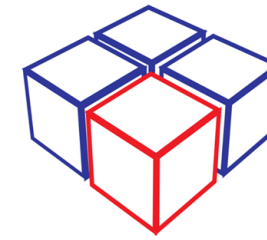


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**iema**  
Software Architectures

# Oracle APEX Developing Database Web Applications



18 Maggio 2023

ORACLE

Partner



**capancioni.com**

# Chi Siamo

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ITOUG: <https://itoug.it>

# Chi Siamo

- Dott.ssa Nicoletta Bindi
- in Tema dal 2001
- Analista sviluppatrice java e web
- Apex dal 2020



# D17 REST

---

# D17 REST

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes the APEX logo, 'App Builder', 'SQL Workshop', 'Team Development', and 'Galleria'. A search bar and user information (adm usrx00) are also present. The left sidebar shows the 'Browser oggetti' section with a search for 'd17' and a list of objects, including 'D17\_VENDITA'. The main area displays the configuration for the 'D17\_VENDITA' table. A green message bar at the top indicates 'Elaborazione di TABLE D17\_VENDITA riuscita'. Below this, a tabbed interface shows various options for the table, with the 'REST' tab selected. The REST configuration includes: 'Abilita oggetto per REST' (Yes), 'Alias oggetto' (d17\_vendita), 'Autorizzazione obbligatoria' (No), and 'URI RESTful' (https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\_vendita/). An 'Applica' button is at the bottom right.

Oracle APEX SQL Workshop interface showing the REST configuration for the **D17\_VENDITA** table.

Schema: WKSP\_USRX00

Versione ORDS 23.1.2.r1151944

Abilita oggetto per REST: ☒ Sì ☐ No

Alias oggetto: d17\_vendita

Autorizzazione obbligatoria: ☐ Sì ☒ No

URI RESTful: [https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/)

Applica

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/)

# D17 REST

APEX

App Builder

SQL Workshop

Team Development

Galleria

Cerca

AD

adm

usrx00

Servizi RESTful

Oggetti abilitati per ORDS

Schema

WKSP\_USRX00

Servizi dati RESTful

Oggetti abilitati

Moduli

Privilegi

Ruoli

Oggetti abilitati per RESTful

Vai

1. Report primario

Azioni

Schema di analisi	Oggetto analizzato	Alias oggetto	Tipo	Stato	Autenticazione REST automatica	Operazioni consentite	Percorso tipo	Con alias
WKSP_USRX00	D16_PERSONA	d16_persona	TABLE	ENABLED	DISABLED	-	ENABLED	
WKSP_USRX00	<u>D16_VENDITA</u>	<u>d16_vendita</u>	TABLE	ENABLED	DISABLED	-	ENABLED	

