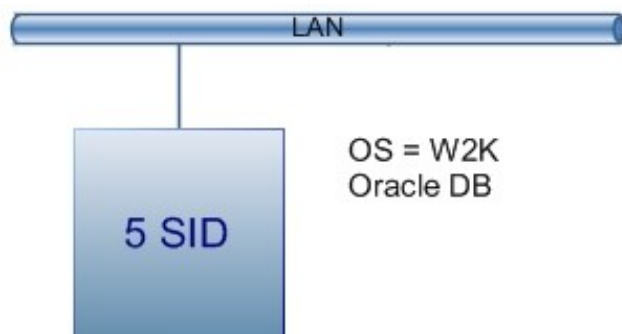


SEP sesam ORACLE Licensing Whitepaper

This document shows how SEP sesam licenses can be used in different ORACLE environments. SEP hereby concentrates on the licensing of the ORACLE System Identifier (SID) and the use of RMAN (Recovery Manager ORACLE). The SIDs are counted independently from the platform. They are relevant when purchasing SEP sesam licenses.

Using the following examples the necessary installation and licensing is shown:

Stand-Alone ORACLE System



Installation:

1x SEP sesam Client
1x ORACLE DB package

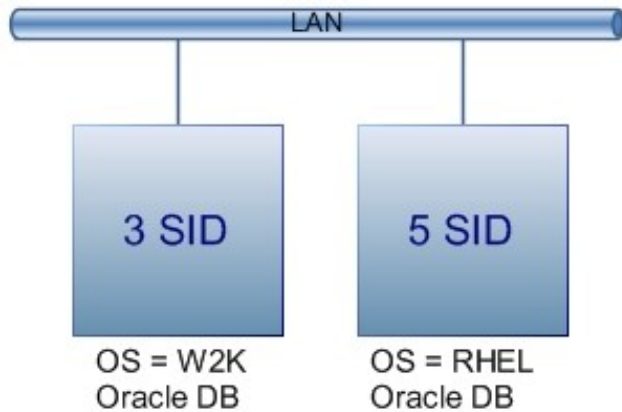
Licensing:

1x Data Backup Client
1x ORACLE Online Modul (incl. 5 SID)

In an environment with an ORACLE database server the operating system can be freely selected as long as it is supported by SEP sesam and available as ORACLE installation package. All supported ORACLE versions and client operating systems can be found at www.sep.de.

Setting up an ORACLE server first the SEP sesam Client is installed and afterwards the ORACLE module.

Distributed ORACLE System



Installation:

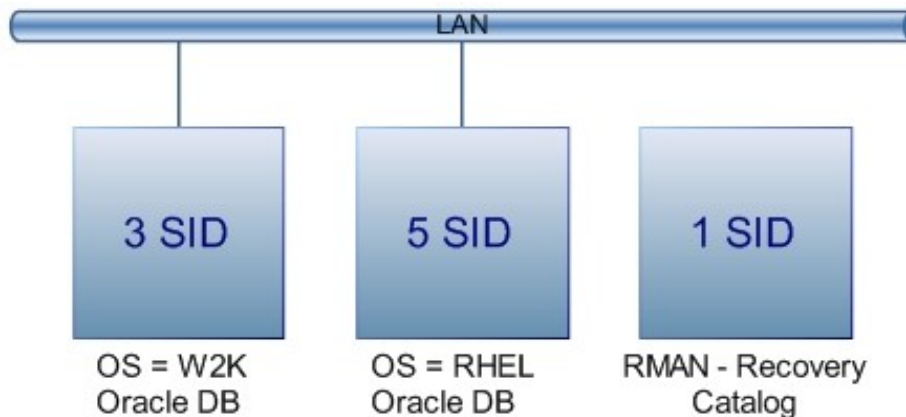
each 1x SEP sesam Client
each 1x ORACLE DB pack

Licensing:

2x Data Backup Client (DC)
1x ORACLE Online Module (incl. 5 SID)
1x ORACLE SID extension 5 SID

In the displayed environment with two ORACLE database servers the operating systems each can be different, according to the supported platforms. To backup the databases a SEP sesam Client (basic communication with the SEP sesam Server) and an ORACLE installation package have to be installed. Since the total amount of SIDs is > 5 a SEP sesam ORACLE extension license should be purchased in addition to the SEP sesam ORACLE Online Module.

