

Ask Poli's Pocket Edition Integration Guide

Table of Contents

Overview	3
What is Ask Poli?	3
Our Strategy	3
Pocket Edition	3
Integration High Level Overview.....	4
Prerequisites	4
High Level Activities	4
Integration Details	5
The integration details section of this document provides the following details:	5
Terms of Service.....	5
Terms of Use	5
Agreement Acceptance.....	5
Metadata Requirements.....	5
User Role – Mapping to Generic Names.....	6
Pocket Edition Code	7
Code Integration Location	7
Metadata Code Location.....	7
Sample Code	7
Functional Validation Testing.....	8
Feature Test: Initial Load	8
Feature Test: Accordion	9
Feature Test: Anchor Link	9
Feature Test: Link.....	10
Feature Test: Search Bar	10
Feature Test: Scroll Validation	11
Troubleshooting & Unique Environment Constraints	12
Appendix	14
Integration Check-List	14
Capturing On-Premises SharePoint User Profile Details (Metadata)	15
Adding Pocket Edition Code to SharePoint Master Page	17

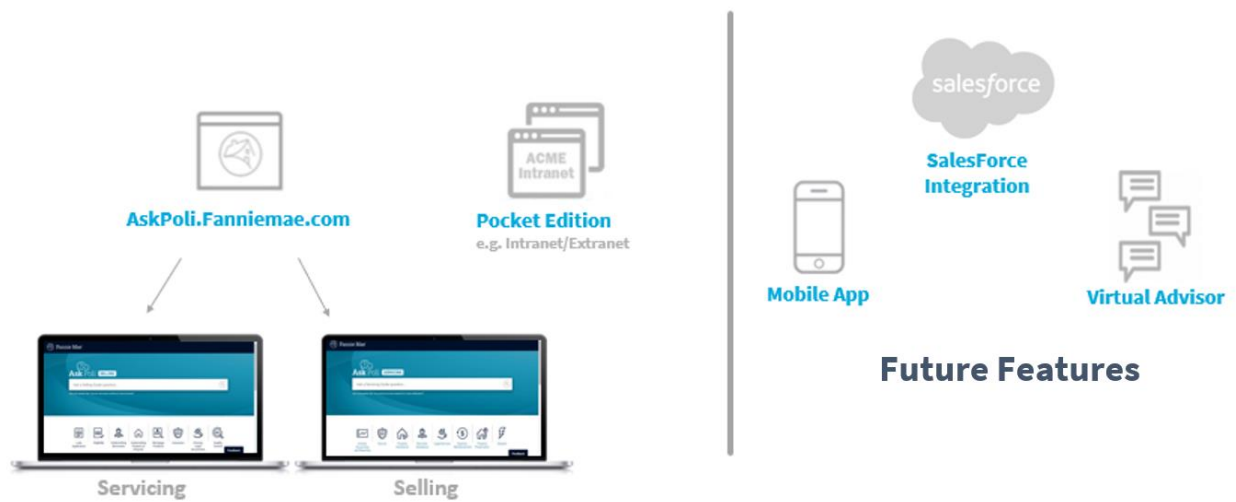
Overview

What is Ask Poli?

Ask Poli helps mortgage sellers & servicers answer policy-related questions by providing an intelligent search tool with fast, accurate & reliable answers straight from the source.

Our Strategy

Where you are, when you need it.



Pocket Edition

Similar to Ask Poli, Pocket Edition uses Natural Language Processing (NLP) and Artificial Intelligence (AI) to quickly answer your questions directly from *your* website. Pocket Edition integrates inside your intranet allowing expanded access across your team, richer analytics and even faster answers to your policy-related questions.

Integration High Level Overview

Pocket Edition integration requires very little effort between initial deployment and testing in your non-production environment. Review the prerequisites and activity breakdown to better understand integration.

Prerequisites

While Pocket Edition integration requires very little effort, following resources and requirements need to be available to ensure a successful deployment:

- Identify where Pocket Edition will reside. The best opportunity is to implement Pocket Edition where target users typically work.
- Ability to access and update target location (website).
- Ensure technical resources understand website scripts (Pocket Edition Code is a script) and how to add scripts to your HTML page (target location).
- Technology Constraints, see troubleshooting section for more detail:
 - **Google Sites** security blocks scripts so Pocket Poli will not function as intended. Unfortunately, Pocket Edition is not compatible.
 - **Angular Software Framework** has a few HTML compatibility quarks. Please let us know if you use Angular so we can update your Pocket Edition profile to ensure compatibility.

