



Leveraging SharePoint Web Services

The SharePoint Everywhere Promise

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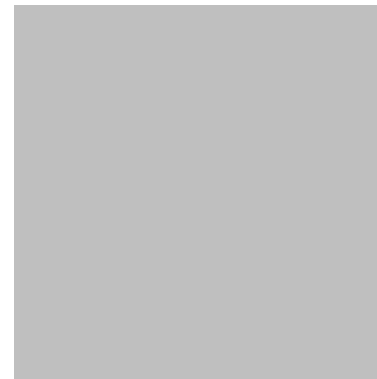
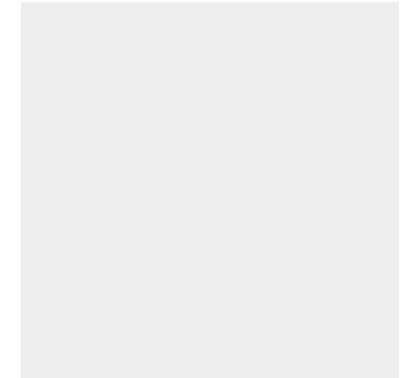
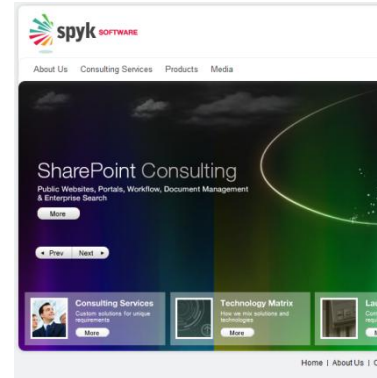
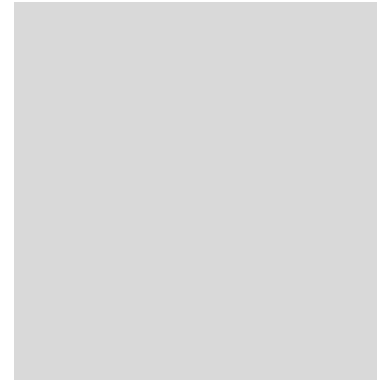


Recent SharePoint Projects

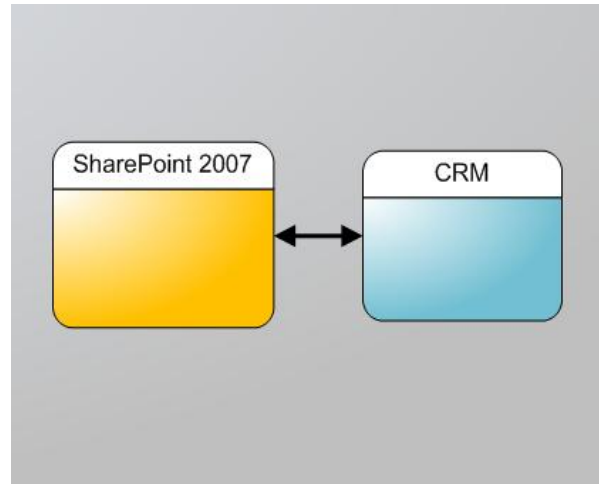
WorleyParsons Public Website
www.worleyparsons.com

Spyk Public Website
www.spyk.com

iShare
SharePoint for iPhone
www.spyk.com/products/iShare



Why use SharePoint Web Services?



Rich Clients

System Integrations

Rich Web Parts

Accessing SharePoint Web Services

Service Addresses

`http://<sitepath>/_vti_bin/WebServiceNameHere.asmx`

WSDL 's

`http://<sitepath>/_vti_bin/WebServiceNameHere.asmx?wsdl`

What services are available?

Table 1. SharePoint Web Services

Service	WSS/MOSS	Address	Description
Administration web service	Both	http://[Central Administration site]/_vti_admin/Admin.aspx	Provides services for creating, deleting, and managing site collections
Alerts web Service	Both	http://[Site Collection]/_vti_bin/alerts.aspx	Provides services for managing alerts
Authentication web service	Both	http://[Site Collection]/_vti_bin/authentication.aspx	Provides services to authenticate users
Copy web service	Both	http://[Site Collection]/_vti_bin/copy.aspx	Provides services for copying files to or within a site
Document Workspace web service	Both	http://[Site Collection]/_vti_bin/dws.aspx	Provides services to interact with Document Workspaces
Forms web service	Both	http://[Site Collection]/_vti_bin/forms.aspx	Provides support for returning the forms that are used to manage lists
Imaging web service	Both	http://[Site Collection]/_vti_bin/imaging.aspx	Provides support for creating and managing image libraries
Lists web service	Both	http://[Site Collection]/_vti_bin/lists.aspx	Provides services to create, delete, and manage lists
Meetings web service	Both	http://[Site Collection]/_vti_bin/meetings.aspx	Provides services to create, delete, and manage Meeting Workspaces

More services..

