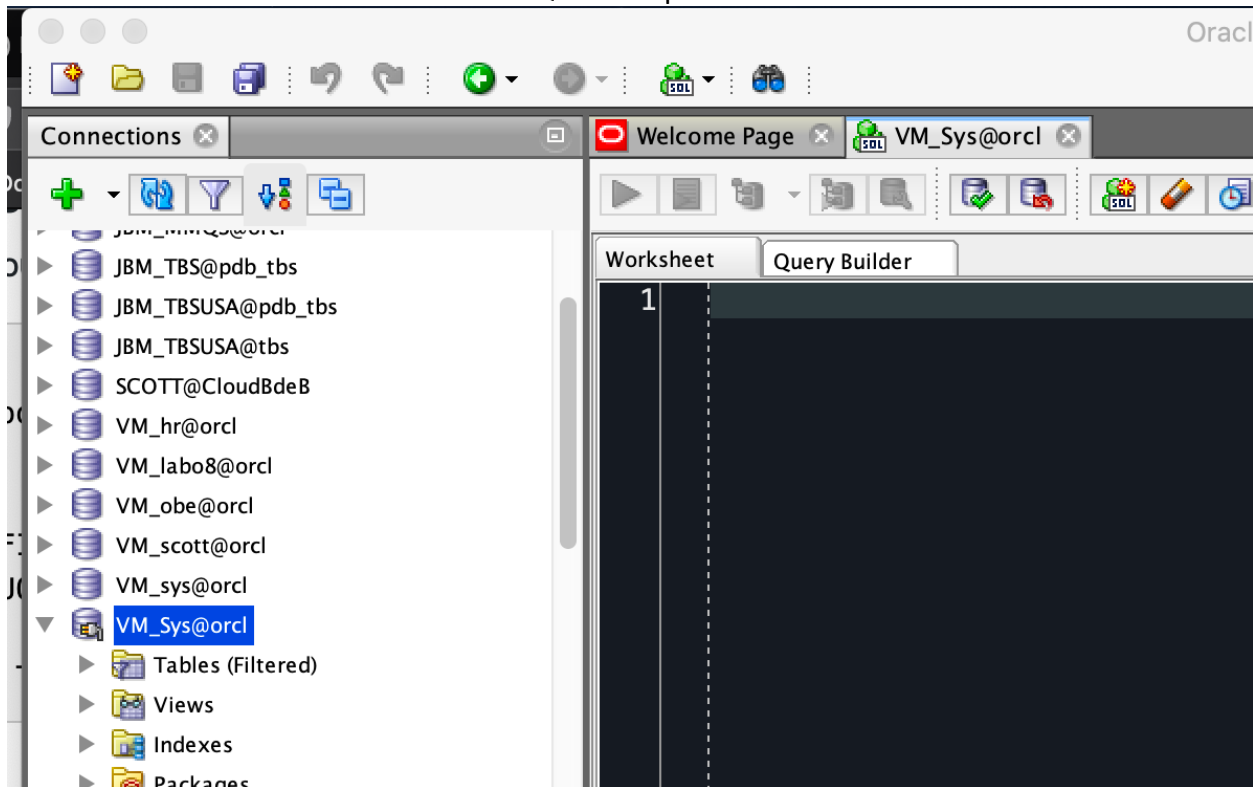


Instruction afin d'activer le mode REST de votre base de données.

La base de données peut s'occuper automatiquement de répondre à des requêtes venant de l'internet et retourner des tableaux JSON contenant la réponse à vos requêtes.

Créer un nouveau schéma pour y mettre vos tables

Sur une base de données local (VirtualBox) Connectez-vous comme sys as sysdba, sur une base de données cloud comme ADMIN avec SQL Developer :



Créer un utilisateur qui comprendra le schema qui sera activer pour REST.

Vous pouvez copier/coller ce qui suit : dans la feuille de calcul de SQL Developer et appuyer F5 (exécuter script).

```
-- creation de l'utilisateur RESTSCOTT/oracle
```

Si BD local:

```
CREATE USER RESTSCOTT IDENTIFIED BY oracle DEFAULT TABLESPACE  
users QUOTA UNLIMITED ON users;
```

