



## **ENOVIA SmarTeam**

# **SmarTeam Development Suite Installation and Deployment Guide**

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# Chapter 1: Introduction

## Overview

This guide outlines the following software procedures needed to successfully install Microsoft Internet Information Services (IIS), SmarTeam i-Platform SDK and SmartiXF SDK.

This guide assumes knowledge and experience to install Microsoft Internet Information Services (IIS), SmarTeam i-Platform SDK and SmartIXLF SDK.

**Notes:** All the documentation mentioned in this document, unless specified otherwise, is available on the SmarTeam Documentation DVD.

## SmarTeam I-Platform SDK Deployment

The SmarTeam I-Platform SDK provides client applications with the ability to access the SmarTeam functionality provided by the SmarTeam I-Platform. The SmarTeam functionality is accessed through short scripts (referred to in this guide as *embedded scripts*) that are embedded in requests sent by the client application to the SmarTeam I-Platform and executed on the server.

## Overview of SDK Components

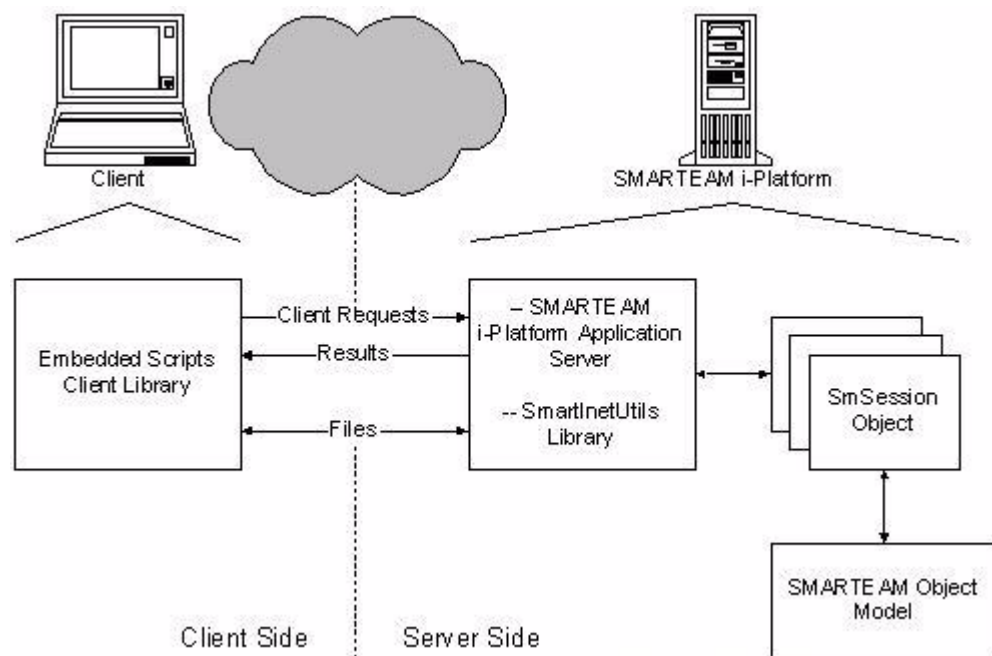
The primary function of this section is to describe how to deploy the following three components in various deployment scenarios while taking into account sensitive [Security Issues](#).

The three major components provided by the SDK are:

- SmarTeam I-Platform Application Server – a server application providing SmarTeam services via a variety of protocols and communication methods. This package includes the Embedded-Scripts Engine – a Web Service for executing scripts sent by the client and returning results to the client.
- Embedded-Scripts Client Library – a Java™-based client side library for generating, encoding and sending client requests to the server and receiving results. This library contains the Embedded-Scripts Connection Package and the Record List Package.
- SmartInetUtils Library – a server-side library providing support for operations related to Internet protocols, such as file uploading and downloading.

## Network Architecture

The network architecture of the SmarTeam i-Platform SDK components is illustrated below:



The client sends requests of the following types to the server:

- Connection request – including password and other login information
- Script execution requests – including commands for activating the SmarTeam API.
- Disconnect request

The client request information is transmitted using the SOAP protocol, using XML encoding over HTTP in clear text format.

## Software Location

The installation procedures described are for the SmarTeam i-Platform SDK and SmartIXLF SDK software, which is available on the SmarTeam DVD.

## Related Documentation

The following documents are referred to in this guide. All of these documents are available on the SmarTeam Directory DVD.

Document	Remarks
SmarTeam i-Platform Programmers Guide	This document provides information necessary for configuring the SmarTeam – Gateway software
Hardware and Software Requirements	Details the hardware and software required for a successful installation
IXF Programmers Guide	This document provides information on generating and processing iXF schema and archive files.
IXF Reference Guide	This iXF online help details: <ul style="list-style-type: none"> <li>• How to access iXF functions</li> <li>• How to customize iXF objects</li> <li>• How to customize the iXF parameters</li> </ul>
SmarTeam API Object Model Programmers Guide	This document provides programmatic access to the functionality of the SmarTeam family of products.
STCom API Reference Guide	This online help details: <ul style="list-style-type: none"> <li>• How to access functions</li> <li>• How to customize objects</li> <li>• How to customize the parameters</li> </ul>
Customizing Using Server-side Hooks for Server-based Applications	This document describes how to use SmarTeam API in Server Mode, in particular it describes interface mechanisms provided by SmarTeam to allow you to use the SmarTeam hooks in Server Mode.
Customizing Using Client-side Hooks for Client-based Applications	This document describes how to use procedural script interfaces to add functionality to SmarTeam.
SmarTeam – BOM Programmer's Guide	This guide provides the necessary information for maintaining an assembly BOM product, referenced information and BOM changes.

## SmarTeam Corporation Internet Site

You are highly recommended to frequently visit the SmarTeam Corporation Internet site for the latest updates to SmarTeam and plug-in products, including the latest service packs, hot fixes and technical support at <http://www.3ds.com/support>.

