Data Archiving for Adabas

Data Archiving for Adabas Installation

Version 1.1.1

May 2011

This document applies to Data Archiving for Adabas Version 1.1.1.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 Data Archiving for Adabas Installation

Data Archiving for Adabas is a fully portable technology. It runs in all primary Unix systems, Windows and also in z/OS. There is only one code-base rather than one code-base for open systems and another for mainframe.

Important: Software AG strongly recommends that you read the installation very carefully. Also, there are often things that are mentioned in the Readme of the product that have come to light after this documentation is frozen so please also be sure to read that before proceeding with the installation actions.

- Software AG Installer
- Installation Prerequisites
- Installation Planning and Preparation
- Installation Procedure Overview
- Installation Procedure for Windows and Unix
- Installation Procedure for z/OS
- Deactivating and Uninstalling

2 Software AG Installer

Data Archiving for Adabas is installed using the Software AG Installer from the Software AG download center. The Software AG Installer center is sensitive to the products for which you are licensed. When you enter it you see all the products that you are able to install. Depending upon the platform you wish to install, you can install both the Runtime or the User Interface or both.

z/OS can only install the Runtime, for these systems you must install the User Interface in another platform type.

For Windows and Unix you can choose to install Runtime only, User Interface only or both depending upon what you wish to do.

Adabas System Coordinator is prerequisite sibling product with the same choices of Runtime only, User Interface only or both. These choices must match those you make regarding Data Archiving for Adabas.

When the User Interface is to be installed the System Management Hub will also be automatically selected because it is prerequisite.

The Installer will do the following under your direction:

- Download the install files to the computer location you request (or will arrange to ship a CD, DVD, etc.).
- Copy the files to the install location that you choose.
- Define the required local service (Windows only).
- Launch (or make available to launch) the product-specific activation component to finish off the installation.

Note: In Windows a Start menu option is created for this function.

3 Installation Prerequisites

- Operating Systems 6
- Adabas 13
- Adabas System Coordinator Version 6
- System Management Hub 7

Operating Systems

The installation for Data Archiving for Adabas is for:

- AIX
- HP-UX
- Red Hat Enterprise Linux
- Solaris
- SUSE Linux Enterprise Server
- Windows XP Professional
- Windows Server 2008
- Windows 7 Home
- Windows 7 Professional
- z/OS

Adabas

Data Archiving for Adabas can be used with any supported level of Adabas Version 6.1.9 or above in open systems and Adabas 8.1 or above in mainframe z/OS. Adabas must be UES enabled.

Adabas Client Library (OS)

For sites using Adabas 6.2, the client library ACL 6.2.1.61 (or above) is required.

Adabas System Coordinator Version

Adabas System Coordinator Version 8.2 or above is required when using Data Archiving for Adabas.

The installation kit for Data Archiving for Adabas includes and will install Adabas System Coordinator 8.2 too.

System Management Hub

System Management Hub Version 8.1 or above is required and is used as the user interface for all interaction with Data Archiving for Adabas.

A web browser supported by SMH must be available.

4 Installation Planning and Preparation

- Planning Information 10

Planning Information

It is very important to plan the overall implementation of your archiving infrastructure from the beginning. If you intend to limit the whole implementation to be completely within a single computer then the planning is straightforward since there is a network of one computer, which is clearly the simplest model. Other enterprises have many computers so must consider:

- The databases you intend to extract data from; and the computers where these databases run. Data Archiving for Adabas must be installed on all these computers in order to run extractors.
- The computers you intend to run accumulators on, to write archive data. Accumulators can be run on different computers to extractors so Data Archiving for Adabas must be installed on all the accumulator computers to:
  - spread processing load and
  - run accumulators on cheaper hardware.

Once you have a mental picture of all the computers involved you now must decide where the (Adabas) configuration file is to be loaded and run. Software AG strongly recommends a single configuration file is shared by all computers. To accommodate configuration file sharing we have provided an in-built mechanism - so you do not need to acquire our Net-Work product simply for configuration! By sharing the file all connectivity configuration is automatic, which completely frees you from the chores of reciprocally matching up numerous settings across all computers. This automated configuration is a major feature.

The configuration file usually runs on one of the primary computers out of all involved, but the choice is clearly yours. One apparent concern is that a single configuration file introduces a single point of failure. However, we take measures in the software to make sure outages of the file do not interrupt 24*7 operations. Put simply, the archive management service in each computer acquires a copy of its configuration on first use, and keeps a copy of it locally thereafter. Consequently, outages of the shared file are tolerated. In addition, each service periodically checks for changes to the configuration and automatically reflects changes locally too.

In summary, implementation planning necessarily involves:

- Try to use all installation defaults; it is always simpler. Especially where port numbers are concerned
- Decide all the computers where extractors will run.
- Decide all computers where accumulators will run.
- Decide which computer is to house the configuration file. The specific installation sections for each platform cover the choices between sharing or establishing the configuration file.
- Install on the computer that houses the configuration file first. Instruct the installer to establish the file for first use.

- Find out the hostname of the computer housing the configuration file. You need this as a reference point when doing subsequent installs. See below for information on finding hostname in various systems.
  - for z/OS (USS), use the *nslookup* directive to show the "name" (hostname) of the computer
  - for Unix, use the *nslookup* directive to show the "name" (hostname) of the computer
  - for Windows, go to the Control panel. Select System. And then select the Computer name tab. This will show the Full computer name (hostname).
- In all subsequent installs on other computers make sure you use the shared configuration option, do not establish additional files.
- Make sure ports are enabled where firewalls are used. Where Data Archiving for Adabas is used across multiple computers there may be need to adjust firewall settings. The User Interface doesn't usually need any adjustments because communications by the User Interface are out-bound. However, the runtime receives communications so it must be enabled as follows:
  - The following program in the Data Archiving for Adabas directory structure must be added as an exception:

    ```
    adrdrv
    ```

  - The following programs in the Adabas System Coordinator directory structure must be added as an exception:

    ```
    corlc
    cord
    ```

5 Installation Procedure Overview

This section provides and overview of the procedure for Data Archiving for Adabas installation:

Overview

Data Archiving for Adabas requires both Adabas System Coordinator and System Management Hub in order to function. There are three basic areas of the archiving installation:

- The runtime logic.
- The browser UI (user interface).
- The configuration file.

In a production environment it is quite normal for the runtime to be installed on many computers without the UI. The UI is usually installed on a workstation; one session with the UI can manage, monitor and operate all the runtimes on all the computers in your network, providing your firewall allows of course!

The Runtime Logic

The whole aim of the runtime logic is that it runs unattended. The runtime is made up of the following components:

- Launch controller.

  The launch controller is a very small part of the logic that is recommended to start up when the operating system starts up. The launch controller does what its name suggests, it launches the other components automatically according to the rules you define in the configuration file.
- The Archive management service.

  This is the “control center” for all archive operations. The archive service makes sure all the archive operations that you define (in the configuration file) are carried out. In doing so it will

itself launch extractors, accumulators, recalls, etc as appropriate. No need for submitting jobs or typing command-line inputs; everything happens automatically.

- Extractors, accumulators, recalls, etc.

  As stated above, these are launched by the archive service. As they run they will confide status information back to the archive service.

Where you only install the runtime without the UI (this is normal for most servers where Adabas runs) then the embedded System Management Hub install is also skipped.

The Browser UI

The UI is a plug-in to the System Management Hub. All archiving administration, configuration, operation and monitoring is performed through the UI. No need to get into every computer where the runtime is installed, you can manage everything from the outside in the UI. So where the runtime is installed on the many differing types of operating system that you have you only need get into the UI in one place in order to manage archiving across your whole network.

The Configuration File

The configuration file has already been discussed in the planning section above. The planning section describes how to use the recommended in-built mechanism for sharing the configuration file. However, depending upon the products installed and the platform being installed upon it is possible for other sharing mechanisms to be used, in whole or in part:

- Use Adabas Cluster Services as the home of the file. This is appropriate for all instances of the runtime that are to run in connected z/OS computer running as a SYSPLEX.
- Use Net-Work.

6 Installation Procedure for Windows and Unix

- License Keys 50
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Important: Before beginning to install the ADR package, you must ensure that all the latest operating system updates have been applied.

License Keys

License keys for the runtime component only are supplied separately from the software installation mechanism. You should make sure your license file is in a file that is available to the installation activation (unless you are going to use the software under a community edition agreement, without a license).

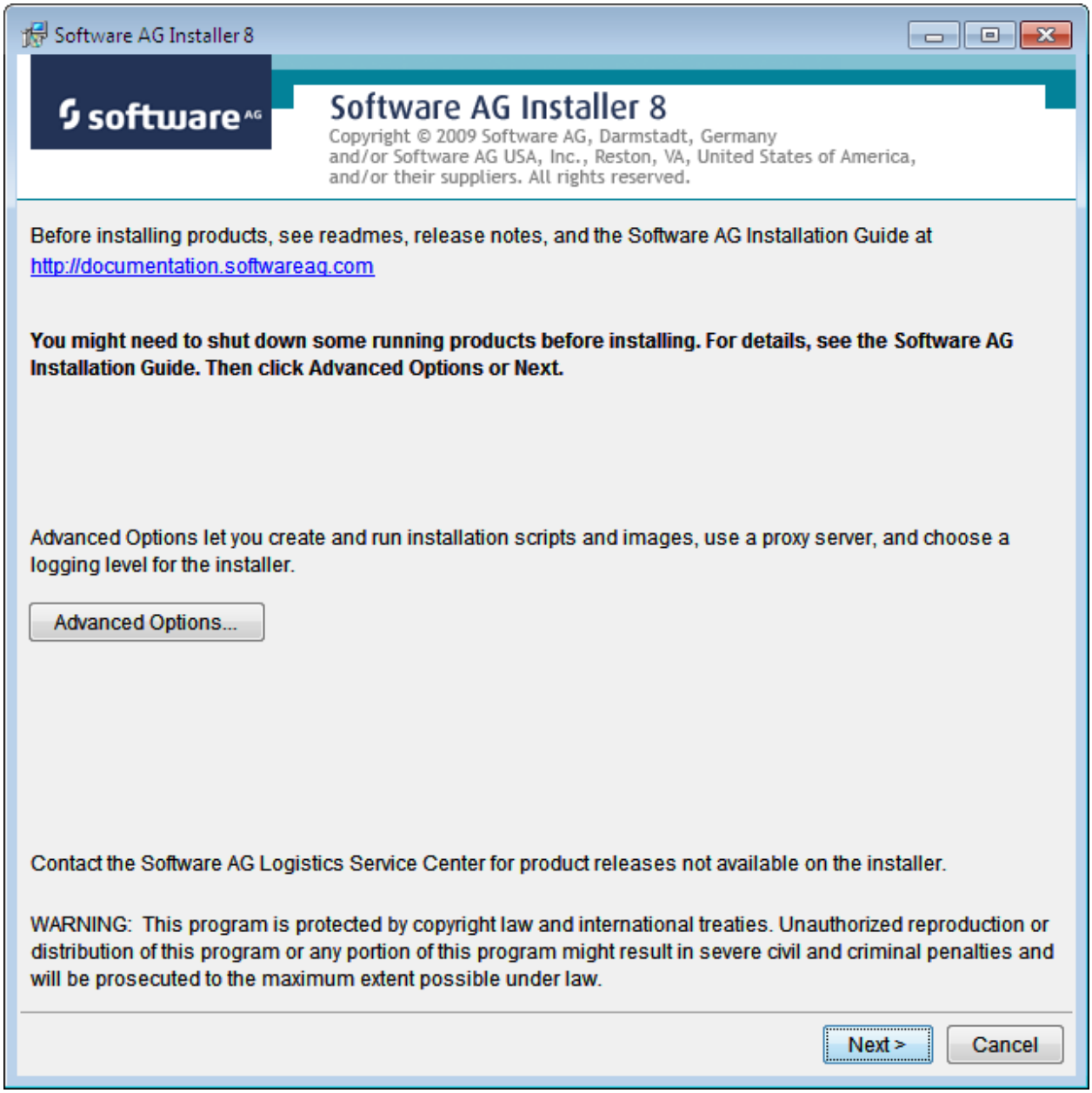
Installation Steps

During the install you must identify the configuration file. Please refer to the section **Installation Planning and Preparation** for information on how to manage that part of the installation. The installation comprises the following steps;

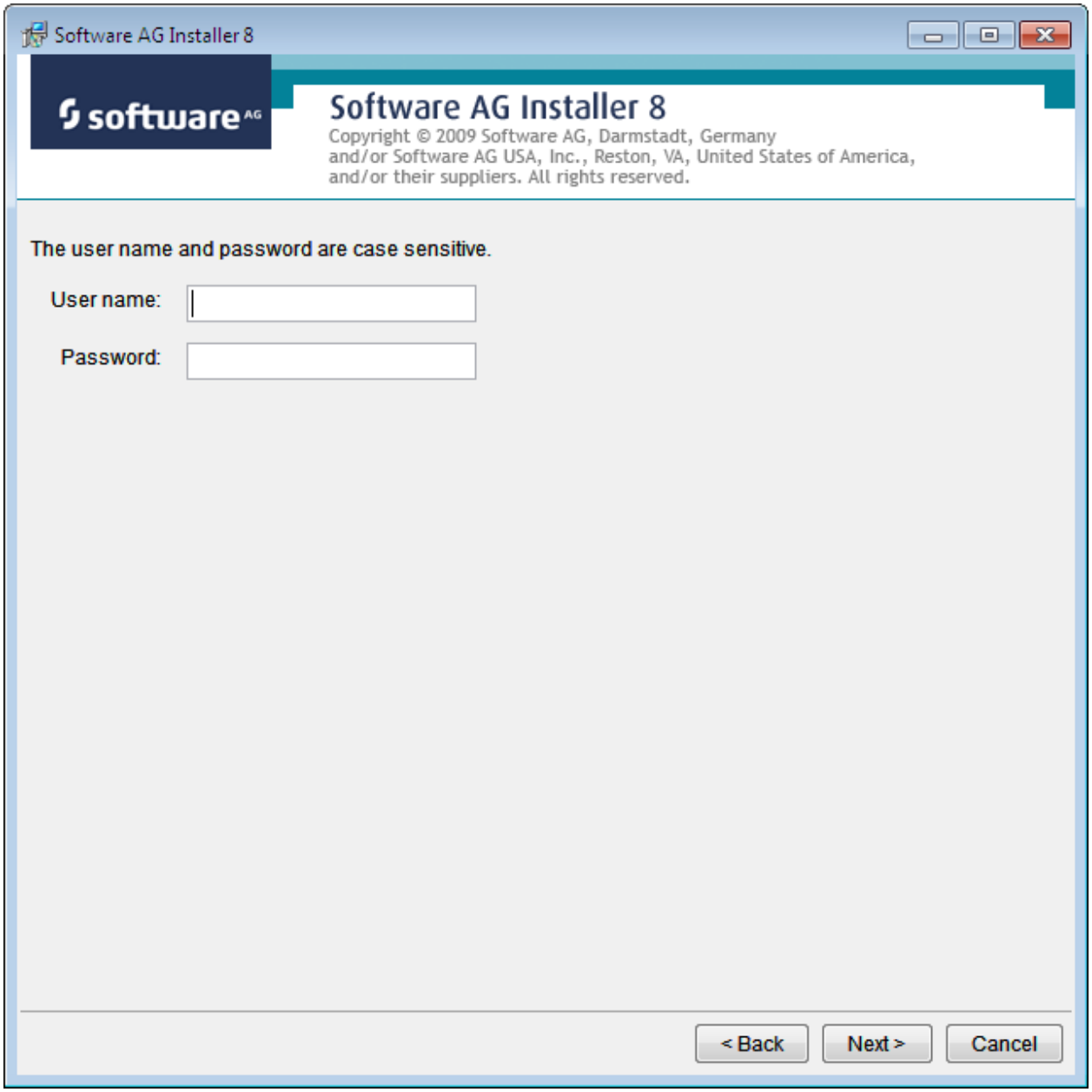
- Log into the Software AG Installer.
- Select the installation directory location.
- Select the product component(s) to be installed.
- Confirm the Installer should proceed.
- Execute the product activation step.

Step by Step Installation of all Components

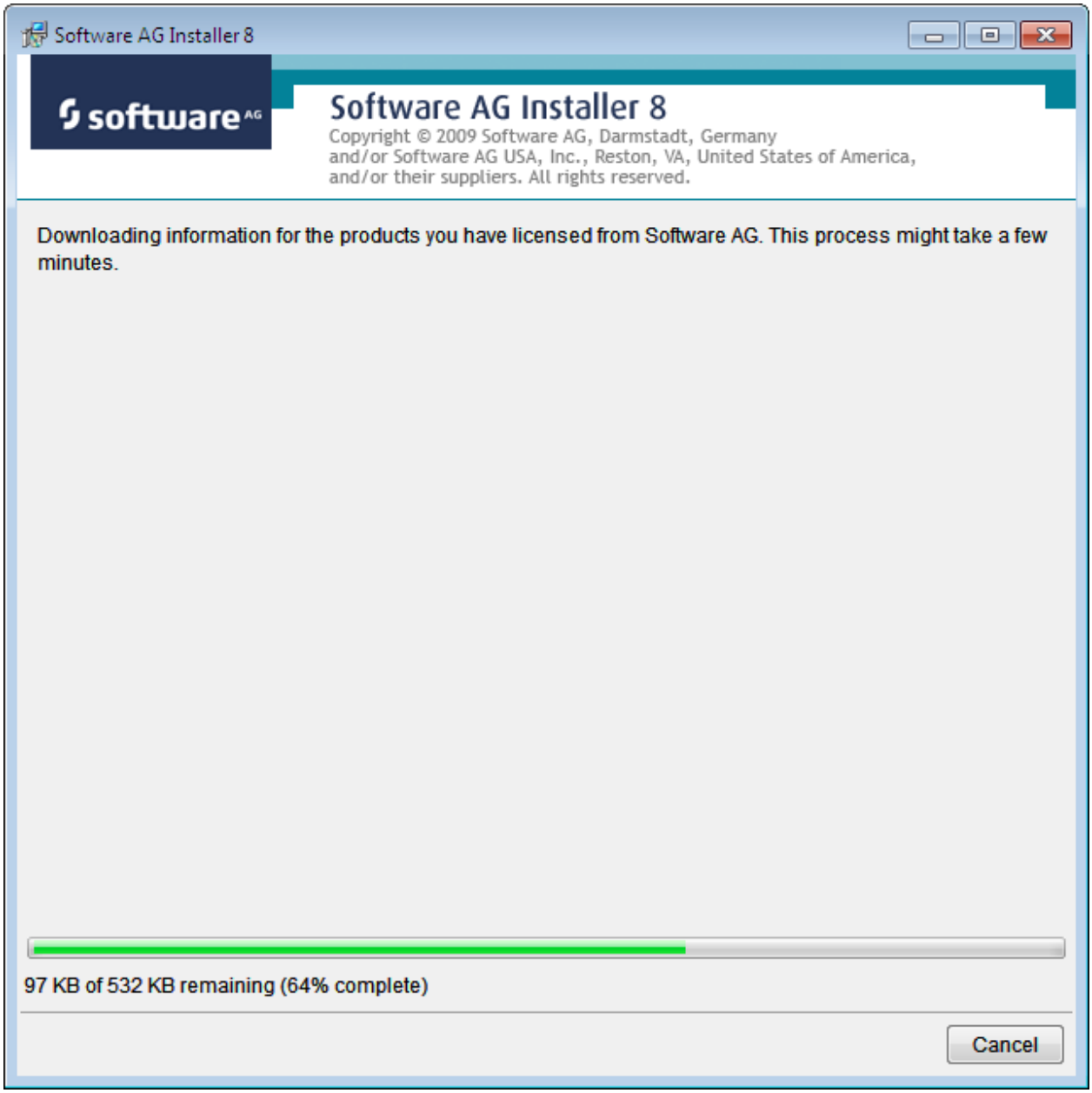
On the Software AG Installer Welcome Screen, click Next to start the installation.



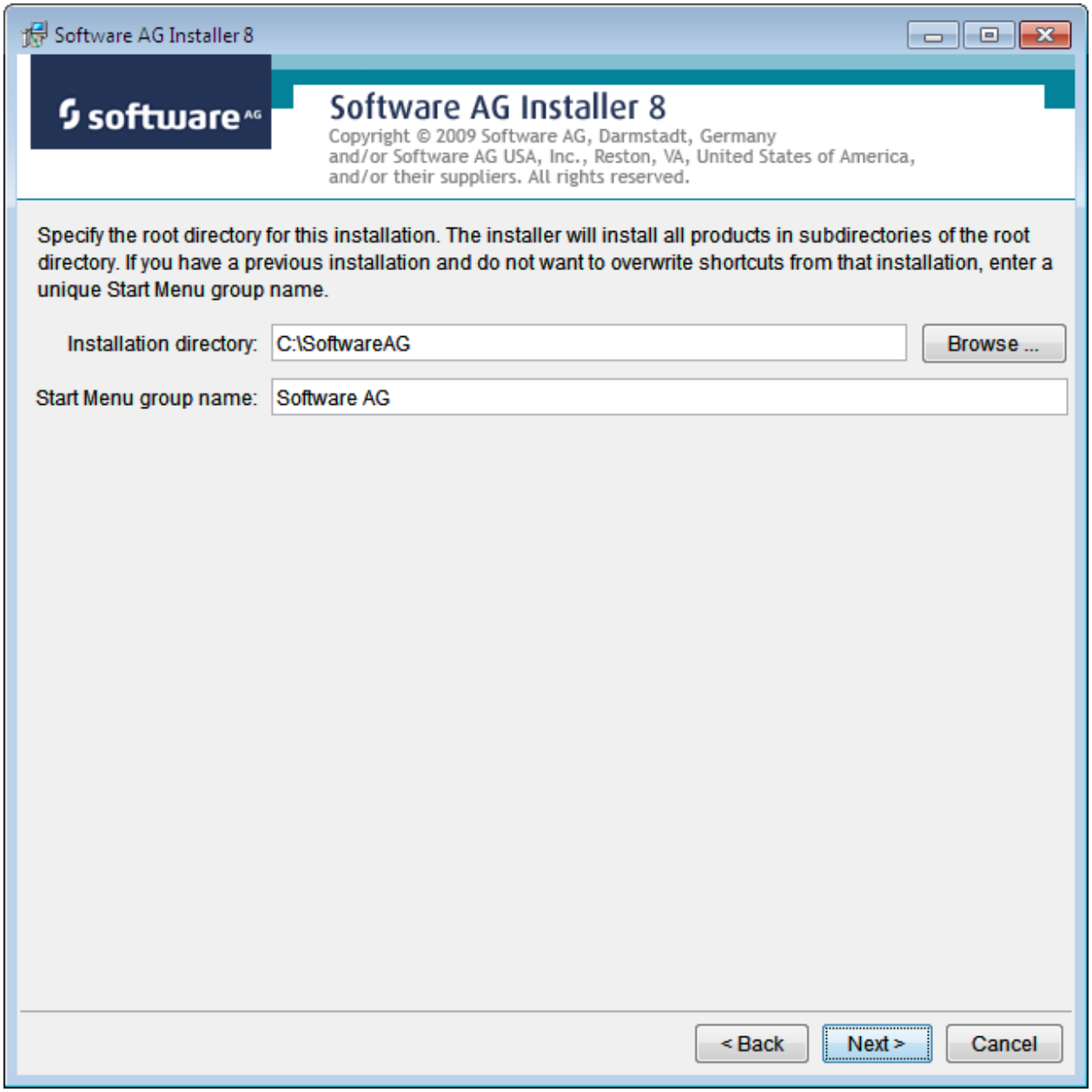
Identify yourself to the Installer by logging in with your credentials as shown below. Then click Next to proceed to the next step:



The Installer acquires information about a) all the products for which you are licensed and b) are able to be installed using the Installer. You can see this happening (below). It may take a few minutes:



Once the Installer has acquired all licensing information for your site it shows the default install location. You can alter this if you wish but make sure you understand the implications of changing it for all the products being installed. Click *Next* to proceed:


Software AG Installer 8
software AG
Software AG Installer 8
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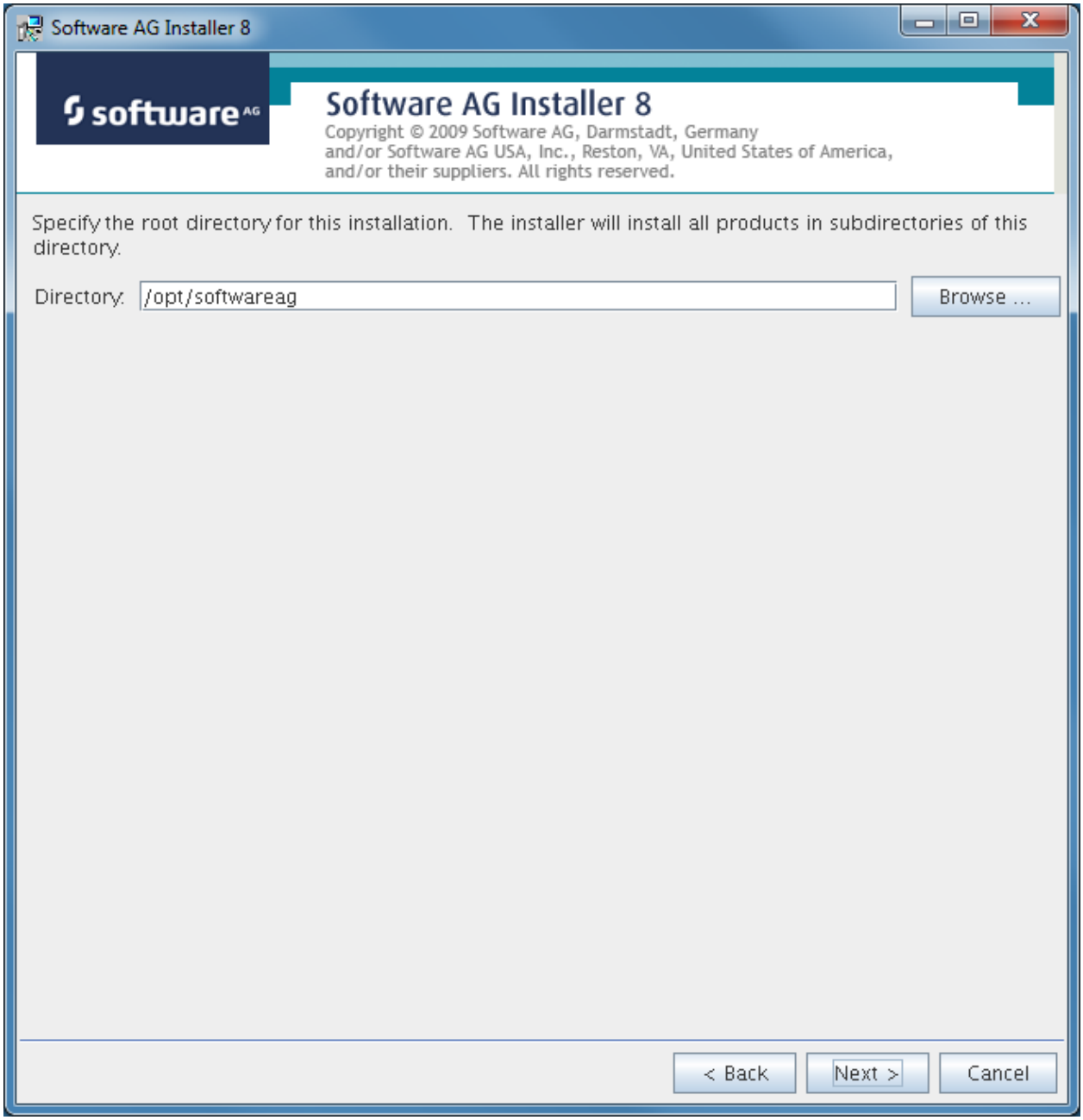
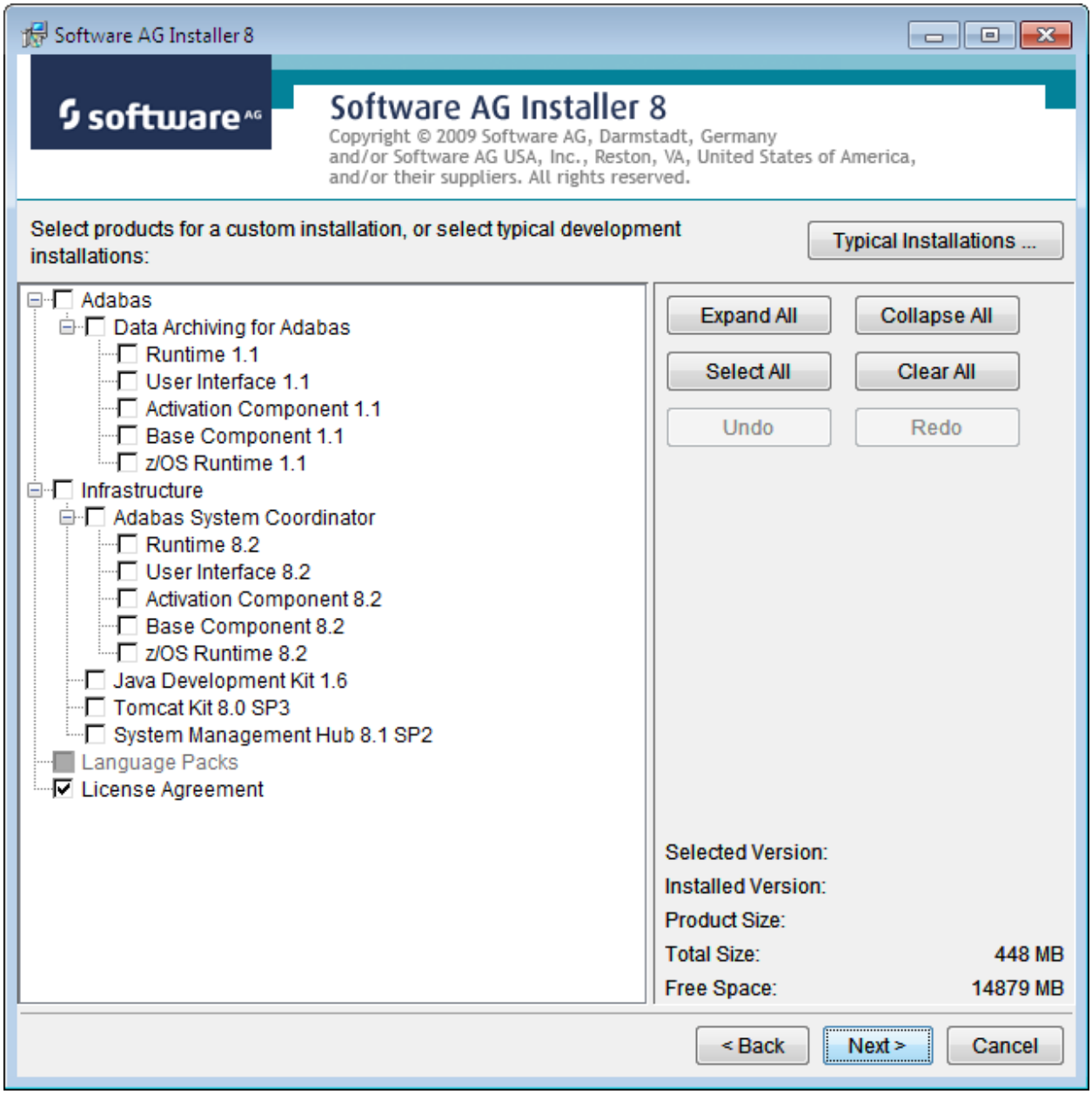
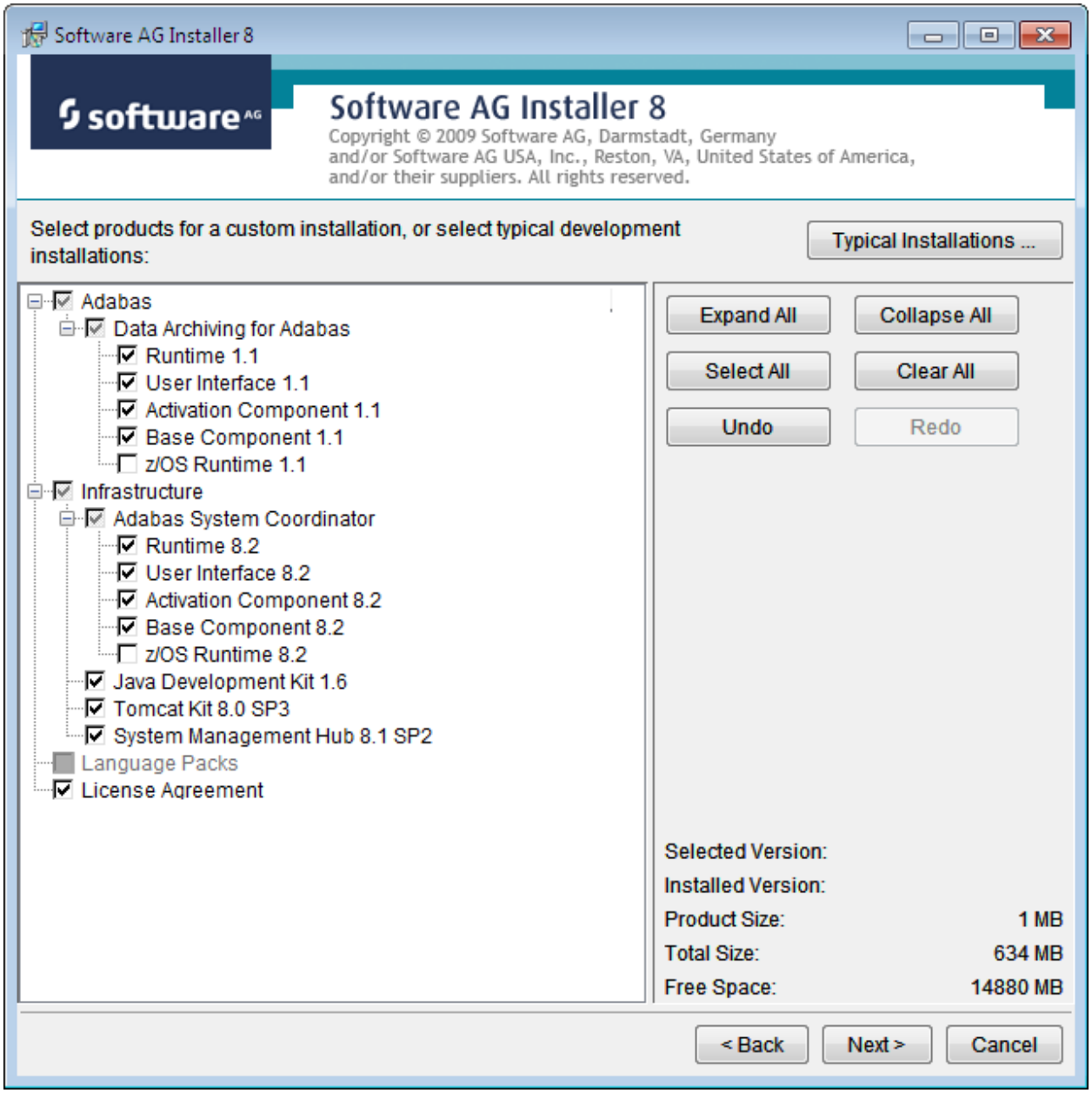
and/or their suppliers. All rights reserved.
Specify the root directory for this installation. The installer will install all products in subdirectories of the root directory. If you have a previous installation and do not want to overwrite shortcuts from that installation, enter a unique Start Menu group name.
Installation directory:
C:\SoftwareAG
Browse ...
Start Menu group name:
Software AG
< Back
Next >
Cancel



