

ORDS listener and REST webservices

Wat rest? APEX open naar de wereld!



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Welkom

- Hendrik Blok
- Nicolay Moot

Doel

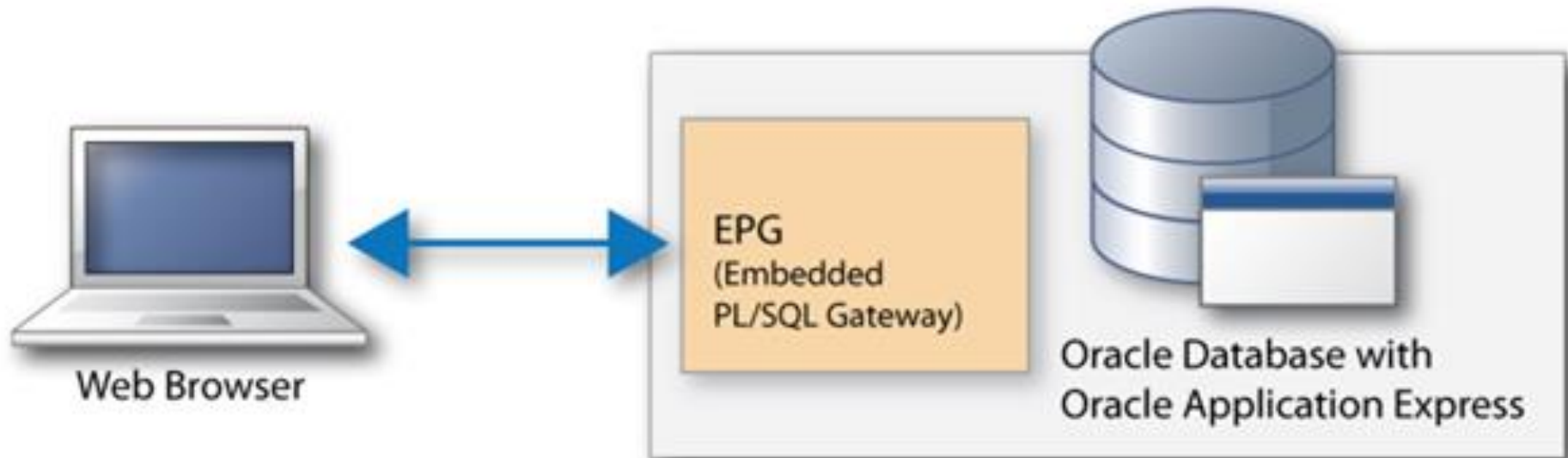
- Inzicht geven in de ORDS listener en webservices met APEX

Onderwerpen

- APEX listener, ORDS en webservices
- APEX en webservices
- Installatie en configuratie ORDS listener
- Demo installatie ORDS
- REST in APEX gebruiken
- Demo webservice
- Authenticatie

