SUDAAN Installation Guide

PC and Windows Installation
32 and 64 bit Operating Systems

Release 11.0.0

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1. OVERVIEW

SUDAAN is a single program consisting of a family of procedures used to analyze data from complex surveys and other observational and experimental studies involving cluster-correlated data. A complete description of the capabilities of SUDAAN can be found at **http://www.rti.org/sudaan.**

The following document provides instructions on how to install and run SUDAAN for both 32-bit (x32) and 64-bit (x64) operating systems. The screen shots in this document reflect the installation and renewal process for x32 systems. Screens for SUDAAN x64 will look the same, except references to "x32" will be replaced with "x64".

If you are installing SAS-Callable SUDAAN and you have 64-bit SAS, it is critical that you install x64 SUDAAN software. Similarly, if you are installing SAS-Callable SUDAAN and you have 32-bit SAS, it is critical that you install x32 SUDAAN software. If you would like to change your license from x32 to x64 (or vice-versa), please contact the RTI SUDAAN office (see Section 1.1).

SUDAAN 11.0.0 Standalone versions are only available as 32-bit software. The 32-bit Standalone versions can be installed and will operate correctly on both 32-bit and 64-bit Windows PCs.

SUDAAN 11.0.0 Command Prompt versions are only available in 64-bit versions. You should only install the Command Prompt versions on 64-bit Windows systems. *These 64-bit versions will not run on 32-bit Windows systems and you should not install them on 32-bit systems. If you would like to change your license from 64-bit Command Prompt to 32-bit Standalone, please contact the RTI SUDAAN office (see Section 1.1). Please note that Standalone SUDAAN supports the same command line interface as Command Prompt SUDAAN.*

Please note:

Most Current Version of:	Can Be Found Here:
Installation Instructions	SUDAAN website at http://www.rti.org/sudaan. Select the *Downloads* tab and then *SUDAAN 11*.
SUDAAN 11 software that should be used for both installing new licenses and renewing annual licenses	SUDAAN website at http://www.rti.org/sudaan. Select the *Downloads* tab and then *SUDAAN 11*.

1.1 Technical Support

RTI International provides limited technical support for SUDAAN problems free of charge. The SUDAAN Language Manual provides detailed information on programming with SUDAAN and the SUDAAN website shows numerous example programs. The SUDAAN Language Manual can be installed during the SUDAAN setup (as a PDF file). Hardcopy versions of this manual can also be purchased from the SUDAAN website at http://www.rti.org/sudaan**.** You may also review bug reports, get answers to frequently asked questions and obtain other technical assistance through our website.

For additional technical support please submit a support request available from our website or send an email to **sudaan@rti.org**.

You may also contact the RTI SUDAAN offices at:

>RTI International
>SUDAAN Coordinator
>3040 Cornwallis Road
>Research Triangle Park, NC 27709-2194
>
>Voice Mail: (919) 541-6602
>FAX: (919) 541-7431
>Email: sudaan@rti.org

Due to the high volume of telephone calls we receive, you may automatically be sent to the SUDAAN voice mail when you call the SUDAAN office. Please leave your name, telephone number and a brief description of the reason for your call. One of our SUDAAN administrators will contact you as soon as possible.

1.2   SUDAAN Release 10 Users Who Are Installing Release 11.0.0

We recommend that if you are installing *SUDAAN Release 11.0.0* for the first time, and you have an existing annual license to *SUDAAN Release 10*, that you remove SUDAAN 10 from your computer before proceeding with the SUDAAN 11.0.0 installation. This will avoid any conflicts that may arise when trying to access SUDAAN. To remove *SUDAAN Release 10* from your system, you can:

1. Insert the *SUDAAN Release 10* CD, run the **SETUP.EXE** program and follow the instructions to remove SUDAAN from your computer.

OR

2. Select **Add or Remove Programs** from the Windows Control Panel.

If you have a current annual license to a network version of SUDAAN (Standalone or SAS-Callable), we recommend both the administrator and each user remove *SUDAAN Release 10* from their systems before proceeding with the SUDAAN 11.0.0 installation.

SUDAAN Release 10 users who do not have a current, annual SUDAAN license will not be able to download *SUDAAN Release 11.0.0*.

1.3   Software Installation

The software to install SUDAAN will be available to you either on CD or by downloading the installation file from the SUDAAN website located at:

>http://www.rti.org/sudaan. Select the *Downloads* tab and then *SUDAAN 11*.

To install SUDAAN, make sure that you are logged into your computer with administrator privileges. Then execute the program **SETUP.EXE** from the **Run**… command on the Windows **Start** menu. You can do this by entering:

```
    D:\x32\setup          (This assumes the installation software is available on your d:\ drive
                          and you would like to install a 32-bit version of SUDAAN.)

        OR

    D:\x64\setup          (This assumes the installation software is available on your d:\ drive
                          and you would like to install a 64-bit version of SUDAAN.)
```

You can also execute **SETUP.EXE** by locating it in the Windows Explorer. Double-click on the
SETUP.EXE program icon to start the installation.

The **SETUP.EXE** program will lead you through the installation process, during which you will do the
following:

1. Supply your name and company name as they should appear in the SUDAAN banner.

2. Accept the SUDAAN license agreement.

3. Accept the default target directory C:\Program Files\SUDAAN\Release11.0.0 (*recommended*) or
    specify a different directory where SUDAAN should be installed.

4. As illustrated in **Figure 1.1**, you will be asked to check all versions of SUDAAN that you wish to
    install. Note that if you have purchased more than one license to SUDAAN (e.g. a SAS-Callable
    Indiv. User license and a Standalone Indiv. User license), then all versions can be installed
    concurrently by checking the corresponding boxes on this screen.

Figure 1.1 Selecting Versions of SUDAAN During Installation
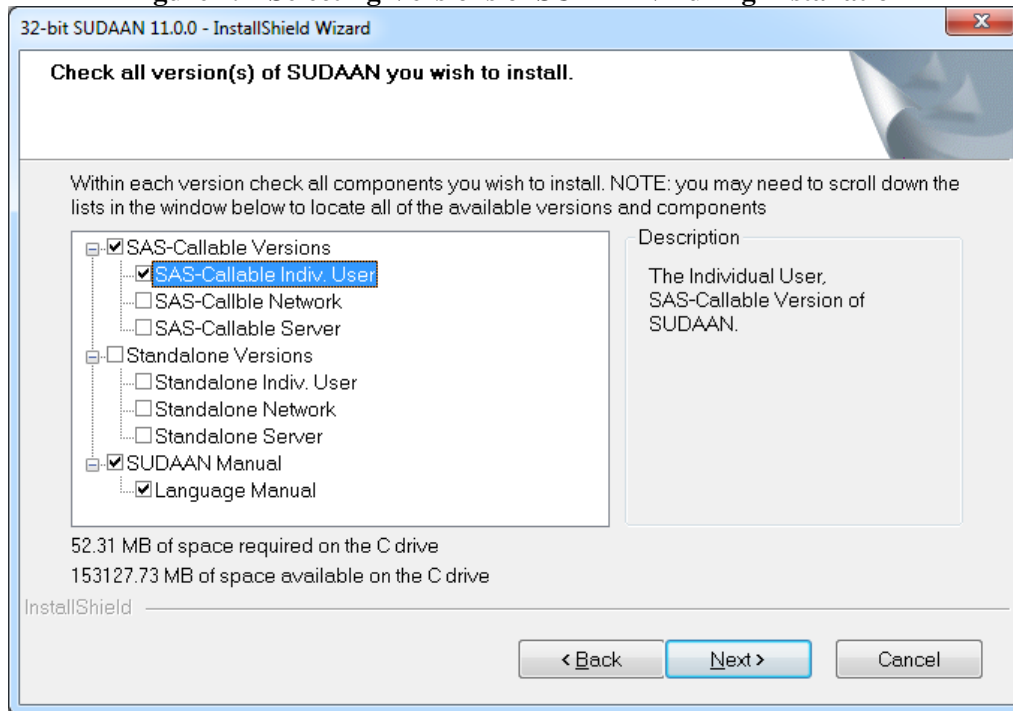
5. You will be asked to enter your 22-digit product key as illustrated in **Figure 1.2**. A product key has been sent to you for each SUDAAN product you purchased. Be sure to enter the product key exactly as given (including dashes). The product keys are included in the letter correspondence that accompanied the SUDAAN **SETUP** disk.

