

TehnoKoktel

Iskustva u primjeni i integraciji različitih razvojnih alata u istom projektu

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HEP d.d.

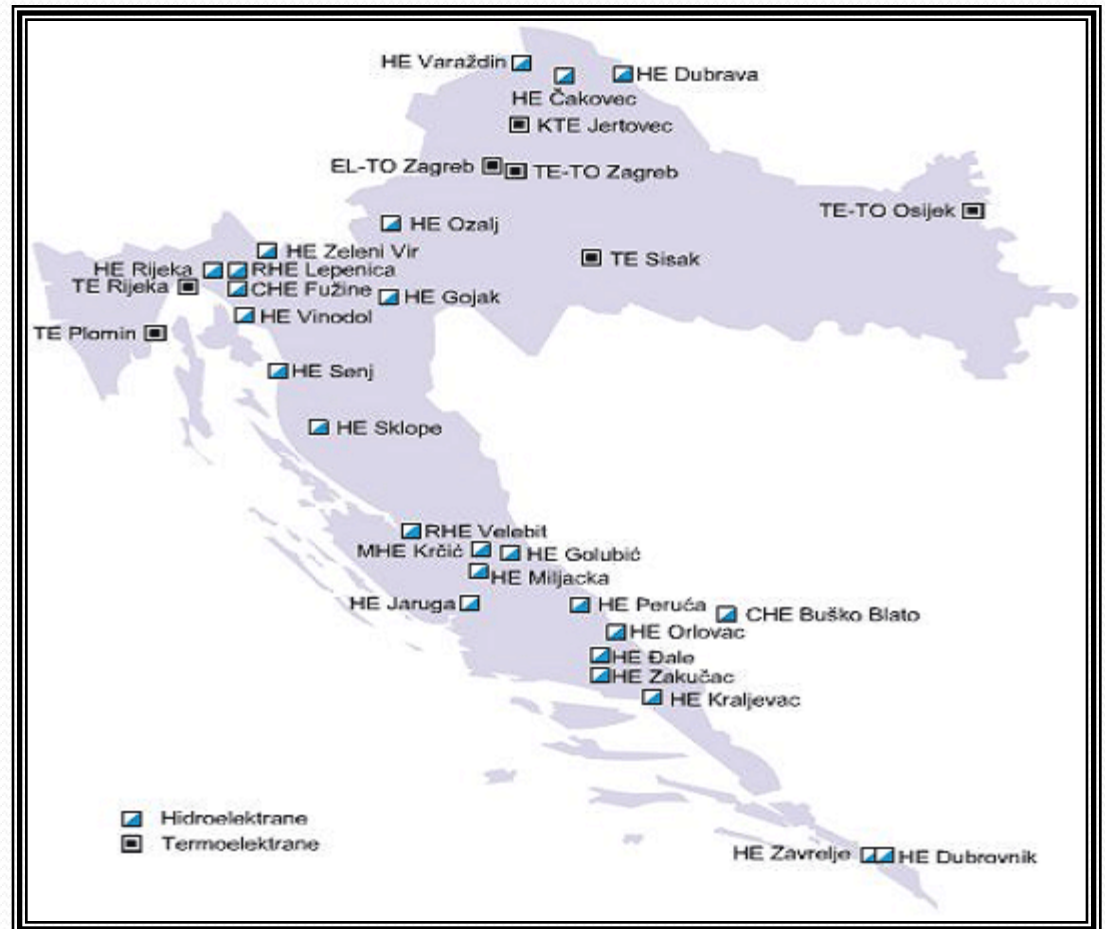
Sektor za informatiku i telekomunikacije

Sadržaj

- Uvod
- O projektu i njegovim fazama
- Oracle Forms & Reports
- Web servisi & B2B
- WebLogic – BI Publisher
- Flex – BI Publisher
- Forms – BI Publisher
- JDeveloper – BI Publisher
- Cilj i zaključak

UVOD – HEP Proizvodnja d.o.o.

