



# SPAAP Section Replacer

Usage Guide V1

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# 1 Introduction

Section replacer is an open community tool with no rights or restrictions.

When using HTML 5 web templates on SharePoint in the past each page was individual and any changes to one page had to be replicated to the other pages manually unless a master page was used.

Section replacer works by having tags in the HTML 5 pages that outline the common areas of each page (Like the footer or the global nav). It then takes the html that you store in the background lists on your SharePoint site and puts the content inside the tags of each page.

You update the SharePoint list with new content, select update and the next time section replacer runs it will grab all the aspx pages in the template and update the tag in each page with your changes.

The tool works specifically against HTML 5 templates. It runs locally on a client PC from inside the SPAAP folder. The client in question does not have to be part of a domain.

It uses the PowerShell Client Side Object Model to interact with your SharePoint platform so does not need to be used from a SharePoint server.

All of the code has been written to cater for on premise or office 365 deployments so the tool will run against any SharePoint platform.

The tool has been created to run in a folder structure on the C: drive with all code and functions broken out into separate files that can be examined, studied and tweaked at your leisure.

Please ensure that you use the tool in a test environment and ensure that you understand the concepts behind the tools operation before using in any environment.

The tool itself is provided "as-is" and you use at your own risk.

## 2 Notes before usage V1

The following notes are provided for your information. Please read them before using section replacer

### 2.1 Pages in sub directories not supported

At present the tool does not upload aspx pages to subfolder inside the root – so ensure that your template pages for use are stored in the root folder of your template. If you are storing pages in a sub folder for backup purposes etc. then rename the page so the extension is \_aspx rather than .aspx – this way the page will be skipped.

This functionality is very close to release and will be in V1.1 end of October 2015 but we could get this embedded in time before the release of V1

### 2.2 Character encoding

Section replacer works by passing the pages through the filestream. This allows the tool to be compliant with Office 365. Due to this (and depending on the encoding of your templates) any special characters may get replaced with character symbols. To prevent this from happening replace the characters in your html with the correct UTF characters.

An example would be:

***Please don't do that***

Would be replaced with:

***Please don't do that***

The following page from W3Schools lists all the correct encoding

[http://www.w3schools.com/charsets/ref\\_utf\\_basic\\_latin.aspx](http://www.w3schools.com/charsets/ref_utf_basic_latin.aspx)

The main characters that are effect are listed for your quick reference:

&#45; equates to -

&quot; equates to "

&#39; equates to '

### 2.3 Execution policy

For the scrip to run you must set the execution policy for your PowerShell commands to unrestricted. This can be done sing the following command:

***Set-ExecutionPolicy Unrestricted***

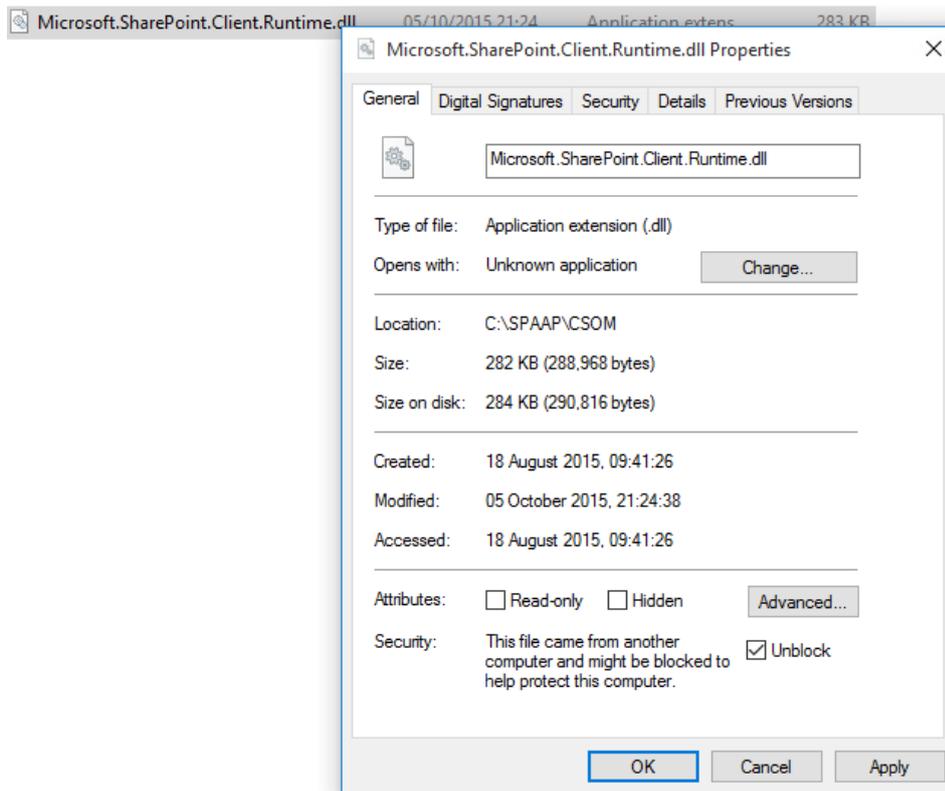
## 2.4 Unblocking the CSOM dlls

When you first run the solution you may see this error: Add0Type Could not load file or assembly...

