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tema
Software Architectures

Oracle APEX
Developing Database Web Applications

4 Aprile 2023

Chi Siamo

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–Board Member ITOUG

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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

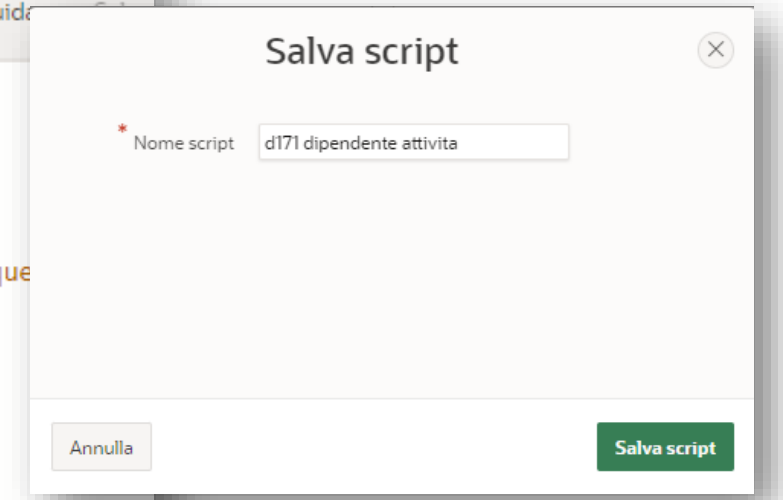
D05 - Dipendente Attività

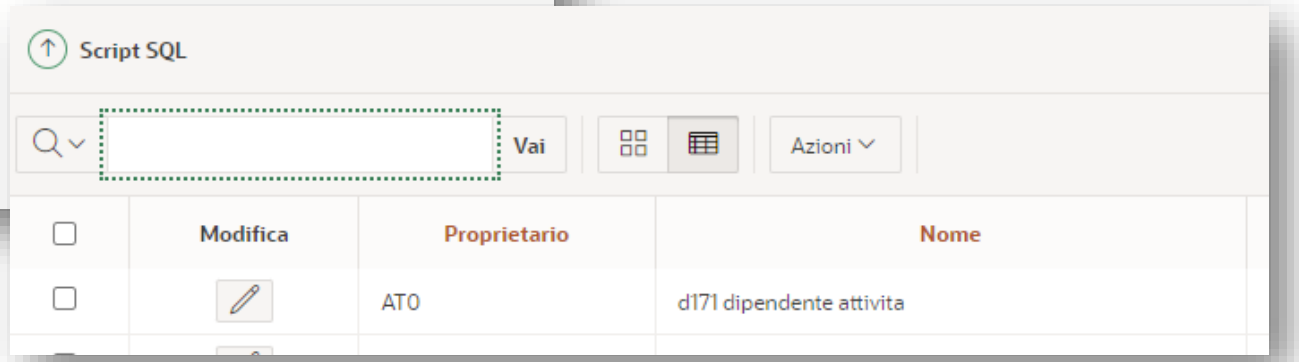
D05 - Dipendente Attività

Quick SQL

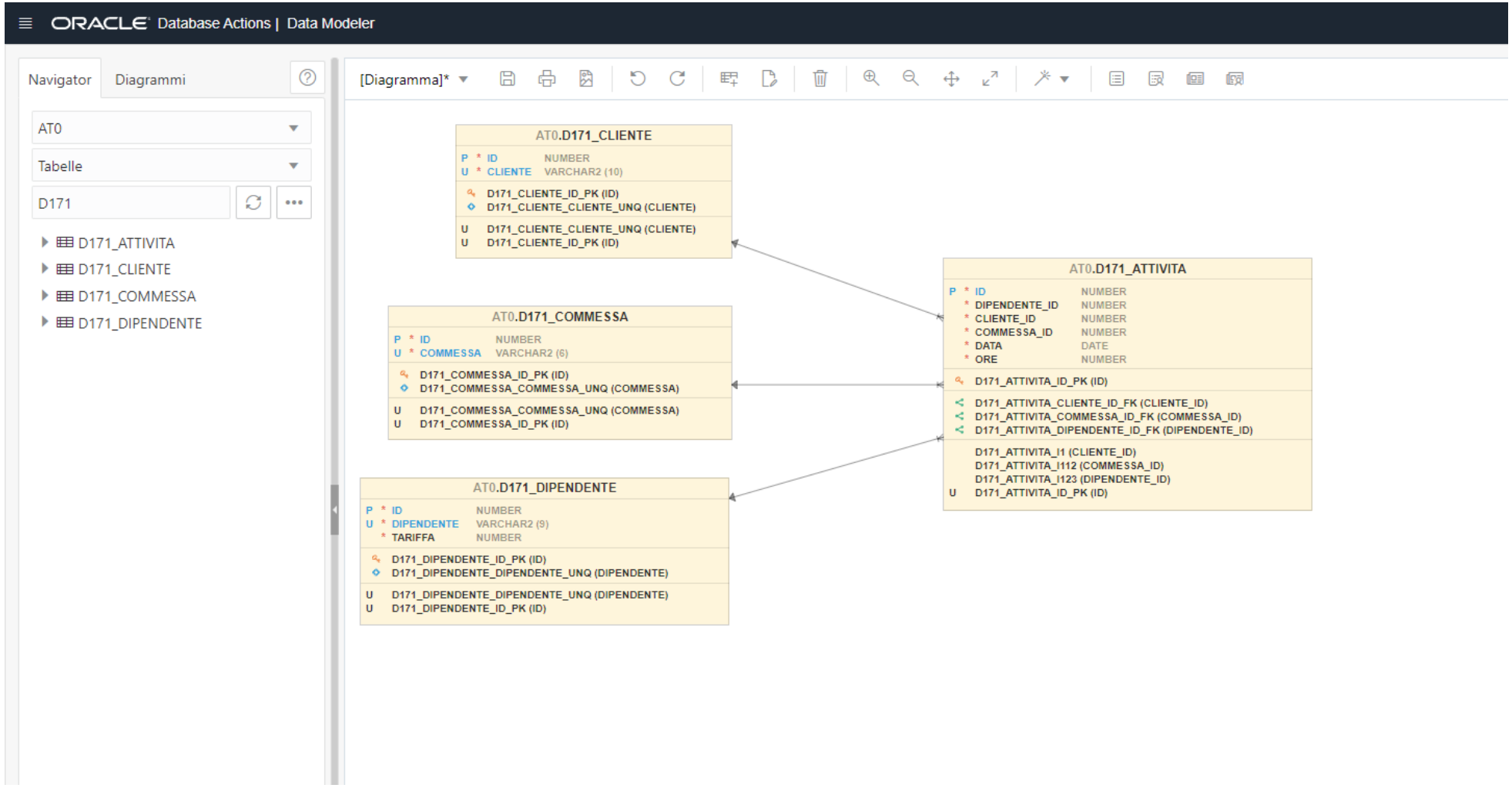
Cancella Carica Guida

```
1  dipendente /insert 5
2    dipendente /nn /values francesca, marco, anna, simone, paola /unique
3    tariffa num /nn /values 200,150
4
5  cliente /insert 5
6    cliente vc50 /nn /values cliente_01,cliente_02,cliente_03,cliente_04,cliente_05 /unique
7
8  commessa /insert 5
9    commessa vc30 /nn /values COMM01, COMM02, COMM03, COMM04, COMM05 /unique
10
11 attivita /insert 200
12   dipendente_id /nn
13   cliente_id /nn
14   commessa_id vc100 /nn
15   data d /nn
16   ore num /nn
17
18 #prefix: d171
19 #ondelete: restrict
20
```

