

# SmartProject (SP9)

BPA Delivery 6 for V5R19 (V5.6)

## *Implementation Guide*

---



## Table of content

<i>Chapter 1: Introduction .....</i>	<i>3</i>
1. What is SMARTPROJECT? .....	3
<i>Chapter 2: Prerequisites for Installation.....</i>	<i>3</i>
1. Hardware .....	3
2. Software .....	3
<i>Chapter 3: Installation of SMARTPROJECT code .....</i>	<i>4</i>
a. Installation of the application.....	4
<i>Chapter 4: Usage of Demo database and Licensing Mechanism .....</i>	<i>9</i>
<i>Chapter 5: Implementation of SMARTPROJECT on an existing database .....</i>	<i>10</i>
1. Data Model Source (WizSrc).....	14
a. In case you have SQL Server Management Studio .....	14
b. In case you don't have SQL Server Management Studio .....	17
2. Create a new Database.....	20
3. Data Model Designer.....	22
4. SQL Scripts.....	30
5. Values for Lookup tables.....	31
6. Sequence Designer.....	31
7. Menu Editor .....	32
8. Web Form Designer .....	41
9. User Maintenance .....	52
10. Configuration Settings .....	52
11. NLS Settings .....	54
12. Server Side Scripts:.....	54
<i>Chapter 6: Updating Database From D4 to D6 .....</i>	<i>56</i>
<i>Chapter 7: Uninstallation of SMARTPROJECT .....</i>	<i>56</i>

# Chapter 1: Introduction

---

The purpose of this document is to help the reader understand how to install the BPA SMARTPROJECT.

## *1. What is SMARTPROJECT?*

---

SMARTPROJECT is a Project Management tool upon SMARTEAM WEB EDITOR.

# Chapter 2: Prerequisites for Installation

---

## *1. Hardware*

---

Based on SMARTEAM WEB Editor

## *2. Software*

---

- SMARTEAM WEB Editor (Must)
- Microsoft Excel (Must for reporting)
- Microsoft Project (Optional for import/export)
- PLM DB (if running with Demo database)

## *3. Operating system*

---

Microsoft Windows Server 2003 SP2

## Chapter 3: Installation of SMARTPROJECT code

---

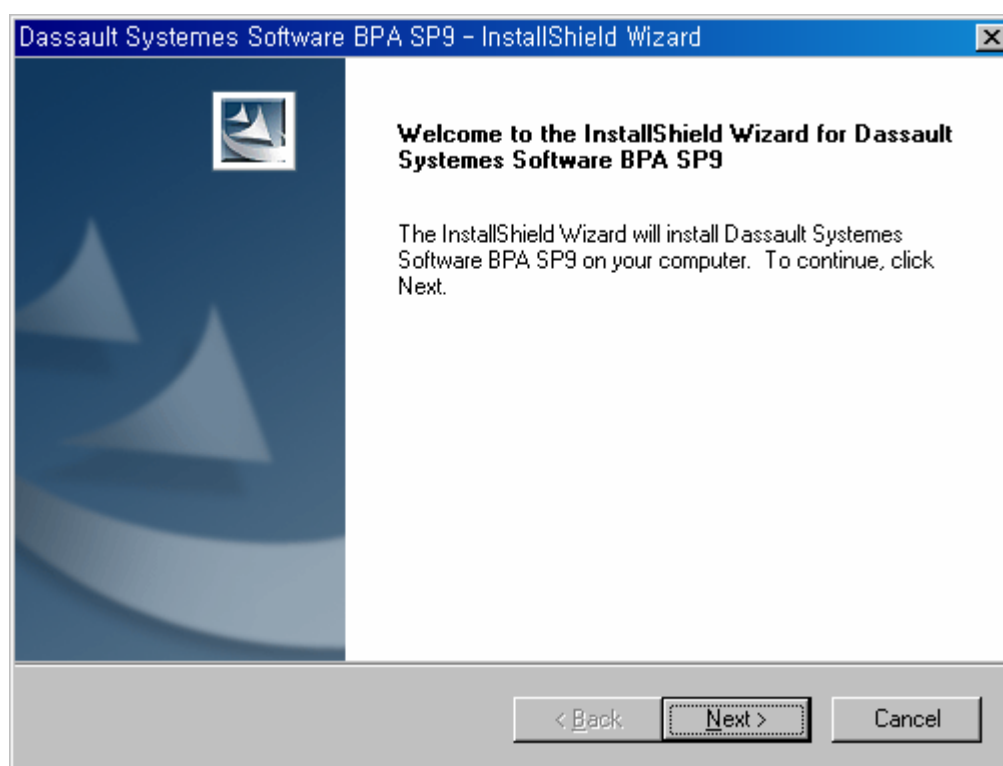
### *a. Installation of the application*

---

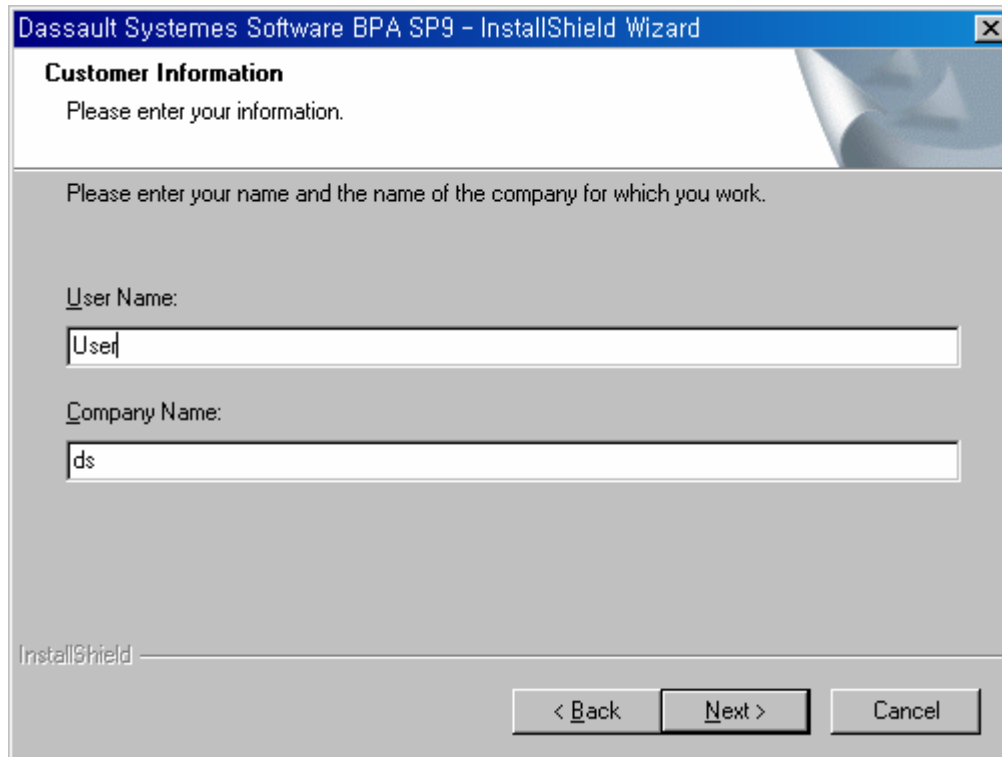
Launch the setup.exe file contained in the zip file

The following window will appear and disappear once the preparing step is done:

At the end, the following window appears, if SMARTPROJECT is not installed on the computer yet



Click on Next button



**Dassault Systemes Software BPA SP9 - InstallShield Wizard**

**Customer Information**  
Please enter your information.

Please enter your name and the name of the company for which you work.

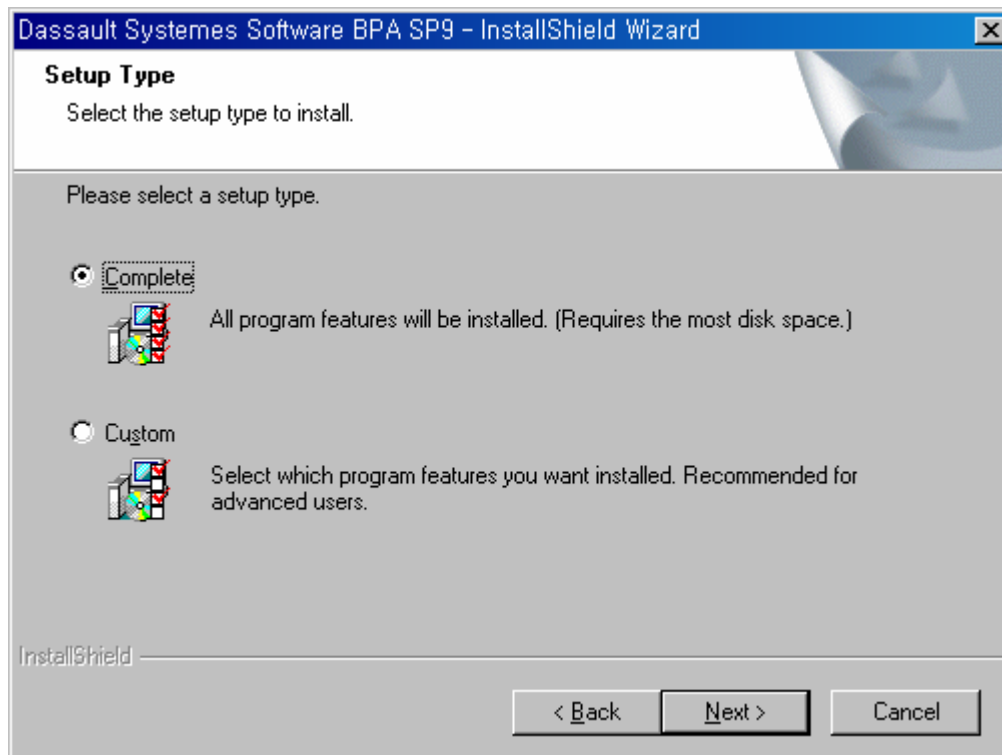
User Name:  
User

Company Name:  
ds

InstallShield

< Back   Next >   Cancel

Enter your user name and company name (no check is done afterwards it is just an information)  
Click on Next Button



**Dassault Systemes Software BPA SP9 - InstallShield Wizard**

**Setup Type**  
Select the setup type to install.

Please select a setup type.

☒ Complete  
All program features will be installed. (Requires the most disk space.)

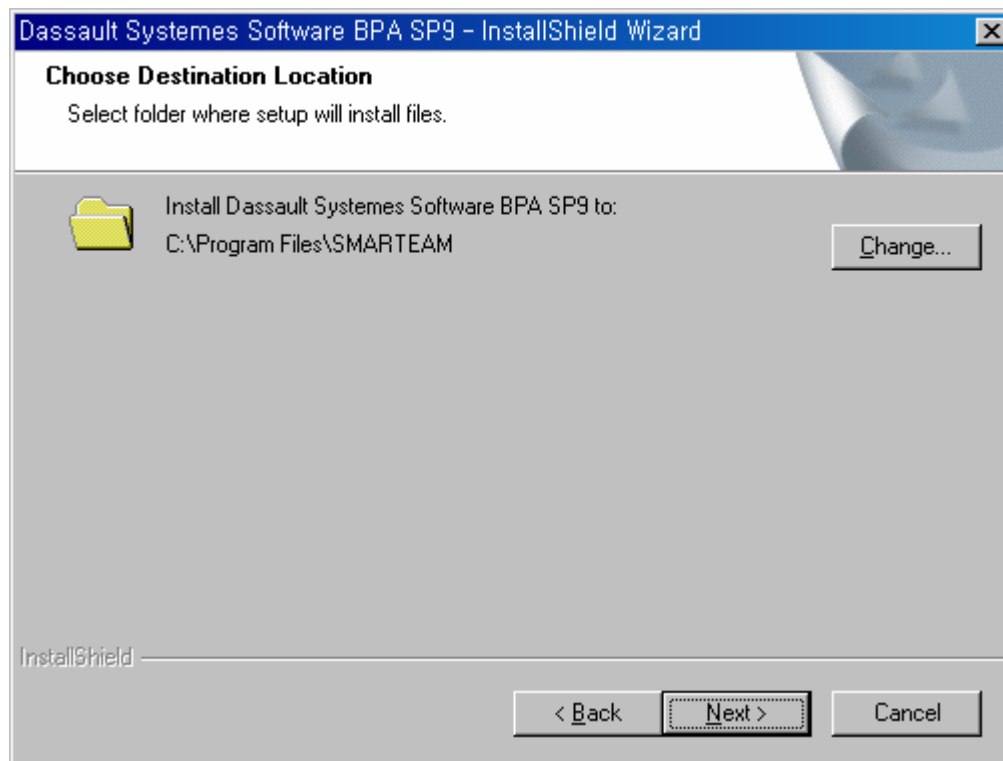
☐ Custom  
Select which program features you want installed. Recommended for advanced users.

InstallShield

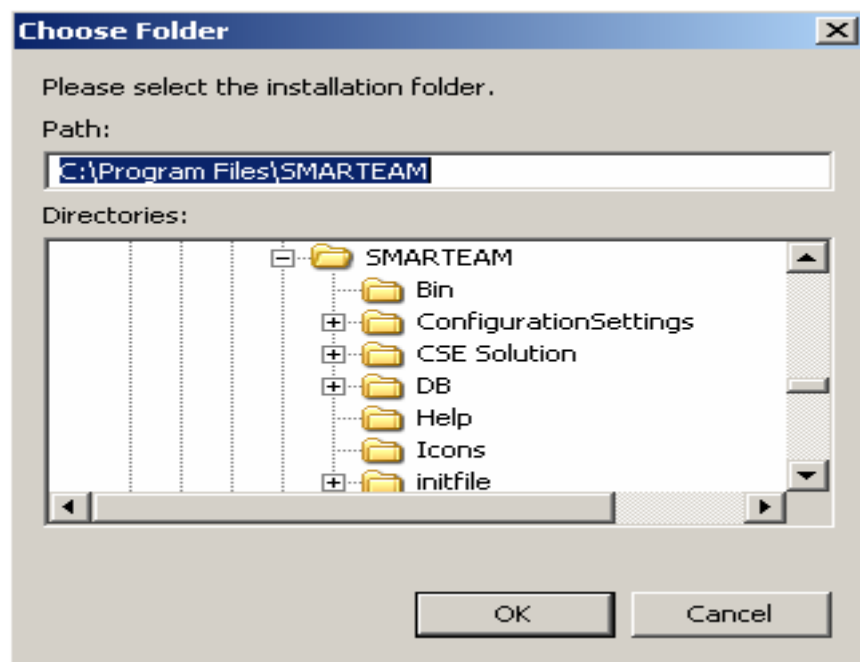
< Back   Next >   Cancel

If you select “complete”, it will install the full solution in the SMARTEAM installation directory. We recommend selecting “Custom”.

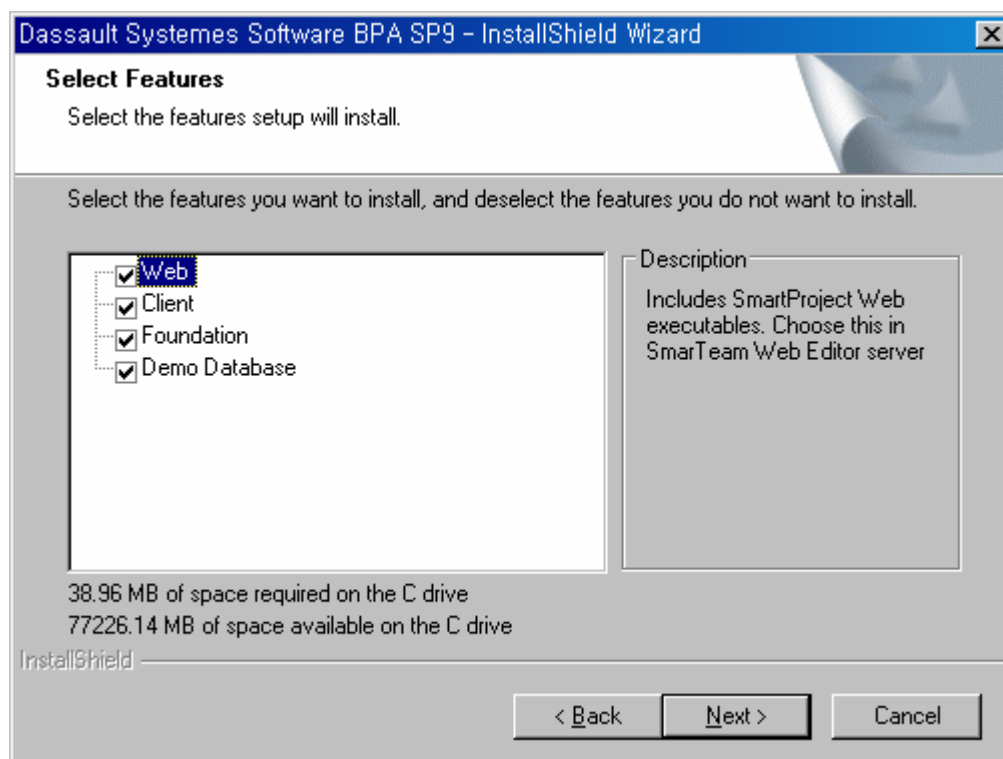
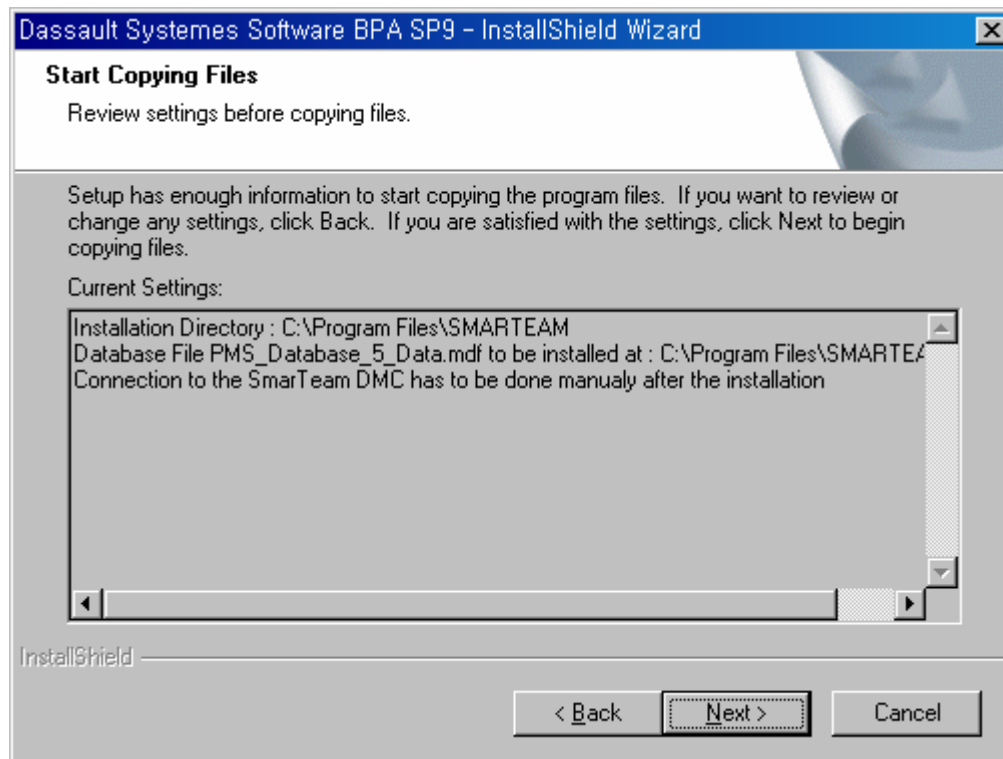
Click on Next



If you want to change the directory where to install the application, please select “change” button:



Once you entered the appropriate path, select OK and Next.



Meaning of the bullets:

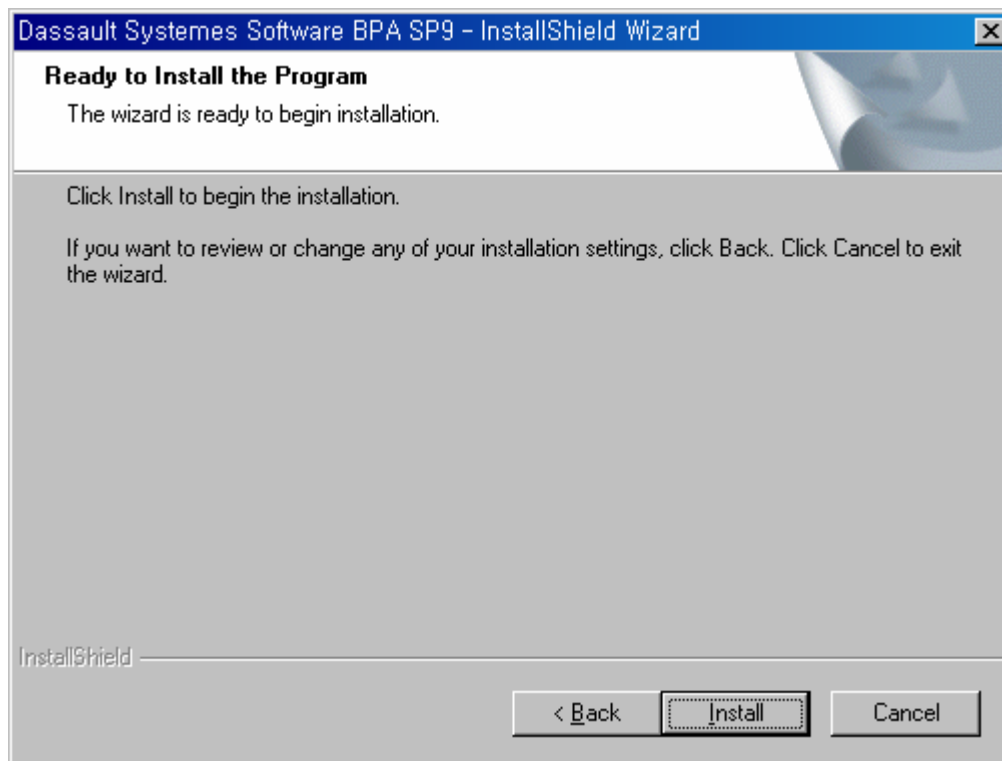
Web Application: SMARTPROJECT Executables

Foundation: Configuration of XML and NLS files.

