions and fields on a page. It's the Redwood equivalent of Transaction Design Studio for responsive pages.
- **HCM Experience Design Studio:** The HCM Application extensibility tool to extend responsive pages, which includes Transaction Design Studio and Autocomplete Rules.
- **Transaction Design Studio:** A feature of HCM Experience Design Studio used to control the display of responsive pages.

Types of Changes

The types of change you can make depend on the pages you're changing.

- **Configuration:** For most of the Redwood pages, the configuration is done in the setup tasks under the Setup and Maintenance work area. For example, you can enable a descriptive flexfield (DFF) on the Manage Descriptive Flexfields page.
- **Application Extension:** These changes are made using VB Studio. For example, you want to show a new descriptive flexfield on a specific page only for a specific country.

What's Extensible in Redwood Pages

The types of modifications you can make to a Redwood page in VB Studio depends on the page you're modifying. The changes listed in this guide may not be universally available for all Redwood pages.

Note: All setup tasks to configure pages that aren't in Redwood, whether global or specific to a product such as Manage Common Lookups and Manage Descriptive Flexfields, remain unchanged unless otherwise specified.

Considerations for Extending HCM Redwood Pages

- Extensibility is disabled for any dynamic components used in HCM Redwood pages. You must remove any changes made to the layout prior to release 23D.
- The existing validation rules with error from Autocompletes Rules will work in HCM Redwood pages for Change Assignment and Correct Employment Details processes. This won't require modification in existing rules.
 - All rules for all other pages built on the underlying business objects for this page must be disabled when you enable the Redwood page. Note that disabling rules on a business object will disable Autocomplete for both the Redwood and Responsive pages.

Related Topics

- [Examples of Configuration and Extension, and the Tools to Use](#)

Express Mode in VB Studio

Redwood applications leverage Express mode in VB Studio to empower your business users to configure processes and ensure data quality. Express mode has 2 key components: Business Rules and Page Properties.

- **Business Rules** includes these sub components:
 - **Configure Fields and Regions** is used to:
 - Leverage delivered best practices, or to create your own rules based on various criteria, such as country and business unit.
 - Make fields and regions required or optional, read-only or editable, and show or hide fields and regions depending on specific criteria.
 - Default field values.
 - **Validate Field Values** is used to ensure data quality.
- **Page Properties** are used to configure Redwood pages to best fit your business needs, for example, hide the evaluation panel in Connections.

Note that default and validate field values rules aren't mutually exclusive and can be used both for the same fields to ensure data quality and consistency while improving the user experience. Likewise, defaulting rules and rules to control the display of fields and regions can be combined such as defaulting a date and making the field read-only.

To learn about key terms and concepts in Express mode, refer to the VB Studio documentation.

Note: Express mode is the only mode supported by HCM, SCM, and Procurement. If Express mode isn't available, that means the page isn't ready to be extended in this release.

Related Topics

- [What Can You Do with Visual Builder Studio in Express Mode?](#)

Comparison of Express Mode, HCM Experience Design Studio, and Page Composer

Here's a comparison between Express mode in VB Studio, the HCM Experience Design Studio, and Page Composer.

Our goal is to empower you to make informed decisions and embrace the new possibilities that the HCM Redwood application unlocks for your business.

With the new Express mode in VB Studio, you can apply the same changes previously made in HCM Experience Design Studio and Page Composer, while also introducing a set of new features that improve your productivity. Here are the features available in Express mode.

Note: Transaction Design Studio, Autocomplete Rules, and Page Composer only apply to responsive pages and can't be used in the context of Redwood pages.

Category	Extensibility Feature	Express Mode	HCM Experience Design Studio and Page Composer
Control Display			
	Build rule conditions	Build advanced conditions using operators between criterion or a grouping of criterion	Build simple conditions using the AND operator between criterion
	Make a field read-only or editable	Yes New	No
	Make a field required and hidden	Yes New This can be utilized for all employment flows, for example, where values are copied from the previous assignment to the new one and aren't required to be shown to users.	No
	Make a field required or optional	Yes	Yes
	Hide or show a field	Yes	Yes
	Hide or show DFFs and EFFs	Yes	Yes

Category	Extensibility Feature	Express Mode	HCM Experience Design Studio and Page Composer
	Hide or show UI elements (action button, message, and so on)	Yes	Yes
	Configure guided journeys	Yes	Yes
	Evaluate rules	Yes	Yes
	Rename a region	Yes User Interface Text	Yes
	Reorder regions	Yes Available in Advanced mode If the capability is enabled in the page using page properties or dynamic container.	Yes Page Composer
	Reorder fields	Yes Partially Reordering flexfields for all pages is supported from the setup tasks. Reordering flexfields for only a specific page isn't currently supported.	Yes Page Composer
	Hide or show KFFs	Yes	Yes
	Default field values	Yes Page-specific	Yes
	Validate field values with warning and error	Yes Page-specific	Yes
Usability			
	Activate or deactivate all rules	Yes New	No
	Identify overridden regions (blue dot)	Yes New	No
	Identify overridden attributes (blue dot)	Yes	Yes
	Filter rule, region, and field names	Yes	No

Category	Extensibility Feature	Express Mode	HCM Experience Design Studio and Page Composer
		New	
	Filter rules by region and field with overrides	Yes New	No
	Filter region and field in a rule	Yes New	No
	Only display regions and attributes with overrides	Yes New	No
	Identify number of overrides per region	Yes New	No
	Identify all rules applying to a field or a region	Yes New	No
	Prevent customers to override factory settings	Yes	Yes

Related Topics

- [Control Your Display with Business Rules](#)

Examples of Configuration and Extension, and the Tools to Use

You can configure and extend Redwood applications using different tools.

Let's look at some of the key things you can do with these tools.

Modify the UI

Use these tools and work areas to modify the UI:

- VB Studio: Extend application page components for certain applications.
- User Interface Text: Edit text that appears on multiple pages.
- Structure: Configure the Navigator and the icons on the home page for navigation.

Here are some changes that you can make to pages, and the corresponding tools or work areas to use.

Task	Subtask	Example	Tool, Setup Task, or Feature	VB Studio Mode	Where to go in VB Studio	Additional Information
Add your own content	Enable guided journey at the page level	Show analytics about a worker's career and salary's progression at the page level on the Employment Info page.	VB Studio	Express	Oracle-delivered page properties	Guided Journeys Configuration Using Page Properties
Add your own content	Enable guided journey at the section level	Show the Seniority Dates policies in the Seniority Dates section on the Employment Info page.	VB Studio	Express	Oracle-delivered page properties	Guided Journeys Configuration Using Page Properties
Add your own content	Add company policies, link to resources, and so on on a page	Publish respective employee announcement by country on the Review Employee Resources page.	VB Studio	Advanced	Oracle-delivered dynamic container	Add Your Own Content in Review Employee Resources
Add your own content	Embed BI report		VB Studio	Express	Oracle-delivered dynamic container	
Add your own content	Enable nudges		VB Studio	Express	Oracle-delivered page properties	
Add your own content	Display the same content on a page or global header for all pages		Not Supported			
Add your own content	Add a message, text, link, action button, and so on in the page or global header		Not Supported			
Add your own content	Embed OTBI report		Not Supported			
Align terminology with your organizational language	Change the content of a Redwood message, page title, and so on		User Interface Text			How You Modify User Interface Text
Align terminology with your organizational language	Change a UI text across all pages, such as to change 'employee' to 'associate' on all pages where the term 'employee' is used		User Interface Text			How You Modify User Interface Text
Align terminology with your organizational language	Translate UI text into a language supported by Oracle		User Interface Text			How You Modify User Interface Text

Task	Subtask	Example	Tool, Setup Task, or Feature	VB Studio Mode	Where to go in VB Studio	Additional Information
Control field display	Show a field	Show the Candidate Email field in the Job Application Preview Key Info for the HR specialist only in the Activity Recruiting Center.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Control field display	Show a field	Show pronoun in Person Profile panel in Connections.	VB Studio	Express	Oracle-delivered page properties	<i>Customization of Processes Using Page Properties</i>
Control field display	Show descriptive flexfields (DFF) segments	Show people DFF by specific segment for specific roles in the Biographical Info region.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Control field display	Show extensible flexfield (EFF) contexts	Show the Additional Work Location Info context to capture consultants' work location in the Change Assignment process.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Control field display	Change a field style (font)	Show the percentage of salary increase in bold and red when it's more than 10%.	Not Supported			
Control field display	Validate a field value	Validate proposed salary basis based on Full Time or Part Time status or Salaried or Hourly value	VB Studio	Express	Business Rules	<i>Validate Field Values</i>
Control field display	Default a field value	Default action reason based on action	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Control field display	Show additional attributes on a page	Show additional bank account attributes on the Payment Method Details page	VB Studio	Express	Business Rules	<i>Control Display of Additional Attributes in Personal Payment Method Details</i>
Control sections display	Hide and show sections	Hide Disabilities for Mexico and France employees on the Personal Details page.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>

Task	Subtask	Example	Tool, Setup Task, or Feature	VB Studio Mode	Where to go in VB Studio	Additional Information
Control sections display	Hide and show sections	Hide the Salary History section for a specific business unit in the My Compensation page.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Control sections display	Make a section required	Make the Payroll section required for France in the Promote and Change Position process.	VB Studio	Express	Business Rules	<i>Field and Region Display Control</i>
Extend UI elements	Reorder tabs	Reorder tabs in Journeys.	VB Studio	Express	Oracle-delivered page properties	<i>Customization of Processes Using Page Properties</i>
Extend UI elements	Hide or show Sort By	Hide a sorting option in Team Learning.	VB Studio	Express	Oracle-delivered page properties	<i>Customization of Processes Using Page Properties</i>
Extend UI elements	Control guided journey display based on user role	Show guided journey at the page-level in Change Assignment for HR Specialist	VB Studio	Express	Oracle-delivered page properties	<i>Control Display of Guided Journey Based on User Roles</i>
Configure page header	Configure fields displayed in the page header	Show the payroll relationship number or the person number in the page header on the Payment Methods page.	VB Studio	Express	Oracle-delivered page properties	
Control field display	Show a field	Show the account number reverification field on the Payment Methods page	VB Studio	Express	Oracle-delivered page properties	<i>Customization of Processes Using Page Properties</i>
Control icon display	Display add or edit icons	Show the add and edit icons in the National Identifier section, or the edit icon in the Biographical Info section when an employee views his or her own record on the Personal Details page.	VB Studio	Express	Oracle-delivered page properties	<ul style="list-style-type: none"> Show Add Icon in the National Identifiers Section on the Me > Personal Details Page - Set to true to display the national identifier add icon when an employee is viewing their own record. Show Edit Icon in the

Task	Subtask	Example	Tool, Setup Task, or Feature	VB Studio Mode	Where to go in VB Studio	Additional Information
						National Identifiers Section on the Me > Personal Details Page - Set to true to display the national identifier edit icon when an employee is viewing their own record. <ul style="list-style-type: none"> Show Edit Icon in the Biographical Info Section on the Me > Personal Details Page - Set to true to display the biographical info edit icon when an employee is viewing their own record.

