

Overview of Oracle Database

By Ahmed Baraka

Objectives

In this lecture, you will learn how to perform the following:

- List Oracle database releases
- Describe the difference between Long Term Support Releases and Innovation Releases
- List and describe the Oracle Database Cloud Services
- Describe Oracle database editions
- Understand Oracle Database License options



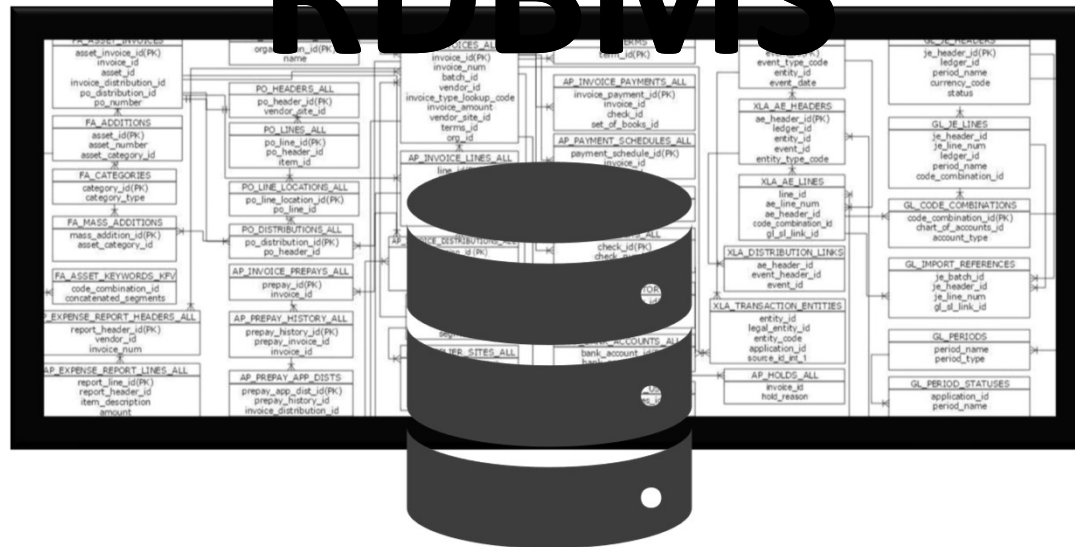
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What is Oracle Database?