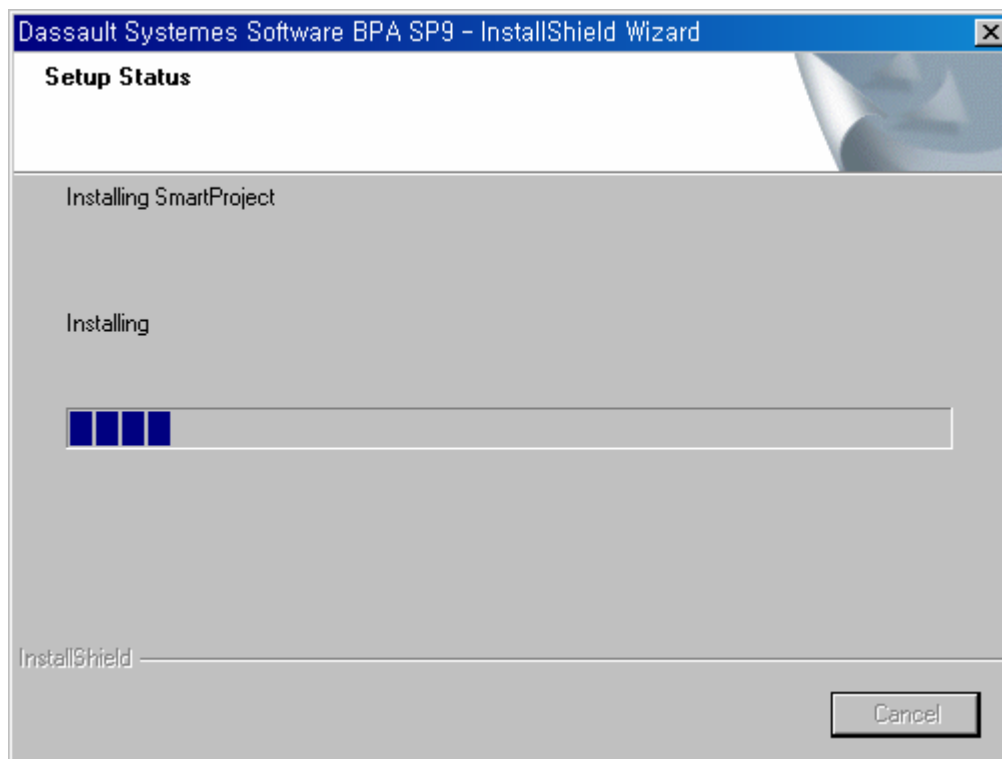
Client: Import and Export functions

Demo Database: Install the empty demo database, already configured to run SMARTPROJECT

Select what you want to install and click on Next.

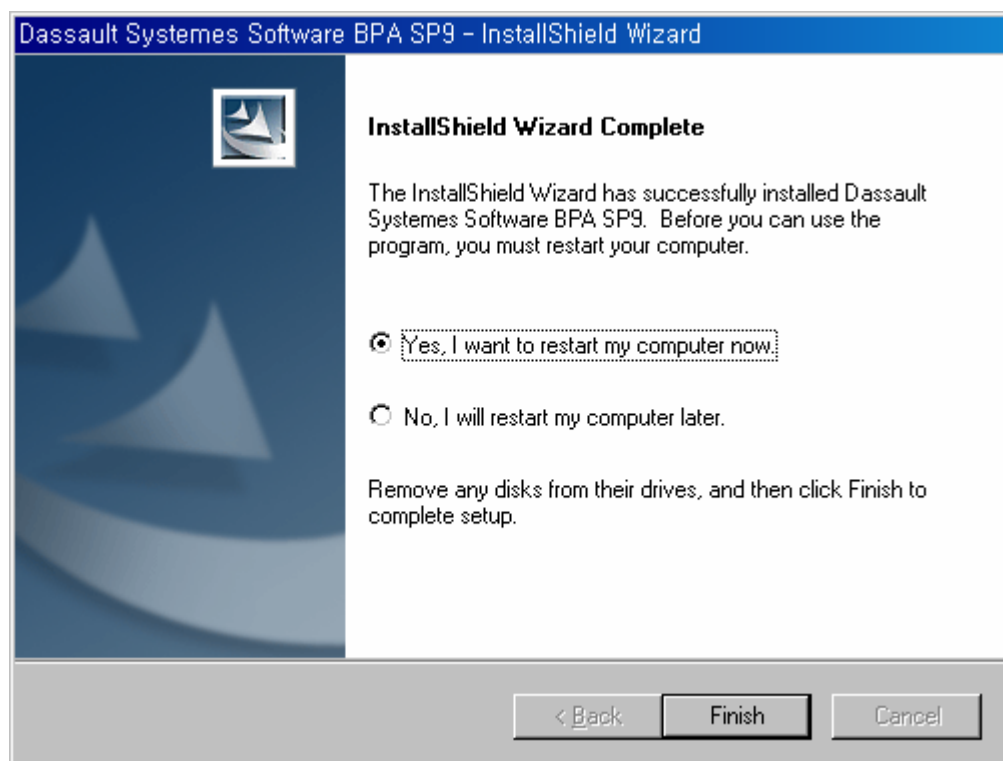


Click on Install



Once the installation is done, the following window appears:





Click on “Finish”.

You can check that the application is visible in the “control panel” / “Add or Remove programs” command.

## Chapter 4: Usage of Demo database

---

If you want to run SMARTPROJECT application with the Demo database which is provided in the setup, you need to attach Demo DB.

Attach the demo database installed in the DB directory of your installation directory. Use Database connection Manager Tool to make the attachment.

# Licensing Mechanism

---

Ask for a license and copy or enroll licenses as per following.

## Software Requirements:

- The license server should have LUM 4.6.8.3 or above installed.

To ask a license, the following information must be provided:

- Product Name: This is the BPA trigram.
- License Type: nodelock or concurrent.
- Number of License: 1 for nodelock , >0 for Concurrent
- LUM targetID: Provide the target id (run i4target in a DOS window)
  - On Client side for Nodelock
  - On Server side for Concurrent

On receiving the license:

- For Nodelock type of license
  - Modify/ Create Nodelock file by inserting necessary information (VendorID, ProductPassword ) - See Appendix A
- For Concurrent type of license
  - Enroll the license on the LUM server - See Appendix B

## ***Appendix A : Creating a Nodelock file***

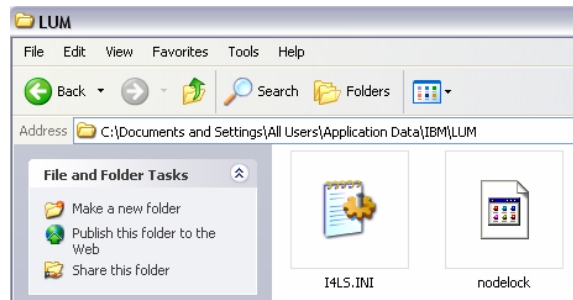
### **Nodelock file : how to proceed**

You should input yourself the parameters of your License into the nodelock file (create it if ***doesn't exist***)

- This file is located in C:\Documents and Settings\All Users\Application Data\IBM\LUM\nodelock
- You should extract from the .lic file the following informations :
  - VendorID (looks like an UUID)
  - ProductPassword (a crypted key)
  - ProductAnnotation (should be unset)
  - ProductVersion (should be set to 1)

- And insert them in nodelock file by respecting the order
  - *# comment : put your BPA trigram and its range date*
  - *vendorID ProductPassword ProductAnnotation ProductVersion*

Example :

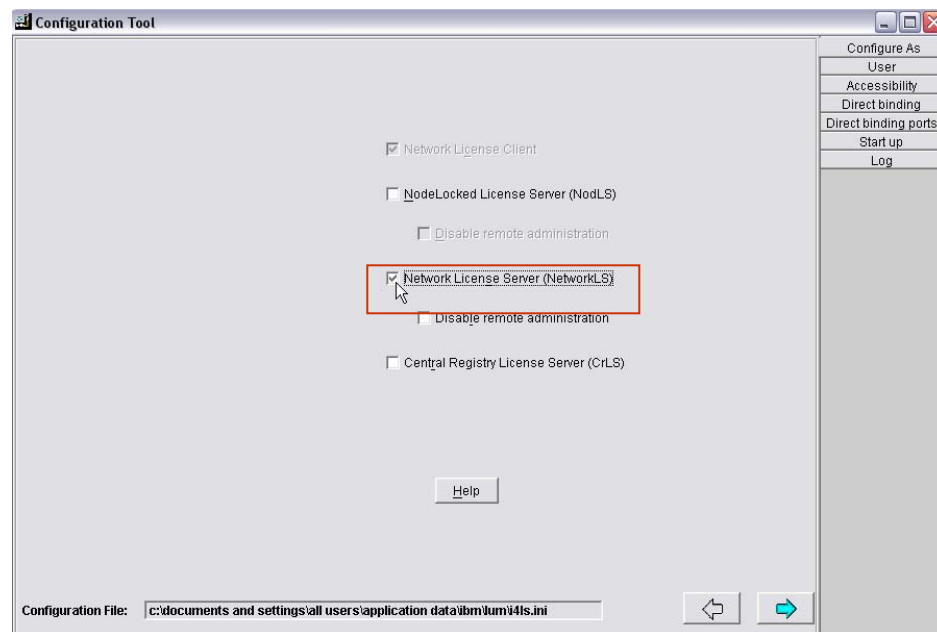


## Appendix B : Enrolling a Concurrent license on the Network license server

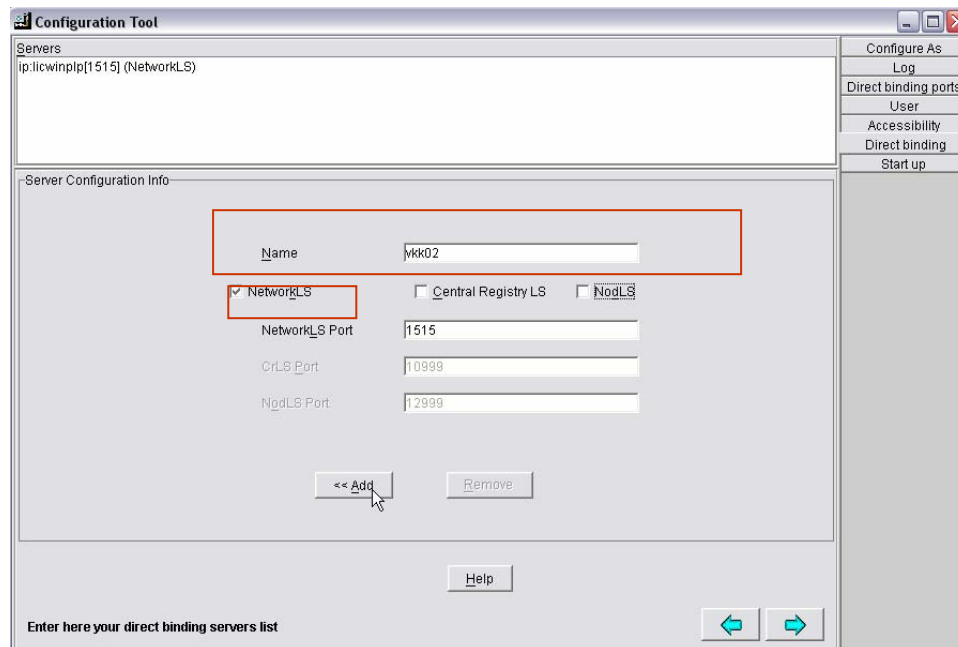
Setting up the Network License server:

Start > Programs> License Use Runtime > Configuration tool

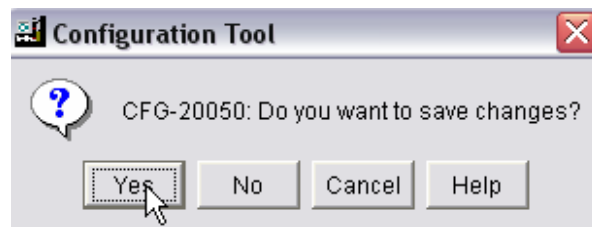
- Stop the service if needed using the Service Manager Tool.
- Ensure that the option for Network License Server is selected



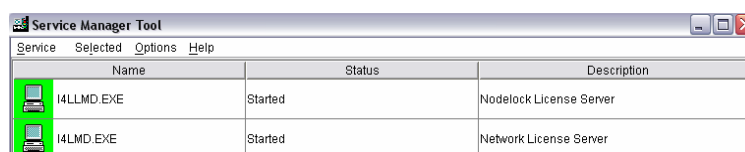
- Switch to the Direct Binding tab.
- In the Name field enter the machine name
- Check the box for NetworkLS and click on Add button



- Close the Configuration Tool window and validate accepting the changes



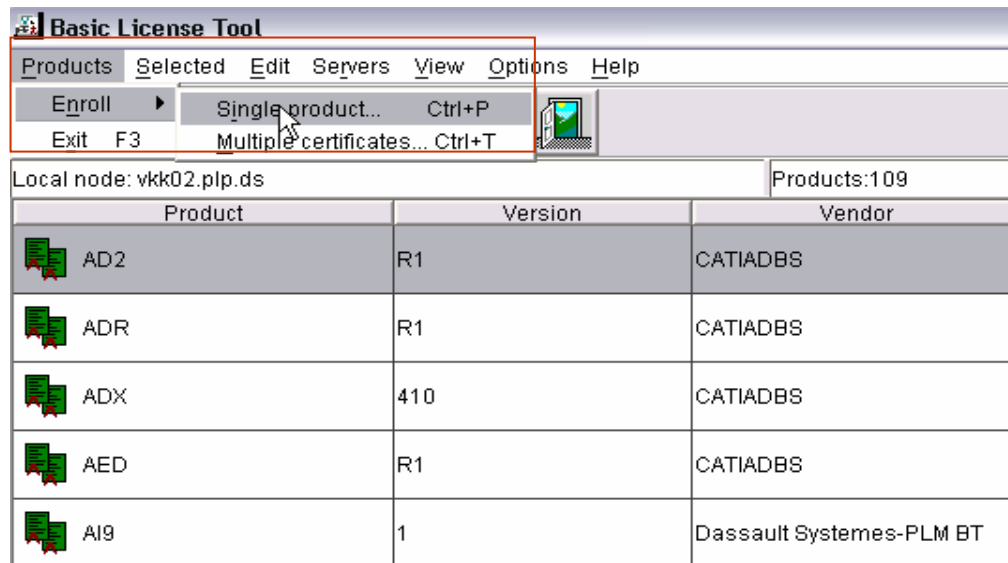
- Pass the message to restart the service (if previously it was stopped)



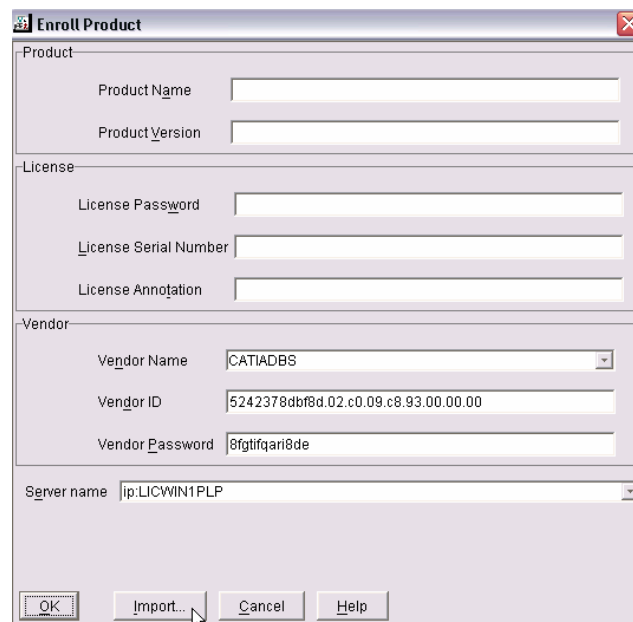
## Enrolling the Concurrent License

Start > Programs> License Use Runtime > Basic License Tool

- Select Product / Enroll/ ....
  - Choose Single or Multiple depending on whether you want to enroll a single or multiple licenses at a time.



- Click on Import button



# Chapter 5: Implementation of SMARTPROJECT on an existing database

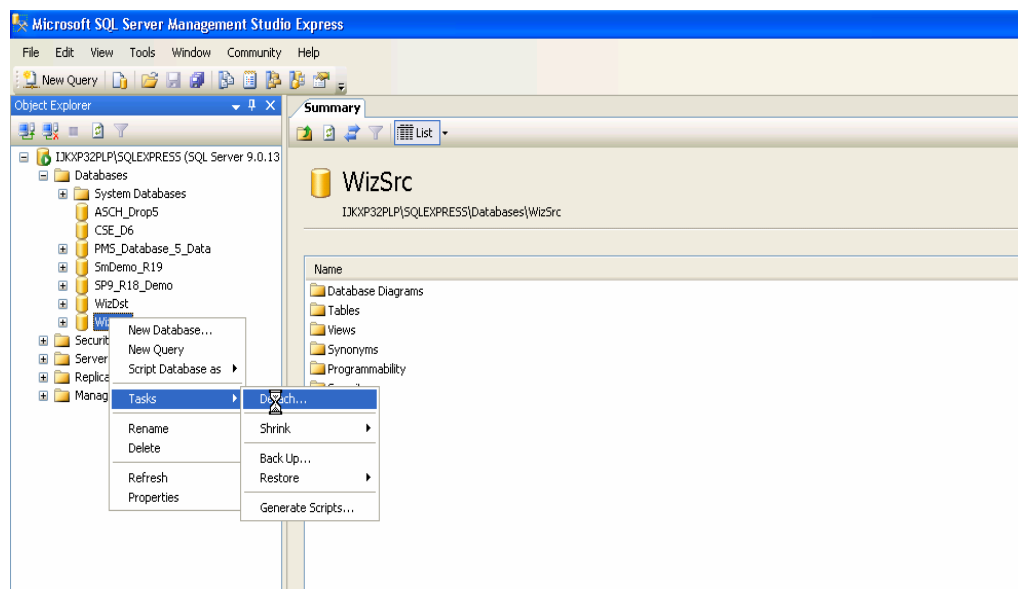
This chapter describes the steps that must be performed to implement the BPA SMARTPROJECT on top of PLM database. IF you need to implement it on top of another database, follow the same steps, only the screenshot will probably be different.

**Note:** The WizSrc database will not be provided along with the setup. It will be provided only if required by the customer. Hence the Wizsrc DB will not be copied in the SmarTeam\DB directory as it is not present in the setup.

## 1. Data Model Source (WizSrc)

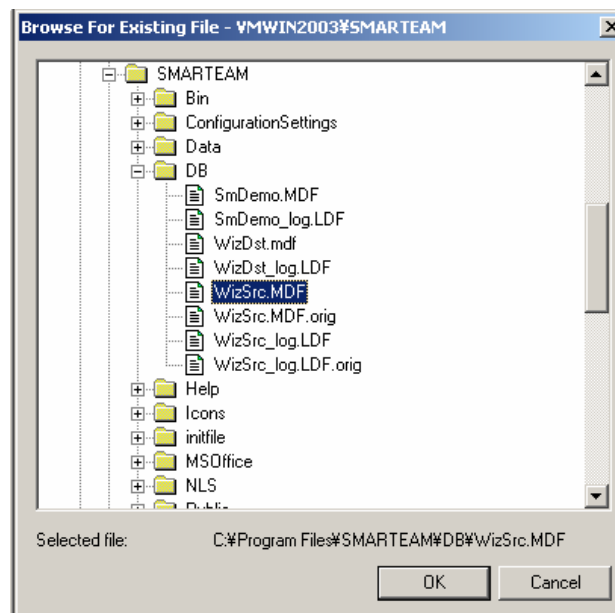
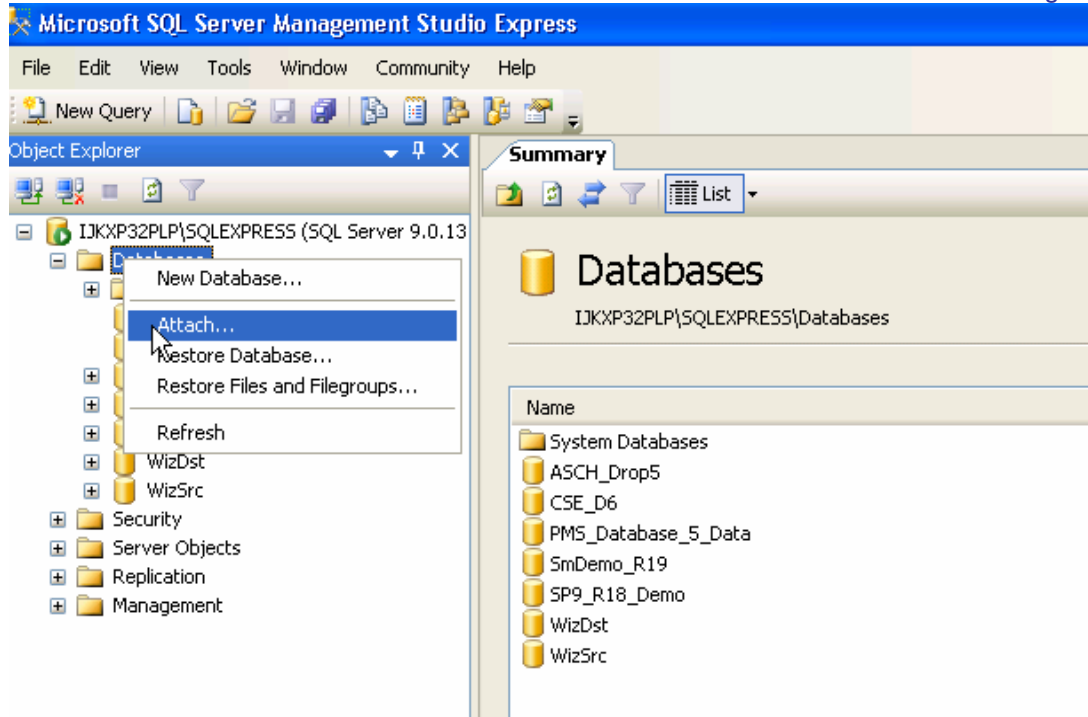
### a. In case you have SQL Server Management Studio

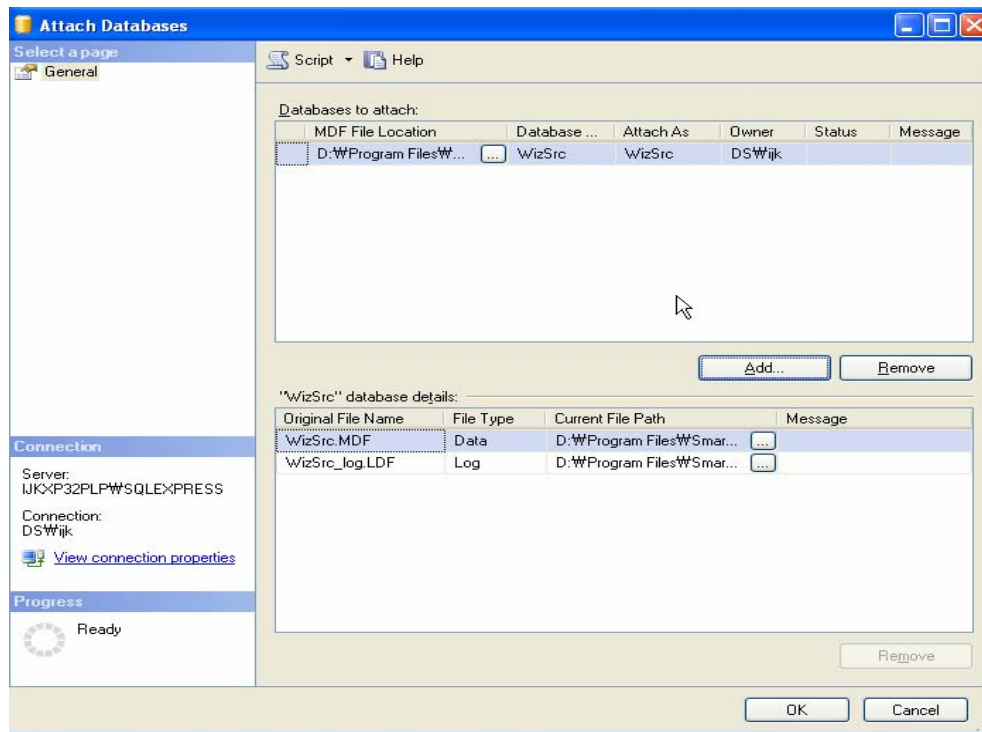
1. Check that a WizSrc.mdf file was copied in the DB directory
2. Detach the original one in SQL Server Management Studio



