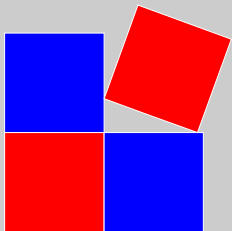


WebService tesztelés

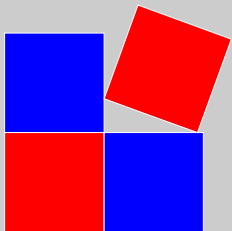
SOAPui Pro, GreenPepper és Confluence
használatával

Verhás & Verhás Szoftver Manufaktúra
KNOW-HOW

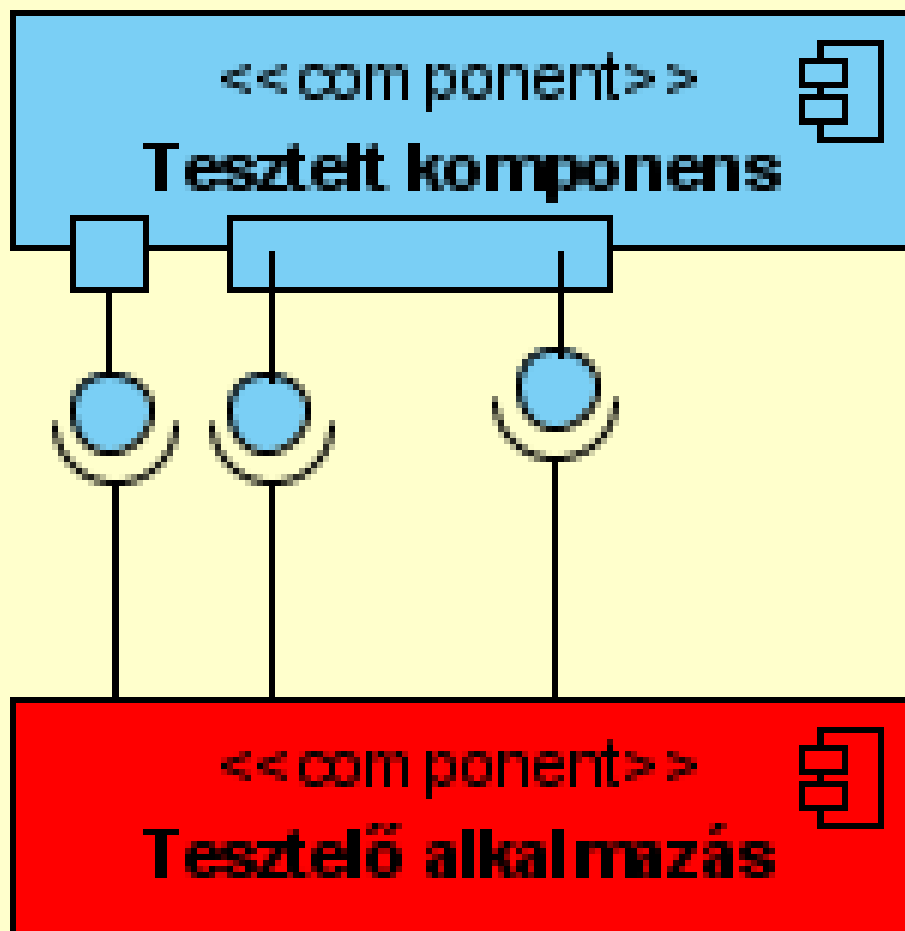


Tartalom

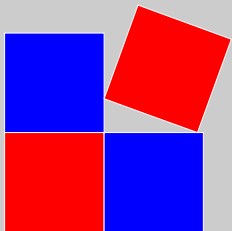
- WebService tesztelés általában
- Komponensek
- Összekapcsolás, egy teszt lefutás folyamat
- Tipikus munka
 - SOAPui projekt felépítése
- Kiegészítő scriptek
- Mintapélda



Egyszerű WS tesztelési struktúra, hagyományosan

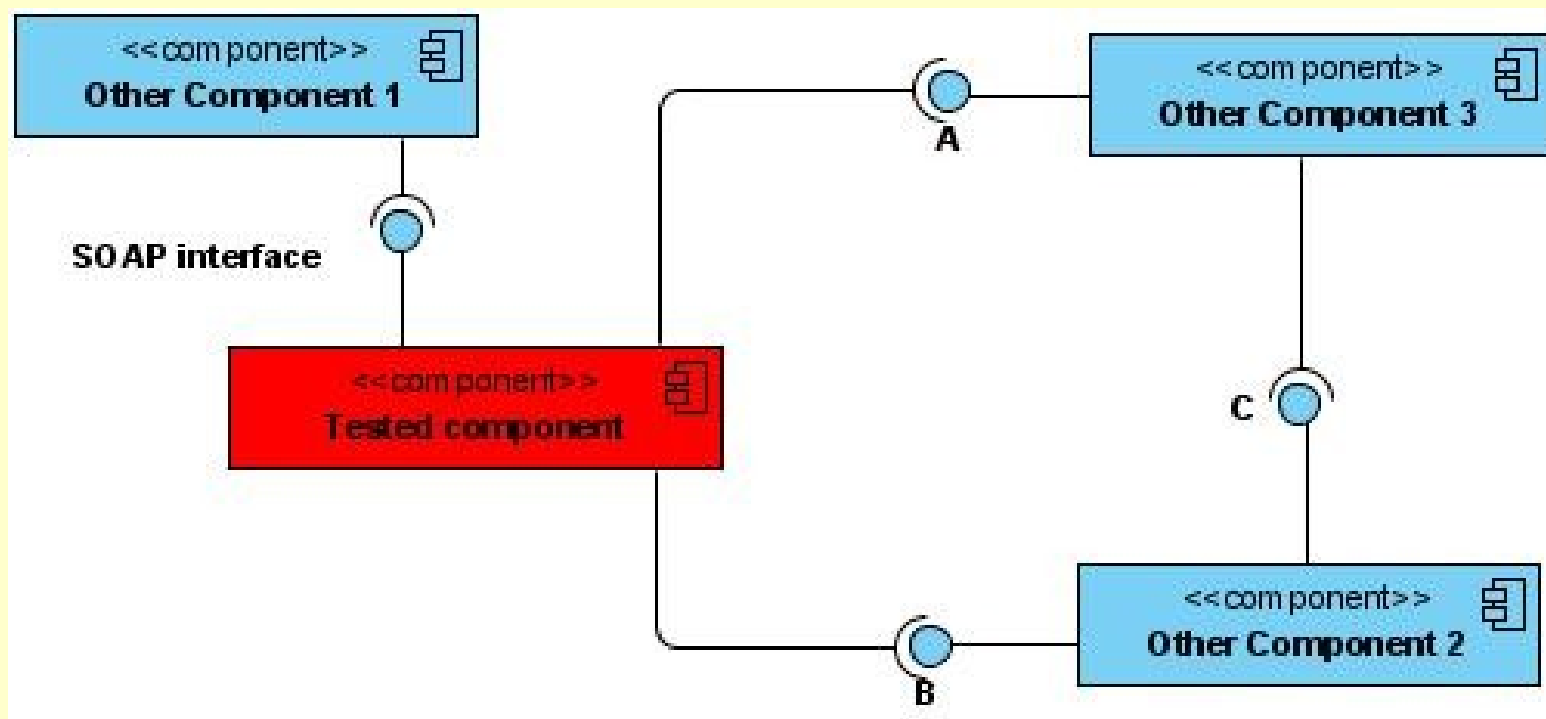


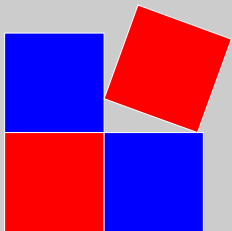
- Technikai tesztelés
- SOAP hívások programozása
- SOAP válaszok ellenőrzése



