

SAP on Oracle Development Update

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Introduction

This presentation contains information that is relevant in the context of SAP installations running on an Oracle database.

Based on several examples it will be discussed which Oracle versions and features are supported in an SAP environment and what benefit they have. In addition information is provided about new developments in the SAP/Oracle environment.

Patch Set 11.2.0.2

1st Patch Set for Oracle 11.2

Released 10 November, 2010

- General Availability since mid January 2011
- Windows available since 10 May, 2011

November 2013 SBP was final and contains PSU 12 for 11.2.0.2 (11.2.0.2.12)

Patch Set 11.2.0.3

- 2nd Patch Set for Oracle 11.2
- Released 12 December, 2011
 - HP-UX PA-RISC available since June 2012
 - Windows available since 14 February, 2012

August 2014 SBP is most recent and contains PSU 11 for 11.2.0.3 (11.2.0.3.11)

August 2015 SBP will be final

Patch Set 11.2.0.4

Final Patch Set for Oracle 11.2

Released 14 February, 2014

- General Availability since February 2014
- Windows Cluster available since May 2014

August 2014 SBP is most recent and contains PSU 3 for 11.2.0.4 (11.2.0.4.3)

New SAP projects should start on 11.2.0.4 or higher

SAP on Oracle Database 12c

Roadmap

Oracle Database 12c Release 1 (12.1)

NEW! 12.1.0.2 planned to be first release for SAP

- hereby breaking 'Terminal Release' custom valid to date
- to ensure sufficient overlap with 11g
- No support of base release 12.1.0.1
 - Starting from SAP NetWeaver 7.X based products
 - Rollout planned for Q1/2015
- Base certification w/o major 12c features
- Staged rollout for major features later

New Features

Planned with initial certification:

- Advanced Index Compression1)
- Automatic prefix computation
- Higher compression rate, ease of use
- Client-Server Network Compression1)

- Less network load between application servers and database instance(s)

New Features

Planned with initial certification:

- ACFS Support on Exadata
- For SAP shared file system support (/sapmnt, etc.)
 - RAC: HA-NFS support with ACFS
- Complete SAP HA solution for shared file system
 - RMAN: Cross platform backup and restore
- Faster and easier heterogeneous platform migration
 - Storage Snapshot Optimization
- No more begin/end backup for certain snapshot technologies
 - Active Data Guard Far Sync1)
- High performance zero data loss across large distance WAN

New Features

Not available with initial certification, rollout in staged approach:

- Information Lifecycle Management (ILM)/ADO1)
- Multitenant (aka. Pluggable Databases)2)
- In-Memory3)
- Hybrid Columnar Compression (HCC)1), 4) for Exadata and SuperCluster
- Online Move Partition
- Move a Datafile Online

1) requires Advanced Compression Option 2) requires new Multi

Virtualization Update

Oracle VM

Certification

Supported for SAP as follows:

- OVM 3.2.1 or higher
- x86-64 platforms¹⁾
- See SAP Note **1808268**

Guest Operating Systems Support

- Oracle Linux 5 and 6
- Solaris 10 and 11
- Microsoft Windows currently not supported
- SUSE Linux Enterprise Server currently not supported
- No Red Hat Enterprise Linux support

SAP Products Support

- All SAP products certified for supported guest OS
- Check PAM for OS availability for SAP product

Oracle Database Support

- Single Instance
- 10.2.0.5, 11.1 (non-NW, e.g. BO), 11.2
 - Real Application Clusters (RAC)
- minimum 11.2.0.3
- Oracle Linux guests only

Virtualization Update

Microsoft Hyper-V

SAP Products Support

- All SAP products certified for supported guest OS
- Check PAM for OS availability for SAP product

Oracle Products Support

- All Oracle products certified for Windows Server, including
 - Oracle Database 11.2
 - Oracle Instant Client 11.2

Virtualization Update
^{NEW!} **Microsoft Azure**

- SAP Products can now be deployed using the Oracle Database in a Microsoft Azure environment.

Supported Oracle Database versions:

- Minimum: Oracle Database 11g Release 2 Patch Set 3 (11.2.0.4)
- Single Instance only

Supported Operating System versions:

- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2012 R2 Service Pack 1

For details see:

- SAP Note **1928533** – List of supported SAP Products and Azure VM types
- SAP Note **2039619**

BR*Tools 7.40

Enhancements in brarchive

New Profile Parameters

*_arch parameters in init<DBSID>.sap

- Semantics like non-_arch parameters:
 - rman_maxopenfiles_arch
 - rman_compress_arch, etc.
- Allows brarchive to run differently from brbackup

Parallel Disk Backup of Archive Log Files

May result in significant time savings

- Use new init<DBSID>.sap parameter
 exec_parallel_arch=<par_cnt>

Backup of Standby Archive Log Files

Saving and deletion of archive log files generated on standby side

- Processing takes place on standby side
- Use new init<DBSID>.sap parameter:
 archive_type=standby

Second Disk Copy of Archive Log Files

Disk backup of archive log files now credible alternative to backup on tape

- Also applies to remote disk (**stage**)