

PnP Partner Pack for ITPros, Admins and Architects – and a little bit for Dev's




slide deck based on:




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- Erwin van Hunen Product Owner @ Rencore











**Vesa Juvonen** 😊 sehr dankbar.
14 Std. · 👤



That's actually pretty cool. Taken from Yammer discussions: "I'm writing my Bachelor-Thesis about PnP".



 **Gefällt mir**  **Komentieren**  **Teilen**




  **Du, Stefan Bauer, Matthias Einig und 36 weitere Personen**

**Aleksi Vesaikko-Rodriguez** Plz contact him/her to inform that it's not a good topic at all. It's way too practical for academic purposes.
Gefällt mir · Antworten ·  2 · 14 Std.

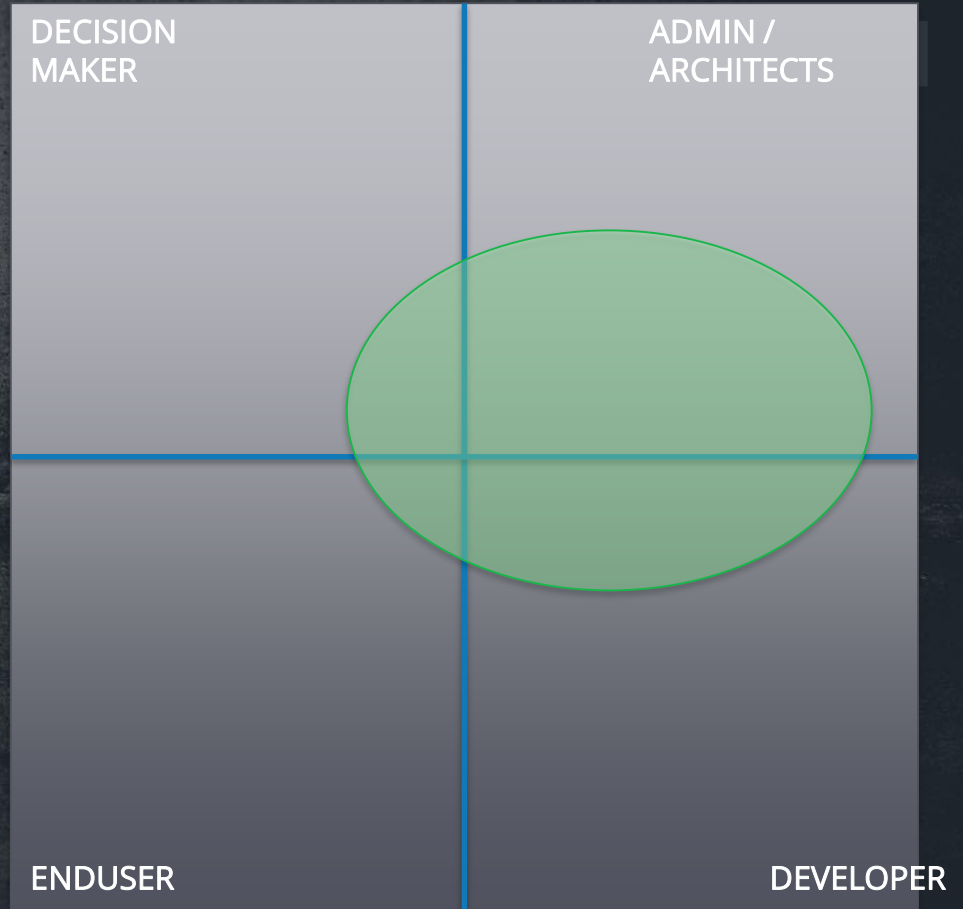
**Jeremy Thake** He studying Finglish?
Gefällt mir · Antworten ·  8 · 13 Std.

**Harri Mikkonen** How much longer we have to wait for to add his/her e-mail address in to: field?
Gefällt mir · Antworten ·  1 · 13 Std.

