

Cloudiway Google sites migration

Migrate to SharePoint sites

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I. Overview

Google sites and SharePoint sites are two different systems. Cloudiway site migration proceed by equivalence to migrate the different Google elements to SharePoint.

This article explains the operation of the Google sites migration.

II. Migration steps

Once you've configured your site settings on Cloudiway platform, you can launch the Migrate task. The Migrate task is the mechanism that will dump your data from the source site and write them to the target SharePoint site.

During the Migrate task, actions are going to be performed on the source, on the target and on the Cloudiway platform.

1. On the source

Cloudiway site migration is read-only to the source: no data is altered.

The site migration tool will read the specific Google site to migrate in two ways:

- with a service account
- with an administrator account

A google service account must be created to enable Google APIs. Google APIs allow the access to Google sites elements like embedded Google Drives, site Menu, Google site pages...

Nevertheless, all the sites elements are not accessible nor entirely retrievable by Google APIs (e.g.: list of Google sites, site pages, table of content ...). To work around this lack, the tool uses an administrator account that will have access to the admin sections of the Google site.

The retrieved site elements are stored in a volatile cache that are dumped on the Cloudiway platform.

2. On the platform

The volatile cache is loaded to the platform. The platform sorts the site elements by migration priority. Then these elements are migrated to their SharePoint equivalents. See in section 4 what is migrated and the equivalence to SharePoint.

Site elements contents (e.g.: html content, document contents ...) are not modified but migrated as such to the target SharePoint.

Once the migration is completed, the cache is deleted, no data is stored on Cloudiway platform.

3. On the target

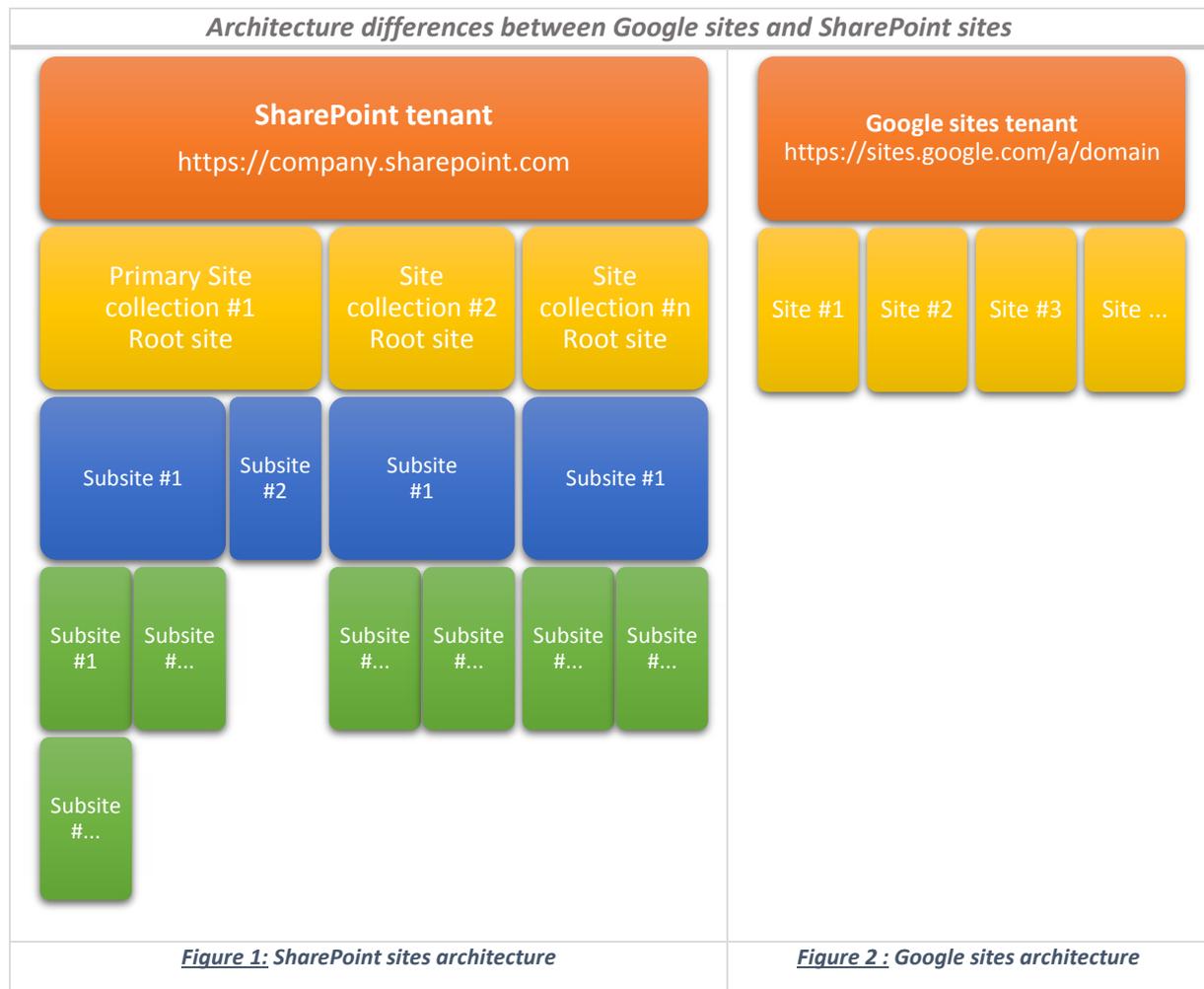
Each google site elements are converted to its SharePoint equivalent.

