Usage Document

FuseIT®
CONNECTED SOLUTIONS

S2T Salesforce to HP TRIM Integration

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Contents

1 Introduction 5

2 S2T Features and Constraints 6

3 S2T Functionality 8

4 Support Information 18

Appendix A - HP TRIM Record Management Overview 19

List of Figures

Figure 1 – Document Direction 5
Figure 2 – Document Viewing 6
Figure 3 – TRIM Tab 8
Figure 4 – TRIM Detail 8
Figure 5 – Document Synchronization 10
Figure 6 – Trim Documents Button 10
Figure 7 – Attachment Status 11
Figure 8 – Selecting Files or Existing Attachments 12
Figure 9 – Editing Existing TRIM Records 12
Figure 10 – TRIM Container Lookup 13
Figure 11 – Synchronizing TRIM Records 13
Figure 12 – S2T Authentication against a TRIM Server 14
Figure 13 – TRIM View of Synchronized Documents 15
Figure 14 – S2T Document Filtering on My Trim Documents 15
Figure 15 – Records Lookup 16
Figure 16 – TRIM Organizational Structure 19

List of Tables

Table 1 – S2T Tabs 8
Table 2 – S2T Trim Tab Field Details 9
Table 3 – S2T Support Matrix 18

1 Introduction

This document describes how to use S2T, the Salesforce to HP TRIM integration from FuseIT. For information about installing or updating S2T please see the document, S2T_Installation_Document.pdf.

S2T is a one way integration that lets Salesforce users push record attachments and chatter documents to HP TRIM. Pushing a document means it is stored in both HP TRIM and Salesforce.

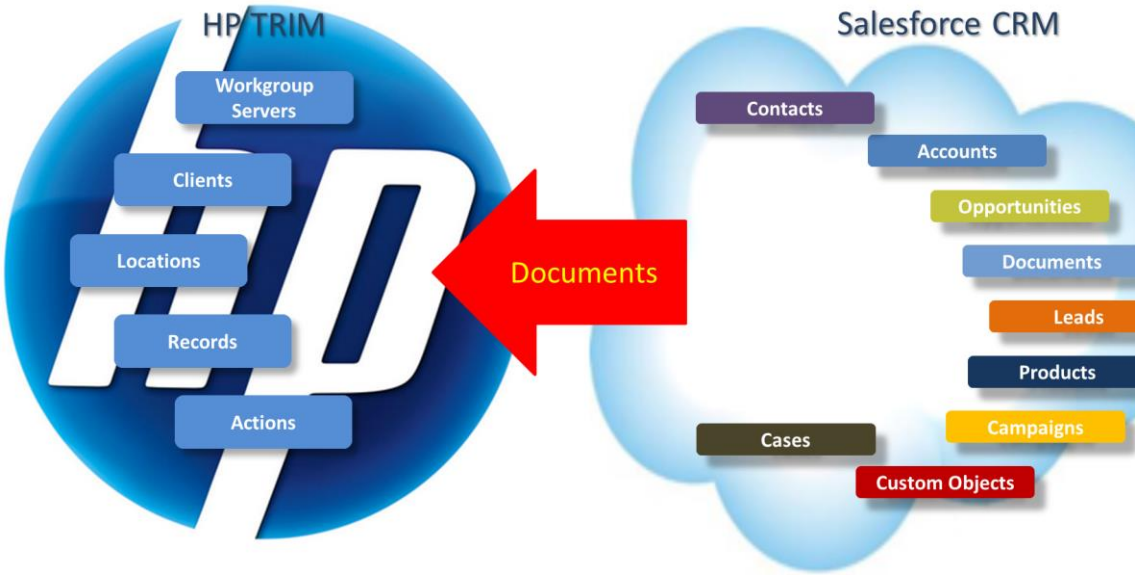

Figure 1 – Document Direction

FuseIT have two other products in this space that allow documents to be sent in both directions (bidirectional).

- T4S is Salesforce centric and pushes documents to and pulls documents from HP TRIM using HP TRIM Web Services and an intermediate Windows server. Documents can be stored in HP TRIM and Salesforce, or only in TRIM and link referenced from Salesforce. T4S can send larger files than S2T which, because of Salesforce imposed limits to callout requests, has file size constraints.
- TRIM4S is HP TRIM centric and adds document links to Salesforce that allow users to access those files from Salesforce. This makes HP TRIM the single repository for documents.

The differences between products can be seen on the FuseIT website. This document provides details of S2T only.

2 S2T Features and Constraints

The S2T connector adds advanced record and data residency capabilities to Salesforce.com by integrating with HP TRIM. S2T is a native Salesforce.com application that allows users to push individual documents to HP TRIM at the click of a button. S2T utilises standard HP TRIM Web Services.

The document handling and governance features of S2T include:

- Onshore record retention solution.
- Documents reside in both HP TRIM and Salesforce.
- Create, update or delete HP TRIM documents from Salesforce.
- Upload documents to customizable container destinations in HP TRIM.
- Save Salesforce records to HP TRIM as PDF documents.
- Add direct links to HP TRIM documents in Salesforce.
- Control access with Salesforce roles and HP TRIM permissions.
- Save and view records using your personal HP TRIM credentials.
- Two way SSL connection between Salesforce and HP TRIM.

