

SE round Table



Agenda

How to get it

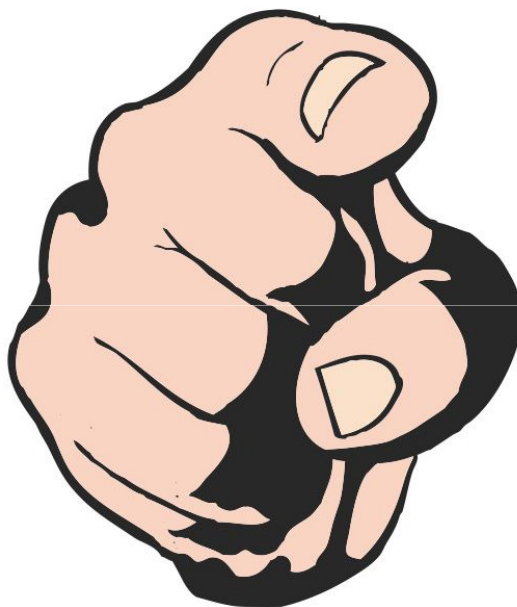
Why

Licensing

Use cases

What is missing

Do's and Don't



WE WANT YOU

From 12.1.0.2 onwards SE and EE are 2 different downloads ...








Oracle Database Software Downloads

You must accept the [OTN License Agreement](#) to download this software.








Accept License Agreement | Decline License Agreement

Oracle Database 12c Release 1

(12.1.0.2.0) - Enterprise Edition

 Microsoft Windows x64 (64-bit)	File 1 , File 2 (2.5 GB) See All
 Linux x86-64	File 1 , File 2 (2.5 GB) See All
 Oracle Solaris (SPARC systems, 64-bit)	File 1 , File 2 (2.6 GB) See All
 Oracle Solaris (x86 systems, 64-bit)	File 1 , File 2 (2.3 GB) See All
 HP-UX Itanium	File 1 , File 2 (3.1 GB) See All
 AIX (PPC64)	File 1 , File 2 (2.7 GB) See All
 zLinux64	File 1 , File 2 (2.3 GB) See All

(12.1.0.1.0) - Standard Edition, Standard Edition One, and Enterprise Edition

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- See All page above contains **unzip instructions** plus Database Client (32 and 64-bit), Gateways, Grid Infrastructure, more

Upgrade your Database - NOW!

Ease your Oracle Database upgrades and migrations - Best Practices, Workshops, Projects - and something about the pleasures of traveling

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Recent Posts

New in Oracle 12c:
_optimizer_gather_stats_on_load

OOW 2015 Sessions and Labs - Oracle Open World

Some Seoul Impressions - 09/2015

No OS Authentication? datapatch will fail in every upgrade

Upcoming Upgrade Workshops in Prague and Bucharest

New version of the UPGRADE 12c SLIDE DECK available

DBUA displays wrong RMAN backup for restore - Oracle 12.1.0.2

SE2 - Some questions, some answers ...

Script: Is your database ready for Oracle GoldenGate?

SQL Plan Management - Known Issues in Oracle 12.1.0.2

« [Upgrade downtime...](#) | [Main](#) | [No patches anymore...](#) »

Oracle Database 12.1.0.2 Standard Edition (SE2) available for download

By Mike Dietrich-Oracle on Sep 01, 2015

Finally ...

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Some information is already available in the [Oracle Database Licensing Information](#). And you'll find more here: <https://www.oracle.com/database/standard-edition-two/index.html>

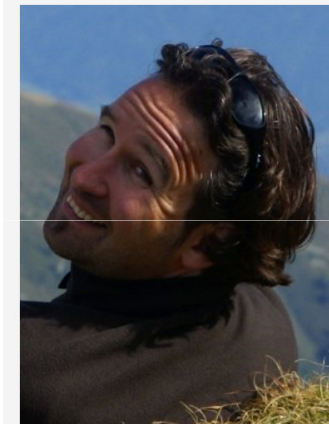
Quoting from the pricing document:

<http://www.oracle.com/us/corporate/pricing/databaselicencing-070584.pdf>

"Oracle Database Standard Edition 2 may only be licensed on servers that have a maximum capacity of 2 sockets. When used with Oracle Real Application Clusters, Oracle Database Standard Edition 2 may only be licensed on a maximum of 2 one-socket servers. In addition, notwithstanding any provision in Your Oracle license agreement to the contrary, each Oracle Database Standard Edition 2 database may use a maximum of 16 CPU threads at any time. When used with Oracle Real Application Clusters, each Oracle Database Standard Edition 2 database may use a maximum of 8 CPU threads per instance at any time. The minimums when licensing by Named User Plus (NUP) metric are 10 NUP licenses per server."



