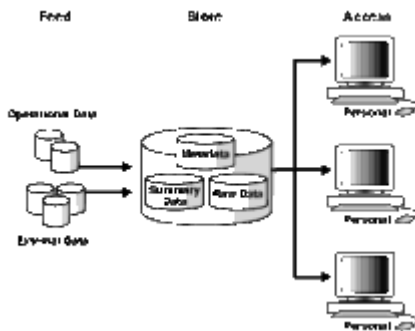


Oracle 18c Features :

In my previous articles, I have given the basic idea about the Oracle 18c database and its basic features and advantages. In this article, I will try to explain the advanced Oracle 18c Features ,which includes Data warehouse Features, Cloud Features and RMAN Features. As you, all know that Oracle 18c is world’s first autonomous database it has more automation features. The next decade will be the ‘Automation decade’ as all the old technologies come up with new automation techniques. Because of the automation feature, the oracle has changed the process of deployment as well as query processing techniques.

Data warehouse Features of Oracle 18c:

Simply the Data warehouse means the system, which is used for reporting purpose, as well as data analysis purpose where data is coming from multiple heterogeneous sources, which will store the historical data. In the world of analytics, the Data warehouse features are very important. Oracle 18c uses the Database as a Service (Oracle Cloud DBaaS) and it has many cloud features, which are useful in Data warehouse implementation. Oracle 18c come up with very useful features, which are used to enhance the Data warehouse:



1.Infrastructure of Database:

The infrastructure of database is very important for implementing the Data warehouse. The oracle 18c has provided Autonomous health framework to improve the database infrastructure.

2.Change in Partitioning strategy :

The partitioning strategy of table has changed in Oracle 18c. In Oracle 18c the partitioning will be implemented by cloud services and conversion of partitioning will be done by online method.DBAs need not create the manual partitions on tables.

3.Change in SQL Language Processing :

The data processing is very important factor of any database management system. SQL language data processing has changed drastically in Oracle 18c as compare to Oracle 12c. The query processing is enhanced as compare to Oracle 12c.

4.In-Memory :

In Oracle 12c we need to define In-memory tables manually but in Oracle 18c the artificial intelligence engine will process the query and defines the in-memory table automatically. For Data warehouse oracle 18c uses In-Memory Dynamic Scans and In-Memory optimized.

In short In-Memory is managed automatically in Oracle 18c.

5.Optimizer features :

In Oracle 18c cost based optimizer is used but the artificial engine manages the task of optimizer automatically. All Inline external tables and polymorphic table functions will be managed automatically in Oracle 18c.

Oracle RAC New Features :

Oracle Real Application Cluster (RAC) will be improved as compare to Oracle 12c. In Oracle 18c the patching using RAC will be done online in specified SLA. This is most powerful and reliable platform for patching. There are following 3 main features of Oracle RAC :

1.Rolling patches :

In Rolling Patching, each node is shut down, the patch is applied, then each node is brought back up again. This is done node by node separately until all nodes in Oracle RAC are patched. This is the most efficient mode of applying an interim patch to an Oracle RAC setup because this results in no downtime. So in Oracle 18c most of the patches are rolling patches.

2.Rolling upgrades :

All upgrades are done by Rolling method so that there is no need to take downtime. Because of this method there is no need to take downtime of server or the downtime is minimum for deployments.

3.DSC :

DSC stands for Domain Services Cluster Management Service (DSC) which is working with machine learning.



Oracle RMAN New Features :

Oracle RMAN stands for Oracle Recovery Manager. The data recovery is very important factor of any database management system. The RMAN is a tool which is used by DBA in day to day life to recover the data. RMAN is used for doing following tasks :

a. Cloning and platform migration

b. For Data Guard Operations

c. To take a backup of disk

d. To take the third party backup

e. Backing up Cloud storage.

In Oracle 18c the new RMAN features are included just like :

1. Refreshing Database files :

The data guard features has enhanced in oracle 18c version. new **RECOVER STANDBY DATABASE FROM SERVICE** will be used in oracle 18c. In other versions to refresh all files DBA need to perform multiple command operation but in 18c in only one refresh command it will refresh all control files and data files.

2. Latest Duplication Features :

In Oracle 18c Latest duplication features has been added. The duplication of PDB to different CDBs are now possible. User can duplicate database using following command :

DUPLICATE PLUGGABLE DATABASE <PDBNAME> to <CDBNAME> FROM ACTIVE DATABASE;

3. Multitenant Database Enhancements :

User can restore a PDB from backup which is taken by non-Multitenant. User can export PDB metadata in to different CDB backups.

4.Active Cloud Support :

User can get the active cloud support at any time as the data is stored in to cloud.

These are above some very important Oracle 18c Features.Hope you like this article on Oracle 18c Features.