

Windows Azure Storage Plugin for WordPress

Introduction

This WordPress plugin allows you to use Windows Azure Storage Service to host your media for your WordPress powered blog. Windows Azure Storage is an effective way to scale storage of your site without having to go through the expense of setting up the infrastructure for content delivery.

Features

Key features of this plug-in are listed below.

Transparent Storage for End User

Actual storage location details are transparent to the end user.

Automatic File Upload to Windows Azure Storage

Uploaded media files are automatically saved into your Windows Azure Storage Blob Container without any extra steps. Media files will be served by Windows Azure Storage, instead of your own web host.

Highly Configurable

This plugin provides several options for configuration of the underlying Windows Azure Storage service.

Search Media Files

Provides ability to search media files based on criteria (like tag, file type, creation date etc.) provided by user. The plugin performs search using the Windows Azure Storage Services APIs available in the Windows Azure SDK for PHP.

Target Users

Personal blogging websites

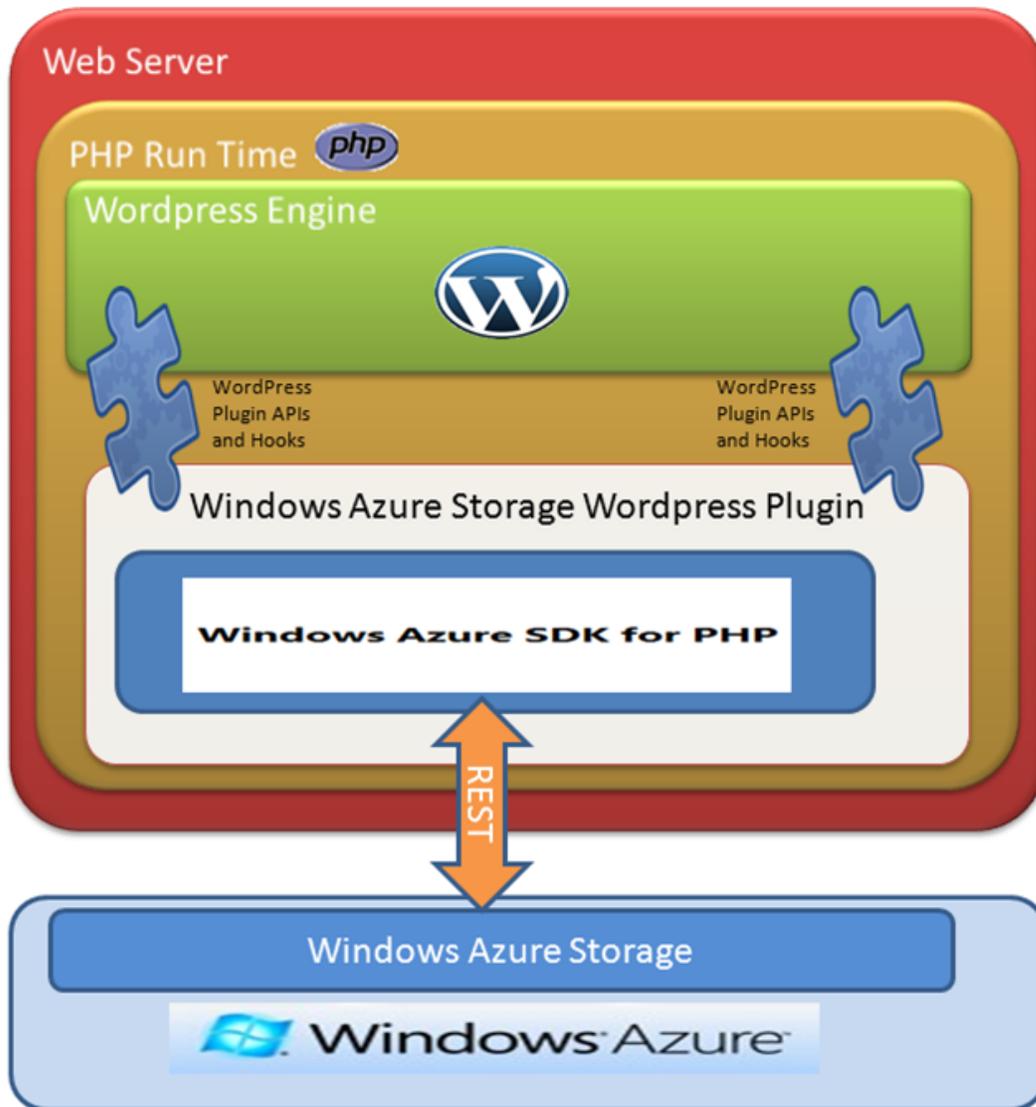
You can use the Windows Azure Storage Plugin with your personal WordPress website. By using this plugin, you can avoid the time and money necessary to set up your own storage solution. Global account settings with a single Blob Container will allow you to store all your media (image files, music files, etc.) in Windows Azure Storage.