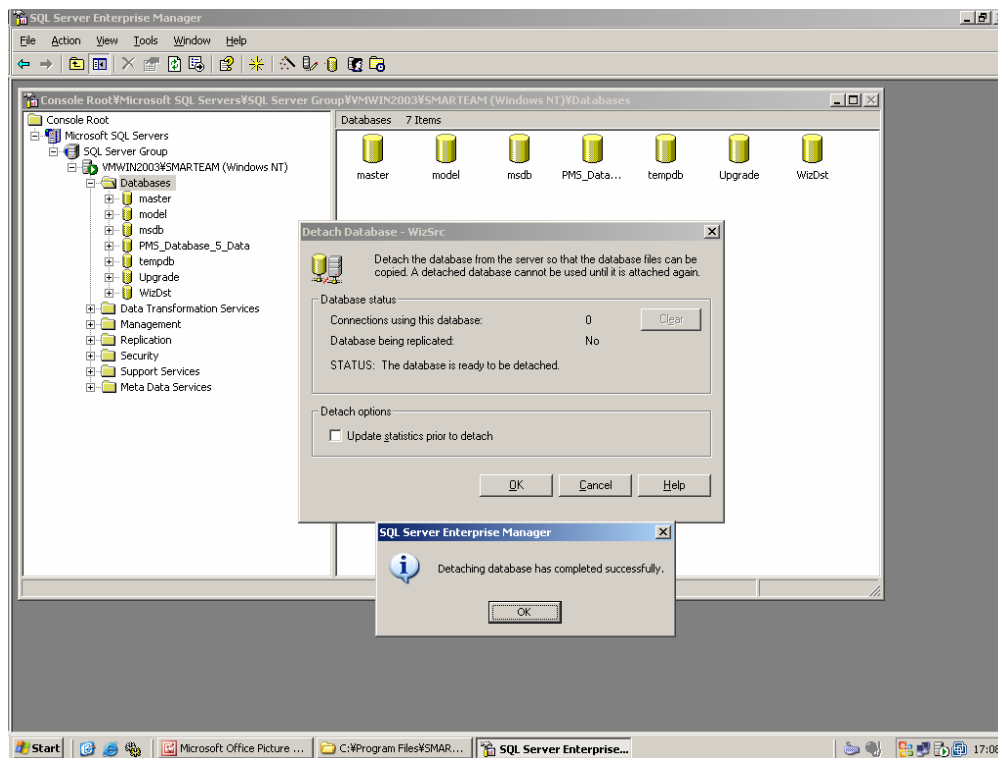
3. Replace the original one with the new one

4. Attach the new one in SQL Server Management Studio



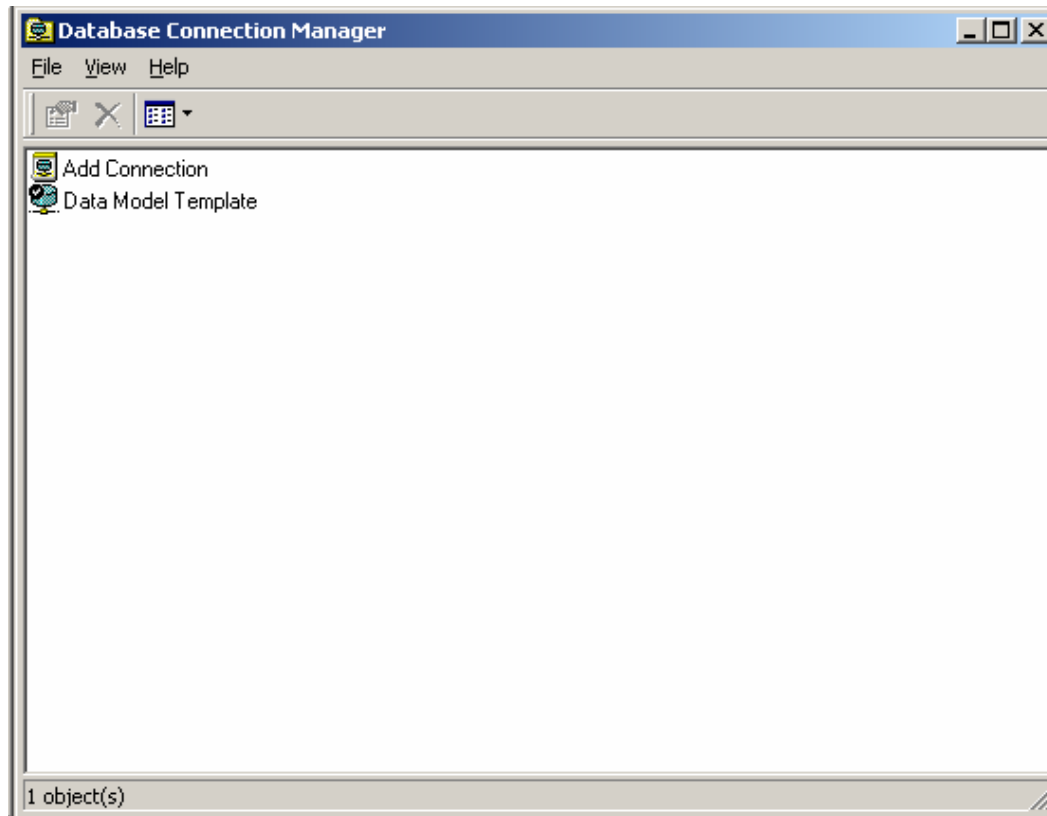


## 5. Detach again the database



## 6. Attach the Wizsrc with Database Connection Manager

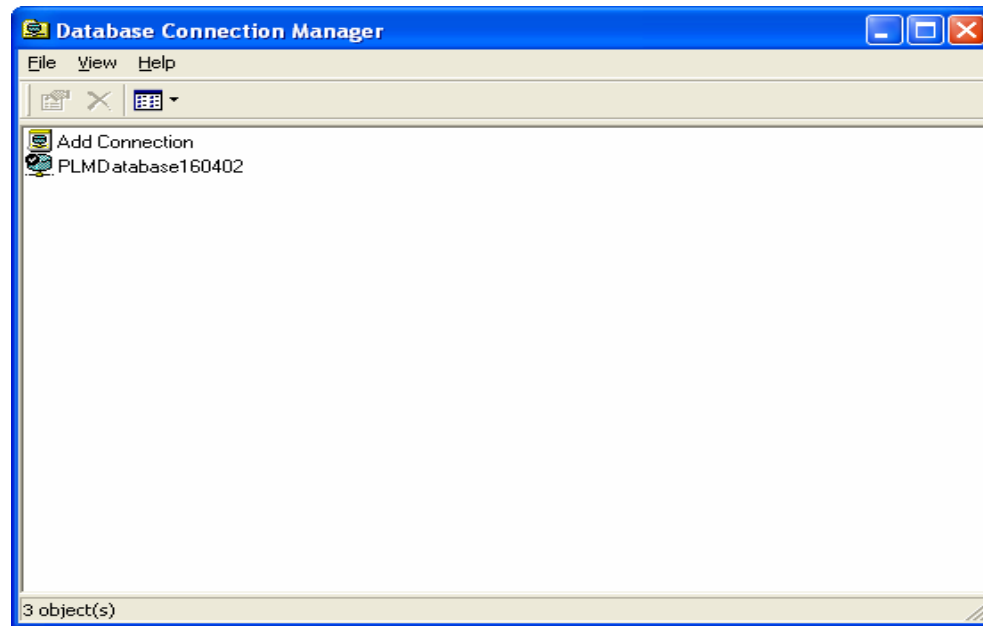




7. Delete this newly created connection (Delete, not Detach)

## ***b. In case you don't have SQL Server Management Studio***

By default, a standard WizSrc database is already connected to Smarteam. But, if you open the Database connection manager, you will not see any WizSrc displayed, as shown below:



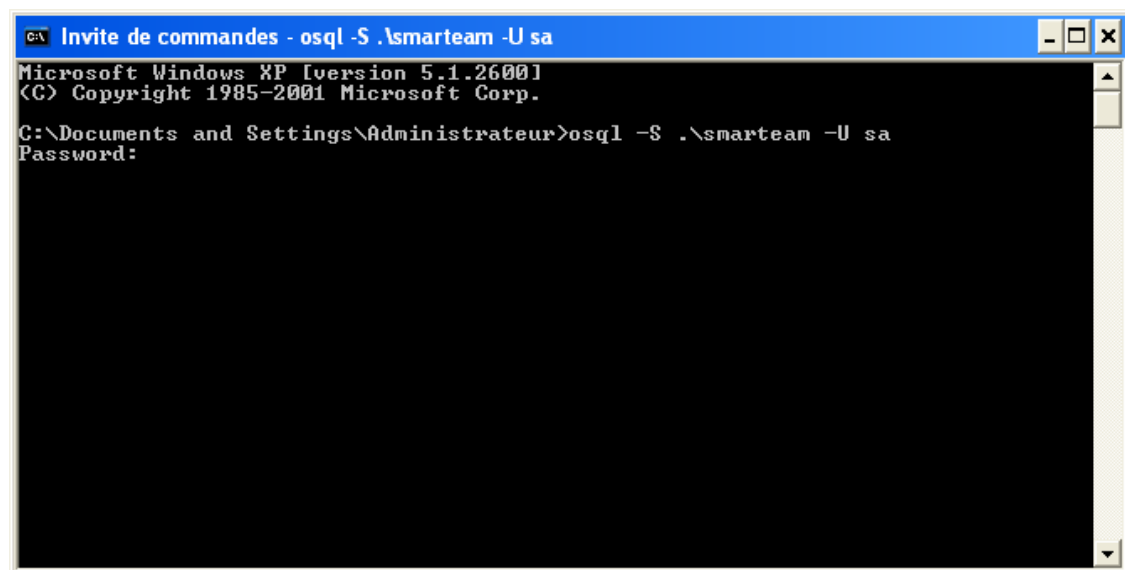
*The WizSrc database cannot be found here.*

To disconnect it, you will need to use command lines.

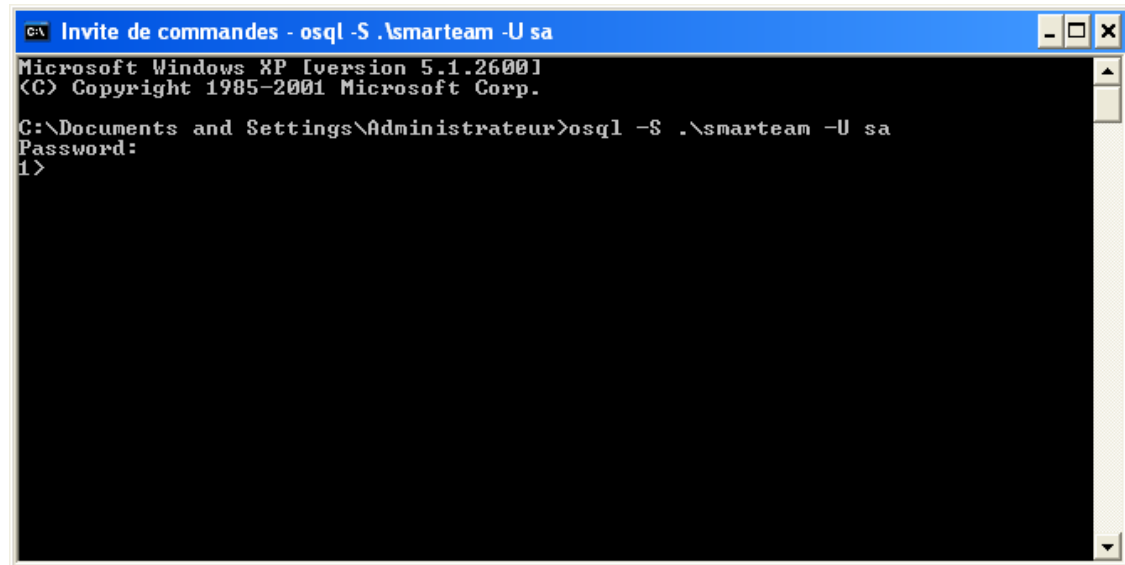
- open a cmd window : click on "start"->"execute", then type "cmd" and press "enter"
- Type the following command:

***Osql -S .\smarteam -U sa***

"Sa" is the user name generally used. If you have set another one, you may type it instead.  
You may then get the following window:



- Type the password that's prompted. Usually "sa" or "smarteam"
- You should get the following prompt :

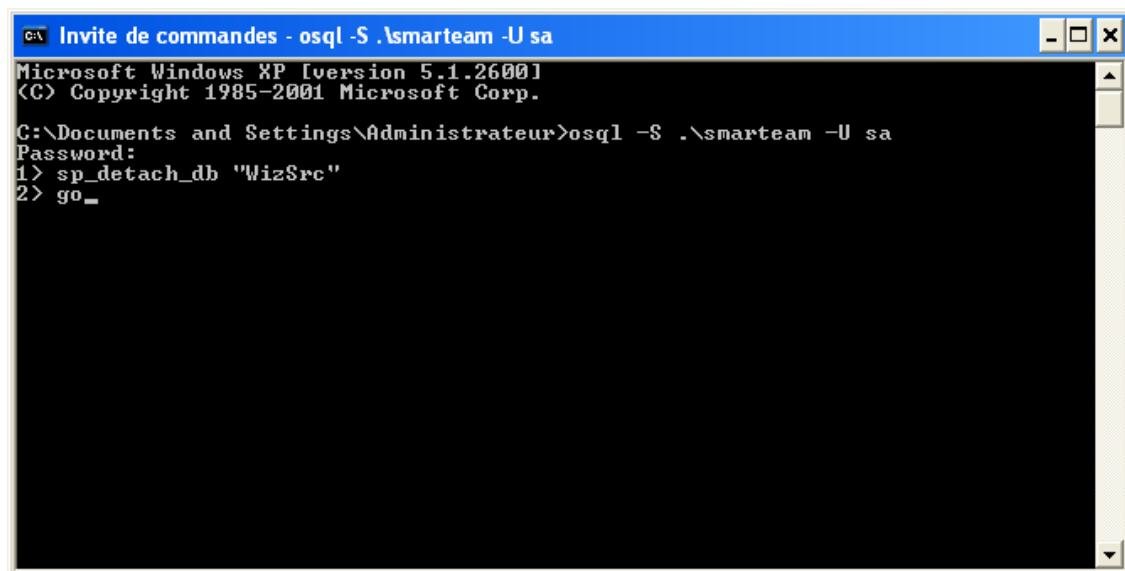


- Then at this prompt, type the following instruction and press enter.

***sp\_detach\_db "WizSrc"***

Here, "WizSrc" is the name of your WizSrc database. Do not forget the quotes.

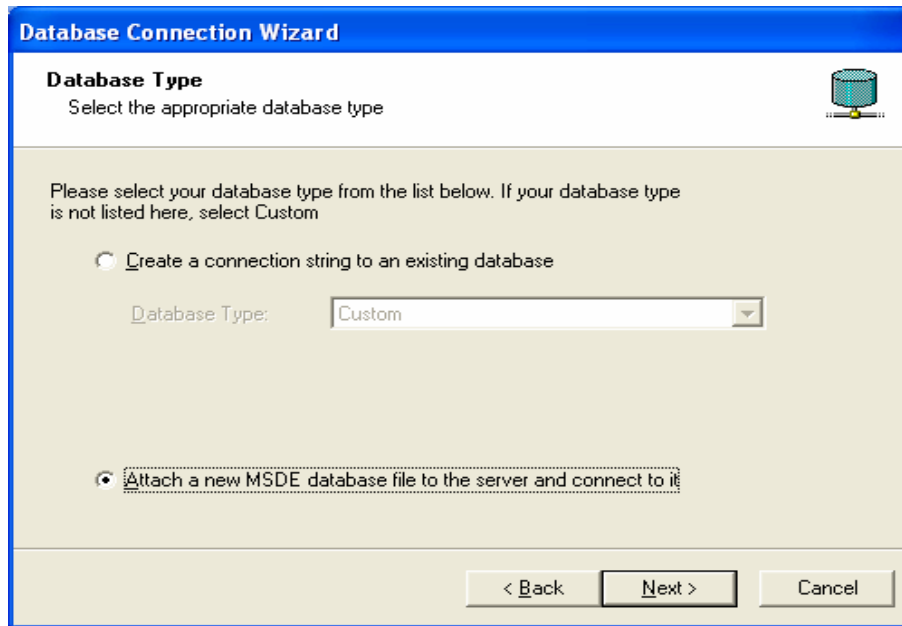
- To actually execute the previous command, type "go" and press enter as shown below :



- Then type "exit" (without quotes here) and close the cmd window.

You can now replace the previous WizSrc.mdf file with the new one. Place it in the DB folder of your Smarteam installation, usually: c:\program file\smarteam\db\

- Do not forget to delete the WizSrc.LDF (log file) that is placed in the same directory.
- Now you can simply connect the new WizSrc file as a normal database with the Smarteam Database connection manager.



## 2. *Create a new Database*

Create a new DB in SQL Server Management Studio and be sure you select the right **Collation Name** you wanted.

Note: The collation name should be case insensitive (CI), not case sensitive (CS). Here is a sample

**New Database**

Select a page: General, Options, Filegroups

Script Help

Database name: SampleDB

Owner: SMARTTEAM

☐ Use full-text indexing

Database files:

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth
SampleDB	Data	PRIMARY	2	By 1 MB, unrestricted growth
SampleDB_log	Log	Not Applicable	1	By 10 percent, unrestricted growth

Connection:

Server: JKKXP32PLP\SQLEXPRESS

Connection: DS\JKK

[View connection properties](#)

Progress: Ready

Add Remove

OK Cancel

**New Database**

Select a page: General, Options, Filegroups

Script Help

Collation: Chinese\_Taiwan\_Stroke\_CI\_AS

Recovery model: Simple

Compatibility level: SQL Server 2005 (90)

Other options:

☒ Automatic

Auto Close	False
Auto Create Statistics	True
Auto Shrink	False
Auto Update Statistics	True
Auto Update Statistics Asynchronously	False

☒ Cursor

Close Cursor on Commit Enabled	False
Default Cursor	GLOBAL

☒ Miscellaneous

ANSI NULL Default	False
ANSI NULLS Enabled	False
ANSI Padding Enabled	False
ANSI Warnings Enabled	False
Arithmetic Abort Enabled	False
Concatenate Null Yields Null	False
Cross-database Ownership Chaining Enabled	False
Date Correlation Optimization Enabled	False
Numeric Round-Abort	False

ANSI NULL Default

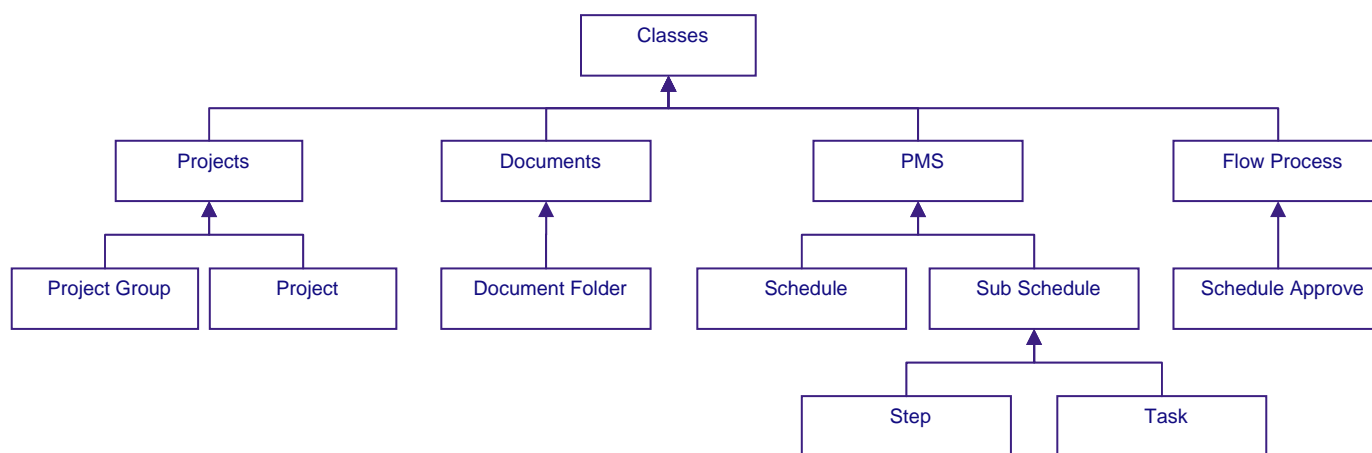
OK Cancel

Add SMARTEAM login to the DB as DB owner

With SmartDBExplorer, copy PLM Database to the new database

### 3. *Data Model Designer*

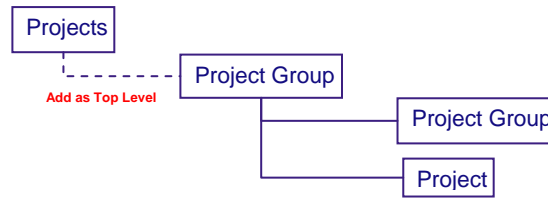
1. Launch SMARTEAM Data Model Designer
2. Modify PLM database (or the database you want to add SMARTPROJECT in)
3. Global database settings
  - 3.1 Un-check (Remove) "Program Management"
  - 3.2 Select "SmartProject"
  - 3.3 Click button "Next"



4. Apply "Revision Control" and "Workflow" Class Mechanism to PMS class
4. Create Step class under Schedule
5. Create Project Group class under Projects
- 6. Create process classes: Project Creation Approval, Schedule Approval, and Project Closing Approval**
7. Apply "PMS User Class Behavior" to Users class
 

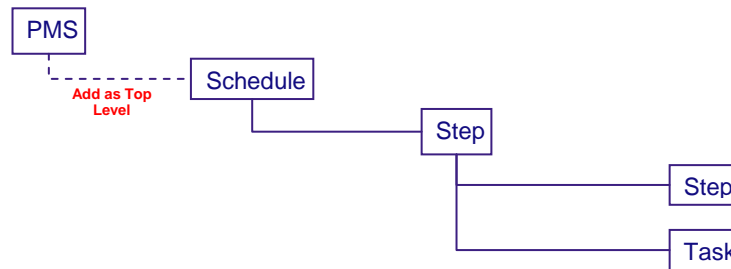
(Remark: The required attributes will be added into related classes based on your behavior assignment.)
8. Apply "PMS Project Class Behavior" to Projects class
9. Apply "PMS Project Leaf Class Behavior" to Project class
10. Apply "PMS Document Class Behavior" to Documents class
11. Apply Workflow and Revision Control behaviors to PMS class
12. In Projects classes, define only Project Group as Add as Top Level
 

Uncheck "Add as top level" of "Projects", and check "Add as top level" for "Project Group" only



