



BEA SALT™

Installation Guide

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Preparing to Install BEA SALT

The following sections provide information on the preparations you need to know before installing BEA SALT:

- [Overview](#)
- [System Requirements](#)
- [Upgrade Consideration](#)
- [BEA SALT Installation Program](#)
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- [What's Next?](#)

Overview

BEA SALT provides a native Web service stack for Tuxedo. It enables you to integrate Web service applications and Tuxedo applications via the SOAP/WS-* protocol. BEA SALT is a separate product that must be installed on top of Tuxedo.

BEA SALT software is distributed as an installer file which can be executed on Windows or UNIX platforms using any of the following three methods:

- Graphical user interface (GUI) installation.
- Console installation.
- Silent installation.

BEA SALT 2.0 distribution contains the following key components:

- BEA SALT Web Service Gateway Server software
- BEA SALT Web Service Development Assistant utilities
- BEA SALT administrative utilities
- BEA SALT sample applications

BEA SALT components are installed in the BEA Tuxedo `TUXDIR` directory directly.

System Requirements

BEA Tuxedo

Tuxedo 9.1 must be installed before you can install SALT. The following prerequisites are required before installing BEA SALT 2.0:

- You have successfully installed Tuxedo 9.1 server components. For more server component information, see [Tuxedo 9.1 install sets](#).
- You have successfully patched Tuxedo 9.1 with Rolling Patch “070” or above.

Note: Tuxedo 9.1 Rolling Patch 070 installation programs are shipped on the SALT 2.0 product DVD. You can also contact BEA Support for the latest rolling patch version.

Supported Platforms

Please refer to [Appendix A, “BEA SALT 2.0 Supported Platforms”](#) for BEA SALT 2.0 supported Tuxedo 9.1 platform list.

WSDL Converter Requirement

BEA SALT provides a WSDL converter, `wsdlcvt`, for external Web service support. `wsdlcvt` is a command utility that require using the Java Runtime Environment (JRE). Java Runtime Environment 1.5 is certified for `wsdlcvt`. For more information, see [wsdlcvt](#) in the *BEA SALT Command Reference*.

Upgrade Consideration

If you have SALT 1.1 installed, it must be uninstalled before installing SALT 2.0. SALT 1.1 and SALT 2.0 cannot co-exist on the same Tuxedo installation.

SALT 2.0 provides utilities to help you migrate from your SALT 1.1 application. For more information, see “[Migrating from BEA SALT 1.1 Application](#)” in the *BEA SALT Administration Guide*.

BEA SALT Installation Program

The BEA SALT software is distributed as an installation program for Windows or UNIX systems. The BEA SALT installation program supports three installation methods. You can use any of these methods to install the BEA SALT product software:

- Graphical user interface (GUI) mode installation, described in “[BEA SALT GUI-Mode Installation](#)” on page 2-1.
- Console-mode installation, described in “[BEA SALT Console-Mode Installation](#)” on page 3-1.
- Silent installation, described in “[BEA SALT Silent Mode Installation](#)” on page 4-1.

BEA SALT Distribution

BEA SALT is distributed on both the BEA Web site and DVD.

Web Distribution

An evaluation copy of BEA SALT is available for download from the BEA corporate Web site at http://commerce.beasys.com/products/tuxedojoit/tuxedo_prod_fam.jsp.

Platform-specific installer files for the BEA SALT product software are available for download from the BEA corporate Web site.

DVD Distribution

If you purchased BEA SALT from your local sales representative, you will find the following items in the BEA SALT product box:

- BEA SALT product software DVD

- The following printed documents:
 - "Read-Me-First" card containing an overview of the product box content
 - "Customer Support Quick Reference and Other Important Information" card
 - BEA SALT Documentation Location sheet

What's Next?

You are now ready to begin your installation. For more information, see:

- [BEA SALT GUI-Mode Installation](#)
- [BEA SALT Console-Mode Installation](#)
- [BEA SALT Silent Mode Installation](#)

BEA SALT GUI-Mode Installation

The following sections describe how to install BEA SALT using graphical user interface (GUI) mode installation on both Windows and UNIX systems:

- [What Is GUI-Mode Installation](#)
- [Installing on Windows or UNIX Platforms in Graphics Mode](#)

What Is GUI-Mode Installation

GUI- mode installation is a graphics-based method for executing the BEA SALT installation program. It can run on both Windows and UNIX systems.

To run GUI-mode installation, the computer console on which you are installing the software must support a Java-based GUI. All Windows system consoles support Java-based GUIs, but not all UNIX system consoles do.

