

Custom Site Provisioning with SharePoint

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Agenda

- What is Site Provisioning?
- Why Do You Need It?
- Site Template Primer
- Third Party Alternatives
- Code Snippets
- Development Challenges
- Best Practices
- Questions

What is Site Provisioning?

- Simply stated, site provisioning is all about creating new SharePoint sites through automation
- Site Provisioning is available in both WSS 3.0 and MOSS 2007 through the 'Create Site' link in Site Actions
- The most basic required elements are:
 - (1) Location (2) Name (3) Template
 - With an assumption about language usage

Create New Site

New SharePoint Site - Microsoft Internet Explorer

Address: http://moss2007/marketing/_layouts/newsweb.aspx

New SharePoint Site

Use this page to create a new site or workspace under this SharePoint site. You can specify a title, Web site address, and access permissions.

Title and Description
Type a title and description for your new site. The title will be displayed on each page in the site.


Title:

Description:

Web Site Address
Users can navigate to your site by typing the Web site address (URL) into their browser. You can enter the last part of the address. You should keep it short and easy to remember.
For example, http://moss2007/marketing/*sitename*

URL name: http://moss2007/marketing/

Template Selection



Select a template:

Collaboration Meetings Enterprise Publishing

- Team Site
- Blank Site
- Document Workspace
- Wiki Site
- Blog

Permissions
You can give permission to access your new site to the same users who have access to this parent site, or you can give permission to a unique set of users.

User Permissions:
 Use same permissions as parent site
 Use unique permissions

Contains commands for working with the selected items.

Start | New SharePoint Site - ... | 11:25 AM

Why Do You Need It?

Site Settings - Microsoft Internet Explorer

Address: http://moss2007/marketing/_layouts/settings.aspx

Home > Marketing

Marketing Portal

Marketing

Home Clients **Marketing** Advertising Public Relations Sales Workspaces Reports Search Site Actions

Home > Marketing > Site Settings

Site Settings

Site Information

Site URL: http://moss2007/marketing/
Mobile Site URL: http://moss2007/marketing/m/
Version: 12.0.0.4518

Users and Permissions	Look and Feel	Galleries	Site Administration	Site Collection Administration
<ul style="list-style-type: none">People and groupAdvanced permissions	<ul style="list-style-type: none">Title, description, and iconMaster pageNavigationTermsSite themeSave site as templateReset to site definitionSearchable columns	<ul style="list-style-type: none">Master pagesSite content typesSite columns	<ul style="list-style-type: none">Regional settingsSite libraries and listsSite usage reportsUser alertsRSSSearch visibilitySites and workspacesSite featuresDelete this siteRelated links scope settingsContent and structureContent and structure logs	<ul style="list-style-type: none">Go to top level site settings

Contains commands for working with the selected items.

Start Site Settings - Micros... 11:24 AM

Why Do You Need it?

- **Control**
 - You don't want to make users administrators
- **Training**
 - How can users become SharePoint savvy?
- **Governance**
 - Does site provisioning conflict with your governance model?
- **Support**
 - Is IT willing to handle support through help desk?
- **Business Process Integration**
 - Are there existing business processes that should initiate site creation?

Site Template Primer

The screenshot shows a Microsoft Internet Explorer browser window displaying the 'Site Settings' page for a 'Marketing Portal'. The browser's address bar shows the URL 'http://moss2007/marketing/_layouts/settings.aspx'. The page title is 'Marketing Portal' and the breadcrumb trail is 'Home > Marketing > Site Settings'. The page is divided into several sections:

- Site Information:** Displays the Site URL (http://moss2007/marketing/), Mobile Site URL (http://moss2007/marketing/m/), and Version (12.0.0.4518).
- Users and Permissions:** Includes options for 'People and groups' and 'Advanced permissions'.
- Look and Feel:** Includes options for 'Title, description, and icon', 'Master page', 'Navigation', 'Tree view', 'Site theme', 'Save site as template' (circled in red), 'Reset to site definition', and 'Searchable columns'.
- Galleries:** Includes options for 'Master pages', 'Site content types', and 'Site columns'.
- Site Administration:** Includes options for 'Regional settings', 'Site libraries and lists', 'Site usage reports', 'User alerts', 'RSS', 'Search visibility', 'Sites and workspaces', 'Site features', 'Delete this site', 'Related Links scope settings', 'Content and structure', and 'Content and structure logs'.
- Site Collection Administration:** Includes the option 'Go to top level site settings'.

The bottom of the browser window shows the Windows taskbar with the Start button, a taskbar icon for 'Site Settings - Micros...', and the system tray showing the time as 11:24 AM.

Advantages of Site Templates

- **Consistency/Control**
 - Defining an organizationally approved structure for similar collaboration sites
 - “this is how we think about this information”
 - Enforcing the use of metadata
 - Improved user experience
 - Easier aggregation of content

Quick Tip on Custom Site Templates

- In the selection interface, you'll see a 'Custom' tab for your organizational templates
 - This is confusing to some end users
- Here is one way to improve this
 - Find the file **core.en-US.resx** in the `\Program Files\Common Files\Microsoft Shared\web server extensions\12\Resources` folder.
 - Edit the value for "**TemplatePickerControl_Custom**", changing it from 'Custom' to whatever you want.
 - Do an **IISRESET** (I always do this to be sure my changes are picked up).

Third Party Alternatives

- **Site Provisioning Assistant for SharePoint 2007**
 - How can I enable our users to have the SharePoint sites they need in a timely manner, but maintain the integrity of our organization's taxonomy?
 - How can I give my users an easy to use, consistent interface for requesting new SharePoint sites?
 - How can I automate my organization's approval process for requesting new SharePoint sites?