13. In PMS classes, define only Schedule as Add as Top Level

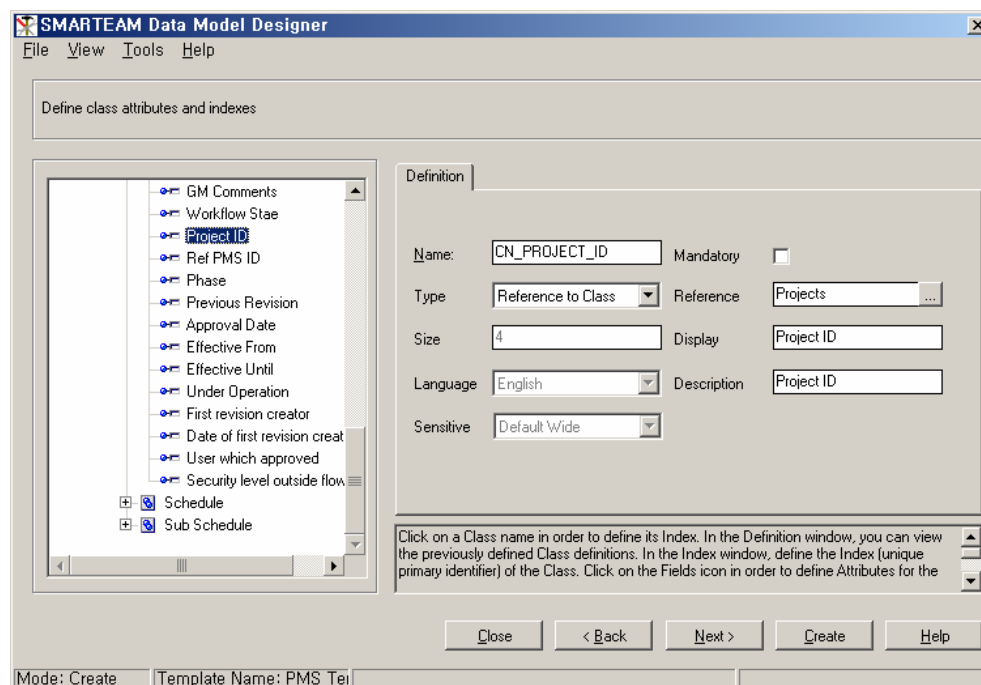
Uncheck **"Add as top level"** of "PMS", and check **"Add as top level"** for "Schedule" only



14. Define all the icons for the new classes

15. Create "Ref PMS ID" and "Project ID" attributes in PMS class, as reference to PMS and Projects classes

Display Name	Filed Name	Field Type
Project ID	CN_PROJECT_ID	REF (Projects)
Ref PMS ID	CN_REF_PMS_ID	REF (PMS)



SMARTTEAM Data Model Designer

File View Tools Help

Define class attributes and indexes

Definition

Name: CN\_PROJECT\_ID Mandatory ☐

Type: Reference to Class Reference: Projects

Size: 4 Display: Project ID

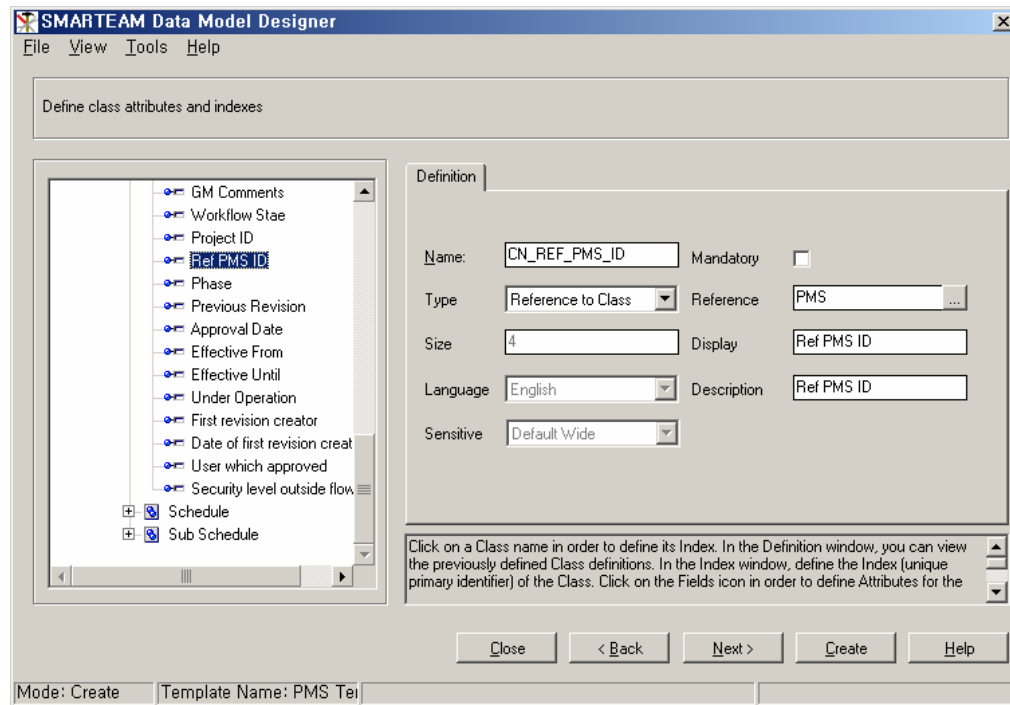
Language: English Description: Project ID

Sensitive: Default Wide

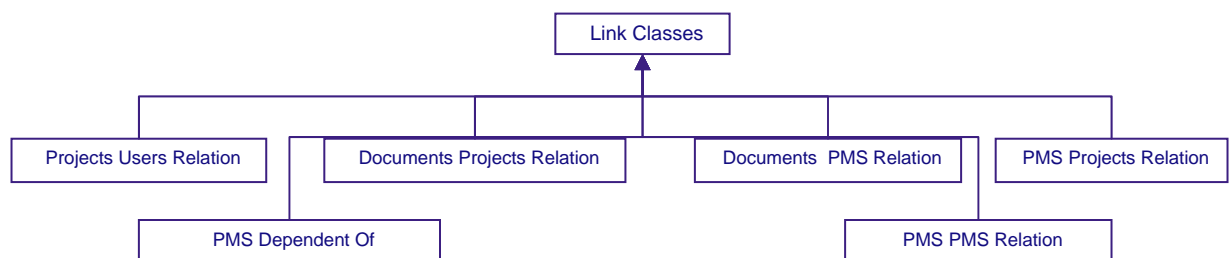
Click on a Class name in order to define its Index. In the Definition window, you can view the previously defined Class definitions. In the Index window, define the Index (unique primary identifier) of the Class. Click on the Fields icon in order to define Attributes for the

Close < Back Next > Create Help

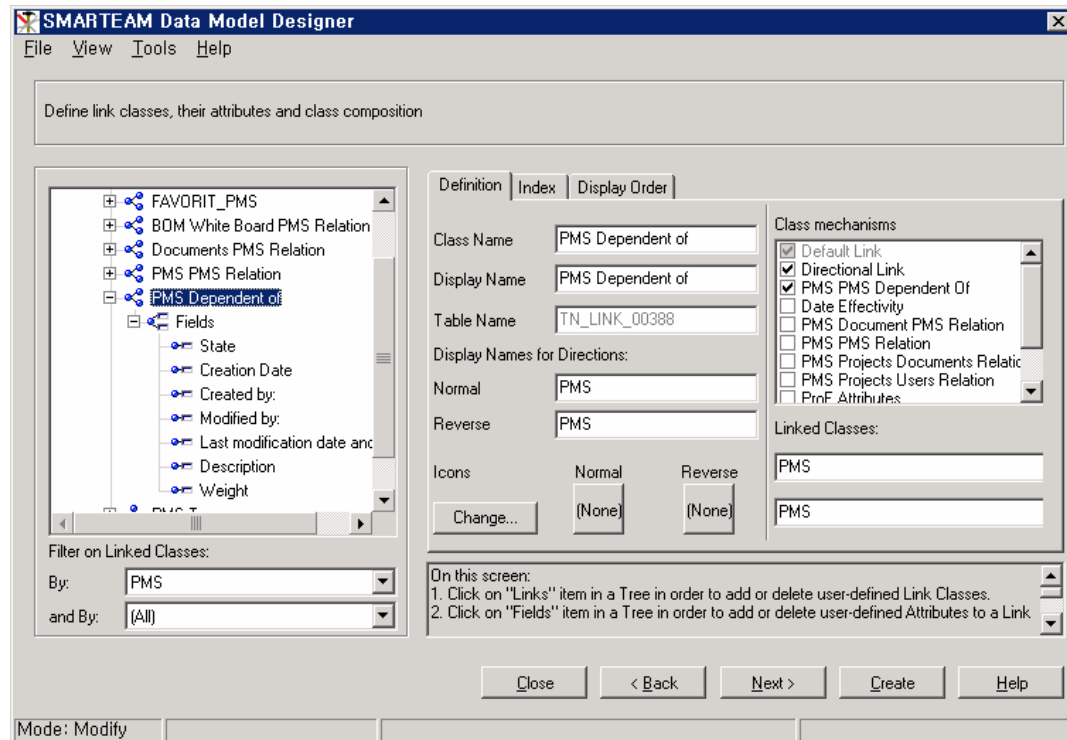
Mode: Create Template Name: PMS Tei



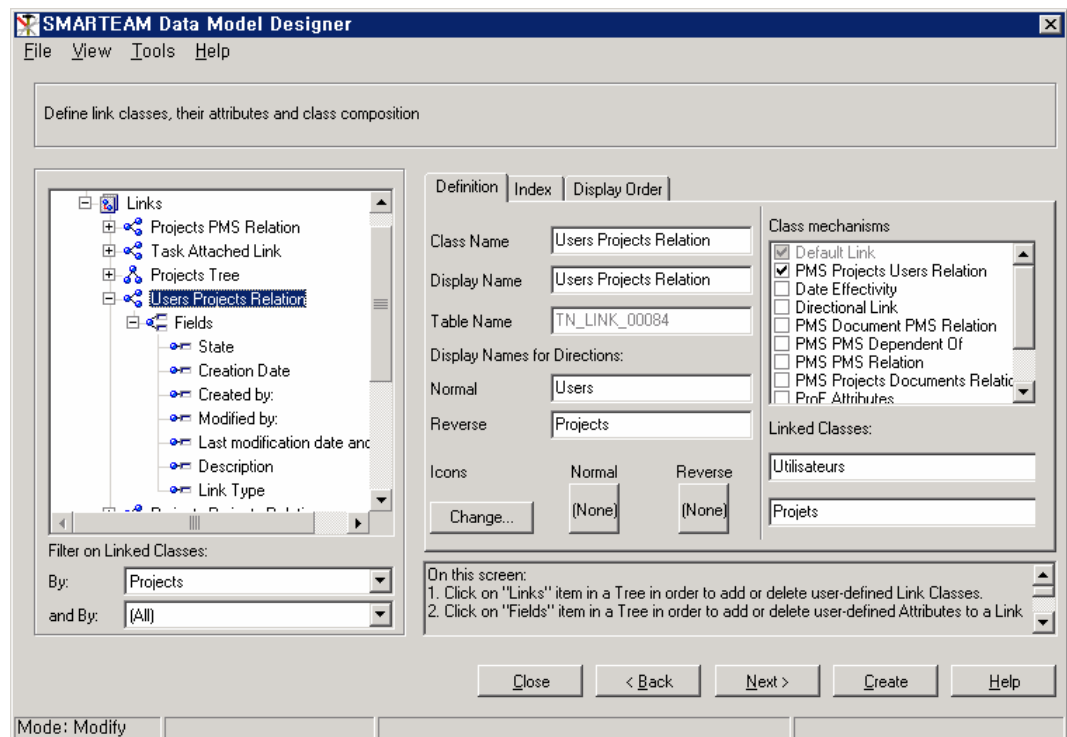
16. Create “PMS Documents Relation”, “PMS PMS Relation”, “PMS Dependent Of” (this one is a directional link between PMS and PMS classes) link classes







17. Apply all the PMS link behaviors to appropriate links (5 should be done)



**SMARTeam Data Model Designer**

File View Tools Help

Define link classes, their attributes and class composition

- Projects Tree
- Users Projects Relation
- Projects Projects Relation
- TN\_PRQJ\_FAVORIT
- Parts Projects Relation
- Documents Projects Relation**
  - Fields
    - State
    - Creation Date
    - Created by:
    - Modified by:
    - Last modification date and
    - Description

Filter on Linked Classes:

By: Projects

and By: (All)

Definition Index Display Order

Class Name: Documents Projects Relation

Display Name: Documents Projects Relation

Table Name: TN\_LINK\_00094

Display Names for Directions:

Normal: Documents

Reverse: Projects

Icons: Normal (None) Reverse (None)

Change...

Class mechanisms:

- ☒ Default Link
- ☒ PMS Projects Documents Relatic
- ☐ Date Effectivity
- ☐ Directional Link
- ☐ PMS Document PMS Relation
- ☐ PMS PMS Dependent Of
- ☐ PMS PMS Relation
- ☐ PMS Projects Users Relation
- ☐ PrnF Attributes

Linked Classes:

Documents

Projets

On this screen:

1. Click on "Links" item in a Tree in order to add or delete user-defined Link Classes.
2. Click on "Fields" item in a Tree in order to add or delete user-defined Attributes to a Link

Close < Back Next > Create Help

Mode: Modify

**SMARTeam Data Model Designer**

File View Tools Help

Define link classes, their attributes and class composition

- Task Attached Link
- PMS Tree
- FAVORIT\_PMS
- BOM White Board PMS Relation
- Documents PMS Relation**
  - Fields
    - State
    - Creation Date
    - Created by:
    - Modified by:
    - Last modification date and
    - Description
    - Weight

Filter on Linked Classes:

By: PMS

and By: (All)

Definition Index Display Order

Class Name: Documents PMS Relation

Display Name: Documents PMS Relation

Table Name: TN\_LINK\_00386

Display Names for Directions:

Normal: Documents

Reverse: PMS

Icons: Normal (None) Reverse (None)

Change...

Class mechanisms:

- ☒ Default Link
- ☒ PMS Document PMS Relation
- ☐ Date Effectivity
- ☐ Directional Link
- ☐ PMS PMS Dependent Of
- ☐ PMS PMS Relation
- ☐ PMS Projects Documents Relatic
- ☐ PMS Projects Users Relation
- ☐ PrnF Attributes

Linked Classes:

Documents

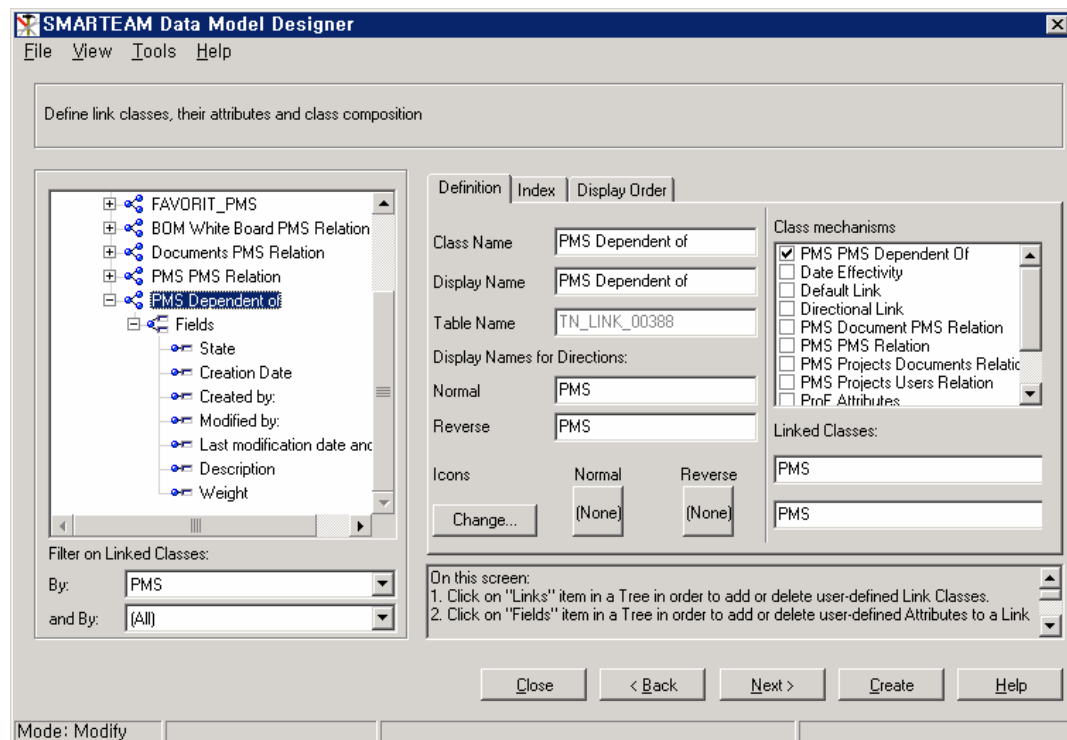
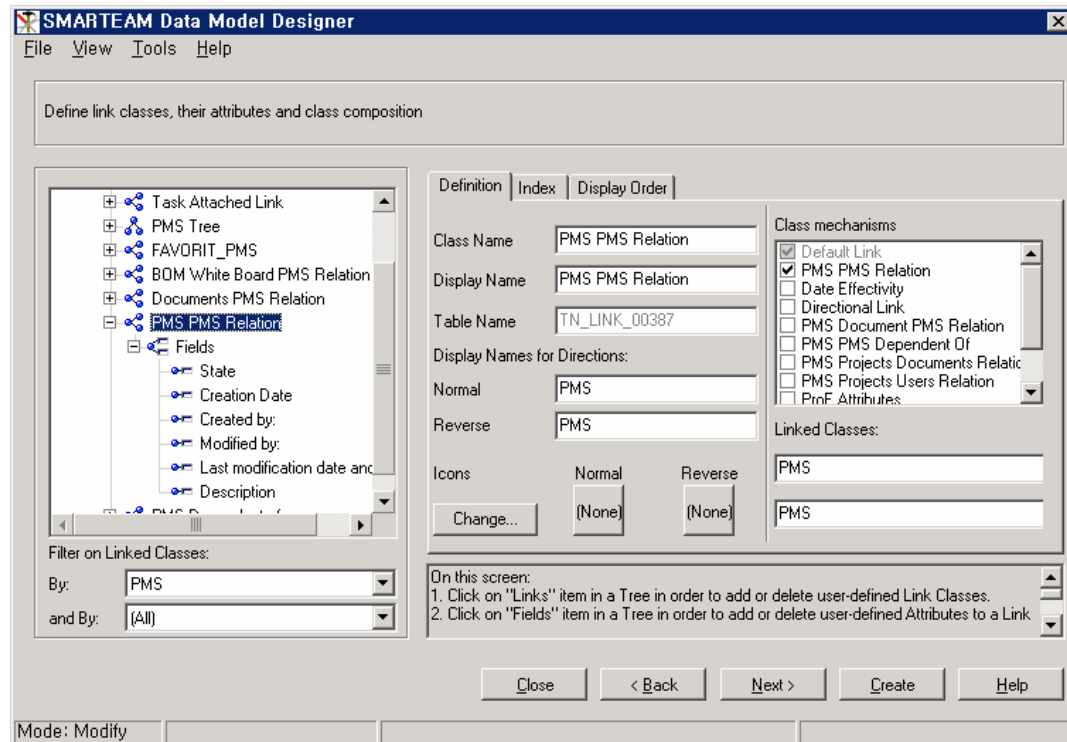
PMS

On this screen:

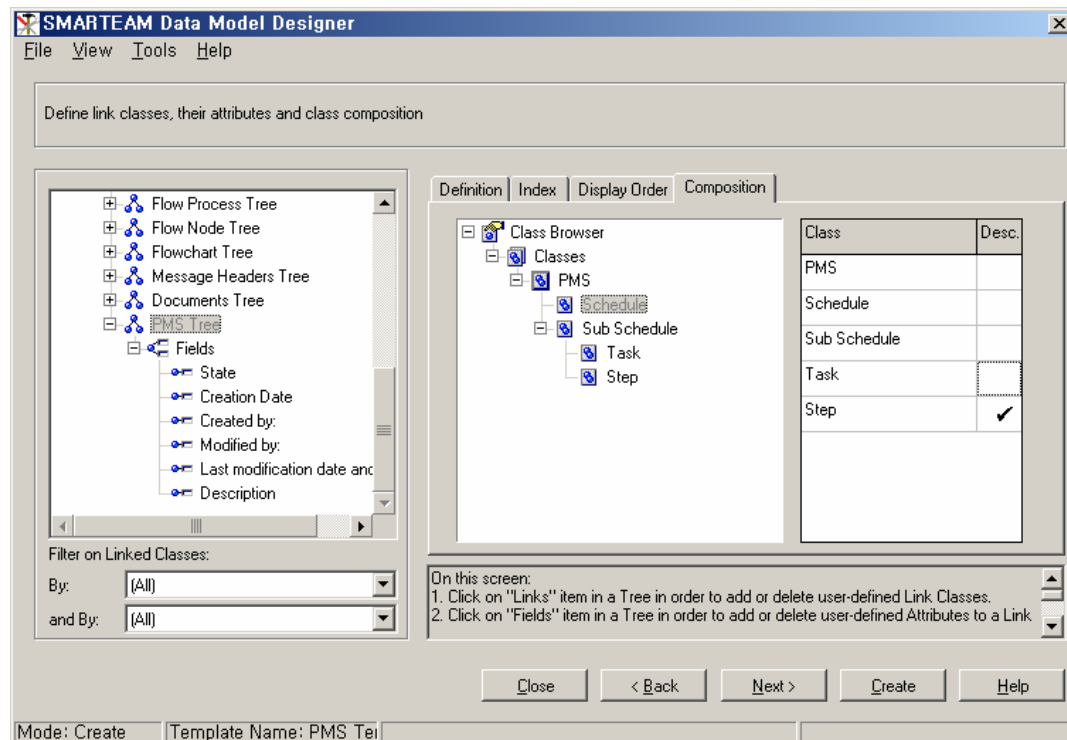
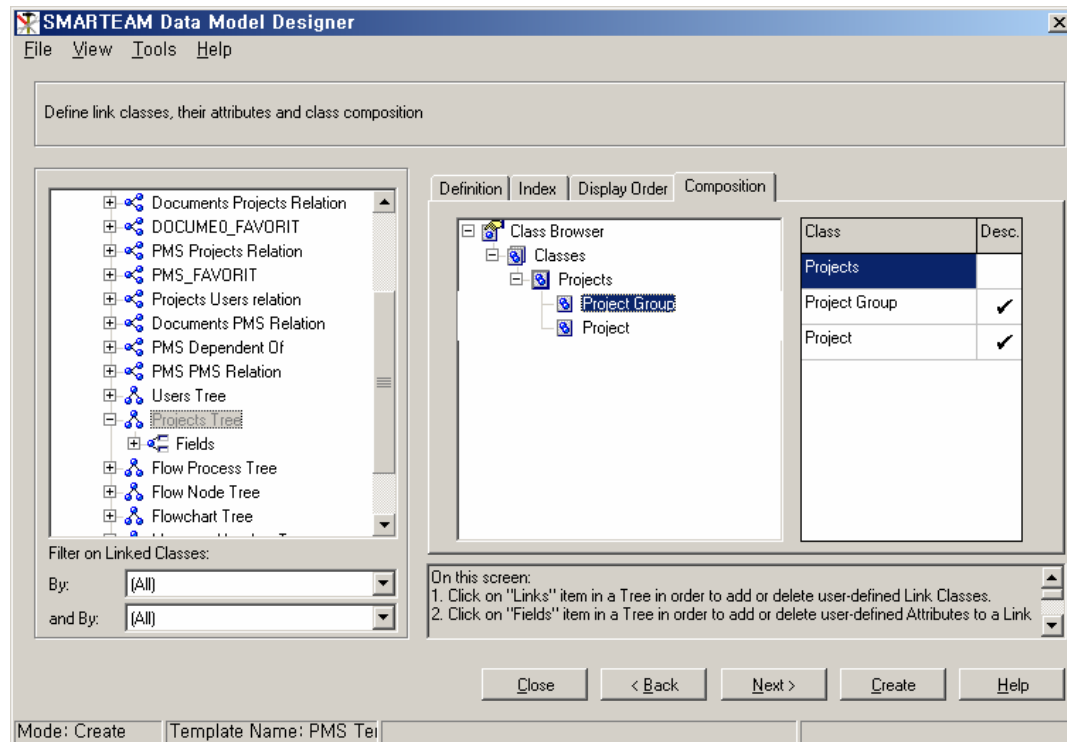
1. Click on "Links" item in a Tree in order to add or delete user-defined Link Classes.
2. Click on "Fields" item in a Tree in order to add or delete user-defined Attributes to a Link