In addition, you will also be able to view any installation known issues.

## Chapter 2: Installation Checklist

Choose one of the following types of installations for DVS Installation and Deployment:

- **SmarTeam i-Platform SDK:** Installs SmarTeam i-Platform SDK on a computer
- **SmartiXF SDK:** Installs SmartiXF SDK on a computer

### Checklist: SmarTeam i-Platform SDK

\*Requirement: M = Mandatory, O = Optional

<input type="checkbox"/>	Item	M/O*	Reference
Stage 1: Pre-Installation			
<input type="checkbox"/>	Verify that your Hardware & Software meet the requirements	M	SmarTeam Hardware and Software Requirements Guide
<input type="checkbox"/>	Verify that the Microsoft Internet Information Services is installed on your computer	M	<a href="#">Installing Microsoft Internet Information Services (IIS)</a>
<input type="checkbox"/>	Check for any additional prerequisites on the SmarTeam Web Site	M	Release Notes of latest service pack in the release or <a href="#">SmarTeam Support Site</a>
Stage 2: Installation Process			
<input type="checkbox"/>	Run the SmarTeam i-Platform SDK installation	M	<a href="#">Installing SmarTeam I-Platform SDK</a>
Stage 3: Post Installation			
<input type="checkbox"/>	Verify and remedy security issues for the both SmarTeam i-Platform and SmartiXF SDK systems	M	<a href="#">Security Issues</a>

### Checklist: SmartiXF SDK

\*Requirement: M = Mandatory, O = Optional

<input type="checkbox"/>	Item	M/O*	Reference
Stage 1: Pre-Installation			
<input type="checkbox"/>	Verify that your Hardware & Software meet the requirements	M	SmarTeam Hardware and Software Requirements Guide
<input type="checkbox"/>	Verify that the Microsoft Internet Information Services is installed on your computer	M	<a href="#">Installing Microsoft Internet Information Services (IIS)</a>



<input type="checkbox"/>	Item	M/O*	Reference
<input type="checkbox"/>	Check for any additional prerequisites on the SmarTeam Web Site	M	Release Notes of latest service pack in the release or <a href="#">SmarTeam Support Site</a>
<b>Stage 2: Installation Process</b>			
<input type="checkbox"/>	Run the SmartiXF SDK Installation	M	<a href="#">Installing SmartiXF SDK</a>
<b>Stage 3: Post Installation</b>			
<input type="checkbox"/>	Verify and remedy security issues for the both SmarTeam i-Platform and SmartiXF SDK systems	M	<a href="#">Security Issues</a>

# Chapter 3: System Requirements

## Hardware and Software Requirements

Refer to the i-Platform SDK and SmartIXF SDK components section of the Hardware and Software Requirements document. This document describes the i-Platform SDK and SmartIXF SDK system requirements.

## System Requirements

Recommended system requirements necessitate sizing the specific customer configuration. Please contact the SmarTeam support team to obtain the most recent metrics, test results and recommendations.

## Order of Installation

Refer to [Installation Checklist](#) for a detailed list of all the steps that need to be performed.

The installation procedure is split into four stages:

Stage 1: [System Requirements](#) (This Chapter)

Stage 2: [Installing Microsoft Internet Information Services \(IIS\)](#)

Stage 3: [Installing SmarTeam I-Platform SDK](#) or [Installing SmartIXF SDK](#) ([Chapter 4](#))

Stage 4: [Post Installation](#) ([Chapter 5](#))

For a successful installation you must complete one stage before proceeding to the next stage.

## Prerequisites

Before installing the i-Platform SDK and SmartIXF SDK components, you must install the Microsoft Internet Information Services (IIS).

## Installing Microsoft Internet Information Services (IIS)

In order to use Microsoft Internet Information Services (IIS) as your application server, the following procedure must be used for installing IIS on a Windows 2003 platform.

**To configure IIS on an existing Windows 2003 system:**

- 1 Select **Start, Settings, Control Panel, Administrative Tools**.

**2** In the Welcome to Configure Your Server wizard:

- Click **Next**

**3** In the Preliminary Steps window:

- Click **Next**

**4** In the Server Role window:

- Select **Application Server (IIS, ASP.NET)**
- Click **Next**

**5** In the Application Server Options window:

- Select **Enable ASP.NET**
- Click **Next**

**6** In the IIS Services Manager window:

- Click **Web Service Extensions**
- Select **Server Side Includes**
- Choose **Active Server Pages**
- Click **Allow** to verify that the ASP.NET status is set to allowed.

**Note:** If both, Windows 2003 and IIS exist on the system; verify in IIS Services Manager that Web Service Extensions are following step 6.

## Chapter 4: Installation process

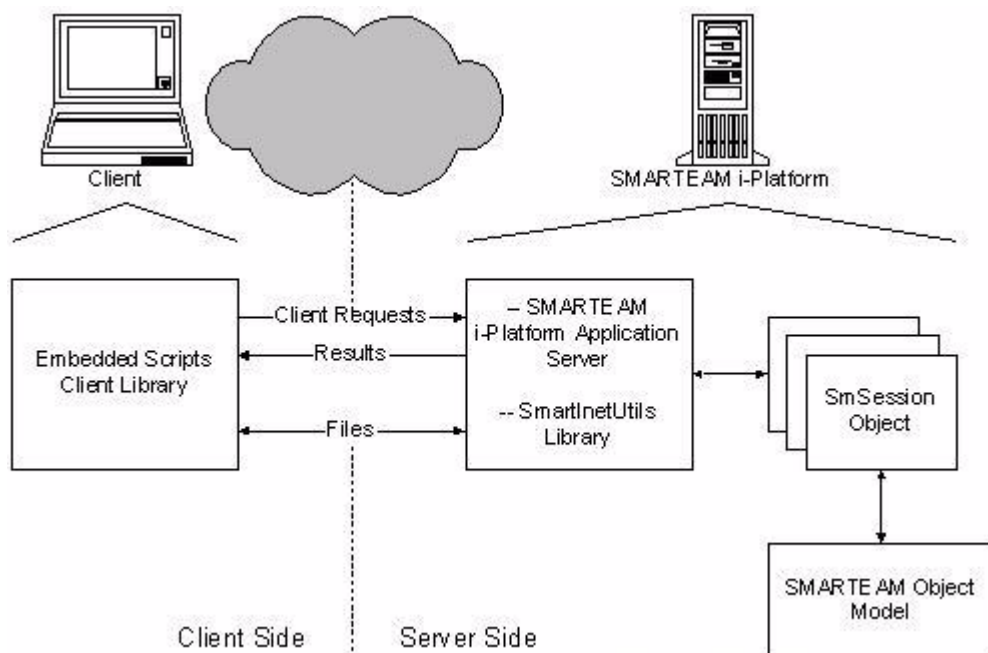
This chapter provides a step-by-step description of both i-Platform and IXF installation processes. Buttons

