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# Manager Overrides Overview

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# Agenda

- Use Cases
- Key Requirements
- Configuration
- Execution logic
- Database Changes
- Available APIs
- Examples – Execution Flows

## Some Use Cases

- Entering order quantity that exceeds the keyed in quantity limit
- Voiding a line or an order
- Selling of item that is not on file
- Manual discount or price overrides
- Selling with quantity that exceeds maximum order quantity for an item
- Accepting expired coupons
- Accepting coupon that doesn't meet the coupon's criteria
- Accepting payment that exceeds tender limits
- Accepting return of item that exceeds return window

## Key Requirements

- Represent an override use case with a well-defined validation
- Allow a business user to define and manage validation rules and overridden rules against a validation
- Allow a business user to associate a set of approvers, who can approve/reject violations from the overridden rules
- Evaluate validation rules and overridden rules
- Record violations as they occur
- Present violations information as part of order details
- Allow end users like operators or managers to review and approve/reject violations.

# Configuration

- Consists of 3 major processes

## 1. Defining Validations

- A validation represents an override use case.
- I.e. MAX\_NUMBER\_COUPON\_FOR\_ORDER validation represents the maximum number of coupons for an order use case.

## 2. Defining Validation Rules

- A detection rule that a business user can create based on the violation definition.
- I.e. A business user can configure the maximum number of coupons as 5 for the MAX\_NUMBER\_COUPON\_FOR\_ORDER validation.

## 3. Defining Overridden Rules

- If the validation rule defined does not suffice the business needs, business users can define overridden rules for the violation.
- I.e.  
Overridden Rule 1: If (NumberOfCoupons > 10), then approval is required by a manager  
Overridden Rule 2: If (CustomerLevel is "GOLD" and (NumberOfCoupons > 10)), then approval is not required.

# Sterling Business Center

The screenshot shows a web browser window titled "IBM Sterling Business Center - Windows Internet Explorer provided by IBM". The address bar contains the URL: `http://9.55.48.199:9220/sbc/sbc/container/SystemSetup.do?_dc=1374700989437&scCSRFToken=13747007660395FKSRwGdk1GNLc117`. The browser's Favorites bar includes links to "IBM Business Transformatio...", "IBM Standard Software Inst...", "IT Help Central", "Join World Community Grid", "IBM Home Page", and "VIRUS Computer Emergenc...".

The page content is as follows:

- Business Center** (Page Title)
- Administrator Help | Sign Out** (User/Action Links)
- IBM** (Logo)
- Home Products Pricing Customer Inventory System Setup** (Navigation Menu)
- Organization: Hub Organization** (Organization Info)
- System Setup** (Section Header)
- Validation and Override Rules** (Section Header)
  - Set up validation or override criteria for various business scenarios
- Domain Administration** (Section Header)
  - Manage domain related configurations.
- Order** (Section Header)
  - Set up criteria for various order related scenarios
- Pricing** (Section Header)
  - Set up criteria for various pricing related scenarios
- Payment Capture** (Section Header)
  - Set up criteria for various payment capture related scenarios
- Payment Processing** (Section Header)
  - Set up criteria for various payment processing related scenarios

The browser's status bar at the bottom shows "Done", "Internet", and a zoom level of "110%".

# Sterling Business Center

IBM Sterling Business Center - Windows Internet Explorer provided by IBM

http://9.55.48.199:9220/sbc/sbc/container/SystemSetup.do?\_dc=1374700989437&scCSRFToken=13747007660395FKSRwGdkl

File Edit View Favorites Tools Help

Business Center Administrator Help Sign Out

Home Products Pricing Customer Inventory System Setup Organization: Hub Organization

### Validation - Order [Back To System Setup](#)

**Related Tasks**

**Other Validations**

- Pricing
- Payment Capture
- Payment Processing

Validation	Validation Description
AGE_VERIFICATION	Define approval conditions for an Item which requires age verification
ITEM_NOT_ON_FILE	Define approval conditions when item not on file is found.
MANUAL_PRICE_OVERRIDE	Ensures manual discounts/price overrides do not exceed a certain percentage of an item's price.
MAX_QUANTITY_LIMIT	Define approval conditions for maximum quantity for an Item
NEGATIVE_LINE_TOTAL	Define approval conditions when orderline total is negative
NEGATIVE_ORDER_TOTAL	Define approval conditions when order total is negative

