



Quick Start Guide

Time Machine Windows Server 2008 for SAP NetWeaver

The following is a quick guide to evaluating Solution-Soft's Time Machine with SAP NetWeaver 7.0.2 on Windows Server 2008 installed on an Intel machine. This paper will show how simple it is to integrate Time Machine to perform date & time (temporal) testing with SAP NetWeaver. This paper also provides a graphical step by step guide for installing SAP NetWeaver which can be skipped if needed.

NOTE: This paper is specific to Time Machine for use with Windows Server 2008. For those running on other platforms please refer to the Time Machine manual or contact Solution-Soft support at support@solution-soft.com

Time Machine for SAP NetWeaver is supported on Windows, AIX, HP-UX, Linux, Solaris

System Configuration used in creating this paper:

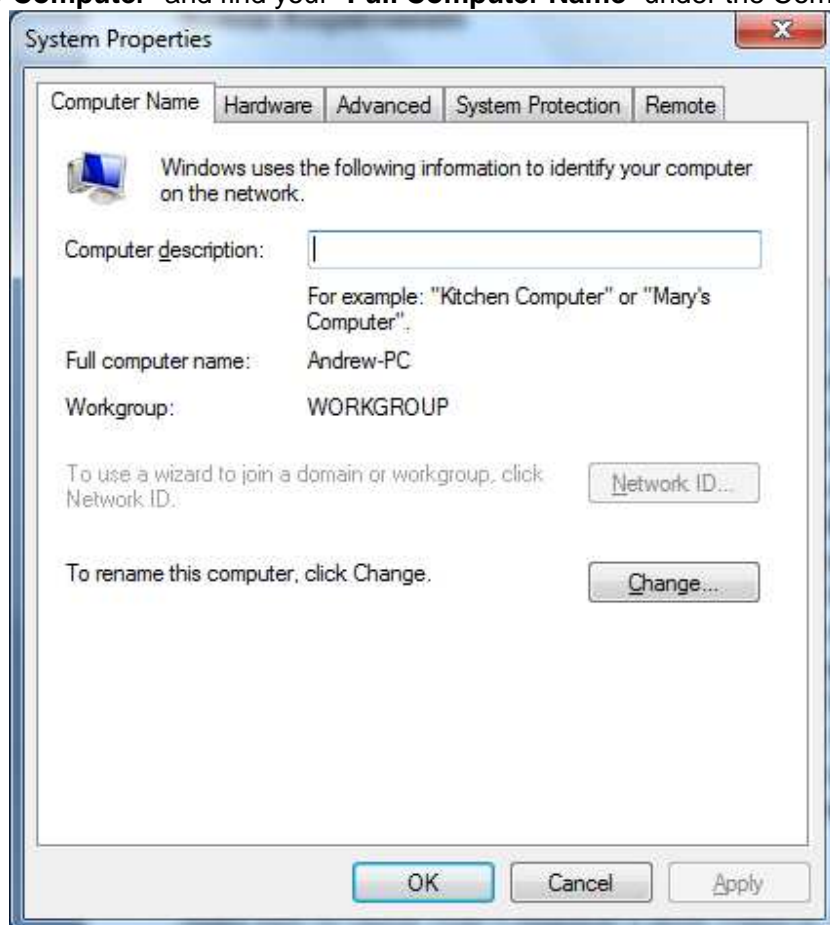
OS: Windows Server 2008, 64 bit, 2 GB Ram
Time Machine: Version 7.0.1 for Windows Server 2008 64b Build Date: 10/12/10
SAP NetWeaver: Release 7, Windows Version, Build Number: 7.0.2
Publish Date: September 1, 2011

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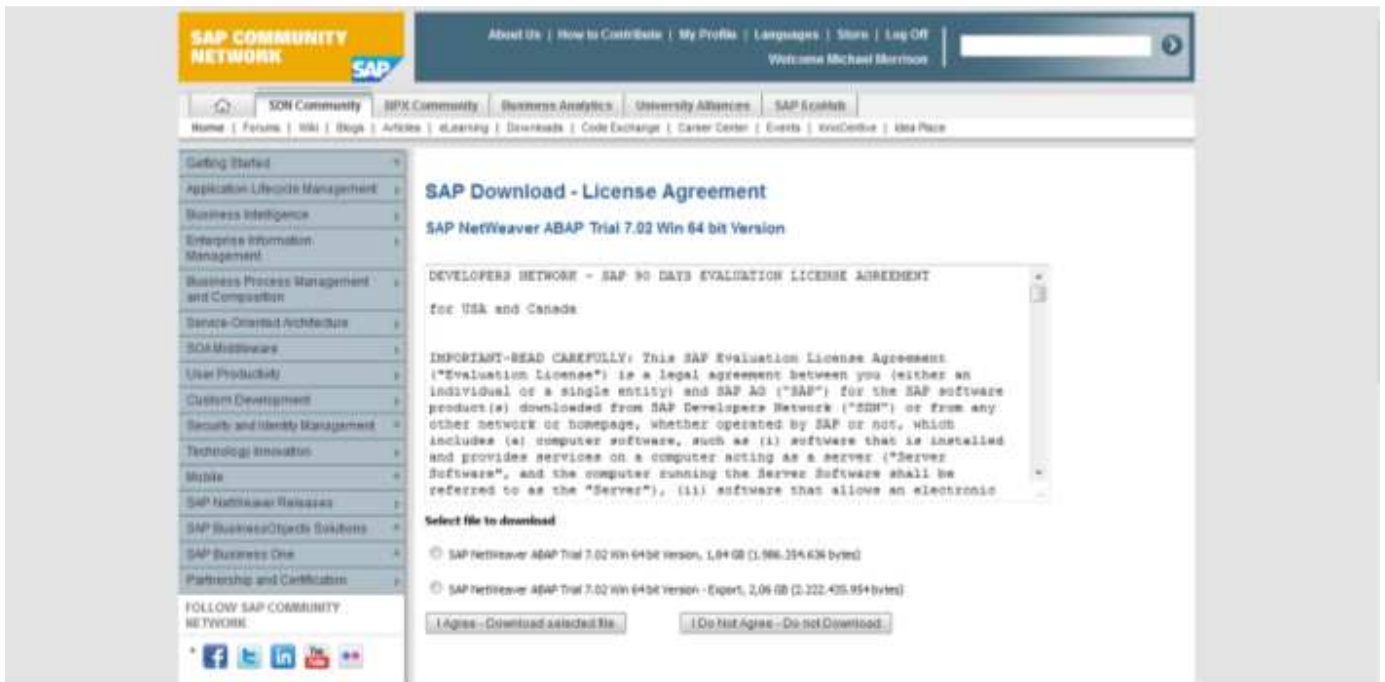
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SAP NetWeaver 7.02 Installation

1. Before you begin your Windows Server 2008 64bit machine must meet the following System Requirements
 - **Operating System Windows 7 64 bit Professional** (unsupported platform for Trial Installation) or **Windows Server 2008**
 - JRE 1.4.x or JRE 1.5.x (for installation only, JRE 1.6 is not supported)
 - **Hostname must not exceed 13 characters** (Full Qualified Domain Name optional)
 - **NTFS File system**
 - **Internet Explorer 6.0** or higher or **Firefox 1.0** or higher
 - **Minimum 2 GB RAM** (4 GB or more recommended)
 - **Pagefile** size according to your RAM settings.
 - **Intel Pentium III/1.1 GHz** or higher (or compatible)
 - **45 GB hard disk space** temporary during installation - 36 GB permanent
 - **High-resolution monitor (1024x768 or higher, 256 colors)**
 - Make sure that **no other SAP system or MaxDB is installed on your computer or has registry entries** (multiple instances not supported with Trial))
 - The SAP system requires several ports for communication services. Therefore the file **%WINDIR%\system32\drivers\etc\services** must not include an entry for the ports **3200, 3600, 3900 and 8000**. A possible entry can be excluded by using the hash symbol (#). (Note: The entry sapmsNSP 3600 for dialog instances may not exist, as it is set to 0 in Trial versions).
 - If **no DHCP server is available** on your network (which dynamically determines the IP address) or your **computer is not connected to any network**, you need to install the virtual interface adapter [MS Loopback Adapter](#).
- i. Make sure to check your Computer's Host Name is <=13 characters. To check Right Click **"My Computer"** and find your **"Full Computer Name"** under the Computer name tab.



- ii. You must also install Java JRE, only **JRE 1.4.x and 1.5.x. Do not use 1.6.x or any other version!!** Remember the JRE installation directory as it will be asked during the SAP install
2. Download the 2 files for SAP NetWeaver ABAP Trial 7.02 Win 64 bit Version on the download page
- i. You must download both files the
*SAP NetWeaver ABAP Trial 7.02 Win 64 bit Version &
SAP NetWeaver ABAP Trial 7.02 Win 64 bit Version - Export*
 - ii. You should have downloaded files
NWABAPTRIAL70206_64.rar and **NWABAPTRIAL70206_64_EXPORT.rar**

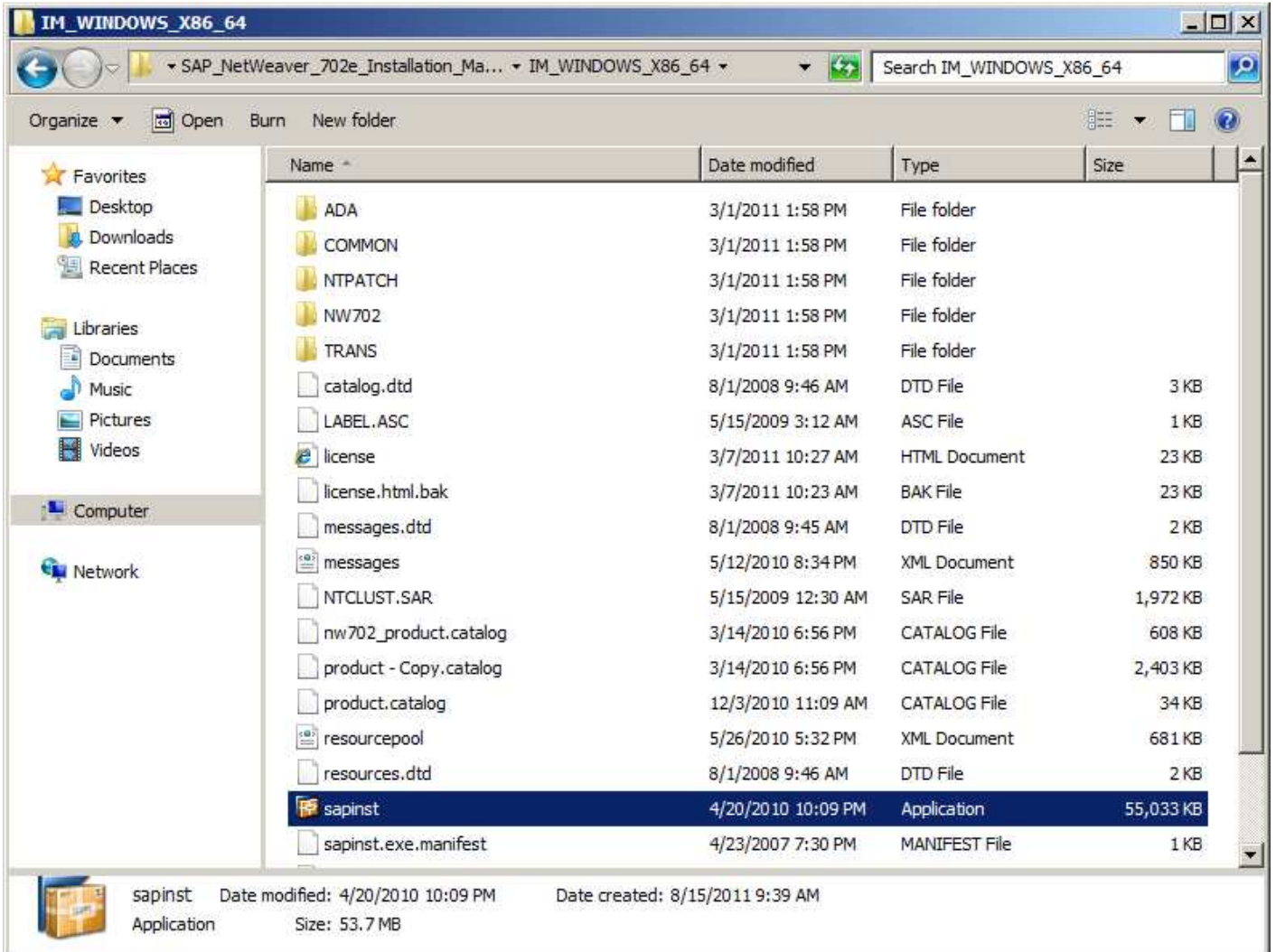


3. Unzip both Rar files into the top directory of your Windows Server 2008 64bit machine. (C:)
- i. Inside the **C:\NWABAPTRIAL70206_64** folder is a "**start.html**" file that is an HTML guide to installing SAP that can be used as an extra resource along with this guide.