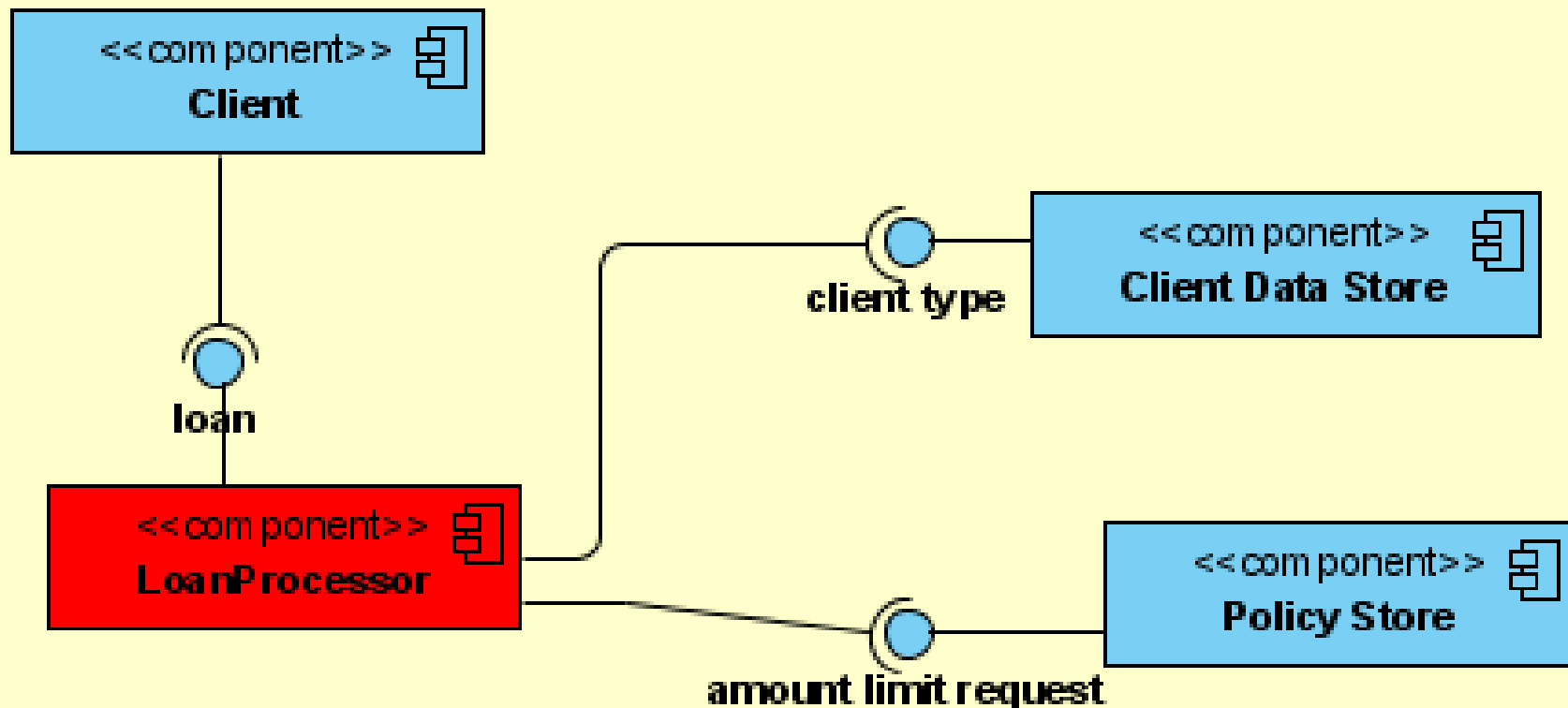
Általános struktúra

- Minden komponensnek meg van a maga feladata
- A komponensek egymásra épülnek

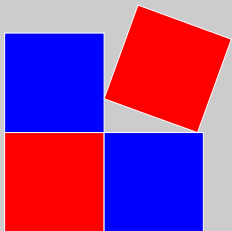




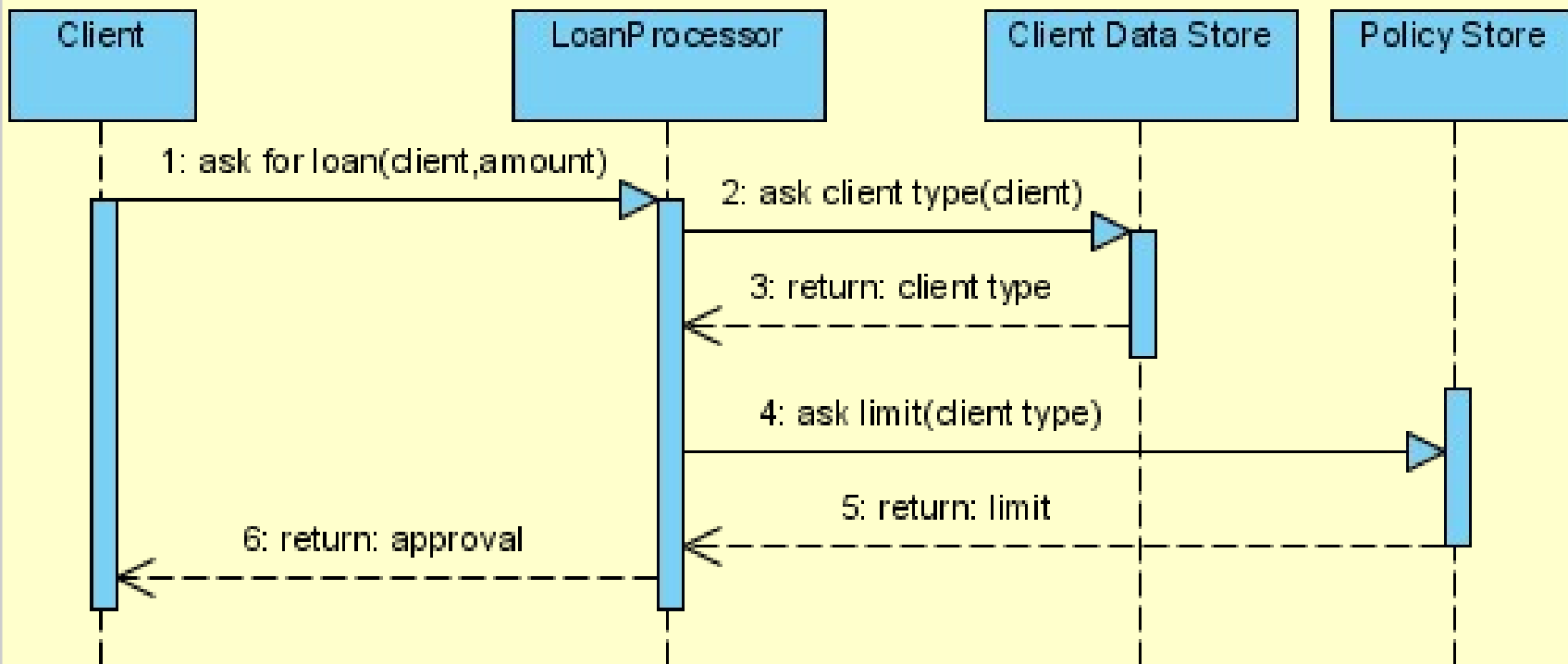
Konkrét példa

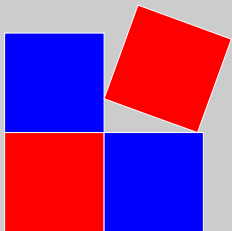


- WS kliens és szerver is
- SOAP szint

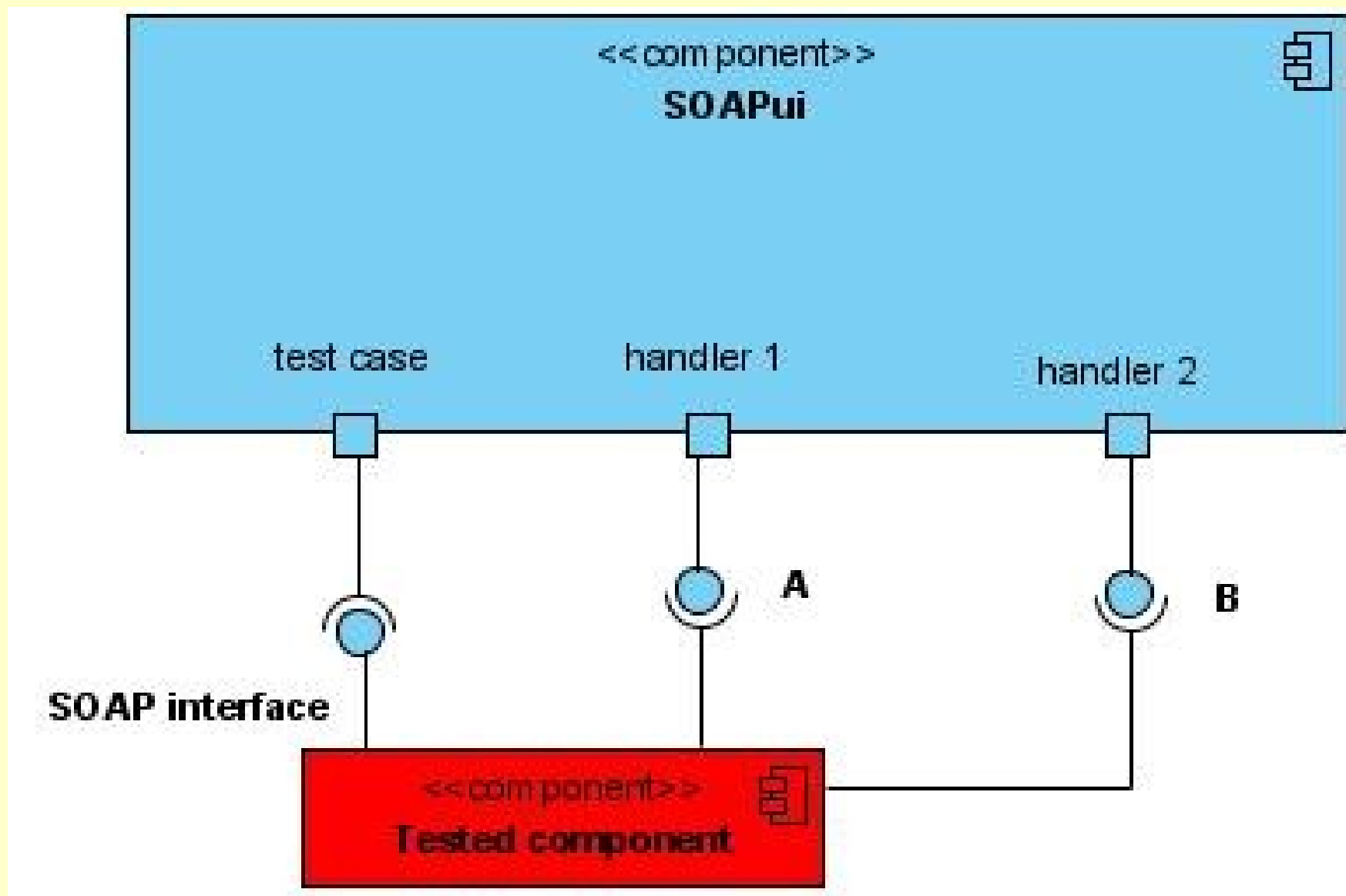


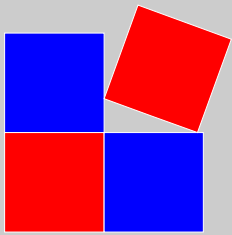
Üzleti folyamat





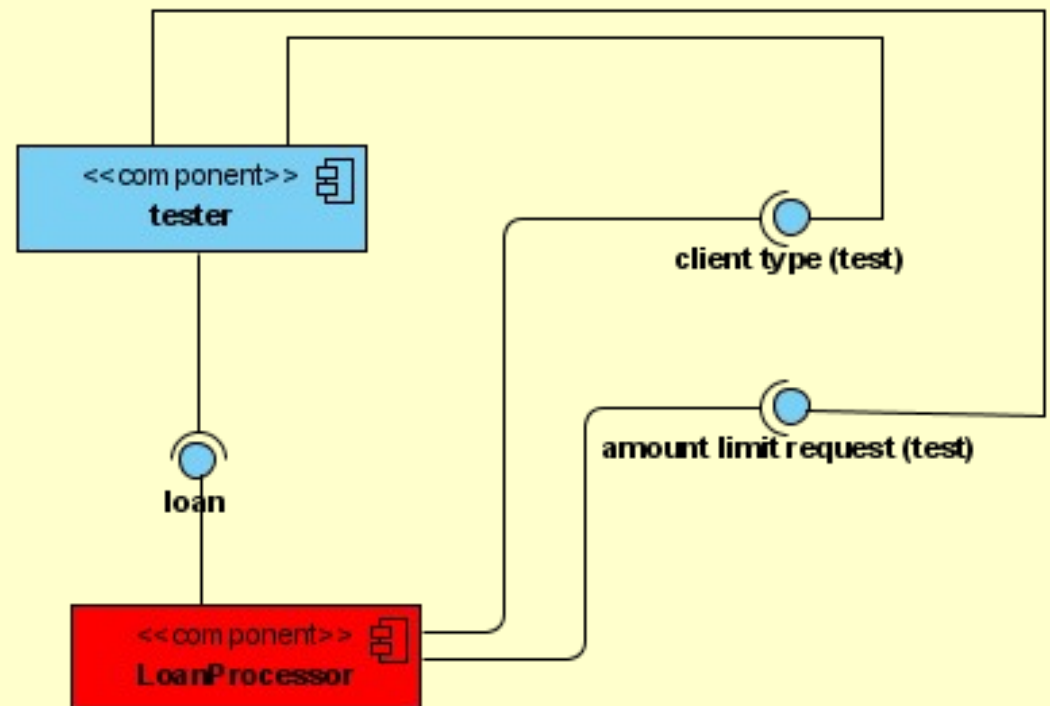
Általános teszt struktúra

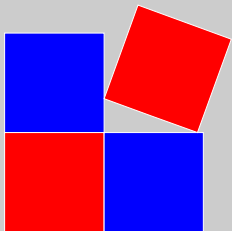




Általános teszt struktúra

- A teszt környezet NEM tartalmazza az általános funkcionalitást
- Táblázat vezérelt
- Esetleg minimális programozás
- SOAP hívások és válaszok

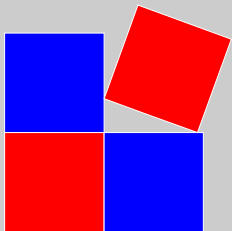




Senki sem akar SOAP-ot tesztelni

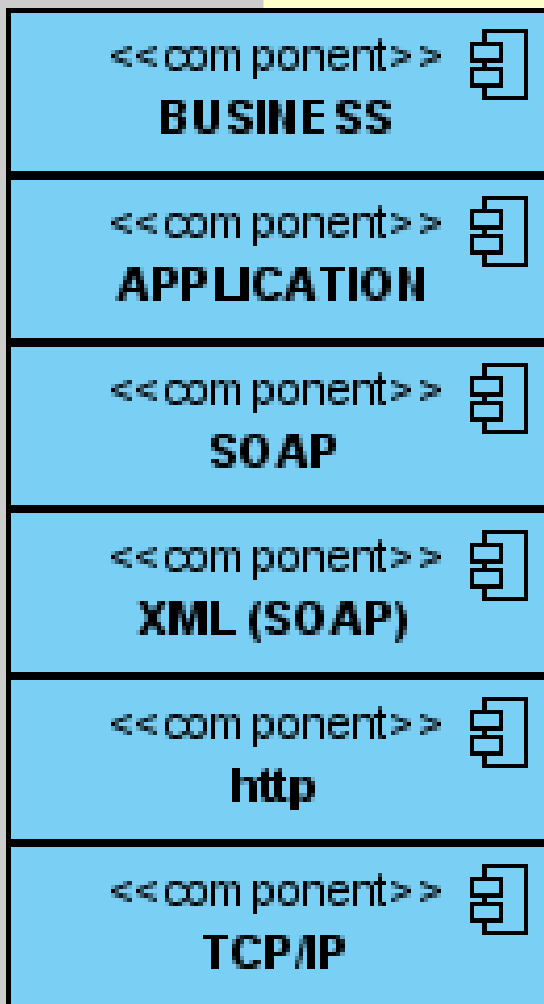
- A WebService / SOAP egy technológiai eszköz
- Az ügyfélnek megoldás kell
- Működési funkcionalitás, üzleti modell, egyszerűen áttekinthető teszt eredmény

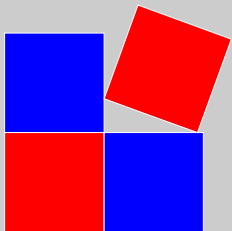
