SOP: SAP Kernel Upgrade on Windows Server

Upgrade the SAP Kernel on a Windows-based SAP system.

🔧 Prerequisites

Before starting the kernel upgrade process,

- ✓ You have downloaded the **latest compatible SAP Kernel SAR files**:
  - **DB Independent Kernel File** (e.g., `SAPEXE_<version>.SAR`)
  - **DB Dependent Kernel File** (e.g., `SAPEXEDB_<version>.SAR`)
- ✓ You have the **SAPCAR** for extracting `.SAR` files.
- ✓ Backup of the current kernel directory (for safety).
- ✓ All SAP Technical and Non-Technical users have been logged off and the system is not in active use.

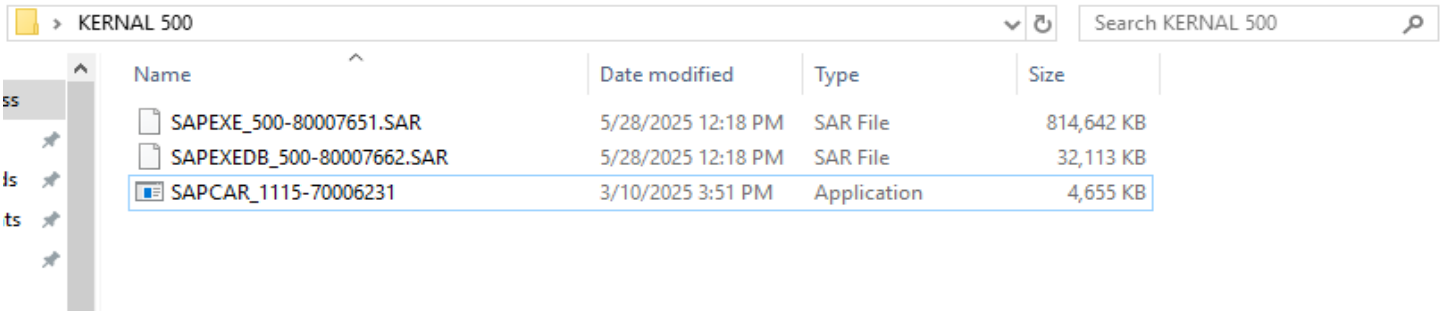
1. Download Required Files
   - Download the latest **compatible kernel files** (both DB independent and DB dependent) from SAP Service Marketplace.
   - Also, download the latest **SAPCAR tool** (e.g., `SAPCAR_1115-70006231.EXE`).





