



IBM İş Kuralları Yönetimi (ILOG JRules) Dinamik Fiyatlandırma

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<02.02.2012>

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WebSphere software

İş Kararları Hayatımızın Her Noktasında Yer Alıyor

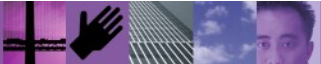
Yeni regülasyonların devreye alınması için yeni bir onay adımına ihtiyacımız var.

En iyi müşterilerimizi özel bir promosyon yaratalım.



Bu tip siparişler için onayları otomasyona sokabilir miyiz ?

Ve Sürekli Değişiyor



İş Kuralları çözümü için uygun “Ortak Kullanım Senaryoları”

Banking

- Loan Origination
- Credit Decisioning
- Sales Advisory
- Payments
- Accounting

Insurance

- Claims Processing
- Underwriting
- Quoting
- Rating
- Commissioning

Capital Markets

- Automated Trading
- Trade Order Management
- Accounting
- Compliance KYC / AML
- On Boarding

Public Sector

- Claims Processing
- Entitlement and Benefit calculation
- Fraud Detection and Management
- Screening and Targeting

Telecom

- Offer Configuration
- Order Management
- Fraud Detection and Management
- Loyalty Programs
- Network Monitoring

Transportation and Travel

- Promotions Management
- Loyalty Programs
- Customer Service
- Billing
- Contract Management

Retail

- Online recommendation
- Campaign Management
- Order Management
- Pricing

Manufacturing

- Order Management
- Billing
- Contract Management



İş kuralları kodlandığı zaman



İş Birimi
Ekipleri

- Değişim süreçleri zaman alır
- İş Kullanıcıları için şeffaf değildir
- Çoğunlukla gizli, dağınık ve çoklanmıştır



Bilgi
İşlem

```

// Approve or reject the loan
borrower.getName()); // Approve or reject the loan
loan.isApproved()){ System.out.println("==> Loan is approved -"); } else { System.out.println("==> Loan is rejected -"); }
for(Object msg : loan.getMessages()){ System.out.println("==> Because " + msg); } } /** * Check conditions on the
borrower and the loan
Check maximum amount
loan.reject(); } // Check
100 / borrower.getYearlyRepayment() *
(borrower.getCreditScore() < 20) { loan.addToMessages("debt-to-income too high compared to credit score");
loan.reject(); } if ((val > 45) && (borrower.getCreditScore() < 400)) {
loan.addToMessages("debt-to-income too high compared to credit score"); loan.reject(); } if ((val >= 45) && (val < 50)
&& (borrower.getCreditScore() < 600)) { loan.addToMessages("debt-to-income too high compared to credit score");
loan.reject(); } if ((val >= 50) && (borrower.getCreditScore() >= 0) && (loan.getAmount() >