High Level Activities

1. Review this integration guide for general integration overview
2. Accept **Terms of Service**, see Terms of Service section below
 - a. Copy/paste Terms of Service to email, provide your approval and send to your Fannie Mae relationship or technology delivery manager
3. Deploy Pocket Edition test code
 - a. Identify Pocket location where your users reside
 - b. Copy code-snippet provided by Fannie Mae into your environment
 - i. Code is typically added after <BODY> tag on your website
 - ii. Perform basic validation steps - open/close widget and perform basic searches
 - c. **Update metadata fields**, see Metadata requirements section for additional details, and appendix for examples
 - d. Validate functionality, see **Functional Validation Testing** section below
 - e. Validate metadata fields are passed to Fannie Mae
 - i. Contact your Fannie Mae Ask Poli point of contact to ask for confirmation
4. Deploy Pocket Edition
 - a. Notify your Ask Poli point of contact widget is in production. The Ask Poli team will validate your widget-profile to ensure Pocket Edition is pointed to production material.
 - b. Deploy Pocket Edition to your users
 - c. Take advantage of the Ask Poli Marketing Toolkit to help communicate the launch

Integration Details

The integration details section of this document provides the following details:

- Terms of Service – SSA agreement
- Metadata Requirements – Configuration details for widget code

Terms of Service

The following agreement must be reviewed and agreed by the appropriate delegate before Pocket Edition code is deployed to production. For questions or concerns, please contact your Relationship Manager, Technology Delivery Manager or the Ask Poli team.

Terms of Use

You and your company have been provided access to Ask Poli. By following the instructions below, please indicate your agreement on behalf of your company that:

- the terms and conditions of the Software Subscription Agreement (“SSA”) between your company and Fannie Mae will govern all access and use of Ask Poli by you and your company,
- Ask Poli will be considered a “Licensed Application” under the SSA,
- the contents and output of Ask Poli are the Proprietary Information of Fannie Mae protected by the terms of the SSA, and
- except as reasonably required to facilitate access to Ask Poli by your company’s third party originators for their sole access and use for the internal business purposes of their company, Ask Poli may not be used, reproduced or disclosed for any purpose other than the internal business purposes of your company without the prior written consent of Fannie Mae.

Agreement Acceptance

Please indicate your agreement by copy/pasting the above terms of use to an email, adding “I agree” and sign your reply by typing your name at the end of the message (even if your name is also automatically applied). If you do not have delegated authority to agree on behalf of your company, please forward this message to an authorized representative so that they may submit the requested reply

Metadata Requirements

Metadata represents select user profile details automatically captured when navigating Pocket Edition. This information provides valuable insights about your users, including questions, frequency and volume trends, and is required before moving to production. All your information is protected by existing NDA’s, and is available through Fannie Mae’s FM Connect application.

Please contact your Ask Poli point of contact to validate metadata fields are flowing to Ask Poli.

Required Metadata Fields:

- **User Name:** Users full name (e.g. First and Last), used to identify users
- **User Email Address:** Users email address
- **User Role:** Role associated with user.
 - **The Role needs to be mapped to a pre-defined role, see “User Role Mapping” for additional details.**
- **Sub-Company Name (optional):** Setup only if Pocket Edition is deployed to your external-customers

Note: See examples at the end of this document for additional details on how to capture and feed metadata into Ask Poli.

User Role – Mapping to Generic Names

User roles are unique for every organization and provide valuable trending insights across different user groups. To ensure analytics are actionable, your individual role needs to be mapping to one of the following generic roles listed below. **This is a requirement.**

User Role Option: Choose the field that best matches your internal role

Selling:

- Closure/Funder
- Credit Risk Analyst
- Loan Processor
- Mortgage Originator
- QC
- Underwriter
- **Other (if match is unavailable)**

Servicing:

- Bankruptcy Specialist
- Claims Specialist
- Customer Care Specialist
- Default Specialist
- Foreclosure Specialist

- Investor Accounting Analyst
- Loss Mitigation Specialist
- Policy Specialist
- **Other (if match is unavailable)**

Pocket Edition Code

Fannie Mae will provide code snippets allowing you to fully test Pocket Edition before pushing to production.

Code Integration Location

Code should be inserted immediately after the <BODY> tag on your application, typically in the repeating code to load with every page.

Metadata Code Location

Pocket Edition code needs to be updated to capture metadata (user profile details), refer to the sample code below (highlighted in red) for specific location. Red-text between quotes should be updated to pull in specific information (e.g. User Name, UserID and Role).