**Spencer Harbar** No mate. That is bad onso many levels. Check yo.
Gefällt mir · Antworten ·  1 · 10 Std.

TARGET AUDIENCE



TOPICS

Why Patterns
& Practices

Site
Provisioning
Framework

Additional
Options &
Roadmap



REFERENT

Nicki Borell
Consultant / Evangelist
SharePoint & Office 365
www.nickiborell.com



EXPERTS
INSIDE



Author:



"...if you ask why you will never understand"

Why Patterns & Practices

"WHY SHOULD I CARE?"

1. SharePoint development is changing rapidly
2. New model requires new mindset
3. Every SharePoint professional should know about Office 365 Developer Patterns & Practices

1

How is SharePoint Evolving

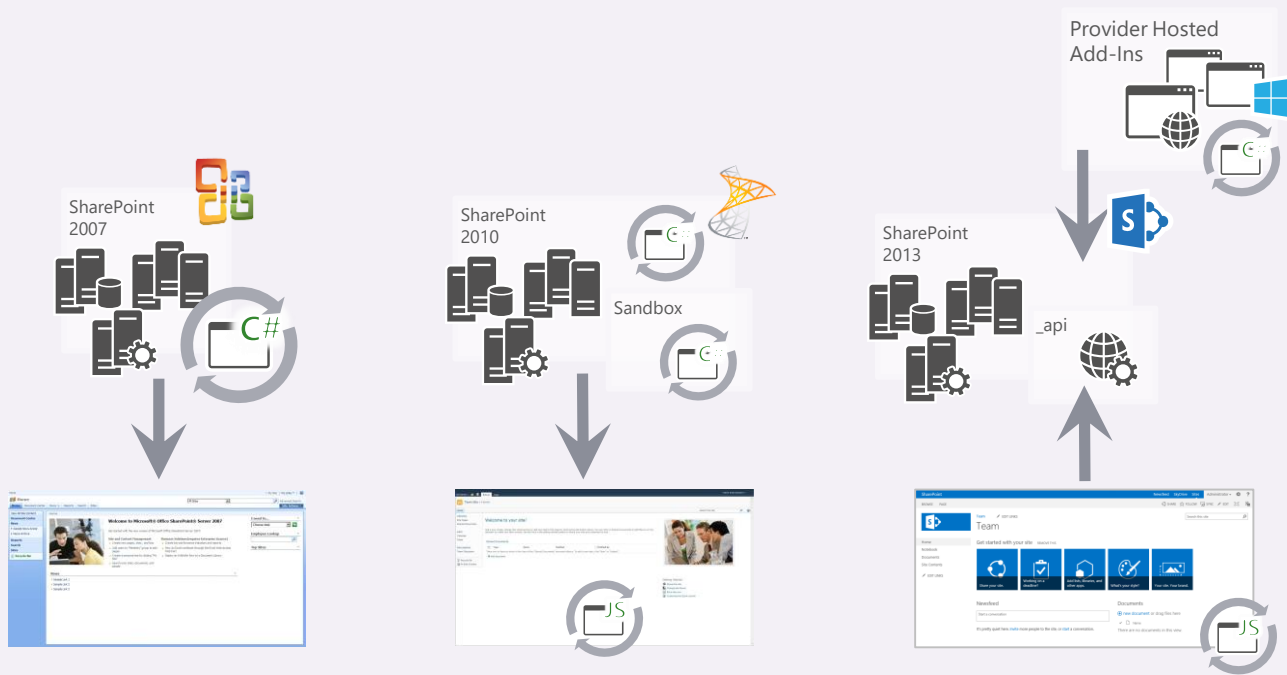


"THE MOST
STRATEGIC
DEVELOPER SURFACE
AREA FOR US IS
OFFICE 365"

- SATYA NADELLA



SHAREPOINT EVOLVES...



“WILL FARM SOLUTIONS BE DEPRECATED SOON ?!?!?”

No.