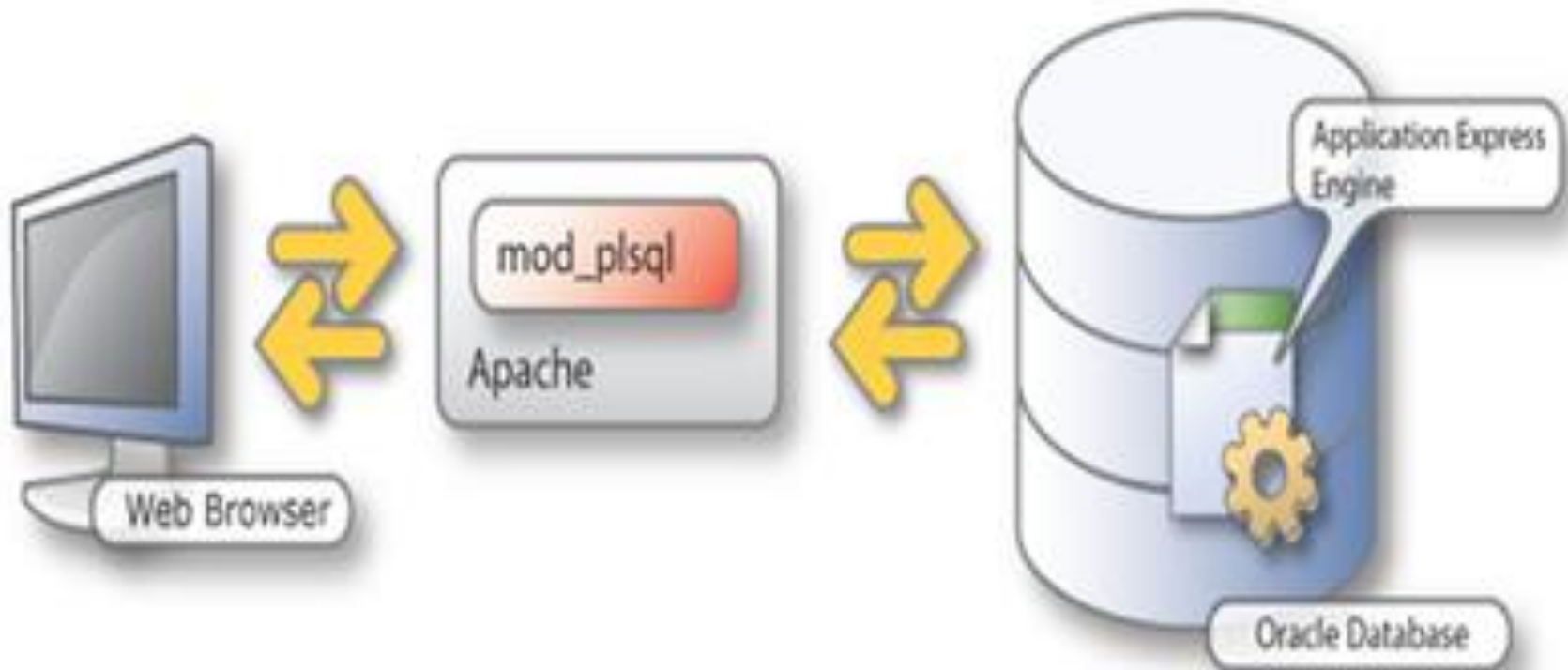
APEX installatie opties

■ Embedded gateway

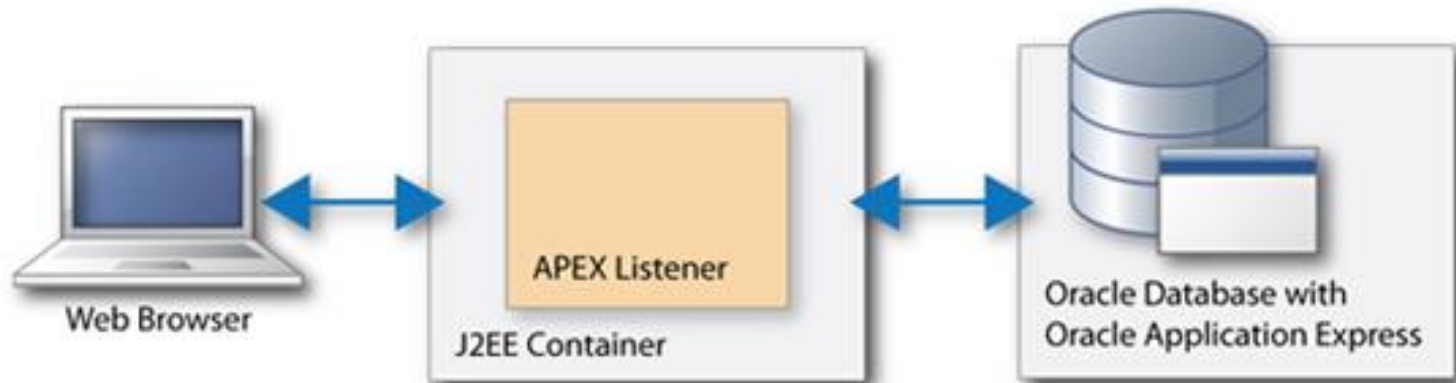


APEX installatie opties (2)