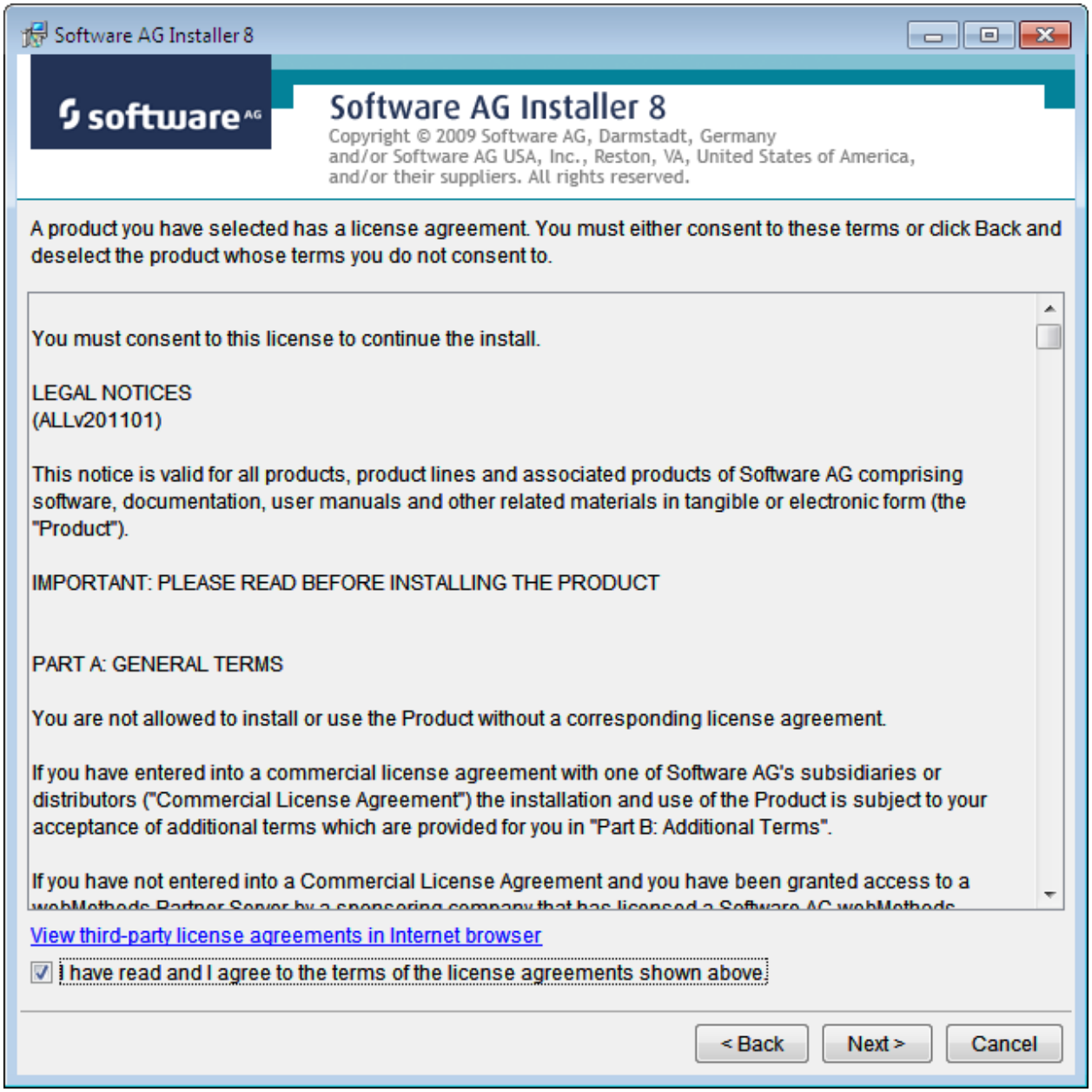
You can now choose the products that you wish to install:



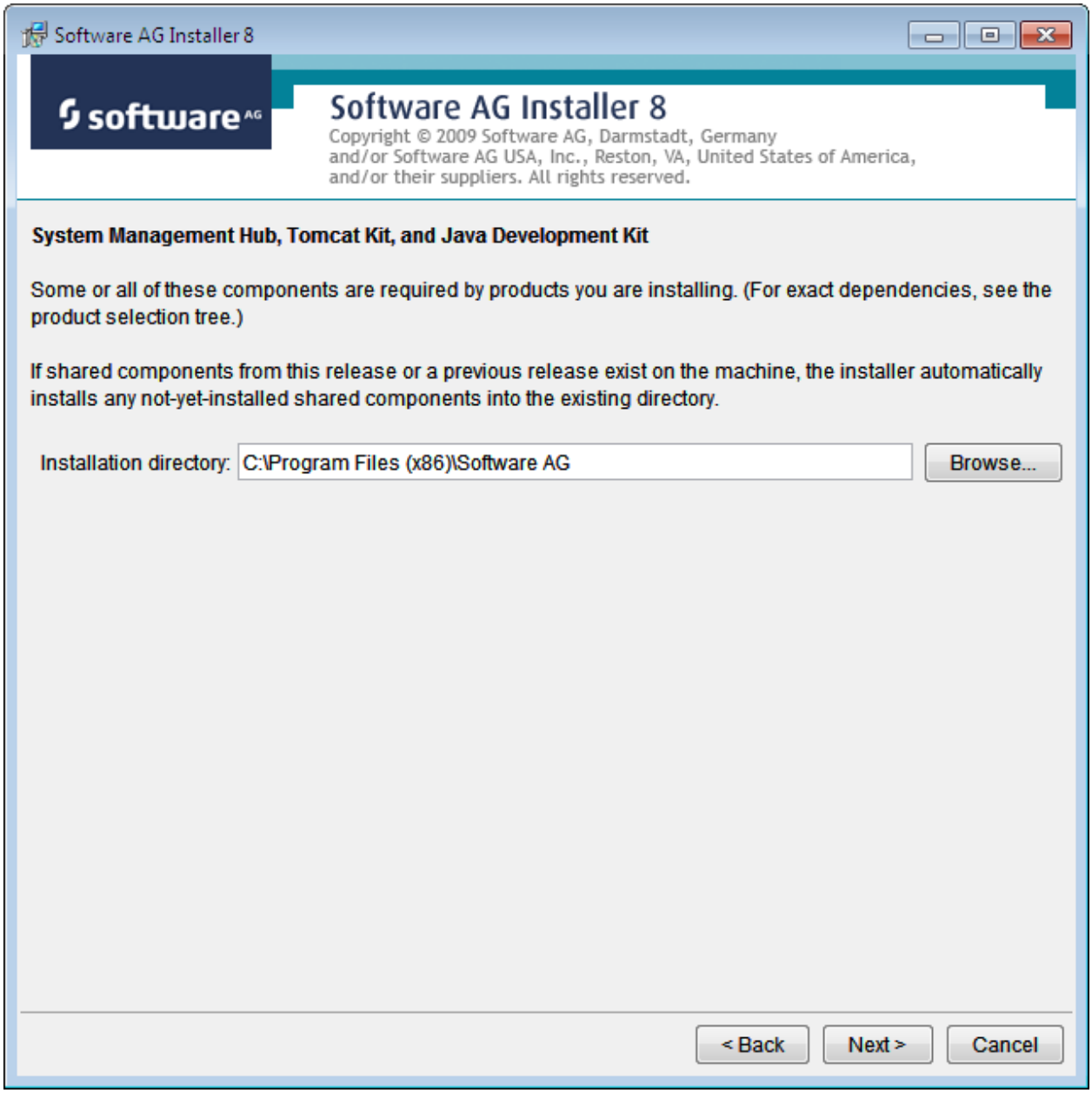
You can see below which products have been selected for install. In making these choices, other implied choices of sibling and prerequisite products are also made automatically. Once your selections are made, click Next to proceed:

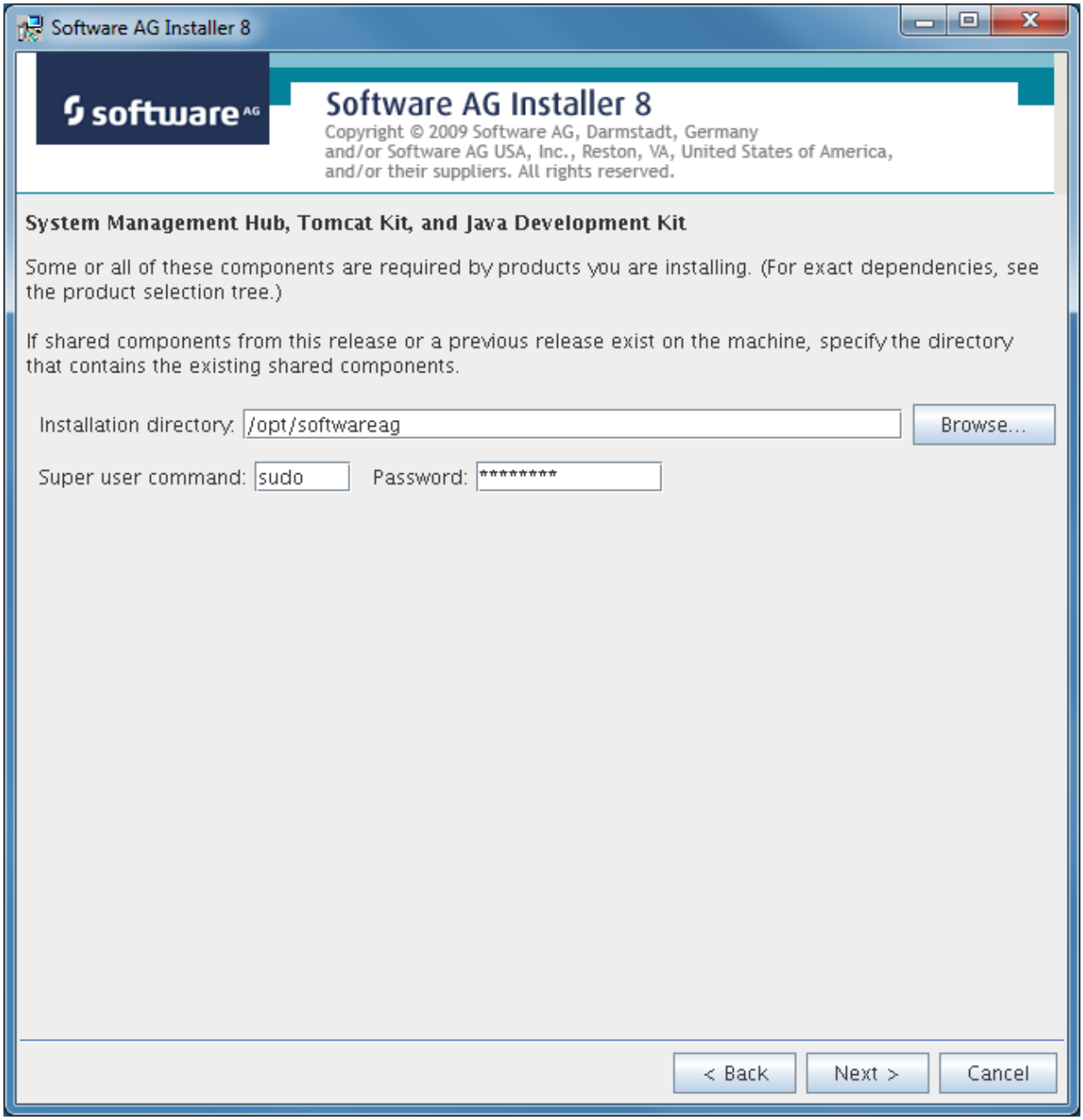


Read the terms and conditions. When you have finished confirm you have done so by checking the box. Then click Next to continue:

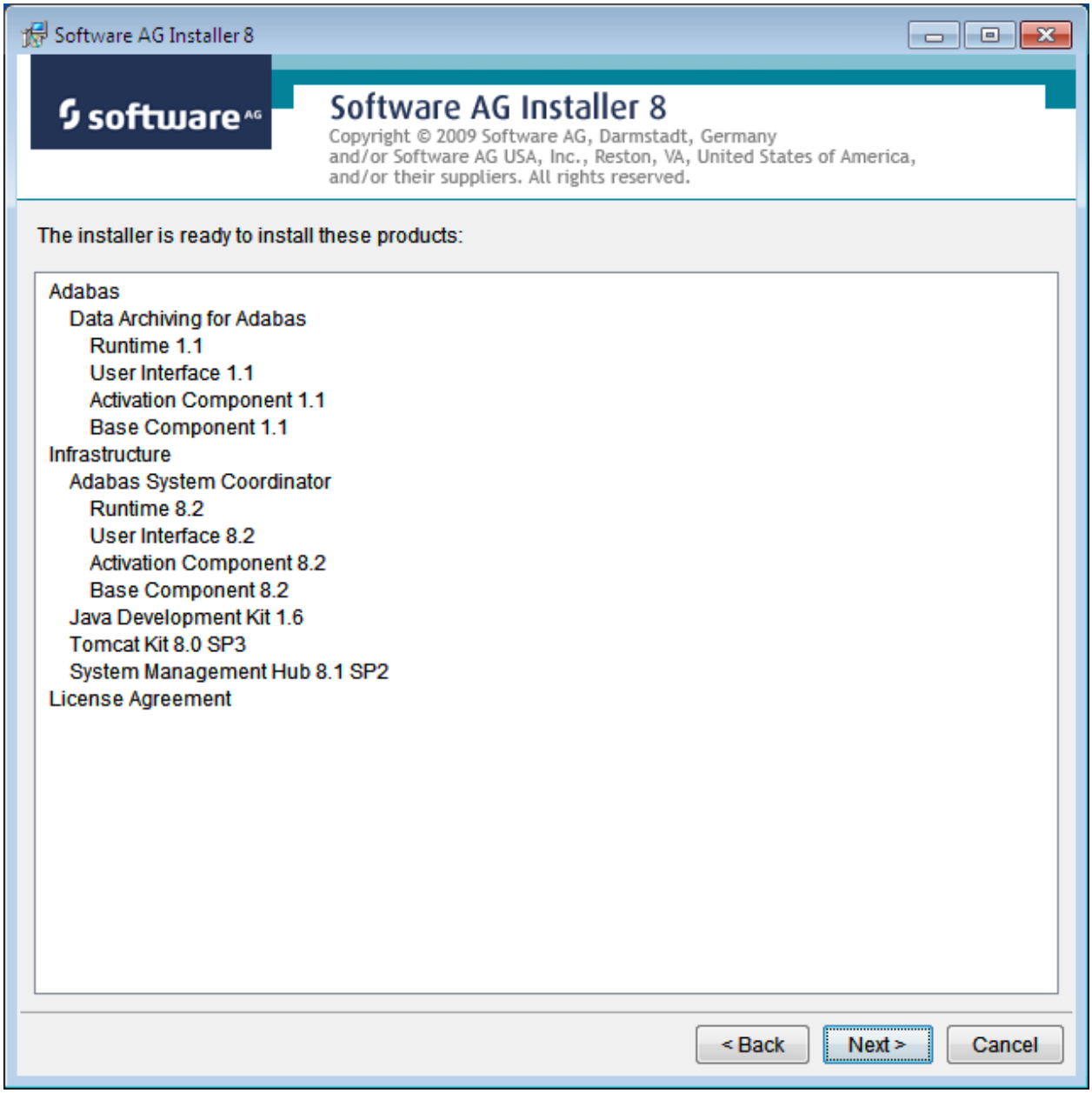


The following display is shown if the user interface is to be installed. This allows you to determine the install location for the prerequisite System Management Hub which you normally allow to default. Click Next to proceed to the next step:

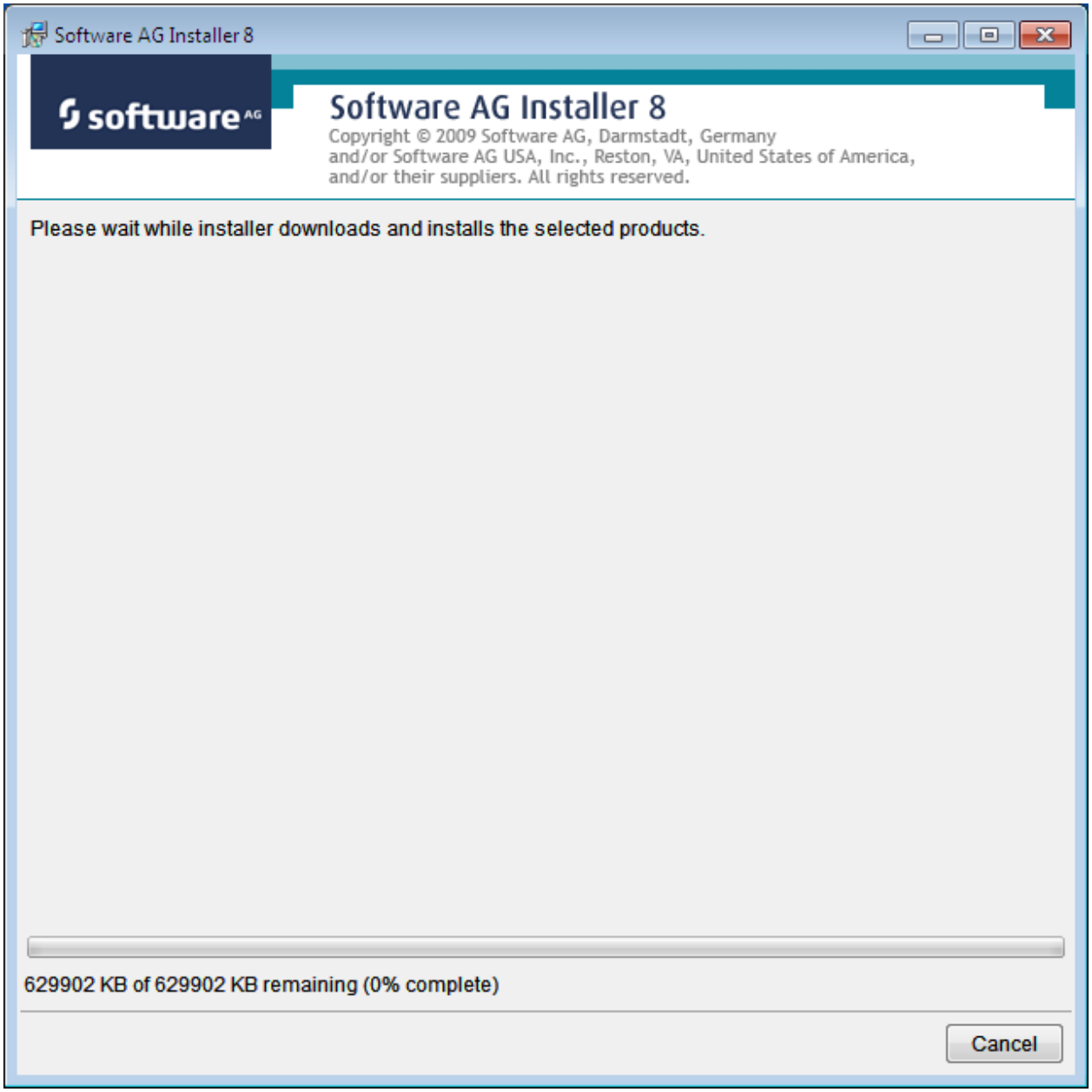

Software AG Installer 8
Software AG Installer 8
Copyright © 2009 Software AG, Darmstadt, Germany
and/or Software AG USA, Inc., Reston, VA, United States of America,
and/or their suppliers. All rights reserved.
System Management Hub, Tomcat Kit, and Java Development Kit
Some or all of these components are required by products you are installing. (For exact dependencies, see the product selection tree.)
If shared components from this release or a previous release exist on the machine, the installer automatically installs any not-yet-installed shared components into the existing directory.
Installation directory:
C:\Program Files (x86)\Software AG
Browse...
< Back
Next >
Cancel



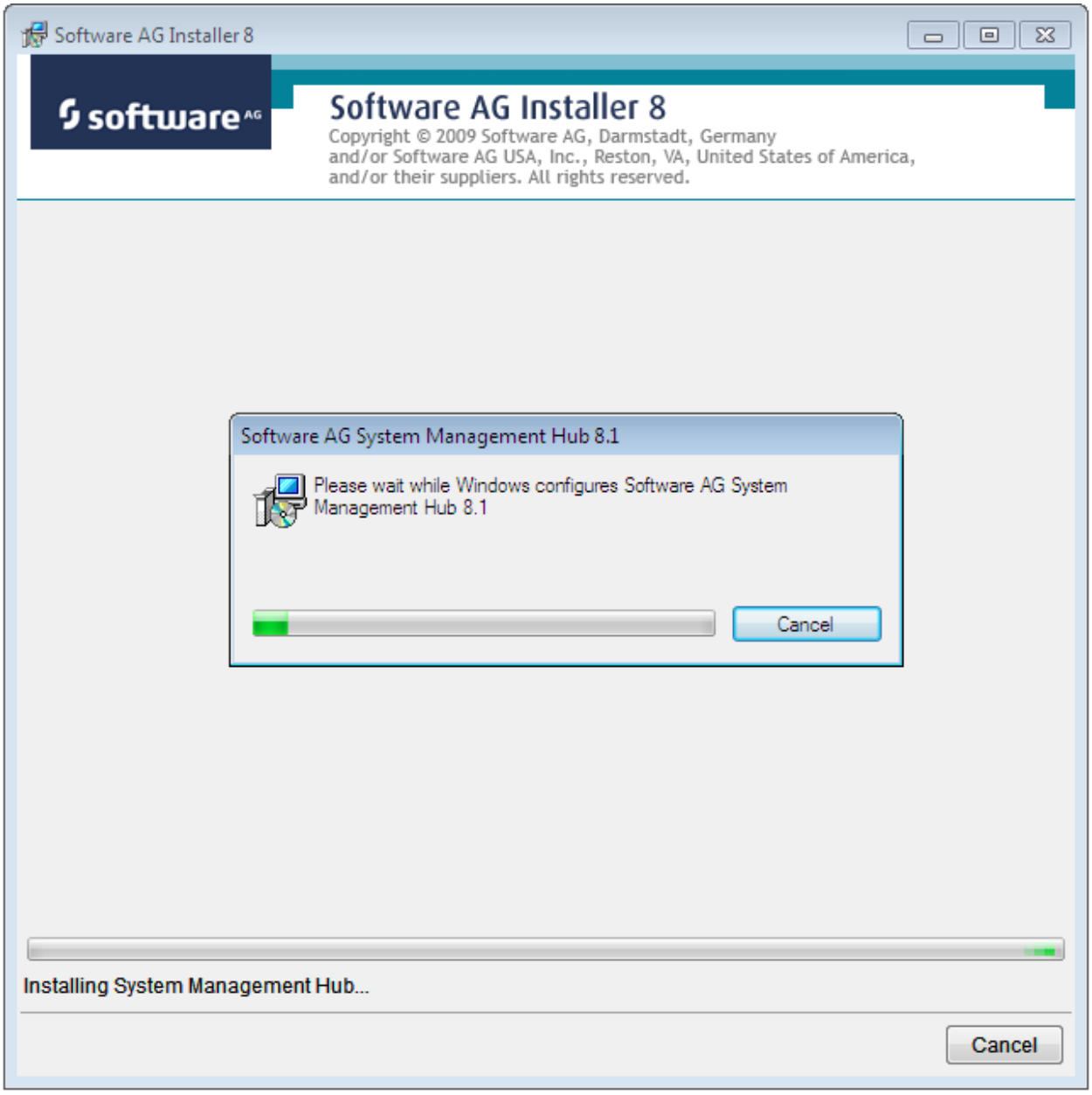
A list of the products selected for install is provided. Click Next to perform the installation:



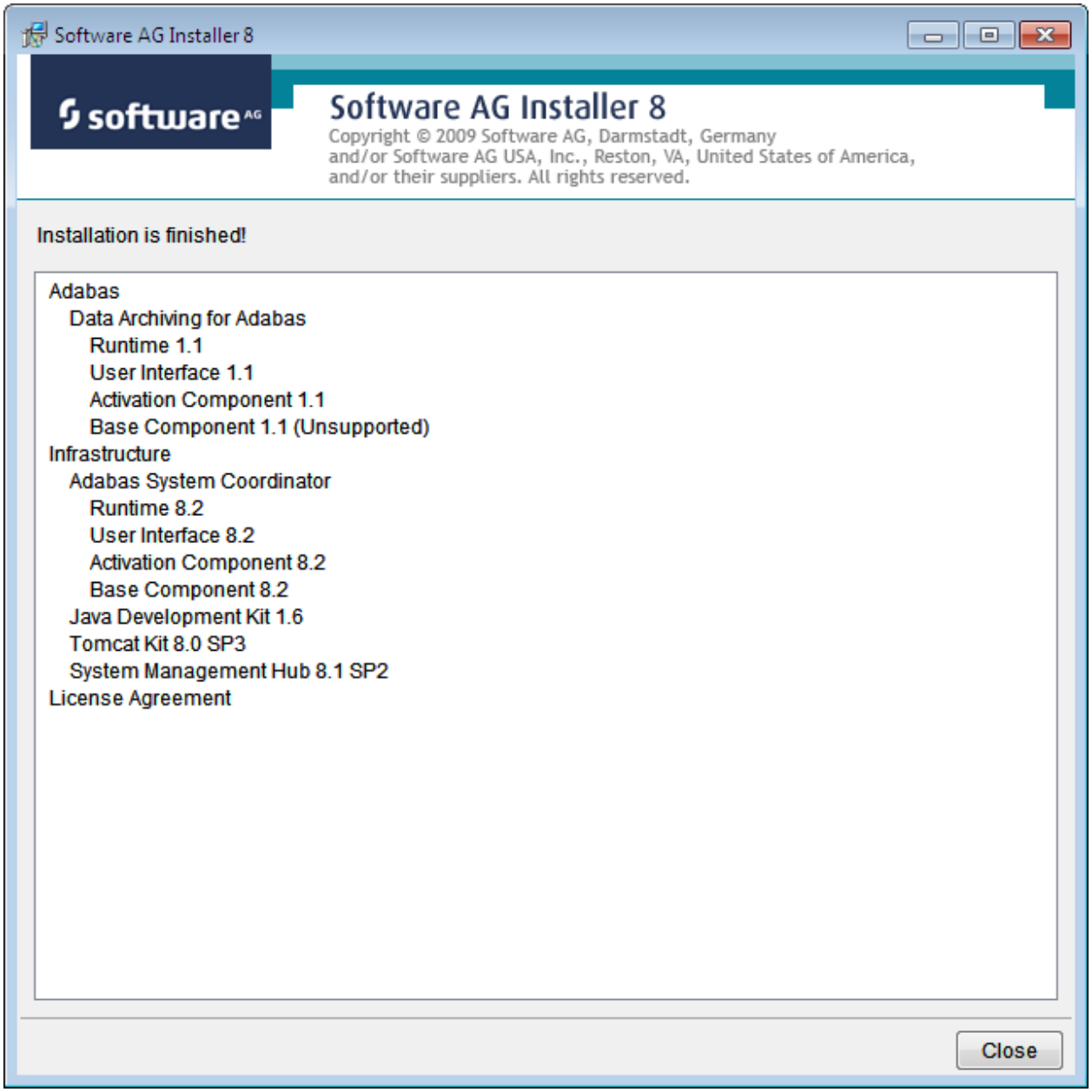
The installation may take some time. In the case of Data Archiving for Adabas the installation is usually quite quick whereas the install of the prerequisite System Management Hub (for installing the User Interface) takes longer.