```

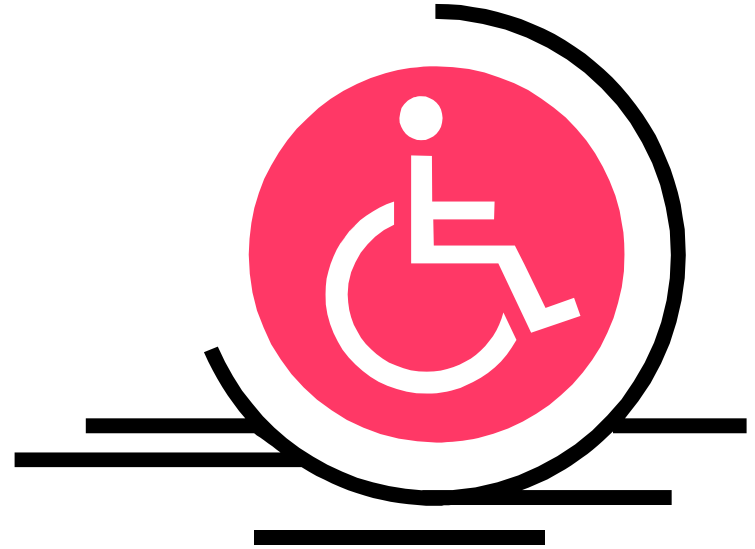
İş Mantığı

Uygulama Kodu

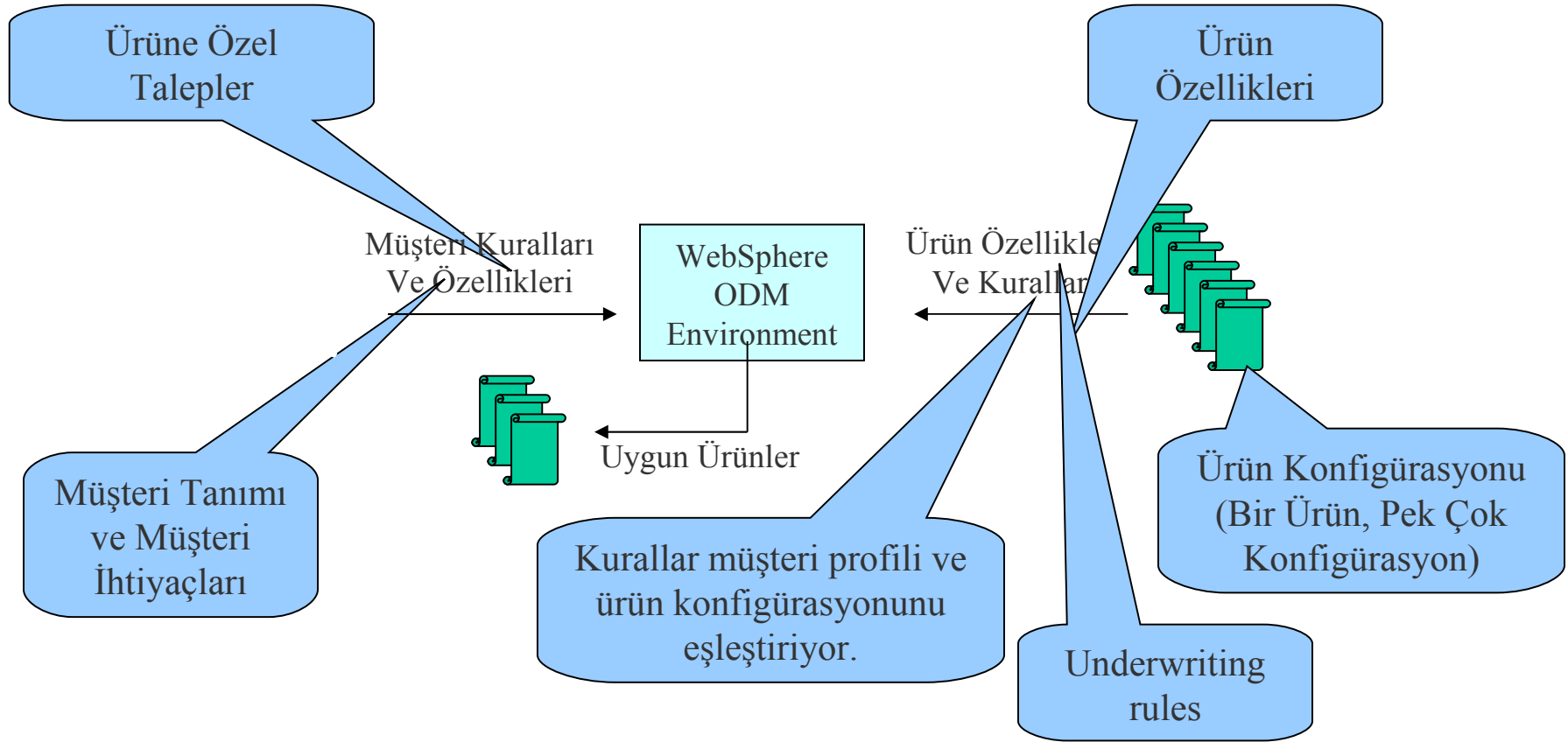


İş Kuralları Yönetim Platformuna İhtiyacınız Var Mı?

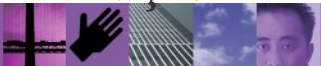
- Kurallarınız iş birimleri tarafından okunabilir ve anlaşılabilir şeffaf durumda mı ?
- Zaman içerisinde kurallara yaptığınız değişikliklerin kimler tarafından, ne zaman ve hangi amaçla yapıldığını takip edebiliyor musunuz ?
- IT Kaynaklarını kullanmadan iş kurallarını değiştirebiliyor musunuz ?
- Bir iş kuralı sistem içerisinde kopyalanıyor mu ?
- Gerçekleşen kararların izlenebilirliği nedir ?
- Yapmak istediğiniz değişiklikler işinizi nasıl etkileyecek ?
- Farklı karar senaryolarını simüle edip karşılaştırabiliyor musunuz ?
- Uygulamaya sokacağınız yeni kuralların doğruluğunu kim test etti ?