The migration tool uses the administrator account to write on the target SharePoint.

For some google elements, we migrate directly html contents to SharePoint. As explained in section 2.3, the platform do not modify any of these contents. But any site migration user must keep in mind that SharePoint may adapt these contents to make them fit to its environment.

III. The differences between Google and SharePoint architecture?

Google and SharePoint have architectural differences. The following chart shows the difference between Google sites and SharePoint sites: hierarchical vs flat organization.



1. SharePoint sites

In SharePoint, sites are hierarchically organized. A SharePoint sites tenant is a set of site collections. Each site collection contains root site (the top site). The top site may have several subsites which also may have subsites and so on.

2. Google sites

Unlike in SharePoint, Google sites are organized directly in flat way in the tenant. The notion of subsite does not exist in Google sites.

IV. Where to migrate your sites?

Cloudiway site migration migrates Google site by Google site. The site can be migrated either to the root site of a specific SharePoint site collection or in the first level subsite of a SharePoint site collection.

Given a Google site entitled site1 with site url like <https://sites.google.com/a/domain/site1>. The following table lists the possible migration location with Cloudiway sites migration.

| Target name | Target collection | Migrate to the root | Migrate to subsite |
|-------------|-------------------|---|---|
| site1 | void | Not allowed* | https://company.SharePoint.com/site1 |
| site1 | siteCollection | https://company.SharePoint.com/siteCollection | https://company.SharePoint.com/siteCollection/site1 |

**for security reason, Cloudiway platform does not allow to migrate directly to the primary site's topsite/rootsite (<https://company.SharePoint.com>)*

1. To a specific existing site collection's root site: at the top site

Since Google sites are flat organized, you can migrate each Google site in a SharePoint site collection, at the top site.

The site collection's topsite must be provisioned in SharePoint central administration.

2. To a specific existing site collection's subsite

All the Google sites can also be migrated all at once in a site collection subsites. Cloudiway site migration tool create as much SharePoint subsites as the number of Google sites to migrate.

3. To both to remediate your sites architecture

You may also want to categorize your sites in SharePoint. Given in source five sites that are related to sales department and you want to group them in one site collection in SharePoint. This is possible with Cloudiway sites migration. You can totally remediate your sites architecture as shown in figure 3 below.