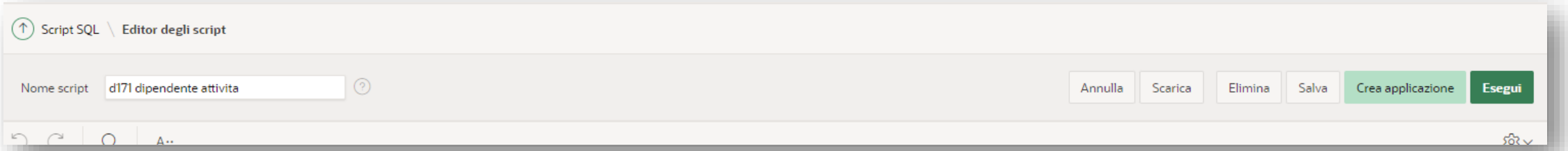


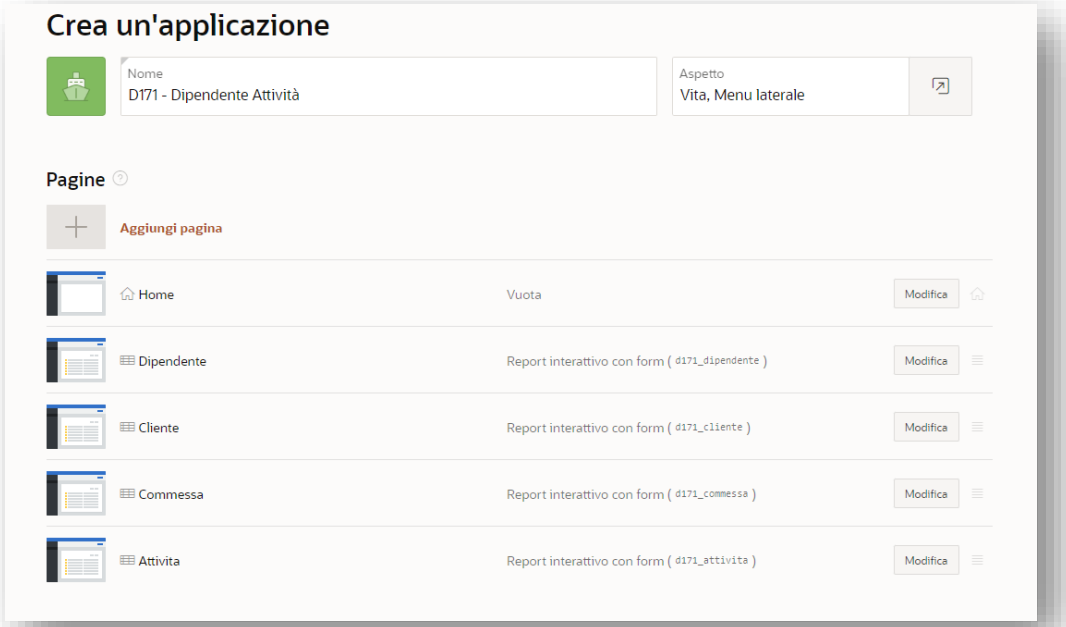


D05 - Dipendente Attività



D05 - Dipendente Attività





D05 - Dipendente Attività

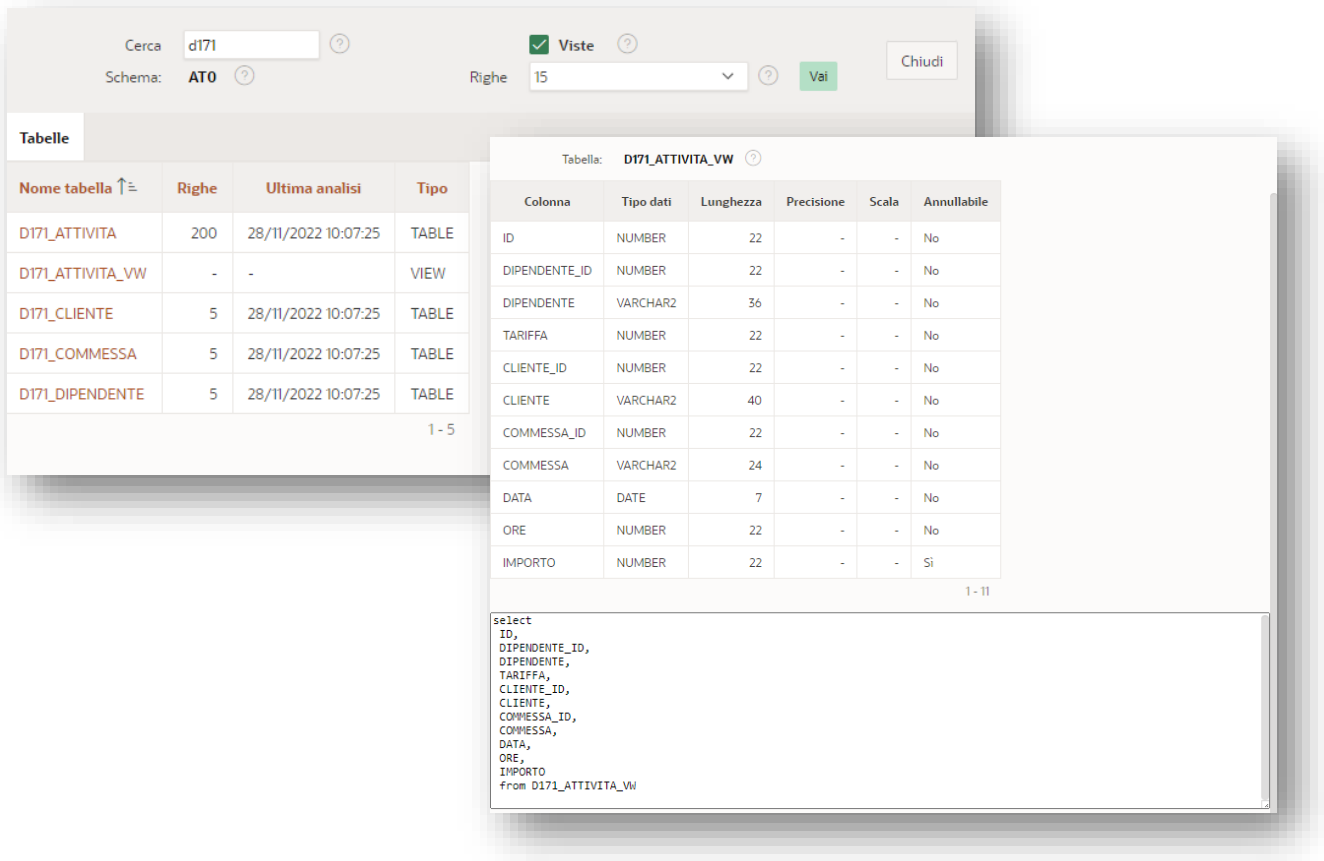
```
select
       a.id,
       a.dipendente_id,
       d.dipendente,
       d.tariffa,
       a.cliente_id,
       c.cliente,
       a.commessa_id,
       m.commessa,
       a.data,
       a.ore,
       d.tariffa * a.ore importo
  from d05_attivita a
  join d05_dipendente d on a.dipendente_id = d.id
  join d05_cliente    c on a.cliente_id    = c.id
  join d05_commessa   m on a.commessa_id   = m.id
```

D05 - Dipendente Attività

```
create or replace view d05_attivita_vw as
select
       a.id,
       a.dipendente_id,
       d.dipendente,
       d.tariffa,
       a.cliente_id,
       c.cliente,
       a.commessa_id,
       m.commessa,
       a.data,
       a.ore,
       d.tariffa * a.ore importo
  from d05_attivita a
  join d05_dipendente d on a.dipendente_id = d.id
  join d05_cliente    c on a.cliente_id    = c.id
  join d05_commessa   m on a.commessa_id   = m.id
```

D05 - Dipendente Attività

```
select * from d05_attivita_vw
```




```
select
        dipendente,
        tariffa,
        cliente,
        commessa,
        data,
        ore,
        importo
  from d05_attivita_vw
```

D05 - Dipendente Attività

```
select
       dipendente,
       tariffa,
       cliente,
       commessa,
       data,
       ore,
       importo
  from d05_attivita_vw
```

```
select
       sum(ore) tot_ore,
       sum(importo)importo
  from d05_attivita_vw
```

Nessun Raggruppamento

```
select dipendente,
       sum(ore) tot_ore,
       sum(importo)importo
  from d05_attivita_vw
group by dipendente
```

1 Raggruppamento

```
select dipendente,
       cliente,
       sum(ore) tot_ore,
       sum(importo)importo
  from d05_attivita_vw
group by dipendente,
       cliente
```

2 Raggruppamenti

D05- Dipendente Attività

```
select
       data,
       to_char(data,'YYYY')     anno,
       to_char(data,'MM')       mese,
       to_char(data,'MONTH')    mese_desc,
       to_char(data,'YYYY-MM') annomese,
       to_char(data,'Q')        trimestre,
       to_char(data,'YYYY-Q')   annotrimestre
  from d05_attivita_vw
```