Set Up Visual Builder Studio

Before you can start working with Visual Builder Studio to extend your Redwood applications, a systems administrator must complete some initial setup. For instructions, see [Set Up VB Studio to Extend Oracle Cloud Applications](#).

2 Working with Configure Fields and Regions

Field and Region Display Control

You can use Configure Fields and Regions to control field and region display and default field values.

Configure Fields and Regions enables you to:

- Maintain valid data and ensure data quality by reducing errors.
- Build more efficient processes that end users can trust by offering a simple user experience, without having to understand the complexity of policies.
- Make work faster, easier, and more manageable by showing only the relevant, most appropriate content that in turn drives engagement and productivity.

Here's a recap of what you can control at the field and region levels.

Capability	Field	Region
Optional or required	•	• For processes such as Promote and Change Position
Hide or show	•	•
Editable or read-only	•	Not Applicable
Default field values	•	Not Applicable

Business rules offers a user-friendly extensibility tool, enabling professionals and administrators to make changes without the need for extensive programming skills.

Using Conditions, Simple Expression, Advanced Expression and JavaScript (JS)

You can build simple rules using the condition builder to define when to trigger the defaulting or validation rules.

Use simple expressions to default a value with another field value, or to transform data before assigning the value to a field.

Use advanced expressions in conditions, if:

- The available operators aren't sufficient to write the rule logic.
- You need to transform data. Note that the use of JS in advanced expression is strictly limited to data transformation like substring, day of, and so on.

Note: If the **Configure Fields and Regions** button isn't available, that means that the feature isn't supported for the page as yet.

Note: Error code isn't supported for HCM, SCM, and Procurement. See, [Override Field Properties in a Form](#)

Let's learn how to do these actions conditionally:

- Hide or show a region
- Hide or show a field
- Make a field read-only
- Hide or show a developer flexfield (DDF) segment
- Hide or show an extensible flexfield (EFF) context

Related Topics

- [Control Your Display with Business Rules](#)
- [Understand What Will Be Shown at Runtime](#)
- [Set a Default Value for a Field](#)

Hide or Show a Region

In this example, you hide the Disabilities region on the Personal Details page for employees in Mexico and France.

Personal Details
Marian Seyes

Name

Start Date
12/12/95

Last Name
Seyes

First Name
Marian

Demographic info

Country
United States

Start Date
12/12/95

Marital Status Change Date

Gender
Male

Marital Status
Single

Highest Education Level

Veteran Self-Identification Status

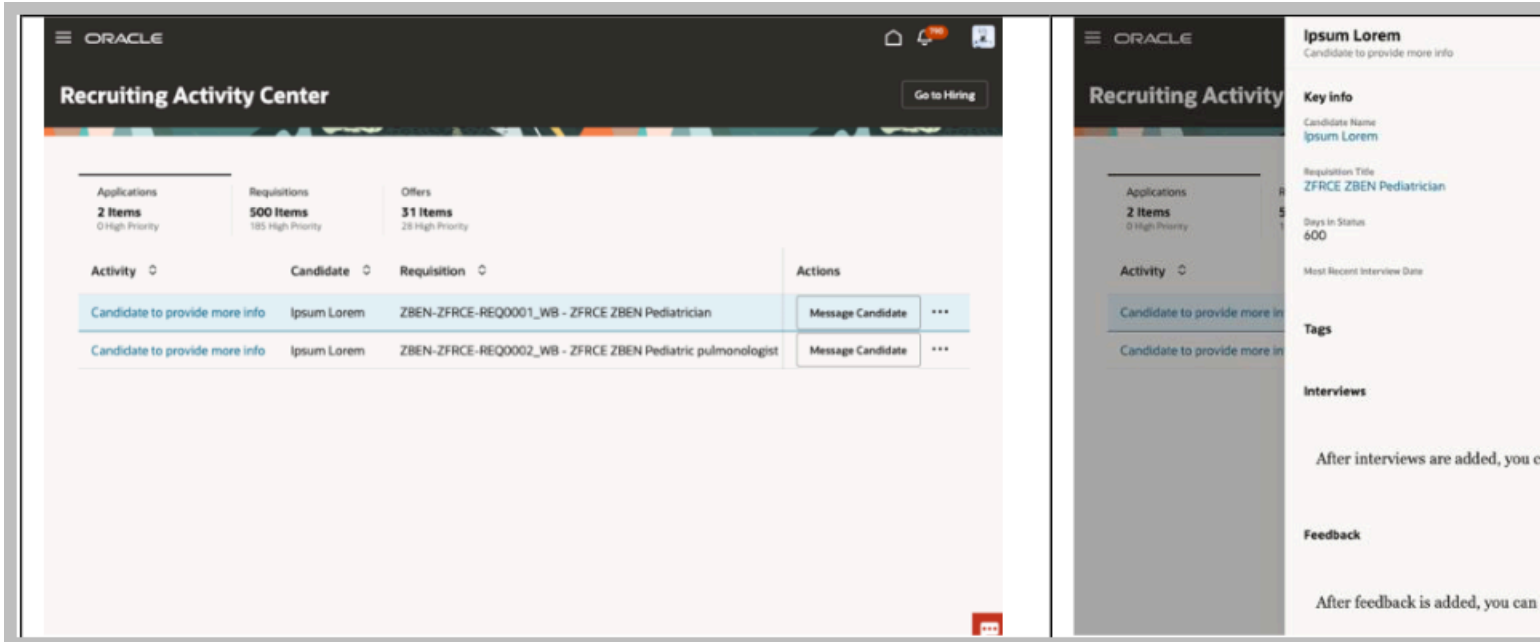
Disabled Veteran
N

Let's look at the steps to hide the region from business rules.

1. Create or edit a rule.
2. Select **France** and **Mexico** in the **Country** list to define the population for which the rule applies.
3. Search or navigate to the Disability region and set the **Hidden** property to **Hidden** in the Regions and Fields filter.

Hide or Show a Field

In this example, you show the Candidate Email field in the Job Application Preview Key Info in the Recruiting Activity Center for the HR Specialist only.



Let's look at the steps to show the field from business rules.

1. Create or edit a rule.
2. Select **Human Resource Specialist** in the **User Roles** list to define the population for which the rule applies.
3. Search or navigate to the **Candidate Email** field and set the **Hidden** property to **Visible** in the Regions and Fields filter. Note that the read-only property is specific to some pages and fields and may not be available for all fields on the same page.

Make a Field Read-Only

In this example, you make the Business Unit field read-only in the When and why step of the Promote and Change Position process.

Promote and Change Position

When and why

Pramesh Soman, 10030.Software Development Snr Manager

Information X

The selected position has existing incumbents

When does the promotion start?
10/8/23

Whats the way to promote? Required

Why do you want to promote?

How do you want to do this action?
Move to other position

Business Unit
Vision Corporation Enterprise

Position
1001.Operations Vice President

Cancel Continue Submit

3 | 8

Promote And Cha

Info to include

When and why

Position details

Position override

Assignment

Seniority dates

Need help? Conta

Let's look at the steps to make the field read-only from business rules.

1. Create or edit a rule.
2. Define the population for which this rule applies.
3. Search or navigate to the **Business Unit** field and set the **Read Only** property to **Read Only** in the Regions and Fields filter. Note that the read-only property is specific to some pages and fields and may not be available for all fields on the same page.

Hide or Show a Developer Descriptive Flexfield Segment

In this example, you hide the developer descriptive flexfield (DDF) segment on the Assignment step of the Promote and Change Position process.

Let's look at the steps to hide the DDF flexfield segment from business rules.

1. Create or edit a rule.
2. Define the population for which the rule applies.
3. Search or navigate to the **Business Unit** field and set the **Hidden** property to **Hidden** in the Regions and Fields filter. Note that descriptive flexfields (DFF) and developer flexfields (DDF) are configured similarly as any other fields in business rules.

Hide or Show an Extensible Flexfield Context

In this example, you show the Assignment Extra Information context in the Additional Assignment Info step of the Promote and Change Position process.

Promote and Change Position

Additional assignment info

Pramesh Soman, 10030.Software Development Snr Manager

Info Group
Assignment Extra Information ▼

Assignment Extra Information

Grade Retention Info

Type of Transfer ▼

Personnel Area ▼

Employee Group ▼

Company Code ▼

Personnel Subarea ▼

Employee Subgroup ▼

Cancel Continue Submit

719

Promote And Change Position

Info to include

When and why

Position details

Position override

Assignment

Additional assignment info

Seniority dates

Need help? Contact Us

Not all context codes are displayed for the Additional Assignment Info and Additional Person Info in their respective Business Rules pages. To view all context codes, you need to **Refresh and Deploy Offline** for each EFF using the Manage Extensible Flexfields page.

Let's look at the steps to show the extensible flexfield context from business rules.

1. Create or edit a rule.
2. Define the population for which the rule applies.
3. Search or navigate to the **Assignment Extra Information** context and set the **Hidden** property to **Visible** in the Regions and Fields filter.

3 Working with Field Validations

Validate Field Values

You can author validation rules (warning and error) only in HCM Redwood pages for a limited list of pages, regions, and fields:

- Global Human Resources
 - Additional Person Info
 - Departments
 - Change Assignment for the following regions only:
 - When and Why
 - Assignment
 - Additional Assignment Info
 - Salary
 - Correct Employment Details accessible from Employment Info supporting the same capabilities and regions as Change Assignment
 - Document Records
 - Jobs
 - Positions
- Goal Management
- Salary
- Individual Compensation
- Talent Review and Succession Management

Note: Though this feature is visible for all HCM and SCM Redwood pages yet only the HCM pages listed above are supported.

Using Fields to Author Your Conditions or Rule Logic, or Both

Fields including initial field values are available at different places in Business Rules when they have been enabled for a region:

- Conditions
- Simple or advanced expressions to write the rule logic, or default a field value, or both

Note: Fields that can be used in the conditions, both simple and advanced expressions are limited to the fields and direct attributes available in the page and that are listed in the Regions and Fields section.