S2T helps organisations meet data residency requirements by onshoring documents to HP TRIM. The attachments and chatter documents associated with Salesforce standard and custom objects can be saved in HP TRIM. Strong encryption techniques ensure that the document data is never compromised.

As well as attachments and chatter documents, S2T provides conversion features to push individual Salesforce records to HP TRIM as PDF documents. This makes it easy to quickly take a snapshot of key information and save it to HP TRIM creating an audit and evidence trail.

Documents pushed from Salesforce to HP TRIM have their locations tracked in Salesforce. This means both the HP TRIM and cloud copies of any document can be viewed in Salesforce (see below).

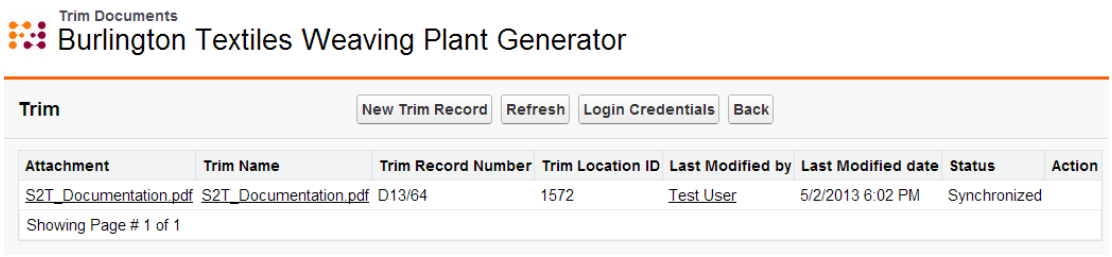

Figure 2 – Document Viewing

S2T tightly controls document permissions using HP TRIM's in-built security model coupled to the extensive security offered by Salesforce. By using HP TRIM web services S2T enforces the same security constraints as those imposed in HP TRIM itself. S2T offers very secure connection options including:

- Restrict page access using Salesforce roles.
- Generic HP TRIM access using stored credentials.
- Override generic access using individual credentials.

S2T uses Salesforce callouts to pass information to HP TRIM so it has the following constraints imposed by Salesforce.

- Maximum size of a callout request is 3 MB. This relates to the total size of the binary data in the callout. In reality the maximum document size that can be transferred to HP TRIM is more like 2.2 MB.
- Maximum timeout for all callouts in a request is 120 seconds.

For customers requiring higher volumes of a bidirectional connector please refer to our T4S product.

Since S2T is a Salesforce.com managed application it can easily be upgraded as new features are added.

3 S2T Functionality

S2T enables existing Salesforce Attachments and Chatter Documents to be pushed into HP TRIM. If the reader is unfamiliar with HP TRIM please read the overview in Appendix A.

3.1 S2T Salesforce Tabs

The S2T package installs two custom tabs in Salesforce, Trim and Trim Records. Each has a corresponding sObject, Trim__c and Trim_Record__c.

Tab Name	Custom Object Name
Trim	Trim__c
Trim Records	Trim_Record__c.

Table 1 – S2T Tabs

Trim Tab

The Trim Tab is for the HP TRIM Server settings, and is not necessary for regular Salesforce Users.

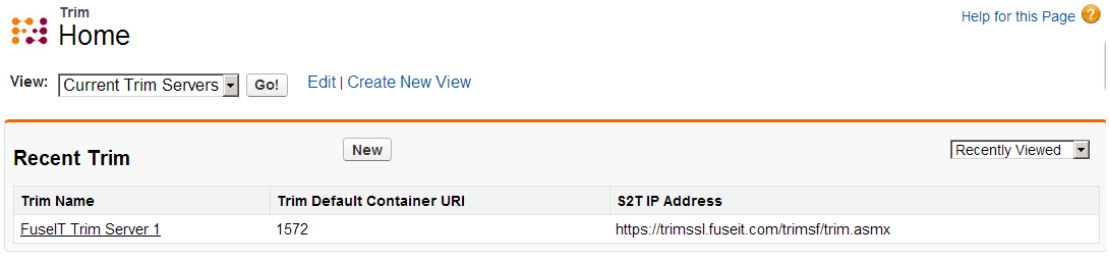

Figure 3 – TRIM Tab

Trim__c contains the information about the TRIM server i.e. TRIM Web Service URL, Default TRIM container ID, TRIM login Username etc.