Figure 1.2 Enter Product Key
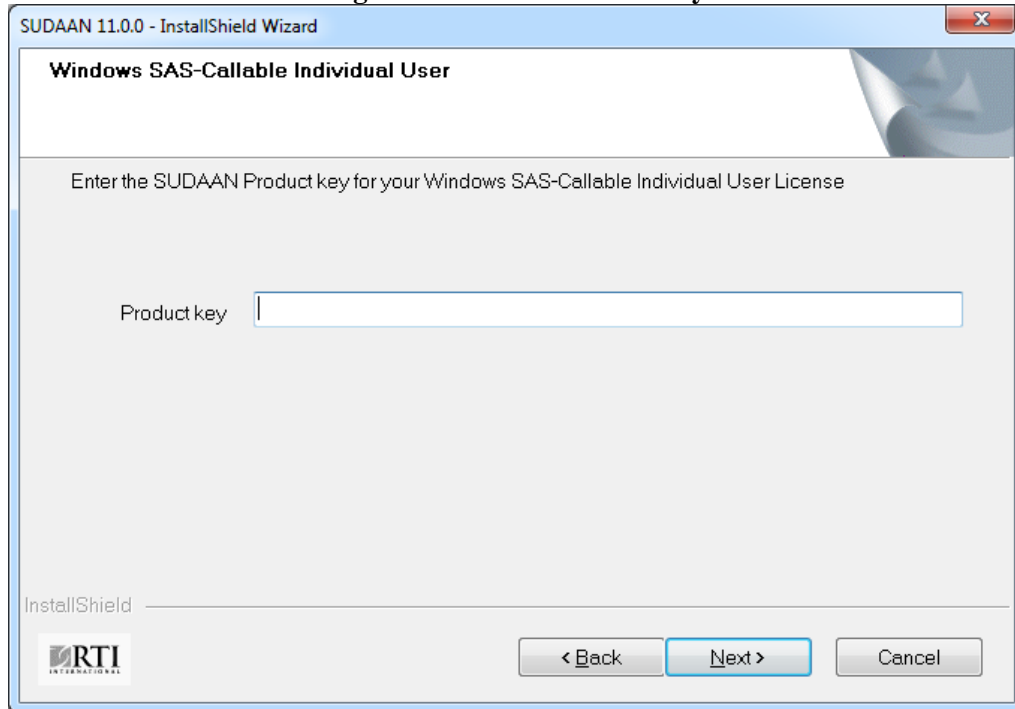
> **IMPORTANT:** Be sure to save all product keys. You will need them again whenever you have to reinstall the software, for example on a new computer.

6. After you enter the SUDAAN product key for each SUDAAN product you purchased, SUDAAN will install all the necessary files in the directory you specified in Step #3. Note that specific instructions for installing SUDAAN for each license type are provided in **Sections 2 - 4** and **Sections 6 - 11** of this Guide.

7. After a few more screens that are specific to the type of SUDAAN product you purchased, you will see a message box as indicated in **Figure 1.3**. Although not required, we encourage all SUDAAN users to register their SUDAAN products.

Figure 1.3 Product Registration
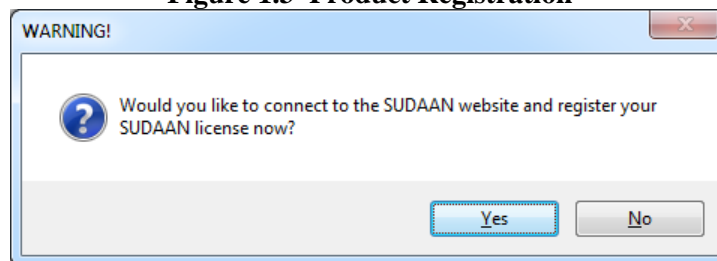
At the SUDAAN product registration screen located at the SUDAAN website, you will be asked if you would like to receive any email correspondence regarding new releases, training and other significant SUDAAN-related news. By checking this box, you will also automatically receive any news regarding SUDAAN-related bugs and appropriate work-arounds that have been identified by our staff. Please note that we treat your email address as confidential information and we will not share this information with anyone outside the immediate SUDAAN team.

1.4   SUDAAN Manual

The SUDAAN Language Manual will be installed by default in the Manual subdirectory of SUDAAN\Release11.0.0 and a shortcut to this document will be located in the SUDAAN folder on the **Start Programs** menu in Windows. This manual is in PDF format. Use Adobe Acrobat Reader, which is available free from Adobe's website to view this document. You can find SUDAAN examples on our website. If you do not wish to install the SUDAAN manual, for example to conserve disk space, uncheck the manual selections in the setup dialog shown in **Figure 1.1**

1.5   Procedure to Renew a SUDAAN License

Unless you have obtained a permanent license to this release of SUDAAN, you will need to renew your SUDAAN license in order to continue using the software after the expiration date. Once you have purchased the renewal, you will receive a new 22-digit Product Key for each version of SUDAAN that you have an annual license to.

To renew your software, do the following:

1. Make sure that you are logged into your computer with administrator privileges.

2. Click on the **SUDAAN Setup and Renewal** item in the SUDAAN folder on the **Start, All Programs** menu in Windows.

3. Choose **Renew one or more versions of SUDAAN** from the menu as illustrated in **Figure 1.4.**

Figure 1.4 Product Renewal
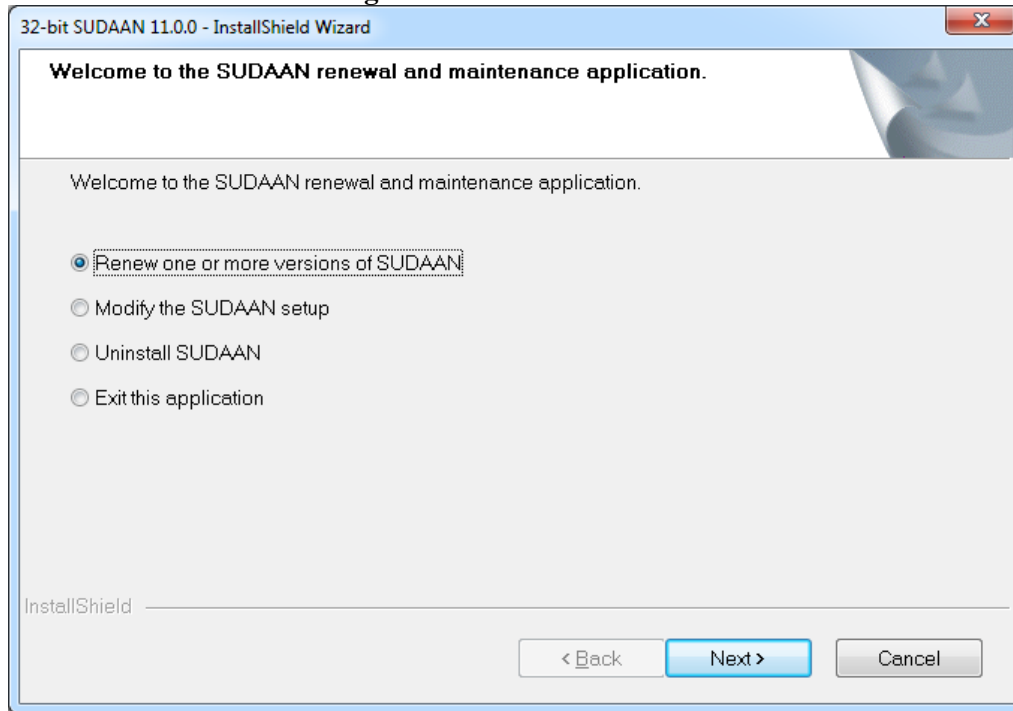
4. **SETUP** will prompt you for a product key for each installed version of SUDAAN. In each case you will have the opportunity to skip renewal for that version, or supply a new product key.