These buttons are available at the bottom of the installation windows:

- **Next:** Confirms your selection in the current window and proceeds to the next window
- **Back:** Allows you to return to the previous window
- **Cancel:** Allows you to abort the installation setup program without installing the SmarTeam I-Platform SDK or SmartIXF SDK

### Installing SmarTeam I-Platform SDK

This section describes the SmarTeam I - Platform installation process. The following diagram shows each component in relation to each other and the order of installation.



**Notes:**

- If the installation process does not support your Operating System (OS), this message will be displayed:  
"The Operating System configuration does not meet the minimum requirements for this type of installation. Please refer to the SmarTeam Hardware and Software Requirements Guide for more information. Would you like to continue with the installation anyway?"
- To run SmarTeam installation as a different user than the currently-logged on user, you can use **Run As** option.
  - a Right click **Install.exe**
  - b Select **Run as**
  - c In the **Run As** window select **The following user** radio button
  - d Enter **Administrator user name** and **password**
  - e Click **OK**

## Running the Installation

**To begin installing:**

- 1 Insert the DVD containing the DVS software in the DVD-ROM drive:.

- The SmarTeam Core & Enterprise Services Splash appears

**Note:** If for some reason the opening screen does not appear, click on the **Start** button in the taskbar and select **Run** to open the Run utility. In the Run Open line, type **D:\install.exe** to run the installation setup program (where D denotes the DVD ROM drive in which the DVD is inserted.).

- Click **SmarTeam – Development Suite**



- 2 In the SmarTeam – Development Suite dialog, click **i-Platform SDK**.



- 3 In the Welcome window:

- Click **Next**

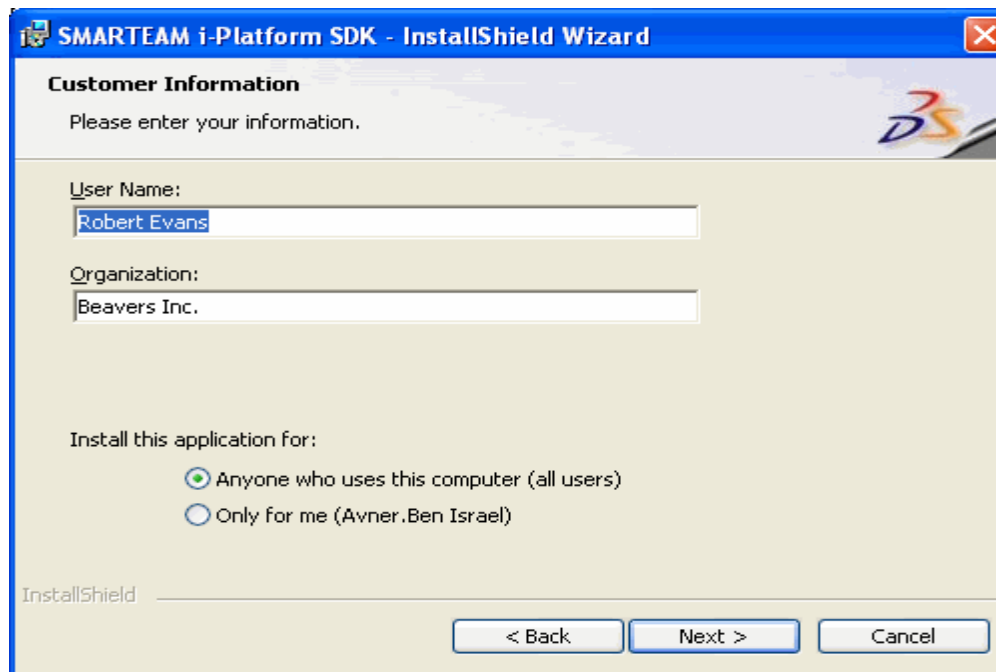


- 4 In the Customer Information window:

- Personalize the program by entering your name and company details in the applicable fields.
- In the Install this application for section, select one of the following radio buttons:

- Anyone who uses the computer (all users): Select this option to enable access to this installation by anyone who uses the specific computer
- Only for me (user name): Select this option to enable access to this installation only to the user entered in the User Name field.