Note: To install BEA SALT on a non-graphical UNIX system console, see [“BEA SALT Console-Mode Installation” on page 3-1](#).

Installing on Windows or UNIX Platforms in Graphics Mode

Perform the following steps to install the BEA SALT software on Windows or on UNIX in graphics mode:

1. Launch the BEA SALT installation program.

On Windows:

- a. Choose Start→Run. The Run dialog appears.
- b. Click Browse to navigate and select BEA SALT 2.0 for Windows installer executable:
`salt20_tux91_32_win2k3_x86.exe`
- c. Click Open.
- d. Install Anywhere runs and the Introduction screen ([Figure 2-1](#)) appears.
- e. Proceed to Step 2.

On UNIX:

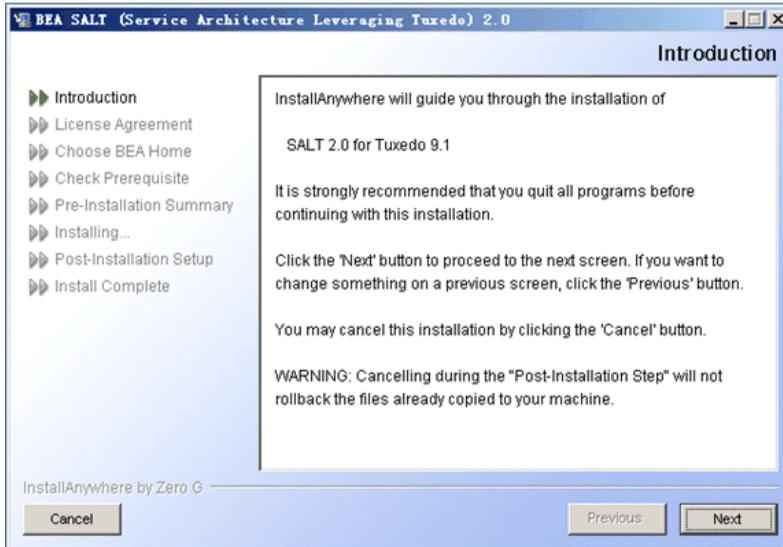
- a. Log on as root to install the BEA SALT software.

```
$ su -  
Password:
```
- b. Execute the installation program. For example:

```
/tmp > sh salt20_tux91_32_hpux_1123_pa.bin
```

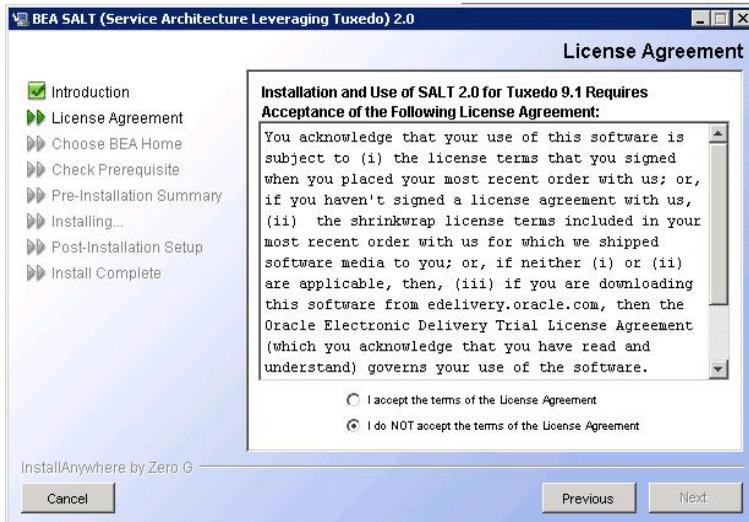
The Introduction screen (see [Figure 2-1](#)) appears.
- c. Proceed to Step 2.

Figure 2-1 Introduction Screen



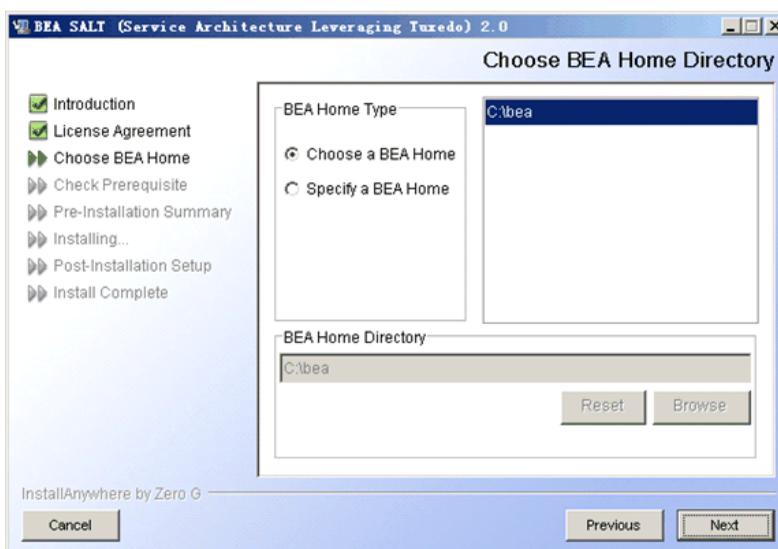
2. Click Next to continue with the installation. The License Agreement screen appears (Figure 2-2).