5. Click Finish to complete the renewal process.

At this point your software is updated and you can continue to use it.

1.6   Procedure to Uninstall SUDAAN

To uninstall your software, do the following:

1. Make sure that you are logged into your computer with administrator privileges.

2. Click on the **SUDAAN Setup and Renewal** item in the SUDAAN 11.0.0 folder on the **Start, All Programs** menu in Windows.

3. Choose **Uninstall SUDAAN** from the menu as illustrated in **Figure 1.5.**

Figure 1.5 Uninstall SUDAAN
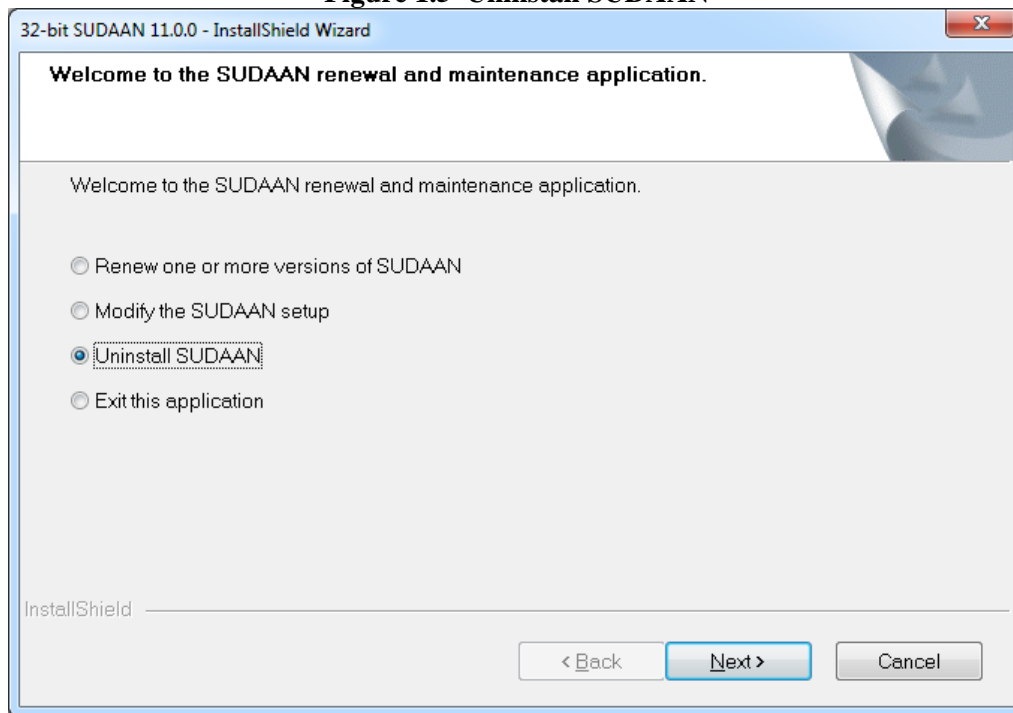
4. The software will verify that you want to uninstall SUDAAN. Click "OK" at the message box.

After a minute or two, the SUDAAN software will be removed from your computer.

2. INSTALLATION INSTRUCTIONS FOR WINDOWS STANDALONE INDIVIDUAL USER VERSION

2.1 System Requirements

The Windows Standalone Individual User version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Standalone versions are only available as 32-bit software. The 32-bit Standalone versions can be installed and will operate correctly on both 32-bit and 64-bit Windows PCs.

2.2 Software Installation

During the installation process select **Standalone Indiv. User** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, The SUDAAN Language Manual is installed. You can deselect the SUDAAN Language Manaul by clicking on the check box to the left of the Language Manual component name which is displayed in the **SETUP** window.

Following installation, the following subdirectories and files should be present (by default under C:\Program Files (C:\Program Files (x86) on 64-bit systems), or in the installation directory you have specified during setup):

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST file.

- **SUDAAN\Release11.0.0\WinInd**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the SUDAAN Language Manual. Note that **SETUP** will create shortcuts to this manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

2.3 Running SUDAAN

Please refer to **Chapter 5** for complete details on how to run Windows Standalone SUDAAN.

3. INSTALLATION INSTRUCTIONS FOR WINDOWS STANDALONE NETWORK VERSION

The LAN version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SUDAAN as described in **Section 3.2**.

2. Each user wishing to use SUDAAN on the LAN must complete the LAN User Version installation as described in **Section 3.3**. All files needed for the LAN User Version installation will be installed during the LAN Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the network should not exceed the total number of users associated with your SUDAAN LAN license.

3.1 System Requirements

The Windows Standalone Network User version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Standalone versions are only available as 32-bit software. The 32-bit Standalone versions can be installed and will operate correctly on both 32-bit and 64-bit Windows PCs.

3.2 Software Installation–LAN Administrator

During the interactive installation process (see **Section 1.3**), select **Standalone Network** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the **SETUP** window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
NetUser Setup Files	**SETUP.EXE** and other files for the network user to install (See **Section 3.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

Following installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST files.

- **SUDAAN\Release11.0.0\WinNet**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\WinNet\NetUser**
  This subdirectory will contain **SETUP.EXE** and other files required for the network user install.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the <u>SUDAAN Language Manual.</u> Note that **SETUP** will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

3.3   Software Installation–LAN User

The **SETUP.EXE** program in the NetUser subdirectory of the SUDAAN\Release11.0.0\WinNet network directory is a program that will automatically set up SUDAAN for each user. <u>This program should be run by each user</u>. After **SETUP** has run, verify that **SETUP** has created a SUDAAN folder in the **Start Programs** menu. In the folder one should find shortcuts to the SUDAAN program, the SUDAAN website, and SUDAAN Language Manual.

3.4   Running SUDAAN

Please refer to **Chapter 5** of this manual for complete details on how to run Windows Standalone SUDAAN.

4. INSTALLATION INSTRUCTIONS FOR WINDOWS 32 BIT STANDALONE SERVER VERSION

The Server version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SUDAAN as described in **Section 4.2**.

2. Each user wishing to use SUDAAN on the Server must complete the Server User Version installation as described in **Section 4.2**. All files needed for the Server User Version installation will be installed during the Server Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the server should not exceed the total number of users associated with your SUDAAN Server license.

4.1 System Requirements

The Windows Standalone Server version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Standalone versions are only available as 32-bit software. The 32-bit Standalone versions can be installed and will operate correctly on both 32-bit and 64-bit Windows PCs.

4.2 Software Installation–Server Administrator

During the interactive installation process (see **Section 1.3**), select **Standalone Server** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the **SETUP** window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
SrvUser Setup Files	**SETUP.EXE** and other files for the server user to install (See **Section 4.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

Following installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST files.

- **`SUDAAN\Release11.0.0\WinSrv`**
  This subdirectory will contain all program and other required files.

- **`SUDAAN\Release11.0.0\WinSrv\SrvUser`**
  This subdirectory will contain **`SETUP.EXE`** and other files required for the server user install

- **`SUDAAN\Release11.0.0\Manual`**
  This subdirectory will be present if you specify installation of the <u>SUDAAN Language Manual.</u> Note that **`SETUP`** will create shortcuts to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **`SETUP`** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

4.3   Software Installation–Server User

The **`SETUP.EXE`** program in the SrvUser subdirectory of the SUDAAN\Release11.0.0\WinSrv directory is a program that will automatically set up SUDAAN for each user. <u>This program should be run by each user</u>. After **`SETUP`** has run, verify that **`SETUP`** has created a SUDAAN folder in the **Start Programs** menu. In the folder one should find shortcuts to the SUDAAN program, the SUDAAN website, and SUDAAN Language Manual.