Third Party Pros/Cons

- **Pros:**
 - Supported, well-defined, well-documented solution
 - Easy to deploy; it just works
- **Cons**
 - Your unique requirements
 - Your requirement to facilitate site provisioning from external systems
 - You don't get to flex your coding muscles

Native Site Templates References (through coding)

- *STS#0 Team Site*
- *STS#1 Blank Site*
- *STS#2 Document Workspace*
- *MPS#0 Basic Meeting Workspace*
- *MPS#1 Blank Meeting Workspace*
- *MPS#2 Decision Meeting Workspace*
- *MPS#3 Social Meeting Workspace*
- *MPS#4 Multipage Meeting Workspace*
- *WIKI#0 Wiki Site*
- *BLOG#0 Blog Site*

Simple Code Snippet

```
public static bool CreateSharePointSite(  
    string parentURL, string siteURLnode, string siteTitle, string siteTemplateName)  
  
    {  
        bool successStatus= false;  
        using (SPSite siteCollection = new SPSite(parentURL))  
        {  
            SPWeb parentWeb = siteCollection.OpenWeb();  
            SPWebTemplateCollection Templates = siteCollection.GetWebTemplates(1033);  
            SPWebTemplate siteTemplate = Templates[siteTemplateName];  
            parentWeb.Webs.Add(siteURLnode, siteTitle, "", 1033, siteTemplate, false, false);  
  
            successStatus = true;  
        }  
        return successStatus;  
    }  
}
```

Webs.Add (Parameters)

- strWebUrl [Location]
- strTitle [Name]
- strDescription
- nLCID [Language]
- WebTemplate [Site template]
- useUniquePermissions [Security Rules]
- bConvertIfThere [Dupe Test]

Another Example

- You want users to have self-service for ad hoc collaboration sites BUT you want to control where they go and what they look like
 - Create a custom web part
 - Place it on the 'My Site' page
 - Code controls location and site template
 - User simply gives it a name and is the administrator

More Advanced Scenario

- Your organization does project work for clients
- Every time a new project is initiated, a new SharePoint site should be created
 - A client site should be created if it does not exist
 - Both types of sites should use custom site templates
- This site provisioning should be done from an external system... using a web service

Demo

```
using (SPSite siteCollection = new SPSite(parentSiteURL + projectsSiteUrl))
{
    siteCollection.AllowUnsafeUpdates = true;
    SPWeb parentWeb = siteCollection.OpenWeb();

    SPWebTemplateCollection Templates = siteCollection.GetCustomWebTemplates(Locale_EN);
    if (parentWeb.Webs[siteURLRequested].Exists)
    {
        parentWeb.AllowUnsafeUpdates = true;
        parentWeb.Webs.Delete(siteURLRequested);
    }

    //using the custom template, create the site and assign unique permissions
    SPWebTemplate siteTemplate = Templates[siteTemplateName];
    parentWeb.AllowUnsafeUpdates = true;
    parentWeb.Webs.Add(ProjectNo.ToString(), ProjectNo.ToString(), siteTitle, Locale_EN, siteTemplate, true, false);
}
```

Additional Coding Challenges

- **Adding Users**
 - Adding individuals or groups
- **Populating with content**
 - Moving files into document libraries
- **Email notification**
 - Registering success or failure
- **Creating a transactional process**
 - Defining multi-step process with rollback

More Code Snippets

```
using (SPWeb web = siteCollection.OpenWeb(MyNewSite.ToString()))
{
    Boolean allowUnsafeUpdate = web.AllowUnsafeUpdates;
    try
    {
        web.AllowUnsafeUpdates = true;
        string groupName
        =System.Configuration.ConfigurationManager.AppSettings["DefaultSecurityGroup"];
        web.SiteGroups.Add(groupName, null, null, null);
    }
    finally
    {
        web.AllowUnsafeUpdates = false;
    }
}
```

Advanced Development

- **Site Provisioning Workflow with Custom SharePoint Designer Activity**
 - Ed Hild's blog - <http://blogs.msdn.com/edhild/archive/2008/02/27/site-provisioning-workflow-with-custom-sharepoint-designer-activity.aspx>
 - create a SharePoint Designer workflow activity that could be used by a site collection owner to control how subsites within their collection are provisioned

Best Practices

- Have a well-defined, documented process
- This is not a simple coding exercise
- Watch out for memory leaks
- Don't forget the security model
- Leverage existing code bases in the SharePoint community
- Custom templates are different from native templates (while coding)

Site Provisioning Usage

- Just because you can, doesn't mean you should!
- Think custom solution when
 - You don't want to allow users to create sites in the interface
 - You want to create a business process which includes site provisioning
 - You want to enable user self-service without the headaches of support/training
 - You want to enforce your governance model and have a very rigid taxonomy management

Resources

- **Mauro's Blog**
 - <http://blogs.officezealot.com/mauro/>
- **Site Provisioning Assistant for SharePoint 2007**
 - <http://software.sharepointsolutions.com/products/Pages/SiteProvisioningAssistantforSharePoint2007.aspx>
- **SharePoint Server 2007 Sample: Creating a Custom User Site Provisioning Solution with Office SharePoint Server 2007**
 - <http://www.microsoft.com/downloads/details.aspx?FamilyID=5B6C8FB0-9B67-47DB-8A09-BCA76BC9A5D1&displaylang=en>

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Thank you!