



The Future of Insurance Starts Here

**Configuration Rules (UI Rules)
in Dev Studio**



AGENDA

- Rule Configuration
- Rule Guidelines
- Types of Rules
- UI Rules
- Rule Configuration editor
- Rule Attributes
- Different parts of Rule
- Weightage and Preferences in Rule
- Best Practices



Rule Configuration

- Rule Configuration is one of the feature provided by Dev Studio to set properties of fields/Object field on top of default properties being set on a field.
- Cover-All Dev studio provides common Base product to all the customers (if applicable) and as per customer requirement user can customize existing field properties, using rule configuration.
- Also in case of base/custom products, the default property of any field can be modified by using Rule configuration.
- The rules can be divided into 2 general categories:
- **Base Rules:** Base rules are define only in base and over any base object/field. We can override base properties of object/field by using custom rules. These rules are visible in both Base and Custom login of Dev Studio.
- **Custom Rules:** Custom rules are defined only in custom and can be define on base or custom object/field. By using the custom rules we can override the base properties as well as custom properties. Custom rules always have more weightage than base rules on an object/field. These rules are visible only in Custom login of Dev Studio.

Rules Guidelines




- Rules are conditional properties for the object/field.
- These Rules are configurable, where the user only needs to add conditional instructions in the Rule editor to achieve desired results.
- Policy platform has the capability to read the appropriate Rules (conditions) on each Child Object/Field within the screens based on control dates, company, state, product version etc. as per applicable requirement.
- Rules that are added in one release cannot be modified in another release. In order to modify the rule users need to expire the existing rule and add a new rule. There is special right of MRR (Modified Released Resource), which allows user to modify released rule as well.
- The Number appended to the property signifies the number of rules written on that particular property for the selected object/field.

Types of Rules

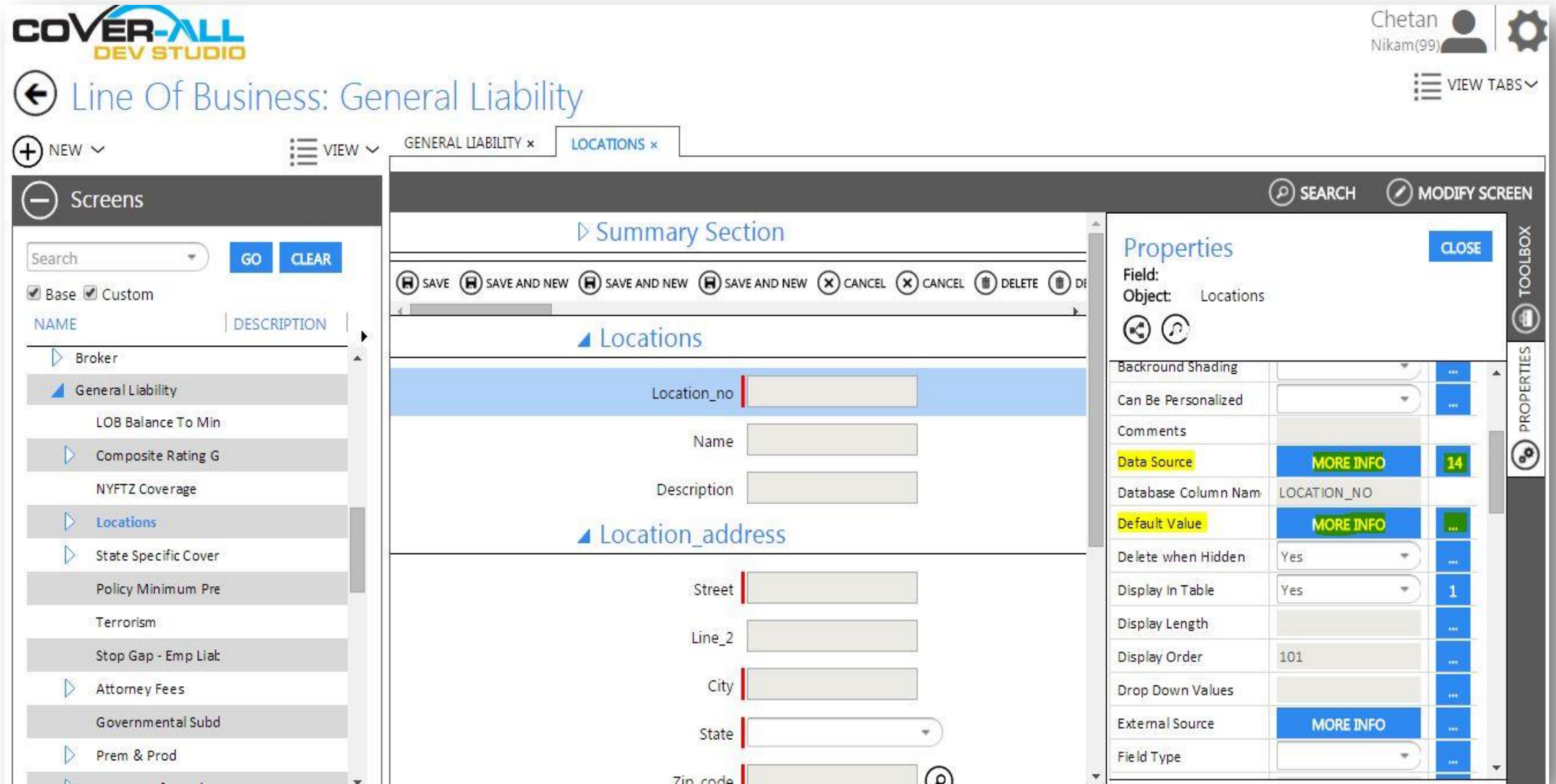
- There are 3 types of rules:
 - Configuration Rule (UI Rules)
 - Validation Rule
 - Action Rule