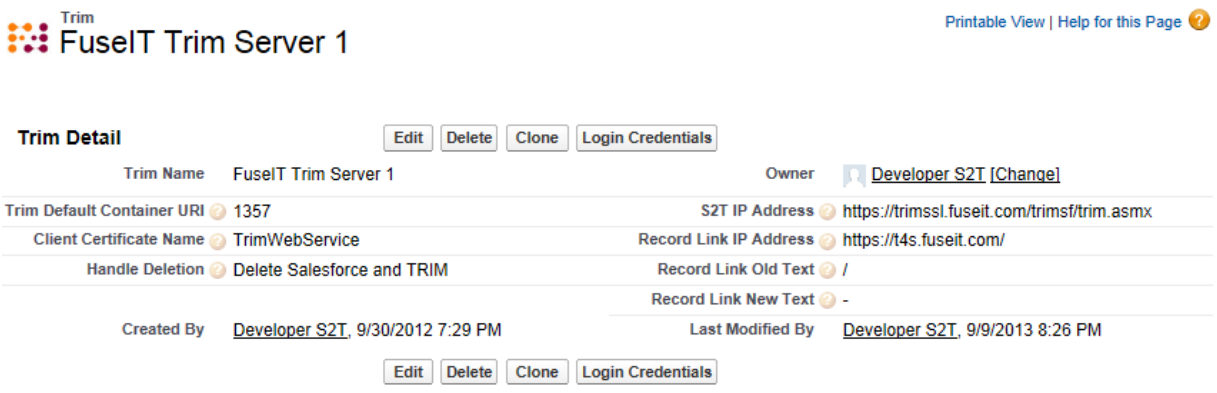

Figure 4 – TRIM Detail

S2T USG

It is possible to have more than one TRIM server record in any Salesforce Org so, for example, two HP TRIM servers in different work areas can use the same Salesforce Org (instance).

Field Name	Description
Trim Name	A name given to identify this TRIM Server
Trim Default Container URI	A TRIM Container URI that is used as the default container to save records to. If the Container URI be missing or blank when a new Record is saved to the TRIM Server, the TRIM Record will be saved to the top level of the Repository.
Client Certificate Name	The Salesforce Certificate created within your Org to allow two-way SSL connection to your TRIM Server.
S2T IP Address	Your SSL IP address to your TRIM Web Services.
Handle Deletion	There are 3 options to handle what should happen globally when a Salesforce Attachment is deleted. 1. No (do not handle deletions) 2. Delete Local (Salesforce Trim Record is deleted along with the Attachment) 3. Schedule for Deletion (Salesforce Trim Record is marked for deletion, on the next synchronization Salesforce and TRIM Server Record are deleted.)
Record Link IP Address	If your Users have access to a URL that allows them to open TRIM Documents directly, then you can enter the URL here. When a URL is entered it will enable links in S2T that Users can click.
Record Link Old Text	Some Record Link URLs need to be formatted before they can be used, enter the text character within the Record Number that needs to be modified i.e. “/”
Record Link New Text	This is the character that will replace the char within the Record Number so the Record Link URL is correctly formulated.

Table 2 – S2T Trim Tab Field Details

Trim Record Tab

Trim_Record__c is the relationship record between Salesforce Documents and TRIM Documents.

The following image is a list showing the synchronization state of each Users document. T2S document synchronization with TRIM is done manually by clicking the Synch link in the Action column. Note the document list can be shortened by filtering using a dropdown list of document types.

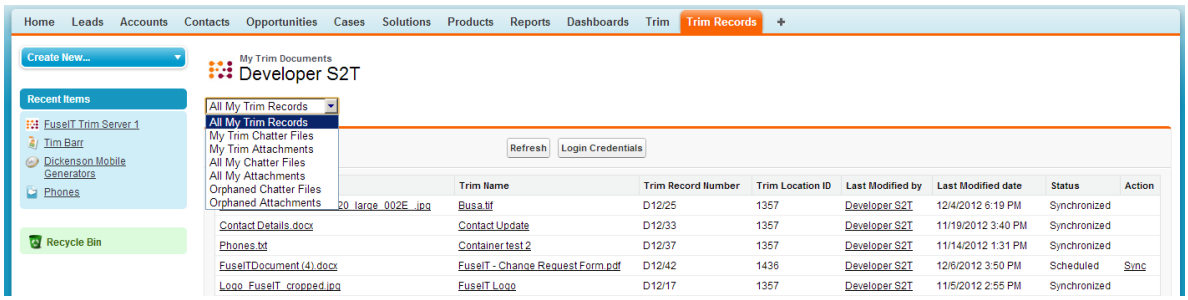

Figure 5 – Document Synchronization

Trim Documents Button

The TRIM functionality is accessed via a “Trim Documents” button on the Salesforce object page or the Trim Records Tab for an overview of all Trim Records, Attachments and Chatter Files.

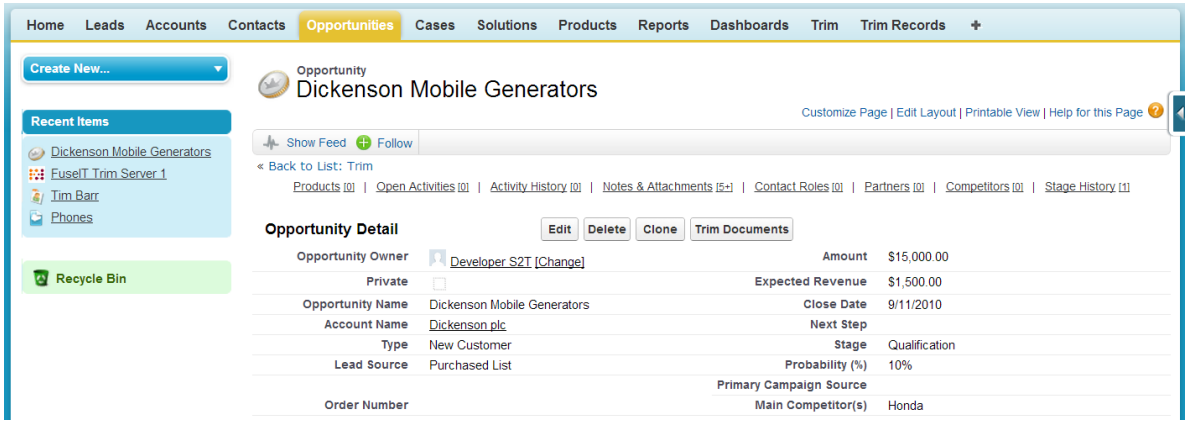

Figure 6 – Trim Documents Button

Clicking the Trim Documents” button opens a page the Visualforce page that displays the current attachments for the associated page e.g. Opportunity, and corresponding TRIM details if the attachment has been synced with TRIM.
It also allows new Attachments to be uploaded and added to TRIM