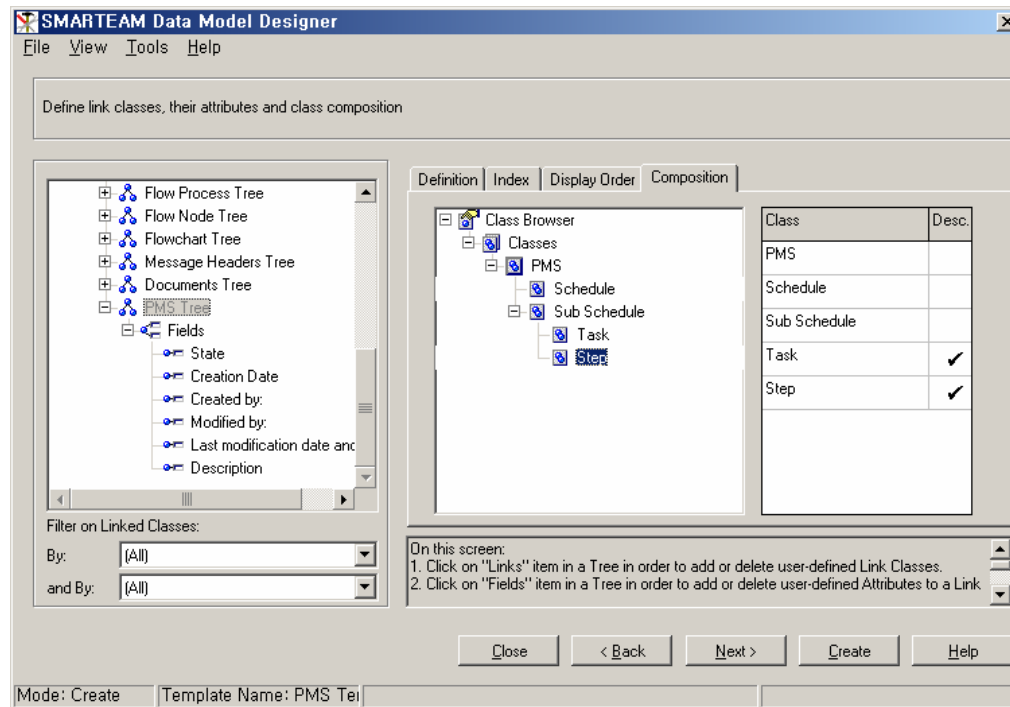
Close < Back Next > Create Help

Mode: Modify

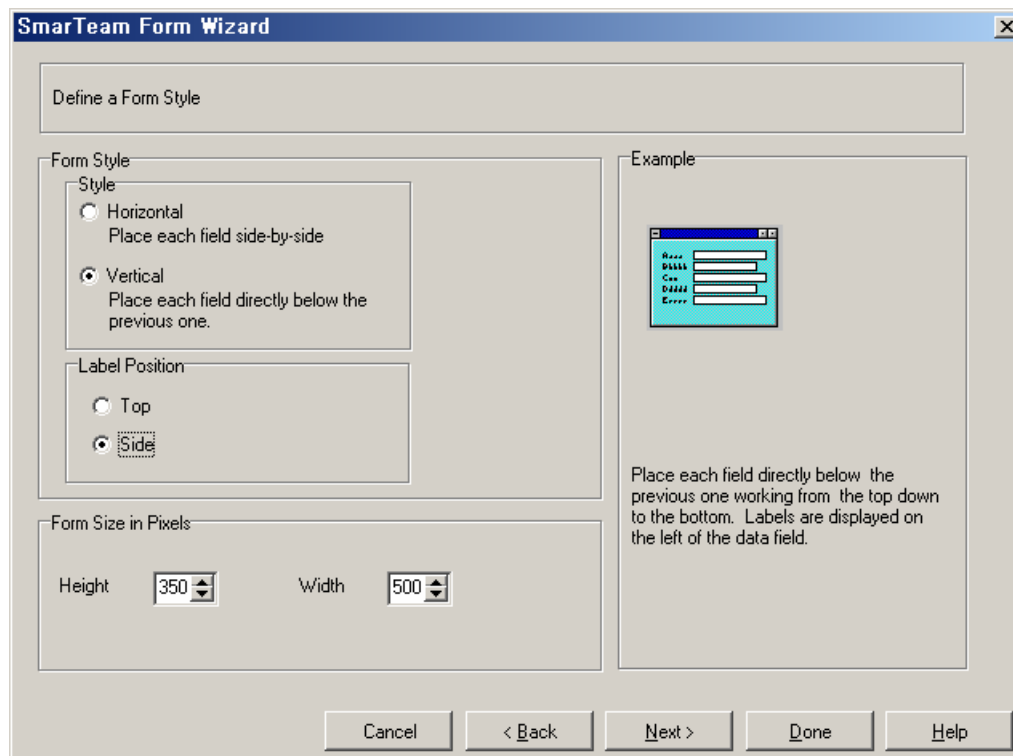


## 18. Define the compositions for Projects and PMS super classes





19. Design the profile cards for ST Editor (Web Editor profile cards will be automatically generated)



20. Create the database

Be sure to run "SMARTeam – Web Editor Datamodel Wizard" for current database.

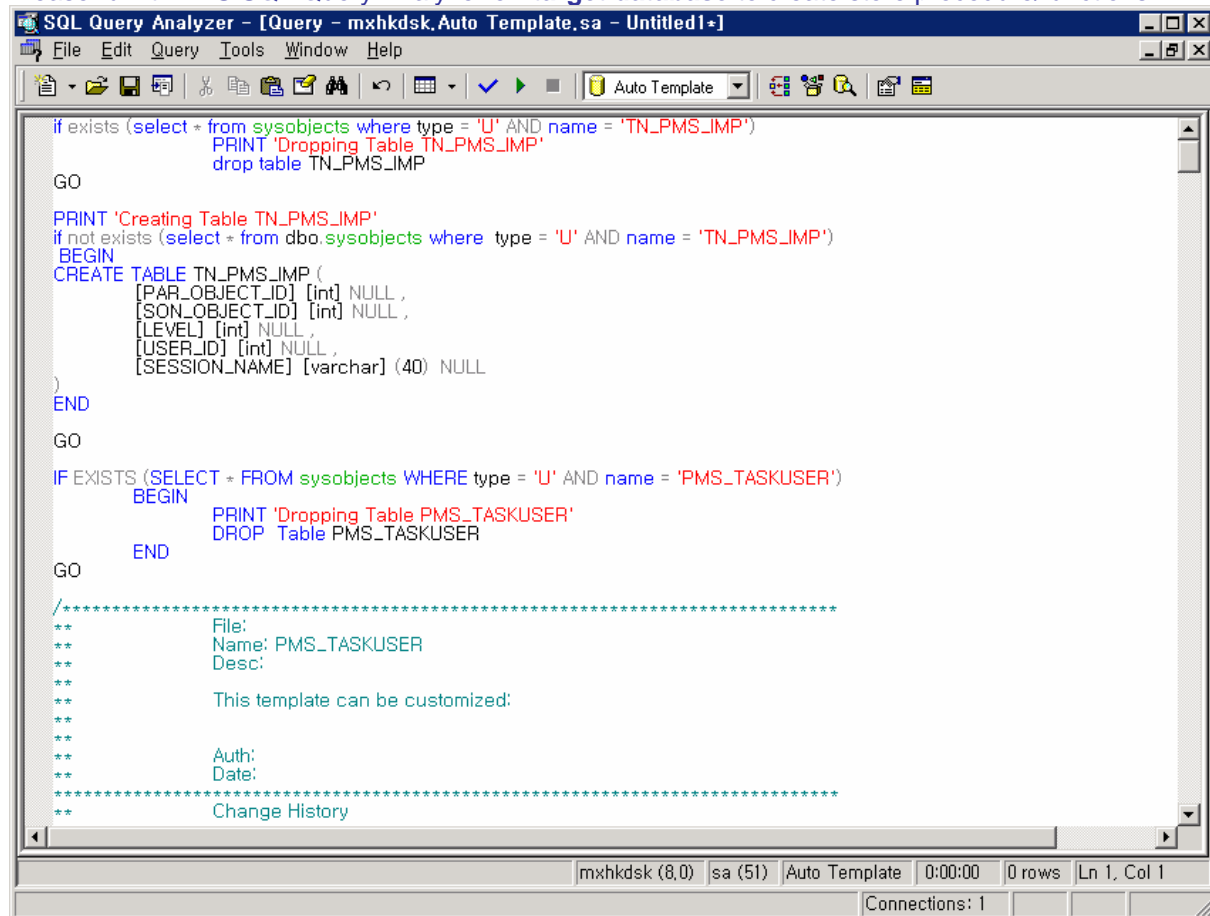
SmartProject –Implementation guide-V5.6

© Dassault Systèmes 2008 – Do not reproduce, copy or use without a license from Dassault Systèmes

## 4. SQL Scripts

Run ScriptAll.sql to make tables and stored procedures. As SQL user SMARTEAM, run this procedure in SQL Query Analyzer

Please run it in MS SQL Query Analyzer **on target database** to create store procedure/functions.



```

SQL Query Analyzer - [Query - mxhkdsk.Auto Template.sa - Untitled1-]
File Edit Query Tools Window Help
Auto Template

if exists (select * from sysobjects where type = 'U' AND name = 'TN_PMS_IMP')
    PRINT 'Dropping Table TN_PMS_IMP'
drop table TN_PMS_IMP
GO

PRINT 'Creating Table TN_PMS_IMP'
if not exists (select * from dbo.sysobjects where type = 'U' AND name = 'TN_PMS_IMP')
    BEGIN
    CREATE TABLE TN_PMS_IMP (
        [PAR_OBJECT_ID] [int] NULL ,
        [SON_OBJECT_ID] [int] NULL ,
        [LEVEL] [int] NULL ,
        [USER_ID] [int] NULL ,
        [SESSION_NAME] [varchar] (40) NULL
    )
    END
GO

IF EXISTS (SELECT * FROM sysobjects WHERE type = 'U' AND name = 'PMS_TASKUSER')
    BEGIN
        PRINT 'Dropping Table PMS_TASKUSER'
        DROP Table PMS_TASKUSER
    END
GO

/*****
**      File:
**      Name: PMS_TASKUSER
**      Desc:
**
**      This template can be customized:
**
**      Auth:
**      Date:
*****/
**      Change History

```

mxhkdsk (8,0) sa (51) Auto Template 0:00:00 0 rows Ln 1, Col 1  
Connections: 1

## 5. Values for Lookup tables

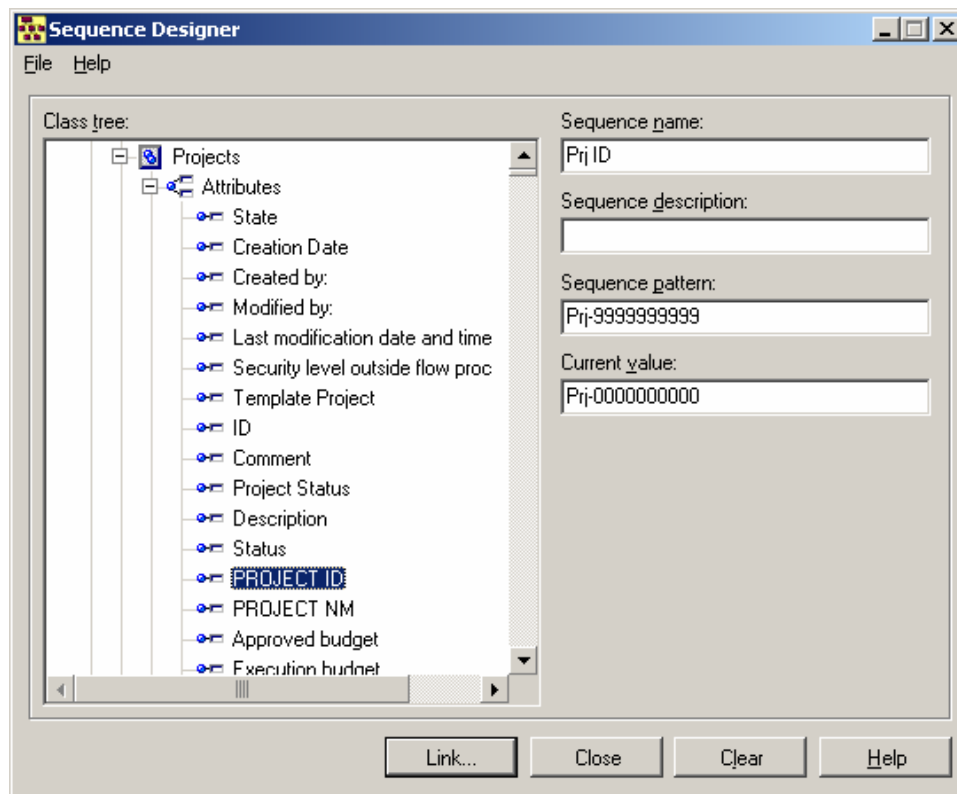
Enter values in the “User PMS Role” lookup table

Project Manager  
Project Leader  
PMS Engineer

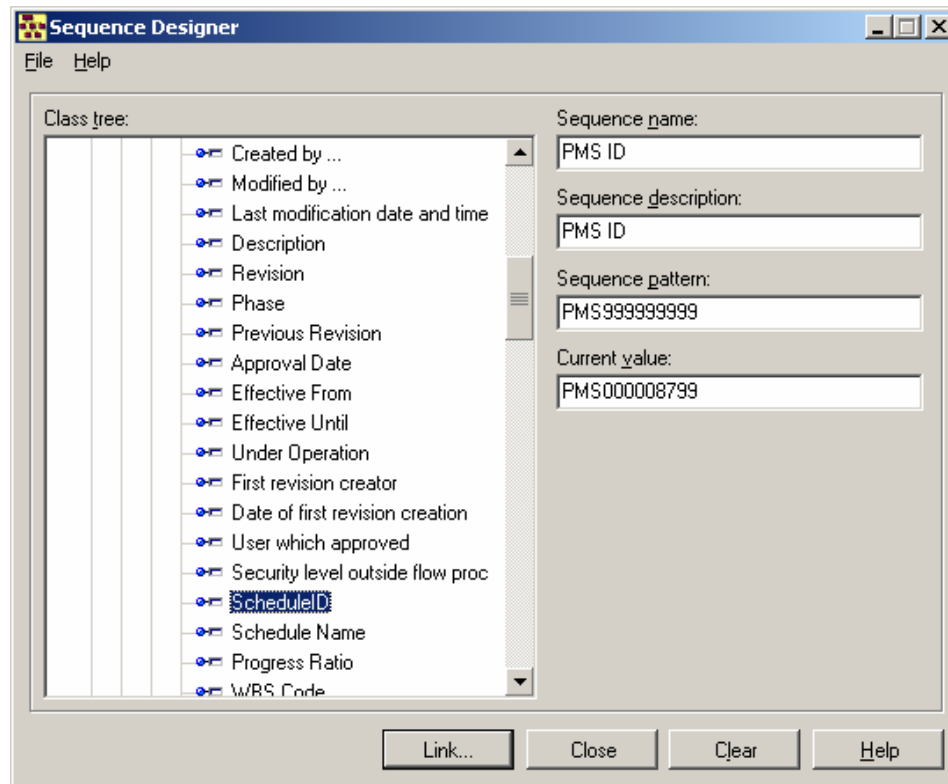
## 6. Sequence Designer

Add Sequence for Project, Document, and PMS classes and place those Sequence name in Ds.Bpc.SMARTPROJECT.config.xml

1. Launch SMARTEAM Sequence Designer.
2. Add sequence name “ProjectID” for project

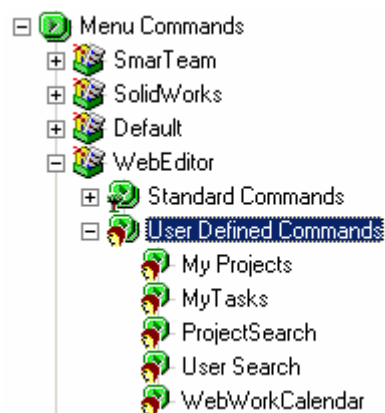


2. Add sequence name “PMS ID” for PMS



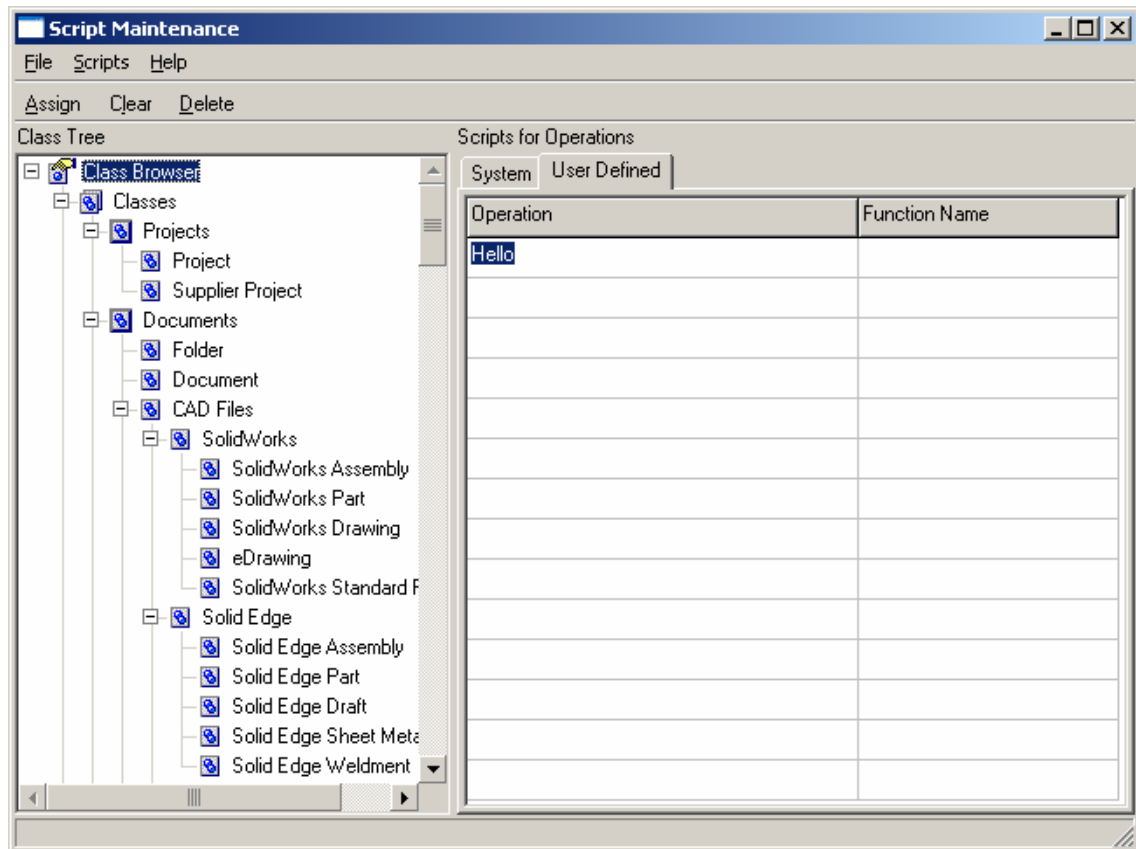
## 7. Menu Editor

1. Launch SMARTEAM Admin console->User Interface Management->Menu editor.
2. Menu Commands for WebEditor

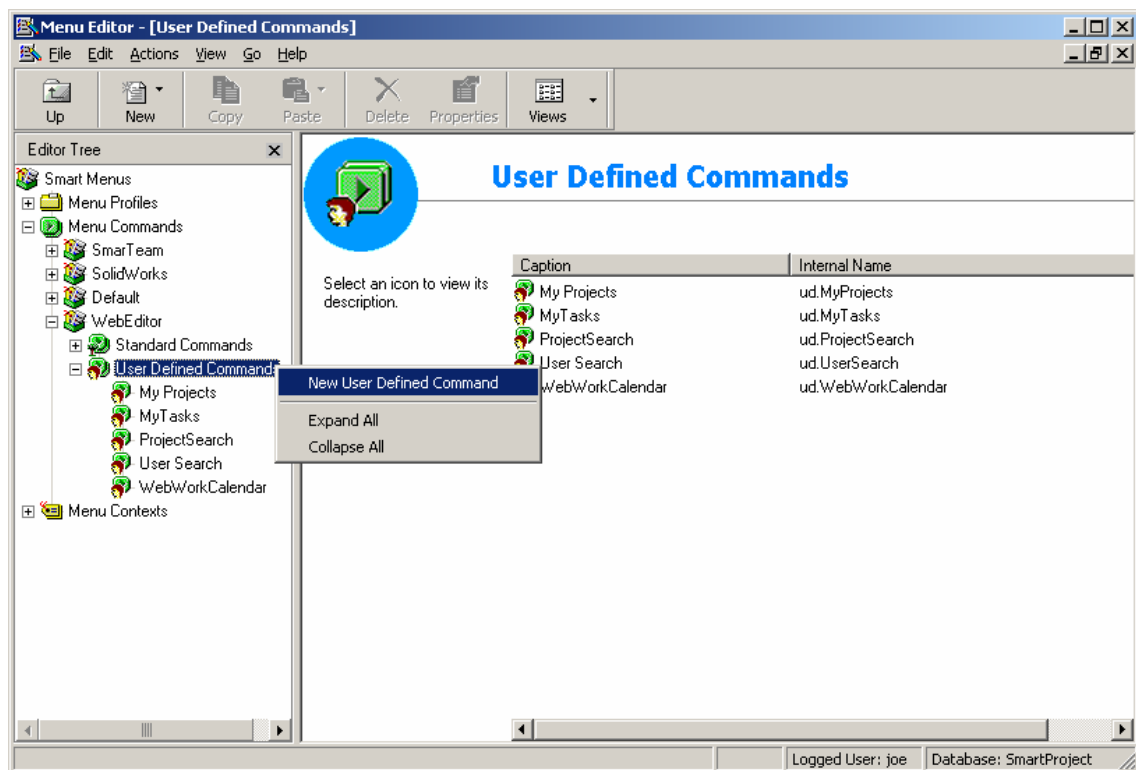


Note: Before you do the following steps, you must have at least one dummy user define script in script maintenance then you can choose in “user script”.