■ Apache plus Mod_plsql



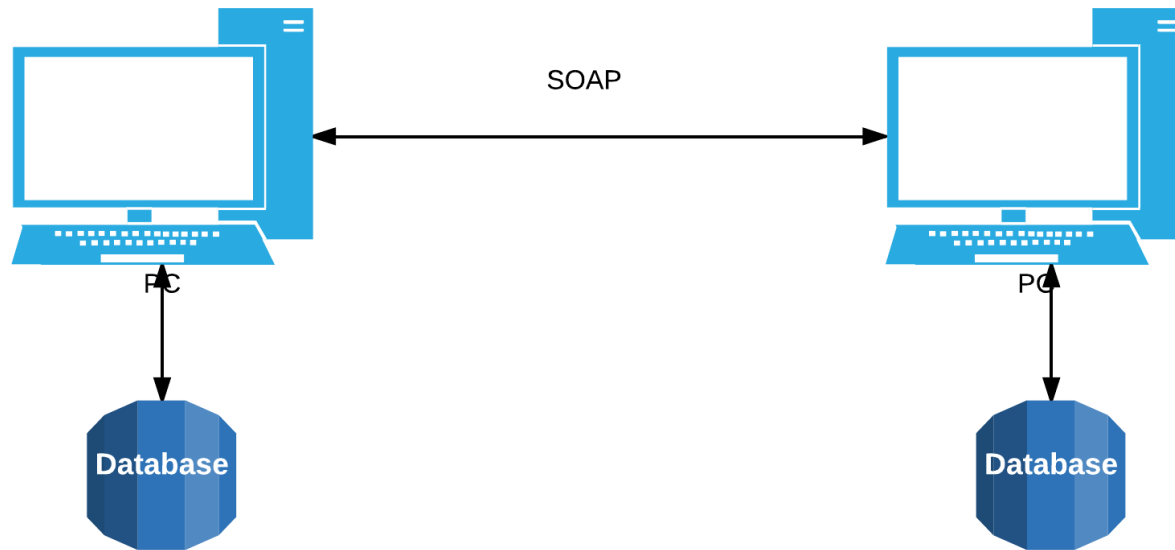
Entrée: APEX listener



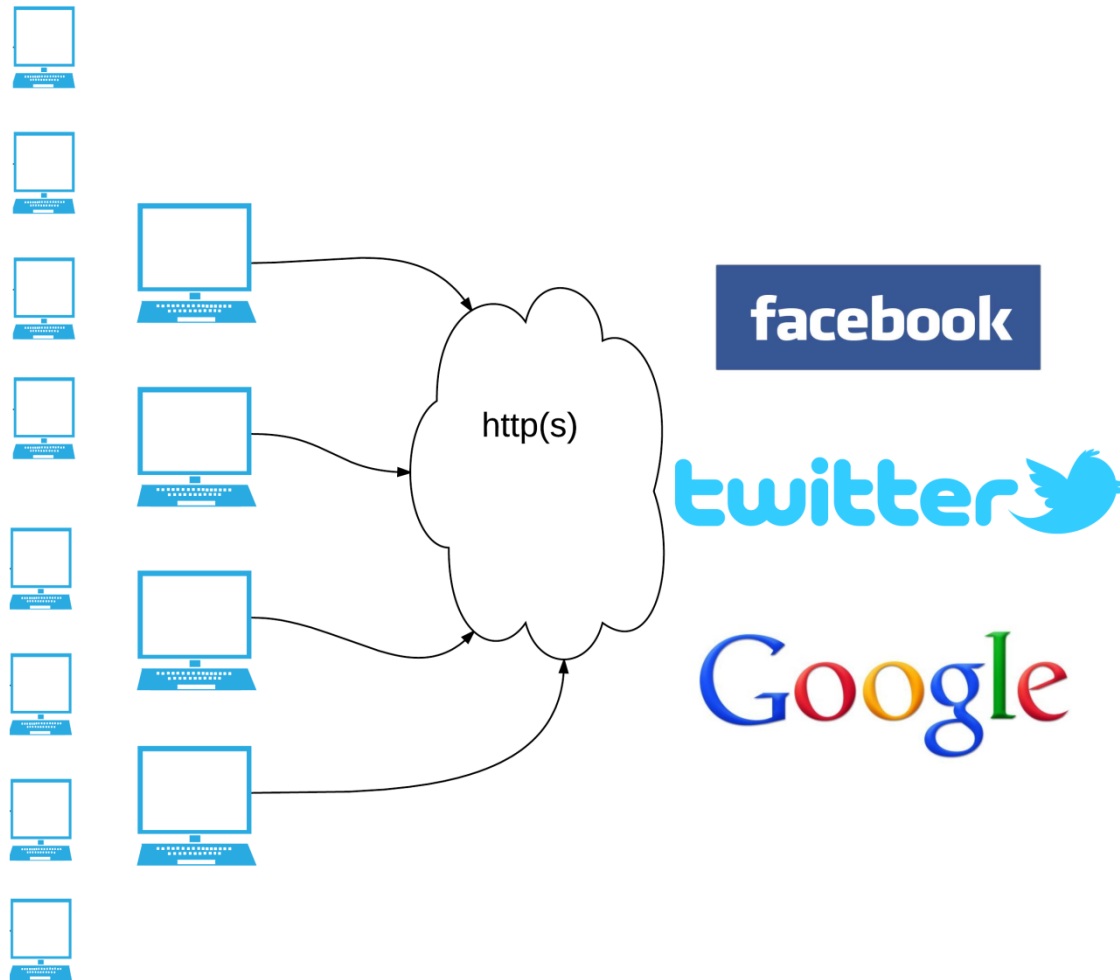
Webservices !