- proizvodnja električne i toplinske energije
- 24 pogona
- > 70 generatora
- > 20 kotlova
- energenti:
plin,
ugljen,
mazut,
ellu,
voda

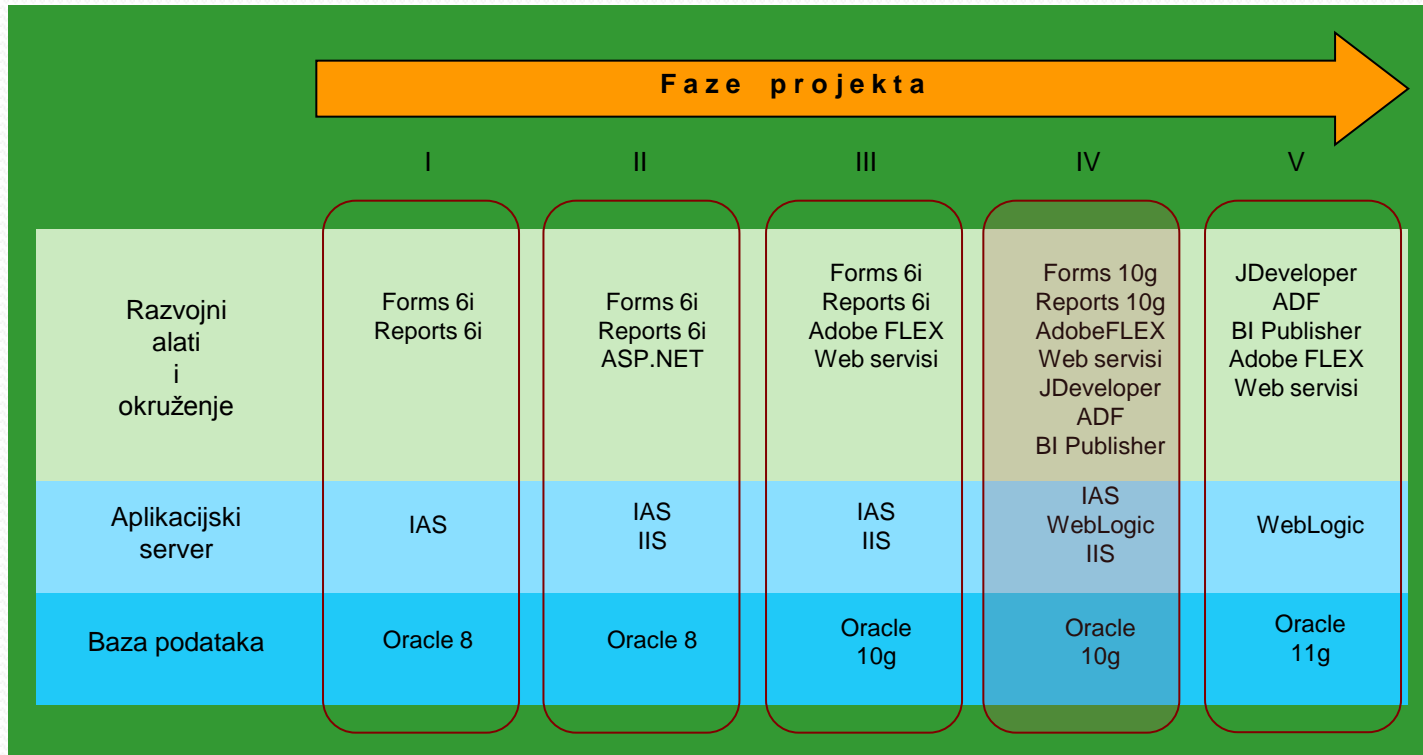


O projektu - Alat za prikupljanje i obradu svih operativnih podataka HEP Proizvodnje d.o.o.

