

SPSF SharePoint Software Factory

Documentation

Version: 2.4.3

Authors: Torsten Mandelkow, Matthias Einig

1. Overview

Welcome to SPSF SharePoint Software Factory

The SPSF SharePoint Software Factory is provided by the team of SharePoint Consultants of Steria Mummert Consulting AG in Germany.

Our intention is to provide our tools and concepts to the SharePoint community to make it easier to develop custom applications in SharePoint.

SPSF is based on open technology by Microsoft

SPSF SharePoint Software Factory is based on the free Microsoft Guidance Automation Toolkit (GAX). This toolkit is used to create software factories and several software factories are already provided by Microsoft, e.g. SFSF Smart Client Software Factory, WSSF Web Service Software Factory etc.



SPSF is NOT "yet another SharePoint framework"

We want to make sure that SPSF is not a SharePoint framework which needs to be installed in SharePoint or has dependencies to custom assemblies for SharePoint applications.

- SPSF helps to generate SharePoint code like a experienced developer would write. The generated code is based on our projects or taken from MSDN.
- There is no dependency to SPSF. Projects created with SPSF can be opened and compiled on any other plain computer with Visual Studio 2008.

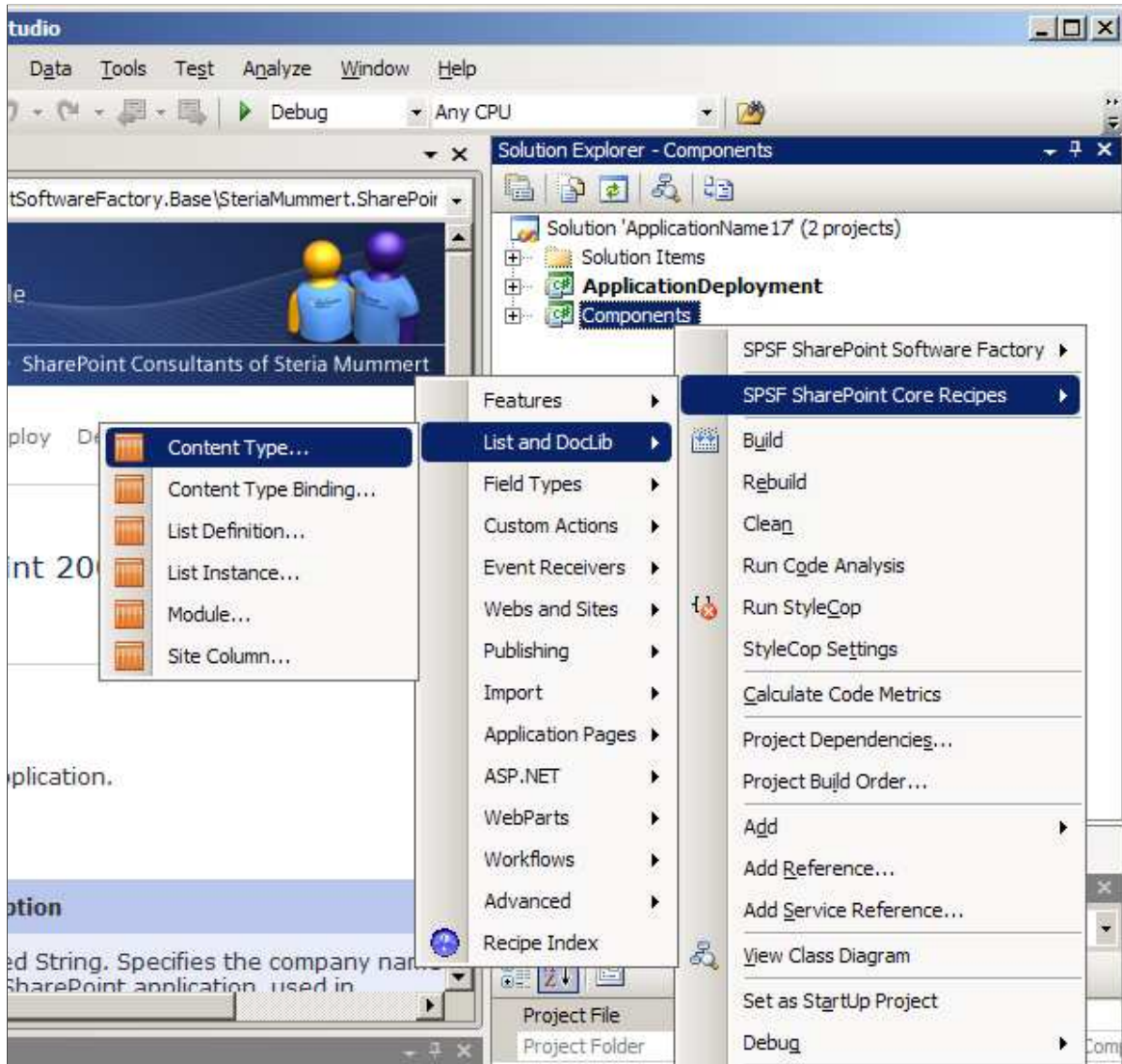
SPSF is part of SPALM SharePoint Application Lifecycle Management