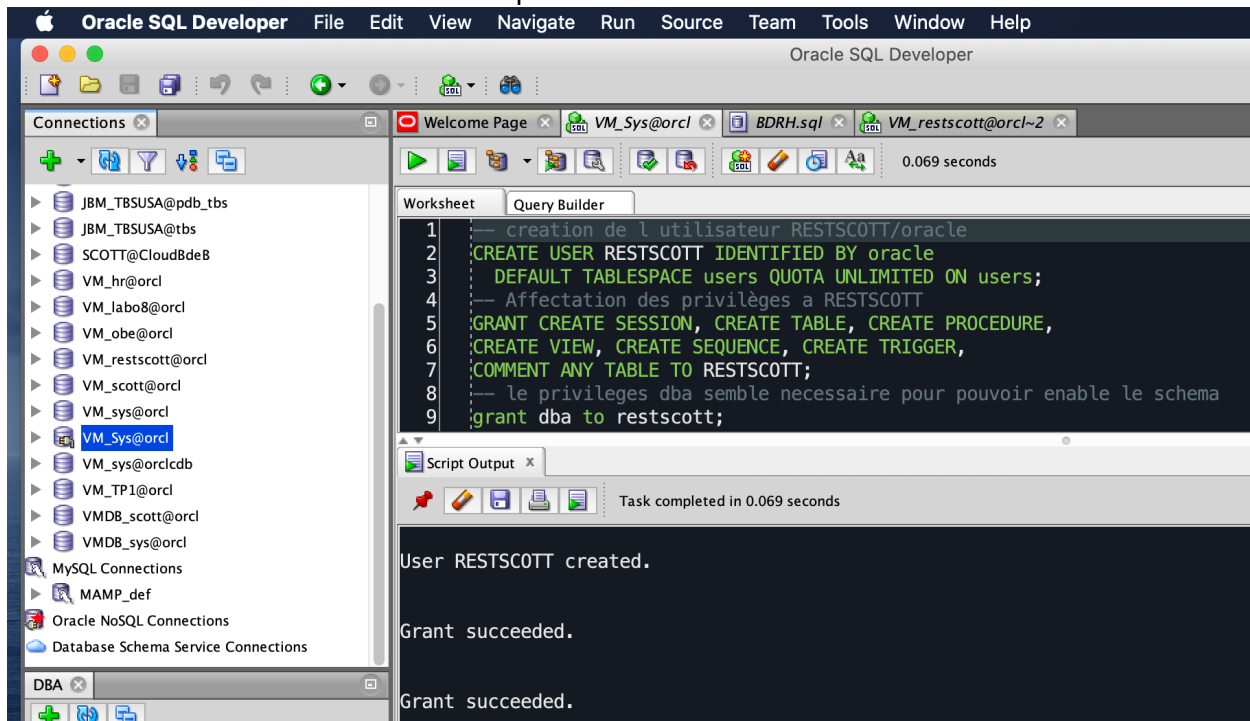
Si BD Cloud:

```
CREATE USER RESTSCOTT IDENTIFIED BY oracle DEFAULT TABLESPACE  
data QUOTA UNLIMITED ON data;
```

Pour les deux BD: -- Affectation des privilèges a RESTSCOTT
GRANT CREATE SESSION, CREATE TABLE, CREATE PROCEDURE,
CREATE VIEW, CREATE SEQUENCE, CREATE TRIGGER,
COMMENT ANY TABLE TO RESTSCOTT;

Si BD Local: grant dba to restscott;
-- le privileges dba semble necessaire pour pouvoir enable le
schema dans une bd locale.

Voici le résultat de l'exécutions des scripts :




Après avoir créé l'utilisateur RESTSCOTT et lui avoir donnée les privilèges requis, il faut créer une connexion avec SQL Developer afin d'exécuter des commandes dans son schéma. Créer les tables requises pour une application et ensuite activer REST pour le schéma et la(les) tables qu'on désire exposer avec REST.

Création de la connexion pour RESTSCOTT :

New / Select Database Connection

Connection Name	Connection Details
CloudBdeB@using...	admin@db202001...
CloudJBMAAdmin@...	admin@db202001...
JBM_LIVE_Integra...	INTEGRAJBMLIVE...
JBM_MMQS@orcl	mmqs@//10.10.1...
JBM_TBS@pdb_tbs	integra@//10.10...
JBM_TBSUSA@pdb...	TBSUSA@//10.10...
JBM_TBSUSA@tbs	TBSUSA@//10.10...
MAMP_def	root@//localhost:...
SCOTT@CloudBdeB	scott@db2020012...
VM_hr@orcl	hr@//localhost:1...
VM_labo8@orcl	labo8@//localhos...
VM_obe@orcl	obe@//localhost:...
VM_scott@orcl	scott@//localhost:...
VM_Sys@orcl	sys@//localhost:1...
VM_sys@orcl	sys@//localhost:1...
VM_sys@orclcdb	sys@//localhost:1...
VM_TP1@orcl	tp1@//localhost:...
VMDB_scott@orcl	scott@//localhost...
VMDB_sys@orcl	sys@//localhost:1...