Microsoft uses these approaches to build the product ourselves. BUT, many service providers (not just Office365) restrict their usage for the known challenges they impose.

“OK, BUT WHAT ABOUT SANDBOX
SOLUTIONS? I WAS TOLD THESE ARE
GOOD AND CLOUD READY!”

Well... not really...



Sandbox History

October 2009

- › Sandboxed Solutions announced at SPC 2009
- › “Save Site as Template” uses the sandbox

July 2012

- › Microsoft ships Design Manager, which is based on Sandboxed Solutions
- › New App Model is announced
- › Sandbox deprecated for SharePoint 2013

January 2014

- › Solutions Gallery is spared (for the time being)

January 2015

- › Microsoft PnP team says, “Stay out of the sandbox!”

SANDBOXED SOLUTIONS

The Good

Customize SharePoint without a farm solution

Declarative Features (lists, libraries, files,
client side code)

User Code (web parts, InfoPath forms, event
receivers, workflow actions)

Multi-tenant friendly

The Bad and the Ugly

Limited server side API

Provisioned content is brittle

Versioning is a black art

No central way to manage,
update

Scalability Problems

While they still work for the time being, it's best to

Avoid all use of Sandboxed Solutions

“WAIT? NO FEATURE FRAMEWORK?”

We are indeed gradually moving away from feature framework to alternative patterns...

APP MODEL = ADD-IN MODEL

Marketing terminology change done spring 2015, which was only done for marketing messaging purposes.

TRANSFORMING YOUR CODE

From farm solutions and full trust code...

To app model...

“WHAT DOES THIS MEAN IN PRACTICE?”

Rewrite your code to app model.
There's actually no 100% automated
migration or transformation as such,
but you can reuse concepts and
patterns

“BUT I DO WANT TO DO CUSTOMIZATIONS USING FULL TRUST CODE WAY!”

Feel free to do that in future as well. It comes down on the business and functional requirements, together with deployment roadmap.

“WILL FARM SOLUTIONS BE SUPPORTED WITH SHAREPOINT SERVER 2016?”

Yes.

Microsoft will make investments mainly on the app model side also for on-premises to better align the development story: write once and use it cross cloud and on-premises

“WILL THEY EVER SUPPORT FARM SOLUTIONS IN OFFICE 365?”

No.

Farm solutions are deployed cross SharePoint farm and they could impact multiple customers...