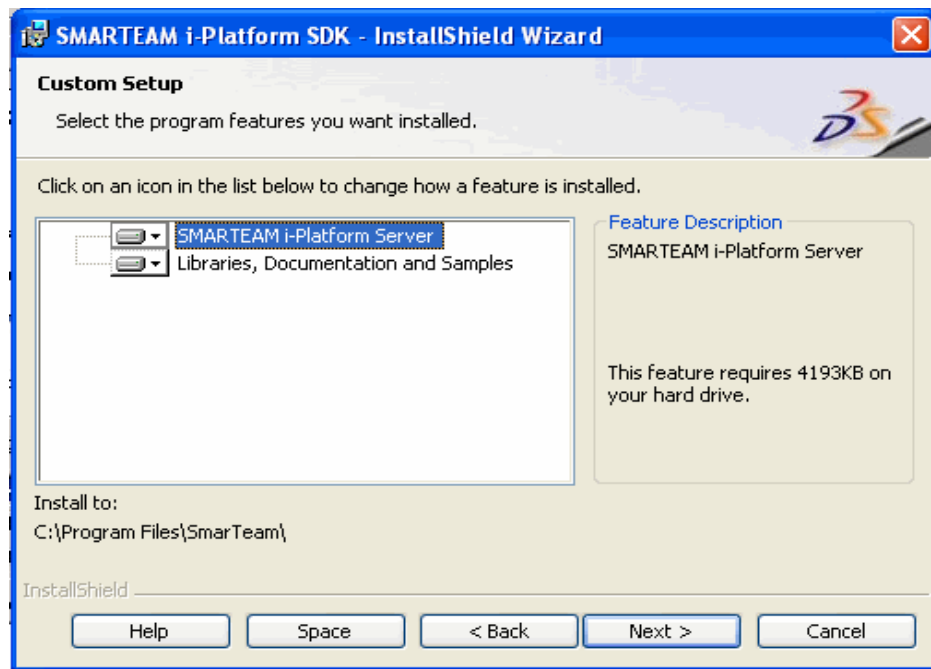
■ Click **Next**



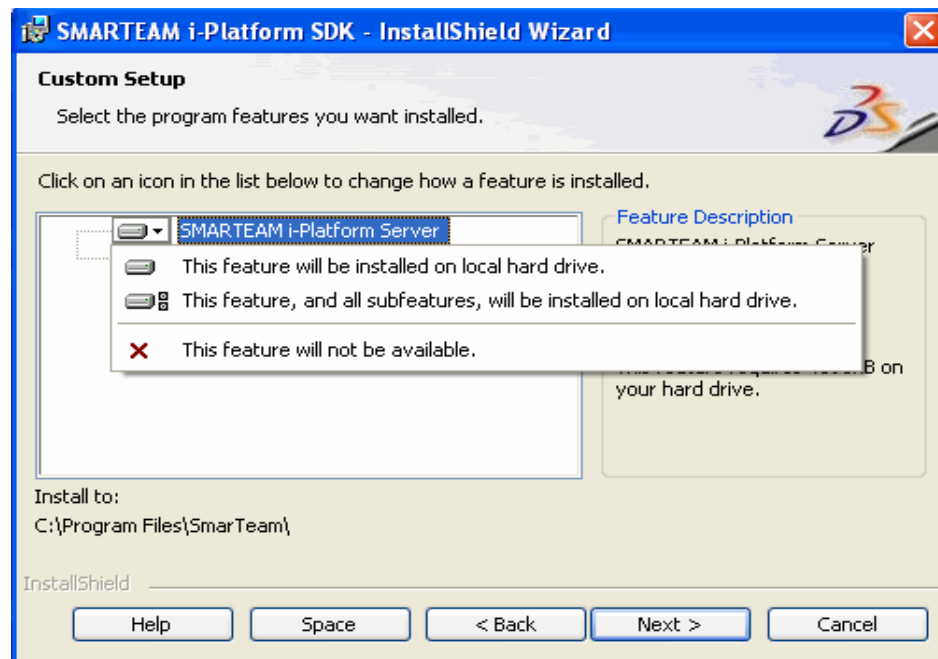
5 In the Custom Setup window, select one of the following features:

- SmarTeam i-Platform Server
- Libraries, Documentation Samples

**Note:** The **Space Required** text under the Feature Description, displays the total amount of space required for the selected component.



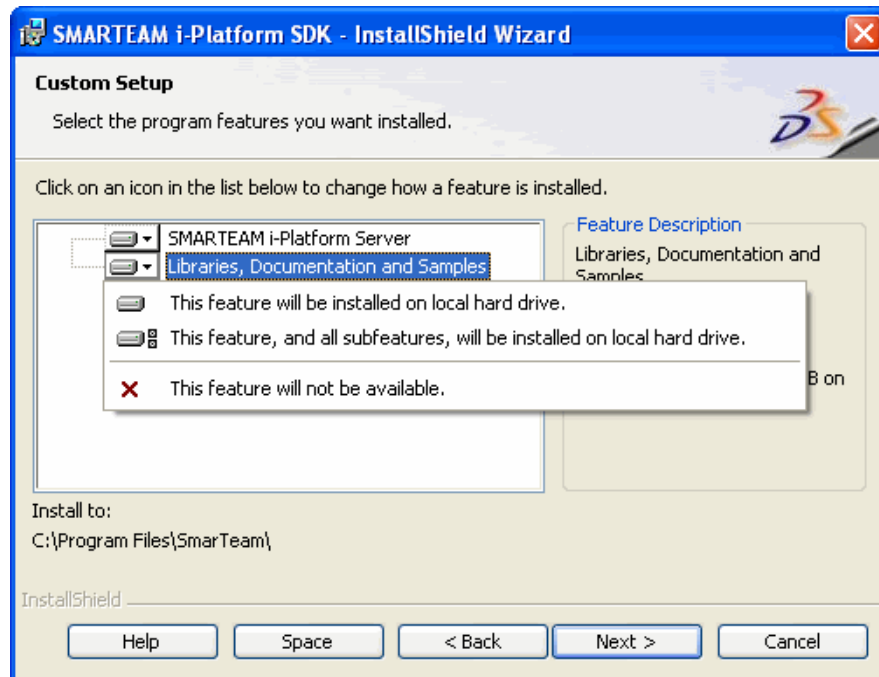
- a** If the SmarTeam i-Platform Server window was selected, choose one of the following options:
- This feature will be installed on local hard drive
  - This feature, and all sub features, will be installed on local hard drive
  - This feature will not be available