```
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:demo="http://demo.verhas.com/">
  <soapenv:Header/>
  <soapenv:Body>
    <demo:integerOperands>
      <!--1 or more
      repetitions:-->
      <!--type: int-->
      <operand>17</operand><operand>19</operand>
    </demo:integerOperands>
  </soapenv:Body></soapenv:Envelope>
```



A feladat: egyszerű és áttekinthető tesztek készíteni



- El kell választani az implementációs réteget az üzleti szinttől
- Meg kell jeleníteni az üzleti folyamatokat
- Könnyen kezelhető tesztelő rendszer kell





GreenPepper teszt felület



Welcome [Peter Verhás](#) | [History](#) | [Preferences](#) | [Administration](#) | [Log Out](#)  

[View](#) [Edit](#) [Attachments \(0\)](#) [Info](#)

Added by [Peter Verhás](#), last edited by [Peter Verhás](#) on máj. 09, 2008 ([view change](#))

Labels: (None) [EDIT](#)



GreenPepperized ☐

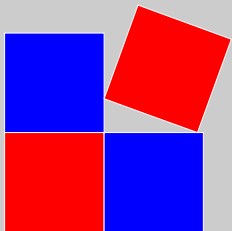
do with [soapUI](#)

Select workspace [P:\projects\GreenPepperSOAPUI\demo\demo-workspace.xml](#) and project [demo](#)