This will be referencing the CSOM DLLs

When you run section replacer, because the CSOM DLLs originated from a different computer you will have to unblock them. To do this go to the CSOM folder, right click them and select Unblock

You will have to do this only once.

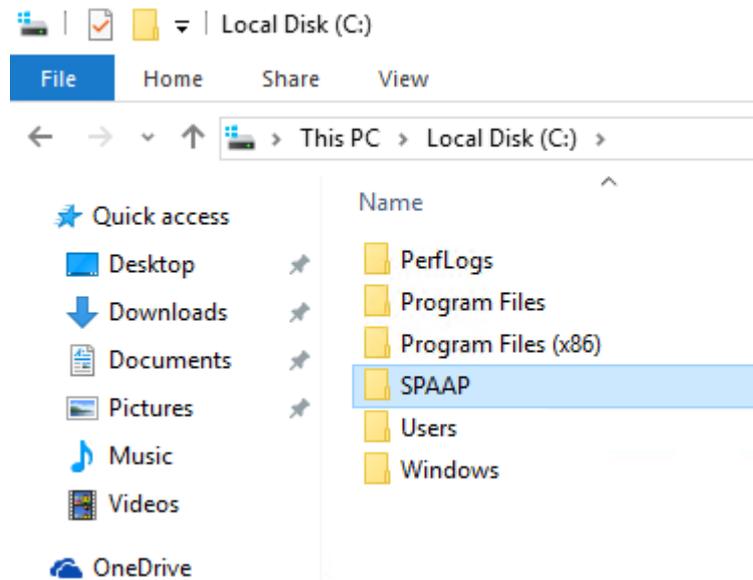


### 3 How to Download

In order to use section replacer you must first download the SPAAP.zip file from:

<http://sundownsolutions.co.uk/spaap/SPAAP.zip>

Extract the Zip file so that the SPAAP folder is on the root of the C: drive on your local client:



Once the SPAAP folder is in place you are ready to begin.

## 4 First Usage

Section replacer works by Utilising three lists:

**Section Replacer** – used to store your tags

**Section Replacer Log** – used to log errors and events

<**Document Library**> - A document library of your choice to store the templates you wish to use (you get to name this when you first run the script)

### Section Replacer Libraries



Section Replacer Log  
287 items  
Modified 3 days ago



Section Replacer  
4 items  
Modified 3 days ago

### Section Replacer List

## Section Replacer ⓘ

[+](#) new item or [edit](#) this list

All Items



Find an item



✓	Title	Tag	Update	Add Tag	Initial HTML
	Header	... Header	No	No	Tag has already been added
	Footer	... Footer	No	No	
	Header Tags 1	... Header Tags 1	No	No	Tag has already been added
	Google Analytics	... Google Analytics	No	No	

If these lists and libraries don't exist on first run (or any subsequent runs) they will be created. If the library you choose to store your template already exists just enter the name of it and section replacer will use that document library instead of creating one.

If section replacer creates the document library for you it will enable major versioning so you can wind back any changes to the pages if necessary.

The details for your section replacer will be stored in a sub folder which will be called the name of you section replacer file. This folder is used for interacting with SharePoint and also for storing your log on data. All password files are encrypted.

## First Run Experience

```
#####
# # # # #
#####
# # # # #
#####

#####
# SharePoint As A Platform - Section Replacer
# For help go to: http://www.sundownsolutions.co.uk/SPAAP #
# Written by Heath Groves May 2015
# All code and script provided as is
# Please see instrction document before use
#####
Sundown_OnPrem

Directory: C:\SPAAP\SectionReplacer

Mode                LastWriteTime         Length Name
----                -
d-----           05/10/2015 11:57             Sundown_OnPrem_WF
Working directory to be used is: C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF
WEBURL is not set - file does not exist - it needs to be created
Please enter the URL of the Site Collection to be used
This only has to be done the first time you run section replacer
Example: http://www.sundownsolutions.co.uk/sites/SPAAP
This will be stored as a secure string here:
C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF\WEBURL.txt
Enter Site Collection Name:
http://www.sundownsolutions.co.uk
Site Collection to be used is: http://www.sundownsolutions.co.uk
The site http://www.sundownsolutions.co.uk is hosted on on-prem
Username file does not exist - it needs to be created
Please enter the user name to be used to connect to the site
This only has to be done the first time you run section replacer
This will be stored as a secure string here:
C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF\UserName.txt
Enter UserName:
domainname\username
Secure credentials file does not exist - it needs to be created
Please enter the password for the account used to run section replacer
This only has to be done the first time you run section replacer
This will be stored as a secure string here:
C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF\pword.txt
Enter Password:
*****
Library file does not exist - it needs to be created
Please enter the title for the document library to be used
This only has to be done the first time you run section replacer
If the library does not exist it will be created for you
This will be stored here:
C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF\Library.txt
Enter Library:
NameOfLibrary_
```

