

ArtfulBits Push Message

For Microsoft® SharePoint®

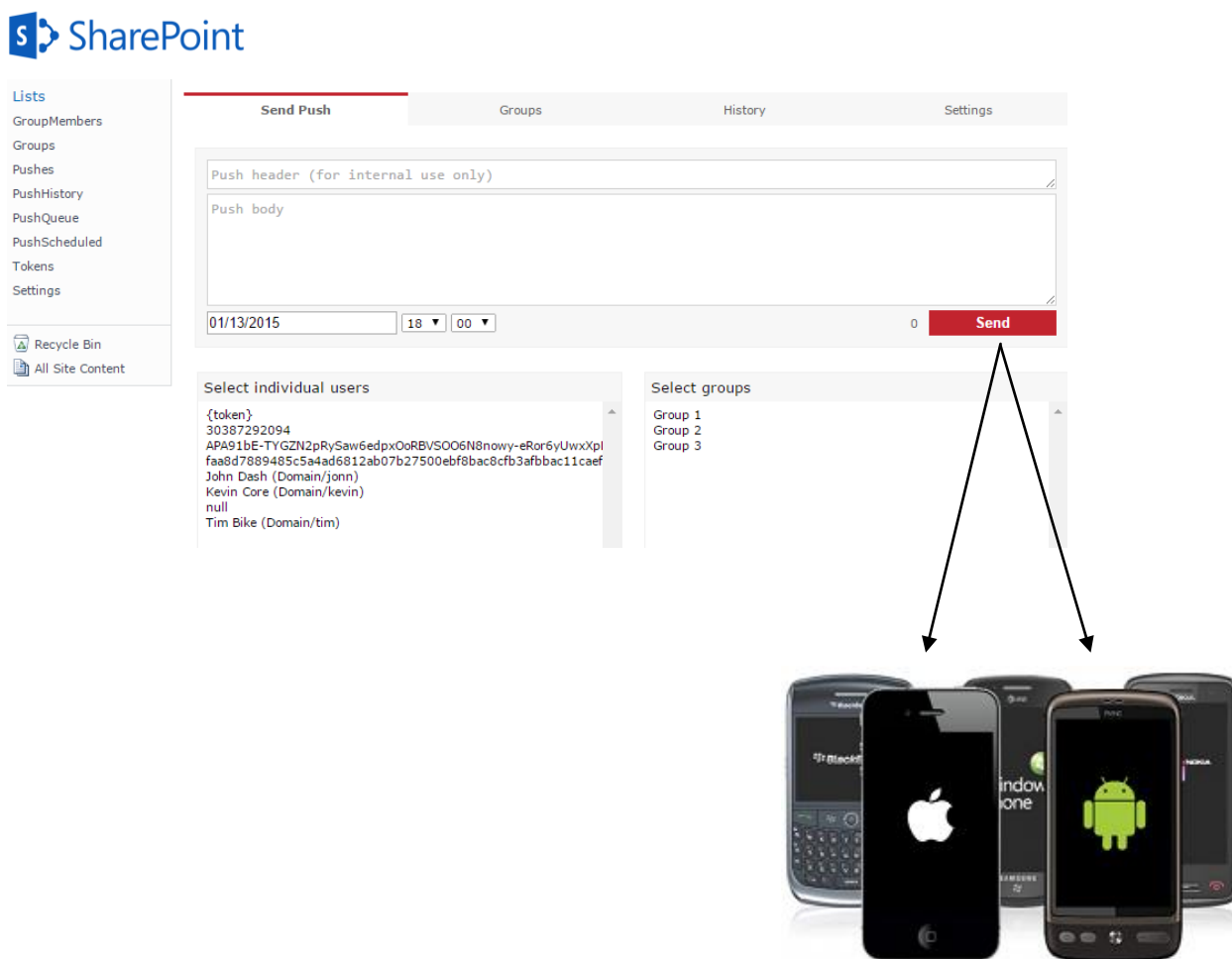


User Guide

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Overview

Push Messages Web Part is intended to enable communication with the users of SharePoint web site by sending push messages to their mobile devices.