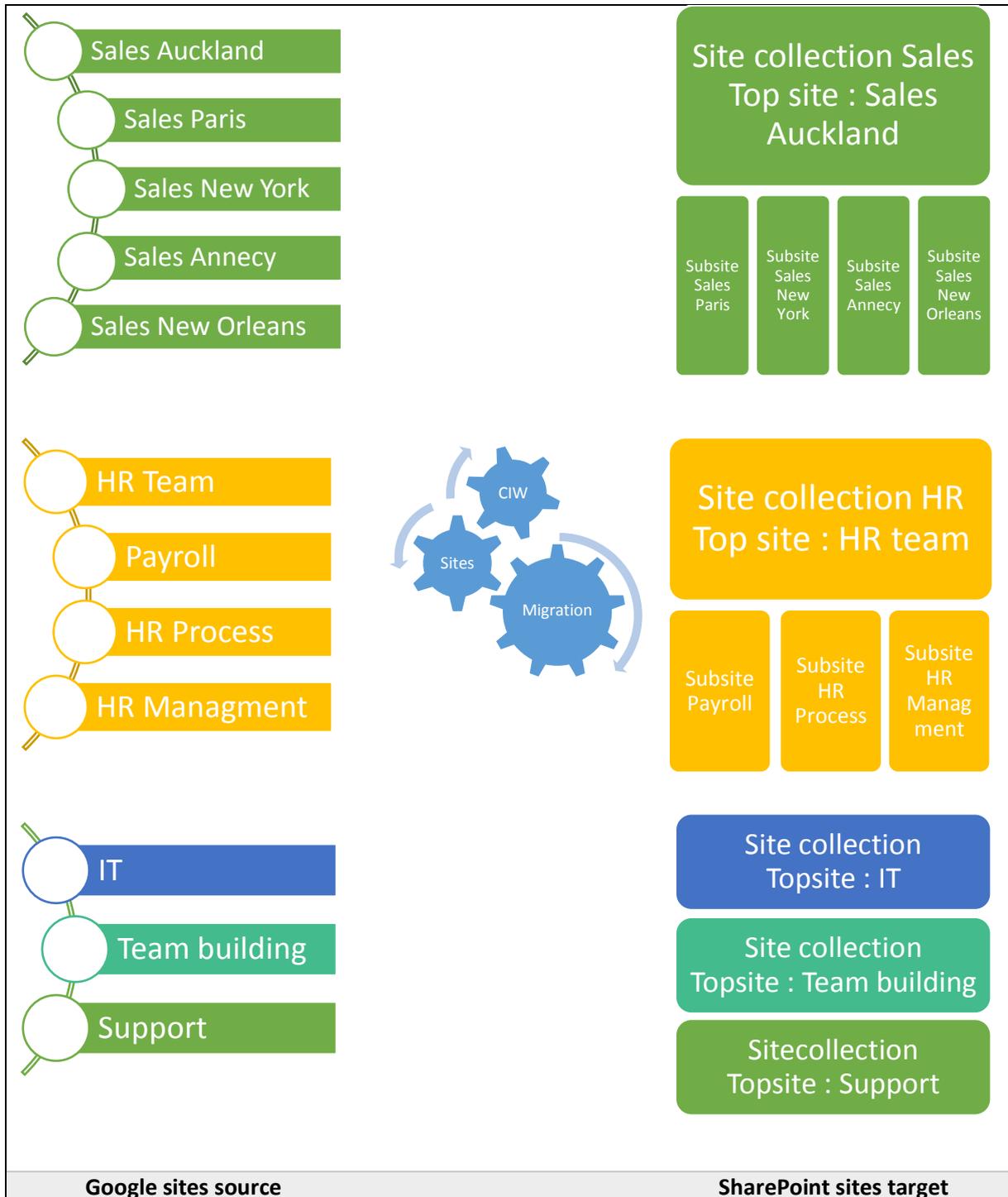


Figure 3: Sites remediation example

V. What is migrated?

Cloudiway site migration migrates the following Google elements:

1. Vertical navigation bar

The Team Updated Jun

testsite

- Home
- Project Definition
- The Team**
- To-Dos
- Time Tracker
- Project updates
- Files
- Benchmark Dates
- Sitemap

1724
days since
Project Due Date

Join Our Discussion



[Join the Discussion](#)

My recent activity

Template tips

[Learn more about working with templates.](#)

[How to change this sidebar.](#)

Office 365

BROWSE PAGE



Navigation

- Home
- Project Definition
- The Team**
- To-Dos
- Time Tracker
- Project updates
- Files
- Benchmark Dates