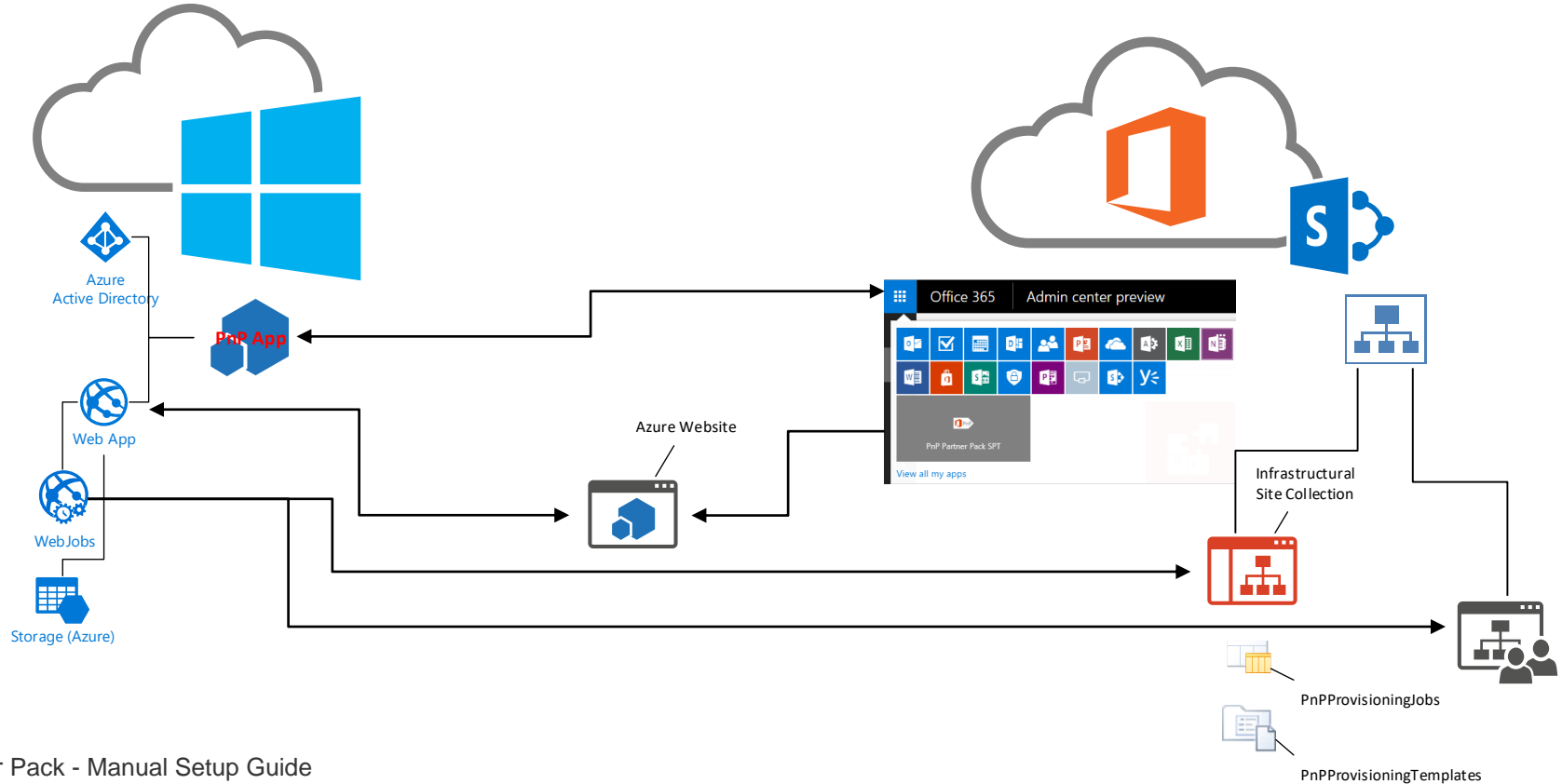
Site Provisioning Framework

What is the PnP Provisioning Engine?

- Open source community effort
- Framework for easily doing Remote Provisioning
 - Part of the OfficeDev PnP Core Library
 - Object Oriented engine for easy and fast Remote Provisioning
- Capabilities
 - Automated Remote Provisioning
 - Easy Site Template Generation/Extraction
 - Available in Microsoft .NET
 - There are PowerShell extensions for common tasks
- Supports templating of sites and artifacts
 - Reusable, updatable (delta handling)