## Sub Folder

This PC > Local Disk (C:) > SPAAP > SectionReplacer >

Name	Date modified
 Sundown_OnPrem_WF	05/10/2015 11:54
 SectionReplacer_CSOM.ps1	16/09/2015 17:07
 Sundown_OnPrem.ps1	16/09/2015 17:07

## Contents of Sub Folder

Local Disk (C:) > SPAAP > SectionReplacer > Sundown\_OnPrem\_WF

Name	Date modified
 _Library.txt	05/10/2015 11:54
 _pword.txt	05/10/2015 11:54
 _UserName.txt	05/10/2015 11:54
 _WEBURL.txt	05/10/2015 11:54

## 4.1 How the tool works

The tool works by replacing sections in-between common tags stored on your pages.

The Tags are stored in the Section Replacer list. At run time the script looks at the list for tags that needs updating.

If a tag is flagged as needing an update section replacer downloads a copy of the aspx pages to the local folder.

Section Replacer then iterates through each page checking for the tag. When it finds the tag it replaces the content in-between the tags with content you stored in the section replacer list.

If the tag is not present on the page, the page is skipped.

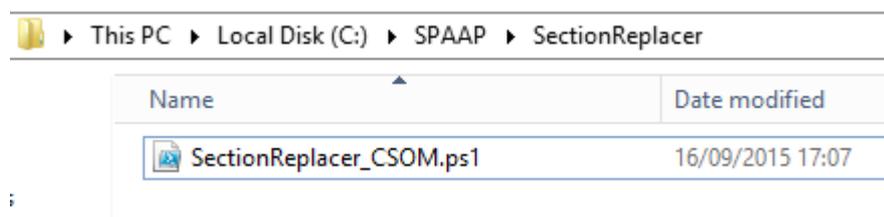
Once the tags have been updated the page is then uploaded back to the root folder, overwriting the old version with the new one.

## 4.2 Running the script

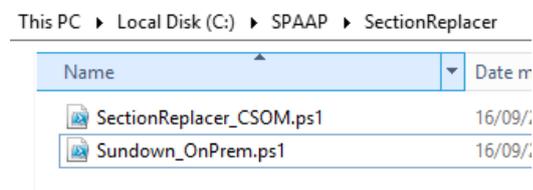
Section Replacer runs via a PowerShell script. This script can be ran on-demand or can be added to a schedule task for scheduled updates.

Section Replacer runs from inside the folder:

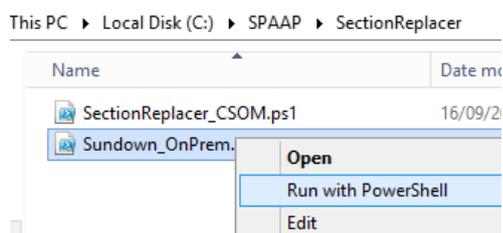
**C:\SPAAP\SectionReplacer\**



As section replacer can run against many sites, we recommend that for each site you copy the section replacer file and give it a meaningful name to run against the site of your choosing:



To run the script right click > Run with PowerShell



You will now see the section replacer console:

```
#####
# # # # #
#####
# # # # #
#####

#####
# SharePoint As A Platform - Section Replacer #
# For help go to: http://www.sundownsolutions.co.uk/SPAAP #
# Written by Heath Groves May 2015 #
# All code and script provided as is #
# Please see instrcution document before use #
#####
Sundown_OnPrem

Directory: C:\SPAAP\SectionReplacer

Mode                LastWriteTime         Length Name
----                -
d-----          05/10/2015   11:50             Sundown_OnPrem_WF
Working directory to be used is: C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF
WEBURL is not set - file does not exist - it needs to be created
Please enter the URL of the Site Collection to be used
This only has to be done the first time you run section replacer
Example: http://www.sundownsolutions.co.uk/stes/SPAAP
This will be stored as a secure string here:
C:\SPAAP\SectionReplacer\Sundown_OnPrem_WF\WEBURL.txt
Enter Site Collection Name:
_
```

We recommend you copy the section replacer file and use a separate one for each site you wish to update. The section replacer folder will contain multiple files if you use it against multiple sites.