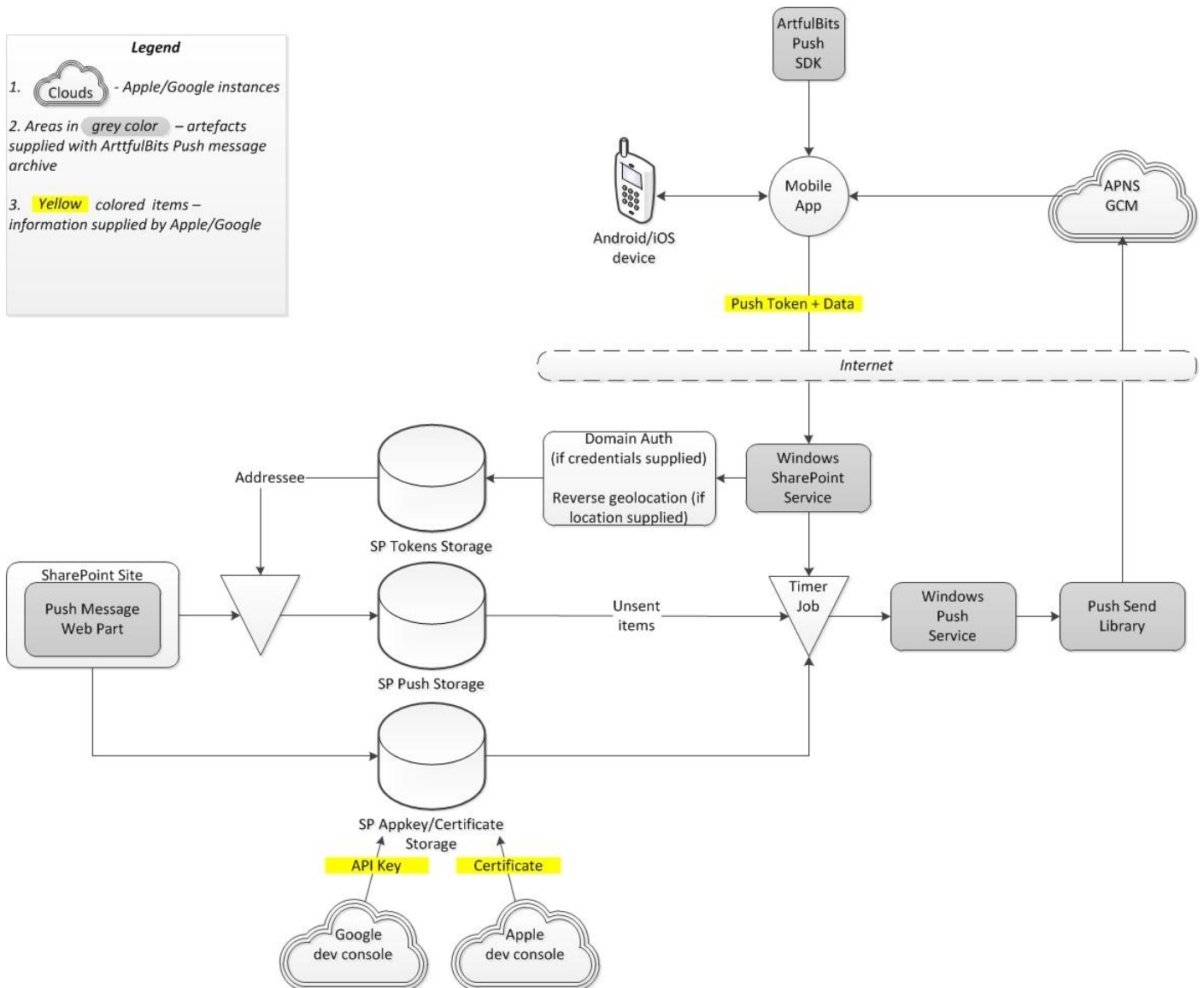
This powerful tool has no limits in regards to the message quantity. The messages are easily created, and automatically stored after sending.

