

Lesson 2 Configuring Charge Invoicing Behaviors

2.1 Bill an item immediately

Succeed Insurance wants to customize when deposits are billed based on the policy issuance date.

2.1.1 Requirements

Spec 1 If the effective date of a policy issuance billing instruction is earlier than today, then bill the down payment immediately.

Spec 2 Not applicable to Agency Bill processing

2.1.2 Tasks

1. Configure the `customizeChargeInitializer()` method in `ChargeInitializer` plugin.
2. Compile your changes

2.1.3 Testing procedure

1. Create a new account
 - a. Use quick jump to execute the Run Account command
2. Add a policy to the new account with these details: (Actions → Add Policy)
 - a. Policy Number: BillToday 1
 - b. Effective Date: 5 days earlier than the BillingCenter clock date
 - c. Expiration Date: 1 year after the effective date
 - d. Payment Plan: PP03
 - e. Premium: \$2500
 - f. Taxes: \$220
3. Go to the Invoice screen (Account → Invoices) and verify that:
 - a. The premium down payment is invoiced on the same day as the BillingCenter clock date.
 - b. The installment premium and taxes are charged on the second invoice (that is, the first regularly scheduled invoice)
4. Add a policy to the new account with these details: (Actions → Add Policy)
 - a. Policy Number: BillToday 2
 - b. Effective Date: 5 days after than the BillingCenter clock date
 - c. Expiration Date: 1 year after the effective date
 - d. Payment Plan: PP03
 - e. Premium: \$600
 - f. Taxes: \$45

5. Go to the Invoice screen (Account → Invoices) and verify that:
 - a. Down payment and taxes are on the same invoice.

2.1.4 Solution



Solution

Exact details on how to complete the exercise.

1. Configure the `customizeChargeInitializer()` method in `ChargeInitializer` plugin.

```
1 package gw.plugin.charge
2
3 uses gw.api.util.DateUtil
4
5 @Export
6 public class ChargeInitializer implements IChargeInitializer {
7
8     public override function customizeChargeInitializer(initializer : gw.api.domain.charge.ChargeInitializer) {
9         // Invoice Plugins - Bill an Item Immediately lab
10         var isBackDatedPolicy = DateUtil.compareIgnoreTime(initializer.BillingInstruction.EffectiveDate,
11             DateUtil.currentDate()) < 0
12         var isDirectBillIssuance = !initializer.AgencyBill and initializer.BillingInstruction typeis Issuance
13         if (isBackDatedPolicy and isDirectBillIssuance) {
14             var deposit = initializer.Entries.firstWhere(\entry -> entry.InvoiceItemType == InvoiceItemType.TC_DEPOSIT)
15             if(deposit != null)
16                 deposit.billToday()
17         }
18     }
19 }
20 }
```

```
package gw.plugin.charge

uses gw.api.util.DateUtil

@Export
public class ChargeInitializer implements IChargeInitializer {

    public override function customizeChargeInitializer(initializer :
gw.api.domain.charge.ChargeInitializer) {
        // Invoice Plugins - Bill an Item Immediately lab
        var isBackDatedPolicy = DateUtil.compareIgnoreTime(initializer.BillingInstruction.EffectiveDate,
            DateUtil.currentDate()) < 0
        var isDirectBillIssuance = !initializer.AgencyBill and initializer.BillingInstruction typeis
Issuance
        if (isBackDatedPolicy and isDirectBillIssuance) {
            var deposit = initializer.Entries.firstWhere(\entry -> entry.InvoiceItemType ==
InvoiceItemType.TC_DEPOSIT)
            if(deposit != null)
                deposit.billToday()
        }
    }
}
```

2. Compile your changes

- a. Execute Run → Debugging Actions → Reload Changed Classes

2.2 Demo code: Splitting the down payment

The following code is from the instructor demo:

```
package gw.plugin.charge
@Export
public class ChargeInitializer implements IChargeInitializer {

    public override function customizeChargeInitializer(initializer :
gw.api.domain.charge.ChargeInitializer) {
    //Insert Code here to modify the ChargeInitializer's Entries that will be used for creation and
placement of InvoiceItems.

    var isDirectBillIssuance = !initializer.AgencyBill and initializer.BillingInstruction typeis
Issuance
    if(isDirectBillIssuance) {
        var paymentPlan = initializer.PolicyPeriod.PaymentPlan
        if(paymentPlan.SplitDownPayment_Ext
            and paymentPlan.DownPaymentPercent >= 20
            and paymentPlan.Periodicity == Periodicity.TC_MONTHLY) {
            // find amounts
            var firstDownPaymentItem = initializer.Entries.firstWhere(\entry -> entry.InvoiceItemType ==
InvoiceItemType.TC_DEPOSIT)
            var totalDownPaymentAmount = firstDownPaymentItem.Amount
            var newFirstDownPaymentAmount = totalDownPaymentAmount / 2
            var newSecondDownPaymentAmount = totalDownPaymentAmount - newFirstDownPaymentAmount
            var newSecondDownEventDate = firstDownPaymentItem.EventDate.addMonths(1)
            // set new amounts
            firstDownPaymentItem.Amount = newFirstDownPaymentAmount
            initializer.addEntry(newSecondDownPaymentAmount, InvoiceItemType.TC_DEPOSIT,
newSecondDownEventDate)
        }
    }
}
```