4.4   Running SUDAAN

Please refer to **Chapter 5** of this manual for complete details on how to run Windows Standalone SUDAAN.

5.   SUDAAN STANDALONE WINDOWS USERS GUIDE

This chapter will introduce you to the special features of the **Standalone Windows Version** of SUDAAN (Individual, Network, or Server version). You can execute this version in either interactive or batch mode. **Section 5.1** describes the SUDAAN interface available to you when you run in interactive mode. **Section 5**.**2** describes how to use SUDAAN in batch mode.

5.1   Using Interactive SUDAAN

Figure 5.1: SUDAAN for Windows Icon

To launch an interactive session of SUDAAN for Windows, click on the **Start** button on your Windows Desktop (generally in the lower left corner), choose **Programs** or **All Programs**, and then click on the SUDAAN icon. You may also locate the SUDAAN executable, WSUDAAN.EXE in the Windows Explorer and double click on the icon to execute SUDAAN as shown in **Figure 5.1**.
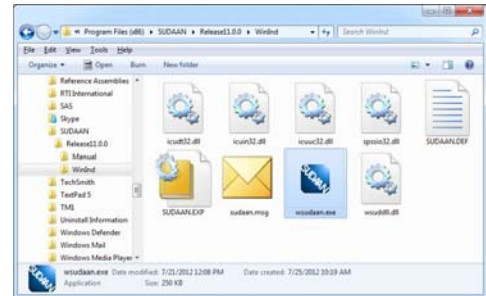
5.1.1   Main Menu

SUDAAN's interface (**Figure 5.2**) displays two windows: the *Input window* and the *Output window*. The Input window is a text editor in which you can create or edit SUDAAN programs; the Output window is a read-only viewer used to display the results from SUDAAN runs. You can switch from the Input window to the Output window by simply clicking in the Output window area, and vice versa.

Figure 5.2: SUDAAN Input and Output Windows
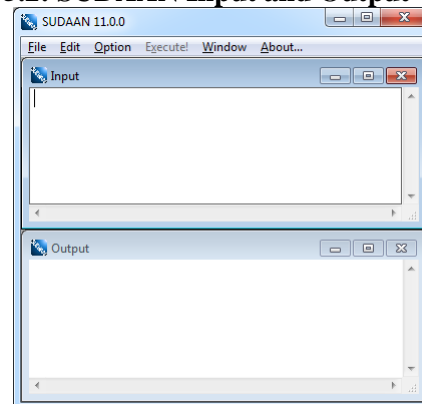
The SUDAAN interface has a single main menu bar at the top of the screen for both Input and Output windows as shown in **Figure 5.2**. From this menu, you can edit and save your SUDAAN programs, execute, display and save SUDAAN results, and access font selection and data directories options, and view information about your version and license. These options are discussed in the next several sections.

5.1.2   File Menu Option

From the Input window, you can open an existing SUDAAN program by selecting **Open** from the **File** menu, or you can select **New** to create a new program from scratch. Note that the capacity of the Input window is 2GB.

From either window you can choose **Save** or **Save as** to save the contents of the window and you can choose **Print** to print the contents of the window.

Figure 5.3 and **Figure 5.4** illustrate the **Open** and **Save** screens in SUDAAN.

Figure 5.3: File Popup Menu for Input Window
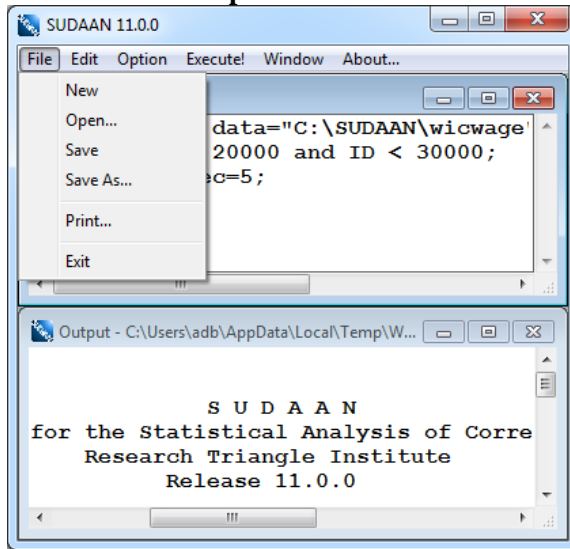
Figure 5.4: File Popup Menu for Output Window
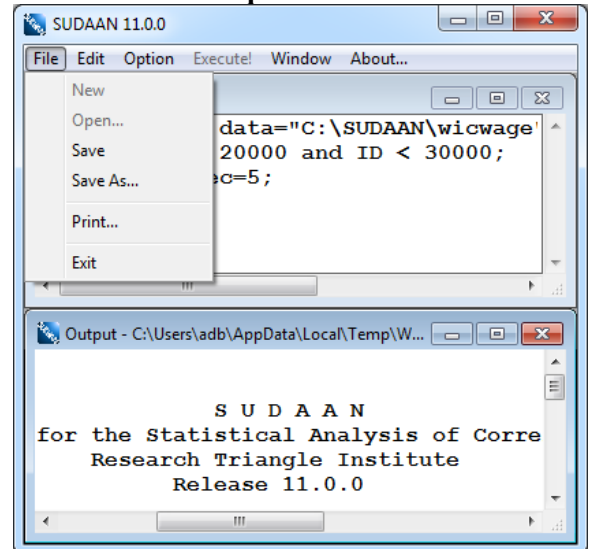
5.1.3   Edit Menu Option

The **Edit** option from the menu bar provides the standard **Undo**, **Cut**, **Copy**, **Paste** and **Select All** functions for the Input window. You can select these functions using either the mouse or the key accelerators. Selecting **Clear** from the **Edit** menu will clear everything in the Input window; anything unsaved will be lost.

Figure 5.5: Edit Popup Menu from Input Window

The only available selection in the **Edit** Menu for the Output window is **Clear**, since it is a read-only viewer. You can save the output to a file and then edit it using another editor, for example, *NotePad*.

Figure 5.5 illustrates the **Edit** screen in SUDAAN associated with the Input window.
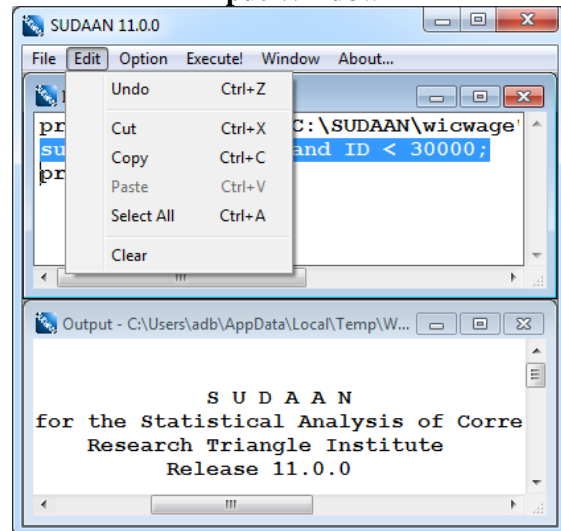
5.1.4   Option Menu Option

Selecting **Option** from the menu bar will allow you to change the default directory and change the font for both viewing and printing. This is depicted in **Figure 5.6**.

