**Introduction**

[Site designs](https://docs.microsoft.com/en-us/sharepoint/dev/declarative-customization/get-started-create-site-design) is newly introduced feature in SharePoint online. With the help of site designs, users can install lists, libraries, add-ins, SPFx web parts, themes at the time of site creation. Following things are possible with site design.

* Create new list in SharePoint
* Define a new site column
* Define a new content type
* Add a navigation link
* Apply a theme
* Set a site logo (only possible for communication sites)
* Join a hub site
* Install add-in or solution
* Register a new extension
* Add users to SharePoint groups
* Trigger a flow
* Configure regional settings

Installing site designs

Site design consists of two things,

* Site script
* Site design

Site script is a json file which contains set of actions to perform. You need to register this site script in SharePoint online, which will return you Id of the installed script. Using this script id, need to create a site design.

Install site designs with PowerShell

Site scripts can be installed using [PowerShell](https://docs.microsoft.com/en-us/sharepoint/dev/declarative-customization/site-design-powershell).

Get ready with json file

Json file will contains actions to perform. Each action will be defined with key verb.

Examples of verbs:

* createSPList
* addSPField
* createSiteColumn
* createContentType
* addSiteColumn
* addNavLink etc.

Sample site script

{

  "$schema": "schema.json",

  "actions": [

    {

      "verb": "createSPList",

      "listName": "Customer Tracking",

      "templateType": 100,

      "subactions": [

        {

          "verb": "SetDescription",

          "description": "List of Customers and Orders"

        },

        {

          "verb": "addSPField",

          "fieldType": "Text",

          "displayName": "Customer Name",

          "isRequired": false,

          "addToDefaultView": true

        },

        {

          "verb": "addSPField",

          "fieldType": "Number",

          "displayName": "Requisition Total",

          "addToDefaultView": true,

          "isRequired": true

        },

        {

          "verb": "addSPField",

           "fieldType": "User",

          "displayName": "Contact",

          "addToDefaultView": true,

          "isRequired": true

        },

        {

          "verb": "addSPField",

          "fieldType": "Note",

          "displayName": "Meeting Notes",

          "isRequired": false

        }

      ]

    }

  ],

  "version": 1

}

Create site design:

* create json file and save into your local machine and copy the file location path.
* Open SharePoint online management shell and connect to your SharePoint tenant with

Connect-SPOServicec -Url "https://<yourdomain>-admin.sharepoint.com"

* Execute below command to add site script to SharePoint

Get-Content 'c:\scripts\constructions.json' -Raw | Add-SPOSiteScript -Title "Construction Site Script"

* Once you execute the above command, it will output as below

Id: 99FBD978-E0F9-460B-B65A-F3EA88572787

Title: Construction Site Script

Description:

Content:

Version: 0

* Execute below command to add site design based on output Id.

Add-SPOSiteDesign -Title "Construction Template" -WebTemplate "64" -SiteScripts "99FBD978-E0F9-460B-B65A-F3EA88572787" -Description "Construction site template with lists and libraries"

Note: Here -WebTemplate parameter will take template number for modern sites. **64** is for modern team site, **68** is for communication site.

* Above command execution will give below output

Id: BFAA61B5-DD1B-488B-B7FF-EF026D523EFB

Title: Construction Template

WebTemplate: 64

SiteScriptIds: {99FBD978-E0F9-460B-B65A-F3EA88572787}

Description: Construction site template with lists and libraries

PreviewImageUrl:

PreviewImageAltText:

Is Default: false

Version: 1

Remove site designs with PowerShell

To remove site designs, first remove site design, then remove site script.

To get the installed site designs in site execute below command

* To get all installed site designs

Get-SPOSiteDesign

* To get your site design

Get-SPOSiteDesign | Where-Object {$\_.Title -eq "<Title of your site design>"}

* Above command will give you the details along with id of the site design. Copy the Id of the site design .
* Remove site design by executing below command

Remove-SPOSiteDesign -Identity "<id of the installed site design>"

* Get the installed site script id by executing following command

Get-SPOSiteScript  | Where-Object {$\_.Titlel -eq "<Title of your site script>" }

* Above command will give you the details along with the Id. Copy the Id of the site script
* Execute below command to remove site script from the site

Remove-SPOSiteScript -Identity "<your site script id>"