Browser oggetti

Schema

WKSP\_USRX00

Tabelle

d16

D16\_DIPARTIMENTO\_JSON

D16\_EVENTI

D16\_PERSONA

D16\_VENDITA

D16\_VENDITA

Tabella

Dati

Indici

Modello

Vincoli

Statistiche

Valori predefiniti di interfaccia utente

Trigger

Dipendenze

SQL

REST

Query di esempio

Versione ORDS 23.1.2.r1151944

Abilita oggetto per REST

Sì

No

Alias oggetto

d16\_vendita

Autorizzazione obbligatoria

Sì

No

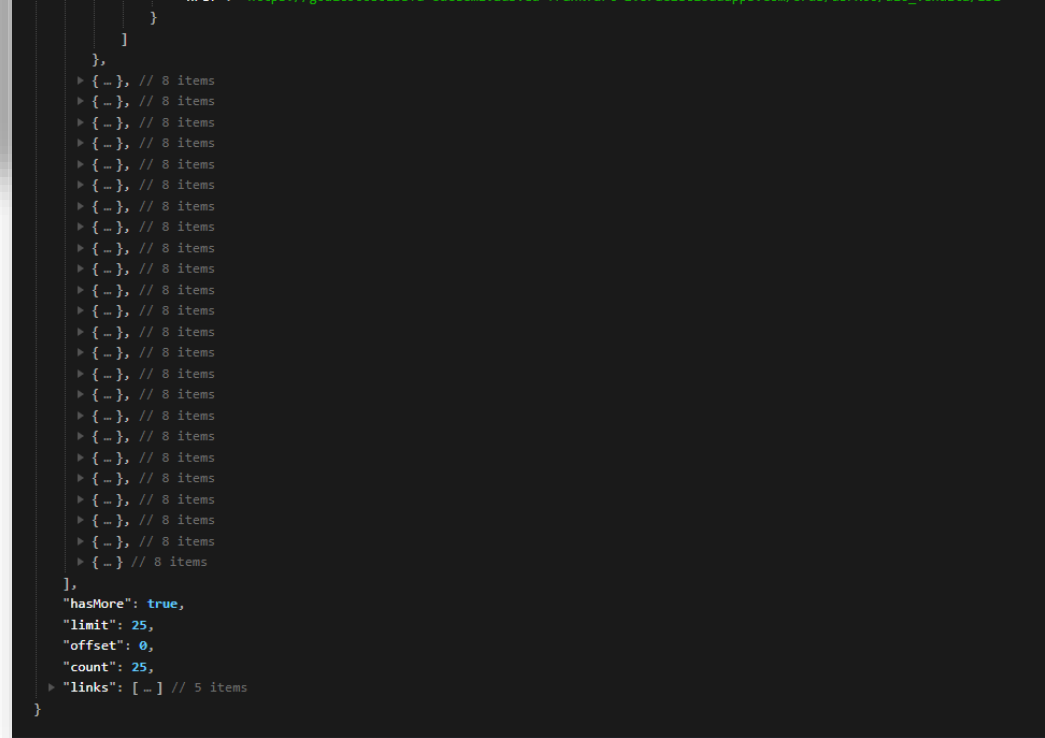
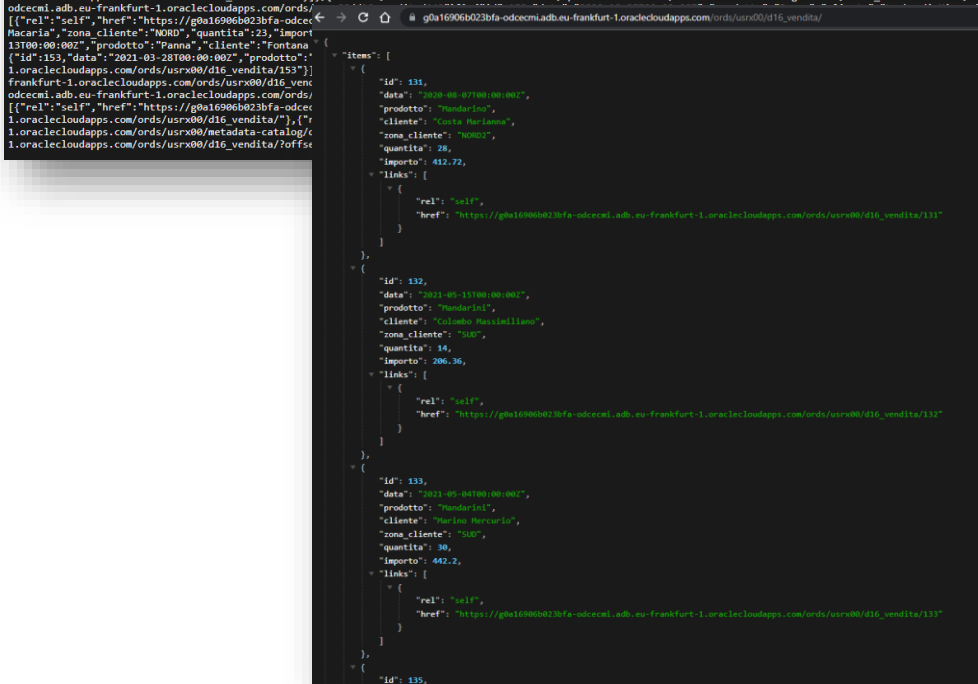
URI RESTful

https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16\_vendita/

Applica

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/)

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/)





# D17 REST

The screenshot shows the Oracle SQL Command window with the following details:

- Schema:** WKSP\_USRX00
- Lingua:** SQL
- Righe:** 100
- Buttons:** Cancella comando, Trova tabelle, Salva, Esegui
- Query:**

```
1 select
2 apex_web_service.make_rest_request(
3   p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com' ||
4   '/ords/usrx00/d16_vendita/',
5   p_http_method => 'GET'
6 ) vendita
7 from dual
```
- Results Tab (Risultati):**
  - Spiega** | **Descrivi** | **SQL salvato** | **Cronologia**
  - VENDITA**
  - JSON Output:**

```
{
  "items": [
    {
      "id": 131,
      "data": "2020-08-07T00:00:00Z",
      "prodotto": "Mandarino",
      "cliente": "Costa Marianna",
      "zona_cliente": "NORD2",
      "quantita": 28,
      "importo": 412.72,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/131"
        }
      ]
    },
    {
      "id": 132,
      "data": "2021-05-15T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Colombo Massimiliano",
      "zona_cliente": "SUD",
      "quantita": 14,
      "importo": 206.36,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/132"
        }
      ]
    },
    {
      "id": 133,
      "data": "2021-05-04T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Marino Mercurio",
      "zona_cliente": "SUD",
      "quantita": 30,
      "importo": 442.2,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/133"
        }
      ]
    },
    {
      "id": 135,
      "data": "2021-04-30T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Lombardi Minervino",
      "zona_cliente": "SUD",
      "quantita": 20,
      "importo": 294.8,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/135"
        }
      ]
    },
    {
      "id": 136,
      "data": "2021-01-05T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Romano Marcella",
      "zona_cliente": "CENTRO",
      "quantita": 14,
      "importo": 206.36,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/136"
        }
      ]
    },
    {
      "id": 137,
      "data": "2020-12-27T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Marino Mercurio",
      "zona_cliente": "SUD",
      "quantita": 13,
      "importo": 191.62,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/137"
        }
      ]
    }
  ]
}
```

```
select apex_web_service.make_rest_request(
  p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com' ||
  '/ords/usrx00/d17_vendita/',
  p_http_method => 'GET'
) vendita
from dual
```



# D17 REST

```
select *
  from json_table(
apex_web_service.make_rest_request(
  p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com' ||
          '/ords/usrx00/d17_vendita/',
  p_http_method => 'GET'
),
 '$.items[*]' columns(
      id                number                path '$.id'
    ,data              date                  path '$.data'
    ,prodotto          varchar2(100)         path '$.prodotto'
    ,cliente           varchar2(100)         path '$.cliente'
    ,zona_cliente      varchar2(100)         path '$.zona_cliente'
    ,quantita          number                path '$.quantita'
    ,importo           number                path '$.importo'
  )
);
```

# D17 REST

```
8
9  select *
10  from json_table(
11  apex_web_service.make_rest_request(
12    p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/',
13    p_http_method => 'GET'
14  ),
15  '$.items[*]' columns(
16    id          number      path '$.id'
17    ,data       date        path '$.data'
18    ,prodotto   varchar2(100) path '$.prodotto'
19    ,cliente    varchar2(100) path '$.cliente'
20    ,zona_cliente varchar2(100) path '$.zona_cliente'
21    ,quantita   number      path '$.quantita'
22    ,importo    number      path '$.importo'
23  )
24 );
```

isultati   Spiega   Descrivi   SQL salvato   Cronologia

ID	DATA	PRODOTTO	CLIENTE	ZONA_CLIENTE	QUANTITA	IMPORTO
131	07/08/2020	Mandarino	Costa Marianna	NORD2	28	412,72
132	15/05/2021	Mandarini	Colombo Massimiliano	SUD	14	206,36
133	04/05/2021	Mandarini	Marino Mercurio	SUD	30	442,2

# D17 REST

```
← → ↻ 🏠 🔒 g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/

▼ {
  ▶ "items": [ ... ], // 25 items
    "hasMore": true,
    "limit": 25,
    "offset": 0,
    "count": 25,
  ▶ "links": [ ... ] // 5 items
}
```

# D17 REST

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/?limit=200](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?limit=200)

```
g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/?limit=200

{
  "items": [ ... ], // 200 items
  "hasMore": true,
  "limit": 200,
  "offset": 0,
  "count": 200,
  "links": [ ... ] // 5 items
}
```

# D17 REST

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/?offset=50](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?offset=50)

```
g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/?offset=50

{
  ▶ "items": [ ... ], // 25 items
  "hasMore": true,
  "limit": 25,
  "offset": 50,
  "count": 25,
  ▶ "links": [ ... ] // 6 items
}
```