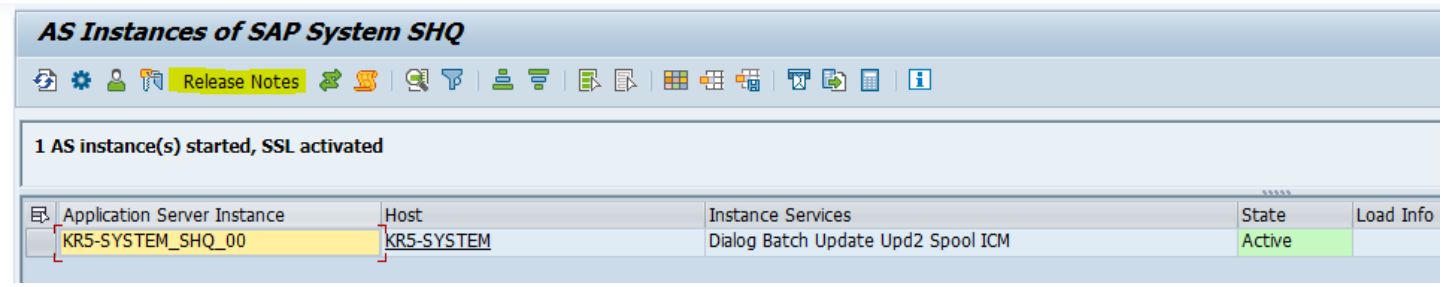


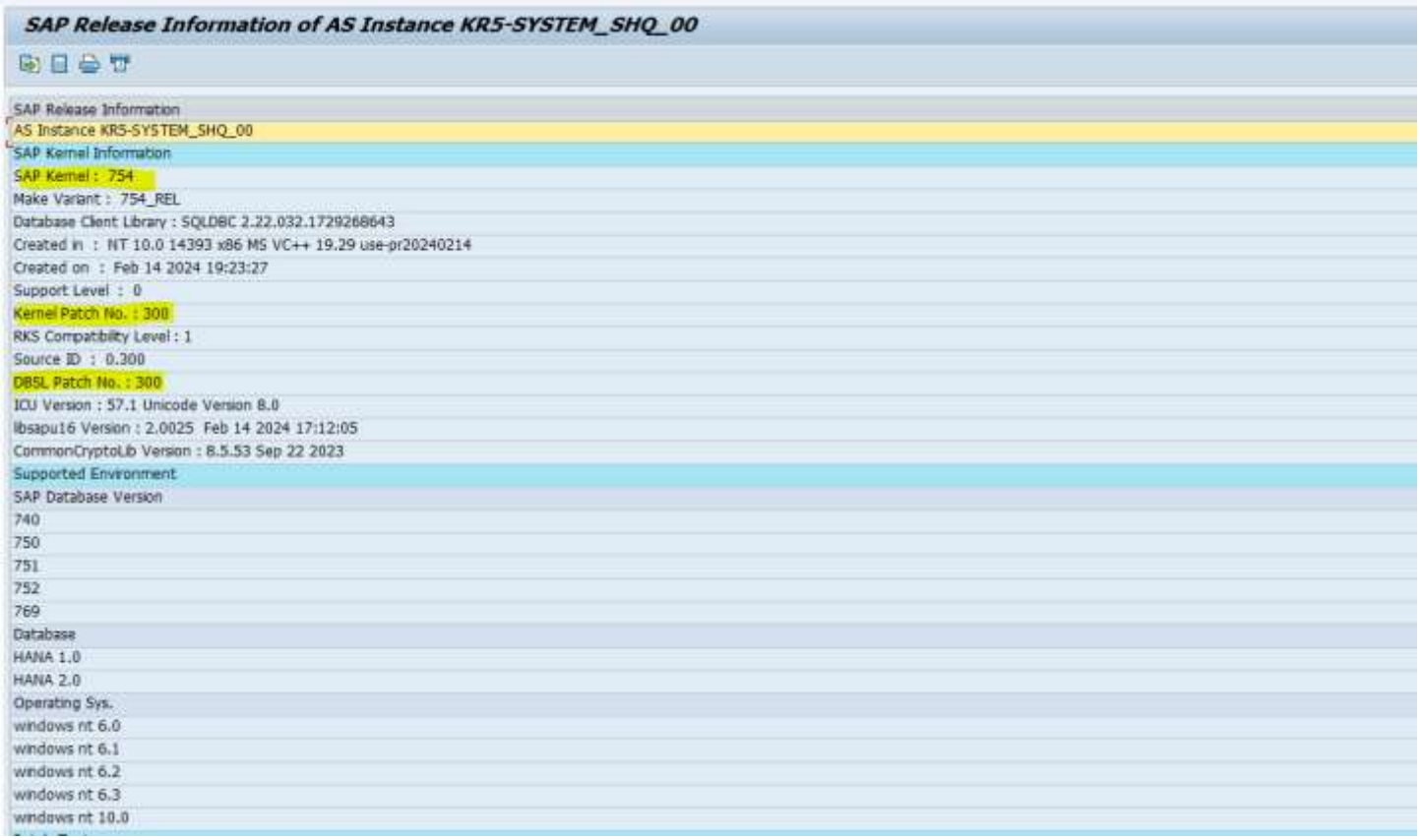




2. Check Current Kernel Version

- Open SAP GUI → Transaction **SM51**
- Note down the **current kernel release** and **patch level** for verification later.