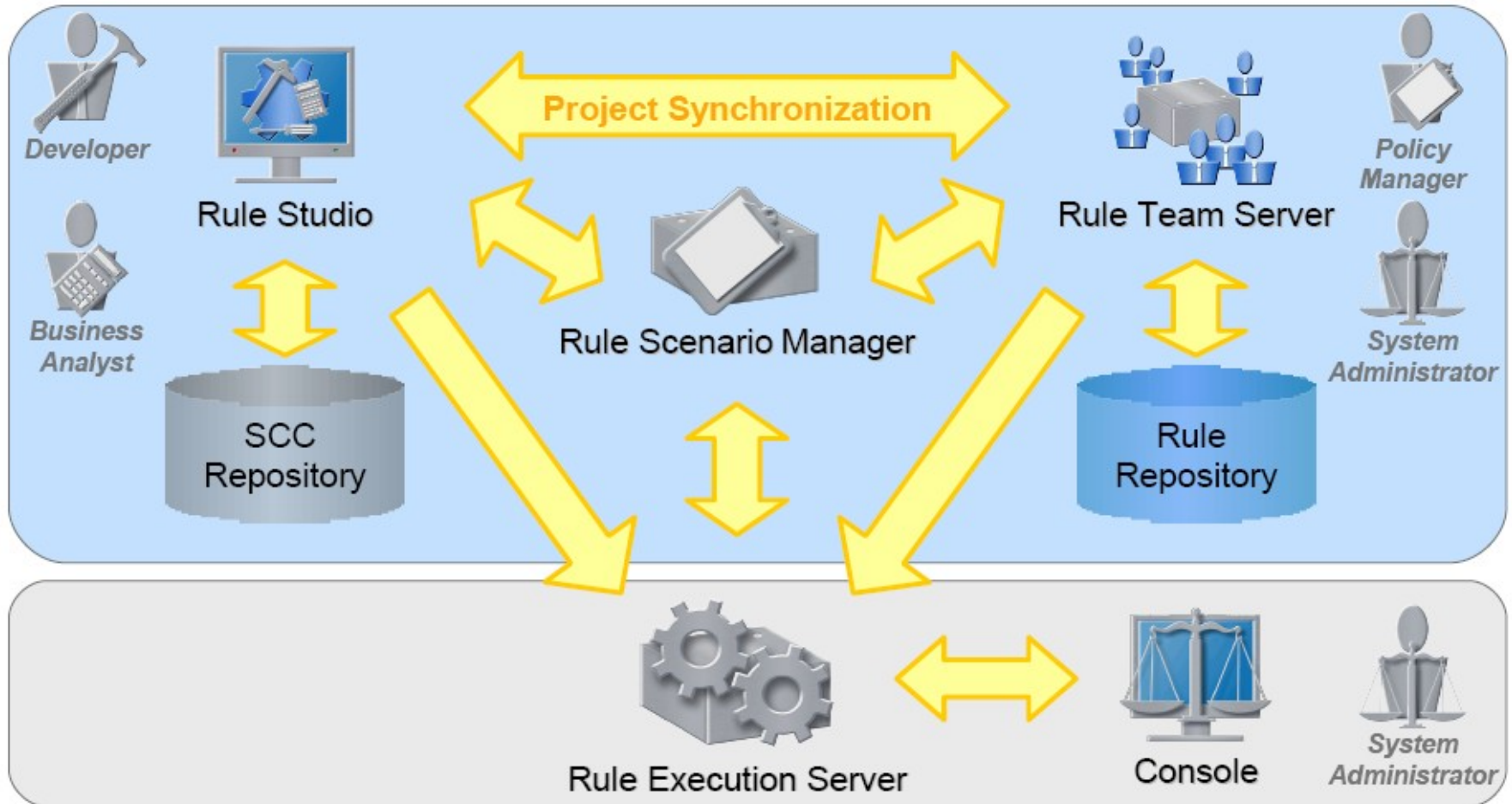
Dinamik Fiyatlandırma



Micro Segmentlerin Adreslenmesi
Ürün Özelliklerinin Değil,
Müşteri İhtiyaçlarının Önde Olduğu Diyaloglar



IBM ILOG Mimarisi



Kural Geliştirme Ortamı, "MS Word"

The screenshot shows the Microsoft Word 2007 interface with a document titled "Pricing.docx - Microsoft Word". The ribbon is set to "Rules". The main document area displays "Page 2" of "Pricing Policies".

Compute the Base Rate

Author: Beatrix Creation Date: 7/5/2007	Last Modification Author: Beatrix Last Modification Date: 8/1/2007
--	---

definitions
 set 'the requested car group' to the requested car group of the rental agreement ;
 then
 the rental agreement qualifies for the "Base" offer ;
 set the rental agreement "Base" price to the number of weeks of the rental agreement * the weekly rate of 'the requested car group' + the remaining number of days of the rental agreement * the daily rate of 'the requested car group' ;

Documentation: This business rule defines the Base rate for all rental agreements. The rule does not include an if part. Since the rule is automatically applied to all agreements, there is no need for any condition statements. The Base price depends on the duration of the rental and on the requested car group. The pricing of all the other special offers is computed from this base price.

Default Special Offer

This section defines eligibility and pricing for the Default special offer. Even if a rental agreement is not eligible for any other special offers, the Default special offer will still be applied.

Default Special Offer: Eligibility

Author: Beatrix Creation Date: 7/5/2007	Last Modification Author: Beatrix Last Modification Date: 8/1/2007
--	---

then
 the rental agreement qualifies for the "Default" offer ;
 display the message: "The rental agreement is eligible for the Default special offer." ;

The interface also shows a "Vocabulary" pane on the left with a list of terms like Boolean, branch, car group, etc. On the right, there are panes for "RuleDoc Outline", "Rule Properties", and "Problem List". The "Problem List" shows three errors: "No automatic variable 'rental agre...", "The word 'discount' is expected in pl.", and "The word ',' is missing."



Kural Geliştirme Ortamı, “Visual Studio.net”

Business Rules - Microsoft Visual Studio

File Edit View Project Build Debug Data Tools Window Community Help

Eligibility.rfx Eligibility.blx+ Customer.cs

AgeCheck.Accept customer

```

AgeCheck.Accept customer
if
  the age of 'the current customer' is at least 21
then
  [Context Menu]
  
```

Context Menu:

- the current customer
- the current status
- all of the following conditions are true :
- any of the following conditions is true :
- false
- it is not true that <condition>
- none of the following conditions are true :
- the age of <a customer>
- the customer
- the first name of <a customer>
- the last name of <a customer>
- the length of <a string>
- the number of elements in <objects>
- there are <a number>
- there are at least <a number>
- there are at most <a number>
- there are less than <a number>

Solution Explorer - Solution 'Business Rules' ...