Figure 5.6: Option Popup Menu   **Figure 5.7: Data Dir... Option Dialog Box**
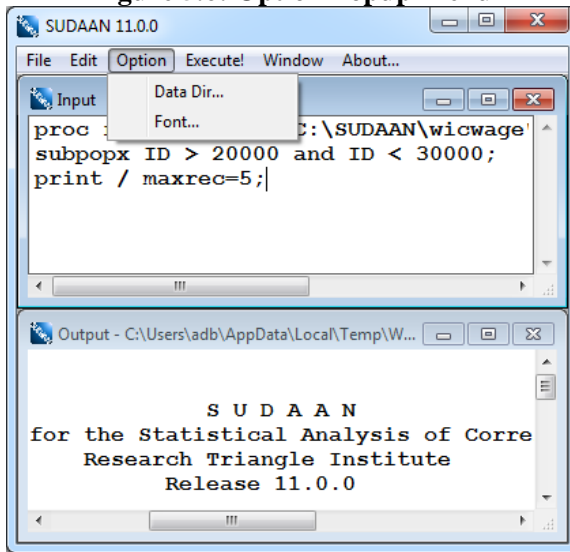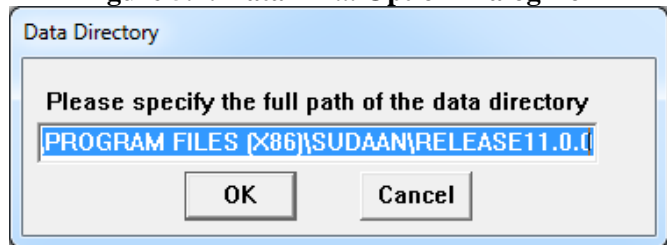
You can set the Data Directory for your SUDAAN data files by selecting **DataDir...** from the **Option** menu. After selection, a dialog box will appear as depicted in **Figure 5.7**.

NOTE: If you don't specify a full path name in the *DATA=* option on the PROC statement of your SUDAAN program or in the *FILENAME=* option on the PRINT and OUTPUT statements, SUDAAN will assume the data is in the directory specified in **DataDir...** on the **Option** menu. The default Data Directory is the directory where the SUDAAN program is located.

Once you set this directory, SUDAAN saves it in a SUDAAN.INI file for future use. SUDAAN will continue to use this Data Directory for both interactive and batch mode until you change it. The SUDAAN.INI file in your Windows directory has several sections. *You should not attempt to modify this file*. The sections entitled [DATA DIRECTORY] and [FILE DIRECTORY] in SUDAAN.INI are used to store the currently selected values for these directories. *DataDir=* and *FileDir=* are reserved case sensitive keywords in SUDAAN.INI which you should never change. *DataDir* is used to keep track of your Data Directory settings. You should change the Data Directory setting only by choosing the **DataDir...** option from the **Option** menu. *FileDir* is used to initialize the current working directory for SUDAAN and should never be changed.

The **Font…** option is available from both Input and Output windows. Select **Font** from the **Option** Menu to specify the font type and font size for both viewing and printing. You can select different fonts for the Input and Output windows. The Courier or Courier New font is suggested for the Output window, since it is a monospaced font.

5.1.5   Execute Command

Click **Execute!** on the menu bar or press the **F3** key, to execute the program in the Input window. The results are displayed in the Output window. Use the cursor keys to navigate within the Output window.

Please note the following:

■ If you don't clear the Output window following execution, the results from subsequent runs will be appended to it.

■ SUDAAN saves all output from the current program in the file SUDAAN.OUT in the WSUDTEMP directory created in your local TEMP directory (by default, your local TEMP directory is located at C:\Documents and Settings\<*user*>\Local Settings\Temp\WSUDTEMP). In cases where no output appears in your Output window because of an error, check this file to determine the possible cause of problems.

5.1.6   Window Menu Option

The **Window** menu option (**Figure 5.8**) provides utilities for **Cascade**, **Tile Horizontal** and **Tile Vertical**. The active window (either Input or Output) is checked. You can switch from Input window to Output window by selecting **Output** from the **Window** menu, and vice versa.

5.1.7   About Dialog

Clicking the **About…** menu item shows the About dialog (**Figure 5.9**) for SUDAAN. This displays the SUDAAN release number as well as your license information.

Figure 5.8: Window Popup Menu   **Figure 5.9: About Dialog**
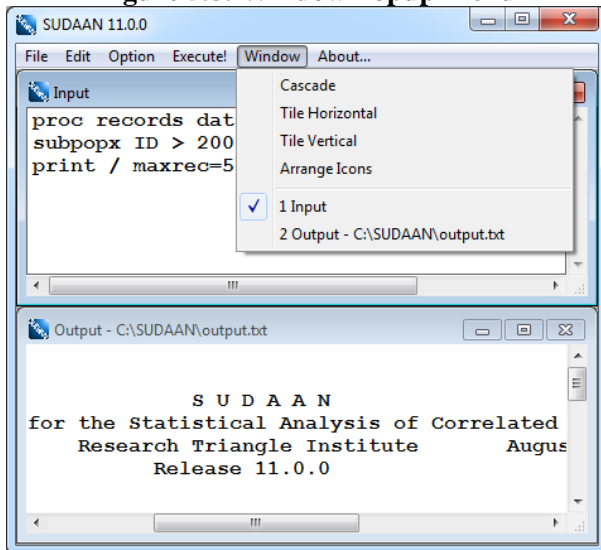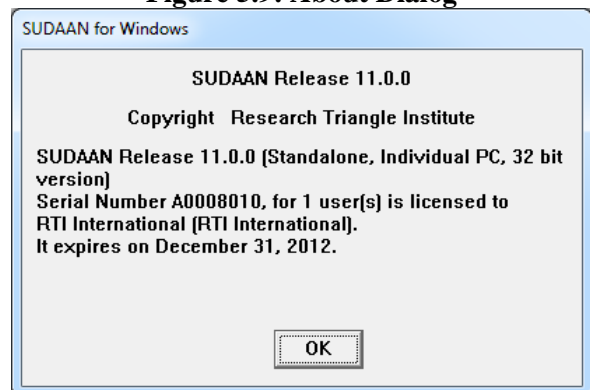
5.1.8 The Right Mouse Button Options

Click the right mouse button in either the input or output window and then select different options using the left mouse button. The options are a subset of those on the SUDAAN main menu. See **Figure 5.10** and **Figure 5.11** for an example.

Figure 5.10: Right Mouse Menu from Input Window
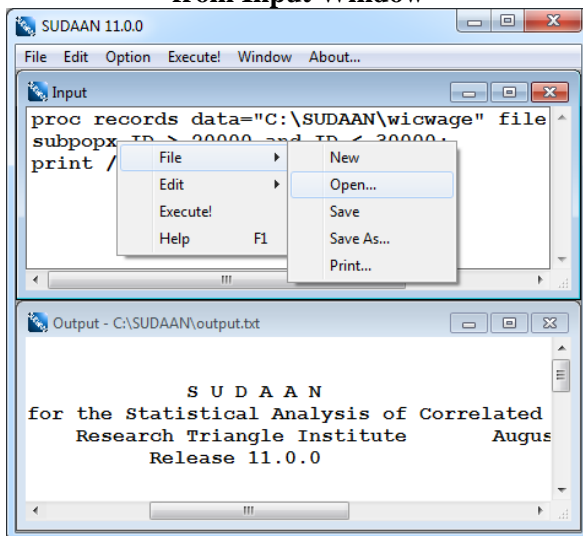
Figure 5.11: Right Mouse Menu from Output Window
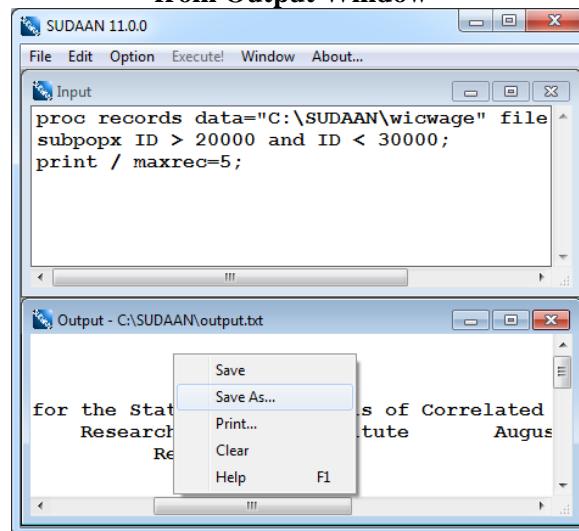
5.2   How to Execute SUDAAN in Batch Mode

The complete command line syntax to run SUDAAN in batch mode is:

*<path>*WSUDAAN.EXE [*infile*] [*outfile*] [-r | -a]

where:

    path is the complete path specification for the SUDAAN executable

    infile is the complete file specification for the file containing your SUDAAN program. If this option is omitted, an interactive session of SUDAAN is launched

    outfile is the name of the file where output should be directed. If this option is omitted, SUDAAN will direct output to a file with the same directory location and name as *infile*, but with extension ".OUT". If the *outfile* already exists, and no write option is specified, SUDAAN will display a dialog box to confirm that you want to overwrite the existing file.

