

# SmartProject (SP9)

BPA Delivery 7 for V5R19SP4 (V5.7)

## *Implementation Guide*

---

## ***Modification Tracking***

---

| Version | Date        | Done by | Modification                                      |
|---------|-------------|---------|---|
| D7W33.2 | 11 Aug 2009 | IJK     | Document updated with Modification Tracking Table |
|         |             |         |   |
|         |             |         |   |
|         |             |         |   |



## Table of content

|  |           |
|--|-----------|
| Copyright Notice .....   | 4         |
| <i>Chapter 1: Introduction .....</i>   | <i>5</i>  |
| What is SMARTPROJECT? .....  | 5         |
| <i>Chapter 2: Usage of Demo database .....</i>                                 | <i>6</i>  |
| a. Attach Demo Database .....  | 6         |
| b. Select Database for Authentication.....                                     | 18        |
| <i>Chapter 3: Implementation of SMARTPROJECT on an existing database .....</i> | <i>19</i> |
| 1. Data Model Source (WizSrc).....   | 19        |
| a. In case you have SQL Server Management Studio .....                         | 19        |
| b. In case you don't have SQL Server Management Studio .....                   | 22        |
| 2. Create a new Database.....  | 25        |
| 3. Data Model Designer.....  | 26        |
| 4. SQL Scripts.....  | 34        |
| 5. Values for Lookup tables.....   | 34        |
| 6. Sequence Designer.....  | 34        |
| 7. Menu Editor .....   | 36        |
| 8. Web Form Designer .....   | 42        |
| 9. User Maintenance .....  | 50        |
| 10. Configuration Settings .....   | 50        |
| 11. NLS Settings .....   | 52        |
| 12. Server Side Scripts:.....  | 52        |

# *Copyright Notice*

---

© 2009. Dassault Systèmes, All Rights Reserved.

**This guide is delivered subject to the following conditions and restrictions:**

**CONFIDENTIAL** - This document contains unpublished, confidential and proprietary information of Dassault Systèmes.

This document or any part thereof shall not be reproduced or transferred to other documents or formats, disclosed to others or used for any purpose other than that for which it is furnished, without the prior written consent of Dassault Systèmes.

It shall be returned to Dassault Systèmes upon request.

Dassault Systèmes is a registered trademark of Dassault Systèmes.

All other trademarks belong to their respective owners.

SMARTEAM is a registered trademark of SMARTEAM Corporation Ltd.

Microsoft Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries.

# Chapter 1: Introduction

---

The purpose of this document is to help the reader understand how to use the Demo DB and implement project on the existing Database with the SmarTeam BPA SMARTPROJECT.

## *What is SMARTPROJECT?*

---

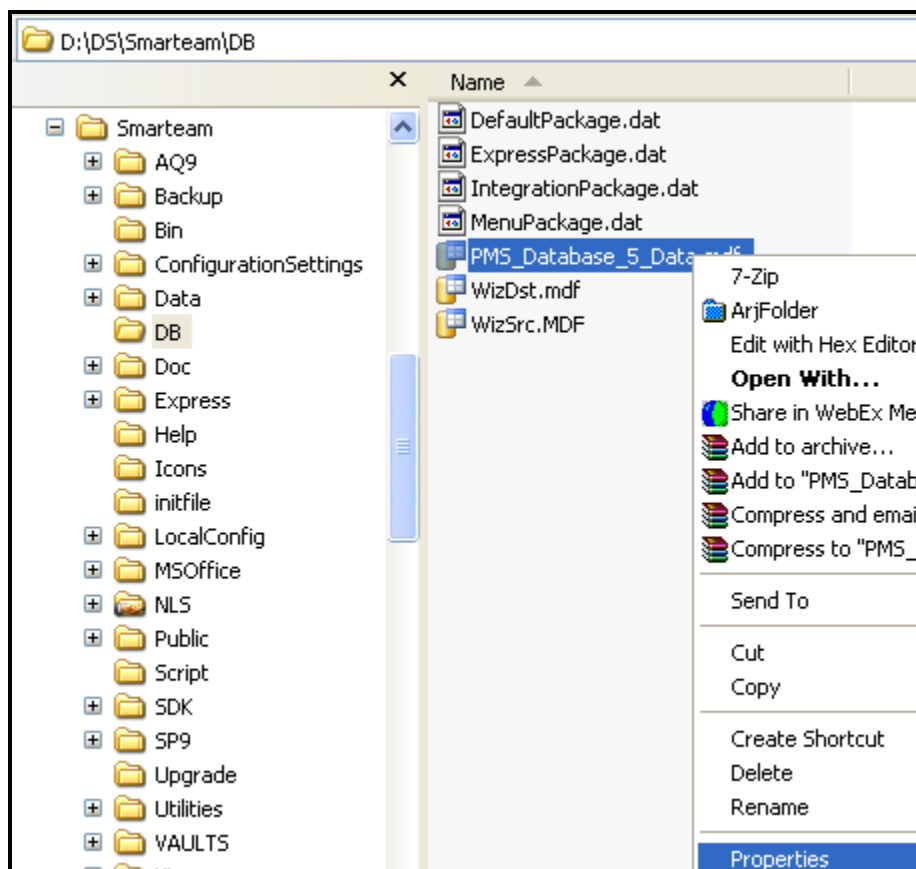
SMARTPROJECT is a Project Management tool upon SMARTEAM WEB EDITOR.

## Chapter 2: Usage of Demo database

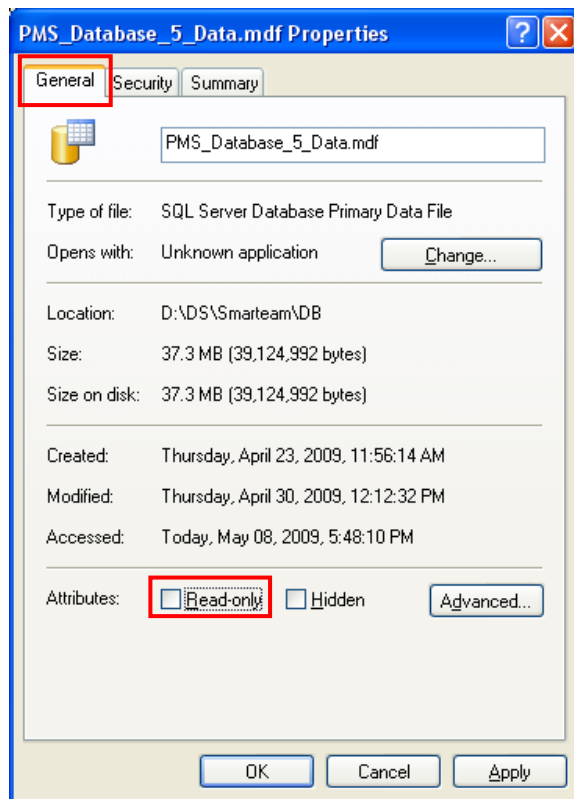
If you want to run SMARTPROJECT application with the Demo database which is provided in the setup, you need to attach Demo DB.

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

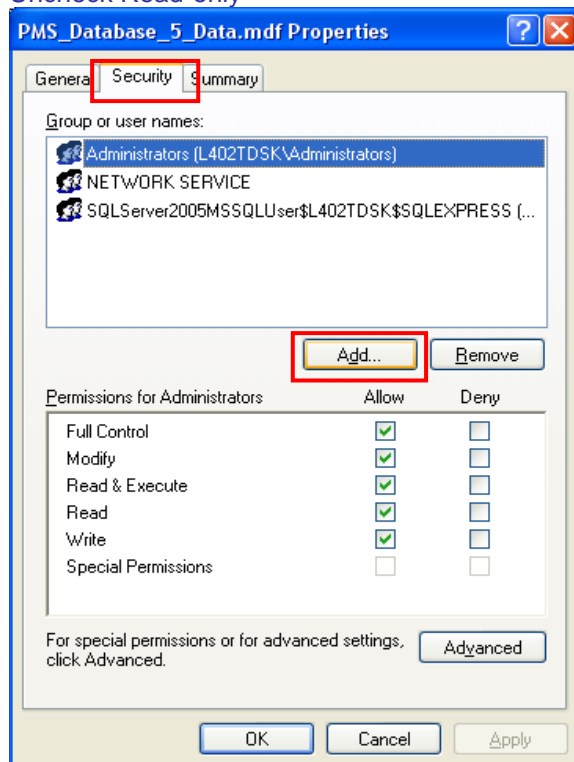
### *a. Attach Demo Database*



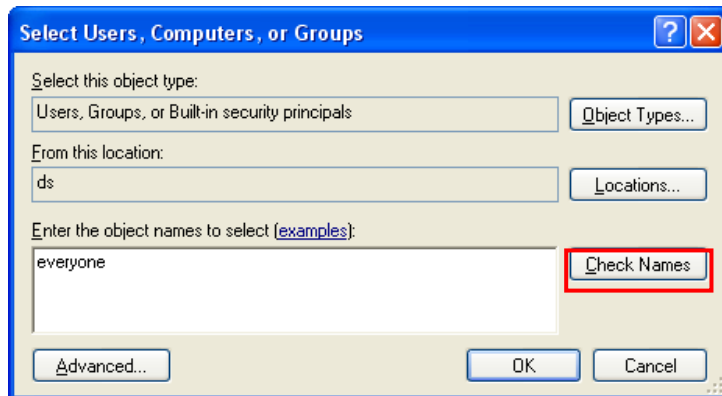
Select Properties



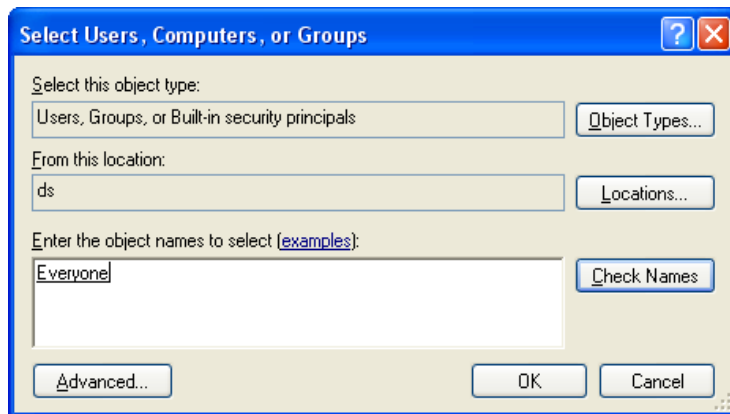
Uncheck Read-only



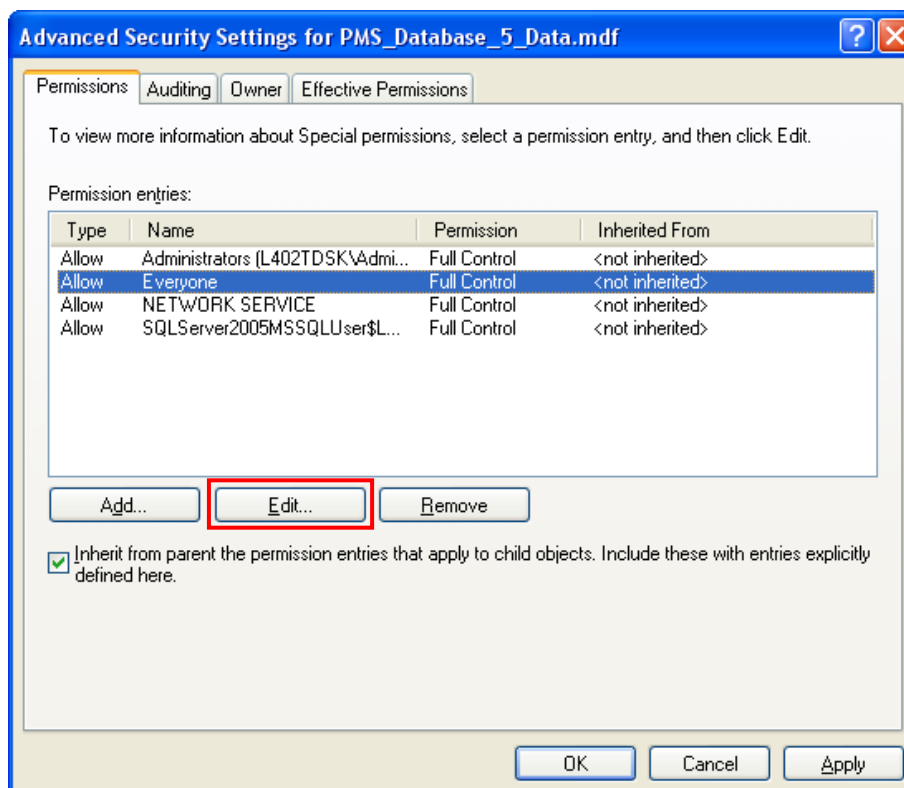
Select Add



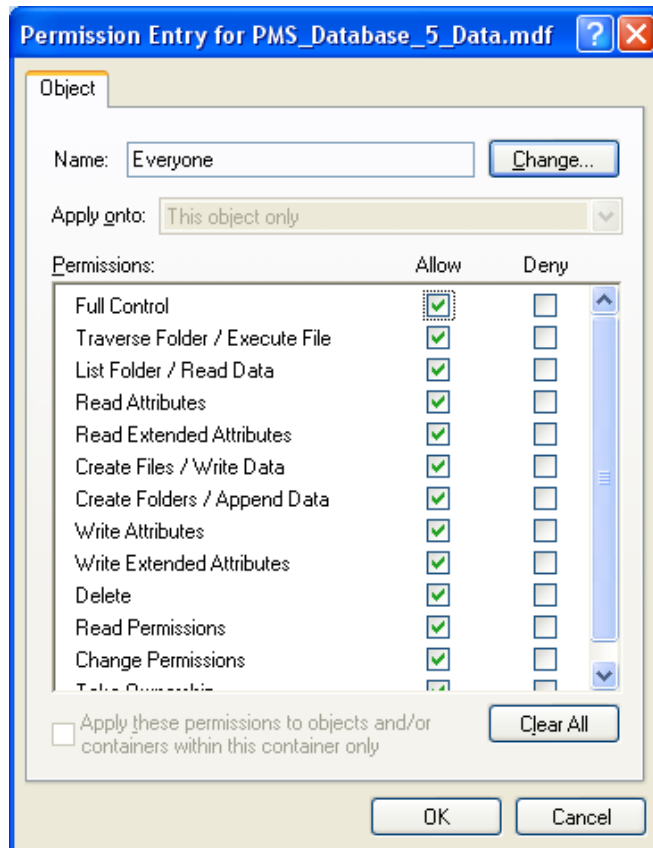
Enter everyone and click on Check Names button



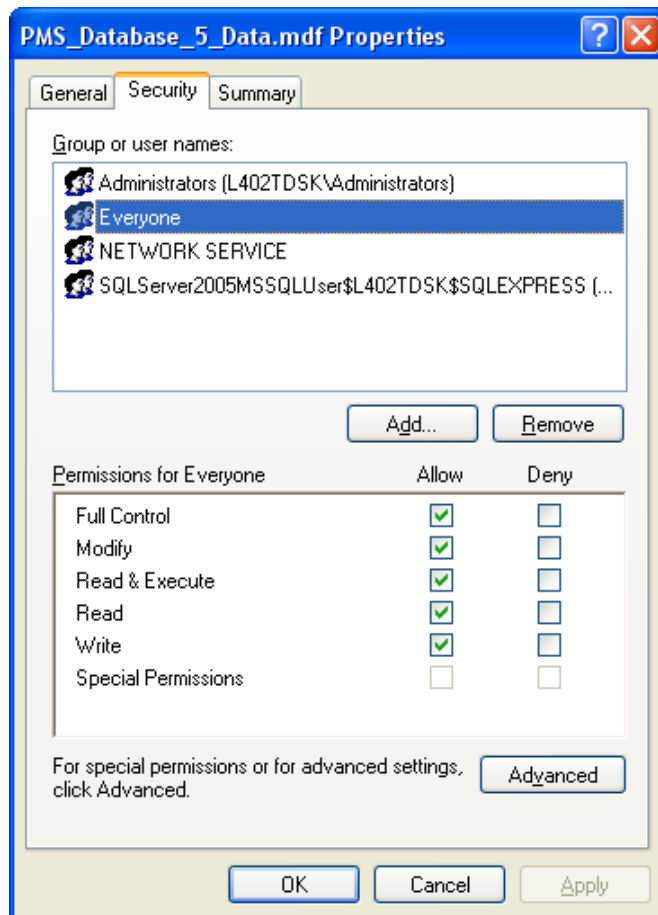
Click on OK button



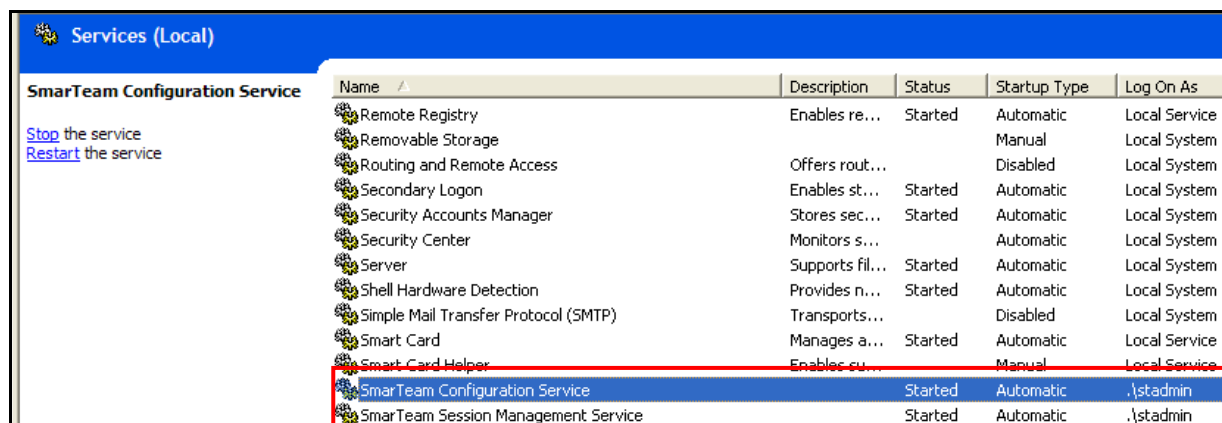
Select Everyone and Edit it



Allow full control, Click on OK.