Service	WSS/MOSS	Address	Description
People web service	Both	http://[Site Collection]/_vti_bin/people.asmx	Provides services to return information about people
Permissions web service	Both	http://[Site Collection]/_vti_bin/permissions.asmx	Provides support for managing site and list permissions
Site Data web service	Both	http://[Site Collection]/_vti_bin/sitedata.asmx	Provides services to return site and list data
Sites web service	Both	http://[Site Collection]/_vti_bin/sites.asmx	Provides support for returning data from sites
Search web service	Both	http://[Site Collection]/_vti_bin/search.asmx	Provides support for searching SharePoint
Users and Groups web service	Both	http://[Site Collection]/_vti_bin/usergroup.asmx	Provides support for working with SharePoint users and groups
Versions web service	Both	http://[Site Collection]/_vti_bin/versions.asmx	Provides support for working with file versions
Views web service	Both	http://[Site Collection]/_vti_bin/views.asmx	Provides support for working with list views
Web Part Pages web service	Both	http://[Site Collection]/_vti_bin/webpartpages.asmx	Provides support for managing web parts
Webs web service	Both	http://[Site Collection]/_vti_bin/webs.asmx	Provides support for creating, deleting, and managing sites and subsites

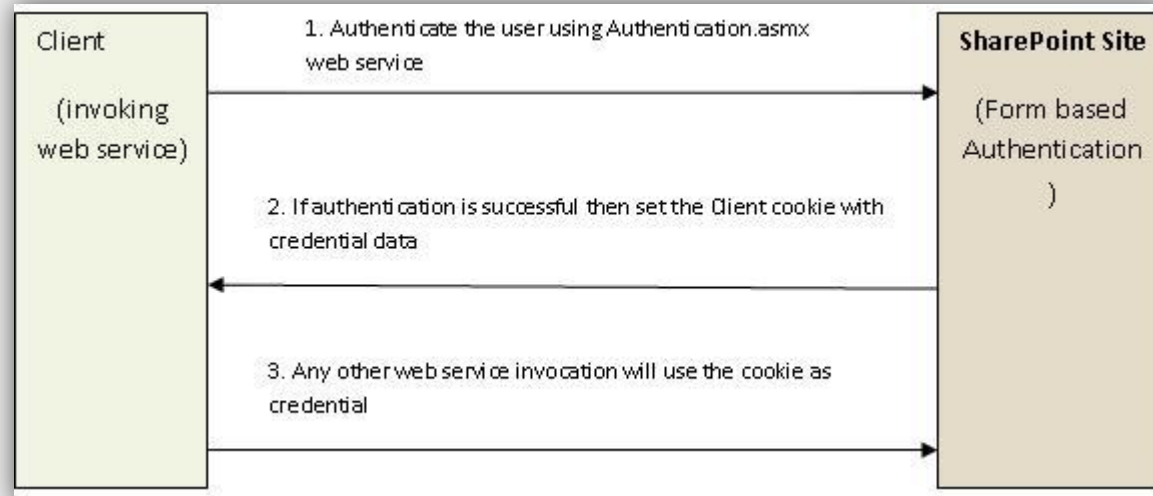
MOSS only web services

Service	WSS/MOSS	Address	Description
Official File web	MOSS only	http://[Site Collection]/_vti_bin/officialfile.asmx	Provides service support for sending files to a records repository
Published Links web service	MOSS only	http://[Site Collection]/_vti_bin/publishedlinks.asmx	Provides support for Office clients to receive links that are targeted at them by SharePoint
User Profile Change web Service	MOSS only	http://[Site Collection]/_vti_bin/userprofilechangeservice.asmx	Provides support for changes to user profiles
User Profile web service	MOSS only	http://[Site Collection]/_vti_bin/userprofileservice.asmx	Provides support for returning information from user profiles
Workflow web service	MOSS only	http://[Site Collection]/_vti_bin/workflow.asmx	Provides support for managing workflows

Integrated Security

```
Web_Reference_Folder .Lists listService = new Web_Reference_Folder.Lists();  
listService.Credentials= System.Net.CredentialCache.DefaultCredentials;  
XmlNode listsNode = listService.GetListCollection();  
MessageBox.Show(listsNode.OuterXml);
```