- b** If the Libraries, Documentation and Samples was selected, choose from the following options:
- This feature will be installed on the local hard drive
  - This feature, and all sub features, will be installed on local hard drive



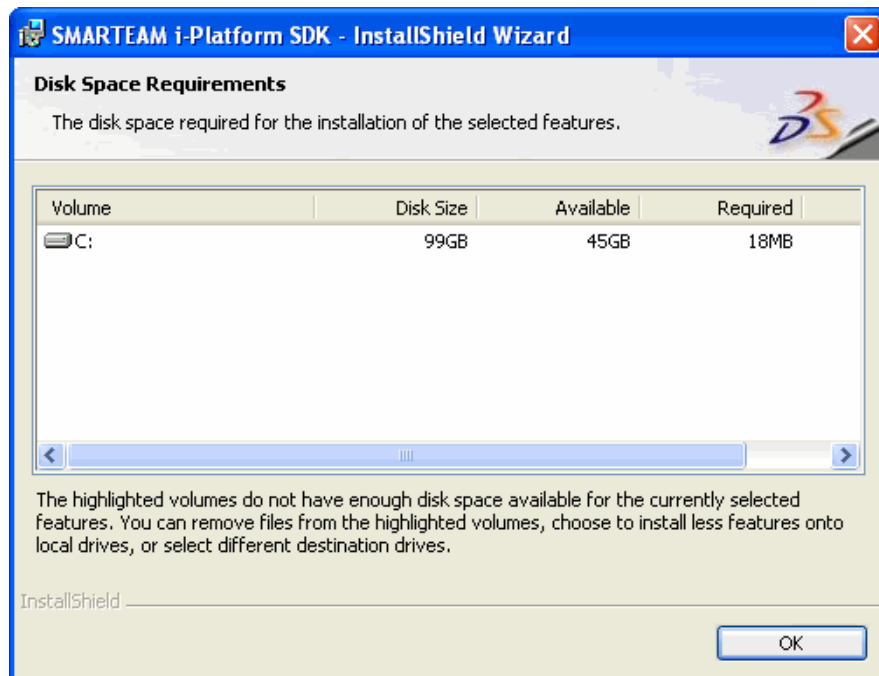
- This feature will be installed to run from network
- This feature, and all sub features, will be run from the network
- This feature will not be available



- c Clicking the Space button displays the disk space required for the selected features

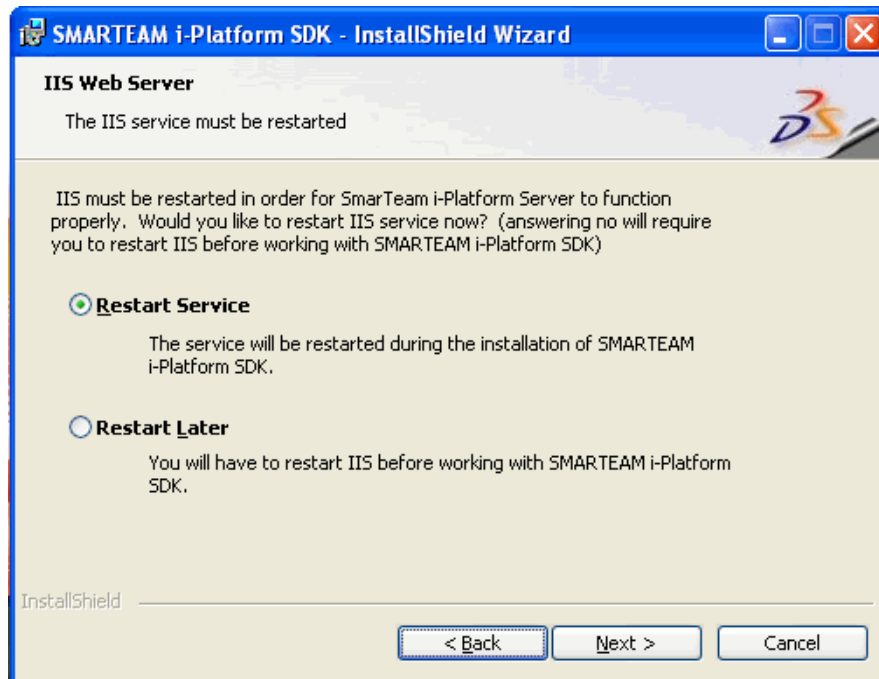
If the disk space required for the selected components totals more than the disk space available on the disk/drive selected, a warning message will appear. Either modify your selections by deselecting components, or free some disk space.

- Click **OK**



After making your selection, click **Next** from the Custom window.

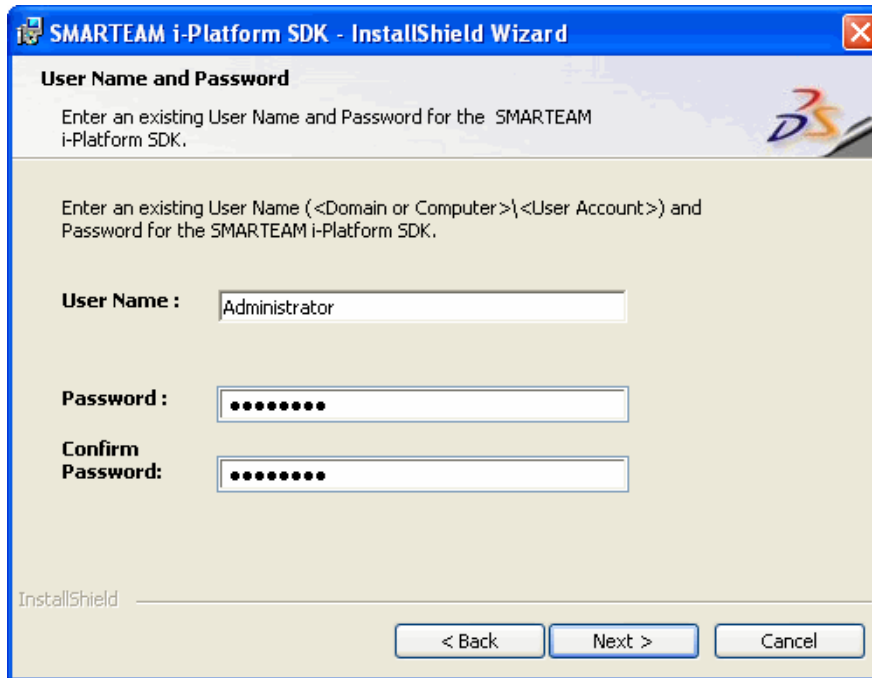
- 6 In the IIS Web Server window, select one of the options for restarting the Internet Information Service (IIS) service:
  - **Restart Service** - Installation process automatically restarts the IIS.
  - **Restart Later** - Enables IIS to be restarted manually.
  - Click **Next**