The “Trim Documents Button” is available to be included on any Salesforce objects page layout that uses Attachments e.g. Opportunity, Contact, Lead or custom page layout. (Chatter Files can be added directly from the Trim Records Tab)

The button can also be duplicated and added to any Custom Object layout. A

simple change is required for this to work with any new objects by duplicating an existing Trim Documents Button, and changing the sObject reference within the JavaScript to the object type it is being used for

```
...
/apex/fuseit_s2t__TrimAttachmentsSection?parentId={!Account.Id}&parentTitle={!Account.Name}
...
```

For example, switch “Account” reference to the name of a custom object and then include the new button on the custom object layout.

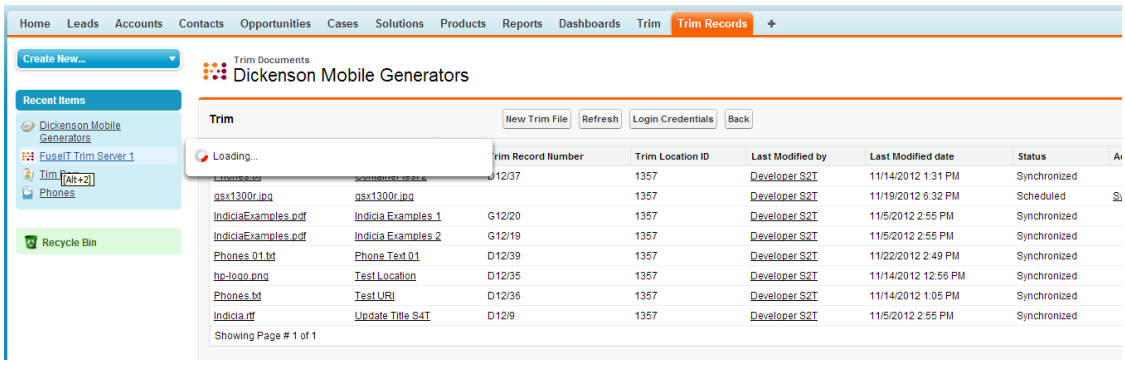

Figure 7 – Attachment Status

The figure above shows the attachments associated with an Opportunity and their status. Clicking on the attachment name goes to the default Attachment page. Clicking on the Trim Name (or “New Trim File”) goes to the “TrimRecord” page

3.2 TrimRecord Page

This page covers two scenarios.

1. Adding an Existing Attachment or uploading a new attachment

Click on the “New Trim File” link or “Change Attachment” on the Visualforce page then browse and select a new Attachment from your local file system, or select an existing available Attachment from the attachments list that has not already been associated with a TRIM Record.

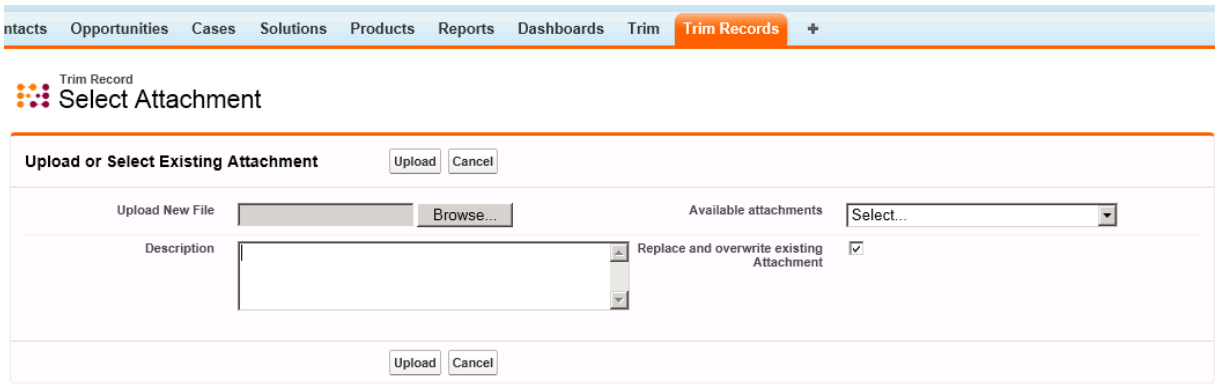

Figure 8 – Selecting Files or Existing Attachments

2. Editing Existing TRIM Record

Click on the TRIM Record Name and change any data or upload new Attachment & save.