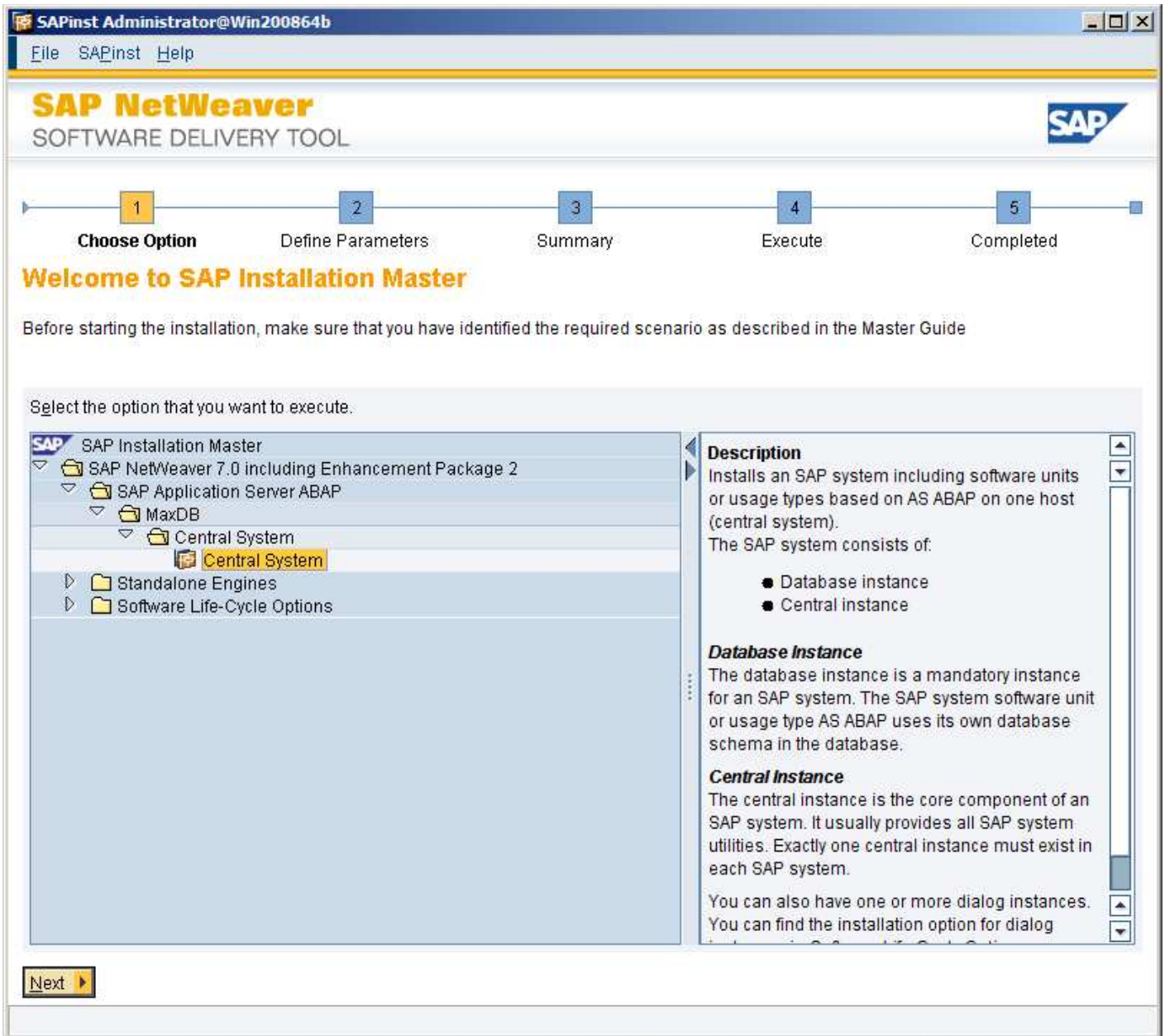
4. Start the Installer in the folder

C:\NWABAPTRIAL70206_64\SAP_NetWeaver_702e_Installation_Master\IM_WINDOWS_X86_64\sapinst.exe.

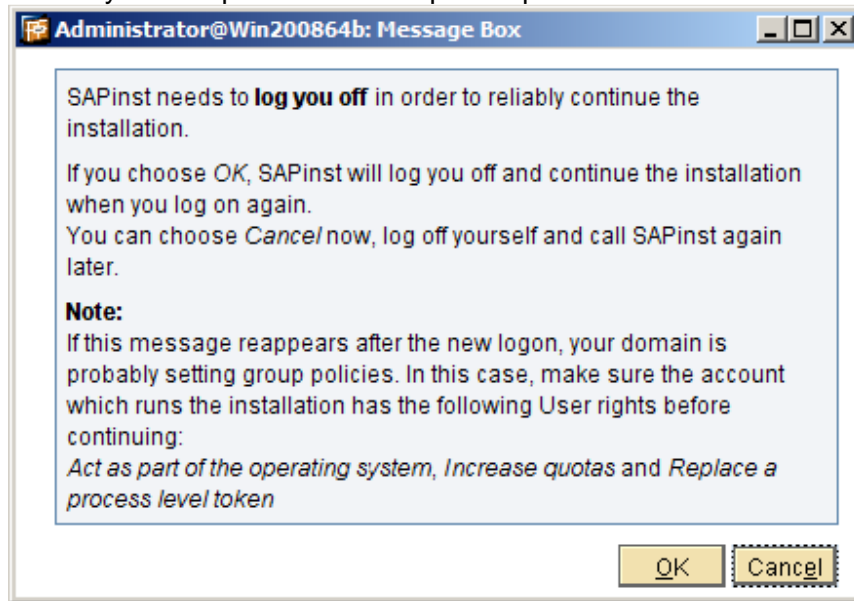
- i. You must be Administrator to complete the install
- ii. Before installing SAP NetWeaver, close all applications.
- iii. Make sure no other SAP System is installed on your pc.



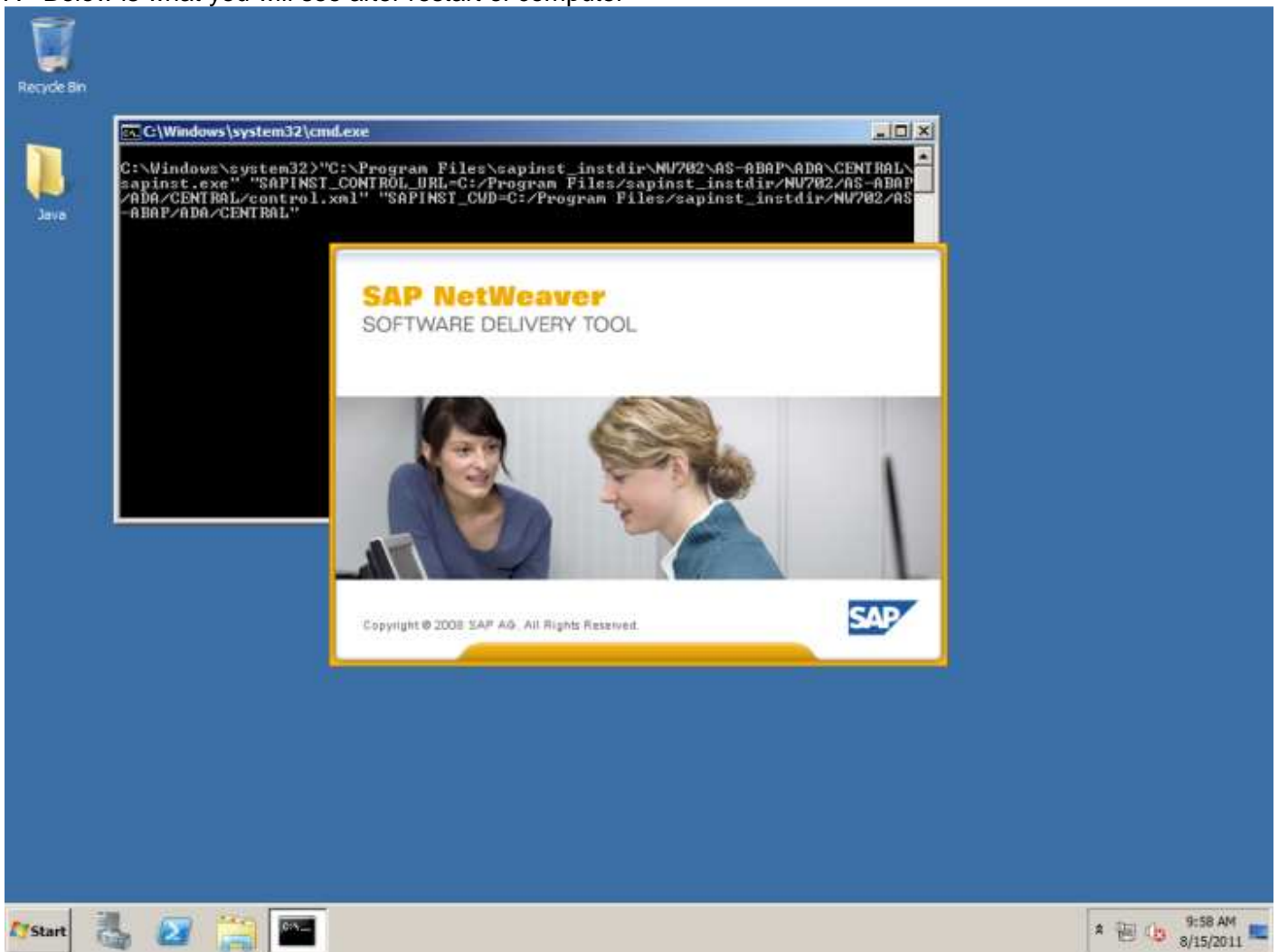
5. Choose "SAP Application Server ABAP" --> "MaxDB" --> "Central System" --> "Central System". Then click **Next**



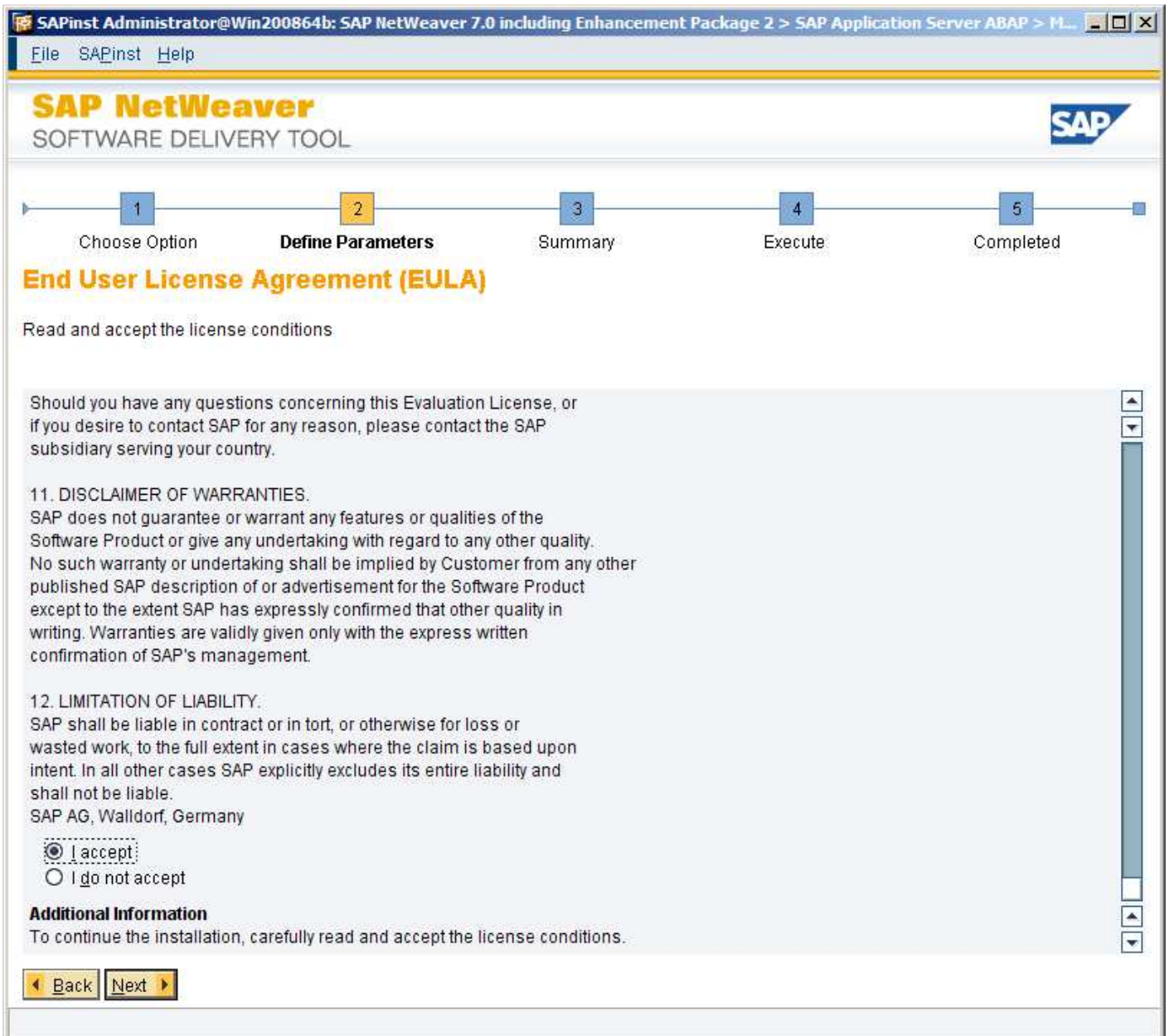
6. Click **OK** on the *Message Box* asking about logging you off.
 - i. It will restart your computer and boot up a script that will auto-resume the installation