[end](#)

rule for	testSuite	Business Process Test	testCase	Approval Process				
desc	client code	requested amount	client type	allowed amount	run result ?	client code asked?	client type asked?	approved?
vip too high amount requested	135855382	30 000	VIP	25 999	0	135855382	VIP	false
vip ok	136728827	24 000	VIP	25 999	0	136728827	VIP	true
vip just below limit	136728827	25 999	VIP	25 999	0	136728827	VIP	true
client does not exist	537727727	12 000	ERR	any	1	537727727		false

 0 Comments | [Add Comment](#)



GreenPepper teszt felület

- WYSIWYG szerkesztő felület
- WEB kliens
- Futtatás web felületről
- Grafikus, színes eredmény

BusinessCase Welcome [Peter Verhás](#) | [History](#) | [Preferences](#) | [Administration](#) | [Log Out](#)

[View](#) [Edit](#) [Attachments \(0\)](#) [Info](#)

Added by [Peter Verhás](#), last edited by [Peter Verhás](#) on máj. 09, 2008 ([view change](#))

Labels: (None) [EDIT](#)

GreenPepperized ☐

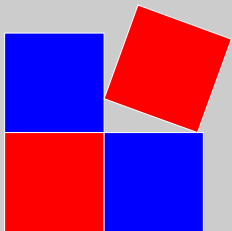
do with [soapUI](#)