WordPress blog hosters

WordPress hosters, such as www.wordpress.com and <http://www.bluehost.com/track/wp/one> can use the Windows Azure Storage Plugin to reduce storage costs by storing millions of blog post media files in Windows Azure.

Architecture

WordPress Plugin APIs allow for easy modification, customization, and enhancement to a WordPress blog. The high level architecture for this plugin is shown in the diagram below.

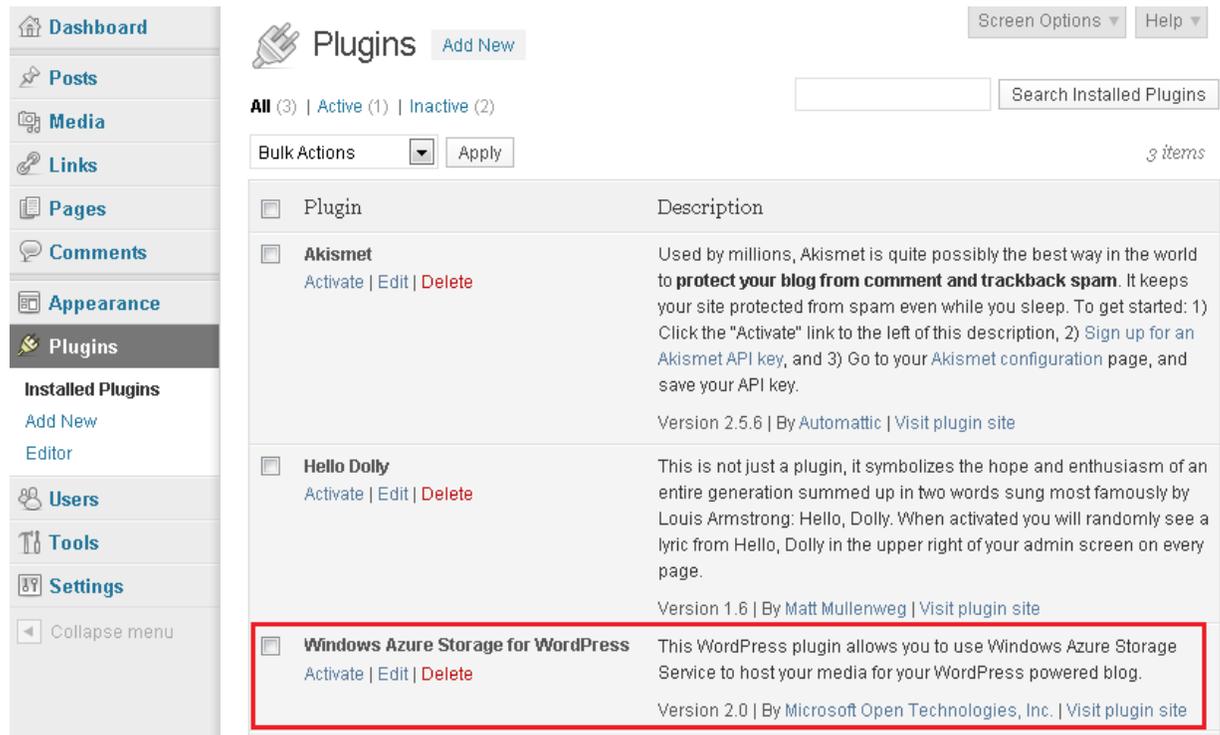


Installation Instructions

- Extract the Windows Azure Storage Plugin (**windows-azure-storage**) from the **windows-azure-storage.zip** archive and put it in the plugins directory of the WordPress installation.

e.g. With a default install of WordPress in “/var/www/html/wordpress”, extract the **windows-azure-storage** folder from the **windows-azure-storage.zip** archive into the “/var/www/html/wordpress/wp-content/plugins” directory.