- jednostavnost, jednoobraznost i brzina u prikupljanju, obradi i prikazu podataka
- jedinstvena baza podataka HEP Proizvodnje d.o.o.
- fleksibilnost i prilagodljivost aplikacije
- povezivanje aplikacije s drugim bazama i aplikacijama unutar i izvan tvrtke
- razvijati projekt u koracima prema važnosti pojedinih koraka i potrebama tvrtke

Tijek projekta

Ovisan o trenutno raspoloživim tehnologijama i znanju/iskustvu inženjera u njihovoj primjeni

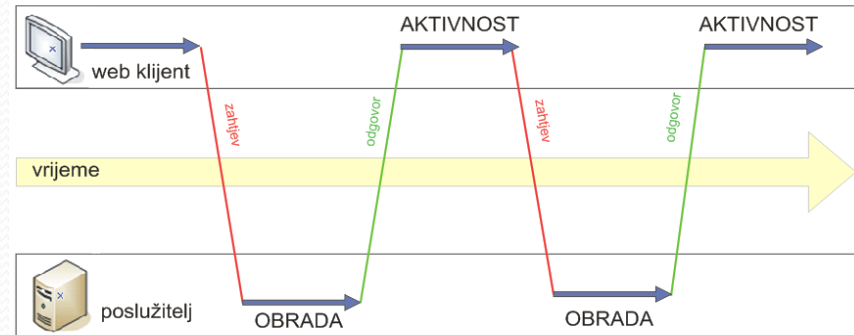


Forms & Reports

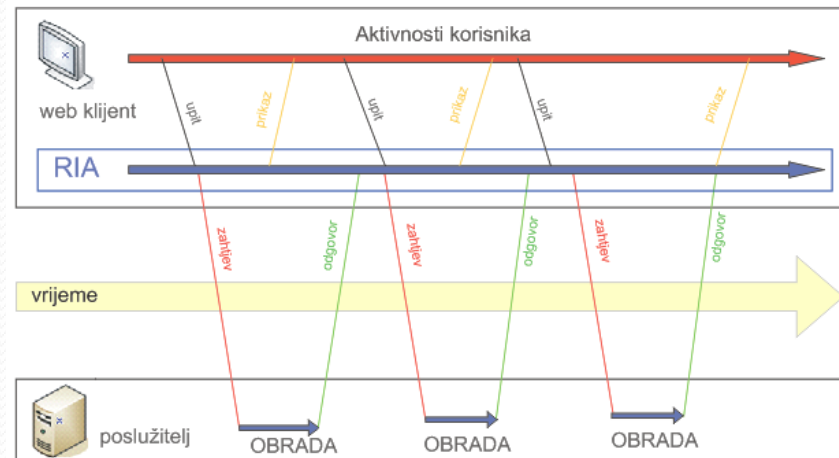
- web sučelje prikazano u java apletu koji komunicira direktno s Forms Serverom
- vrlo brzo ekransko izvješćivanje
- ograničene mogućnosti dizajna
- neograničene mogućnosti formatiranja podatka
- izlaz izvješća u PDF i XLS
- 3 - slojna arhitektura
- ...
- Ali...”Oracle is moving to ADF”

Web servisi (1)

- Početak razvoja web portala za izvješćivanje u ASP.NET
- Microsoft IIS 5.0
- aspx stranice
- odustajanje