Figure 2-2 License Agreement Screen



3. Click the Accept option button to accept the license agreement; then click Next to proceed with the installation. If you click the Do Not Accept option button, you will not be able to continue with the installation.
4. Click *Next* to proceed with the installation. The Choose BEA Home Directory screen appears (see [Figure 2-3](#)).

Figure 2-3 Choose BEA Home Directory Screen



You can select from the following options:

- Choose a BEA Home

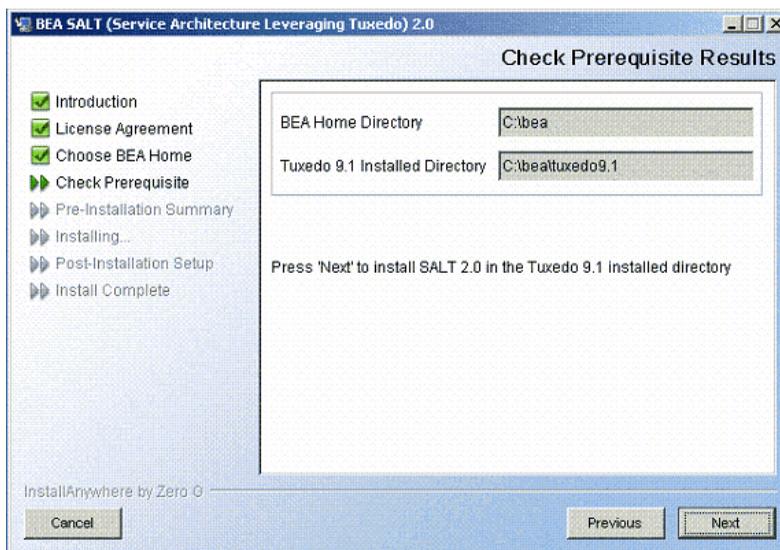
Click the *Choose a BEA Home* option button if you already have one or more BEA Home directories on your system. Select a BEA Home directory from the list displayed to the right of the option buttons.

All valid BEA Home directories are displayed in this list. Valid BEA Home directories are directories where BEA products have been installed using the standard installation program.

- Specify a BEA Home

Click the *Specify a BEA Home* button to select an existing directory.

5. Click *Next* to proceed with the installation. The Check Prerequisite Result screen appears (see [Figure 2-4](#)). The BEA Home directory and the Tuxedo sub-directory appears.

Figure 2-4 Check Prerequisite Result Screen

Click *Next* to accept this BEA Home Directory and Tuxedo sub-directory as the location to install BEA SALT and proceed with the installation.

Click *Previous* to go back and select/specify another BEA Home Directory.

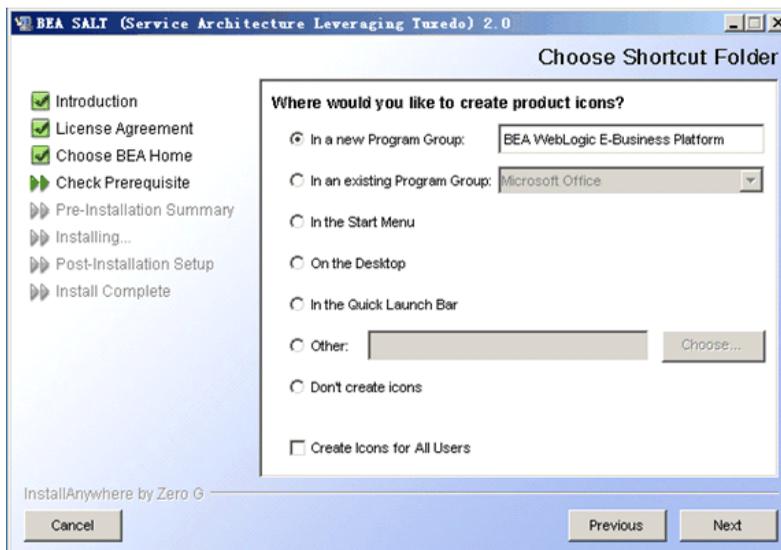
Click *Cancel* to terminate the installation process.