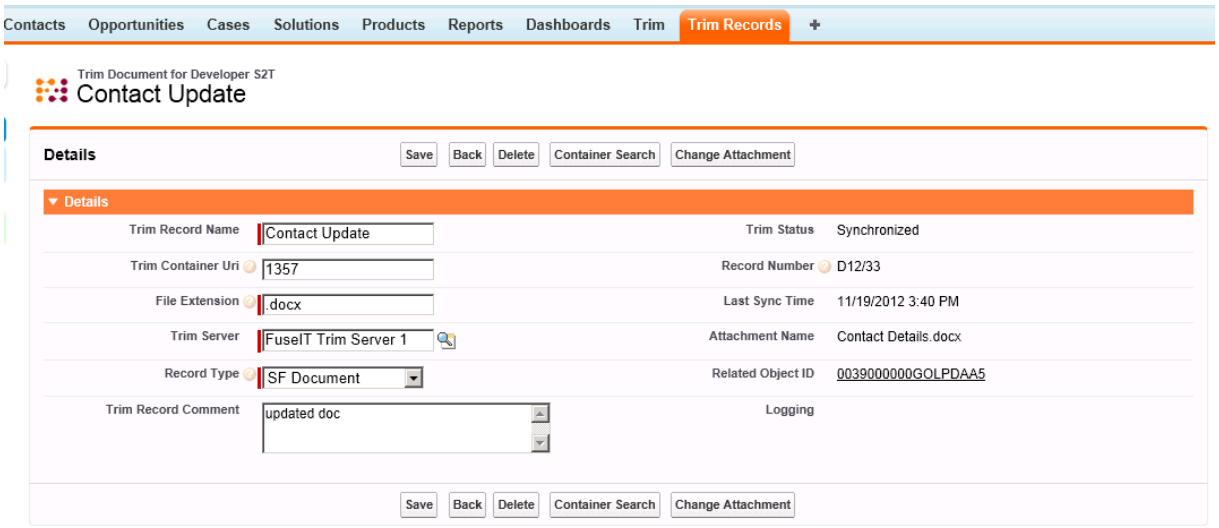

Figure 9 – Editing Existing TRIM Records

The example above will mark the TRIM Records as “Scheduled” upon Save or Delete.

3.3 TRIM Container Search

Each TRIM record needs to be saved to a location on TRIM. With the “Container Search” you can find the TRIM Container URI by searching for a TRIM Record number.

Selecting a container from the results updates the TRIM Record “Trim Container Uri” field.

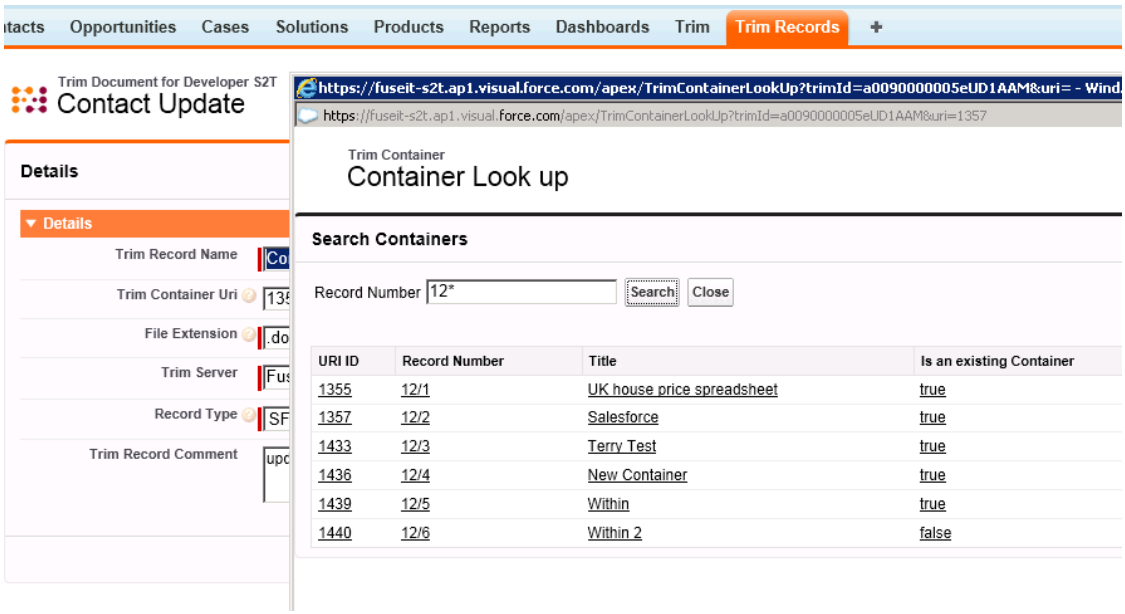

Figure 10 – TRIM Container Lookup

3.4 Synchronizing TRIM Records

Once a TRIM Record has been marked as “Scheduled” for synchronization by saving the TRIM Record or deleting the TRIM Record, the record can then be synchronized with TRIM.

Beside each “Scheduled” TRIM Record will be a “Sync” Action that fires the synchronization process.

At the top of the TRIM Records page is a Refresh button that allows you to refresh the page to see the results as the synchronization process. This may take time depending on the action and the size of the Attachment or Chatter File.