About



Mike Dietrich

Master Product Manager - Database Upgrade & Migrations - Oracle

Based in Germany. Interlink between customers/partners and the Upgrade Development. Running workshops between Arctic and Antarctica. Assisting customers in their reference projects onsite and remotely. Connect via:



WHY

- Promote Oracle Database

Oracle is
Affordable

- Show that SE is a cost effective reliable solution

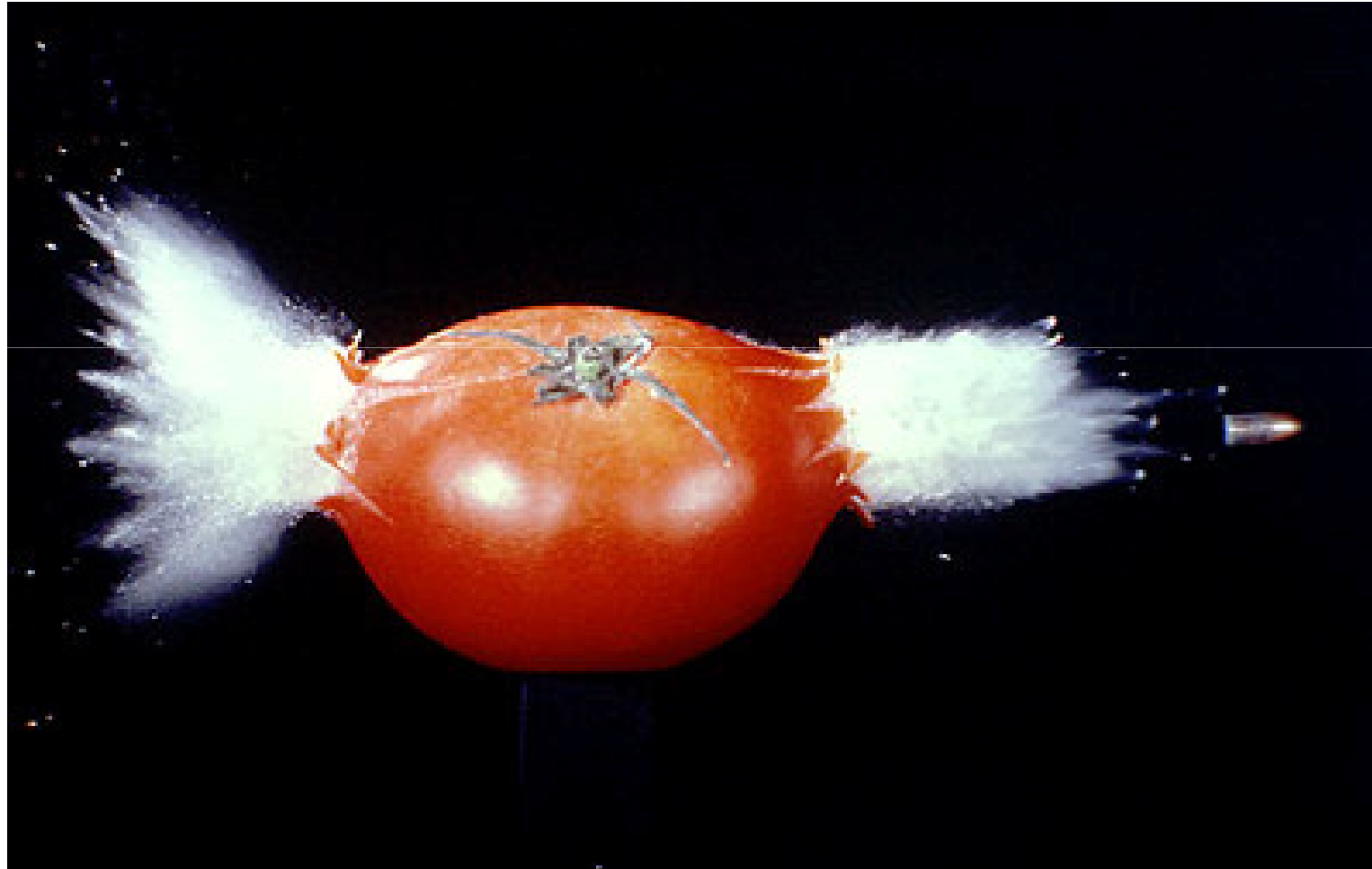
- Some missing feature can be added



- Cheap Supported alternative to OpenSource Db' s

- Prepare myself for customers with SE ;-)

- The whole core thing is Exploding...