Sample Code

```
----- SAMPLE CODE START -----  
  
<script>!function(t,e,o,c,n,a.....;</script>  
<script>  
nanorep.floatingWidget.on({  
  init: function() {  
    this.setConfigId('Provided by Fannie Mae');  
    this.setContext({"Touchpoint": "Provided by Fannie Mae",  
      "secondary_touchpoint": "Sub-Company Name",  
      "email": "User Email Address",  
      "fullname": "User Full Name",  
      "role": "User Role",  
      "SSID": "Provided by Fannie Mae"  
    });  
  }  
});  
</script>
```

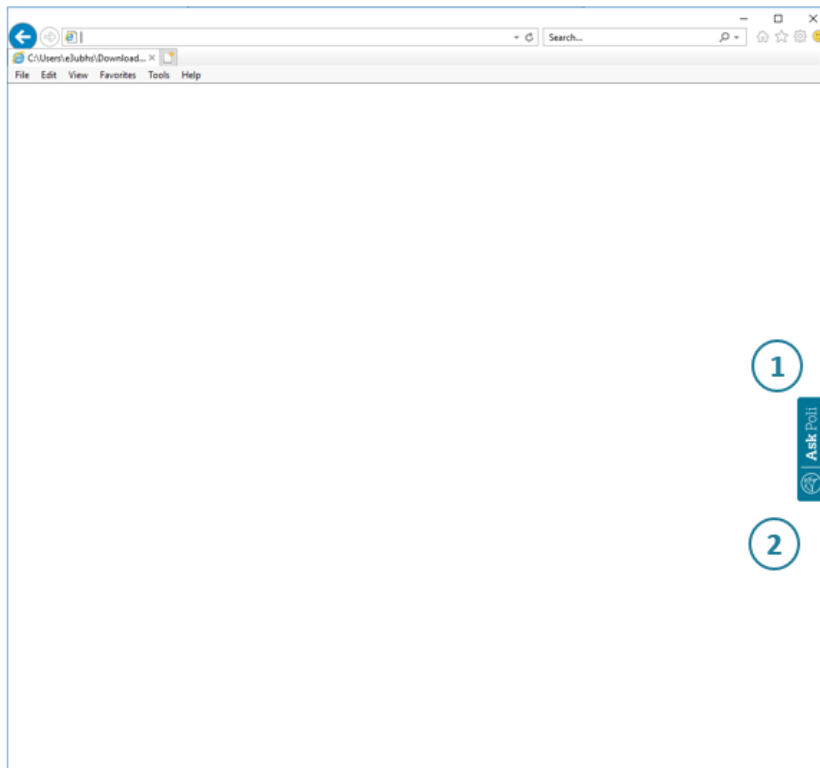
```
<!-- //nanorep floating widget -->
```

----- SAMPLE CODE END -----

Functional Validation Testing

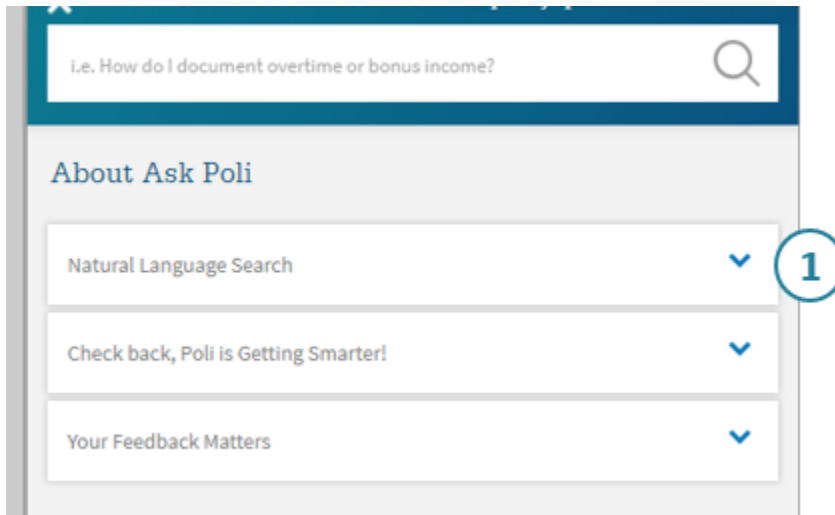
Once the code snippet has been deployed, execute the following steps to ensure Pocket Edition is fully functional. Please contact your Ask Poli point of contact for questions or concerns.