Notes: BEA SALT installation will report an error and will not proceed in the event of the following:

- `registry.xml` not found in the given BEA Home Directory
- Tuxedo 9.1 installation information cannot be obtained from `registry.xml`.
- Tuxedo 9.1 Installed, but does not have the required Rolling Patch. See [System Requirements](#).
- Tuxedo 9.1 does not have server components installed.
- If a previous BEA SALT version is detected. You are required to uninstall the previous version BEA SALT prior to install this program.
- If an existing BEA SALT 2.0 is detected, you are prompted to overwrite it or not. Select “yes” to overwrite the existing BEA SALT 2.0.

6. The Choose Shortcut Folder screen appears (see [Figure 2-5](#)).

Figure 2-5 Choose Shortcut Folder Screen (Windows only)



You can select from the following options:

- In a new Program Group
- In an existing Program Group

If you select an existing Program Group, use the drop down to select the Program Group where you want to install the shortcut icons.

- In the Start Menu
- On the Desktop
- In the Quick Launch Bar
- Other

If you select Other, you should click Choose to browse to another location where you want to install the shortcut icons

- Do not create icons

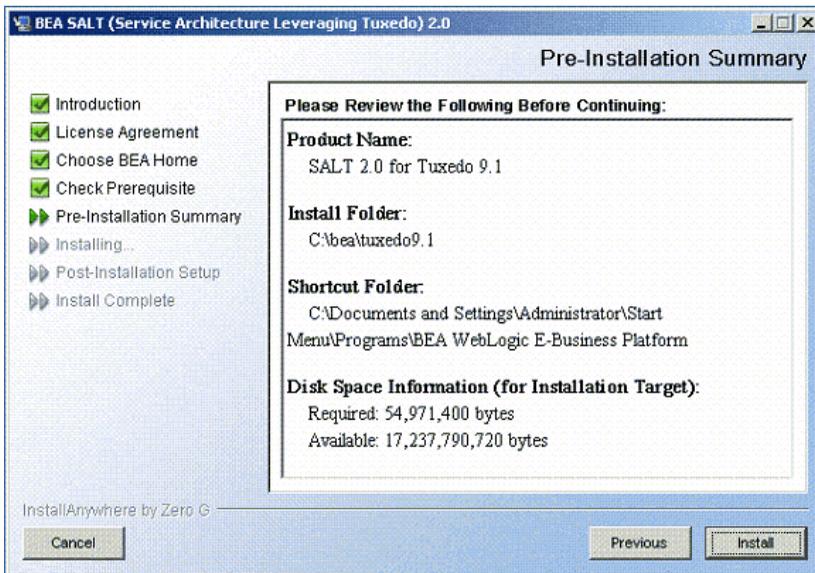
Note: If “In a new Program Group”, “In the Start Menu”, or “On the Desktop” buttons are selected, the “Create Icons for All Users” check box becomes active.

If the box is checked, shortcut icons are created for all users who log on to the computer. If the box is not checked, shortcut icons are created for the current logged-on user only.

Click *Next* to accept the selected option as the location to install BEA SALT shortcuts and proceed with the installation. Click *Cancel* to terminate the installation process.

7. If the installation process continues, the Pre-Installation Summary screen appears.

Figure 2-6 Pre-Installation Summary Screen



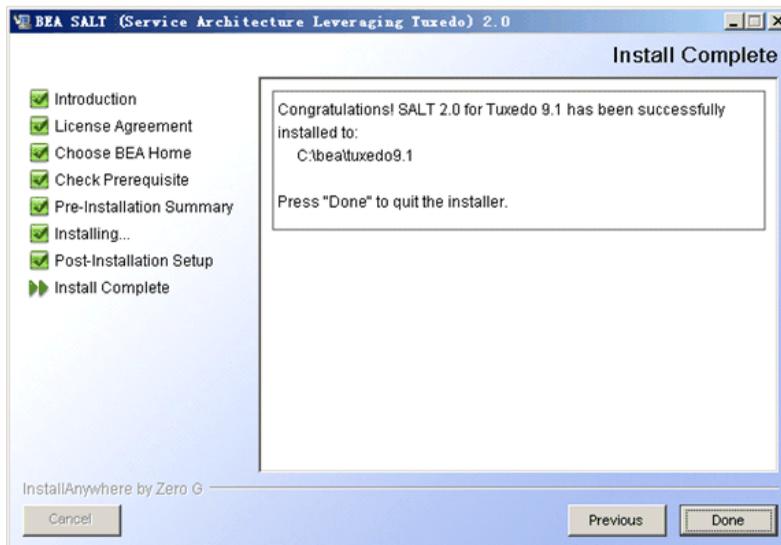
Review the summary information and click *Install* if the information is correct.