The section for installing the System Management Hub has several interaction screens where the defaults can be taken. If you wish to alter the defaults please consult the documentation for the System Management Hub to understand their meanings and implications. The screen below shows one of the many you will see for the System Management Hub installation:



Once the installation of all the products is completed you will see the following confirmation screen:

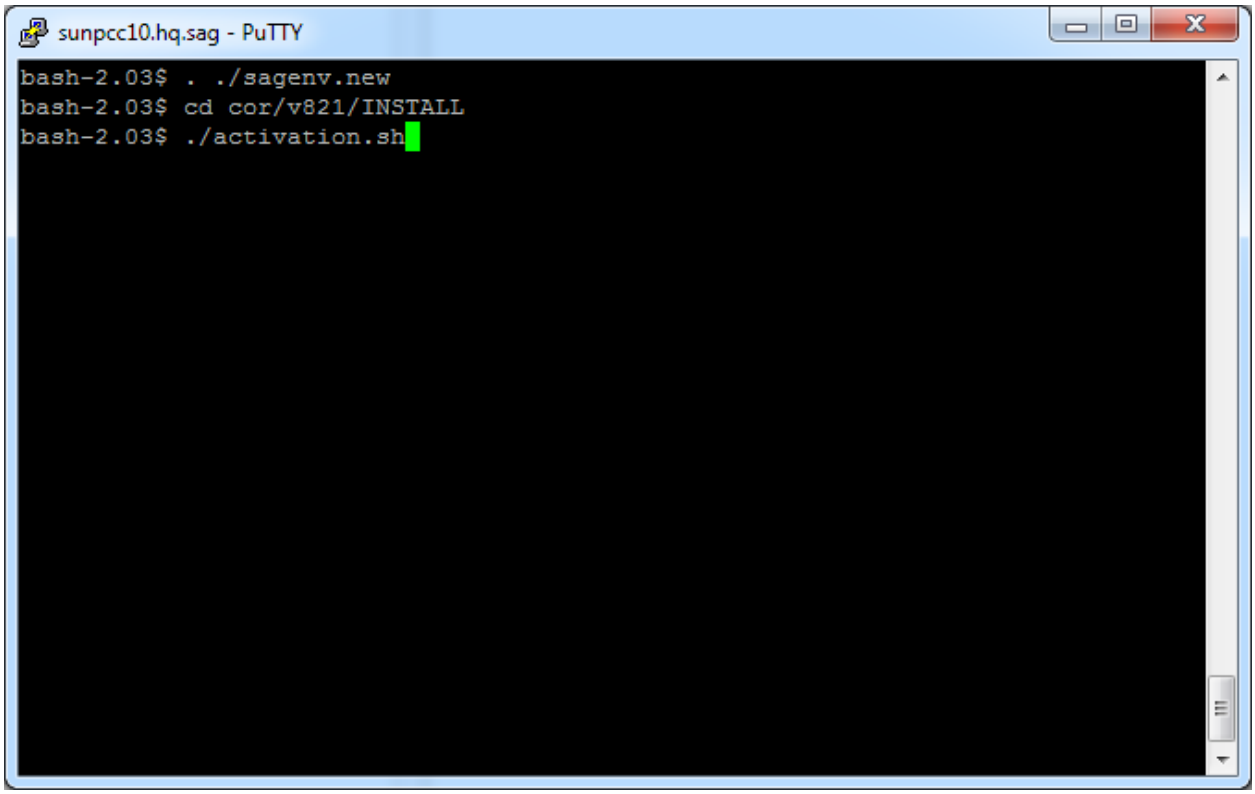


Activation after Installation Download

Once the Software AG Installer has prepared the install download image or you have copied the downloaded install image to the computer where the installation is required you must finally activate the software before it can be used.

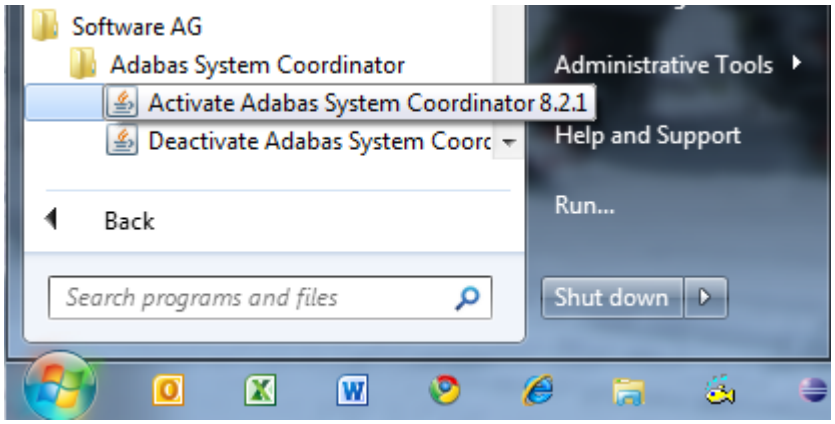
Start the Activation in Unix

Execute the activation script in the install directory as follows:



Start the Activation in Windows

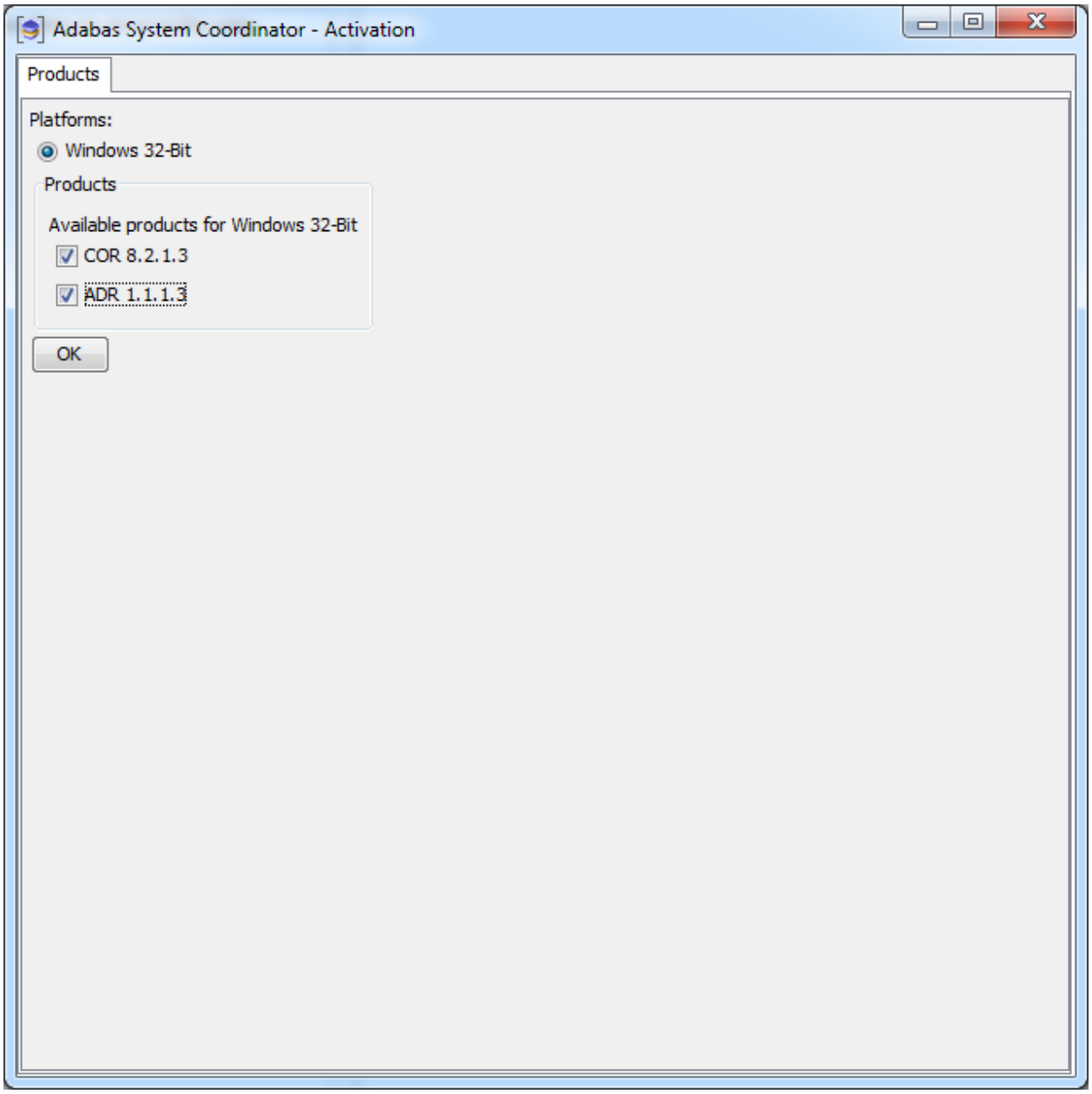
The Installer creates a Start menu entry for activation (and deactivation); execute it as follows:



Note: Windows Server 2008 R2 requires that you start the activation using *right-click and run as administrator*.

Activation Platform and Products

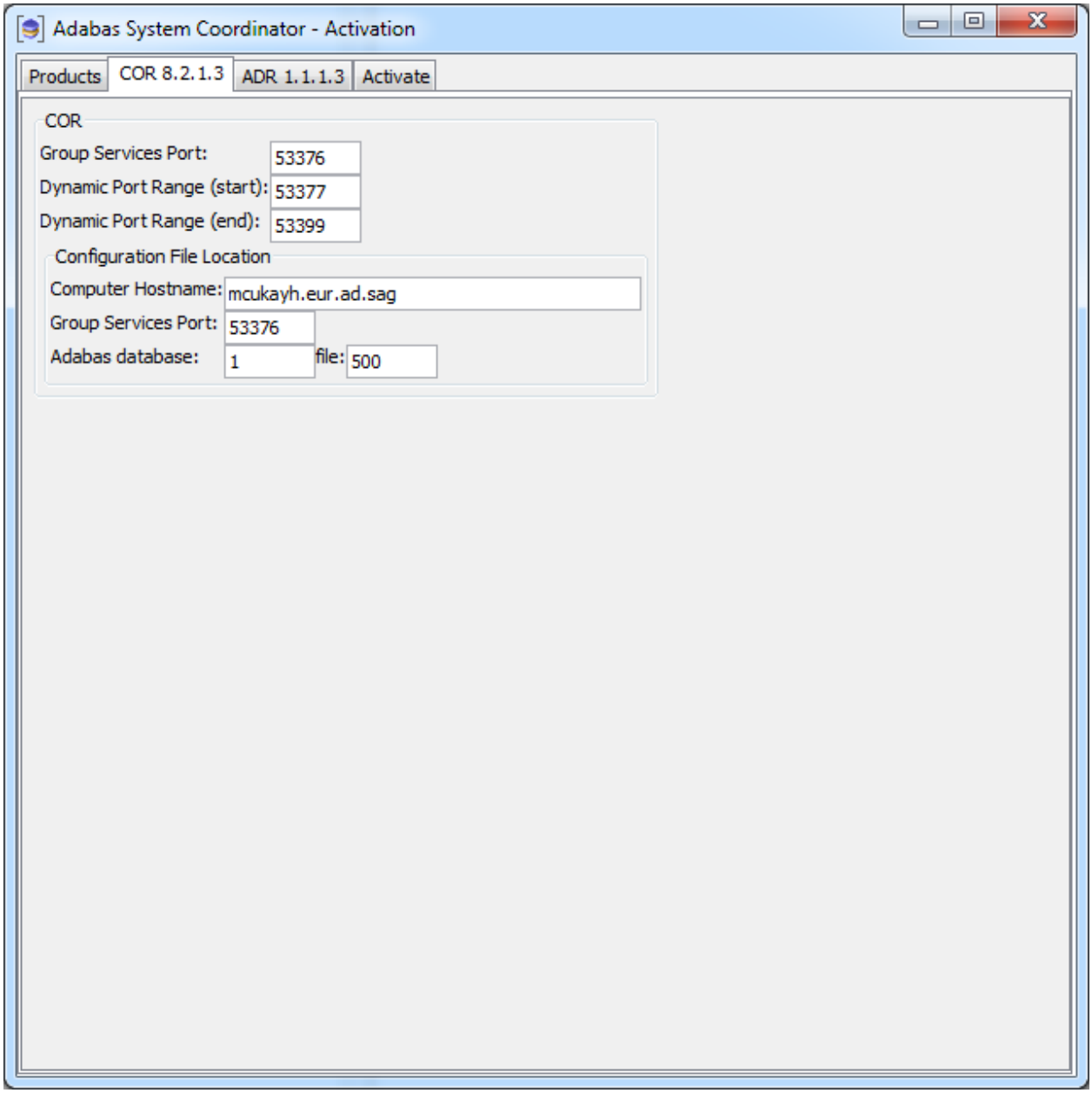
The first tab in the activation requires that you select the platform that you are activating and the products too. The following is an example of Windows, Unix is similar:



Activation: Adabas System Coordinator

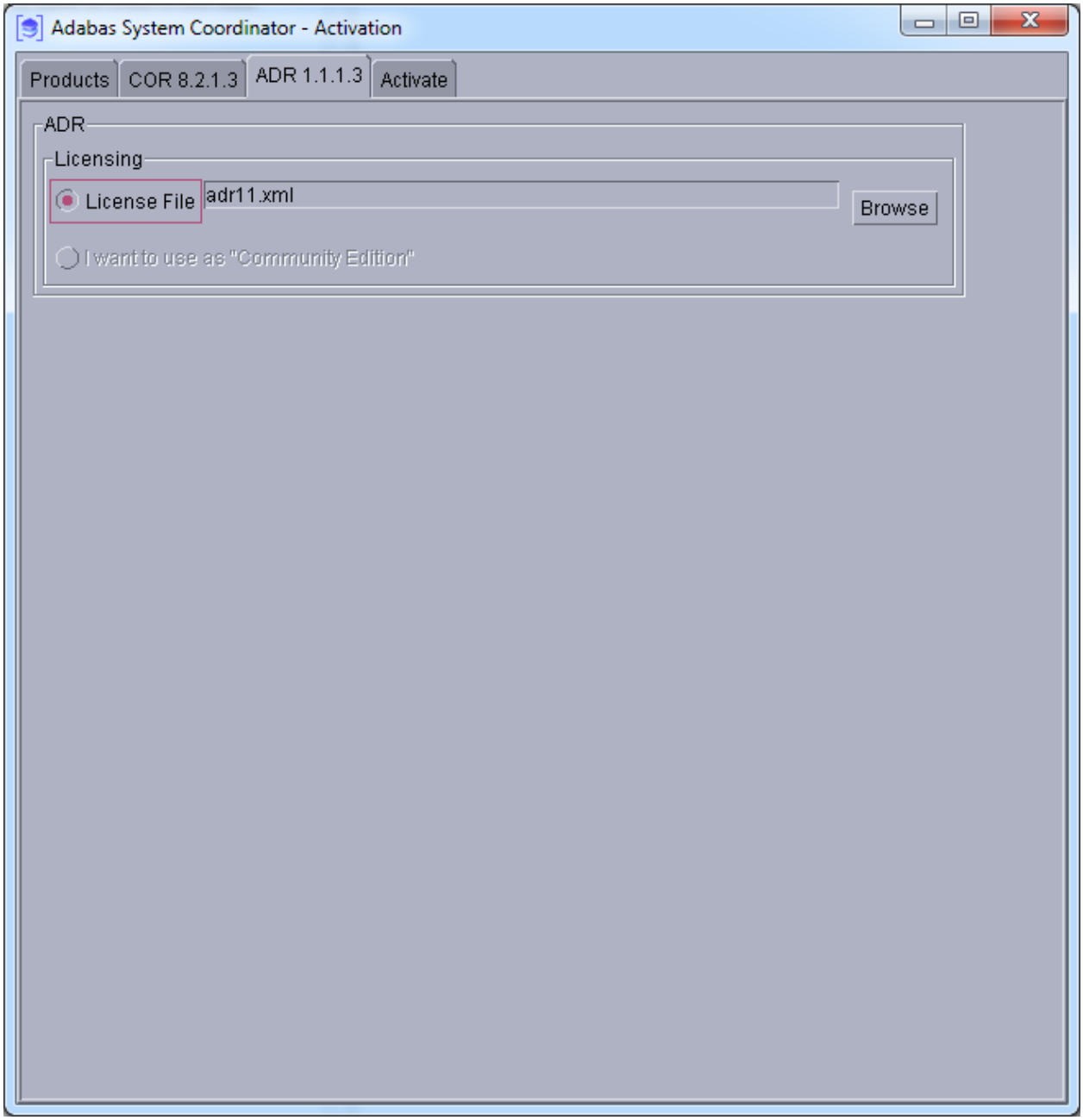
The COR tab requires the following information:

1. Ports: System Coordinator uses ports for communication between components. Normally Group Services Port, Dynamic port range (start) and Dynamic port range (end) are left with the default settings shown below. If you decide to change these ports you must keep a careful note of the port numbers chosen for this computer for use later.
2. Configuration file location: it is very important that the configuration file (and Adabas file) is shared by all computers that are to collaborate. You must identify where the configuration file already resides in another computer; or if this is the first installation you must be sure that this is the computer where the configuration file is to be created by the activation. If the configuration file does already exist in another computer you must identify it with hostname and group services port used in that computer (if group services port was not allowed to default). Finally, the database and file for the file is needed too of course.

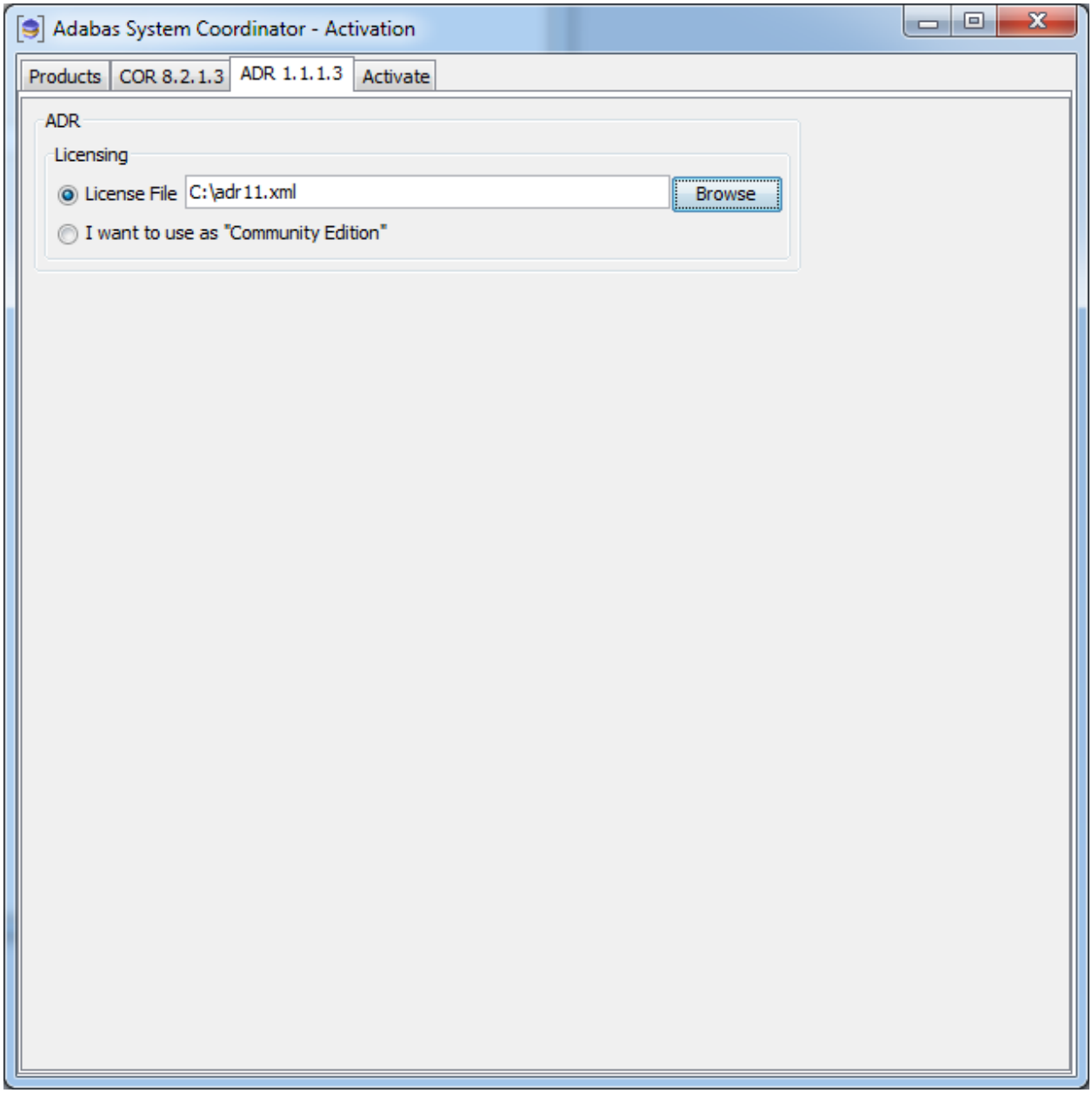


Activation: Data Archiving for Adabas

Licensing has to be identified in the Archiving tab. At the moment this is different for Unix and Windows because Unix does not yet have a community edition available. For Unix a runtime license is mandatory, the location of the license file must be identified here as follows:

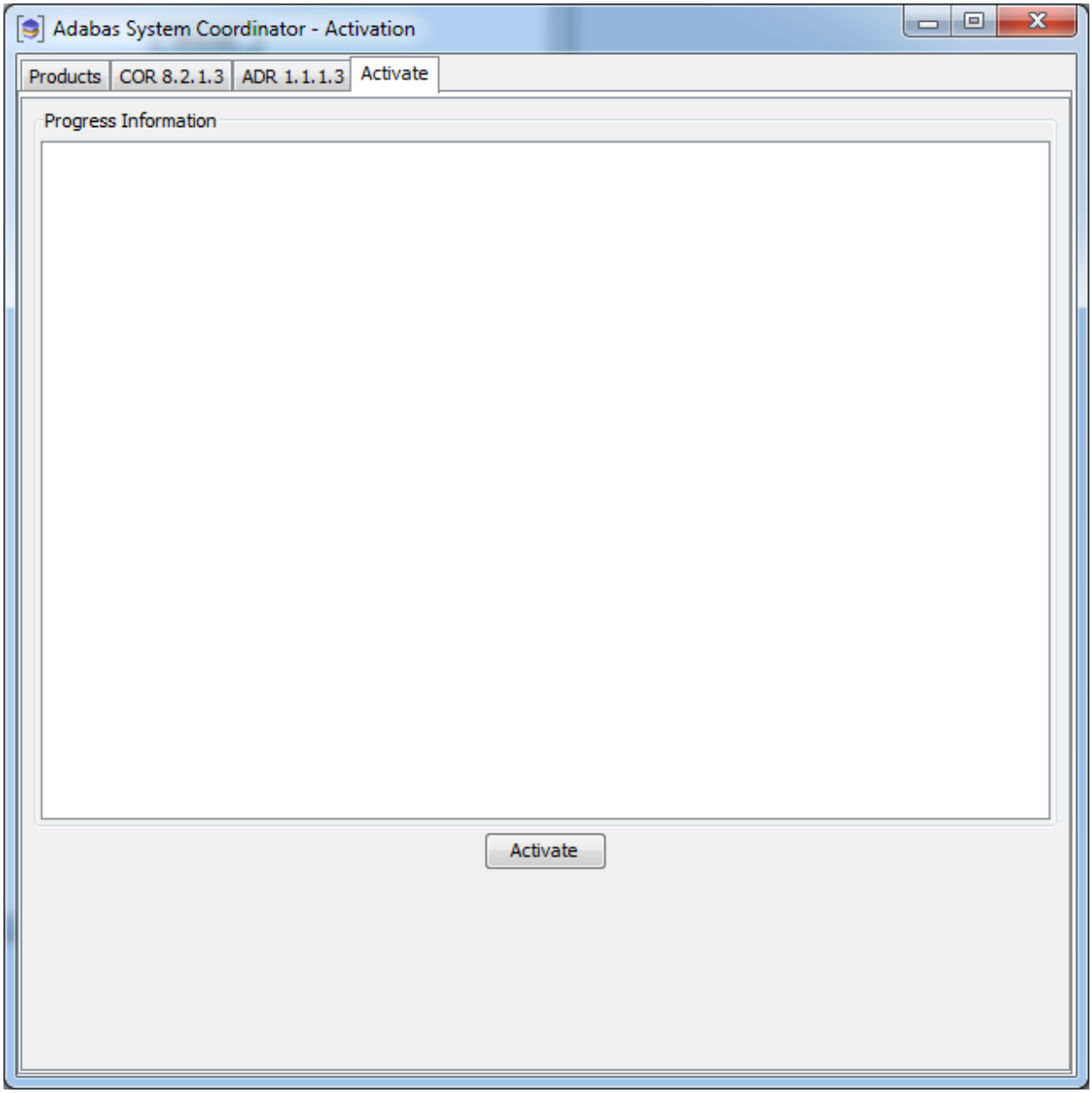


For Windows you can identify the license file location or you can use the software under a community edition agreement without a license. In community edition mode the capabilities of the software are limited. Choose as follows in Windows:

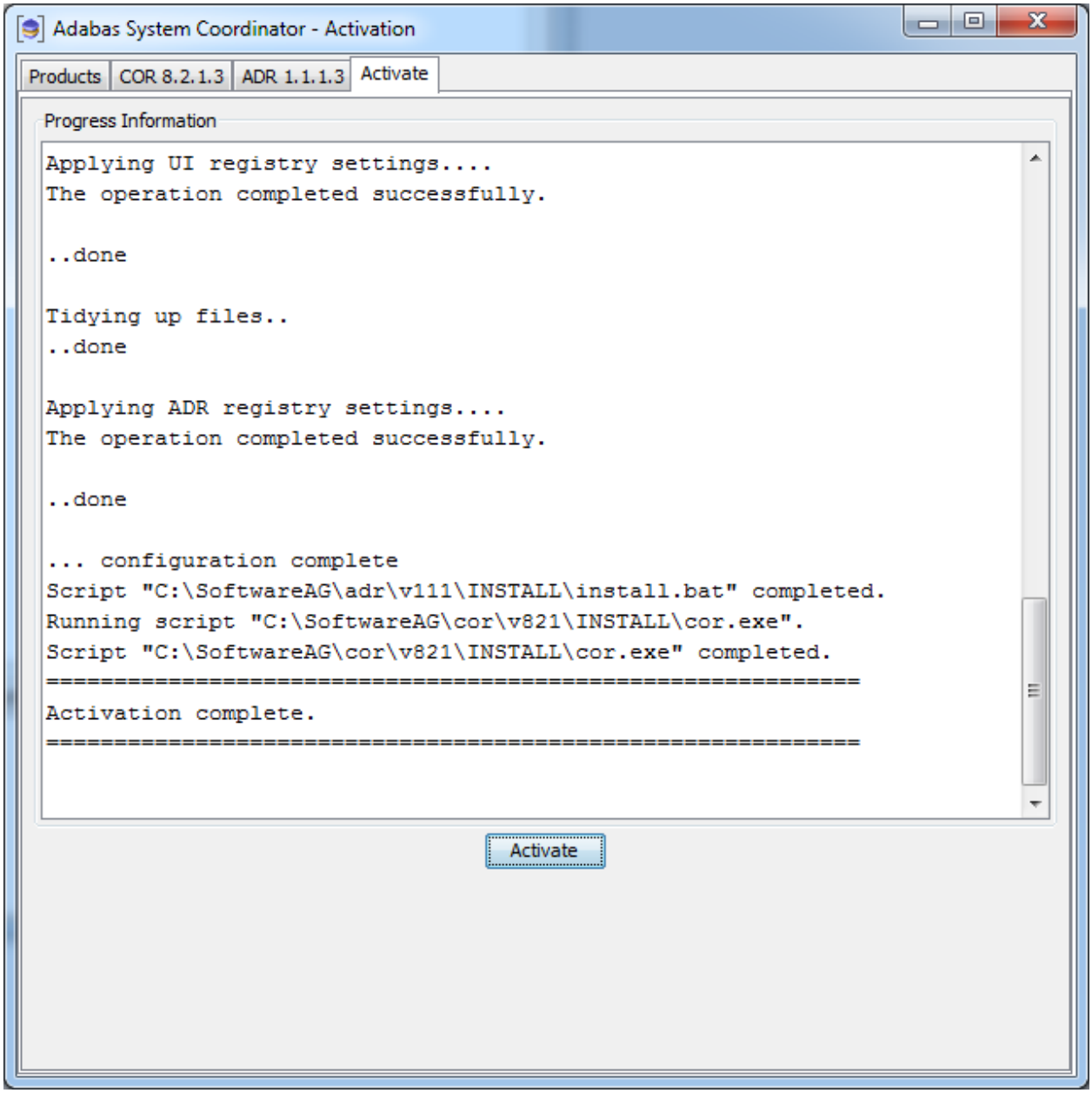


Activation: Execution

Once all options have been selected the activate tab shows the empty activation log screen. Start the activation by clicking the Activate button below.