SPSF SharePoint Software Factory is part of our solution "SPALM - SharePoint Application Lifecycle Management". SPALM provides strategies, methods and tools to provide real Application Lifecycle Management for SharePoint development processes, which include

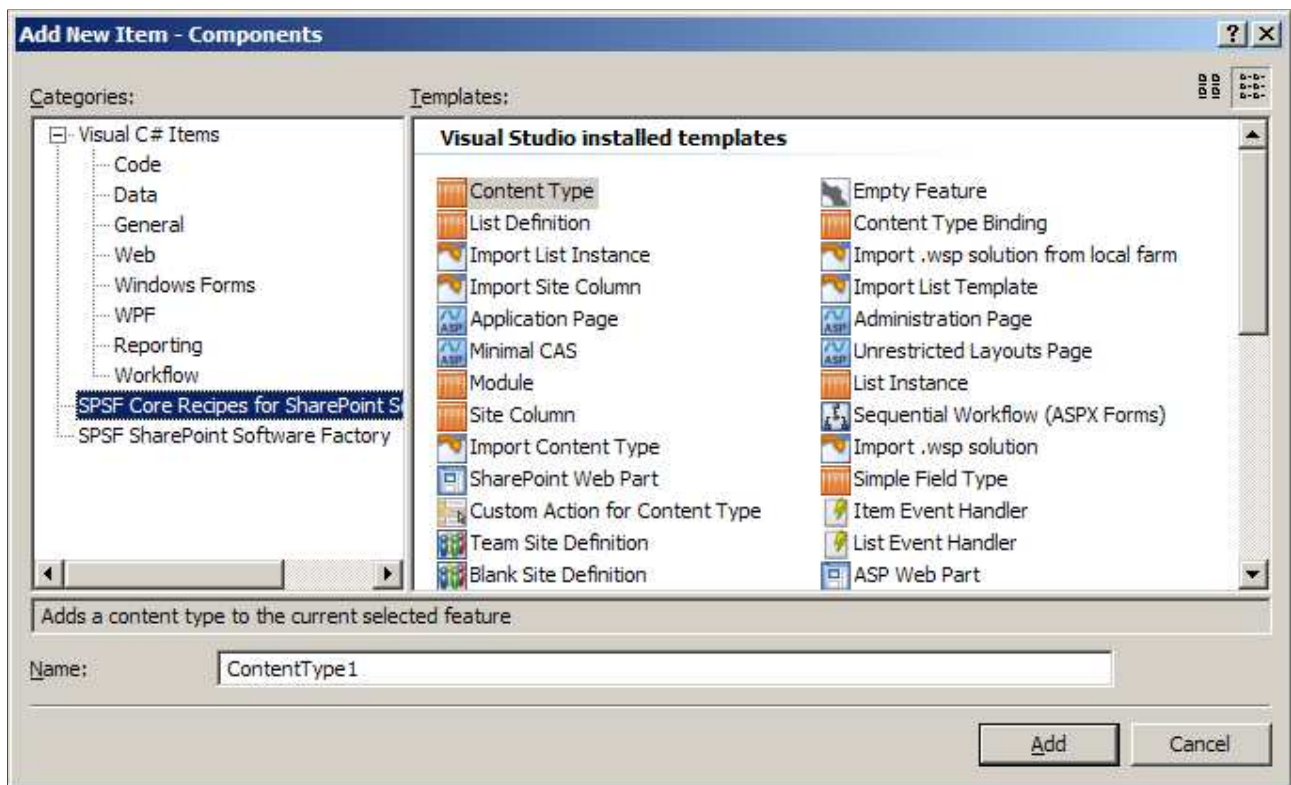
- SharePoint Requirements Management
- SharePoint Application Architecture
- SharePoint Code Generation (SPSF SharePoint Software Factory)
- SharePoint Code Analysis (SPCop)
- SharePoint Deployment
- SharePoint Testing

How to use the SharePoint recipes

Most SharePoint recipes like "Create new Content Type" are displayed in context menus dependent on the current selection. For instance the recipe "Create new Content Type" is only displayed on projects which will create a .wsp solution.