Feature Test: Initial Load



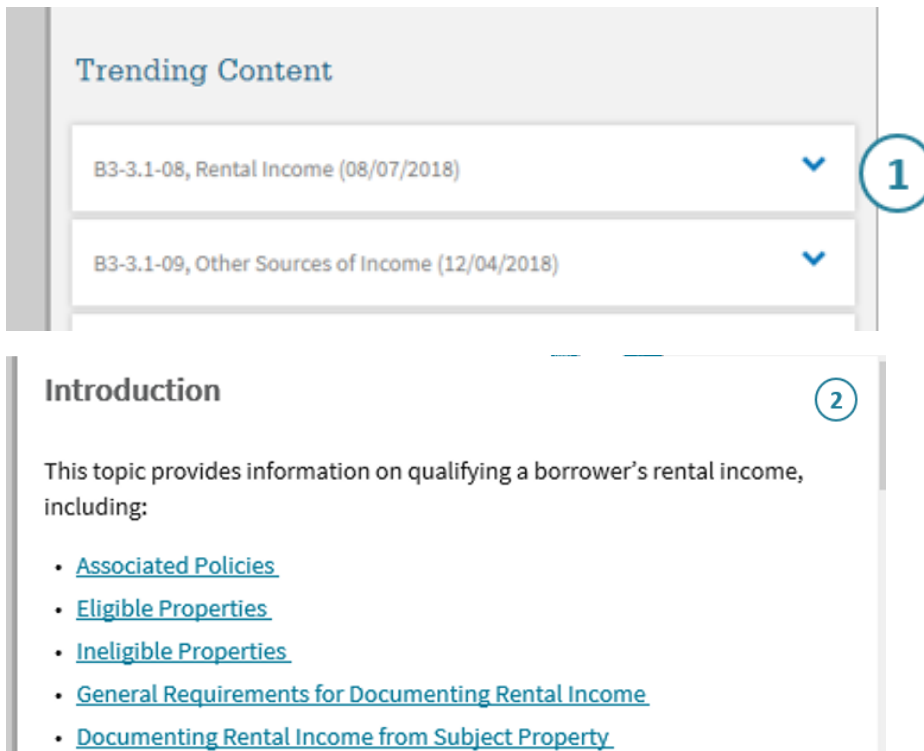
#	Feature	Action	Expected Behavior
1	Initial Load	Navigate to webpage with Pocket Edition	Widget Visible, right side of browser
2	Initial Load	Click Closed Tag to Open	Pocket Edition slides open, occupying right side of browser
3	Initial Load	Click Opened Tag to Close	Pocket Edition slides closed, only tag is visible

Feature Test: Accordion



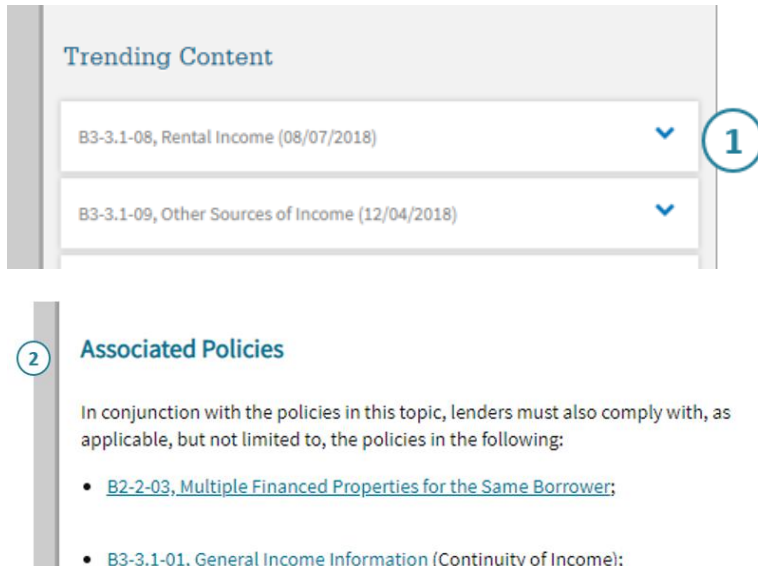
#	Feature	Action	Expected Behavior
	Setup	Open Widget	N/A
1	Accordion	Click Accordion Down arrow	Accordion expands down
2	Accordion	Click accordion Up arrow	Accordion shrinks up