Select workspace [P:\projects\GreenPepperSOAPUI\demo\demo-workspace.xml](#) and project [demo](#)

end

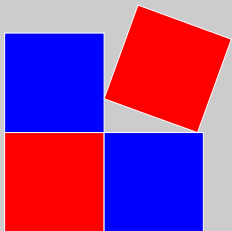
rule for	testSuite	Business Process Test	testCase	Approval Process					
desc	client code	requested amount	client type	allowed amount	run result ?	client code asked?	client type asked?	approved?	
vip too high amount requested	135855382	30 000	VIP	25 999	0	135855382	VIP	false	
vip ok	136728827	24 000	VIP	25 999	0	136728827	VIP	true	
vip just below limit	136728827	25 999	VIP	25 999	0	136728827	VIP	true	
client does not exist	537727727	12 000	ERR	any	1	537727727		false	

0 Comments | [Add Comment](#)



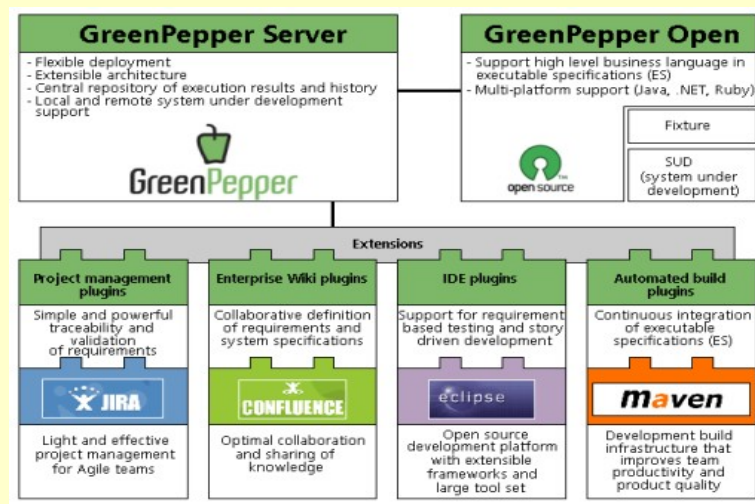
Tesztelő komponensek

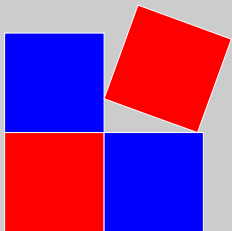
GreenPepper



GreenPepper

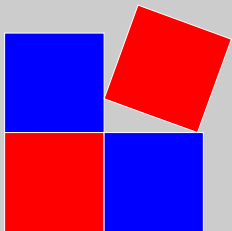
- GreenPepper
 - Open futtatja a tesztelendő alkalmazást
 - Confluence plugin indítja a tesztet, megjeleníti az eredményt
 - Server menedzseli a futtatásokat és nyilvántartja a teszt lefutásokat





Tesztelő komponensek

Confluence



Confluence

- Web felületű Enterprise Wiki alkalmazás

The screenshot shows a web browser window displaying the Confluence Overview page. The browser's address bar shows the URL <http://localhost:8080/display/ds/Confluence+Overview>. The page has a blue header with the Confluence logo and the title "Confluence Overview". Below the header, there is a navigation bar with tabs for "View", "Edit", "Attachments (4)", and "Info". The main content area contains a welcome message for Peter Verhás, a description of the Confluence space, and a list of features. The page is dated February 06, 2008.

Dashboard > Demonstration Space > Confluence Overview

Welcome Peter Verhás | [History](#) | [Preferences](#) | [Administration](#) | [Log Out](#)

[View](#) [Edit](#) [Attachments \(4\)](#) [Info](#) [Browse Space](#) [Add Page](#)

Added by Anonymous, last edited by Anonymous on febr. 06, 2008
Labels: (None) [EDIT](#)

This Confluence space is a living example of how to share information with others. You may [edit](#) these pages or [add](#) to the space whenever you wish. In fact, we encourage you to do so. 😊

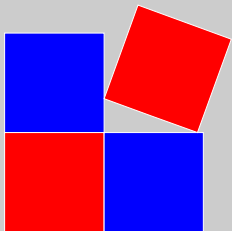
Please direct any sales related questions to sales@atlassian.com or please view [our help process](#) if you need general help.

The main idea of Confluence is to make it easy for you to share information with others; team-members, family, and friends. Confluence, at its base, was built on the principle of a Wiki.

A Wiki or wiki (pronounced "wicky" or "weekee", see pronunciation section below) is a website (or other hypertext document collection) that allows a user to add content, as on an Internet forum, but also allows that content to be edited by any other user. (from wikipedia)

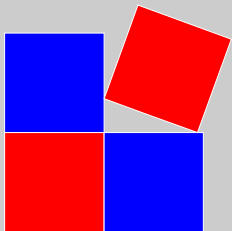
Confluence has many features which extend beyond average wikis. Please find a few of these in the list below. You may also find a growing list at [the Confluence Documentation homepage](#).

- [Formatting Content](#)
- [Creating pages and linking](#)
- [Using Spaces](#)



