



# Administration von Oracle Application Express & Oracle REST Data Services

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**DOAG**

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Client

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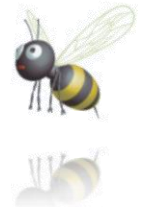
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Ab sofort Vortrag  
einreichen!



# Apex Internals

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## Apex Internals: Carsten Czarski

Ablauf einer Session

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Parsing Schema

---

Workspace,  
Applications und Users

---

htp.p

Die zentrale Funktion.

---

Der htp Buffer

---

# Die Sache mit dem /i/

## Images Verzeichnis

Statische Dateien

ca. 200MB

Grafiken

StyleSheets

JavaScript

<<images>> in apex.zip

Auslieferung

App Server

ORDS

httpd (Apache, nginx, ...)

MUSS zur Apex-Version passen

Abhängigkeit

Die URI kann von /i/ geändert werden

utilities/reset\_image\_prefix.sql

# Apex Installation

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## Vorgehen

apex\_x.x.x.zip

download

entpacken

---

aufruf von

```
sqlplus "sys/syspass@10g as sysdba" @apexins SYSAUX SYSAUX TEMP /i/
```

Arguments:

Position **1**: Name of tablespace for Application Express application user

Position **2**: Name of tablespace for Application Express files user

Position **3**: Name of temporary tablespace **or** tablespace group

Position **4**: Virtual directory for APEX images

---

Images Verzeichnis

bereitstellen

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# Apex Upgrade (Major Version) (z.B. 5.0 > 5.1)

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## Major Upgrade Carsten

Vorgehen wie bei der Installation

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Phased Vorgehen zur Verminderung der Downtime

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1. Installation Apex-Schema

---

2. Überführen der Anwendungen

---

3. Überführen User defined Settings

---

4. Aufräumen

---

# Apex Upgrade (Minor Version) (z.B. 5.1.1 > 5.1.4)

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Upgrade  
(Minor)

Nur über Patch

---

unzip patch

---

Ausführen `apxpatch.sql` as sysdba

---

aktualisieren images

---

# Apex Metadaten

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## Metadaten

Apex Anwendungen sind Metadaten

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PL/SQL füllt daraus den http-Buffer

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Auswertungen und Abfragen

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z.B. via SQL Developer

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# Praxis: Upgrade von APEX

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## Upgrade der OTN VM

Bereitstellenp26795231\_514\_Generic.zip  
in der VM

---

Unzip

---

Aufruf von apxpatch.sql as sysdba

---

Images aktualisieren

---

## Java

Evolved from APEX Listener

### Deploy in Application Server

- Tomcat
- Glassfish (deprecated)
- WebLogic

### Standalone mode

- Brings own http-server
- Supported for Production



## Links

### Installation

- Install ORDS in less than 5 Minutes by Colm Divilly (@cdivilly): <http://blog.cdivilly.com/2015/03/11/install-ords-3.0.0/>

### Official Homepage

- <http://www.oracle.com/technetwork/developer-tools/rest-data-services/overview/index.html>

### Documentation

- [https://docs.oracle.com/cd/E56351\\_01/doc.30/e56293/develop.htm](https://docs.oracle.com/cd/E56351_01/doc.30/e56293/develop.htm)

### Video

- Oracle REST Data Services by Oracle Database Development Tools: <https://www.youtube.com/watch?v=8XlbFRm-c6w>

# Oracle REST Data Services ORDS (2/2)

## REST

- Restful Services: Implement full
- SODA: Simple Oracle Document Access

Provides

## AutoRest

- Rest enable tables
  - very easy
  - some limitations

Schemas

PL/SQL  
Package

ORDS\_ME  
TADATA

ORDS\_PUB  
LIC\_USER

ORDS

OAUTH

## ORDS

Wartungsfrei

Nur Konfiguration

Abfrage / Setzen

```
java -jar ords.war configdir [DIR]
```

Installation:

```
java -jar ords.war install
```

```
java -jar ords.war setup
```

```
java -jar ords.war set-property
```

Veränderungen

```
ords.war selbst
```

```
config files
```

Startup standalone:

```
java -jar ords.war [standalone]
```

# ORDS Upgrade

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## Vorgehen

entpacken des ords.zip

---

Stopp alter ords

---

```
java -jar ords.war configdir <pfad>
```

---

Sart upgrade und standalone:

---

```
java -jar ords.war
```

---

# Praxis: Upgrade von ORDS

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## Upgrade der OTN VM

Bereitstellen ords.zip in der VM  
unzip ords.17.4.1.353.06.48.zip

---

Altes ords:  
kill <java ords.war>, oder ./ords.sh stop  
java -jar ords.war configdir

---

Neues ords:  
java -jar ords.war configdir /home/oracle/ords/vmconfig  
Java -jar ords.war

---



# Thank you!

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# Questions?



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