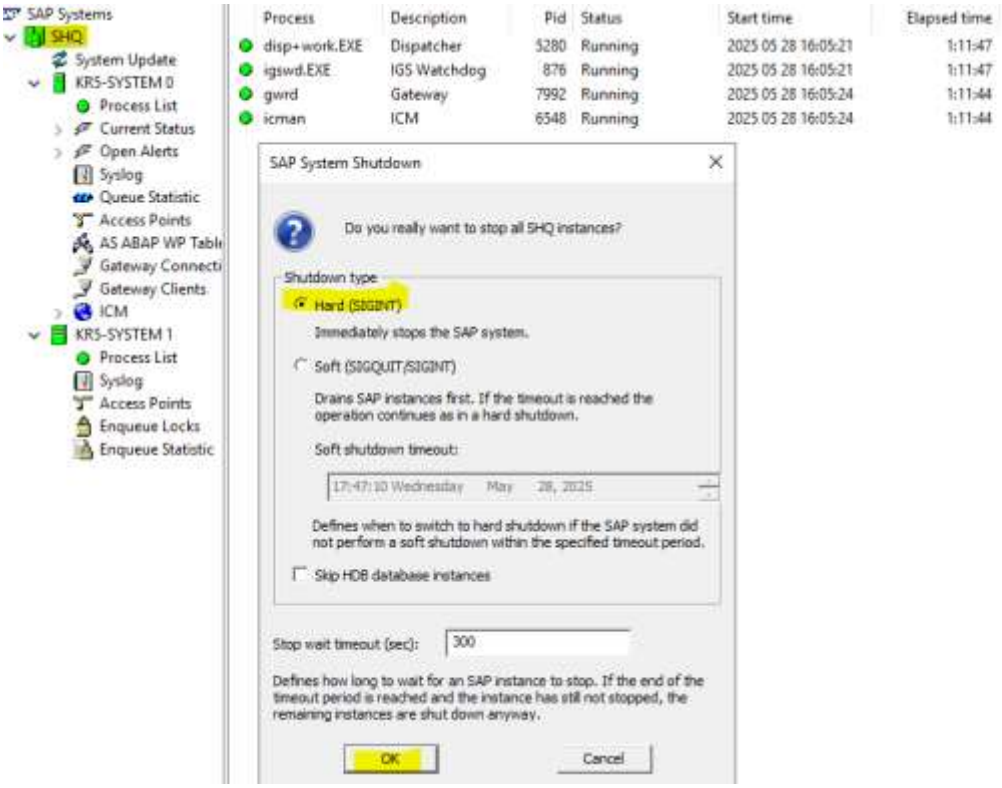




3. Stop SAP System

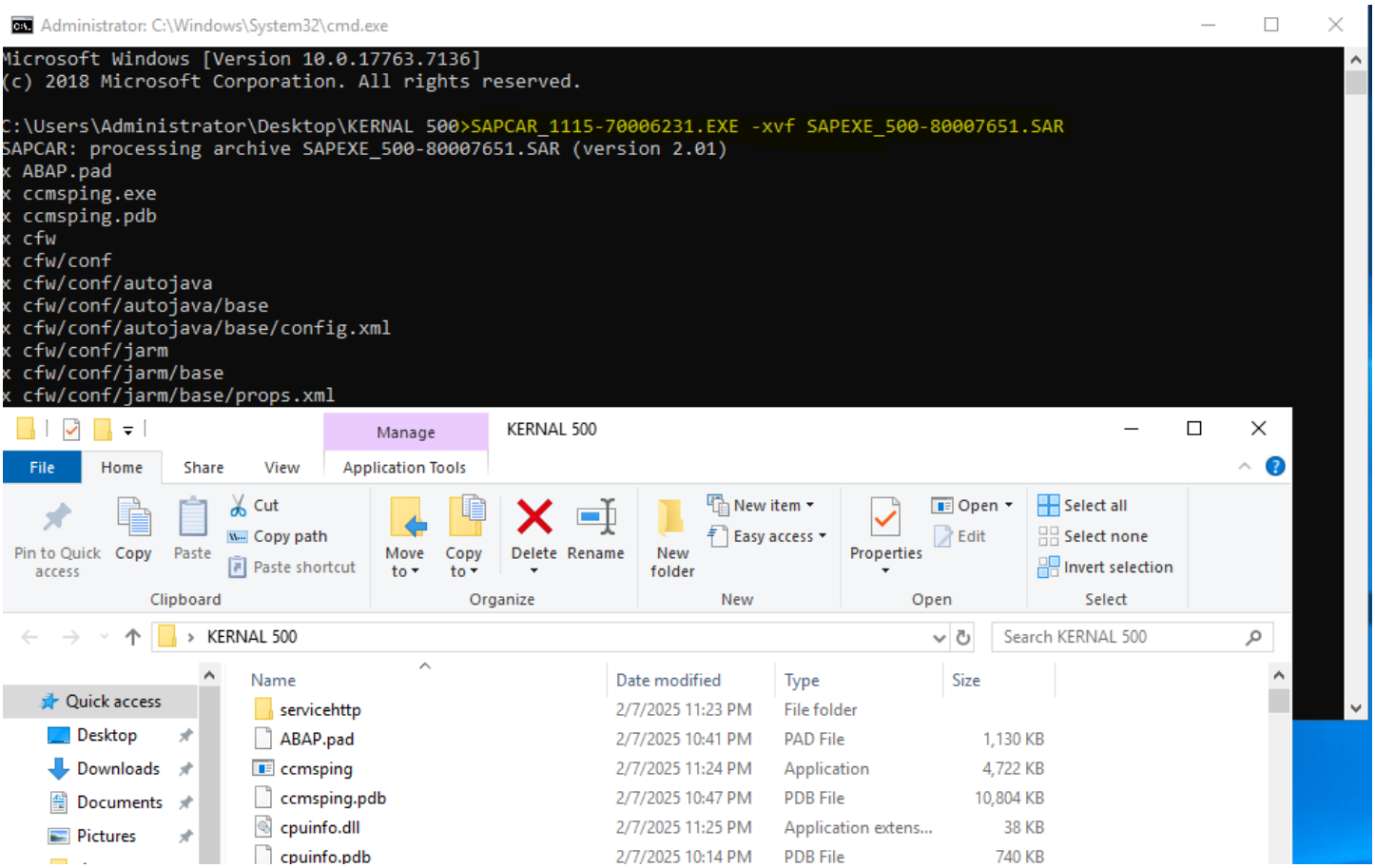
- Open **SAP Management Console (SAPMMC)**.
- Right-click on the SAP instance and choose **Stop**.