Feature Test: Anchor Link



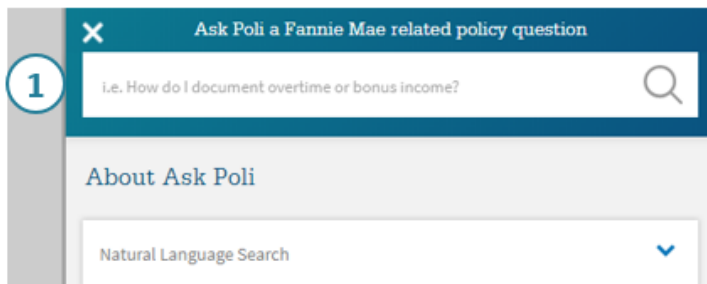
#	Feature	Action	Expected Behavior
	Setup	Open Widget	N/A
1	Anchor Link	Select first accordion under "Trending Content" section	Accordion expands down
2	Anchor Link	Click first anchor link	Jumps to relevant content block

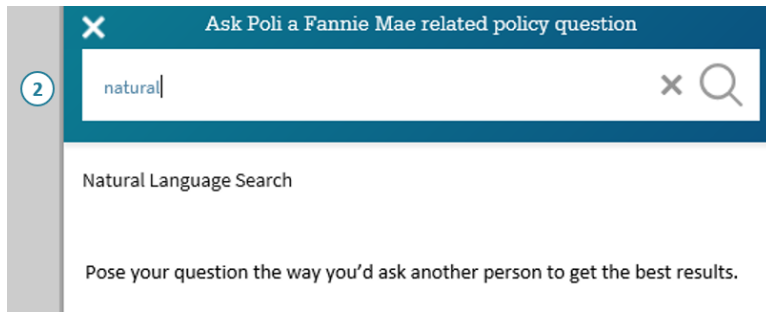
Feature Test: Link



#	Feature	Action	Expected Behavior
	Setup	Open Widget	N/A
1	Link	Select first accordion under "Trending Content" section	Accordion expands down
2	Link	Click first non-anchor link	Article loads

Feature Test: Search Bar

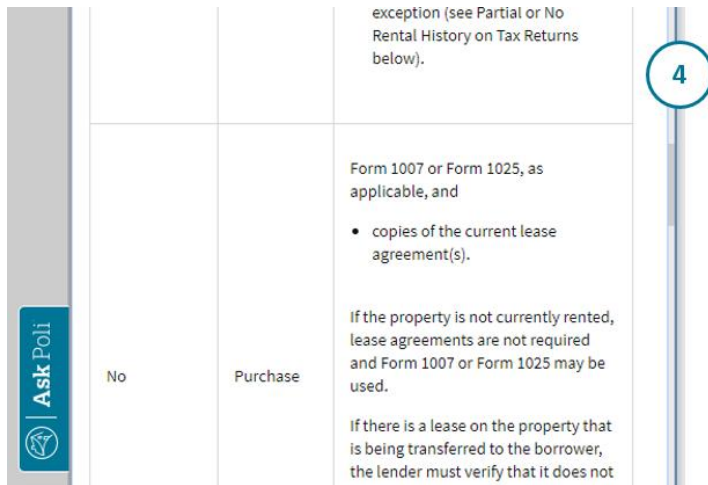




#	Feature	Action	Expected Behavior
	Setup	Open Widget	N/A
1	Search Bar	Select Search Bar Type, "Natural"	Answer drops down below search bar (see image #2)
2	Search Bar	Select "Enter" key	Article Fully Expands

Feature Test: Scroll Validation

This test will validate the scroll bar isn't hidden under your website's scrollbar.



#	Feature	Action	Expected Behavior
	Setup	Open Widget	N/A
1	Search Bar	Select Search Bar Type, "Rental Income"	Recommended articles will appear
2	Search Bar	Select "Enter" key	Multiple articles presented
3	Accordion	Select accordion "B3-3.1-08, Rental Income"	Article expands
4	Scroll Bar	Drag scrollbar up and down	Scrollbar is selectable, and article moves up/down with the scrollbar

Troubleshooting & Unique Environment Constraints

Since each environment is unique, local environment technologies and variables may impact Pocket Edition's functionality. Listed below are known constraints:

Software Framework Angular

Issue: Host application redirected when Pocket Edition anchor link selected

Details: Angular listens for URL changes, and upon change will load different content/components associated with that route. Anchor tags' native functionality will make a change in the URL when clicked. For example, an element on the page has an ID "Intro". When the anchor is clicked, "#Intro" will be appended to the URL, since the # indicates an element's ID. The application is detecting that change and attempting to load content from that new route, which does not exist, causing the host page to display "page not found".