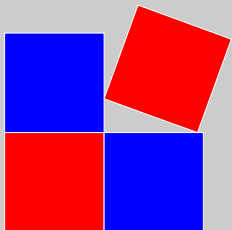
Tesztelő komponensek

SOAPui Pro

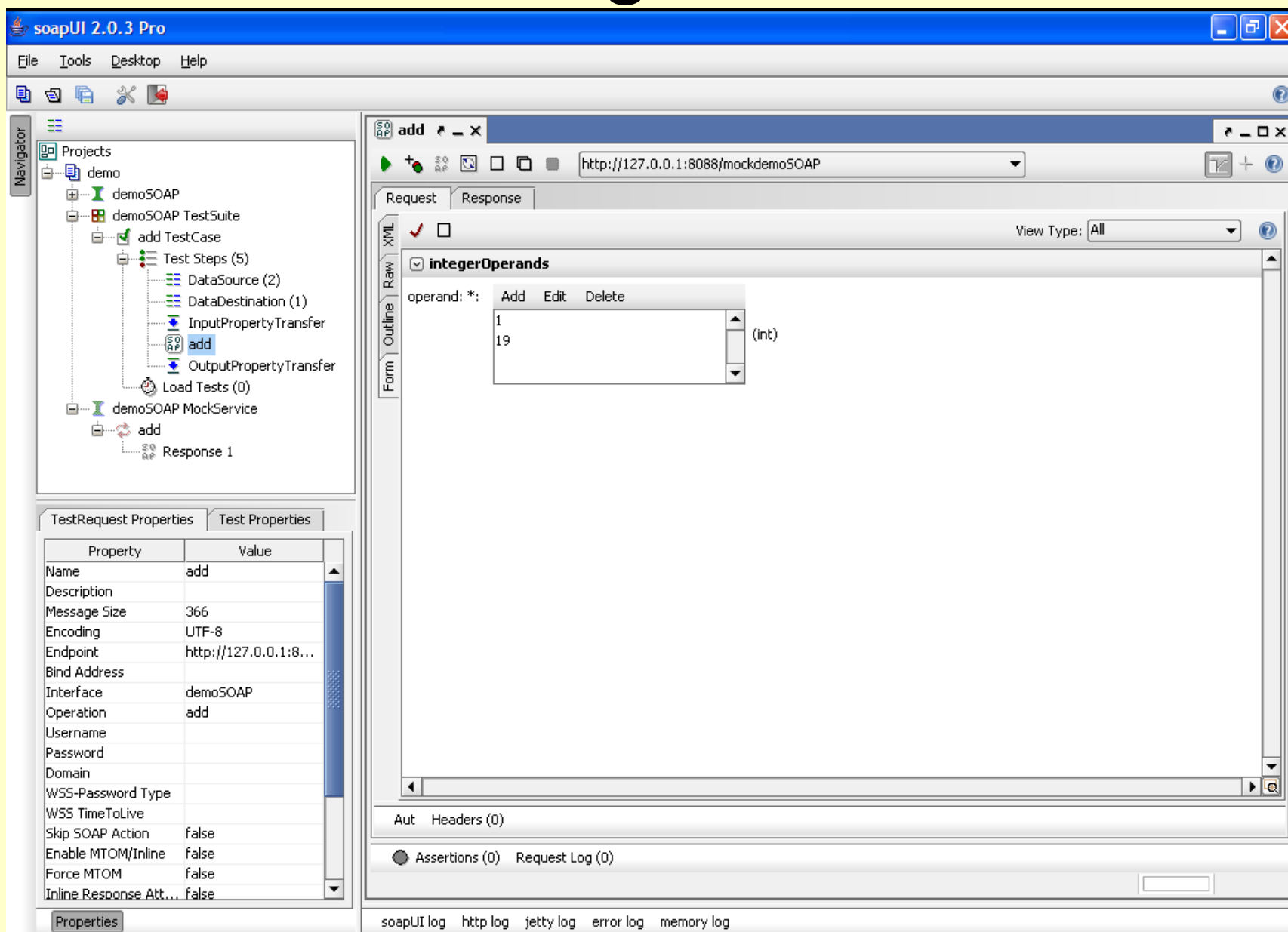


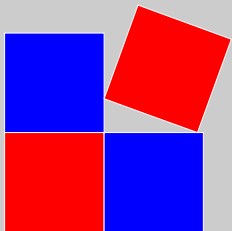
SOAPui Pro

- Personal testing tool
- Swing GUI
- Java test run environment
- Groovy scripting



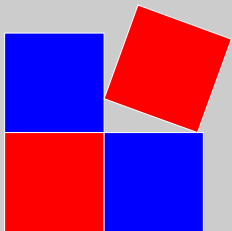
SOAPui Pro grafikus felület



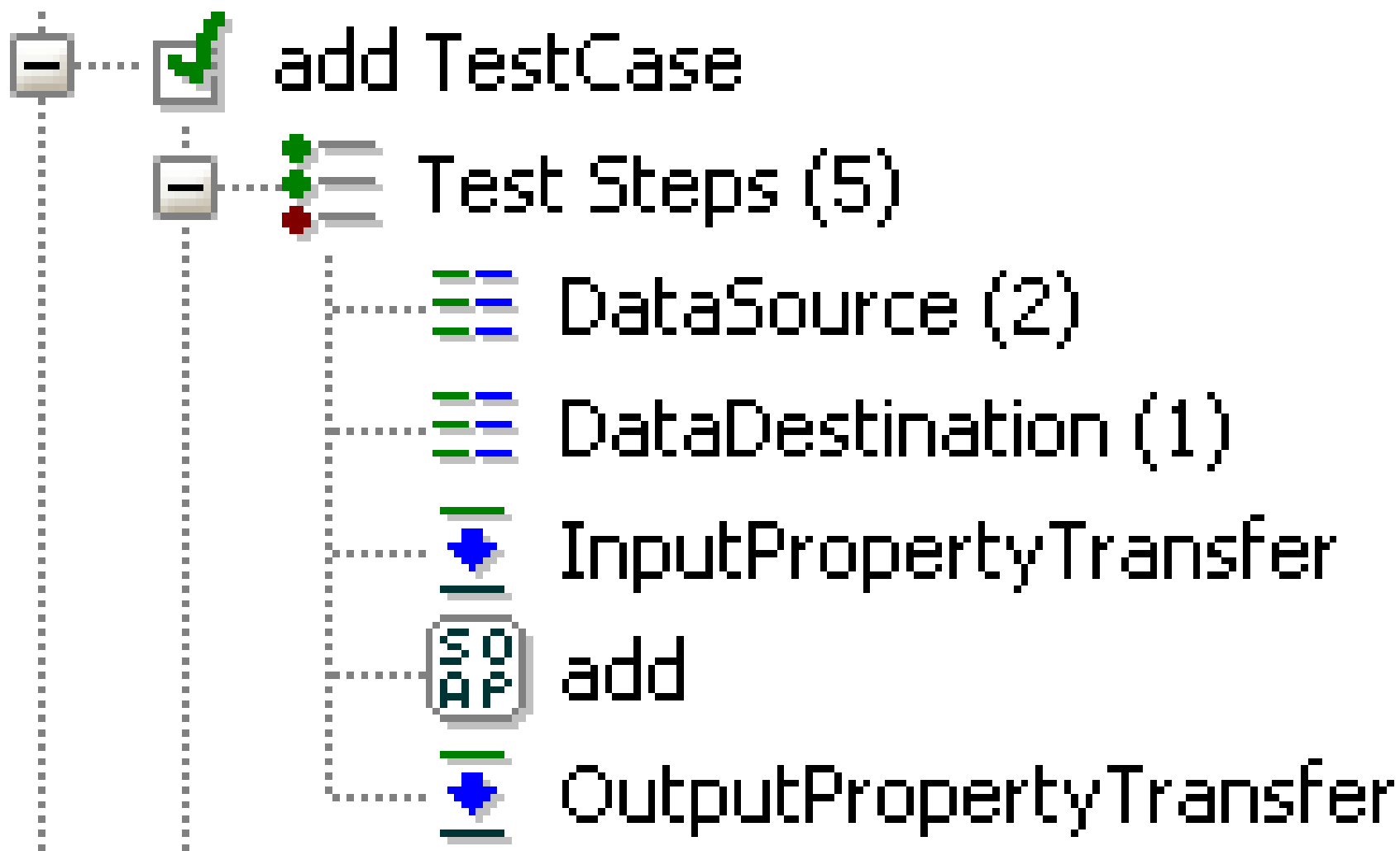


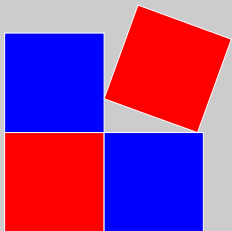
Tipikus munka

- Dokumentáció olvasás, készítés, a teszt folyamatának megértése
- Teszt folyamatának (hívások sorrendje) dokumentálása
- Teszt folyamat SOAPui létrehozása, tesztelés „kézből”
- GreenPepper oldal elkészítése
- Teszt adatok feltöltése, tesztfuttatás
- Tesztfutás eredmények dokumentálása