- Solution 'Business Rules' (2 projects)
 - BusinessObjectModel
 - References
 - AssemblyInfo.cs
 - BomAssemblyInfo.cs
 - Customer.cs
 - BusinessRules
 - References
 - Eligibility.blx
 - Eligibility.rfx

Properties - Accept customer AgeCheck

Active	True
Author	Beatrix
Categories	Any
Creation Date	4/3/2007 11:12 AM
Documentation	
Last Modification Author	Beatrix
Last Modification Date	4/4/2007 6:59 AM
Name	Accept customer
Package	AgeCheck

Active
Indicates whether the rule is active.

Ready



Kural Geliştirme Ortamı, “Internet Tarayıcısı”

Business Rules

Name	Status	Priority	Last Changed By	Last Changed On
approval	New	low	rtsAdmin	17/10/08 17:56
checkCreditScore	New		rtsAdmin	17/10/08 17:56
checkIncome	New		rtsAdmin	17/10/08 17:56
grade	New	high	rtsAdmin	17/10/08 17:56

4 Results

Decision Table Preview

	Yearly repayment		Corporate score		Grade	Message
	Min	Max	Min	Max		
1	0	10,000	≥ 900		A	Very low risk loan
2			600 900		A	Very low risk loan
3			300 600		B	Low risk loan
4	10,000	30,000	≥ 900		A	Very low risk loan
5			600 900		B	Low risk loan
6			300 600		C	Average risk loan
7	30,000	60,000	≥ 900		B	Low risk loan
8			600 900		C	Average risk loan
9			300 600		D	Risky loan
10	≥ 60,000		≥ 900		C	Average risk loan
11			600 900		D	Risky loan
12			300 600		E	Very risky loan



Kural Geliştirme Ortamı “Eclipse Tabanlı Entegre Geliştirme Ortamı (IDE)”

The screenshot displays the IBM Rule Development Environment (RDE) interface. The main window shows a business rule editor for a rule named 'approval'. The rule logic is as follows:

```

if
  'the loan report' is approved and
  the loan grade in 'the loan report' is one of { 'A', 'B', 'C' }
then
  in 'the loan report', accept
  Variable: the loan report: report message "Congratulations! Your loan has been approved"
else
  in 'the loan report', refuse the loan with the message "We are sorry. Your loan has not been approved"
    
```

Below the rule editor, a decision table is visible, which maps input values to output grades and messages:

	Yearly repayment		Corporate score		Grade	Message
	Min	Max	Min	Max		
1			≥ 500	900	A	Very low risk loan
2	0	10,000	600	900	A	Very low risk loan
3			200	600	B	Low risk loan
4			≥ 500	600	A	Very low risk loan
5	10,000	30,000	600	900	B	Low risk loan
6			300	600	C	Average risk loan
7			≥ 500	900	B	Low risk loan
8	30,000	60,000	600	900	C	Average risk loan
9			300	600	D	Risky loan
10			- nan	600		Average risk loan

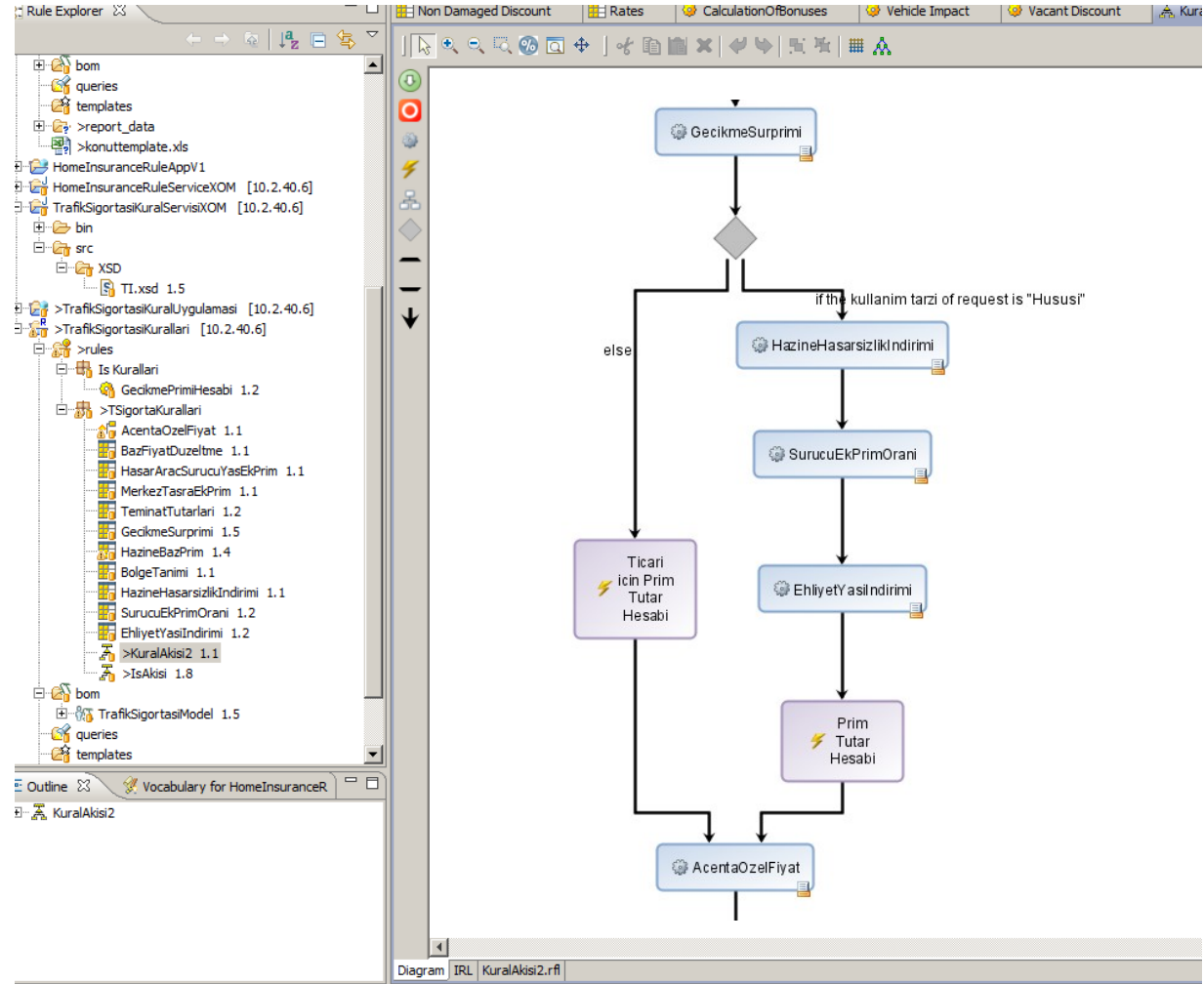
The interface also shows a rule flow diagram on the left, starting with 'intResult', followed by 'validation', 'data valid', 'computation', 'eligibility', and 'insurance'. The 'insurance' node has an 'else' branch that loops back to 'eligibility'. The 'Rule Explorer' on the far left shows a project structure with various rule-related files and folders.

