



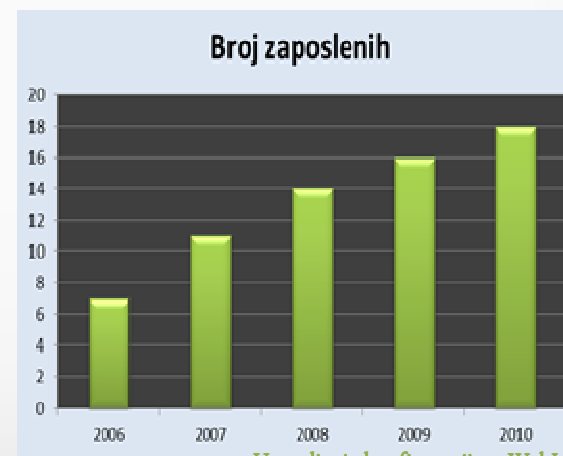
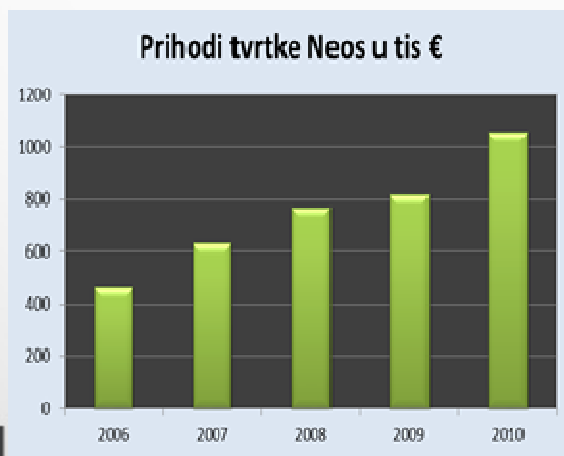
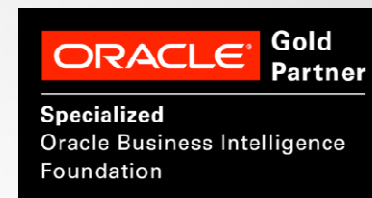
## Upravljanje konfiguracijom WebLogic-a iz Java-e

## > Sadržaj

- O tvrtki
- JMX
- Mbean
- Weblogic MBean
- Java Primjer

## > O tvrtki NEOS

- > Utemeljeno 2002. godine
- > Dugogodišnje iskustvo sa velikim i srednjim korisnicima
- > Oracle Gold Partner – OBI Foundation specialization
- > Trenutno 22 zaposlena 16 OCP, 2 OCA



## > Područja djelatnosti

### KONZULTANTSKE USLUGE

**RAZVOJ APLIKATIVNIH  
RJEŠENJA**

**POSLOVNA INTELIGENCIJA  
(BI i DW)**

- > Razvoj i rješenja se temelje na iskušanim metodologijama, tehnologijama i produktima
  - Oracle RDBMS, Oracle Aplikacijski Server, Oracle alati
  - Metodologije Oracle OUM (CDM/DWM), IBM/Rational RUP

## >JMX

- Java Management Extensions
- standardizirani API
  - upravljanje i(ili) nadgledanje
    - aplikacija
    - uređaj
    - servis
    - Java virtual machine

