Oracle News: 19c on ARM chips, Exadata shifts wholly to AMD, Alma Linux on Ampere in OCI

Description

Oracle 19c available on ARM chits

- **Oracle announced on 28th June 2023 that**
  - Oracle 19c Database Enterprise Edition is now certified & available on ARM architecture
  - Available for both on-premise & cloud deployments
- **On OCI**
  - Customers can subscribe to Oracle Database Service on Oracle Cloud Infrastructure (OCI) using AmpereÂ® AltraÂ® processor (OCI Ampere A1) compute instances
- **Licensing Core Factor for ARM chips**
  - There are two core factors: 1 and 0.25
  - The Ampere Altra/AltraMax and AmpereOne chips will have a core factor of 0.25
  - This makes the Ampere chips competitive to be used by customers running Oracle database
  - All other ARM chips have a core factor of 1.
  - ARM chips have single-threaded cores

Oracle Exadata moves to AMD

- **Oracle announced on 22nd June 2023**
  - The availability of Exadata X10M
  - On Exadata X10M, Oracle has completely moved out from Intel to AMD for both on-premise & cloud service
  - Exadata X10M features fourth-generation AMD EPYCâ?¢ processors
  - 2 X 96 cores available on Exadata X10M
  - Oracle Linux KVM is the Hypervisor
- **Why has Oracle chosen AMD for Exadata? Higher database revenue?**
  - More cores per socket. This helps in better database performance
  - Higher database revenue â?? more cores translates to larger number of licenses.
- **Licensing of Database on Exadata X10M**
  - Capacity on Demand is available enabling scalable licensing
  - Core Factor of AMD EPYC processors is 0.5
  - A minimum of 2 X 14cores (hence 14 Processor licenses)
  - For a fully utilized Exadata X10M with all processors consumed (or with Capacity on Demand inactive), 96 Processor licenses will be required.

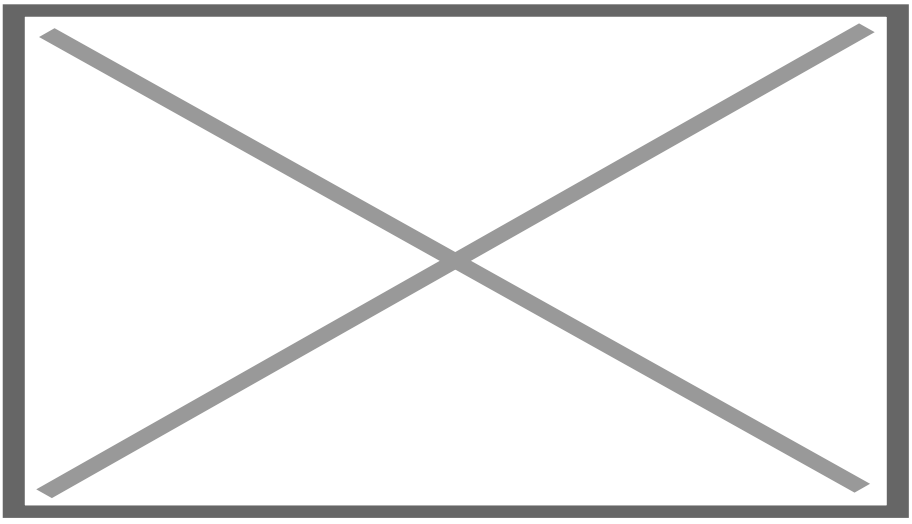
(Note: Oracle had tested out AMD on Exadata in OCI with a partial implementation in the 9XM iteration. But it was still a trial. With 10XM, they have completely ditched Intel and moved to AMD)

Alma Linux on OCI

- **Oracle announced 22nd May 2022**
  - Alma Linux available on Oracle Cloud Infrastructure
  - Almalinux OS Virtual Machines can be deployed on a Virtual Cloud Network
- **Why is this announcement important today (June 2023)**
  - The combination of multiple announcements make this important
    - Ampere is closely associated with Alma Linux
    - Ampere has been available on OCI since May 2022
    - Oracle 19c is now certified on Ampere servers

What is Oracleâ??s direction?

- **Larry Ellisonâ??s statements**
  - The old Intel X86 architecture, after many decades in the market,is reaching its limit.
  - Weâ??ve moved to a new architecture, and weâ??ve moved to new supplier.â• (on Ampereâ??s ARM chips & servers)
- **Oracle investment in Ampere**
  - Oracle has invested close to $1bn in Ampere
  - Oracle would not have certified 19c on Ampere if it was not technically ready. Oracleâ??s 19c availability on Ampere shows its is enterprise ready.
- **How does this affect Intel?**
  - Intel has been losing share to AMD in the server market (see graphic)
  - Oracleâ??s move to AMD for Exadata will give it a major push for running Oracle workloads on other AMD based servers.
  - Oracle certification of 19c on Ampere and ARM architecture opens up a larger battle for Intel
  - Oracle is not the only company that has brought ARM into the server space. AWS, Google and Azure have also debuted ARM chips on their clouds.



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