Click *Previous* to go back and modify any input that you want to change.

Click *Cancel* to terminate the installation process. This is the last chance you have to cancel your installation without copying any files on your target machine.

8. The Install Complete screen (Figure 2-7), appears when the installation is finished.

Figure 2-7 Install Complete Screen



Click *Done* to exit the installation program.

See Also

- [Post BEA SALT Installation](#)

BEA SALT Console-Mode Installation

The following sections describe how to install BEA SALT using console-mode installation:

- [What Is Console-Mode Installation](#)
- [Installing on UNIX Platforms in Console Mode](#)

What Is Console-Mode Installation

Console-mode installation is a text-based method for executing the BEA Installation program. It can be run only on UNIX systems and is intended for UNIX systems with non-graphical consoles. Console-mode installation offers the same capabilities as GUI (graphical-based) installation.

Installing on UNIX Platforms in Console Mode

Perform the following steps to install BEA SALT software in console mode on a certified UNIX platform:

1. Log on as root.

```
$ su -  
Password:
```

2. Execute the installation program in character-based mode by selecting the appropriate installation file for your platform. For example, for the HP-UX platform, select:

```
# sh salt20_tux91_32_hpux_11_pa.bin -i console
```

3. The installation program runs and prompts you for responses (see [Listing 3-1](#) for an example).

Listing 3-1 UNIX Console Mode Installation Example

Launching installer...

Preparing CONSOLE Mode Installation...

=====

(created with InstallAnywhere by Zero G)

=====

Introduction

InstallAnywhere will guide you through the installation of SALT 2.0 for Tuxedo 9.1.

It is strongly recommended that you quit all programs before continuing with this installation.

Respond to each prompt to proceed to the next step in the installation. If you want to change something on a previous step, type 'back'.

You may cancel this installation by typing 'quit'.

WARNING: Cancelling during the "Post-Installation Step" will not rollback the files already copied to your machine.

PRESS <ENTER> TO CONTINUE: <ENTER>

License Agreement

Installation and use of SALT 2.0 for Tuxedo 9.1 requires acceptance of the following License Agreement:

You acknowledge that your use of this software is subject to (i) the license terms that you signed when you placed your most recent order with us; or, if you haven't signed a license agreement with us, (ii) the shrinkwrap license terms included in your most recent order with us for which we shipped software media to you; or, if neither (i) or (ii) are applicable, then, (iii) if you are downloading this software from edelivery.oracle.com, then the Oracle Electronic Delivery Trial License Agreement (which you acknowledge that you have read and understand) governs your use of the software. Note: Programs downloaded for trial use or downloaded as replacement media may not be used to update any unsupported programs.

...

DO YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT? (Y/N):**Y**

Choose BEA Home Directory

- 1- Specify a BEA Home
- 2- Choose a BEA Home

Enter a number: 1

Specify a BEA Home directory: /home/beadev/bea

Pre-Installation Summary

Please Review the Following Before Continuing:

Product Name:

SALT 2.0 for Tuxedo 9.1

Install Folder:

/home/beadev/bea/tuxedo91

Link Folder:

/home/beadev

Disk Space Information (for Installation Target):

Required: 71,850,401 bytes

Available: 19,094,890,496 bytes

PRESS <ENTER> TO CONTINUE: <ENTER>

Installing...

```
[=====|=====|=====|=====]
[-----|-----|-----|-----]
```

Installation Complete

Congratulations. SALT 2.0 for Tuxedo 9.1 has been successfully installed to:

/home/beadev/bea/tuxedo91

PRESS <ENTER> TO EXIT THE INSTALLER: <ENTER>

See Also

[Post BEA SALT Installation](#)

BEA SALT Silent Mode Installation

The following sections describe how to install BEA SALT using silent mode installation on both Windows and UNIX systems:

- [Preparing for Silent Mode Installation](#)
- [Creating a Silent Mode Installation Template File](#)
- [Installing BEA SALT on Windows](#)
- [Verifying Silent Mode Installation](#)

Preparing for Silent Mode Installation

Before you install BEA SALT, complete the following tasks.

- Verify that enough disk space is available.
- Verify the login ID has proper permission for silent installation.
- Create a template file containing the required keyword settings.