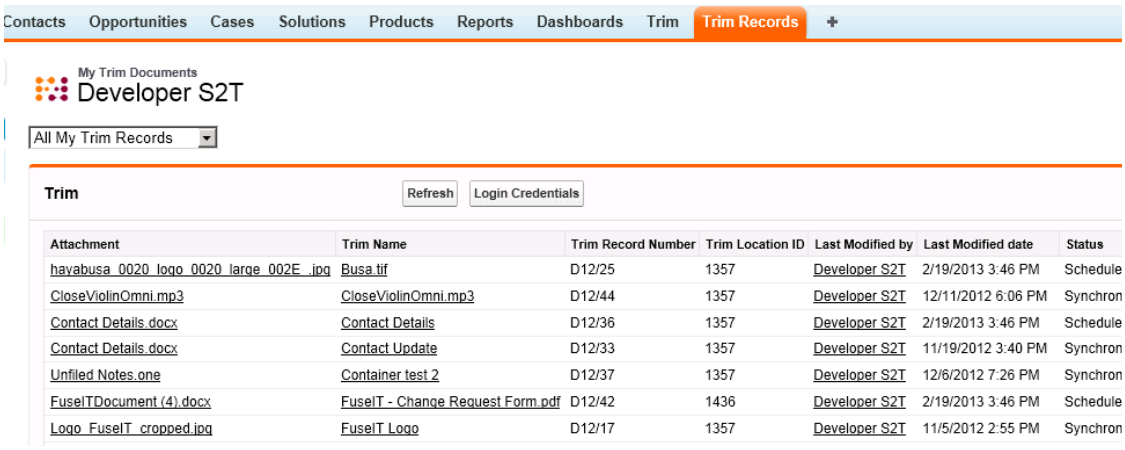

Figure 11 – Synchronizing TRIM Records

3.5 Authentication

Each Salesforce S2T end user has the ability to use their own TRIM credentials to synchronize their records with TRIM, or use the default credentials set against the TRIM server record.

To set your own TRIM Credentials use the “Login Credentials” button found on the TRIM Records page.

This allows you to securely enter your TRIM credentials which are 256bit AES encrypted and stored using Salesforce recommended password procedure.

Different credentials can be stored against each TRIM Server instance and these only need to be set once – see the following figure.

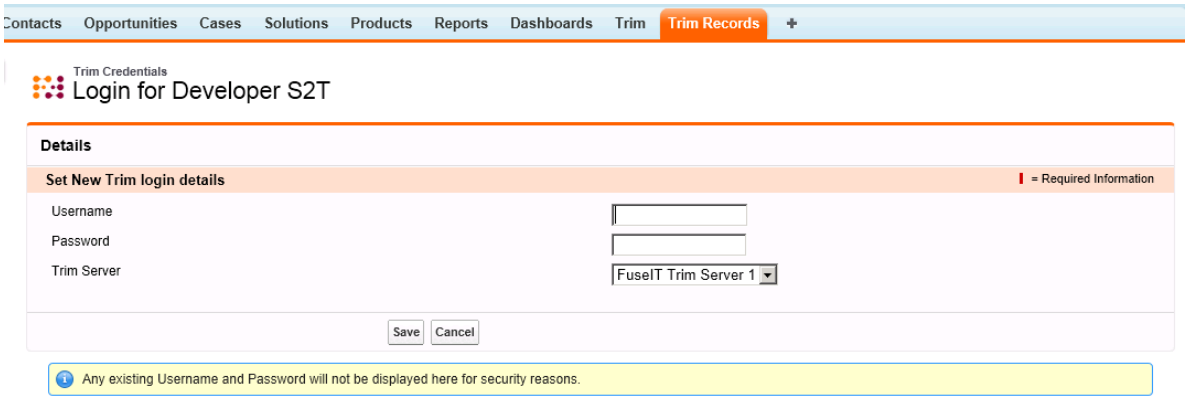

Figure 12 – S2T Authentication against a TRIM Server

3.6 Updated Records

Once the TRIM document has been saved, updated or deleted by S2T, the results of the sync can be seen in TRIM

