



Ultimus and Microsoft SharePoint Integration

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Introduction

Today's organizations are under tremendous pressure to utilize the most cost-efficient tools available and as such there have been many questions on how Microsoft's SharePoint offerings match up with Ultimus Adaptive BPM Suite 8.0.

From an Ultimus perspective, there are two basic integration points with SharePoint:

- a. to create an information portal, and
- b. to create a document repository.

This document outlines the various integration points available to support an Ultimus-SharePoint solution.

Ultimus is excited to offer a multi-faceted and rich set of integration capabilities with Microsoft SharePoint that fully leverages the benefits that SharePoint technologies can provide to an organization deploying a BPM solution. Ultimus (Adaptive) BPM Suite integrates with all of the recent SharePoint releases including Microsoft Windows SharePoint Services 2.0 or 3.0, Microsoft SharePoint Portal Server 2003, and Microsoft Office SharePoint Server 2007.

Ultimus has created the following SharePoint integration components:

- ***Ultimus FloPorts:*** These native SharePoint Web Parts allow process participants to initiate process incidents, complete tasks, and perform many of the same functions offered in Ultimus Client.
- ***Ultimus DocLink for SharePoint Attachment Control:*** This ActiveX control is available for Ultimus BPM Suite 7 in various forms allowing documents stored in SharePoint document libraries to be made available for review or edit.
- ***Ultimus Create-a-Site .NET Class:*** This .NET code interface provides developers the ability to create SharePoint team sites, users in those team sites, and document repositories.
- ***Ultimus SharePoint Flobot:*** This out-of-the-box Ultimus Flobot for Ultimus Adaptive BPM Suite 8.0 offers SharePoint file manipulation such as copying, deleting, renaming, executing, and editing creating metadata.
- ***Ultimus Form Attachments storage in SharePoint:*** Ultimus Form Attachments are natively linked to a SharePoint document repository.

These broad integrations are designed not only to exploit the ways in which document management is most commonly used in conjunction with BPM, but also to provide the ability for users, who natively use SharePoint as application portals, to integrate with Ultimus Adaptive BPM Suite client and forms.

Ultimus' positioning with the Microsoft SharePoint products

The Ultimus SharePoint integrations equally integrate with the various Microsoft SharePoint offerings. While Microsoft Windows SharePoint Services is limited in its ability to provide cohesion between the entire individual, team, and project sites that a single SharePoint server may host, Microsoft SharePoint Portal Server and Microsoft Office SharePoint Server provide the encompassing framework that can link all of the various SharePoint sites together for management purposes. Microsoft SharePoint provides basic document management functionalities such as document check-in, check-out, and versioning. Because Microsoft Windows SharePoint Services is offered free and the other SharePoint offerings are relatively inexpensive, Ultimus expects that SharePoint will capture a large share of the document portal market. The use of Ultimus in conjunction with SharePoint can dramatically increase the value of SharePoint portal site, turning these sites from basic information access portals into process portals where business tasks can be done quickly and easily.

