

Installation Instructions for SAS/ACCESS[®] 9.1.3 Interface to SAP BW



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Chapter 1 - Introduction

About This Document

This document covers the installation of SAS/ACCESS Interface to SAP BW software for SAS 9.1.3. For additional information, you should review the *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide* and the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

The *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide* is available at the following location:

<http://support.sas.com/documentation/onlinedoc/access/>

The *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software* is included in your SAS Installation Kit, on the **Documentation for Installing and Configuring SAS CD**.

How to Use This Book

In Chapter 1, an overview of the architecture of SAS/ACCESS Interface to SAP BW software is provided. You should read this chapter and decide which configuration you want to use for your installation.

In Chapter 2, system requirements and pre-requisites are listed. You will find tips about how to set up and test pre-requisites before you proceed with the installation.

To simplify the installation, two checklists are provided:

[Pre-Installation Checklist](#)

The pre-installation checklist must be completed prior to installation. Do not proceed with installation until all the items on the pre-installation checklist are correctly completed.

[Installation Checklist](#)

During installation, the installation checklist should be completed. This information is important, as it documents the installation and facilitates upgrades, etc.

These checklists are an important tool to successfully install SAS/ACCESS Interface to SAP BW software.

In Chapter 3, the installation of SAS/ACCESS Interface to SAP BW software is explained step by step.

In Chapter 4, how to start the software and how to verify its installation is explained.

Configurations of SAS/ACCESS Interface to SAP BW Software

SAS/ACCESS Interface to SAP BW software can be configured in many different ways. This section describes the components of SAS/ACCESS Interface to SAP BW software and its basic configurations.

Note that for the purposes of installation and configuration, SAP BW can be treated as a separate R/3 system.

The Components of SAS/ACCESS Interface to SAP BW Software

The components of SAS/ACCESS Interface to SAP BW software are:

1. SAS/ACCESS Interface to SAP BW Software - Application
2. Data Dictionary Extract from SAP BW
3. Extracted SAP BW InfoCubes and ODS Tables

SAS/ACCESS Interface to SAP BW software requires that SAS/ACCESS Interface to R/3 software be installed on each machine where SAS/ACCESS Interface to SAP BW software is installed. The SAS RFC Server component of SAS/ACCESS Interface to R/3 software is required for SAS/ACCESS Interface to SAP BW software to connect to SAP BW via the SAP BW Application Server.

SAS/ACCESS Interface to SAP BW Software – Application

The Application is the user interface to extract and navigate the metadata, store selections, and extract SAP BW InfoCubes and ODS Tables.

Note: It is recommended that you store the metadata in one physical location (other than the location that is pointed to the `WORK` library) and the SAP BW InfoCubes and ODS Tables in a separate and different physical location.

Data Dictionary Extract from SAP BW

The Data Dictionary Extract is a copy of metadata from the SAP BW Data Dictionary. The metadata is stored in SAS data sets that provide information about tables, fields, InfoCubes, ODS tables, and InfoObjects in SAS/ACCESS Interface to SAP BW software.

The Data Dictionary Extract from SAP BW is usually installed on the same machine as the SAS/ACCESS Interface to SAP BW software user interface or on a fileserver.

The Data Dictionary Extract can be on a separate machine provided that machine has:

- SAS 9.1.3
- SAS/SHARE Software or SAS/CONNECT Software

Extracted SAP BW InfoCubes and ODS Tables

The SAP BW InfoCubes and ODS tables are extracted by SAS/ACCESS Interface to SAP BW Software - Application. SAS views or SAS data sets are generated for all SAP BW tables that make up an InfoCube in SAP BW. SAS data sets are generated using the SAS views or data sets to define the star schema tables of the InfoCube.

To extract SAP BW InfoCubes or ODS tables on a particular machine, SAS/ACCESS Interface to SAP BW software must be installed. The extraction can be run in batch mode.

Extracted SAP BW InfoCubes can be used in batch mode.