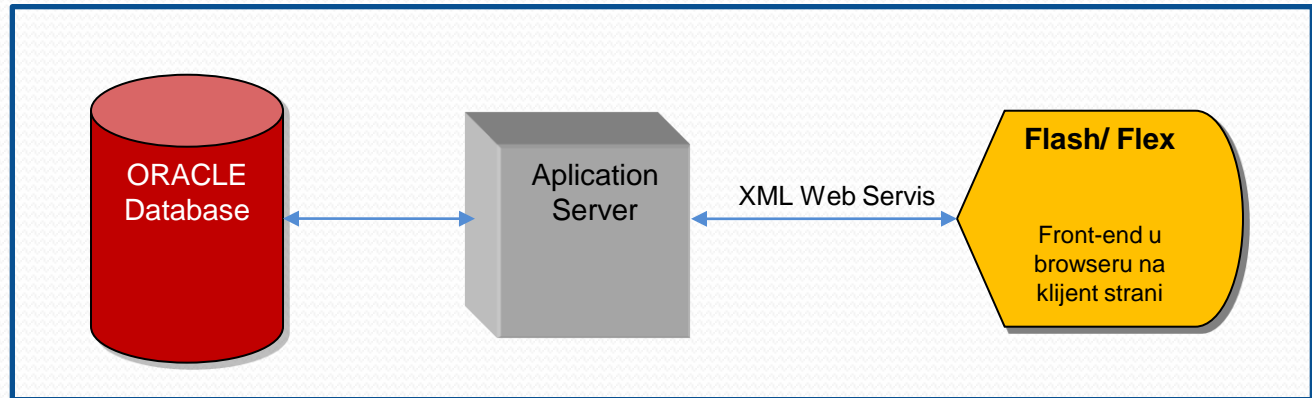


- RIA - funkcionalnost desktop aplikacije
- Adobe Flex Builder
- SWF datoteke
- Web servisi

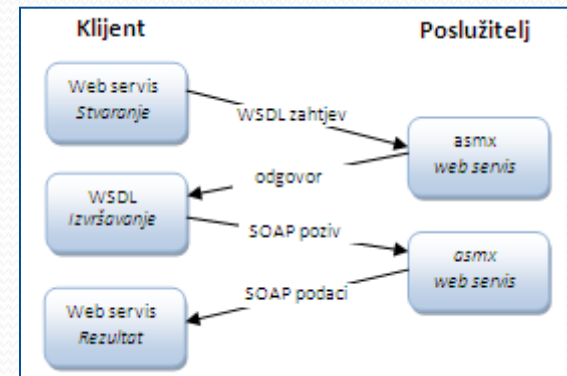


Web servisi (2)

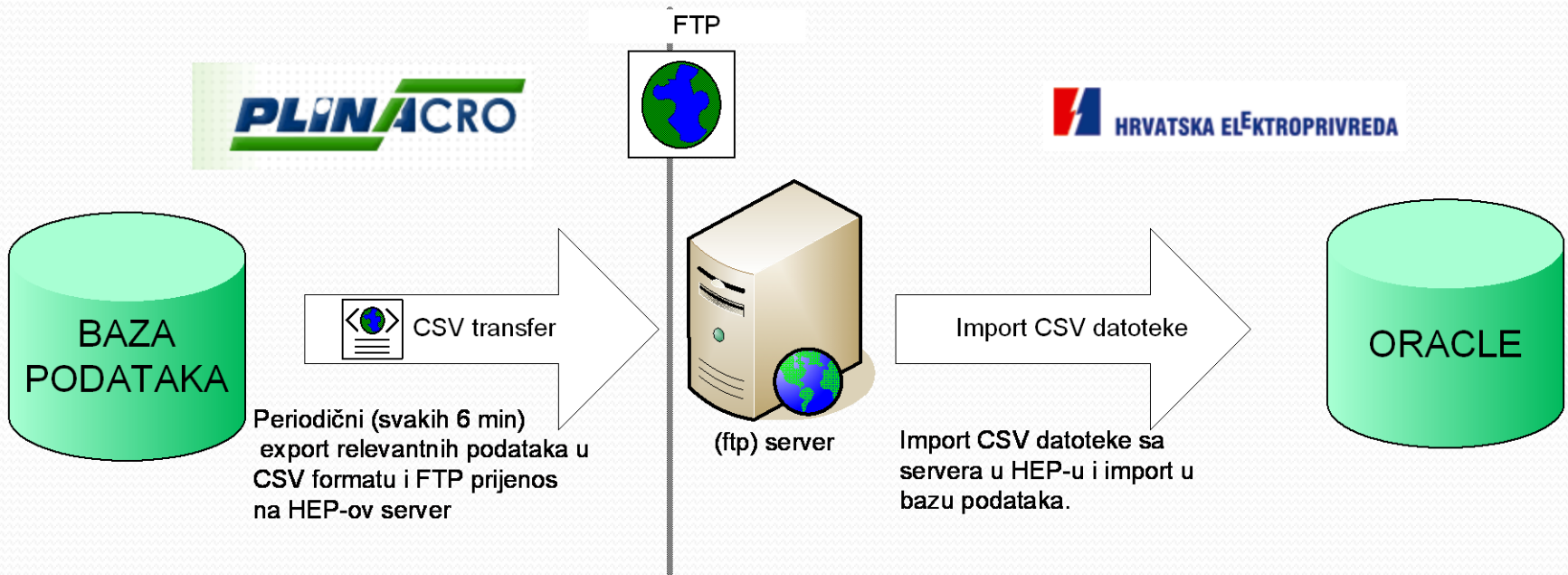
Web servis koristi SOAP komunikacijski protokol baziran na XML-u.
Razmjena informacija između aplikacija preko HTTP protokola