Also, this tool allows for creating the groups of the users based on certain characteristics, like platform type, device location, or your own preferences. The messages can be sent to either the individual users, groups, or even a combination of groups and users.

Simply stated, Push Message Web Part is a compound solution that consist of the few important parts:

- Web Part and infrastructure
- Push Send Library
- 2 services
- Push SDK

The following schematic diagram explains the connection between all parts:



Certainly we presume that your mobile application is either already developed, or is going to be developed soon.

However, please, remember, that WE CAN ALSO HELP TO DEVELOP YOUR MOBILE APPLICATION!

Feature List

Feature	SharePoint Server 2010	SharePoint Server 2013
Integration with iOS applications	✓	✓
Integration with Android applications	✓	✓
SharePoint push message management panel	✓	✓
Identification of mobile users in SharePoint	✓	✓
Online message composer	✓	✓
Unlimited push messages	✓	✓
Message scheduling	✓	✓
Segmentation by user locations, app versions, platforms	✓	✓
Combination users into groups	✓	✓
Send messages to individual users and/or groups	✓	✓
History of messages	✓	✓
Status of messages		
Language pack support (desired localization can be added by request)	✓	✓

Why ArtfulBits Push Message?

Mobile devices have become a necessary target for online marketing and successful team collaboration. You can deliver news and get the feedbacks from your users exponentially faster if you reach them on the mobile devices.

Push Message Web Part is full-cycle solution that contains every part necessary for reaching your SharePoint users on their mobile devices. It contains SharePoint web part itself, iOS and Android SDK for your application that will enable your application to communicate with Push Web Part, web services that will actually send data back and forth, and certainly an extensive and easy to understand documentation for each part.

Push Message Web Part has all capacities to become your greatest assistant. Just imagine what you can do with it - inform your customers about your new products, send messages to your team, schedule marketing campaign notifications, and congratulate your staff and much more!

How to Use

It is very important to deploy properly all parts of the solution:

- Web Part (check Installation Guide for the detailed instructions)
- Push Send Library (it goes with the web part, and doesn't require any additional efforts to be installed)
- 2 services (please see instructions below)
- Push SDK (check [Push Message iOS SDK Integration.pdf](#) and [Push Message Android SDK Integration.pdf](#) for the detailed instructions)