## > JMX

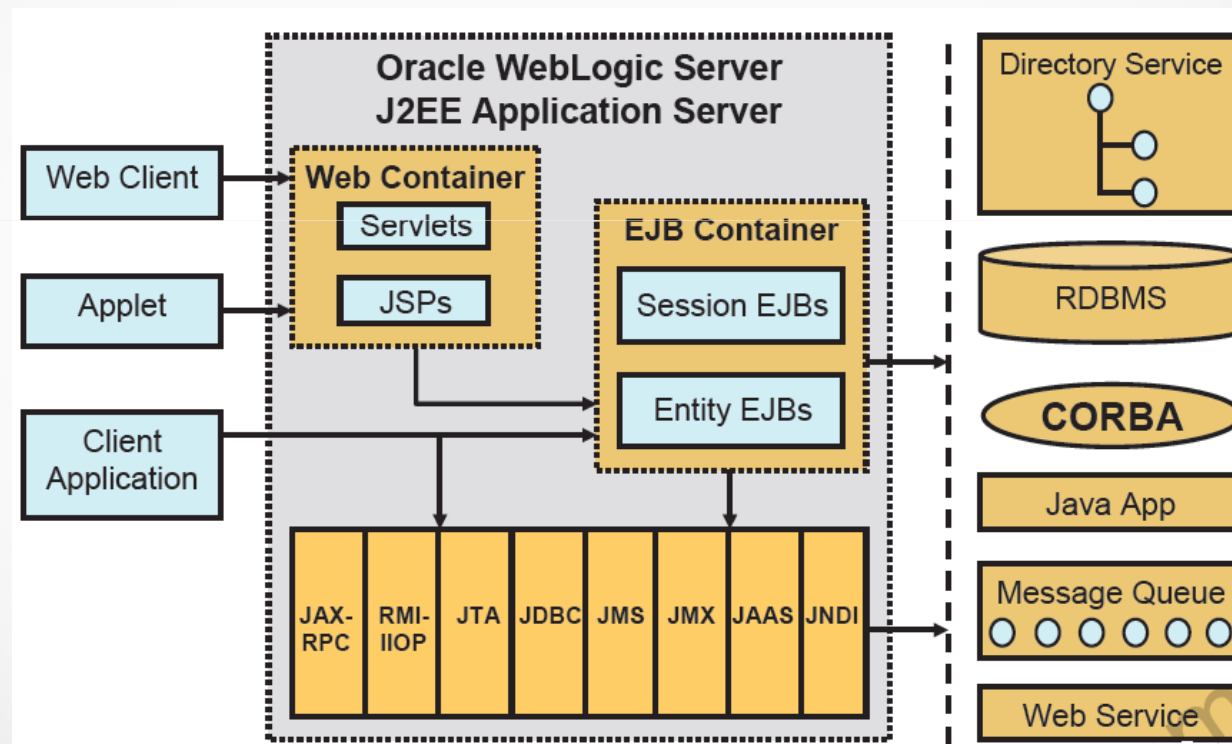
- izmjena postavki aplikacije
- prikupljanje i prikaz statistike
- obavještavanje usljed događaja
  - promijene stanja
  - greška
- Ali NE definira strukturu



## > MBean

- MBeans = *managed beans*
- Java objekti koji predstavljaju "ono" s čime se želi upravljati
- MBean = *management interface*
  - Atributi (RW, get,set)
  - Operacije (koje je moguće pozvati)
  - Notifikacije (tipizirane,registrirane od Mbean)

# > Weblogic





## > Weblogic MBean

- Configuration
  - In-memory kopija domenske konfiguracije
  - Ažuriranje centralno pa propagacija
  - Perzistira se
- Runtime
  - Svaka komponenta
  - Trenutno stanje
  - Ne perzistira se

## > Weblogic MBean

- Hijerarhijska organizacija
- Registrirani kao *javax.management.ObjectName*
- Pristup prema imenu *com.bea:Name=name,Type=type...*

## > Weblogic Mbean – pristupne točke

- Domain Runtime MBean Server
  - *com.bea:Name=DomainRuntimeService,Type=weblogic.management.mbeanservers.domainruntime.DomainRuntimeServiceMBean*
  - Deployment, JDBC,JMS....
- Runtime MBean Servers
  - *com.bea:Name=RuntimeService,Type=weblogic.management.mbeanservers.runtime.RuntimeServiceMBean*
  - *Trenutna konfiguracija konkretnog servera*
- Edit MBean Server
  - *com.bea:Name=EditService,Type=weblogic.management.mbeanservers.edit.EditServiceMBean*
  - *Konfiguracija domene*