# D17 REST

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/?q={"Prodotto":{"\\$instr":"cotto"}}](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?q={)

```
g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/?q={"Prodotto":{"$instr":"cotto"}}

{
  "items": [
    {
      "id": 1,
      "data": "2020-08-26T00:00:00Z",
      "prodotto": "Prosciutto cotto",
      "cliente": "Russo Maida",
      "zona_cliente": "SUD",
      "quantita": 24,
      "importo": 413.04,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/1"
        }
      ]
    }
  ],
  {
```

# D17 REST

[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17\\_vendita/?q={"importo":{"\\$lte":100}}](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?q={)

```
▼ {
  ▼ "items": [
    ▼ {
      "id": 139,
      "data": "2021-01-24T00:00:00Z",
      "prodotto": "Latte",
      "cliente": "Esposito Marinetta",
      "zona_cliente": "NORD",
      "quantita": 18,
      "importo": 72.93,
      ▼ "links": [
        ▼ {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/139"
        }
      ]
    },
    ▼ {
```



# D17 REST

<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com>

[/ords/usrx00/d17\\_vendita/?q={"data":{"\\$lte":{"\\$date":"2021-03-08T23:59:59Z"}}}](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?q={)

```
g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/?q={"data":{"$lte":{"$date":"2021-03-08T23:59:59Z"}}}

{
  "items": [
    {
      "id": 131,
      "data": "2020-08-07T00:00:00Z",
      "prodotto": "Mandarino",
      "cliente": "Costa Marianna",
      "zona_cliente": "NORD2",
      "quantita": 28,
      "importo": 412.72,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/131"
        }
      ]
    },
    {
```

# D17 REST

<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com>

[/ords/usrx00/d17\\_vendita/?q={"importo": {"\\$and": \[{"\\$gt": 100}, {"\\$lt": 300}\]}\]}](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?q={)

```
g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17_vendita/?q={"importo": {"$and": [{"$gt": 100}, {"$lt": 300}]}]}

{
  "items": [
    {
      "id": 132,
      "data": "2021-05-15T00:00:00Z",
      "prodotto": "Mandarini",
      "cliente": "Colombo Massimiliano",
      "zona_cliente": "SUD",
      "quantita": 14,
      "importo": 206.36,
      "links": [
        {
          "rel": "self",
          "href": "https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d16_vendita/132"
        }
      ]
    },
    {

```

# D17 REST

<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com>

[/ords/usrx00/d17\\_vendita/?q={"importo": {"\\$and": \[{"\\$gt": 100}, {"\\$lt": 300}\]}}](/ords/usrx00/d17_vendita/?q={)

"\$eq"	:	string		number		date
"\$ne"	:	string		number		date
"\$lt"	:	number		date		
"\$lte"	:	number		date		
"\$gt"	:	number		date		
"\$gte"	:	number		date		
"\$instr"	:	string				
"\$ninstr"	:	string				
"\$like"	:	string				
"\$null"	:	null				
"\$notnull"	:	null				
"\$between"	:	betweenValue				

# D17 REST

## Syntax

```
APEX_WEB_SERVICE.MAKE_REST_REQUEST (  
  p_url                                IN  VARCHAR2,  
  p_http_method                       IN  VARCHAR2,  
  p_username                           IN  VARCHAR2 DEFAULT NULL,  
  p_password                           IN  VARCHAR2 DEFAULT NULL,  
  p_scheme                             IN  VARCHAR2 DEFAULT 'Basic',  
  p_proxy_override                       IN  VARCHAR2 DEFAULT NULL,  
  p_transfer_timeout                     IN  NUMBER   DEFAULT 180,  
  p_body                                IN  CLOB      DEFAULT EMPTY_CLOB(),  
  p_body_blob                           IN  BLOB      DEFAULT EMPTY_BLOB(),  
  p_parm_name                           IN  apex_application_global.vc_arr2  
                                         DEFAULT empty_vc_arr,  
  p_parm_value                           IN  apex_application_global.vc_arr2  
                                         DEFAULT empty_vc_arr,  
  p_wallet_path                          IN  VARCHAR2 DEFAULT NULL,  
  p_wallet_pwd                           IN  VARCHAR2 DEFAULT NULL,  
  p_https_host                           IN  VARCHAR2 DEFAULT NULL,  
  p_credential_static_id               IN  VARCHAR2 DEFAULT NULL,  
  p_token_url                           IN  VARCHAR2 DEFAULT NULL )  
RETURN CLOB;
```