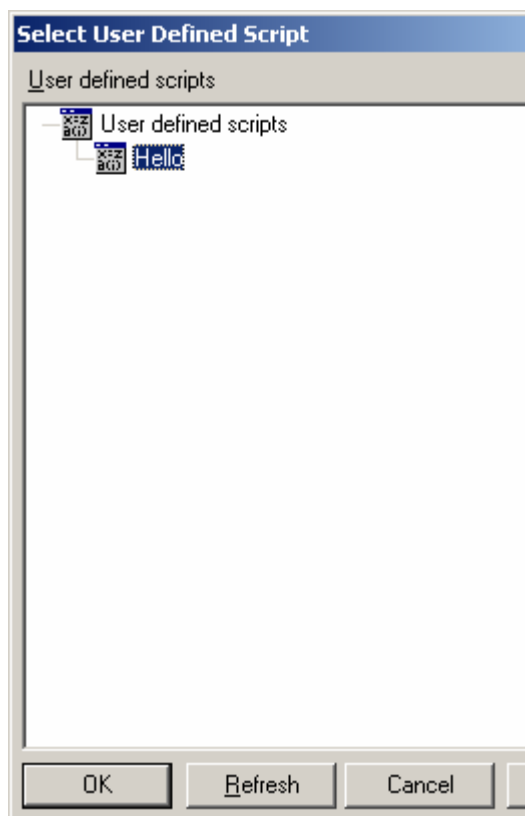


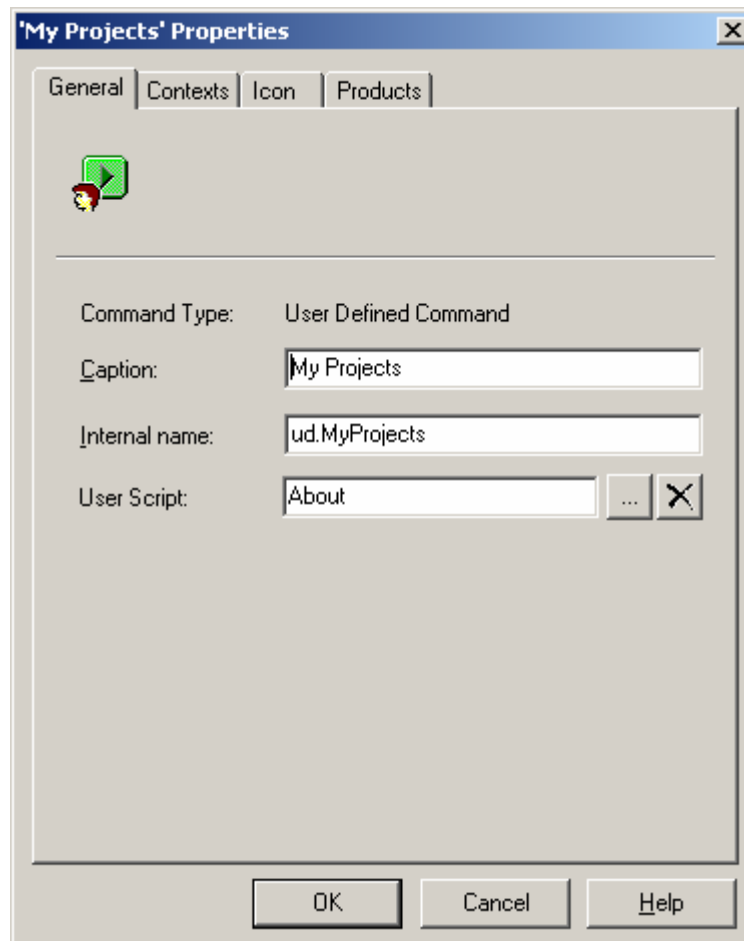


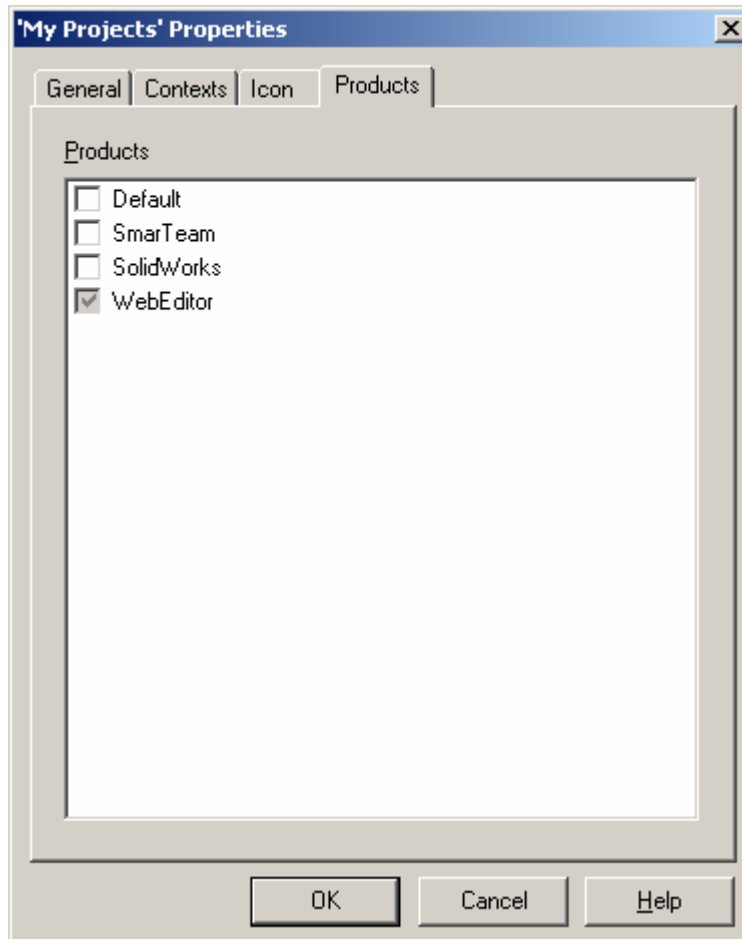
2.1 Right click on “**User Defined Commands**”, choose “**New User Defined Command**””



2.2 Input values **"My Projects"** into "Caption", Select any dummy script (for example: Hello) as User script





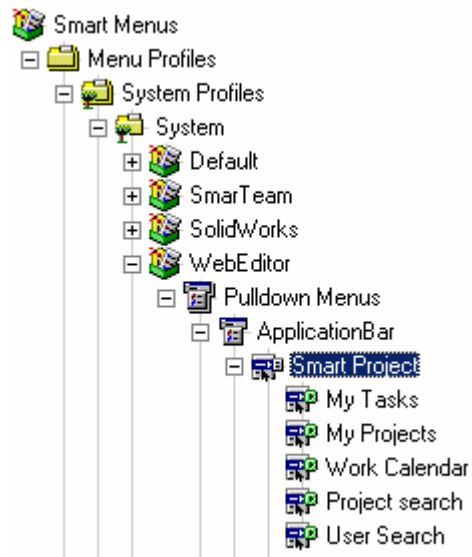


2.3 Click button “**OK**” to save

2.4 Add following commands into “**User Defined Commands**” for “**WebEditor**” in “**Menu Commands**”

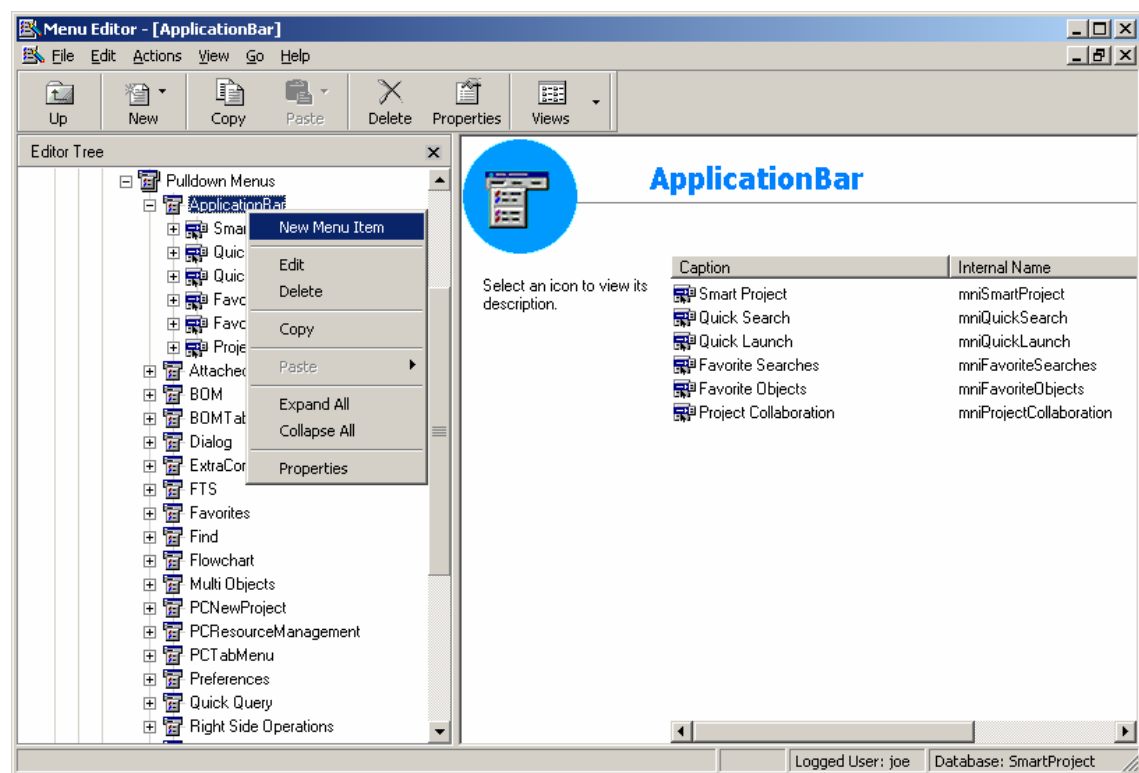
Caption	InternalName	Commands
My Tasks	mniMyTasks	ud.MyTasks
My Projects	mniMyProjects	ud.MyProjects
Work Calendar	mniWorkCalendar	ud.WorkCalendar
Project Search	mniProjectSearch	ud.ProjectSearch
User Search	mniUserSearch	ud.UserSearch

### 3. Menu Profiles for System

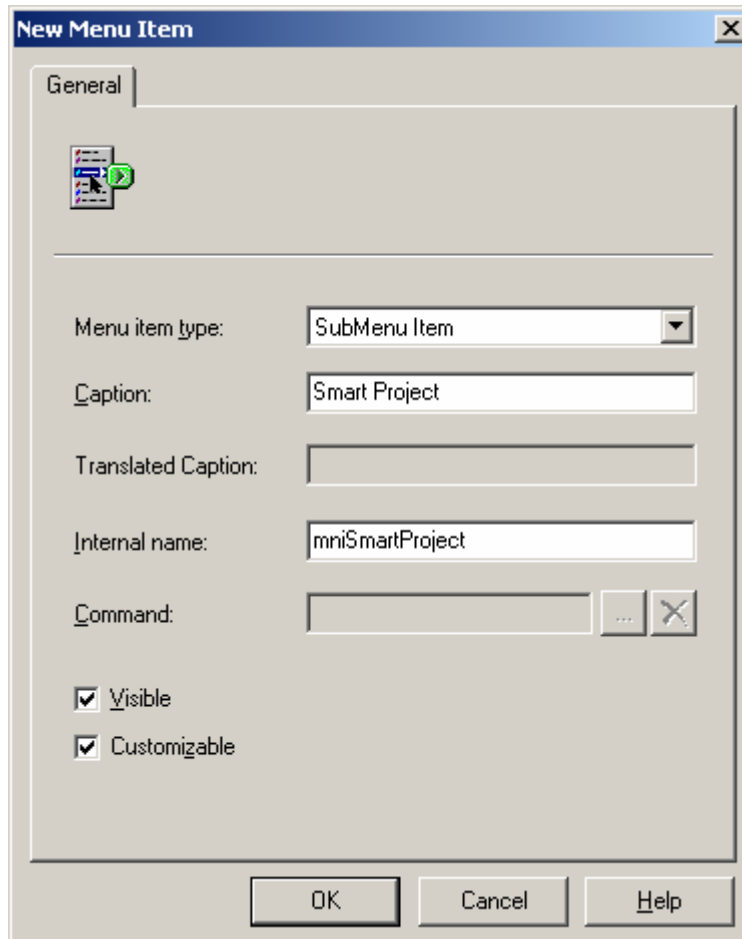


### 3.1 Create SubMenu

#### 3.1.1 Right click on “ApplicationBar”, choose “New menu Item”



#### 3.1.2 Choose Menu item type as “SubMenu Item”, Caption as “Smart Project”



**New Menu Item**

General

Menu item type: SubMenu Item

Caption: Smart Project

Translated Caption:

Internal name: mniSmartProject

Command:

☒ Visible

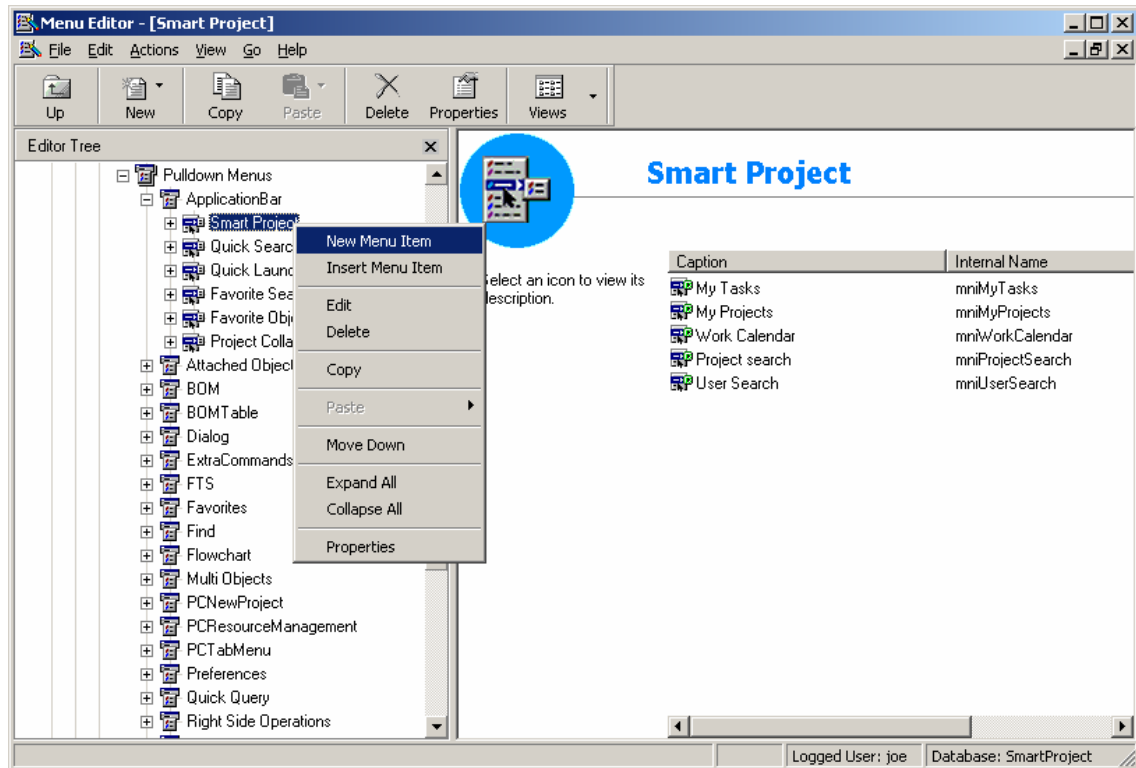
☒ Customizable

OK Cancel Help

3.1.3 Click button :OK: to save

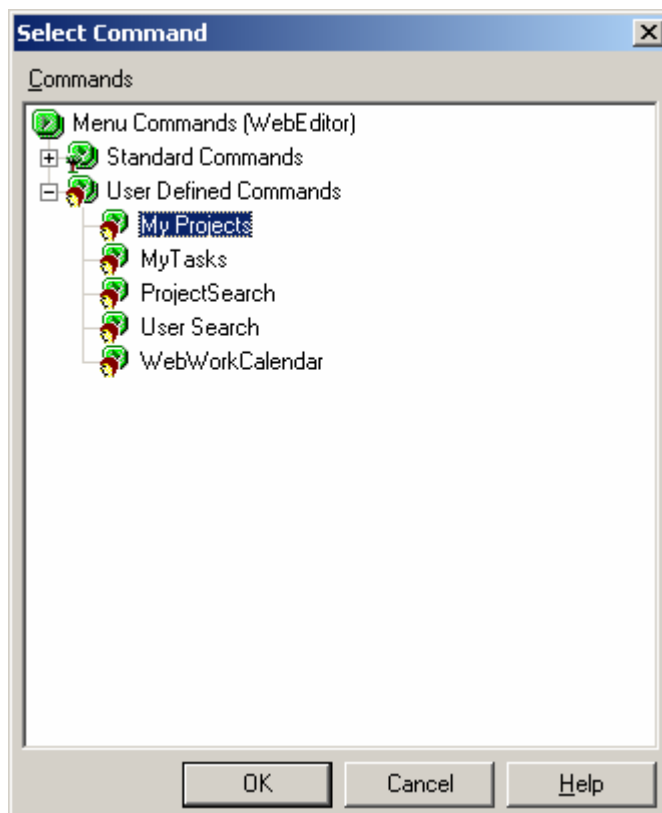
3.2 Create menu item

3.1.1 Right click on **“Smart Project”**, choose **“New menu Item”**

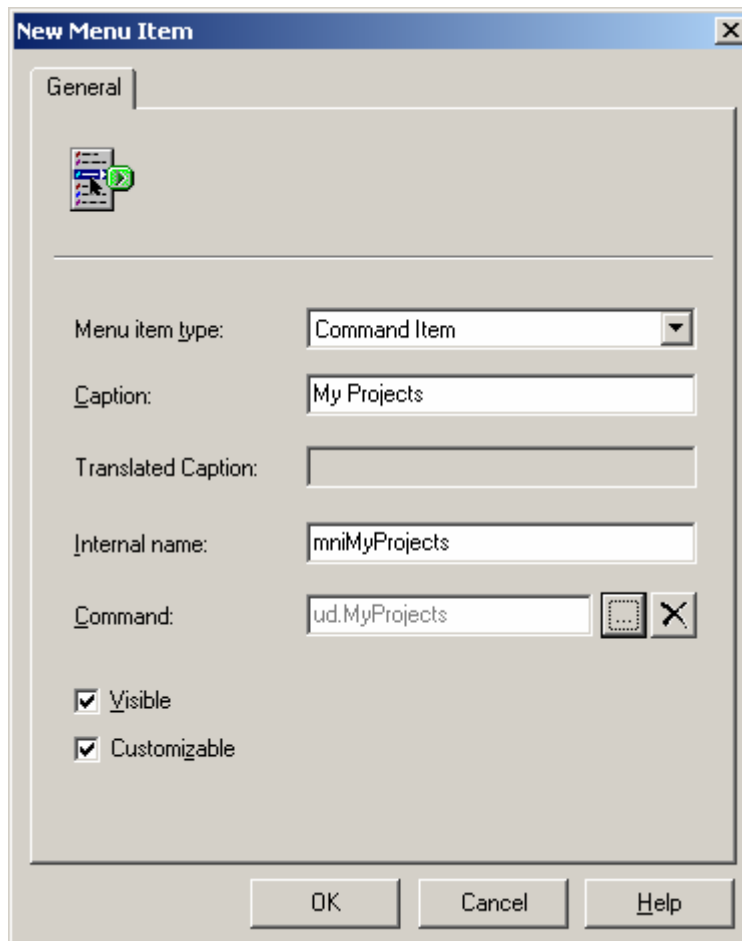


3.1.2 Input **“Caption”** as **“My Project”**

3.1.3 Choose command with **“My Projects”**



3.1.3 Click **“OK”** to choose command with **“My Projects”**



**New Menu Item**

General

Menu item type: Command Item

Caption: My Projects

Translated Caption:

Internal name: mniMyProjects

Command: ud.MyProjects

☒ Visible

☒ Customizable

OK Cancel Help

3.1.3 Click “OK” to save the menu item

3.2 Redo “Create menu item” for **“My Tasks”**, **“Project search”**, **“Work Calendar”**, **“User Search”**



## 8. Web Form Designer

1. Launch SMARTEAM Web Form Designer.

Class Name	Button Name	Visible Mode
Project	Member	Update/View
Project	Project Copy	Update/View
Schedule/Step	Weight setting	Update
Schedule/Step	Change WBS code	Update
Schedule	Schedule planning	Update
Schedule	Regenerate WBS	Update
Schedule	Recalculate progress	Update
Schedule	Gantt Chart	View
Schedule	Compare WBS	View
Schedule	Pert Chart	View
Schedule	Resource Chart	View
Schedule	Cost Summary	view
Schedule	Deliverables	View
Task	Retrieve Output	View
Task	Assign Engineer	Update/View
Task	Precedence task setting	Update/View

2. Remove the web profile cards that need to be re-generated

3. Modify profilecard of **“Project”**

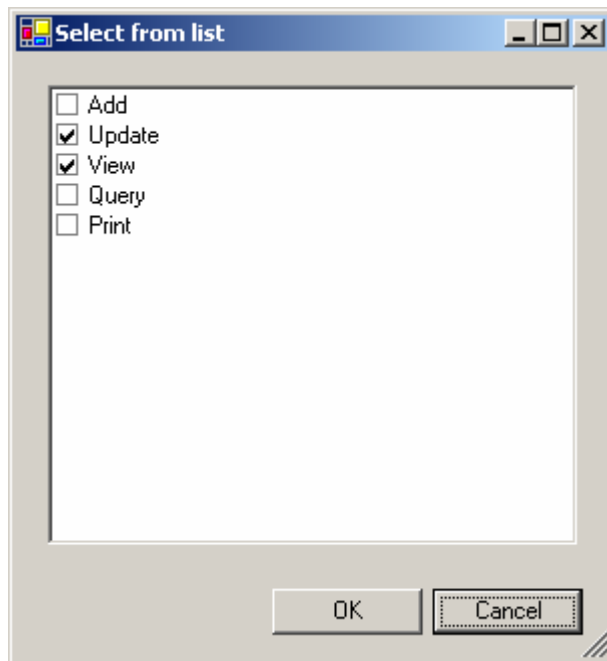
3.1 Add buttons “Members”, “Project Copy”,

3.2 Add Java Script for button **“Member”** at **“On Enter”**, visible in Mode **“Update”** & **“View”**

```

var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/SetParticipants.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+
"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
if (hWindow != null)
    hWindow.focus();

```

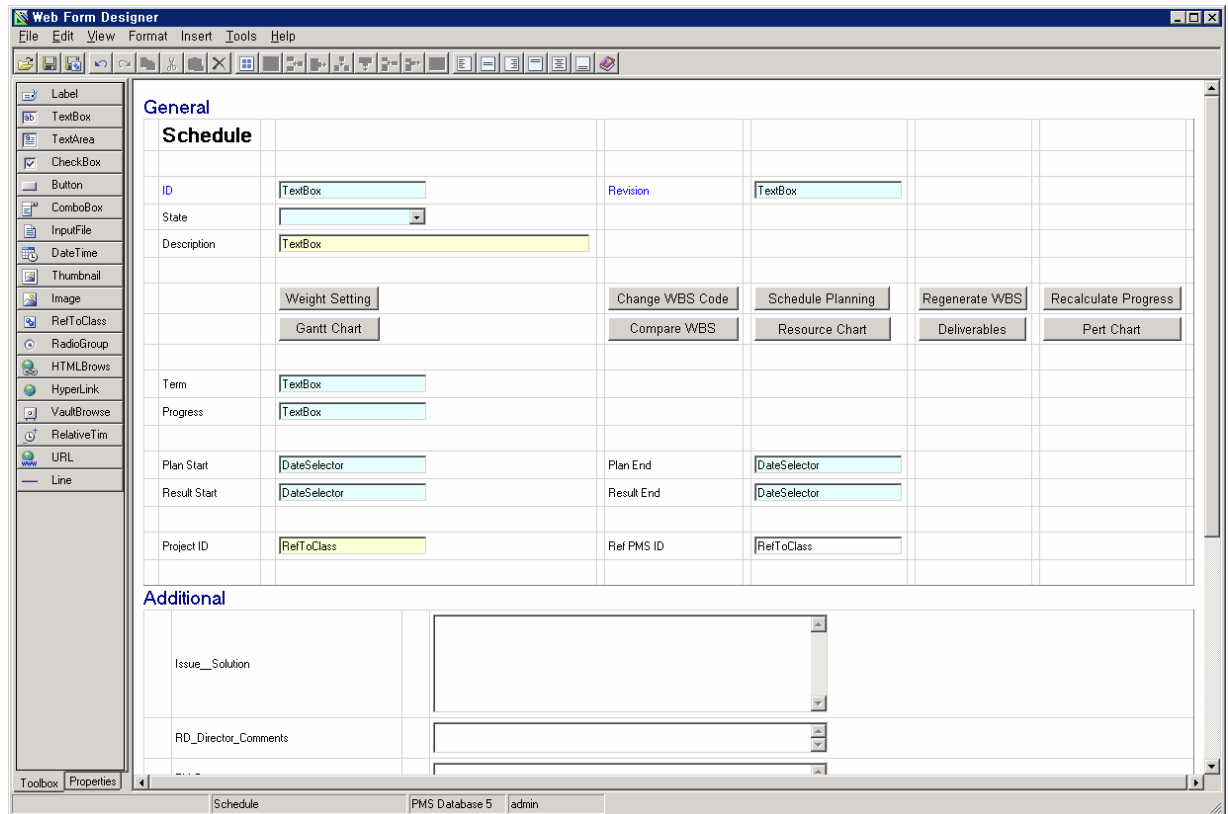


### 3.3 Add Java Script for button “Project Copy” at “On Enter”, visible in Mode “Update” & “View”

```
var width=window.screen.width*7/10;
var height=window.screen.height*7/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow
window.showModalDialog("/WebEditor/PMS/ProjectCopy.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()
+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:"
height+"px;dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
if (hWindow != null)
    hWindow.focus();
```

### 3. Modify profilecard of “Schedule”

3.1 Add buttons “Weight setting”, “Change WBS code”, “Schedule planning”, “Regenerate WBS”, “Recalculate progress”, “Compare WBS”, “Gantt Chart”, “Pert Chart”, “Resource Chart”, “Deliverables”, “Cost Summary”.