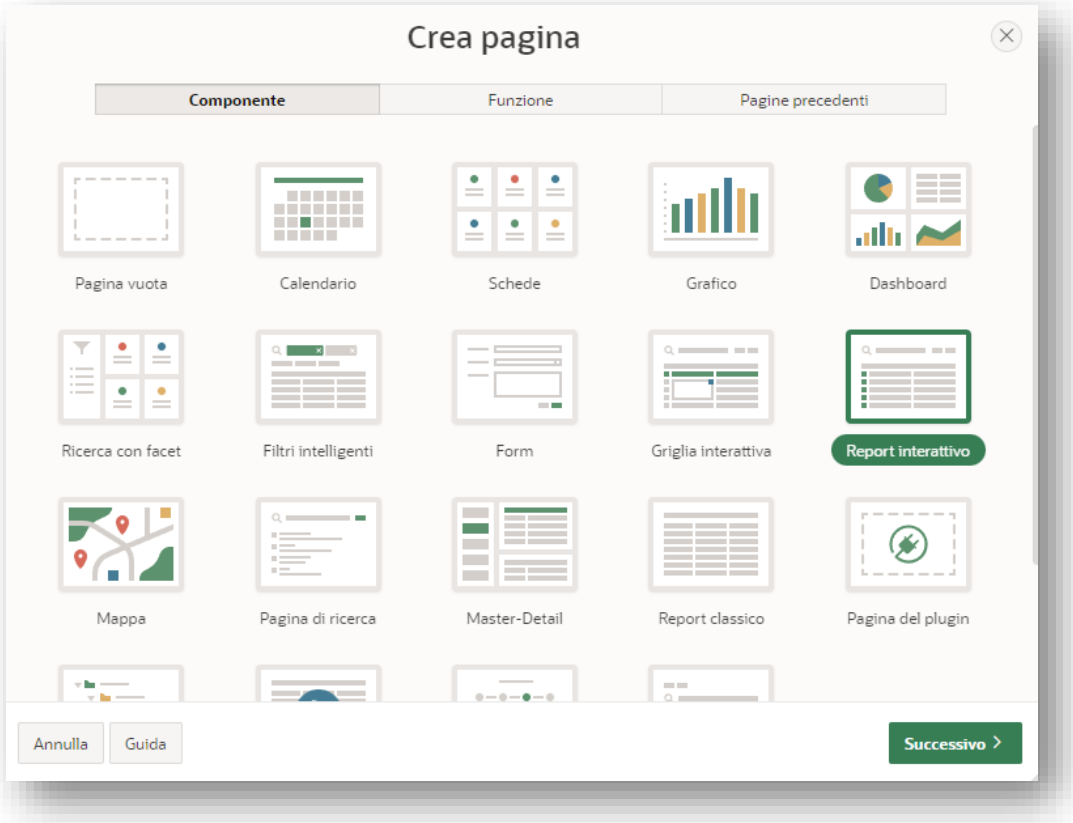
D05 - Dipendente Attività

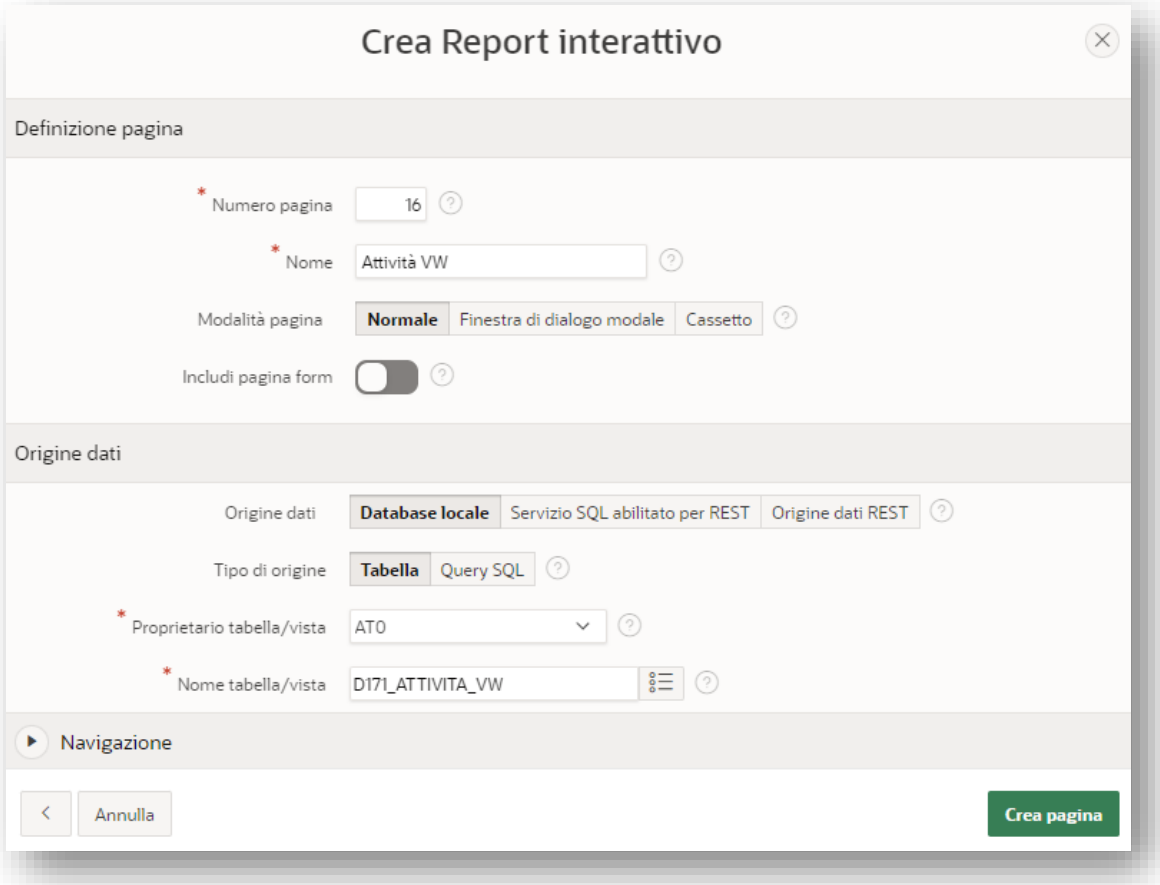
```
  select to_char(data,'YYYY')anno,
         sum(ore) tot_ore,
         sum(importo)importo
    from d05_attivita_vw
group by to_char(data,'YYYY')
```

L'alias nel GROUP BY non si ripete

```
   select to_char(data,'YYYY-MM')annomese,
          cliente,
          sum(ore) tot_ore,
          sum(importo)importo
     from d05_attivita_vw
 group by to_char(data,'YYYY-MM'),
          cliente
```