SAS/ACCESS Interface to R/3 Software and the SAS RFC Server

SAS/ACCESS Interface to R/3 software and the SAS RFC Server are required for SAS/ACCESS Interface to SAP BW software. For information on installing SAS/ACCESS Interface to R/3 software and the SAS RFC Server, refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

The same SAS RFC Server can be used to read both R/3 tables (using SAS/ACCESS Interface to R/3 software) and SAP BW InfoCubes (using SAS/ACCESS Interface to SAP BW software).

SAP BW Application Server

The SAS RFC Server communicates with SAP BW via the SAP BW Application Server. The installation of SAS/ACCESS Interface to SAP BW software includes a number of ABAP/4 objects and appropriate connection parameters. For information on installing the ABAP/4 objects and the connection parameters, refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

Basic Configurations

Figure 1 represents the basic configuration where all components of SAS/ACCESS Interface to SAP BW software are located on the same machine. In Figure 2, the SAS RFC Server is installed on the same host as the SAP BW Application Server.

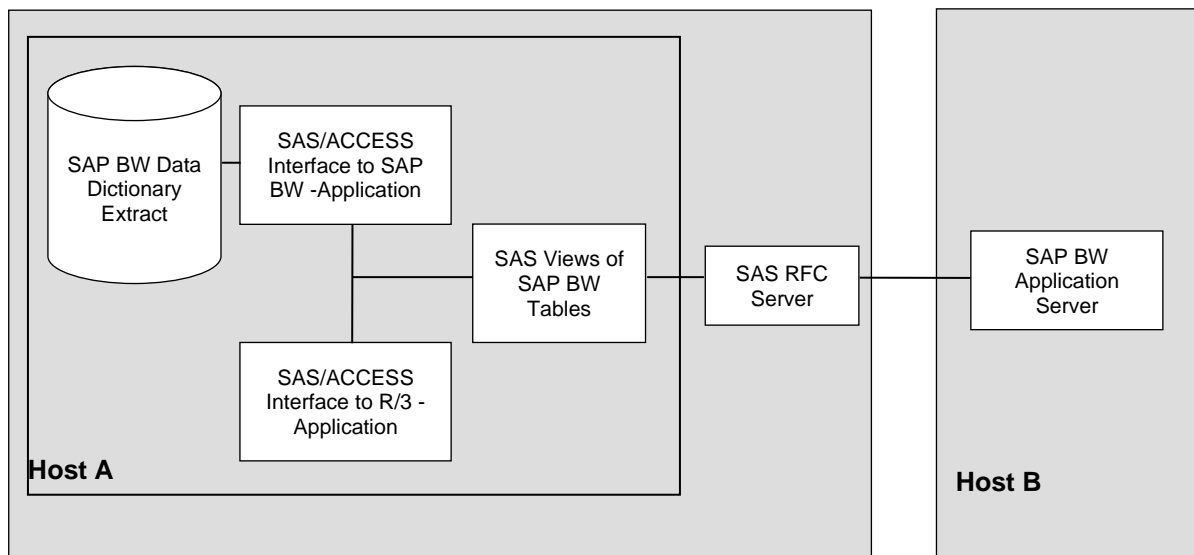


Figure 1 - Basic Configuration (1) of SAS/ACCESS Interface to SAP BW Software

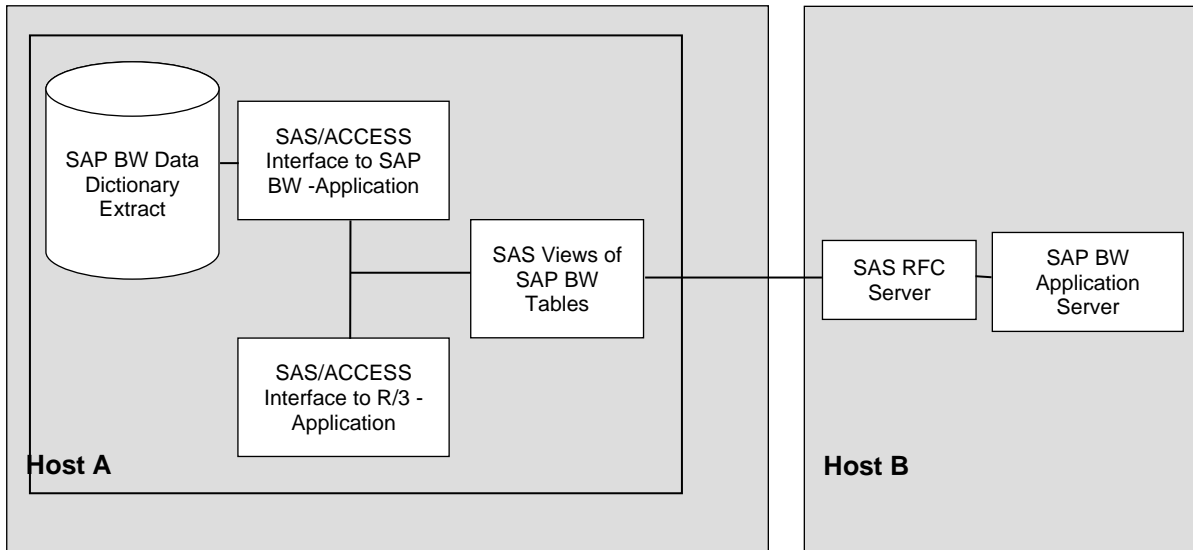


Figure 2 - Basic Configuration (2) of SAS/ACCESS Interface to SAP BW Software

Other Configurations

If a basic configuration cannot be used, other configurations are available. In general, the recommendation is to use as few machines as possible to minimize network traffic and offer better system performance.

As mentioned previously, SAP BW should be considered a separate R/3 system for installation and configuration. Refer to the information in the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software* to define a suitable configuration.

Communication Protocols

For details of the communication protocols used by the SAS RFC Server, refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

Related Publications

- *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide*
- *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide*
- *SAS 9.1 Companion for Microsoft Windows*

In addition, the SAS 9.1.3 *Installation Instructions* and *System Requirements* for the respective operating system may be useful.

Chapter 2 - Pre-Installation

Overview