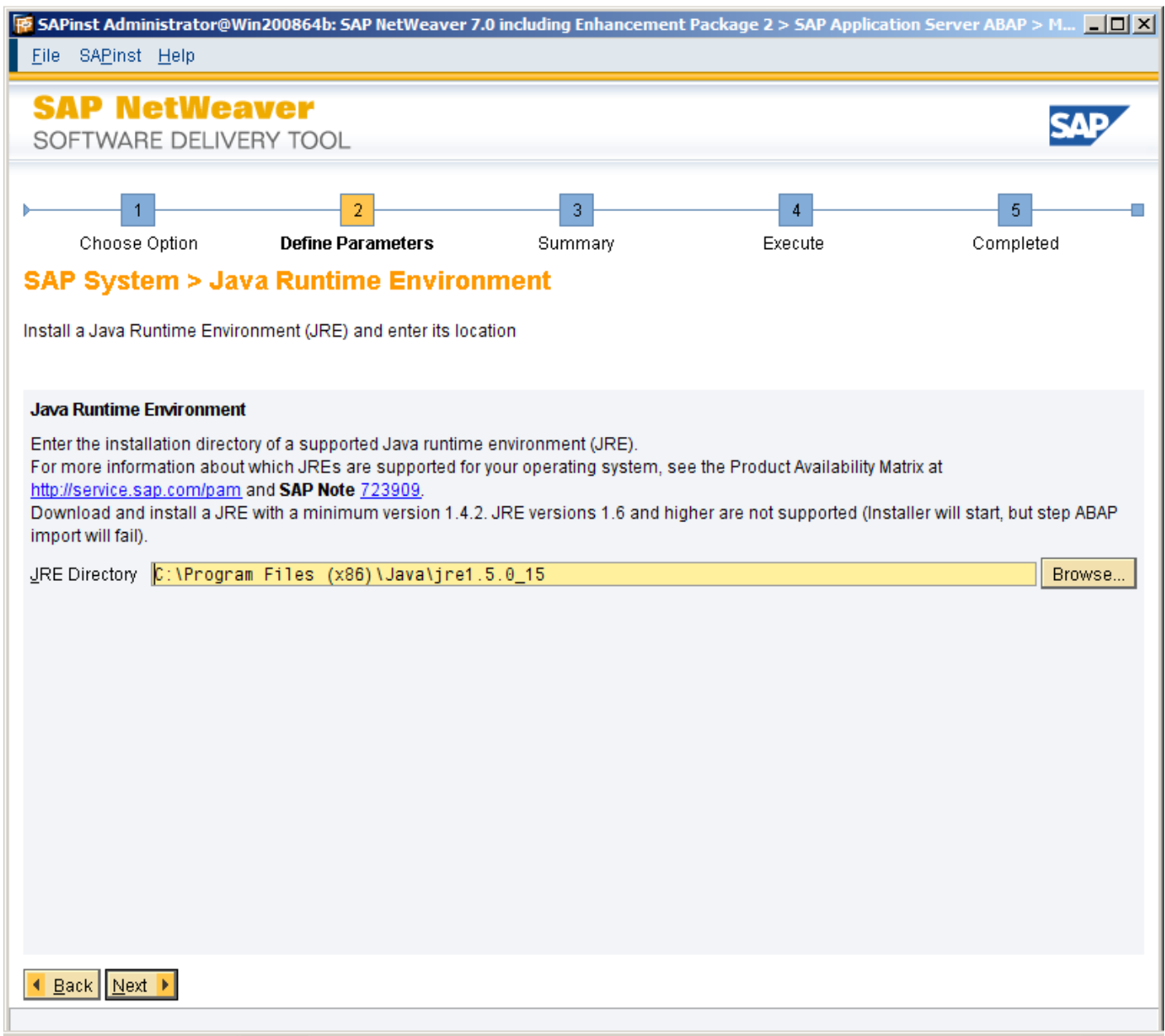
7. Below is what you will see after restart of computer



8. After re-launching the installation, the *License Agreement* window will appear. Scroll down to the bottom and select **"I accept"** and click **Next**



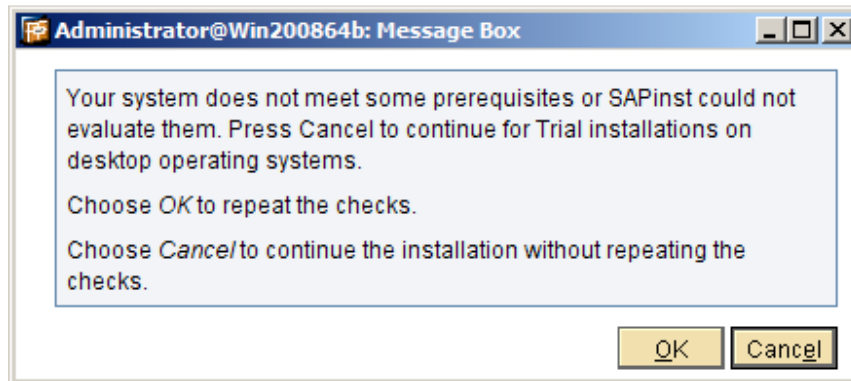
9. For Java *Runtime Environment*, click **Browse...** and select the directory that JRE is installed under. Then click **Next**.



10. For *Master Password*, enter an acceptable password. This master password will be used to logon to all components of SAP and the SAP users it creates. Then click **Next**.

The screenshot shows the SAP NetWeaver Software Delivery Tool interface. At the top, the title bar reads "SAPinst Administrator@Win200864b: SAP NetWeaver 7.0 including Enhancement Package 2 > SAP Application Server ABAP > M...". Below the title bar is a menu bar with "File", "SAPinst", and "Help". The main header area displays "SAP NetWeaver" in large orange letters and "SOFTWARE DELIVERY TOOL" in smaller grey letters, with the SAP logo on the right. A progress bar below the header shows five steps: 1. Choose Option, 2. Define Parameters (highlighted in orange), 3. Summary, 4. Execute, and 5. Completed. The main content area is titled "SAP System > Master Password" in orange. Below this title, it says "Enter the master password all users". A section titled "Master Password" contains the text: "The password will be used for all accounts SAPinst creates and for the secure store key phrase. Check the F1 help for restrictions and dependencies." Below this text are two password input fields: "Password for all users of this SAP system*" and "Confirm*", both containing masked characters (asterisks). At the bottom left, there are "Back" and "Next" navigation buttons.

11. For *Prerequisites Checker > Results*, if you receive a popup window, like below, discussing how your system does not meet the prerequisites, just click “**Cancel**” to ignore the warning and continue with the installation. For a single user environment PC, skipping this warning is acceptable.



Prerequisites Checker > Results

Read the results of the prerequisites analysis carefully

Important Information
Your system has been checked for compliance with the prerequisites.

- If a condition is not met by your system, we strongly recommend that you fix this before starting the installation.
- In rare cases, you may decide to run the installation despite of conditions that do not hold. The installation will not immediately prevent you from doing this, but make sure that you know what you are doing.

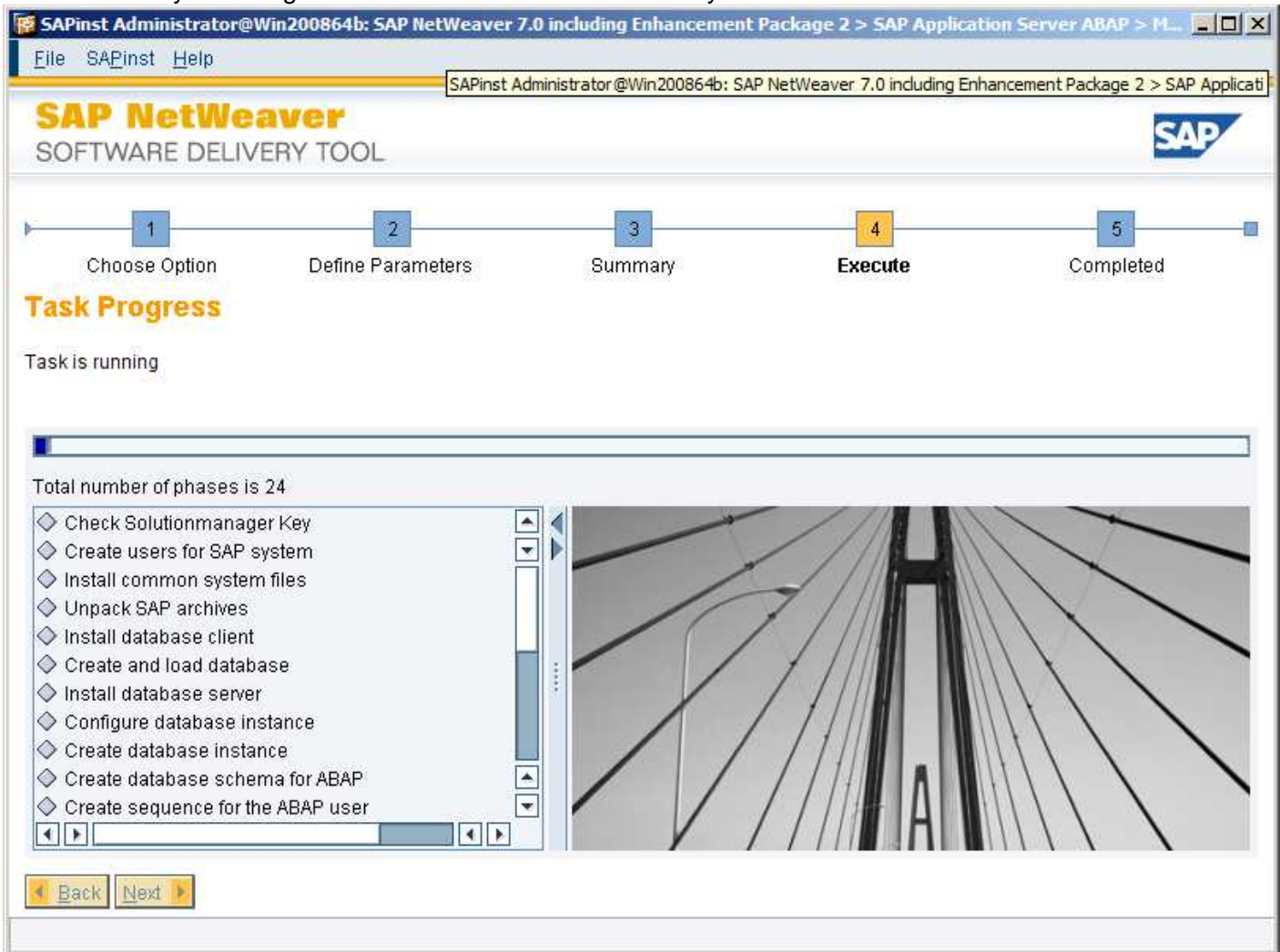
Detailed Results

| Condition | Result Code | Severity | Message | More Information |
|-----------|-------------------|----------|--|----------------------------|
| Swap Size | Condition not met | MEDIUM | For the selected services at least 20480 MB swap space are recommended. Current value: 2047 MB. (Updated 2005-06-24) | Click here |

12. For *Parameter Summary*, click **Next** to start installation. Scroll down to view the full specs of the install.

The screenshot shows the SAP NetWeaver Software Delivery Tool installation wizard. The title bar reads "SAPinst Administrator@Win200864b: SAP NetWeaver 7.0 including Enhancement Package 2 > SAP Application Server ABAP > M...". The menu bar includes "File", "SAPinst", and "Help". The main header displays "SAP NetWeaver SOFTWARE DELIVERY TOOL" with the SAP logo on the right. A progress bar at the top indicates five steps: 1. Choose Option, 2. Define Parameters, 3. Summary (highlighted in yellow), 4. Execute, and 5. Completed. Below the progress bar, the section "Parameter Summary" is titled in orange. A paragraph of instructions states: "Choose 'Next' to start with the values shown. Otherwise, select the parameters to be changed and choose 'Revise'. You are then taken to the screen where you can change the parameter. You might be guided through other screens that have so far been processed." The "Parameter List" section contains three expandable items, each with a checkbox and a text input field: "End User License Agreement (EULA)" with the value "I accept"; "SAP System > Java Runtime Environment" with "JRE Directory" set to "C:\Program Files (x86)\Java\jre1.5.0_15"; and "SAP System > General Parameters" with "SAP System ID (SAPSID)" set to "NSP" and "Installation Drive" set to "C:". At the bottom, there are three buttons: "Back", "Next" (highlighted with a yellow border), and "Revise".

13. Installation may take 8+ hours. Do not interrupt the install. If interrupted, you may continue the current install by choosing "**Continue Old Installation**" when you re-launch the installer



14. Warning, step 16 "Importing ABAP" will take a significant amount of time. It took us ~6 hrs to complete.

The screenshot shows the SAP NetWeaver Software Delivery Tool interface. At the top, the window title is "SAPinst Administrator@Win200864b: SAP NetWeaver 7.0 including Enhancement Package 2 > SAP Application Server ABAP > M...". The menu bar includes "File", "SAPinst", and "Help". The main header displays "SAP NetWeaver SOFTWARE DELIVERY TOOL" with the SAP logo on the right.