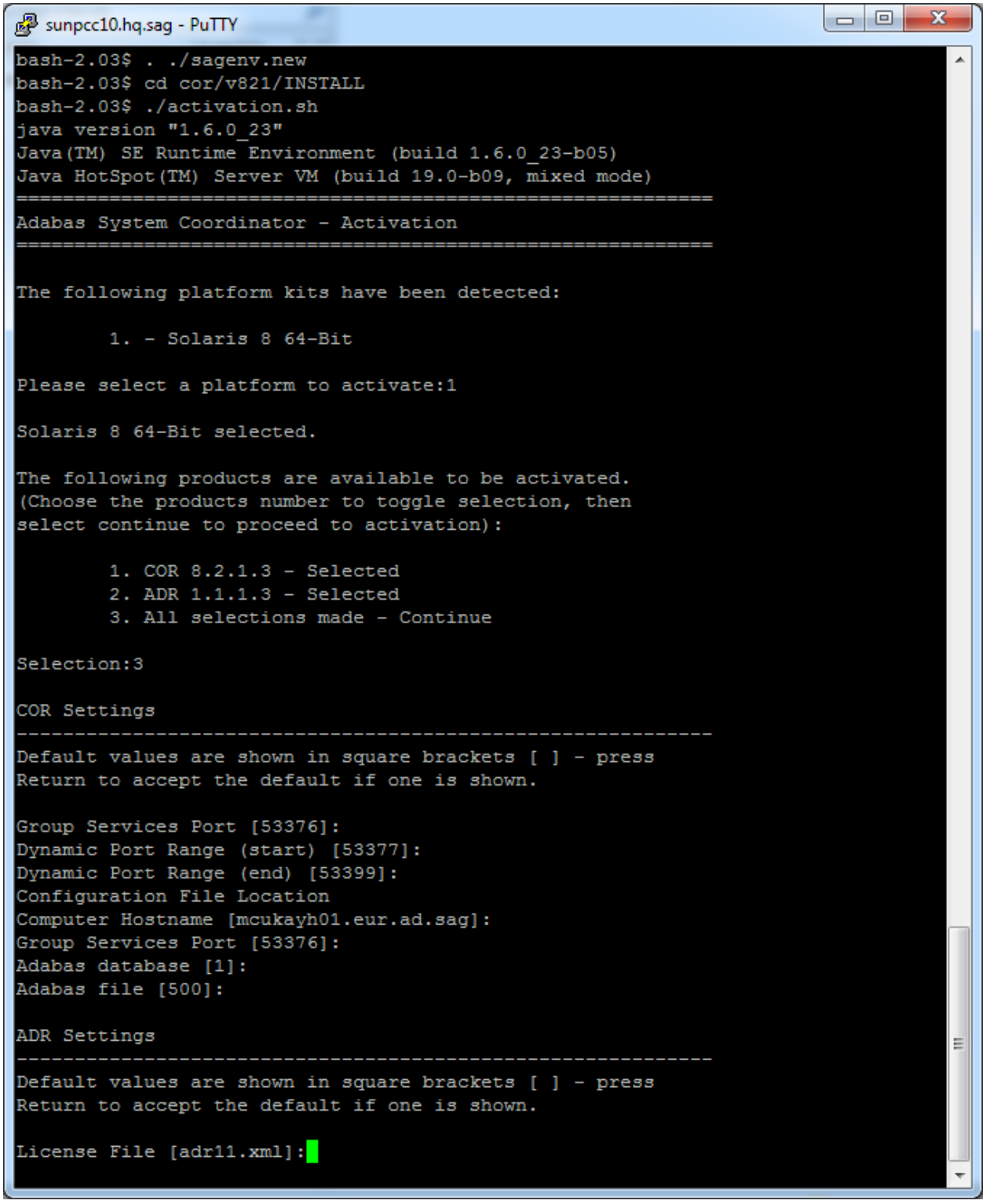


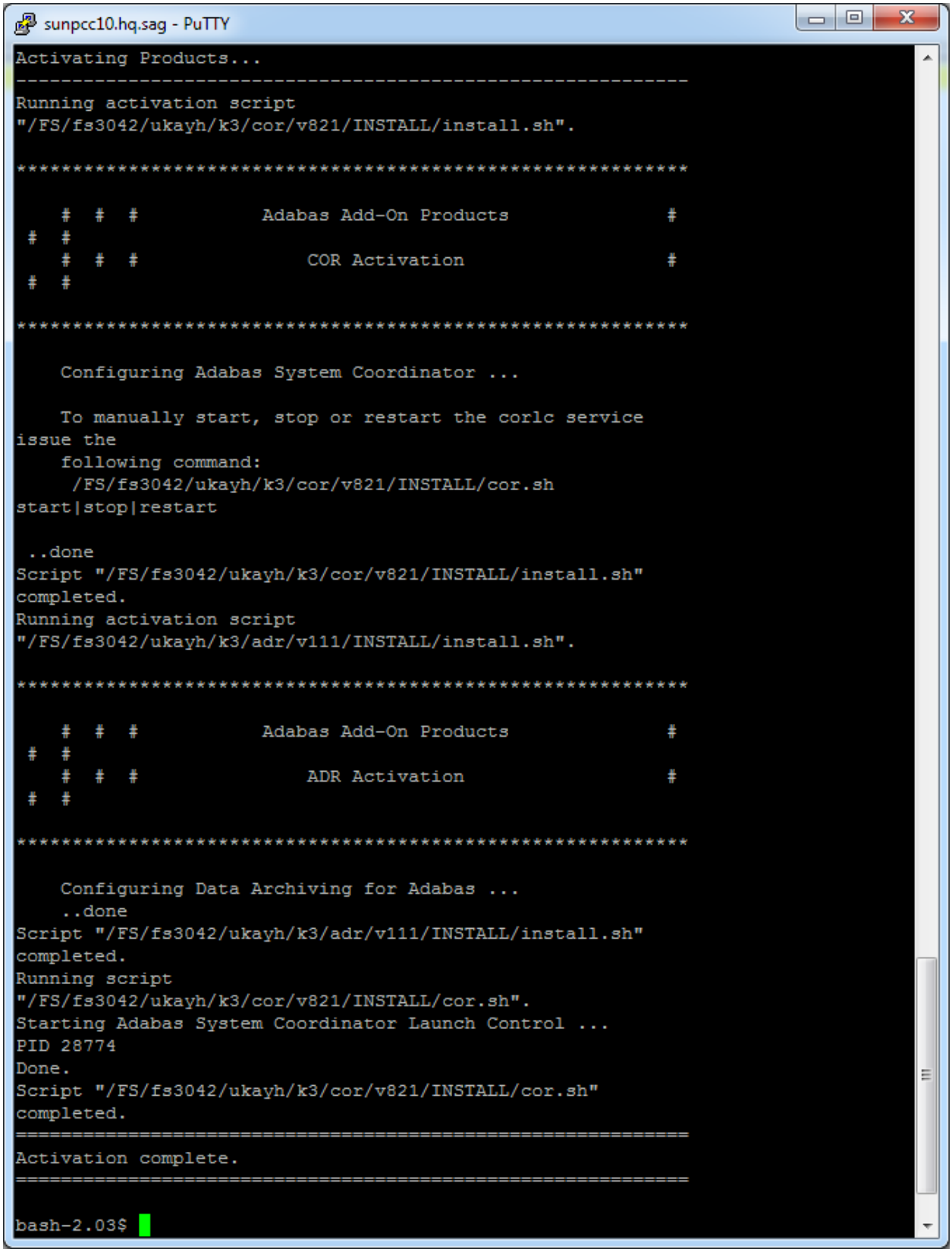
The activation log screen shows progress during execution which may contain important information is a problem occurs (such as permissions failure). Here is a successful activation execution completion:



Activation in Unix from the Console

The activation detects when a GUI is unavailable and will use the console mode automatically as follows:


sunpcc10.hq.sag - PuTTY
bash-2.03$ . ./sagenv.new
bash-2.03$ cd cor/v821/INSTALL
bash-2.03$ ./activation.sh
java version "1.6.0_23"
Java(TM) SE Runtime Environment (build 1.6.0_23-b05)
Java HotSpot(TM) Server VM (build 19.0-b09, mixed mode)
Adabas System Coordinator - Activation
The following platform kits have been detected:
1. - Solaris 8 64-Bit
Please select a platform to activate:1
Solaris 8 64-Bit selected.
The following products are available to be activated.
(Choose the products number to toggle selection, then
select continue to proceed to activation):
1. COR 8.2.1.3 - Selected
2. ADR 1.1.1.3 - Selected
3. All selections made - Continue
Selection:3
COR Settings
Default values are shown in square brackets [ ] - press
Return to accept the default if one is shown.
Group Services Port [53376]:
Dynamic Port Range (start) [53377]:
Dynamic Port Range (end) [53399]:
Configuration File Location
Computer Hostname [mcukayh01.eur.ad.sag]:
Group Services Port [53376]:
Adabas database [1]:
Adabas file [500]:
ADR Settings
Default values are shown in square brackets [ ] - press
Return to accept the default if one is shown.
License File [adr11.xml]:


sunpcc10.hq.sag - PuTTY
Activating Products...
Running activation script
"/FS/fs3042/ukayh/k3/cor/v821/INSTALL/install.sh".
Adabas Add-On Products
COR Activation
Configuring Adabas System Coordinator ...
To manually start, stop or restart the corlc service
issue the
following command:
/FS/fs3042/ukayh/k3/cor/v821/INSTALL/cor.sh
start|stop|restart
..done
Script "/FS/fs3042/ukayh/k3/cor/v821/INSTALL/install.sh"
completed.
Running activation script
"/FS/fs3042/ukayh/k3/adr/v111/INSTALL/install.sh".
Adabas Add-On Products
ADR Activation
Configuring Data Archiving for Adabas ...
..done
Script "/FS/fs3042/ukayh/k3/adr/v111/INSTALL/install.sh"
completed.
Running script
"/FS/fs3042/ukayh/k3/cor/v821/INSTALL/cor.sh".
Starting Adabas System Coordinator Launch Control ...
PID 28774
Done.
Script "/FS/fs3042/ukayh/k3/cor/v821/INSTALL/cor.sh"
completed.
Activation complete.
bash-2.03$

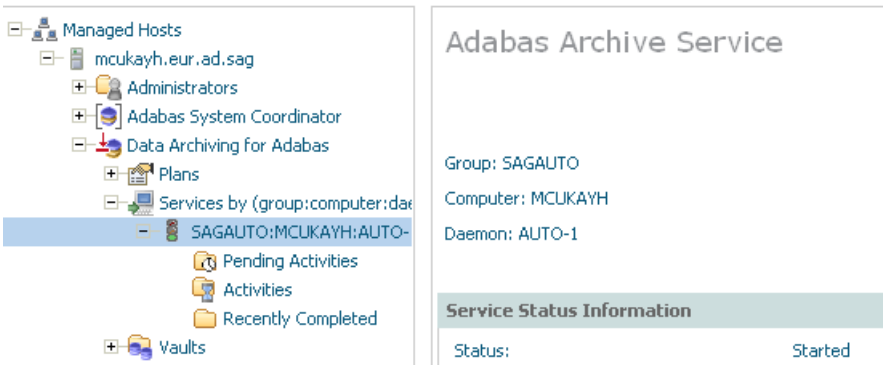
Starting to Use the Software

To use the software

1 Go to your browser and use *http://localhost:49981/smh* (assuming defaults have been used for SMH) or use you normal entry to SMH.

2 Select the main **Data Archiving for Adabas** node.

3 Within the tree you should select the **Services by ...** node. You should see the archive service for the runtime in the computer you have just installed. This should show a green traffic light which indicates that the service is active.



The installation is now complete. You can begin using Data Archiving for Adabas. See the section Getting Started for further information.

7 Installation Procedure for z/OS

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- Overview 44
- Actions Required Before Starting the Install 44
- Installation Steps 50
- Use the Runtime from the Browser UI 70

Important Information

The Software AG Installer (download center) has limited support for z/OS at present. However, the installation (and activation) of the z/OS software is downloaded along with all other platforms. Here are some useful points to help you understand the process overall:

- The install image must be downloaded to one of the other supported platforms (Windows or Unix for example).
- There is a special z/OS activation step that has to run in the download platform (off-host).
  - This step guides you through the FTP process to load the z/OS software into the z/OS system.

Overview

Data Archiving for Adabas is a fully portable technology. It runs in all primary Unix systems, Windows and also in z/OS. There is only one code-base rather than one code-base for open systems and another for mainframe. Data Archiving for Adabas uses the openness of z/OS by running within a USS process within z/OS.

Note: This is not the same as running in a z/Linux partition.

IBM's z/OS has embedded Unix System Services (USS) within it. This is part of the ongoing modernization that has been happening to the operating system in recent years. This means z/OS is able to embrace modern technologies that in the past were considered only for off-host (outside the mainframe).

When running in z/OS, Data Archiving for Adabas uses normal z/OS Adabas databases, not a special "Unix like" Adabas. This is because systems running with USS can also interact with normal z/OS resources at the same time.

Actions Required Before Starting the Install

During the install you must identify the configuration file. Please refer to the section **Installation Planning and Preparation** for information on how to manage that part of the installation.

Before the installation you must:

- Create Data Set for ADR Load Library
- Create Site-Based Adabas Link Routine (ADALNKR)
- Establish Access to the Browser User Interface

- Some Useful Information about USS (OMVS)

Create Data Set for ADR Load Library

The ADR install requires that you construct a load library with the following specific attributes:

```
DCB=(BLKSIZE=23200,RECFM=U)
```

The default name for the dataset is *prefix.SAG.ADRvrl.LOAD* where *prefix* is the RACF (or equivalent) userid of the person doing the installation. The prefix must remain as part of the dataset name (this will be reviewed later), the rest can be changed if you wish.

Create Site-Based Adabas Link Routine (ADALNKR)

Make a site-based ADALNKR with the appropriate SVC number for your site. Make it available in the z/OS dataset mentioned above. LNKGBLS must be linked in with your ADALNKR in this library.

Make sure ADALNKR is fully maintained.

Here is some example JCL…

```
//LNKRGBLS JOB CLASS=G,MSGCLASS=X
//* ------------------------------------------------------------------ *
//* Assemble LNKGBLS - reentrant                                     - *
//* ------------------------------------------------------------------ *
//GBLSWLS EXEC ASMACL,
//      PARM.C='ASA,NODECK,OBJECT,XREF(SHORT),TERM',
//      PARM.L='XREF,LIST(ALL),LET,MAP,NCAL'
//C.SYSLIB     DD DISP=SHR,DSN=SAG.ADA822.SRCE
//             DD DSN=SYS1.MACLIB,DISP=SHR
//             DD DSN=SYS1.MODGEN,DISP=SHR
//C.SYSPRINT   DD SYSOUT=*
//C.SYSTERM    DD SYSOUT=*
//C.SYSIN      DD *
*
*        Global definitions for the Adabas link routine
*        for Batch/TSO.
*        Modify this sample for your site.
*        Then assemble and link it and include the
*        resulting module with ADALNK8 to create the ADALNKR
*        for use with ADR in z/OS.
*
         LGBLSET LOGID=1,         DEFAULT ADABAS DBID                  X
               SVCNO=252,         DEFAULT ADABAS SVC NUMBER            X
               OPSYS=ZOS,         Operating system                     X
               COR=NO,            Activate System Coordinator          X
               TPMON=BAT,         Batch/TSO                            X
               RENT=YES,          Non-reentrant for Batch/TSO          X
```

```
               GEN=CSECT,         Generate CSECT for load module       X
               GBLNAME=LNKGBLS,   DEFAULT GLOBALS MODULE NAME          X
               USERX1=NO,         Link user exit 1 YES/NO              X
               LX1NAME=UEXITB,    User exit 1 module name              X
               USERX2=NO,         Link user exit 2 YES/NO              X
               LX2NAME=UEXITA,    User exit 2 module name              X
               UES=YES            Enable UES
*
         END
//L.SYSPRINT   DD SYSOUT=*
//L.SYSLMOD    DD DISP=SHR,DSN=SAG.ADR111.LOAD
//L.SYSIN   DD  *
 MODE AMODE(31),RMODE(ANY)
 ENTRY LNKGBLS                 Default entry name
 NAME LNKGBLS(R)               DEFAULT TABLE NAME
//*
//* ------------------------------------------------------------------ *
//* LINK ADALNKR with LNKGBLS                                        - *
//* ------------------------------------------------------------------ *
//LINKA8Y EXEC PGM=IEWL,
//      PARM='LET,LIST(ALL),MAP,XREF,REUS=RENT',REGION=4M
//SYSPRINT     DD  SYSOUT=*
//SYSUT1       DD  DSN=&&SYSUT1,SPACE=(1024,(120,120),,,ROUND),UNIT=VIO
//ADALIB       DD  DISP=SHR,DSN=SAG.ADA822.LOAD
//SYSLMOD      DD  DISP=SHR,DSN=SAG.ADR111.LOAD
//SYSLIN       DD  *
  MODE AMODE(31),RMODE(ANY)
  INCLUDE ADALIB(ADALNKR8)             /* V8 LINK ROUTINE */
  INCLUDE SYSLMOD(LNKGBLS)
  INCLUDE ADALIB(LNKUES)
  INCLUDE ADALIB(ASC2EBC)
  INCLUDE ADALIB(EBC2ASC)
  ENTRY ADABAS
  NAME ADALNKR(R)
/*
//
```

Establish Access to the Browser User Interface

Data Archiving for Adabas uses the UI provided by System Management Hub. The UI *cannot* be installed in z/OS. It must therefore be installed in another platform and be available for use before the ADR runtime installation can be started.

The user interface to Data Archiving for Adabas is the same for all operating systems. You use the UI to operate, configure and monitor your archiving environment throughout your network. The most common approach is to install and use the UI on a Windows platform.

Some Useful Information about USS (OMVS)

- Activating OMVS (USS: Unix System Services) in z/OS
- Getting into OMVS via TSO
- Getting into OMVS via Telnet
- Entering Unix Commands

Activating OMVS (USS: Unix System Services) in z/OS

OMVS is usually available within z/OS by default because many other software components from other vendors (including IBM) use it. If it is not available, you can use the following information to make it available:

- When z/OS is first installed and configured a RACF (or equivalent) basic user called IBMUSER is defined. The IBMUSER is automatically defined with an OMVS segment. It is an OMVS segment that enables a user to use OMVS (USS).
- Therefore, your RACF or equivalent systems such as ACF2, TOP SECRET etc. (please consult the appropriate documentation of these other systems for similar information) administrator needs to add an OMVS segment to all users who are to use OMVS, including the person who will be doing the ADR install.
- An OMVS segment contains the following:
  - UID.

    A numeric UID like in any other Unix system. This UID represents one sharable Unix that one or more userids may be able to use. There may be many more OMVS systems (UID) defined for your system.
  - Home directory.

    Something like /u/nat/xyz
  - A shell program.

    This is essentially Unix (the korn shell), often called “ksh” in the Unix community. An example of this may be: /bin/sh
  - Maximum size.

    This is akin to address-space size. It may be allowed to default. It is not unusual for a Unix OMVS to be 128-512 meg.
- In RACF the command to add such a segment would be…

```
ALU <userid>  OMVS (UID(1234) HOME ('/u/nat/xyz') PROGRAM ('/bin/sh')
```

This command needs to be entered using a tool that supports mixed case (such as TSO IS-PF/PDF/Option 6).

- Next, a Unix group should be assigned to the <userid>. Again, this is a numeric and is referred to as "GID". A normal RACF "connect" command can be used to do this.

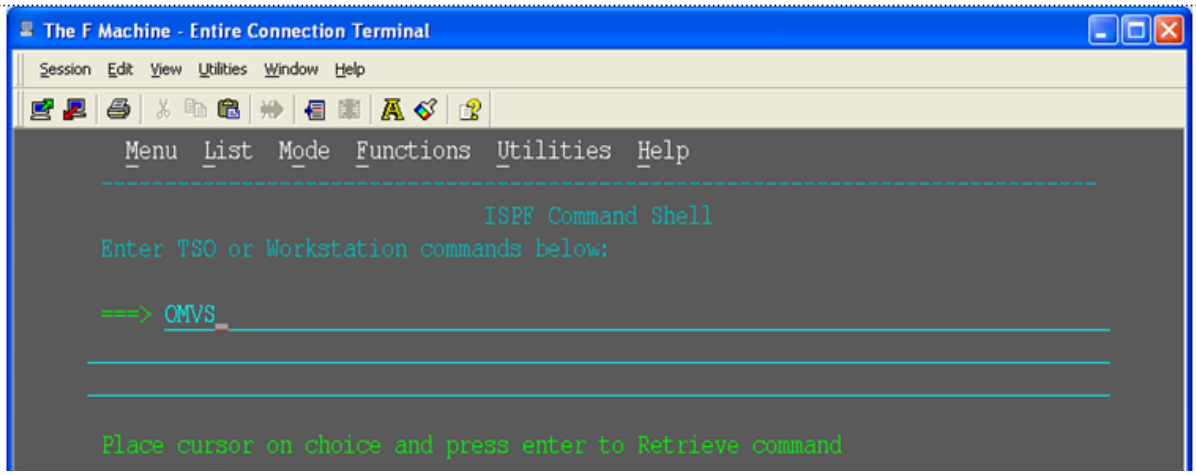
  A GID can be assigned to a RACF group with…

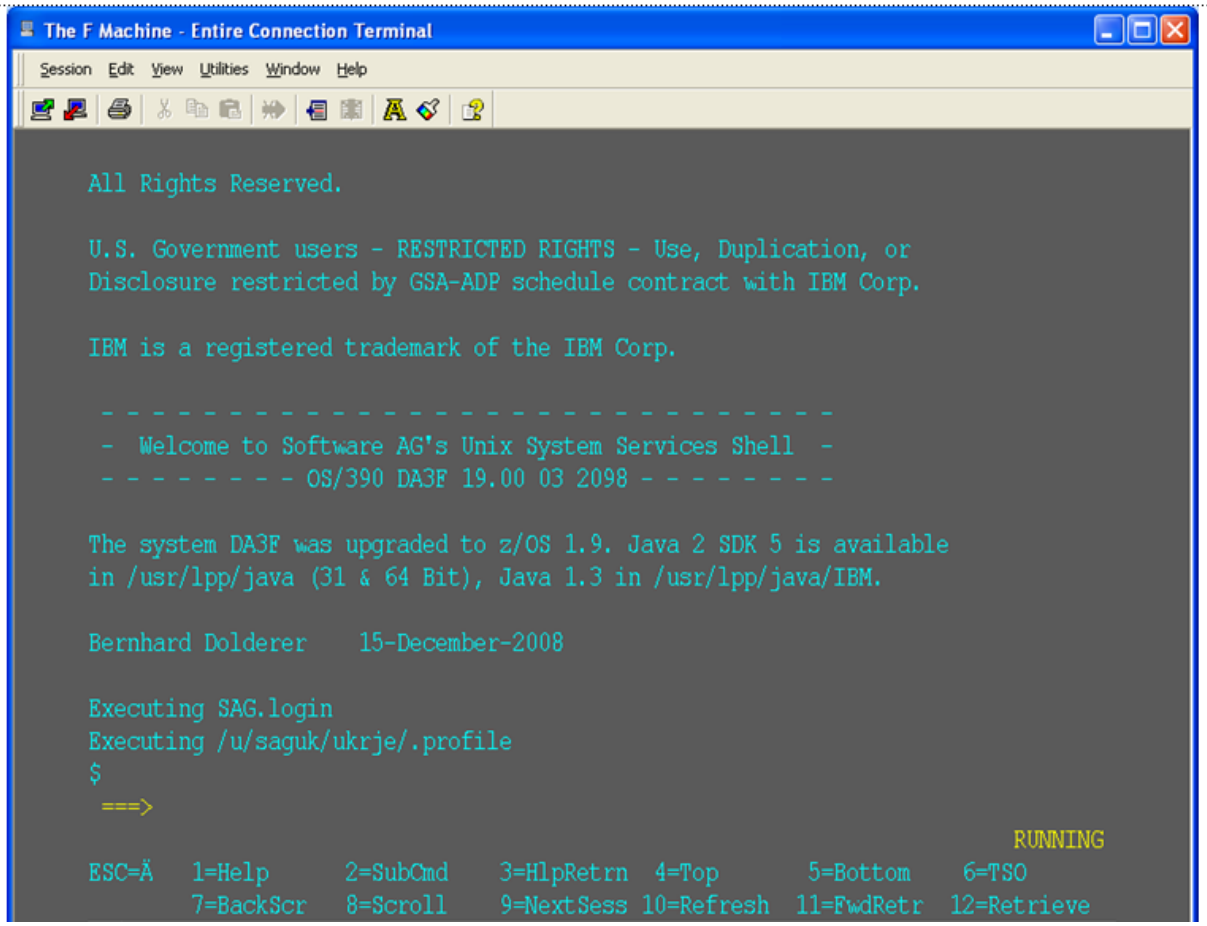
```
ALG <group> OMVS(GID(nn))
```

- The home directory needs to be created in the filesystem (HFS, ZFS etc).

Getting into OMVS via TSO

Once the permissions, home directory etc. are acquired, there are two typical ways to get into OMVS. One is through TSO. Get into TSO and issue the OMVS command and press Enter.





Getting into OMVS via Telnet

You can get to OMVS like any other Unix system from outside z/OS using telnet. Enter the following at your workstation:

```
telnet <computer> <port>
```

This will enable access into the OMVS Unix at the same point as entering “OMVS” in TSO.

Entering Unix Commands

Once in OMVS, you will be able to use all the usual Unix directives:

Directive	Description
cd	Change directory
mkdir	Make directory
chmod	Set protection
chown	Set owner
chgrp	Change group
ls -la	Display directory contents

Installation Steps

This section describes the steps required to install Data Archiving for Adabas for z/OS.

Important: Please read the Installation Preparation Checklist (below) before starting with the installation.

- Installation Preparation Checklist
- Step 1: Use Software AG Installer to Acquire the Software
- Step 2a: Perform the Off-host Activation (FTP) in Windows or Unix

Installation Preparation Checklist

There are a number of things that need to be done prior to installing. These have been covered in the preceding sections and are summarized here as a checklist to help you ensure the installation is successful:

Installation Preparation Checklist

Step	Description	Notes

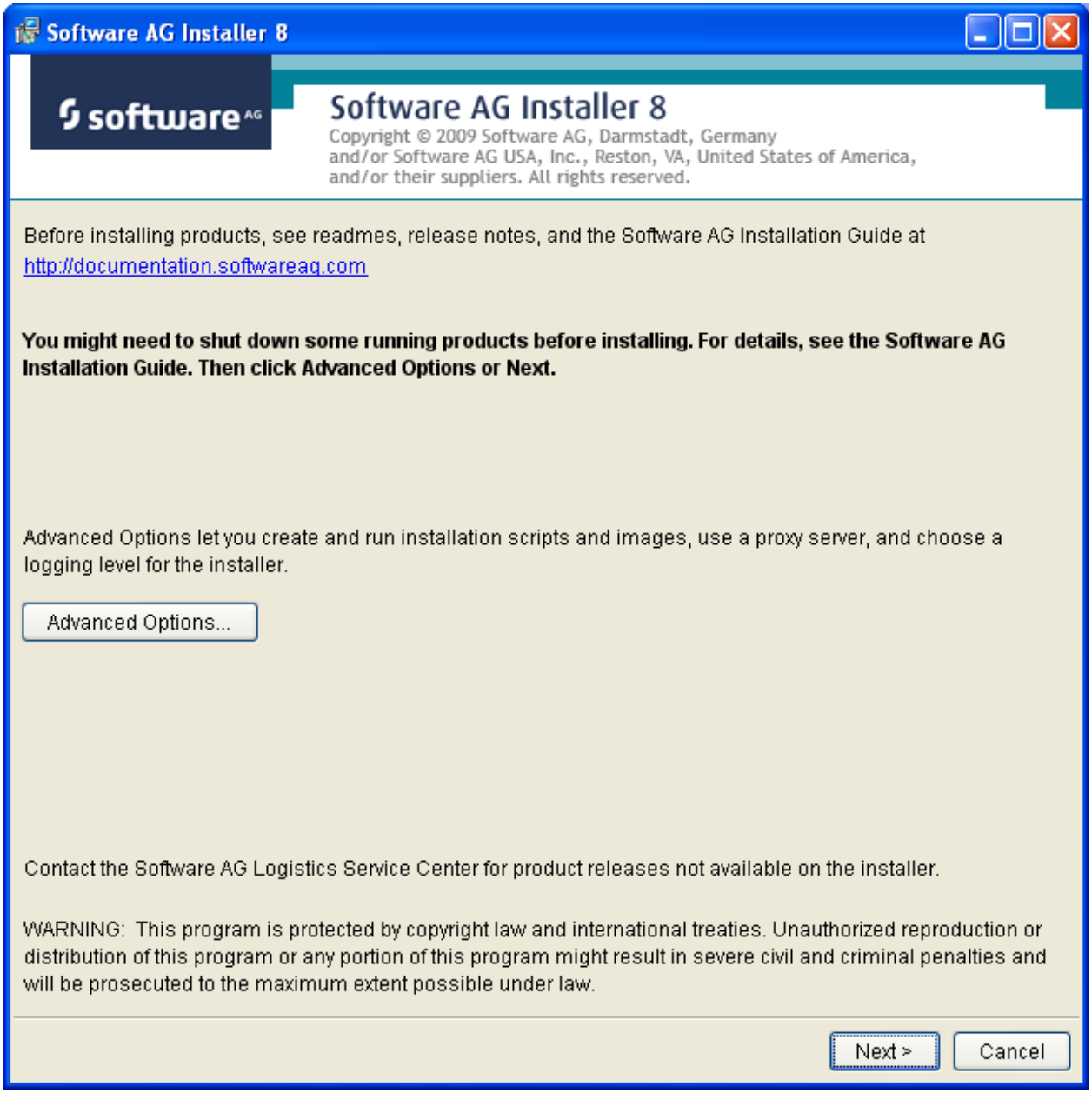
1	Check the system name and hostname of the z/OS machine where the software is being installed:
	■ the system name and hostname must be the same
	■ the hostname must resolve to the correct IP address
		Use the `uname` command to acquire the system name:
		`da3f:saguser> uname -a`
		`OS/390 DA3F 20.00 03 2098`
		Use the `onslookup` command with the system name to acquire the hostname and IP address:

Step	Description	Notes
		da3f:saguser> *onslookup DA3F* Defaulting to nslookup version 4 Starting nslookup version 4 Server: daedns.ad.sag Address: 10.20.xxx.xxx Name: *DA3F.hq.sag* Address: *10.20.xxx.xxx*
2	Check the amount of free disk space available in the directory in the USS filesystem where the software is being installed. Minimum disk space: 300 MB	Use the df command to see the amount of free space available: da3f:saguser> *df -k /opt/softwareag*
3	Check the amount of memory (region size) available to a process running in the USS environment. **Note:** If you use USS via TSO (OMVS) then the size of your TSO session governs the size of the USS session. Minimum memory: 64 MB	Minimum memory: 64 MB
4	User ID and password for the USS account that will be used to install and run the software. Make sure that the account has read/write and execute permissions to the installation directory in the USS filesystem (from Step 2 above).	User ID: *saguser* Password: ******** Permissions:
5	Check that the USS account (from Step 4 above) has the correct z/OS security permissions for the dataset where the ADALNKR/LNKGBLS were prepared earlier.	Dataset: *SAG.ADRvrl.LOAD* Permissions:
6	Adabas database and file number for the Configuration File. This can be a file that will be created or replaced as part of the installation, or it can be an existing file shared by another computer already running Data Archiving for Adabas. If the file is being shared by another computer, the hostname of the computer and its Group Services port number will be required (default 53376).	Database: 10 File number: 120 Choose one of: ■ create ■ replace ■ share When choosing share you will be prompted for:

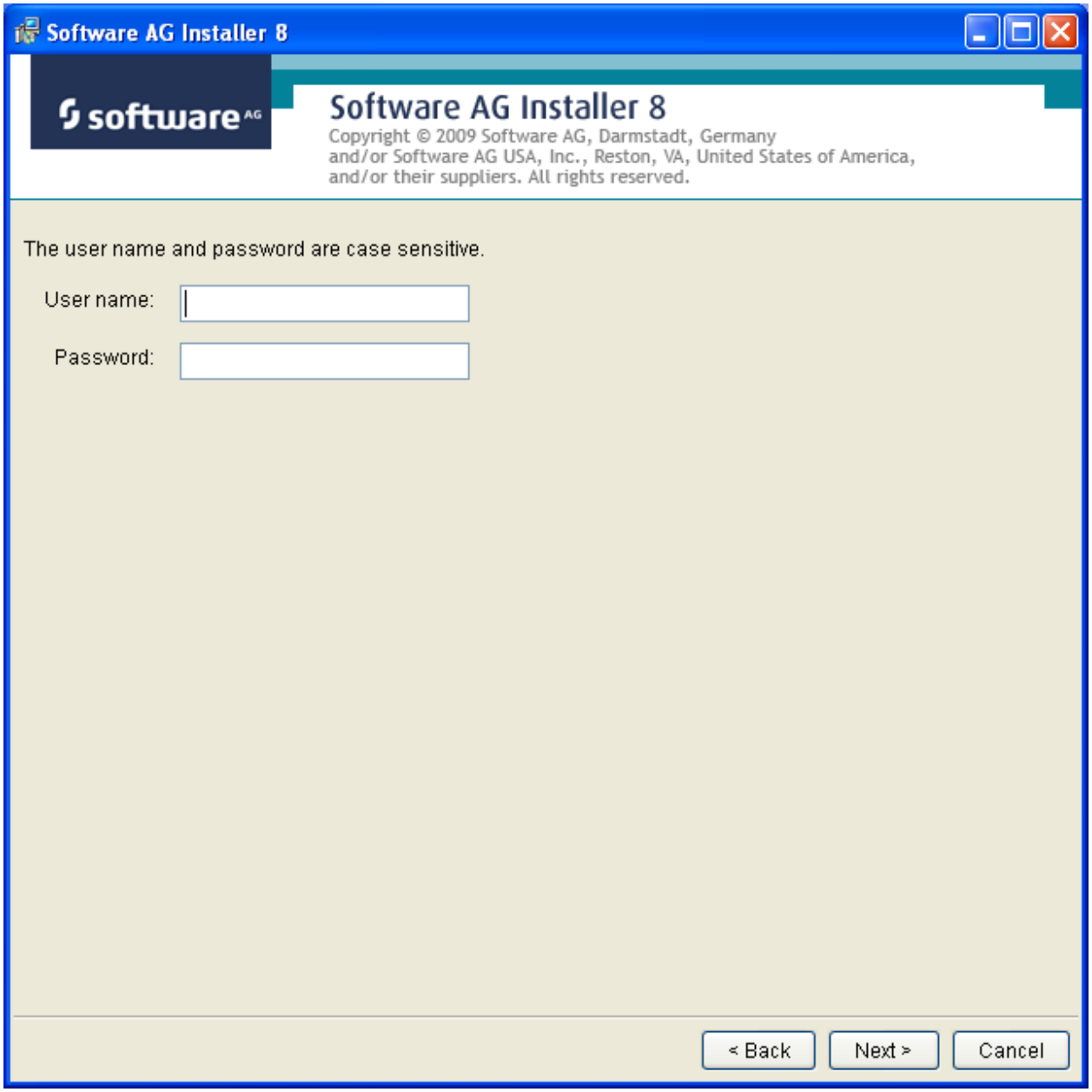
Step	Description	Notes
		Hostname: *sunpcc10.hq.sag* Portnumber: *53376*
7	Download location. This is the non-z/OS computer where you either download directly or placed the software distribution image. **Note:** Installations are much faster if you use a local disk on the download computer.	Example: *C:\SoftwareAG\Temp*
8	Details for the FTP upload of the z/OS software because the software must be uploaded to z/OS. The following information is needed: ■ Hostname of z/OS (from 1 above) ■ User ID (from 4 above) ■ Password (from 4 above) ■ Temporary target upload directory Software AG recommends the target directory for the upload is different to the location where the software will finally be installed, since the FTP is only a temporary step. Typically, this is a temporary directory in the user's home directory. Check the amount of free disk space available in the target directory. Minimum upload disk space: 30MB	Hostname: *da3f.hq.sag* User ID: saguser Password: ******** Directory: */u/saguser/tmp* The `df` command shows the amount of free space available: da3f:saguser> *df -k /u/saguser/tmp*

Step 1: Use Software AG Installer to Acquire the Software

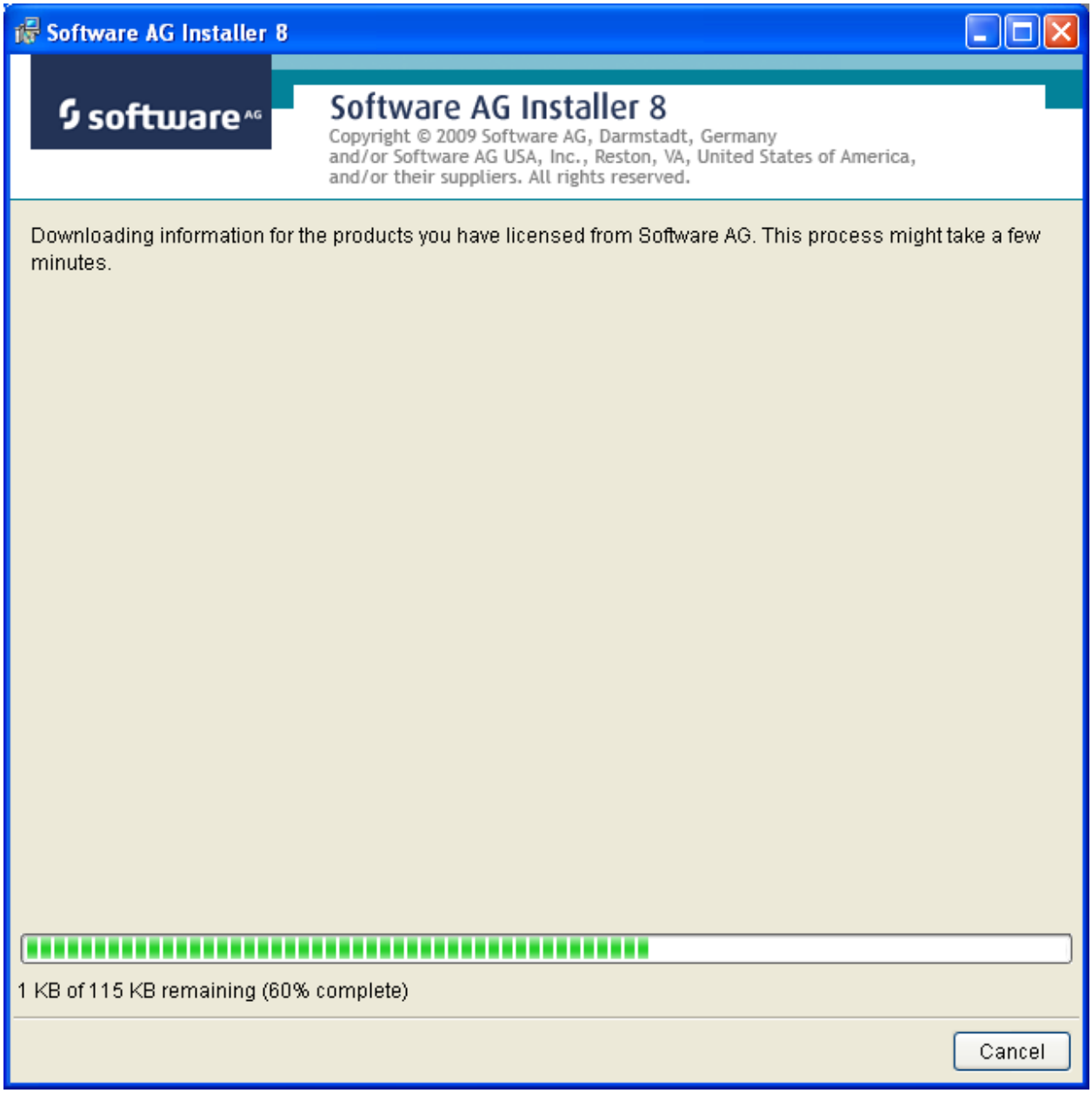
On the Software AG Installer Welcome Screen, click Next to start the installation.



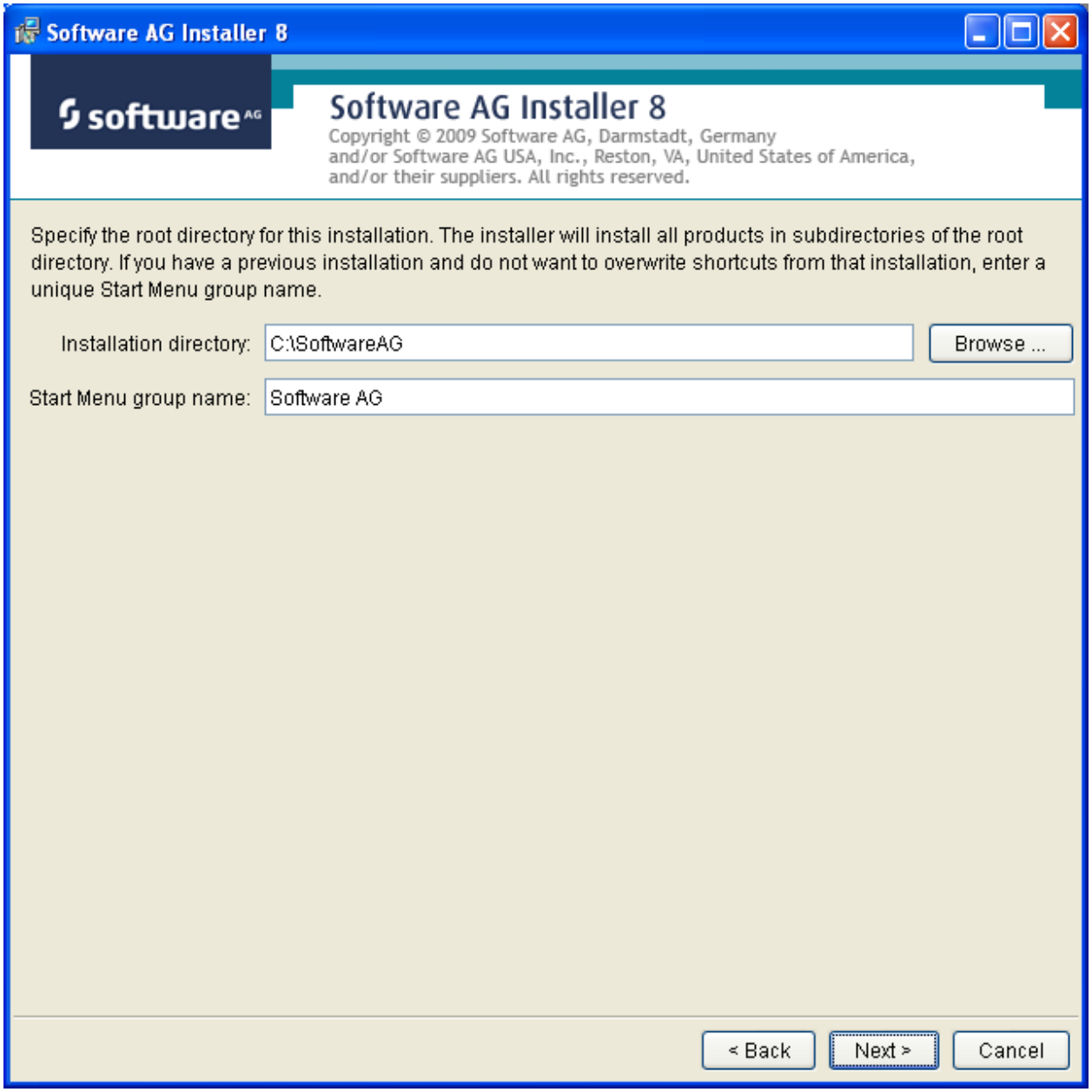
Identify yourself to the Installer by logging in with your credentials as shown below. Click Next to proceed to the next step:



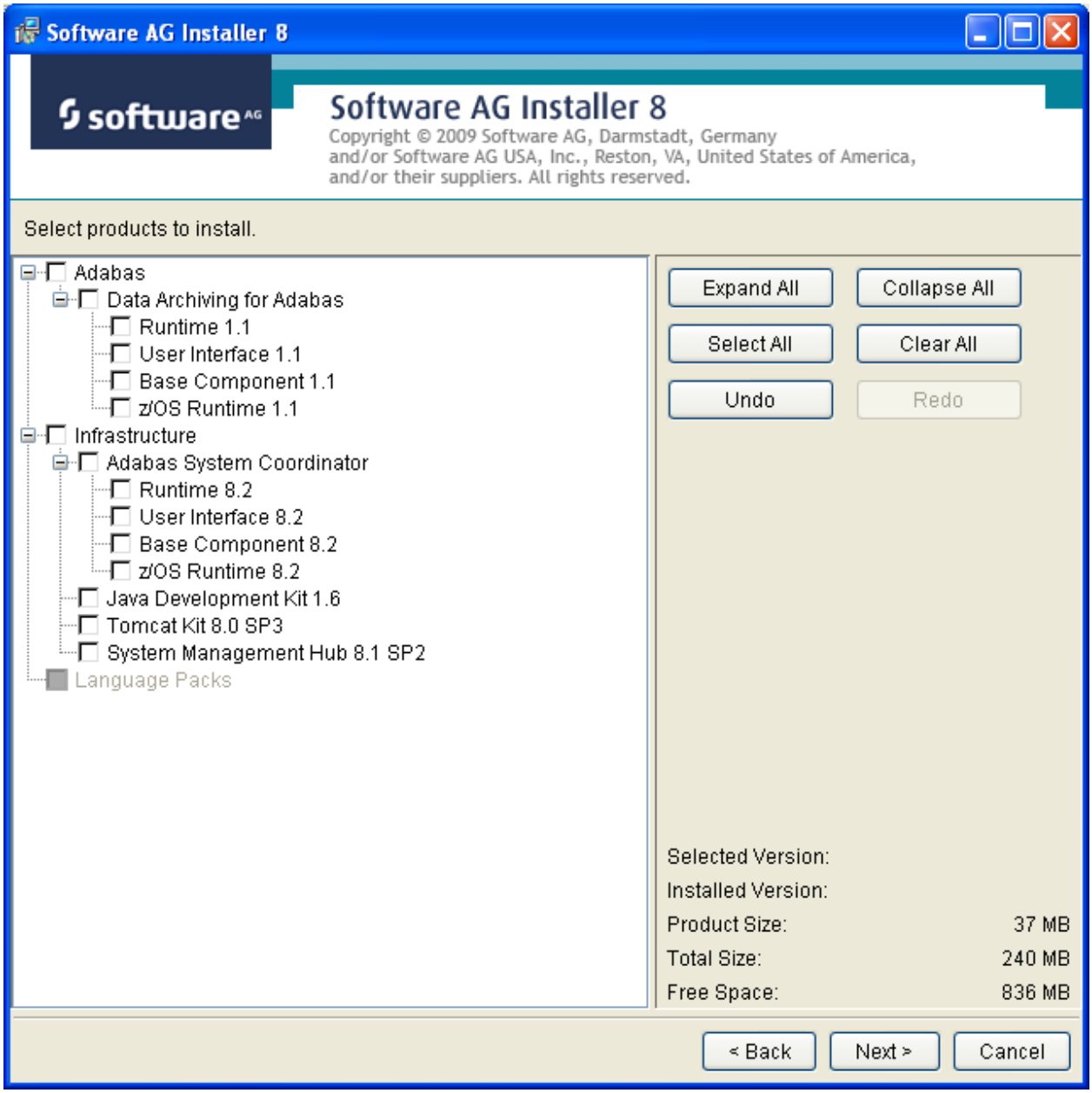
The Installer acquires information about a) all the products for which you are licensed and b) are able to be installed using the Installer. You can see this happening (below). It may take a few minutes:



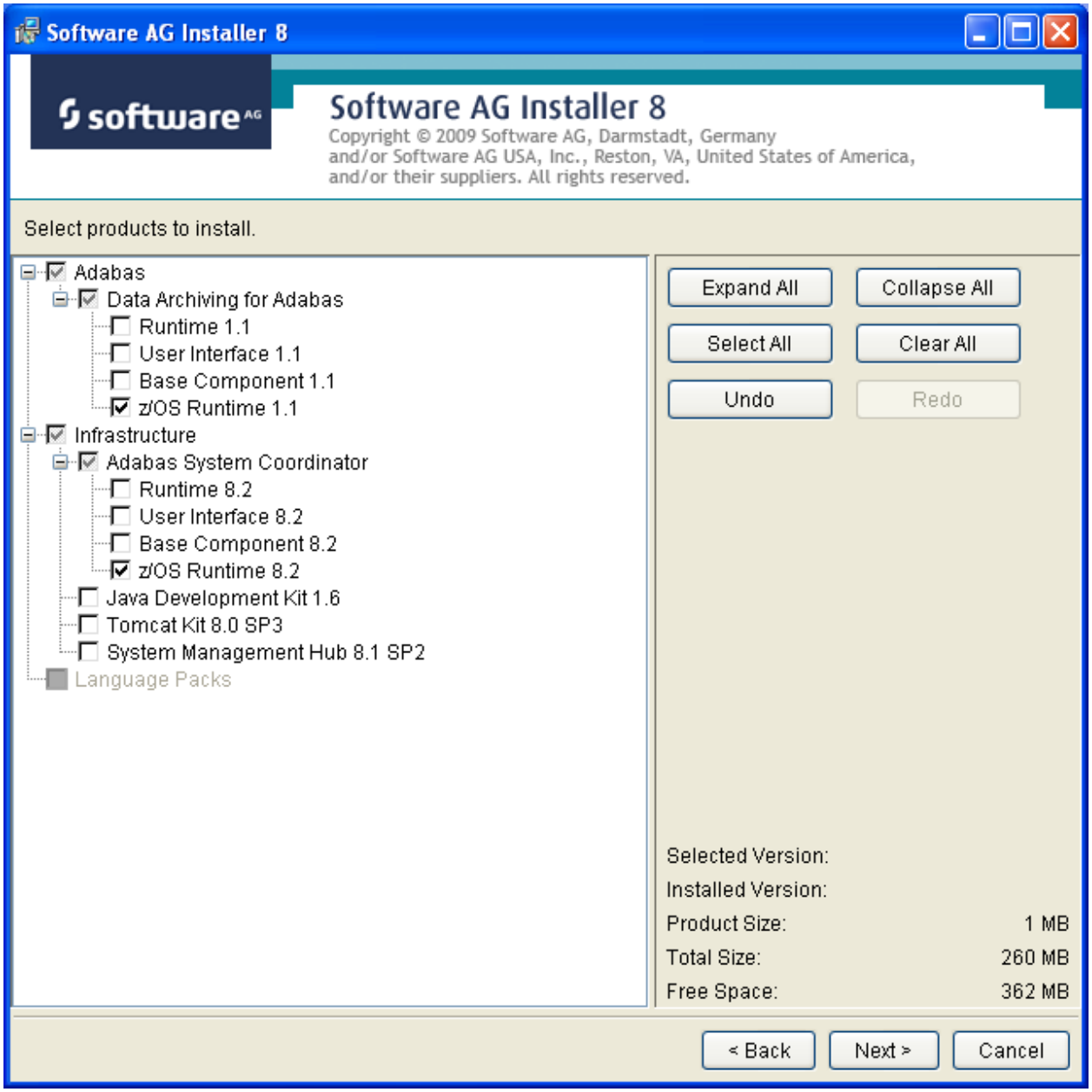
Once the Installer has acquired all licensing information for your site, it shows the default install location. You can alter this if you wish but make sure you understand the implications of changing it for all the products being installed. Click Next to proceed further:



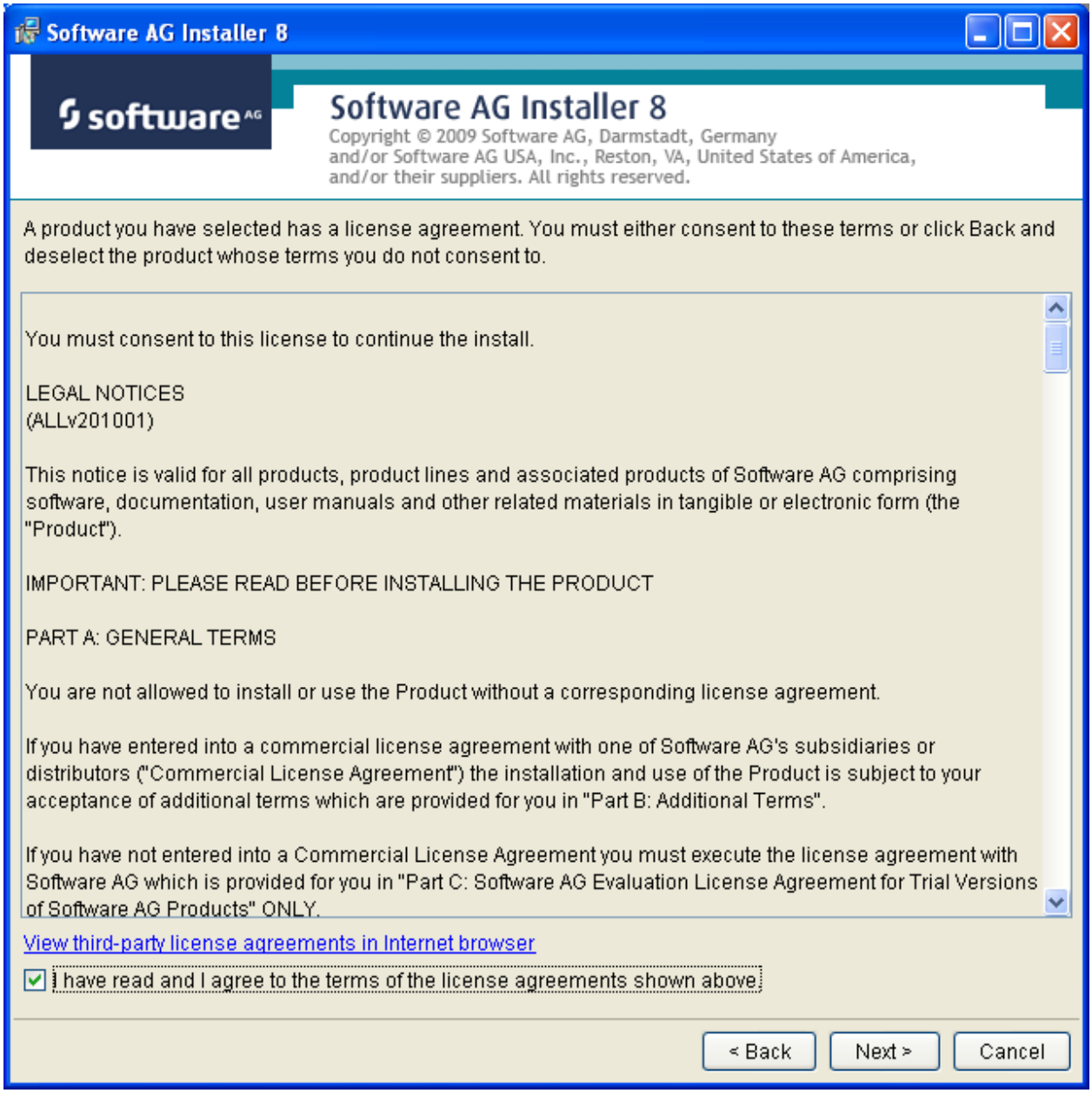
You can now choose the products that you wish to install:



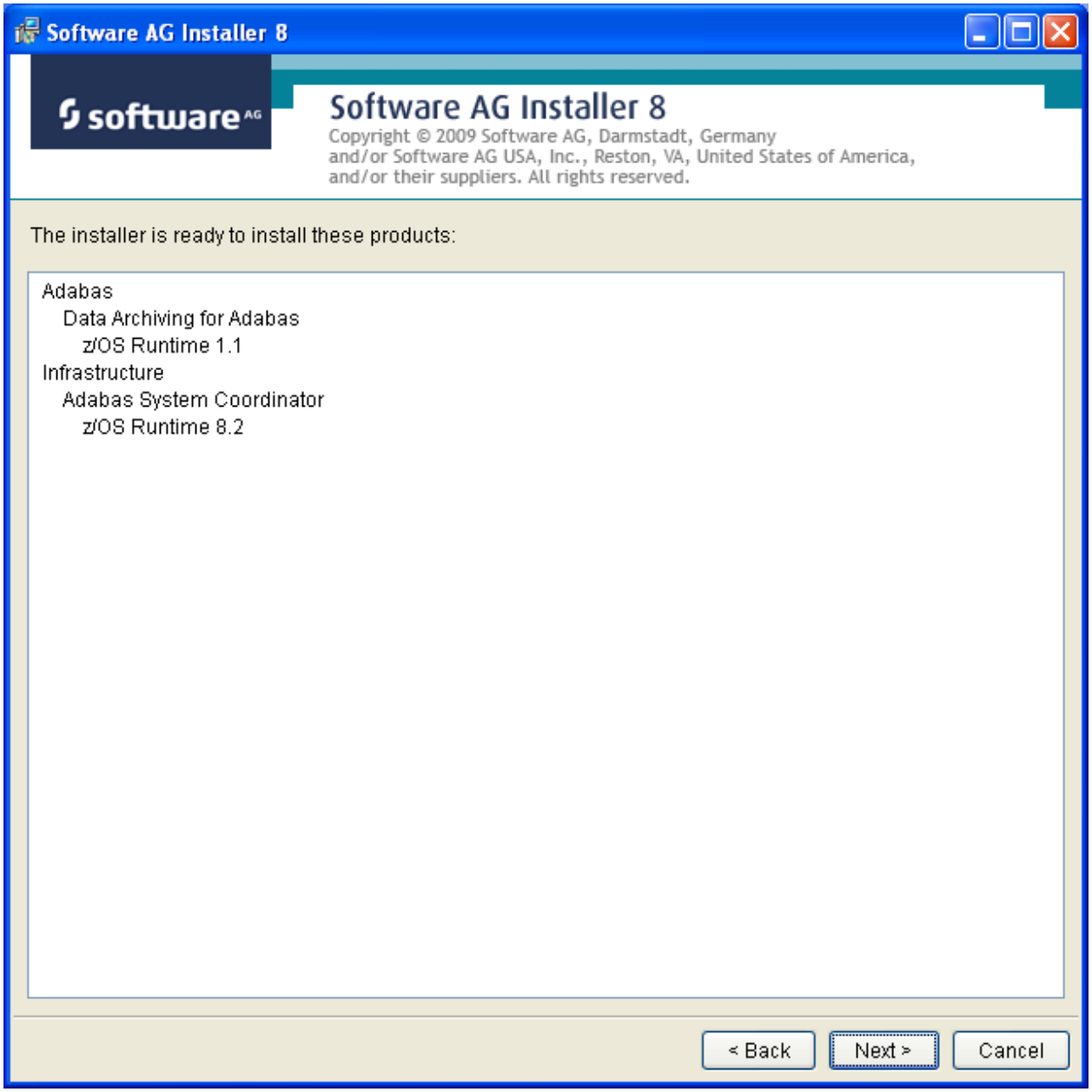
You can see below which products have been selected. In making these choices, other implied choices of sibling and prerequisite products are also made automatically. Once your selections are made, click Next to proceed:



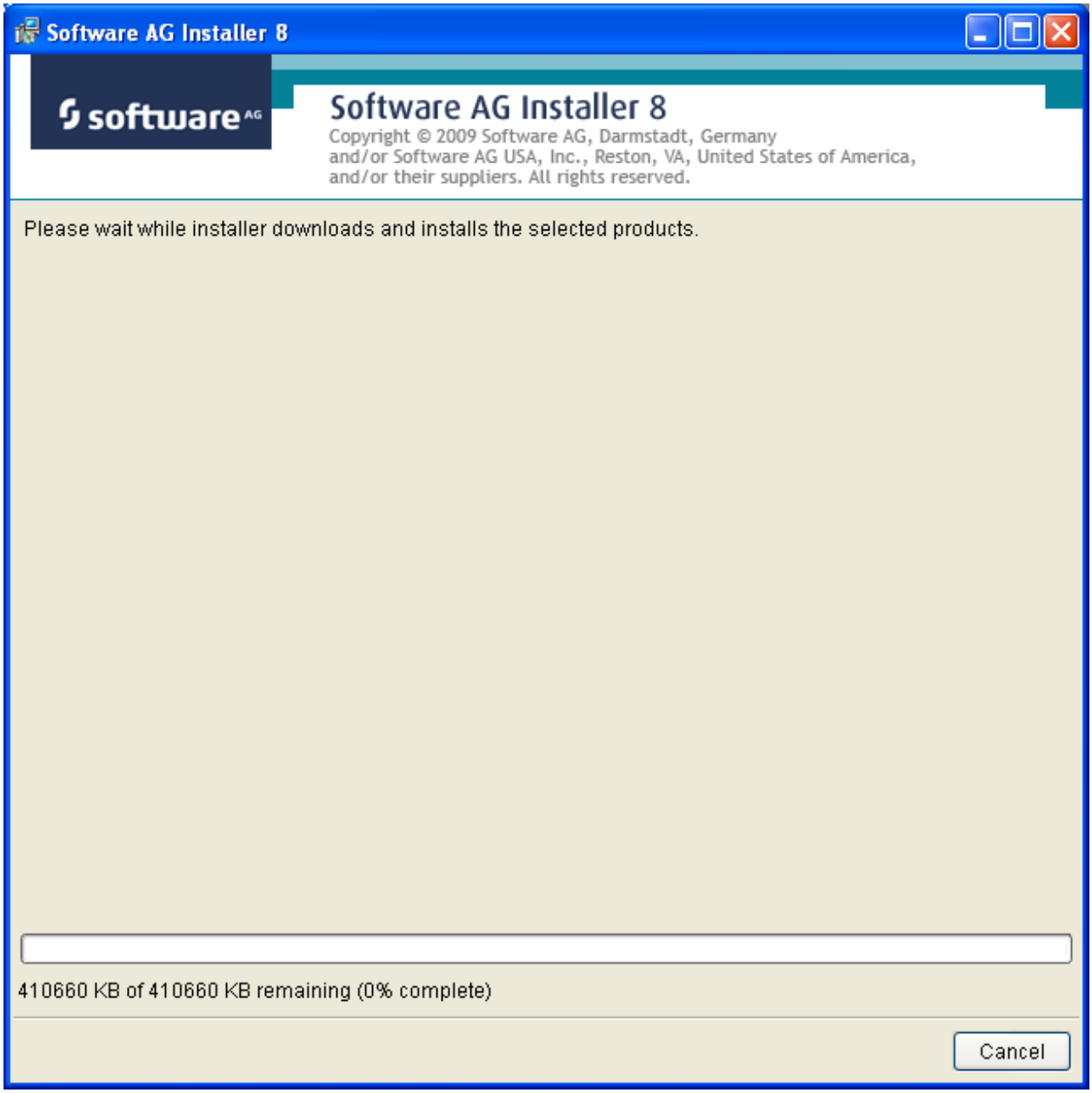
Read the terms and conditions. When you have finished confirm you have done so by checking the box. Click Next to continue:



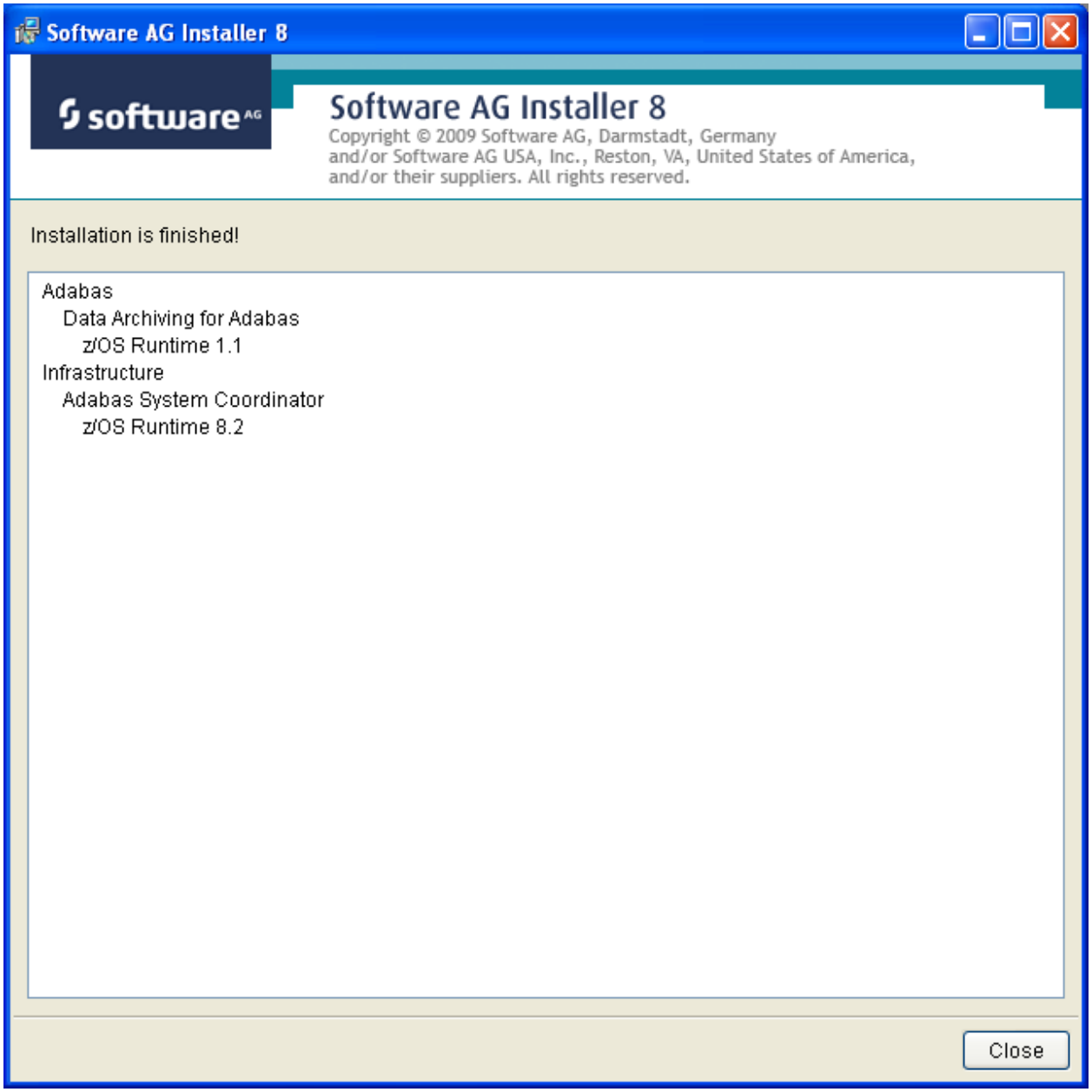
A list of the products selected for install is provided. Click Next to perform the installation:



The installation may take some time.