Alternatively you can use the "New Item" dialog to run the SharePoint recipes.



More help

SPSF SharePoint SoftwareFactory provides an extensive help which is also integrated into the Visual Studio help.

More information can also be found here: www.spalmblogger.de

Further information

For more information on guidance automation, please see the following resources:

- [SPALM Blogger: Information and Downloads](#)
- [Microsoft patterns and practices](#)

1.1. About

The Core Recipes are part of the SPALM (SharePoint Application Lifecycle Management) solution. SPALM was created by the SharePoint Consultants of [Steria Mummert Consulting AG](#) to support the implementation of SharePoint Applications with TFS. To use the core recipes the SharePoint Software Factory (SPSF) Framework has to be installed on the development machine. The software factory is an "extension" for Visual Studio 2008 to allow easier development of SharePoint applications. It is based on the Microsoft Guidance Automation Toolkit.

This project is intended to show the capabilities of a SharePoint software factory with some examples. Everybody is invited:

- to develop his own SharePoint software factory based on this project (please download the source code)
- to support this project with new templates, recipes, code samples and snippets to increase the capabilities of this project
- to help us improve the software factory by reporting bugs, feature ideas etc.

Target platforms are

- Windows SharePoint Services (WSS) 3.0
- Microsoft Office SharePoint Server (MOSS) 2007
- Windows SharePoint Services (WSS) 4.0 (still in development)

- Microsoft SharePoint Server (MSS) 2010 (still in development)

We (as Steria Mummert Consulting AG) will further support SPALM with new recipes and templates over time. You can find slides about the software factory at our project blog at <http://www.spalmblogger.de>.

1.2. System Requirements

The SPSF Software Factory requires the following components:

- Supported Operating Systems: Windows Server 2003 Service Pack 2; Windows Vista; Windows Vista Service Pack 1; Windows XP Service Pack 2
- Visual Studio 2008 (Team System, Professional Edition or Standard Edition)
- Guidance Automation Extensions - February 2008 Release ([Download](#))

1.3. SPSF Editions

Available SPSF Editions

We provide the SharePoint Software Factory mainly to our customers. But to allow others to use the software factory for free we provide 2 editions. The only limitation is that the full version supports development in teams e.g. with Team Foundation Server.

- SPSF Express Edition: Intended to be used by a single SharePoint developer or architect.
- SPSF Team Edition: Provides additional functionality for SharePoint team development (TeamBuild with TFS, support for source control with TFS)

Differences between SPSF Editions

Functionality	Express Edition	Team Edition
Usage of recipes	Unlimited	Unlimited
Usage of project templates	Unlimited	Unlimited
Source code available	Yes	Yes
Source Control supported	No	Yes
Team Build	No	Yes

1.4. Contact

SPSF is provided by SharePoint Consultants of Steria Mummert Consulting AG in Germany.

You can reach the authors of SPSF here:

- [Blog of Torsten Mandelkow \(Author\)](#)
- [Blog of Matthias Einig \(Author\)](#)
- [Our Codeplex project](#)
- [Steria Mummert Consulting AG](#)

2. Recipes

2.1. Projects

2.1.1. Complex SharePoint 2007 Application

Description

Creates a complex SharePoint application.