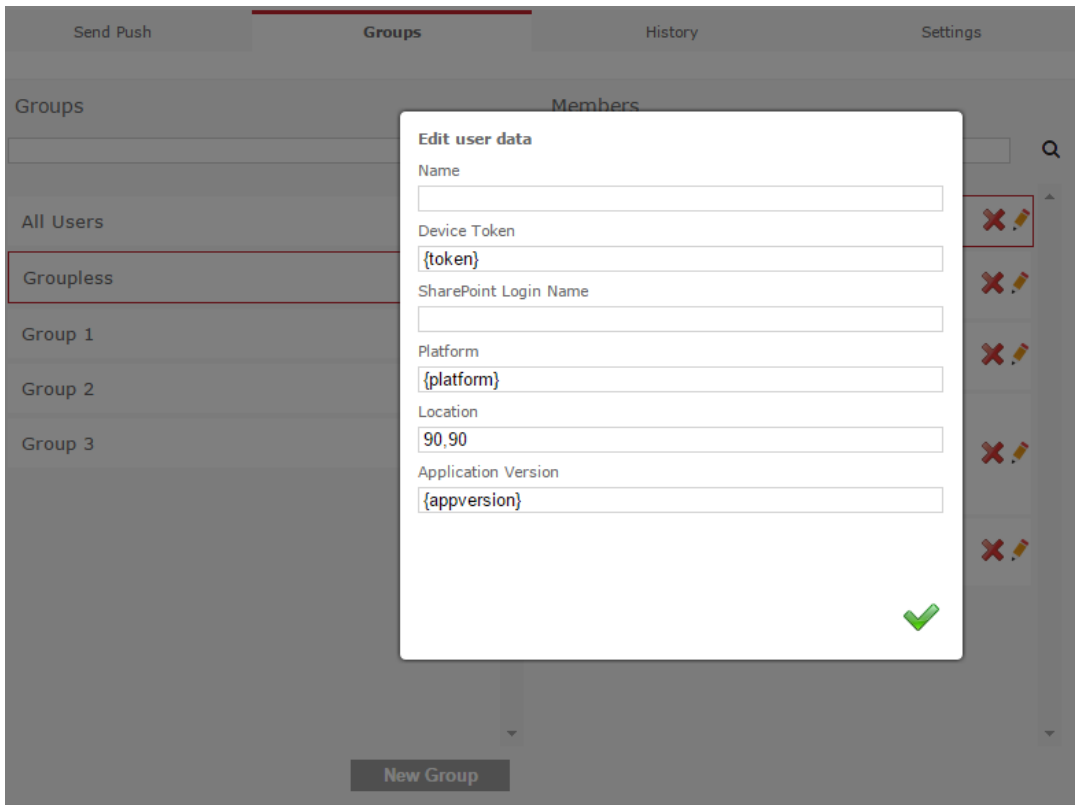
After deployment, new user push tokens received from the devices of the users will be stored in SP tokens storage:

Lists	ID	Title	SharePointAuth	DisplayName	Platform	Location	AppVersion	LocationDisplay
GroupMembers	1	{69064EB1-584A-407F-B670-C3D75A39C430}	Domain/jonn	John Dash	Ios	Paris	1.0	
Groups	2	{70AA4318-D08D-41E7-AAA6-326957B216B7}	Domain/kevin	Kevin Core	Android	London	1.1	
Pushes	3	{24E26AEF-E354-4EF6-A7ED-4CCCD45C5EC8}	Domain/tim	Tim Bike	WinPhone	Berlin	1.2	
PushHistory	4		SHAREPOINT\system	System Account				
PushQueue								
PushScheduled	6	{token}			{platform}	90,90	{appversion}	
Tokens	9	faa8d7889485c5a4ad6812ab07b27500ebf8bac8cfb3afbbac11caef7292c632			ios			
Settings	10		ARTFULBITS\vhal	Valentyn Hal				
	19		ARTFULBITS\mary	Maryana Kravtsova				
Recycle Bin	20	30387292094			android	49.810576,23.999615		Knyahyni Ol'hy Street, 104, L'viv, Lviv Oblast, Ukraine
All Site Content								
	21	APA91bE-TYGZN2pRySaw6edpxOoRBVS006N8nowy-eRor6yUwxXpLwnqfKHTjWUaVXY4__JJaSVTicz-QXFvF0xJd2eWjzmt37fFGVVAbOi6TqA6p8jA3secpYZlIrHN5HISckMGx6VR6Ygtgl0wBL53BPi_WZ3fA			android	49.810576,23.999615		Knyahyni Ol'hy Street, 104, L'viv, Lviv Oblast, Ukraine
	22		ARTFULBITS\mgontar	Maksim Gontar				
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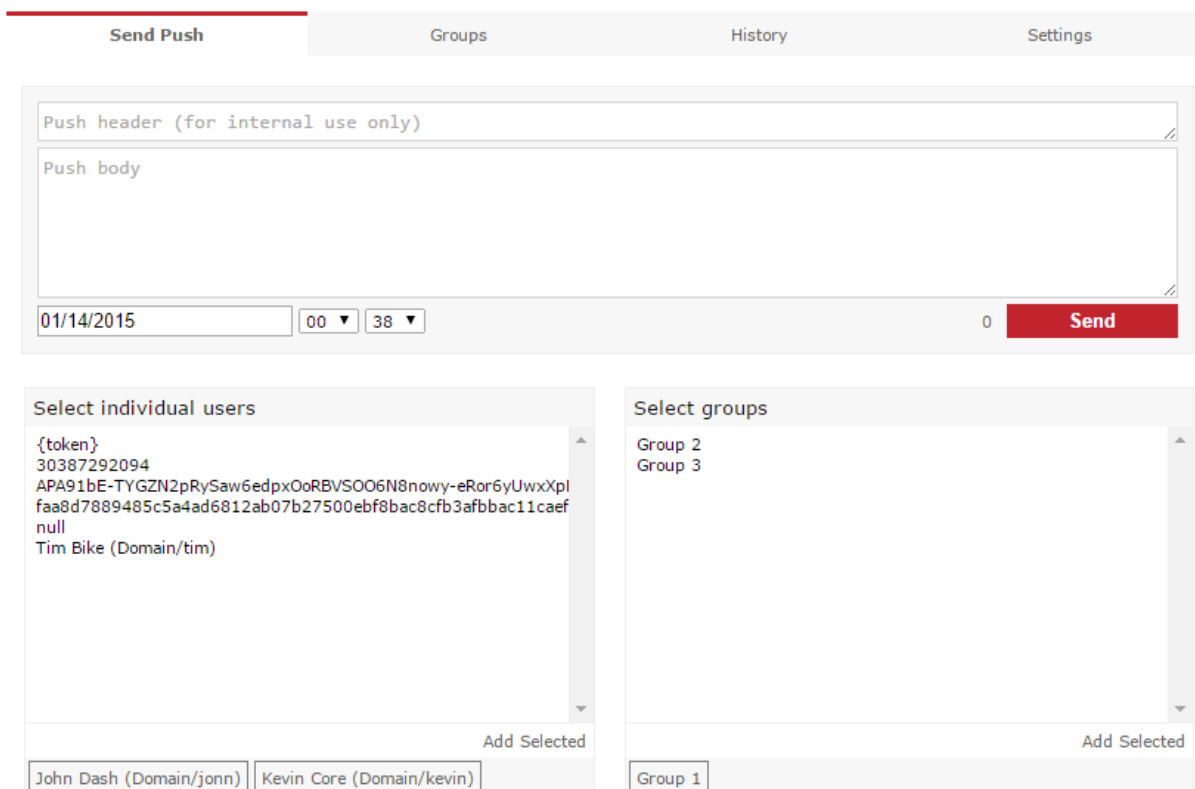
Some additional information can be received along with the token - device platform, location and SharePoint authentication. Also, it is possible to edit each user's data at the Groups area:

The screenshot shows a web interface with a top navigation bar containing 'Send Push', 'Groups' (selected), 'History', and 'Settings'. Below the navigation bar, there are two main sections: 'Groups' on the left and 'Members' on the right. The 'Groups' section has a search bar and a list of groups: 'All Users', 'Groupless' (highlighted with a red box), 'Group 1', 'Group 2', and 'Group 3'. Each group has a red 'X' and a pencil icon next to it. The 'Members' section has a search bar and a list of members. The first member is highlighted with a red box and contains the text: '{token}', '{platform} | 90,90 | {appversion}', and a red 'X' and pencil icon. Below it are other members with their IDs, platforms, and locations, each with a red 'X' and pencil icon. At the bottom of the interface is a 'New Group' button.

SharePoint login name can be added, as well as the displayed name in the Push Message users list. At the same area a new group can be created.



Finally, a new message can be composed very easily. Just select users and/or groups you'd like to send the message to, compose the message, add the header and choose the date and time, if you'd like to schedule your message.



“History” area (Push Storage) shows you all the deliveries and its statuses.