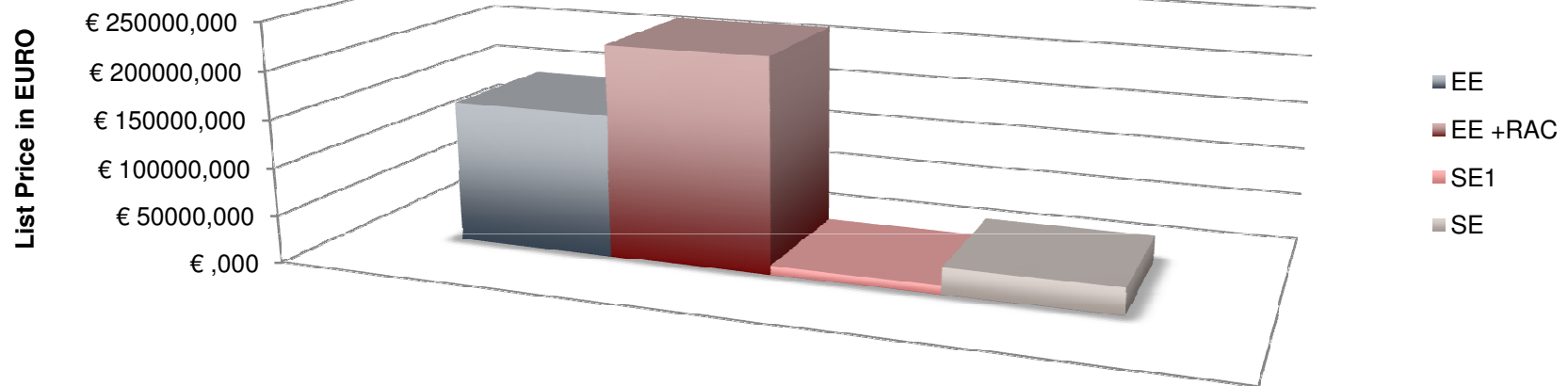
- The same great database as EE although some features removed (see later)

- RAC included at no extra cost for 4 sockets in total

- Full 3 tier Rapid Application Development environment

-
- Oracle Warehouse Builder (in 11g) not anymore there in 12c

2 Socket * 4 core Intel Xeon system



License	List per Unit	Nr License	Total Price
Oracle EE	€ 37.492,00	4	€ 149.968,00
Oracle EE + RAC	€ 55.646,00	4	€ 222.584,00
Oracle SE1	€ 4.578,00	2	€ 9.156,00
Oracle SE	€ 13.813,00	2	€ 27.626,00



Business case

- Capture
- Combine
- Professionalize
- Mobilize



According to Oracle

- Enterprise-Class Performance and Security
- Optimized for deployment in:
 - small enterprises
 - line-of-business departments
 - distributed branch environments.
- Available on all Oracle-supported os including Windows, Linux, and Unix.

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- Standard Edition can go a long way