Done Internet 110%

# Sterling Business Center

**IBM Sterling Business Center - Windows Internet Explorer provided by IBM**

URL: [http://9.55.48.199:9220/sbc/sbc/container/SystemSetup.do?\\_dc=1374700989437&scCSRFToken=13747007660395FKSRwGdk1GNLc11](http://9.55.48.199:9220/sbc/sbc/container/SystemSetup.do?_dc=1374700989437&scCSRFToken=13747007660395FKSRwGdk1GNLc11)

**Business Center** Administrator Help Sign Out

Home Products Pricing Customer Inventory System Setup Organization: Hub Organization

### Validation Rule Summary

Configure for: Hub Organization [Take Ownership](#)

**Validation - MANUAL\_PRICE\_OVERRIDE**

Validation Rule ID: BASIC\_MANUAL\_PRICE\_OVERRIDE Effective Start Date: 07/01/2013

Document Type: Sales Order Effective End Date: 07/31/2014

Message Code:  Status: ACTIVE [Deactivate](#) [Delete](#)

Message Description:

**Criteria**

Channel:  Store Type:

Lane Type:  Region:

[Switch To Custom Attributes](#)

Maximum Override Percentage On Orderline: 5.0000



# Sterling Business Center

IBM Sterling Business Center - Windows Internet Explorer provided by IBM

http://9.55.48.199:9220/sbc/sbc/container/SystemSetup.do?\_dc=1375109003890&scCSRFToken=1375108573658CB2JR29cRW7yJgtpXP1vQ2PWC4wpLLFJG

File Edit View Favorites Tools Help

Business Center Administrator Help Sign Out

Home Products Pricing Customer Inventory System Setup Organization: Hub Organization

### Override Rule Summary

Validation - MANUAL\_PRICE\_OVERRIDE

Override Rule ID: MANUAL\_PRICE\_OVR\_RULE1 Effective Start Date: 07/01/2013

Document Type: Sales Order Effective End Date: 07/31/2014

Message Code: [Dropdown]

Message Description: [Text Area]

Status: ACTIVE [Deactivate] [Delete]

#### Criteria

Channel: [Dropdown] Store Type: [Dropdown]

Lane Type: [Dropdown] Region: [Dropdown]

[Group] [Un Group] [Not] [Remove Condition] [Move Up] [Move Down]

(Use Ctrl/Command key for selecting multiple conditions)

Manual Discount(%) For line greater than 10.0000  
AND Customer Type is Business Customers