This chapter outlines the pre-requisites to install and run SAS/ACCESS Interface to SAP BW software. Some of these pre-requisites require the involvement of other staff, such as the SAP BW system administrator.

System Requirements

The installer requires operating system user IDs and passwords. For a multi-machine installation, appropriate access to the network and all machines must be included. For Windows NT, administrator privilege is required.

SAS 9.1.3

SAS/ACCESS Interface to SAP BW Software

For a list of operating system requirements for SAS/ACCESS Interface to SAP BW software, see the system requirements for SAS 9.1.3.

Required SAS Products

- Base SAS Software
- SAS/ACCESS Interface to SAP BW Software
- SAS/ACCESS Interface to R/3 Software

In addition, to use the Export OLAP Metadata feature, SAS/EIS software or SAS OLAP Server software is needed. To use the SAS client/server support, SAS/CONNECT software or SAS/SHARE software is needed.

SAP BW

Release

- SAP BW, Release 2.0B or higher

Refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software* for R/3 system requirements.

Connectivity

The SAS RFC Server uses TCP/IP socket programming. For further information, refer to the *SAS/ACCESS 9.1 Interface to R/3: User's Guide*.

Authorization Profiles

To install and use SAS/ACCESS Interface to SAP BW software, a user ID with certain authorizations is required. For further information, refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

SAS/ACCESS Interface to SAP BW software requires additional authorizations.

Object	Minimum Requirement for Values	Example for predefined Authorization
S_RS_ADMWB (Administrator Workbench – Objects)	RSADMWBOBJ: INFOBJECT ACTVT: 3, 16	S_WB__IOB_SHOW

Table 1 – Authorizations

Chapter 3 - Installing SAS/ACCESS Interface to SAP BW Software

Overview

During the installation of SAS 9.1.3, you should select to install SAS/ACCESS Interface to SAP BW software, along with the required software (Base SAS software and SAS/ACCESS Interface to R/3 software), and any other software you want to install. Refer to the *Installation Instructions for SAS 9.1.3* for your operating system for further information.

Installation

Before you can configure and use SAS/ACCESS Interface to SAP BW software, you have to install SAS/ACCESS Interface to R/3 software. Refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software* for instructions on installing these components.

Configuration of SAS/ACCESS Interface to SAP BW Software

Step 1 - Start the SAS RFC Server.