Using Conditions, Simple Expression, Advanced Expression and JavaScript (JS)

You can build simple rules using the condition builder to define when to trigger the defaulting or validation rules.

Use simple expressions to default a value with another field value, or to transform data before assigning the value to a field.

Use advanced expressions in conditions, if:

- The available operators aren't sufficient to write the rule logic.
- You need to transform data. Note that the use of JS in advanced expression is strictly limited to data transformation like substring, day of, and so on.

Author Validation Messages

You can author validation messages that are displayed at runtime. When you author your messages, ensure that you select at least one target field.

The target field should be:

- A field part of your rule logic.
- A field part of the region where you expect to see the validation message.
- If you are validating a combination of fields part of different regions, it's recommended that you select all fields as target fields.

Note: Error and warning are the only two levels of severity supported in business rules for HCM Redwood pages and are page-specific.

Note: Error code isn't supported for HCM, SCM, and Procurement. See *Override Field Properties in a Form*.

4 Implementing Defaulting and Validation Rules for HCM Redwood Pages

Guidelines for Implementing Defaulting and Validation Rules

You can enhance user experience by creating defaulting and validation rules using Business Rules in Oracle Visual Builder Studio.

This ensures data quality, consistency, and streamlined user experiences, and allow for quick adaptation to HR compliance requirements in Cloud HCM Redwood applications.

Document Records

This topic lists the implementation considerations for Document Records processes.

You can typically use field value defaulting and validation in these cases.

- Defaulting when creating or editing a new document
 - Default Document Number as "Person ID || Issued Date" based on the Document Type.
 - Default Publish Date to Issued Date based on the Document Type.
- Validation in the landing page
 - For Passport document type, Issued Date should be greater than or equal to From Date.
 - For Drivers License document type, warn users if To Date is null.

This table lists the supported attributes, exceptions, and the implementation recommendations for the Document Records pages.

It applies to all pages under Me, My Team, and My Client Groups tabs.

Page/Flow	In the Conditions for both Defaulting and Validation	To Default Field Values	To Validate Field Values	Implementation Guidelines
Document Records Landing Page	<ul style="list-style-type: none">• User Roles• When is the rule applied? (Values are Viewing other's info and Viewing own info)• Country• Business Unit• Legal Employer	Not Applicable	Not Applicable	There is no support to create rules to validate or default based on other reference objects like Person, or Assignment).

Page/Flow	In the Conditions for both Defaulting and Validation	To Default Field Values	To Validate Field Values	Implementation Guidelines
	<ul style="list-style-type: none"> Document Type Category Subcategory Tags 			
Document Records > Add Flow	Same as above	<ul style="list-style-type: none"> Code Comments Date From Date To Document Name Document Number Descriptive Flexfields Developer Flexfields Issued Date Issuing Authority Issuing Country Issuing Location Publish Date 	<ul style="list-style-type: none"> Code Comments Date From Date To Document Name Document Number Descriptive Flexfields Developer Flexfields Issued Date Issuing Authority Issuing Country Issuing Location Publish Date 	Same as above.

Employment

This topic lists the implementation considerations for Employment processes.

Change Assignment and Correct Employment Details

You can typically use field value defaulting and validation in these cases.

- When and Why
 - Default action reason based on action.
 - Default action to Assignment Change for line managers.
- Assignment
 - Default Regular or Temporary and Full Time or Part Time based on Assignment Category field.
 - Default Full Time or Part Time based on Working Hours. If the Full Time or Part Time value must be enforced, the field can be marked as read-only in the same business rule.

- **Additional Assignment Info**
 - Defaulting and validation of Additional Assignment Info segments include single and multi-rows contexts.
 - Default Additional Assignment Info segment date with action date from When and Why.
 - Default fields in Additional Assignment Info segments based on values selected in When and Why or Assignment sections, or both.
 - Validate Additional Assignment Info data against existing data in the same single row EFF context.
- **Salary**
 - Default proposed salary basis based on Full Time or Part Time status or Salaried or Hourly value or other assignment attributes.
 - Validate proposed salary basis based on Full Time or Part Time status or Salaried or Hourly value or other assignment attributes.

This table lists the supported regions, attributes, exceptions, and the implementation recommendations for the Change Assignment and Correct Employment Details processes.

Region	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
When and Why	<ul style="list-style-type: none"> When and why attributes 	<ul style="list-style-type: none"> Action Reason Action Business Unit 	<ul style="list-style-type: none"> Not supported 	
Assignment	<ul style="list-style-type: none"> When and why attributes Assignment attributes Initial field values 	Aren't supported for defaulting: <ul style="list-style-type: none"> FTE Key flexfields 	<ul style="list-style-type: none"> Not supported 	
Additional Assignment Info (PerAssignmentEITCategory)	<ul style="list-style-type: none"> When and why attributes Assignment attributes Additional Assignment Info, single or multi-rows context 	<ul style="list-style-type: none"> Additional Assignment Info, single or multi-rows context 	<ul style="list-style-type: none"> Additional Assignment Info, single or multi-rows context 	<ul style="list-style-type: none"> Refer to Working with Extensible Flexfields to view all context codes in business rules
Salary	<ul style="list-style-type: none"> Assignment attributes 	<ul style="list-style-type: none"> Proposed Salary Basis 	<ul style="list-style-type: none"> Adjustment Amount Adjustment Percentage Next Salary Review Date Proposed Salary Basis Salary Amount 	<ul style="list-style-type: none"> Proposed Salary Basis field must be initialized with the Salary Basis ID, not Name. Initial field values on salary fields aren't supported.

Individual Compensation

This topic lists the implementation considerations for Individual Compensation processes.

Administer Compensation, Individual Compensation, and Personal Compensation

You can typically use field value defaulting and validation in these cases.

- Default When date such that awards can be created after 1st of next quarter by employees only.
- Validate When date such that it's in the current fiscal year (1 Apr - 31 Mar)
- Validate spot bonus is effective either on 01 Apr 2024 or 01 Oct 2024
- Validate new hire bonus doesn't exceed \$3000
- Validate car allowance increase is below or equal to 10%
- Validates new awards starts on or before 17th of a month
- Validate that only one award proposal is submitted at a time
- Validate bus and taxi reimbursement aren't claimed together

This table lists the supported attributes, exceptions, and the implementation recommendations for Administer Compensation, Individual Compensation, and Personal Compensation.

It applies to the Admin Compensation page accessed from My Client Groups tab, Individual Compensation pages accessed from My Team and My Client Groups tabs and Personal Contribution page accessed form Me tab.

In the Conditions to Default Values	To Default Field Values	In the Condition to Validate Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> • User Roles • Legal Employer • Business Unit • Country 	<ul style="list-style-type: none"> • Action Date 	<p>For When Section</p> <ul style="list-style-type: none"> • User Roles • Legal Employer • Business Unit • Country • Action Date <p>For Compensation Section</p> <ul style="list-style-type: none"> • User Roles • Legal Employer • Business Unit • Country • Plan • Option • Start Date 	<p>These fields can be validated using Advanced Expression</p> <ul style="list-style-type: none"> • Action Date <p>Record Level Attributes</p> <ul style="list-style-type: none"> • Plan • Plan Option • Start Date • End Date • Currency • Legal Entity • Create or Edit <p>Section Level Attributes</p> <ul style="list-style-type: none"> • Current Allocations 	<ul style="list-style-type: none"> • Can default Action Date only and validate individual compensation section data. • You can validate at the record or section level. <ul style="list-style-type: none"> ◦ Record level validations are triggered on clicking Save in the edit panel drawer. ◦ Section Level validation are triggered on clicking Continue in the process ◦ All the current allocation records will be available in the Current Allocations attribute

In the Conditions to Default Values	To Default Field Values	In the Condition to Validate Values	To Validate Field Values	Implementation Guidelines
		<ul style="list-style-type: none"> End Date Value Currency Legal Entity Create or Edit Current Allocations* 		<ul style="list-style-type: none"> You can iterate through the records and create rule on the above mentioned record level fields Section level rules can be written only using Advanced Expression Mode Plan LOV and Plan – Option LOV in Business Rules is secured by the Individual Compensation Plan functional privilege: Define Variable Compensation Plan for Individual Compensation (CMP_DEFINE_VARIABLE_COMPENSATION_PLAN_FOR_INDIVIDUAL_COMPENSATION). This is required for business rule design time users to view the values in Plan LOV, Plan – Option LOV. If you don't have this security, you won't see the values in the LOV. Initial Value is available for individual compensation fields to compare old value and new value Current Allocations can be accessed while creating validation using Advanced Expression only.

Examples

Default When date such that awards can be created after 1st of next quarter by employees only.

Advanced Expression

```
let effectiveDate = new Date();
let currentQuarter = Math.floor((effectiveDate.getMonth() + 3) / 3);

// Get first date of current quarter
effectiveDate.setDate(1);
effectiveDate.setMonth((currentQuarter - 1) * 3);

// Use this technique for year rollover
```

```
effectiveDate.setMonth(effectiveDate.getMonth() + 3);  
return effectiveDate.toISOString().slice(0, 10);
```

Validate When date such that it's in the current fiscal year (1 Apr - 31 Mar)

Advanced Expression

```
let effectiveDate = $fields.individualCompensationDetails.EffectiveDate.$value();  
if (effectiveDate) {  
  // Fetch current financial year start date  
  let currentDate = new Date();  
  let fyStartDate = null, fyEndDate = null;  
  if (currentDate.getMonth() + 1 <= 3) {  
    fyStartDate = new Date(currentDate.getFullYear() - 1, 3, 1);  
    fyEndDate = new Date(currentDate.getFullYear(), 2, 31);  
  } else {  
    fyStartDate = new Date(currentDate.getFullYear(), 3, 1);  
    fyEndDate = new Date(currentDate.getFullYear() + 1, 2, 31);  
  }  
  return (new Date(effectiveDate) < fyStartDate || new Date(effectiveDate) > fyEndDate);  
}  
return false;
```

Validate new hire bonus doesn't exceed \$3000

Advanced Expression

```
if ($fields.individualCompensationDetails.PlanId.$value() === '100000018708168'  
    && Number($fields.individualCompensationDetails.ValueString.$value()) > 3000) {  
  return true;  
}  
  
return false;
```

Validate car allowance increase is below or equal to 10%

Advanced Expression

```
if ($fields.individualCompensationDetails.ComponentId.$numberValue() === 300100010424490  
    && $fields.individualCompensationDetails.Mode.$initialValue() === 'EDIT') {  
  let proposedValue = Number($fields.individualCompensationDetails.ValueString.$value());  
  let currentValue = Number($fields.individualCompensationDetails.ValueString.$initialValue());  
  
  if (proposedValue > (1.1 * currentValue))  
    return true;  
}  
  
return false;
```

In this example, initialValue of Mode is used to handle date-effective update scenario.