How to begin with a Configuration rule (UI Rule)



- **PROPERTIES AND CONFIGURATION OF RULES :**


- Screens plug-in's Properties Editor (Right Panel) lists all properties of Object / Fields, which can be filtered by entering search criteria in Search box or selecting the Base and Custom checkbox.
- Users can click the  in the Properties Editor (Right panel), Rule Editor will open for creating a new rule.
- User can apply multiple Rules on each property.
- When user successfully save and validate Rules in Rule Editor, under Properties Editor that Property will shows the applied Rule counts like  instead of .

How to begin with a rule?





COVER-ALL DEV STUDIO


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VIEW TABS 

Line Of Business: General Liability

NEW  VIEW  GENERAL LIABILITY x LOCATIONS x

Screens









Search  **GO** **CLEAR**

☒ Base ☒ Custom

NAME | DESCRIPTION

- Broker
- General Liability
- LOB Balance To Min
- Composite Rating G
- NYFTZ Coverage
- Locations
- State Specific Cover
- Policy Minimum Pre
- Terrorism
- Stop Gap - Emp Liab
- Attorney Fees
- Governmental Subd
- Prem & Prod

Summary Section

 SAVE  SAVE AND NEW  SAVE AND NEW  SAVE AND NEW  CANCEL  CANCEL  DELETE  DELETE

Locations



Location_no	Name	Description

Location_address

Street	
Line_2	
City	
State	
Zip_code	

Properties **CLOSE**

Field: Locations

Background Shading		...
Can Be Personalized		...
Comments		...
Data Source	MORE INFO	14
Database Column Name	LOCATION_NO	...
Default Value	MORE INFO	...
Delete when Hidden	Yes	...
Display In Table	Yes	1
Display Length		...
Display Order	101	...
Drop Down Values		...
External Source	MORE INFO	...
Field Type		...

TOOLBOX

PROPERTIES

RULE CONFIGURATION EDITOR

- The Editor layout is designed to view or edit Rule attributes based on Product Releases.

Rules

(OBJECT: Address, HIERARCHY: General Liability->Locations->LOCATION, FIELD: Street, PROPERTY: Auto Lookup)

Category: UI Rule Author: Release:

Search By: [ADD SEARCH](#)

☒ BASE ☒ CUSTOM ☒ ALL HIERARCHIES [+](#) ADD [✎](#) EDIT [📄](#) COPY [🗑️](#) REMOVE

SELECT	SOURCE	RULE ID	CATEGORY	RELEASE	RULE DESCRIPTION	MORE
<input type="checkbox"/>	BASE	PR-10542749-12445	UI Rule	2068.5.0	No description available for this rule.	MORE INFO
<input type="checkbox"/>	BASE	MRG-GL-0005	UI Rule	13.11.0		MORE INFO
<input type="checkbox"/>	BASE	HSJ-COM-0002	UI Rule	2013.5.0		MORE INFO
<input type="checkbox"/>	BASE	PR-10564817-12643	UI Rule	2071.5.0	No description available for this rule.	MORE INFO
<input type="checkbox"/>	BASE	18704	UI Rule	2013.5.0		MORE INFO
<input type="checkbox"/>	CUSTOM	GL-C-10752101-13920	UI Rule	NOT RELEASED	No description available for this rule.	MORE INFO

NOTE: Rules at top of the table will have higher executional precedence when multiple rules are qualified.

[CLOSE](#)

Rule Attributes

- The information displayed in the top panel of Editor provides information about a 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

Attribute	Description
CATEGORY	<ul style="list-style-type: none">• This is the specification of the Rule<ul style="list-style-type: none">○ Default value: UI 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

Rule Attributes

- Users can specifically filter on the type of Rules (Base, Custom and all hierarchies).
- All hierarchies show existing released rules along with current rules within all the contexts.
- User can have multiple Rules on a given field and based on different parameters, a final set of property will get qualified.
- Editor Bottom panel shows all Rules for specific Property and has following attributes.