Descriptions of the Ultimus and SharePoint integrations

Ultimus FloPorts

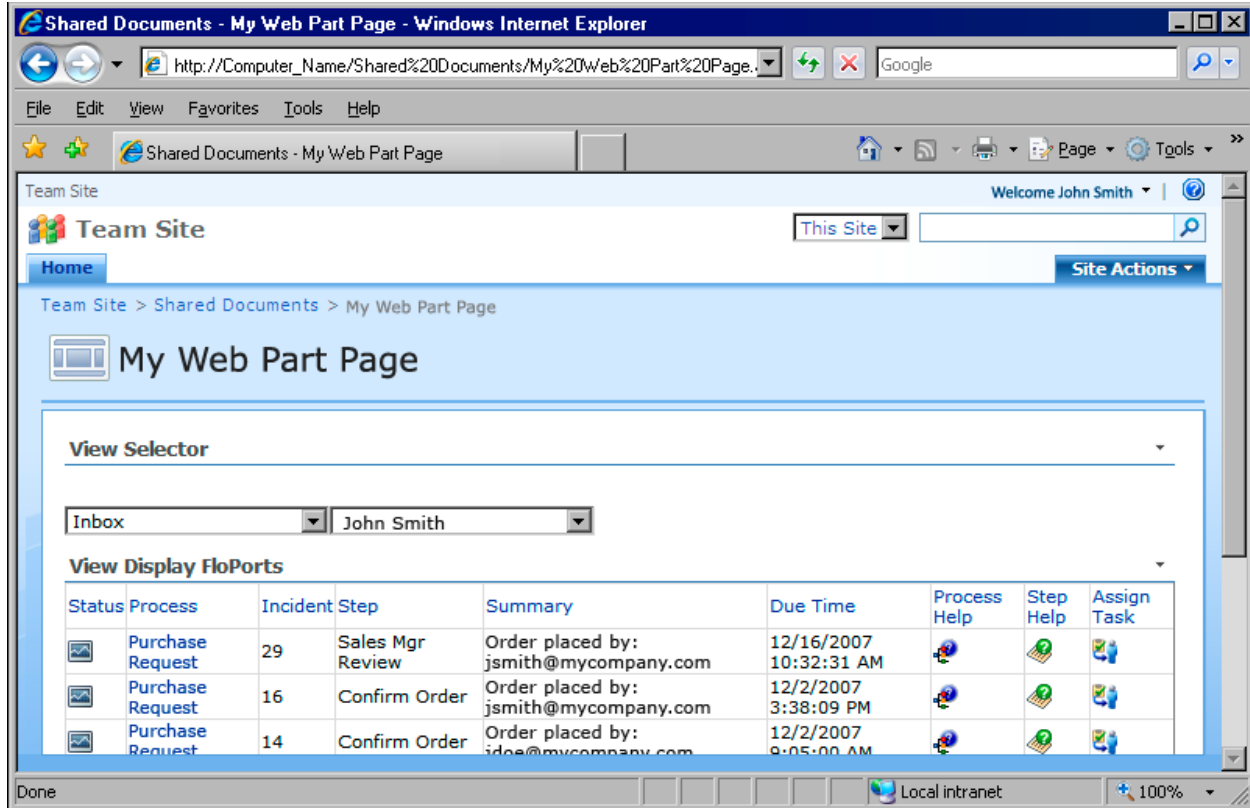
These native Ultimus Web Parts allow SharePoint users to initiate process incidents, complete tasks, and participate in processes automated within Ultimus Adaptive BPM Suite from a SharePoint Web page.

IT departments utilizing Microsoft SharePoint today provide portals for corporate, departmental, and project-oriented work teams. These portals give employees a single workspace interface which include access to the information and applications that employees use most often. Well-designed portals focus employees' attention and energy, while reducing distraction, thereby increasing productivity. Efficient Web Parts, like Ultimus FloPorts, occupy minimal space while delivering relevant information from other applications. Ultimus FloPorts literally embed a view of business process activity into an employee's SharePoint portal page. For business process participants, Ultimus FloPorts provides views of pending or completed tasks. From these views, employees can submit inbox tasks, check the status of previously submitted tasks, or initiate new incidents of a business process. For example, the employee who approves new loans may have a portal view that includes loan approval tasks appearing in an inbox, a Web Part to check payment history, and another to check the borrower's accounts.

Ultimus FloPorts are embedded in a SharePoint page and offer two different approaches for participating in business process activities:

- **The Task Viewer FloPort** is a Web Part that displays an individual task view (for example, an Initiate, Inbox, Completed, or a custom view). By creating custom views and configuring multiple Task Viewer FloPorts on a single portal page, the process participant can customize their SharePoint portal page to provide a holistic view for their entire process activities. For example, a manager might configure multiple FloPort Web Parts to show all of his inbox tasks, all activities pertaining to a specific process, and also all late tasks of his subordinates.
- **The View Selector and View Display FloPorts** are Web Parts used in conjunction with one another to provide access to many Ultimus client views while minimizing the space occupied on a portal page. The View Selector FloPort allows the process participant to select an Ultimus client view and a specific client user. The chosen view is then displayed in the View Display FloPort. These two FloPorts are used in tandem, leveraging SharePoint's "connected Web Parts" technology. For example, a manager can configure the View Selector FloPort to view either his own tasks or his subordinates' tasks in a View Display FloPorts Web Part.

The image below illustrates how the View Selector and View Display FloPorts Web Parts function together.



Ultimus FloPorts is available for use with Ultimus BPM Suite 7.x and Ultimus Adaptive BPM Suite 8.x.