D05 - Dipendente Attività





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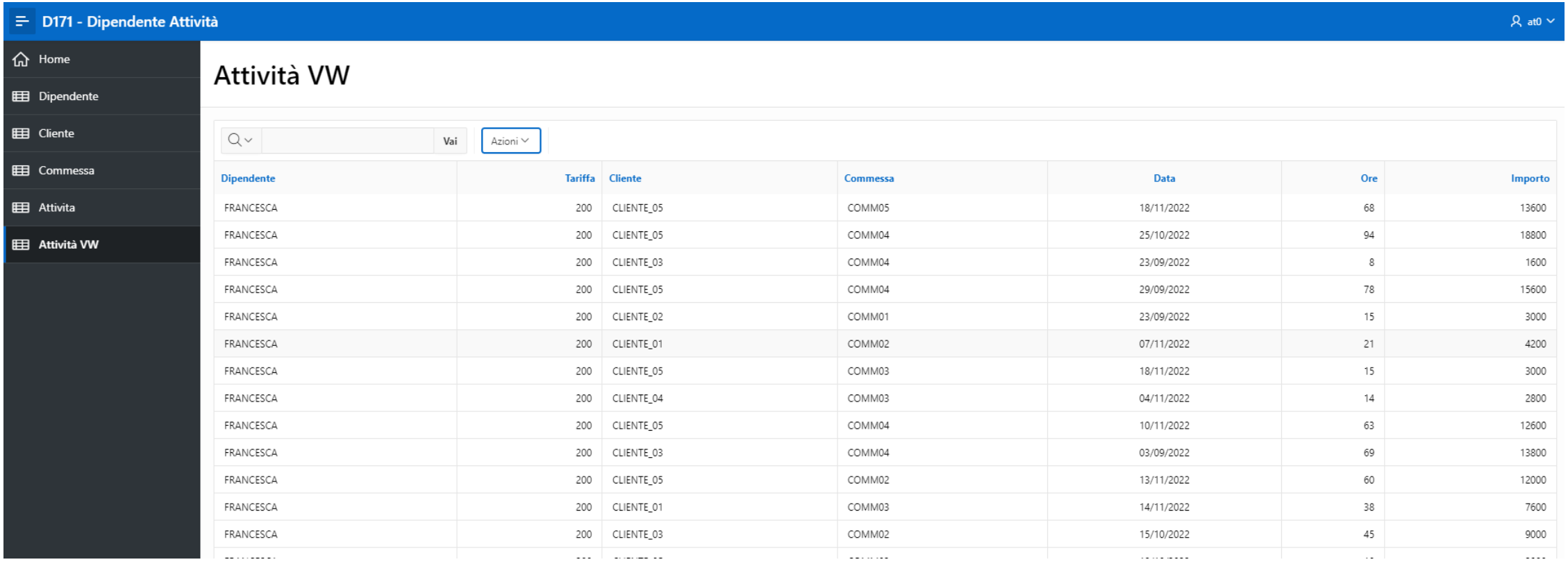
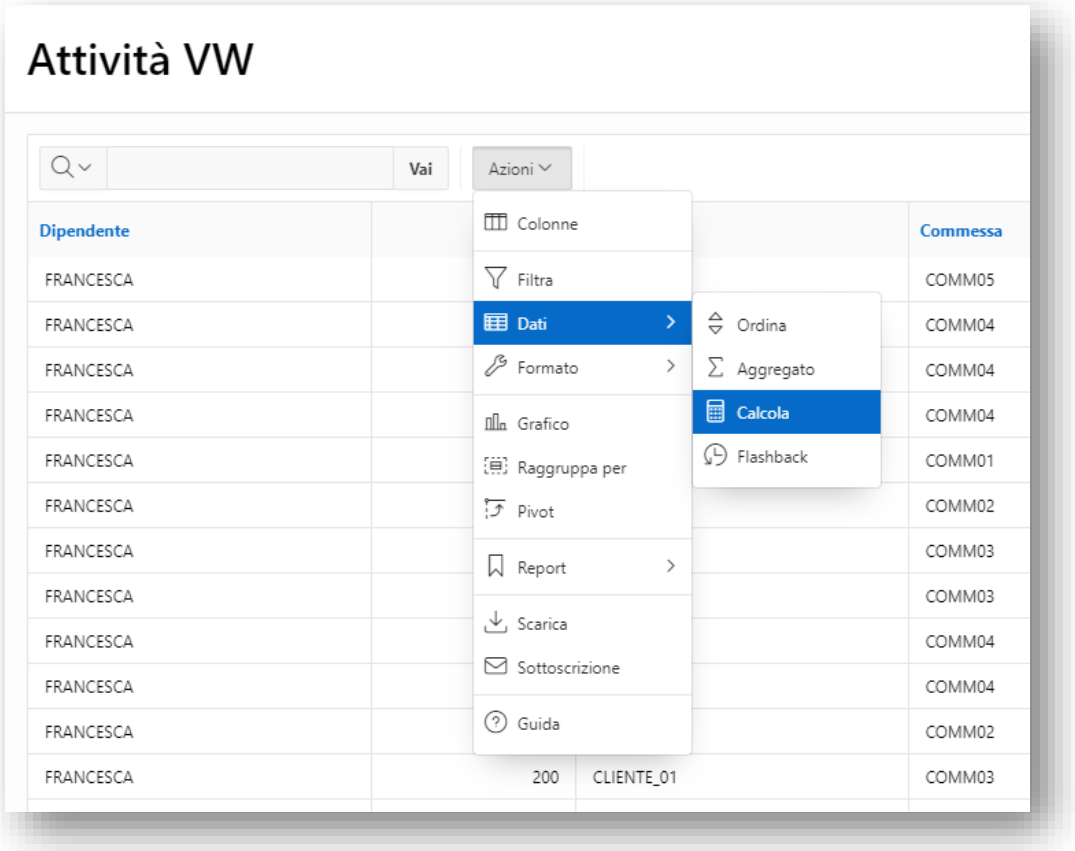
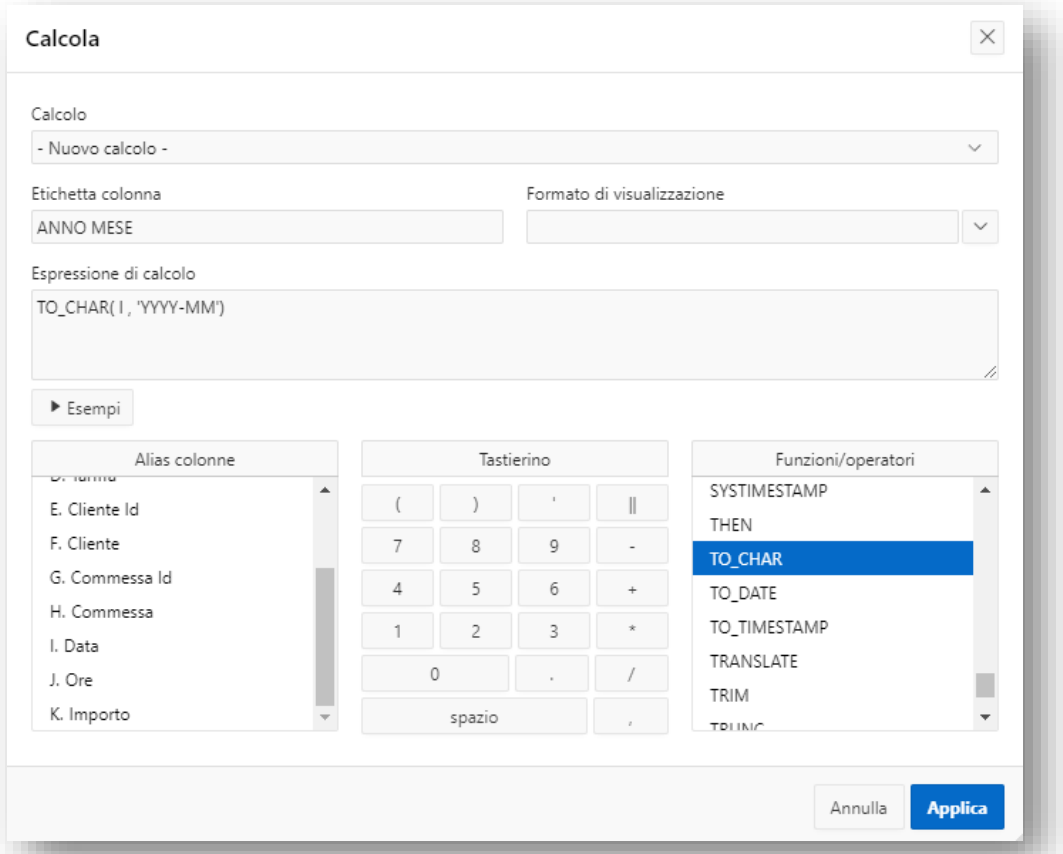
D05 - Dipendente Attività