Start the SAS RFC Server as described in *SAS/ACCESS 9.1 Interface to R/3: User's Guide*, Chapter 5, "Using the RFC Server".

Step 2 - Log on to SAP BW.

Start a SAS session and enter %bwaccess on the command line. Double-click on the **Logon** icon. In the Logon to SAP BW window and the Advanced Parameters window, enter the connection parameters. Save the connection parameters and then logon.

Refer to the *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide* for more information about using and managing logon profiles and refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software* to review the communication parameters and their requirements.

Step 3 - Start the metadata extraction program.

SAS/ACCESS Interface to SAP BW software uses a copy of metadata to navigate and to generate the program to read SAP BW InfoCubes and ODS tables. Extracting the necessary metadata from the SAP BW Data Dictionary is a pre-requisite for any data extraction from SAP BW.

If new SAP BW InfoCubes or ODS tables are added or the structure of existing ones are changed, re-extract the metadata to reflect the changes.

A wizard interface guides you through loading the metadata from SAP BW into SAS. To start the wizard, double-click on the **Wizard to Load Metadata** icon.

Note: Make sure the library referenced for the Data Dictionary in Local Setup corresponds to the one from which you want to extract your metadata.

You can run the metadata or InfoCube extraction interactively or in batch mode. Refer to the *SAS/ACCESS 9.1 Interface to SAP BW: User's Guide* for more information about extracting metadata using the **Wizard to Load Metadata** icon and for information on how to run the extraction in batch mode.

Note: If you are extracting metadata interactively, you can submit the following command in a Program Editor in your interactive SAS session to prevent the log from becoming full and requiring interactive responses:

```
Options nosource nonotes;
```

Step 4 - Log off from SAP BW.

Close the SAS/ACCESS Interface to SAP BW desktop to logoff. When required, confirm that the connection is to be closed.

Installation of the basic configuration is now complete. To ensure it has been successful, Start SAS/ACCESS Interface to SAP BW Software and test the installation. Double-click on the **BW Explorer** icon and browse the content of SAS/ACCESS Interface to SAP BW software.

Chapter 4 - Start SAS/ACCESS Interface to SAP BW Software

To start SAS/ACCESS Interface to SAP BW software from SAS 9.1.3, enter on the SAS command line either:

```
%bwaccess
```

Functionality

You must log on to SAS/ACCESS Interface to SAP BW software to use the `SAP BW Explorer` window.

Note: SAP BW Explorer reads metadata from the library specified in Local Setup. If you used a libref different from `BWLIB` to extract your metadata, your libref needs to be assigned in your current SAS session and you need to specify the metadata library in Local Setup. Double-click on the **Local Setup** icon, choose the **Data Dictionary** tab, select your libref from the **SAS Library** drop-down list, and click on **OK**. Double-click on the **SAP BW Explorer** icon to view your metadata or InfoCube data.

The SAS RFC Server must be running to extract metadata, InfoCube data, or ODS table data, or to use the SAP BW Explorer. If the SAS RFC Server is not running, an error message is generated. For more information, refer to the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

Appendix A - Pre-Installation Checklist

Before installing SAS/ACCESS Interface to SAP BW software, the following information must be available. Documenting the information identified in Appendix A and B significantly simplifies installation and on-going maintenance.

Most of the information required is for the installation of SAS/ACCESS Interface to R/3 software. However, the pre-installation checklist sections cover all the information you need for installing both SAS/ACCESS Interface to R/3 software and SAS/ACCESS Interface to SAP BW software. There is no need to also complete the pre-installation checklist in the *Installation Instructions for SAS/ACCESS 9.1.3 Interface to R/3 Software*.

The checklist is broken down into sections A, B, and C. Section A is general information and can be provided by the SAS Account Representative. Section B should be completed by the person maintaining the SAS environment. Section C should be completed by the person maintaining the SAP BW environment.

