

Oracle Communication Descriptors

Introduction

Oracle RDBMS has a way to allow you to query databases in other environments through the use of communication descriptors.

Communication Descriptors are a great way to query multiple environments within a single statement. They're like a shortcut to another database instance.

Example

Consider the following example – a query to get a count of things from the same table in each of four environments – DEV, TEST, STAGING, and PROD:

```
SELECT 1 AS ORDINAL, 'DEV' AS ENVIRONMENT, COUNT(DEV.ID) AS THINGS
FROM ABC.ABC_THINGS DEV
GROUP BY 'DEV'
UNION
SELECT 2 AS ORDINAL, 'TEST' AS ENVIRONMENT, COUNT(TEST.ID) AS THINGS
FROM ABC.ABC_THINGS@TEST TEST
GROUP BY 'TEST'
UNION
SELECT 3 AS ORDINAL, 'STAGING' AS ENVIRONMENT, COUNT(STAGING.ID) AS THINGS
FROM ABC.ABC_THINGS@STAGING STAGING
GROUP BY 'STAGING'
UNION
SELECT 4 AS ORDINAL, 'PROD' AS ENVIRONMENT, COUNT(PROD.ID) AS THINGS
FROM ABC.ABC_THINGS@PROD PROD
GROUP BY 'PROD'
;
```

Result:

ORDINAL	ENVIRONMENT	THINGS
1	DEV	30471
2	TEST	29518
3	STAGING	46838
4	PROD	42765

Discussion

The query above returns a count of THINGS from four distinct environments. The query is comprised of a series of statements bound together through UNION keywords to provide a unified result.

The communication descriptors in each statement are appended by an at symbol ('@') following the database table name. There is no descriptor for the DEV statement (the first statement) because the entire query was run in the DEV environment. The second statement runs the same query against the TEST environment, the third statement runs the query against the STAGING environment, and the fourth runs the query against PROD.