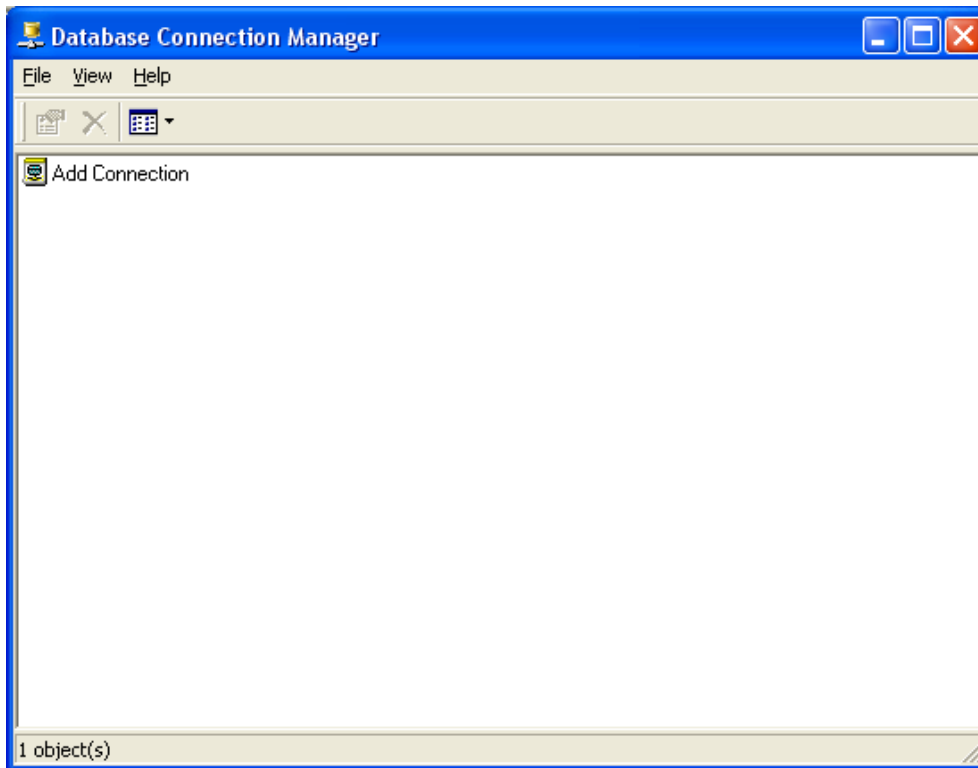
Apply changes. Click on OK



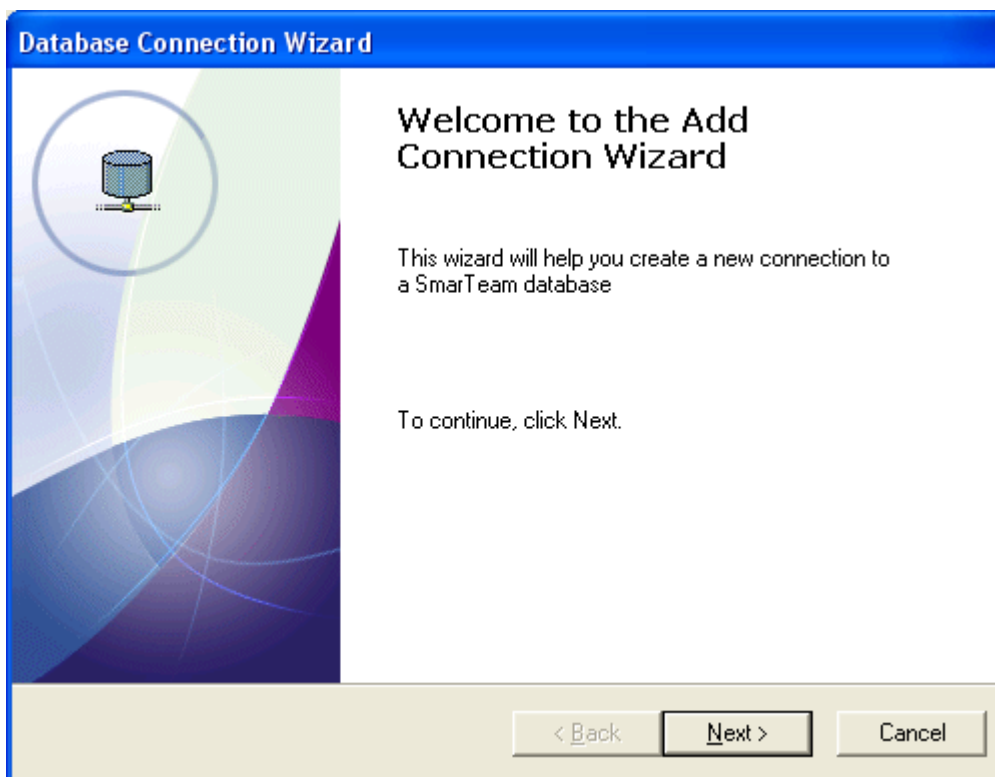
Restart two services : SmarTeam Configuration Service & SmarTeam Session Management Service



Launch Database Connection Manager



Double click on Add Connection



Click on Next

### Database Connection Wizard

**Database Type**  
Select the appropriate database type

Please select your database type from the list below. If your database type is not listed here, select Custom

☐ Create a connection string to an existing database

Database Type:

☒ Attach a new SQL Server database file to the server and connect to it

< Back   Next >   Cancel

Select Attach a new SQL Server database file, click on Next

### Database Connection Wizard

**Database Server**  
Select the destination database server

Select the server where the new database will reside and enter the database administrator login name and password

Server Name:  Refresh

☐ Windows Authentication

☒ SQL Server Authentication

Login Name:

Password:

< Back   Next >   Cancel

Select SQL Server Authentication, enter Login Name and Password, Click on Next

### Database Connection Wizard

**New Database Details**  
Enter database file and database name

Select the MDF file you want to attach and enter a name for the newly created database

Database file:

Database name:

< Back    Next >    Cancel

Click on Browse

### Open

Look in:

- PMS\_Database\_5\_Data.mdf
- WizDst.mdf
- WizSrc.MDF

File name:

Files of type:

Select DB


**Database Connection Wizard**

**New Database Details**  
Enter database file and database name

Select the MDF file you want to attach and enter a name for the newly created database

Database file:

Database name:

 The database file you selected is already used by database PMS\_Database\_5\_Data.

☒ Detach the current database and use this file instead

Select Detach the current database and use this file instead, Click on Next


**Database Connection Wizard**

**New Database Details**  
Enter database file and database name

Select the MDF file you want to attach and enter a name for the newly created database

Database file:

Database name:

 The database file was successfully attached to the server. Click Next to continue.

Click on Next

### Database Connection Wizard

**Database Connection String**  
Enter the connection details

A connection string contains the information required to connect to a specific database.  
Enter the connection string or click Build to have the connection string built for you.

Connection String:

Provider=SQLOLEDB.1;Persist Security Info=False;User  
ID=SMARTTEAM;Initial  
Catalog=PMS\_Database\_5\_Data;Data

Build...

< Back   Next >   Cancel

Click on Build

### Data Link Properties

Provider   Connection   Advanced   All

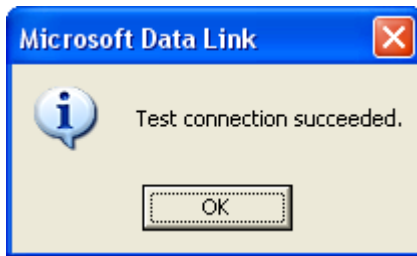
Specify the following to connect to SQL Server data:

1. Select or enter a server name:  
L402TDSK\SQLEXPRESS   Refresh
2. Enter information to log on to the server:  
☐ Use Windows NT Integrated security  
☒ Use a specific user name and password:  
 User name: SMARTTEAM  
 Password:   
☐ Blank password   ☐ Allow saving password
3. ☒ Select the database on the server:  
 PMS\_Database\_5\_Data  
☐ Attach a database file as a database name:  
 PMS\_Database\_5\_Data  
 Using the filename:   
 ...