+ Add a condition

#### Assign Course Of Action On Satisfying the Override Criteria

Do not allow override

Allow override

Must be approved by one of the following users

#### Approval Plan

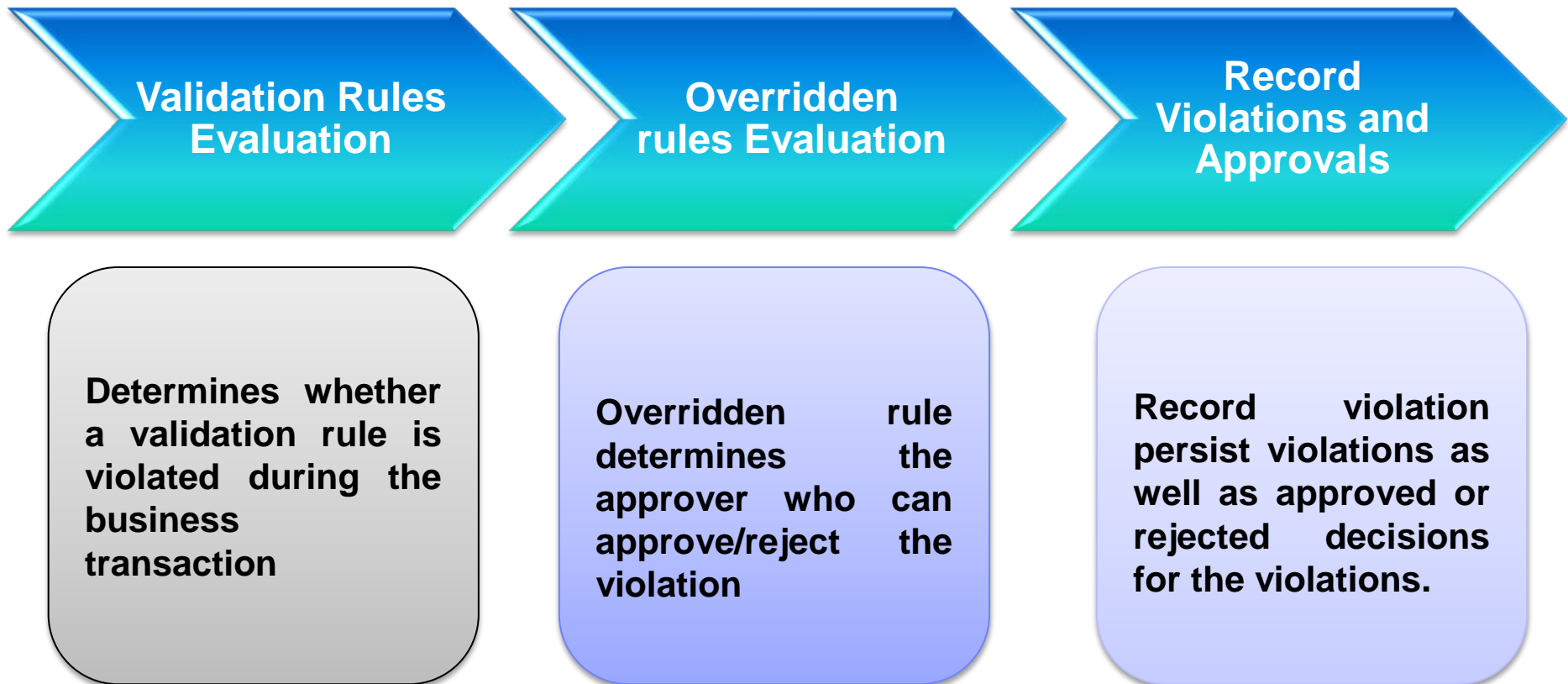
Modifications in the current plan will affect all the rules using this plan

Sequence	User Group	Team
Default approval plan not set up. Choose switch option to select a available approval plan		

Done, but with errors on page.

## Execution Flow

The execution logic consists of three steps



## Available APIs

- Configuration APIs
  - manageValidationDomain
  - getValidationDomainList
  - getValidationList
  - manageValidationRule
  - getValidationRuleList
  - manageOverriddenRule
  - getOverriddenRuleList
- Transactional APIs
  - checkValidationRules
    - Checks against validation rules of a validation
    - Returns whether transaction is allowed or disallowed
  - checkOverriddenRules
    - Checks against overridden rules of a validation
    - Returns a list of violations and appropriate approvers
  - recordViolations
    - Persists violations
  - recordApproval
    - Persists violations
    - Record approvals or rejections of violations