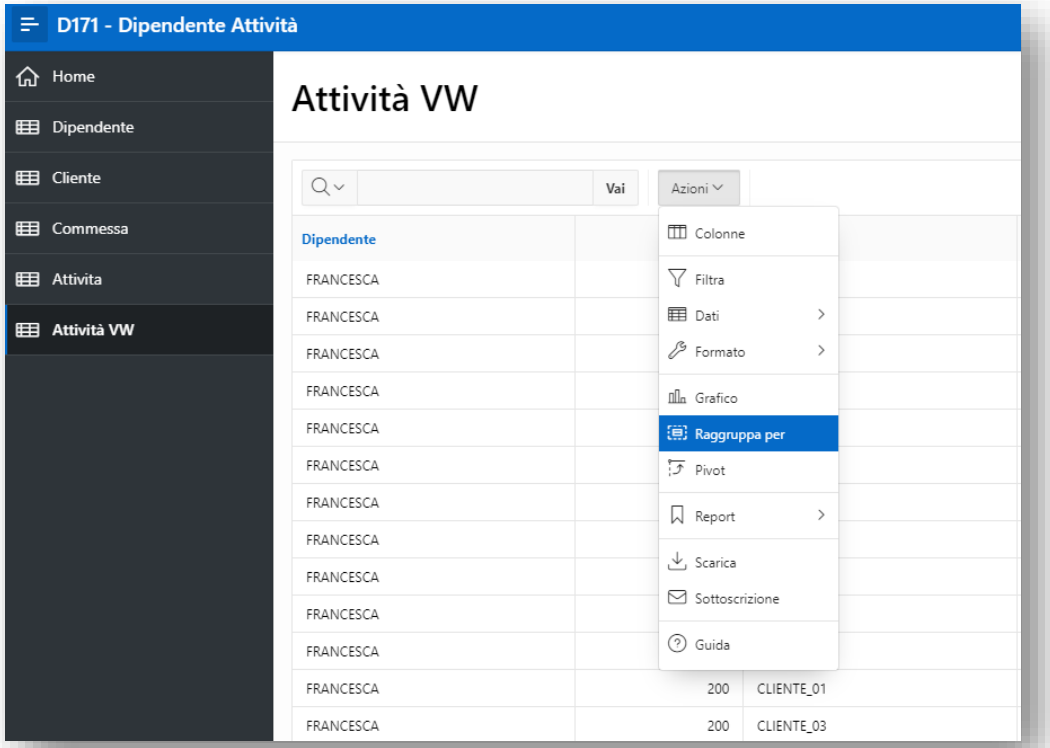
Dipendente	Tariffa	Cliente	Commessa	Data	Ore	Importo
FRANCESCA	200	CLIENTE_05	COMM05	18/11/2022	68	13600
FRANCESCA	200	CLIENTE_05	COMM04	25/10/2022	94	18800
FRANCESCA	200	CLIENTE_03	COMM04	23/09/2022	8	1600
FRANCESCA	200	CLIENTE_05	COMM04	29/09/2022	78	15600
FRANCESCA	200	CLIENTE_02	COMM01	23/09/2022	15	3000
FRANCESCA	200	CLIENTE_01	COMM02	07/11/2022	21	4200
FRANCESCA	200	CLIENTE_05	COMM03	18/11/2022	15	3000
FRANCESCA	200	CLIENTE_04	COMM03	04/11/2022	14	2800
FRANCESCA	200	CLIENTE_05	COMM04	10/11/2022	63	12600
FRANCESCA	200	CLIENTE_03	COMM04	03/09/2022	69	13800
FRANCESCA	200	CLIENTE_05	COMM02	13/11/2022	60	12000
FRANCESCA	200	CLIENTE_01	COMM03	14/11/2022	38	7600
FRANCESCA	200	CLIENTE_03	COMM02	15/10/2022	45	9000