2 Sockets Maximum

No limit RAM

No limit Database Size

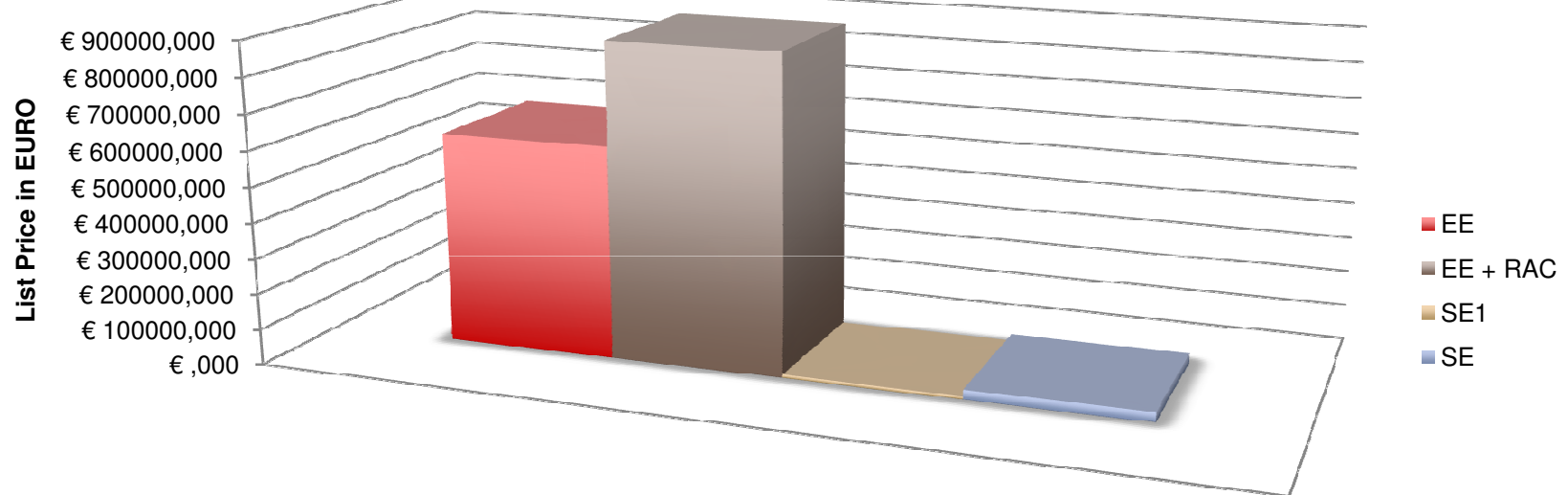


4 Sockets Maximum

No limit RAM

No limit Database Size

2 Socket * 16 core T5-2 SPARC system



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Lets be honest

Block Recovery

Online Rebuild

Transportable Tablespace

Bitmap Indexes

Tablespace point in time recovery

Online indexes rebuild

Parallelism

Virtual Private Database

Parallel backup

Data Guard

Flashback database features

Partitioning

Trial Recovery

Resource Manager

Connection Manager

DBMS_REDEFINITION

Duplexed backup sets

Oracle EE Options + Packs

Option	Database Management Packs
Partitioning	Diagnostic
Advanced Security	Tuning
Active Data Guard	Data Masking
Advanced Compression	Lifecycle Management Pack
In memory Database Cache	Test Management Pack
Multitenant	
Label Security	
OLAP	
Real Application Clusters	
RAC One	
Real Application Testing	
Spatial	

SE what's missing



But are you using it ?

Does Your Application Use It ?

Or does it just
uses the db for
persistency

Do correct size-matching

TIP

20. hroug
godišnja konferencija



How to fill these gaps



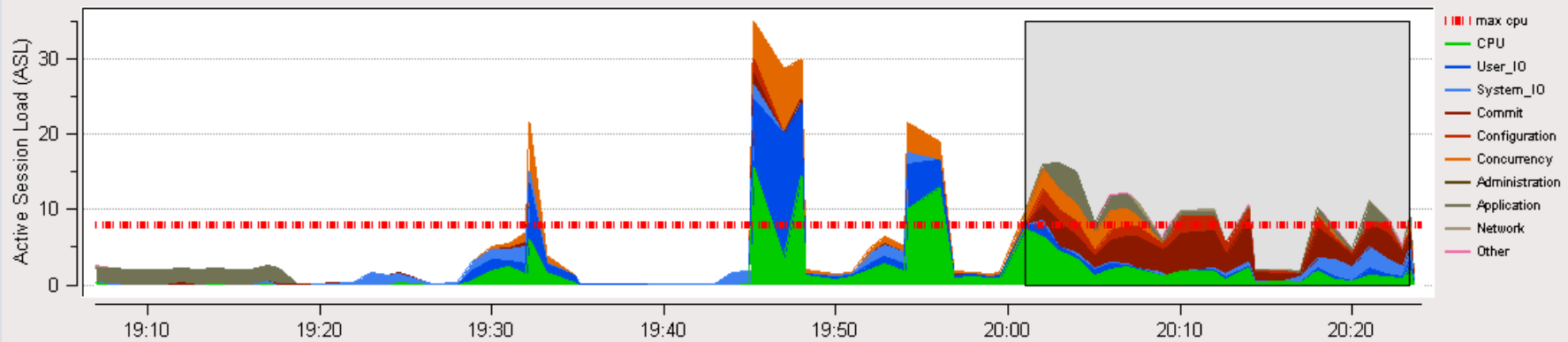
OraSash

Good old STATSPACK

- Ash is great to diagnose performance issues
- However only in EE with tuning Pack and 10g feature
- Kyle Hailey made Simulated ASH:
 - Works in versions < 10g and on SE
- Marcin Przepiorowski maintains is now here
 - <https://github.com/pioro/orasash>