- 7 In the **User Name and Password** window, enter the user name and password of an existing user as follows:
  - **Username** – Enter an existing username.

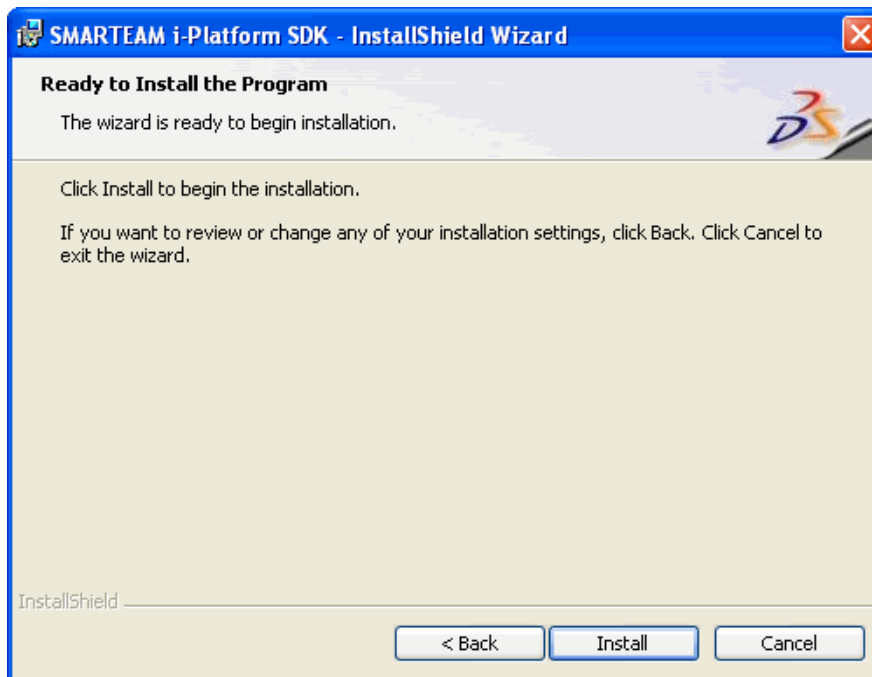
When using a **local user** name and password, enter the local computer name and user name in the following format: **local computer name\User Name**

When using a **domain user** name and password, enter the domain name and username in the following format: **domain name\User Name**
  - **Password** – Enter the user password.
  - **Confirm Password** – Enter the password again for the process to begin
  - Click **Next**



8 In the **Ready to Install the Program** window:

- Click **Install** to start the installation process and copy files from the CD-ROM to the designated folders on your computer.



In the InstallShield Wizard Completed window:

- Click **Finish**.

**Note:** After completing installation, you must allow Active Server Pages (ASP) in the Internet Service Manager (IIS).

## INSTALLING SMARTIXF SDK

This section describes the installation procedure for the SmartIXF SDK. The software is available on the DVS CD-ROM.

### To begin installing:

- 1 Insert the DVD-ROM containing the DVS software in the DVD-ROM drive.  
The SmartIXF SDK installation application is started automatically.

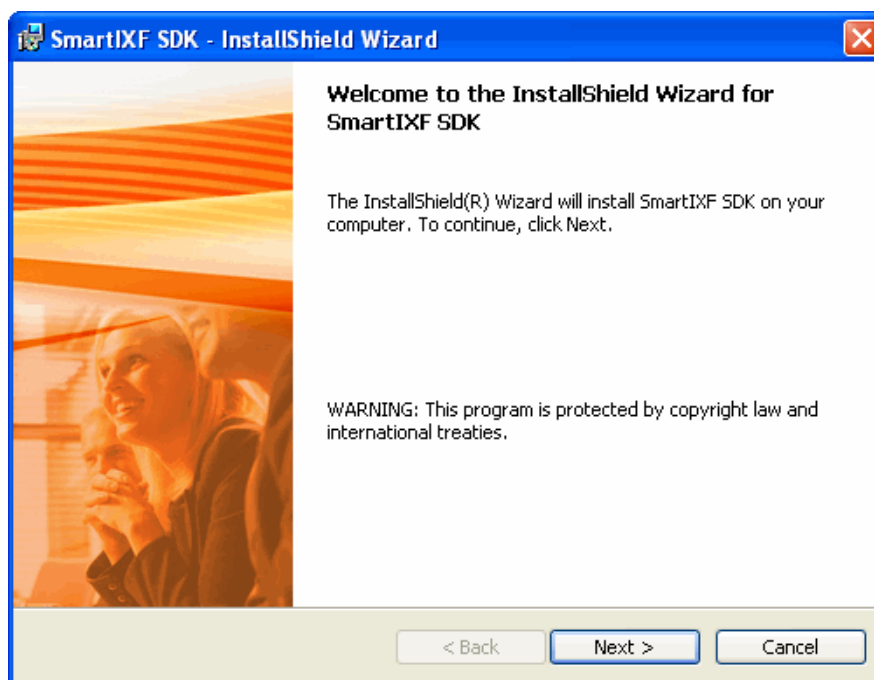


**Note:** If for some reason the opening screen does not appear, click on the **Start** button in the taskbar and select **Run** to open the Run utility. In the Run Open line, type **D:\install.exe** to run the installation setup program (where D denotes the DV ROM drive in which the DVD-ROM is inserted.)