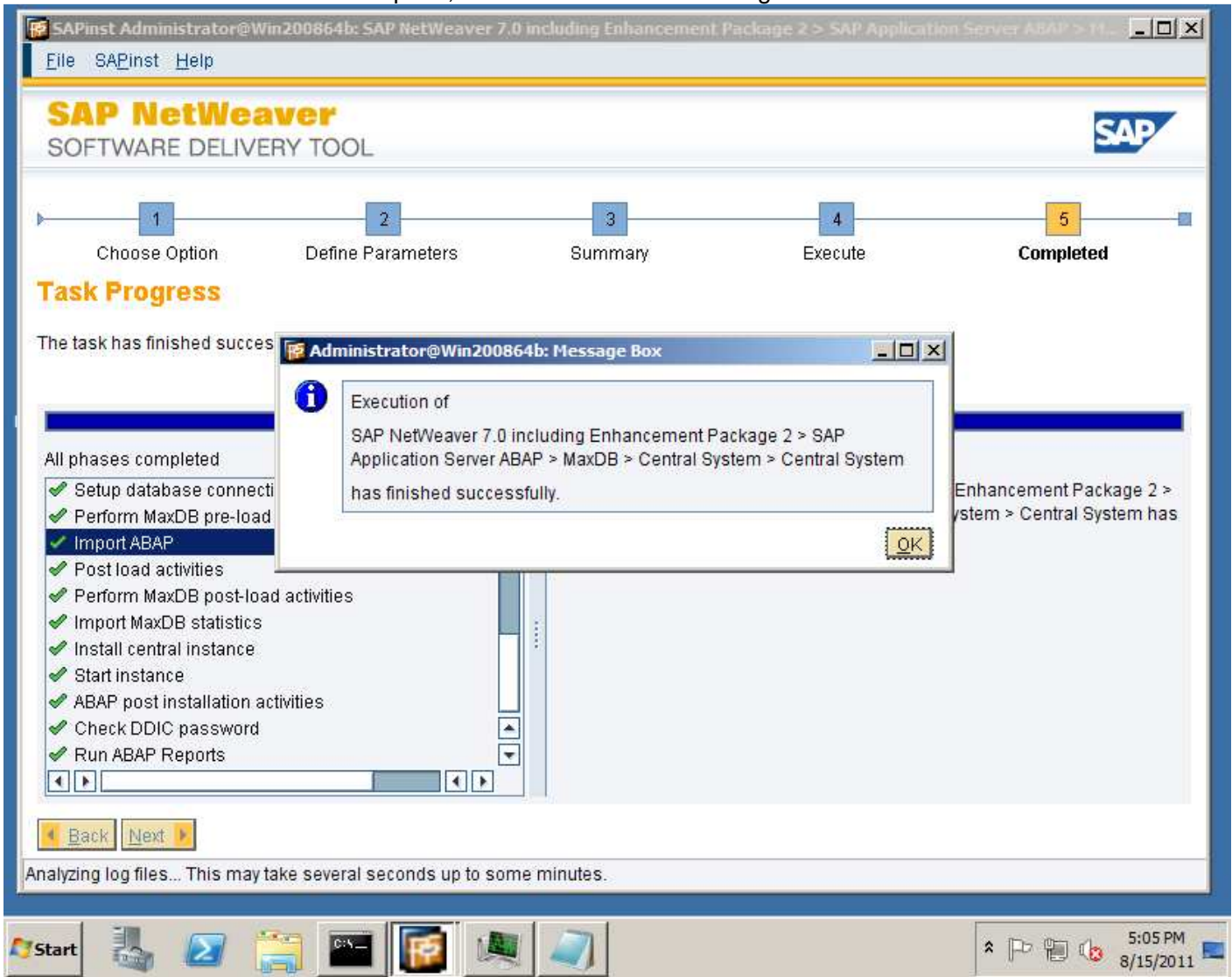
A progress bar at the top indicates five steps: 1. Choose Option, 2. Define Parameters, 3. Summary, 4. Execute (highlighted in yellow), and 5. Completed.

The "Task Progress" section shows "Running phase: Import ABAP". Below this is a progress bar and a list of tasks for "Phase 16 of 24":

- ✓ Create and load database
- ✓ Install database server
- ✓ Configure database instance
- ✓ Create database instance
- ✓ Create database schema for ABAP
- ✓ Create sequence for the ABAP user
- ✓ Setup database connection for user Win200864b\ms
- ✓ Setup database connection information
- ✓ Setup database connection for user Win200864b\SA
- ✓ Perform MaxDB pre-load activities
- Import ABAP

To the right of the task list is a large image showing a perspective view of a cable-stayed bridge structure. At the bottom left, there are "Back" and "Next" navigation buttons.

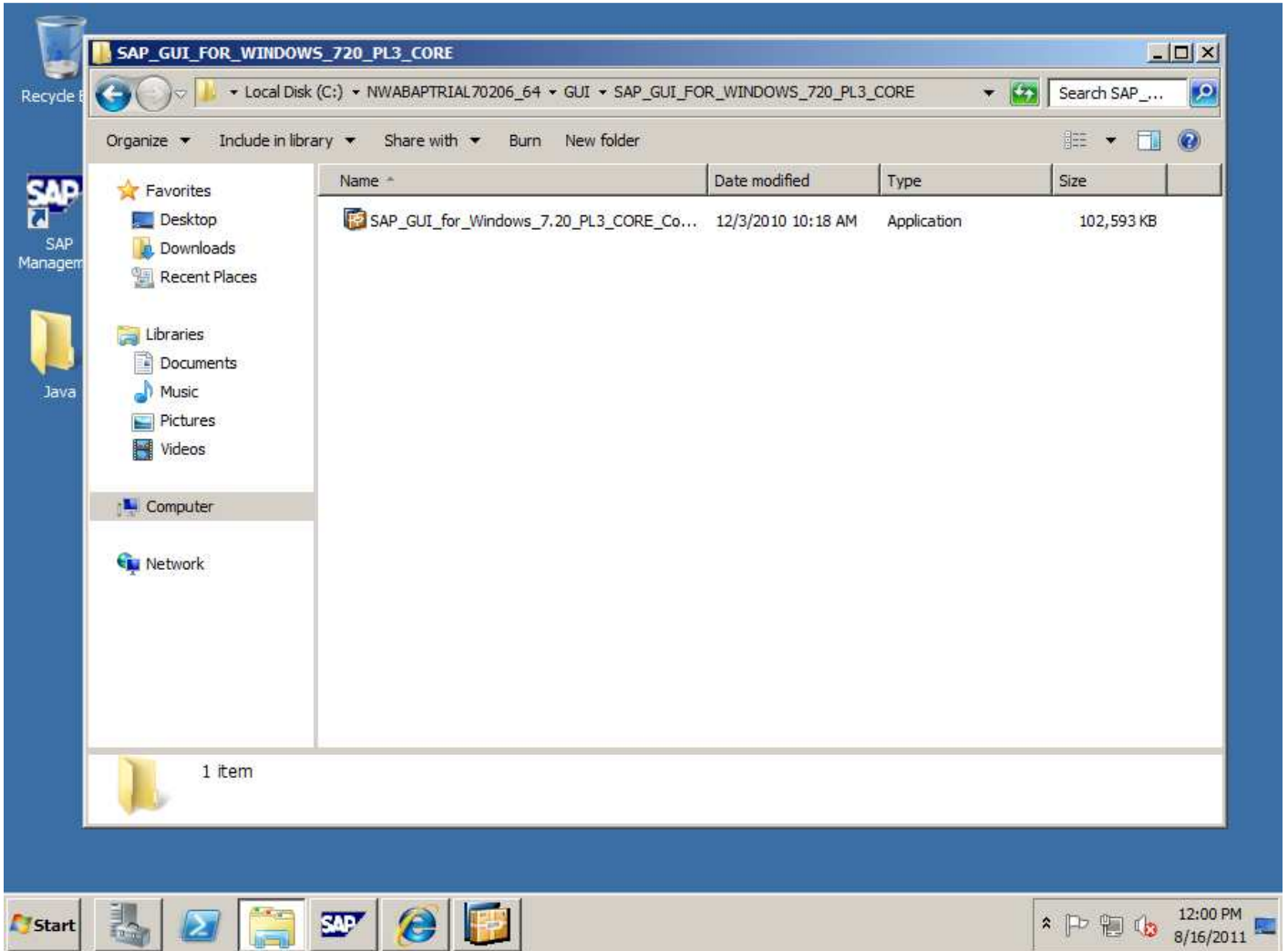
15. When the installation is complete, click **OK** at the final message box.



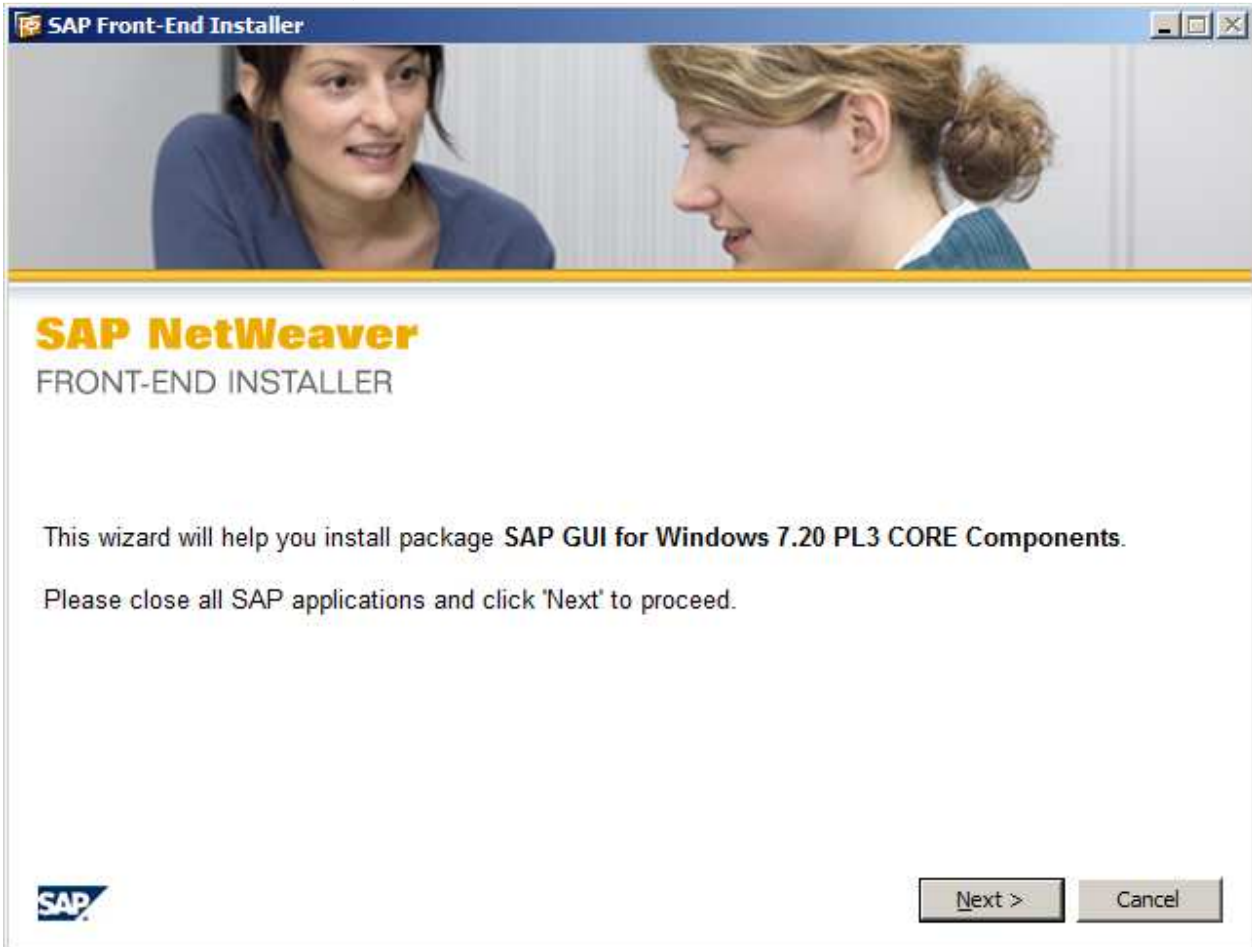
SAP Front-End GUI Installation

Below we will install the Front-End GUI for Windows. There are 2 other options, a Java and HTML version, which can also be used. Consult SAP online resources or the **start.html** file inside of the unzipped install files if you wish to install the other versions.

1. After installing SAP NetWeaver, you must install the Front-End GUI in order to interact with the server. Run the installer located in **C:\NWABAPTRIAL70206_64\GUI\SAP_GUI_FOR_WINDOWS_720_PL3_CORE**



2. For the initial screen, click **Next**



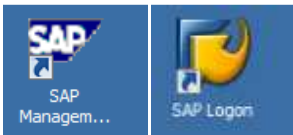
3. For the next window, check the SAP GUI files on left hand side and click **Next** to begin the install