Komunikacijski model Web servisa

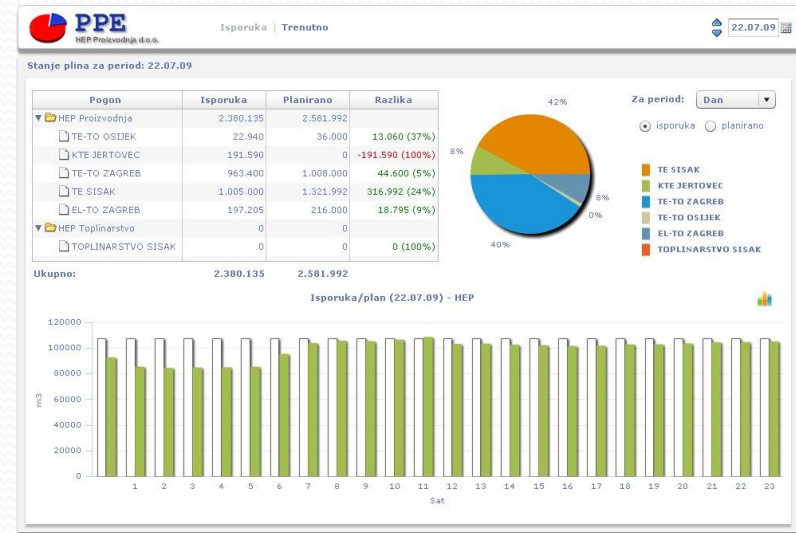
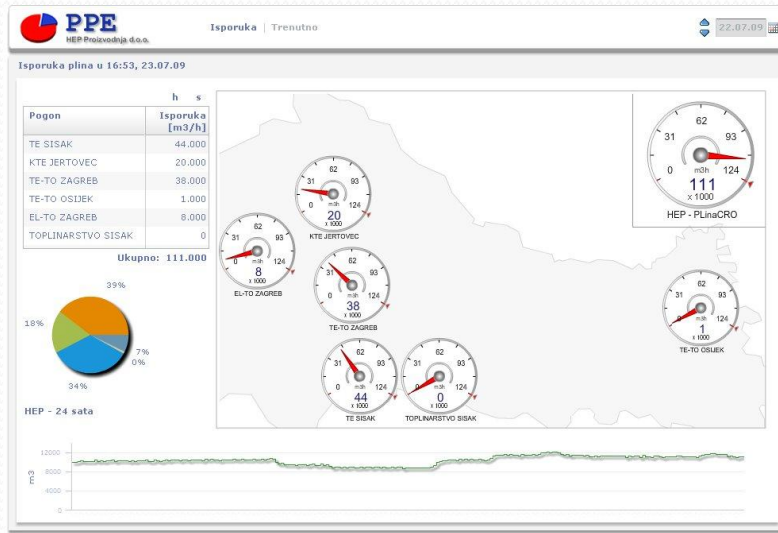


B2B - Razmjena podataka između dviju tvrtki (1)



B2B - Razmjena podataka između dviju tvrtki (2)