</cloudiwaytest/testsite>

Join Our Discussion

<http://groups.google.com/support/bin/topic.py?topic=9216>

Join the Discussion

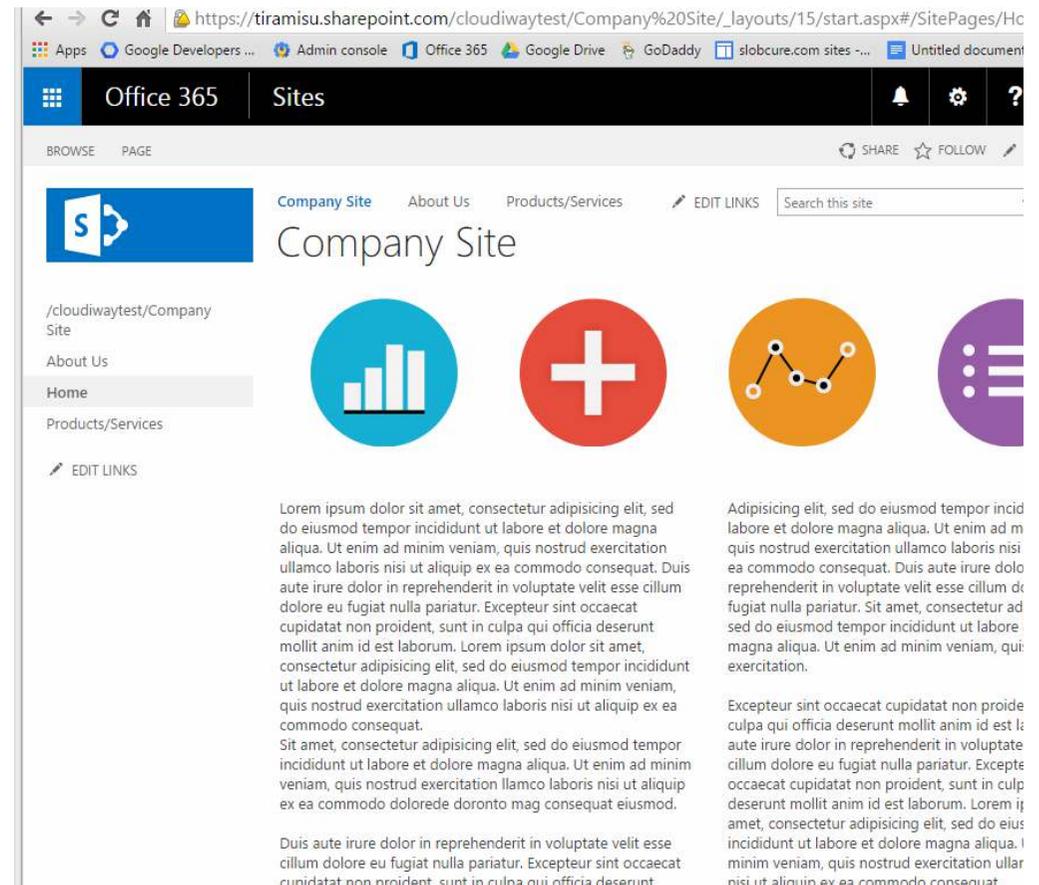
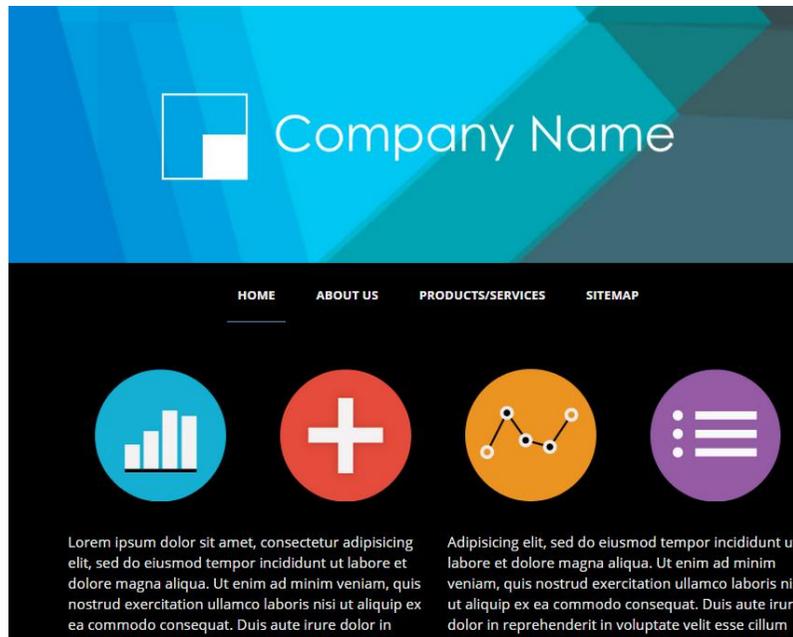
</cloudiwaytest/testsite>

Template tips

Learn more about working with templates.

How to change this sidebar.