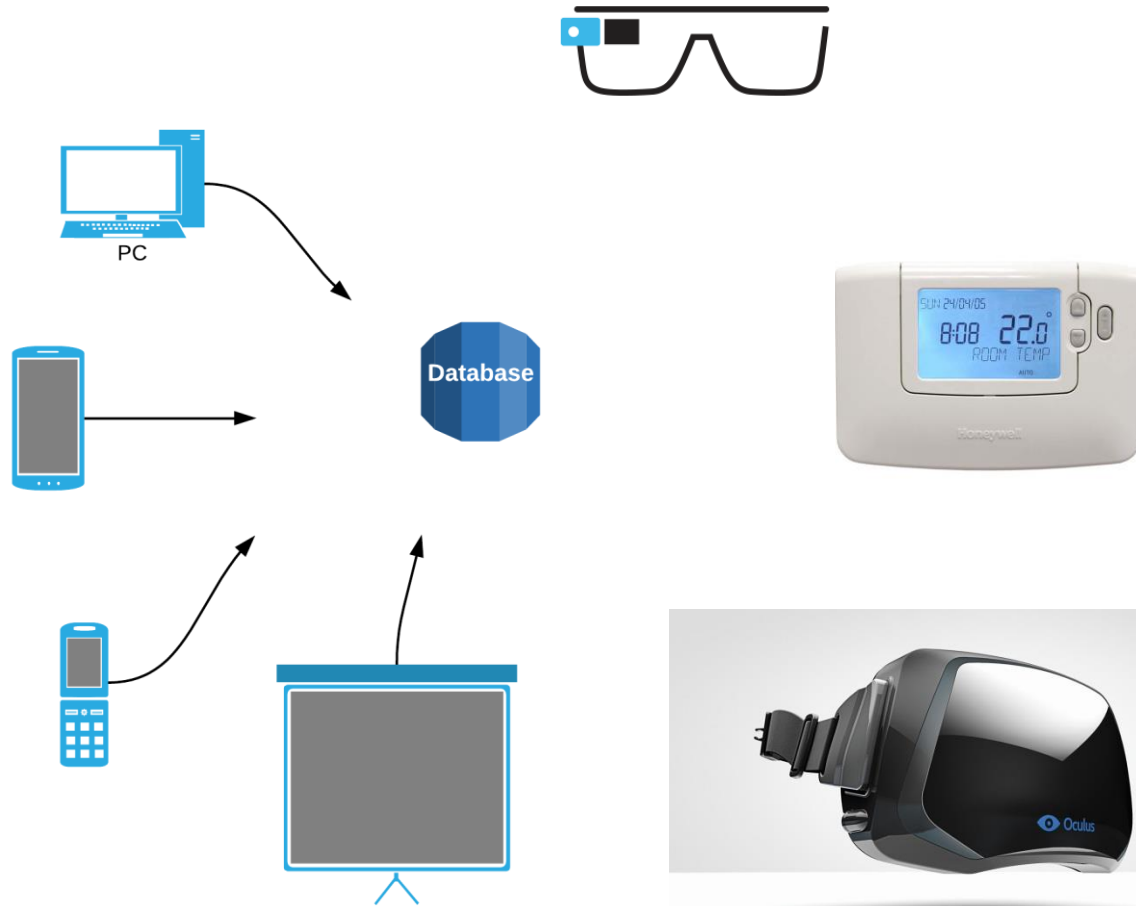
Private webservices



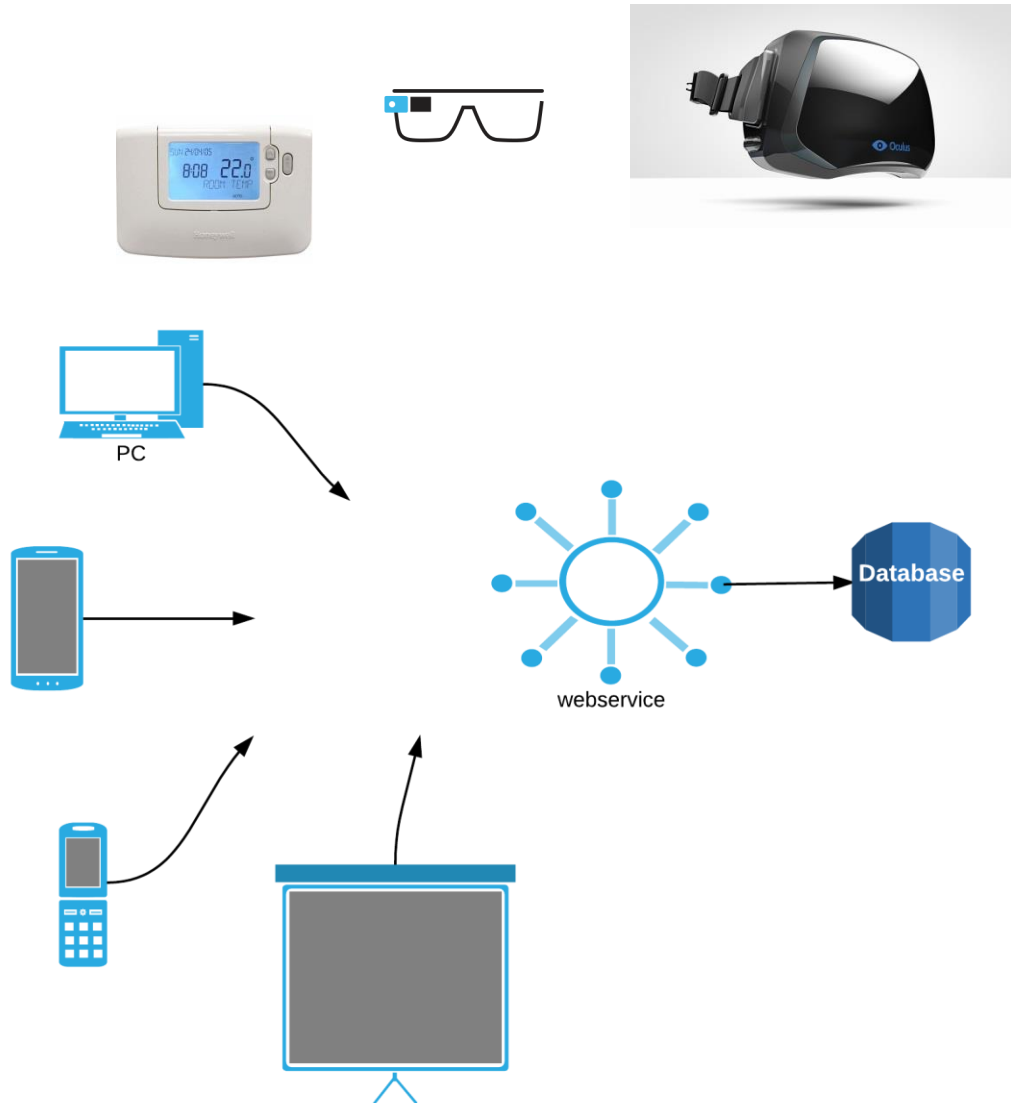
Public webservices



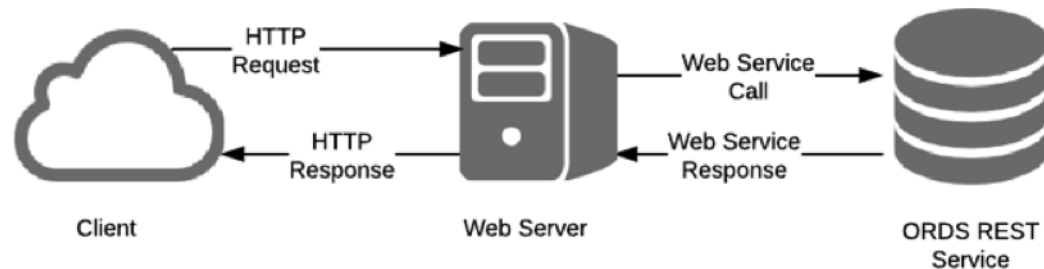
So many devices..



One webservice



ORDS webservices



- Definieren in APEX
 - Of SQL Developer
- Volledige authenticatie mogelijkheden
- Sky is the limit!

Overige features ORDS

- Embedded PDF engine
- Excel upload and parsing
- NOSQL database support
- JSON document store
- Multiple database connections
- Command line configuration (scripting)
- ..