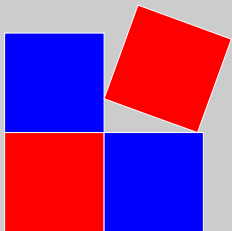
Egyszerű teszt folyamat



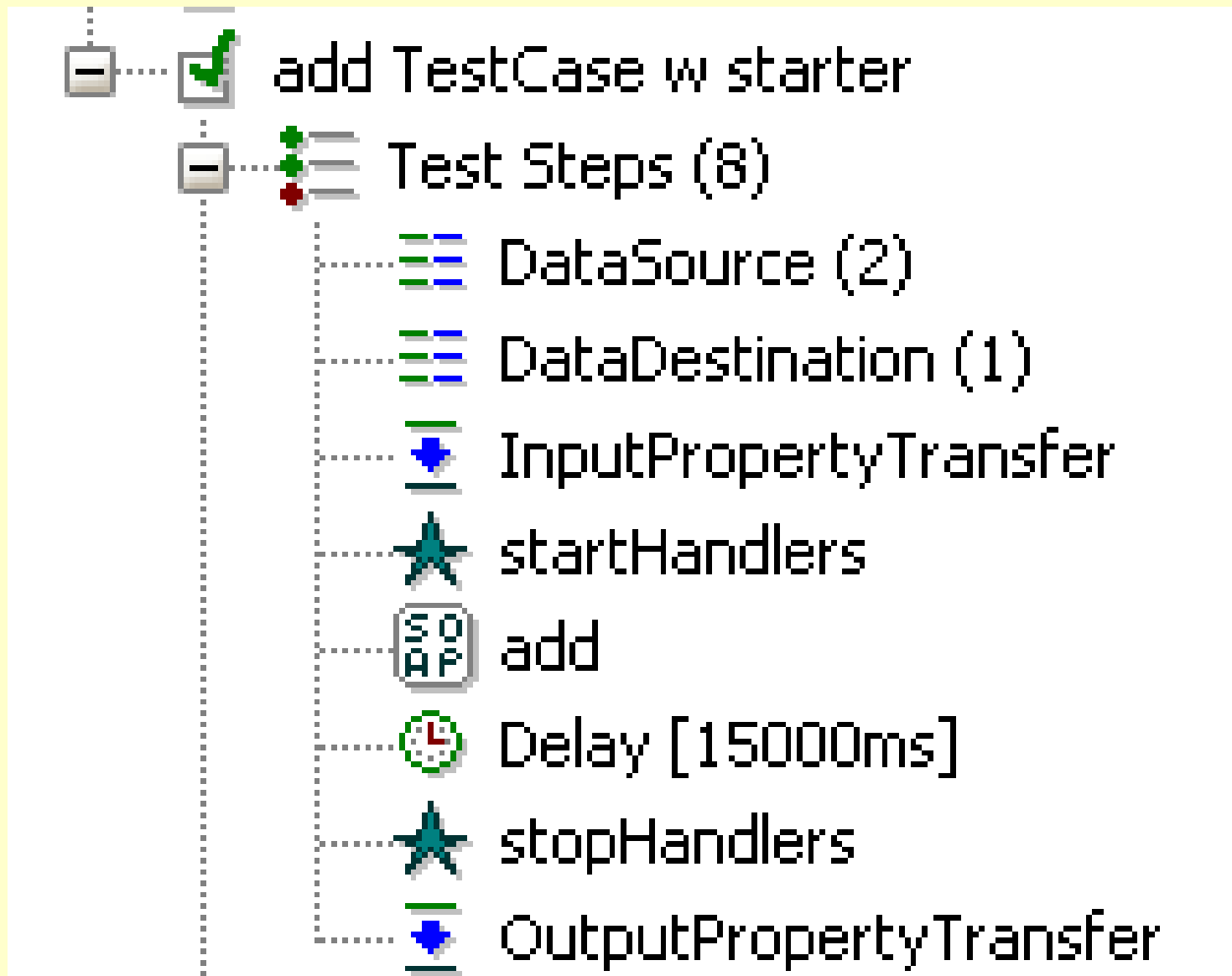


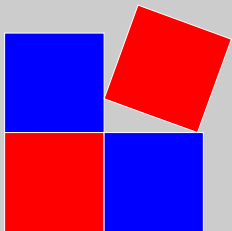
Lépések

- DataSource
- DataDestination
- InputPropertyTransfer
- Teszt lépések
- OutputPropertyTransfer