Örnek Kullanım Senaryosu, Dinamik Fiyatlandırma

- Trafik Sigorta Poliçesi Fiyatlandırması
 - Kullanım Tarzı
 - Araç Yaşı
 - Şoför Yaşı
 - Hasar Durumu
 - Gecikme Durumu
 - Bölge / İl
- Acenta Komisyon Tespiti
 - İşlem Hacmi
 - Ödeme Performansı



Trafik Sigorta Poliçesi Kural Akışı



Kullanım Tarzı x Araç Tipi x Hasarsızlık x Tescil Tarihi Gecikme Sürprimi

	Kullanım Tarzı	Araç Tipi	Hasarsızlık Basamağı	Tescil Tarihi Grubu		Gecikme Sürprimi
				Min	Max	
1				1	4	0.95
2			1	4	8	1
3				8	24	1
4				≥ 24		1
5			2	1	4	0.95
6				4	8	1
7				8	24	1
8				≥ 24		1.5
9			3	1	4	0.95
10				4	8	1
11				8	24	1
12				≥ 24		1
13			4	1	4	0.95
14		Otomobil		4	8	1
15				8	24	1
16				≥ 24		1
17			5	1	4	0.95
18				4	8	1
19				8	24	1
20				≥ 24		1
21			6	1	4	0.95
22				4	8	1
23				8	24	1
24				≥ 24		1
25			7	1	4	0.95
26				4	8	1
27				8	24	1
28				≥ 24		1
29		Taksi				
30			1	1	4	0.95
31				4	8	1
32				8	24	1
33				≥ 24		1



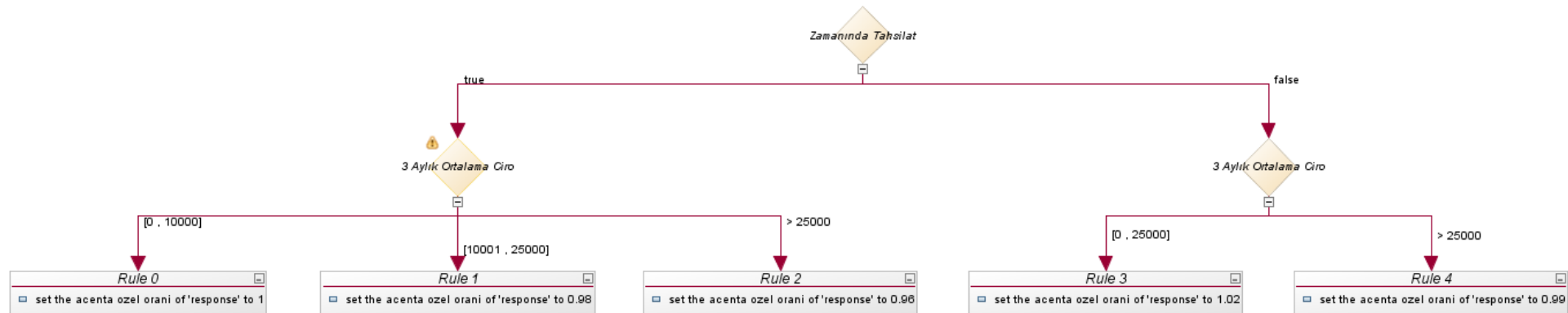
Sürücü Yaşı x Araç Yaşı Ek Primi

	Sürücü Yaşı		Araç Yaşı		
	Min	Maks	Min	Maks	
1			0	1	1,02
2			1	2	1,03
3	18	30	2	5	1,04
4			5	10	1,05
5			≥ 10		1,10
6			0	1	0,98
7			1	2	0,99
8	30	45	2	5	1,00
9			5	10	1,01
10			≥ 10		0,99
11			0	1	1,00
12			1	2	1,01
13	45	65	2	5	1,02
14			5	10	1,03
15			≥ 10		1,04
16			0	1	1,03
17			1	2	1,04
18			2	5	1,05
19			5	10	1,06
20			≥ 10		1,12
21		≥ 65			