Oracle Statement of Direction

Oracle REST Data Services provide a RESTful Web Service interface to data and logic in an Oracle Database, as well as access to data in an Oracle NoSQL Database. Oracle REST Data Services include features that make it easy to generate RESTful Web Services for data objects, to migrate data from an NoSQL Database to the Oracle Database, and to implement security with first-part or OAUTH2 authentication. Oracle REST Data Services extend the standard REST framework with the ability to dynamically add modifiers to RESTful queries and to maintain a consistent snapshot view of data over multiple pages in the stateless Web Service environment. Oracle REST Data Services is critically important to countless Oracle customers and Oracle remains committed to the ongoing development and support of Oracle REST Data Services. RESTful Web Services are rapidly becoming the standard access protocol for Web-based data sources, and support for this architecture is crucial to Oracle and the continued success of the Oracle Database.

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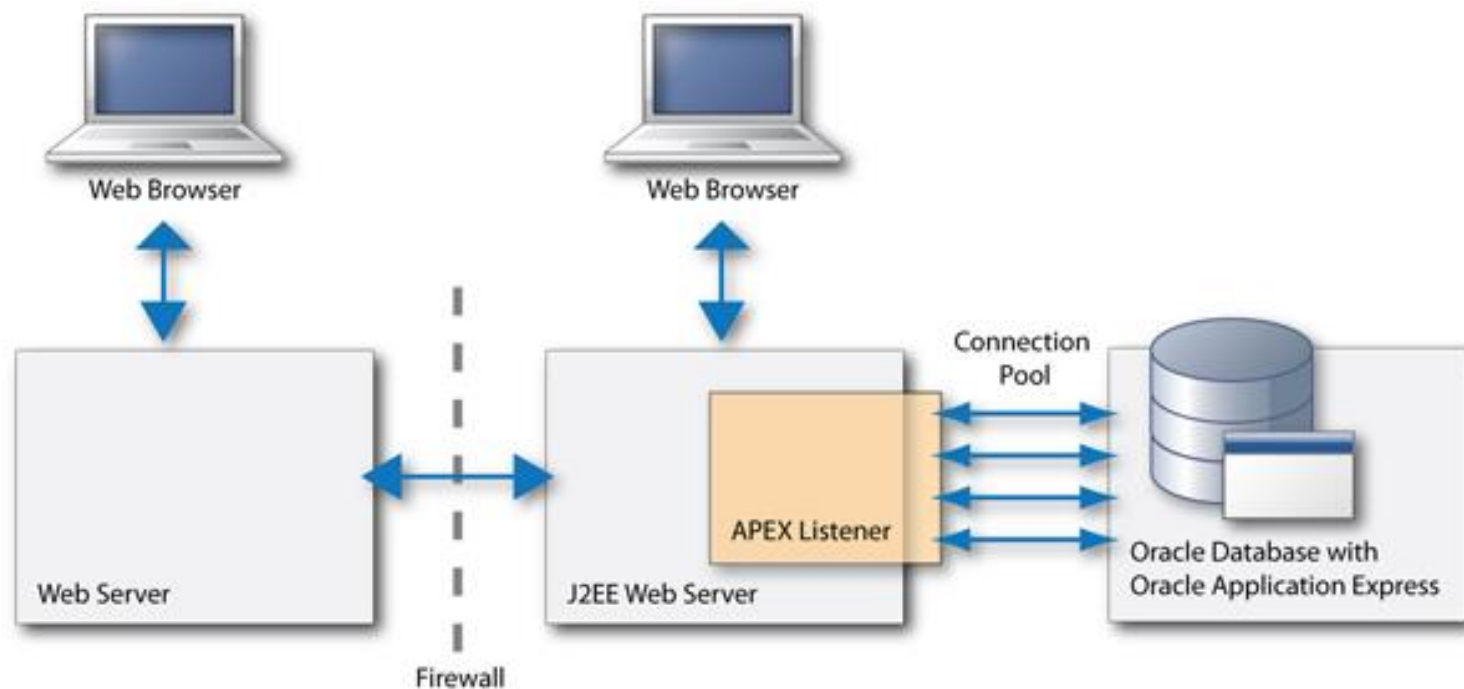
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APEX installatie opties (3)

■ APEX (ORDS) listener



Installatie en Configuratie ORDS



Onderwerpen

- Apex versus ORDS
- Applicatieservers
- Webservers
- High availability
- Overzicht
- Installeren
- Performance en monitoring
- Support

APEX versus ORDS

APEX-Listener

- Support voor meerdere databases
- Vanaf versie 2 hernoemd naar ORDS

ORDS

- Webservice support
- Sqldeveloper remote administration
- Open Authorisation (oAUTH2) framework support
- Cross origin resource sharing

Applicatieservers

■ Keuze voor ORDS

- Weblogic 11g / 12c
- Glassfish Opensource 4.x
- Oracle Glassfish 3.x (support tot maart 2016)
- Tomcat