# D17 REST

APEX App Builder SQL Workshop Team Development Galleria

Servizi RESTful \ Moduli \ Definizione modulo

Schema WKSP\_USRX00

Definizione modulo ORDS

\* Nome modulo D17

\* Percorso di base /d17/

\* Pubblicato ☒

\* Dimensione impaginazione 25

Origini consentite

Commenti

Legenda: ☒ Modello protetto completamente da un privilegio

Modulo creato

```
ords.define_module(  
    p_module_name => 'd17' ,  
    p_base_path   => '/d17/' ,  
    p_items_per_page => 25 ,  
    p_status      => 'PUBLISHED'  
);
```

APEX App Builder SQL Workshop Team Development Galleria

Servizi RESTful \ Moduli \ Definizione modulo

Schema WKSP\_USRX00

Modulo creato

Definizione modulo ORDS

\* Nome modulo D17

\* Percorso di base /d17/

URL completo <https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/>

\* Pubblicato ☒

\* Dimensione impaginazione 25

<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/>

# D17 REST

Servizi RESTful \ Moduli \ Definizione modulo \ Modello risorsa

Schema WKSP\_USRX00

Definizione modello ORDS

Modulo servizio RESTful **D17**

Percorso di base modulo **/d17/**

\* Modello URI

\* Priorità

\* Tipo di tag entità HTTP

Commenti

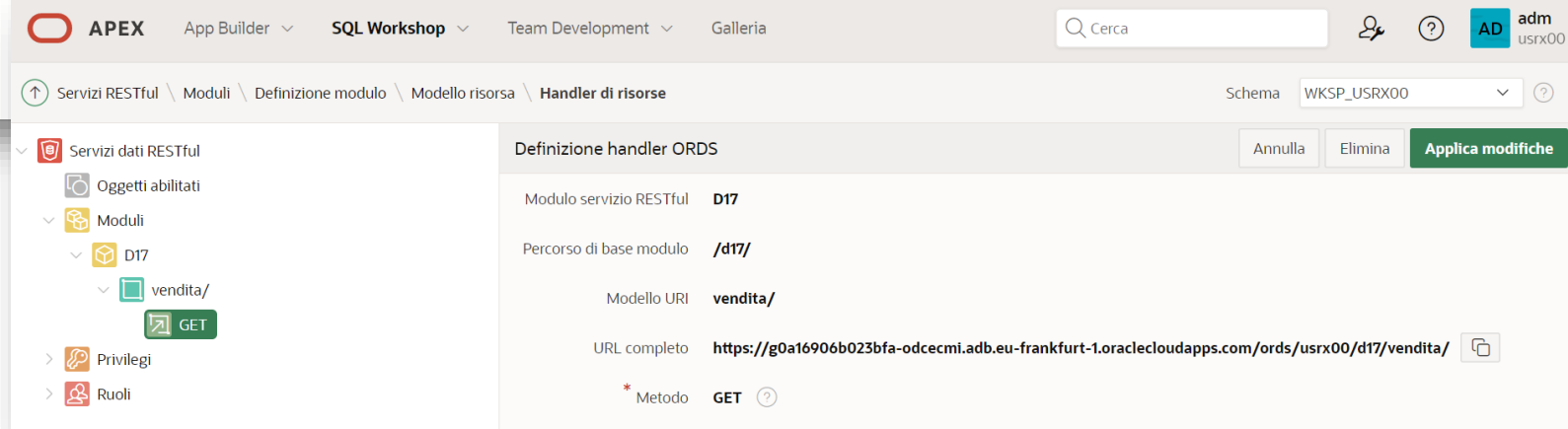
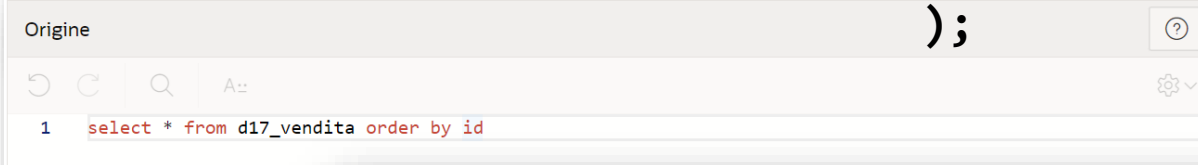
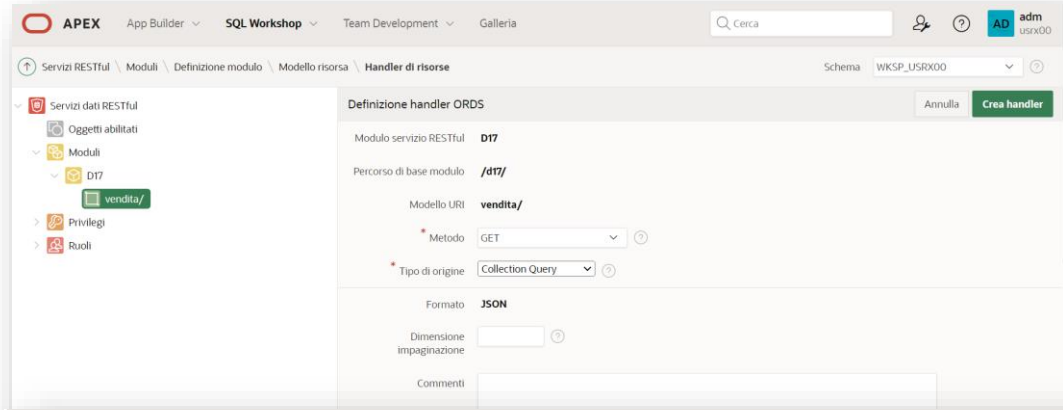
Annulla Crea modello

```
ords.define_template(  
    p_module_name => 'd17' ,  
    p_pattern => 'vendita/'  
);
```