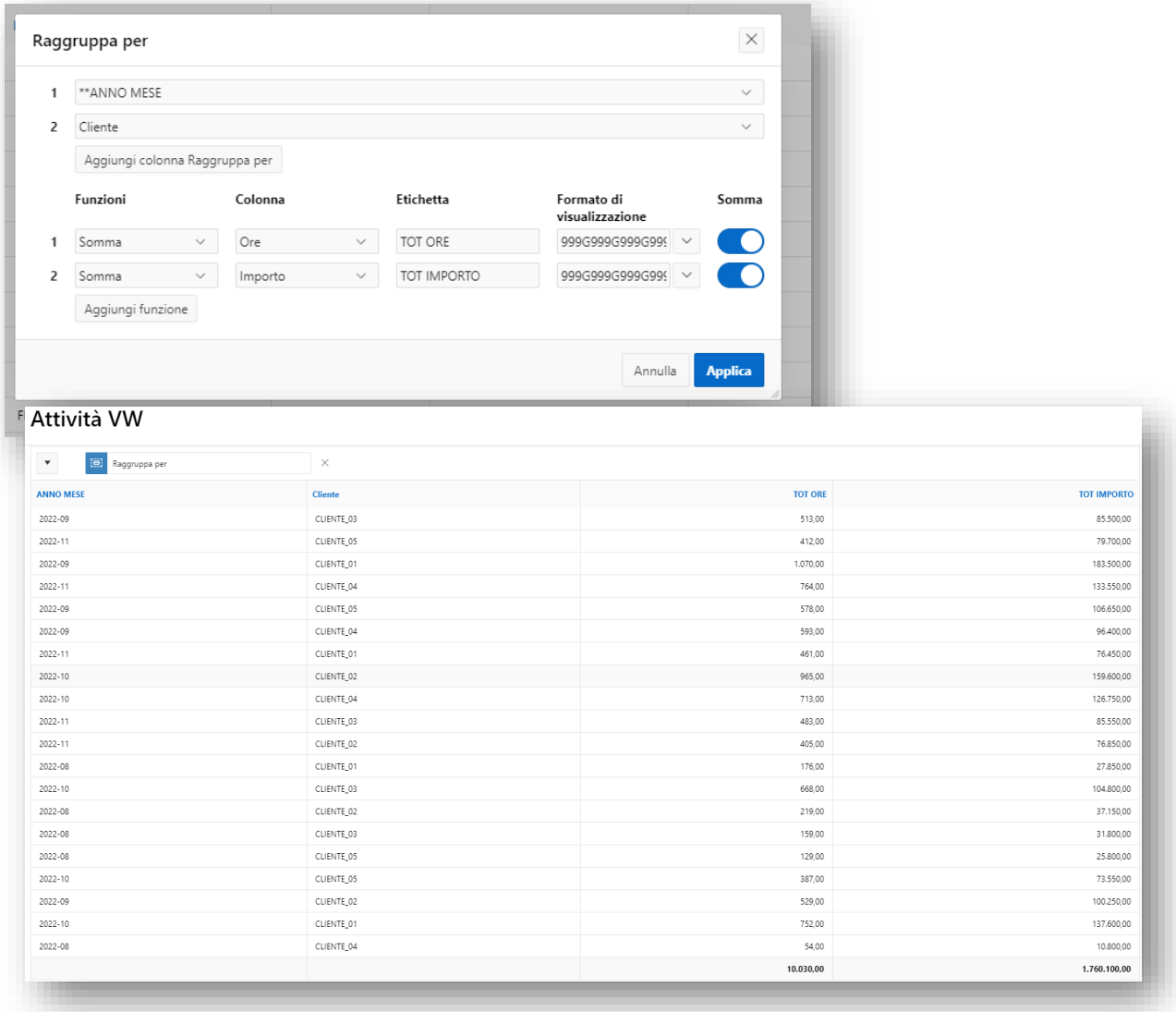
D05 - Dipendente Attività





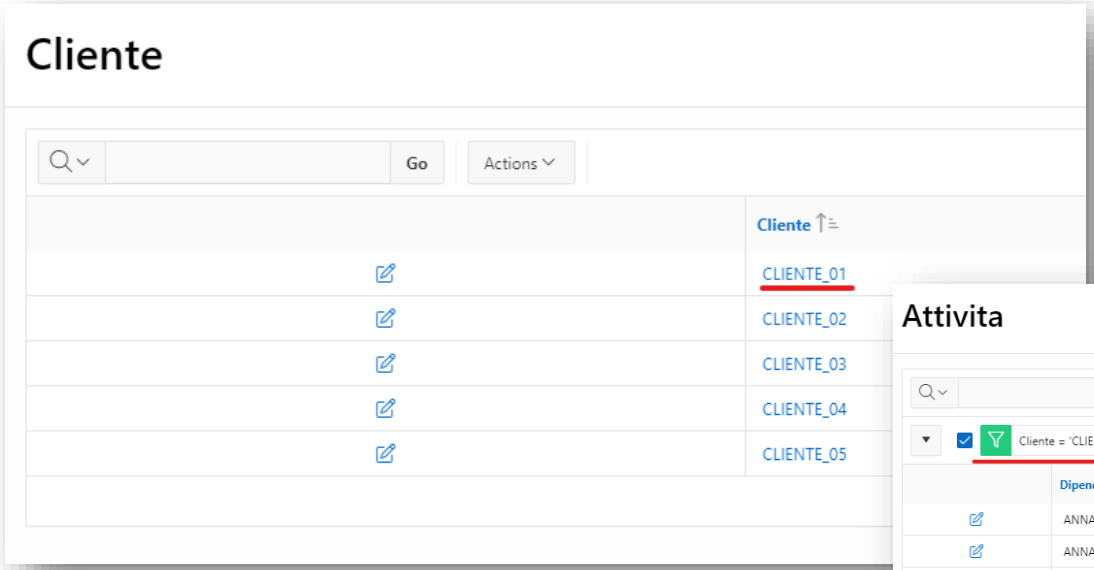
D05 - Dipendente Attività

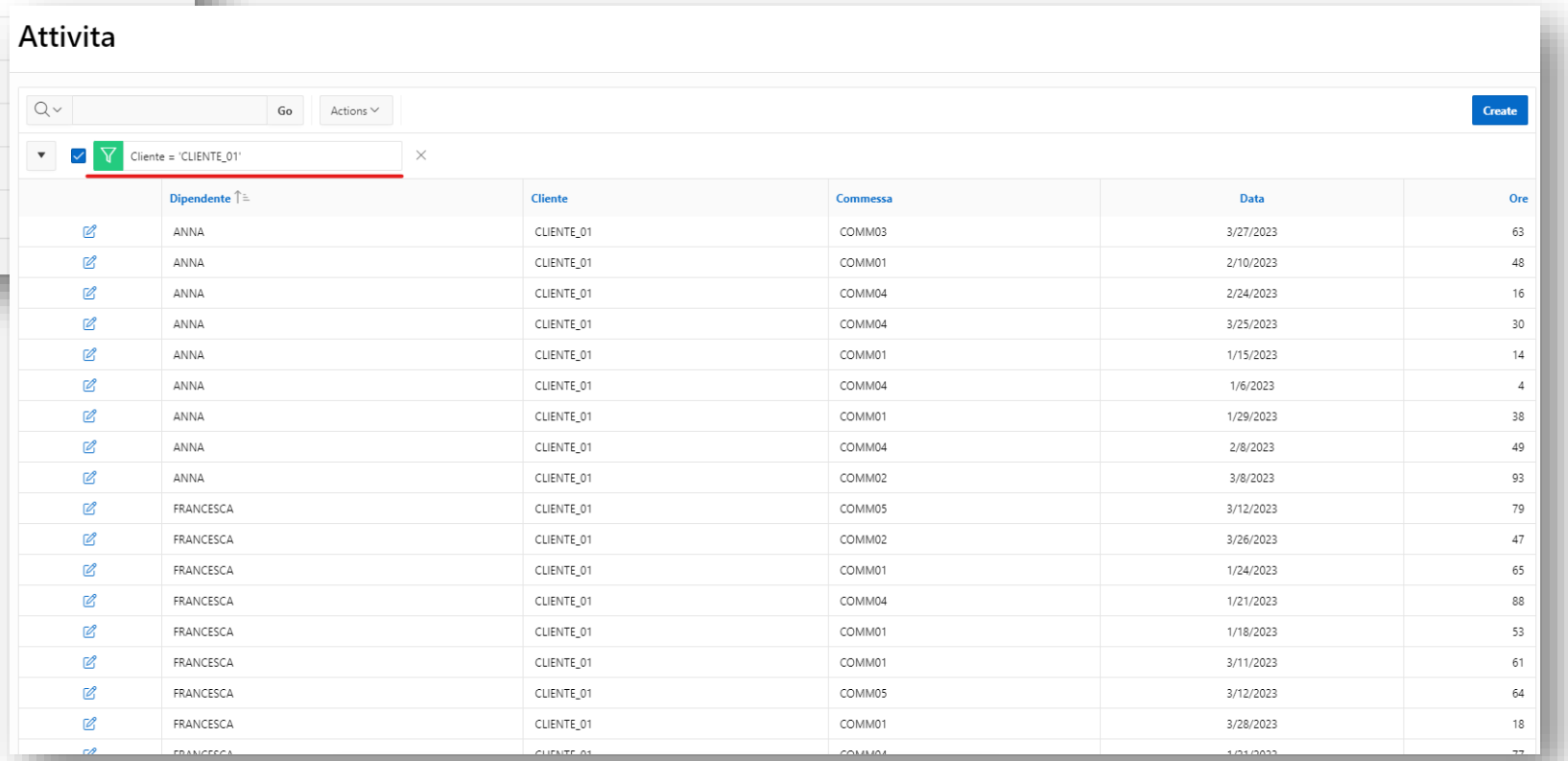




Filtri URL

D05 - Dipendente Attività





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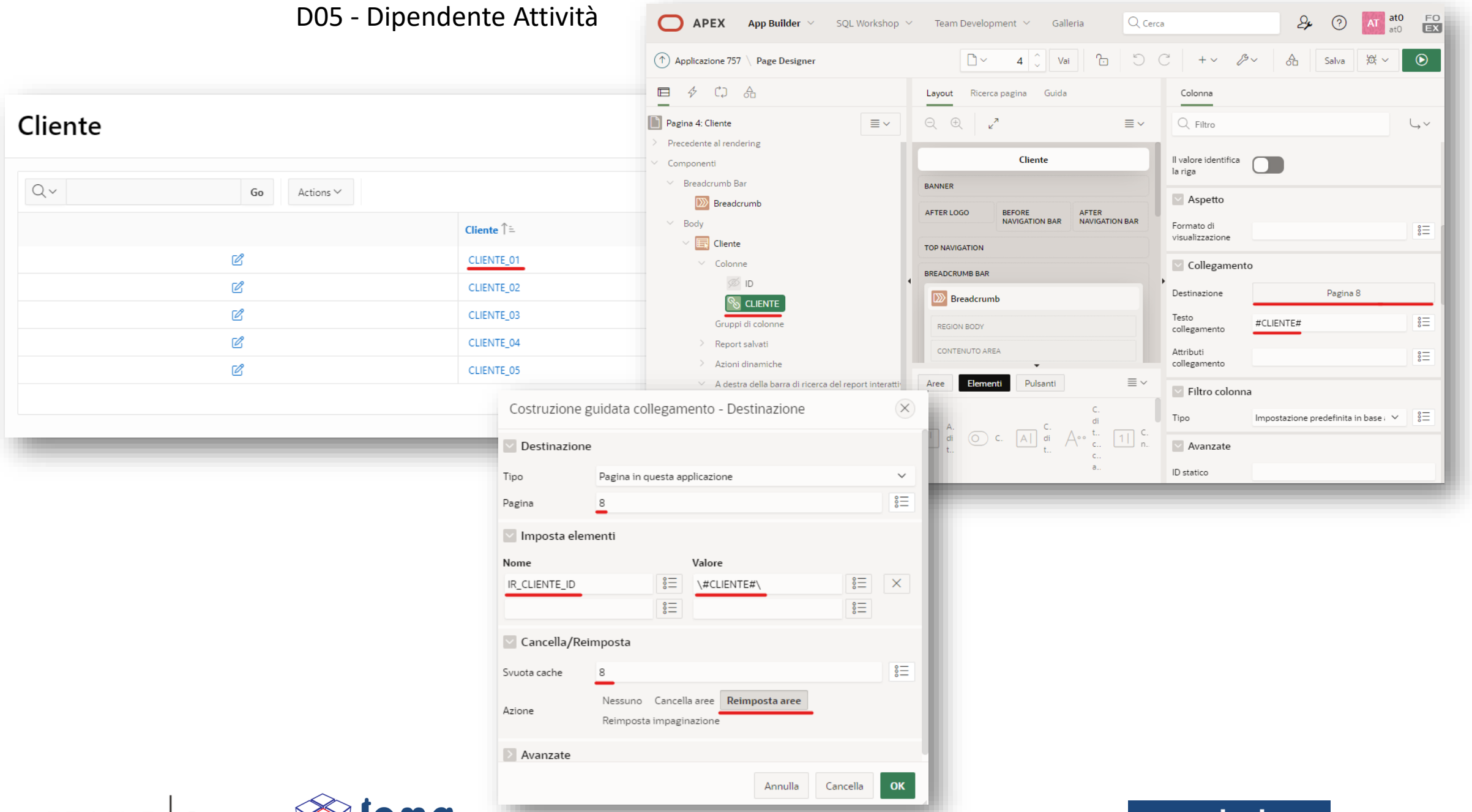

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IR[region static ID]<operator>_<target column alias>

IR[emp]EQ_NAME IREQ_CITY

Function	Meaning
IREQ_<COLUMN_NAME>	Equals
IR_<COLUMN_NAME >	Same as IREQ
LT_<COLUMN_NAME >	Less than
IRLTE_<COLUMN_NAME >	Less than or equal to
IRGT_<COLUMN_NAME >	Greater then
IRGTE_<COLUMN_NAME >	Greater then or equal to
IRLIKE_<COLUMN_NAME >	Like operator
IRN_<COLUMN_NAME >	Is Null
IRNN_<COLUMN_NAME >	Is not Null
IRC_<COLUMN_NAME >	Contains
IRNC_<COLUMN_NAME >	Not Contains

Main Function Maintains:	CR (CIR) Clears Interactive Report	RR (RIR) Resets Interactive Report	RP Resets interactive report pagination.
– Column visibility	YES*	NO	
– Primary Report	NO	YES	
– Filters	NO	NO	
– Breakpoints	NO	NO	
– Pagination	NO	NO	
– Sort	YES	NO	
– Highlight	NO	NO	
– Computation	NO	NO	
– Aggregate	NO	NO	
– Chart	NO	NO	
– Group by	NO	NO	

* Please note that when a CIR has been given, the columns displayed are still the columns of the primary report, but 'stripped'. But if you alter the shown columns as a user it will display these columns.