For date effective update case, the new record will have Mode as 'CREATE' since it's a newly generated split.

Validate new awards start on or before 17th of a month

Advanced Expression

```
if ($fields.individualCompensationDetails.Mode.$value() === 'CREATE'  
    && $fields.individualCompensationDetails.EffectiveStartDate.$value()) {  
  
  let planSD = new Date($fields.individualCompensationDetails.EffectiveStartDate.$value());  
  return (planSD.getDate() > 17)  
}  
return false;
```


Validate that only one award proposal is submitted at a time

Advanced Expression

```
let currentAllocations = $fields.individualCompensationDetails.CurrentAllocations.$value();
if (currentAllocations && currentAllocations.length) {
  let newAllocationCount = 0;

  for (let allocation of currentAllocations) {
    if (allocation.Mode == 'CREATE')
      newAllocationCount++;
  }

  if(newAllocationCount > 1)
    return true;
}
return false;
```

Validate bus and taxi reimbursement aren't claimed together

Advanced Expression

```
let currentAllocations = $fields.individualCompensationDetails.CurrentAllocations.$value();
if (currentAllocations && currentAllocations.length) {
  let busBonusPresent = false;
  let taxiBonusPresent = false;

  for (let allocation of currentAllocations) {
    if (allocation.PlanId == '300100113565911')
      busBonusPresent = true;

    else if (allocation.PlanId == '300100113565893')
      taxiBonusPresent = true;
  }

  return (busBonusPresent && taxiBonusPresent);
}
return false;
```

Field Details

Field	Field Accessor	Type	Comments
Action Date	<code>\$fields.individualCompensationDetails.ActionDate.\$value()</code>		
Record Level Attributes			
Plan	<code>\$fields.individualCompensationDetails.PlanId.\$value()</code>	Number	PlanId selected using Plan LOV which shows Plan Name
Plan Option	<code>\$fields.individualCompensationDetails.PlanOptionId.\$value()</code>	Number	OptionId selected using Option LOV which shows values in the format <Plan Name> - <Option Name>
Start Date	<code>\$fields.individualCompensationDetails.StartDate.\$value()</code>	String	Allocation start date as string (Format: yyyy-MM-dd) Requires Advanced Expression mode for date comparison.

Field	Field Accessor	Type	Comments
End Date	<code>\$fields.individualCompensat \$value()</code>	String	Allocation end date as string (Format: yyyy-MM-dd) Requires Advanced Expression mode for date comparison.
Value	<code>\$fields.individualCompensat \$value()</code>	String	Primary input value as string. Requires Advanced Expression mode for non-string primary input value. For numerical field, the value should be type-casted to Number for arithmetic operations. Similarly, for date field, the value should be type-casted to Date for date comparisons.
Currency	<code>\$fields.individualCompensat \$value()</code>	String	Currency for monetary primary input value
Legal Entity	<code>\$fields.individualCompensat \$value()</code>	Number	LegalEntityId selected using Legal Entity LOV which shows LE Name
Create or Edit	<code>\$fields.individualCompensat \$value()</code>	String	Mode attribute is to determine whether the record is newly created or an existing record.
Section Level Attributes			
Current Allocations	<code>\$fields.individualCompensat \$value()</code>	Array	Object Structure <pre>{ "PlanId": "string", "ComponentId": "string", "EffectiveStartDate": "string", "EffectiveEndDate": "string", "ValueString": "string", "DisplayCurrency": "string", "LegalEntityId": "string", "Mode": "string" }</pre>

Troubleshooting

To print all the attributes of an IC object:

1. Create a validation rule without any condition
2. Add a messages to display the proposed value, by using the below
expression: `[[JSON.stringify($fields.individualCompensationDetails.$value(), null, 2)]]`
3. Add another messages to display the initialValue (the database value of the record, for EDIT case), by using the
below expression: `[[JSON.stringify($fields.individualCompensationDetails.$initialValue(), null, 2)]]`

Note:

- For new allocation, initialValue will be null since it doesn't exist in the database
- Same applies for Section Level Validation as well. It will trigger on Continue/Submit.
- To review the value of CurrentAllocations array, set the message severity to error, otherwise it will allow submit or navigate to next section.

Validation Rule Definition

testValue

Active

Add description

Conditions

Edit

This rule is always applied.

Messages

+ Message

Summary *

fx (x)

Severity *

Target Fields

Value

Warning

Detail *

[[JSON.stringify(\$fields.individualCompensationDetails.\$value(), null, 2)]]

Summary *

Severity *

Target Fields

Initial Value

Warning

Detail *

[[JSON.stringify(\$fields.individualCompensationDetails.\$initialValue(), null, 2)]]

Result

Manage Contributions

Personal Contribution

Roger ZCMP_CWB_Federer, ZCMP_CWB_CEO

+ Add

▲ Value

{ "ComponentId": "300100182420225", "DisplayCurrency": "USD", "EffectiveEndDate": "4712-12-31", "EffectiveStartDate": "2024-07-18", "LegalEntityId": "100000011593308", "PlanId": "300100182420223", "ValueCurrency": 500, "ValueFormat": "CURRENCY", "ValueString": "500", "Mode": "EDIT" }

▲ Initial Value

{ "LegalEntityId": "100000011593308", "PlanId": "300100182420223", "ComponentId": "300100182420225", "EffectiveStartDate": "2024-07-18", "EffectiveEndDate": "4712-12-31", "ValueFormat": "CURRENCY", "ValueCurrency": "45", "DisplayCurrency": "USD", "ValueString": "45", "Mode": "EDIT" }

ZCMP US VOL 401B Many

401B Many

07.18.2024 - Ongoing

Amount

USD 500.00

Processing Type

Recurring

...

▼

Show previous contributions

Cancel

Continue

Submit

Person

This topic lists the implementation considerations for Person processes.

Additional Person Info

You can typically use field value defaulting and validation in these cases.

- Default the start date in a section with current application date, and prevent users from entering an earlier date.
- Default a segment (PEI_INFORMATION3) based on another segment (PEI_INFORMATION4) of the same context.
- Validate the format of a segment to be alphanumeric and exactly composed of 11 characters.

This table lists the supported attributes, exceptions, and the implementation recommendations for the Additional Person Info page.

ORACLE

30

Supported Fields <ul style="list-style-type: none"> In the Conditions To Default Field Values To Validate Field Values 	Implementation Guidelines
<ul style="list-style-type: none"> Any segment part of a single or multi-rows context Initial field values 	<ul style="list-style-type: none"> Defaulting and validation rules with error only are supported within the same Person EFF context.

Share Data Access

You can typically use field value defaulting and validation in these cases.

- Default expiration date to 2 weeks from current date
- Default text in the Notes field
- Default expiration date based on the recipient info
- Validate expiration date is no earlier than 2 weeks from current date and no later than one month from current date
- Validate expiration date is 2 months in the future

This table lists the supported attributes, exceptions, and the implementation recommendations for Share Data Access.

It applies to the pages under Me, My Team, and My Client Groups tabs.

Processes/Pages	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
Share Data Access	<ul style="list-style-type: none"> Legal Employer 	<ul style="list-style-type: none"> Expiration Date Notes 	<ul style="list-style-type: none"> Expiration Date Notes 	

Salary

This topic lists the implementation considerations for Salary processes.

Change Salary

You can typically use field value defaulting and validation in these cases.

- Default the proposed salary basis based on the employee's legal employer when Line Managers are proposing salary change.
- Default the effective date to current date and next salary review date to 1 year after the effective date, when line managers are proposing salary change.
- Validate that users don't enter retro-active salary changes.
- Validate that Change of salary occurs the first of the month.

- Validate salary amount is above a minimum values.

This table lists the supported attributes, exceptions, and the implementation recommendations for the Change Salary page.

It applies to both pages under My Team and My Client Groups tabs.

In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> • User Roles • Legal Employer • Business Unit • Country • Start Date • Action • Reason <p>Assignment attributes including</p> <ul style="list-style-type: none"> • Assignment Status • Bargaining Unit • Business Unit • Working Hours Frequency • Hourly or Salaried 	<ul style="list-style-type: none"> • Start Date • Action • Reason • Proposed Salary Basis • Salary Amount • Next Salary Review Date • Proposed Salary Basis • Salary Amount • Next Salary Review 	<ul style="list-style-type: none"> • User Roles • Legal Employer • Business Unit • Country • Proposed Salary Basis • Salary Amount • Adjustment Amount • Adjustment Percentage • Next Salary Review Date • Rate Component Values through Advanced Expression • Validation with Error from Autocomplete Rules 	<p>Defaulting</p> <ul style="list-style-type: none"> • Salary amount can be defaulted when using the user determined type of salary basis only. • Fields in the salary section can be defaulted based on the fields "listed in the conditions" row of this table. • Initial Field Values on salary fields aren't supported

In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> Legal Employer Next Payroll Start Date Payroll Start Date Primary Work Relationship Termination Date US Job Info Overtime Status Working Hours Job Job Code Job Function Job Family Position Position Code Position Budget Value Position Standard Working Hours Grade Ladder Grade Grade Code Department Department Code Location FTE <p>Additional Assignment Info segments</p>		<ul style="list-style-type: none"> Fields from When and Why, Salary Details section: <ul style="list-style-type: none"> Start Date Action Reason Proposed Salary Basis Salary Amount Annual Salary Annual Full-time Salary Compa-ratio Salary Range Salary Range Minimum Salary Range Maximum Salary Range Midpoint Quartile Quintile Next Salary Review Date Grade Step Ladder Compensation Zone Compensation Zone Type 	

Salary History

You can typically use field value defaulting and validation in these cases.

- Default the proposed salary basis based on the employee's legal employer when Compensation Managers propose a salary change.
- Default the effective date to first day of next month and next salary review date to 1 year after the effective date, when line managers propose a salary change.
- Validate that users don't enter retro-active salary changes.
- Validate that Change of salary occurs the first of the month.
- Validate salary amount is above a minimum values.

This table lists the supported attributes, exceptions, and the implementation recommendations for Salary History.

It applies to the Admin Salary History page accessed from My Client Groups tab.