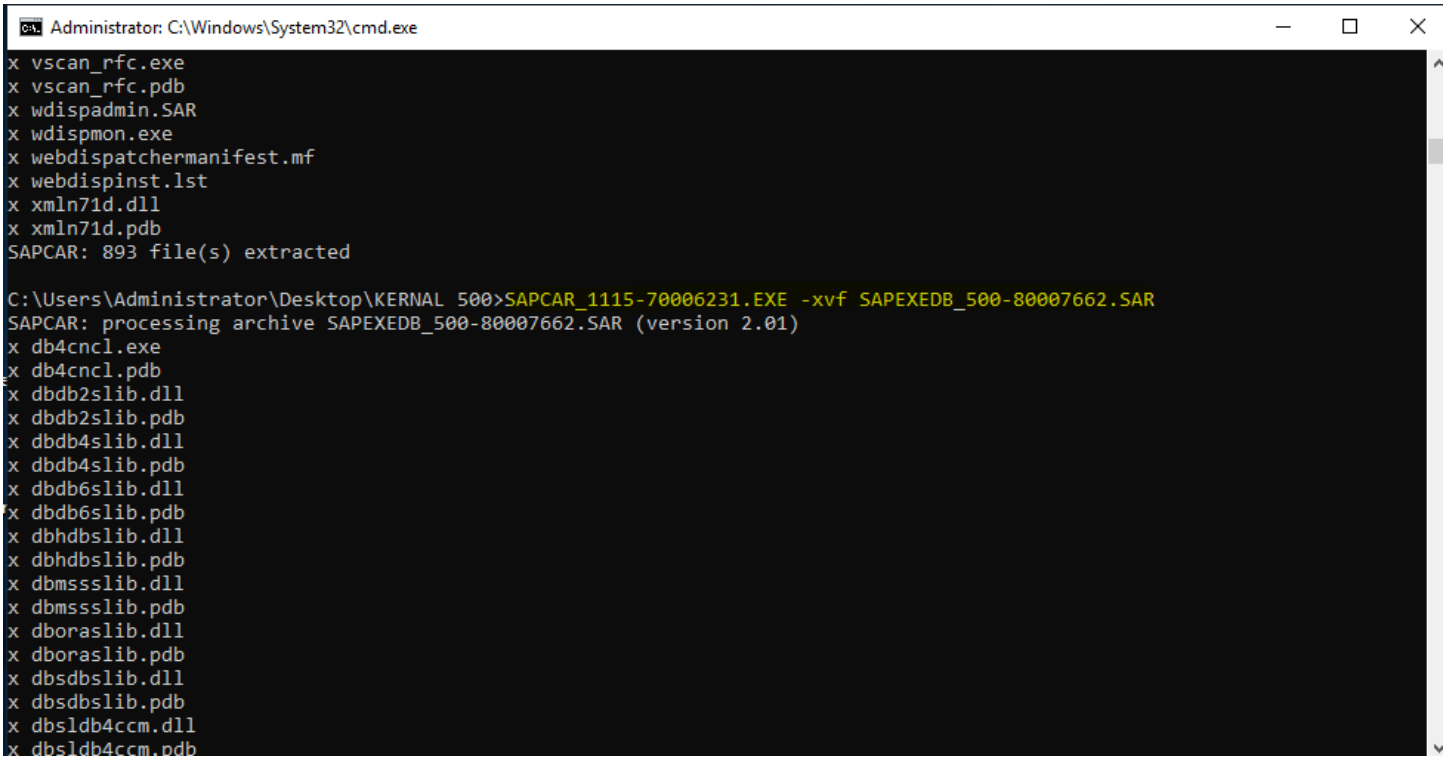
- Wait until the status shows **Stopped**.