Recommendation: Validate issue within your environment. We have customers using Angular without any issues.

Google Sites

Issue: Hosting website on Google Sites prevents Pocket Edition's embedded script from loading

Details: Google Sites security controls prevent embedded scripts from loading, preventing Pocket Edition functionality.

Troubleshooting: Links Open Blank Tabs

Ask Poli does not use href (hyperlink references) links within the widget. If you've deployed custom JavaScript that looks for anchor elements, then opens a new tab if href attribute does not exist or is outside the main page domain, then add a check for "nanoreplinkID" attribute to bypass your new tab functionality.

Appendix

Integration Check-List

Use the following check-list to ensure you're ready for production:

#	Requirement	Complete?	Date
1	Accepted Terms of Service		
2	Code snippet copied to test environment		
3	Validation functional testing		
4	Metadata fields in code are updated		
5	Validate metadata fields are working		
6	Deployed to production		

Please contact your Ask Poli point of contact if you have any questions.

Capturing On-Premises SharePoint User Profile Details (Metadata)

The following example is for on premises SharePoint reference only.

Once the customer logs into SharePoint, user profile details are stored in the “_spPageContextInfo” client object. Below is a generic example of pulling metadata fields.

This sample SharePoint code should be inserted immediately after the <BODY> tag on your website and before the Ask Poli code provided by Fannie Mae

```
<!-- Metadata Code Example Start -->
```

```
<!-- Capture User Profile Details -->
```

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.js"
type="text/javascript"> </script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery.SPServices/2014.02/jquery.SPServices.js"
type="text/javascript"> </script>
<script type="text/javascript">

var loginRole;
var loginEmail;
var loginName;
var requestHeaders = { "accept" : "application/json;odata=verbose" };
$.ajax({
    url: _spPageContextInfo.webAbsoluteUrl +
"/_api/SP.UserProfiles.PeopleManager/GetMyProperties",
    contentType : "application/json;odata=verbose",
    headers: requestHeaders,
    success : onSuccess,
    error : onError
});

function onSuccess(data, request){
    loginRole = data.d.Title;
    loginEmail = data.d.Email;
    loginName = data.d.displayName;

```

```
<!-- Map Role Field-->
```

```
if (loginRole == "Update with SharePoint title") {
    loginRole = "QC";
}
else if(loginRole == "Update with SharePoint title") {
    loginRole = "Loan processor";
}
else if(loginRole == "Update with SharePoint title") {
    loginRole = "Mortgage originator";
}
else if(loginRole == "Update with SharePoint title") {
    loginRole = "Other";
}
else if(loginRole == "Update with SharePoint title") {
    loginRole = "Underwriter ";
}
console.log("loginRole value ==== " + loginRole);
console.log("loginEmail value ==== " + loginEmail);
```