2. Horizontal navigation bar



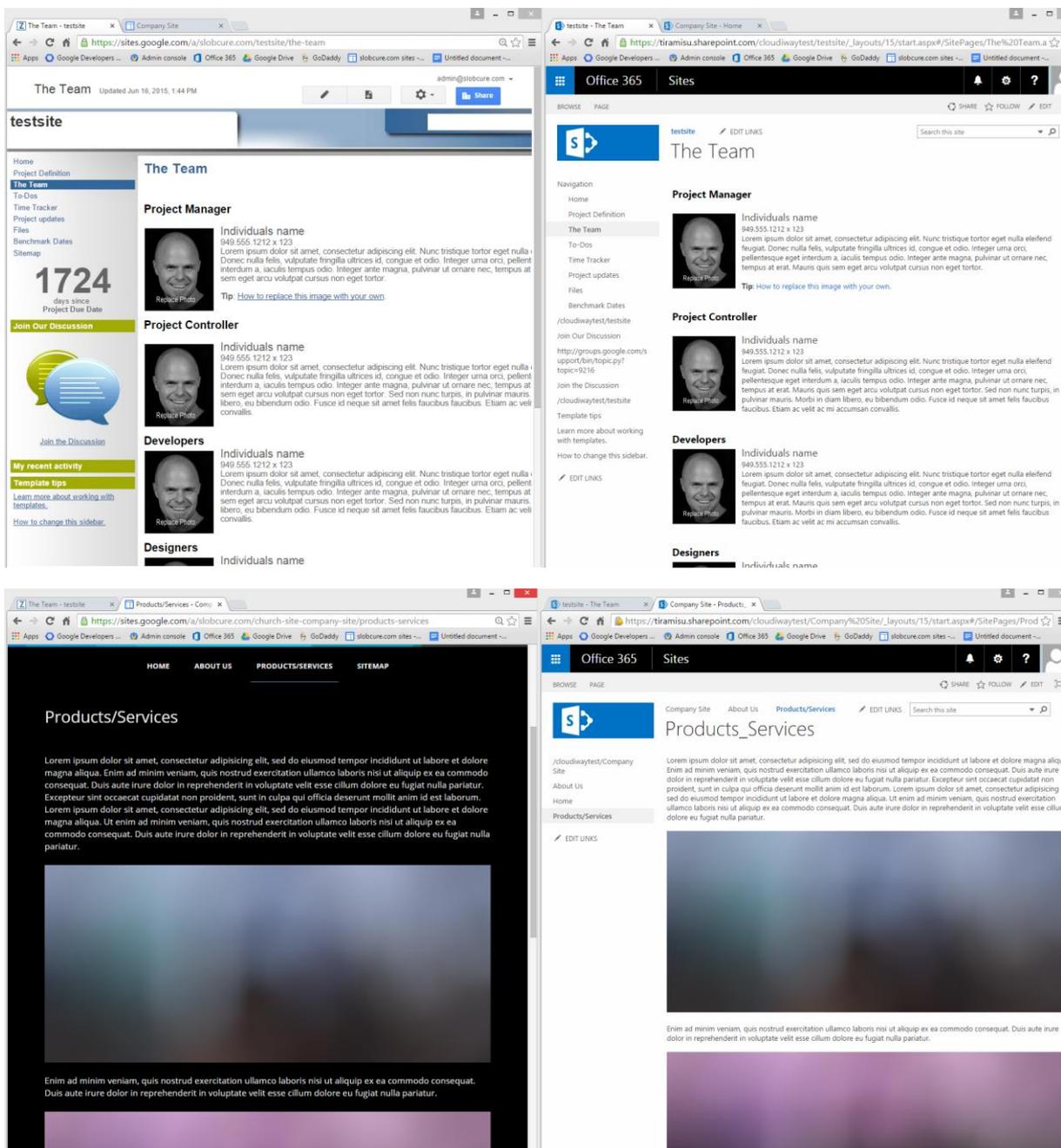
3. Permissions

All permissions are migrated :

- Permissions on users : are mapped to existing users in SharePoint.
- Permissions on groups : are mapped to existing Office 365 groups in SharePoint.
- Permissions on the domain : is mapped to the SharePoint default everyone group in target.

4. Site content

Images, formatting and so on are preserved.



5. Welcome Page

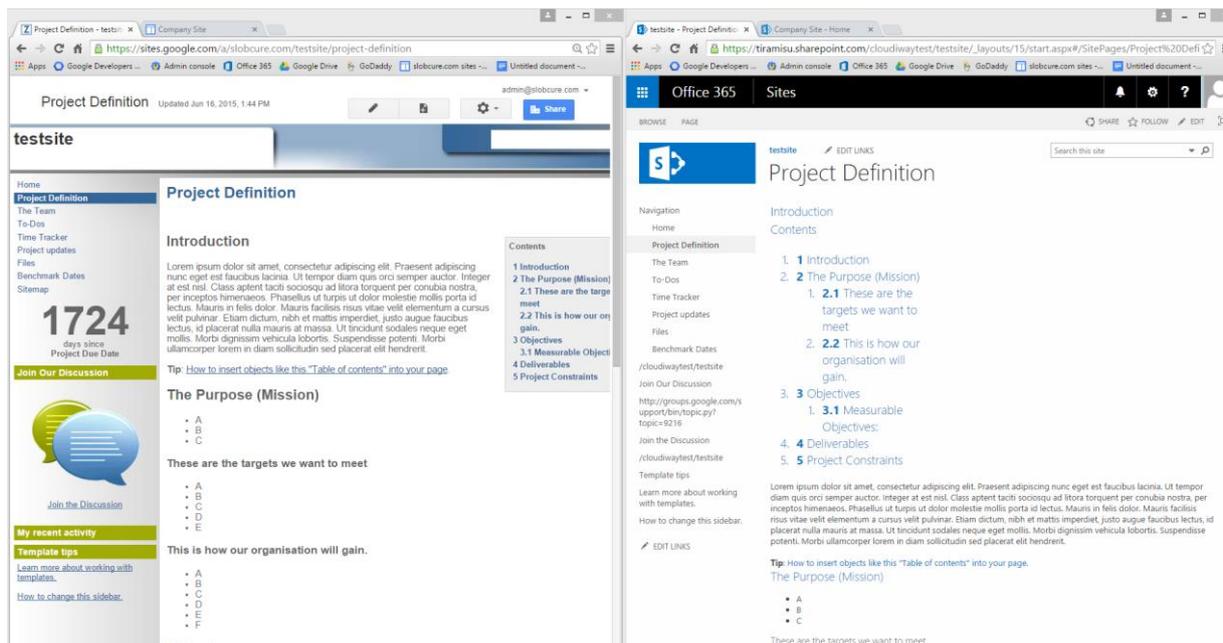
The welcome page is the first page displayed when browsing the site url. This page is set during migration.