Section A - General Information

Date:
Company Name:
Address:
Name of SAS Account Representative: Phone Number: E-mail:
Name of SAS Contact (responsible for the installation): Phone Number: E-mail:
Name of Customer Contact: Phone Number: E-mail:

Section B - SAS Environment

SAS/ACCESS Interface to SAP BW Software – Application

Name of SAS Contact: Phone Number: E-mail:
Name of Network Contact: Phone Number: E-mail:
Host Name:
IP Address:
Operating System Version:
Operating System User ID and Password: If Windows, does the User ID has administrator rights? <input type="checkbox"/> Yes
Windows Screen-saver Password:
Path where SAS 9.1.3 is installed, for example c:\Program Files\SAS\SAS 9.1 or /usr/local/sas:
Does SAS Installation Data (SETINIT) include SAS/ACCESS to SAP BW software and SAS/ACCESS Interface to R/3 software (provided by SAS)? <input type="checkbox"/> Yes
If UNIX, does it have X Windows? <input type="checkbox"/> Yes
UNIX Root Password:

Data Dictionary Extract(s)

If you have multiple versions of SAP BW, then SAP BW metadata has to be extracted from each version of the system. Complete one of these tables for each metadata extract.

Host Name: IP Address (typically from the machine that has SAS/ACCESS Interface to SAP BW software):
Drive/Path where Data Dictionary is to be installed:
50 MB or more of disk space is required, depending on the number of InfoCubes and InfoObjects in SAP BW. Is the disk space available? <input type="checkbox"/> Yes

SAP BW InfoCubes on Separate Machine

Host Name:
IP Address:
Operating System Version:
Operating System User ID and Password: If Windows, does the User ID has administrator rights? <input type="checkbox"/> Yes
Windows Screen-saver Password:
UNIX Root Password:
Path where SAS 9.1.3 is installed, for example c:\Program Files\SAS\SAS 9.1 or /usr/local/sas:
Does SAS Installation Data (SETINIT) include SAS/ACCESS to R/3 software, SAS/ACCESS Interface to SAP BW software, and SAS/CONNECT software (provided by SAS)? <input type="checkbox"/> Yes

Section C – SAP BW Environment

General Information

Name of SAP BW Administrator (available to help with installation): Phone Number: E-mail:
Name of SAP BW Developer (available to help with installation): Phone Number: E-mail:

SAS RFC Server

Complete one of these tables for each SAS RFC Server.

Host Name:
IP Address:
Windows NT Location of librfc32.dll (for example c:\Program Files\SAS\SAS 9.1.3):
UNIX location of the thread safe shared library for RFC (download the shared library for your platform per instructions in SAP Note 118227):
TCP/IP Port Number (default 6991):
TCP/IP <code>hosts</code> File Entry for SAP BW Application Server (for example, 1.2.3.4 bwserver):
TCP/IP <code>services</code> File Entries (for example, sapdp00 3200/tcp):

SAP BW

This is information about the SAP BW system from which you want to extract InfoCubes. SAS/ACCESS Interface to R/3 software must be installed on each of these systems. Complete one of these tables for each SAP BW system you want to access.

SAP BW Application Server Host Name:
ABAP/4 Developer User ID (if SAP BW Administrator is not available to help with installation): Client: User ID: Password: OSS Access Key (if user ID is not previously used for development):
Normal Dialog User ID (if ABAP/4 Developer is not available to help with installation): Client: User ID: Password:
IP Address:
SAP BW Release (for example, 2.0B):
R/3 System Release (for example, 4.6D)
Operating System Version:
Operating System User ID and Password: If Windows, does the User ID has administrator rights? <input type="checkbox"/> Yes
System ID (for example, A01):
Is the <code>sideinfo</code> file used for communication parameters? <input type="checkbox"/> Yes If yes, full path and name of <code>sideinfo</code> file:
RFC Dialog User ID: Client: User ID: Password:
System Number (SYS) (for example, 00):
Language (for example, E for English):
Gateway Host (if different):
Gateway Service (for example, sapgw00):
Transaction Program (for example, sapdp00):

SAPGUI

Host Name where SAPGUI is installed:
If UNIX, does it have X Windows? <input type="checkbox"/> Yes?

Appendix B - Installation Checklist

During installation, make a note of the following information.

Location of Data Dictionary Extract(s) (for example, c:\Program Files\SAS\SAS 9.1.3):

Transport Request Number (for example, A01K902092):



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