- To activate the plugin, log in into your WordPress site as an administrator and navigate to list of plugins. Check the associated checkbox for the plugin and click “**Activate**”.



The screenshot shows the WordPress dashboard's Plugins page. The left sidebar contains navigation links for Dashboard, Posts, Media, Links, Pages, Comments, Appearance, Plugins, Users, Tools, and Settings. The main content area is titled 'Plugins' and shows a list of installed plugins. The 'Windows Azure Storage for WordPress' plugin is highlighted with a red border. Below the plugin name are links for 'Activate', 'Edit', and 'Delete'. The description of the plugin is: 'This WordPress plugin allows you to use Windows Azure Storage Service to host your media for your WordPress powered blog. Version 2.0 | By Microsoft Open Technologies, Inc. | Visit plugin site'.

Plugin	Description
<input type="checkbox"/> Akismet Activate Edit Delete	Used by millions, Akismet is quite possibly the best way in the world to protect your blog from comment and trackback spam . It keeps your site protected from spam even while you sleep. To get started: 1) Click the "Activate" link to the left of this description, 2) Sign up for an Akismet API key , and 3) Go to your Akismet configuration page, and save your API key. Version 2.5.6 By Automattic Visit plugin site
<input type="checkbox"/> Hello Dolly Activate Edit Delete	This is not just a plugin, it symbolizes the hope and enthusiasm of an entire generation summed up in two words sung most famously by Louis Armstrong: Hello, Dolly. When activated you will randomly see a lyric from Hello, Dolly in the upper right of your admin screen on every page. Version 1.6 By Matt Mullenweg Visit plugin site
<input type="checkbox"/> Windows Azure Storage for WordPress Activate Edit Delete	This WordPress plugin allows you to use Windows Azure Storage Service to host your media for your WordPress powered blog. Version 2.0 By Microsoft Open Technologies, Inc. Visit plugin site

Configure Windows Azure Storage Account

After activating the plugin, you need to configure it by providing your Windows Azure Storage Account credentials:

- Login into your WordPress site as an administrator and navigate to the “**Windows Azure**” sub-tab (under the “**Settings**” tab).
- Enter your Windows Azure Storage account name in the “**Storage Account Name**” text box and enter your Windows Azure Storage primary access key in the “**Primary Access Key**” text box, then click “**Save Changes**”. If the underlying Web Server uses an HTTP proxy for connecting to the Internet, please provide the HTTP proxy server details in the “**HTTP Proxy Host Name**”, “**HTTP Proxy Port Name**”, “**HTTP Proxy User Name**” and “**HTTP Proxy Password**” fields. After specifying “**Storage Account Name**”, “**Primary Access Key**” and proxy details you can create a container by entering the container name in the “**Create New Container**” text box and clicking “**Create**”.

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Windows Azure Storage for WordPress

Settings saved.

This WordPress plugin allows you to use Windows Azure Storage Service to host your media for your WordPress powered blog. Windows Azure provides storage in the cloud with authenticated access and triple replication to help keep your data safe. Applications work with data using REST conventions and standard HTTP operations to identify and expose data using URIs. This plugin allows you to easily upload, retrieve, and link to files stored on Windows Azure Storage service from within WordPress.

For more details on Windows Azure Storage Services, please visit the [Windows Azure Platform web-site](#).

This plugin uses Windows Azure SDK for PHP (<https://github.com/WindowsAzure/azure-sdk-for-php/>).

Plugin Web Site: <http://wordpress.org/extend/plugins/windows-azure-storage/>

Windows Azure Storage Settings

If you do not have Windows Azure Storage Account, please [register](#) for Windows Azure Services.