Status : Success

Name: VM_restscott@orcl  Color

Database Type: Oracle

User Info | Proxy User

Authentication Type: Default

Username: restscott Role: default

Password: ☒ Save Password

Connection Type: Basic

Details | Advanced

Hostname: localhost

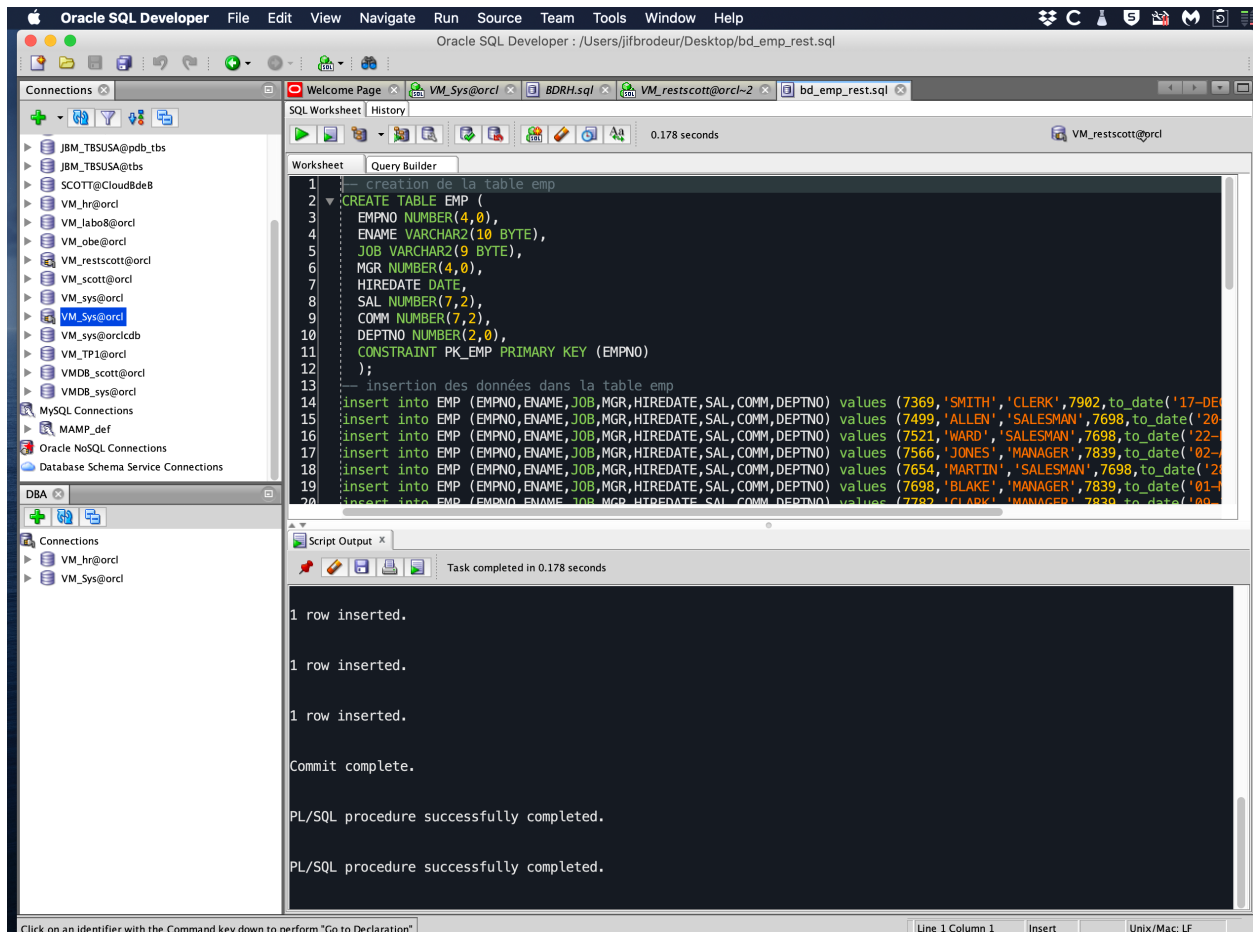
Port: 1521

☐ SID

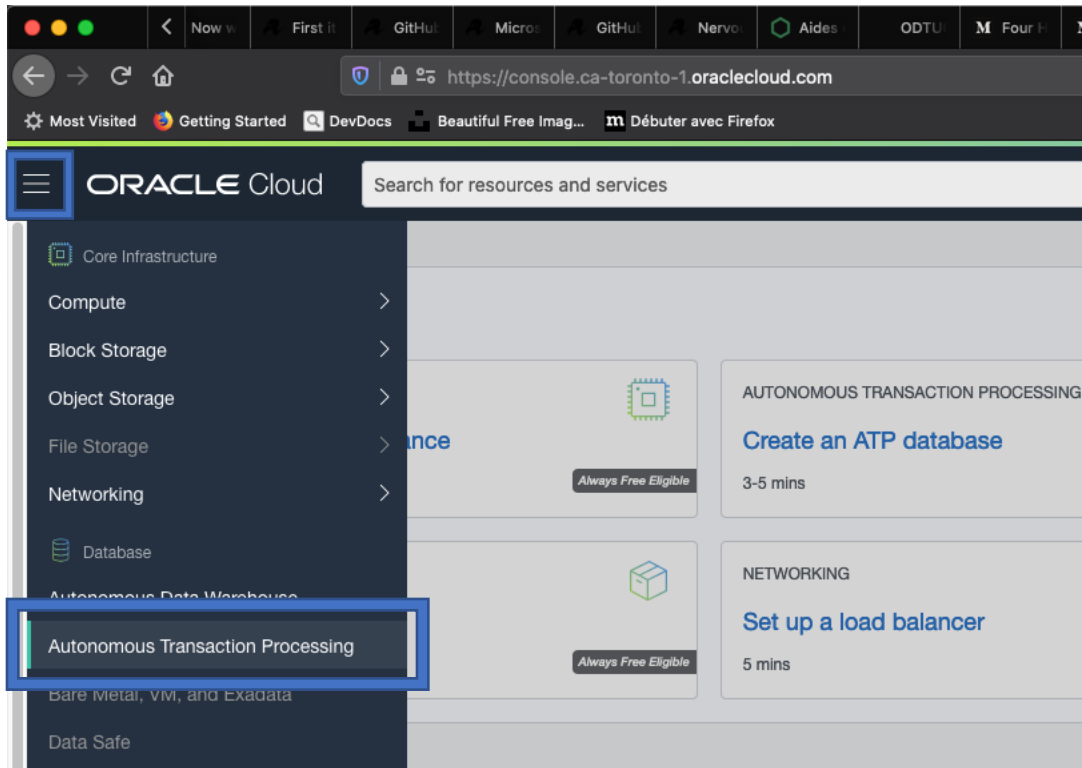