C = Contains
EQ = Equals (this is the default)
GTE = Greater than or equal to
GT = Greater Than
LIKE = SQL Like operator
LT = Less than
LTE = Less than or equal to
N = Null
NC = Not Contains
NEQ = Not Equals
NLIKE = Not Like
NN = Not Null
NIN = Not In (escape the comma separated values with a leading and trailing backslash, \)
IN = In (escape the comma separated values with a leading and trailing backslash, \)
ROWFILTER = Row Text Contains (this searches all columns displayed in the report with type STRING or NUMBER)

IG[region static ID]<operator>_<target column alias>

IG[emp]EQ_NAME IGEQ_CITY

Function	Meaning
IGEQ_<COLUMN_NAME>	Equals
IG_<COLUMN_NAME >	Same as IREQ
LT_<COLUMN_NAME >	Less than
IGLTE_<COLUMN_NAME >	Less than or equal to
IGGT_<COLUMN_NAME >	Greater then
IGGTE_<COLUMN_NAME >	Greater then or equal to
IGLIKE_<COLUMN_NAME >	Like operator
IGN_<COLUMN_NAME >	Is Null
IGNN_<COLUMN_NAME >	Is not Null
IGC_<COLUMN_NAME >	Contains
IGNC_<COLUMN_NAME >	Not Contains

Main Function Maintains:	CR Clears Interactive Report	RR Resets Interactive Report	RP Resets interactive report pagination.
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– Breakpoints	NO	NO	
– Pagination	NO	NO	
– Sort	YES	NO	
– Highlight	NO	NO	
– Computation	NO	NO	
– Aggregate	NO	NO	
– Chart	NO	NO	
– Group by	NO	NO	

* Please note that when a CIR has been given, the columns displayed are still the columns of the primary report, but 'stripped'. But if you alter the shown columns as a user it will display these columns.

C = Contains
EQ = Equals (this is the default)
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Template Directives

Template Directives

- **Report Classico**
- **Report Interattivo**
- **Griglia Interattiva**
- **Schede**
- **Email templates**

- **Direttiva IF**
  - Mostra o meno il testo in base al valore di un elemento o colonna
- **Direttiva CASE WHEN**
  - Mostra o meno il testo in base a più condizioni sul valore di un elemento o colonna.
- **Direttiva LOOP**
  - Usa un loop per ripetere il testo per ogni element o Colonna di tipo multivalore (con un separatore di carattere)

Template Directives

```
[!] E' una negazione

{if [!]NAME/}
     testo1
{elseif [!]NAME2/}
     testo2
{else/}
     altro testo
{endif/}
```

```
{if DESCRIPTION/}
      &DESCRIPTION.
{else/}
      Nessuna Descrizione
{endif/}
```

&DESCRIPTION. o **#DESCRIPTION#**
In base all'area

Template Directives

```
{case NAME/}
{when valore1/}
  testo1
{when valore2/}
  testo2
{otherwise/}
  altro testo
{endcase/}
```

```
{case JOB/}
{when SALESMAN/}
     &SAL. (&COMM.)
{when PRESIDENT/}
     --
{otherwise/}
     &SAL.
{endcase/}
```

Template Directives

```
{loop ["SEP"] NAME/}
   testo
{endloop/}
```

```
<ul>
  {loop "," TAGS/}
    <li>&APEX$I. - &APEX$ITEM.</li>
  {endloop/}
</ul>
```

- APEX$ITEM
  - Valore dell'element corrente nella lista
- APEX$I
  - Posizione dell'element corrente nella lista

D05 - File

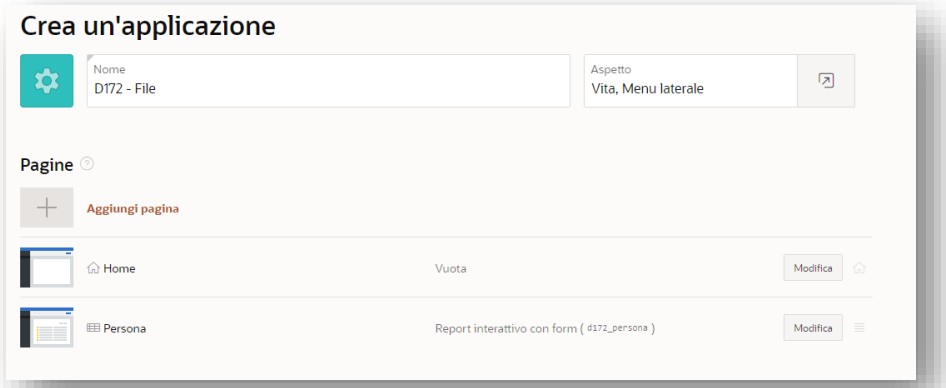
D05 - File

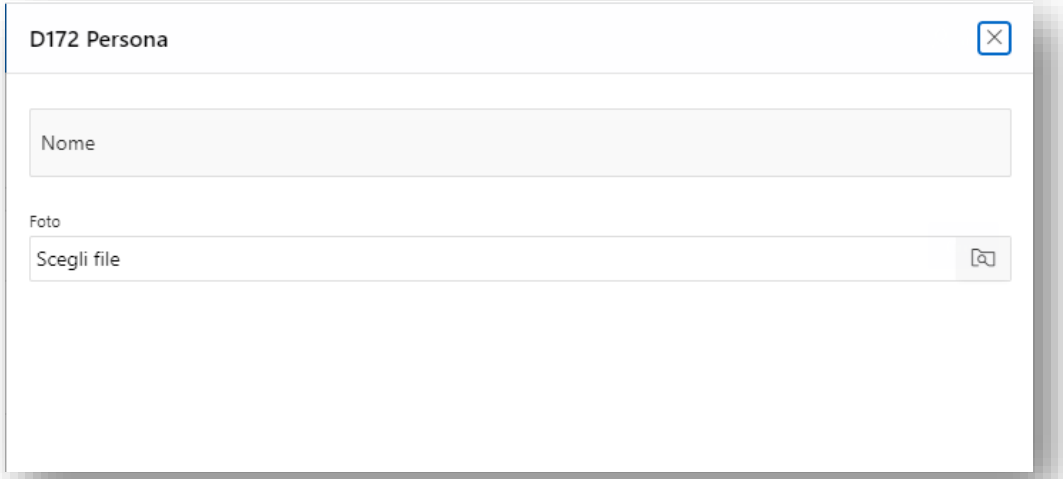
Quick SQL

```
1  persona
2    nome vc20
3    foto file
4
5  #prefix:d172
6
```

SQL — Impostazioni — Scarica — Salva scrip

```
1  -- create tables
2  create table d172_persona (
3      id                          number generated by default on null as identity
4                                  constraint d172_persona_id_pk primary key,
5      nome                        varchar2(20 char),
6      foto                        blob,
7      foto_filename               varchar2(512 char),
8      foto_mimetype               varchar2(512 char),
9      foto_charset                varchar2(512 char),
10     foto_lastupd                date
11 )
12 ;
13
```





D05 - File

Quick SQL

```
persona
    nome vc20
    foto file

#prefix:d172
```

SQL — Impostazioni — Scarica — Salva scrip

```
-- create tables
create table d172_persona (
    id                          number generated by default on null as identity
                                constraint d172_persona_id_pk primary key,
    nome                        varchar2(20 char),
    foto                        blob,
    foto_filename               varchar2(512 char),
    foto_mimetype               varchar2(512 char),
    foto_charset                varchar2(512 char),
    foto_lastupd                date
)
;
```