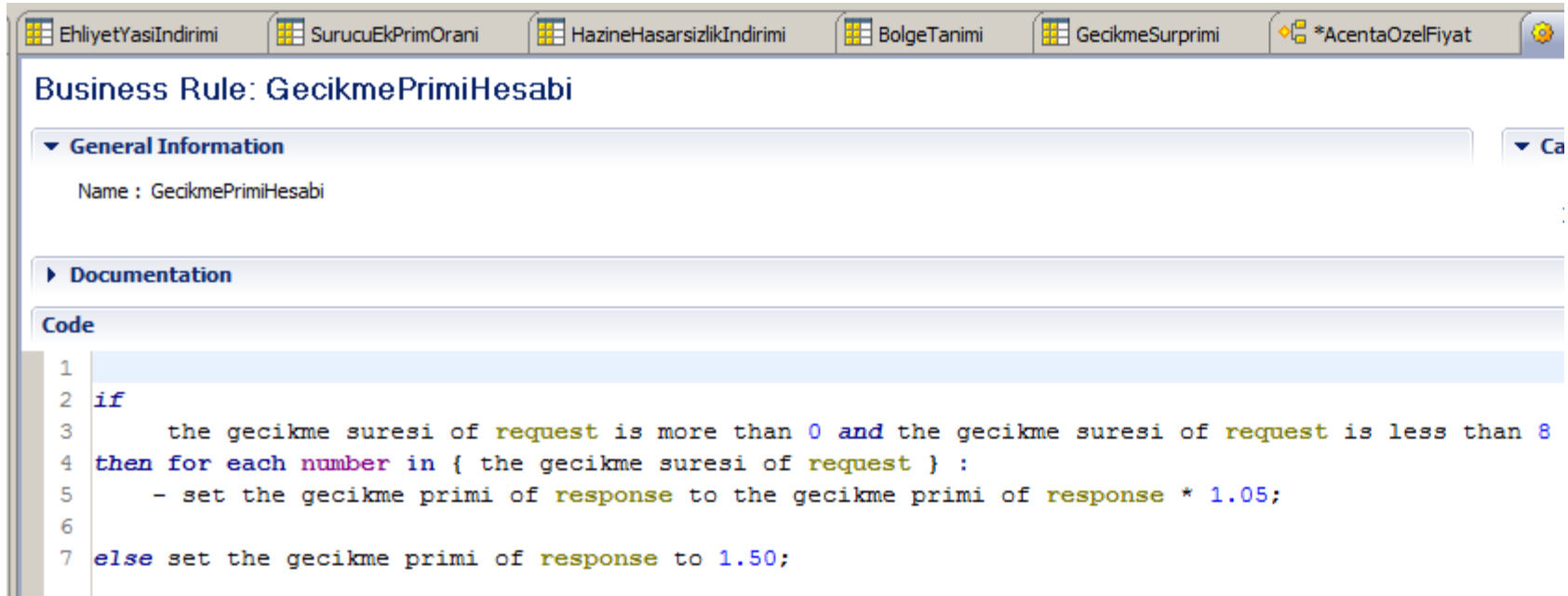
Rule Explorer

- >konuttemplate.xls
 - HomeInsuranceRuleAppV1
 - HomeInsuranceRuleServiceXOM [10.2.40.6]
 - TrafikSigortasiKuralServisXOM [10.2.40.6]
 - bin
 - src
 - XSD
 - TI.xsd 1.5
- >TrafikSigortasiKuralUygulamasi [10.2.40.6]
 - >TrafikSigortasiKurallari [10.2.40.6]
 - >rules
 - Is Kurallari
 - GecikmePrimiHesabi 1.2
 - >TSigortaKurallari
 - AcentaOzelFiyat 1.1
 - BazFiyatDuzeltme 1.1
 - HasarAracSurucuYasEkPrim 1.1
 - MerkezTasraEkPrim 1.1
 - TeminatTutarlari 1.2
 - GecikmeSurprimi 1.5
 - HazineBazPrim 1.4
 - BolgeTanimi 1.1
 - HazineHasarsizlikIndirimi 1.1
 - SurucuEkPrimOrani 1.2
 - EhliyetYasiIndirimi 1.2
 - >KuralAkisi2 1.1
 - >IsAkisi 1.8
- bom
 - TrafikSigortasiModel 1.5
- queries
- templates
- report_data
 - rehber_tarife_sonuc_primleri.xls 1.1
 - rehber_tarife_sonuc_primleri3.xls 1.2
 - template.xls 1.1