6. Urls

Internal urls are rewritten during the migration. Urls pointing to internal documents, pages or lists will point to the target location of the documents, site pages or list in SharePoint.

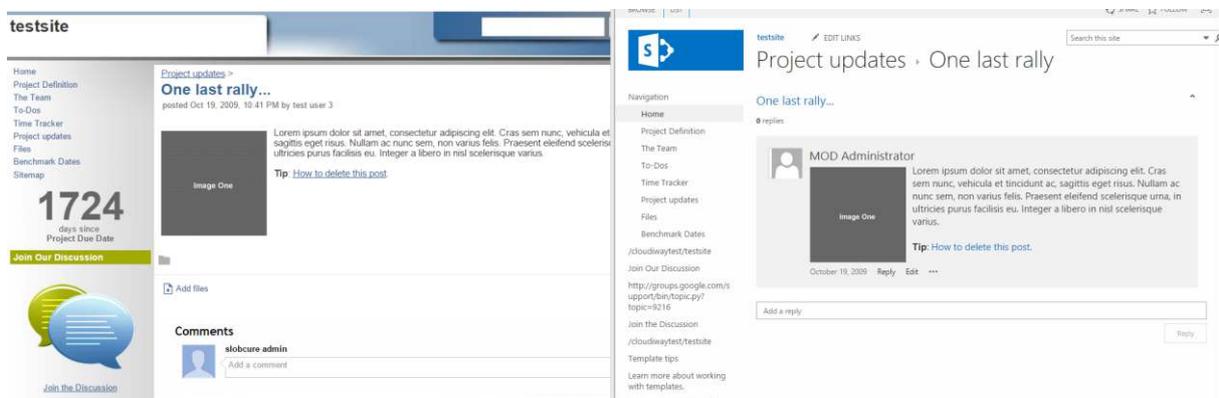
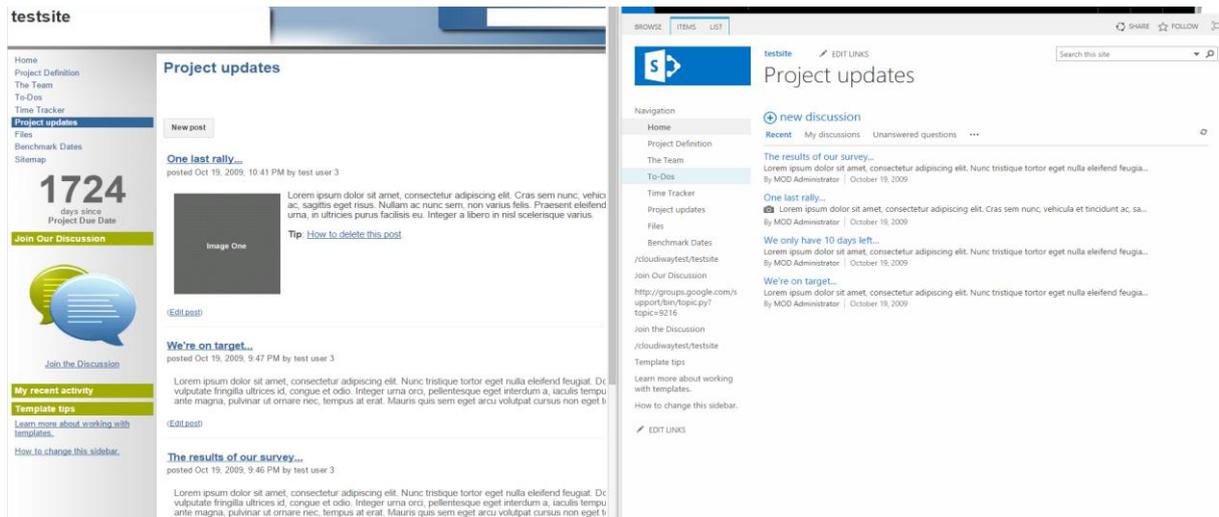
7. Web pages

A web page is the simplest kind of page. You can write content, embed gadgets, and arrange it however you like. The web page has standard formatting controls like bold, italic, and underline, bullets, and more. You can attach documents from your hard drive to the bottom of the page, and you can let other site collaborators comment on your pages. Google Sites periodically saves versions of your page as you make 'Edit', so it's easy to go back to earlier versions of the page to make comparisons or undo changes.