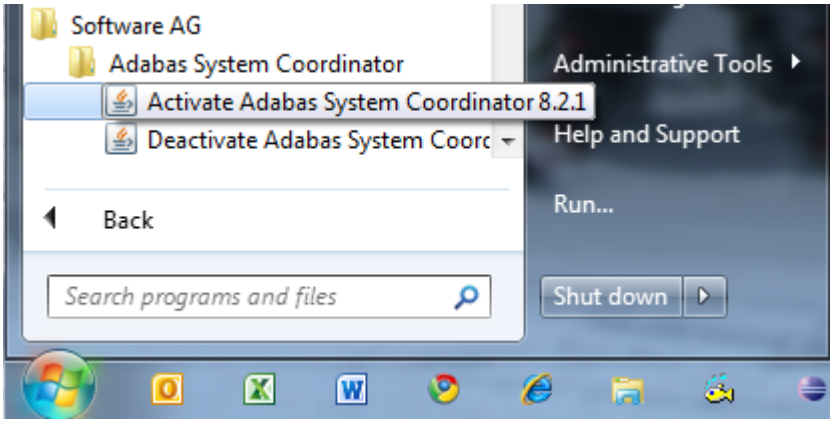


Once the installation of all the products is completed you will see the following confirmation screen:



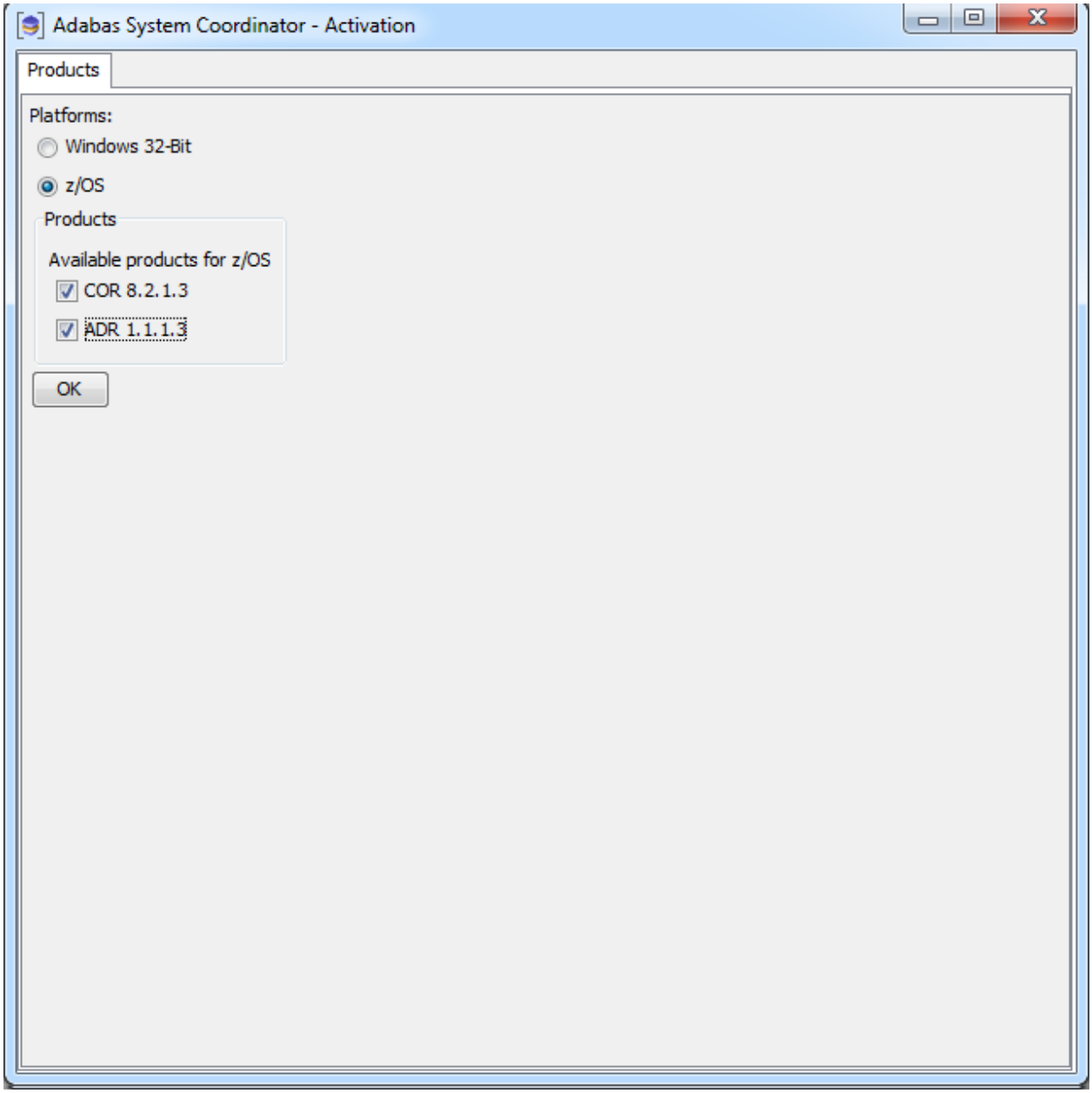
Step 2a: Perform the Off-host Activation (FTP) in Windows or Unix

z/OS activation can be performed from either Unix or Windows, this example is from Windows. First click the activation in the Start menu:



Activation Platform and Products

The first screen in the activation requires that you select the platform that you are activating and the products too. The following show z/OS:

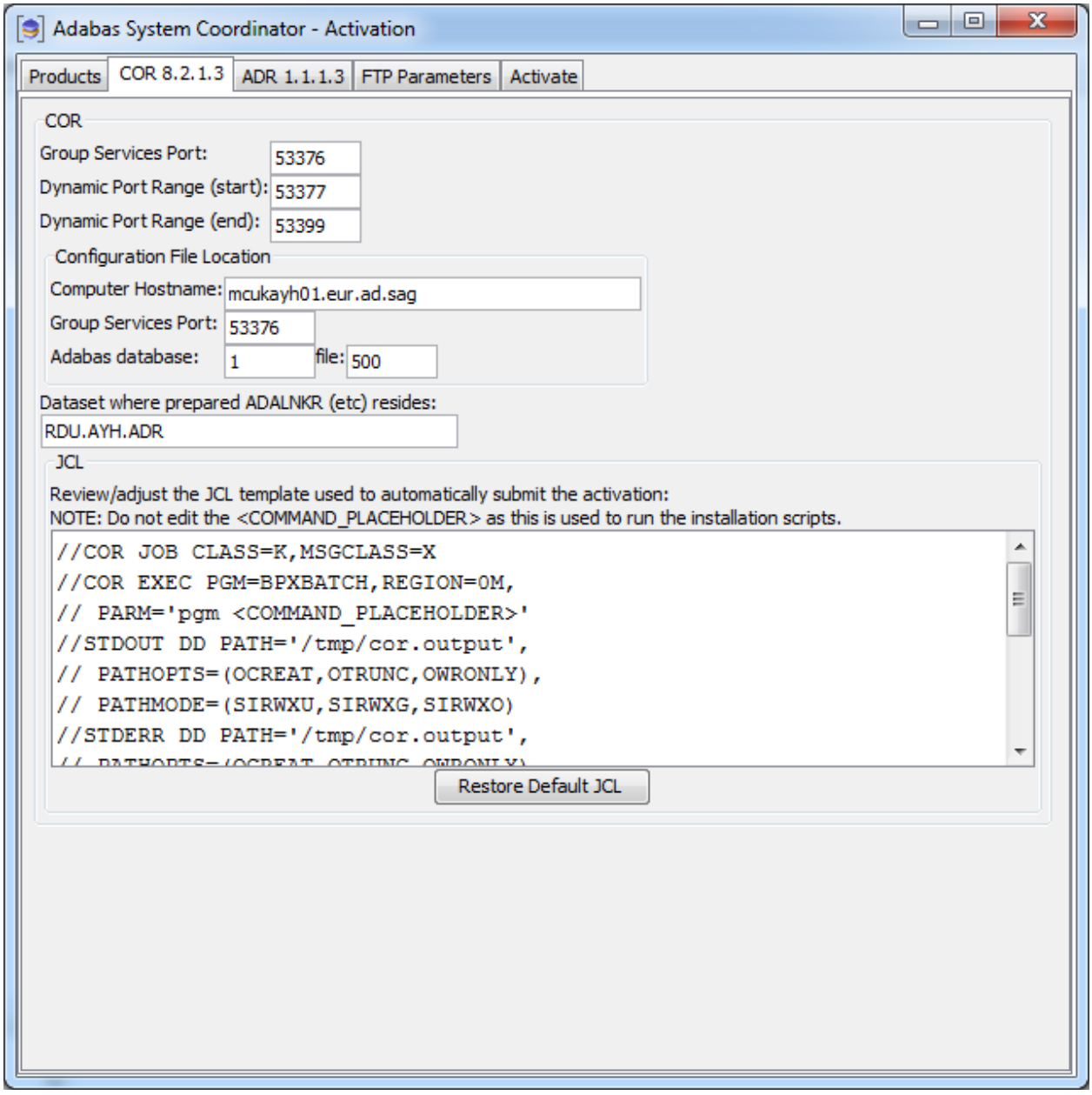


Activation: Adabas System Coordinator

1. Ports: System Coordinator uses ports for communication between components. Normally Group Services Port, Dynamic port range (start) and Dynamic port range (end) are left with the default settings shown below. If you decide to change these ports you must keep a careful note of the port numbers chosen for this computer for use later.
2. Configuration file location: it is very important that the configuration file (and Adabas file) is shared by all computers that are to collaborate. You must identify where the configuration file already resides in another computer; or if this is the first installation you must be sure that this is the computer where the configuration file is to be created by the activation. If the configuration

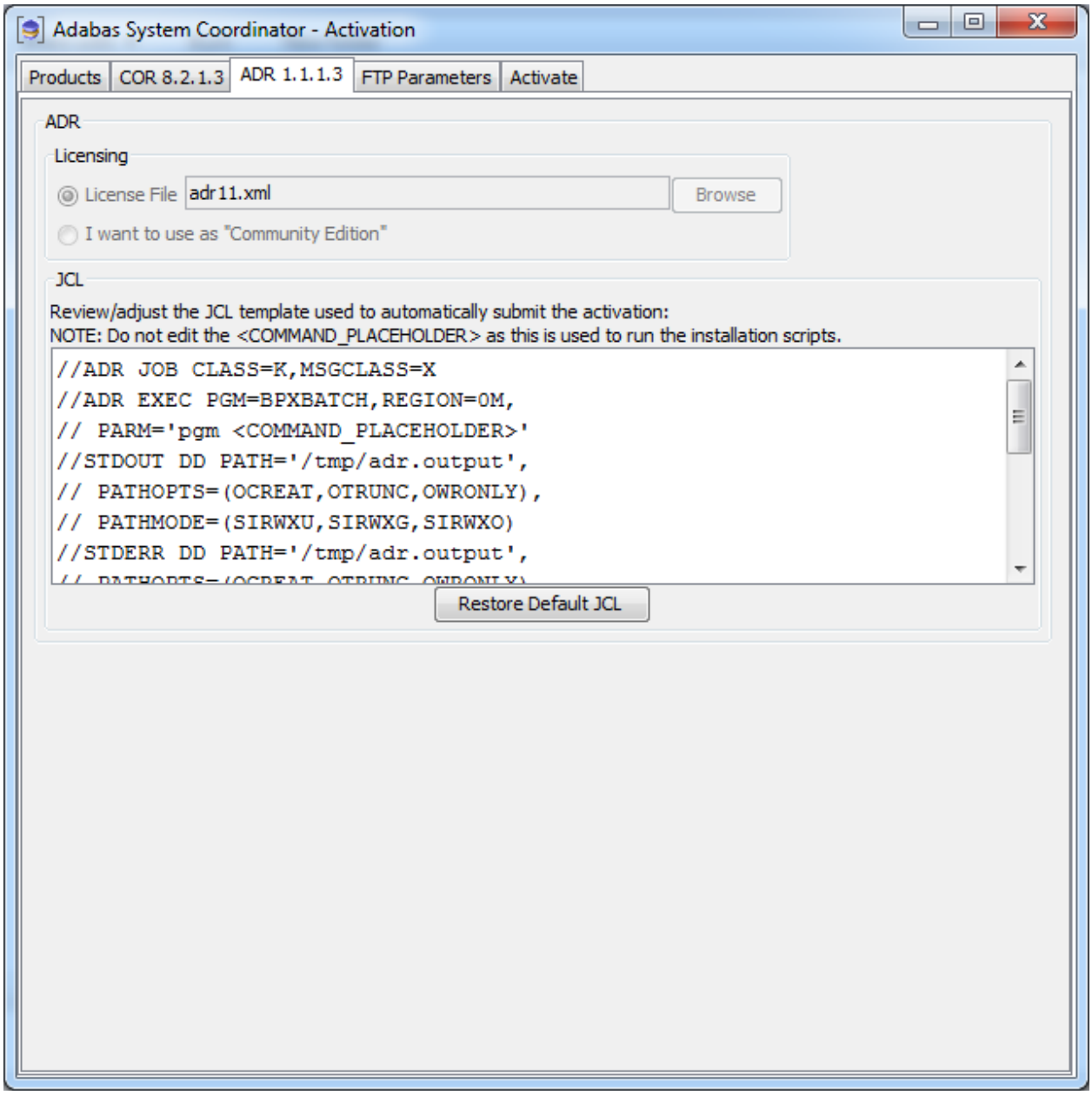
file does already exist in another computer you must identify it with hostname and group services port used in that computer (if group services port was not allowed to default). Finally, the database and file for the file is needed too of course.

3. Dataset for ADALNKR: you must identify the z/OS dataset where you prepared the ADALNKR earlier, as previously described.
4. JCL for dynamic activation submission: you must edit the model JCL so that it is valid for your site, but do not modify the <COMMAND_PLACEHOLDER> because this is dynamically replaced at runtime.



Activation: Data Archiving for Adabas

Dynamic submission JCL must be adjusted to run correctly at your site, but do not modify the <COMMAND_PLACEHOLDER> because this is dynamically replaced at runtime:



Activation: FTP Preparation

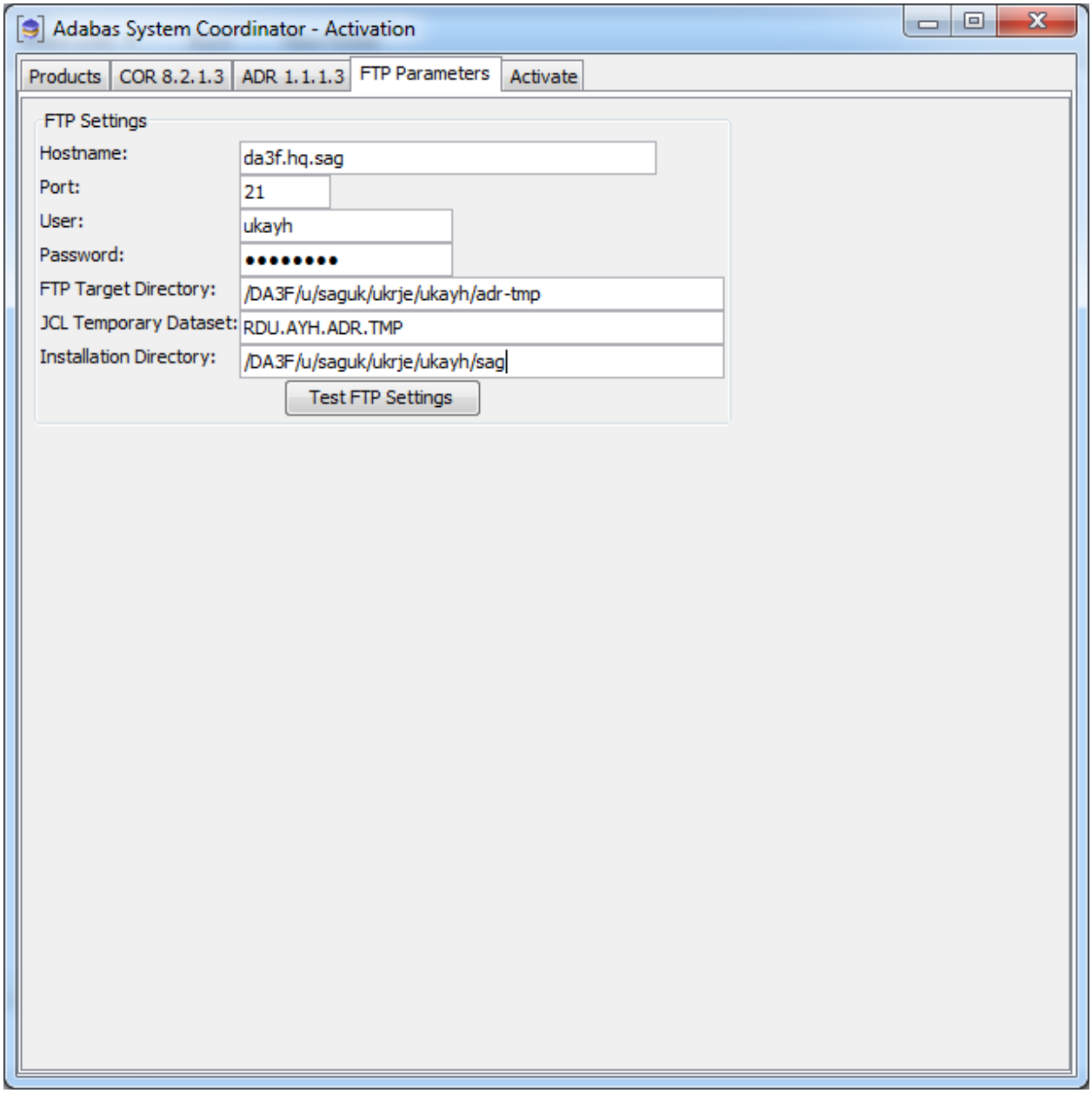
The activation involves an FTP into the z/OS system and then dynamically submitting the activation. To do this your z/OS FTP information is required.

1. Hostname: the name of the z/OS system where the activation is to take place.
2. Port: the z/OS FTP port, usually 21.
3. User: your z/OS userid for RACF, ACFR2 or Top Secret etc.
4. Password: your z/OS password.
5. FTP target directory: the area where you wish to initially load the copied install files into z/OS.

   Note: This is an intermediate destination, not the final installation location.

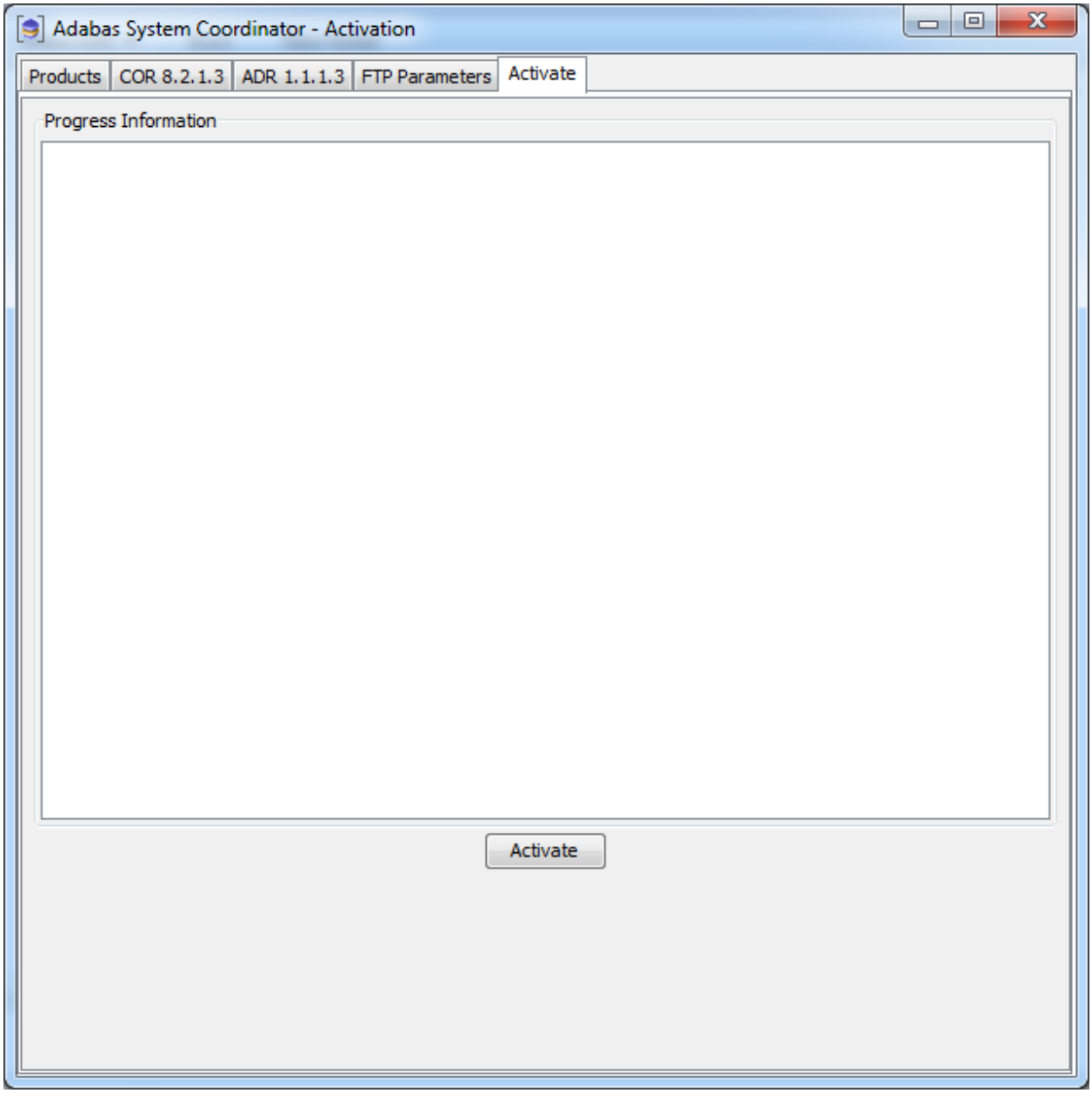
6. JCL temporary dataset: a temporary z/OS dataset is required to dynamically construct the activation JCL. This must be a file that your z/OS userid has modify permissions.
7. Installation directory: the final location where the software will be located and run.

There is a *test* button to do some basic checking of the information you supply below but this cannot check everything. Only when you finally execute the activation will you find out if it is successful or not.

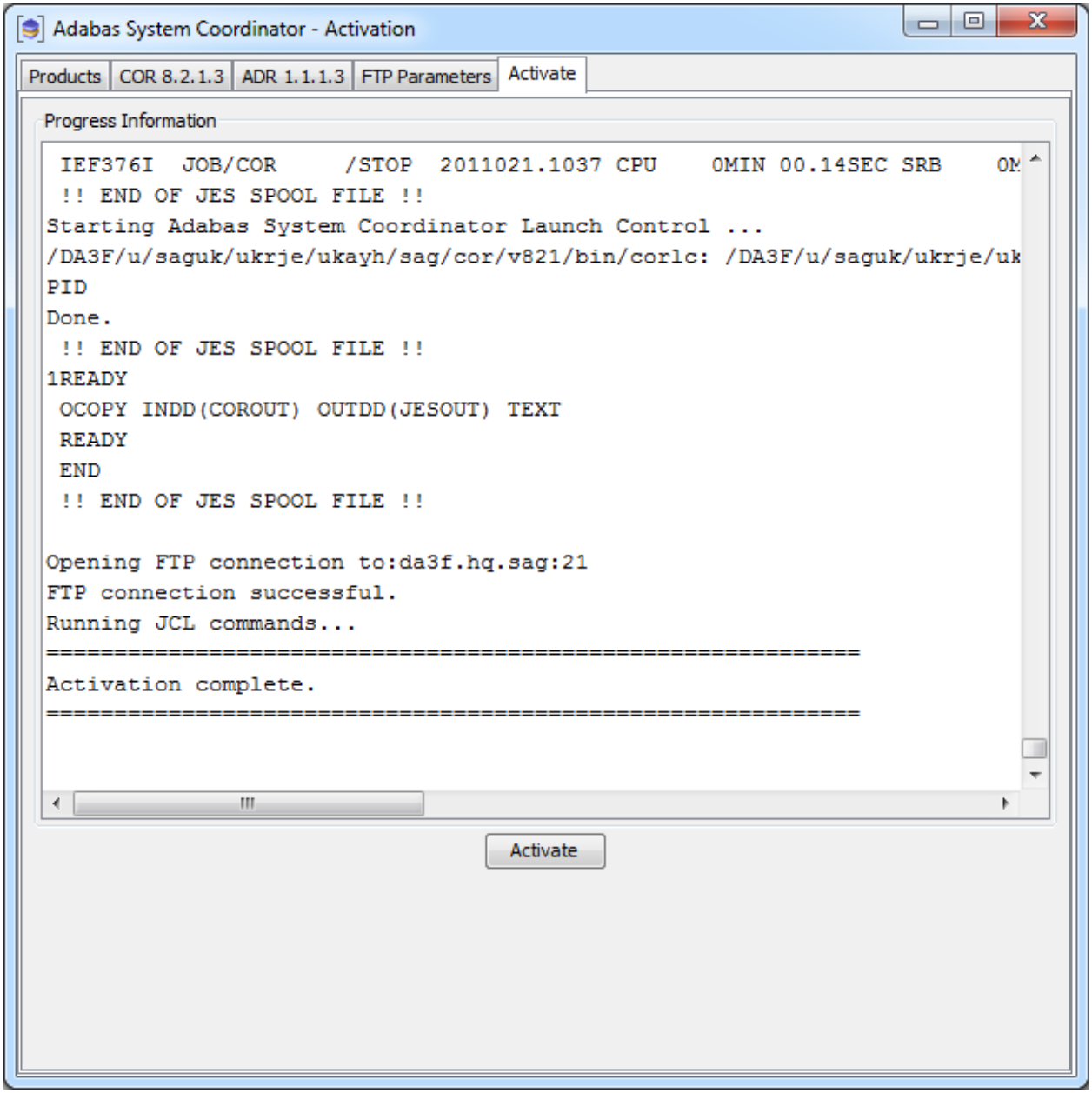


Activation: Execution

Once all options have been selected the next thing to do is to select the activate tab so the activation log screen appears. Start the activation by clicking the Activate button below.