In the Conditions to Default Values	To Default Field Values	In the Condition to Validate Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> User Roles Legal Employer Business Unit Country Start Date Action Reason <p>Assignment attributes including</p> <ul style="list-style-type: none"> Additional Assignment Info segments Assignment Status Bargaining Unit Working Hours Frequency Hourly or Salaried Legal Employer Next Payroll Start Date Payroll Start Date Primary Work Relationship Termination Date US Job Info Overtime Status Working Hours Job Job Code Job Function Job Family Position Position Code Position Budget Value Position Standard Working Hours Grade Ladder Grade Grade Code Department Location 	<ul style="list-style-type: none"> Start Date Action Reason Proposed Salary Basis Salary Amount Next Salary Review Date 	<ul style="list-style-type: none"> User Roles Legal Employer Business Unit Country Start Date Action Reason <p>Assignment attributes including</p> <ul style="list-style-type: none"> Additional Assignment Info segments Assignment Status Bargaining Unit Business Unit Working Hours Frequency Hourly or Salaried Legal Employer Next Payroll Start Date Payroll Start Date Primary Work Relationship Termination Date US Job Info Overtime Status Working Hours Job Job Code Job Function Job Family Position Position Code Position Budget Value Position Standard Working Hours Grade Ladder Grade Grade Code Department 	<ul style="list-style-type: none"> User Roles Legal Employer Business Unit Country Fields from When and Why, Salary Details section: <ul style="list-style-type: none"> Start Date Action Reason Proposed Salary Basis Salary Amount Annual Salary Annual Full-time Salary Compa-ratio Salary Range Salary Range Minimum Salary Range Maximum Salary Range Midpoint Quartile Quintile Next Salary Review Date Grade Step Ladder Compensation Zone Compensation Zone Type 	<ul style="list-style-type: none"> Salary amount can be defaulted when using user determined type of salary basis only. Defaulting is supported when salary is being created. It will not work when during correction of existing salary. When there is more than one assignment on the same day, details from the highest sequenced assignment will be considered. Validations will be performed on clicking Save or OK and not while clicking the Submit. Validations can't be performed across salaries. Initial Field Values on salary fields aren't yet supported

In the Conditions to Default Values	To Default Field Values	In the Condition to Validate Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> FTE Additional Assignment Info Segments		<ul style="list-style-type: none"> Location FTE Additional Assignment Info Segments		

Talent Management

This topic lists the implementation considerations for Talent Management processes.

Goal Management

You can typically use field value defaulting and validation in these cases.

- Goals Detail
 - Restrict goal category selection based on user roles.
 - Enforce minimum weight for goal.
- Edit Weights
 - Enforce minimum weight for goal.

This table lists the supported attributes, exceptions, and the implementation recommendations for the Goal Management pages.

It applies to both pages under Me and My Team tabs.

Page	Defaulting		Validation		Implementation Guidelines
	Supported Fields In the Conditions	Supported Fields To Default Field Values	Supported Fields In the Conditions	To Validate Field Values	
Performance Goal Details	All	Fields for which the value property is enabled.	performanceGoalsV2 <ul style="list-style-type: none"> GoalName PersonNumber AssignmentNumber Source GoalVersionType StatusCode StartDate TargetCompletionDate ActualCompletionDate PercentCompletion 	developmentGoals <ul style="list-style-type: none"> Actual Completion Date Allow workers to update key attribute Category Goal name Source Goal version type Level 	

	Defaulting		Validation		
Page	Supported Fields In the Conditions	Supported Fields To Default Field Values	Supported Fields In the Conditions	To Validate Field Values	Implementation Guidelines
			<ul style="list-style-type: none"> Category Level Weighting RequestContext Published Publication Date LoggedInPersonType GoalPlanWeightEn 	<ul style="list-style-type: none"> completion percentage person number Priority RequestContext Start date Status Target completion date 	
			AssociatedGoalPlans <ul style="list-style-type: none"> Priority Weight perfGoalTasks TaskName TaskTypeCode StartDate Status TargetCompletion PriorityCode PercentCompletion ActualCompletion CompletionStatus TargetType TargetValue UomCode 	devGoalTasks <ul style="list-style-type: none"> Actual completion date completion status goal name Completion percentage priority start date status target completion date target type target value name type uom code learning item relations - <ul style="list-style-type: none"> learning item id source type 	
Development Goal Details	All	Fields for which the value property is enabled.	Same as above	Same as above	
Edit Weights	Not Applicable	Weight	Not Applicable	Weight	

Talent Review and Succession Management

You can typically use field value defaulting and validation in these cases.

- Default succession plans to public plans
- Default flexfields when adding a succession plan
- Validate Succession Plan Candidate Ranking field
- Validate Talent Review Meeting Status field

This table lists the supported attributes, exceptions, and the implementation recommendations for Talent Review and Succession Management.

It applies to pages under My Client Groups tab.

Page	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
Add Succession Plan	User Roles SuccessionPlanCandidates <ul style="list-style-type: none"> • Ranking • Candidate Readiness Code • Is Interim Successor • CandidateStatusCode SuccessionPlanOwners <ul style="list-style-type: none"> • enableAlert • OwnerTypeCode talentSuccessionPlans <ul style="list-style-type: none"> • Private • Business Unit ID • DepartmentID • Grade ID • Incumbent Person ID • Job ID • PlanTypeCode • Position ID • Status Code 			In Configure Fields and Regions, the Value property is only available for fields that can be defaulted.
Edit Succession Plan	User Roles SuccessionPlanCandidates <ul style="list-style-type: none"> • Ranking • Candidate Readiness Code 			In Configure Fields and Regions, the Value property is only available for fields that can be defaulted.

Page	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
	<ul style="list-style-type: none"> Is Interim Successor CandidateStatusCode SuccessionPlanOwners <ul style="list-style-type: none"> enableAlert OwnerTypeCode talentSuccessionPlans <ul style="list-style-type: none"> Private Business Unit ID DepartmentID Grade ID Incumbent Person ID Job ID PlanTypeCode Position ID Status Code 			
Talent Review Configuration	User Roles meetings <ul style="list-style-type: none"> Business Leader Id Dashboard Template Id Meeting Date Meeting Purpose Meeting Status Organization Rating Submission Deadline Talent Review Meeting Talent Review Meeting DFF Review Content <ul style="list-style-type: none"> Data Validity Code Include Matrix Manager Questionnaire Id Use Potential Assessment Prior Rating Start Date Prior Rating End Date Template			In Configure Fields and Regions, the Value property is only available for fields that can be defaulted.

Page	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
	<div><ul style="list-style-type: none">NameDashboard Template IdCreatedByCreationDateIncludeMatrixMgmtIncludeSuccessionPlansIncludeTalentPoolsLastUpdateDateLastUpdatedByOwnerIdPopulationSizeForESSQuestionnaireIdTemplateStatusCodeInt</div> <div>Business Leader Assignment<ul style="list-style-type: none">AssignmentIdPersonIdBusinessTitleEffectiveLatestChangeBusinessUnitIdAssignmentTypeUserPersonTypeIdProposedUserPersonTyPrimaryFlagPrimaryAssignmentFlagPrimaryWorkRelationshPositionIdJobIdGradeIdDepartmentIdReportingEstablishmenLocationIdFullPartTimeManagerFlagCreatedByCreationDateLastUpdatedBy</div>			

Page	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
	<ul style="list-style-type: none"> LastUpdateDate JobSetId GradeSetId LocationSetId DepartmentSetId assignmentsEFF managers 			

Add Reviewees to Plan, Add or Edit Talent Pool, Add Reviewees to Pool, and Add Candidates to Pool

You can typically use field value defaulting and validation in these cases.

- **Add or Edit Talent Pool**
 - Default talent pools as public
- **Talent Pools - Add Candidates to Pool**
 - Allow only active members to be added to a talent pool
- **Talent Review - Add Reviewees to Plan**
 - Default the readiness level for reviewee being added to a plan
 - Validate the rank field while adding a reviewee to plan
- **Talent Review - Add Reviewees to Pool**
 - Allow only active members to be added to a talent pool

This table lists the supported attributes, exceptions, and the implementation recommendations for Add Reviewees to Plan, Add or Edit Talent Pool, Add Reviewees to Pool, and Add Candidates to Pool

It applies to the pages under My Client Groups tab.

Processes/Pages	In the Conditions to Default and Validate Values	To Default Field Values	To Validate Field Values	Implementation Guidelines
Talent Review - Add Reviewees to Plan	<ul style="list-style-type: none"> Candidates <ul style="list-style-type: none"> ◦ CandidateStatusCode ◦ Is interim successor ◦ Ranking ◦ CandidateReadinessCo 			

Processes/Pages	In the Conditions to Default and Validate Values	To Default Field Values	To Validate Field Values	Implementation Guidelines
Add or Edit Talent Pool	<ul style="list-style-type: none"> Pool Info <ul style="list-style-type: none"> Private (Access type) Description JobId JobFamilyId GradeId BusinessUnitId DepartmentId PositionId Talent Pool Member Section (talentPoolMembers) <ul style="list-style-type: none"> MemberStatusCode 			
Talent Review: Add Reviewees to Pool Talent Pools - Add Candidates to Pool	<ul style="list-style-type: none"> Talent Pool Member Section (talentPoolMembers) <ul style="list-style-type: none"> MemberStatusCode 			

Workforce Structures

This topic lists the implementation considerations for Workforce Structures processes.

Departments

You can typically use field value defaulting and validation in these cases.

- Default Location in department based on a specific set.
- Default Internal Address Line based on descriptive flexfield values.
- Default Department Title from Department Name and Set.
- Validate that Department Set and Location should match.
- Enforce valid combinations of Department Name and department descriptive flexfield segments.

This table lists the supported attributes, exceptions, and the mplementation recommendations for the Departments page.

In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
<ul style="list-style-type: none"> • ActiveStatus • Departments Descriptive Flexfields • InternalAddressLine • LocationId • Name • SetCode • Title 	<ul style="list-style-type: none"> • Departments Descriptive Flexfields • InternalAddressLine • LocationId Name • Title 	<ul style="list-style-type: none"> • Departments Descriptive Flexfields • InternalAddressLine • LocationId • Name • Title 	These aren't currently supported: <ul style="list-style-type: none"> • Defaulting in edit and duplicate flows • Attachments • Initial field values • Defaulting and validation for extensible flexfields

Jobs

You can typically use field value defaulting and validation in these cases.

- Default Full time or Part time field with value as Part time
- Default job level based on selected management level
- Validate job name doesn't contain special characters
- Validate job code contains six characters of which the first 3 are alphabets and the last 3 are numbers, without any special characters.

