



The Future of Insurance Starts Here

**Validation Rules
in Dev Studio**



AGENDA

- What is Validation Rule and its purpose?
- How to begin with a Validation rule?
- Different parts of Validation Rules
- Database table
- Override Validation rules
- Best Practices



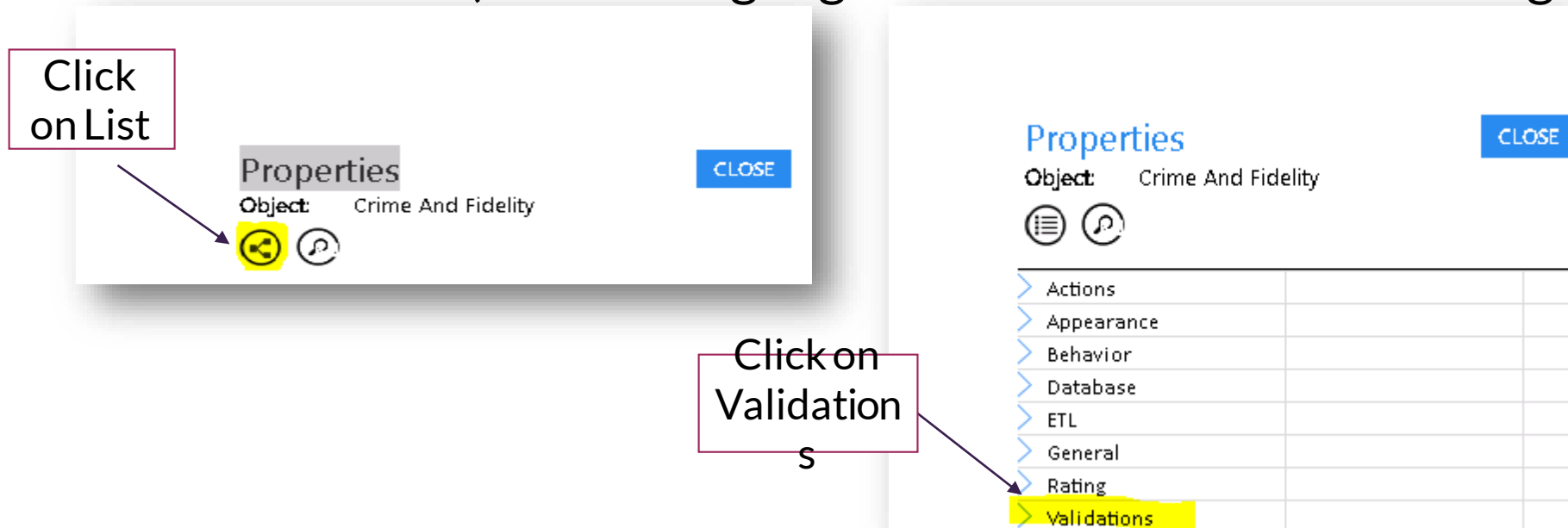
What is Validation Rule and its purpose?

- Validation Rule is one of the feature provided by Dev Studio to perform validations and display relevant messages.
- Validation Rules are Rules that are configured using Dev Studio, to validate Data based on Business Logic and need.
- Cover-All Dev studio provides common Base product to all the customers and as per customer requirement users can customize validations and display messages.
- Even in BASE we can define these validation rules. Messages are customized, here it does not mean customer specific. It means we can configure our own messages. E.g. For a required field, framework generates a message if data is not entered in the field, say “Please enter Effective Date”. Now we want to override this message with “User, please enter Effective Date”, then we will need validation rule.
- Also in case of base products, the existing validations of any field can be modified by using Validation Rule.

How to begin with a Validation rule?

- **Validation List :**

- Screens plug-in's Properties Editor (Right Panel) contains properties section of Object / Fields.
- Users can click on list section of Properties Editor (Right panel), to locate Validations.(Click on highlighted section as shown in images).



How to begin with a Validation rule?

The screenshot displays the DEV STUDIO application interface. The top bar shows the user 'training7' and a gear icon. The main title is 'Line Of Business: Crime & Fidelity'. The left sidebar contains a 'Screens' list with a search bar and a 'GO' button. The main workspace is titled 'CRIME AND FIDELITY' and contains a 'Summary Section' and a 'Crime And Fidelity' section. The 'Properties' panel on the right shows the 'Object: Crime And Fidelity' and a table of validation rules.