Arguments

Name	Description
Company Name	Required String. Specifies the company name of the SharePoint application, used in copyright statements.
Application Name	Required String. Specifies the name of the SharePoint application, given by the name of the VS solution name.
Application Version	Required String. Specifies the version of the SharePoint application.
Local Webapplication for debugging	Optional Url. Name of a SharePoint webapplication for local debugging.
Generate manifest.xml automatically	Optional Boolean. If true the files manifest.xml and makecab.ddf are generated automatically.
Generate .resx files automatically	Optional Boolean. If true .resx files are generated automatically.
Add Customization Project (.wsp)	Optional Boolean. If checked a customization project (.wsp solution) is created.
Final WSP Solution Filename	Optional String. Displays the final name of the wsp solution file
WSP Solution Name	Required String. Specifies the name of the wsp solution. The final wsp solution name will be a combination of the application name (name of the VS.NET solution) and the wsp name.
Deployment Server Type	Optional String. Specifies the type of deployment server.
Deployment Target	Optional String. Specifies the deployment target.
Reset Webserver	Optional Boolean. If checked the option "ResetWebServer" in the solution manifest is set to TRUE.
Add Content Project	Project to add content to SharePoint during deployment.
Add separate project for language resources	It is a best practice to use a separate project for language resources to make new languages easier to integrate. If unchecked resources are added in each WSP solution.
Add STSADM Extensions Project	Project to add custom stsadm task which can be used during deployment.
Add SharePoint Webtest Project	Project to perform webtest after deployment (e.g. for Smoke tests).

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.2. Content Project

Description

Adds a new content project to the solution.

Recipe Description

Content projects are used to deploy content to the ContentDB during deployment. Typically this could be SharePoint Designer Workflows, master pages etc.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.3. Customization Project (WSP)

Description

Adds a new customization project (wsp) to the solution.

Recipe Description

A customization project is the core wsp solution project type to deploy a .wsp solution to SharePoint.

Arguments

Name	Description
Final WSP Solution Filename	Optional String. Displays the final name of the wsp solution file
Deployment Server Type	Optional String. Specifies the type of deployment server.
Deployment Target	Optional String. Specifies the deployment target.
Reset Webserver	Optional Boolean. If checked the option "ResetWebServer" in the solution manifest is set to TRUE.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.4. MSBuild Task Project

Description

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.5. MSBuild Task**Description**

Adds a custom msbuild task to the project.

Arguments

Name	Description
Task Name	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.6. Resources Project (WSP)**Description**

Adds a new resources (wsp) project to the solution.

Recipe Description

A resources project is deployed as a wsp solution and should contain only .resx files to support multiple languages.

Arguments

Name	Description
Final WSP Solution Filename	Optional String. Displays the final name of the wsp solution file
Deployment Server Type	Optional String. Specifies the type of deployment server.
Deployment Target	Optional String. Specifies the deployment target.
Reset Webserver	Optional Boolean. If checked the option "ResetWebServer" in the solution manifest is set to TRUE.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.7. Simple SharePoint 2007 Application

Description

Creates a simple SharePoint application.

Arguments

Name	Description
Company Name	Required String. Specifies the company name of the SharePoint application, used in copyright statements.
Application Name	Required String. Specifies the name of the SharePoint application, given by the name of the VS solution name.
Application Version	Required String. Specifies the version of the SharePoint application.
Local Webapplication for debugging	Optional Url. Name of a SharePoint webapplication for local debugging.
Generate manifest.xml automatically	Optional Boolean. If true the files manifest.xml and makecab.ddf are generated automatically.
Generate .resx files automatically	Optional Boolean. If true .resx files are generated automatically.
Final WSP Solution Filename	Optional String. Displays the final name of the wsp solution file
WSP Solution Name	Required String. Specifies the name of the wsp solution. The final wsp solution name will be a combination of the application name (name of the VS.NET solution) and the wsp name.
Deployment Server Type	Optional String. Specifies the type of deployment server.
Deployment Target	Optional String. Specifies the deployment target.
Reset Webserver	Optional Boolean. If checked the option "ResetWebServer" in the solution manifest is set to TRUE.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.8. SharePoint 2010 Application (experimental)

Description

Creates a experimental SharePoint 2010 application.

Arguments

Name	Description
Company Name	Required String. Specifies the company name of the SharePoint application, used in copyright statements.

Application Name	Required String. Specifies the name of the SharePoint application, given by the name of the VS solution name.
Application Version	Required String. Specifies the version of the SharePoint application.
Local Webapplication for debugging	Optional Url. Name of a SharePoint webapplication for local debugging.
Generate manifest.xml automatically	Optional Boolean. If true the files manifest.xml and makecab.ddf are generated automatically.
Generate .resx files automatically	Optional Boolean. If true .resx files are generated automatically.
Final WSP Solution Filename	Optional String. Displays the final name of the wsp solution file
WSP Solution Name	Required String. Specifies the name of the wsp solution. The final wsp solution name will be a combination of the application name (name of the VS.NET solution) and the wsp name.
Deployment Server Type	Optional String. Specifies the type of deployment server.
Deployment Target	Optional String. Specifies the deployment target.
Reset Webserver	Optional Boolean. If checked the option "ResetWebServer" in the solution manifest is set to TRUE.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.9. STSADM Command

Description

Adds a stsadm command to the selected project.