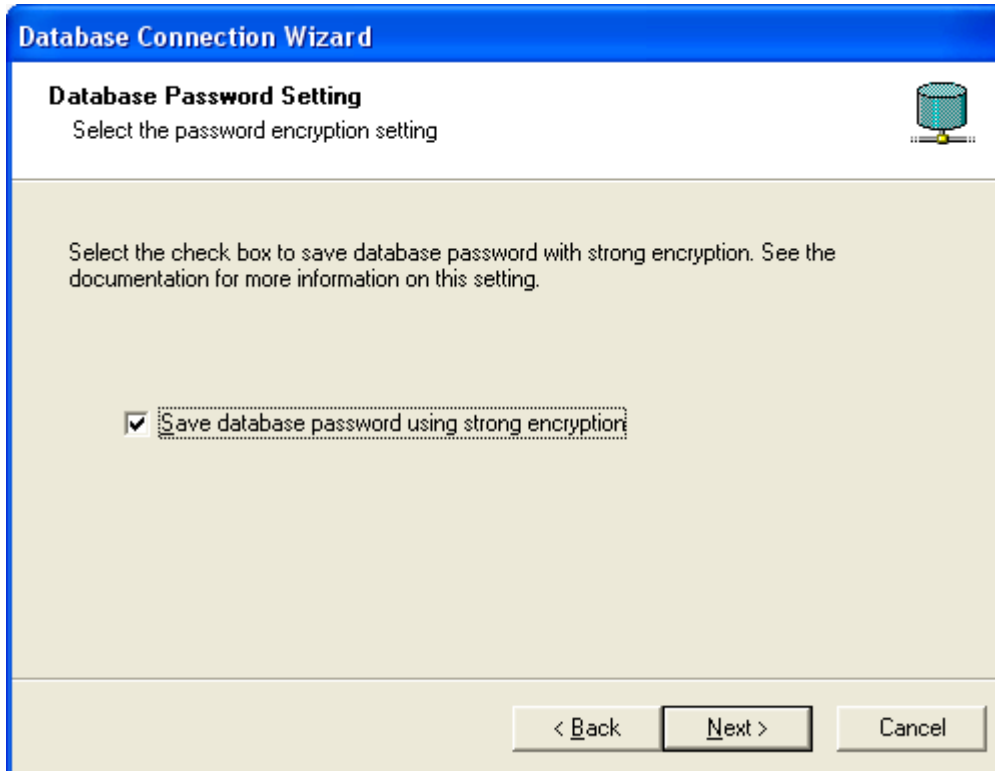
Test Connection

OK   Cancel   Help

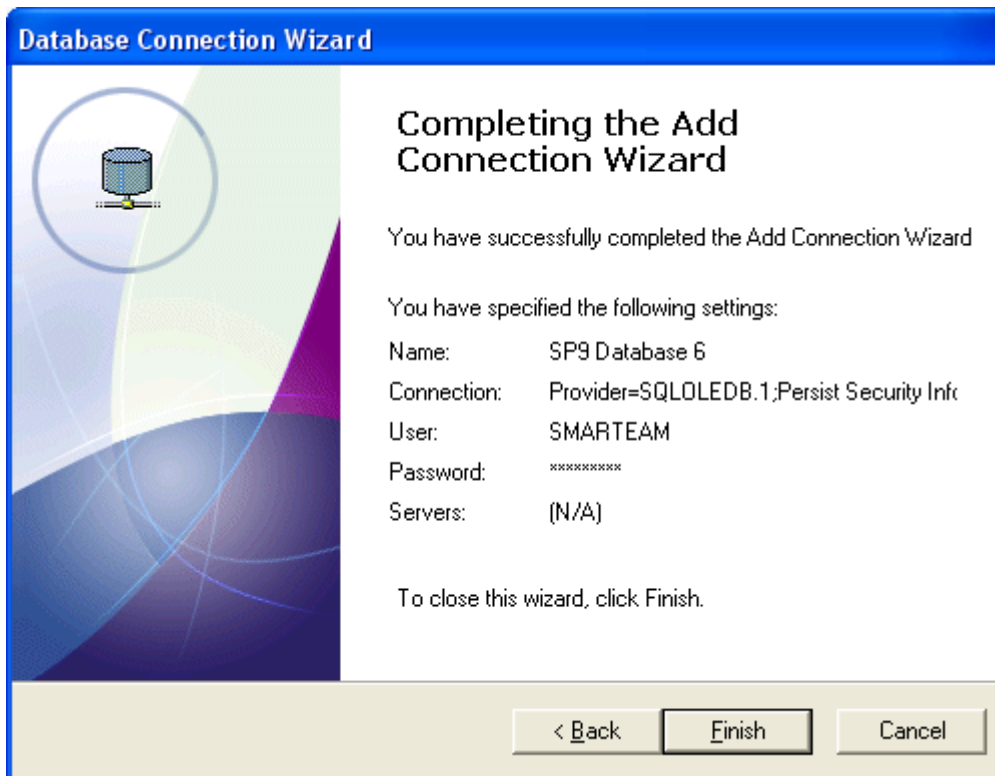
Click on Test Connection



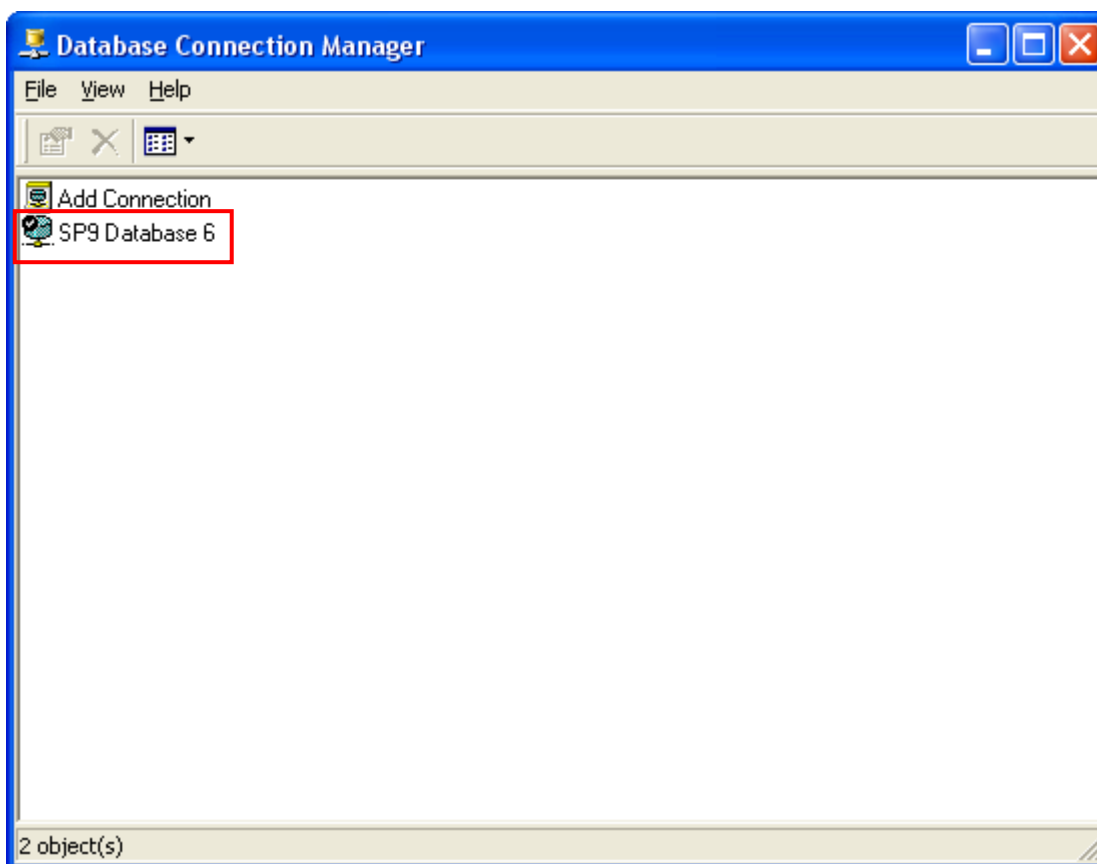
Click on OK. Click on OK. Click on Next



Click on Next

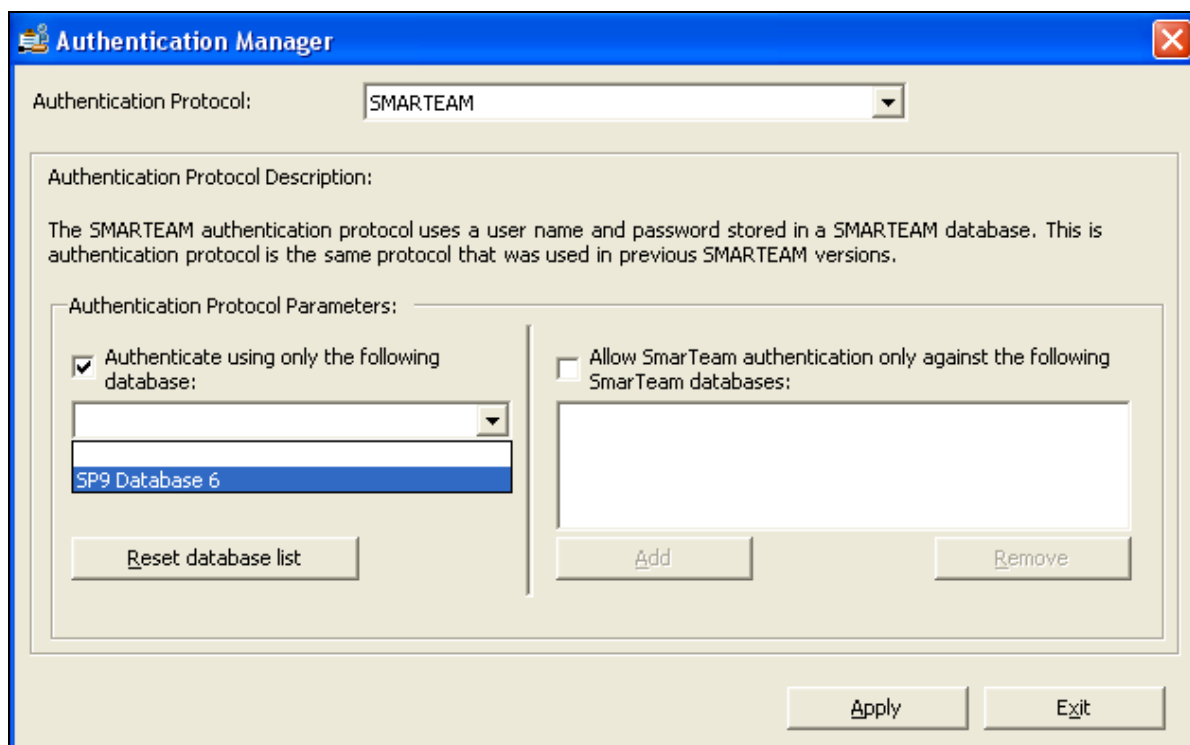
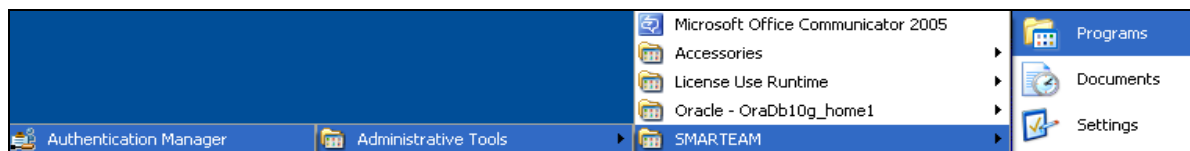


Click on Finish



Database is connected. Close the window

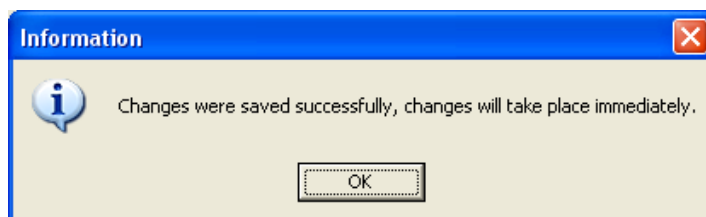
## ***b. Select Database for Authentication***



Authenticate Database. Apply changes.



Click on Yes.



Click on OK. Click Exit

# Chapter 3: Implementation of SMARTPROJECT on an existing database

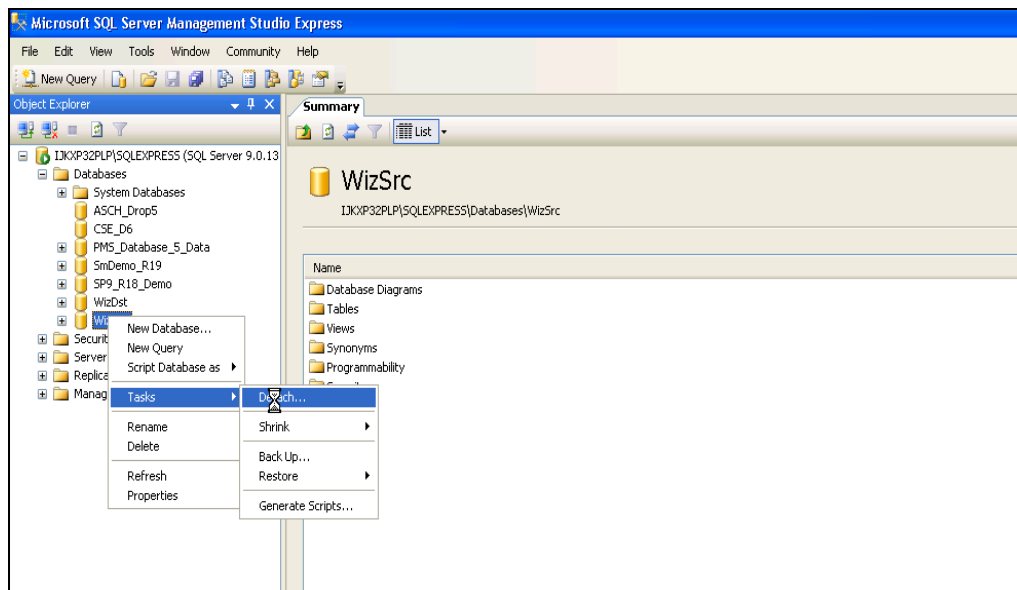
This chapter describes the steps that must be performed to implement the BPA SMARTPROJECT on top of PLM database. IF you need to implement it on top of another database, follow the same steps, only the screenshot will probably be different.

**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)

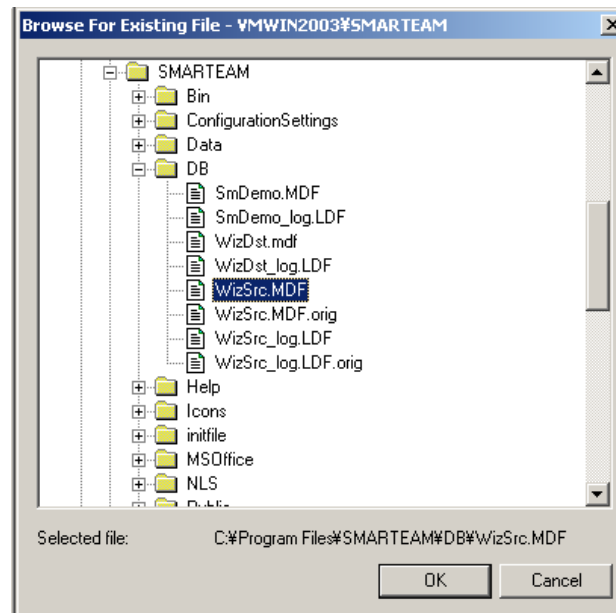
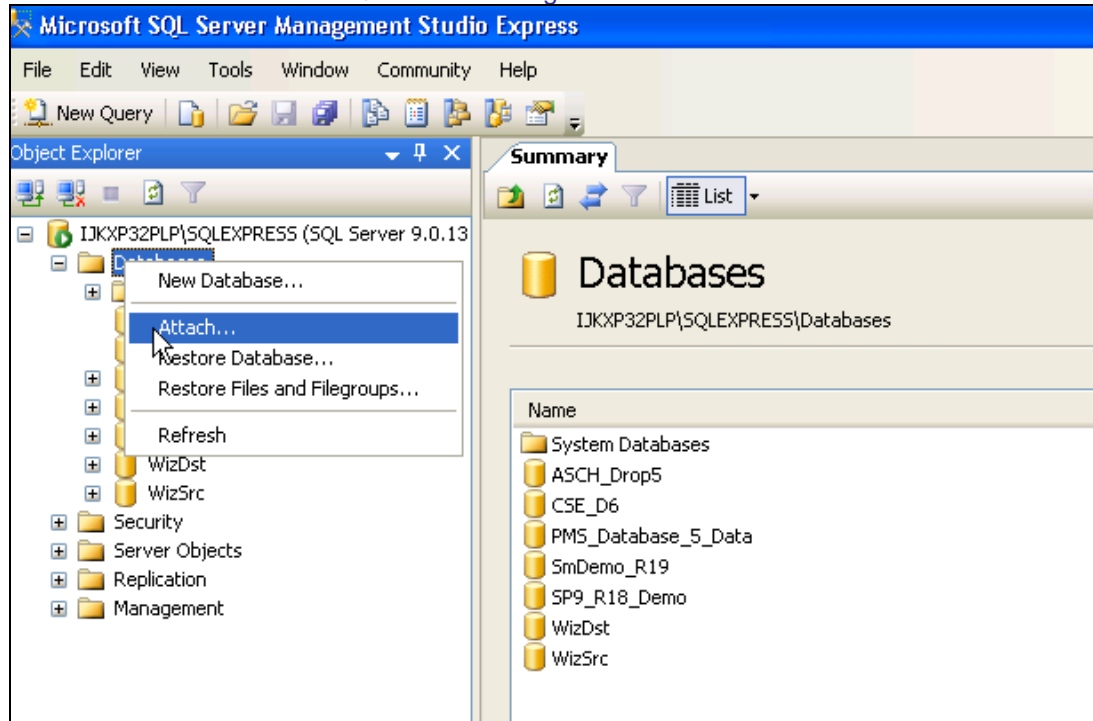
### a. In case you have SQL Server Management Studio

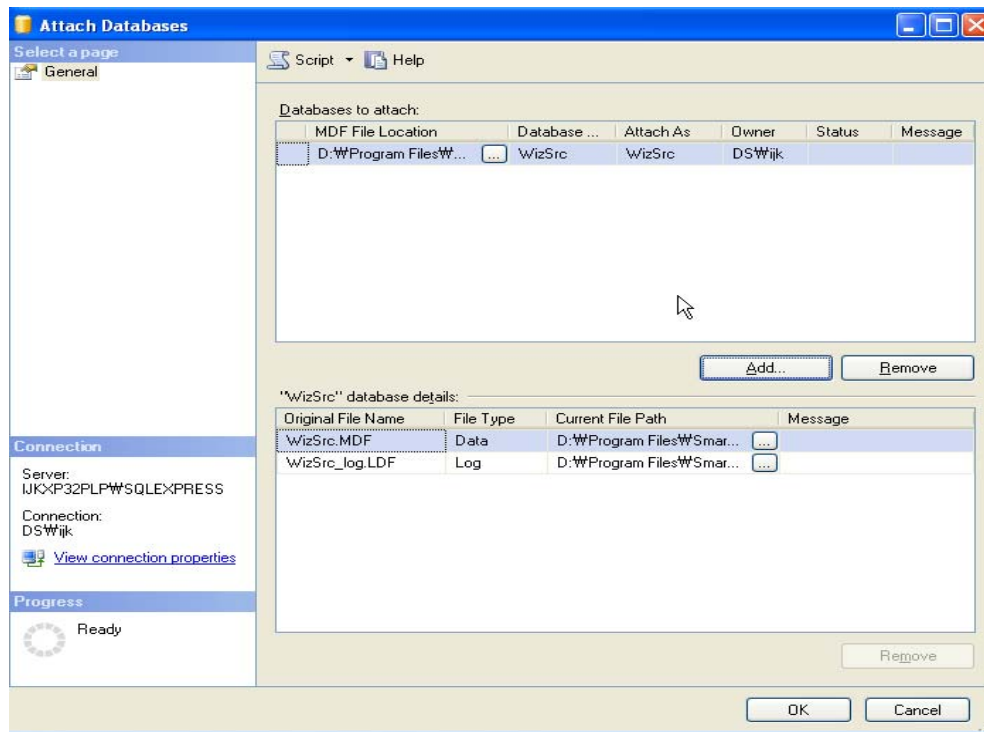
1. Check that a WizSrc.mdf file was copied in the DB directory
2. Detach the original one in SQL Server Management Studio



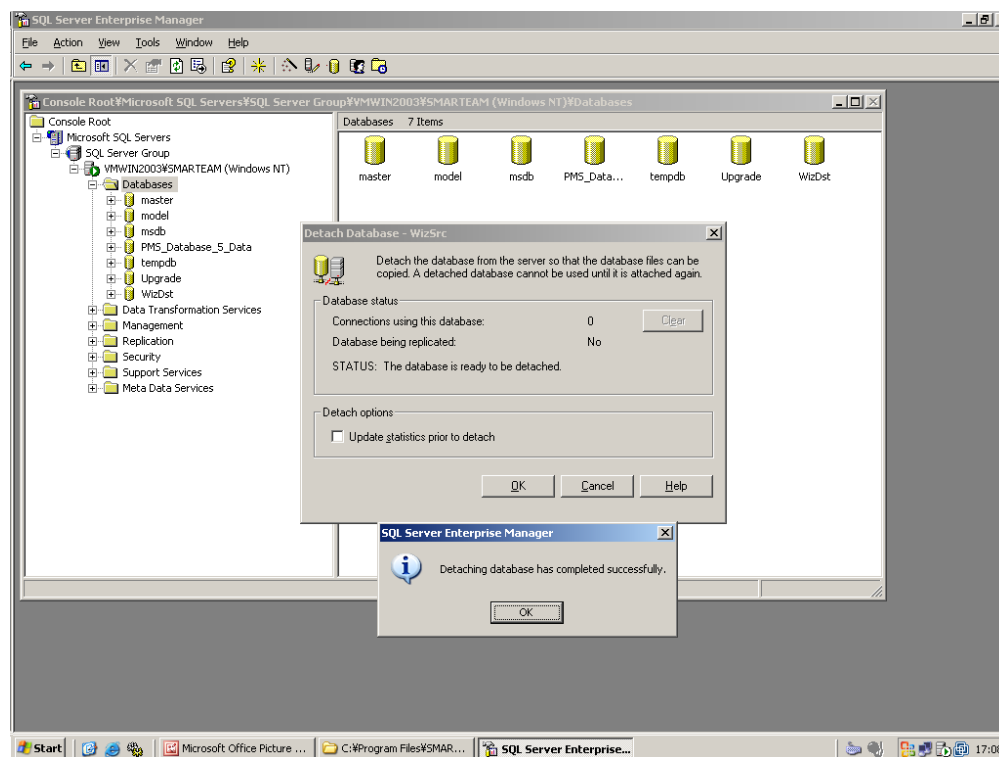
3. Replace the original one with the new one

#### 4. Attach the new one in SQL Server Management Studio

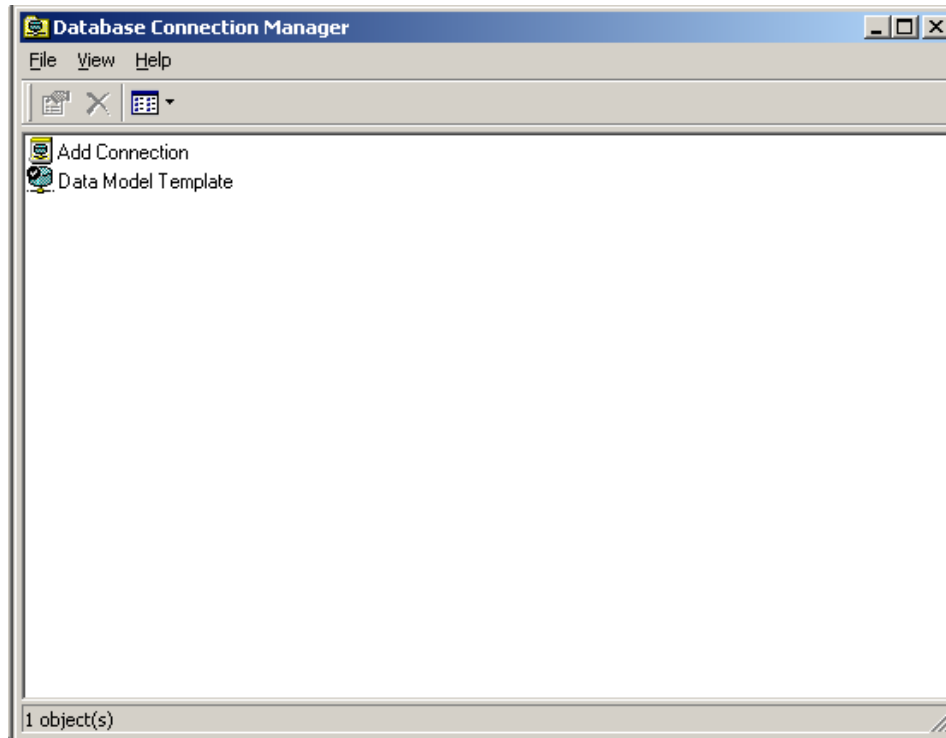




## 5. Detach again the database



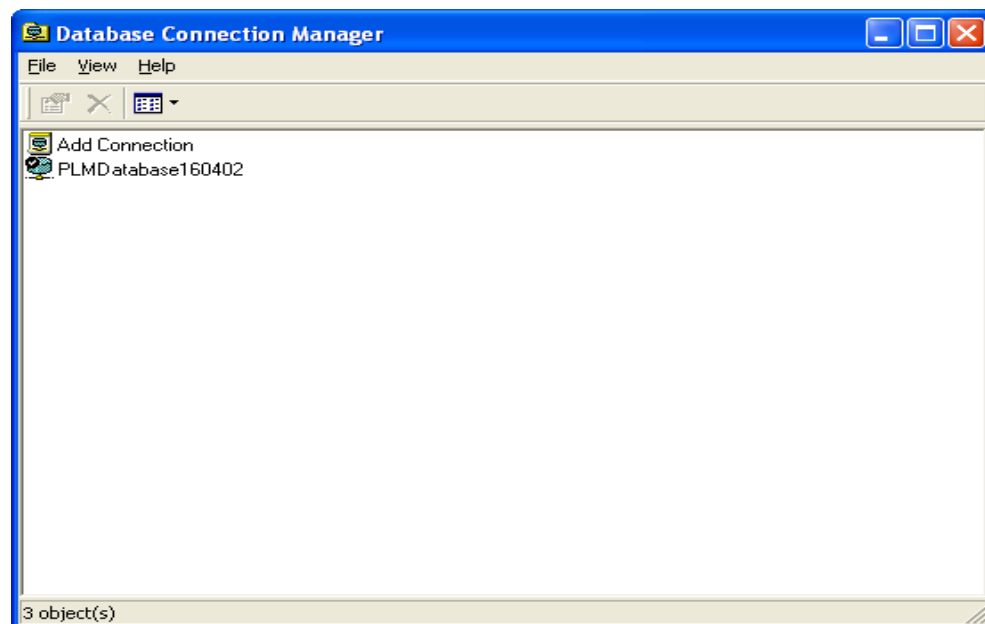
## 6. Attach the Wizsrc with Database Connection Manager