Crea un'applicazione

Nome: D172 - File

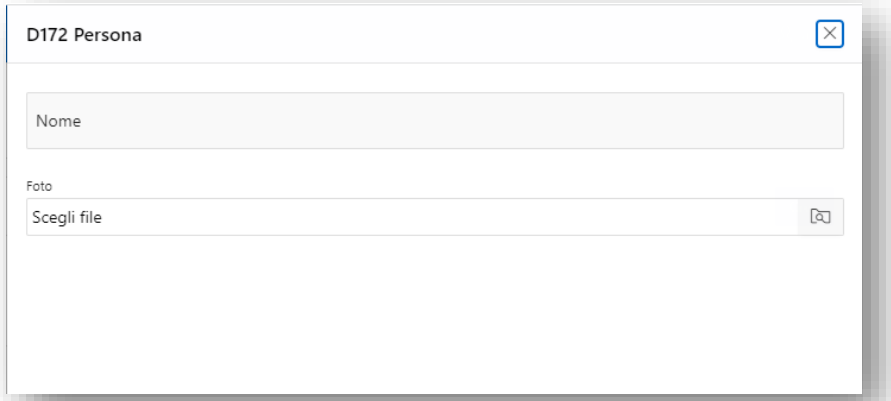
Aspetto: Vita, Menu laterale

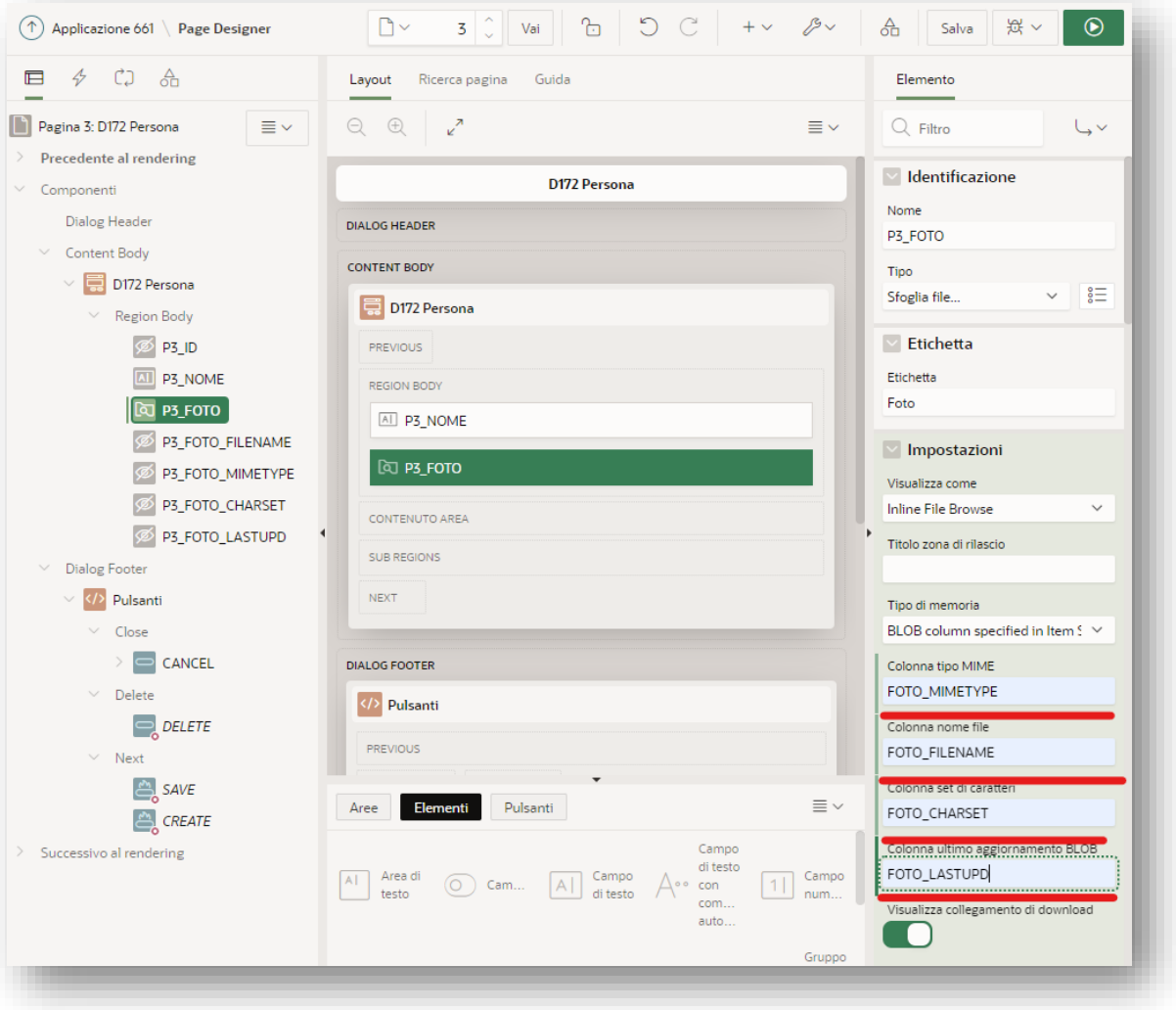
Pagine

Aggiungi pagina

Home	Vuota	Modifica
Persona	Report interattivo con form (d172_persona)	Modifica

D05 - File





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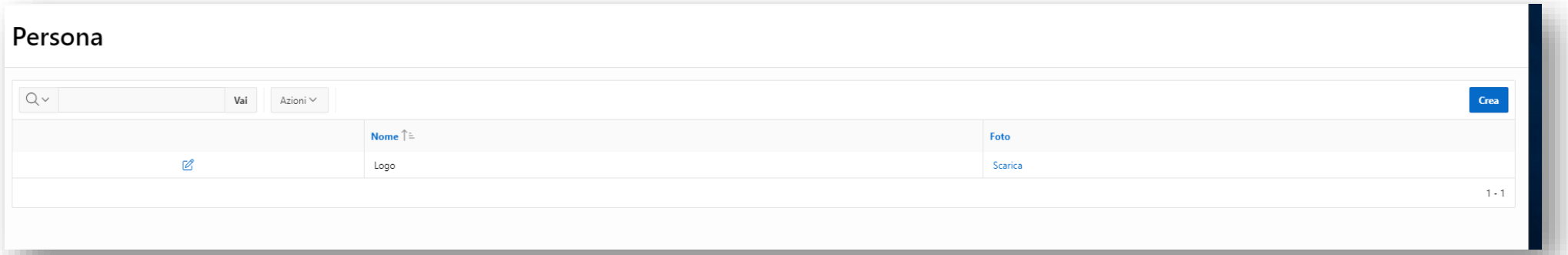
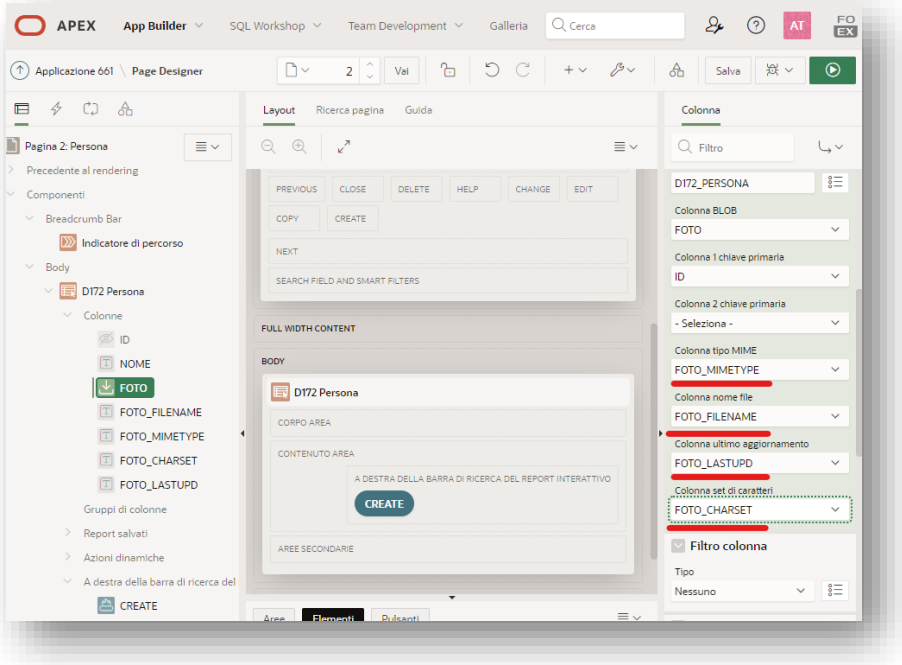
D05 - File




```
select "ID",
       "NOME",
       sys.dbms_lob.getlength("FOTO")"FOTO",
       "FOTO_FILENAME",
       "FOTO_MIMETYPE",
       "FOTO_CHARSET",
       "FOTO_LASTUPD"
  from "D05_PERSONA"
```