Arguments

Name	Description
Name	
Class Name	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.1.10. STSADM Extensions Project

Description

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.2. Deployment

2.2.1. Configure Project

Description

Configures general settings of the selected project.

Recipe Description

Configures the general settings of the project.

Arguments

Name	Description
DeploymentTarget	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.2.2. Deploy Solution(s)

Description

Deploys the selected wsp solution(s) to the local SharePoint farm.

Recipe Description

The recipe deploys the selected project(s) to the local SharePoint farm.

If the wsp solution contains web application resources the solution is deployed to a specific web application. This specific web application can be configured with "Configure Deployment".

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.2.3. Redeploy Solution(s)

Description

Redeploys the selected wsp solution(s) to the local SharePoint farm (complete undeploy before a deploy).

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.2.4. Undeploy Solution(s)

Description

Undeploys the selected wsp solution from the local SharePoint farm (retract and delete solution).

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.2.5. Upgrade Solution(s)

Description

Upgrades the selected wsp solution in the local SharePoint farm.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.3. Quick Deploy

2.3.1. Copy Assembly

Description

Copies the assembly of the selected project to GAC.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.3.2. Copy Both

Description

Copies the assembly of the selected project to GAC and all files in folder "12".

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.3.3. Copy to SharePoint Hive

Description

Copies all files in project folder "12" or "14" to the SharePoint hive on the local machine.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.4. Debugging

2.4.1. Attach to Worker Process

Description

Starts the debugging of the selected project and attaches the debugger to the selected w3wp worker process (IIS).

Arguments

Name	Description
Worker Process	Select the worker process.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.4.2. Recycle App Pool

Description

Recycles the selected application pool in IIS.

Arguments

Name	Description
Application Pool	Select the application pool.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.4.3. IIS Reset

Description

Performs an iisreset on the local maschine.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.4.4. Attach to owstimer.exe

Description

Starts the debugging of the selected project and attaches the debugger to the ows timer process (OWSTIMER.EXE).

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.4.5. Restart owstimer.exe**Description**

Restarts the owstimer service.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5. STSADM

2.5.1. stsadm activatefeature

Description

Activates the selected feature in the selected site or web.

Recipe Description

This recipe is helpfull if hidden features are deployed and a feature needs to be activated via stsadm -o activatefeature.

Arguments

Name	Description
Feature Id	Select the feature to activate.
Url	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5.2. stsadm deactivatefeature

Description

Deactivates the selected feature in the selected site or web.

Recipe Description

This recipe is helpfull if hidden features are deployed and a feature needs to be deactivated via stsadm -o deactivatefeature.

Arguments

Name	Description
Feature Id	Select the feature to activate.
Url	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5.3. stsadm uninstallfeature

Description

Uninstalls the selected feature.

Recipe Description

Uninstalls the selected feature. This is useful if e.g. by corrupt solution deployments some features are still registered in the database, but the feature folder is already removed.

Arguments

Name	Description
Feature Id	Select the feature to activate.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5.4. stsadm copyappbincontent**Description**

Runs stsadm -o copyappbincontent.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5.5. stsadm execadmsvcjobs**Description**

Runs stsadm -o execadmsvcjobs to run all pending deployment jobs.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.5.6. Open stsadm Prompt**Description**

Opens a prompt to enter stsadm commands manually.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.6. CodeAnalysis

2.6.1. Run SPCop

Description

Checks to SharePoint project for violations of best practices and recommendations

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.6.2. Run SPDisposeChecker

Description

Runs SPDisposeChecker for selected project.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.7. Shortcuts

2.7.1. Debugging Webapp

Description

Opens the debugging webapplication of the project in the browser.

Recipe Description

This recipe provides a shortcut to the debugging webapplication of the current selected project.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.7.2. Central Administration

Description

Displays the Central Administration.

