

PLEASE FILL OUT YOUR EVALUATIONS

MTAG

Applications Services **Analytics**

enabling the adaptive enterprise

Second Se

About MT AG



Founded 1994



Privately-Owned Corporation

Non-Proprietary



36 Mio. Euro Revenue in 2020



>100 Active Clients



Head Office Ratingen

Branch Offices Frankfurt am Main Cologne Munich Hamburg



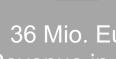
280 Employees 45 APEX Experts



Oracle Platinum Partner

> Microsoft Gold Partner





Your partner for digital change

Cross-Industry

Individual IT solutions from one source





Top Company for Trainees & Students



About Me



Moritz Klein

Principal Consultant APEX at MT AG

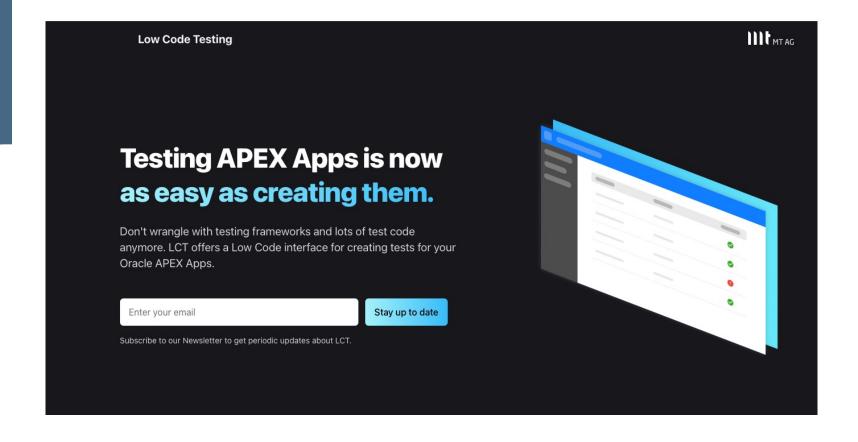
APEX Developer since first public release (2004 called HTMLDB 1.5)

Oracle Developer since 2001 (SQL, PL/SQL, OWB)

Host of Oracle APEX Meetups Frankfurt



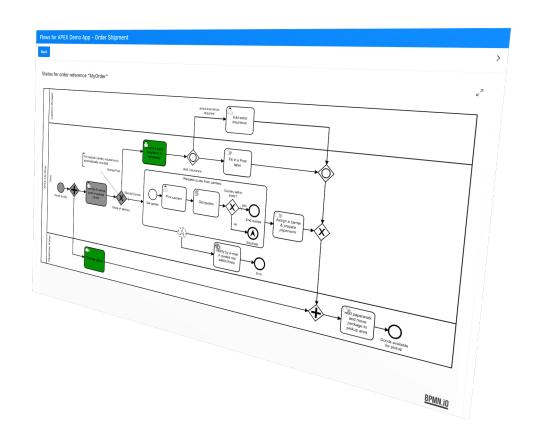
LCT Low Code Testing





Flows for APEX

- Model and run process flows all within APEX
- Designed for APEX developers
- Packaged App for APEX 20.1+ running on 12.2+
- Open Source (MIT License)
- Supports BPMN 2.0
- Region Plug-In "BPMN Viewer" for existing apps
- Interaction with a Flow Instance via
 - 2 Process Plug-Ins
 - PL/SQL API





Agenda

- A quick take on REST
- Standards?
- REST Connector Plug-Ins
- Demo / Code
- What's ahead



REST and Standards

- Representational State Transfer
- Typically HTTP(s)
- JSON Response
- No world-wide standards for
 - Pagination
 - Sorting
 - Filtering



REST Connector Plug-Ins

- Provide Metadata to APEX Components
- Utilize APEX Component Metadata
- Utilize APEX Component Runtime Information
- Translate APEX way to REST Endpoint way
 - Pagination
 - Sorting
 - Filtering



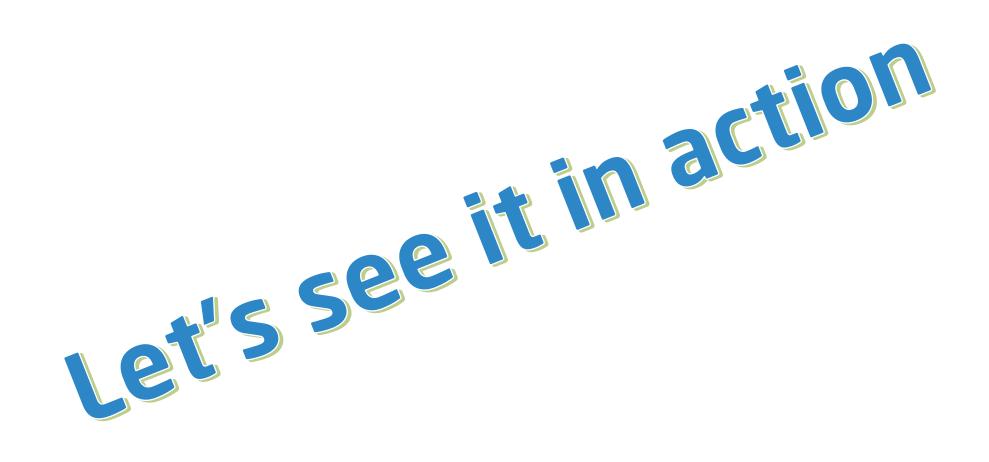
Approach

- Pull sample response
- Read API documentation
- Dry runs
- (swearing)
- Compare to ORDS REST Service
- (swearing)
- Write a REST Connector Plug-In



Demo / Code

Repository Link on "Resources" Slide





What's ahead

- More complex examples
- GraphQL
- Utilize more APEX Component Runtime Information
- Add DML operations (not only fetch)





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Resources

Carsten Czarski – The Movie DB example

- The Rest "easy" Repository
- APEX PL/SQL Packages
 - APEX_PLUGIN
 - APEX_PLUGIN_UTIL