Creating a Silent Mode Installation Template File

To create a template file for use in the silent installation process, you must use the following keywords:

Table 4-1 Template File Keywords

For This Keyword . . .	Enter the Following Value . . .
INSTALLER_UI= (UNIX and Windows)	The mode of installation. The default is <code>silent</code> ; do not modify this value.
BEAHOME= (UNIX and Windows)	The full pathname of the BEA Home directory of your choice.
OVERWRITE=yes no (UNIX and Windows)	If you are using silent mode installation over an existing version of BEA SALT, you must add this line to your template file. This is a case-sensitive keyword; the value must be lowercase. Any value other than “yes” will not overwrite the existing BEA SALT version and cancels the installation.

Sample UNIX Template

```
INSTALLER_UI=silent
### BEA Home Directory ###
### NOTE: backslashes must be escaped. ###
BEAHOME=/home/user/boa
### Overwrite Option###
OVERWRITE=yes|no
```

Sample Windows Template

```
INSTALLER_UI=silent
### BEA Home Directory ###
### NOTE: backslashes must be escaped. ###
BEAHOME=C:\\bea
### Overwrite Option###
OVERWRITE=yes|no
```

Installing BEA SALT on UNIX

To invoke the silent mode installation procedure on a UNIX system, execute the following steps:

- Create a file containing the required variables set to valid data.

- At a command line prompt go to the directory containing the installer executable.
- Enter the following command:

```
sh installer_name.bin -f full_path/installer.data
```

In the previous command, *full_path* is the full path to the variable data file and *installer.data* is the data file containing the required variables.

Installing BEA SALT on Windows

To invoke the silent installation procedure on a Windows system, execute the following steps:

- Create a file containing the required variables set to valid data.
- At a command line prompt go to the directory containing the installer executable.
- Enter the following command:

```
Installer_name.exe -f full_path\installer.data
```

In the previous command, *full_path* is the full path to the variable data file and *installer.data* is the data file containing the required variables.

An initial window appears indicating that the installer is running. The amount of time to install in silent mode is approximately the same as interactive mode.

Verifying Silent Mode Installation

You can verify successful silent mode installation by checking the `TUXDIR` directory to see if all the SALT binaries are listed.

If silent mode installation failed, check the following log files:

Windows:

```
%USERPROFILE%\Salt_silent_install.log
```

UNIX:

```
$HOME/Salt_silent_install.log
```

See Also

[Post BEA SALT Installation](#)

Post BEA SALT Installation

The following sections describe post-installation tasks after installing BEA SALT:

- [Understanding the BEA SALT Directory Structure](#)
- [Uninstalling BEA SALT](#)
- [Reinstalling BEA SALT](#)
- [Installing BEA SALT Rolling Patches](#)

Understanding the BEA SALT Directory Structure

During the BEA SALT software installation, all BEA SALT files are decompressed within the BEA Tuxedo `TUXDIR` directory.

[Table 5-1](#) lists brief descriptions of BEA SALT directories and files.

Table 5-1 BEA SALT Directory and File Structure

Directory Name	Description
bin	Contains SALT executable programs, including: <ul style="list-style-type: none"> • GWWS • tmwsdlgen • wsadmin • wsdlcvt • wsloadcf • tmwsdlflt (internally used)
include	Contains C language header files for SALT plug-in development and administrative development, including: <ul style="list-style-type: none"> • auth_pi_ex.h • credmap_pi_ex.h • custtype_pi_ex.h • wsadmflds.h • wsoapflds.h
lib	Contains dynamic shared libraries needed to run BEA SALT programs, including: <ul style="list-style-type: none"> • libwsbase.* (shared library suffix is variant on different platforms) • libwsconf.* • libsoapeng.* • libwsdomconv.*
locale	Contains the localization of system messages used by SALT. C subdirectory contains the following SALT specific message catalogs for the default locale (U.S. English): GWWS, WSBASE, WSCFG, WSCMD. file CATNAMES is the Tuxedo catalog name definition file that includes the above message catalog names used by SALT.
samples/salt	A collection of simple applications that demonstrate the BEA SALT features.