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:



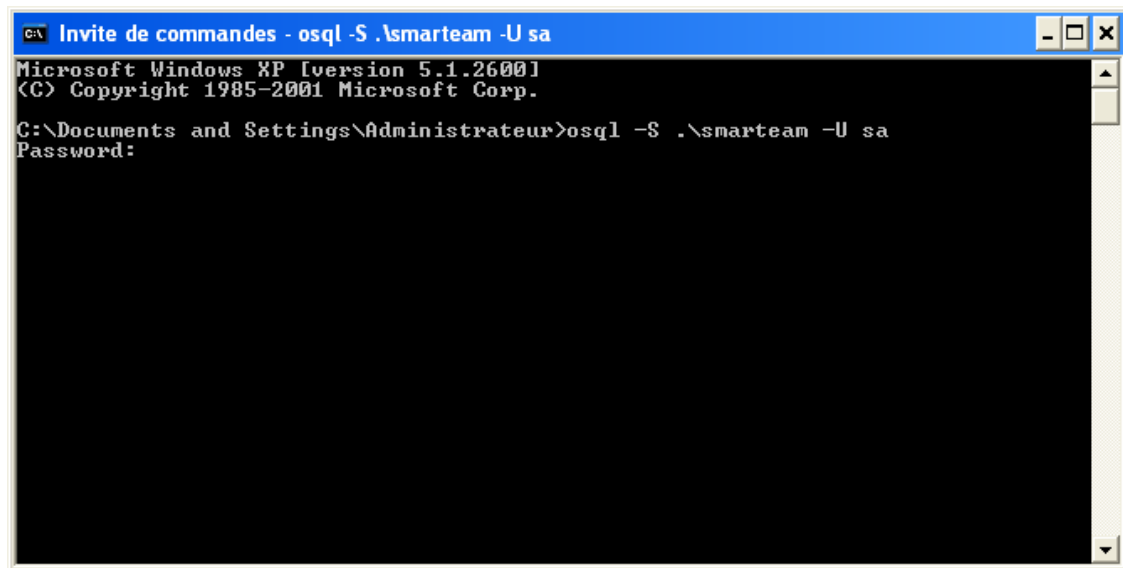
*The WizSrc database cannot be found here.*

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

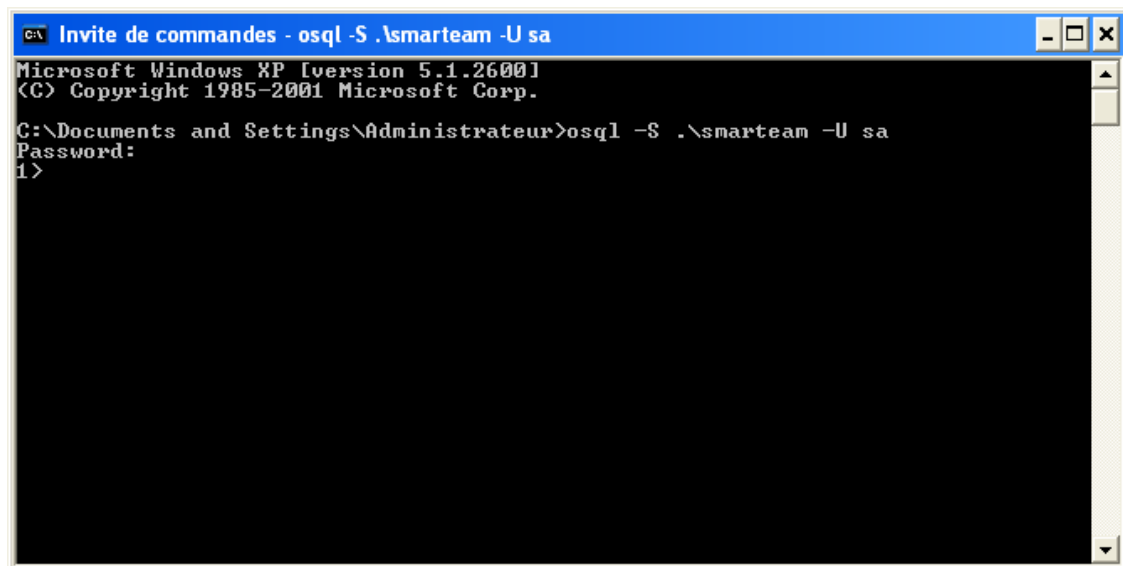
- open a cmd window : click on "start"->"execute", then type "cmd" and press "enter"
- Type the following command:

***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 :

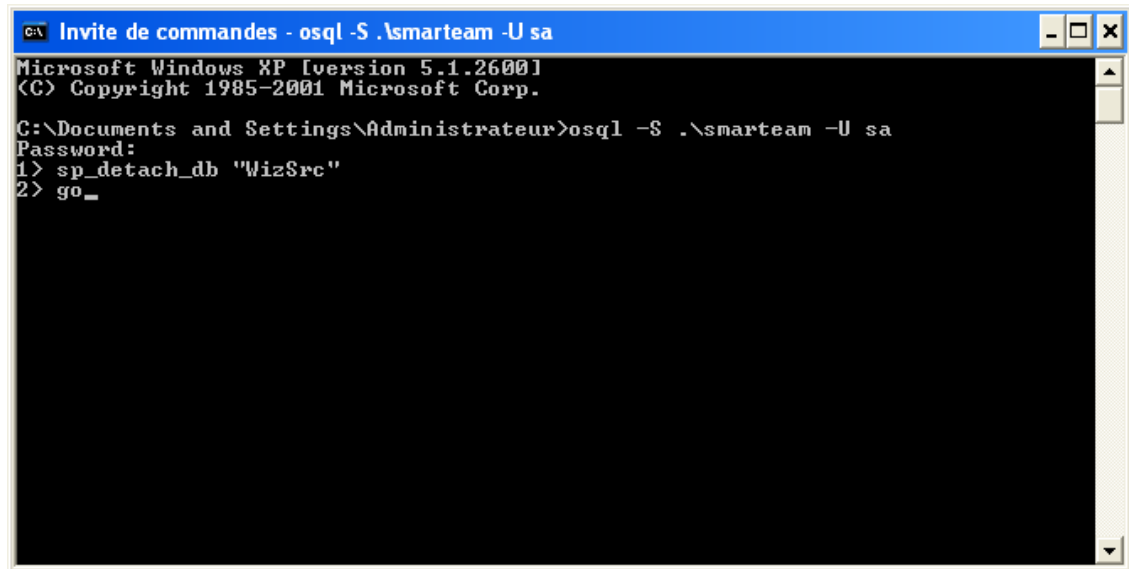


- Then at this prompt, type the following instruction and press enter.

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

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

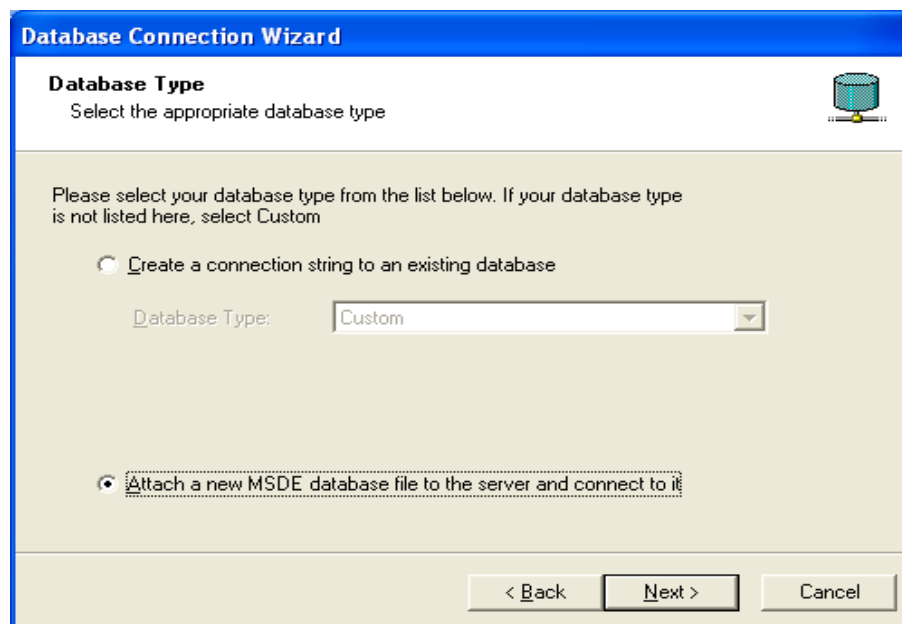
- To actually execute the previous command, type "go" and press enter as shown below :



- 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\

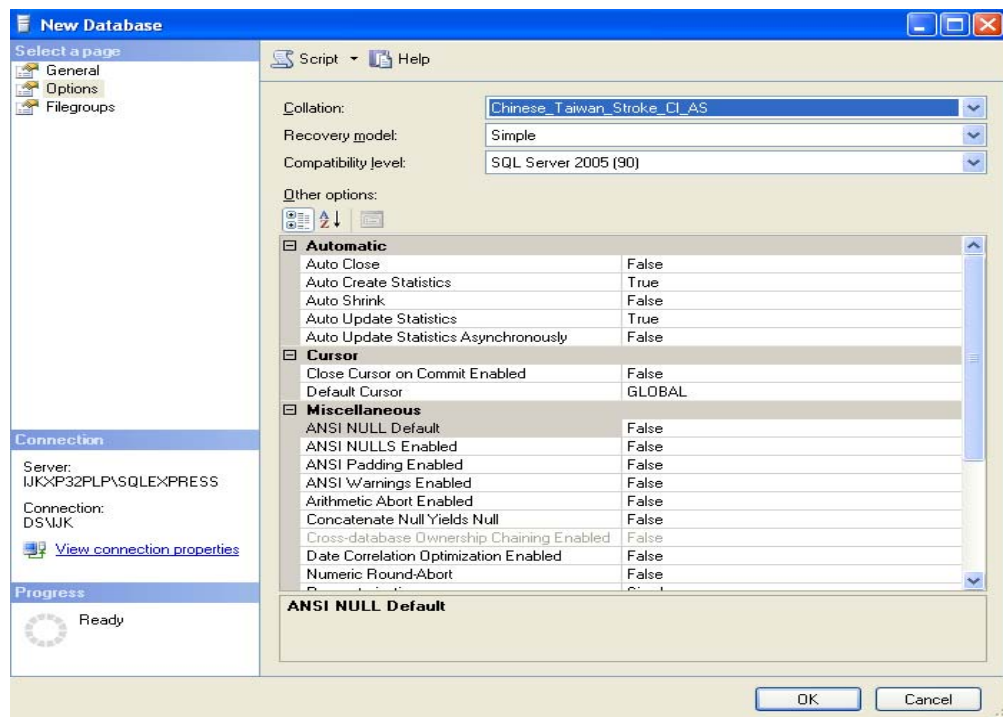
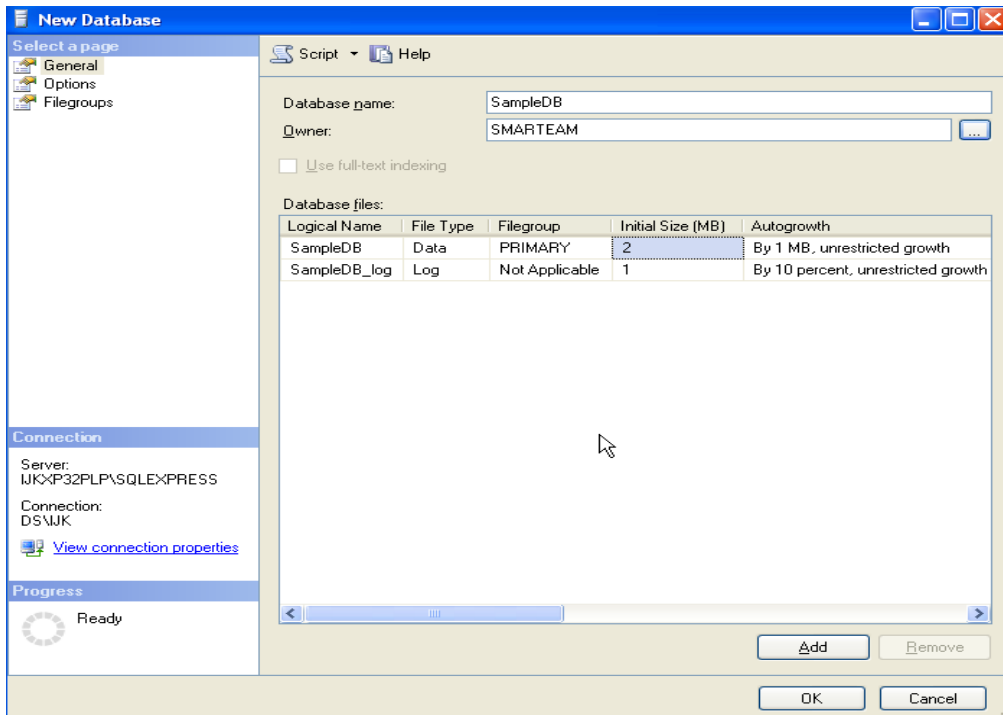
- Do not forget to delete the WizSrc.LDF (log file) that is placed in the same directory.
- Now you can simply connect the new WizSrc file as a normal database with the Smarteam Database connection manager.



## 2. Create a new Database

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

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

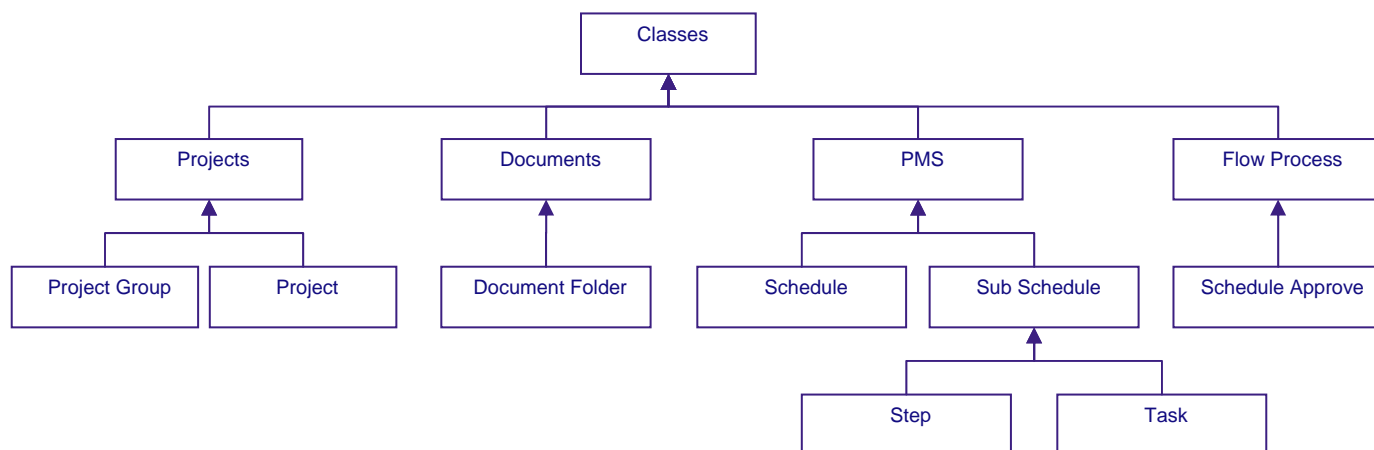


Add SMARTEAM login to the DB as DB owner

With SmartDBExplorer, copy PLM Database to the new database

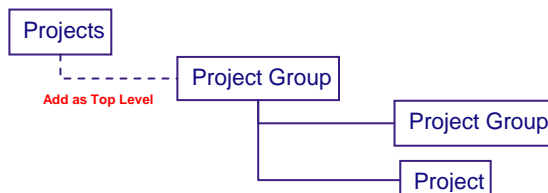
### 3. *Data Model Designer*

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"



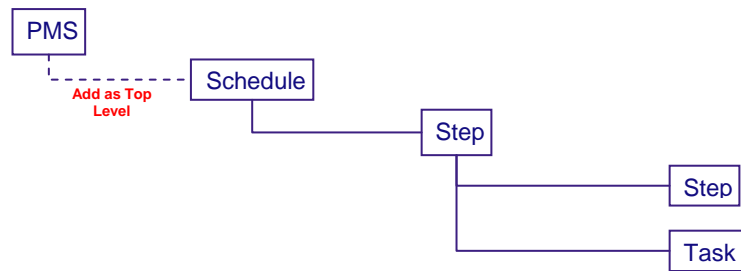
4. Apply "Revision Control" and "Workflow" Class Mechanism to PMS class
4. Create Step class under Schedule
5. Create Project Group class under Projects
- 6. Create process classes: Project Creation Approval, Schedule Approval, and Project Closing Approval**
7. Apply "PMS User Class Behavior" to Users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