- Click **i-Platform SDK**

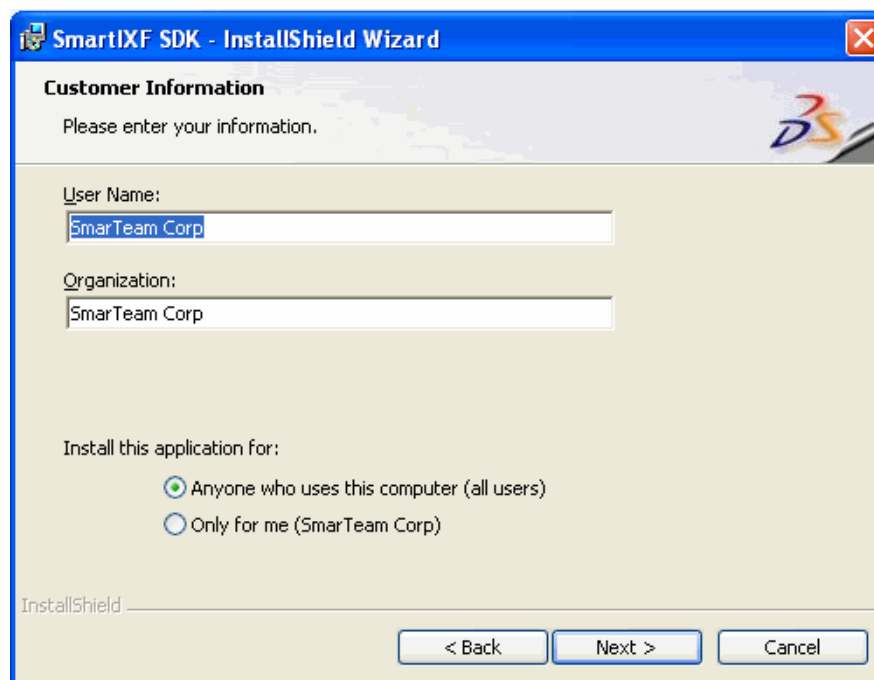
- 2 In the **Welcome** window:

- Click **Next**

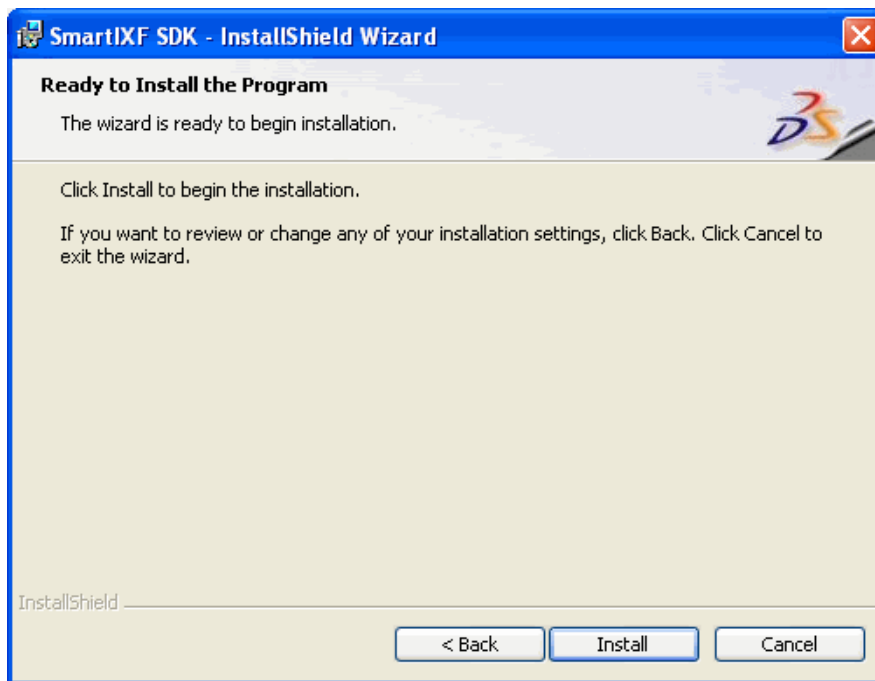


**3** In the Customer Information window:

- Personalize the program by entering your name and company details in the applicable fields.
- In the Install this application for section, select one of the following radio buttons:
  - Anyone who uses the computer (all users): Select this option to enable access to this installation by anyone who uses the specific computer
  - Only for me (user name): Select this option to enable access to this installation only to the user entered in the User Name field.
- Click **Next**



- 4 In the **Ready to Install the Program** window:
  - Click **Install** to start the installation process and copy files from the CD-ROM to the designated folders on your computer.



- 5 In the **InstallShield Wizard Completed** window:
  - Click **Finish**.

# Chapter 5: Post Installation

After the SmarTeam i-Platform software is installed, security issues are necessary. The following guidelines should be followed.

## Security Issues

By default, data traveling across the public Internet is not encrypted. Consequently, unless certain precautions are taken, malicious parties may be able to tap into the communication channel and access restricted information.

Specifically, the following security issues are relevant:

- Exposure of user name and password and other proprietary information can enable an intruder to gain unauthorized access to the SmarTeam platform.
- Scripts may use the built-in SmarTeam facilities to bypass the normal SmarTeam security mechanism. Hence, non-authorized use of the script mechanism can compromise SmarTeam information.

## Deploying on Secure Channels

In view of the security issues involved, it is recommended to deploy the i-Platform SDK components so that communication between them takes place on a secure channel. This section describes the ways in which the i-Platform SDK components are normally configured on a network and specifies the secure channels that are required for each network configuration.

