**Billing Test Info**

This document is simply described how to execute billing test cases in VisualStudio. What are the test cases. and what are verified.

1. Environment setup
   1. Machine – **BillingTest**
   2. Project location – **C:\BillingTest**
   3. Get projects:
      1. Billing Git: clone tfs/tfs/DefaultCollection/Trupanion/\_git/Billing to “C:\BillingTest\Billing”
      2. Trupanion dblibs Git: clone to “C:\BillingTest\dblibs”
      3. QALib Git: clone test.QALib to “C:\BillingTest\test.QALibs”
      4. Billing.Test project: copu to “C:\Billing.Test”
   4. Build Billing service
      1. Load billing project: Open c:\billingtest\billing\**trupanion.billing.sln** in visual studio
      2. Restore package: i) Go to solution explorer; ii) right click solution Trupanion.Billing; iii) click context menu of **Restore NuGet Packages**
      3. **Compile** project: Rebuild Solution without error
   5. Build QALib service
      1. Load billing project: Open c:\billingtest\test.QALib\**trupanion.test.qalib.sln** in visual studio
      2. Restore package: i) Go to solution explorer; ii) right click solution Trupanion.Test.QALib; iii) click context menu of Restore NuGet Packages
      3. Compile project: Rebuild Solution
2. Run tests in Cmd box
   1. Start CMD in admin mode
   2. Go to location of *C:\BillingTest\BillingTest\Trupanion.Billing.Test\bin\Debug*
   3. Run program *BillingTest.exe* with test suite name and test category name. e.g.
      1. **BillingTest.exe** 🡺 display help info
      2. **BillingTest.exe Enrolltest BVT** 🡺 run test BVT tests for enrollment tests
      3. **BillingTest.exe Apitest Enrolltest All** 🡺 run test all tests for both apis and enrollment tests
3. Test results
   1. Saving location is: \\BillingTest\BillingTestResults\[mmddyyyy]
   2. Result files prefix is as [user name].[machine name]\_[date stapm] with extension of .trx and html
   3. There are also a set of copy located in C:\BillingTest\BillingTest\Trupanion.Billing.Test\bin\Debug

1. Executing test cases in Visual Studio
   1. Start VisualStudio in administrator mode
   2. Load **c:\billingtest\billingtest\Trupanion.Billing.Test.sln**
   3. Restore nugget package and rebuild solution without error
   4. Go to Test Explorer; from menu Test\Windows\Test Explorer
   5. Select tests: expand test file\test cases
   6. Run test: right click and select Run Selected Tests
2. Billing test sets
   1. API tests: test all Billing services populated v2 Apis. These tests are not rely on any other Trupanion services. They only need couple of minutes to execute all of them. So they are good on used as BVT test after Billing service has deployed on Test environment
   2. Enrollment tests: test Trupanion policy enrollment, account update, policy update scenarios and verifying billing services’ behaviors. Enrollments cover standard and trial enrollments for US, Canada and Australia.
3. Billing Service Verification Covers:
   1. Billing account
      1. should or shouldn’t exist
   2. Account Info:
      1. AutoPau
      2. Currency
      3. BillingCycleDay
      4. balance
   3. Payment method
      1. Type
      2. Bank Name
      3. Account Name
      4. Account Type
      5. Account number mask, last for digits
      6. ACH AbaCode (US only)
   4. Premium
      1. for each enrolled pet
   5. Account updated
4. Test case list
   1. EnrollmentTests
   2. EnrollmentTests
      1. USEnrollmentOnePetNoRiderBank
      2. USEnrollmentOnePetWithBankSavingAccount
      3. USEnrollmentOnePetWithTwoRiderBank
      4. USEnrollmentTwoPetsBank
      5. USAddAPetInEnrollmentPolicySkipPayment
      6. USAddAPetInEnrollmentPolicyCollectPayment
      7. USCancelAFullEnrolledPet
      8. USPendingCancelAFullEnrolledPet
   3. EnrollmentTestsCA
      1. CAEnrollmentOnePetNoRiderBank
      2. CAEnrollmentOnePetWithBankSavingAccount
      3. CAEnrollmentOnePetWithTwoRiderBank
      4. CAEnrollmentTwoPetsBank
      5. CAAddAPetInEnrollmentPolicySkipPayment
      6. CAAddAPetInEnrollmentPolicyCollectPayment
      7. CACancelAFullEnrolledPet
      8. CAPendingCancelAFullEnrolledPet
   4. TrialEnrollmentTests
      1. USTrialEnrollmentOnePet
      2. USAddATrialPetToTrial
      3. USCancelTrialPet
      4. USPendingCancelTrialPet
      5. USAddATrialPetInFullEnrollment
      6. USAddAEnrollmentPetInTrialPolicy
      7. USTrialConvertOnePet
      8. USTrialConvertTwoWeeksAgoPet
   5. TrialEnrollmentTestsCA
      1. CATrialEnrollmentOnePet
      2. CAAddATrialPetToTrial
      3. CACancelTrialPet
      4. CAPendingCancelTrialPet
      5. CAAddATrialPetInFullEnrollment
      6. CAAddAEnrollmentPetInTrialPolicy
      7. CATrialConvertOnePet
      8. CATrialConvertTwoWeeksAgoPet
   6. TrialEnrollmentTestsAU
      1. AUTrialEnrollmentOnePet
      2. AUAddATrialPetToTrial
      3. AUCancelTrialPet
      4. AUPendingCancelTrialPet
   7. AccountTests
      1. AccountBalancePayNow()
      2. ChangeAccountMonthlyBillingDay()
      3. ChangeAccountPaymentMethod()
      4. ReschedulePaymenys()
      5. USChangeAccountCharity()
      6. UpdateCreditCardExpirationDate()
      7. GetAccountRefund()
      8. AccountCreditBalanceRefund()
      9. GetAccountPaymentReschedulingRequests()
      10. InvoicesPreviewTest()
   8. ApiTests
      1. HTTP Get Apis
         1. accounts/{id}
         2. accounts
         3. accounts/{id}/invoices/next
         4. bankaccounts
         5. bankaccounttypes
         6. invoices
         7. invoices/{id}/payments
         8. invoices/{id}
         9. invoices/{id}/items
         10. payments
         11. paymentmethods
         12. paymentmethodtypes
         13. paymentreschedulingrequests
         14. products
         15. refunds
      2. HTTP Post Apis
         1. bankaccounts/use 🡺 may not in use
         2. bankaccounts/Canada 🡺 may not in use
         3. creditcatds/expirationupdates
         4. invoices/previews
         5. paymentcollections
         6. paymentmethods/efts 🡺 may not in use
         7. creditbalancerefunds
         8. reschedulepayments
         9. accountupdates
5. Notes:
   1. Current test environment is set to Test
   2. All policies generated by test are have “bat” as prefix string on theirs owner last name and email address
   3. Readme: c:\billingtest\billingtest\Billing Test ReadMe.docx (this document)
   4. Test data for Api test may need updated in a time period
6. Extended verification applications
   1. SQL Server Management Tools, some queries are in folder “**C:\BillingTest\sql.scripts**”
   2. Pet Organizer - **test-www.petorganizer.com**
   3. Zuora - **pt1.zuora.com**