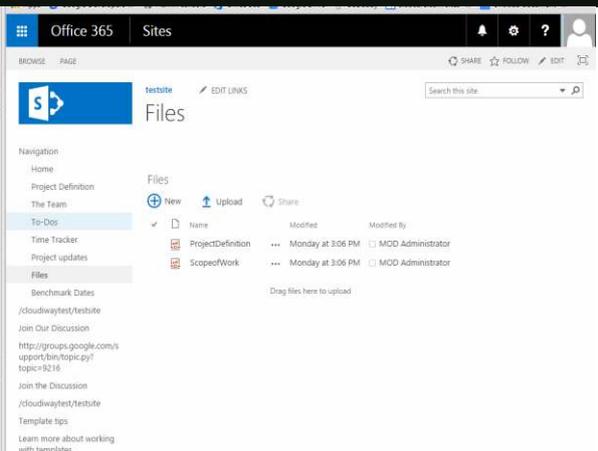
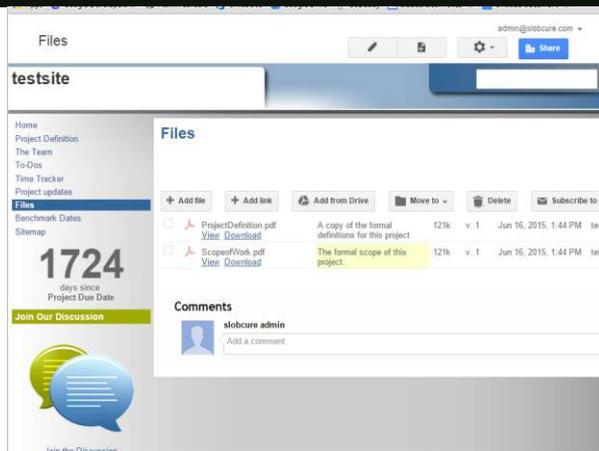
8. Announcements

Much like a blog, announcement pages display posts you make to the page in chronological order, starting with the most recent. For example, an announcement page would be great for keeping a record of weekly meeting notes, while providing quick access to the most recent meeting info.



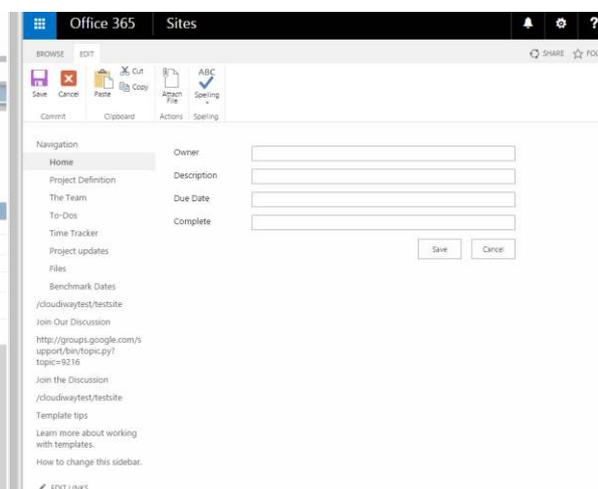
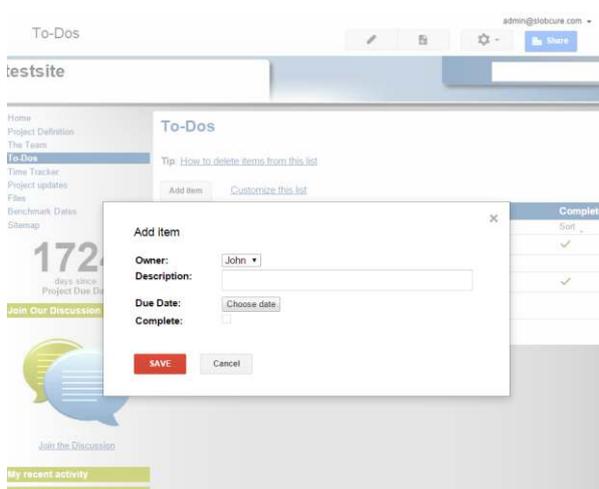
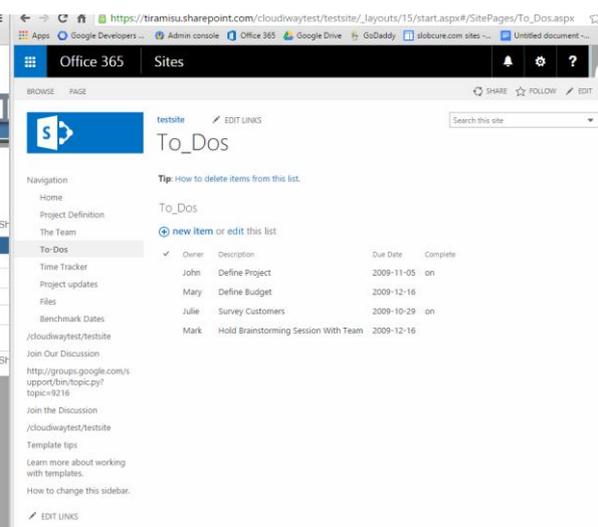
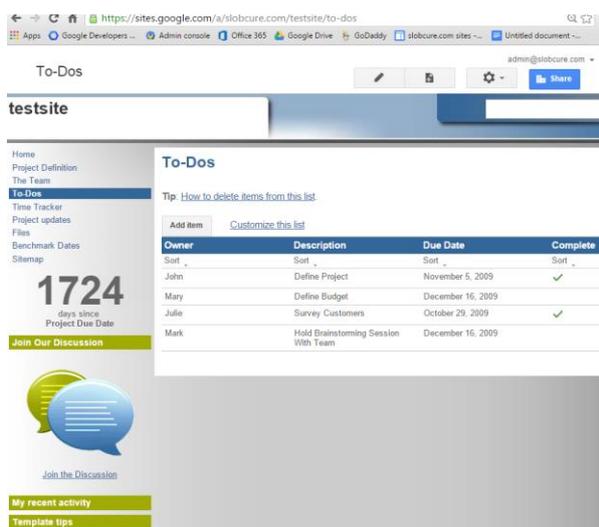
9. File cabinet