☒ Service name: orcl

Help Save Clear Test **Connect** Cancel

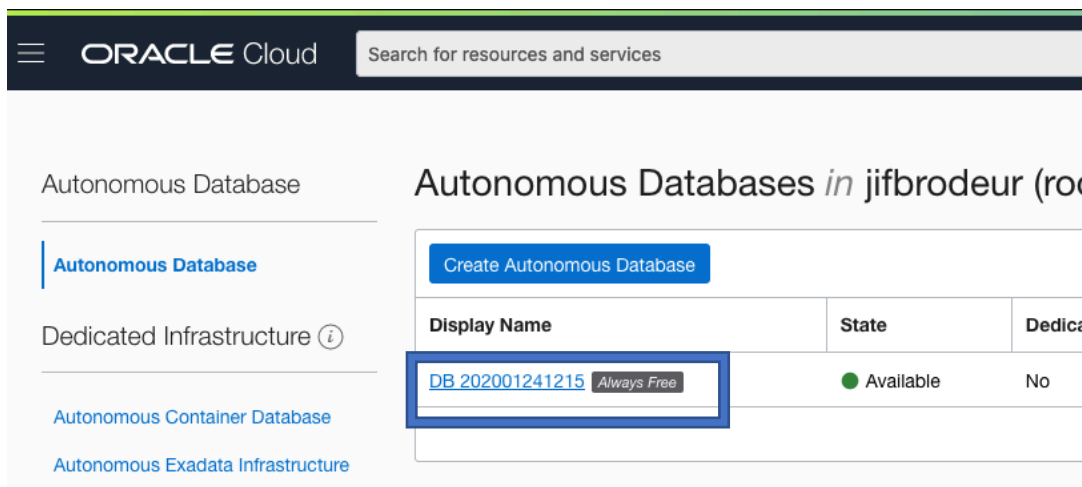
Ensuite se connecter comme RESTSCOTT, en appuyant bouton de droite de la souris la connexion nouvellement créer VM_RESTSCOTT -> connexion et ensuite ouvrir le script **BD_emp_rest.sql** (présent sur le Google Drive) pour créer les tables et activer le mode AUTOREST.