Table 5-1 BEA SALT Directory and File Structure

Directory Name	Description
udataobj	Contains the following information files for BEA SALT: <ul style="list-style-type: none"> • 3rd_party_licenses_salt.txt License information for 3rd party software used by BEA SALT • wsadmflds SALT administrative FML32 field definitions • wsoapflds SALT pre-defined FML32 fields for outbound Web Service call salt subdirectory contains other files required by BEA SALT.
udataobj/salt	Contains sub-directories and files required by BEA SALT, including: <ul style="list-style-type: none"> • policy subdirectory Contains SALT pre-defined WS-* policy files. • WS subdirectory Contains various external XML Schema files required by BEA SALT. • xalan subdirectory Contains Apache Xalan Java 2.7 class library files and corresponding license information. • xslt files wsdl*.xsl files are used by BEA SALT WSDL converter (wsdlevt). • SALT XML Schema files *.xsd files are XML Schema files of SALT configuration file format.
uninst_salt_2	Contains files required to uninstall the BEA SALT 2.0 software.

Uninstalling BEA SALT

Uninstalling BEA SALT in GUI-Mode

Perform the following steps to uninstall BEA SALT software using GUI-Mode:

Windows:

Choose Start→Programs→BEA WebLogic E-Business Platform→SALT 2.0 for Tuxedo 9.1→Uninstall SALT 2.0 for Tuxedo 9.1 from the Start menu.

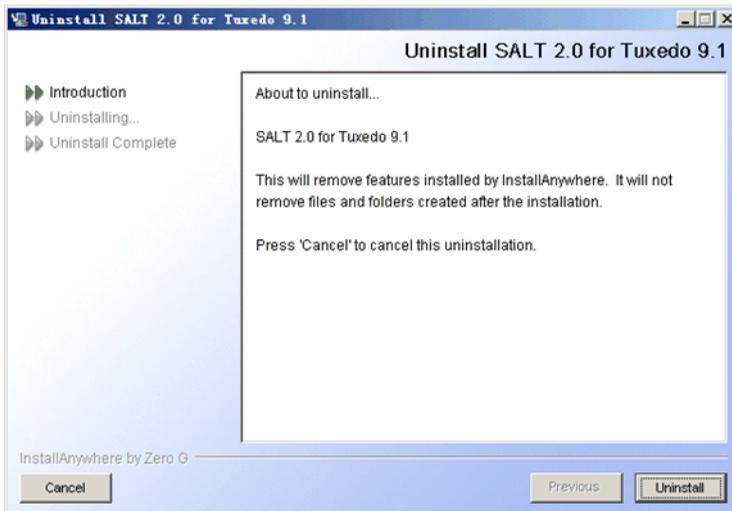
You can also uninstall via Start→Control Panel→Add or Remove Programs.

UNIX:

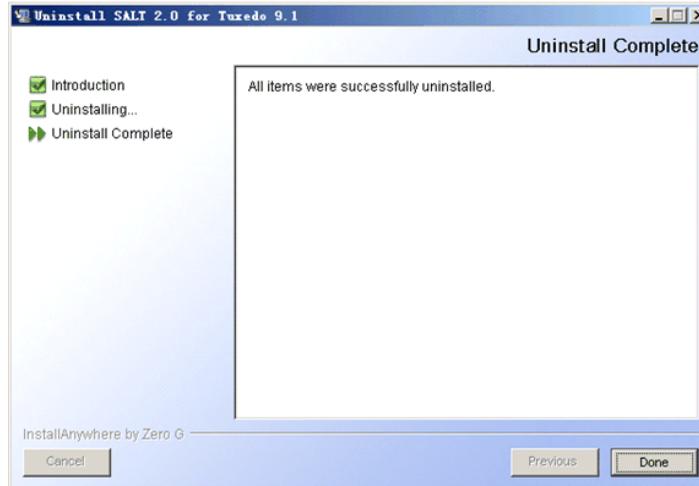
Execute the command `$TUXDIR/uninst_salt_2_0/Uninstall_SALT_2.0_for_Tuxedo_9.1`

The BEA SALT Uninstaller screen appears (Figure 5-1).

Figure 5-1 Uninstall SALT 2.0 for Tuxedo 9.1 Screen



Click *Uninstall* to start uninstalling BEA SALT. When the process is complete, the screen shown in Figure 5-2 is displayed.

Figure 5-2 Uninstall Complete Screen

4. Click *Done* to complete the uninstall.

Uninstalling BEA SALT in Console-Mode

To uninstall BEA SALT on a UNIX platform using console mode:

1. Change to your uninstall directory using the following command:


```
> cd $TUXDIR/uninst_salt_1_1/Uninstall_SALT_2.0_for_Tuxedo_9.1
```
2. Start the uninstallation program with the following command:


```
<bea/home> sh Uninstall_SALT_2.0_for_Tuxedo_9.1 -i console
```

[Listing 5-1](#) displays a BEA SALT component uninstallation.