Rule 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 Rule○ Base: If Rules are created for the Base.○ Custom: If 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.○ Rule ID is the combination of Prefix of Line Of Business, "C" followed by sequence No : “ <LOB Prefix>_<Ticket No>_<Sequence No>○ Example: GL-56865-45452, PR-1034287-1232
CATEGORY	<ul style="list-style-type: none">○ This column holds UI category○ Default Value: UI 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 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 Rules

- **RULE CONFIGURATION EDITOR: MORE INFO :**
 - On click of ADD button on panel it opens rule configuration editor
 - Rule configuration editor is divided into two sections:
WHEN: In this section, user can apply conditions on Policy/System attributes and apply advance conditions as per business requirement.
THEN: This section is used to Set/Reset the Field properties and apply validation as per customer/business requirement.

Different parts of Rules

Rule: PR-10542749-12443



UI Rule

2073.5.0

No description available for this rule.

WHEN

BASIC CONDITION ON POLICY ATTRIBUTES

Control Date is between 
and 

Company is

State is any of

Program is any of

Market Segment is any of

Product is

Line Of Business is

Transaction is any of

Originating Role is any of

Current Role is any of

Control By Adoption ? ☐

Adoption Type

Bureau Effective Date

Product Version is

ADVANCED
CONDITION




CREATE QUOTE

THEN

STREET

ACTIONS FOR: FIELD: Street, OBJECT: General Liability->Locations->LOCATION

 ADD ACTION  REMOVE ALL

Set Data Source  DATA SOURCE HEADING & MAPPING ...
Set Auto Lookup Multi

CLOSE

Database table

- The editor contains 3 main sections as mentioned below
 - WHEN
 - ADVANCED CRITERIA
 - THEN
- The parameters of WHEN condition goes into PCT_QUALIFIER table
- The query in ADVANCED CRITERIA section goes to PCT_QUALIFIER_CRITERIA
- Whereas property set in THEN part goes to PCT_OBJECT_FIELDS_CUST.



Steps to Analyze
configuration rule

When Section

- **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

When section attributes

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

When section attributes

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.

When section attributes

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

Advance Conditions

- **RULE CONFIGURATION EDITOR: WHEN SECTION : ADVANCE CONDITIONS**
 - Advance condition is used when there is need to put condition other than those specified in WHEN condition.
 - It contains a SQL query whose result should always return a 'Y' value.
 - Once the WHEN condition (if specified) is satisfied along with advance conditions returning 'Y' then the rule qualifies to be executed.
 - To View /Add advance conditions, user can click on ADVANCE CONDITION icon.
 - While adding a rule, if we do not want to enter anything for 'Advanced Condition' part, but we clicked it by mistake, then we will have to specify default "SELECT 'Y' FROM dual" as dummy value.
 - NOTE : Advanced condition sql should not be ended by a ";" (semicolon)

Attributes

Attribute	Description
LANGUAGE	User can write advance conditions in PL/SQL language.
VIEW	User can view/apply advance condition in: <ul style="list-style-type: none">• Flowchart: Based on Parameters• Script: Based on SQL conditions
DATABASE	The applied advance conditions can be validated by given DATABASE details: <ul style="list-style-type: none">• Hostname• PORT• SID• USERNAME, PASSWORD

NOTE: Please don't update above attributes while adding query(eg. Advance condition, Data source etc.)

Different parts of Rules and the corresponding table

Advanced Condition for Rule: Rule: PR-10564817-12643

LANGUAGE

VIEW ☐ Flowchart ☒ Script

DATABASE 

```
CREATE OR REPLACE FUNCTION advancedCriteria (  
  p_entity_type IN VARCHAR2 , p_entity_reference IN VARCHAR2 , p_error_message OUT VARCHAR2 ) RETURN NUMBER  
IS  
  v_return NUMBER;  
BEGIN  
  SELECT  
    CASE WHEN '{queryvalue:CHK_SINGLE_AGENT_FOR_AGENCY}' = 'Y' AND '{param:ENTITY_TYPE}' = 'INSURED' AND NVL(k_product_options_management.f_has_global_option('TURN_RC_ON'),'N') =  
    'Y' AND ${var:license('Risk Clearance','number')} = 1  
      THEN 'Y'  
      ELSE 'N'  
    END  
  FROM dual  
  
  RETURN v_return;  
END;
```

[BACK TO RULE](#)

Attributes

NOTE: While adding query after clicking complete button will get below error always click yes button to complete the process. Validation button functionality is not available.