4. Once finished, click **Done**



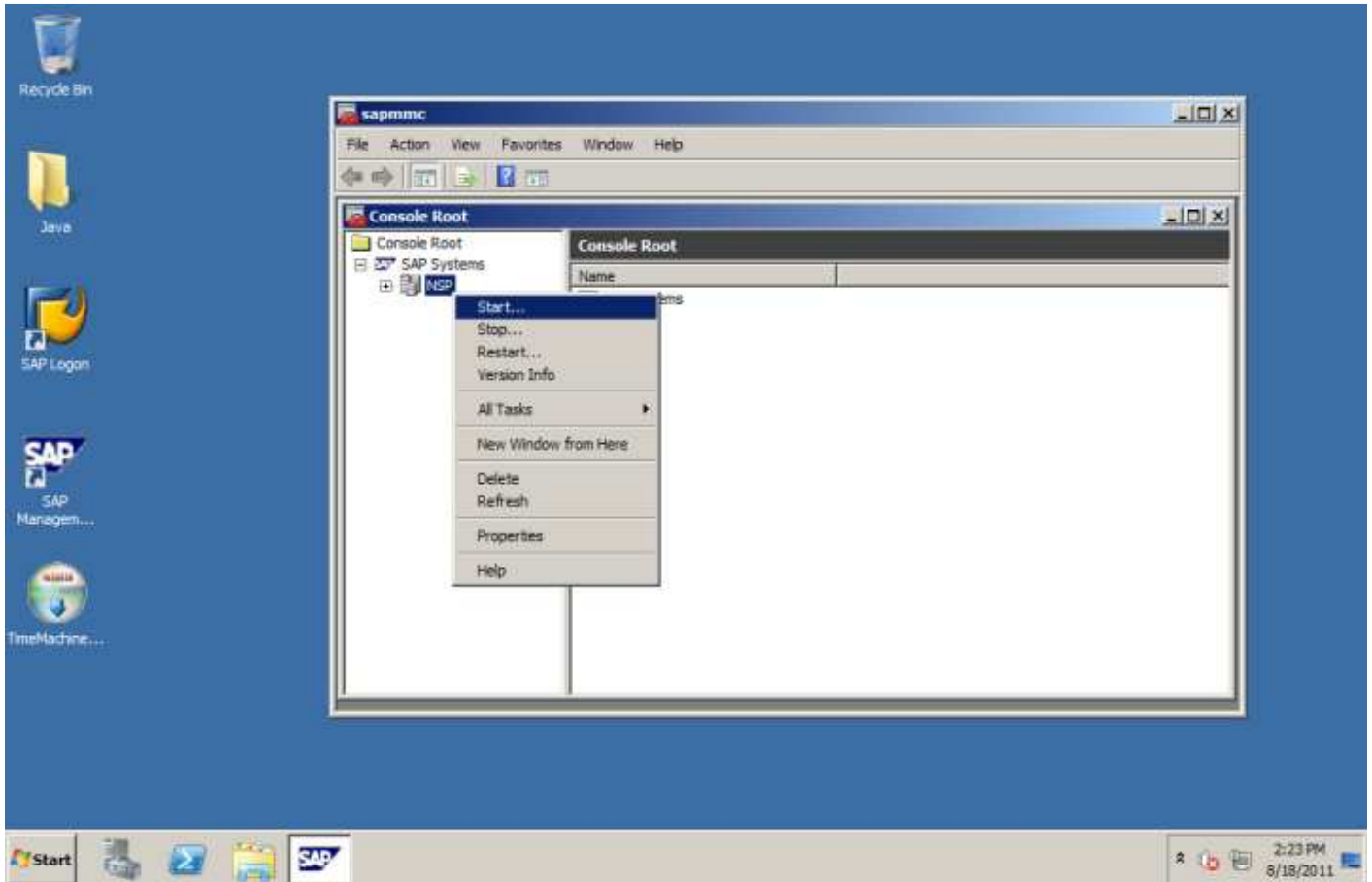
5. You should have the below 2 icons now on your Desktop after the installation. The *SAP Management Console* icon is to start the server whereas the *SAP Logon* starts the GUI.



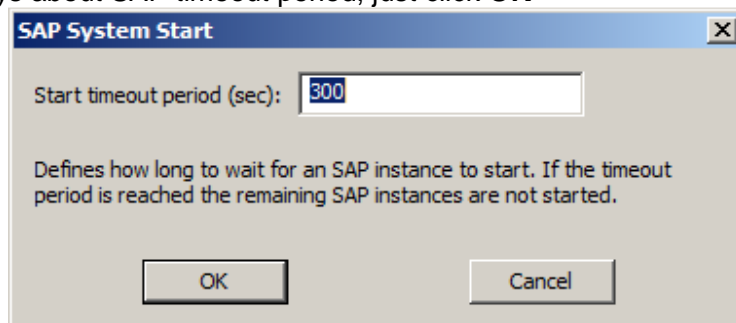
Post Install Configuration SAP



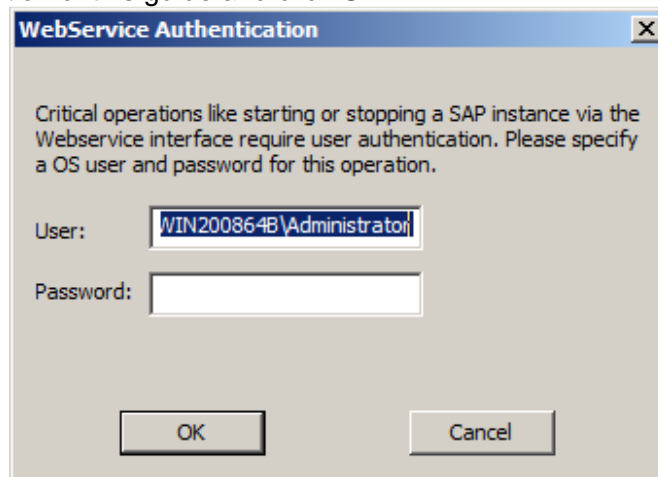
1. Double click the *SAP Management Console* icon to open the console. Click '+' on SAP Systems to reveal NSP. Then right click NSP and select **Start...**



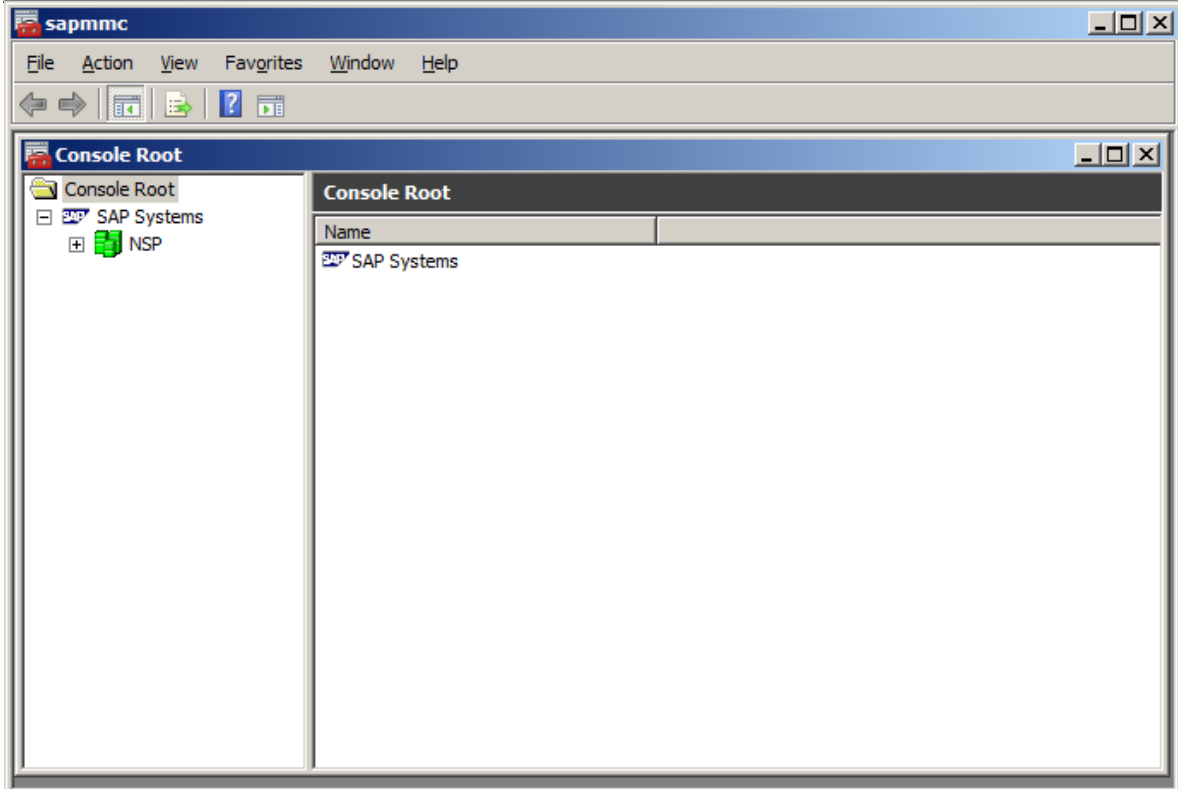
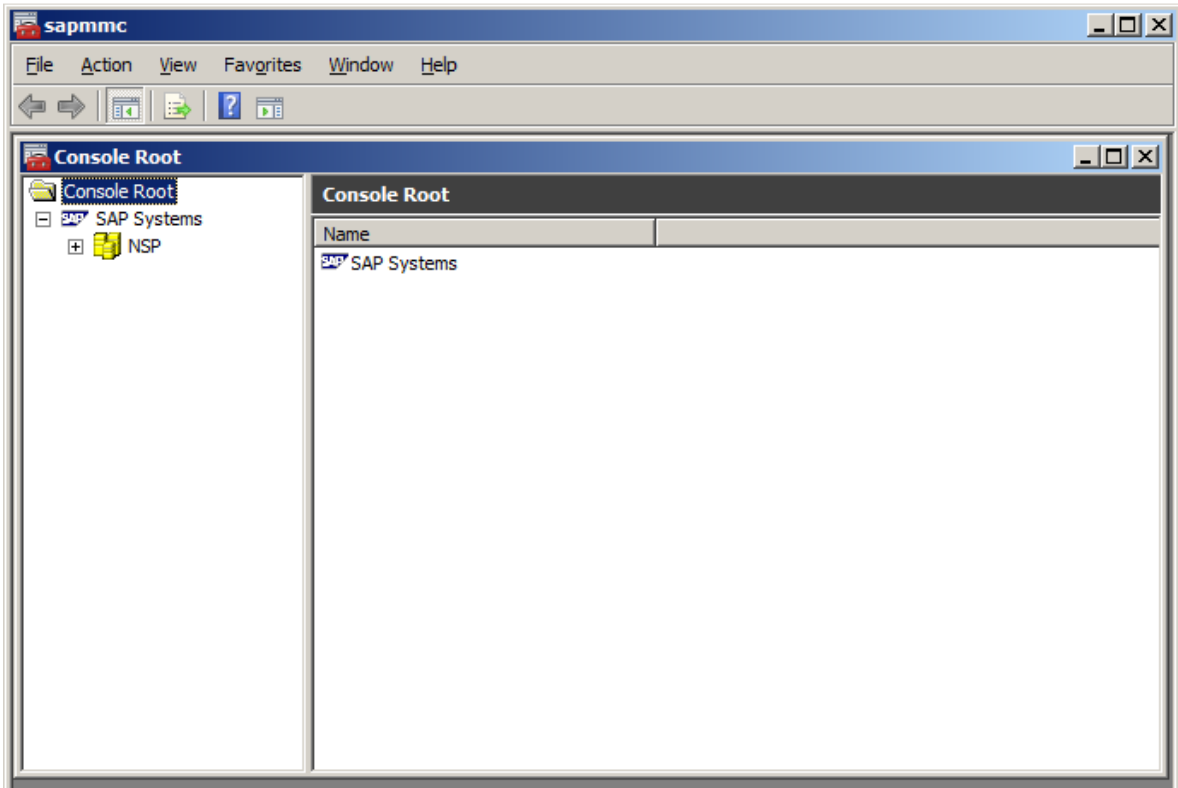
2. If a window displays about SAP timeout period, just click **OK**



3. For *Web Service Authentication*, enter the Master Password that you created in step 10 of the *SAP NetWeaver Install* portion of this guide and click **OK**.

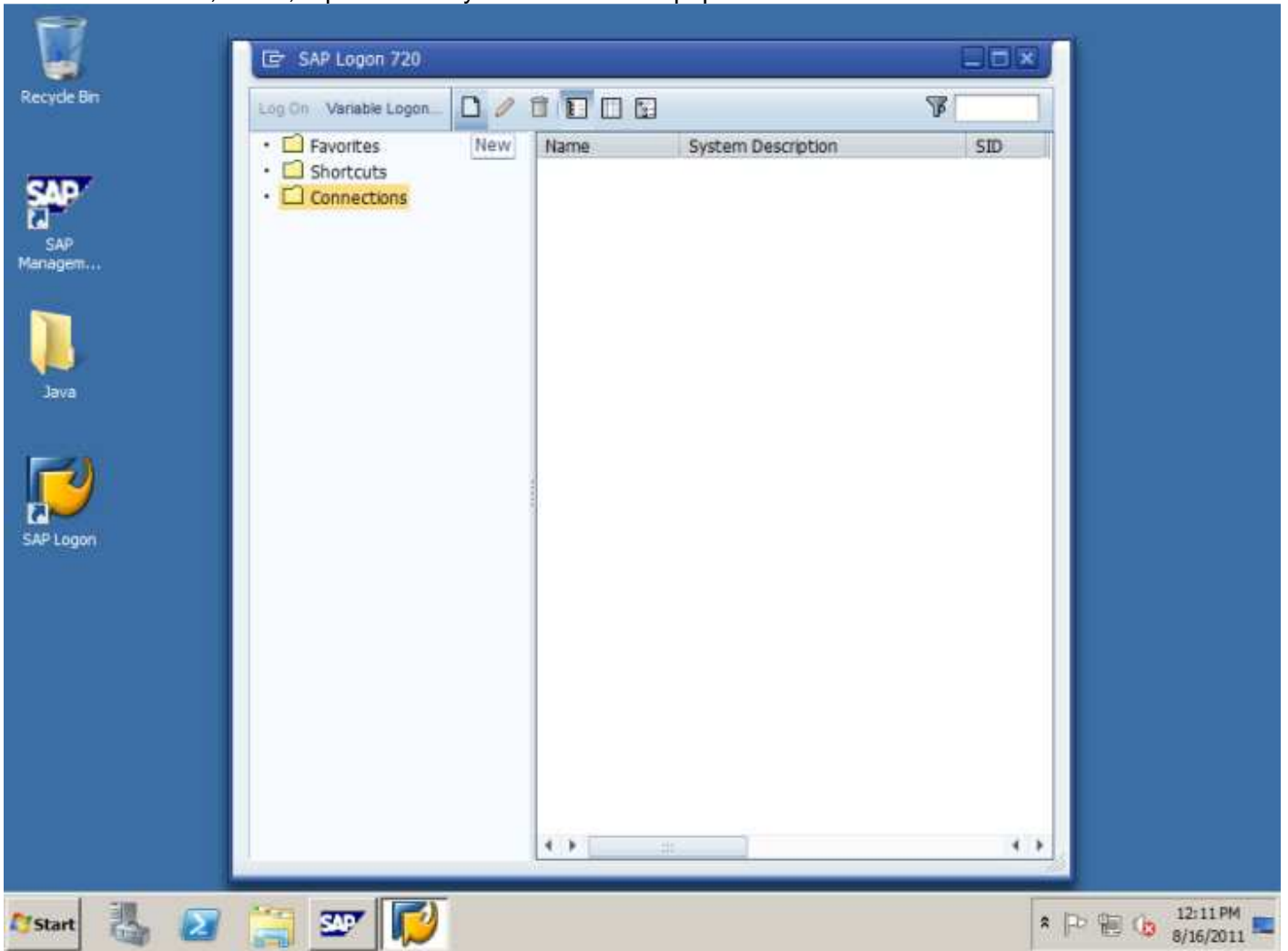


4. The server is now starting, wait for the NSP icon to go from yellow to green. Once it's green you can officially logon to the SAP GUI and use the software.
 - i. If the NSP icon stays yellow for more than a few minutes than the setup failed. Right click and restart the server. If it is red, the license is invalid.