PPE Dashboard – plinski modul



WebLogic – BI Publisher (1)

- WebLogic aplikacijski server verzija 10.3.2.0
- BI Publisher verzija 10.1.3.4.1
- BIP - nova izvješća i djelomična migracija starih
- na postoji *Universal Installer* za BIP na WebLogic
- ručna instalacija BI Publisher-a na WebLogic server zahtjevala je “igru” s JAR datotekama
- uz pomoć Oracle *Forums* zajednice uspješno instaliran

WebLogic – BI Publisher (2)

ORACLE WebLogic Server® Administration Console

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: Testranje

Home > Summary of Deployments

Change Center

View changes and restarts

No pending changes exist. Click the Release Configuration button to allow others to edit the domain.

Domain Structure

- Testranje
 - Environment
 - Deployments**
 - Services
 - Security Realms
 - Interoperability
 - Diagnostics

How do I...

- Install an Enterprise application
- Configure an Enterprise application
- Update (redeploy) an Enterprise application
- Start and stop a deployed Enterprise application
- Monitor the modules of an Enterprise application
- Deploy EJB modules
- Install a Web application

System Status

Health of Running Servers

Failed (0)

Critical (0)

Summary of Deployments

Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

[Customize this table](#)

Deployments

Showing 11 to 20 of 20 Previous Next

<input type="checkbox"/>	Name	State	Health	Type	Deployment Order
<input type="checkbox"/>	oracle.dconfig-infra(11.1.1.1.1.0)	Active		Library	100
<input type="checkbox"/>	oracle.jrf.system.filter	Active		Library	100
<input type="checkbox"/>	oracle.jsp.next(11.1.1.1.1.1)	Active		Library	100
<input type="checkbox"/>	oracle.pwdgen(11.1.1.1.1.2.0)	Active		Library	100
<input type="checkbox"/>	oracle.wsm.seedpolicies(11.1.1.1.1.1)	Active		Library	100
<input type="checkbox"/>	oral18n-adf(11.1.1.1.1.0)	Active		Library	100
<input type="checkbox"/>	test1_application1	Active	✓ OK	Enterprise Application	100
<input type="checkbox"/>	UIX(11.1.1.1.1.0)	Active		Library	100
<input type="checkbox"/>	wsil-wls	Active	✓ OK	Enterprise Application	5
<input type="checkbox"/>	xmpserver	Active	✓ OK	Web Application	100

Showing 11 to 20 of 20 Previous Next

Flex – BI Publisher (1)

- Web Dashboards portal je izrađen Adobe Flex alatom
- potrebno omogućiti printabilna izvješća iz web portala
- Web servisi BI Publishera – PublicReportService
- <http://<host>:<port>/xmlpserver/services/PublicReportService?wsdl>
- problem sigurnosti kod konekcije Flex aplikacije na Web servis BI Publishera

Flex – BI Publisher (2)

crossdomain.xml - u root WebLogic aplikacijskog servera

```
<?xml version="1.0" ?>
- <cross-domain-policy>
  <allow-access-from domain="*" />
  <allow-http-request-headers-from domain="*" headers="SOAPAction" />
</cross-domain-policy>
```

mimemapping.properties - definirati MIME content-type za xml ekstenzije

The screenshot shows the Oracle WebLogic Server Administration Console. The main content area is titled 'Settings for Testiranje' and has several tabs: Configuration, Monitoring, Control, Security, Web Service Security, and Notes. Under the 'Configuration' tab, there are sub-tabs for General, JTA, EJBs, Web Applications, Logging, and Log Filters. The 'Web Applications' sub-tab is active. A 'Save' button is visible. Below it, the 'X-Powered-By Header' is set to 'Servlet/2.4 JSP/2.0'. The 'Mime Mapping File' field is highlighted with a red box and contains the path '/config/mimemappings.properties'. To the right of this field, there is explanatory text: 'returns the name of the file containing mime-mappings for the domain. More Info...'. On the left side of the console, there is a 'Change Center' section with 'Lock & Edit' and 'Release Configuration' buttons, and a 'Domain Structure' tree showing 'Testiranje' and its sub-items: Environment, Deployments, Services, Security Realms, Interoperability, and Diagnostics.