Architecture & Logic Flow

<https://github.com/OfficeDev/PnP-Partner-Pack>



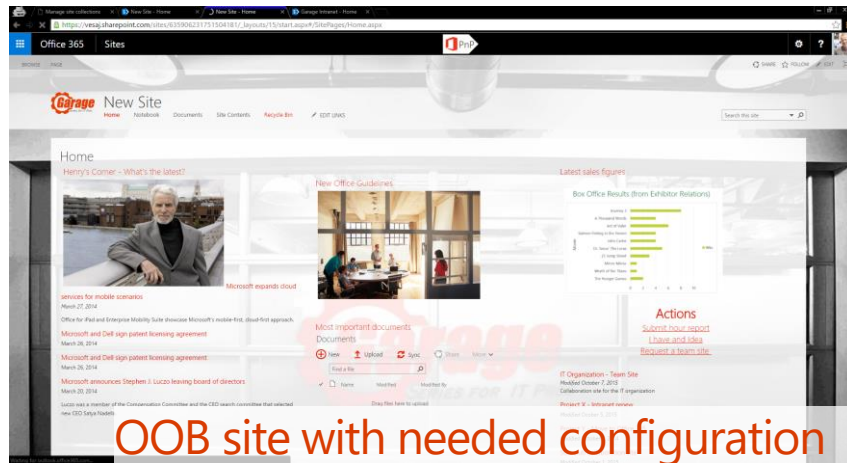
PnP Provisioning Engine – Export/Import



Template site

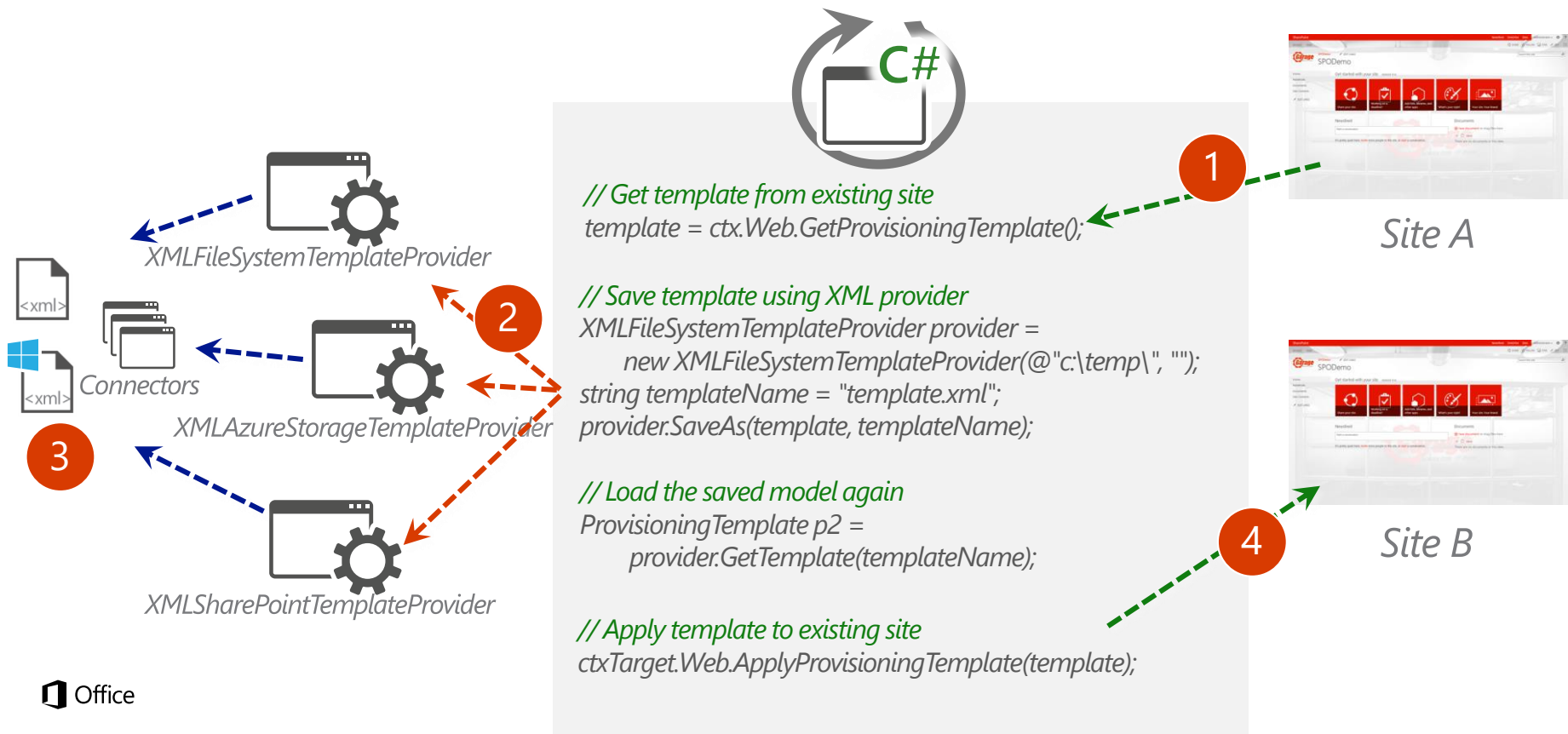


Empty OOB site



OOB site with needed configuration

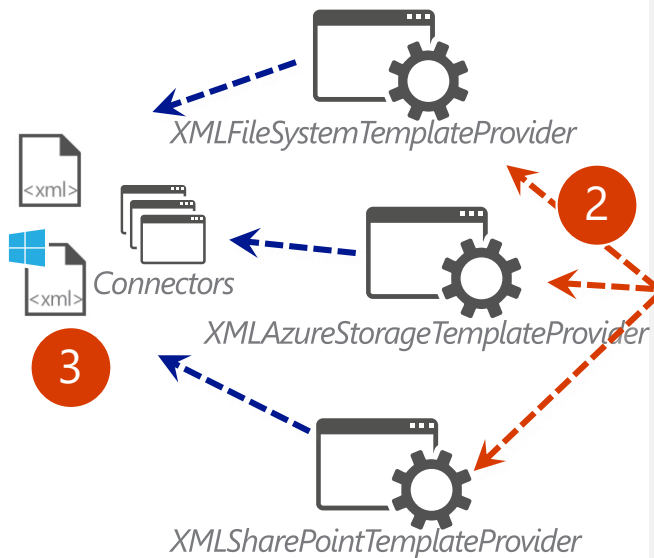
Site Provisioning Framework



Site Provisioning Framework



PowerShell



```
// Get template from existing site  
Get-SPOProvisioningTemplate...
```

```
// Save template as XML  
Get-SPOProvisioningTemplate c:\Temp\Demo2.xml
```

```
// Apply template to existing site  
Apply-SPOProvisioningTemplate c:\Temp\Demo2.xml
```



Site A



Site B

Key Features

- Export/Import of artifacts and configurations
 - No export of contents/files/pages
- Delta handling for on going maintenance
- Template format(ter)-independent
 - XML Schema – community defined
 - JSON
 - Whatever else ...
- Extensibility Model

Delta Handling

- We provide base templates to implement 'delta handling'
 - Base templates are available for all supported O365 site definitions
 - Embedded in the engine
- Useful to keep sites up to date with reference templates
 - Do not remove/delete anything
 - Just update/add

PnP Provisioning Engine Main Features

SP2013, SP2016 and SPO

Delta templates

XML, JSON formatter

Site Columns

Content Types

Lists/Libraries Instances

Features (Site or Web)

Custom Actions (Site or Web)

Files/Pages (Wiki, WebPart)

Taxonomies

Composed Look

Site Policies

Web Settings

Regional Settings

UI Languages

Resource Files

Audit Settings

Workflows (SPD only)

Search Settings

Publishing (including Page Layouts)

Additional Options & Roadmap

PnP Provisioning Engine Additional Options

Create Templates using SharePoint UI

Use Policies

Create addition services like a Yammer
Saesforce Group per Team Site etc.

Deploy Responsive UI Package

Roadmap...

1) enable the capability to break role inheritance at sub-site level.

2) copy parent security roles while breaking role inheritance at sub-site level.

3) support extraction and provisioning of navigation, both structural or managed.

4) configure whether to force checkout of files in a document library.

5) force removal of specific existing content types from a list instance.

6) remove a CustomAction at Site or Web level.

7) upload, during provisioning only, the content of a folder, eventually recursive, with file inclusion/exclusion based on file extension, and with optional metadata file in JSON.

8) support both Web and Site level search settings.

9) support site collection creation with basic site template.

10) support site creation with basic site template.

AND: ...provide an abstraction layer in the PnP Partner Pack architecture to make it easy to support on-premises scenarios, but we will not directly provide the implementation for on-premises.

Q & A



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