Pour ceux qui ont un **environnement Cloud**, il vous faut aller chercher le point de terminaison (endpoint) où le serveur répondra aux requêtes venant du Web. À partir de la console, appuyer sur le menu en haut à gauche puis Autonomous Transaction Processing.




Puis sélectionnez votre base de données : DB.....



Appuyez sur Service Console.

Autonomous Database » Autonomous Database Details



AVAILABLE

DB 202001241215 Always Free

[DB Connection](#)
[Performance Hub](#)
[Service Console](#)
[Scale Up/Down](#)
[More Actions](#)

Autonomous Database Information Tools Tags

General Information

Database Name: DB202001241215
Workload Type: Transaction Processing
Compartment: jifbrodeur (root)
OCID: ...nq2hmq [Show](#) [Copy](#)
Created: Fri, Jan 24, 2020, 17:20:19 UTC
OCPU Count: 1
Storage: 0.02
License Type: License included

Sélectionnez Development :

ORACLE
Cloud Infrastructure

Autonomous Transaction Processing

[Overview](#)
[Activity](#)
[Administration](#)
[Development](#)

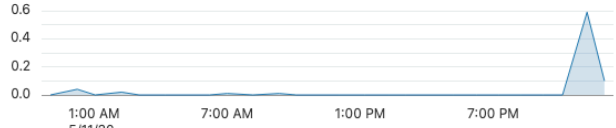
DATABASE
DB202001241215

Storage used

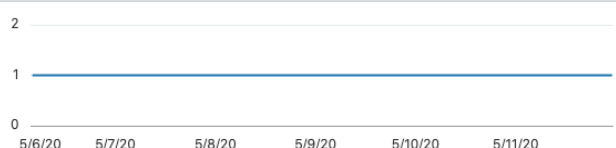
51%

10.27 GB / 20 GB

CPU utilization (%)



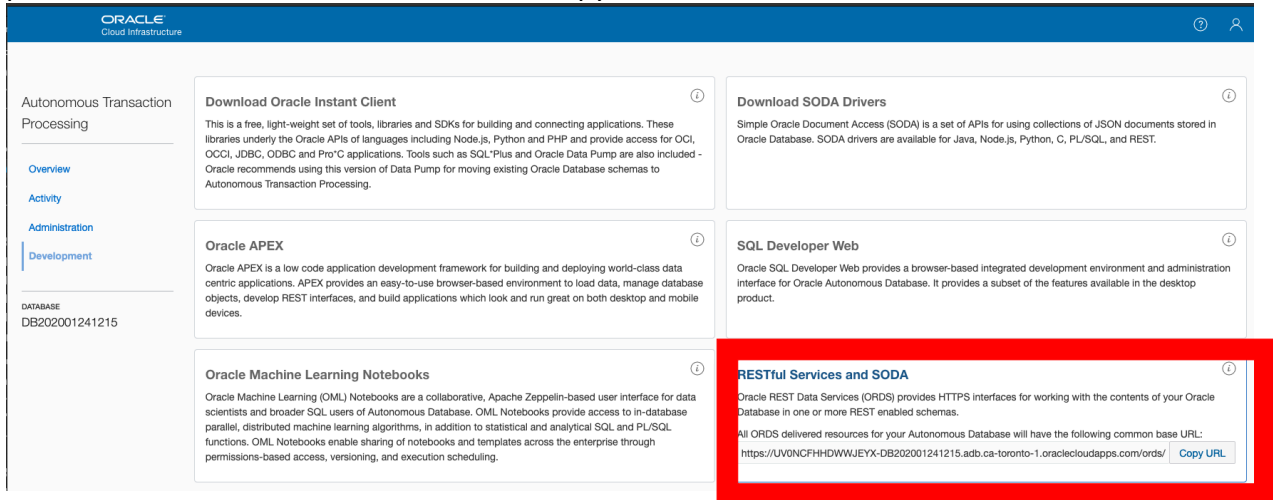
Number of OCPUs allocated [\[Show Details \]](#)



SQL statements executed per second

18

Et finalement, en bas à gauche vous trouverez le point de terminaison, copier et conserver précieusement ce URL à l'aide du bouton copy URL.



