

Guia de Demonstração

Instalação e configuração

Pressupostos:

Assumimos que quando abrimos o terminal nos encontramos no Home

Instruções:

Passo 0:

Num terminal executamos os seguintes comandos

```
git clone https://github.com/tecnico-distsys/T04-Komparator  
cd T04-Komparator
```

Passo 1:

```
mvn install -DskipTests  
cd supplier-ws  
mvn process-resources exec:java
```

Passo 2:

Abrir **outro** terminal

```
cd T04-Komparator  
cd supplier-ws  
mvn process-resources -Dws.i=2 exec:java
```

Passo 3:

Abrir **outro** terminal

```
cd T04-Komparator  
cd mediator-ws  
mvn exec:java
```

Passo 4:

Abrir **outro** terminal

```
cd T04-Komparator  
cd mediator-ws-cli  
mvn verify
```

Passo 5

Verificar que surge uma mensagem idêntica à seguinte:

```
Tests run: 117, Failures: 0, Errors: 0, Skipped: 0  
  
[INFO]  
[INFO] --- maven-failsafe-plugin:2.19.1:verify (default) @ mediator-ws-cli ---  
[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 03:59 min  
[INFO] Finished at: 2017-05-05T23:23:41+01:00  
[INFO] Final Memory: 14M/253M  
[INFO] -----  
moon :: Projects/ProjSD/mediator-ws-cli » |
```

Antecedem várias mensagens SOAP que são as várias mensagens trocadas pelo módulo do Mediator-cli e Mediator

Demonstração da resistência a um ataque

Para simular uma situação de ataque

Num terminal

```
cd supplier-ws-cli/scr/jaxws
```

Editar o ficheiro *Supplierservice_handler.xml* e remover os comentários de um dos últimos handlers, consoante o ataque pretendido.

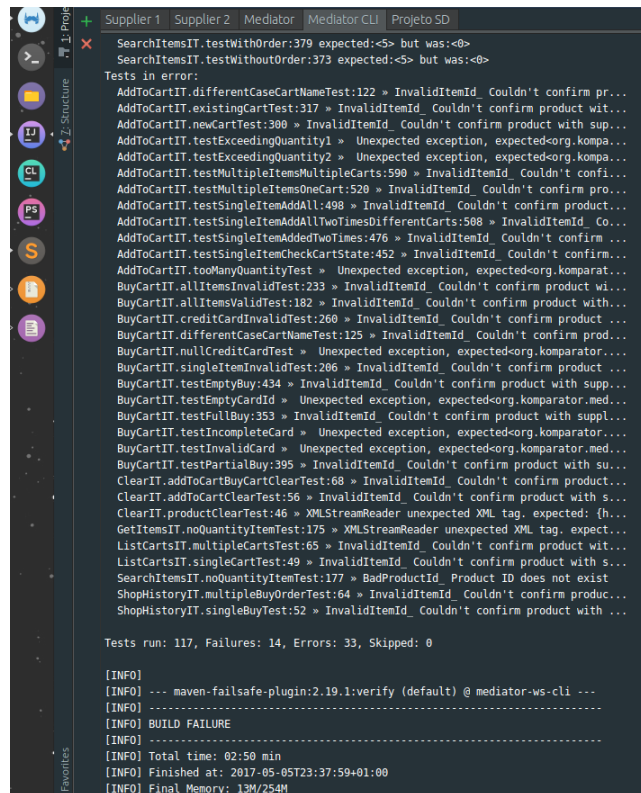
Ataques existentes:

- SignatureModifierAttackHandler – Ataque à autenticidade
- SignatureTimestampAttackHandler – Ataque à frescura
- SignaturePriceAttackHandler – Ataque à integridade