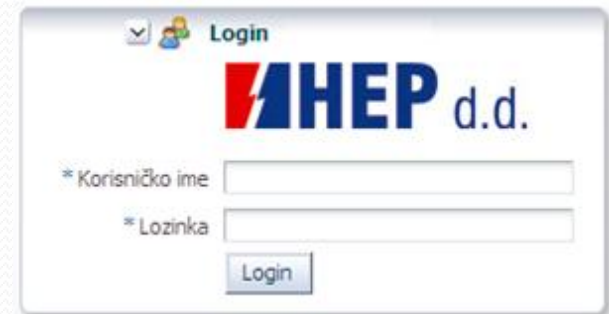
xml=application/xml
js=text/javascript

Forms – BI Publisher

- BI Publisher izvješća iz postojeće Forms aplikacije
- koristili smo BIP Web servise s WebLogic servera
- java klijent na strani Forms-a koristi Web servise
- Oracle JDeveloper 11g - izrada JAR (java ARchive) datoteke, koja sadrži java klase
- Oracle Forms Builder treba te klase za vrijeme dizajna
- Oracle AS Forms Service za vrijeme izvršavanja (runtime)

JDeveloper ADF – BI Publisher

- web portal proizvodnih jedinica - ADF Faces komponente
- potrebno integrirati operativni i izvještajni modul
- autentikacija - LDAP protokol koristi MS Active Directory
- autorizacija - izrađena po mjeri
- pozivanje izvještaja pomoću BI Publisher Web servisa koji se nalaze na WebLogic aplikacijskom serveru



The image shows a login form for HEP d.d. The form has a title bar with a mail icon, a person icon, and the word "Login". Below the title bar is the HEP d.d. logo. The form contains two input fields: one for the username labeled "* Korisničko ime" and one for the password labeled "* Lozinka". A "Login" button is located below the password field.

Cilj – RIA ili Bogata internet aplikacija

Oracle Fusion Middleware - kvalitetna infrastruktura za web orijentirane inteligentne poslovne aplikacije

Baza podataka

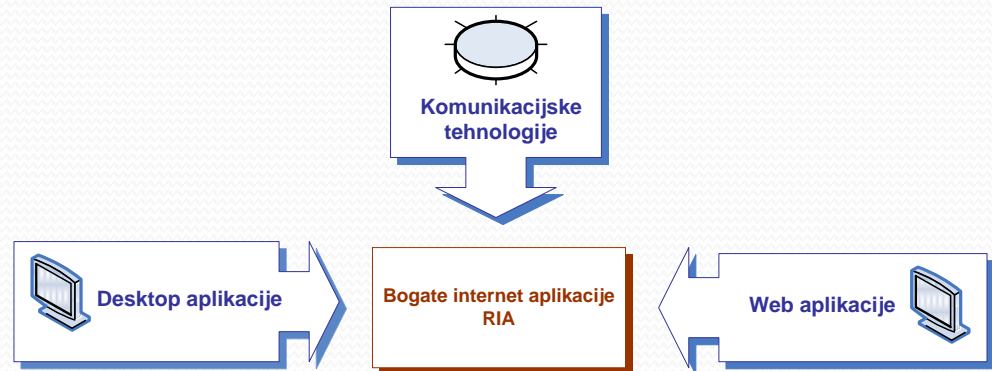
Oracle 11g

Aplikacijski server

WebLogic

Razvojno okruženje i alati

JDeveloper,
ADF,
BI Publisher,
Adobe Flex,
Web servisi



Zaključak

- Projekt se stalno razvija – novi zahtjevi
- Rješenja – trenutno raspoložive tehnologije i iskustvo informatičara u njihovoj primjeni
- Paralelno - usvajanje nova znanja i iskustva u primjeni naprednih tehnologija
- SOA - Oracle Fusion Middleware