DevDays Asia 2019
@ Taipei
MODERN SHAREPOINT SOLUTION DEVELOPMENT ADVANCED TOPICS

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In this session, we will see

- Provisioning service
- Reusable components
- Theming and section background styling
- Connect to APIs
- Dynamic Data
- Full page application
- SPFx in Teams Tabs
- More SPFx features...
SharePoint Provisioning Service

Currently in public preview and available to be used worldwide with initial set of Look Book templates, SharePoint Starter Kit and the Custom learning solution.

Enables tenant administrator to provision demo structures with actual content on their tenant (site collection administrator support coming later).

Deploys automatically needed customizations in the tenant level and configures content in the tenant based on the template.

Actual templates are SharePoint Tenant Templates Engine templates which can be easily added on the service by adding them to specific GitHub repository (replication) – Tenant templates supports defining tenant scoped elements, like site collections, Teams structures etc.

http://provisioning.sharepointpnp.com
Contoso Enterprise Landing
See how you can setup a welcome site using the communication site template and webparts.

Contoso Drone Landing
See how you can setup a welcome site using the communication site template and webparts.

Leadership Site
This template shows how a company executive information site could look like in SharePoint Online. It has example pages and contents to get you started.

Work @ Contoso
This template shows what a typical work-oriented hub site could look like in SharePoint Online. It is designed to aggregate content and news from the associated site collections to show all relevant information from a single location.

Give @ Contoso
This template shows what a human resources giving campaign site could look like.

Contoso Workshop Site
This template shows how a workshop-centric site could look like in SharePoint Online.

Contoso Team Site
This template is an example of enabling collaboration at a team level. It has many parts including news, files, and team calendar.

Brand @ Contoso
This template shows how a typical company brand site could look like in the SharePoint Online.
Demo

SharePoint Provisioning Service
Microsoft Office UI Fabric

Code for Developers
Fabric Core and Fabric React

Toolkits for Designers
Adobe XD and Sketch

Documentation for Both
uifabric.io
PnP SPFx reusable open source controls

React content controls

Property Pane controls

https://sharepoint.github.io/sp-dev-fx-controls-react

https://sharepoint.github.io/sp-dev-fx-property-controls
Theming and Section background styling

Opt-in approach: developers must declare that their web parts comply with the new section background.

If you do nothing, the web part will continue to look like it does today.

Works on modern pages: Developers can register to events raised by the system when a theme change happened.
Themimg

Theme consists of main and accent colors used accessibly across a site.

Out-of-the-box SharePoint themes include 6 light and 2 dark themes.

Can be customized from those starting points.
Section background

Use to break up a long page or highlight content

Use theming for changing entire page background color; not section background colors

Use Office UI Fabric front-end framework for applying theming to your custom web parts so they work against section backgrounds
Demo

Theming and section background styling
Connect to APIs

- SharePoint REST API
- Microsoft Graph Integration
- AAD Integration
Demo

Connect to APIs
Dynamic Data

Data Sources
- Expose a set of data that others can consume
- Decides when data gets updated

Consumers
- Configure properties to use data from a data source

Well known data sources
- Web Parts, Extensions, Page context
- Page metadata, User context, Page query string

First party web part support

Data source
- List web part

Consumers
- List property web part
- File viewer web part
- Embed web part
Demo

Dynamic Data
Microsoft Teams Tabs

Advantages on using SharePoint Framework as the UI implementation

Automated hosting
Automated hosting with optimized CDN

Access to Graph
Easy Graph API access even without Azure admin UI configurations

Simple deployment
Simple centralized deployment

Reuse same implementation
One codebase to implement extensibility which works in multiple platforms

Teams Solution build with SharePoint Framework
SPFx for Teams Tabs

SPFx is THE WAY for System Integrators and Enterprise Developers to build solutions for SP and Teams

Continue to use the development model you know

Choose if your solution is usable in Microsoft Teams, SharePoint, or both

"supportedHosts": ["SharePointWebPart","TeamsTab"]

Allow configurability experience

"canUpdateConfiguration": true | false
Full Page Single Web Part Apps

- Aka: App Pages
- Page with pre-configured application content
- Uses the same site “chrome” experience as the other pages in the site, but with the full width and height available.
- Runs same extensions as the Pages app (in fact, it is the Pages app)
Demo

SPFx for Teams Tabs and Full Page Single Web Part Apps
SharePoint Framework (SPFx) Evolves Constantly

### General Availability

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<th>Extensions</th>
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<td>ALM APIs</td>
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<td>Office 365 CDN and automatic hosting</td>
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### SPFx 1.8!!!

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<td>Domain Isolated Web Parts</td>
<td>Support for TypeScript 2.7, 2.9 and 3.x</td>
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Building intelligent portals and collaboration platforms

Your extension

Gateway

Your or your customer’s data

Microsoft Graph

Office 365 | Windows 10 | Enterprise Mobility + Security

Microsoft identity | Rich content | Deep insights | Real-time updates
Getting started

1. Build SharePoint Framework web parts and extensions
2. Take advantage of our open-source projects and assets
3. Extend and integrate with Microsoft Teams and Microsoft Graph

Sign up for the Office Dev Program - https://aka.ms/o365devprogram
Thank You!