Screens List:

NAME	DESCRIPTION
Billing Inf	
Coinsurar	
Producers	
Audit Deta	
Policy_co	
Additional	
Locations	
Broker	
Crime Anc	
KY Tax Exe	
Premium	
Commissi	
Other Inf	

Properties Panel:

Object: Crime And Fidelity

Validation	Rule	Action
On AutoSave	Not Defined	...
On Delete	Not Defined	...
On Rate	Not Defined	...
On Request	Not Defined	...
On Save	Not Defined	...

How to begin with a Validation rule?

- Validation can be configured on 4 different properties:
 - **On AutoSave** : As soon as value of any particular field is saved. Validates the field without clicking on Save Button.
 - **On Delete** : On delete of an instance/ record from the table. Fires a validation when delete button is clicked
 - **On Rate** : On Rating the quote/ policy. Fires a validation when Rate button is clicked
 - **On Save** : On click of next button on screen. Fires a validation when Save button is clicked
 - **On Request**

Reference Link:<https://confluence.majesco.com/display/MPCL/Data+Validations>

How to begin with a Validation rule?

- **Validation RULE CONFIGURATION EDITOR:**
 - The Editor layout is designed to view or edit Validation Rule attributes.

Rectangular Snip

Rules

(OBJECT: Composite Rating Group, HIERARCHY: Crime And Fidelity->Crime And Fidelity, FIELD: Group Name, PROPERTY: On Rate)

Category: Validation Rule Author: Release:

Search By: ADD SEARCH

☒ BASE ☒ CUSTOM ☒ ALL HIERARCHIES + ADD ✎ EDIT 📄 COPY ↺ OVERRIDE 🗑 REMOVE

SELECT	SOURCE	RULE ID	CATEGORY	RELEASE	RULE DESCRIPTION	MORE
<input type="checkbox"/>	BASE	PKS-CF-0001	Validation Rule	13.11.0		MORE INFO

CLOSE

How to begin with a Validation rule?

Button	Description
ADD	Allows to add a new rule.
EDIT	Allows to edit the selected rule.
COPY	Allows to create a copy of the selected rule.
REMOVE	Allows to delete the selected record.
OVERRIDE	Allows to override the selected record.

OVERRIDE: Based on customer requirement, BASE VALIDATION should be overridden using *OVERRIDE BASE*. This creates a new entry in the *pct_object_field_validations* table with same POI_NAME and it will shown as Custom under Source attribute in Dev Studio. The framework ignores the base validation and executes the custom validation.

How to begin with a Validation rule?

- Validation Rules added by base user for a given property are called as Base Rules which are visible in both Base and Custom login of Cover-all Dev studio.
- As per customer requirement, customize Validation rules can be applied on the top of the Base Rules, those are called as Custom Rules.
- The information displayed in the top panel of Editor provides information about a Validation Rule attribute and has following fields. First top line indicates Parent object name, actual object, field name and the property on which the User is applying the Rule

Attributes

Attribute	Description
CATEGORY	<ul style="list-style-type: none">• This is the specification of the Validation Rule<ul style="list-style-type: none">○ Default value: Validation Rule
AUTHOR	<ul style="list-style-type: none">• This column holds information of the User
RELEASE	<ul style="list-style-type: none">• Product Release version from which User wants to apply Rule for a specific Property<ul style="list-style-type: none">○ Example: Base Release no 16.1.0○ Example: Custom Release no 41.0.0
SEARCH BY	<ul style="list-style-type: none">• Criteria to search rules

How to begin with a Validation rule?

- Users can specifically filter on the type of Rules (Base, Custom and all hierarchies).
- Editor Bottom panel shows all Rules for specific Property and has following attributes.

Attribute	Description
SELECT	<ul style="list-style-type: none">○ User can Edit Rule by selecting SELECT
SOURCE	<ul style="list-style-type: none">○ This column holds Type of Validation Rule○ Base: If Validation Rules are created for the Base.○ Custom: If Validation rules are created for customize requirement
RULE ID	<ul style="list-style-type: none">○ This column holds Rule ID for specific field property○ This is auto generated Id based on screen and description of the Rules.
CATEGORY	<ul style="list-style-type: none">○ This column holds Validation Rule○ Default Value: Validation Rule
RELEASE	<ul style="list-style-type: none">○ Product Release version from which User wants to apply Rule for specific Property○ This column is mandatory field○ Example: Base Release no 16.1.0○ Example: Custom Release no 40.0.0
RULE DESCRIPTION	<ul style="list-style-type: none">○ This column holds description of the applied Validation Rule for properties.
MORE	<ul style="list-style-type: none">○ User can click on MORE INFO, to modify or add conditions/ define Rule