This table lists the supported attributes, exceptions, and the implementation recommendations for Jobs.

It applies to the Jobs pages under My Client Groups tab.

Flow	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
Jobs: Add, Duplicate, and Update flows	<ul style="list-style-type: none"> • User Roles 	<ul style="list-style-type: none"> • Full time or Part time • Manager level • Level • Regular or Temporary • Jobs descriptive flexfield 	<ul style="list-style-type: none"> • Job Family Id • Job Name • Job Code • Job Function Code • Level • Jobs descriptive flexfield 	

Positions

You can typically use field value defaulting and validation in these cases.

- Default assignment category.
- Default location based on position descriptive flexfield (DFF).
- Validate that position name includes job name and department name.
- Validate standard working hours is not equal to 375 or 40.

This table lists the supported attributes, exceptions, and the implementation recommendations for the Positions pages. It applies to the Positions pages under My Client Groups tab.

Flow	In the Conditions	To Default Field Values	To Validate Field Values	Implementation Guidelines
Positions: Add, Duplicate, and Update flows	<ul style="list-style-type: none"> User Roles 	<ul style="list-style-type: none"> BargainingUnitCode Budget Currency Code BudgetedPositionFlag Business Unit ID Department ID FullPartTime HiringStatus Job ID Location ID OverlapAllowedFlag Position DFF PositionType ProbationPeriod ProbationPeriodUnitCo Regular or Temporary Requisition Template ID Union ID 	<ul style="list-style-type: none"> ActionReasonId PositionName PositionCode JobName DepartmentName LocationName PositionsDFF RequisitionTemplateId AssignmentCategory FullPartTime RegularTemporary Status BusinessUnitId StandardWorkingHours Type WorkingHours EffectiveStartDate BargainingUnitId CollectiveAgreementId UnionId HiringStatus ParentPositionCustomF FTE Cost Center ID Headcount StartTime OverlapAllowedFlag 	Any rule that refers to incumbent assignment data or collective agreement data is currently not supported.

5 Working with Page Properties

Customization of Processes Using Page Properties

Functional administrators use page properties in Oracle Visual Builder Studio (VB Studio) to extend Redwood pages.

These page properties play a crucial role in extensibility and are used for various purposes, for example, for reordering tabs in Journeys, showing or hiding panels in Connections, or configuring guided journeys. The ability to write expression to conditionally render an element, such as displaying the person pronoun for specific roles only is supported in Express mode.

You can access the list of available page properties for a particular page by navigating to the **Page Properties** pane in the Designer. If the **Page Properties** pane displays the message "We didn't find any extendable page properties on this page", that means that HCM hasn't yet delivered page properties for the page.

It's worth noting many page properties that have been already delivered across various Redwood pages ensuring a diverse range of options to tailor the application to your specific needs.

- Adding your own content to a page or region
- Configuring guided journeys
- Enabling nudges
- Controlling page elements such as sort by, tabs, and field display in some cases

Edit Layout in Express Mode

Dynamic Form and Dynamic Table

- Don't use the Edit Layout feature in Dynamic Form or Dynamic Table in Express mode as it's not supported and may impact working of Business Rules.
- Edit Layout in Dynamic Form and Dynamic Table will be disabled from Update 24D. Any changes made to the layout using this feature prior to Update 24C must be removed.

Rule Editor in Express Mode

Container Layout

- If a Container Layout is available in Express mode for the page you want to personalize, use the Customer Connect forum to post queries and seek guidance before using the Rule Editor.

Approval Process for Business Rules Express Mode

- Building rules in Business Rules editor doesn't require an approval from Oracle for this release as long as the implementation guidelines are followed.
- The approval process may be reevaluated by Oracle as more capabilities are delivered in subsequent releases.

Rules from Autocomplete Rules Triggering in Redwood pages

- The existing object validation rules with the error from Autocompletes Rules will continue to work in the Redwood pages, Change Salary and Document Records, listed above. This won't require modification in existing rules.
- All rules for all other pages built on the underlying business objects for this page must be disabled when you enable the Redwood page. Note that disabling rules on a business object will disable Autocomplete for both the Redwood and Responsive pages.
- Approval process for Autocomplete Rules in responsive UI is the same.

Connections Profile Extension

Connections enables worker relationships, experiences, and engagement by helping colleagues find each other for easier collaboration.

By default, cards such as About Me or Organization are visible but the person pronoun in the Person Profile card is hidden.

Hide or Show a Card

Page properties control any card display in Connections. For example, to hide the Experience card deselect the check box of the associated page property **showExperienceCard**.

Note: Sometimes a page may not show up in the Page Designer. You can use the Play mode to test your page. Refer to the *Troubleshooting and FAQs* section of the Extending Oracle Cloud Applications with Visual Builder Studio guide for more information.

Show Person Pronoun in Person Profile

You must configure the Person Name Styles before making the person pronoun in the Connections Profile visible. The person pronoun is stored in a Person Name Information field.

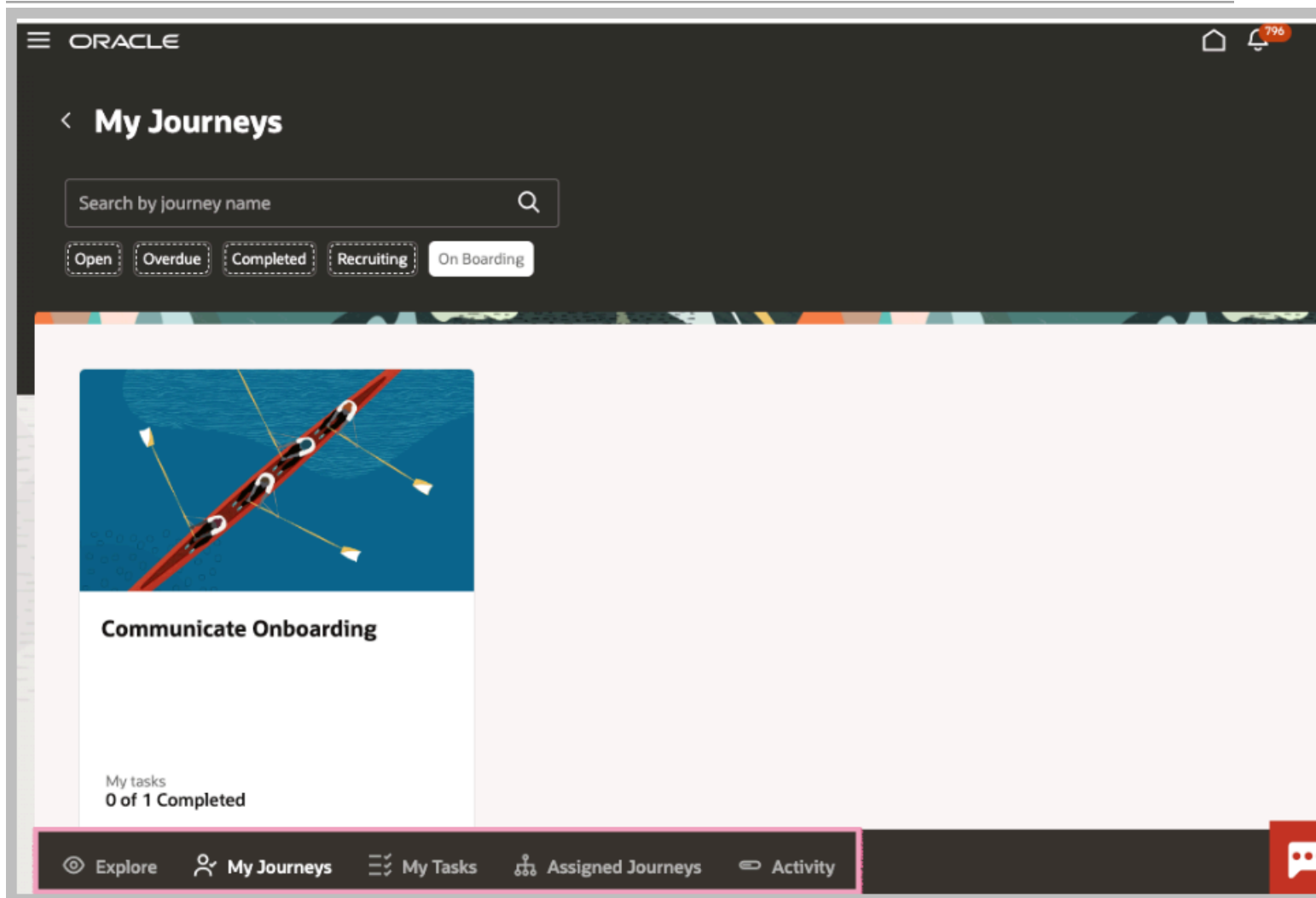
Note that to display the person pronoun in the Connections Profile:

- Store the person pronoun in a Person Name Information 15 to Name Information 30.
- If you need to show the person pronoun in multiple countries, make sure to use the same Person Name Information field for all countries. In this example, Person Name Information 16 is used for all countries.

On the Person Name Styles setup page, add the pronoun to all required countries. After setting the Person Name Styles, you can set the **pronounNameAttribute** page property with the technical name of the Person Information Name where the person pronoun is stored, for example, NameInformation16.

Control Display of Tabs in My Journeys

In this example, you reorder tabs in My Journeys page using page properties with an array type.



A unique page property is used when tabs are extensible. They control these attributes.

- Display and ordering of each tab that gets displayed, by default. In Journeys, the page property used is **listOfTab**. The default list of tabs shown are Explore, My Journeys, My Tasks, Assigned Journeys, and Activity. The tabs can be reordered or removed by modifying the array.
- The page property description provides you the values expected by the array:
 - {"id": "explore", "icon": "oj-ux-ico-view"}
 - {"id": "myJourneys", "icon": "oj-ux-ico-due-dillegence"}
 - {"id": "myTasks", "icon": "oj-ux-ico-progress-list"}
 - {"id": "orgJourneys", "icon": "oj-ux-ico-building"}
 - {"id": "activity", "icon": "oj-ux-ico-progress-linear"}

Watch video

Let's look at the steps to reorder or remove tabs.

1. Click + to add the tabs you want to show in the page using the values provided in the description.

2. Drag and drop to reorder the tabs.
3. Click the delete icon to remove a tab.

Control Display of Additional Attributes in Personal Payment Method Details

In this example, you enable additional bank account attributes on the Payment Method Details page using page properties.