4. Extract Kernel Files
   - Open CMD and rum cd C:\Users\Administrator\Desktop\KERNEL_500
   - Then extract the SAR files: SAPCAR_1115-70006231.EXE -xvf SAPEXE_500-80007651.SAR

   SAPCAR_1115-70006231.EXE -xvf SAPEXEDB_500-80007662.SAR



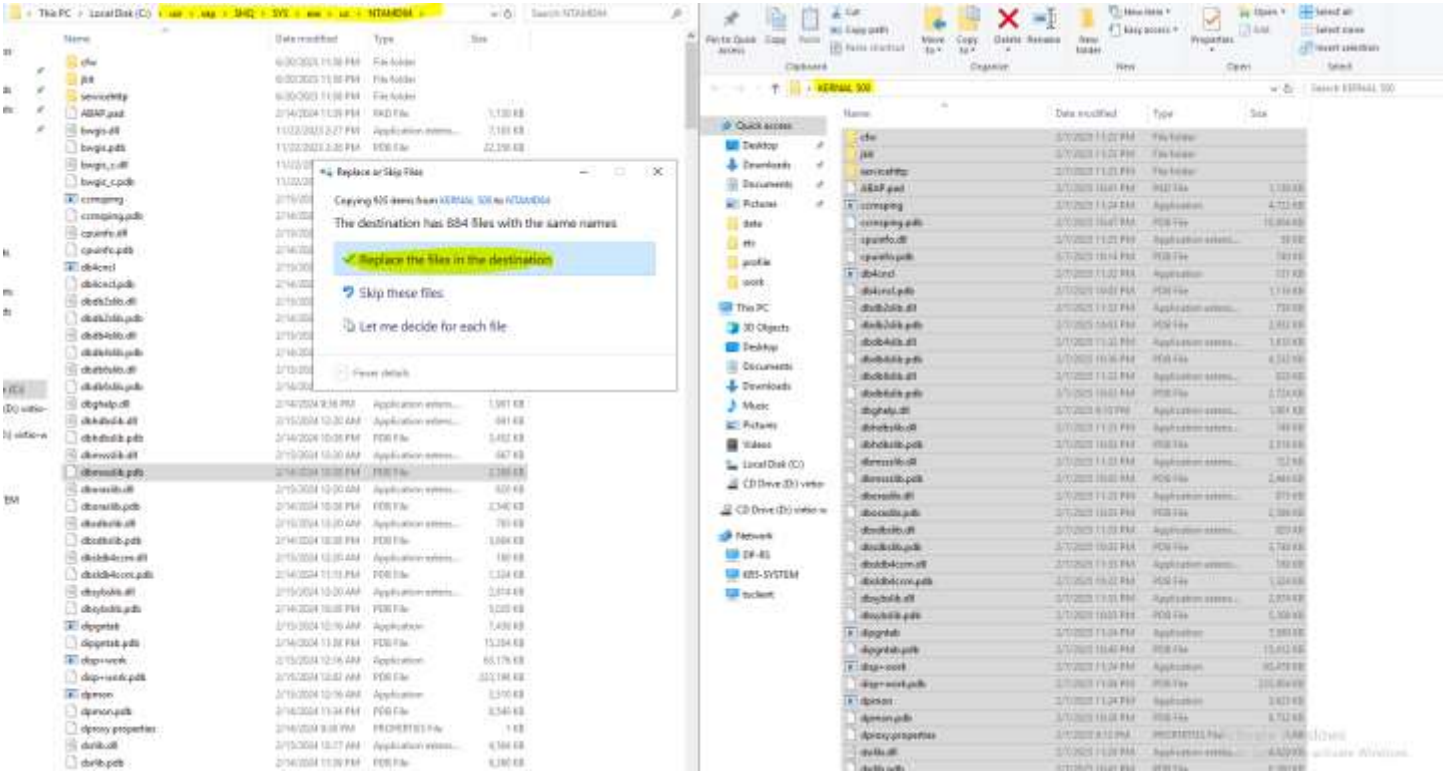


5. Replace Old Kernel Files

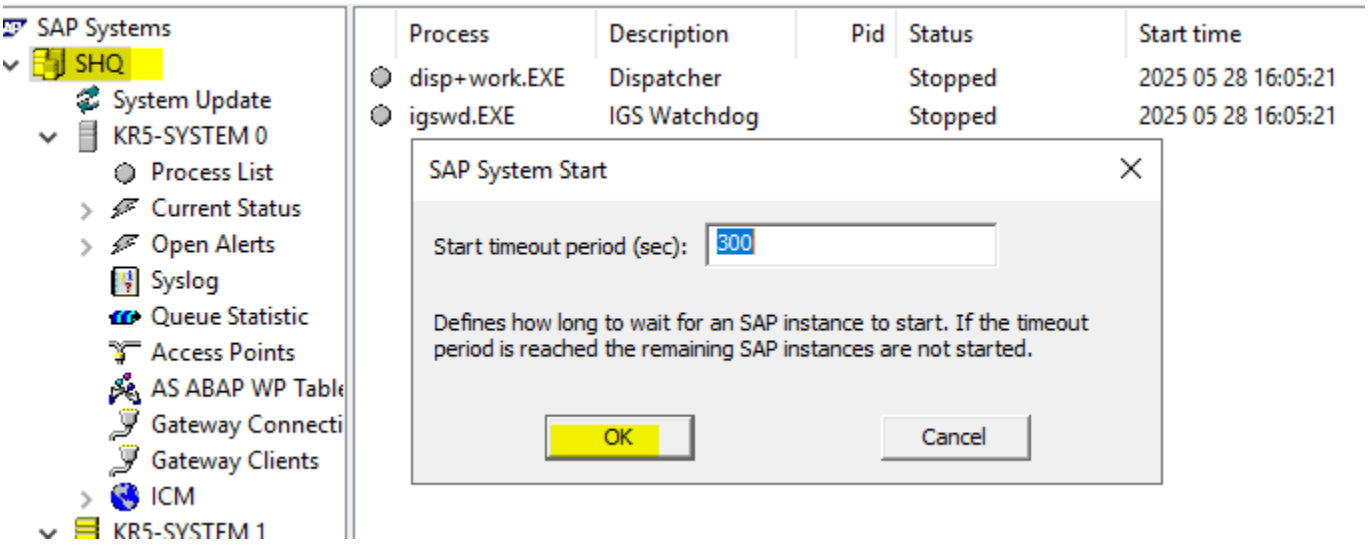
- Copy all extracted files from that folder.

- Paste and **replace** the existing files in the SAP kernel directory:
  C:\usr\sap\<SID>\SYS\exe\uc\NTAMD64

Important: Keep a backup of the old kernel directory before replacing.



6. Start SAP System
   - Right-click on the SAP instance → Click **Start**.
   - Wait until all processes are up and running.
   - Login to SAP GUI → Run transaction **SM51**.
   - Click on **Release Notes**, Verify the new kernel version and patch level are reflected.



SAP Release Information of AS Instance KR5-SYSTEM_SHQ_00

SAP Release Information
AS Instance KR5-SYSTEM_SHQ_00
SAP Kernel Information
SAP Kernel : 754
Make Variant : 754_REL
Database Client Library : SQLDBC 2.22.032.1729268643
Created in : NT 10.0 20348 x86 MS VC++ 19.29 use-pr20250207
Created on : Feb 7 2025 18:25:28
Support Level : 0
Kernel Patch No. : 500
RKS Compatibility Level : 1
Source ID : 0.500
DBSL Patch No. : 500
ICU Version : 57.1 Unicode Version 8.0
libsapu16 Version : 2.0025 Feb 7 2025 16:46:14
CommonCryptoLib Version : 8.5.58 Nov 13 2024
Supported Environment

KASHIF RAZA