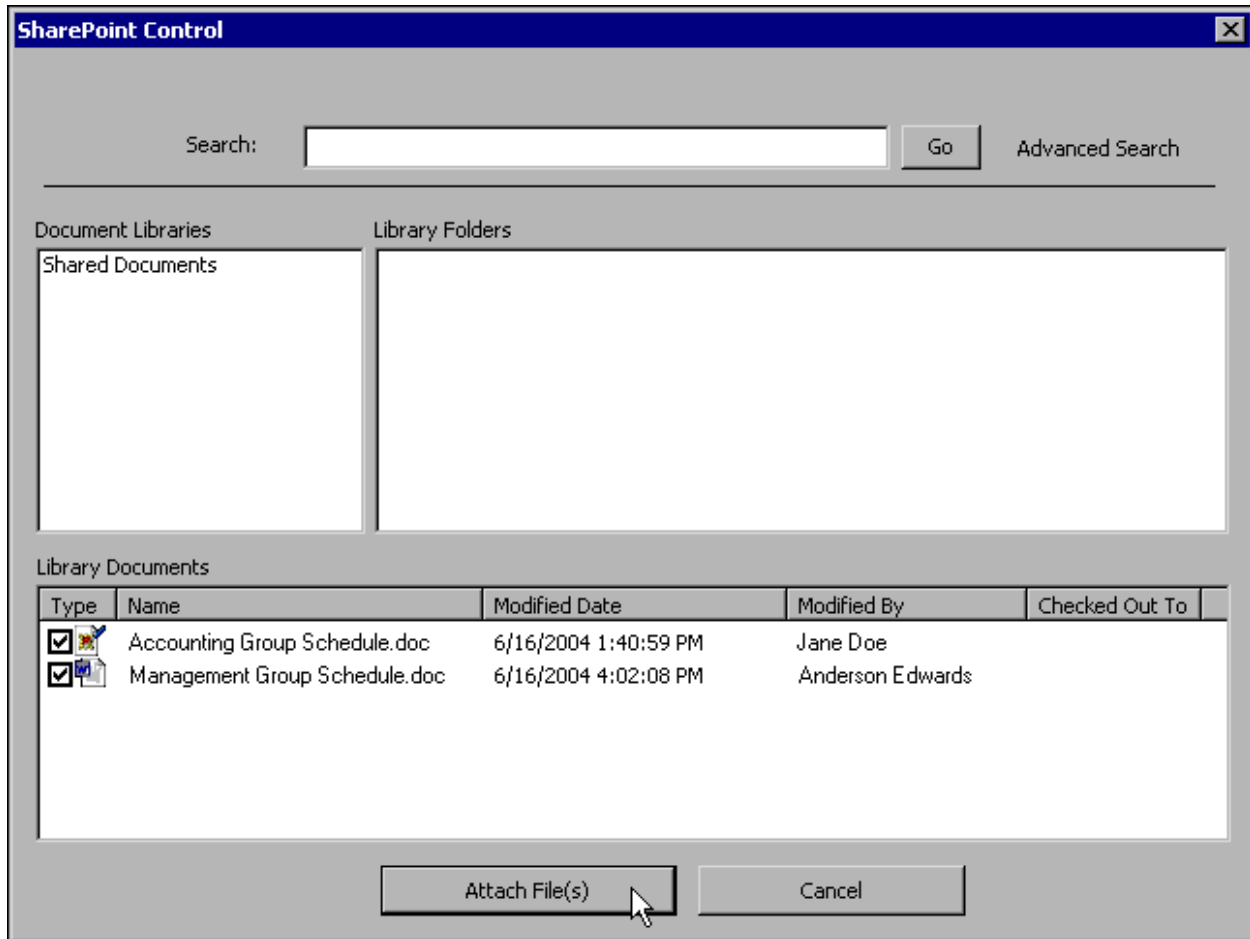
Ultimus DocLink for SharePoint Attachment Control

This Ultimus ActiveX form control allows documents stored in a SharePoint document library to be “attached” to an Ultimus form and routed through a business process. Typical uses of this functionality include basic document review for approval processes or more complex processes where attached documents (such as instruction sheets) are used in a supportive role for the business process. This version of Ultimus DocLink is compatible with Ultimus BPM Suite 7.x Standard Forms.