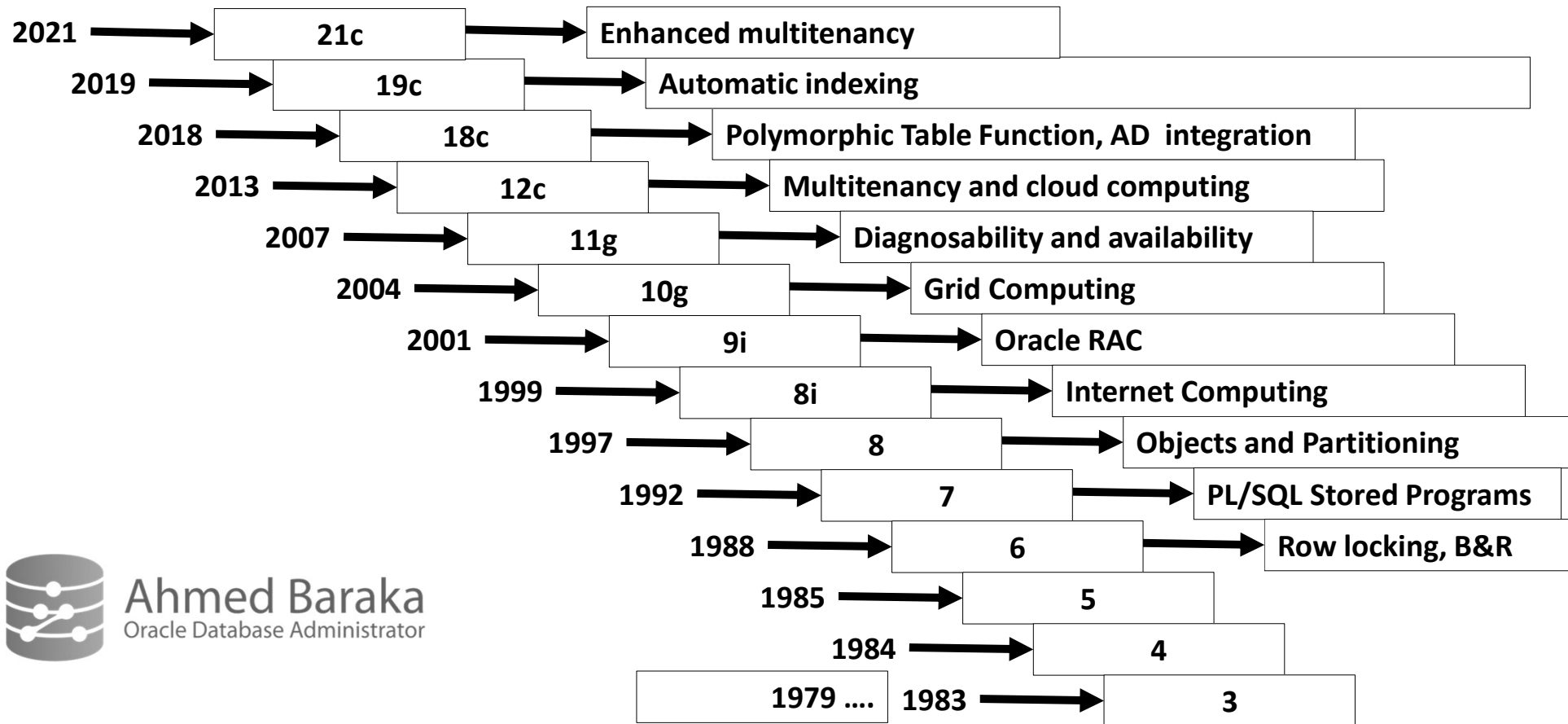


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RDBMS



Oracle Database Release History



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Oracle Database Release Types

- **Long Term Support Release**

- 5 years of Premier support followed by 3 years of Extended Support
- Recommended for production databases
- Currently is 19c (PS ends April 30, 2024)
- The next one is scheduled to be 23c