-r | -a is the write option. The option *r* indicates that SUDAAN should *replace* or overwrite an existing file of the same name in the same location. The option *a* indicates that SUDAAN should *append* new output to an existing file of the same name in the same location.

If you don't specify the full path name of the input data file using the DATA= option on the SUDAAN procedure statement, SUDAAN will assume the data is in the ***DataDir=*** variable of the [DATA DIRECTORY] section of the SUDAAN.INI file. If the data is not in the specified directory, there will be an error message in the SUDAAN output file. When the SUDAAN batch job starts to run, the following message box will appear (**Figure 5.12**) then automatically disappear when the job is completed.

Figure 5.12: SUDAAN Job is Running Message
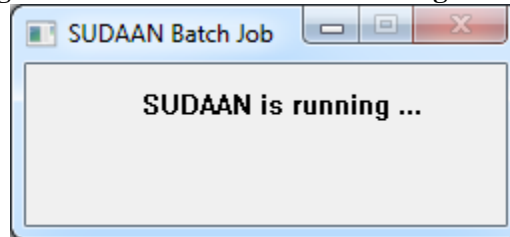
SUDAAN can be run in batch mode using the following methods:

1.   Choose **Run** from the **Start** menu in Windows and type in the desired WSUDAAN.EXE command line.

2.   Select **Command Prompt** from the **Start** menu in Windows (sometimes located under **All Programs** and then **Accessories**) and type in the desired WSUDAAN.EXE command line.

3.   The WSUDAAN.EXE command line can be put in a typical .BAT file and executed accordingly.

6. INSTALLATION INSTRUCTIONS FOR SAS-CALLABLE INDIVIDUAL USER VERSION

6.1 System Requirements

The Windows SAS-Callable Individual User version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008 and SAS 9.

If you are installing SAS-Callable SUDAAN and you have 64-bit SAS, it is critical that you install x64 SUDAAN software. Similarly, if you are installing SAS-Callable SUDAAN and you have 32-bit SAS, it is critical that you install x32 SUDAAN software. If you would like to change your license from x32 to x64 (or vice-versa), please contact the RTI SUDAAN office (see Section 1.1).

6.2 Software Installation

During the interactive installation process (see **Section 1.3**), select **SAS-Callable Indiv. User** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, The SUDAAN Language Manual is installed. You can deselect the SUDAAN Language Manaul by clicking on the check box to the left of the Language Manual component name which is displayed in the **SETUP** window.

During the installation process, you will be asked to supply the directory location of your default SAS configuration file (SASV9.CFG). **SETUP** will display the correct path for you if SAS is installed in the default locations. If you are not sure where the SASV9.CFG is, or you want to override the default location, you can use the Browse option provided by **SETUP** or you can search for the file in the Windows Explorer. If **SETUP** locates the file, it creates a backup copy, named SASV9.BK# before making changes in the SASV9.CFG file. **SETUP** makes the following change to the file:

- **SETUP** inserts a line within the –PATH command at the end of the SASV9.CFG file pointing to the location of your SUDAAN program files. By default:

    `'C:\Program Files\SUDAAN\Release11.0.0\SASInd'`

Note: If the default SASV9.CFG contains only a –CONFIG command pointing to a complete SASV9.CFG file in another location, the install will update the second SASV9.CFG file.

IMPORTANT: SAS will not be able to find your SUDAAN.DLL files without this change to your SASV9.CFG. If you have multiple SASV9.CFG files on your computer (both local and network drives), check to make sure that you have specified the **default** SAS configuration file within **SETUP** and that you manually update the remaining SASV9.CFG files you will be using with SUDAAN.

Following a default installation, the following subdirectories and files should be present (by default under C:\Program Files, or in the installation directory you have specified during setup)

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST file.

- **SUDAAN\Release11.0.0\SASInd**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the SUDAAN Language Manual. Note that **SETUP** will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

6.3 Running SUDAAN

You can run SUDAAN jobs in either SAS's interactive mode or in batch mode. Execute SUDAAN procedures just like any other SAS procedures in either mode*. NOTE: Some SUDAAN syntax has been changed for this SAS-Callable version.* Please refer to the SUDAAN Language Manual for details. See the SAS User's Manual for information on how to run SAS jobs.

7. INSTALLATION INSTRUCTIONS FOR SAS-CALLABLE NETWORK VERSION

The SAS-Callable, LAN version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SAS-Callable SUDAAN as described in **Section 7.2**.

2. Each user wishing to use SUDAAN on the LAN must complete the LAN User Version installation as described in **Section 7.3**. All files needed for the LAN User Version installation will be installed during the LAN Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the network should not exceed the total number of users associated with your SUDAAN LAN license.

7.1 System Requirements

The Windows SAS-Callable Network User version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008 and SAS 9.

If you are installing SAS-Callable SUDAAN and you have 64-bit SAS, it is critical that you install x64 SUDAAN software. Similarly, if you are installing SAS-Callable SUDAAN and you have 32-bit SAS, it is critical that you install x32 SUDAAN software. If you would like to change your license from x32 to x64 (or vice-versa), please contact the RTI SUDAAN office (see Section 1.1).

7.2 Software Installation–LAN Administrator

During the interactive installation process (see **Section 1.3**), select **SAS-Callable Network** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the **SETUP** window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
NetUser Setup Files	**SETUP.EXE** and other files for the network user to install. (See **Section 7.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

During the installation process, you will be asked to supply the directory location of your default SAS configuration file (SASV9.CFG). **SETUP** will display the correct path for you if SAS is installed in the default location. If you are not sure where the file is, or you want to override the default location, you can use the Browse option provided by **SETUP**, or you can search for the file in the Windows Explorer. If

SETUP locates the file, it creates a backup copy, named SASV9.BK# before making changes in the SASV9.CFG file. **SETUP** makes the following change to the file:

- **SETUP** inserts a line within the –PATH command at the end of the SASV9.CFG file pointing to the location of your SUDAAN program files. By default:

  `'M:\Program Files\SUDAAN\Release11.0.0\SASNet'`

If the default SASV9.CFG contains only a –CONFIG command pointing to a complete SASV9.CFG file in another location, the install will update the second SASV9.CFG file.

IMPORTANT: SAS will not be able to find your SUDAAN .DLL files without this change to your SASV9.CFG. If you have multiple SASV9.CFG files on your computer (both local and network drives), check to make sure that you have specified the **default** SAS configuration file within **SETUP** and that you manually update the remaining SASV9.CFG files you will be using with SUDAAN.

Following a default installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST file.

- **SUDAAN\Release11.0.0\SASNet**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\SASNet\NetUser**
  This subdirectory will contain the **SETUP** for all network users.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the SUDAAN Language Manual. Note that **SETUP** will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN website, SUDAAN Language and Example Manuals, and the SUDAAN Renewal and Setup program.