```
        console.log("loginName value ==== " + loginName);  
    }  
  
    function onError(error) {  
        alert("error");  
    }  
  
</script>
```

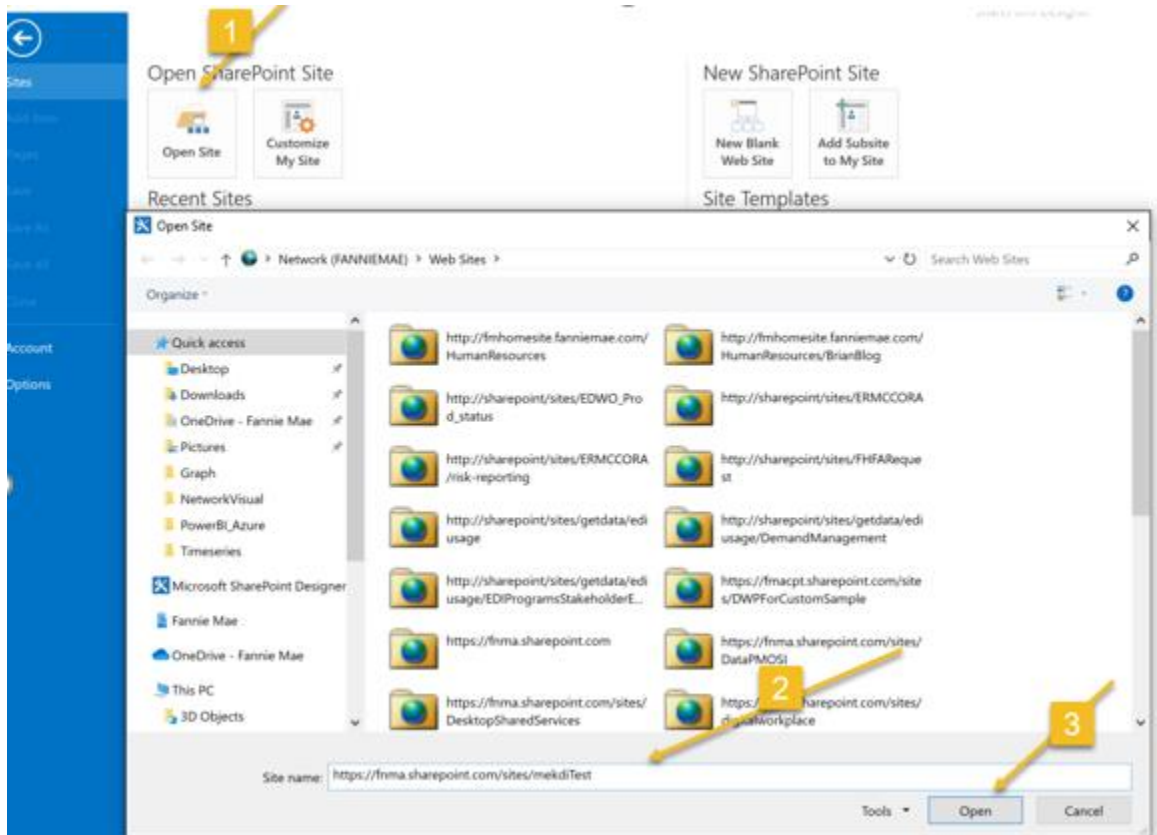
```
<!--Metadata Code Example End -->
```

```
<!-- ADD Widget Code Here - After Metadata Code -->
```


Adding Pocket Edition Code to SharePoint Master Page

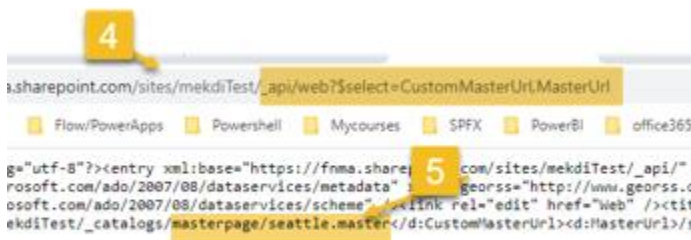
The following steps provide an overview of installing Pocket Edition code into a SharePoint master page. These steps are specific to SharePoint installations only.

1. Open the site collection you want to add the widget using SharePoint designer

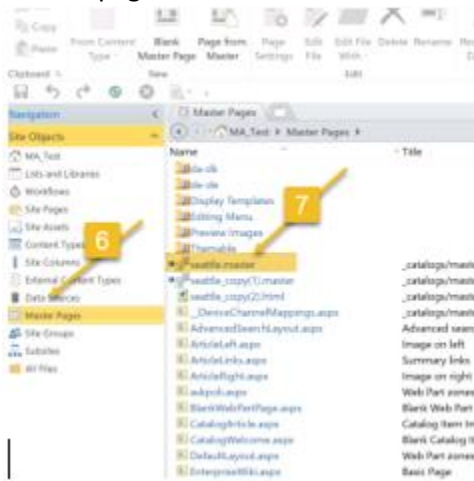


2. Check which master page the site collection is associated with using the below url URL(change the site collection name by users) as highlighted on #5 check if the master page is seattle or oslo (or any other custom master page)

- o [https://fnma.sharepoint.com/sites/xxxx/_api/web?\\$select=CustomMasterUrl,MasterUrl](https://fnma.sharepoint.com/sites/xxxx/_api/web?$select=CustomMasterUrl,MasterUrl)



3. On SharePoint Designer (from step 1)
 - Select Master Page on (#6 below) from left navigation.
 - Select the master page associated with the site collection (#7)- right click on the master page name and edit in advance mode



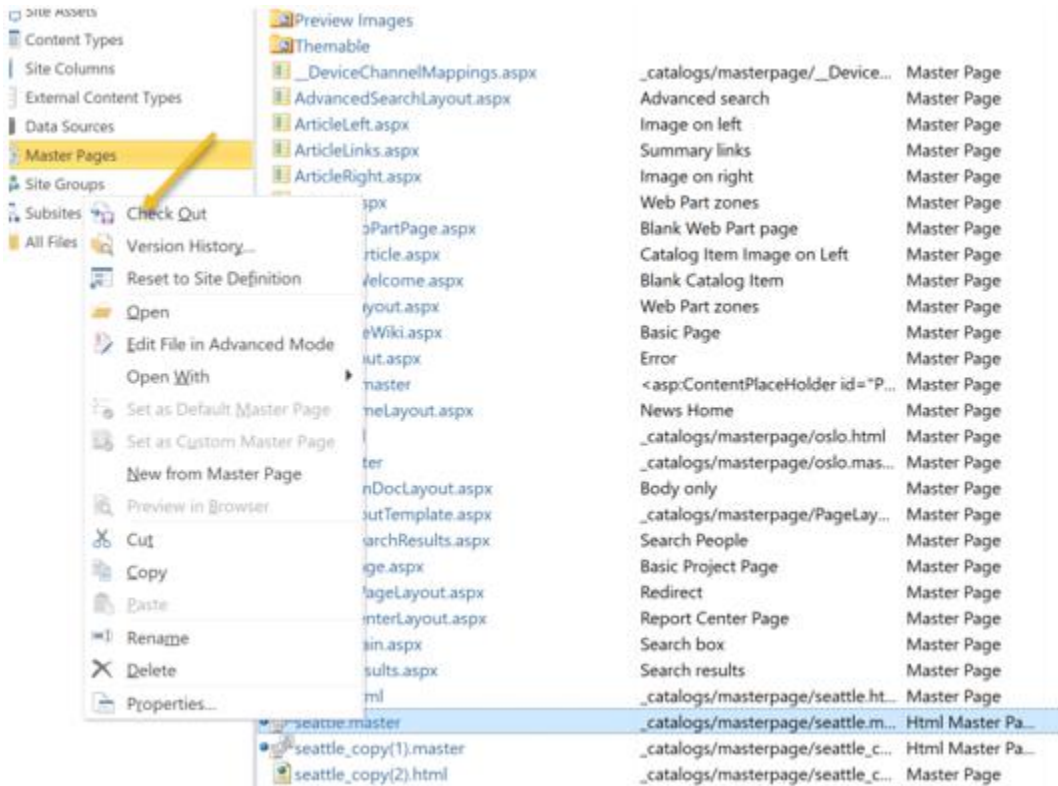
4. On the editor under <body> tag search for the following tag, below closing tag (
 - <SharePoint:DelegateControl ControlId="GlobalSiteLink3" Scope="Farm" runat="server" Visible="false" />
5. Add <div> </div>
6. Paste the Pocket Edition script in between the dive tag you added on step 5