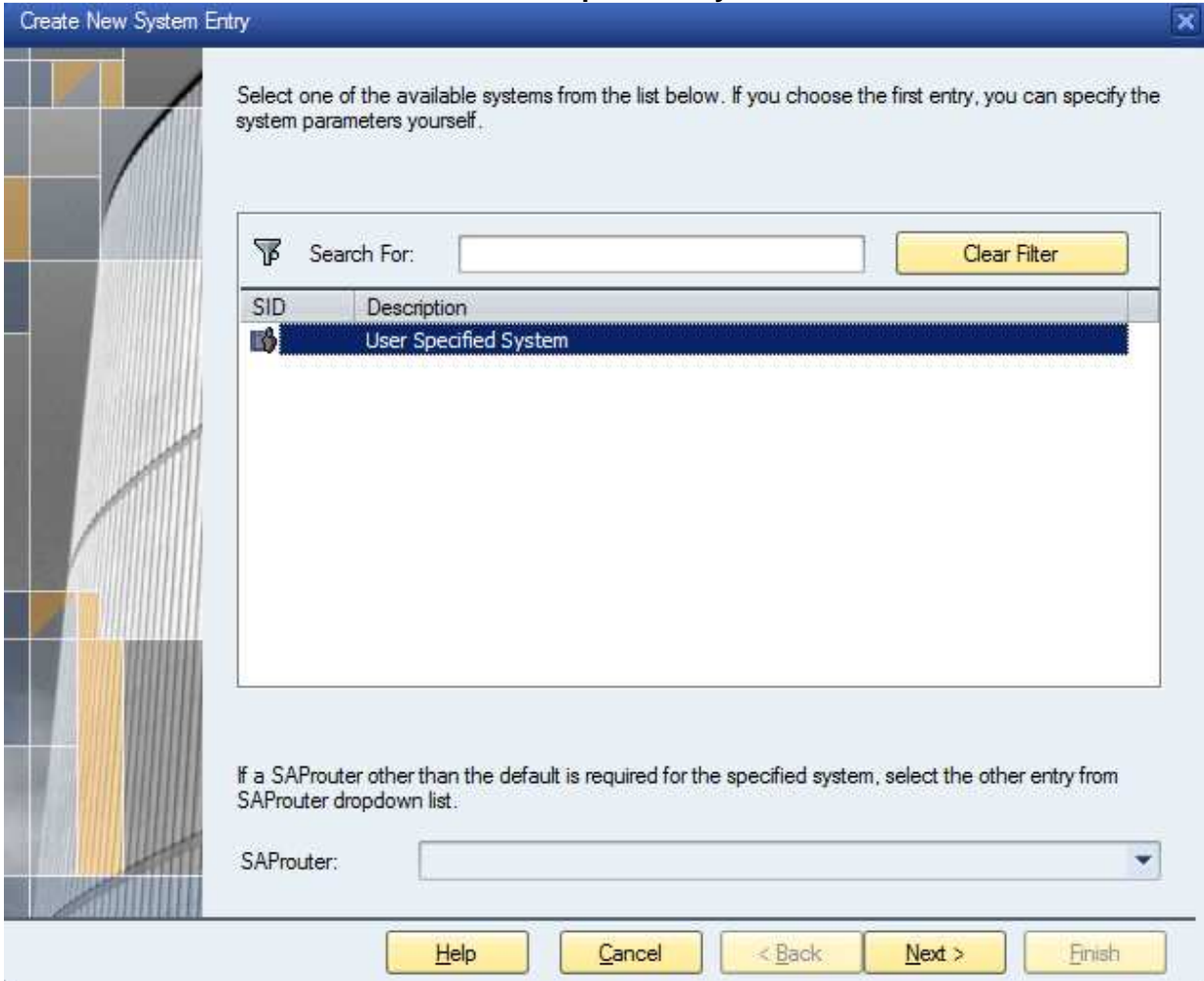


5. Now double click the *SAP Logon* icon, , and on the below *SAP Logon 720* window click the

“New” icon, , represented by a blank sheet of paper.



6. Click **New Item/Next** then click **“User Specified System”** and click **Next**



7. For the next window, enter values shown in the below figure. Then click **Finish**.

Create New System Entry

Choose the connection type and change the system parameters as required. Leave the description field empty if you want the system to propose a description. Buttons 'Next >' and 'Finish' are only active when all required input data has been entered.

Connection Type: Custom Application Server

System Connection Parameters

Description: NSP local

Application Server: localhost

Instance Number: 00

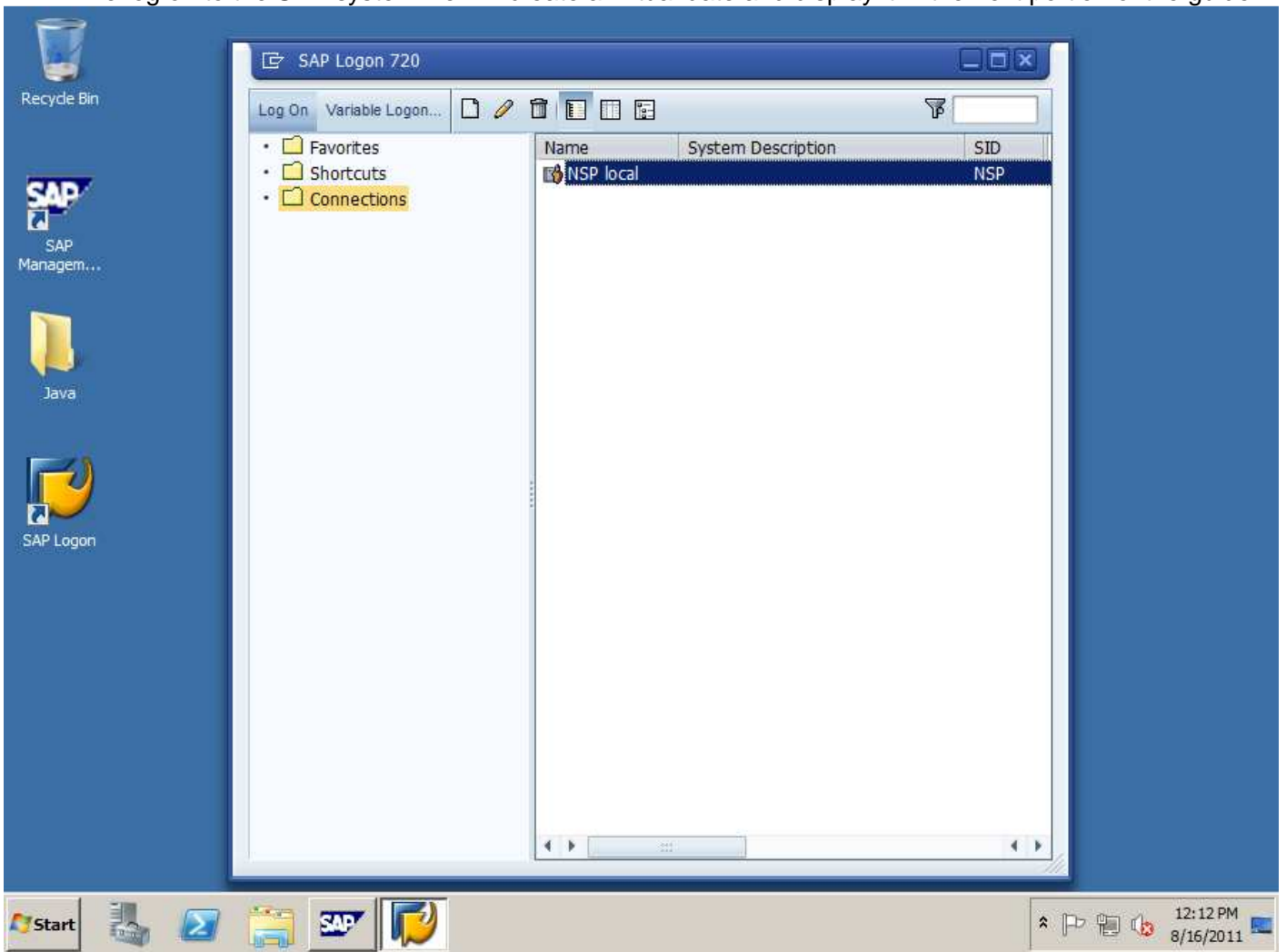
System ID: NSP

SAProuter String:

Use this page as the first page for next entry creations. This is effective immediately

Help Cancel < Back Next > Finish

8. Afterwards you should see the newly created System Entry in the original SAP Logon window. Before we log on to the SAP system we will create a virtual date and display it in the next portion of the guide.



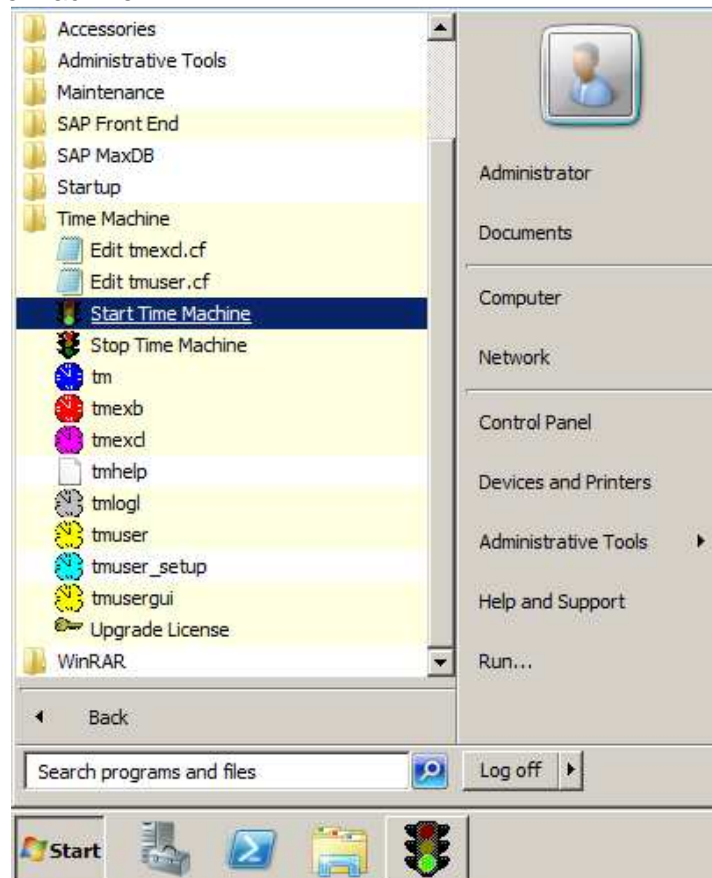
Time Machine Configuration & SAP Example

Below we will use the Time Machine command line to assign a virtual date and demonstrate how the SAP built in calendar app will see the virtual date. After installing SAP, 3 new users will be created (nspadm, sapadm, and sqdnsp). We will assign sapadm a virtual date and show the results.