■ Volledige authenticatie mogelijkheden

- High availability
- Performance
- Hardware
- Licentiekosten

Webservers

■ Keuze voor HTTP Servers

- Apache
- Oracle HTTP Server
- Microsoft IIS

■ Overwegingen

- High availability
- Performance
- Hardware / operating system
- Licentiekosten

High availability

■ Database

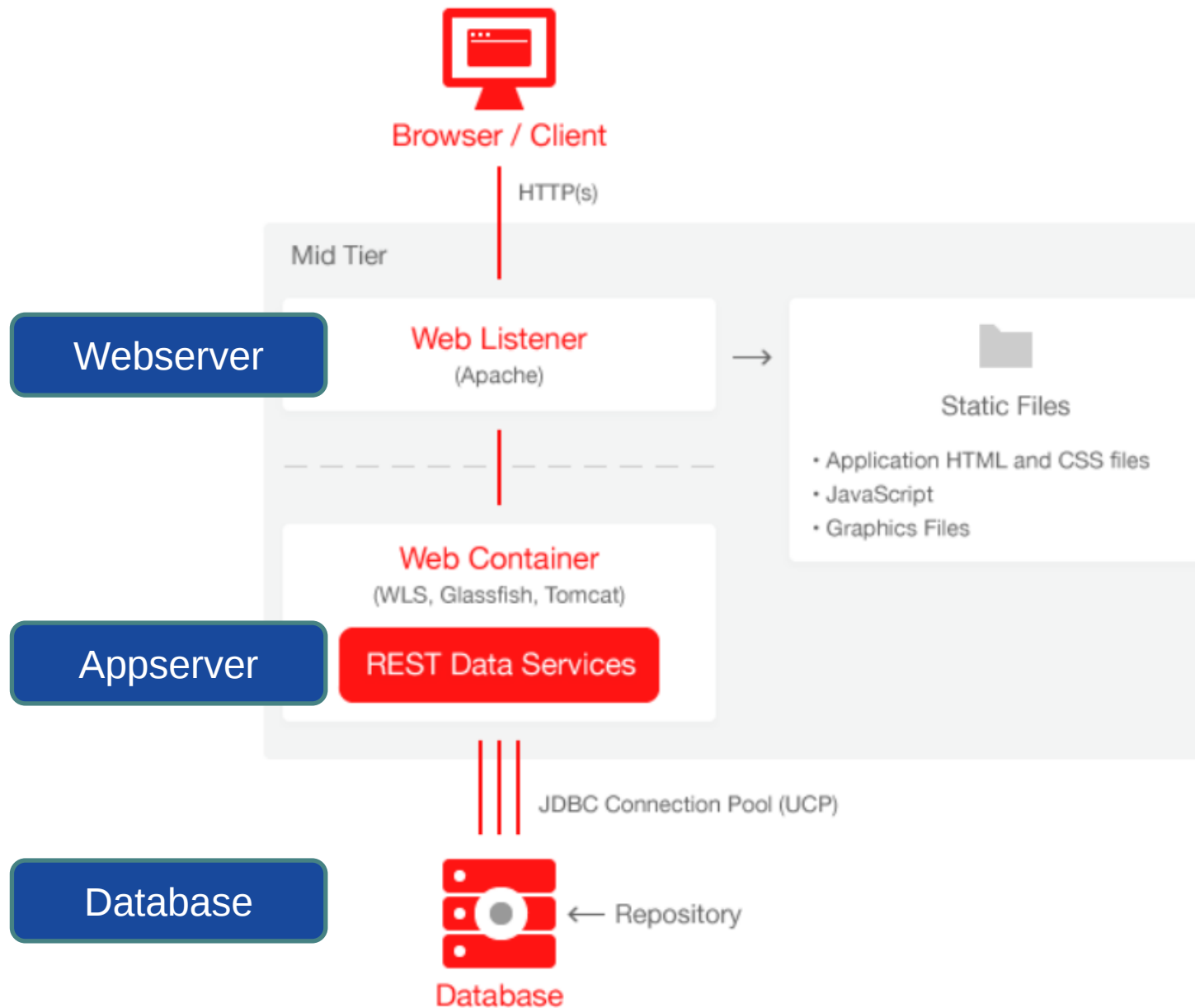
- Bestaand uit een RAC Cluster met meer dan één node