7.3   Software Installation–LAN User

The **SETUP.EXE** program in the NetUser subdirectory of the SUDAAN\Release11.0.0\SASNet network directory is a program that will automatically setup SUDAAN for each user. This program should be run by each user. After **SETUP** has been run for each user, verify that the following step has completed successfully.

The SASV9.CFG file – Verify SUDAAN Path
Verify that the network path to SUDAAN is inserted into the –PATH command in the default SASV9.CFG file. This tells SAS where to find SUDAAN procedures. For example, if SUDAAN is

installed at `M:\SUDAAN\Release11.0.0\SASNet`, then the following line should be present:

`M:\SUDAAN\Release11.0.0\SASNet`

in the –PATH command. This command is usually located at the end of the `SASV9.CFG` file.

Note: If the default SASV9.CFG contains only a –CONFIG command pointing to a complete SASV9.CFG file in another location, the install will update the second SASV9.CFG file.

If a user changes their network drive letter associated with SUDAAN, or if the directory where SUDAAN is located changes, then the user will need to make the corresponding changes in their SASV9.CFG file.

7.4   Running SUDAAN

SUDAAN jobs can be run in either SAS's interactive mode or in batch mode. Execute SUDAAN procedures just like any other SAS procedures in either mode. *NOTE: Some SUDAAN syntax has been changed for this SAS-Callable version.* Please refer to the <u>SUDAAN Language Manual</u> for details. See the SAS User's Manual for information on how to run SAS jobs.

8.   INSTALLATION INSTRUCTIONS FOR SAS-CALLABLE SERVER VERSION

The SAS-Callable, Server version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SUDAAN SAS-Callable as described in **Section 8.2**.

2. Each user wishing to use SUDAAN on the server must complete the Server User Version installation as described in **Section 8.3** if they access the server from their own copy of a SASV9.CFG configuration file. All files needed for the Server User Version installation will be installed during the Server Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the server should not exceed the total number of users associated with your SUDAAN Server license.

8.1   System Requirements

The Windows SAS-Callable Server version of SUDAAN 11.0.0 runs on PCs with Microsoft Windows 7, Windows XP, Windows Server 2003, or Windows Server 2008 and SAS 9.

If you are installing SAS-Callable SUDAAN and you have 64-bit SAS, it is critical that you install x64 SUDAAN software. Similarly, if you are installing SAS-Callable SUDAAN and you have 32-bit SAS, it is critical that you install x32 SUDAAN software. If you would like to change your license from x32 to x64 (or vice-versa), please contact the RTI SUDAAN office (see Section 1.1).

8.2   Software Installation–Server Administrator

During the interactive installation process (see **Section 1.3**), select **SAS-Callable Server** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the **SETUP** window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
SrvUser Setup Files	**SETUP.EXE** and other files for the server user to install. (See **Section 8.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

During the installation process, you will be asked to supply the directory location of your default SAS configuration file (SASV9.CFG). **SETUP** will display the correct path for you if SAS is installed in the default location. If you are not sure where the file is, or you want to override the default location, you can use the Browse option provided by **SETUP**, or you can search for the file in the Windows Explorer. If

SETUP locates the file, it creates a backup copy, named SASV9.BK# before making changes in the SASV9.CFG file. **SETUP** makes the following change to the file:

- **SETUP** inserts a line within the –PATH command at the end of the SASV9.CFG file pointing to the location of your SUDAAN program files. By default:

  `'M:\Program Files\SUDAAN\Release11.0.0\SASSrv'`

If the default SASV9.CFG contains only a –CONFIG command pointing to a complete SASV9.CFG file in another location, the install will update the second SASV9.CFG file.

IMPORTANT: SAS will not be able to find your SUDAAN .DLL files without this change to your SASV9.CFG. If you have multiple SASV9.CFG files on your computer (both local and server drives), check to make sure that you have specified the **default** SAS configuration file within **SETUP** and that you manually update the remaining SASV9.CFG files you will be using with SUDAAN.

Following a default installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST file.

- **SUDAAN\Release11.0.0\SASSrv**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\SASSrv\SrvUser**
  This subdirectory will contain the **SETUP** for all server users.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the SUDAAN Language Manual Note that **SETUP** will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

8.3 Software Installation–Server User

The **SETUP.EXE** program in the SrvUser subdirectory of the SUDAAN\Release11.0.0\SASSrv directory is a program that will automatically setup SUDAAN for each user. This program should be run by each user. After **SETUP** has been run for each user, verify that the following step has completed successfully.

The SASV9.CFG file – Verify SUDAAN Path
Also verify that the server path to SUDAAN is inserted into the –PATH command in the default SASV9.CFG file. This tells SAS where to find SUDAAN procedures. For example, if SUDAAN is installed at M:\SUDAAN\Release11.0.0\SASSrv, then the following line should be present:

```
M:\SUDAAN\Release11.0.0\SASSrv
```

in the –PATH command. This command is usually located at the end of the `SASV9.CFG` file.

> **Note:** If the default SASV9.CFG contains only a –CONFIG command pointing to a complete SASV9.CFG file in another location, the install will update the second SASV9.CFG file.

If a user changes their server drive letter associated with SUDAAN, or if the directory where SUDAAN is located changes, then the user will need to make the corresponding changes in their SASV9.CFG file.

8.4   Running SUDAAN

SUDAAN jobs can be run in either SAS's interactive mode or in batch mode. Execute SUDAAN procedures just like any other SAS procedures in either mode. *NOTE: Some SUDAAN syntax has been changed for this SAS-Callable version.* Please refer to the <u>SUDAAN Language Manual</u> for details. See the SAS User's Manual for information on how to run SAS jobs.

9. INSTALLATION INSTRUCTIONS FOR COMMAND PROMPT INDIVIDUAL USER VERSION

9.1 System Requirements

The Windows Command Prompt Individual User version of SUDAAN 11.0.0 runs on PCs with 64-bit Microsoft Windows 7, 64-bit Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Command Prompt versions are only available in 64-bit versions. You should only install the Command Prompt versions on 64-bit Windows systems. ***These 64-bit versions will not run on 32-bit Windows systems and you should not install them on 32-bit systems. If you would like to change your license from 64-bit Command Prompt to 32-bit Standalone, please contact the RTI SUDAAN office (see Section 1.1). Please note that Standalone SUDAAN supports the same command line interface as Command Prompt SUDAAN.***

9.2 Software Installation

During the installation process, select **Command Prompt Individual** by clicking the appropriate check box to the left of this item in the `SETUP` window when you reach the screen displayed in **Figure 1.1.**

By default, The SUDAAN Language Manual is installed. You can deselect the SUDAAN Language Manaul by clicking on the check box to the left of the Language Manual component name which is displayed in the `SETUP` window.

Following installation, the following subdirectories and files should be present (by default under C:\Program Files, or in the installation directory you have specified during setup)

- **`SUDAAN\Release11.0.0`**
  This subdirectory will contain the README.1ST file.

- **`SUDAAN\Release11.0.0\CmdInd`**
  This subdirectory will contain all program and other required files.

- **`SUDAAN\Release11.0.0\Manual`**
  This subdirectory will be present if you specify installation of the SUDAAN Language Manual. Note that `SETUP` will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The `SETUP` program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

9.3   Running SUDAAN

After installation, you will need to add your new SUDAAN directory, by default

   <path>\SUDAAN\Release11.0.0\CmdInd,

to your directory PATH. *<path>* is the complete path specification for the SUDAAN programs, which by default is "C:\Program Files". Remove any old SUDAAN directory from the PATH. If you make these changes in your system settings, they will be available each time you boot your system.

The syntax for executing SUDAAN (from the DOS Command prompt, or from the RUN command) is:

```
SUDPROC infile [outfile] [-r | -a]
```

Where *infile* is the name of the file containing SUDAAN procedure statements, *outfile* is the name of the file to which SUDAAN should direct outputs, and *r* and *a* are write options.