<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita/>

# D17 REST

```
ords.define_handler(  
  p_module_name => 'd17' ,  
  p_pattern => 'vendita/' ,  
  p_method => 'GET' ,  
  p_source_type => ords.source_type_collection_feed ,  
  p_source => 'select *  
                from d17_vendita  
                order by id' ,  
  p_items_per_page => 25
```

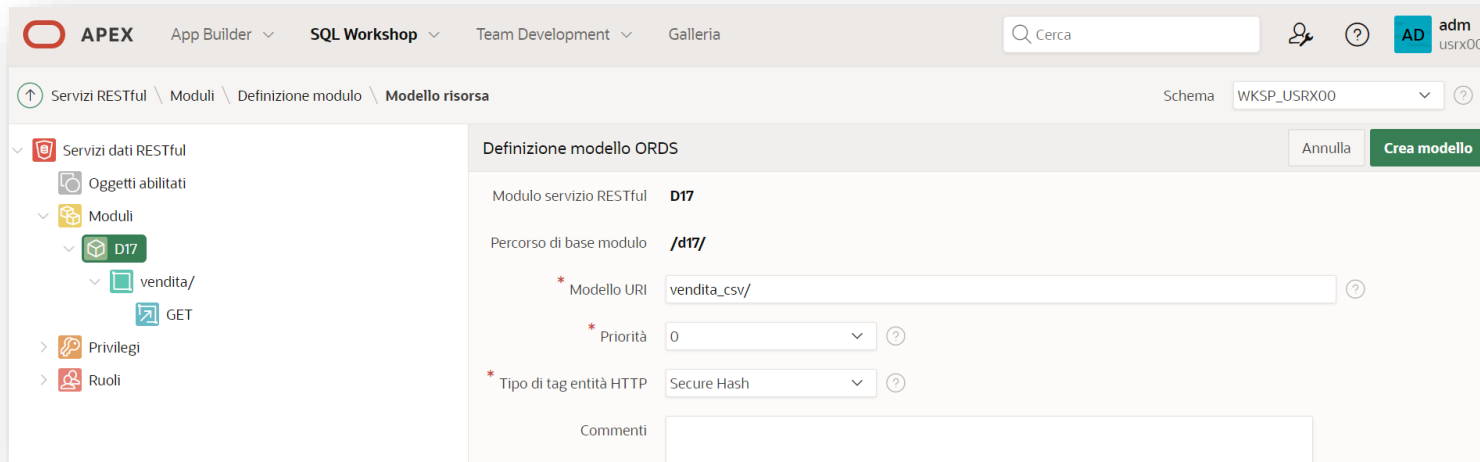


<https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita/>



# D17 REST

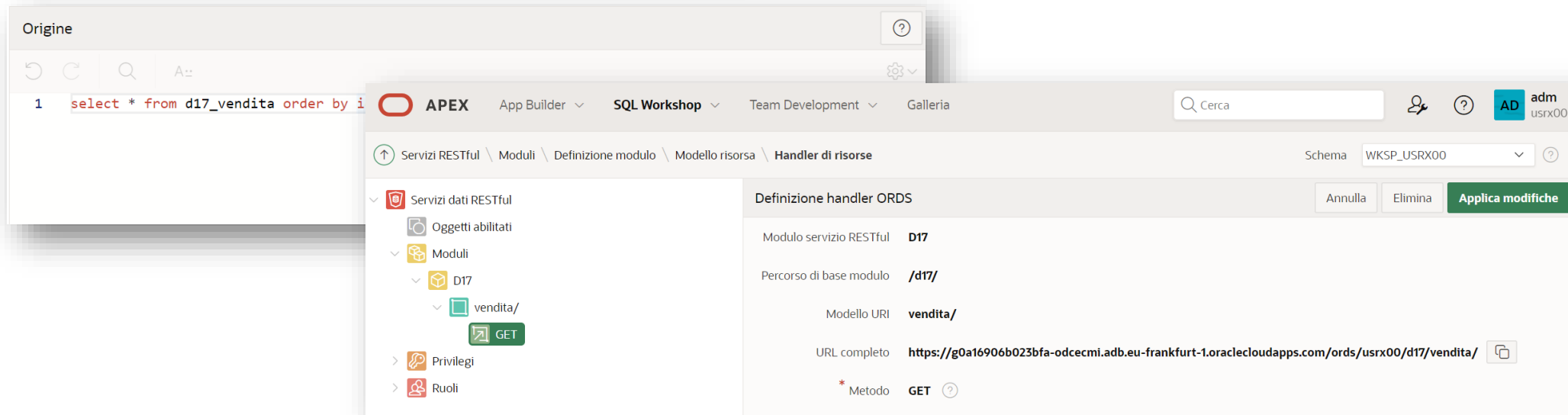
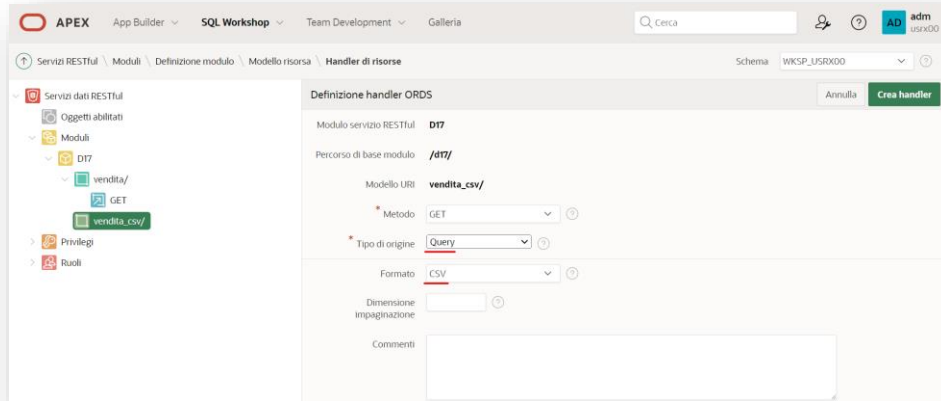
```
ords.define_template(  
    p_module_name => 'd17' ,  
    p_pattern => 'vendita_csv/'  
);
```



[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita\\_csv/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/)

# D17 REST

```
ords.define_handler(  
    p_module_name => 'd17' ,  
    p_pattern => 'vendita/' ,  
    p_method => 'GET' ,  
    p_source_type => ords.source_type_csv_query ,  
    p_source => 'select *  
                from d17_vendita  
                order by id' ,  
    p_items_per_page => 25  
);
```



[https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita\\_csv/](https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/)

# D17 REST

```

1 select
2   apex_web_service.make_rest_request(
3     p_url => 'https://g0a15906eb023fa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/uxrvx08/d17/vendita/',
4     p_http_method => 'GET'
5   ) vendita
6 from dual;

```

```

1 select
2 apex_web_service.make_rest_request(
3     p_url => 'https://g9a16906b023bfa-odcncmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/',
4     p_http_method => 'GET'
5 ) vendita
6 from dual;
```