1. Install Time Machine windows 2008 v7.0.1 for Windows Server 2008 64bit.
 - i. Make sure you are Administrator.

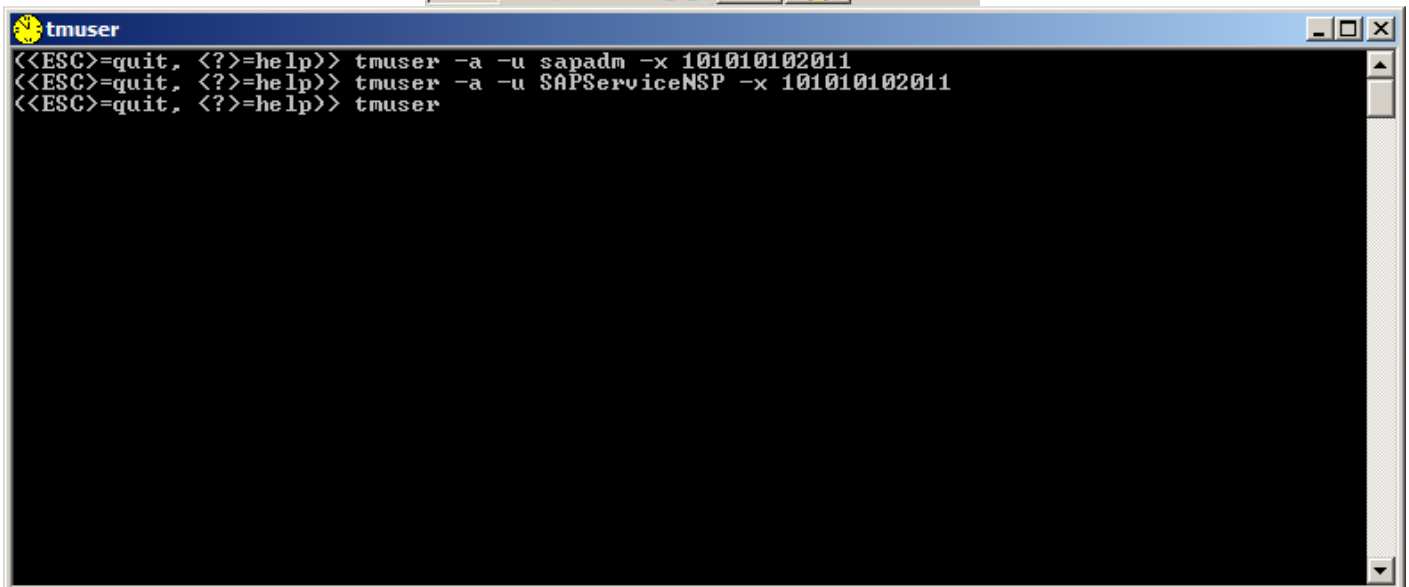
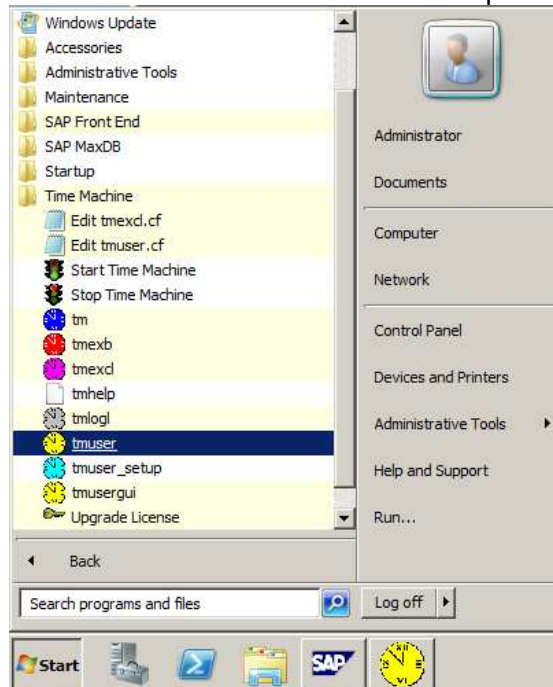
2. Afterwards start time machine



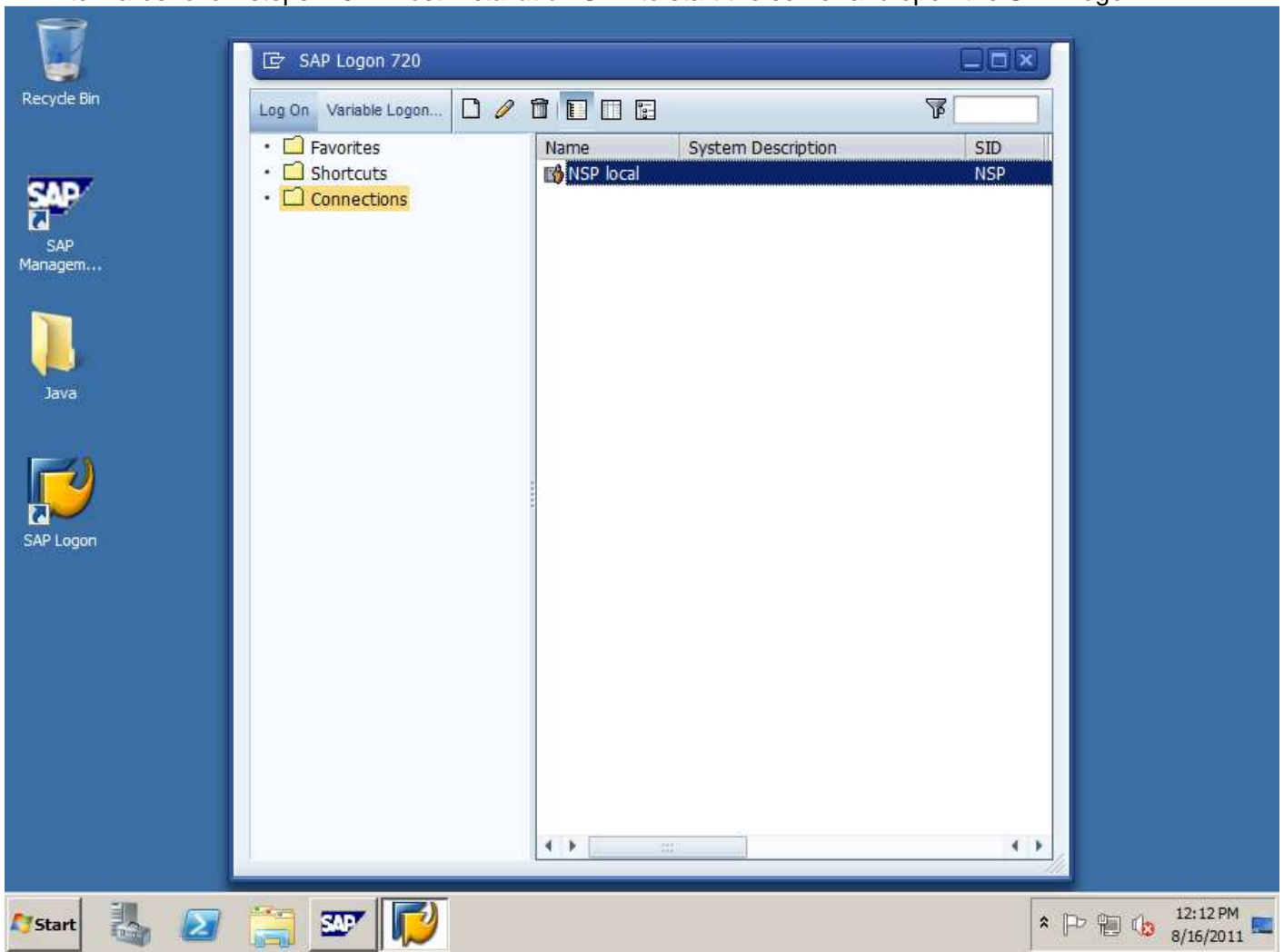
```
Start Time Machine
<<ESC>=quit, <?>=help>> net start "time machine"
The Time Machine service is starting.
The Time Machine service was started successfully.

<<ESC>=quit, <?>=help>> net start "time machine"
```

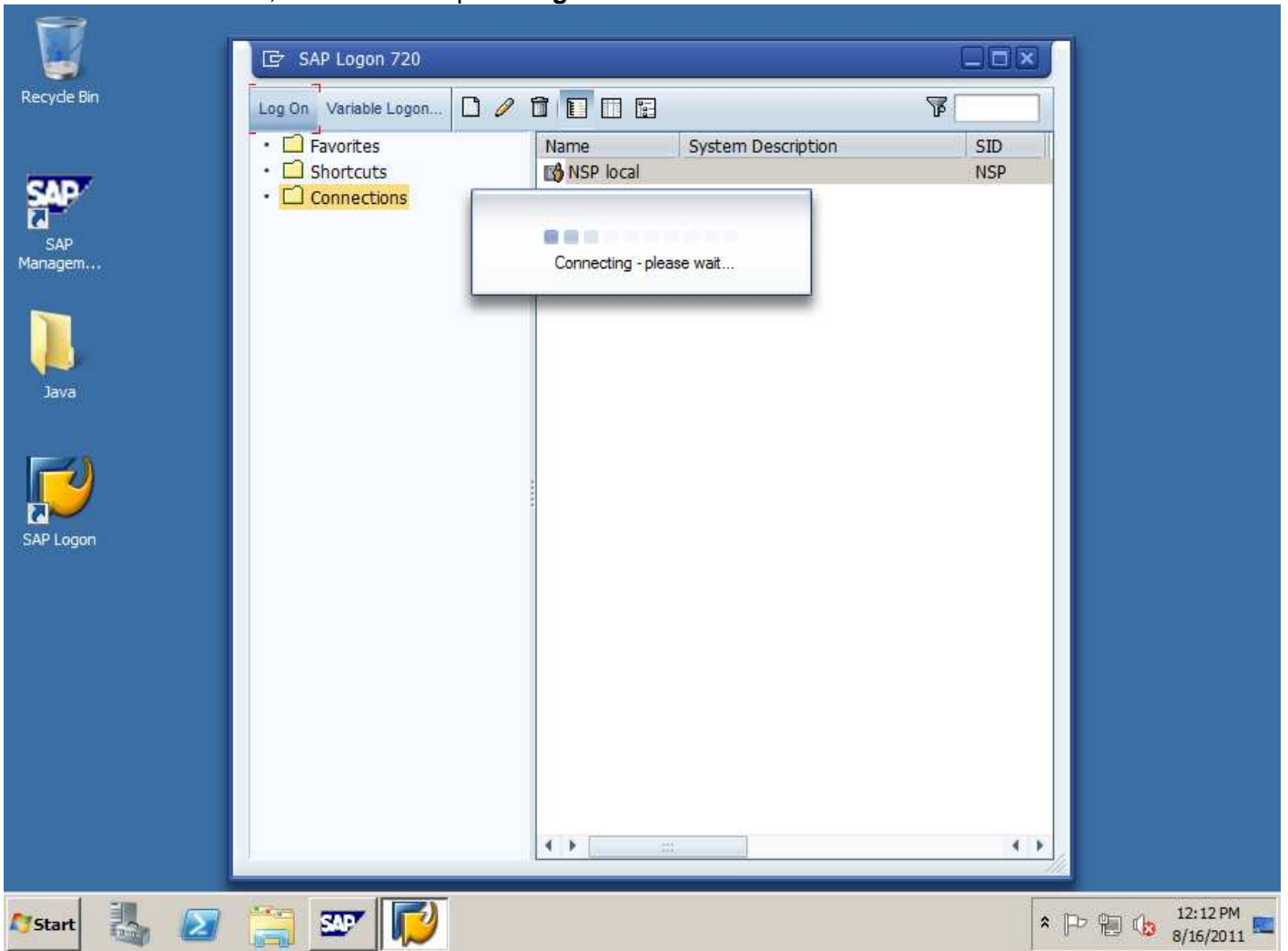
3. Open "tmuser" to run the Time Machine command line to assign virtual dates. You **must** assign a virtual date to both the user we chose **sapadm** and the background service **SAPServiceNSP**.
 - i. We created a virtual date of 10/10/2011, 2 months in the future from the current date of 8/16/2011 because the trial has a 3 month license expiration



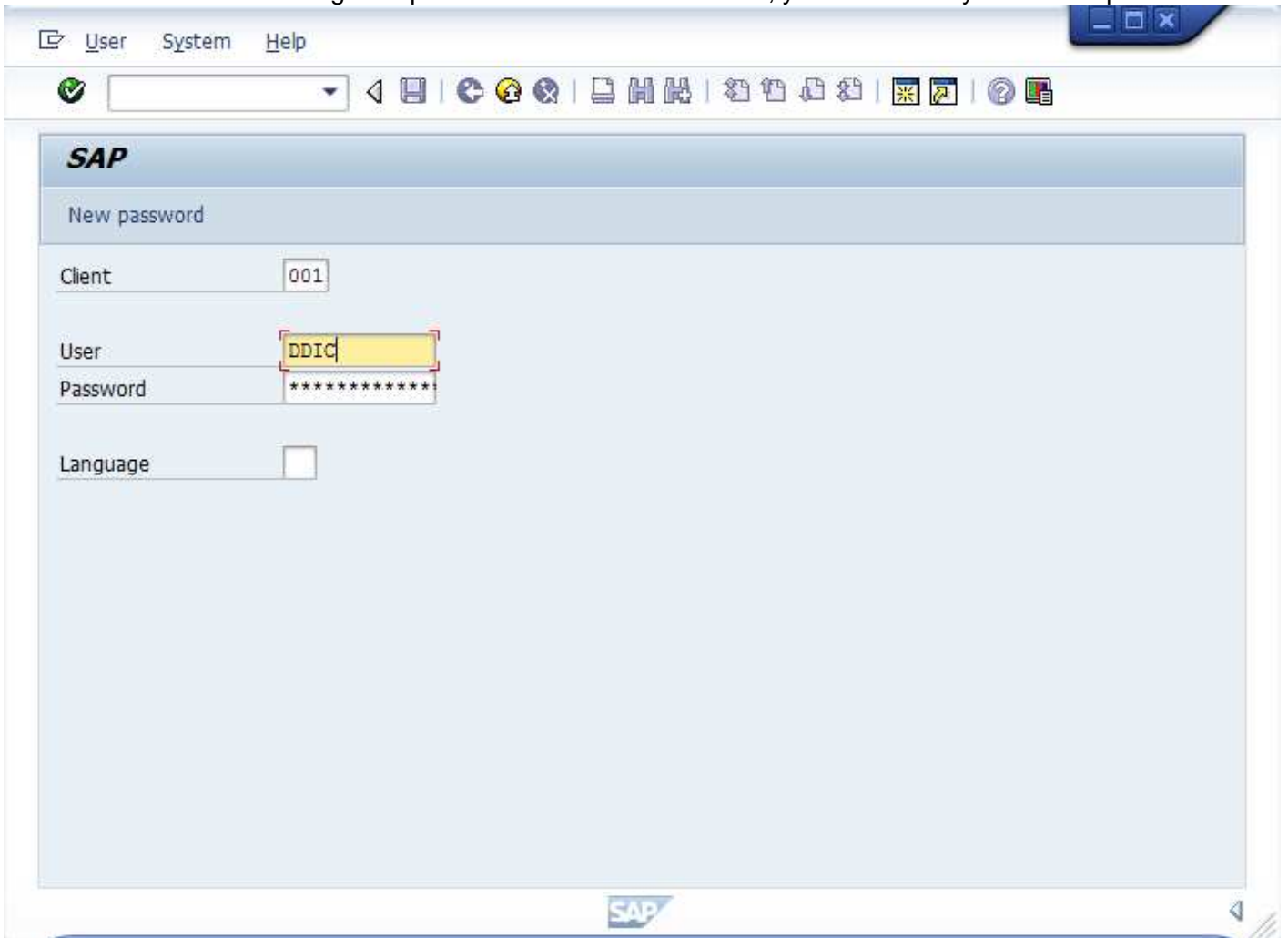
4. Now that the virtual dates have been assigned, log off of Administrator and log into **sapadm**. Afterwards follow steps 1-5 in *Post Installation SAP* to start the server and open the SAP Logon.