No mesmo terminal

Correr as instruções a partir do passo 1

No caso de ter escolhido o SignatureModifierAttackHandler receberá uma mensagem idêntica à seguinte:



```
Supplier 1 Supplier 2 Mediator Mediator CLI Projeto SD
SearchItemsIT.testWithOrder:379 expected:<5> but was:<0>
SearchItemsIT.testWithoutOrder:373 expected:<5> but was:<0>
Tests in error:
  AddToCartIT.differentCaseCartNameTest:122 » InvalidItemId_Couldn't confirm pr...
  AddToCartIT.existingCartTest:317 » InvalidItemId_Couldn't confirm product wit...
  AddToCartIT.newCartTest:300 » InvalidItemId_Couldn't confirm product with sup...
  AddToCartIT.testExceedingQuantity1 » Unexpected exception, expected<org.kompa...
  AddToCartIT.testExceedingQuantity2 » Unexpected exception, expected<org.kompa...
  AddToCartIT.testMultipleItemsMultipleCarts:500 » InvalidItemId_Couldn't confi...
  AddToCartIT.testMultipleItemsOneCart:520 » InvalidItemId_Couldn't confirm pro...
  AddToCartIT.testSingleItemAddAll:498 » InvalidItemId_Couldn't confirm product...
  AddToCartIT.testSingleItemAddAllTwoTimesDifferentCarts:508 » InvalidItemId_Co...
  AddToCartIT.testSingleItemAddedTwoTimes:476 » InvalidItemId_Couldn't confirm ...
  AddToCartIT.testSingleItemCheckCartState:452 » InvalidItemId_Couldn't confirm...
  AddToCartIT.tooManyQuantityTest » Unexpected exception, expected<org.komparat...
  BuyCartIT.allItemsInvalidTest:233 » InvalidItemId_Couldn't confirm product wi...
  BuyCartIT.allItemsValidTest:182 » InvalidItemId_Couldn't confirm product with...
  BuyCartIT.creditCardInvalidTest:260 » InvalidItemId_Couldn't confirm product ...
  BuyCartIT.differentCaseCartNameTest:125 » InvalidItemId_Couldn't confirm prod...
  BuyCartIT.nullCreditCardTest » Unexpected exception, expected<org.komparator....
  BuyCartIT.singleItemInvalidTest:206 » InvalidItemId_Couldn't confirm product ...
  BuyCartIT.testEmptyBuy:434 » InvalidItemId_Couldn't confirm product with supp...
  BuyCartIT.testEmptyCardId » Unexpected exception, expected<org.komparator.med...
  BuyCartIT.testFullBuy:353 » InvalidItemId_Couldn't confirm product with suppl...
  BuyCartIT.testIncompleteCard » Unexpected exception, expected<org.komparator....
  BuyCartIT.testInvalidCard » Unexpected exception, expected<org.komparator.med...
  BuyCartIT.testPartialBuy:395 » InvalidItemId_Couldn't confirm product with su...
  ClearIT.addToCartClearTest:68 » InvalidItemId_Couldn't confirm product...
  ClearIT.addToCartClearTest:56 » InvalidItemId_Couldn't confirm product with s...
  ClearIT.productClearTest:46 » XMLStreamReader unexpected XML tag, expected: {h...
  GetItemsIT.noQuantityItemTest:175 » XMLStreamReader unexpected XML tag, expect...
  ListCartsIT.multipleCartsTest:65 » InvalidItemId_Couldn't confirm product wit...
  ListCartsIT.singleCartTest:49 » InvalidItemId_Couldn't confirm product with s...
  SearchItemsIT.noQuantityItemTest:177 » BadProductId_Product ID does not exist
  ShopHistoryIT.multipleBuyOrderTest:64 » InvalidItemId_Couldn't confirm produc...
  ShopHistoryIT.singleBuyTest:52 » InvalidItemId_Couldn't confirm product with ...

Tests run: 117, Failures: 14, Errors: 33, Skipped: 0

[INFO]
[INFO] --- maven-failsafe-plugin:2.19.1:verify (default) @ mediator-ws-cli ---
[INFO]
[INFO] BUILD FAILURE
[INFO]
[INFO] Total time: 02:50 min
[INFO] Finished at: 2017-05-05T23:37:59+01:00
[INFO] Final Memory: 13M/254M
```

No caso de ter escolhido o `SignatureTimestampAttackHandler` receberá uma mensagem idêntica à seguinte:

```
Results :

Failed tests:
  GetItemsIT.differentCaseNameNoConflictTest:147 expected:<2> but was:<0>
  GetItemsIT.multipleItemsDifferentSuppliersTest:202 expected:<0> but was:<2>
  GetItemsIT.singleItemSingleSupplierTest:192 expected:<1> but was:<0>
  GetItemsIT.testMultipleExistingItems:326 expected:<2> but was:<0>
  GetItemsIT.testOrder1:333 expected:<2> but was:<0>
  GetItemsIT.testOrder2:341 expected:<2> but was:<0>
  GetItemsIT.testSingleExistingItem:315 expected:<1> but was:<0>
Tests in error:
  AddToCartIT>BaseWithSuppliersIT.oneTimeSetup:17->BaseIT.oneTimeSetup:36 » MediatorClient
  BuyCartIT.allItemsInvalidTest:233 » InvalidItemId_Couldn't confirm product wi...
  BuyCartIT.allItemsValidTest:182 » InvalidItemId_Couldn't confirm product with...
  BuyCartIT.creditCardInvalidTest:260 » InvalidItemId_Couldn't confirm product ...
  BuyCartIT.differentCaseCartNameTest:125 » InvalidItemId_Couldn't confirm prod...
  BuyCartIT.nullCreditCardTest » Unexpected exception, expected<org.komparator....
  BuyCartIT.singleItemInvalidTest:206 » InvalidItemId_Couldn't confirm product ...
  BuyCartIT.testEmptyBuy:434 » InvalidItemId_Couldn't confirm product with supp...
  BuyCartIT.testEmptyCardId » Unexpected exception, expected<org.komparator.med...
  BuyCartIT.testFullBuy:353 » InvalidItemId_Couldn't confirm product with suppl...
  BuyCartIT.testIncompleteCard » Unexpected exception, expected<org.komparator....
  BuyCartIT.testInvalidCard » Unexpected exception, expected<org.komparator.med...
  BuyCartIT.testPartialBuy:395 » InvalidItemId_Couldn't confirm product with su...
  ClearIT>BaseWithSuppliersIT.oneTimeSetup:17->BaseIT.oneTimeSetup:36 » MediatorClient
  GetItemsIT.noQuantityItemTest:175 » XMLStreamReader unexpected XML tag. expect...
  ListCartsIT>BaseWithSuppliersIT.oneTimeSetup:17->BaseIT.oneTimeSetup:36 » MediatorClient
  PingIT>BaseIT.oneTimeSetup:36 » MediatorClient Client failed lookup on UDDI at...
  SearchItemsIT>BaseWithSuppliersIT.oneTimeSetup:17->BaseIT.oneTimeSetup:36 » MediatorClient
  ShopHistoryIT>BaseWithSuppliersIT.oneTimeSetup:17->BaseIT.oneTimeSetup:36 » MediatorClient

Tests run: 49, Failures: 7, Errors: 19, Skipped: 0

[INFO]
[INFO] --- maven-failsafe-plugin:2.19.1:verify (default) @ mediator-ws-cli ---
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 02:21 min
[INFO] Finished at: 2017-05-05T23:51:29+01:00
[INFO] Final Memory: 14M/257M
[INFO] -----
```