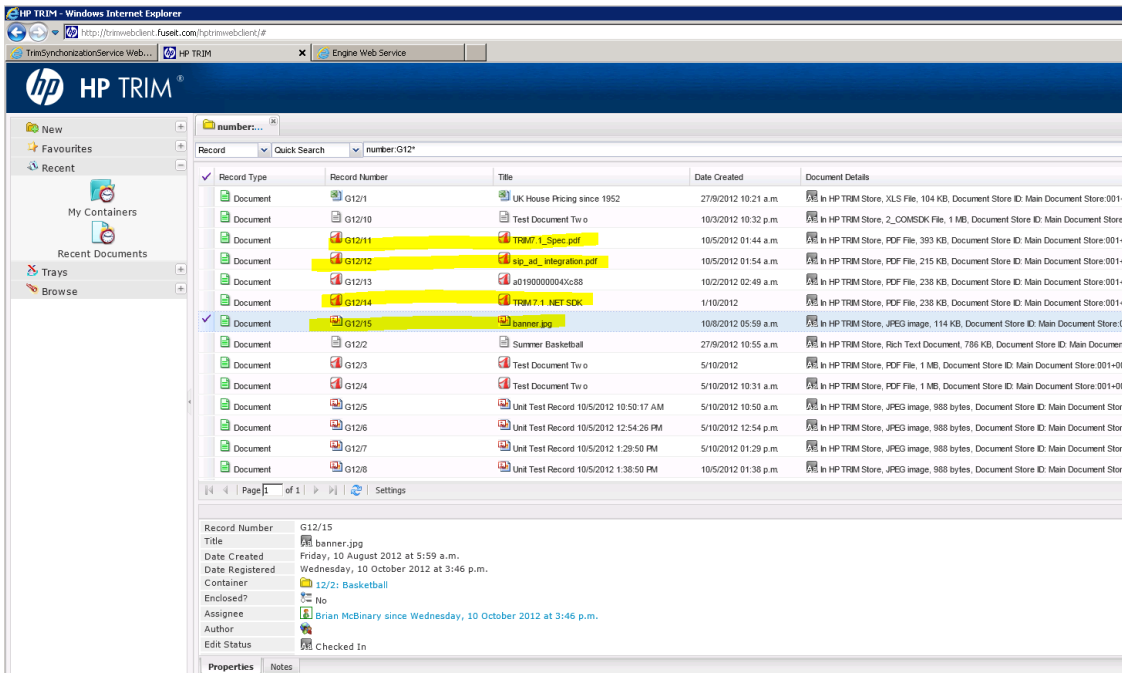

Figure 13 – TRIM View of Synchronized Documents

3.7 My Trim Documents Page

The Trim Records Tab enables a view of all the related TRIM records in one place. It also allows the assignment of existing Attachments and Chatter Files to TRIM records and mark them as scheduled for Synchronization.

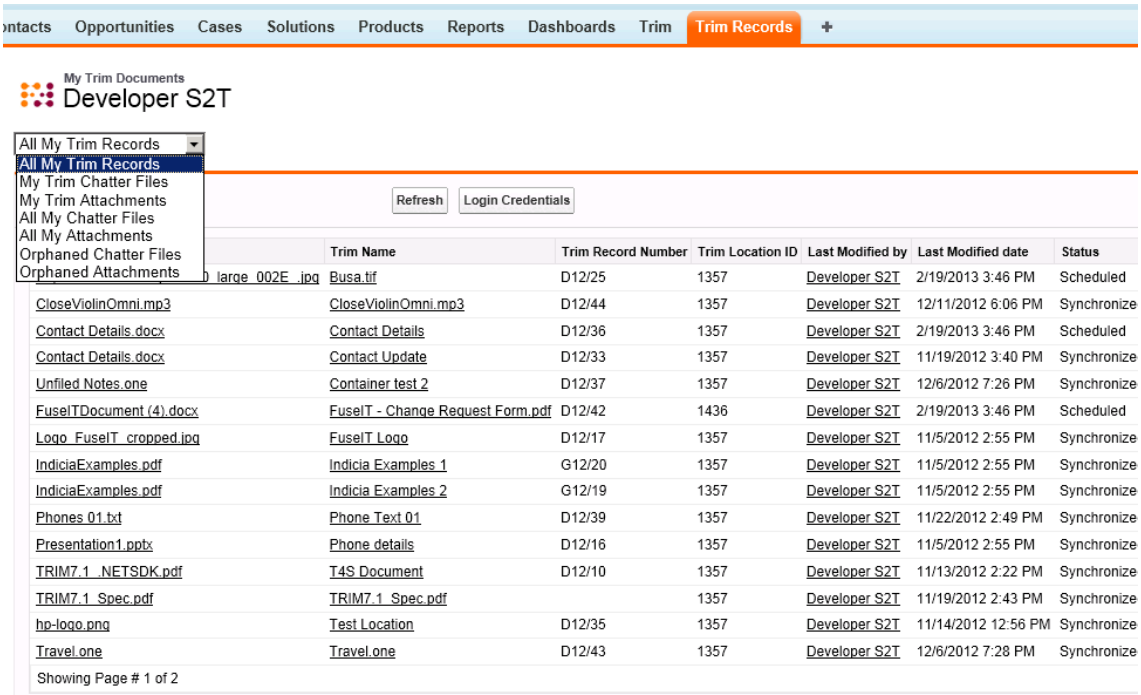

Figure 14 – S2T Document Filtering on My Trim Documents

3.8 Linked Records

It's possible to create Salesforce Trim Records without uploading files into Salesforce.
When creating a new Trim Record there is the option to select a "Linked" record.
You will then be able to search HP TRIM for the existing TRIM Record and make a Likened record from there.
This will enable Salesforce objects to be associated with TRIM Records that do not exist in Salesforce.