Ortalama Ciro x Ödeme Performansı Acenta Komisyonu



Zamanında Sigortalanmamış Araçlar için Geçikme Sürprimi



The screenshot displays the IBM Business Rule Manager interface. At the top, there is a navigation bar with several tabs: 'EhliyetYasiIndirimi', 'SurucuEkPrimOrani', 'HazineHasarsizlikIndirimi', 'BolgeTanimi', 'GecikmeSurprimi', and '*AcentaOzelFiyat'. The main content area is titled 'Business Rule: GecikmePrimiHesabi'. Below the title, there are two expandable sections: 'General Information' and 'Documentation'. The 'General Information' section shows the rule name 'GecikmePrimiHesabi'. The 'Documentation' section is expanded to show the rule's code, which is as follows:

```
1  
2 if  
3     the gecikme suresi of request is more than 0 and the gecikme suresi of request is less than 8  
4 then for each number in { the gecikme suresi of request } :  
5     - set the gecikme primi of response to the gecikme primi of response * 1.05;  
6  
7 else set the gecikme primi of response to 1.50;
```



Prim Başvurusu & Fiyatlandırma

- IBM BPM + WODM = iBPMs
 - Hızlı Süreç Modelleme
 - Hızlı Form Geliştirme
 - Kural Web Servisleri ile dakikalar içerisinde entegrasyon
 - Çevrim içi güvenlik
 - Tramer Servisleri ile Entegrasyon
 - Merkezi Versiyonlama ve sunucu yönetimi
 - Hızlı Test Ortamı

Sigorta Prim Hesaplama

Acenta

Acenta No:

Zamanında Tahsilat: Evet Hayır

Acenta Üç Aylık Ortalama Ciro:

Bulunduğu Yer: Merkez Taşra

Police Tipi:

Kullanım Türü:

Sigortalı Bilgileri:

Ad: Soyad:

T.C Kimlik No: Doğum Tarihi:

Müşteri Tipi: Özel Tüzel Ehiyet Alınma Tarihi:

Adres Bilgileri

İl: İlçe:

Araç Bilgileri

Araç Tipi: Araç Tescil Tarihi:

Trafik Poliçeniz Hala Geçerli mi? Evet Hayır Gecikme Süresi (Ay):

Marka: Plaka No:

Tramer Belge No:

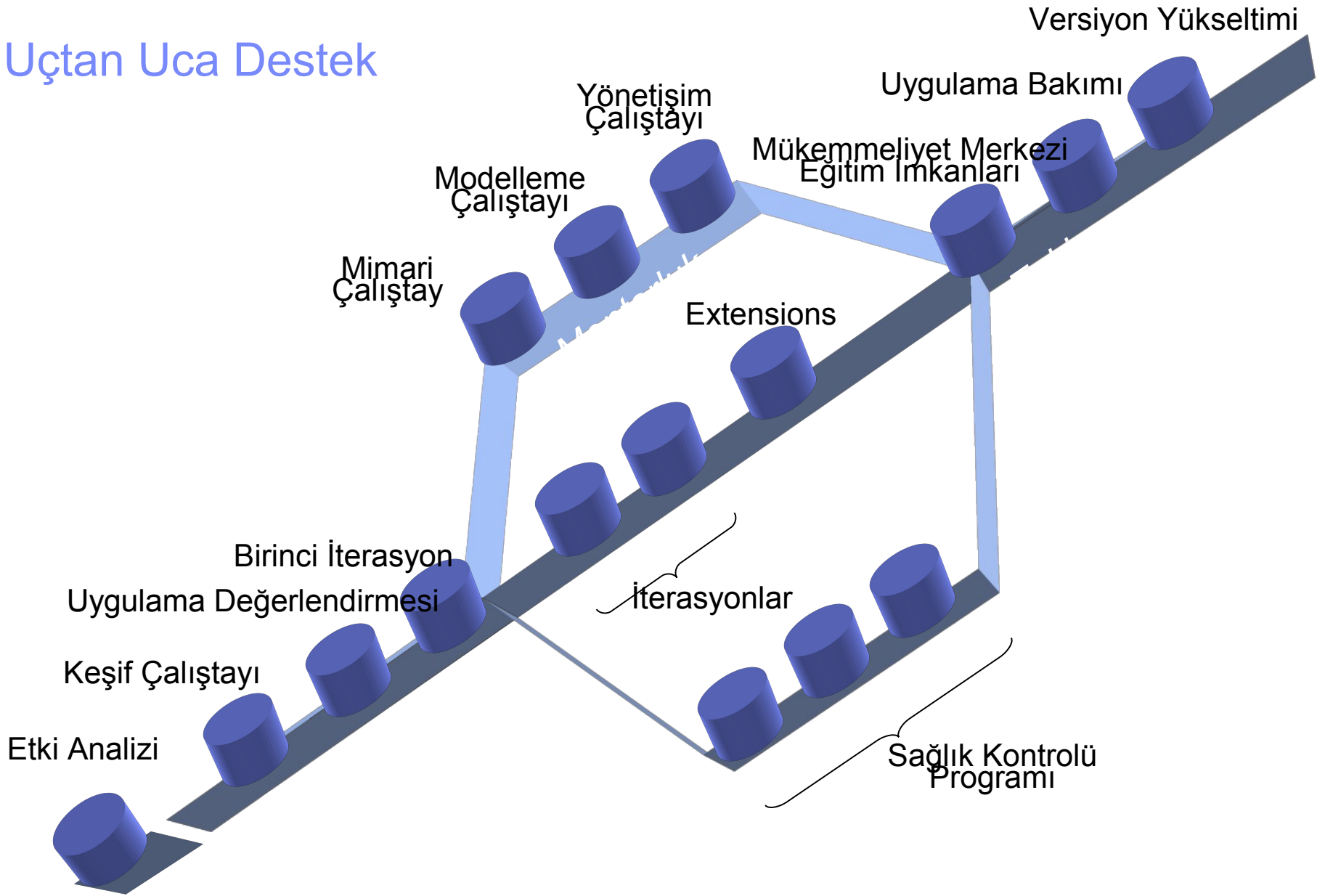
Sigorta Prim Hesap Sonuçları

Baz Fiyat(TL): <input type="text" value="265"/>	Sürücü Yaşı: <input type="text" value="27"/>
Sürücü Ek Prim Oran: <input type="text" value="36"/>	Araç Yaşı: <input type="text" value="6"/>
Merkez/Taşra Ek Prim Oran: <input type="text" value="64"/>	Ehiyet Yaşı: <input type="text" value="4"/>
Acenta Özel Oran: <input type="text" value=""/>	Hasarsızlık Basamağı: <input type="text" value="3"/>

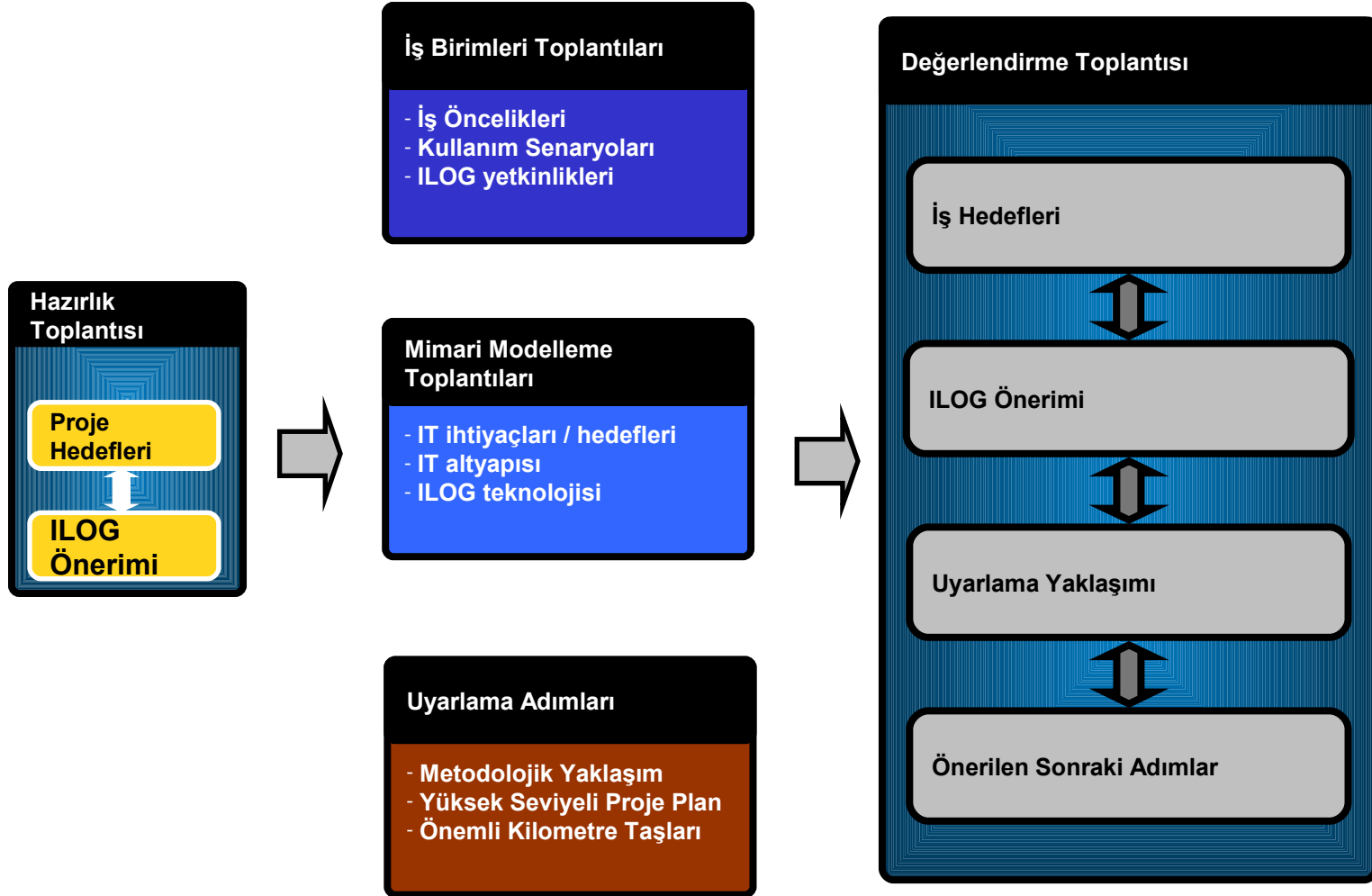
Prim Tutarı(TL):



Uçtan Uca Destek



Önerilen Bir Sonraki Adım: Keşif Çalıştayı



TEŞEKKÜRLER



WebSphere software