Distributed ORACLE System with a separate RMAN server



Installation:

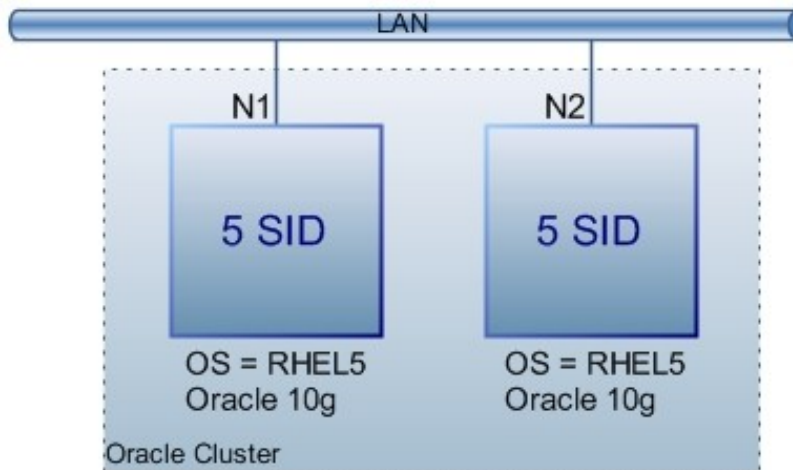
each 1x SEP sesam Client
each 1x ORACLE DB package (1x ORACLE DB package)

Licensing:

1x SEP sesam Client
3x Data Backup clients(DC)
1x ORACLE online module (incl. 5 SID)
1x ORACLE SID Extension 5 SID

Regarding this installation the recovery manager of the ORACLE database has been implemented separately. On the additional server only the SEP sesam Client package is necessary. If a separate SID was chosen for the RMAN catalogue (RCVCAT) an additional ORACLE Online Module has to be installed. In this example the licensing stays the same since there are enough free SIDs available.

ORACLE Cluster Ware Environment

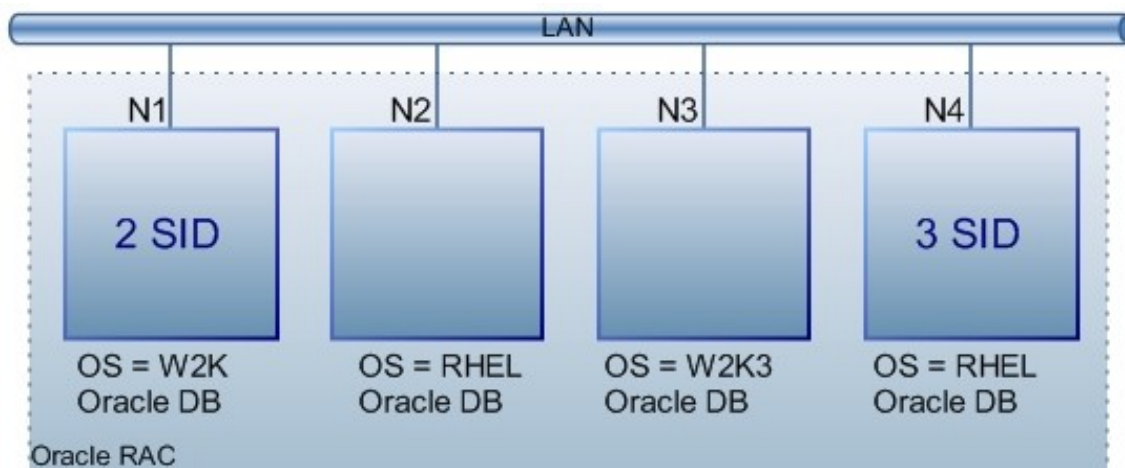


Installation:
each 1x SEP sesam Client
each 1x ORACLE DB

Licensing:
2x Data Backup Clients (DC)
1x ORACLE Online Module (incl. 5 SID)

The OCW environment represents a standby cluster. The breakdown of a server is intercepted by the second node. In the cluster there are 5 SIDs which run either on N1 or N2. Again on each cluster server a SEP sesam Client is installed together with an ORACLE Online Module. The total amount of SIDs to be licensed depends on the maximum amount of SIDs on one node. In our example it is a total of 5 SIDs.

ORACLE Real Application Cluster Environment



12 SID with independent IP - 5 SID as local databases on the corresponding node

Installation:
each 1x SEP sesam Client per physical node
1x ORACLE DB package per physical node
GUI configured as client per SID with IP address

Licensing:
16x Data Backup Clients (DC) each
1x ORACLE Online Module (incl. 5 SID)
3x ORACLE SID extension 5 SID

Whitepaper

The RAC environment guarantees a real fail proof operation with or without a dynamic load distribution.

The operating systems in a RAC can be different. Due to this reason the installation varies to the other described environments. Since the RAC database instances are called up with their own IP-names, these virtual database servers have to be installed and configured just like a physical server. In the virtualised database server there is no SEP sesam client installed but for every SID (IP) one SEP sesam Client has to be included in the SEP sesam GUI and therefore must be licensed. The SEP sesam database packages only have to be installed on the physical nodes (N1-N4). These nodes need a SEP sesam Client for basic communication. The amount of all SIDs result in the amount of necessary SID extensions.

Common installation advise:

In case there is more than one ORACLE version used on an ORACLE server system, for each ORACLE version- in each library path - the corresponding SEP sesam ORACLE Online Module should be installed.

The SEP specialists are looking forward to your questions about the ORACLE licensing and installation requirements.

The supported ORACLE database versions can be found at www.sep.de.