Store Account Name	<input type="text"/>	
Primary Access Key	<input type="text"/>	
Default Storage Container	<input type="text"/>	Create New Container <input type="text"/> <input type="button" value="Create"/>
CNAME	<input type="text"/>	<small>Note: Use this option if you would like to display image urls belonging to your domain like http://MyDomain.com/ instead of http://YourAccountName.blob.core.windows.net/. This CNAME must start with http(s) and administrator will have to update DNS entries accordingly.</small>
HTTP Proxy Host Name	<input type="text"/>	
HTTP Proxy Port Name	<input type="text"/>	
HTTP Proxy User Name	<input type="text"/>	
HTTP Proxy Password	<input type="text"/>	
Use Windows Azure Storage for default upload	<input checked="" type="checkbox"/>	<small>Use Windows Azure Storage when uploading via WordPress' upload tab. Note: Uncheck this to revert back to using your own web host for storage at anytime.</small>

- Once your Windows Azure Storage account details are set correctly, the page will be refreshed and the **“Default Storage Container”** drop down will be populated with all available blob containers associated with the storage account. Select the one container for storing your media files and click **“Save Changes”**.
- If are no blob containers exist in your Windows Azure Storage account, then you will still see the **“Create New Container”** text box where you can enter container name and click on **“Create”** to create a container.

Create New Container:

Default Storage Container

The container 'wordpress-media' successfully created
To use this container as default container, select it from the above drop down and click 'Save Changes'

- If there are blob container(s) in the configured Windows Azure Storage account then you will not see the text box to create a new container. To create a new container select *<Create New Container>* option from the “**Default Storage Container**” drop down.

Default Storage Container

 **Windows Azure Storage Settings**

If you do not have Windows Azure Storage Account, please [register](#) for Azure Services.

Store Account Name

Primary Access Key

Default Storage Container

- All media files stored in Windows Azure Storage will have a URL like “`http://<AccountName>.blob.core.windows.net/<ContainerName>/<MediaFileName>`”. You can hide usage of the underlying Windows Azure Storage account by defining a CNAME entry in the “**CNAME**” text box and then clicking “**Save Changes**”. This CNAME must start with `http(s)` and you will have to update DNS entries appropriately to route requests back to `blob.core.windows.net`.

CNAME

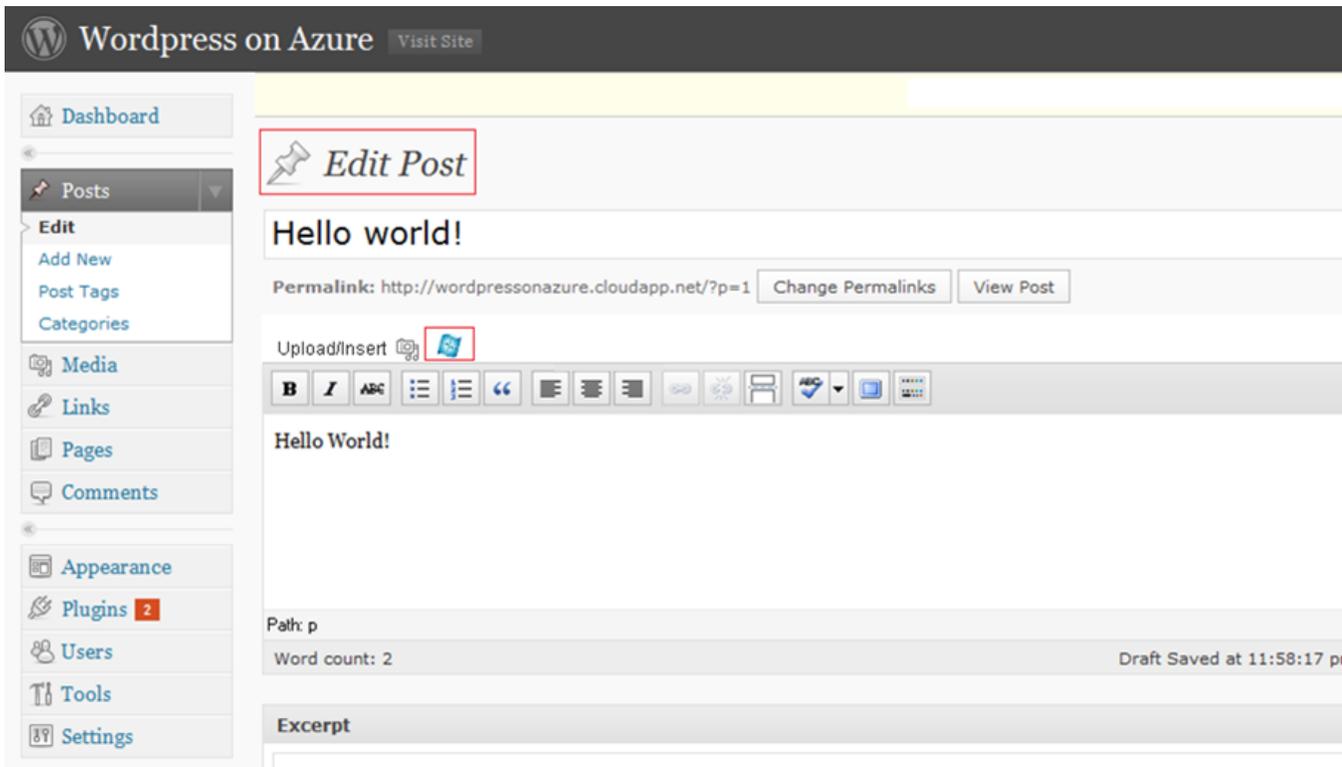
Note: Use this option if you would like to display image urls belonging to your domain like `http://MyDomain.com/` instead of `http://YourAccountName.blob.core.windows.net/`. This CNAME must start with `http(s)` and administrator will have to update DNS entries accordingly.