A unique page property is used for each extensible attribute. These page properties control the visibility of the respective attribute.

The page property description provides information on the purpose and the valid values for the page property. For example, if you want to enable account number reverification field, use the page property "verifyAccountNumber". Let's look at the steps to enable additional attributes.

1. Select the page property corresponding to the attribute that you want to enable.
2. Set the value for the page property.

Control Display of Guided Journey Based on User Roles

In this example, you want to display a page-level guided journey in the Change Assignment page for HR specialist users.

In the Page Properties section, select the page property to set the guided journey code at the page level. Enter the default value for the following page property:

- Set Guided Journeys Code at the page level: `[[$Application.user.roles.includes('HR_SPECIALIST_-_VIEW_ALL_DATA') ? 'GUIDED_JOURNEY_FOR_CHANGE_ASSIGNMENT' : null]]` where
 - HR_SPECIALIST_-_VIEW_ALL_DATA is the user role code
 - GUIDED_JOURNEY_FOR_CHANGE_ASSIGNMENT is the task code

It will show all the tasks defined in the Guided Journey to your HR specialist user.

You can define the same expression at the task code level to show a subset of tasks. Enter the default value for the following page property:

- Set Guided Journeys Task Codes at the page level: `[[$Application.user.roles.includes('HR_SPECIALIST_-_VIEW_ALL_DATA') ? 'KNOW_BEFORE_YOU_START' : null]]` where
 - HR_SPECIALIST_-_VIEW_ALL_DATA is the user role code
 - KNOW_BEFORE_YOU_START is a task code defined in the GUIDED_JOURNEY_FOR_CHANGE_ASSIGNMENT guided journey.

Note: Simple expression based on the user roles can apply to any page property of any type. Displaying a guided journey conditionally is just one illustration. The user role is the only condition available across applications.

6 Adding Your Own Content in Redwood Pages

Add Your Own Content in Redwood Pages

Depending on the page and need, you can find different ways to add your own content.

Guided Journeys Configuration Using Page Properties

A guided journey lets administrators embed tutorials, company policies, and best practices at the page or section level to help users complete tasks more efficiently.

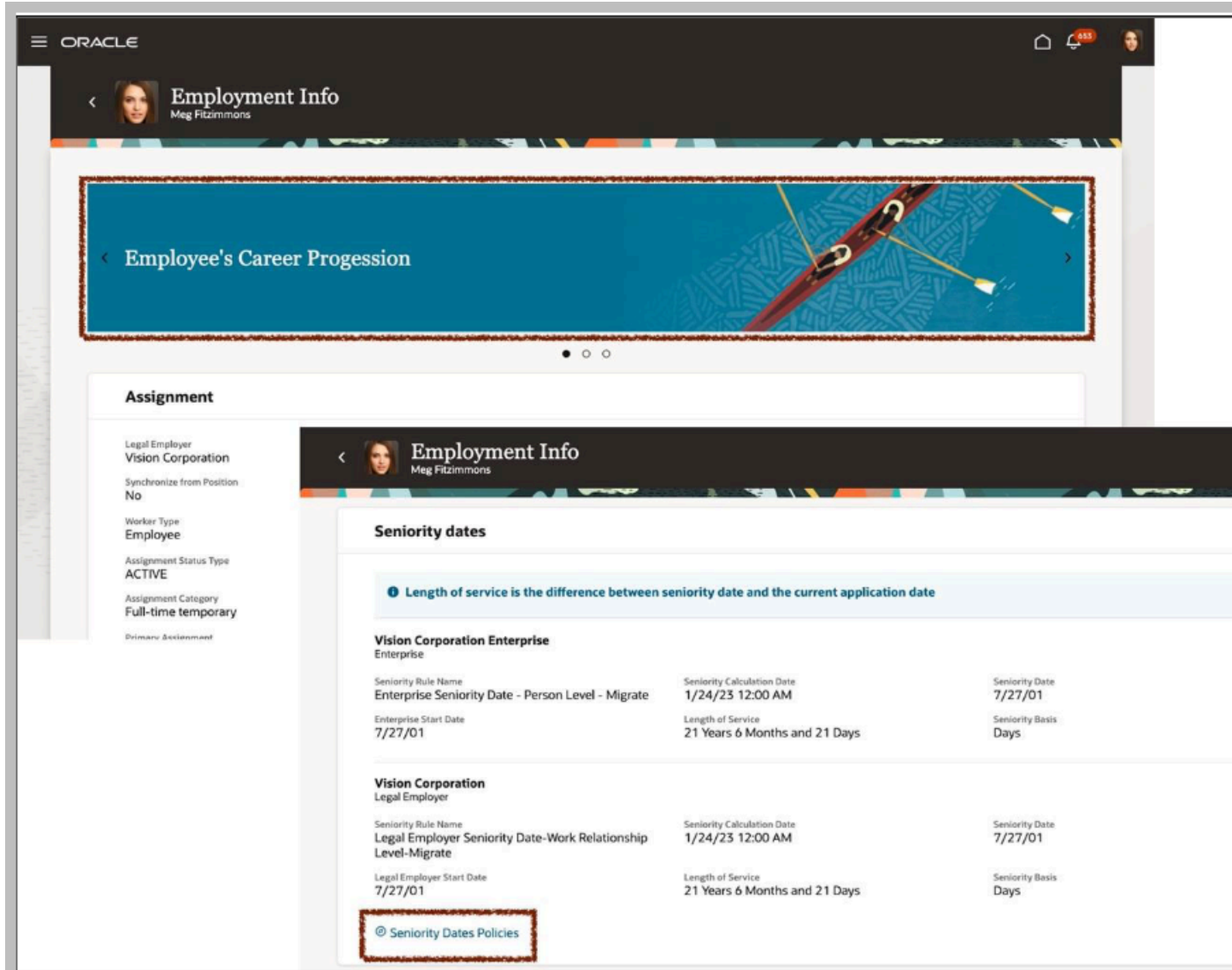
Guided journeys helps your users in doing their HR transactions efficiently by providing guidance such as tutorials, company policies, and best practices using guided journey tasks.

A journey is a collection of tasks that can facilitate a business process, such as analytics, documents, embedded learning, external URLs, manual tasks, questionnaires, reports, and videos.

For example, you want to configure a page-level guided journey for the Employment Info page and a section-level guided journey for the Seniority Dates section. When your HR specialists navigates to the page, they can access:

- Analytics about the worker's career and salary's progression at the page level.

- Policies based on the worker's seniority date at the Seniority date section level.



Use the **Manage Administrator Profile Values** task in the Setup and Maintenance work area to ensure that the `ORA_PER_JOURNEYS_ENABLED` and `ORA_PER_GUIDED_JOURNEYS_ENABLED` profile options are set to Y at the site level. These profile options enable journeys.

For Oracle Fusion Human Capital Management, you can find guided journey code and task codes at **My Client Groups > Employment > Checklist Template**

For Oracle Fusion Cloud Supply Chain & Manufacturing (SCM) and Oracle Fusion Cloud Procurement, go to the **Setup and Maintenance** work area and select the Guided Journeys task:

- Offering: Select any Oracle Cloud SCM or Oracle Procurement offering (Manufacturing and Supply Chain Materials Management, Order Management, Inventory Management, Product Management, Supply Chain Planning, or Procurement)
- Functional Area: Application Extensions
- Task: Guided Journeys

Select the guided journey template you want to use for your page, and note the codes within the template for future use.

To enable guided journeys on your Redwood-enabled pages, navigate to the **Page Properties** section in the Page Designer and find the following page properties with these descriptions:

- Page-Level Journey Page Property (PageJourneyCode) - Controls the display of the guided journey at the page level. Set it with the guided journey code available in the template.
- Page-Level Journey Task Page Property (PageTaskCodes) - Controls the display of the guided journey tasks at the page level. Set it with the task codes available in the template. Use the comma as separator to display many tasks.
- Section-Level Journey Page Property (MainSectionJourneyCodes) - Controls the display of the guided journey in the `<section name>` section. Set it with the guided journey code available in the template.
 - Where section name is the region in the page where you want to enable a guided journey.
- Section-Level Journey Task Page Property (MainSectionTaskCodes) - Controls the display of the guided journey .tasks in the `<section name>` section, where section name is the region on the page where you want to enable a guided journey. Set it with the task codes available in the template. Use a comma as separator to display many tasks.

Note: If the page properties associated with guided journeys aren't available that means that the feature isn't supported for the page as yet.

Related Topics

- [Overview of Guided Journeys](#)
- [Control Your Display with Business Rules](#)

Nudges Configuration Using Page Properties

Nudges remind managers and employees to perform important tasks such as scheduling check-ins, assigning goals and so on.

You can configure nudges to be displayed as cards on pages. When a nudge recipient clicks the card, they are navigated to the specific page where they can complete the task.

You can do these actions:

- Define nudges as transaction cards for your employees and specify the criteria for triggering these nudges.
- Optionally, assign a priority for each nudge. Nudges will be displayed in the order of importance.

This feature ensures that managers and employees perform important tasks in a timely manner. Nudges remind them to act on pending tasks and provide easy navigation to the relevant pages of the application.

For example, some organizations may require managers to perform timely check-ins with their employees. By configuring a nudge, you can remind a manager who wants to view the salary history of an employee that a check-in is overdue. When the manager opens the Employment Info page, a nudge is displayed to schedule a check-in. On clicking the nudge, the manager is directed to the Check-Ins page where a check-in can be scheduled.

To enable nudges in your pages, navigate to the **Page Properties** section in the Page Designer and find the following page property:

- **renderNudges:** This variable controls the rendering of the nudges on this page. Set it to on or off to show and hide nudges respectively.

Note: If the page property associated with nudges isn't available that means that the feature isn't supported for the page as yet.