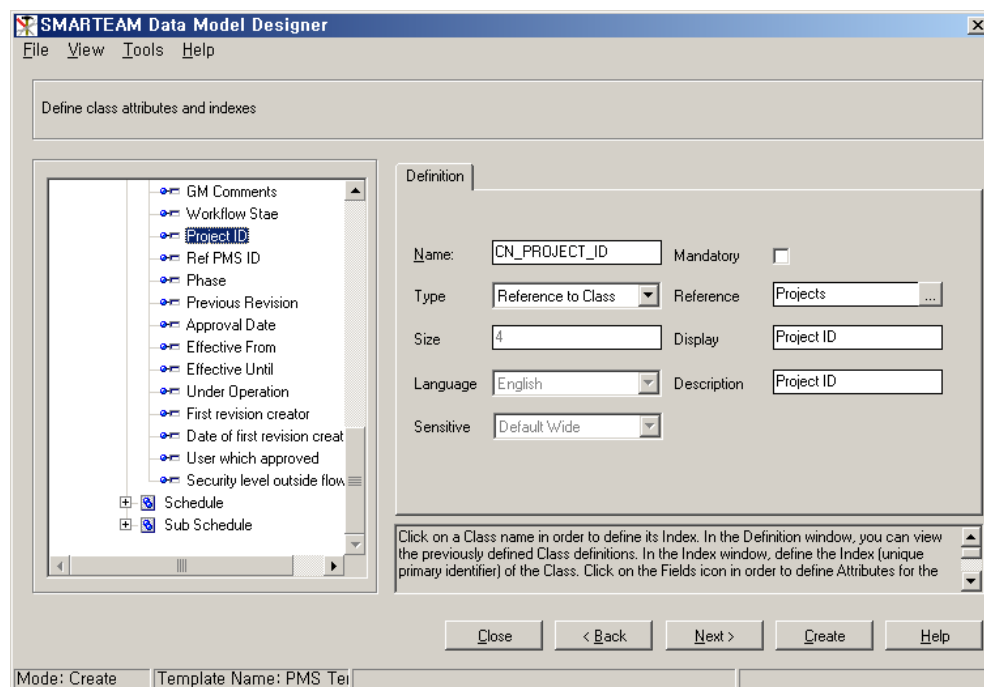
Uncheck "**Add as top level**" of "PMS", and check "**Add as top level**" for "Schedule" only

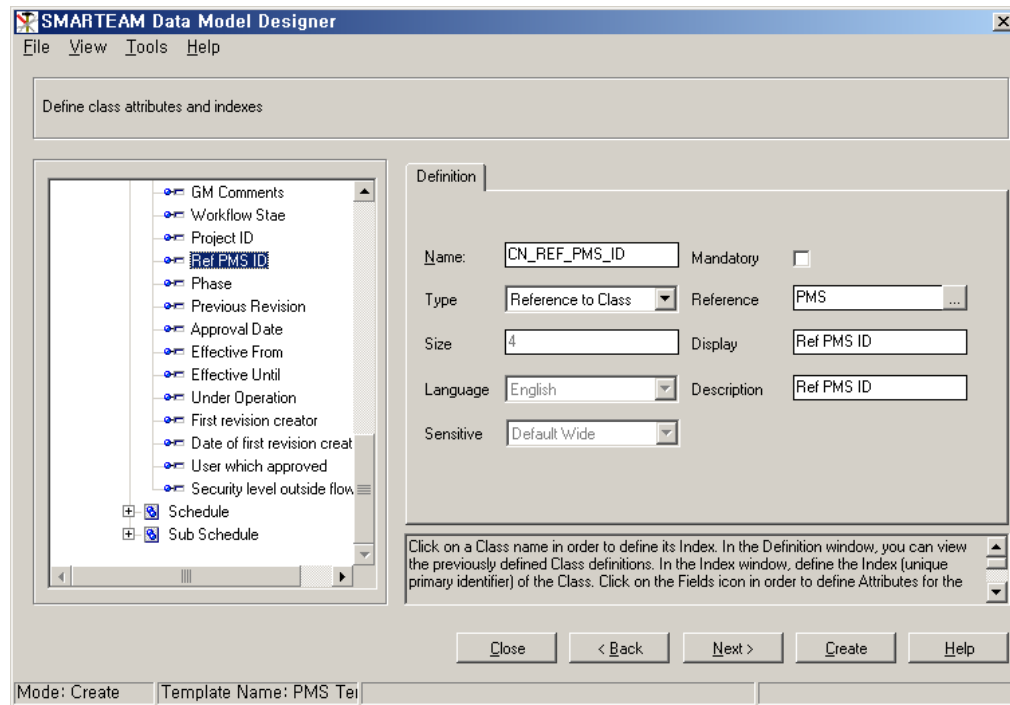


14. Define all the icons for the new classes

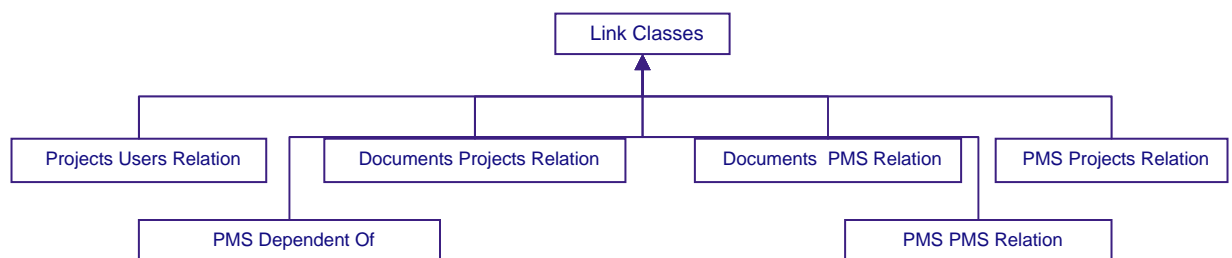
15. Create "Ref PMS ID" and "Project ID" attributes in PMS class, as reference to PMS and Projects classes

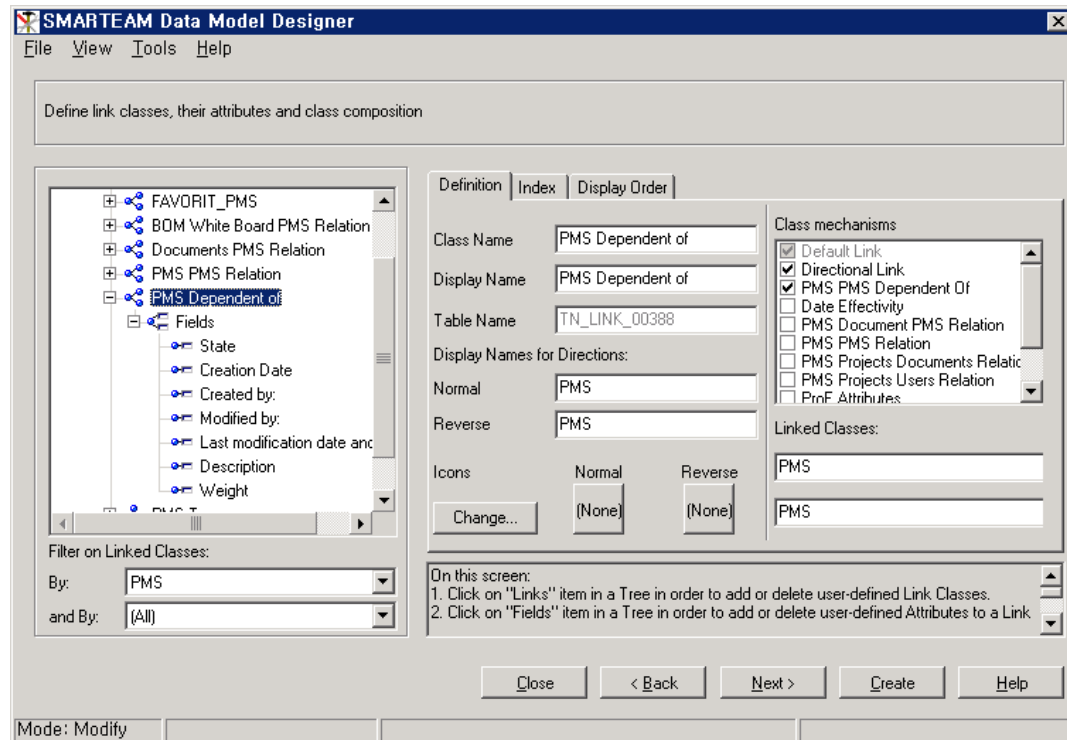
| Display Name | Filed Name    | Field Type     |
|--------------|---------------|----------------|
| Project ID   | CN_PROJECT_ID | REF (Projects) |
| Ref PMS ID   | CN_REF_PMS_ID | REF (PMS)      |



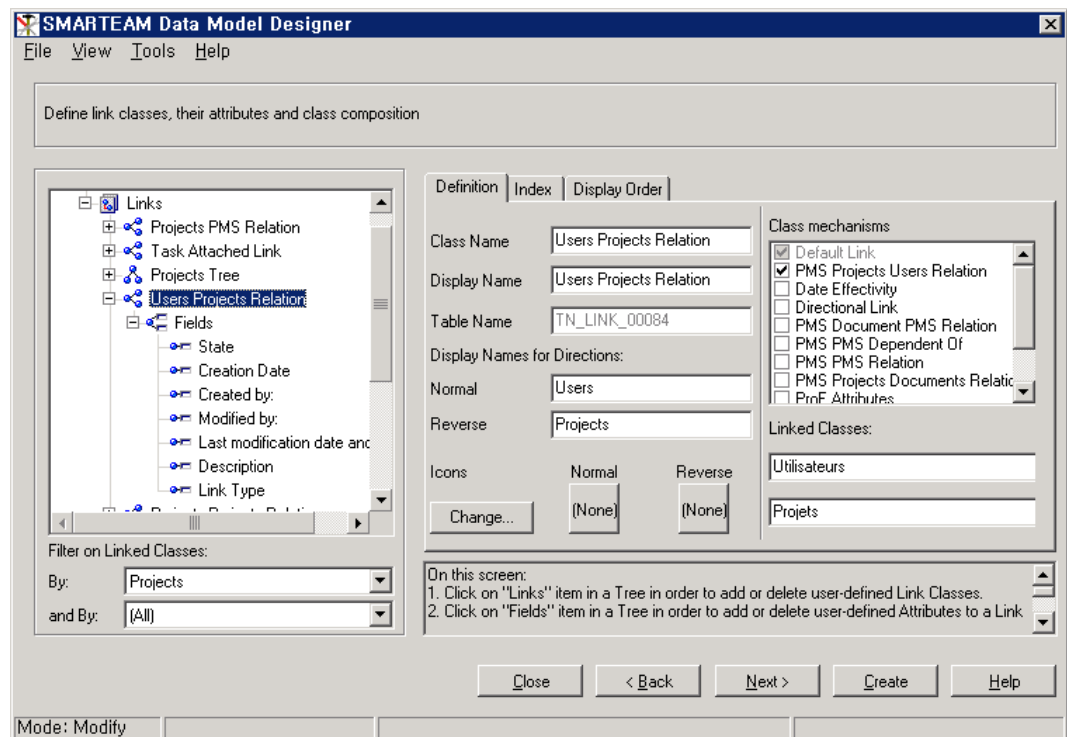


16. Create “PMS Documents Relation”, “PMS PMS Relation”, “PMS Dependent Of” (this one is a directional link between PMS and PMS classes) link classes





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



**SMARTTEAM 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

**SMARTTEAM 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

**SMARTTEAM 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
- PMS PMS Relation**
  - Fields
    - State
    - Creation Date
    - Created by:
    - Modified by:
    - Last modification date and
    - Description

Filter on Linked Classes:

By: PMS

and By: (All)

Definition Index Display Order

Class Name: PMS PMS Relation

Display Name: PMS PMS Relation

Table Name: TN\_LINK\_00387

Display Names for Directions:

Normal: PMS

Reverse: PMS

Icons: Normal Reverse

Change... (None) (None)

Class mechanisms

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

Linked Classes:

PMS

PMS

On this screen:

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

**SMARTTEAM Data Model Designer**

File View Tools Help

Define link classes, their attributes and class composition

- FAVORIT\_PMS
- BOM White Board PMS Relation
- Documents PMS Relation
- PMS PMS Relation
- PMS Dependent of**
  - 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: PMS Dependent of

Display Name: PMS Dependent of

Table Name: TN\_LINK\_00388

Display Names for Directions:

Normal: PMS

Reverse: PMS

Icons: Normal Reverse

Change... (None) (None)

Class mechanisms

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

Linked Classes:

PMS

PMS

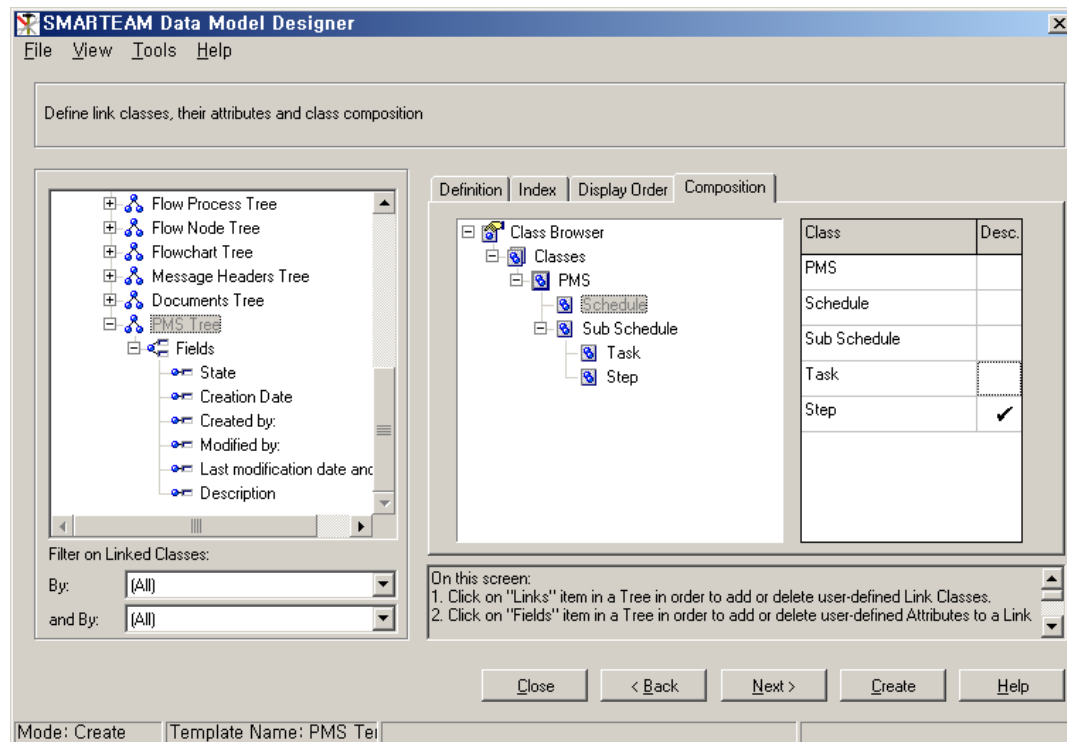
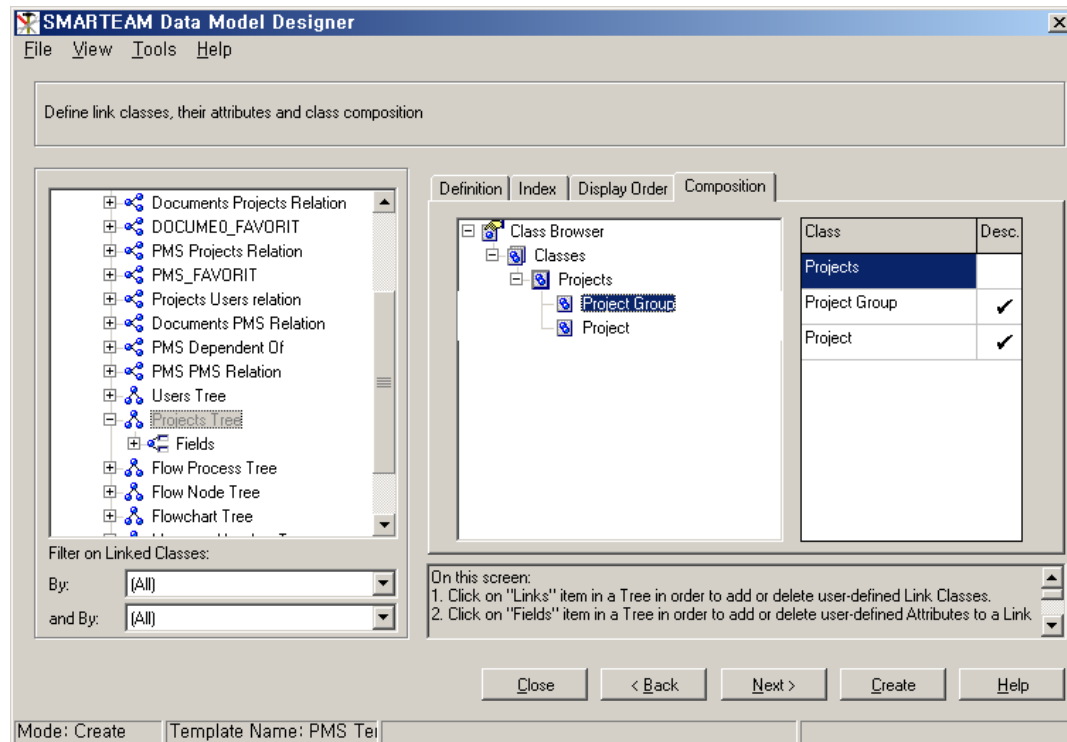
On this screen:

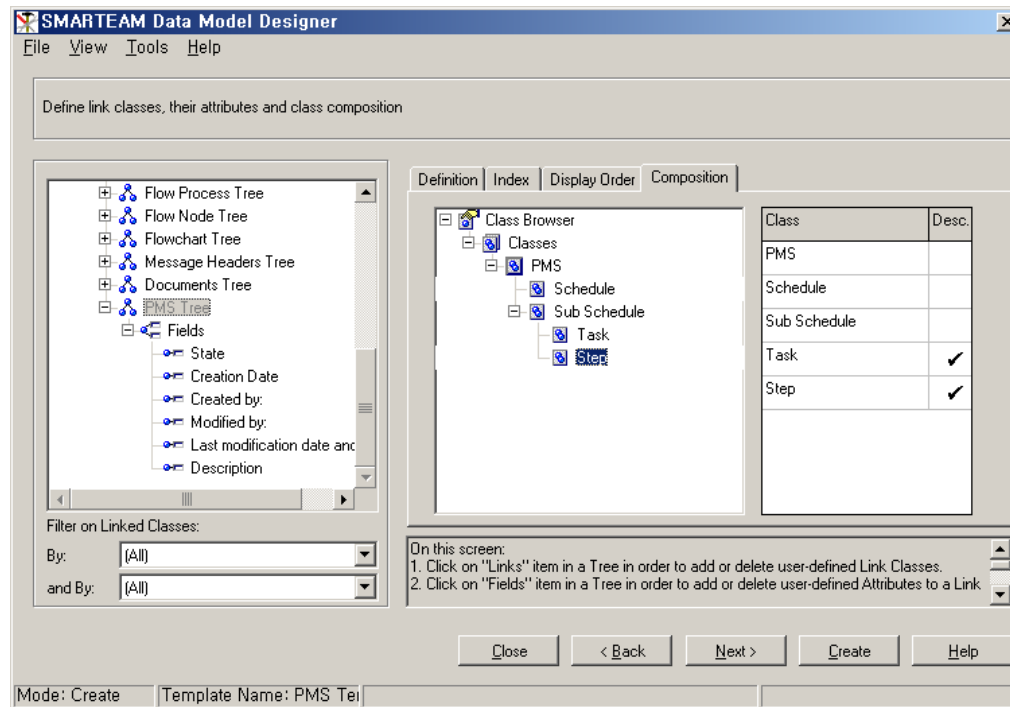
- Click on "Links" item in a Tree in order to add or delete user-defined Link Classes.
- Click on "Fields" item in a Tree in order to add or delete user-defined Attributes to a Link

Close < Back Next > Create Help

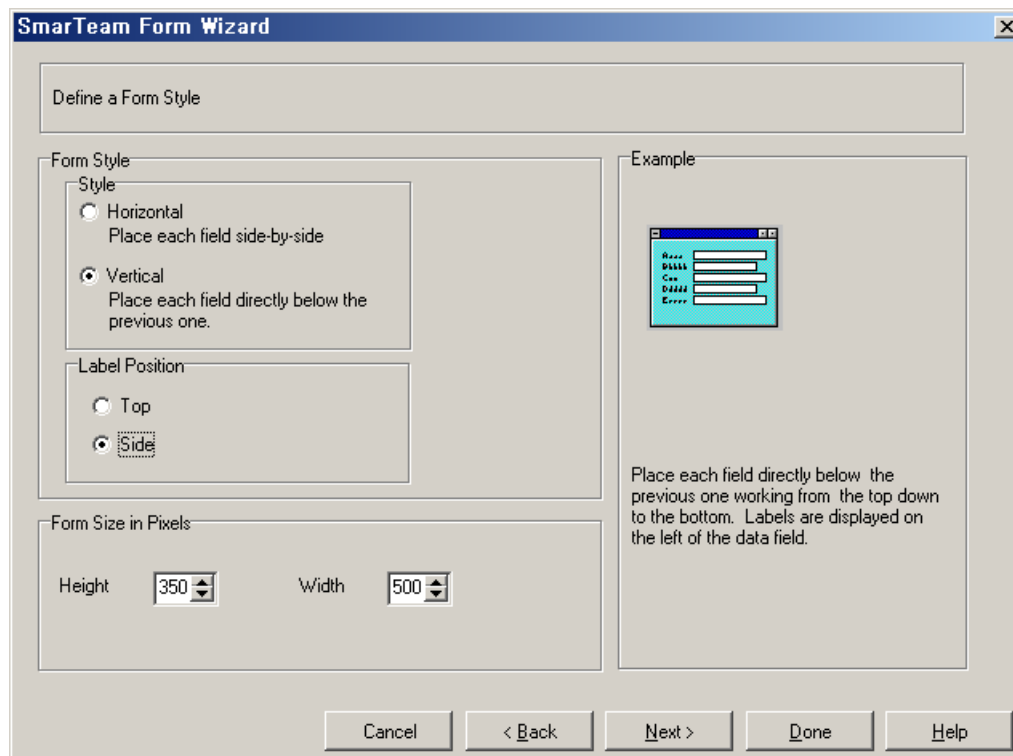
Mode: Modify

## 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.

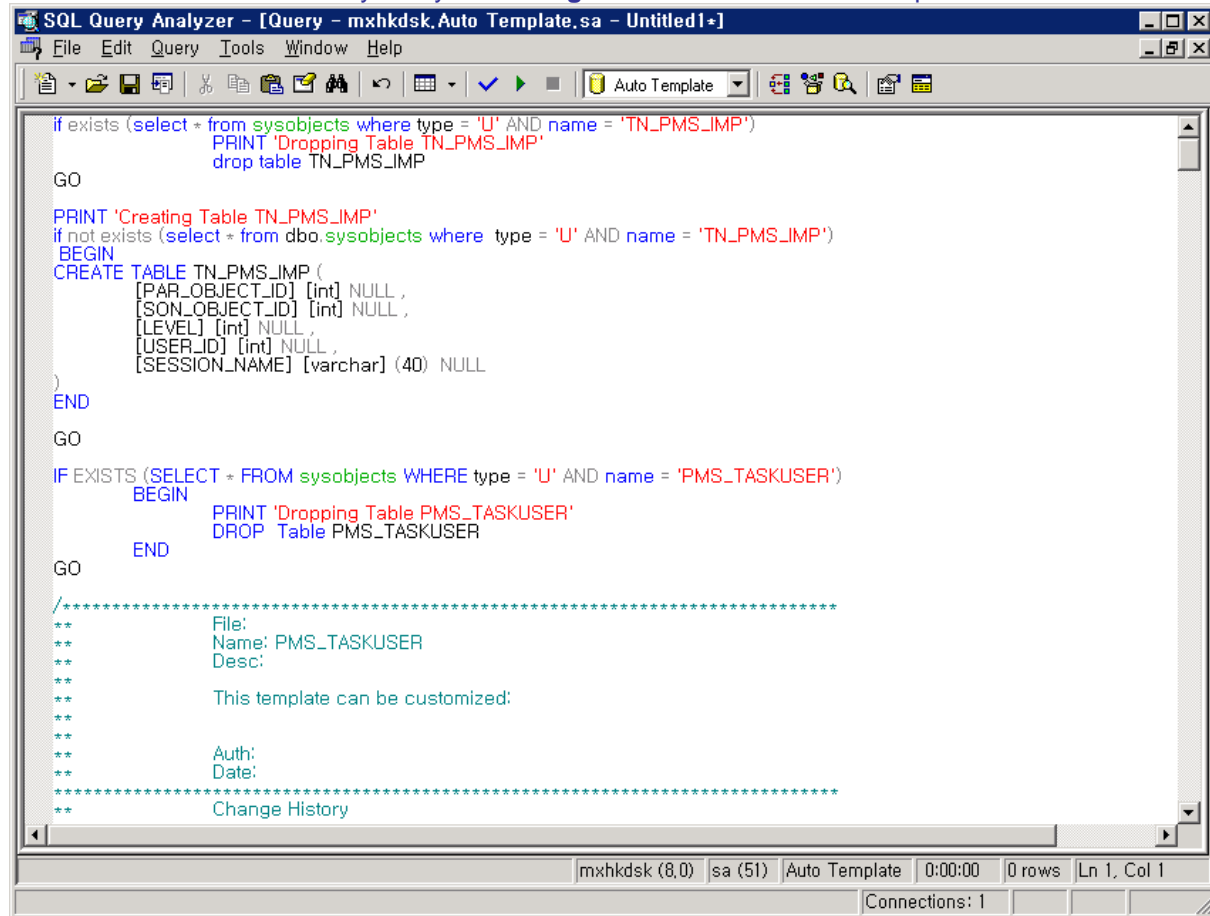
SmartProject –Implementation Guide-V5.7

Do not reproduce, copy or use without a license from DASSAULT SYSTEMES  
© 2009, DASSAULT SYSTEMES K.K, All Rights Reserved

## 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

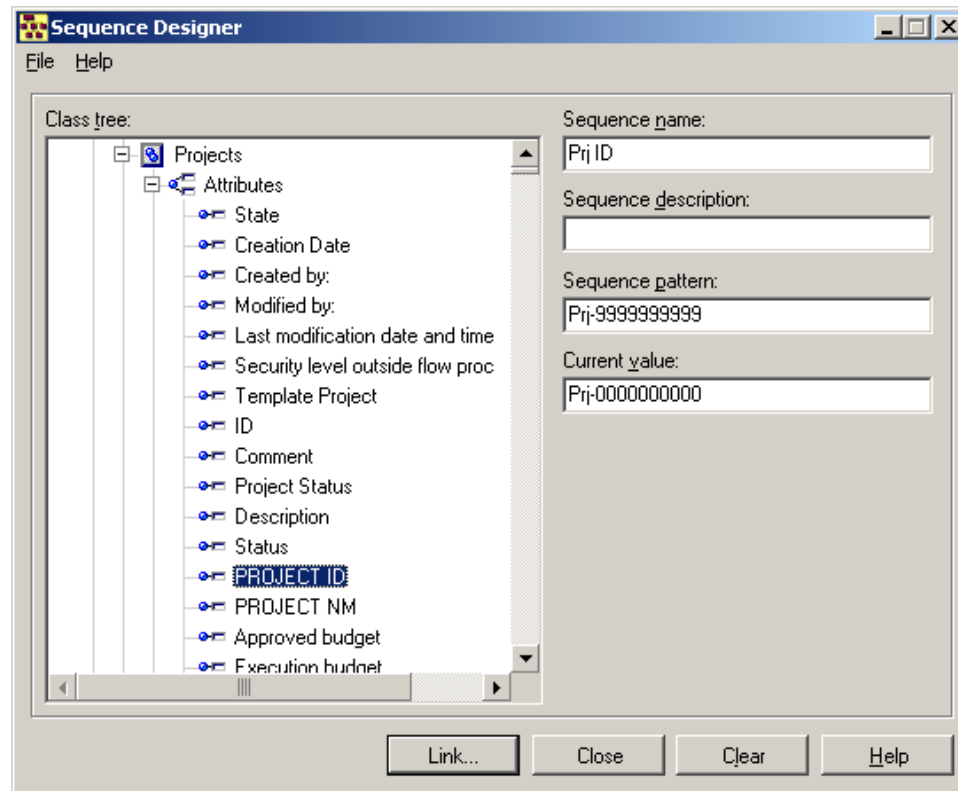
Enter values in the “User PMS Role” lookup table

Project Manager  
Project Leader  
PMS Engineer

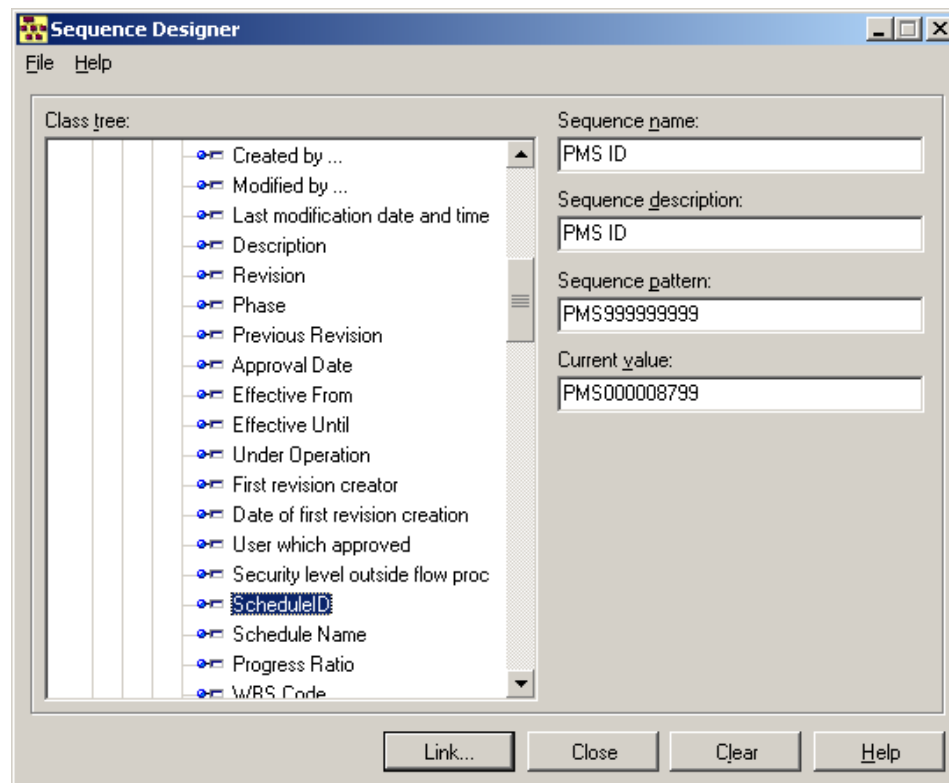
## 6. Sequence Designer

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

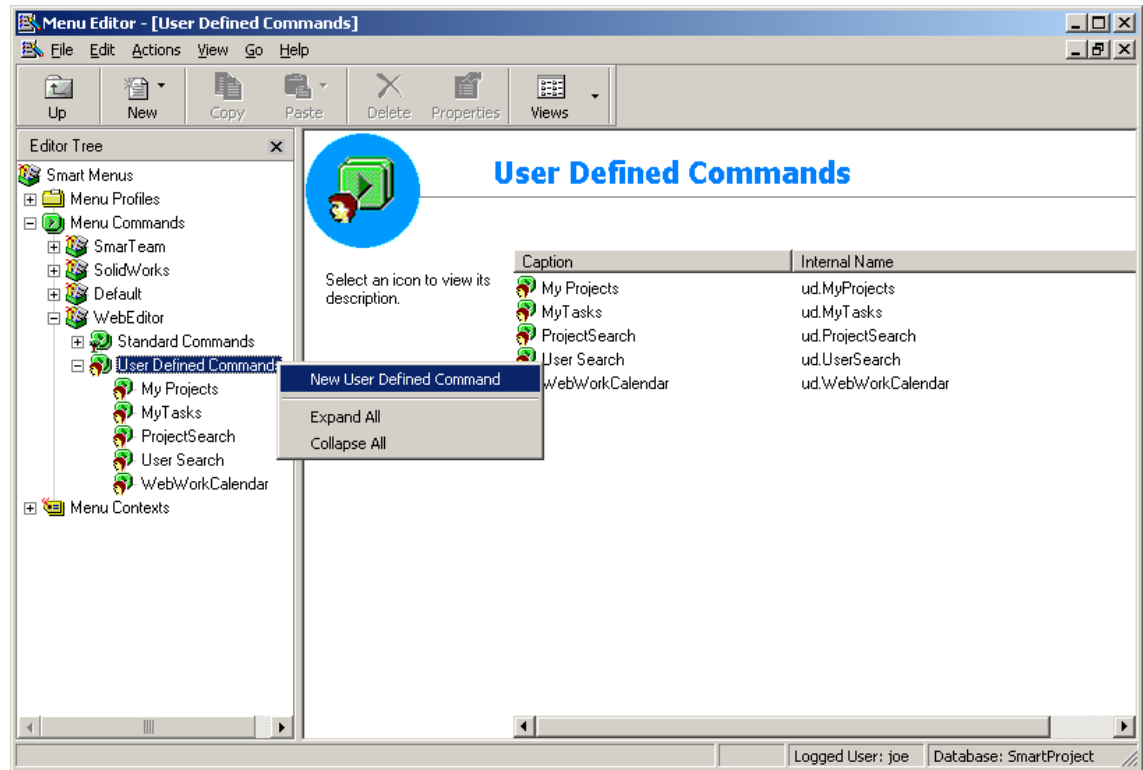
1. Launch SMARTEAM Sequence Designer.
2. Add sequence name “ProjectID” for project