The activation log screen shows progress during execution which may contain important information if a problem occurs (such as permissions failure). Here is a successful activation execution completion:

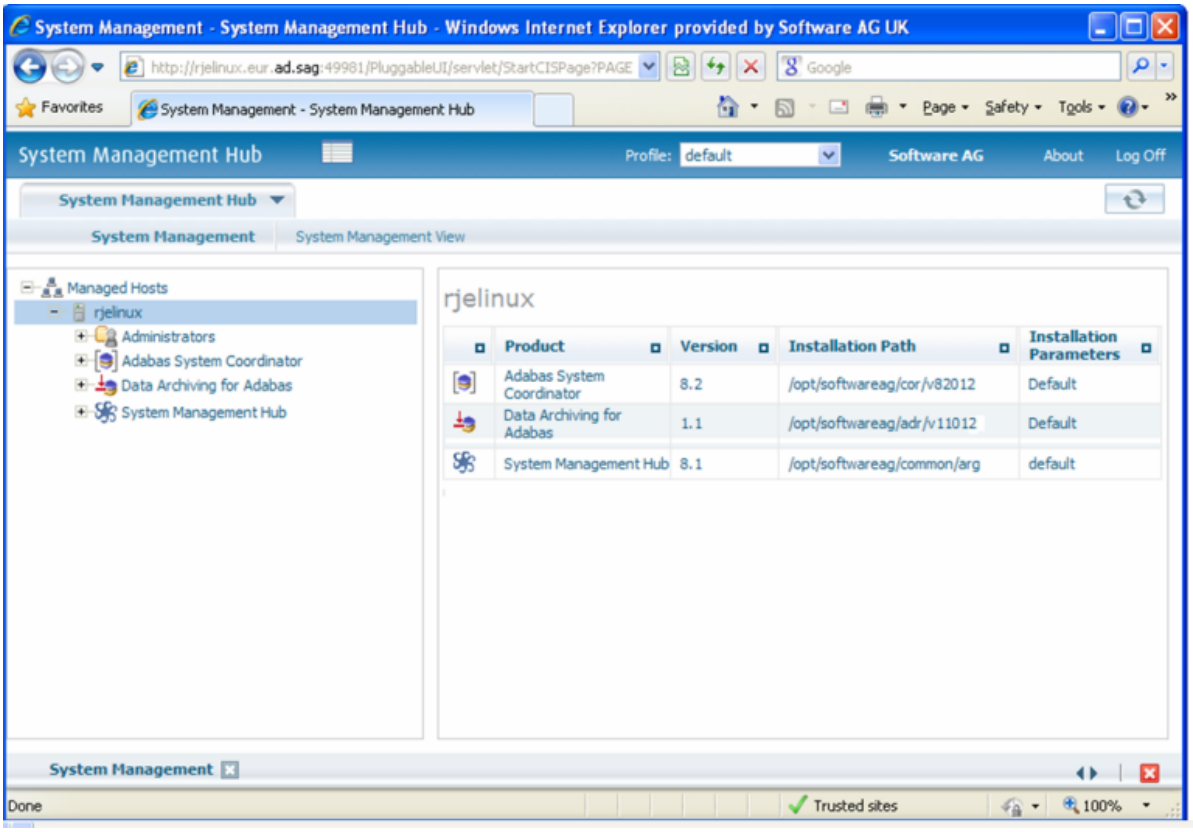


Use the Runtime from the Browser UI

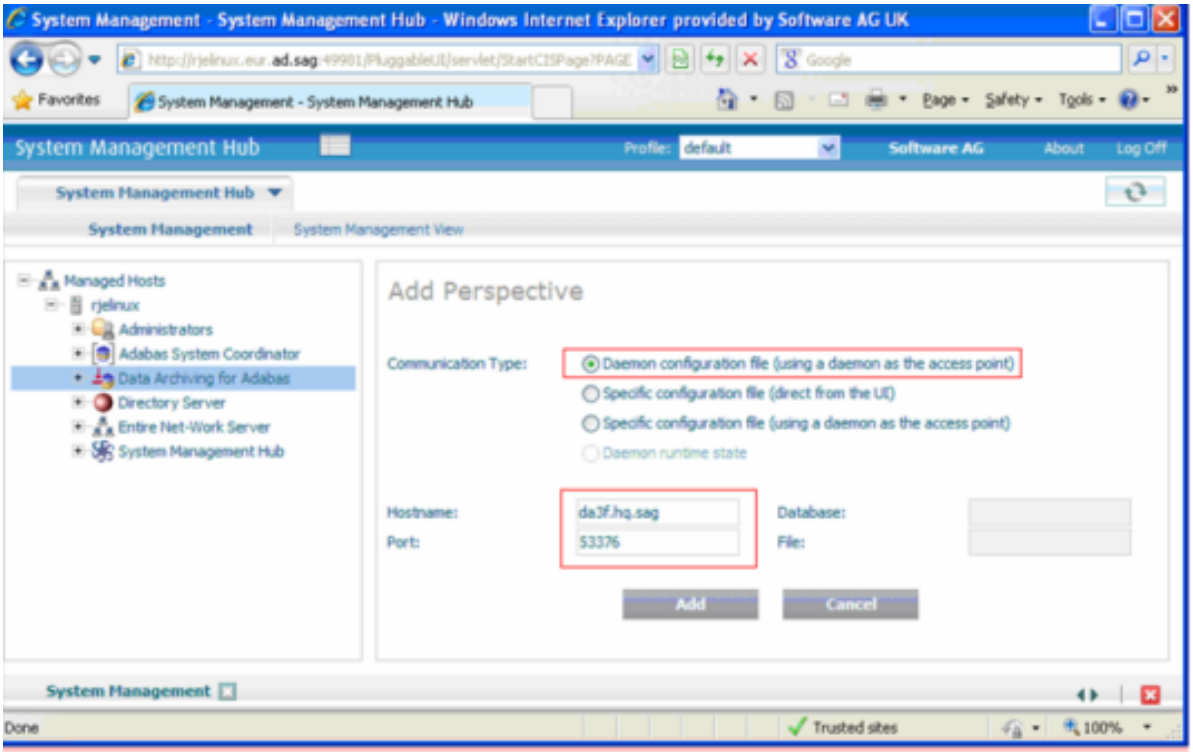
After installing the ADR runtime for the first time you must activate the ADR runtime within the UI browser. The browser (and prerequisite System Management Hub) must have been previously installed.

to use the Runtime from the Browser UI:

1 Log on to SMH on a computer where the UI has been installed and expand the tree node for the UI computer.

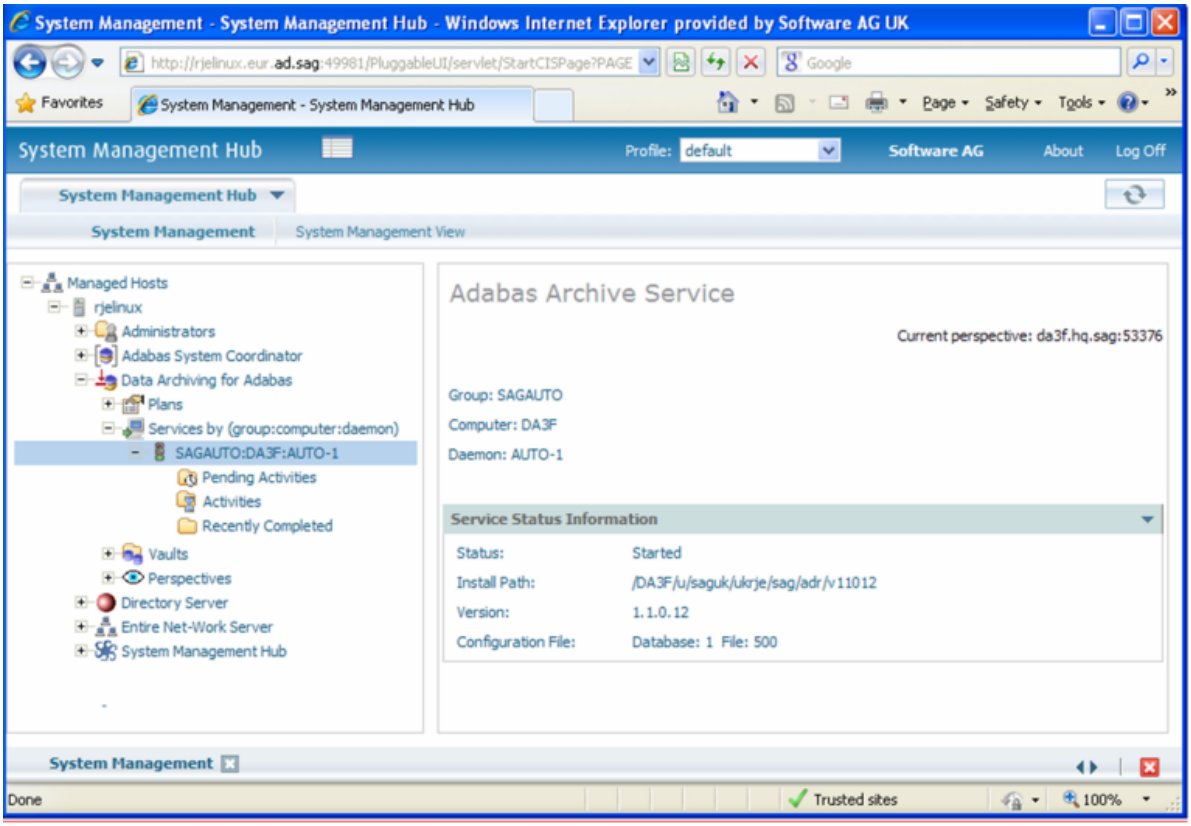


2 Select the main **Data Archiving for Adabas** node. If the UI computer does not also have the runtime installed there, the first time you enter it you will be asked to identify the location of the configuration file that has just been created in z/OS (or elsewhere if it was created during the install of the runtime in a different computer altogether)…then click Add.



3 Right-click on the main **Data Archiving for Adabas** node in the tree and select Refresh so that the selected perspective comes into force.

4 Within the tree select the **Services by ...** node. You should see the archive service for the runtime in the computer you have just installed. This should show a green traffic light which indicates that the service is active.



The installation is now complete. You can begin using Data Archiving for Adabas. See the section Getting Started for further information.

8 Deactivating and Uninstalling

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This chapter describes how to deactivate components and to optionally uninstall them too.

Note: To uninstall you must first do the product deactivation described here (selecting uninstall) and following that you must then use the Software AG Installer to finalize the uninstall. For Unix you must be sure to follow the Software AG Installer uninstall with specific shutdown either a) with sudo rights (sudo $SAG/install/removeCORDaemon.sh) or b) as root user ($SAG/install/removeCORDaemon.sh).

Deactivating and Uninstalling in Windows and Unix

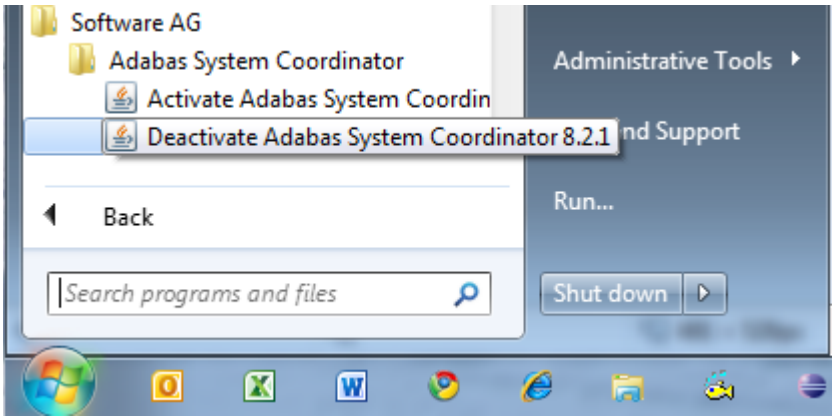
Deactivation Startup

Start the Deactivation in Unix

Execute the deactivation script in the install directory as follows:

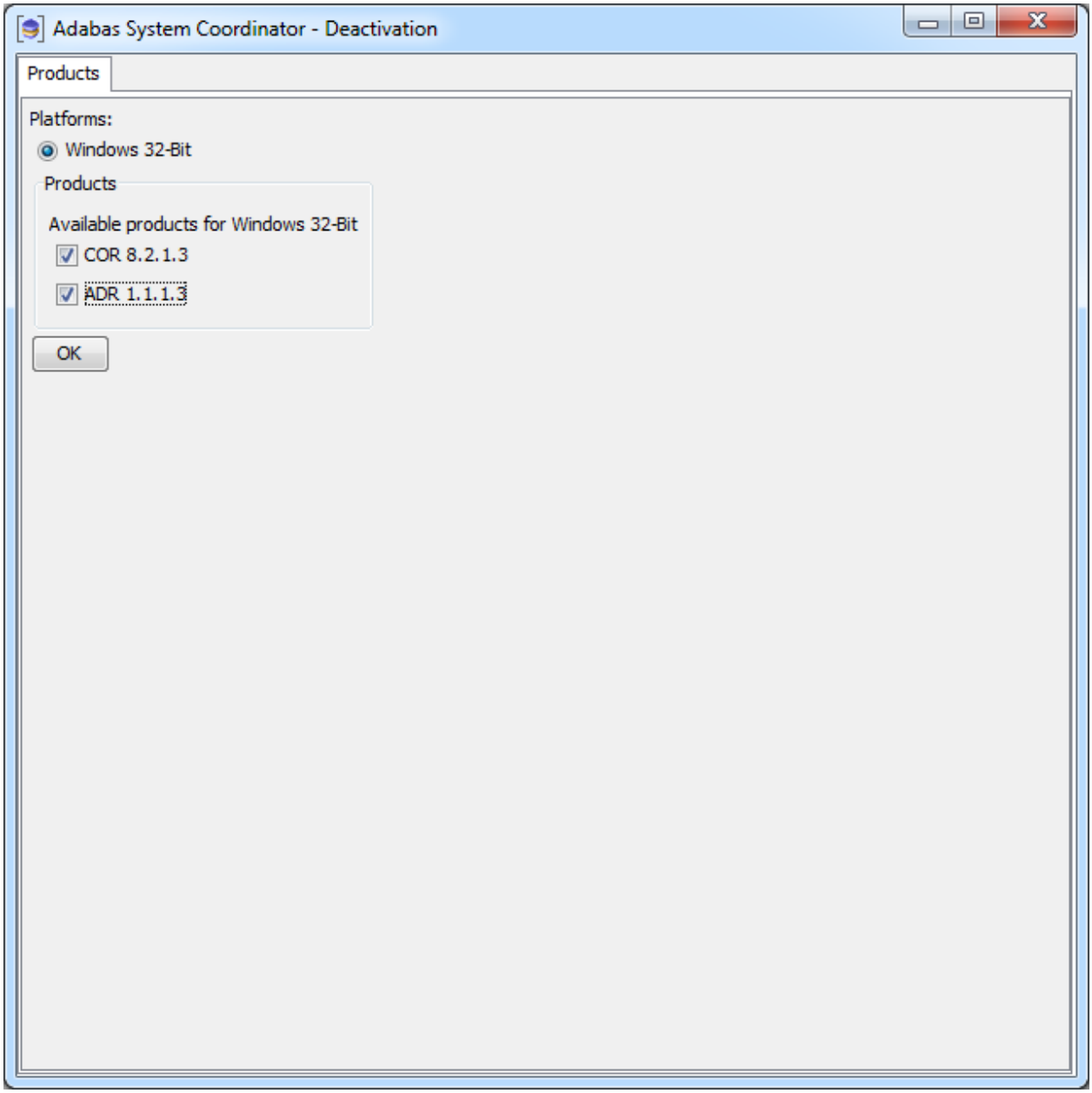
Start the Deactivation in Windows

The Installer creates a Start menu entry for deactivation; execute as follows:



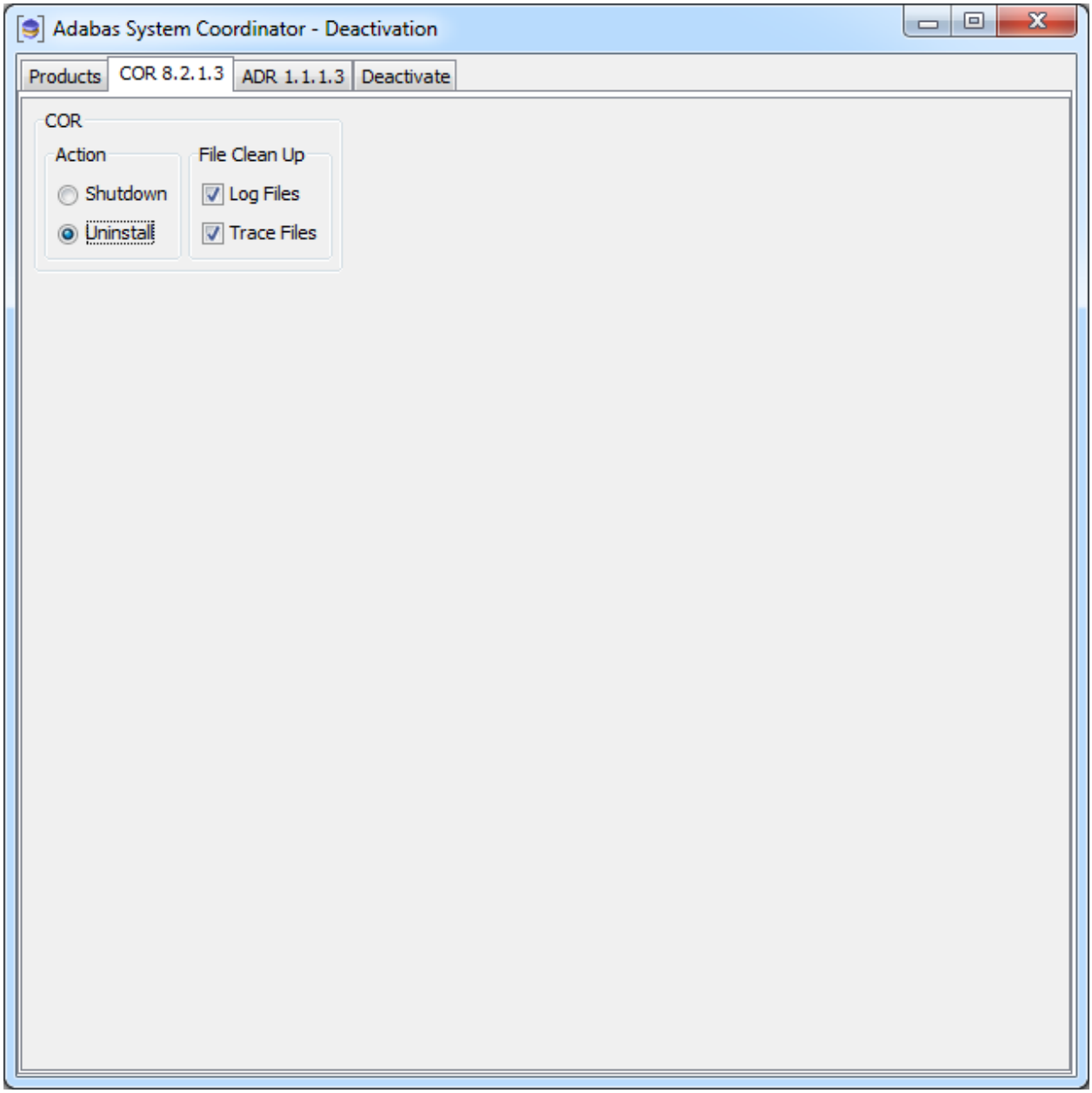
Deactivation: Choose Platform and Products

Select the platform and products you wish to deactivate or uninstall, the example below shows Windows:



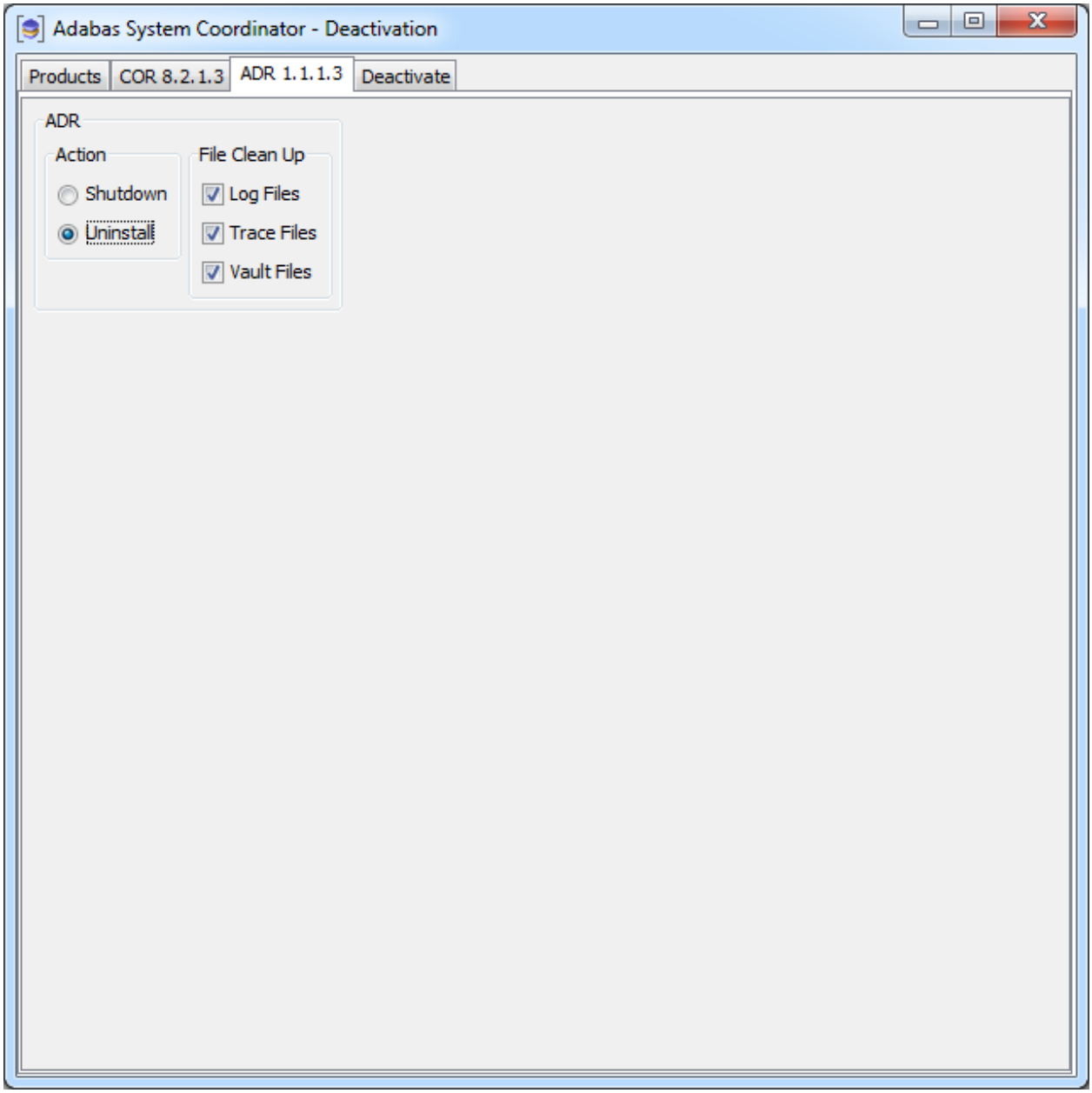
Deactivation: Adabas System Coordinator

On this tab, choose if you wish to do shutdown or if you also wish to uninstall too. In addition, indicate if log files (etc) are to be removed:



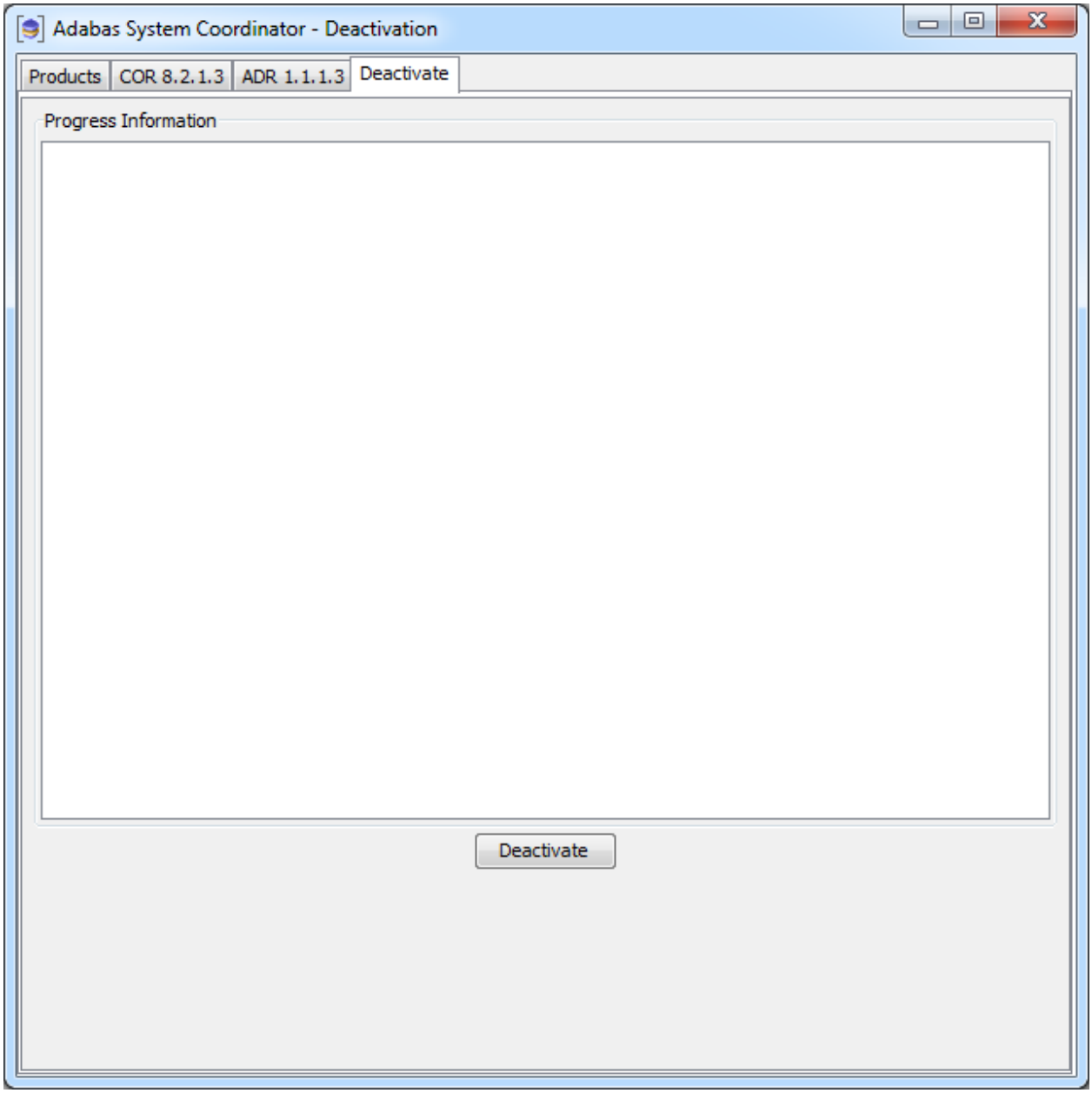
Deactivation: Data Archiving for Adabas

On this tab choose if you wish to do shutdown or if you also wish to uninstall too. In addition, indicate if log files (etc) are to be removed:

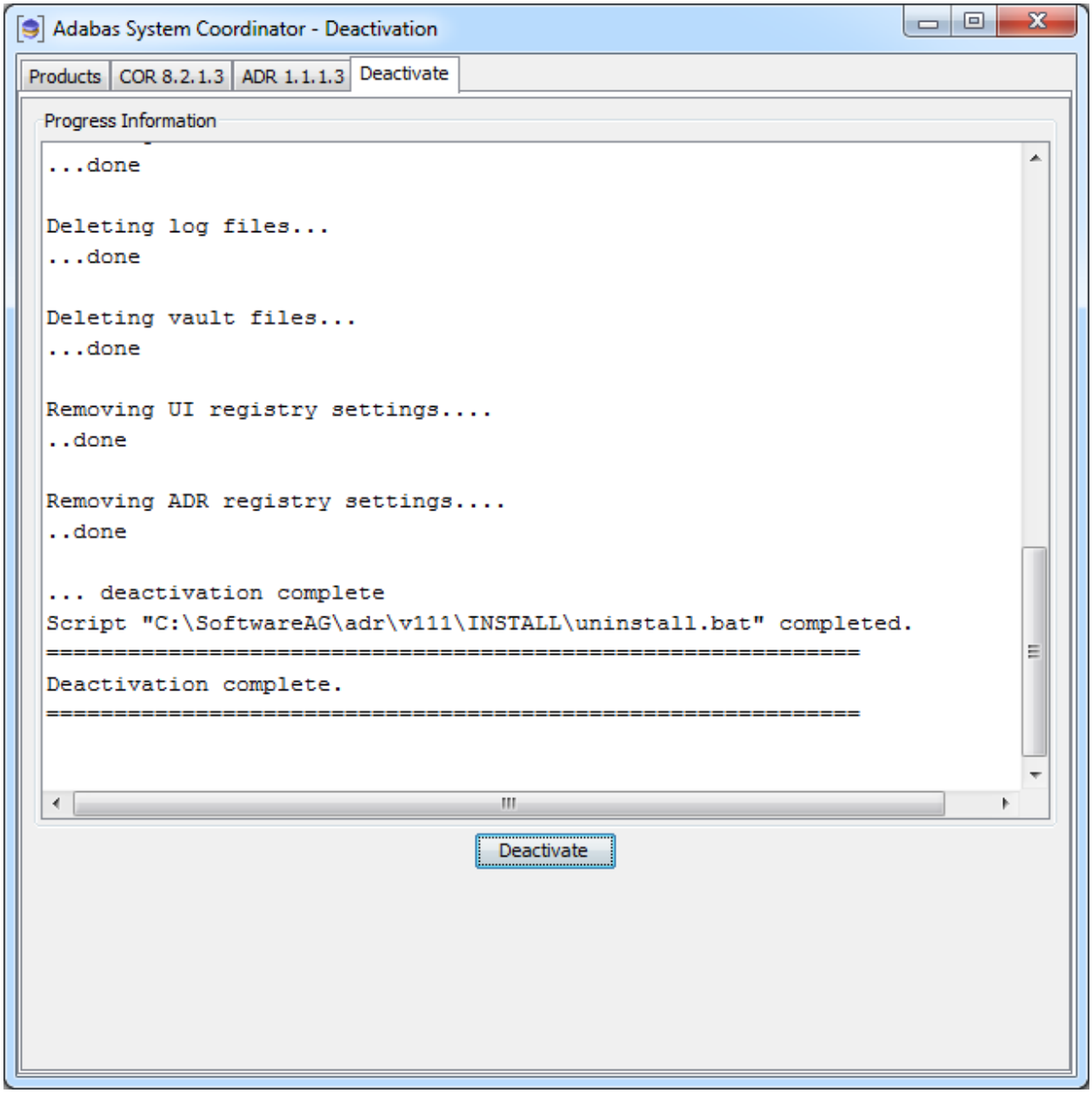


Deactivation: Execution

The *deactivation* tab shows the empty log screen where you can click to deactivate:



The *deactivation* displays log information while running, the following shows a successful run:


Adabas System Coordinator - Deactivation
Products
COR 8.2.1.3
ADR 1.1.1.3
Deactivate
Progress Information
...done
Deleting log files...
...done
Deleting vault files...
...done
Removing UI registry settings....
..done
Removing ADR registry settings....
..done
... deactivation complete
Script "C:\SoftwareAG\adr\v111\INSTALL\uninstall.bat" completed.
Deactivation complete.
Deactivate

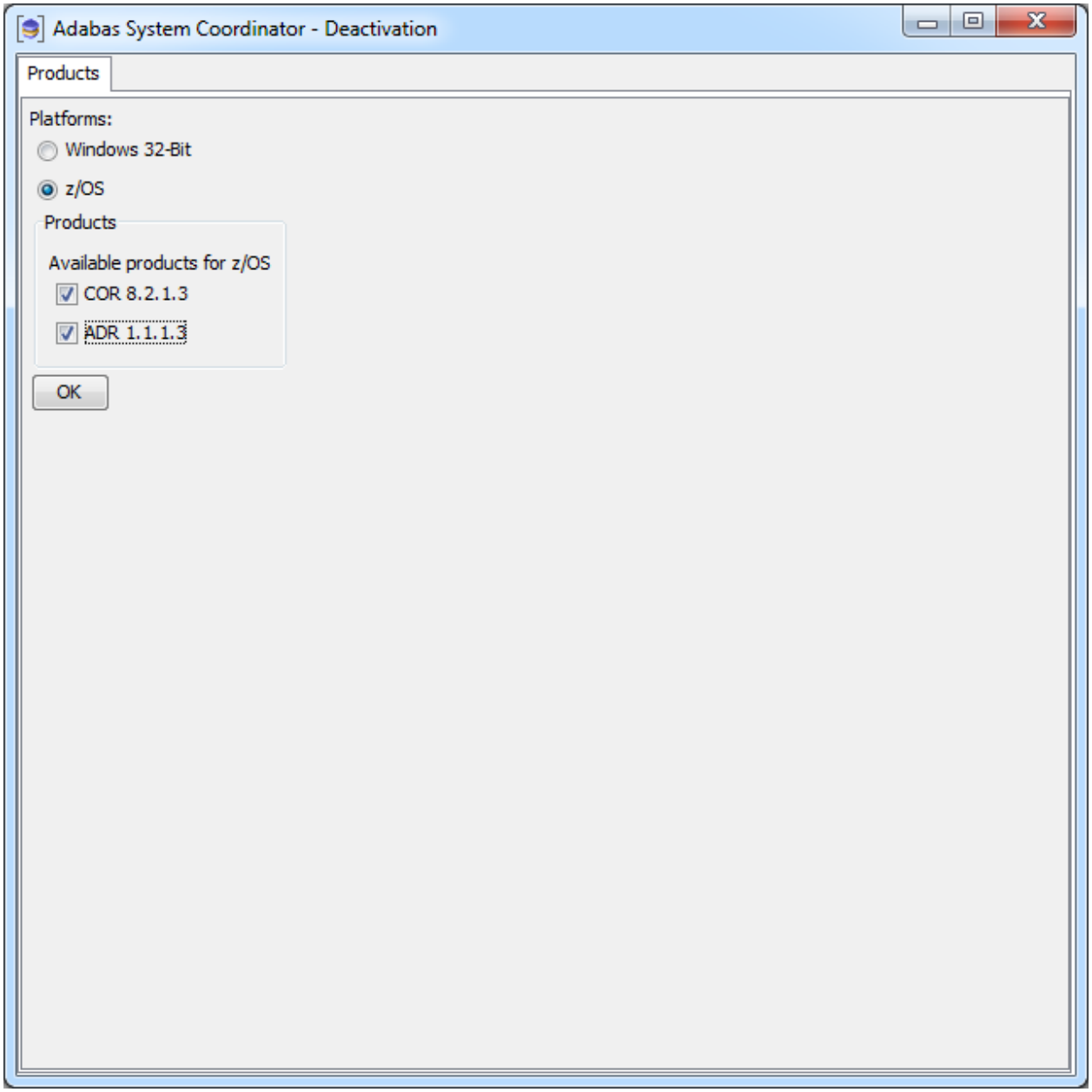
Deactivating and Uninstalling in z/OS

Deactivation Startup

The start-up is the same as in Windows or Unix above.