Based on design time settings, the control can also:

- Search the linked document library for specific documents
- Enable the setting or editing of document library attributes
- Set document status
- Maintain document version
- Display documents as View Only
- Provide a URL link to the associated SharePoint page

The image below provides an example of the Ultimus DocLink interface.



The Ultimus DocLink control is available for use with Ultimus BPM Suite 7.x.

The Ultimus Create-a-Site .NET Class

The Ultimus Create-a-Site .NET Class allows .NET code integration in a business process to create document team sites, add members to those team sites, and post documents to document repositories. Each of the methods in this class may be called through a human action on a form (such as a button click) or as an automated step (such as an Ultimus .NET Code Flobot).

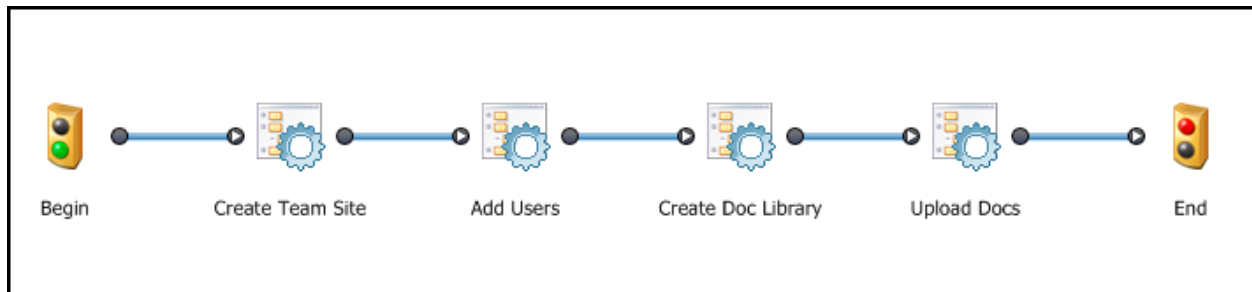
Examples of specific functions that may be executed as part of this .NET class include:

- Create a SharePoint team site
- Assign members of the review team to the team site
- Identify and upload documents from the file system to the SharePoint document library
- Mark those documents as pending, accepted or rejected
- Identify and set values for the default attributes of all documents in that document library

The Ultimus Create-a-Site .NET Class is available for use with Ultimus BPM Suite 6.x/7.x and Ultimus Adaptive BPM Suite 8.x.

The Ultimus SharePoint Flobot

The Ultimus SharePoint Flobot combines the functionality of the Ultimus DocLink control and the Ultimus Create-a-Site .NET Class as a new Ultimus Flobot for Ultimus Adaptive BPM Suite 8.0. Moreover, the new Ultimus SharePoint Flobot provides the capability to move documents from one location on a file server to another location on the file server, or the documents can be moved from the file server to Microsoft SharePoint (and vice-versa). Lastly, the Ultimus SharePoint Flobot can be used to remove documents from a document repository, in the case you wish to use the Flobot to maintain only active documents in a specific document repository. Leveraging the power and convenience of Ultimus Flobots and Ultimus FloStation, integration between Ultimus and SharePoint can be executed as part of the day-to-day Ultimus engine processing.



The Ultimus SharePoint Flobot is available in Ultimus Adaptive BPM Suite 8.x.

Ultimus Form Attachments storage in SharePoint

Ultimus Form Attachments storage in SharePoint allows the Ultimus BPM Server to have a single scalable document repository for all form attachments utilized in Ultimus Forms. By leveraging the innate document repository features of Microsoft SharePoint, Ultimus SharePoint Attachments provide out-of-the-box versioning and check-in/check-out capabilities. Moreover, because Ultimus Attachments are not stored on the Ultimus BPM Server, multiple Ultimus BPM Servers in a BPM environment can each utilize a single document repository location.

Ultimus Form Attachments in SharePoint is available for use with Ultimus Adaptive BPM Suite 8.x.

Conclusion

These four integration points between Ultimus Adaptive BPM Suite and Microsoft SharePoint offer the broadest interaction between a BPM platform and SharePoint's native functionality. This unique combination of portal and document library integration, workspace creation, and custom SharePoint configuration enables Ultimus business process participants to make full use of SharePoint technologies for BPM.