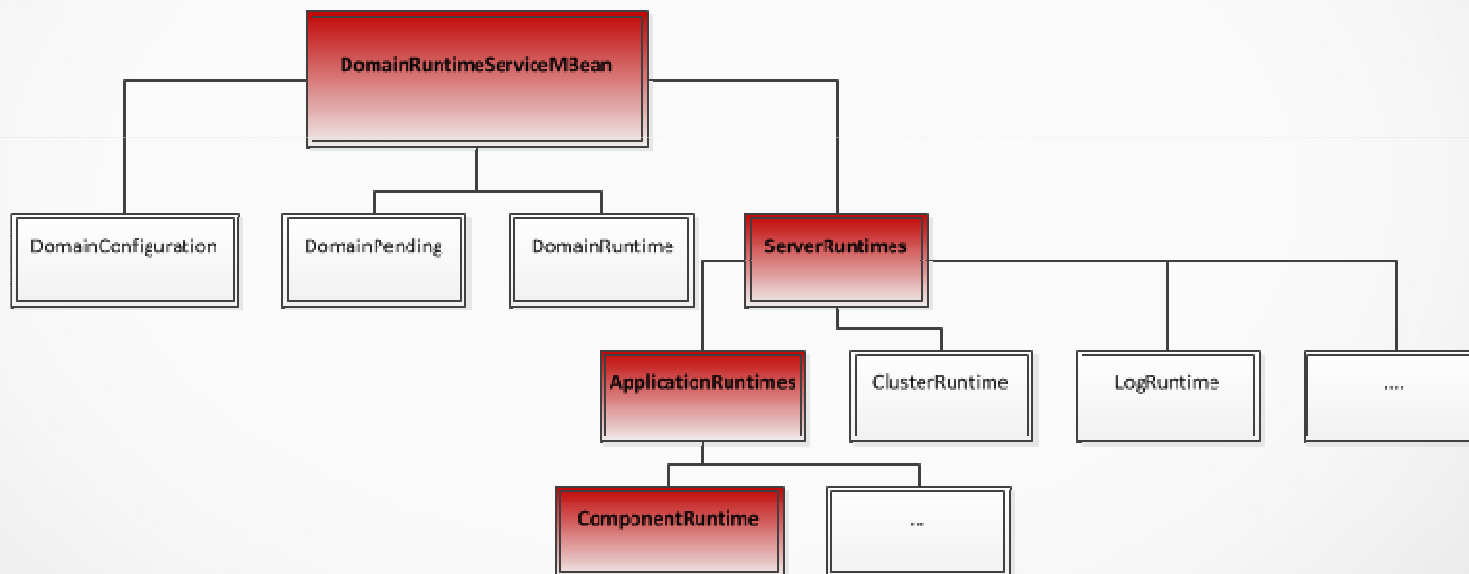
## > Java primjer - spajanje

```
JMXServiceURL serviceURL =
    new JMXServiceURL("http", "test.bea.com", "7001", "/jndi/",
        "weblogic.management.mbeanservers.domainruntime");
```

```
Hashtable h = new Hashtable();
h.put(Context.SECURITY_PRINCIPAL, "weblogic");
h.put(Context.SECURITY_CREDENTIALS, "welcome1");
h.put(JMXConnectorFactory.PROTOCOL_PROVIDER_PACKAGES,
    "weblogic.management.remote");
```

```
JMXConnector connector =
    JMXConnectorFactory.connect(serviceURL, h);
```

## > Java primjer - hijerarhija



## > Java primjer - hijerarhija

```
ObjectName service;
service =new ObjectName
    ("com.bea:Name=DomainRuntimeService,Type=weblogic.management.
        mbeanservers.domainruntime.DomainRuntimeServiceMBean");
```

```
ObjectName[] serverRunTime;
serverRunTime =
    (ObjectName[])mBeanServerConnection.getAttribute(service,
        "ServerRuntimes");
```

```
ObjectName[] appRunTimes;
appRunTimes =
    (ObjectName[])mBeanServerConnection.getAttribute(
        serverRunTime[serverInx], "ApplicationRuntimes");
```



## > Java primjer - atributi

- Prema dokumentaciji
  - Svaki Mbean ima svoje attribute
  - Dohvat = Mbean + ime atributa

```
String[] sessionMonitoringIds = null;
sessionMonitoringIds =(String[])
    mBeanServerConnection.getAttribute(
        webAppComponentRuntime,
        "ServletSessionsMonitoringIds");
```

## > Java primjer - WebAppComponentRuntime

- This MBean extends or implements `ComponentRuntimeMBean`, you can also access this MBean by retrieving `ComponentRuntimeMBeans`

```

if(((String)mBeanServerConnection.getAttribute
    (compRunTimes[compInx], "Type"))
    .equalsIgnoreCase("WebAppComponentRuntime")){
    return compRunTimes[compInx];
}
    
```

## > Java primjer -operacije

- Prema dekometaciji
  - Svaki Mbean ima svoj skup operacija
  - Poziv = Mbean + parametri + potpis (signature)

```
mBeanServerConnection.invoke(
    webAppComponentRuntime, "invalidateServletSession",
    new String[] { monitoringId },
    new String[] { "java.lang.String" });
```

## > Java - dokumentacija

- [http://download.oracle.com/docs/cd/E13222\\_01/wls/docs90/wlsmbearref/core/index.html](http://download.oracle.com/docs/cd/E13222_01/wls/docs90/wlsmbearref/core/index.html)

Hvala na pažnji!