

Acceptance Criteria:

Story 2 - Calculate target date in Holidays service

Description

CRX system relies on the Holiday Service to calculate target date in working days based on a provided input.

Pre-Condition

Story has been triggered by getTargetDate call from another Service.

Steps

Holidays Service conducts the calculations and reverts the result to the requestor

Functional Requirements

Calculate target date to be returned:

1. Start from provided startDate
2. Check if provided startDate is a holiday of type = EUR or a weekend
 - If yes:
 - o if direction = FORWARD: startDate = next date after provided startDate that is not a holiday of type EUR
 - o if direction = BACKWARD: startDate = first previous date before provided startDate that is not a holiday of type EUR
 - else: continue with the provided startDate
3. If direction = FORWARD: Add provided numberOfWorkingDays, excluding all holiday dates of type EUR and weekends
4. If direction = BACKWARD: Subtract provided numberOfWorkingDays, excluding all holiday dates of type EUR and weekends
5. Return: targetDate = calculated date

Test Plan Name

Holiday Service Validation to fetch Target Date for Holiday Type EUR

- Scenario 1: Verify the Start Date calculation for **FORWARD direction when provided start date is a holiday in EUR with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to FORWARD

Setup and Validate:

1. Set startDate = 15 AUG 2023 which is a Tuesday and a holiday in EUR
Calendar
2. Set numberOfWorkingDays = 0

Expected Result: 2023-08-15 should be stored in Holiday Service as holiday.date for holiday.type. "EUR". The returned target date should be 16 Aug 2023

- Scenario 2: Verify the Start Date calculation for **BACKWARD direction when provided start date is a holiday in EUR with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to BACKWARD

Setup and Validate:

1. Set startDate = 15 AUG 2023 which is a Tuesday and a holiday in EUR
Calendar
2. Set numberOfWorkingDays = 0

Expected Result: 2023-08-15 should be stored in Holiday Service as holiday.date for holiday.type. "EUR". The returned target date should be 14 Aug 2023

- Scenario 3: Verify the Start Date calculation for **FORWARD direction when provided start date is not a holiday in EUR with respect to numberOfWorkingDays set as 5 and there is a holiday within the numberOfWorkingDays**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to FORWARD
15 Aug 2023 Is a known Holiday in EUR

Setup and Validate:

1. Set startDate = 14 AUG 2023 which is a Tuesday and not a holiday in EUR Calendar
2. Set numberOfWorkingDays = 5

Expected Result: 2023-08-15 should be stored in Holiday Service as holiday.date for holiday.type. "EUR". The returned target date should be 22 Aug 2023

- Scenario 4: Verify the Start Date calculation for **BACKWARD Direction when provided start date is not a holiday in EUR with respect to numberOfWorkingDays set as 5 and there is a holiday within the numberOfWorkingDays**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to FORWARD
15 Aug 2023 Is a known Holiday in EUR

Setup and Validate:

1. Set startDate = 17 AUG 2023 which is a Tuesday and not a holiday in EUR Calendar
2. Set numberOfWorkingDays = 5

Expected Result: 2023-08-15 should be stored in Holiday Service as holiday.date for holiday.type. "EUR". The returned target date should be 9 Aug 2023

- Scenario 5: Verify the Start Date calculation in EUR zone for **FORWARD Direction when provided start date is a holiday in USD with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to FORWARD

Setup and Validate:

1. Set startDate = 04 JUL 2023 which is a Tuesday and a holiday in USD Calendar
2. Set numberOfWorkingDays = 0

Expected Result: 2023-07-04 should be stored in Holiday Service as holiday.date for holiday.type. "USD". The returned target date should be 04 Jul 2023

- Scenario 6: Verify the Start Date calculation for EUR zone **BACKWARD Direction when provided start date is a holiday in USD with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to BACKWARD

Setup and Validate:

1. Set startDate = 04 JUL 2023 which is a Tuesday and a holiday in USD Calendar
2. Set numberOfWorkingDays = 0

Expected Result: 2023-07-04 should be stored in Holiday Service as holiday.date for holiday.type. "USD". The returned target date should be 04 Jul 2023

- Scenario 7: Verify the Start Date calculation for **FORWARD Direction when provided start date is a weekend with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to FORWARD

Setup and Validate:

1. Set startDate = 08 JUL 2023 which is a Saturday
2. Set numberOfWorkingDays = 0

Expected Result: The returned target date should be 10 JUL 2023 which is Monday

- Scenario 8: Verify the Start Date calculation for **BACKWARD Direction when provided start date is a weekend with respect to numberOfWorkingDays set as 0**

GIVEN Pre-Condition:

User or Application has triggered getTargetDate from another Service in application
Holiday Type is set as EUR
Direction is set to BACKWARD

Setup and Validate:

1. Set startDate = 08 JUL 2023 which is a Saturday
2. Set numberOfWorkingDays = 0

Expected Result: The returned target date should be 07 JUL 2023 which is the Friday before

Note:

We can consider the following as other potential scenarios if this story is implementing the feature for the first time or we are also maintaining a Regression:

- Mandatory field validations for Start Date
- Mandatory field validations or default cases for Direction field
- Mandatory field validations for noOfWorkingDays