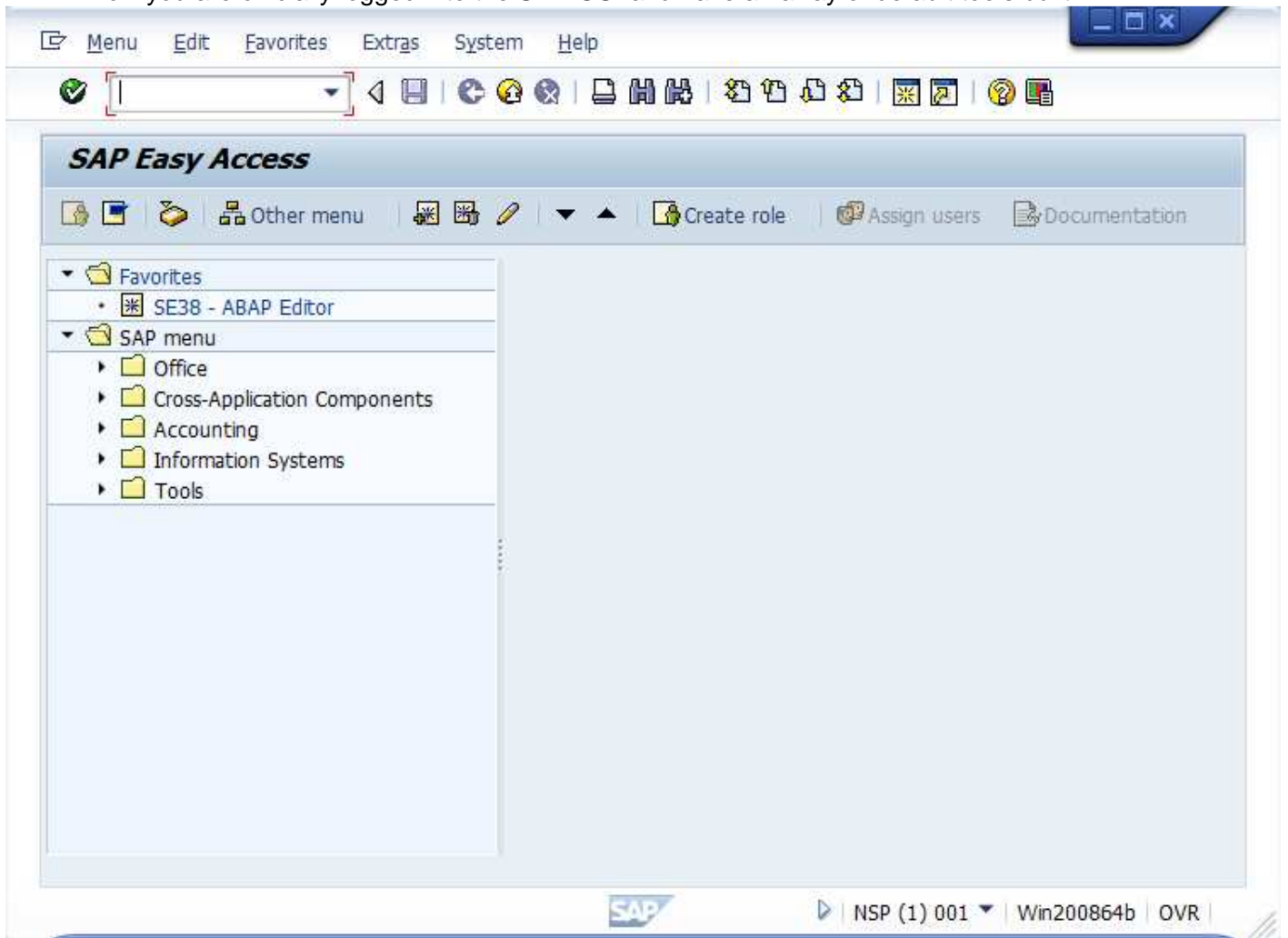
5. Click **NSP local**, and click the top left **Log On**.



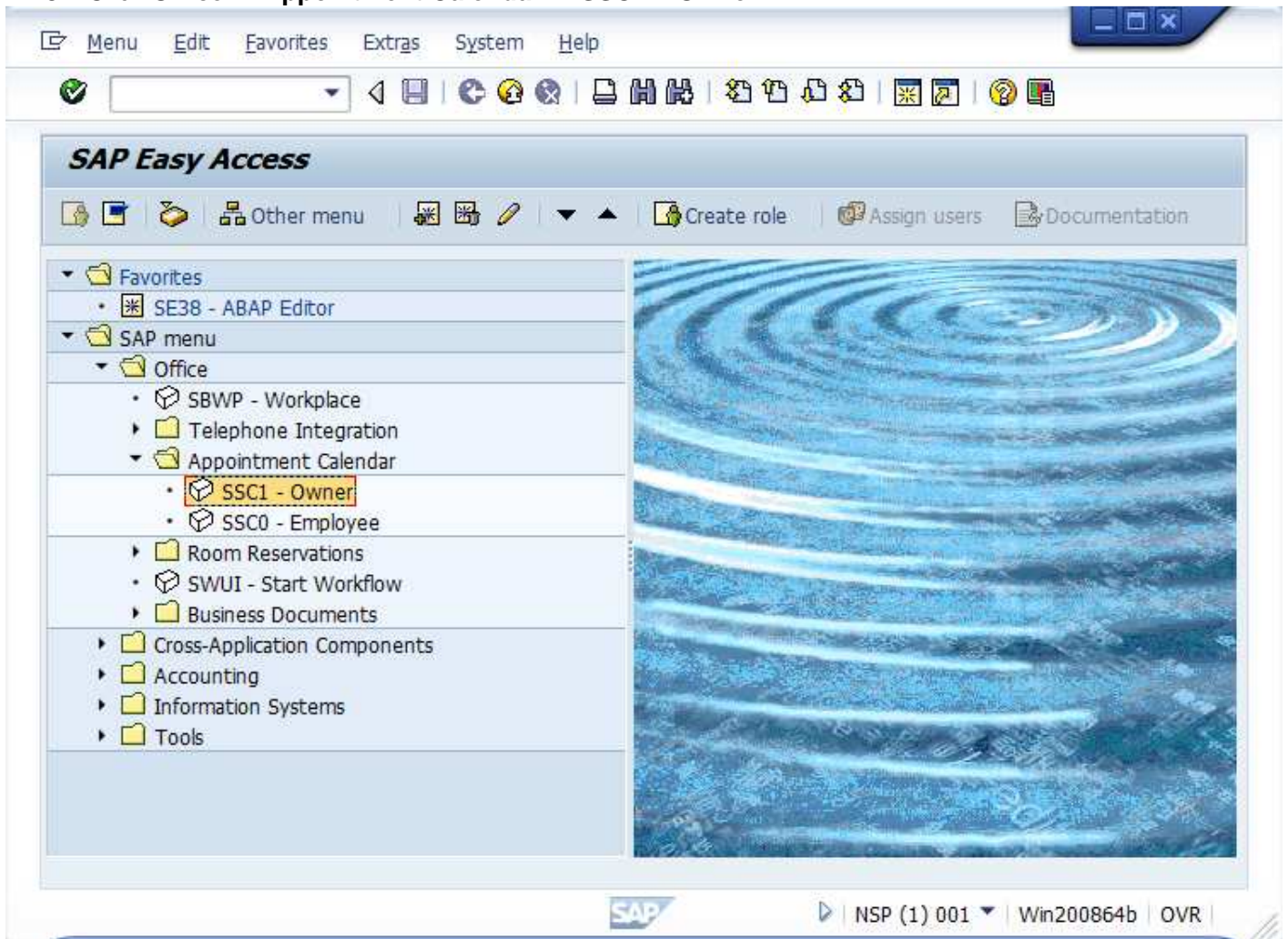
6. The below figure will appear. Log in as the built in user **DDIC** using the master password you created in step 10 of *SAP Install* above.
- i. On your keyboard press **Enter** to login.
 - ii. Even though the password area is filled with ****, you must enter your master password



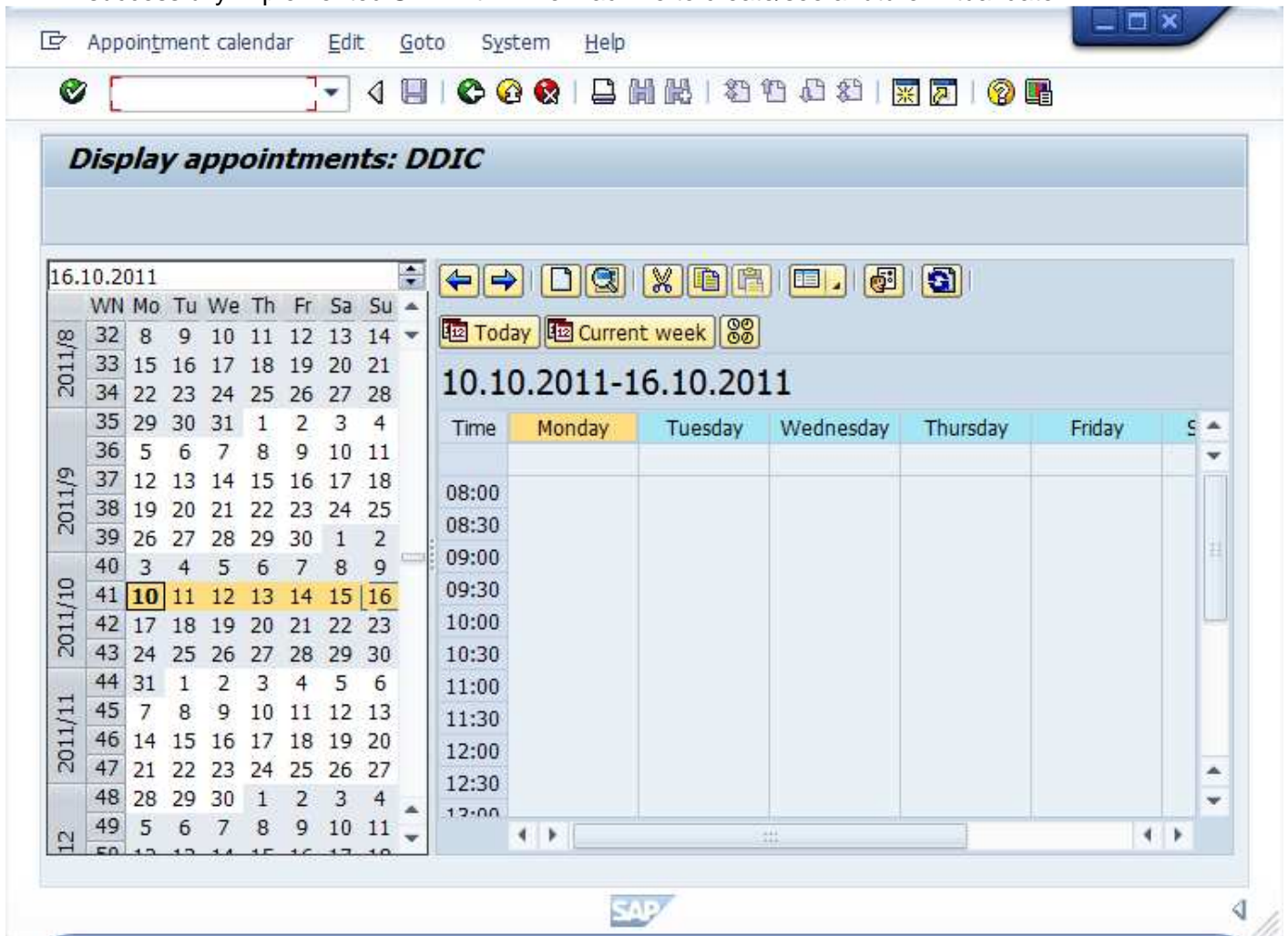
7. Now you are officially logged into the SAP GUI and have an array of default tools built-in



8. Click **Office** -> **Appointment Calendar** -> **SSC1 – Owner**



9. You will now see the virtual date we created 10/10/2011 below in the calendar app. We have now successfully implemented SAP with Time Machine to create/see a future virtual date.



For more help on installing SAP visit these guides.

<http://www.sdn.sap.com/irj/scn/weblogs?blog=/pub/wlg/20668>

<http://www.sdn.sap.com/irj/scn/weblogs?blog=/pub/wlg/20467>

*You need a free SAP account to view the above guides.