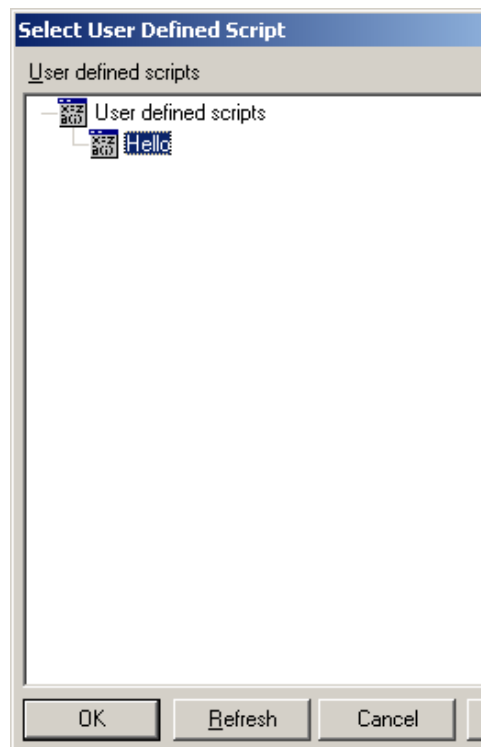
## 2. Add sequence name “PMS ID” for PMS

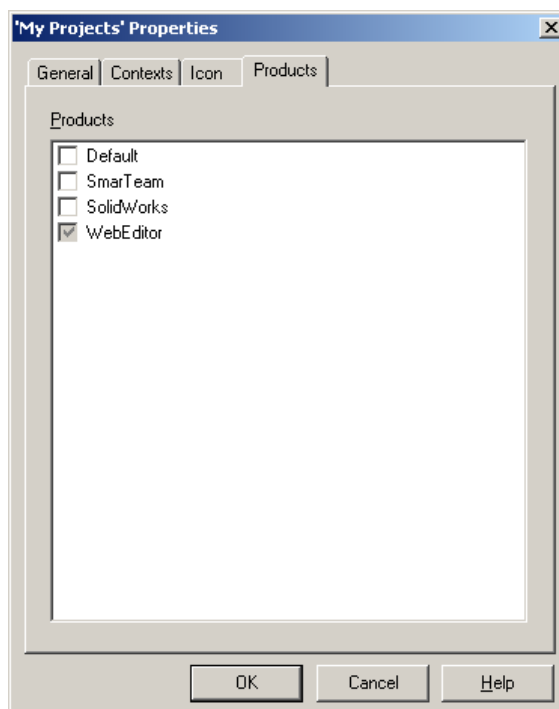
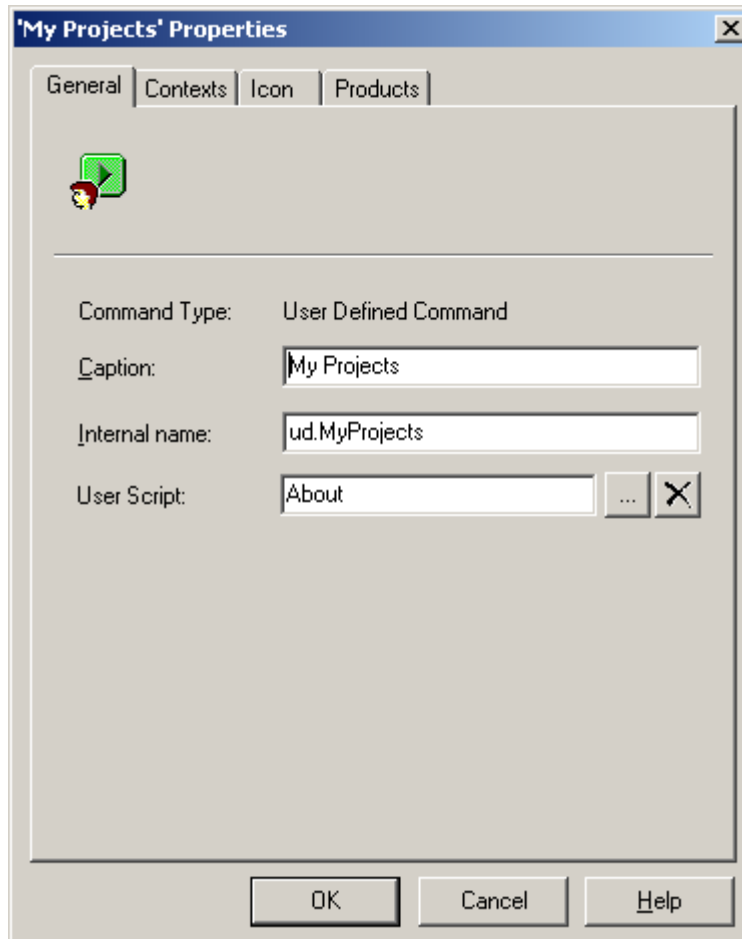






2.2 Input values **"My Projects"** into **"Caption"**, Select any dummy script (for example: Hello) as User script



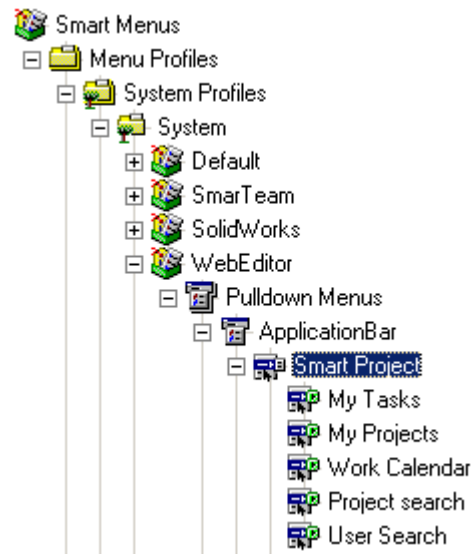


2.3 Click button **“OK”** to save

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

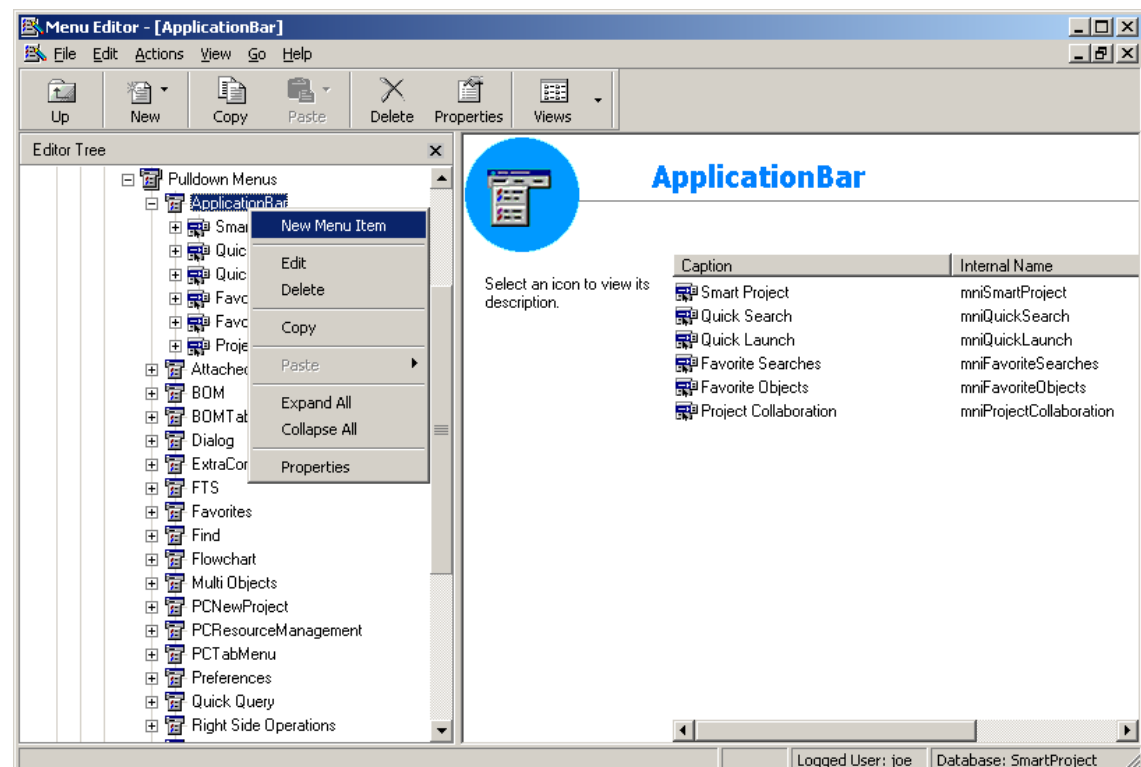
| Caption        | InternalName     | Commands         |
|----------------|------------------|------------------|
| My Tasks       | mniMyTasks       | ud.MyTasks       |
| My Projects    | mniMyProjects    | ud.MyProjects    |
| Work Calendar  | mniWorkCalendar  | ud.WorkCalendar  |
| Project Search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

### 3. Menu Profiles for System

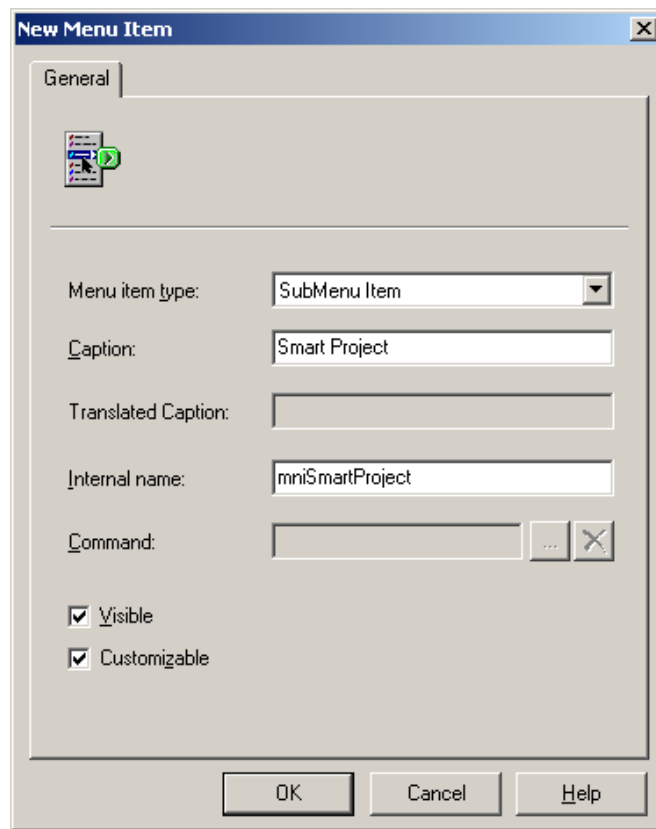


#### 3.1 Create SubMenu

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



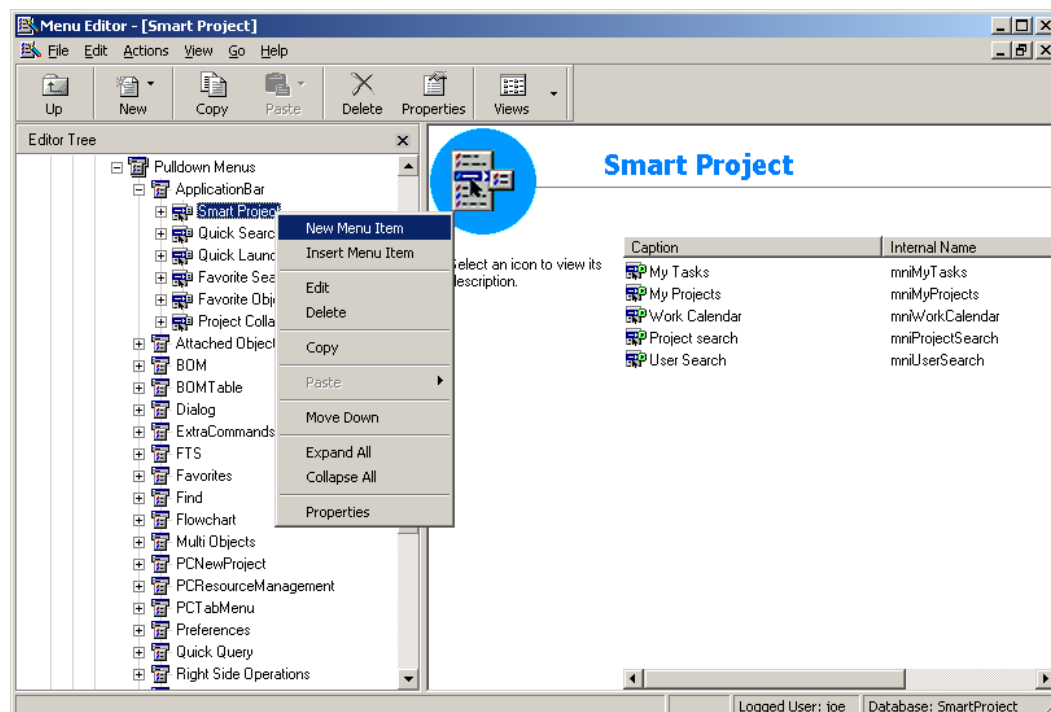
### 3.1.2 Choose Menu item type as “SubMenu Item”, Caption as “Smart Project”



### 3.1.3 Click button :OK: to save

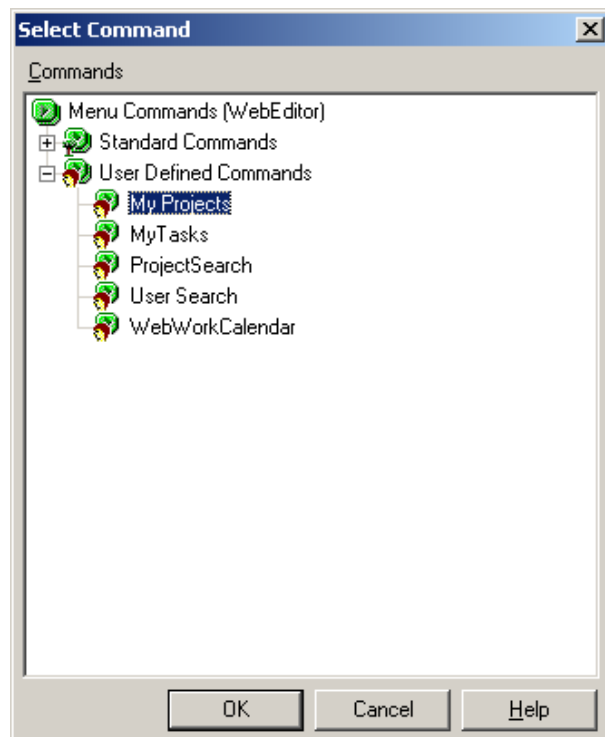
## 3.2 Create menu item

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

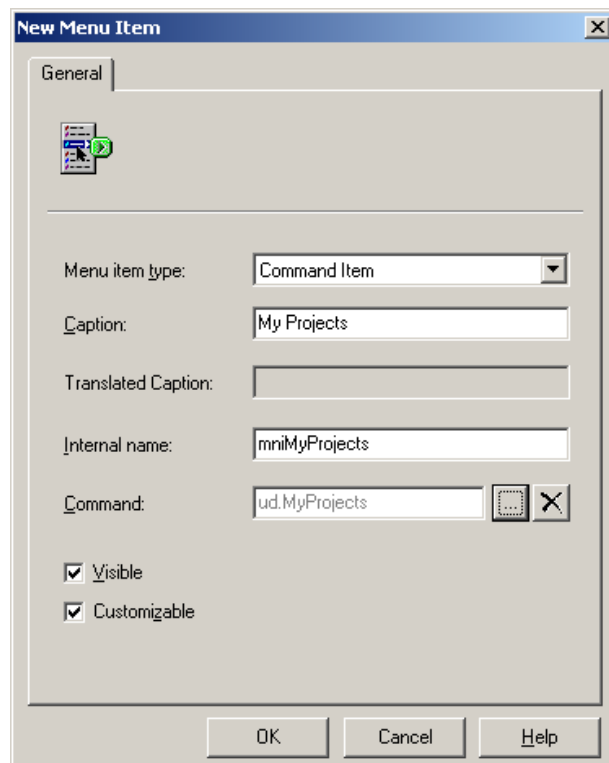


3.1.2 Input **“Caption”** as **“My Project”**

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



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



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”**

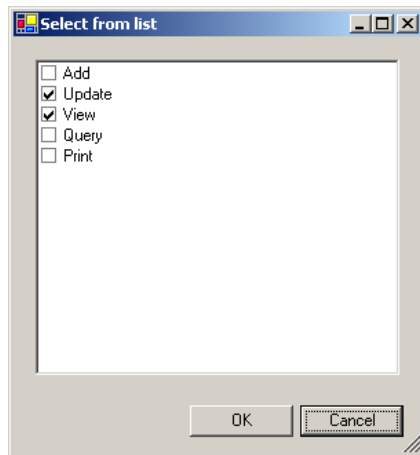
3.1 Add buttons “Members”, “Project Copy”,

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();

```

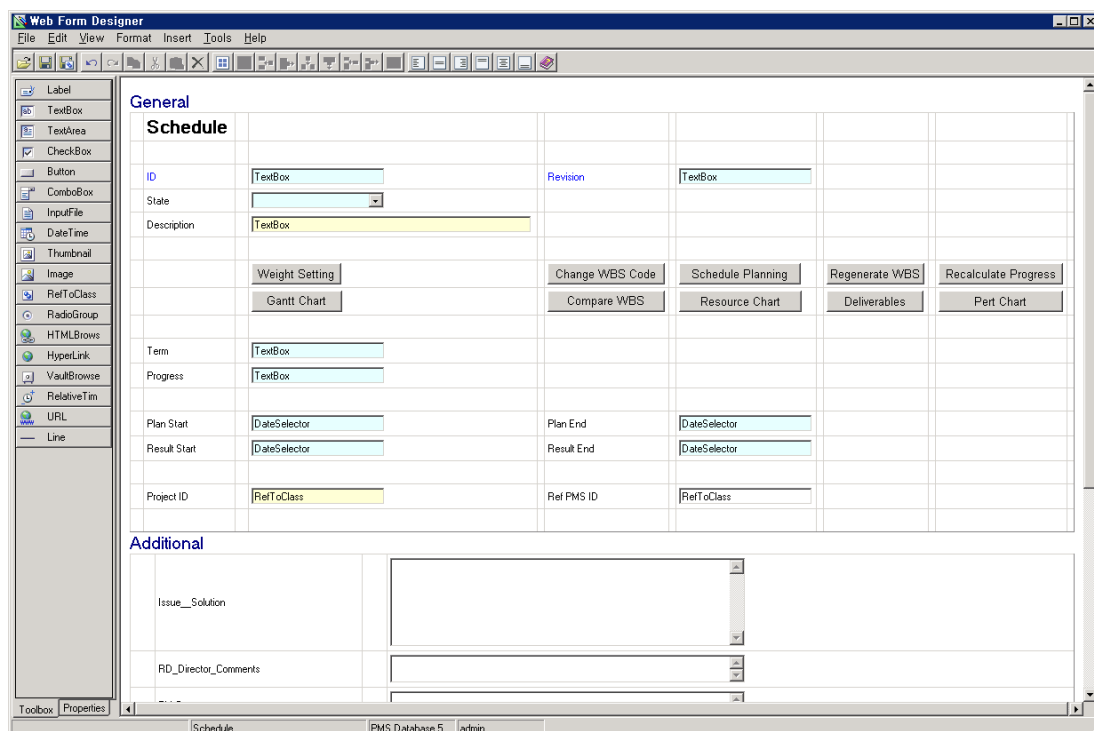


### 3.3 Add Java Script for button “Project Copy” at “On Enter”, visible in Mode “Update” & “View”

```
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”.