Related Topics

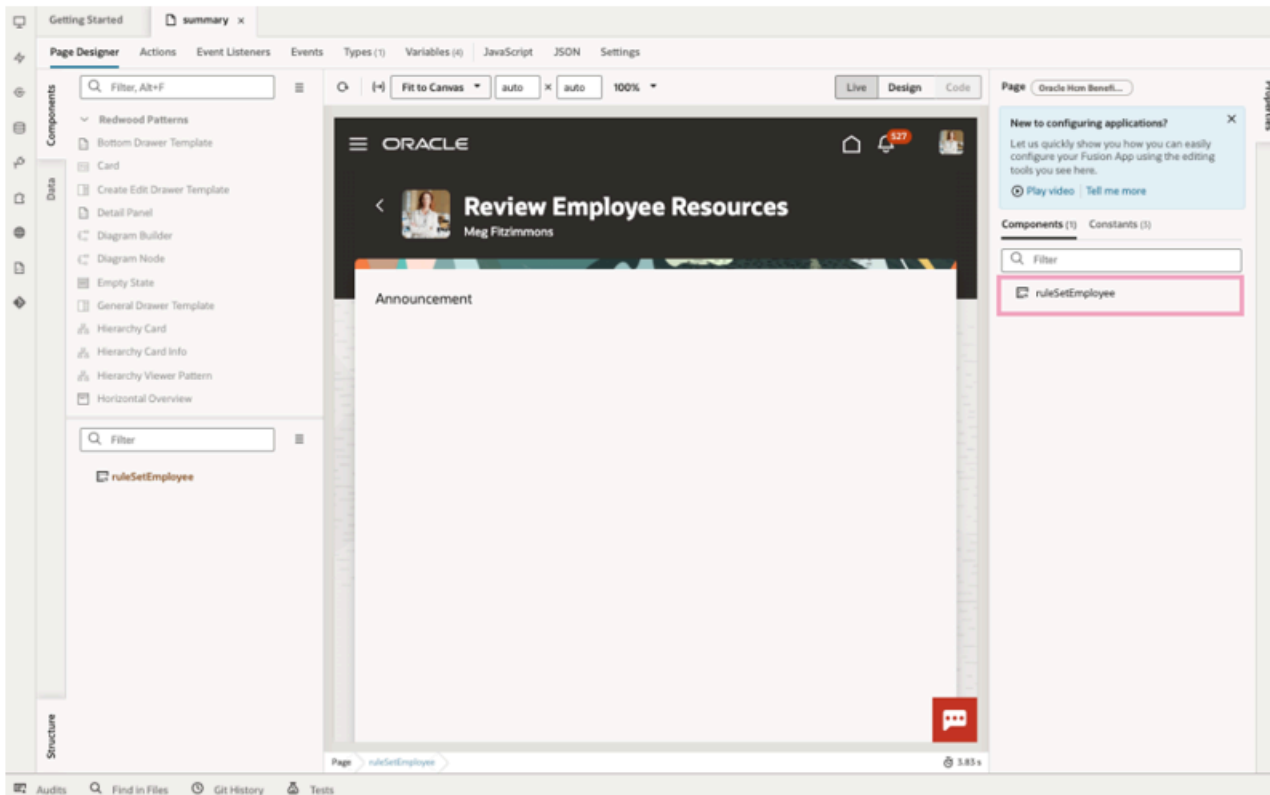
- [Overview of Nudges](#)
- [Control Your Display with Business Rules](#)

Add Your Own Content in Review Employee Resources

Note: This is the only scenario where you need to navigate to the Advanced mode to extend your page. Working with dynamic containers may require users with some technical skills.

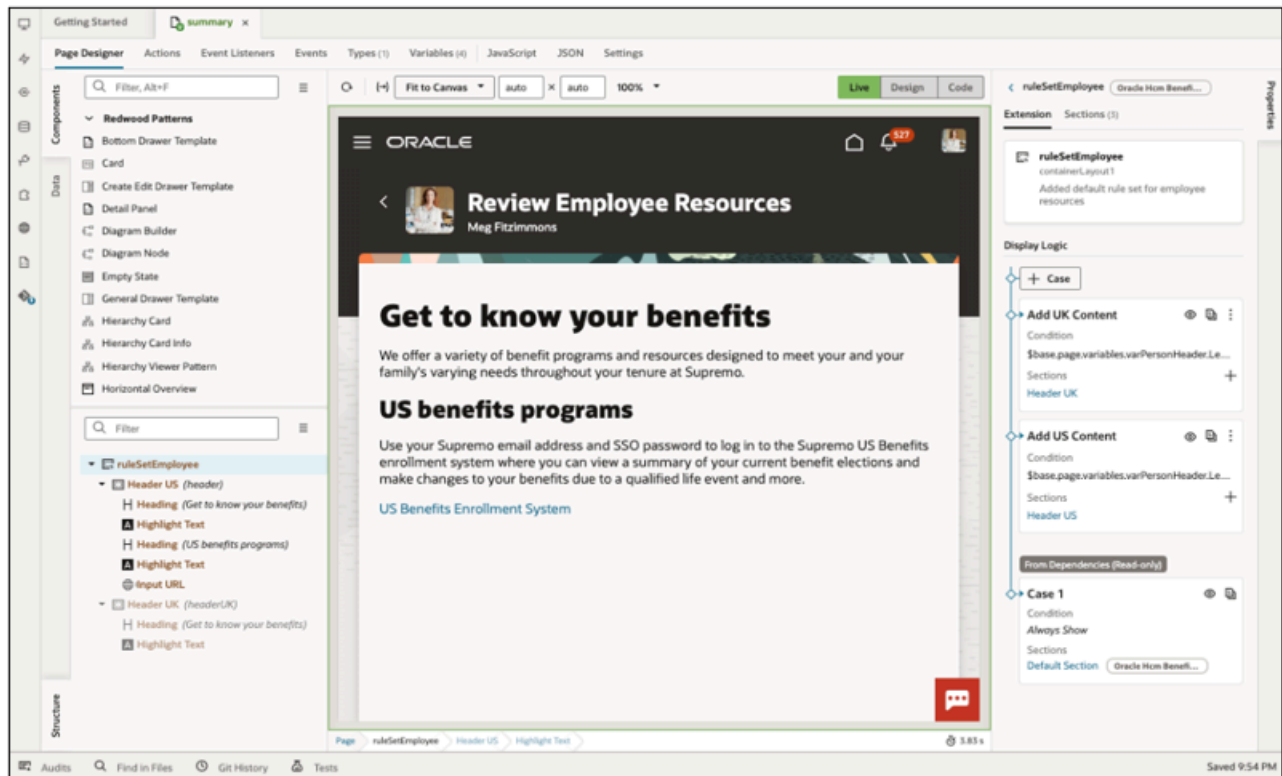
Review Employee Resources is an Oracle Cloud Benefits page where you can add text, documents for policies or procedures, or instructional videos, specific to your enterprise.

By default, this page is empty built with a dynamic container to add your own content.



1. Go to Advanced mode in VB Studio.

2. Click the **ruleSetEmployee** dynamic container in the **Structure** view to add your own content.



- Case 1 is Oracle-delivered. It's in read-only format.
- Refer to the VB documentation to create your own cases, sections, and conditions to show the right content to the right population.

Related Topics

- [Customize Dynamic Containers](#)
- [Re-Ordering a Container's Content](#)

7 Modifying User Interface Text

How You Modify User Interface Text

User Interface Text is the tool that helps ensure the terminology of your application aligns with the language used within your organization.

If you modify the terminology, such as the page title directly in Oracle Visual Builder Studio (VB Studio), a message is displayed that the customization component doesn't exist for the page. This indicates that VB Studio isn't the appropriate tool for changing your terminology; however, you can still use User Interface Text for this purpose.

Related Topics

- [Tools for Changing Text](#)

8 FAQs

Branding

How can I update the branding of the Redwood pages?

Using the Themes page, you can update the branding of your Redwood pages.

Related Topics

- [Overview of Configuring Themes and Home Page Settings](#)

Express Mode and Business Rules

How do I know what's extensible in a page?

Configuration is page specific. When you access a Redwood page in Oracle Visual Builder Studio (VB Studio), you can extend it using business rules.

Related Topics

- [Express Mode in VB Studio](#)

What should I do if Express mode isn't available for my page?

The coverage of VB Studio in Express mode pages is still evolving and is expected to evolve further in the future.

Note: Please refrain from making any alterations, even if the Advanced mode option is available for such pages. It's important to note that only changes related to VB Studio in Express mode are supported.

Why can't I see business rules for my page?

If you can't see business rules for your page, it means it isn't supported for the page as yet.

What should I do if the change I need to do on a Redwood page isn't supported?

If Express mode isn't available, that means the page isn't ready to be extended in this release.

Why do I see the Start Preparing button on the business rules page?

You will see the **Start Preparing** button on the Business Rules page when creating a new rule after selecting Configure Business Rules.

This is to prompt you to migrate any existing layouts from layout(-x).json to metadata-rules(-x).json. This applies to all dynamic layouts in the extension, occurring only once. Click the **Start Preparing** button to load all rules and conditions.

Delivered Rules for HCM Redwood Pages

Which release are delivered rules available in business rules?

Delivered rules, such as best practices or localization rules, are introduced as of 24A and are page specific.

VB Studio

How do I enable VB Studio?

To learn more about enabling VB Studio, go to [Oracle Help Center](#) > your apps service area of interest > Books > Configuration and Extension.

Before you can start working with VB Studio, a systems administrator must set up the requisite environment.

Which role is required to access VB Studio?

You must be granted the Human Capital Management Application Administrator role.

Page Composer and Transaction Design Studio

Can I customize Redwood pages using Page Composer?

No, you can use Page Composer only for responsive pages.

You need to use Express mode in VB Studio to configure Redwood pages.

Should I move all my changes from Page Composer to VB Studio?

All extensibility changes done in a responsive page must be done in the Redwood page using Express mode.

Related Topics

- [HCM Redwood Personalization Tool](#)

Will page personalizations in Transaction Design Studio or Page Composer be available in Redwood pages?

Yes! Use the [HCM Redwood Personalization Helper tool](#) to list and convert most existing Page Composer and HCM Experience Design Studio personalizations to work with Redwood pages.

- Start by running the tool in **Report Only** mode to see which personalizations can be converted and migrated.
 - See a list of personalized pages you've created in Page Composer and Transaction Design Studio in a PDF report or XLS spreadsheet.
 - See which page personalizations the tool can convert to VB Studio Express.
- Then run the tool in **Migrate and Report** mode to convert the personalizations and package them in a VB Studio workspace. You then import the workspace into a test environment to validate the personalizations on Redwood pages.

Do I need a sandbox or Customization Set Migration (CSM) tools for Redwood pages?

No, you won't need these tools. You will be managing extensibility changes as well as deployment or rollbacks using VB Studio.

Support

Does HCM, SCM, and Procurement only support changes done in Express mode?

Yes, only changes done for HCM, SCM, and Procurement Redwood pages in Express mode in VB Studio are supported.

Migration and Patching

Is there any documentation on Express Mode or Business Rules migration from one instance to another?

Migration from one instance to another is handled within VB Studio. For more information refer to [Set Up the Project to Deploy to Other DEV and TEST Instances](#) documentation.