File cabinet pages let you store and organize files from your computer's hard drive, making it an easy way to share files with other users of your site. Anyone subscribed to the page will be notified when files are added, changed, or removed.



10. List page

List pages let you make and organize lists of information. Items on the list are easy to add, edit, and remove, and viewers of the list can sort it by any column. Like the file cabinet page, subscribers are notified when items are added, changed, or removed.



11. Google Gadgets

To easily embed rich media, retrieve feeds, or perform simple tasks like managing a to-do list, you can insert gadgets into your Google site.

| Gadgets Type | Description |
|-------------------------------|----------------------|
| sites-embed-type-punch | Presentation |
| sites-embed-type-spreadsheet | Spreadsheet |
| sites-embed-type-docs-video | Video |
| sites-embed-type-toc | Table of content |
| subpages | Subpages listing |
| sites-embed-type-youtube | Youtube |
| sites-embed-type-text | Text Gadget |
| recent-announcements | Recent Post |
| recent-list-items | Recent List Items |
| recent-files | Recent Updated Files |
| sites-embed-type-presently | Google Presentation |
| sites-embed-type-google-video | Embedded video |

12. Viewers of documents

Viewers of documents can be displayed inline through wopiframes.

Features:

- SharePoint sites are automatically created in an existing site collection.
- File cabinets: A page is created in SharePoint. Documents are uploaded to a document library and a webpart is added to the page to display the library.
- List Pages: A page is created in SharePoint. Items are created in a generic list library and a webpart is added to the page to display the library.
- Announcement pages: Migrated to a discussion list.
- Webpages: Migrated to standard pages in the SitePages library.
- Native Google documents are converted to Office format.
- Embedded documents (viewer): Displayed in the SharePoint viewers.
- Gadgets: Basic viewer that have an equivalent in SharePoint are migrated.
- Attachments: All attachments found in pages are migrated.
 - Attachments in pages.
 - File cabinet content including Google Drives documents
 - Google Drive documents embedded in files

VI. Limitations

1. Hierarchical hierarchy vs flat hierarchy

Google site has a hierarchical organization of the pages.

Each page can contain subpages and is organized in a tree:

e.g.: <http://www.mysite.com/mainpage/subpage>.

SharePoint stores the page in a flat library.

To avoid page name conflicts, Cloudiway Migration renames the pages in the following way:

“mainpage-subpage”

2. Menus

In Google site, the depth of menus is unlimited.

In SharePoint, the depth of menus is limited to 2.

Nodes in menu with a depth hierarchy greater than 2 are not migrated.

As a solution, you might envisage manually removing the default SharePoint QuickLaunch menu and replace it by a webpart text editor.

In this webpart, you can build your menu.

The Google menu control can contain text. The SharePoint menus cannot. Text content in the Google Site menu control is lost.

3. Logo

Logo of the site is not migrated.

Programmatically, this would require to modify the master page of the SharePoint site.

4. Gadgets and Webparts

Google gadgets that do not have webparts equivalents are not migrated.

5. Announcement pages attachments

Announcements are migrated to SharePoint discussion board. If there are attachments to the post, since discussion boards do not support attachments, they are not displayed directly in the post. To work around this SharePoint limitations, announcements attachments are migrated in a SharePoint library with the post title.

6. Google Drive Files embedded in Google Sites

Google Drive documents can be embedded in Google sites.

Google Site stores the URL of the Google drive documents embedded in the site.

The URL contains the Google drive ID's but does not provide any information about the owner.

All we get is the Google Drive ID of each document and from it, it's not possible to determine the owner and to give permissions to the migration account.

What is the solution?

Use Cloudiway Site Migration and Cloudiway File Migration together.

During the migration or the audit of the Google Drives (Cloudiway File Migration), Cloudiway platform builds a list of all Google Drive ids and their respective owners.

From it, Google site migration is able to determine the owner of each embedded Drive document.

The platform can now impersonate the owner and access the document.

If you do not use Cloudiway Site Migration and Cloudiway File Migration together, the Google drive documents embedded in Google Sites will not be migrated (if the migration account does not have by default access to the files).