- You can set Windows Azure Storage as the default location for storing all media file uploaded via “WordPress upload tab”. File uploads will be automatically saved into your

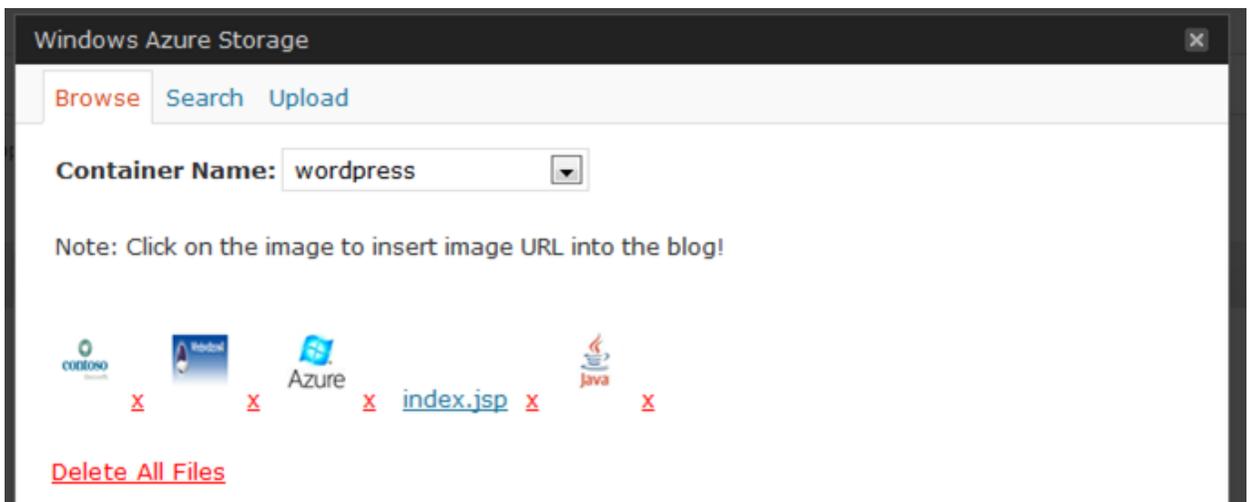
Windows Azure storage account. Just check the “Use Windows Azure Storage as default upload” checkbox and click “Save Changes”.

Using the Plugin

- Once this plugin is configured, you will be able to view a new toolbar button on the “**Edit Post**” page. This button has the Windows Azure logo as shown in following diagram.



- Clicking on the Windows Azure icon displays the “**Windows Azure Storage**” dialog.



- This dialog has 3 tabs: Browse, Search and Upload.
- The Browse tab is the default tab and shows all files available in the default container. For image files, it shows small thumbnails of the images.
- You can change the container by selecting a different name in the “**Container Name**” dropdown. The page will be refreshed and files in the new container will be displayed.
- To insert the media file in a blog post, click on the image in the list of files displayed on screen. Once you click on an image, the dialog is closed and an image link is added into the text area of the post. The HTML view of the post is shown below. Note that the URL for the image points to the Windows Azure storage host for blobs (i.e. blob.core.windows.net).

Edit Post

Hello world!