Listing 5-1 UNIX Uninstallation Example

```
Preparing CONSOLE Uninstall...
```

```
=====
```

```
About to uninstall...
```

```
SALT 2.0 for Tuxedo 9.1
```

This will remove features installed by InstallAnywhere. It will not remove files and folders created after the installation.

PRESS <ENTER> TO BEGIN THE UNINSTALL, OR 'QUIT' TO EXIT THE UNINSTALLER:
<ENTER>

=====

Uninstalling...

```
...*
*
*****
*****
*****
*****
...*
```

Uninstall Complete

All items were successfully uninstalled.

PRESS <ENTER> TO EXIT THE UNINSTALLER: <ENTER>

Reinstalling BEA SALT

When you start the BEA SALT Installation program on the target BEA Tuxedo directory that already has a copy of the same version BEA SALT installed, the installation program detects the existing BEA SALT and a warning screen is shown to ask if you want to:

- Copy the new BEA SALT installation directories/files over the existing one.
 - Click ‘Yes’. This option overwrites the previous installation.

- It is highly recommended that you shutdown all of your Tuxedo/SALT applications before reinstalling BEA SALT.
- Return to choose another BEA Home directory for BEA SALT installation.
 - Click “*No*”. This option does not overwrite the previous installation. Click “*Previous*” to choose another BEA Home directory for BEA SALT installation.
- Exit the installation program.
 - Click “*Cancel*”. This option terminates the BEA SALT installation program without taking any action.
 - Invoke the uninstall the previous BEA SALT installation program (see [Uninstalling BEA SALT](#)), and then reinstall the software as described in one of the following:
 - [BEA SALT GUI-Mode Installation](#)
 - [BEA SALT Console-Mode Installation](#)
 - [BEA SALT Silent Mode Installation](#)

Installing BEA SALT Rolling Patches

BEA SALT 2.0 uses rolling patches to maintain product fixes. A rolling patch installation is a complete BEA SALT package containing the most recent software fixes. Rolling patches can be installed as follows:

- A BEA SALT 2.0 rolling patch installation can be used if there is no previous BEA SALT installation on the target Tuxedo directory.
- A BEA SALT 2.0 rolling patch installation can be used to overwrite an existing BEA SALT GA installation.
- A higher-level BEA SALT 2.0 rolling patch installation can be used to overwrite an existing lower-level BEA SALT 2.0 rolling patch installation.

Rolling Back to A Previous Installation

To roll back a higher-level patched BEA SALT 2.0 installation to a lower one, you must do the following:

1. Un-install BEA SALT 2.0.
2. Re-install the lower-level SALT 2.0 rolling patch installation program.

BEA SALT 2.0 Supported Platforms

BEA SALT 2.0 supports *all* Tuxedo 10.0 platforms. For more information, see [Tuxedo 10.0 Platform Data Sheets](#).

[Table A-1](#) lists BEA SALT 2.0 supported Tuxedo 9.1 platforms. For more information, see [Tuxedo 9.1 Platform Data Sheets](#).

Table A-1 BEA SALT 2.0 Supported Tuxedo 9.1 Platforms

Platform	GA Port/ Post-GA Port & Certification	Release Date	OS EOL Date
HP-UX 11i v2 (32-bit) on Itanium	GA	2007.08.31	2013.12.31
HP-UX 11i v2 (32-bit) on PA-RISC	GA	2007.08.31	2013.12.31
HP-UX 11i v2 (64-bit) on Itanium	GA	2007.08.31	2013.12.31
HP-UX 11i v3 (64-bit) on Itanium	Certification	2007.11.02	2017.12.31
IBM AIX 5.3 (32-bit) on IBM PowerPC	GA	2007.08.31	TBD
Microsoft Windows 2003 Server (32-bit) on Intel With MS Visual Studio 2003 Professional Edition (Visual C++ 7.0)	GA	2007.08.31	TBD

Table A-1 BEA SALT 2.0 Supported Tuxedo 9.1 Platforms

Platform	GA Port/ Post-GA Port & Certification	Release Date	OS EOL Date
Microsoft Windows 2003 Server (32-bit) on Intel With WS Visual Studio 2005 Professional Edition (Visual C++ 8.0)	GA	2007.08.31	TBD
Novell SUSE Linux Enterprise Server 9 (32-bit) on x86	GA	2007.08.31	2011.06.30
Red Hat Linux Enterprise AS 4 (32-bit) on x86	Certification	2007.08.31	TBD
Sun Solaris 9 (32-bit) on SPARC	GA	2007.08.31	TBD
Sun Solaris 10 (32-bit) on SPARC	GA	2007.08.31	TBD