IF *outfile* already exists...

   -r causes the file to be overwritten, and
   -a causes the output to be appended to the existing file

IF you omit *outfile*...

   SUDAAN directs all output to the screen.

See the SUDAAN Language Manual for complete information on using the SUDAAN procedures.

10. INSTALLATION INSTRUCTIONS FOR COMMAND PROMPT NETWORK VERSION

The LAN version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SUDAAN as described in **Section 10.2**.

2. Each user wishing to use SUDAAN on the LAN must complete the LAN User Version installation as described in **Section 10.3**. All files needed for the LAN User Version installation will be installed during the LAN Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the network should not exceed the total number of users associated with your SUDAAN LAN license.

10.1   System Requirements

The Windows Command Prompt Network User version of SUDAAN 11.0.0 runs on PCs with 64-bit Microsoft Windows 7, 64-bit Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Command Prompt versions are only available in 64-bit versions. You should only install the Command Prompt versions on 64-bit Windows systems. *These 64-bit versions will not run on 32-bit Windows systems and you should not install them on 32-bit systems. If you would like to change your license from 64-bit Command Prompt to 32-bit Standalone, please contact the RTI SUDAAN office (see Section 1.1). Please note that Standalone SUDAAN supports the same command line interface as Command Prompt SUDAAN.*

10.2   Software Installation–LAN Administrator

During the interactive installation process (see **Section 1.3**), select **Command Prompt Network** by clicking the appropriate check box to the left of this item in the **SETUP** window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the **SETUP** window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
NetUser Setup Files	**SETUP.EXE** and other files for network user install (See **Section 10.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

Following installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **`SUDAAN\Release11.0.0`**
  This subdirectory will contain the README.1ST files.

- **`SUDAAN\Release11.0.0\CmdNet`**
  This subdirectory will contain all program and other required files.

- **`SUDAAN\Release11.0.0\CmdNet\NetUser`**
  This subdirectory will contain **`SETUP.EXE`** and other files required for the network user install

- **`SUDAAN\Release11.0.0\Manual`**
  This subdirectory will be present if you specify installation of the <u>SUDAAN Language Manual</u>.
  Note that **`SETUP`** will create shortcuts to these documents in the SUDAAN folder on the **Start Programs** Menu.

The **`SETUP`** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

10.3 Software Installation–LAN User

The **`SETUP.EXE`** program in the NetUser subdirectory of the SUDAAN\Release11.0.0\CmdNet network directory is a program that will automatically set up SUDAAN for each user. <u>This program should be run by each user</u>. After **`SETUP`** has run, verify that **`SETUP`** has created a SUDAAN folder in the **Start Programs** menu. In the folder one should find shortcuts to the SUDAAN program, the SUDAAN website, and SUDAAN Language Manual.

10.4 Running SUDAAN

After installation, you will need to add your new SUDAAN directory, by default

   <path>\SUDAAN\Release11.0.0\CmdNet,

to your directory PATH. *<path>* is the complete path specification for the SUDAAN programs located on the network. Remove any old SUDAAN directory from the PATH. If you make these changes in your system settings, they will be available each time you boot your system.

The syntax for executing SUDAAN (from the DOS Command prompt, or from the RUN command) is:

```
SUDPROC infile [outfile] [-r | -a]
```

Where *infile* is the name of the file containing SUDAAN procedure statements, *outfile* is the name of the file to which SUDAAN should direct outputs, and *r* and *a* are write options.

IF *outfile* already exists...

   -r causes the file to be overwritten, and
   -a causes the output to be appended to the existing file

IF you omit *outfile*...

SUDAAN directs all output to the screen.

See the <u>SUDAAN Language Manual</u> for complete information on using the SUDAAN procedures.

11. INSTALLATION INSTRUCTIONS FOR COMMAND PROMPT SERVER VERSION

The Server version of SUDAAN should be installed using a two-step process:

1. Install the Administrator version of SUDAAN as described in **Section 11.2**.

2. Each user wishing to use SUDAAN on the server must complete the Server User Version installation as described in **Section 11.3**. All files needed for the Server User Version installation will be installed during the Server Administrator Version installation.

IMPORTANT: As indicated in the SUDAAN license agreement, the maximum number of simultaneous users who access SUDAAN on the server should not exceed the total number of users associated with your SUDAAN Server license.

11.1 System Requirements

The Windows Command Prompt Server version of SUDAAN 11.0.0 runs on PCs with 64-bit Microsoft Windows 7, 64-bit Windows XP, Windows Server 2003, or Windows Server 2008.

SUDAAN 11.0.0 Command Prompt versions are only available in 64-bit versions. You should only install the Command Prompt versions on 64-bit Windows systems. *These 64-bit versions will not run on 32-bit Windows systems and you should not install them on 32-bit systems. If you would like to change your license from 64-bit Command Prompt to 32-bit Standalone, please contact the RTI SUDAAN office (see Section 1.1). Please note that Standalone SUDAAN supports the same command line interface as Command Prompt SUDAAN.*

11.2 Software Installation–Server Administrator

During the interactive installation process (see **Section 1.3**), select **Command Prompt Server** by clicking the appropriate check box to the left of this item in the `SETUP` window when you reach the screen displayed in **Figure 1.1.**

By default, the following components will be installed. However you can deselect any of these components by clicking on the check boxes to the left of the component names which are displayed in the `SETUP` window.

Component	Description
Program Files	Files required to execute SUDAAN procedures
SrvUser Setup Files	`SETUP.EXE` and other files for the server user to install (See **Section 11.3**)
Language Manual	SUDAAN Language Manual in Adobe Acrobat PDF format

Following installation, the following subdirectories and files should be present in the installation directory you have specified during setup:

- **SUDAAN\Release11.0.0**
  This subdirectory will contain the README.1ST files.

- **SUDAAN\Release11.0.0\CmdSrv**
  This subdirectory will contain all program and other required files.

- **SUDAAN\Release11.0.0\CmdSrv\SrvUser**
  This subdirectory will contain **SETUP.EXE** and other files required for the server user to install.

- **SUDAAN\Release11.0.0\Manual**
  This subdirectory will be present if you specify installation of the <u>SUDAAN Language Manual</u>. Note that **SETUP** will create a shortcut to the manual in the SUDAAN folder on the **Start Programs** Menu.

The **SETUP** program will install a SUDAAN folder on the **Start Programs** menu with shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language Manual, and the SUDAAN Renewal and Setup program.

11.3   Software Installation–Server User

The **SETUP.EXE** program in the SrvUser subdirectory of the SUDAAN\Release11.0.0\CmdSrv server directory is a program that will automatically set up SUDAAN for each user. <u>This program should be run by each user</u>. After **SETUP** has run, verify that **SETUP** has created a SUDAAN folder in the **Start Programs** menu. In the folder one should find shortcuts to the SUDAAN program, the SUDAAN website, SUDAAN Language and Example Manuals and the SUDAAN Help.

11.4   Running SUDAAN

After installation, you will need to add your new SUDAAN directory, by default

   <path>\SUDAAN\Release11.0.0\CmdSrv,

to your directory PATH. *<path>* is the complete path specification for the SUDAAN programs located on the server. Remove any old SUDAAN directory from the PATH. If you make these changes in your system settings, they will be available each time you boot your system.

The syntax for executing SUDAAN (from the DOS Command prompt, or from the RUN command) is:

```
SUDPROC infile [outfile] [-r | -a]
```

Where *infile* is the name of the file containing SUDAAN procedure statements, *outfile* is the name of the file to which SUDAAN should direct outputs, and *r* and *a* are write options.

IF *outfile* already exists...

-r causes the file to be overwritten, and
-a causes the output to be appended to the existing file

IF you omit *outfile...*

SUDAAN directs all output to the screen.

See the SUDAAN Language Manual for complete information on using the SUDAAN procedures.