# Example: External Validation Interaction Flow



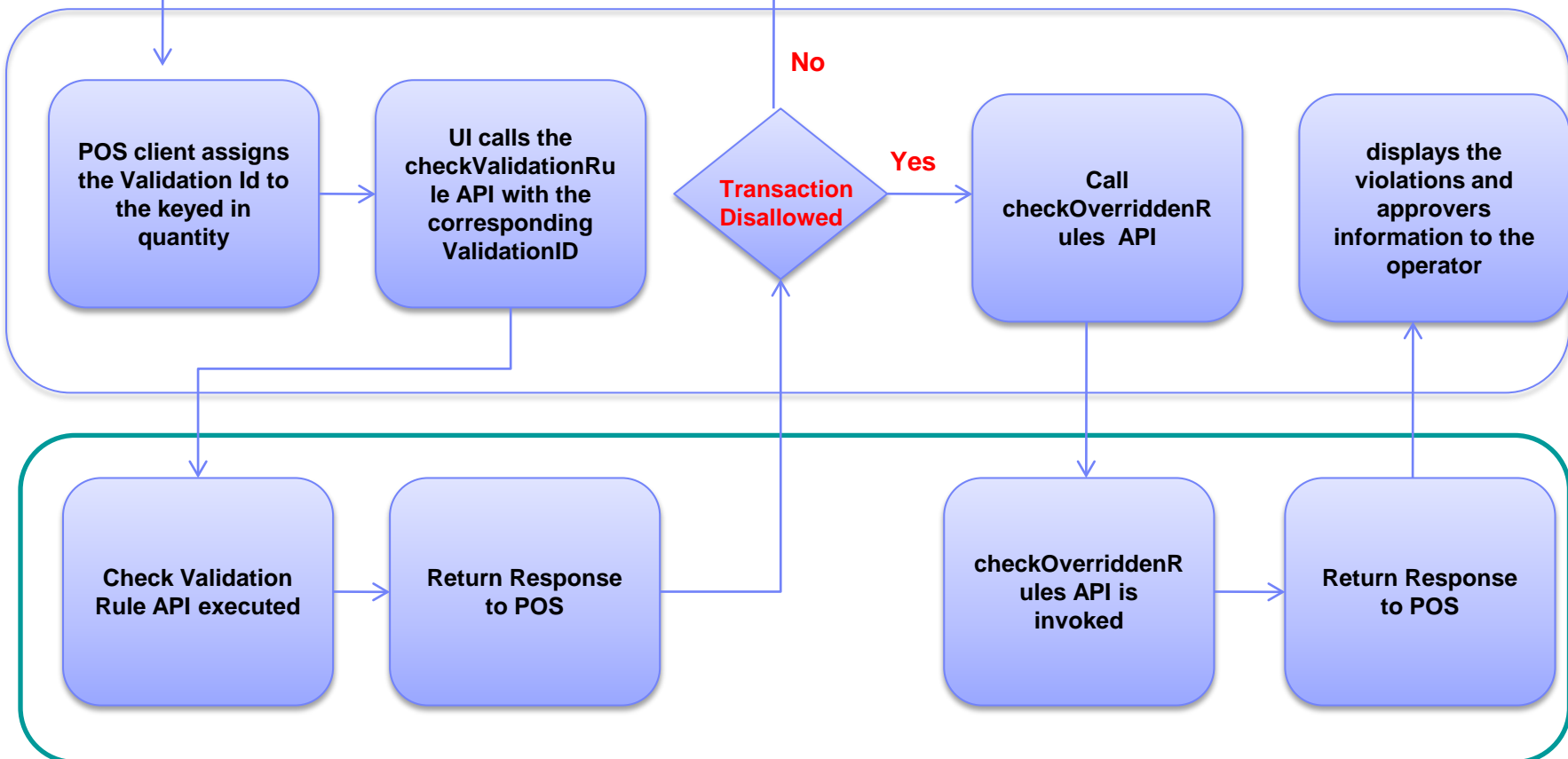
Store Associate keys in quantity manually