Ora Simulation Ash

- Easy to install
- Makes use of a repository database
- Both Marcin as Kyle have some graphical tools to display data



SQL_ID	ASL	SQL_TYPE
0	3.581	UNKNOWN
3003979045	1.326	INSERT
2710468782	1.051	INSERT
3186842843	0.972	UNKNOWN
1197545780	0.572	PL/SQL package ..
1035538479	0.344	INSERT
1935510345	0.340	INSERT
2710468782	0.144	UNKNOWN
1271930454	0.047	UNKNOWN
7470192845	0.022	Queue

event	Activity	A...
log file sync	1256	1256
CPU	746	746
enqueue	460	460
log buffer space	396	396
library cache pin	246	246
control file parallel write	214	214
db file parallel write	128	128
db file sequential read	78	78
buffer busy waits	72	72

session	%Active
SYS DBWO	
SYS	
SIMULATOR	
SIMULATOR	
SIMULATOR	
SIMULATOR	
SIMULATOR	
SYS CKPT	
SIMULATOR	44
SIMULATOR	21

```

INSERT INTO CM_HOUR_FACTS_UP (
    HOUR_STAMP,
    UP_ID,
    UP_TX_10,
    UP_TX_50,
    UP_TX_90,
    UP_CER_10,
    UP_CER_50,
    UP_CER_90,
    UP_CCER_10,
    UP_CCER_50,
    UP_CCER_90,
    UP_SNR_10,
    UP_SNR_50,
    UP_SNR_90,
    UPDATED )
SELECT :1,
    CM.UP_ID,
    UP_TX_10,
    UP_TX_50,
    UP_TX_90,
    UP_CER_10,
    UP_CER_50,
    UP_CER_90,
    UP_CCER_10,
    UP_CCER_50,
    UP_CCER_90,
    UP_SNR_10,
    UP_SNR_50,
    UP_SNR_90,
    SYSDATE
FROM
    (SELECT UP_ID, COUNT(US_SNR_MIN) CNT
    FROM CM_HOUR_FACTS
    WHERE HOUR_STAMP = :2
    GROUP BY UP_ID) CM,
    (SELECT
    UP_ID,
    PERCENTILE_CONT(0.1) WITHIN GROUP (ORDER BY AVG_TXPOWER_UP) UP_TX_10,
    PERCENTILE_CONT(0.9) WITHIN GROUP (ORDER BY AVG_TXPOWER_UP)
    UP_TX_90,
    PERCENTILE_CONT(0.1) WITHIN GROUP (ORDER BY US_CER_MAX) UP_CER_10,
    PERCENTILE_CONT(0.9) WITHIN GROUP (ORDER BY US_CER_MAX) UP_CER_90,
    PERCENTILE_CONT(0.1) WITHIN GROUP (ORDER BY US_CCER_MAX) UP_CCER_10,
    PERCENTILE_CONT(0.9) WITHIN GROUP
    (ORDER BY US_CCER_MAX) UP_CCER_90,
    PERCENTILE_CONT(0.1) WITHIN GROUP (ORDER BY US_SNR_MIN) UP_SNR_10,
    PERCENTILE_CONT(0.9) WITHIN
    GROUP (ORDER BY US_SNR_MIN) UP_SNR_90
    FROM CM_HOUR_FACTS
    WHERE HOUR_STAMP = :3
    
```

Dbvisit Standby

- Offers a supported alternative to the scripted standby
- Comes with a nice webbased gui
- Encrypted redo log traffic between db' s

Dbvisit Standby



- Supports gracefull switch-over
- Reporting Environment

However no use of standby redo log files
it **uses the archived redo**

Dbvisit Replicate

- Streams and Golden Gate alternative
- Uses it's own CDC
- Low impact Downstream capture possible
- Wizard Driven



Dbvisit Replicate

- Cross Platform and Cross Database:
 - Oracle
 - Oracle – Mysql
 - Oracle – SQL Server



Round Table