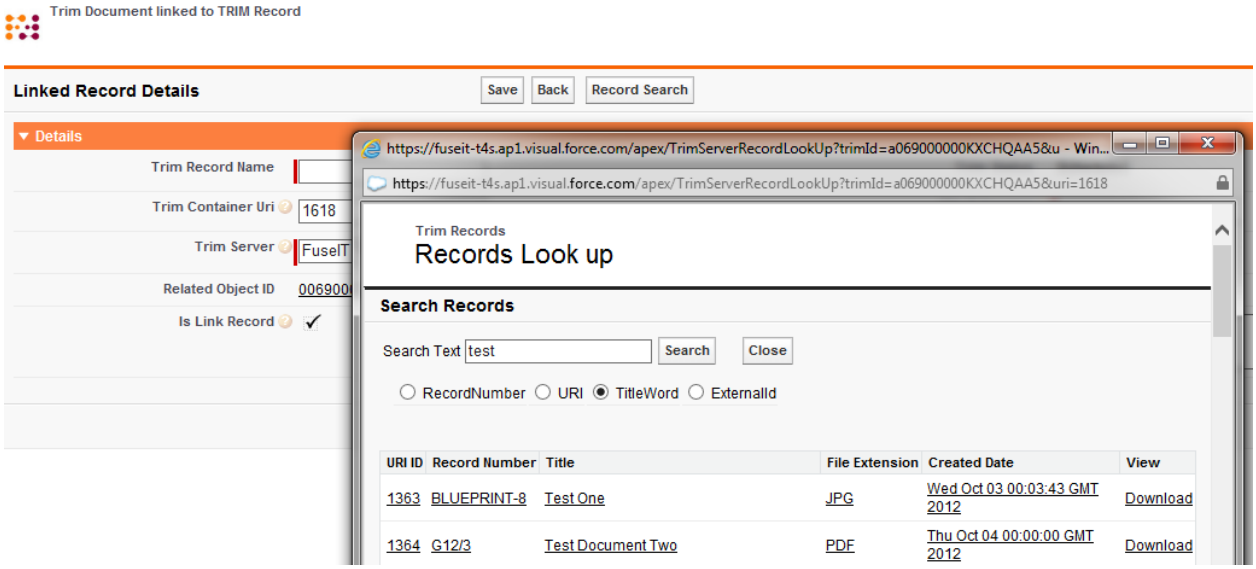

Figure 15 – Records Lookup

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3.9 Public API

S2T has a public api that allows you to build your own custom functionality that meets your requirements

The public api has a number of global methods that you are able to call from your own Visualforce or Apex classes.

- Create Container
- Look Up Container
- Look Up TRIM Record
- Download TRIM Record binary data
- Synchronize TRIM Record with TRIM

Each method has the ability to take a list of TRIM Specification Properties used when synchronizing a Record or creating a Container, or returning meta data along with a result.

3.10 Troubleshooting

Please see the Troubleshooting Section of the Installation document if any error messages appears

4 Support Information

4.1 Support Matrix

The following support matrix specifies the environment required for S2T.

System	Detail	Supported
Infrastructure	Cloud based Force.com	Required
S2T Host Environment	Salesforce.com	Required
S2T Operating System	Not applicable	
S2T Database	Not applicable	
Internet Browser	IE 6+	Yes
	Firefox 3.5+	Yes
	Chrome	Yes
	Safari 4+	Yes
	Opera 9+	Yes
HP Software Integration	HP TRIM Web Services Version 7.02	Yes

Table 3 – S2T Support Matrix

4.2 Support Contacts

Please email the following contacts for more information about S2T or any other HP TRIM product from FuseIT:

- Terry Humphris: terry@fuseit.com
- William Boyd: william.boyd@fuseit.com

Appendix A - HP TRIM Record Management Overview

Records management best practices dictates information should be placed into a shallow container structure (one level deep). This completely eliminates nested containers, like that of a computers file system so alternative systems are required. HP TRIM is one such system.

To ensure files are stored so they can be easily found, while still maintaining best practices, HP TRIM uses concepts such as classifications that can be applied to substitute for a nested structure. The following diagram shows the organizational items in TRIM.

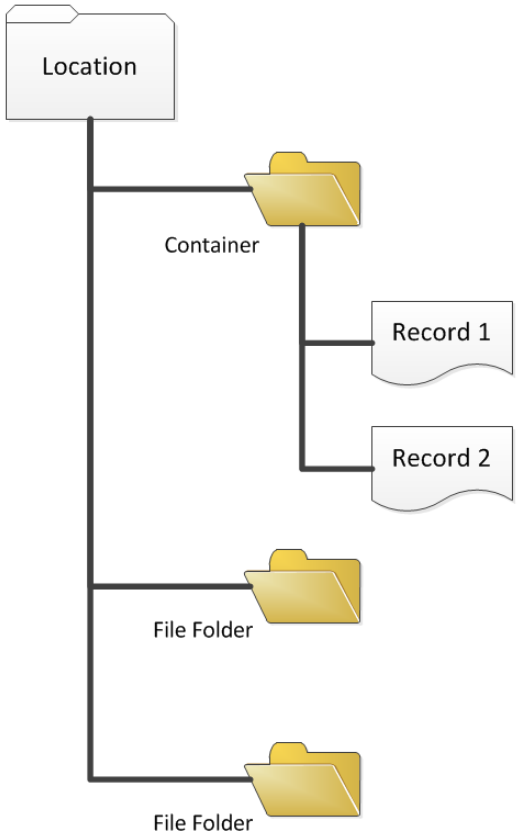

Figure 16 – TRIM Organizational Structure

Location (assignee) is the top level structure and has one of the following location types:

- Group
- Organization
- Position Person
- Project Team
- Committee
- Venue
- Work Group

Locations must have a:

- Name
- Location Type

Container is a record with record type equal to File Folder. It must contain records to be a container otherwise it is just a file folder.

Record is metadata about a record. The record type is typically Document, Standard Document, or File Folder (which are called Containers if they contain records). Records must have an:

- Assignee e.g. Boyd, William
- Record Number e.g. D12/40
- URI e.g. uri:1434
- Title e.g. Test Record
- Record Type e.g. SF Document

Document: Electronic binary information or physical object which is the actual evidence or article.