Different parts of Validation Rules and the corresponding table

- **RULE CONFIGURATION EDITOR: MORE INFO :**

- On click of MORE INFO/ADD button on panel it opens rule configuration editor

Rule: AAM-CF-0001 Validation Rule 13.11.0


WHEN

BASIC CONDITION ON POLICY ATTRIBUTES

Control Date	is between	12/01/2012	Product	is		Control By Adoption ?	<input type="checkbox"/>
	and		Line of Business	is	CF	Adoption Type	<input type="text"/>
Company	is		Transaction	is any of		Bureau Effective Date	<input type="text"/>
State	is any of		Originating Role	is any of		Product Version	is <input type="text"/>
Program	is any of		Current Role	is any of			
Market Segment	is any of		MultiState	is			

THEN

FORM NAME

IF the validation logic  MODIFY LOGIC returns 'N' THEN take the following action :

Set Error Type to :

Block user from navigating without fixing Warning or Error :

CLOSE

Different parts of Validation Rules and the corresponding table

- The editor contains 3 main sections as mentioned below
 - WHEN
 - THEN
 - VALIDATION LOGIC
- The parameters of WHEN condition goes into **PCT_QUALIFIERS** table
- The parameters in THEN part goes to **PCT_OBJECT_FIELD_VALIDATIONS** table
- Whereas query in VALIDATION LOGIC part goes to **PCT_QUALIFIER_CRITERIA**.



Steps to analyze
Validation rule

Different parts of Validation Rules and the corresponding table

- **RULE CONFIGURATION EDITOR: WHEN SECTION :**
 - In this section, user can apply conditions on Policy/System attributes and Advance conditions as per business requirement. This section is called as **WHEN: BASIC CONDITION ON POLICY ATTRIBUTES**

Attribute	Description
CONTROL DATE is between	User can apply condition by selecting CONTROL DATE range, between those dates Rule can be Active. The date entered for "and" can be Null is between: 01/01/2016 and: Null/01/01/2017
COMPANY is	This column defines list of licensed companies for which the user is configuring the Rule. If Company is Null then rule can apply to all companies.
STATE is any of	This column holds the state code for which the rule is applicable. Null State Code record is applicable to all States. State Code is two-character string. Example: AL for Alabama

Different parts of Validation Rules and the corresponding table

Attribute	Description
PROGRAM is any of	Users can select applicable program for which the Rule has to qualify. If there is no program configured, then Rule applies to all programs
MARKET SEGMENT is any of	This column defines list of Market Segment for which the user is configuring the Rule. If Market Segment is Null then rule can apply to all market.
PRODUCT is	This column holds the Product for which the rule is applicable. Null Product record is applicable to all Product.
LINE BUSINESS IS OF	This column defines Line of Business for which the User is configuring the Rule. The log-in Line of business having Default set to LOB Example: User Logs-in with General liability then the Line Of Business is GL

Different parts of Validation Rules and the corresponding table

Attribute	Description
TRANSACTION is any of	This column defines Transaction for which the Rule is configured. Example: If Transaction is any of "CANCELLATION" then this Rule executes only for cancellation transactions performed on Policy.
ORIGINATING ROLE is any of	This column specifies the rule is applicable for any originating role. Null is applicable to all originating role.
CURRENT ROLE is any of	This column specifies the rule is applicable for any specific/set of role. Null is applicable to all role.
CONTROL BY ADOPTION	This column defines if this rule is to be adopted by customers. Not selected means adoption is not required.
ADOPTION TYPE	This column specifies the adoption type for this rule if control for adoption is selected.

Different parts of Validation Rules and the corresponding table

Attribute	Description
BUREAU EFFECTIVE DATE	This column defines the date from which the rule is applicable as specified by bureau(for e.g. ISO)
PRODUCT VERSION is	This column holds Product version from which rule can be applied to the Field property. The Product version is of Base pack version
CUSTOM PACK VERSION	This column holds Custom version from which the rule can be applied to the Field property. The Custom version is for custom Rule


- Data for WHEN section goes into PCT_QUALIFIERS table

Different parts of Validation Rules and the corresponding table

- **VALIDATION RULE CONFIGURATION EDITOR: THEN SECTION**
 - The THEN section of validation rule contains 5 section as mentioned below:

THEN

FORM NAME

IF the validation logic  MODIFY LOGIC returns 'N' THEN take the following action :

Set Error Type to :