Permalink: <http://wordpressonazure.cloudapp.net/?p=1>

Upload/Insert  

b *i* [link](#) b-quote ~~del~~ ins img ul ol li code more lookup close tags

``

- You can define a custom CNAME as follows,

CNAME

Then the added image URL will look as follows:

Upload/Insert  

b *i* [link](#) b-quote ~~del~~ ins img ul ol li code

``

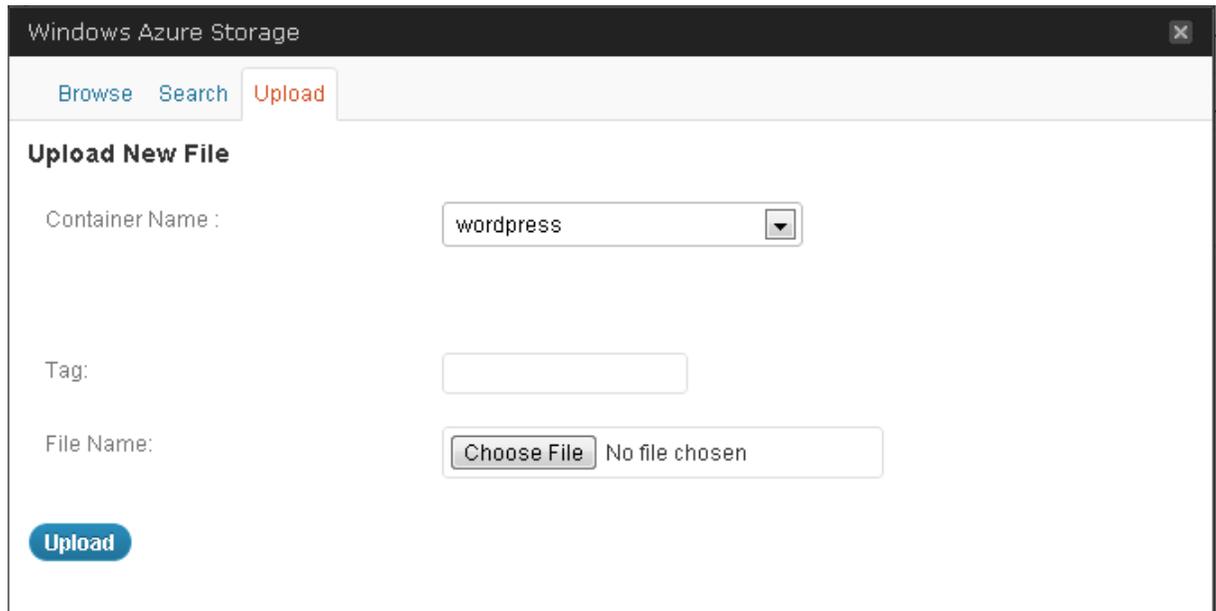
- If you add something other than an image, then a hyperlink is added to the edit post text area as shown below:

Upload/Insert  

b *i* [link](#) b-quote ~~del~~ ins img ul ol li code more lookup close tags

`http://interopstorage.blob.c`

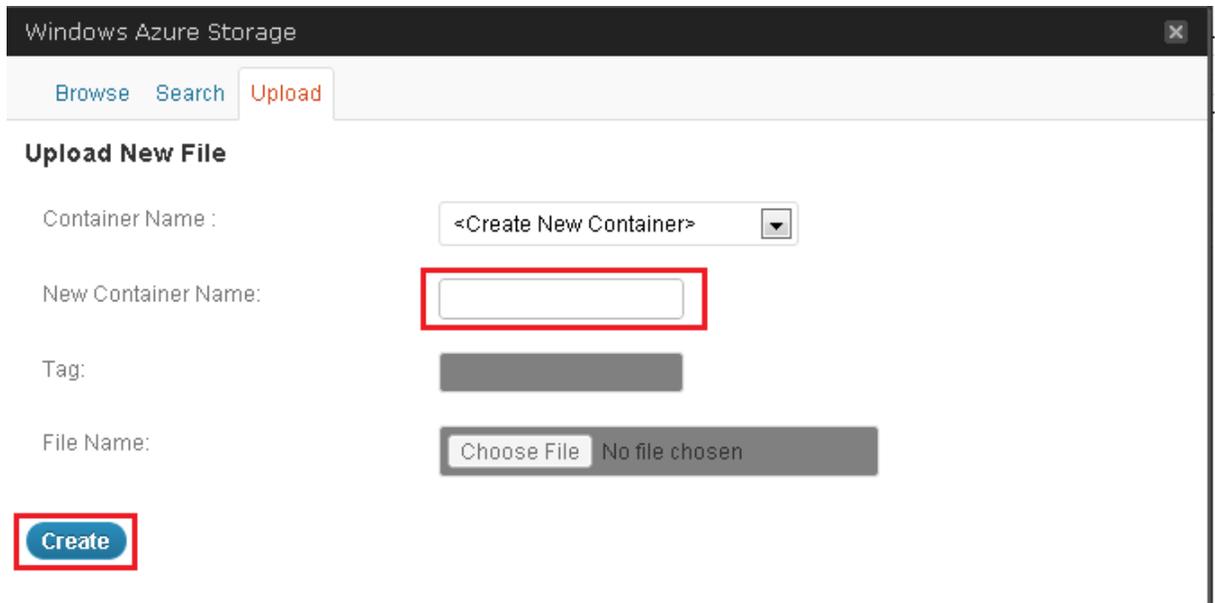
- To upload a new file, click on the “**Upload**” Tab. The following controls are shown in the Upload tab.