```
<div>
<script src="https://fnma.sharepoint.com/sites/mekdiTest/SiteAssets/ASKMAE/jquery.js" type="text/javascript"> </script>
<script>
(function ($) {
    'use strict';
    var loginRole;
    var loginEmail;
    var loginName;
    $(document).ready(function () {
        getMSGraphAccessToken().then(function (msGraphToken) {
            $.ajax({
                url: "https://graph.microsoft.com/v1.0/me",
                headers: {
                    "Accept": "application/json",
                    "Authorization": "Bearer " + msGraphToken
                },
                success: onSuccess,
                error: function (jqxr, errorCode, errorThrown) {
                    console.log(jqxr.responseText);
                }
            });
        });
    });
});
</script>
```

```
//nanorep floating widget -->

function getMSGraphAccessToken() {
  var deferred = new jQuery.Deferred();
  var requestHeaders = {
    'X-RequestDigest': $("#_REQUESTDIGEST").val(),
    "accept": "application/json;odata=nometadata",
    "content-type": "application/json;odata=nometadata"
  };
  var resourceData = {
    "resource": "https://graph.microsoft.com",
  };
  $.ajax({
    url: _spPageContextInfo.webAbsoluteUrl + "/_api/SP.OAuth.Token/Acquire",
    headers: requestHeaders,
    type: "POST",
    data: JSON.stringify(resourceData),
    success: function (data) {
      console.log(data);
      var msGraphToken = data.access_token;
      deferred.resolve(msGraphToken);
    },
    error: function (jqxr, errorCode, errorThrown) {
      console.log(jqxr.responseText);
      deferred.reject(jqxr.responseText);
    }
  });
  return deferred.promise();
}
```

7. Save the script
8. Right click on the master page name and check in if it was checked out



9. Open the site in browser refresh (ctrl F5) and check if the widget appears on all page