Forms Authentication (using Authentication.asmx)



Code Sample – Forms Authentication



```
// Authenticate
Authentication auth = new Authentication();
auth.CookieContainer = new CookieContainer();
LoginResult result = auth.Login("username", "password");
if (result.ErrorCode == LoginErrorCode.NoError) {
    // No error, so get the cookies.
    CookieCollection cookies = auth.CookieContainer.GetCookies(new Uri(auth.Url));
    Cookie authCookie = cookies[result.CookieName];
    Lists lists = new Lists();
    lists.CookieContainer = new CookieContainer();
    lists.CookieContainer.Add(authCookie);
    lists.GetListCollection();
}
```

From Experience

Oh the Pain

Most web services return a huge XML blob
(aka node)

When it eventually arrives, have fun parsing it.

Each web service has its own poorly
documented quirks
um... Keep trying?



- **Create web service and upload to SharePoint Server:**

Local_Drive:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\ISAPI\

- **Web service is then available from mapped virtual directory:**

`http://<site>/vti_bin/NewService.asmx`

Complete Walkthrough:

<http://msdn.microsoft.com/en-us/library/ms464040.aspx>

SharePoint & Frontpage RPC protocol

e.g. Recommended approach for uploading documents

- minimal documentation on MSDN

<http://msdn.microsoft.com/en-us/library/ms448359.aspx>

iShare – SharePoint for iPhone

Browse Sites & Lists

Webs.aspx

Lists.aspx

Common methods:

GetWebCollection()

GetListCollection()



Browse List Contents

Lists.asmx

Common Methods:

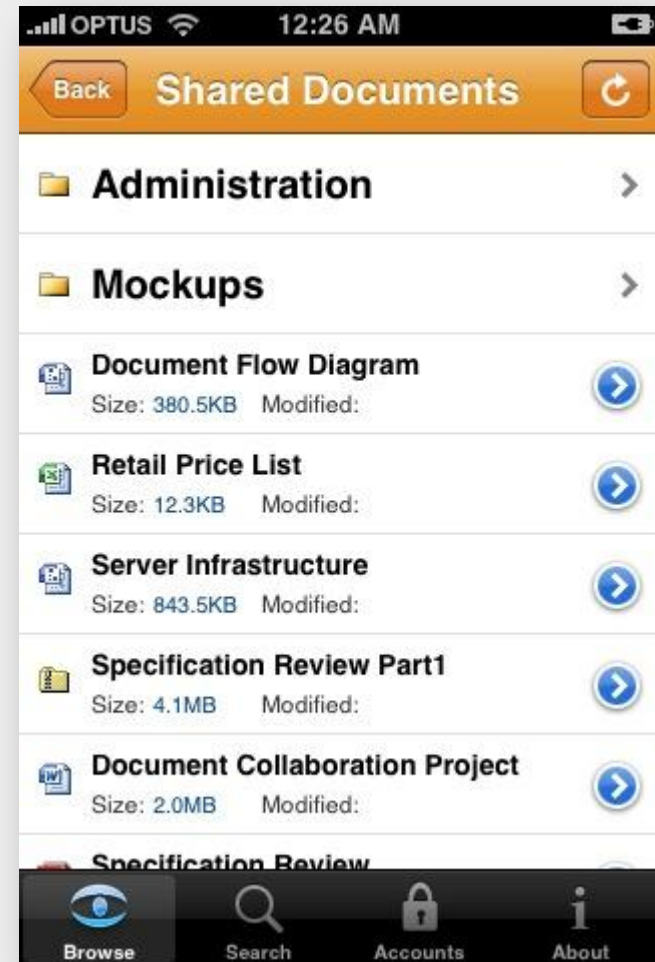
GetListItems()

GetListContentTypes()

GetListContentType()

GetList()

GetListAndView()



Search

SPSearch.asmx (WSS)

Search.asmx (MOSS)

QueryService.Query()

QueryService.Status()



Edit

Lists.aspx

Common methods:

GetContentTypes()

GetListContentType()

GetList()

UpdateListItems()