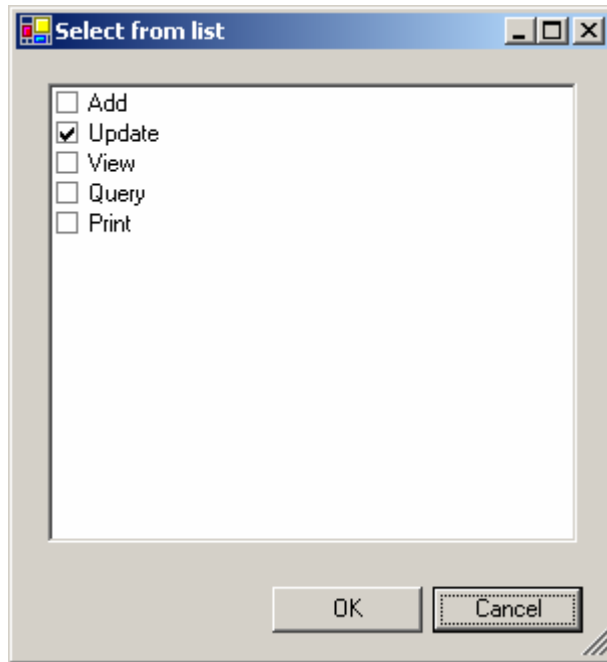
### 3.2 Add Java Script for button “Weight setting” at “On Enter” , visible in Mode “Update”

```
var width=600;//window.screen.width*9/10;
var height=600;//window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/SetWeight.aspx?Height=700&Width=610&cid="+SmObjectData.GetClassId()+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:"+ height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```

### 3.3 Add Java Script for button “Change WBS Code” at “On Enter” , visible in Mode “Update”

```
var width=window.screen.width/2;
var height=window.screen.height*3/4;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow
=window.showModalDialog("/WebEditor/PMS/WBSOrderChange.aspx?Height="+height+"&Width=610&cid="+SmObjectData.GetClassId()+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:"+
height+"px;dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
if (hWindow != null)
    hWindow.focus();
```



### 3.4 Add Java Script for button “Schedule planning” at “On Enter” , visible in Mode “Update”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/Scheduling.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+
"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```

### 3.5 Add Java Script for button “Regenerate WBS” at “On Enter” , visible in Mode “Update”

```
var width=600;//window.screen.width*9/10;
var height=600;//window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/RegenerateWBS.aspx?Height=700&Width=610&cid="+SmObjectData.GetClassId()+"&oid=
"+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```

### 3.6 Add Java Script for button “Recalculate progress” at “On Enter” , visible in Mode “Update”

```
var width=600;//window.screen.width*9/10;
var height=600;//window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/CalcAllProgress.aspx?Height=700&Width=610&cid="+SmObjectData.GetClassId()+"&oid=
"+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

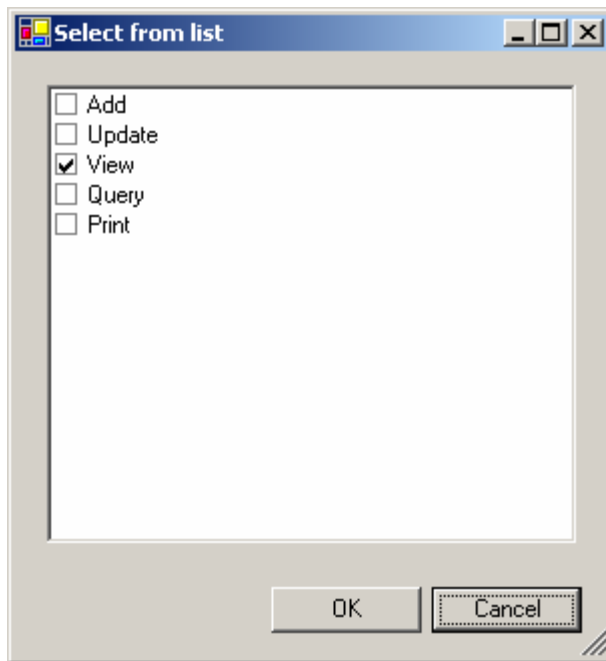
if (hWindow != null)
```

```
hWindow.focus();
```

### 3.7 Add Java Script for button “Gantt Chart” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/GanttBar2.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+
"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```



### 3.8 Add Java Script for button “Compare WBS” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/GanttBar4.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+
"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:"
height+"px;dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
if (hWindow != null)
    hWindow.focus();
```

### 3.9 Add Java Script for button “PERT Chart” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/Pert.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+"&oid="+
SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
```

```
if (hWindow != null)
    hWindow.focus();
```

### 3.10 Add Java Script for button “Resource Chart” at “On Enter”, visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/ResourceBar.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId(
)+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```

### 3.11 Add Java Script for button “Deliverables” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/OutputReport.aspx?Height=700&Width=610&cid="+SmObjectData.GetClassId()+"&oid="+S
mObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

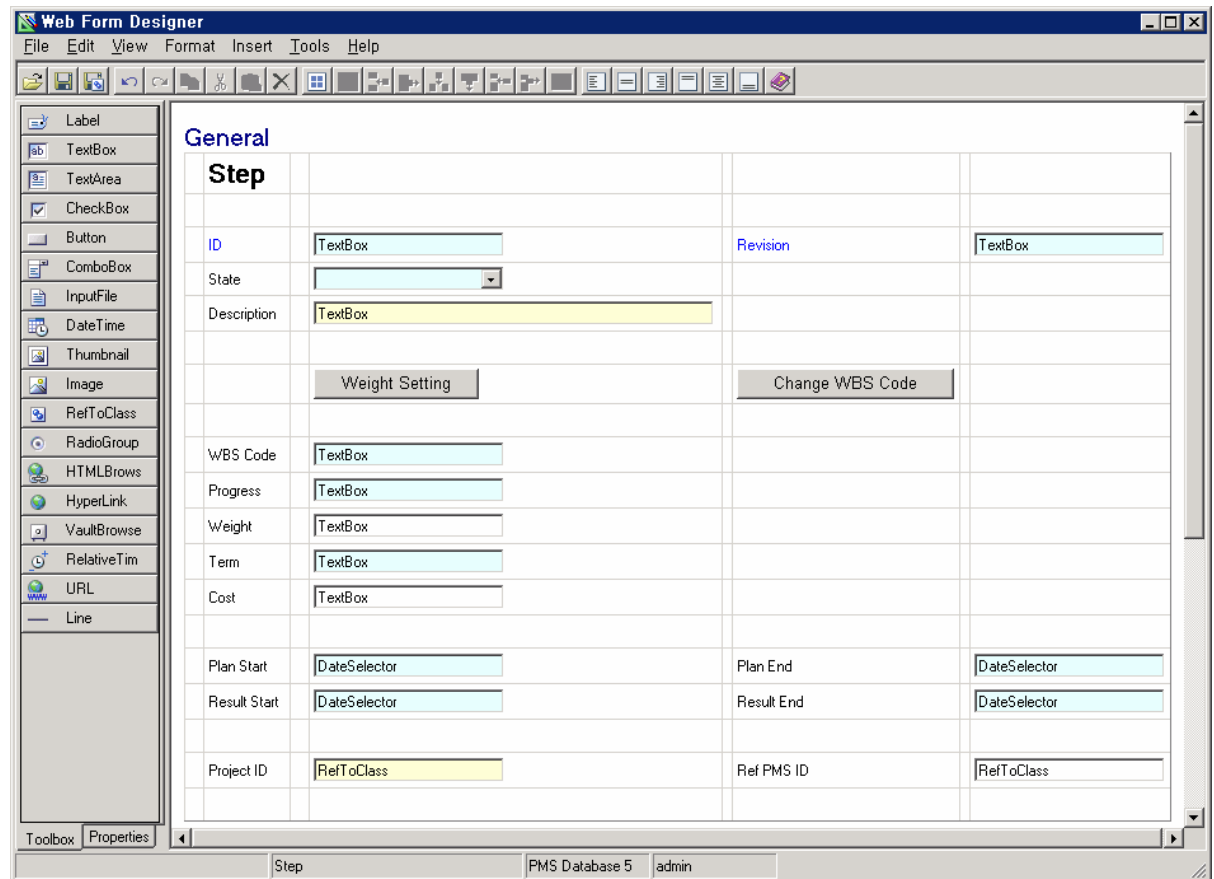
if (hWindow != null)
    hWindow.focus();
```

### 3.12 Add Java Script for button “cost summary” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow
=window.showModalDialog("/WebEditor/PMS/CostSummary.aspx?Height=700&Width=610&cid="+SmObjectData.GetClassId()+"&oid=
"+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" +
height+"px;dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");
if (hWindow != null)
    hWindow.focus();
```

#### 4. Modify profilecard of “Step”

##### 4.1 Add buttons “Weight setting” ,”Change WBS code”

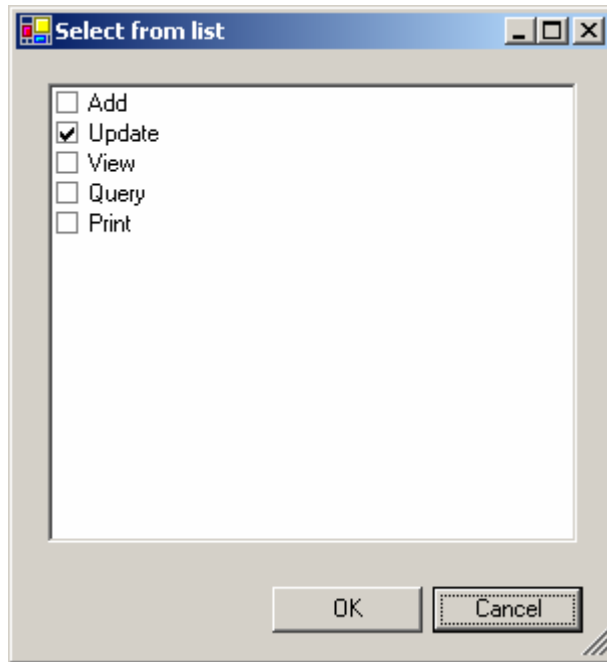


The screenshot shows the 'Web Form Designer' interface. On the left is a 'Toolbox' with various controls like Label, TextBox, TextArea, CheckBox, Button, ComboBox, InputFile, DateTime, Thumbnail, Image, RefToClass, RadioGroup, HTMLBrows, HyperLink, VaultBrowse, RelativeTim, URL, and Line. The main area is titled 'General' and shows a form for 'Step'. The form has several rows of fields: ID (TextBox), State (dropdown), Description (TextBox), Revision (TextBox), WBS Code (TextBox), Progress (TextBox), Weight (TextBox), Term (TextBox), Cost (TextBox), Plan Start (DateSelector), Plan End (DateSelector), Result Start (DateSelector), Result End (DateSelector), Project ID (RefToClass), and Ref PMS ID (RefToClass). Two buttons, 'Weight Setting' and 'Change WBS Code', are placed in the form. The bottom status bar shows 'Step', 'PMS Database 5', and 'admin'.

##### 4.2 Add Java Script for button “Weight setting” at “On Enter” , visible in Mode “Update”

```
var width=window.screen.width/2;
var height=window.screen.height*3/4;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/SetWeight.aspx?Height="+height+"&Width=610&cid="+SmObjectData.GetClassId()+"&oid=
"+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```



#### 4.3 Add Java Script for button “Change WBS code” at “On Enter” , visible in Mode “Update”

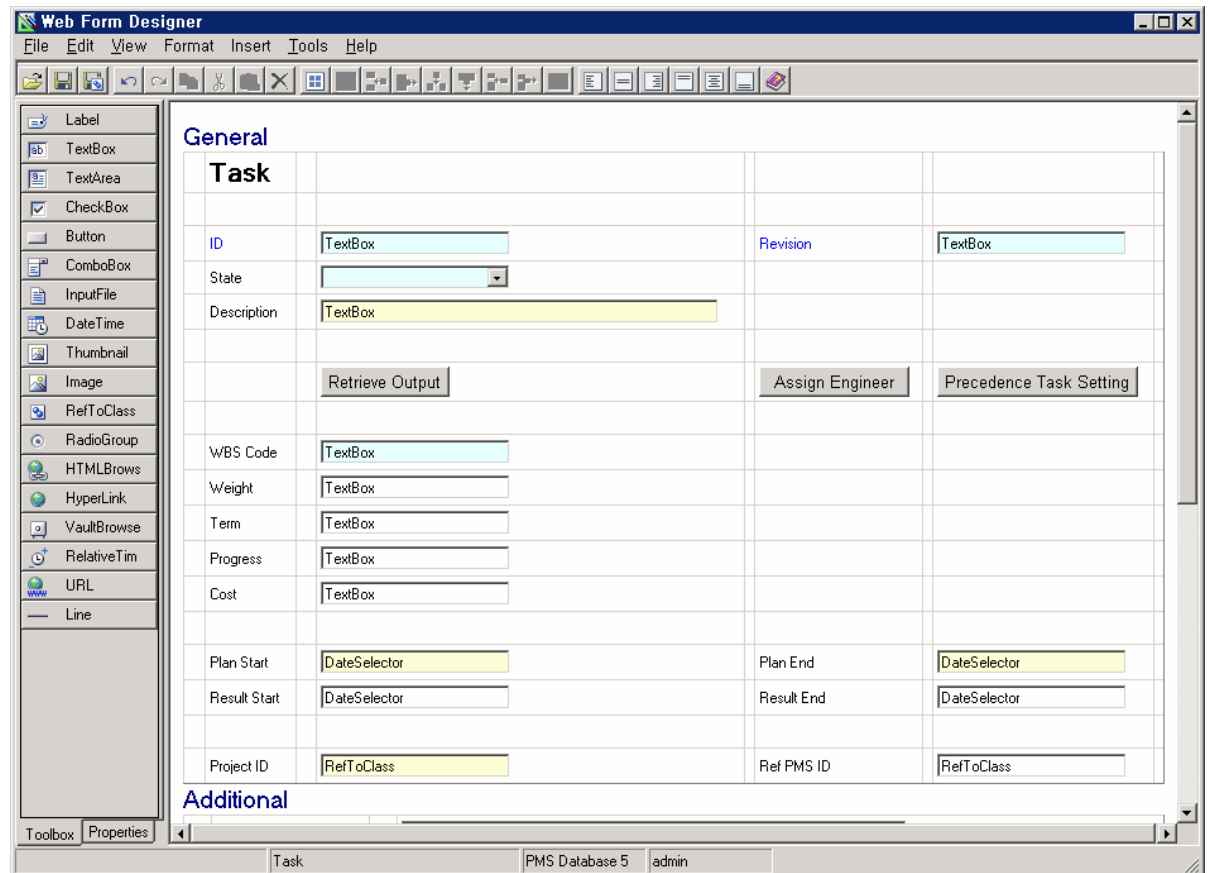
```
var width=window.screen.width/2;
var height=window.screen.height*3/4;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/WBSOrderChange.aspx?Height="+height+"&Width=610&cid="+SmObjectData.GetClassId(
)+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```

#### 5. Modify profilecard of “Task”

##### 5.1 Add buttons “Retrieve Output” , “Assign Engineer” , “Precedence task setting”





The screenshot shows the 'Web Form Designer' application window. The title bar reads 'Web Form Designer'. The menu bar includes 'File', 'Edit', 'View', 'Format', 'Insert', 'Tools', and 'Help'. Below the menu is a toolbar with various icons. On the left is a 'Toolbox' with controls like Label, TextBox, TextArea, CheckBox, Button, ComboBox, InputFile, DateTime, Thumbnail, Image, RefToClass, RadioGroup, HTMLBrows, HyperLink, VaultBrowse, RelativeTim, URL, and Line. The main area is titled 'General' and contains a form with the following fields and buttons:

ID	TextBox	Revision	TextBox
State	DropDown		
Description	TextBox		
	Retrieve Output	Assign Engineer	Precedence Task Setting
WBS Code	TextBox		
Weight	TextBox		
Term	TextBox		
Progress	TextBox		
Cost	TextBox		
Plan Start	DateSelector	Plan End	DateSelector
Result Start	DateSelector	Result End	DateSelector
Project ID	RefToClass	Ref PMS ID	RefToClass

At the bottom, there is a status bar with 'Task', 'PMS Database 5', and 'admin'.

## 5.2 Add Java Script for button “Retrieve output” at “On Enter” , visible in Mode “View”

```
var width=window.screen.width*9/10;

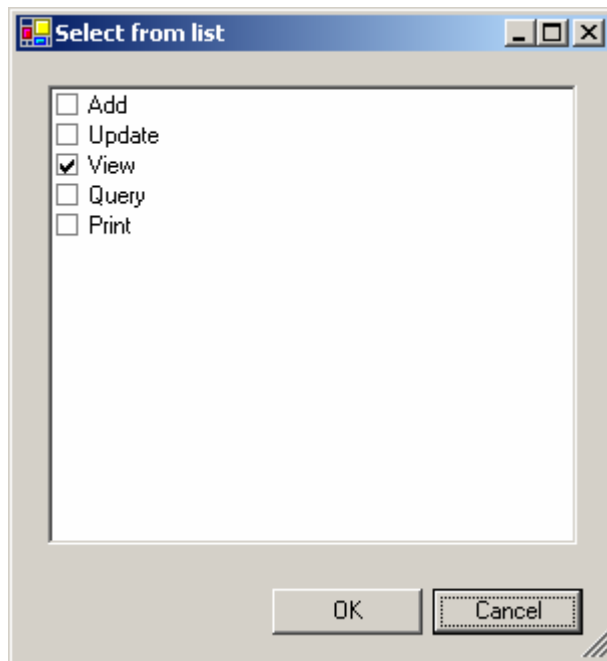
var height=window.screen.height*9/10;

var SmObjectData = ProfileCardObj.GetSmObjectData();

var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;

var hWindow =
window.showModalDialog("/WebEditor/PMS/RetrieveOutput.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassI
d()+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();
```



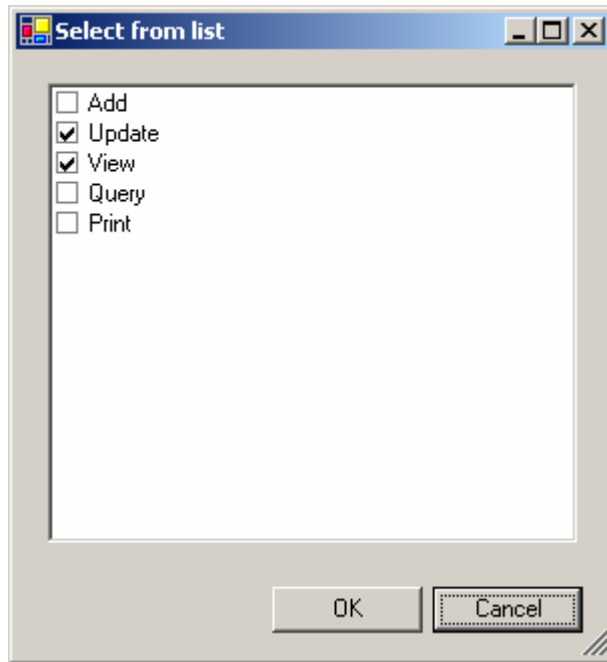
### 5.3 Add Java Script for button “Assign engineer” at “On Enter”, visible in Mode “Update” & “View”

```

var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/AssignEngineer.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClass
Id()+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();

```



#### 5.4 Add Java Script for button “**Precedence task setting**” at “**On Enter**” , visible in Mode “**Update**” & “**View**”

```

var width=window.screen.width*9/10;
var height=window.screen.height*9/10;
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/SetPrecedence.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId()+
"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight: " + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

if (hWindow != null)
    hWindow.focus();

```

## 9. User Maintenance

1. Launch User Maintenance
2. Create Groups:
  - Project Manager
  - Project Leader
  - Project Engineer
3. Create Users:
  - Project Manager, belongs to group Project Manager
  - Project Leader, belongs to group Project Leader
  - Engineer1~5, belongs to group Project Engineer
4. Add Project Leader role with User Maintenance
5. Set SMARTPROJECT authorizations for the 3 SMARTPROJECT groups User Maintenance
  - Project Manager
  - Project Leader
  - PMS Engineer

## 10. Configuration Settings

Ds.Bpc.SMARTPROJECT.config.xml at "C:\Program Files\SmarTeam\ConfigurationSettings\Data\Domain\" and "C:\Program Files\SmarTeam\ConfigurationSettings\Data\System\smarteam#\$\$0926BE6E9FED4551A69845E4C9D3634F"

Tag Name	Explanation
License	License server name. SmartProject license service should be running in this machine.
SMTP	SMTP server name. Mail sending service should be running in this machine.
SmarTeamServer	SmarTeam Web server name. It will be used to generate URL.
SCH_UPDATE	This is used for compatibility with old version. Set False.
PRJ_CLASS	Project class name
PRJ_FOLDER_CLASS	Project group class name
PRJ_LEAF_CLASS	The name of name Project leaf class that contains link with schedule and deliverables.
PRJ_ID	Field name of Project ID in Projects class
PRJ_CODE	Field name of Project Code in Projects class
PRJ_NAME	Field name of Project Description in Projects class
PRJ_START	Field name of Project Start Date in Projects class