■ Applicatieserver

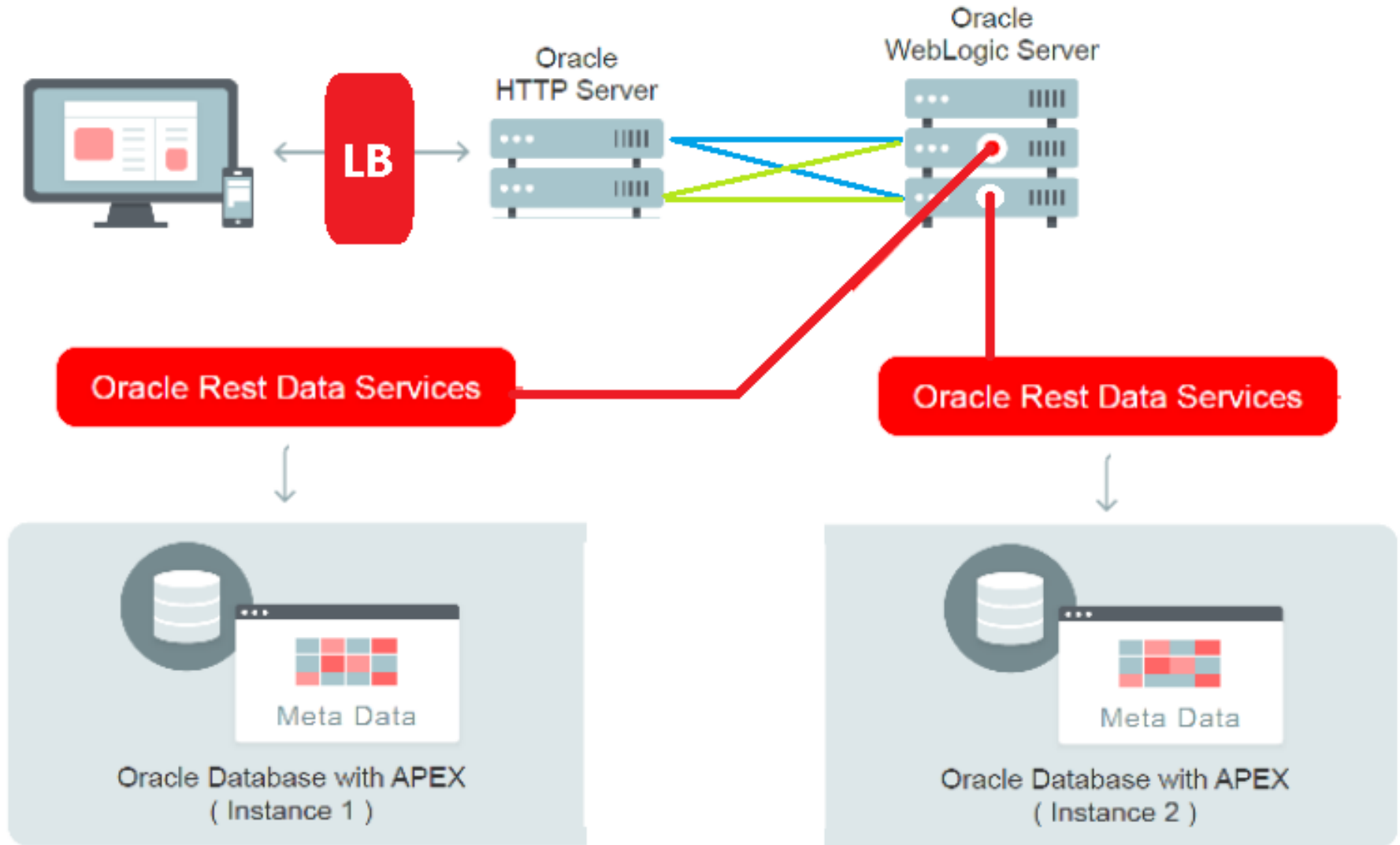
- Extra applicatieserver

■ HTTP Server

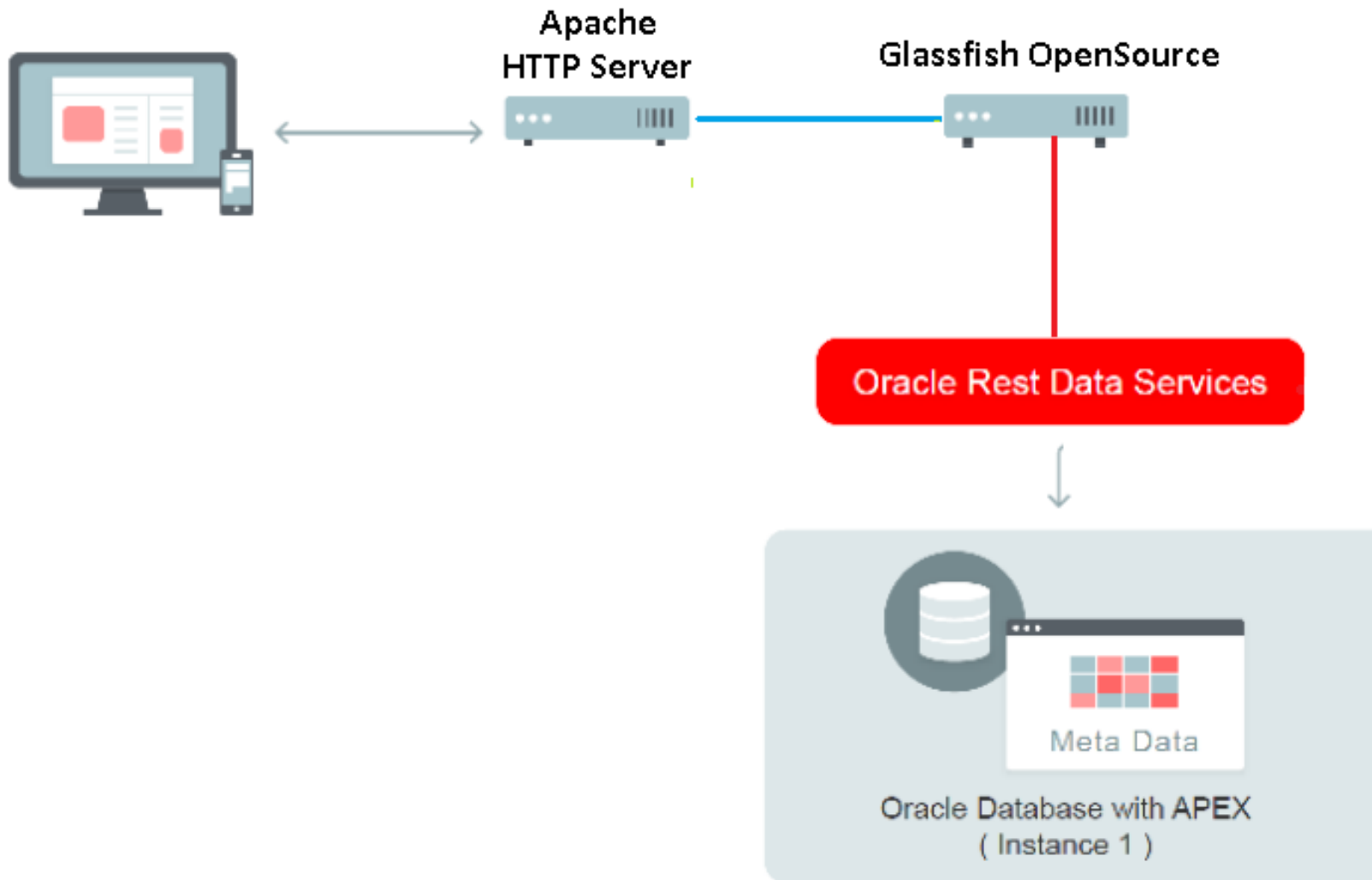
- Extra HTTP Server (naar beide applicatieservers)