Proceed with customer transaction

POS

OMS



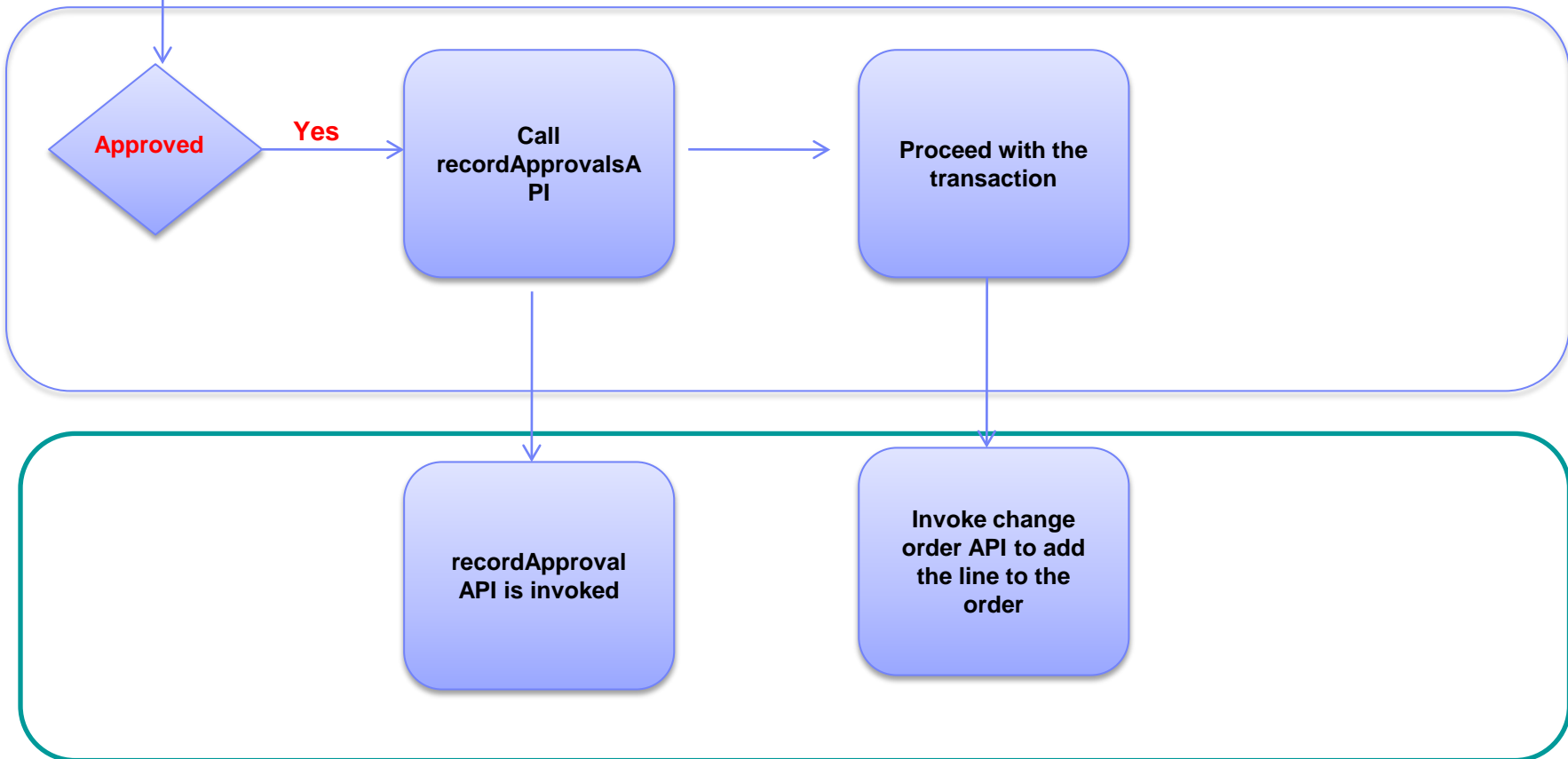
# Example: External Validation Interaction Flow (Cont.)



Manager Approves/Rejects violation

POS

OMS



## Example: Internal Validation Logic

- MANUAL PRICE OVERRIDE validation
  1. POS client calls the changeOrder API with manual discount or overridden price (price locked flag).
  2. The changeOrder API computes ManualDiscountPercentage from both manual discount and overridden price.
  3. Internally, the changeOrder API calls the internal logic of the checkValidationRule API. The internal logic returns whether transaction is allowed or disallowed.
  3. If transaction is disallowed, the changeOrder API continues to call the checkOverriddenRules API. The checkOverriddenRules logic returns a list of violations and corresponding approvers who can approve or reject them.
  4. If a violation is returned, the changeOrder API throws the error specified in the validation along with the violations and approvers information.
  5. Once a manager approves or rejects, the UI calls the recordApproval API with list of violations from the checkOverriddenRule API, approve or reject decision, and the validation reference (the actual discount percentage).
  6. If approved, POS client proceeds with calling the changeOrder API to apply the manual discount or the overridden price.

## Manager Overrides Order Related Use Cases

- Age verification
- Sales of an item that is not on file
- Limiting line item manual discount and manual price override
- Maximum ordered quantity limit
- Order total is negative amount
- Line total is negative amount

## Manager Overrides in Payment, Pricing and Promotion

- Tender Limit
- Offline Limit
- Call For Authorization
- Maximum number of Coupons for an Item in an order
- Item Quantity Condition override for Coupons
- Coupon minimum purchase condition is not satisfied



Q & A

Thank You