Recipe Description

This recipe provides a shortcut to the local Central Administration in SharePoint, e.g. create a new site collection or check farm features.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.7.3. Central Administration Solution Management

Description

Displays the web page "Solution Management" in SharePoint Central Administration.

Recipe Description

This recipe provides a shortcut to the Solution Management in SharePoint, e.g. to check which solutions are deployed or undeployed.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8. Helpers

2.8.1. Check Broken Fields

Description

Checks a site collection for fields which are not properly installed.

Recipe Description

During development of custom fields or custom field types sometimes the list of available fields in a site collection cannot be loaded because of a "broken" field. In the SharePoint you will get the error message on page "Site Columns".

The given key was not present in the dictionary. at System.ThrowHelper.ThrowKeyNotFoundException()

at System.Collections.Generic.Dictionary`2.get_Item(TKey key)

at Microsoft.SharePoint.SPFieldCollection.CreateSPField(Int32 index)

at Microsoft.SharePoint.SPFieldCollection.EnsureSPField(Int32 index)

at Microsoft.SharePoint.SPFieldCollection.get_Item(Int32 iIndex)

at Microsoft.SharePoint.SPFieldCollection.ItemAtIndex(Int32 iIndex)

at Microsoft.SharePoint.SPBaseCollection.SPEnumerator.System.Collections.IEnumerator.get_Current()

at Microsoft.SharePoint.ApplicationPages.FieldListRenderer.OnPreRender(EventArgs e)

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Control.PreRenderRecursiveInternal()

at System.Web.UI.Page.ProcessRequestMain(Boolean includeStagesBeforeAsyncPoint, Boolean includeStagesAfterAsyncPoint)

This recipe helps to find the fields which are not installed properly.

Arguments

Name	Description
Site Collection Url	Enter the url of a local site collection to check for broken fields.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.2. Delete Failed Deployment Jobs

Description

Deletes failed deployment jobs in the local SharePoint farm.

Recipe Description

This handy recipe helps if deployments of wsp solutions failed, e.g. during clean up. If these failed jobs are not deleted new solutions with the same name can not be deployed. The recipe searches for failed jobs and deletes them.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.3. Exclude item from SourceControl

Description

Removes the item from source control, e.g. import for manifest.xml and makecab.ddf to enable automatic generation of these files.

Recipe Description

The recipe removes a file from source control to avoid conflicts during build.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.4. Run MSBuild Target

Description

Runs a target from an msbuild file.

Arguments

Name	Description
Build Target	Name of the target to be executed.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.5. Run Batch

Description

Execute the selected batch file (.bat).

Recipe Description

The recipe open a new process to run the selected batch file. The recipe is useful to start the execution of a batch file directly from within Visual Studio.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.6. Get AssemblyName

Description

Displays the full assembly name of the current selected project.

Recipe Description

The assembly name of often needed during development, e.g. to specify the assembly of a feature receiver in the feature.xml.

Arguments

Name	Description
Assembly Name	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.7. Get SharePoint Version

Description

Displays the version of SharePoint on the local machine.

Arguments

Name	Description
SharePoint Version	

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.8. Remove TextTemplating Transformation

Description

Makes a .tt-file static to enable direct editing of the file.

Recipe Description

Recipe changes a .tt file to a static file. This is usefull e.g. for transforming manifest.tt to manifest.xml to enable editing of manifest.xml.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.9. Open in Browser**Description**

Opens the selected item in browser.

Recipe Description

The recipe opens the selected file in browser. The recipe is useful to open deployed file in SharePoint directly from within Visual Studio.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.8.10. Show Properties**Description**

Shows the properties of the item.

Recipe Description

Recipe displays the properties in visual studio of the current item. This is used for debugging purposes within Visual Studio.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.9. Help

2.9.1. Load SharePoint Configuration

Description

Reloads the file SharePointConfiguration.xml with the contents of the local SharePoint farm (features, listtemplates, content types etc.).

Recipe Description

In several dialogs within the wizards a list of SharePoint elements is provided to the user (e.g. list of available features, content types etc.). The values for this list are taken from the file SharePointConfiguration.xml, which should be located in the current solution.

This recipe recreates the file SharePointConfiguration.xml with the data from the local computer.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

2.9.2. Recipe Index

Description

Displays a list of all recipes in the current Guidance Package.

Authors

- Torsten Mandelkow

Version history

- 1.0 Initial Recipe

3. License

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