- Completed: all push messages are delivered successfully.
- In Progress: all deliveries that are in progress right now.
- With Send Fails: deliveries that have some messages not delivered (IOS/Android settings are incorrect, user token is incorrect, message is too long, etc.). Extended log is recorded into “PushQueue” list on the current site.
- Scheduled: deliveries that should be sent in the future.

Send Push	Groups	History	Settings
Completed	In Progress	With Send Fails	Scheduled

<p>test</p> <hr/> <p>test</p> <p>System Account (SHAREPOINT\system) 11/25/2014 2:09:00 PM</p>	<p>John Dash (Domain/jonn) Send Failed</p> <p>Tim Bike (Domain/tim) Send Pending</p>
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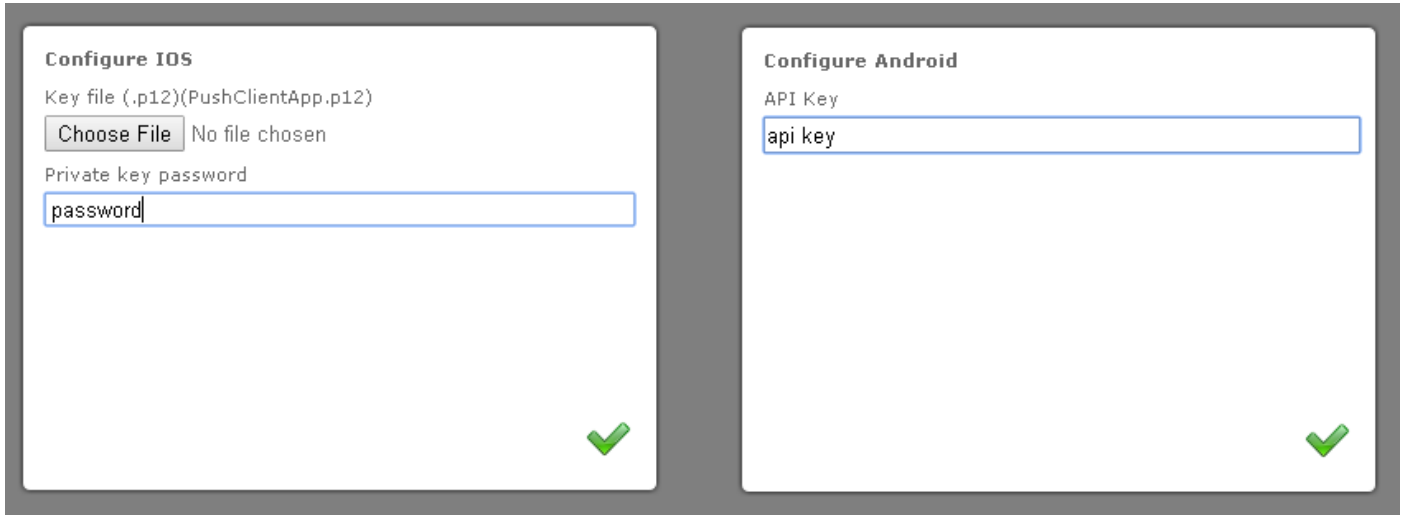
Services

Follow **Installation Guide** to install and configure the package. It also contains the prompts for creating Push Web Part site and install two additional services - Windows SharePoint service and Windows Push Service. Ensure that both services are running, otherwise the push deliveries won't happen!

For installing ArtfulBits Push SDK, please, read [Push Message iOS SDK Integration.pdf](#) and [Push Message Android SDK Integration.pdf](#)

Connection with Push Servers

Navigate to “Settings” screen and configure all the necessary settings.



The image shows two side-by-side configuration screens. The left screen is titled "Configure IOS" and contains the following elements: "Key file (.p12)(PushClientApp.p12)", a "Choose File" button, the text "No file chosen", "Private key password", and a text input field containing the word "password". The right screen is titled "Configure Android" and contains the following elements: "API Key" and a text input field containing the text "api key". Both screens have a green checkmark icon in the bottom right corner.