Edit

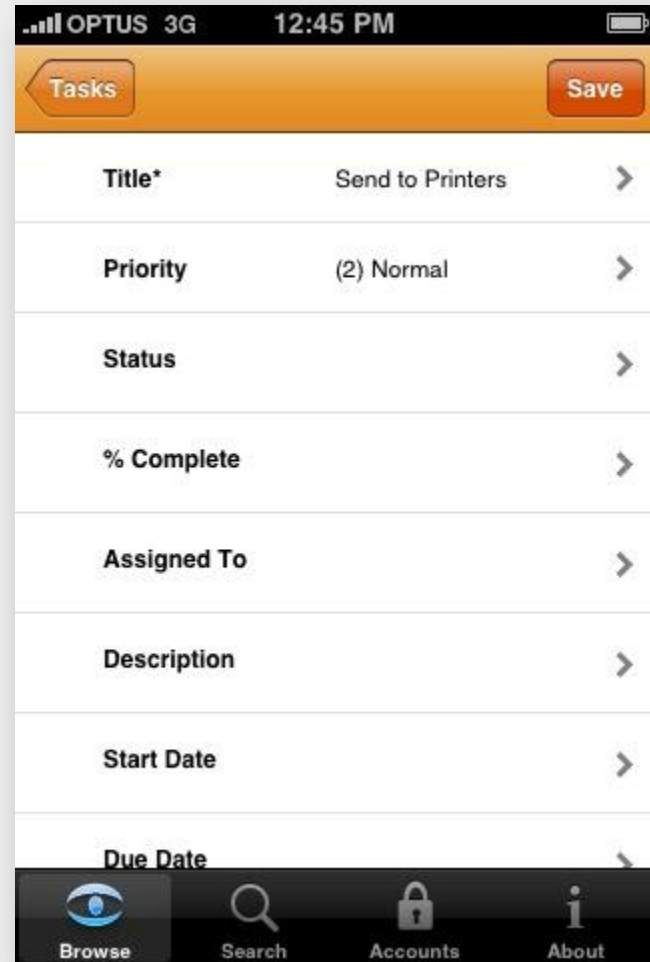
Lists.asmx

Common methods:

GetListItems()

GetListContentType()

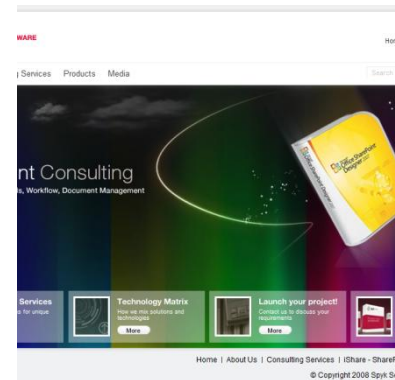
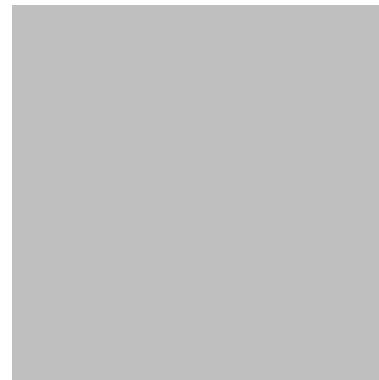
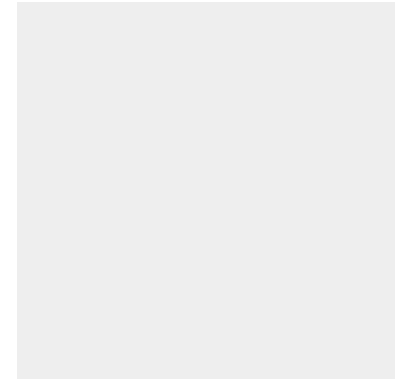
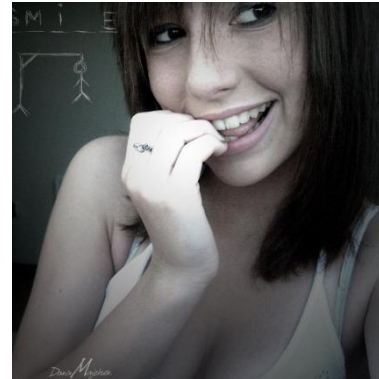
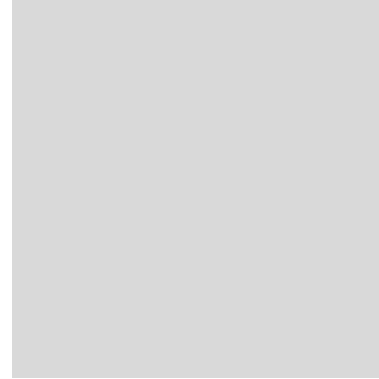
UpdateListItems()



Questions?

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Thank you!



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