The screenshot shows the Oracle Cloud Infrastructure console interface. On the left, there is a sidebar with the 'Autonomous Transaction Processing' section selected, showing 'Overview', 'Activity', 'Administration', and 'Development' tabs. Below this, the database name 'DB202001241215' is displayed. The main content area shows several resource cards: 'Download Oracle Instant Client', 'Download SODA Drivers', 'Oracle APEX', 'SQL Developer Web', and 'Oracle Machine Learning Notebooks'. The 'RESTful Services and SODA' card is highlighted with a red border. It contains the text: 'Oracle REST Data Services (ORDS) provides HTTPS interfaces for working with the contents of your Oracle Database in one or more REST enabled schemas. All ORDS delivered resources for your Autonomous Database will have the following common base URL: https://UV0NCFHHDWWJEYX-DB202001241215.adb.ca-toronto-1.oraclecloudapps.com/ords/'. A 'Copy URL' button is located at the bottom right of this card.

Dans l'exemple ici-haut le URL est : <https://UV0NCFHHDWWJEYX-DB202001241215.adb.ca-toronto-1.oraclecloudapps.com/ords/>

Pour ceux qui ont une base de données local (VirtualBox) :

Vous pouvez tester votre installation en pointant votre navigateur sur le URL :

<http://localhost:8080/ords/hr2/employees>:

Pour ceux qui ont une base de données sur le cloud : utilisez votre URL de terminaison et ajouter /hr2/employees

→ <https://UVONCFHHDWWJEYX-DB202001241215.adb.ca-toronto-1.oraclecloudapps.com/ords/hr2/employees>



```
{
  "items": [
    {
      "empno": 7369, "ename": "SMITH", "job": "CLERK", "mgr": 7902, "hiredate": "1980-12-17T05:00:00Z", "sal": 800, "comm": null, "deptno": 20, "links": {
        "rel": "self", "href": "http://localhost:8080/ords/hr2/employees/7369"
      }
    },
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      "empno": 7499, "ename": "ALLEN", "job": "SALESMAN", "mgr": 7698, "hiredate": "1981-02-20T05:00:00Z", "sal": 1600, "comm": 300, "deptno": 30, "links": {
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    },
    {
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      }
    },
    {
      "empno": 7566, "ename": "JONES", "job": "MANAGER", "mgr": 7839, "hiredate": "1981-04-02T05:00:00Z", "sal": 2975, "comm": null, "deptno": 20, "links": {
        "rel": "self", "href": "http://localhost:8080/ords/hr2/employees/7566"
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    },
    {
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      }
    },
    {
      "empno": 7698, "ename": "BLAKE", "job": "MANAGER", "mgr": 7839, "hiredate": "1981-05-01T04:00:00Z", "sal": 2850, "comm": null, "deptno": 30, "links": {
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      }
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    {
      "empno": 7782, "ename": "CLARK", "job": "MANAGER", "mgr": 7839, "hiredate": "1981-06-09T04:00:00Z", "sal": 2450, "comm": null, "deptno": 10, "links": {
        "rel": "self", "href": "http://localhost:8080/ords/hr2/employees/7782"
      }
    },
    {
      "empno": 7788, "ename": "SCOTT", "job": "ANALYST", "mgr": 7566, "hiredate": "1987-04-19T04:00:00Z", "sal": 3000, "comm": null, "deptno": 20, "links": {
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      }
    },
    {
      "empno": 7839, "ename": "KING", "job": "PRESIDENT", "mgr": null, "hiredate": "1981-11-17T05:00:00Z", "sal": 5000, "comm": null, "deptno": 10, "links": {
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    },
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    },
    {
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      }
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      }
    },
    {
      "empno": 7934, "ename": "MILLER", "job": "CLERK", "mgr": 7782, "hiredate": "1982-01-23T05:00:00Z", "sal": 1300, "comm": null, "deptno": 10, "links": {
        "rel": "self", "href": "http://localhost:8080/ords/hr2/employees/7934"
      }
    }
  ],
  "hasMore": false,
  "limit": 25,
  "offset": 0,
  "count": 14,
  "links": {
    "rel": "self", "href": "http://localhost:8080/ords/hr2/employees/"
  },
  "rel": "edit", "href": "http://localhost:8080/ords/hr2/employees/"
},
{
  "rel": "describedby", "href": "http://localhost:8080/ords/hr2/metadata-catalog/employees/"
},
{
  "rel": "first", "href": "http://localhost:8080/ords/hr2/employees/"
}
```