Block user from navigating without fixing Warning or Error :

THEN

FORM NAME

Set Error Type to :

Block user from navigating without fixing Warning or Error :

☐ Show Message

☒ Show Popup

URL Width px Height px

Different parts of Validation Rules and the corresponding table

- **IF** : It specifies the property on which this validation needs to be executed. Different properties available here are ON RATE, ON DELETE, ON SAVE, ON AUTO SAVE, ON REQUEST.
- **VALIDATION LOGIC** : This section contains a query which should return either 'Y' or 'N'. This section provides a area where additional condition can be specified. If this query returns 'N' then only the validation message would be displayed.
- **Set Error Type to** : It has values as ERROR/WARN. Warning will always be displayed in a pop-up whereas ERROR is displayed below the field on which validation is written.
- **Block user from navigating without fixing Warning or Error** : It has two values Yes/No. It specifies if the user should be restricted from navigating further screens on display of Error message. If value is NO then user would be allowed to navigate to other screens whereas on YES it would not be allowed to navigate to other screens.

Different parts of Validation Rules and the corresponding table

- **SHOW** : It has two options as Show Message/Show Pop Up. Show Message is used to configure a user defined error message where Show Pop Up is used to call a JSP page to show message. The JSP page will be developed to write customized logic of displaying message and other activities on JSP page. Parameters for THEN section goes into **PCT_OBJECT_FIELD_VALIDATIONS** table.

Different parts of Validation Rules and the corresponding table

- **VALIDATION LOGIC SECTION:**

- This provides section where additional condition can be used before showing a validation message.
- It contains a SQL query which can return 'Y' or 'N' value.
- On return of 'N' value the validation rule will show the message.
- This query goes into PCT_QUALIFIER_CRITERIA table

Different parts of Validation Rules and the corresponding table

Advanced Condition for Rule: Rule:
AAM-CF-0001

LANGUAGE

VIEW ☐ Flowchart ☒ Script

DATABASE 

```
CREATE OR REPLACE FUNCTION Criteria (  
  p_entity_type IN VARCHAR2 , p_entity_reference IN VARCHAR2 , p_error_message OUT VARCHAR2 ) RETURN NUMBER  
IS  
  v_return NUMBER;  
BEGIN  
  SELECT NVL2(  
    (  
    SELECT 1  
    FROM vw_mis_cov_cf_ins_agreement cia  
    WHERE UPPER(cia.insuring_agreement_name) = UPPER('{field:INSURING_AGREEMENT}')    AND cia.entity_reference = '{field:ENTITY_REFERENCE}')    , 'Y', 'N')  
  FROM dual  
  
  RETURN v_return;  
END;
```

[BACK TO RULE](#)

Override Validation rules

- If due to any customer requirement we have to override the BASE VALIDATION, we use OVERRIDE BASE. This create a new entry in pct_object_field_validations table with same POI_NAME. Framework will now ignore the base validation and will execute the custom validation
- Select the Validation Rule to be overridden and click on override

The screenshot shows a web interface titled "Rules". Below the title, there is a breadcrumb path: "(OBJECT: Policy, HIERARCHY: Policy, FIELD: Product, PROPERTY: On Save)". Below this, there are fields for "Category: Validation Rule", "Author:" (with a text input), and "Release:" (with a text input). A "Search By:" dropdown menu is followed by an "ADD SEARCH" button. Below the search bar is a toolbar with several icons: a plus sign for "ADD", a pencil for "EDIT", a document with a plus sign for "COPY", a pencil with a checkmark for "OVERRIDE" (which is highlighted with a yellow box), and a trash can for "REMOVE". Below the toolbar is a table with columns: "SELECT", "SOURCE", "RULE ID", "CATEGORY", "RELEASE", "RULE DESCRIPTION", and "MORE". The table contains one row with a checked checkbox in the "SELECT" column, "BASE" in the "SOURCE" column, "28" in the "RULE ID" column, "Validation Rule" in the "CATEGORY" column, "2013.5.0" in the "RELEASE" column, and a "MORE INFO" button in the "MORE" column. At the bottom right of the interface is a "CLOSE" button.

SELECT	SOURCE	RULE ID	CATEGORY	RELEASE	RULE DESCRIPTION	MORE
<input checked="" type="checkbox"/>	BASE	28	Validation Rule	2013.5.0		MORE INFO

Best Practices

- To write Dynamic Validation Message, PL/SQL expression can be used that returns messages based on different conditions.
- Validation logic should return either 'N' or 'Y'.



THANK YOU!