[illegible]

Then Section

- **RULE CONFIGURATION EDITOR: THEN SECTION**

- Under Rule Configuration Editor in THEN section, field properties are the ones that are to be set/reset as per base/customer requirements.
- Editor top most information in THEN section defines Field name and Path
- ADD ACTION (Bottom-Left Panel) to which field properties user wants to SET/RESET
- Click on '-' sign in front of Rule to remove that particular rule.
- REMOVE ALL (Bottom-Left Panel) to delete existing actions on field properties
- User can Set/Reset multiple properties in THEN section
- The rules would be available on all properties which were set in a particular rule.
- For e.g. if a rule was configured on Default value properties of a field, which is setting Updatable and Hidden properties. Then this rule would be available on Updatable and Hidden properties of that field.

Then Section

- Examples :

The screenshot shows a configuration window titled 'THEN' with a sub-header 'LOCATION_NO'. Below this, it says 'ACTIONS FOR: FIELD: Location_no, OBJECT: General Liability->Locations'. There are two buttons: '+ ADD ACTION' and 'REMOVE ALL'. The main area contains three rows of dropdown menus:

Action	Property	Value
Set	Required	Yes
Set	Hidden	No
Set	Updatable	Yes

THEN SECTION - HIDDEN PROPERTY

- User wants to Set Hidden property for field LOCATION_NO.
- Required, Updatable (Set to Yes) where the default properties for the field is (Set to No) at POF level.

Examples


THEN

STREET

ACTIONS FOR: FIELD: Street, OBJECT: General Liability->Locations->LOCATION

Set

Data Source

 DATA SOURCE

Set

Auto Lookup

Multi

Set

Reset On Copy

No

```
CREATE OR REPLACE FUNCTION advancedCriteria (  
  p_entity_type IN VARCHAR2 , p_entity_reference IN VARCHAR2 , p_error_message OUT VARCHAR2 )  
IS  
  v_return NUMBER;  
BEGIN  
SELECT  
  spr_address_1 line_1,  
  spr_address_2 line_2,  
  spr_city city,  
  spr_state_province state_code,  
  spr_postal_code zip_code  
FROM shl_producers, vw_mis_producers vp, vw_mis_addresses va  
WHERE vp.entity_reference = '{field:ENTITY_REFERENCE}'  
  AND va.producer_address = vp.gid  
  AND vp.producer_code = spr_producer_code  
  AND va.gid = '{field:GID}'  
  
RETURN v_return;  
END;
```

RULE CONFIGURATION EDITOR: THEN SECTION - DATA SOURCE PROPERTY

Different parts of Rules and the corresponding table

- User wants to Set Data Source property for field Street.
- User can populate Pre-defined values (from table/views) as per requirement for the field.
- DATA SOURCE will open new dialogue which allows user to create SQL for getting pre-defined values

Weightage and Preferences in Rule:

- In case of having a base and custom rule on one property of a field, custom rule would always have preference over base rule.
- In case of having more than one custom rule on one property of a field, the sequence of execution of custom rule will always depend upon weightage carried by each rule.
- The rule with highest weightage would be executed first.
- The weightage of rule is calculated depending upon the attributes selected in WHEN section of configuration rule.
- Every attribute has a pre-defined weightage specified in system.

Weightage and Preferences in Rule

- Weightage for different attributes of Rule:

Criteria	Weight
CUSTOMER_CODE	10
PRODUCT_CODE	100
MARKET_SEGMENT_CODE	500
PROGRAM_CODE	1000
TRANSACTION_ACTION	10000
ORIGINATING_ROLE	100000
CURRENT_ROLE	1000000
EFFECTIVE_DATE	1200000
EXPIRATION_DATE	1400000
PRODUCT_VERSION	1600000
BUREAU_DATE	1800000
STATE_CODE	10000000
MULTI_STATE	20000000

Case Study for Configuration Rule

- Consider a below mentioned scenario where a field is having base and custom rules written on it.

Rule	Required	Updatable	Hidden
Base Rule	Y	N	Y
Custom Rule	-	Y	N

- What would be final properties set on the field when both are qualified:

Required	Updatable	Hidden
Y	Y	N

Best Practices for UI Rules

- In case, you have used copy functionality for rule creation then please compare Criteria/Query ID and name of both the rules, it should not be same.
- In case of a show-lookup rule, filter should be added in the data-source query.
- While adding lookup headings in show-lookup rule, fields should be added in the same order in Dev Studio as they need to display on UI in the lookup.
- If field behavior is changed from ShowLookup to AutoLookup OR vice-versa and one of the properties is set to Y then ensure to set other property as N.
- If any of these 3 properties (Auto-lookup, Recal default and Reset on hide) is set to Yes then ensure that other two are set to No and not blank.
- In case Multi Lookup is already present on the field then Auto Lookup should NOT be added.
- If any rule needs to be expired with Product Version then that should be done by adding the check of Product Version in advanced Criteria of the rule.
- Do not use "INTO" clause while writing Advance Criteria or Data Source.



THANK YOU!