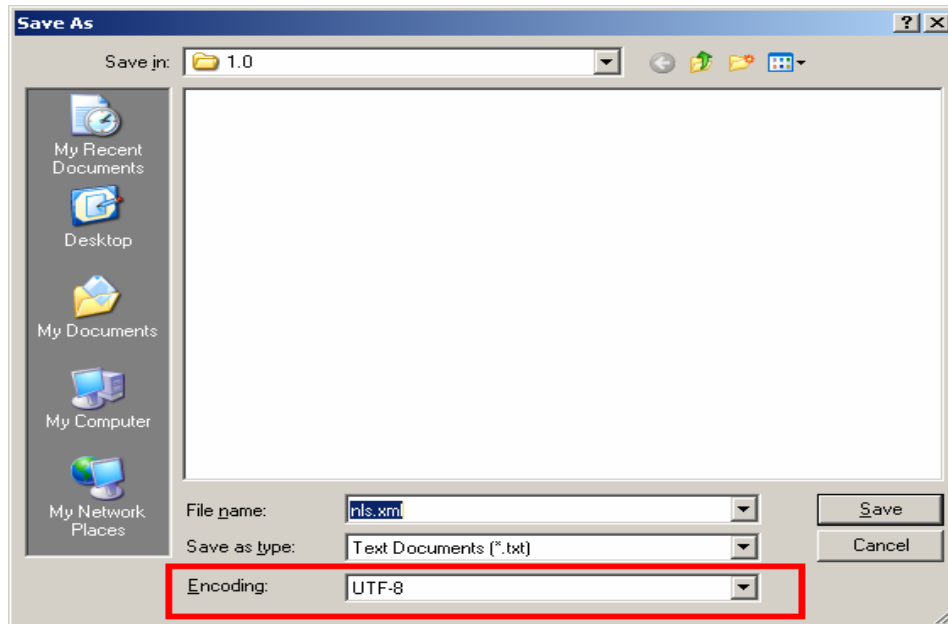
PRJ_END	Field name of Project End Date in Projects class
PRJ_SEQUENCE	Sequence name is being used for Projects class
DOC_CLASS	Document class name
DOC_FOLDER_CLASS	Folder Class Name
DOC_ID	Field name of Document ID in Projects class
DOC_NAME	Field name of Document name in Projects class
DOC_SEQUENCE	Sequence name is being used for Documents class
PMS_CLASS	PMS Class Name
PMS_ID	Field name of PMS ID in PMS class
PMS_NAME	Field name of Project Description in Documents class
PMS_SEQUENCE	Sequence name is being used for PMS class
TASK_CLASS	The name of Task class that is used as leaf object in tree.
PMS_PRJ_REL	Relation class name linking PMS and Projects class
USR_PRJ_REL	Relation class name linking Users and Projects class
PMS_DOC_REL	Relation class name linking PMS and Documents class
DOC_PRJ_REL	Relation class name linking Documents and Projects class
DivisionName	User Division Name
NodeName25	Workflow state
NodeName50	Workflow state (In Work)
NodeName75	Workflow state (In Review)
NodeName100	Workflow state ( In approval)
targetClassName	Document class Name
linkClassName	Relation class name linking PMS and Documents class
linkProjectClassName	Relation class name linking Documents and Projects class
TreeClassName	Documents Tree Class Name
ID	Document class ID
Name	Document description
ClassName	PMS class Name
field	Issue and solution attribute for PMS Class

## 11. NLS Settings

Put your English NLS files into selected language's NLS directory:

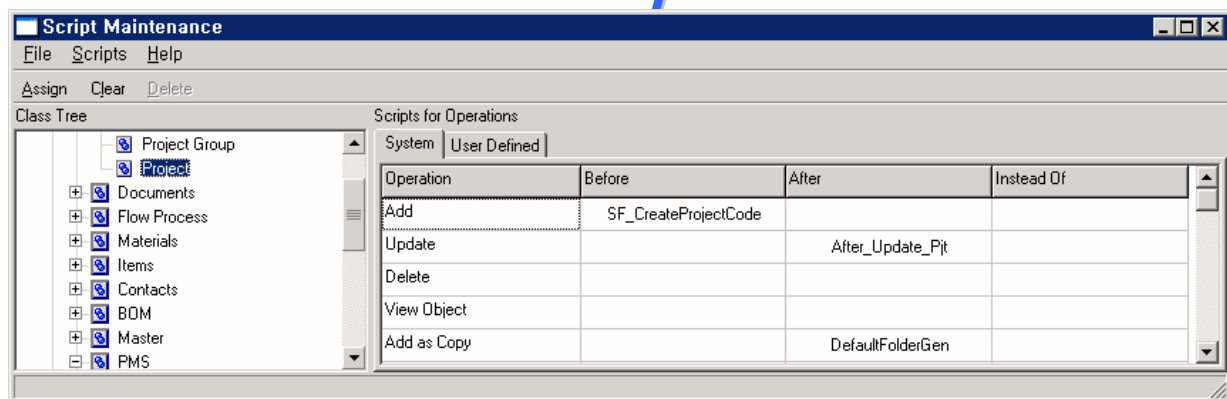
- C:\Program Files\SmarterTeam\NLS\<language code>\Std\Controls\Ds.Bpc.NLS.Controls.SMARTPROJECT\1.0\nls.xml

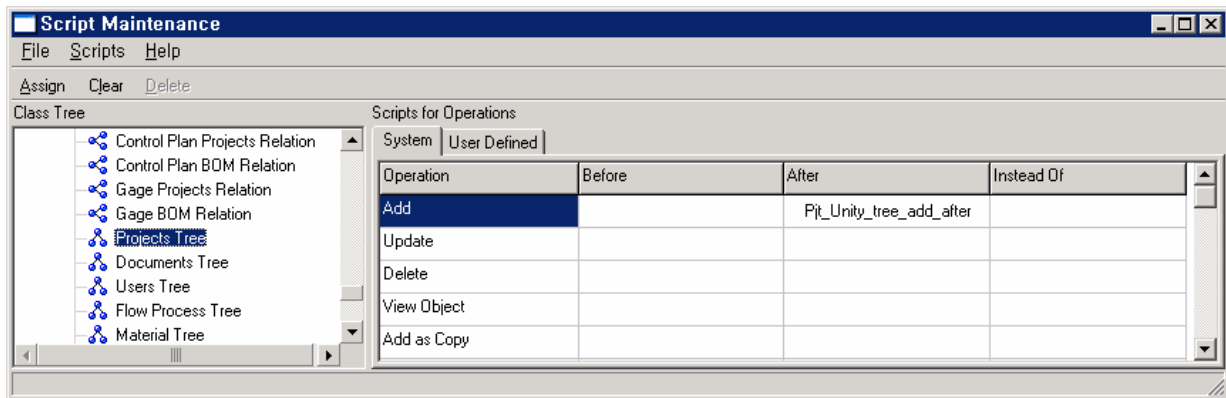
Please edit the nls.xml by notepad, and make sure the encoding is “UTF-8” if you use double byte language like “zh-tw”.



Please do “IISRESET” if you modify the content of NLS.xml

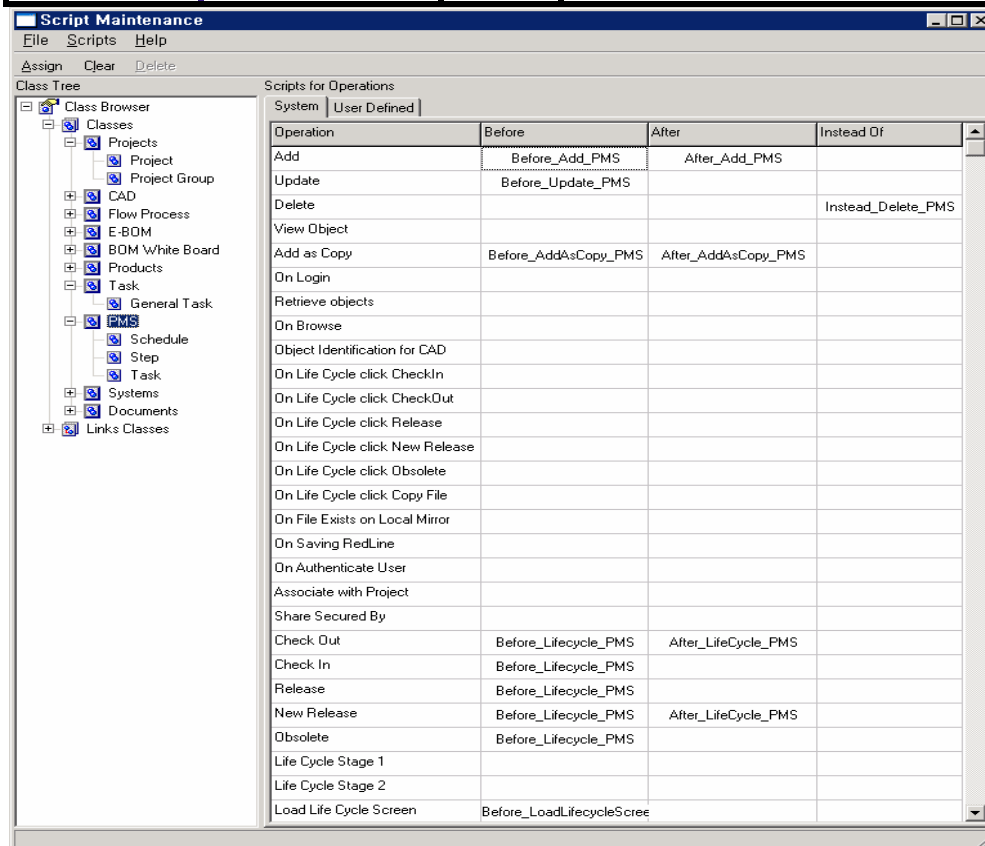
## 12. Server Side Scripts:





Class	Operation	Type	Script	Note
Project	Add	Before	SF_CreateProjectCode	
Project	Update	After	After_Update_Pjt	
Documents	Release	After	After_Release_Doc	
Projects Tree	Add	Afrter	Pjt_Unity_tree_add_after	
PMS	Add	Before	Before_Add_PMS	
PMS	Add	After	After_Add_PMS	
PMS	Update	Before	Before_Update_PMS	
PMS	Delete	Instead of	Instead_Delete_PMS	
PMS	Add as Copy	Before	Before_AddAsCopy_PMS	
PMS	Add as Copy	After	After_AddAsCopy_PMS	
PMS	Check out	Before	Before_LifeCycle_PMS	
PMS	Check out	After	After_LifeCycle_PMS	
PMS	Check In	Before	Before_LifeCycle_PMS	
PMS	Release	Before	Before_LifeCycle_PMS	
PMS	New Release	Before	Before_LifeCycle_PMS	
PMS	New Release	After	After_LifeCycle_PMS	
PMS	Obsolete	Before	Before_LifeCycle_PMS	
PMS	Load Life Cycle Screen	Before	Before_LoadLifecycleScreen_PMS	
Task	Update	After	After_Update_Task	
PMS Tree	Add	Before	Before_Add_PMSTree	
PMS Tree	Add	After	After_Add_PMSTree	

PMS Tree	Delete	Before	Before_Delete_PMSTree	
	Delete	After	After_Delete_PMSTree	



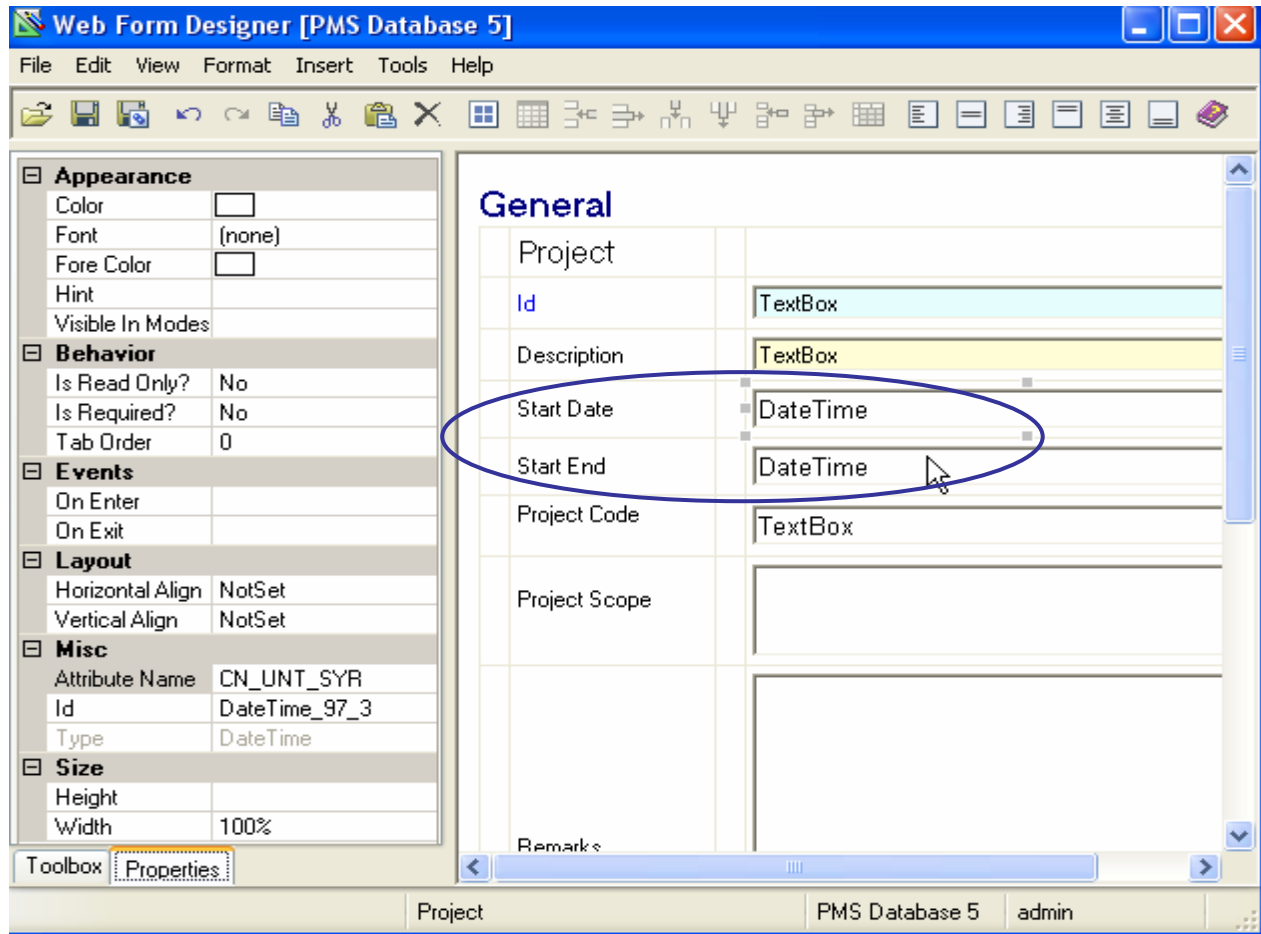
## Chapter 6: Upgrading Database from D4 to D6

It is necessary to upgrade the database if a user decided to update from D4 to D5. After upgrading the database the Data Model Designing steps should be completed.

Following are the steps to upgrade the database:-

1. Run Web form Designer using SmarTeam Administrator Console->user Interface management
2. Open Project class.
3. Check for the Start Date and Start End control types.  
Change the control types to DateTime Control type as shown in following screen.

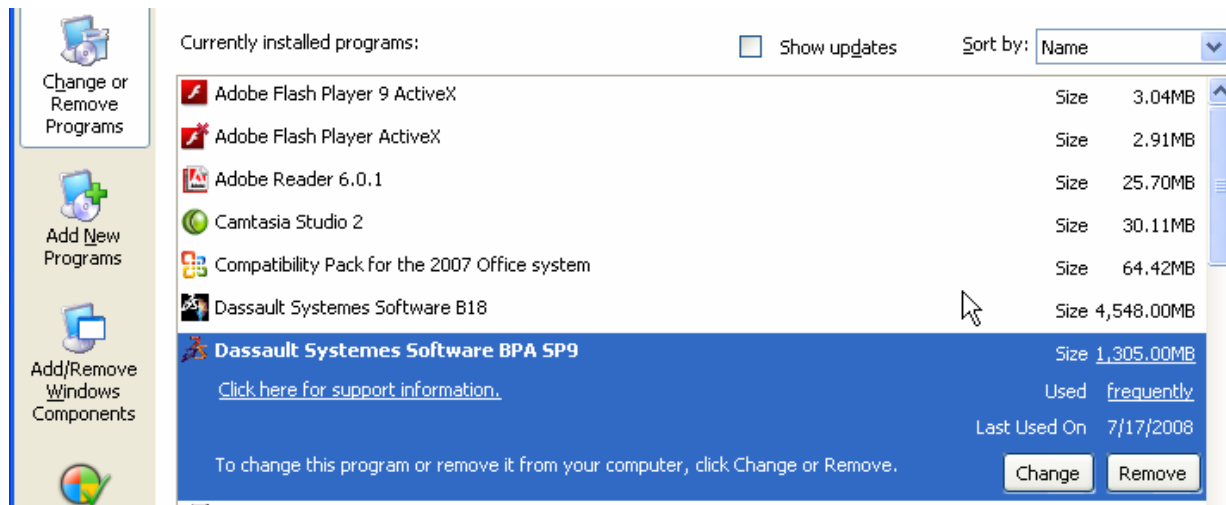




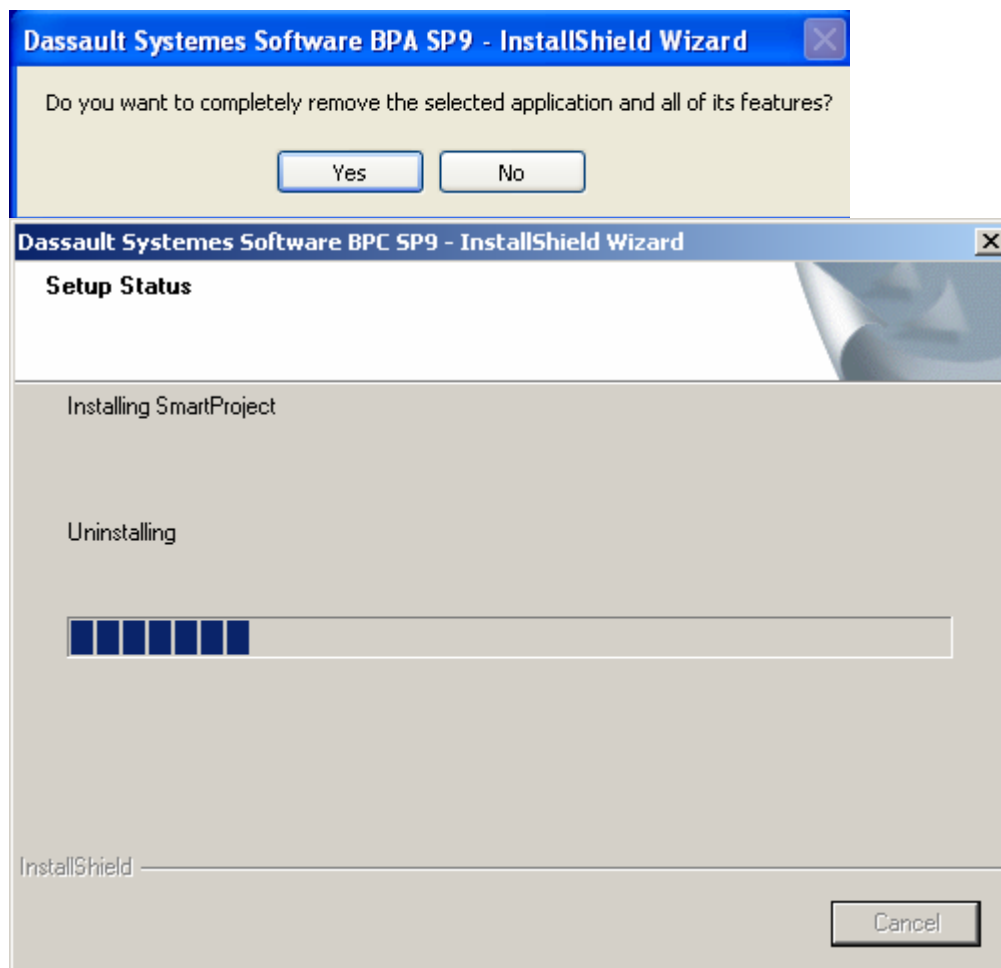
4. Save the changes made.
5. Close the Web form designer.

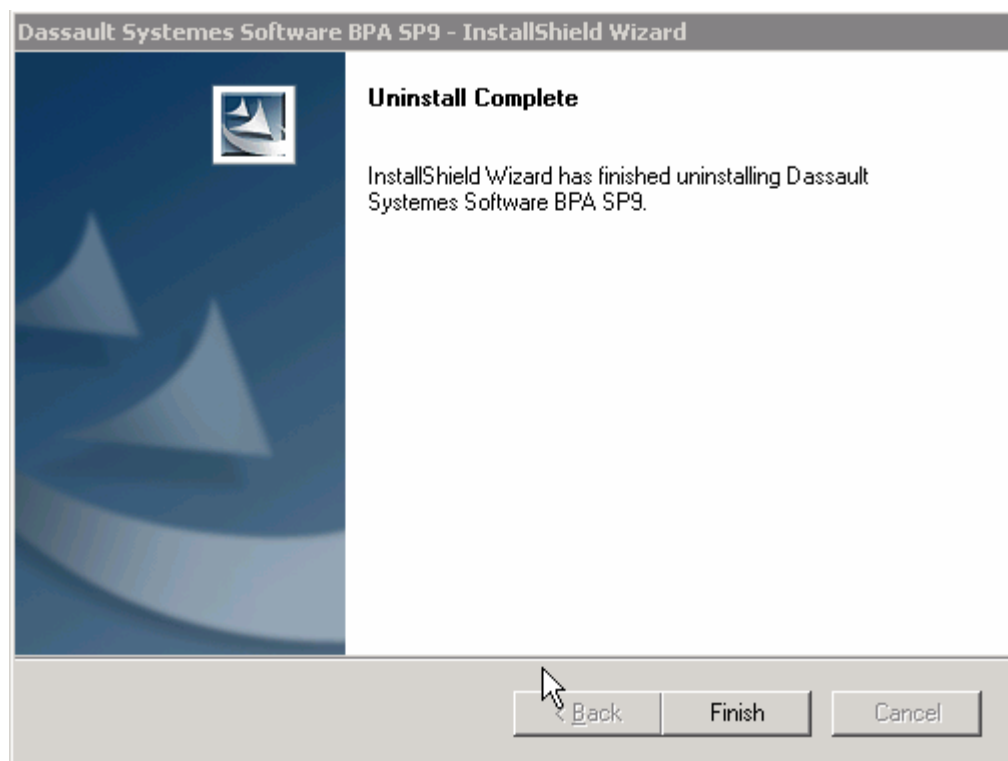
## Chapter 7: Uninstallation of SMARTPROJECT

To uninstall the application, launch “control Panel” / “add or remove programs” command:



Select Remove: the following screen appears and then quickly disappears automatically.





Click on Finish.  
Reminder: this doesn't detach or delete any database.