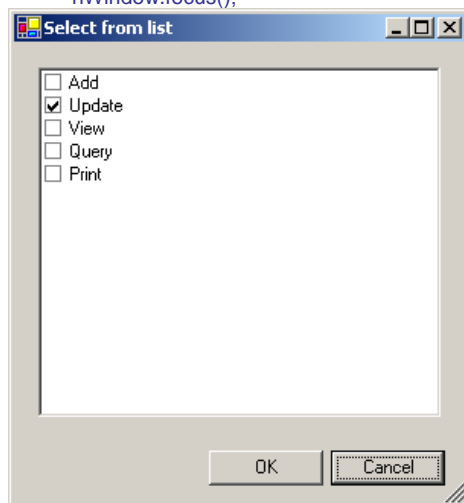
### 3.2 Add Java Script for button “Weight setting” at “On Enter” , visible in Mode “Update”

```
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();

```

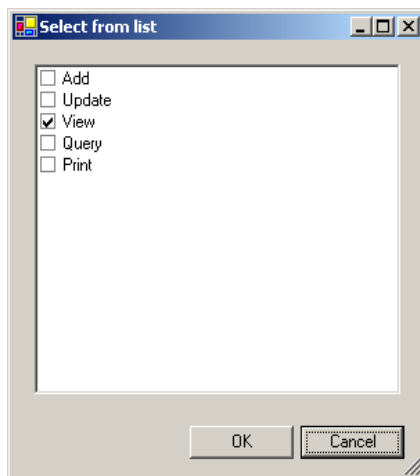
### 3.7 Add Java Script for button **“Gantt Chart”** at **“On Enter”** , visible in Mode **“View”**

```

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="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:" + height+"px;
dialogWidth:"+width+"px;status:no;toolbar:no;menubar:yes;resizable:no;scrollbars:yes;");

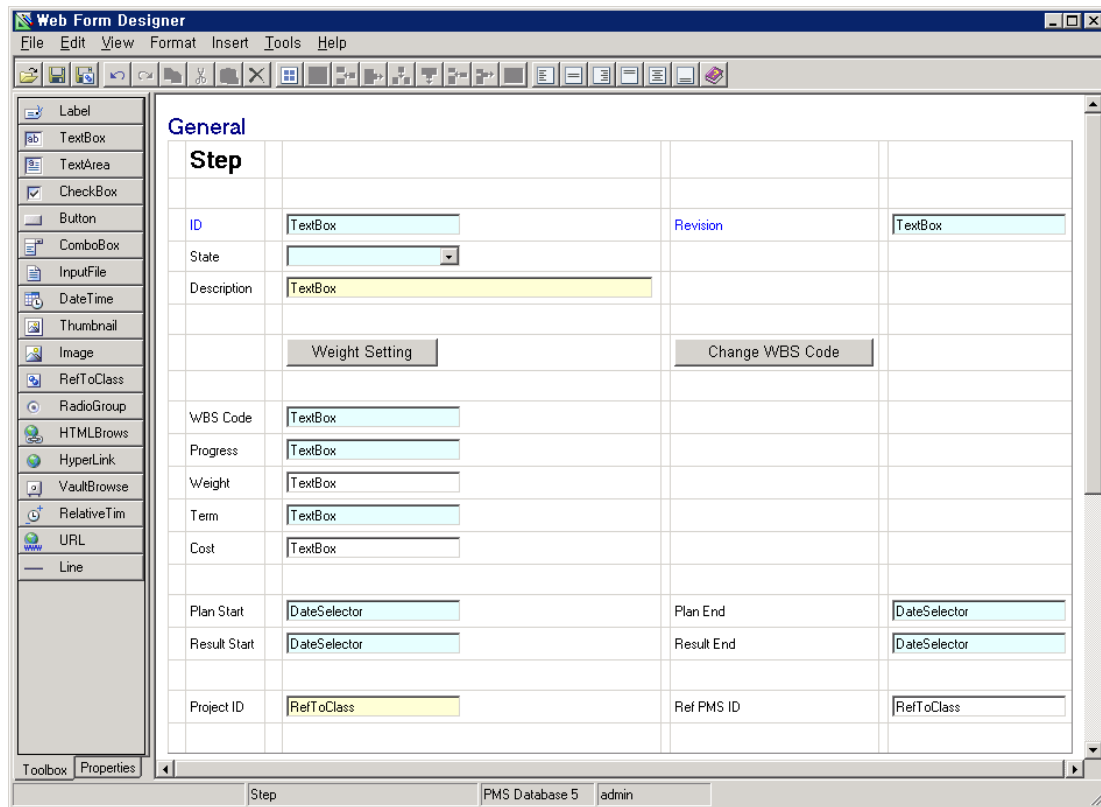
if (hWindow != null)
    hWindow.focus();
```

### 3.12 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”



**Web Form Designer**

File Edit View Format Insert Tools Help

**General**

| Step         |                |                 |              |
|--------------|----------------|-----------------|--------------|
| ID           | TextBox        | Revision        | TextBox      |
| State        | DropDown       |                 |              |
| Description  | TextBox        |                 |              |
|              | Weight Setting | Change WBS Code |              |
| 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     | Ref PMS ID      | RefToClass   |

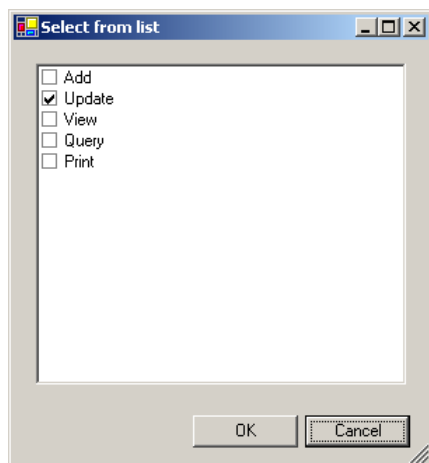
Toolbox Properties

Step PMS Database 5 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();
```



**Select from list**

- ☐ Add
- ☒ Update
- ☐ View
- ☐ Query
- ☐ Print

OK Cancel

#### 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;
```

SmartProject –Implementation Guide-V5.7

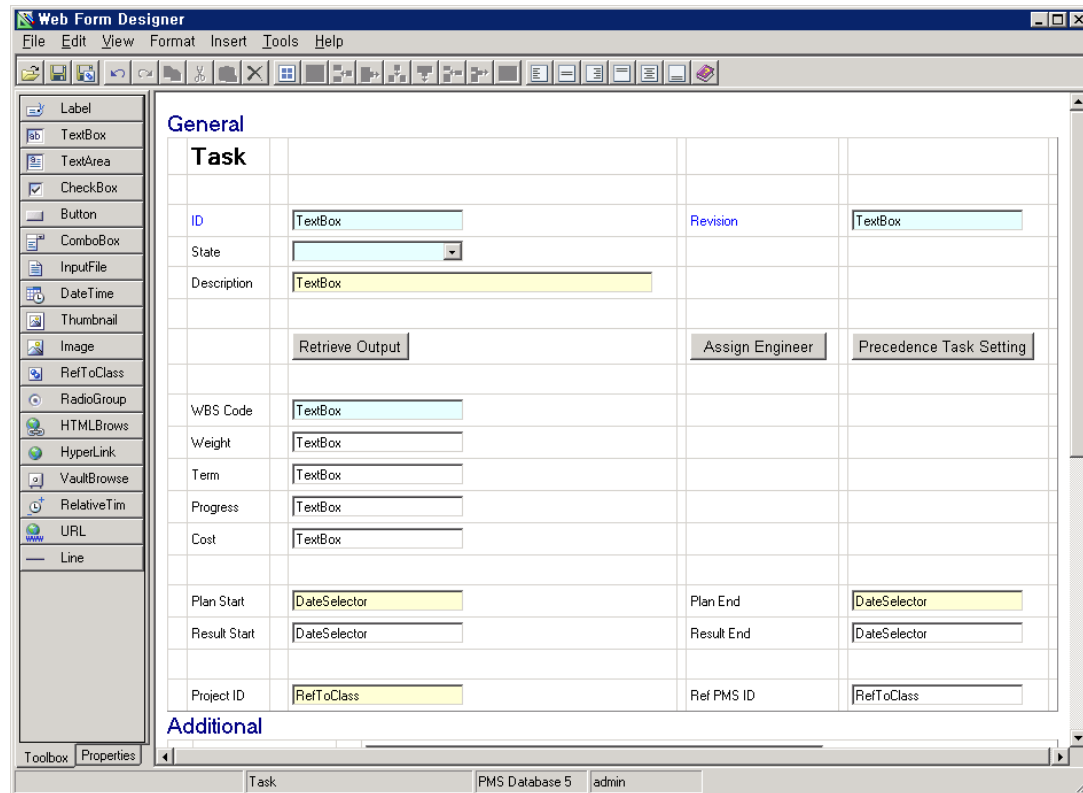
Do not reproduce, copy or use without a license from DASSAULT SYSTEMES  
© 2009, DASSAULT SYSTEMES K.K, All Rights Reserved

```
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' 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 displays a form titled 'Task'. The form has a 'General' tab and an 'Additional' tab. The 'General' tab contains the following fields and controls:

- ID**: TextBox
- State**: Dropdown menu
- Description**: TextBox
- Revision**: TextBox
- 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

Three buttons are added to the form:

- Retrieve Output**: Located below the Description field.
- Assign Engineer**: Located below the Revision field.
- Precedence Task Setting**: Located below the Revision field.

The bottom of the window shows a status bar with the text 'Task', 'PMS Database 5', and 'admin'.

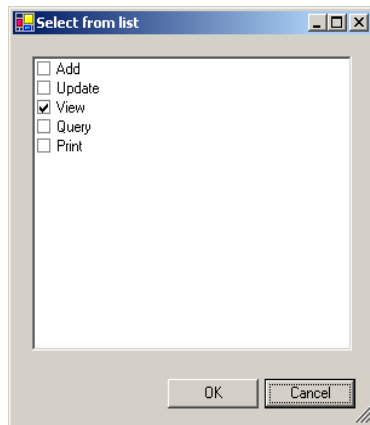
### 5.2 Add Java Script for button "Retrieve output" at "On Enter", visible in Mode "View"

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

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

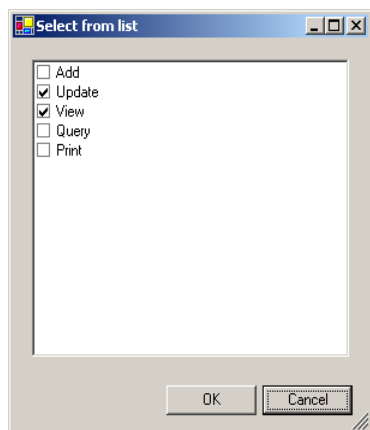
var SmObjectData = ProfileCardObj.GetSmObjectData();
var nb = parent.frames[0].document.getElementsByTagName("span")[0].innerText;
var hWindow =
window.showModalDialog("/WebEditor/PMS/RetrieveOutput.aspx?Height="+height+"&Width="+width+"&cid="+SmObjectData.GetClassId(
)+"&oid="+SmObjectData.GetObjectId()+"&nb="+nb,window,"dialogHeight:"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

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



### 5.3 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.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();
```

## 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                                     |

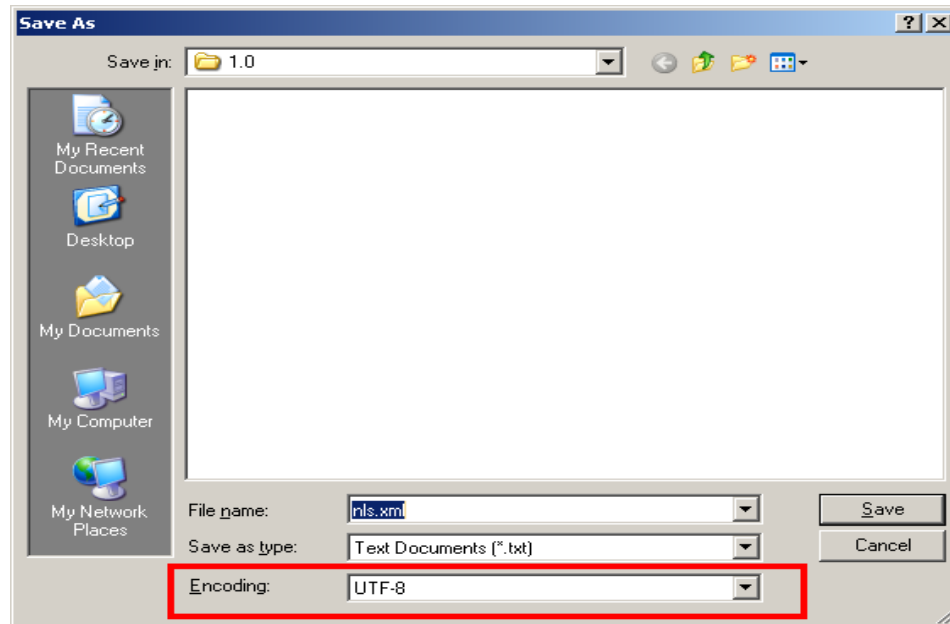
|                      |   |
|----------------------|---|
| PRJ_END              | Field name of Project End Date in Projects class            |
| PRJ_SEQUENCE         | Sequence name is being used for Projects class              |
| DOC_CLASS            | Document class name   |
| DOC_FOLDER_CLASS     | 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:

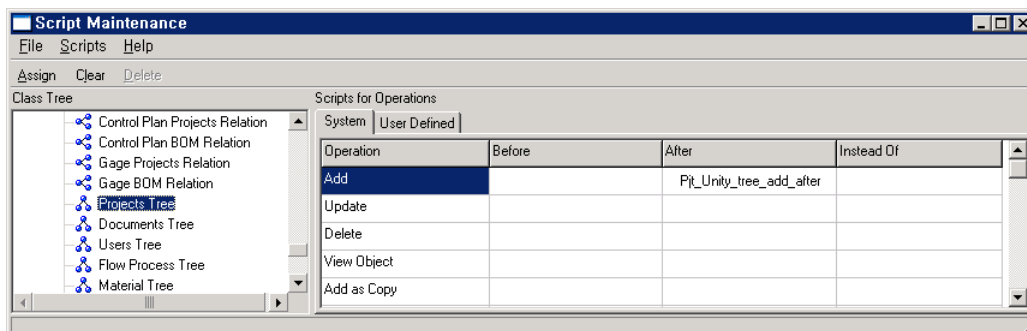
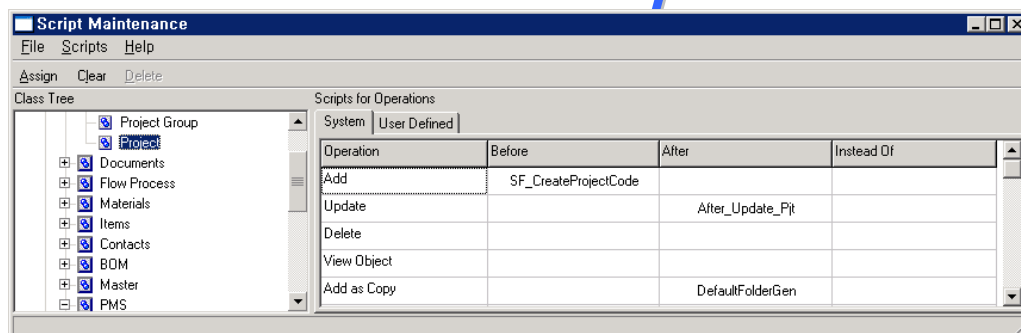
- C:\Program Files\SmarterTeam\NLS\<language code>\Std\Controls\Ds.Bpc.NLS.Controls.SMARTPROJECT\1.0\nls.xml

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                    | After      | 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           |      |