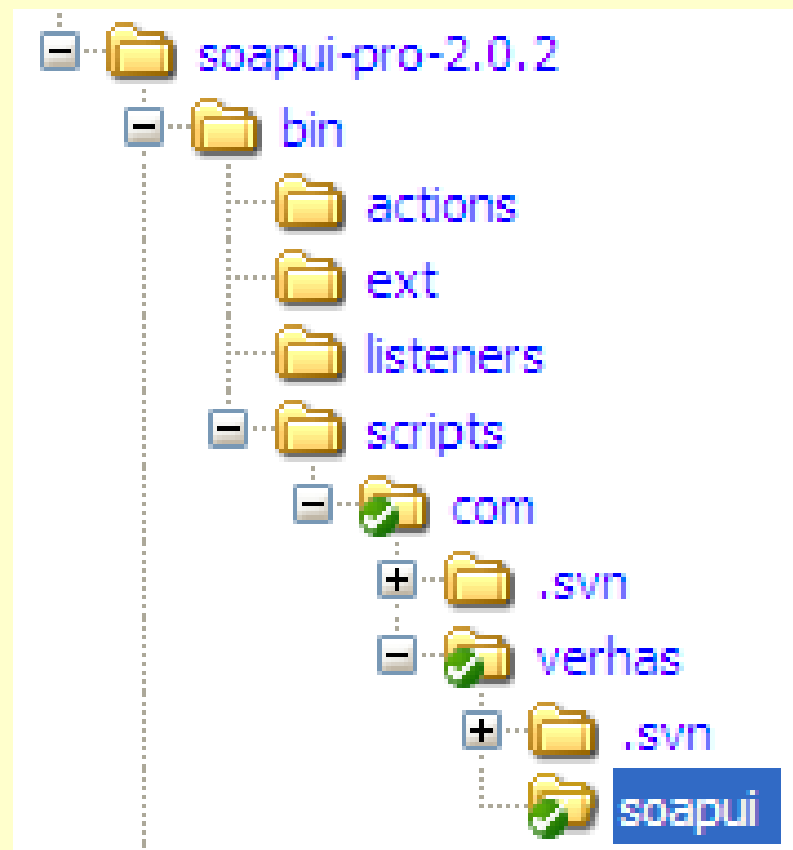
Egy összetettebb példa

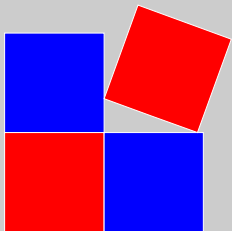




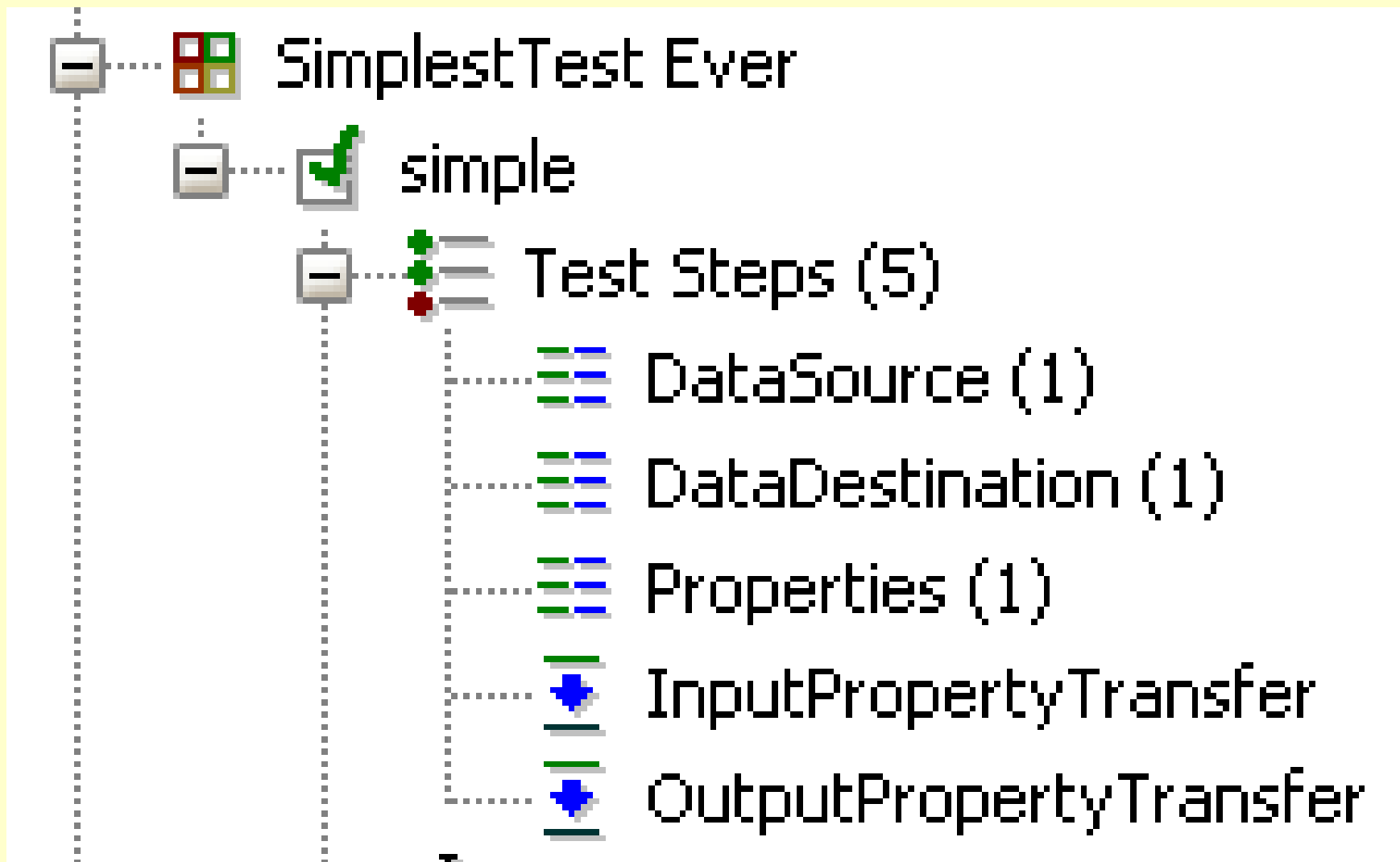
com.verhas.soapui.Util

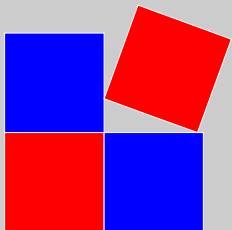
- Groovy script(ek)
- dimanikusan betöltődő (frissülő) script-ek
- classpath





Példa teszteset





Tesztet GreenPepper oldalon

GreenPepperized ☒ - [CONFIGURE](#)

Source Requirements: (None) - [EDIT](#)

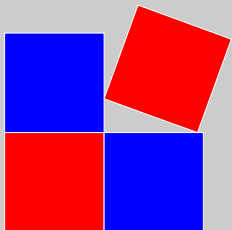
Execute ▶ For [[mpiManagement](#) [EDIT](#)]

do with	soapUI		
Select workspace	/var/opt/soapui/simpleSample-workspace.xml	and project	simpleSampleProject

end

rule for	soapUI	testSuite	simpleSampleTestSuite	testCase	simpleSampleTestCase
verbatimInput	run result?				
102	102				
alma	alma				
55	56				
34	41				

 0 Comments |  [Add Comment](#)



Tesztfuttatás eredménye

GreenPepperized ☒ - CONFIGURE

Source Requirements: (None) - EDIT

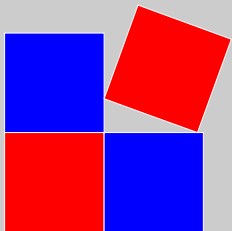
Execute ▶ For [mpiManagement EDIT]

do with	soapUI	
Select workspace	/var/opt/soapui/simpleSample-workspace.xml	and project simpleSampleProject

end

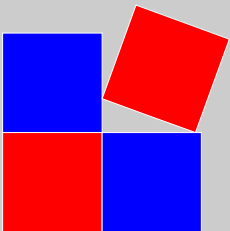
rule for	soapUI	testSuite	simpleSampleTestSuite	testCase	simpleSampleTestCase
verbatimInput	run result?				
102	102				
alma	alma				
55	Expected: 56 Received: 55				
34	Expected: 41 Received: 34				

0 Comments | [Add Comment](#)

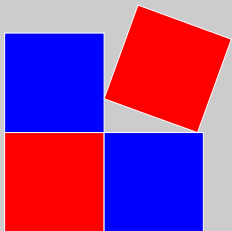


Tapasztalatok

- A tesztelés az interfészek tervezésénél kezdődik
 - Tesztelhetőre tervezés
- A tesztelés nem javítja meg a hibákat
- A QA teszt nem helyettesíti a programozói (unit) teszteket
- Ez egy bonyolult szakma...



HAPPY TESTING



Összekapcsolás, egy teszt futása