For Android you’ll need to provide API key that is generated on Android developer panel for your application.

For iOS you’ll need to provide SSL certificate along with the private key password.

Please, check for the detailed instructions on generating those here:

[Push Message iOS SDK Integration.pdf](#)

[Push Message Android SDK Integration.pdf](#)

Note: If something goes wrong, try searching standard SharePoint logs for “ArtfulBits Web Parts” “Push.Service” or “PushMessage” keywords to find out possible reasons of the incorrect behavior.

See Also



[Cascaded Lookup Column](#)

Cascaded Lookup Column allows building relationship between parent and child columns, the data selected in one field will determine the options presented in another.



[Category Column](#)

Category Column allows tracking, organizing and grouping list items. Outlook 2007 approach for elements categorization, easy indicator color changing and using of advanced tooltip, provide a high professional component style.



[Column Data Adapter](#)

Column Data Adapter is an extension component providing ability to use ArtfulBits Columns in Microsoft Access forms, reports and Microsoft Excel.



[Column Permissions](#)

Column Permissions allows you to manage access to list content on column level. Permissions can be assigned for individual users and for SharePoint groups as well and are effective in forms and list views, as well as in the SharePoint Alerts, RSS, Datasheet and even during exporting to Excel and opening with Access.



[Cross-Site Lookup Column](#)

Use Cross-Site Lookup Column for getting data from any site within site collection. Component includes a powerful function of searching over lookup list. This function provides substring matching in selected column which is very useful for large lists (over 50-100 items).



[Discussion Column](#)

Need to organize well formatted conversation in the list item without enabling list versioning? Discussion Column is the right choice. Component allows entering rich text with formatting, images, tables, hyperlinks and other features.



[Follow-Up Column](#)

Follow-Up Column enables due date flags similar to Outlook follow-up functionality. Applying of flags to the list item allows adding of visual reminder in a natural way.



[Image Upload Column](#)

Quick and simple way of uploading pictures. Image Upload Column provides with ability to select a picture using file browsing dialog, upload and display it in the list view.



[KPI Column](#)

KPI (Key Performance Indicator) Column is simple graphical scorecards that can be used to evaluate business data against business goals. With this column you reduce risk to overlook information about the status of value.



[Link to Document Column](#)

Link to Document Column allows referencing files and folders placed at Document Library and provides easy and intuitive way to download files directly from column. Use this column to provide a browsing interface that allows users to browse to an object to link to instead of typing a URL.



Parent Selector Column

Parent Selector Column is used for organizing hierarchical relations in SharePoint list. Picker dialog allows choosing data from large lists. Standard Lookup column can be easily converted to Parent Selector column and vice versa.



Password Change Web Part

Password Change Web Part allows users to change their own passwords from within the SharePoint environment using standard text box interface (current password, new password and confirm new password).



Password Expiration Web Part

Password Expiration Web Part enables Active Directory users to be notified via Web Part interface that their passwords are about to expire. It also automatically sends out email notifications to users before the password expiration date.



Professional Calendar Web Part

Professional Calendar Web Part provides following key benefits: it allows combining events from different SharePoint Lists, from any SharePoint Site, in one Calendar view; allows specifying different color sets for different event sources; supports on-the-fly AJAX-enabled editing features in Outlook like style; and other enhanced functionalities.



Progress Column

Progress Column provides users with the ability to make SharePoint lists more visualized by displaying numerical data on the page using percentage-based progress bar. Professional progress bar style will make your SharePoint list really modern and stylish.



Video

Video Column and Video Web Part are powerful controls made for uploading, managing, linking and playing video files. These controls support variety of video files that can be uploaded from computer, or linked from SharePoint library or streamed from direct URL.

Remarks

Information in this document may be outdated. Please, visit www.ArtfulBits.com for the latest product version.