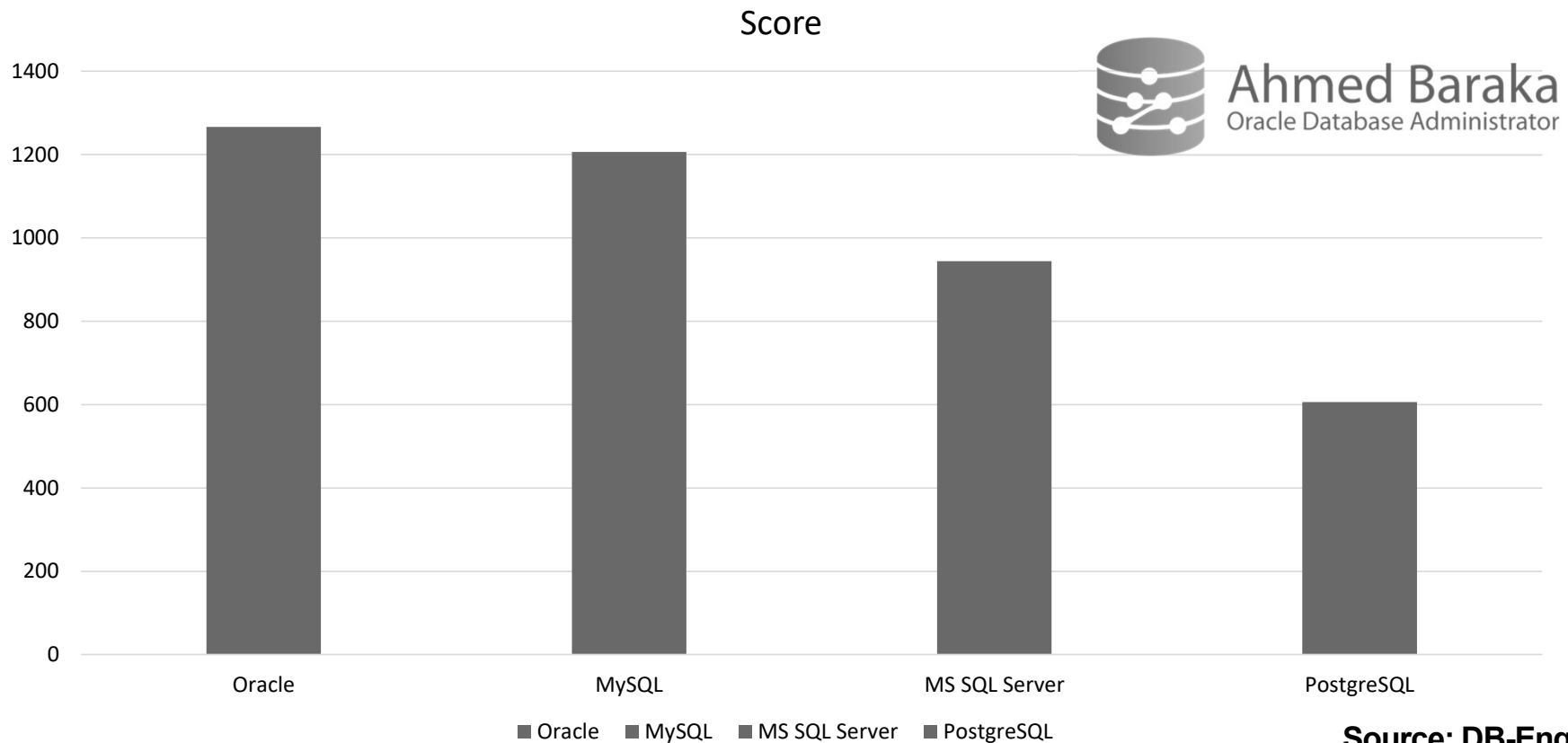
- **Innovation Release**

- 2 year of Premier Support, no Extended Support
- Recommended for studying the new features in development environments
- Examples: 12c, 18c, and 21c



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The Most Widely Used RDBMS up to January 2022



Oracle Database Cloud Services



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Autonomous



Autonomous
(Dedicated)



Autonomous
(Shared)

Co-Managed (DB Systems)



Exadata
Cloud Service
(ExaCS)



Bare
Metal



Virtual
Machine

User Managed



Compute
/Storage

Oracle Database Cloud Services

- **User Manager:** client is responsible for updating the OS, installing, upgrading, and patching Oracle database software.
- **Co-Managed:** Oracle database software comes pre-installed in the machines. Oracle provides tools to facilitate taking database backups, patching database software, upgrading database software, and providing disaster recovery.
- **Autonomous:** fully automated database service that uses machine-learning (ML) for automatically tuning, scaling, and patching Oracle databases.



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Oracle Database 19c Editions (On-premises)

Edition	Main Usage and Notes	RAC
Standard Edition Two SE2	Department level database with limited features 2 Limit socket is applied 16 CPU threads per database	Yes
Enterprise Edition EE	Full features	Yes
Personal Edition PE	Single-user that is compatible with SE2 and EE Available in Linux and Windows only You cannot use RAC or Management Pack	No
Express Edition	Most Oracle EE features for free Max: 12 GB user data, 2GB DB RAM, 2 CPU threads	No

- For more details, refer to the [Database Licensing Information User Manual](#)



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Oracle Database Cloud Service Editions

Edition	Main Usage and Notes	RAC
Service Standard Edition DBCS SE	Includes Oracle Database Standard Edition 2 software.	No
Enterprise Edition DBCS EE	Includes Oracle Database EE software.	No
Enterprise Edition - High Performance DBCS EE-HP	Includes Oracle Database EE software plus many Oracle Database options and Oracle management packs	No
Enterprise Edition - Extreme Performance DBCS EE-EP	Includes Oracle Database EE software plus all Oracle Database options and Oracle management packs that are appropriate for use in Oracle Database Cloud Service	Yes

- For more details, refer to the [Database Licensing Information User Manual](#)



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Oracle Database Licenses



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Database Products	Named User Plus	Software Update License & Support	Processor License	Software Update License & Support
Oracle Database				
Standard Edition 2	3500	77.00	17.000	3.800.00
Enterprise Edition	9500	209.00	47.000	10.400.00
Personal Edition	4000	101.20	-	-
Mobile Server	-	-	25.000	5.000.00
NoSQL Database Enterprise Edition	2000	44	10.000	2.200.00
Enterprise Edition Options:				
Multitenant	3500	77.00	17.000	3.800.00
Real Application Clusters	4000	101.20	25.000	5.000.00
Real Application Clusters One Node	2000	44.00	10.000	2.200.00
Active Data Guard	2000	90.00	11.000	2.500.00
Partitioning	2000	90.00	11.000	2.500.00
Real Application Testing	2000	90.00	11.000	2.500.00
Advanced Compression	2000	90.00	11.000	2.500.00
Advanced Security	3000	66.00	10.000	3.300.00
Label Security	2000	90.00	11.000	2.500.00
Database Vault	2000	90.00	11.000	2.500.00
OLAP	4000	101.20	25.000	5.000.00
TimesTen Application-Tier Database Cache	4000	101.20	25.000	5.000.00
Database In-Memory	4000	101.20	25.000	5.000.00
Database Enterprise Management				
Diagnostics Pack	1000	33.00	7.000	1.600.00
Tuning Pack	1000	33.00	5.000	1.100.00
Database Lifecycle Management Pack	2400	52.00	12.000	2.640.00
Data Masking and Subsetting Pack	2000	90.00	11.000	2.500.00
Cloud Management Pack for Oracle Database	1000	33.00	7.000	1.600.00

Oracle Database Support

- Free for the first year after buying the license
- Payable on yearly basis afterwards
- Oracle support benefits:
 - Resolving technical issues and answer technical questions
 - Obtain patches
 - Entitled to upgrade the database to the most recent release



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Summary

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