## Network Deployment Configurations

The network configurations in which the i-Platform SDK components are normally installed, are as follows:

- **Intranet:** Communication takes place between clients and the i-Platform Server, or between a server application and the i-Platform Server, where all nodes are protected by the same firewall. When using this configuration, no special secure channel is normally required.
- **Internet/Extranet:** Communication takes place between clients and the i-Platform Server, where the clients are located – unprotected – outside the company's firewall, and the i-Platform Server is located within the company's firewall. In this configuration, a secure channel, such as SSL or VPN, is highly recommended.

## Using SSL

The HTTP communication channel can be encrypted using the SSL protocol.

The Secure Sockets Layer (SSL) is a commonly used protocol for managing the security of a message transmission on the Internet. SSL uses the public-and-private key encryption system from RSA, which also includes the use of a digital certificate. SSL is an integral part of most Web browsers (clients) and Web servers.

By using SSL, the danger of sensitive data such as login information, propriety information or files being captured by a malicious party is eliminated.

**Note:** Unless client-side certificates are used, SSL does not provide a strong form of client authentication and unauthorized clients possessing a valid user name and password can still access the system.

## Using a VPN

A virtual private network (VPN) is a private data network that makes use of the public telecommunication infrastructure, maintaining privacy through the use of a tunneling protocol and security procedures.

Using a VPN involves encrypting data before sending it over the Internet and decrypting it at the receiving end.

One popular VPN protocol is Point-to-Point Tunneling Protocol (PPTP), which is incorporated into several popular operating systems. VPN software is typically installed as part of a company's firewall server.

A major benefit of a VPN is that both the client and the server are fully authenticated, which prevents unauthorized clients from accessing the server and circumvents most common types of security attacks.

The network diagram in Figure 2 Configuring i-Platform SDK Components in a VPN illustrates how to configure the i-Platform SDK components in a VPN.

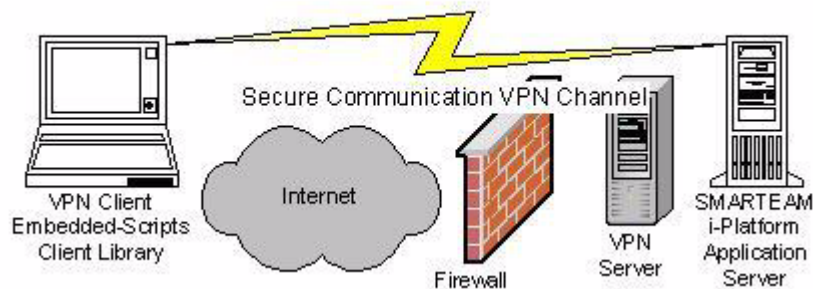


Figure 2 Configuring i-Platform SDK Components in a VPN

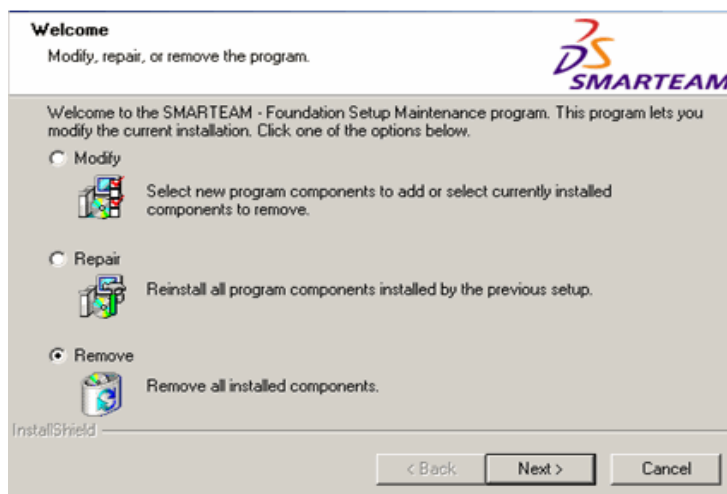


# Chapter 6: Troubleshooting

## Modify/ Repair/ Remove

If you have SmarTeam installed on your machine, when you insert the original software, the Program Maintenance window appears. The following options are available:

- **Modify:** Enables you to install new components that were not installed during the installation process. For details see [Modify](#).
- **Repair:** Repairs installation errors in the program. This option fixes missing or corrupt files, shortcuts and registry entries. For details see [Repair](#).
- **Remove:** Removes SmarTeam – Gateway from your computer. For details see [Remove](#).



### Modify

If you need to modify the configuration of the current SmarTeam – Gateway installation on the machine, select **Modify** and the Select Components window appears, enabling you to change the components selection.

### Repair

**To repair an error using the Add or Remove Programs facility on your computer:**

- 1** Select **Start, Settings, Control Panel, Add or Remove Programs**.
- 2** Select **SmarTeam – Gateway Installation**.
- 3** Click "**Click here for support information**" link; the Support Info window appears.
- 4** Click **Repair** in order to repair the installation.

## Remove

If required you can remove SmarTeam – Gateway Installation from your computer. This can be done by using either the Release CD or the Add or Remove Programs facility on your computer.

To uninstall a Service Pack you need only to uninstall the Release. This will automatically remove the relevant Service Packs.

### ***To uninstall using the Release CD:***

- 1** Insert the SmarTeam – Gateway Installation release CD. The Program Maintenance window is displayed.
- 2** Select **Remove**.
- 3** Click **Next**.

Follow the remaining instructions on the CD.

### ***To uninstall using the Add or Remove Programs facility on your computer:***

- 1** Select **Start, Settings, Control Panel, Add or Remove Programs**.
- 2** Select **SmarTeam – Gateway Installation**.
- 3** Click **Remove**.

## Known Issues

For installation known issues, refer to the SmarTeam Support Web Site.

## Frequently Asked Questions

For Frequently Asked Questions (FAQ) refer to the SmarTeam Support Web Site.