The screenshot shows the 'Windows Azure Storage' application window with the 'Upload' tab selected. The interface includes a navigation bar with 'Browse', 'Search', and 'Upload' tabs. Below the navigation bar, the 'Upload New File' section contains the following controls:

- Container Name :** A dropdown menu with 'wordpress' selected.
- Tag:** An empty text input field.
- File Name:** A button labeled 'Choose File' and a text area displaying 'No file chosen'.
- Upload:** A blue button with white text.

- New files are uploaded to the default container; however you can change the container by selecting a different container from the drop down.
- You can provide custom tags for a file when it is uploaded. Use comma-separated list for multiple tags.
- Click the “**Browse...**” button and select the file to be uploaded using File Open Dialog.
- You can create new container from the **Upload** tab, by selecting *<Create New Container>* from the “**Container Name**” drop down. The page will display a text box to enter name of new container to create.



- If Windows Azure Storage is used as the default storage location for media (which can be enabled by clicking the “**Use Windows Azure Storage when uploading via WordPress’ upload tab**”), then all file uploads happening via default media upload dialogs are routed to your Windows Azure Storage account. The same files will be displayed in the Browse tab in the Windows Azure Storage popup dialog.



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Add New
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Upload New Media

Select Files

You are using the multi-file uploader. Problems? Try the [browser uploader](#) instead.

Maximum upload file size: 2MB. After a file has been uploaded, you can add titles and descriptions.

windows-azure [Hide](#)



File name: windows-azure.bmp
File type: image/bmp
Upload date: July 21, 2012

Title * windows-azure

Alternate Text
Alt text for the image, e.g. "The Mona Lisa"

Caption

Description

File URL
<http://interopstorage.blob.core.windows.net/wordpress/2012/07/windows-azure.bmp>
Location of the uploaded file.

[Delete](#)

Save all changes

- If the XML-RPC option is set in “**Writing Settings->Remote Publishing**”, as shown below, and Windows Azure Storage is set as the default for file uploads, then all file uploads happening via XML-RPC will be routed to your Windows Azure Storage account.

Dashboard

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Comments

Appearance

Plugins 2

Users

Tools

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General

Writing

Writing Settings

Size of the post box lines

Formatting

Convert emoticons like :-) and :-P to gr

WordPress should correct invalidly nested >

Default Post Category

Default Link Category

Remote Publishing

To post to WordPress from a desktop blogging client or remote website that use

Atom Publishing Protocol Enable the Atom Publishing Protocol.

XML-RPC Enable the WordPress, Movable Type, Meta

- The Search tab shows the following controls:

Windows Azure Storage

Browse Search Upload

Search Files

Tag:

File Name:

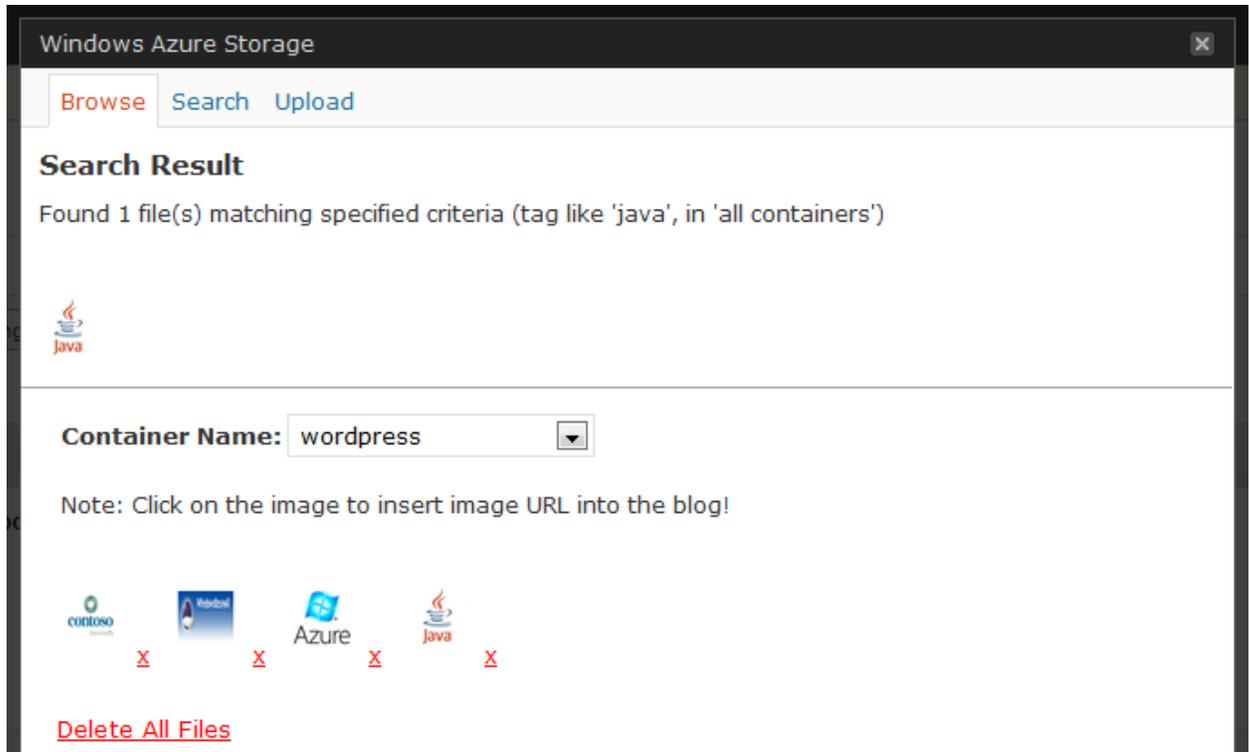
File Type:

Container Name:

Search

- The default container is selected for search. You can change the container to be searched or you can search in all containers.

- You can search files based on Tag, File Name and File Type. The logical AND operation is performed on multiple criteria.
- Click “**Search**” after specifying various criteria. The result will be displayed in the “**Browse**” tab as follows:



Known Issues WordPress MU edition (prior to WordPress 3.0)

This plugin does not work out-of-box with the WordPress MU (Multi User) edition. The only workaround is to edit the `\wp-admin\options.php` file within the WordPress MU installation. Perform following changes in this file:

- Open `\wp-admin\options.php` file and search for the function called “`check_admin_referer`”. This call is inside one **if** condition and looks as follows:

```
switch($action) {
case 'update':
    if ( isset($_POST[ 'option_page' ]) ) {
        $option_page = $_POST[ 'option_page' ];
        check_admin_referer( $option_page - '-options' );
    }
}
```

- The WordPress MU edition does not contain any **else** block in this **if** statement. Add the following **else** block to this **if** statement and save the **options.php** file.

```
switch($action) {  
    case 'update':  
        if ( isset($_POST[ 'option_page' ]) ) {  
            $option_page = $_POST[ 'option_page' ];  
            check_admin_referer( $option_page . '-options' );  
        } else {  
            // Needed by Windows Azure Storage Plugin For WordPress MU edition  
            $option_page = 'options';  
            check_admin_referer( 'update-options' );  
        }  
    }  
}
```

For details, please refer the article: <http://mu.wordpress.org/forums/topic/12474>.

Resources

- For more details on Windows Azure Storage Services, please visit the [Windows Azure Platform web-site](#).
- Windows Azure SDK for PHP is at the core of this plugin. This SDK is available at <https://github.com/WindowsAzure/azure-sdk-for-php>
- Official PHP on Windows Azure website: <http://azurephp.interopbridges.com>