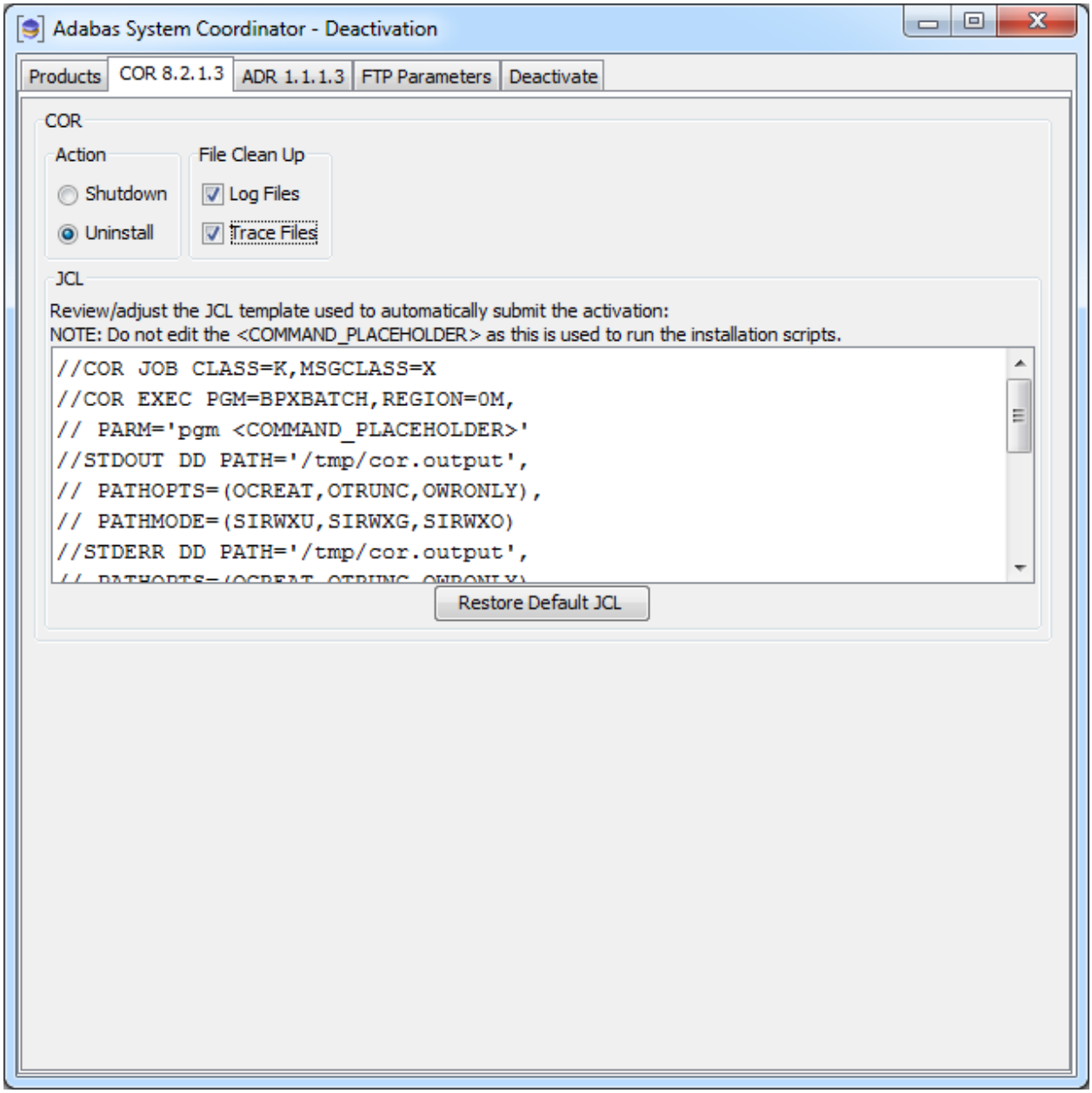
Deactivation: Choose Platform and Products

Select the platform and products you wish to deactivate or uninstall, the example below is taken from Windows:



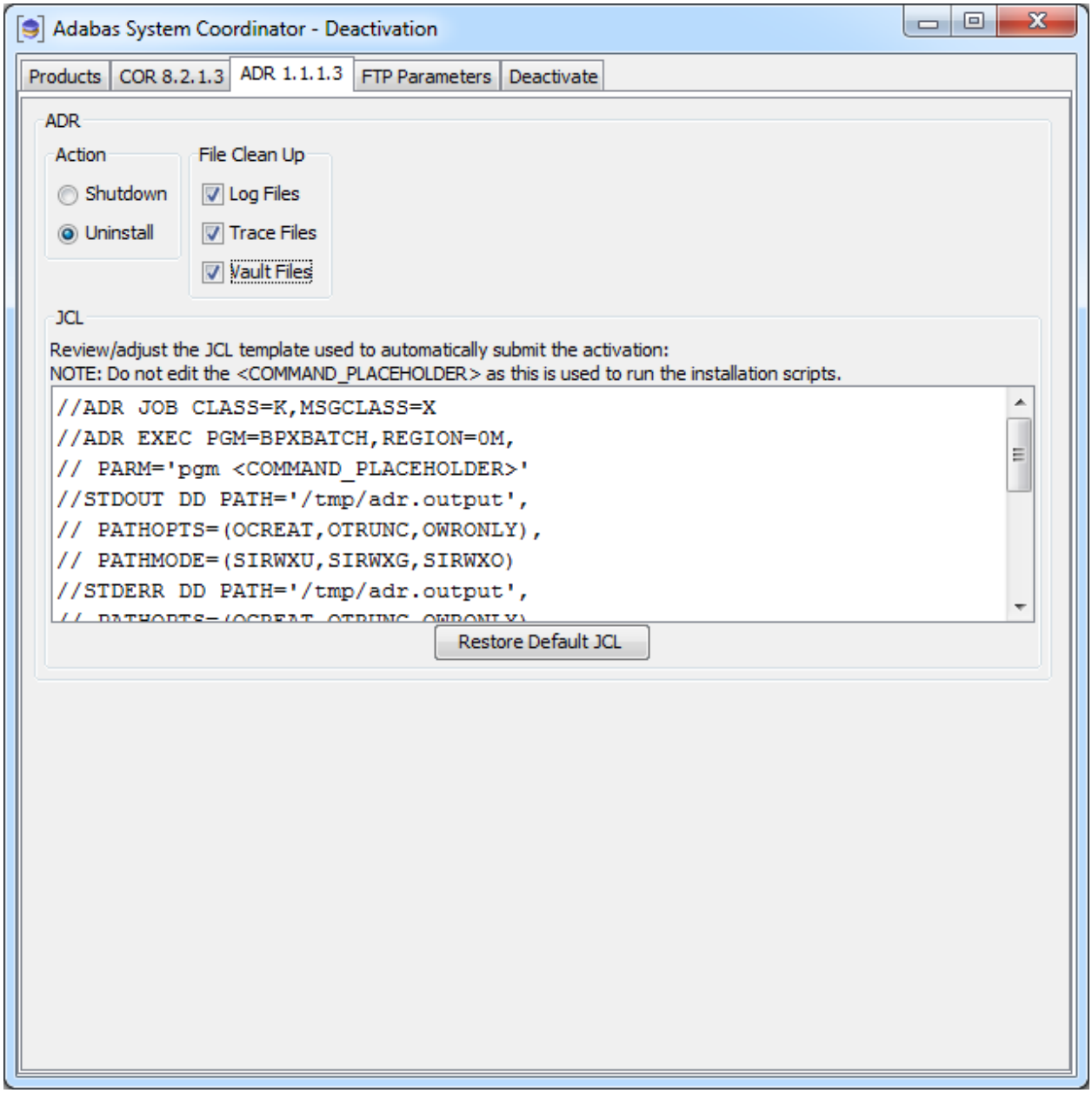
Deactivation: Adabas System Coordinator

On this tab, choose if you wish to do shutdown or if you also wish to uninstall too. In addition, indicate if log files (etc) are to be removed and adjust the JCL for your site:



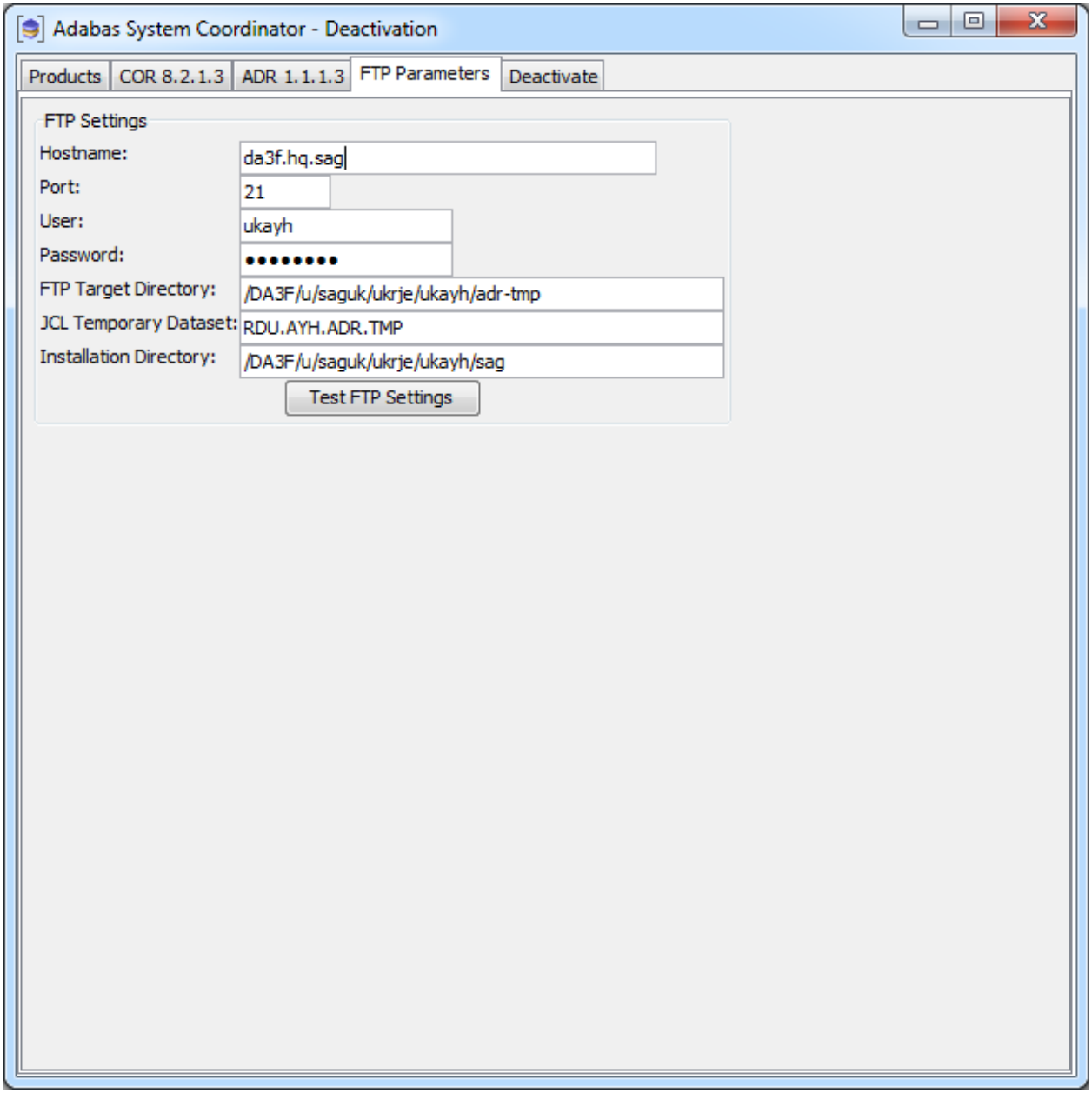
Deactivation: Data Archiving for Adabas

On this tab choose if you wish to do shutdown or if you also wish to uninstall too. In addition, indicate if log files (etc) are to be removed, and adjust the JCL for your site:



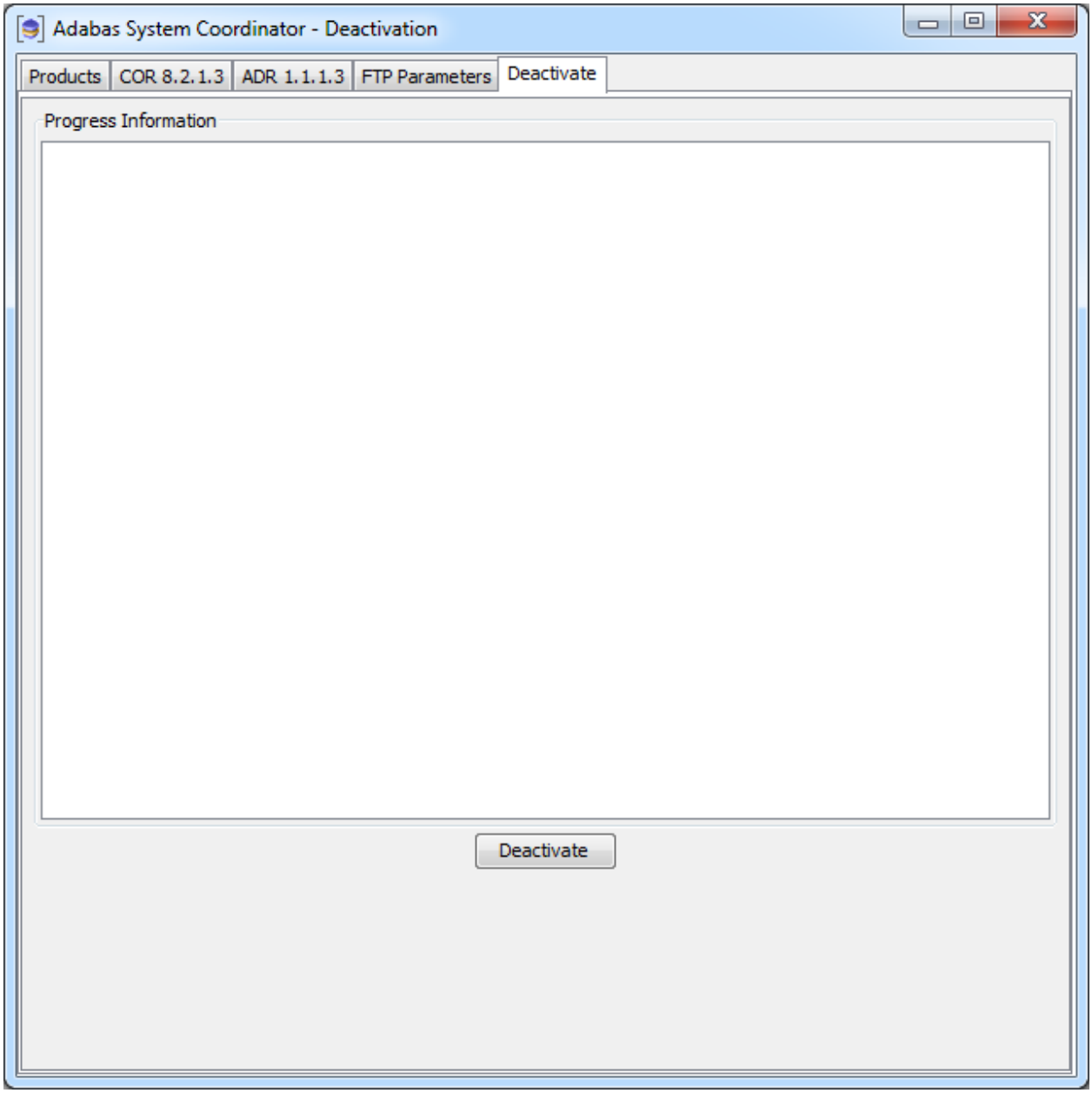
Deactivation: z/OS FTP Details

The *FTP parameters* tab requires that you supply your FTP details:

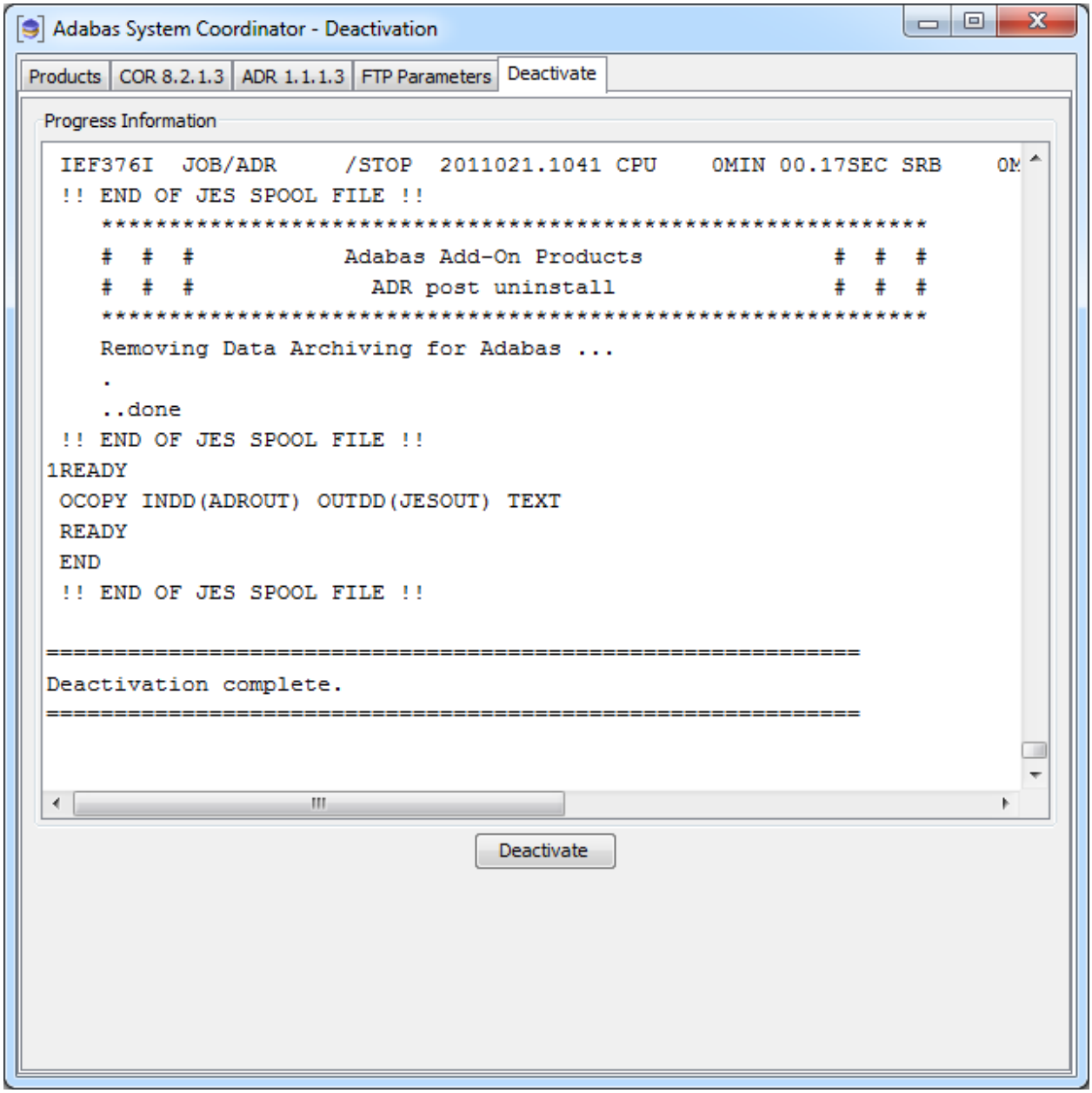


Deactivation: Execution

The *deactivation* tab shows the empty log screen where you can click to deactivate:

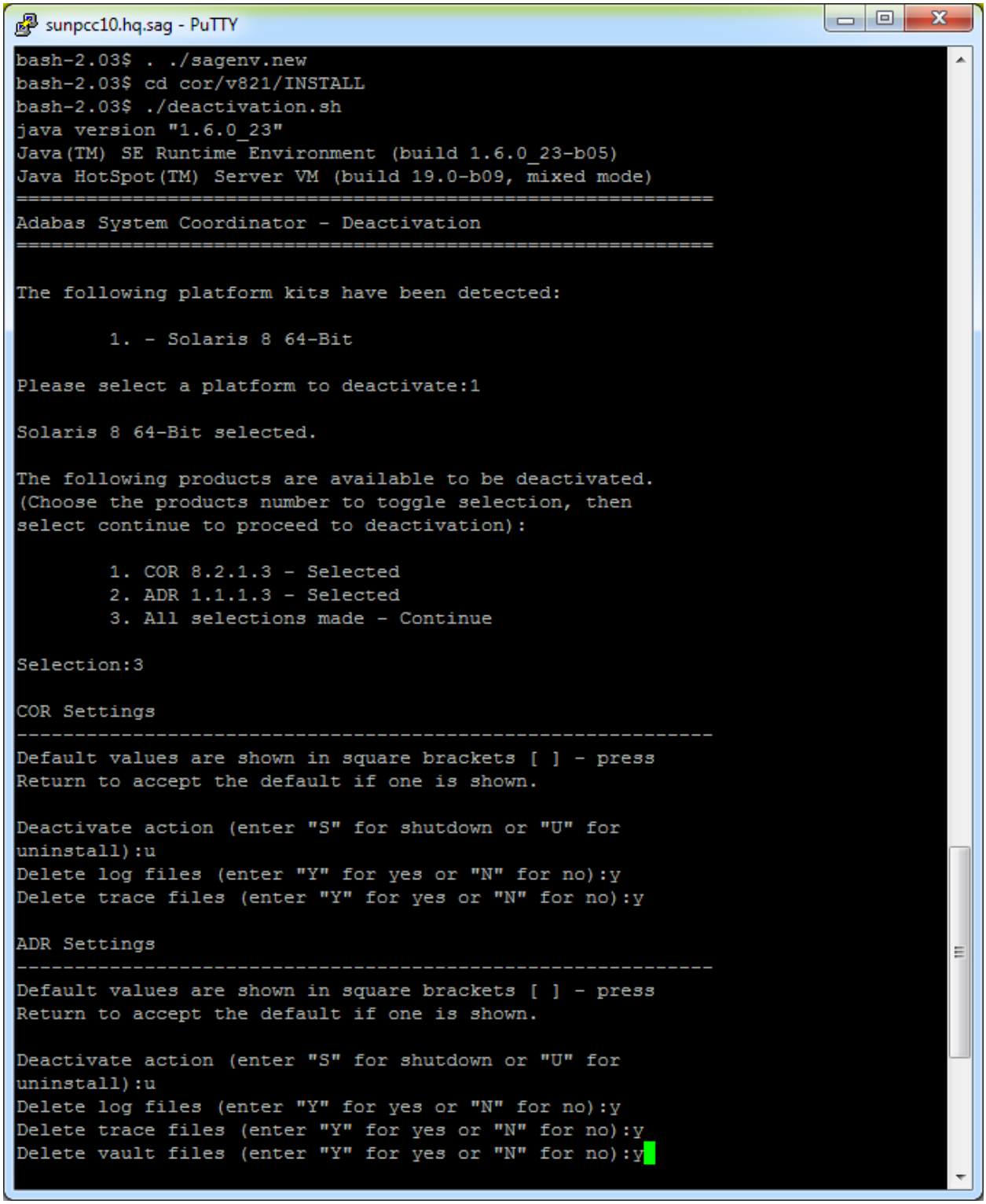


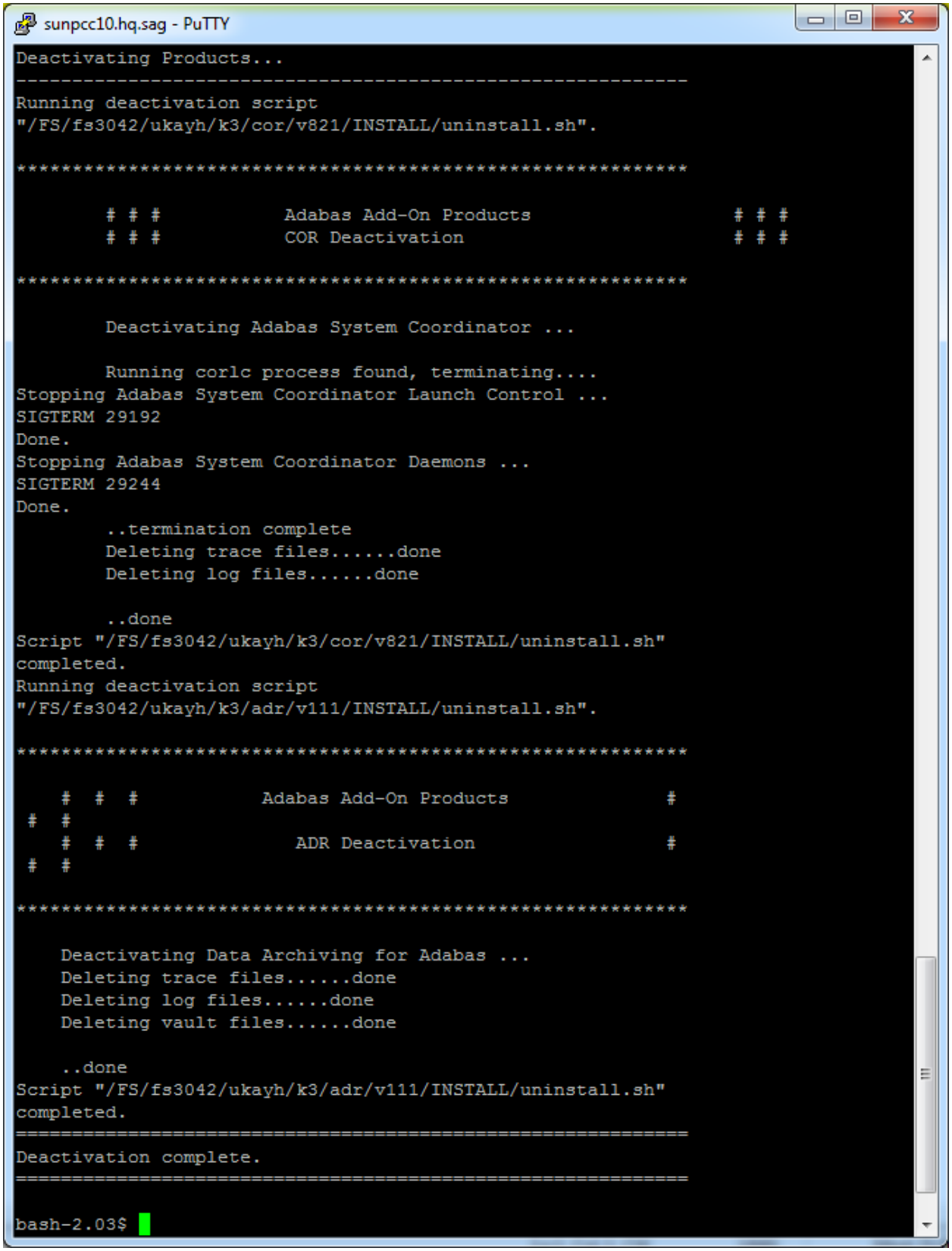
The *deactivation* displays log information while running, the following shows a successful run:



Deactivating and Uninstalling from the Console in Unix

You can perform deactivation/uninstall from the console too using the script deactivation.sh.


sunpcc10.hq.sag - PuTTY
bash-2.03$ . ./sagenv.new
bash-2.03$ cd cor/v821/INSTALL
bash-2.03$ ./deactivation.sh
java version "1.6.0_23"
Java(TM) SE Runtime Environment (build 1.6.0_23-b05)
Java HotSpot(TM) Server VM (build 19.0-b09, mixed mode)
Adabas System Coordinator - Deactivation
The following platform kits have been detected:
1. - Solaris 8 64-Bit
Please select a platform to deactivate:1
Solaris 8 64-Bit selected.
The following products are available to be deactivated.
(Choose the products number to toggle selection, then
select continue to proceed to deactivation):
1. COR 8.2.1.3 - Selected
2. ADR 1.1.1.3 - Selected
3. All selections made - Continue
Selection:3
COR Settings
Default values are shown in square brackets [ ] - press
Return to accept the default if one is shown.
Deactivate action (enter "S" for shutdown or "U" for
uninstall):u
Delete log files (enter "Y" for yes or "N" for no):y
Delete trace files (enter "Y" for yes or "N" for no):y
ADR Settings
Default values are shown in square brackets [ ] - press
Return to accept the default if one is shown.
Deactivate action (enter "S" for shutdown or "U" for
uninstall):u
Delete log files (enter "Y" for yes or "N" for no):y
Delete trace files (enter "Y" for yes or "N" for no):y
Delete vault files (enter "Y" for yes or "N" for no):y


sunpcc10.hq.sag - PuTTY
Deactivating Products...
Running deactivation script
"/FS/fs3042/ukayh/k3/cor/v821/INSTALL/uninstall.sh".
Adabas Add-On Products # #
COR Deactivation # #
Deactivating Adabas System Coordinator ...
Running corlc process found, terminating....
Stopping Adabas System Coordinator Launch Control ...
SIGTERM 29192
Done.
Stopping Adabas System Coordinator Daemons ...
SIGTERM 29244
Done.
..termination complete
Deleting trace files......done
Deleting log files......done
..done
Script "/FS/fs3042/ukayh/k3/cor/v821/INSTALL/uninstall.sh"
completed.
Running deactivation script
"/FS/fs3042/ukayh/k3/adr/v111/INSTALL/uninstall.sh".
Adabas Add-On Products
# #
ADR Deactivation
# #
Deactivating Data Archiving for Adabas ...
Deleting trace files......done
Deleting log files......done
Deleting vault files......done
..done
Script "/FS/fs3042/ukayh/k3/adr/v111/INSTALL/uninstall.sh"
completed.
Deactivation complete.
bash-2.03$