High Available omgeving



Low cost omgeving



Installatie ORDS

- Database ORDS Installatie
- Downloaden
 - ORDS 2.0 / 3.0 van Oracle Technet
- Configureren
 - Java –jar ords.war configdir [*directory*]
 - Params file configureren (alleen 3.0)
 - Java –jar ords.war (setup)
- Deployen
 - Extra HTTP Server (naar beide applicatieservers)

Installatie ORDS

- Demo
 - Configuratie en deployen op Weblogic

Performance

■ Database

- Voldoende connecties
- Database settings in ORDS XML config files

■ Applicatieserver

- Images op de HTTP Server, niet op de database

■ JVM Tuning

Upgraden naar ORDS (3.0)

- Reden om te upgraden
 - Bugfixes
 - Stabiliteit
 - Nieuwe functionaliteiten

Bestaande configuraties upgraden

- Back up
- Download en plaats software
- Configdir instellen
- Migrate configuratie
- Undeploy en Deployen

Meerdere ORDS deployments of meerdere database koppelingen

- Database configuraties toevoegen
 - Bij het configureren gebruik de `–database [sid]` optie
- Overweging
 - Door één listener te gebruiken is bij downtime de hele omgeving uit. (niet voor OTAP)
 - Doordat de listener slechts één connectionpool heeft is het niet mogelijk om load te spreiden.

Support op Middleware en ORDS

- My Oracle Support
 - Onder toegang van een Oracle contract of als partner
- Oracle communities
 - Apex en Apex listeners
- Transfer Solutions
 - Consulting / Remote Beheer Centrum

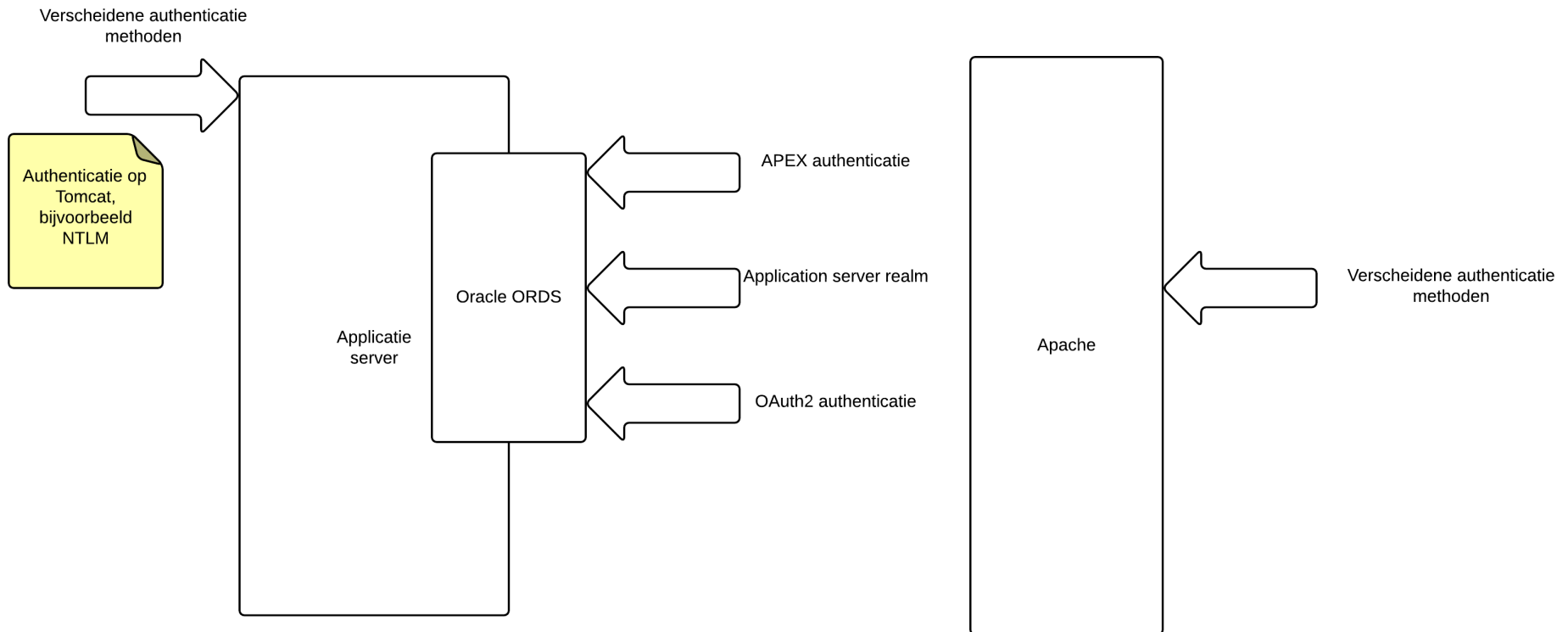
Demo

- <http://kdbk.nl:8080/ords/f?p=paj>
- Webservice maken
- Webservice testen

Authenticatie

- APEX session
- Oauth 2.0
- Glassfish, Weblogic repository
- Authenticatie op webserver of applicatie server
 - NTLM authenticatie Tomcat

Authenticatie





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