## 5 Add Tags

When using the Section Replacer the first thing that needs to happen is to insert the tags into the pages that use the common content you want to keep maintained.

This can be done in two ways:

- Manually
- Automatically

### 5.1 Add TAG Manually

This means opening each individual aspx page and then subsequently adding your tags in manually.

The manual process has to happen when the pages you want to use common content on are not the same in the first place. In other words each pages common content is not unique.

We also recommend using this approach the first time you use section replacer so you can get used to how the scripts operate.

To do this you have to open each page and add the tag in the following format at the begging and the end of your content you wish to replace in this format:

```
<!--Tag Name-->
```

When creating the tag in the page please ensure that:

- You DO NOT have a space between <-- and the start of your tag name
- You DO NOT have a space between --> and the end of your tag name
- You use a tag name that is unique now and will not be reused anywhere else

These points ensure that section replacer can run as expected as it can identify the content accordingly.

When you create the list item for you tag ensure that:

- The name is the TAG name only (no need for <!--or -->) this is done for you at run time
- The content inside your TAG does not include the tag, it stores your content only

## 5.2 Add TAG Automatically

This approach should only be attempted when you are comfortable with using section replacer and you have **CONFIRMED** that the content you are highlighting in each page is **UNIQUE**.

To complete this you need to add the **INITIAL** content that is stored on the page in the **INITIAL HTML** column. Section replacer will use this to find the unique content matching this on all pages. If it is not unique it will not work!

Once you have added the tag name, selected the “Add Tag” option and pasted in the initial HTML you are ready to run. NOTE: the INITIAL HTML Section is at the bottom of the Create page (scroll down!)

### Add TAG

Title *	<input type="text" value="New Tag Name"/>
Tag	<input type="text"/>
Update	<input type="checkbox"/>
Add Tag	<input checked="" type="checkbox"/>
Content	<div style="border: 1px solid #ccc; height: 100px;"></div>

### Initial HTML

Initial HTML	<div style="border: 1px solid #ccc; padding: 5px;"><pre>&lt;footer id="footer" class="main_page"&gt;   &lt;div class="container"&gt;     &lt;div class="row"&gt;       &lt;div class="grid_12"&gt;         &lt;p class="txt_priv wow fadeInLeft"&gt;Symphony Housing Group         © &lt;span id="copyright-year"&gt;         2015&lt;/span&gt;         . &lt;a href="index-5.aspx"&gt;Privacy Policy&lt;/a&gt;       &lt;/div&gt;     &lt;/div&gt;   &lt;/div&gt; &lt;/footer&gt;</pre></div>
--------------	--

When you run section replacer it will add the tag you described around the unique content.

NOTE: at this stage it WILL NOT replace the content between the TAGS – this stage exists just to prepare the content for the replacer.

When this process has been completed you will notice that your INITIAL HTML tag has been replaced with a comment of ***“TAG has already been added”***

## Initial HTML added

Title	Tag	Update	Add Tag	Initial HTML
Header	... Header	No	No	Tag has already been added
Footer	... Footer	No	No	
Header Tags 1	... Header Tags 1	No	No	Tag has already been added

After the new tag has been added it is a good idea to inspect the pages to ensure that the tags are in the location you desire and that they contain the content you expect.

After this you use section replacer as normal.

Add your content into the CONTENT section and tick UPDATE. Run section replacer to replace the content inside your newly generated tags with you common content.

## 6 Update Tags

To update a tag ensure that you list the title of the TAG in the **Title** and **TAG** fields.

Select the UPDATE check box – this allows Section Replacer that you are ready to update a TAG the next time the script is ran.

Ensure your content is stored in the content field – WITHOUT the tag

### Update TAG Example

Title *	<input type="text" value="Footer"/>
Tag	<input type="text" value="Footer"/>
Update	<input checked="" type="checkbox"/>
Add Tag	<input type="checkbox"/>
Content	<pre>&lt;footer id="footer" class="main_page"&gt;   &lt;div class="container"&gt;     &lt;div class="row"&gt;       &lt;div class="grid_12"&gt;         &lt;p class="txt_priv wow fadeinLeft"&gt;Symphony Housing Group         © &lt;span id="copyright-year"&gt; 2015&lt;/span&gt;         . &lt;a href="index-5.aspx"&gt;Privacy Policy&lt;/a&gt;       &lt;/div&gt;     &lt;/div&gt;   &lt;/div&gt; &lt;/footer&gt;</pre>

Once you have saved your tag run the Section Replacer Script as normal and the update will proceed.