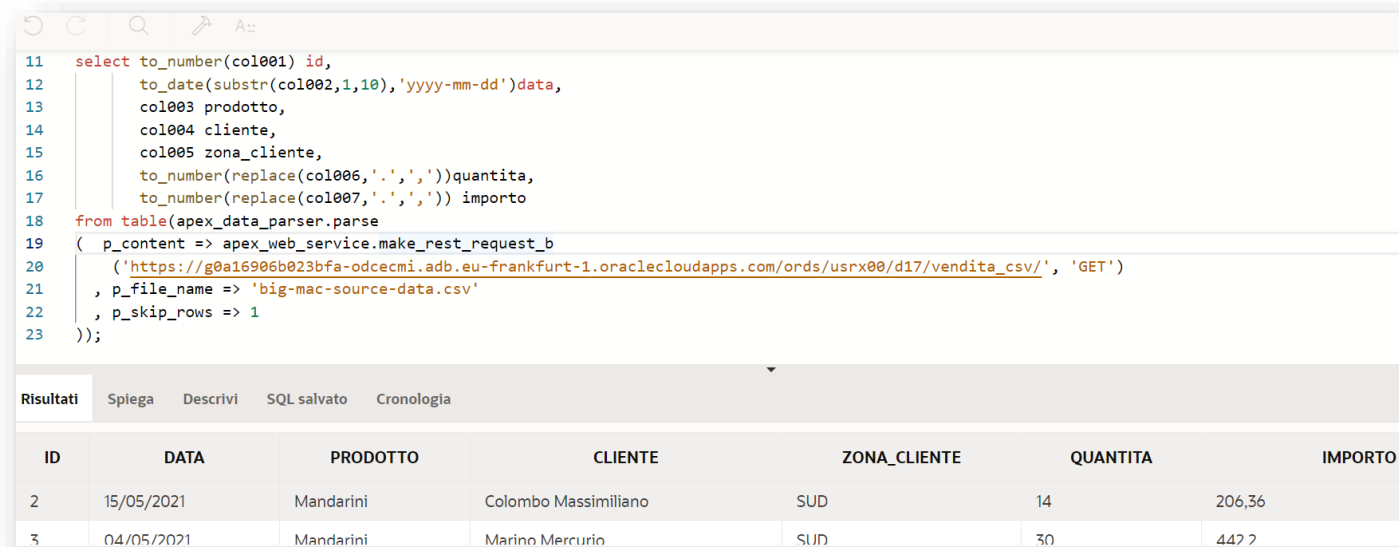
**select**

```
apex_web_service.make_rest_request(
    p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-
frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita/
    p_http_method => 'GET'
) vendita
from dual;
```

**select**

```
apex_web_service.make_rest_request(
    p_url => 'https://g0a16906b023bfa-odcecmi.adb.eu-
frankfurt-
1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/',
    p_http_method => 'GET'
) vendita
from dual;
```

# D17 REST



The screenshot shows a SQL Developer window with a query editor and a results grid. The query is a PL/SQL block that uses the apex\_data\_parser package to fetch data from a REST endpoint. The results grid displays two rows of data.

```
11 select to_number(col001) id,
12        to_date(substr(col002,1,10), 'yyyy-mm-dd') data,
13        col003 prodotto,
14        col004 cliente,
15        col005 zona_cliente,
16        to_number(replace(col006, '.', ',')) quantita,
17        to_number(replace(col007, '.', ',')) importo
18 from table(apex_data_parser.parse
19 ( p_content => apex_web_service.make_rest_request_b
20   ('https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/', 'GET')
21   , p_file_name => 'big-mac-source-data.csv'
22   , p_skip_rows => 1
23 ));
```

ID	DATA	PRODOTTO	CLIENTE	ZONA_CLIENTE	QUANTITA	IMPORTO
2	15/05/2021	Mandarini	Colombo Massimiliano	SUD	14	206,36
3	04/05/2021	Mandarini	Marino Mercurio	SUD	30	442,2

```
select to_number(col001) id,
       to_date(substr(col002,1,10), 'yyyy-mm-dd') data,
       col003 prodotto,
       col004 cliente,
       col005 zona_cliente,
       to_number(replace(col006, '.', ',')) quantita,
       to_number(replace(col007, '.', ',')) importo
from table(apex_data_parser.parse(
  p_content => apex_web_service.make_rest_request_b(
    'https://g0a16906b023bfa-odcecmi.adb.eu-frankfurt-
1.oraclecloudapps.com/ords/usrx00/d17/vendita_csv/', 'GET')
  , p_file_name => 'vendita.csv'
  , p_skip_rows => 1
  )
);
```