



Fiori app extensions with WebIDE

Valid: June 2020



Agenda

- Fiori app extensions
- Create an Extension Project
- Extensibility Pane
- Extension Project
- Extend View/Fragments with Extension Points (View Extension)
- Replace View
- Extend Controller with ControllerHooks
- Extend Controller
- Extend OData Service
- Bring all together

Training setup/alignment

Please respect the good training environment rules



Cell phones

Please turn off

Distracting

Vibration mode, if urgent call expected

Focus on training

Please close your laptop



Questions

There are no stupid questions

Good

Any time

Please ask

Many

Ask the trainer, not your neighbor

Ask again



Timing

Follow agenda

Important

Get training accomplished



Breaks

Appropriate

Be back in time

Time-out



Feedback

Please provide

Positive or negative

Appreciated

Specific

Constructive

Training setup/alignment

- Timeline
 - Daily from 09:00 AM until 05:00 PM
 - Lunch break from ~12:30 AM / 1 hour
 - Small breaks during the sessions
 - Before lunch every hour / 15 minutes
 - After lunch every hour / 15 minutes
- We will do a review of all exercise together
- Save all developments in your Workspace
- Create a new program at every exercise

Fiori app extensions

Fiori app extensions with WebIDE

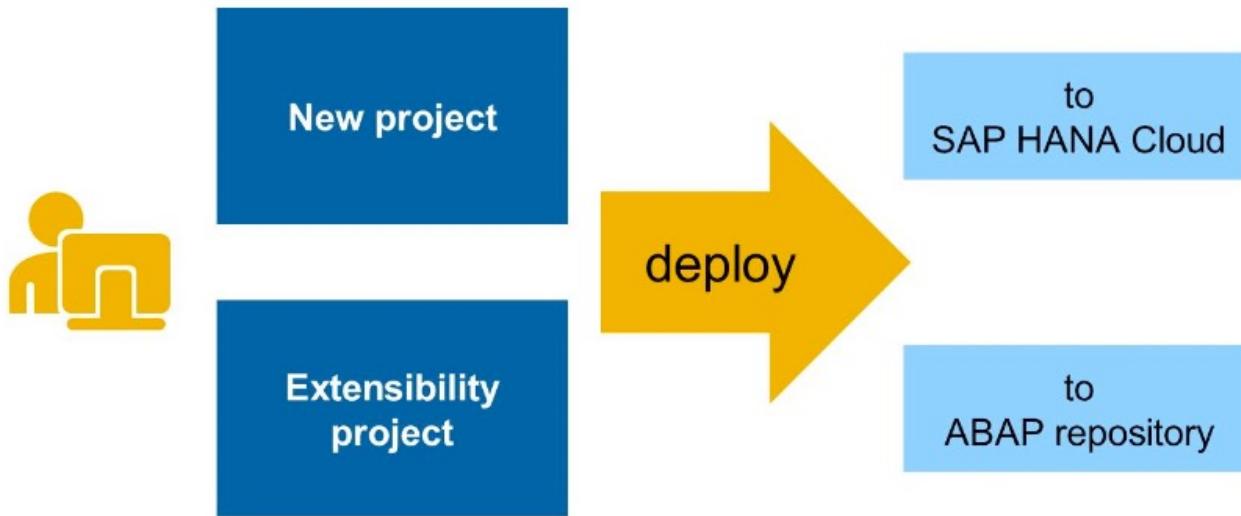
Fiori app extensions

SAP Fiori app extensions have the following features:

- Are integrated into SAP Web IDE in a semi-automated fashion
- Are available for very wide range of situations before modifications are necessary
- Use isolated coding from the original project
- Are also available in Eclipse (but more manual)

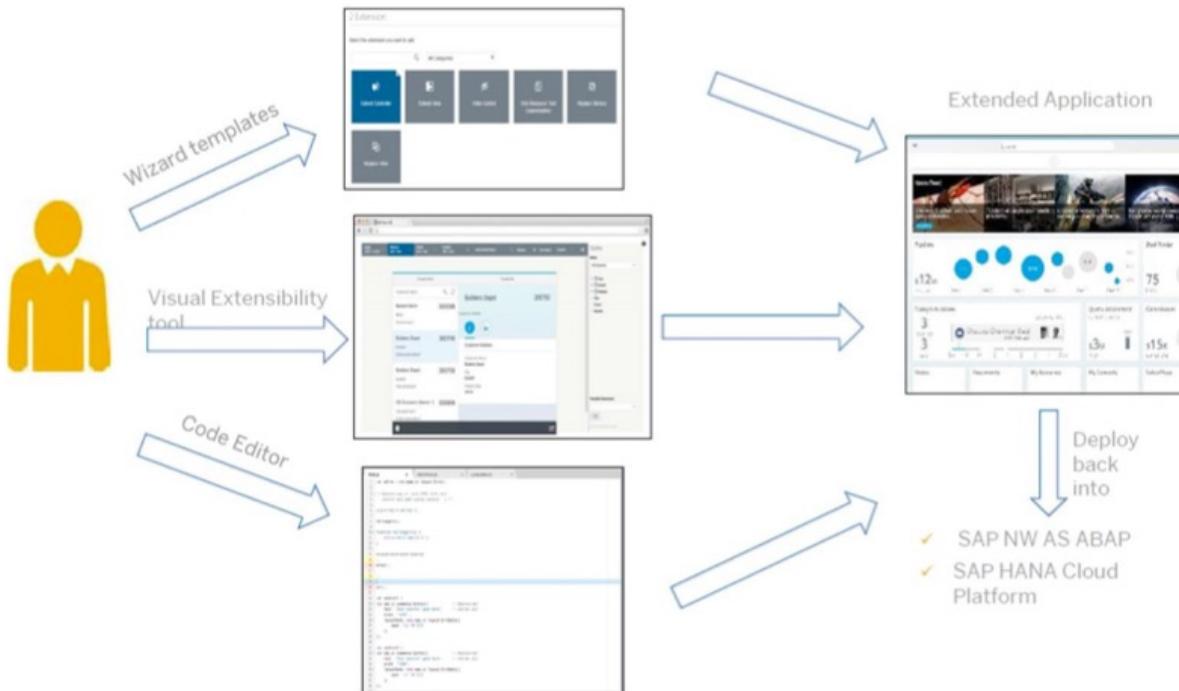
Fiori app extensions with WebIDE

Create an extention project



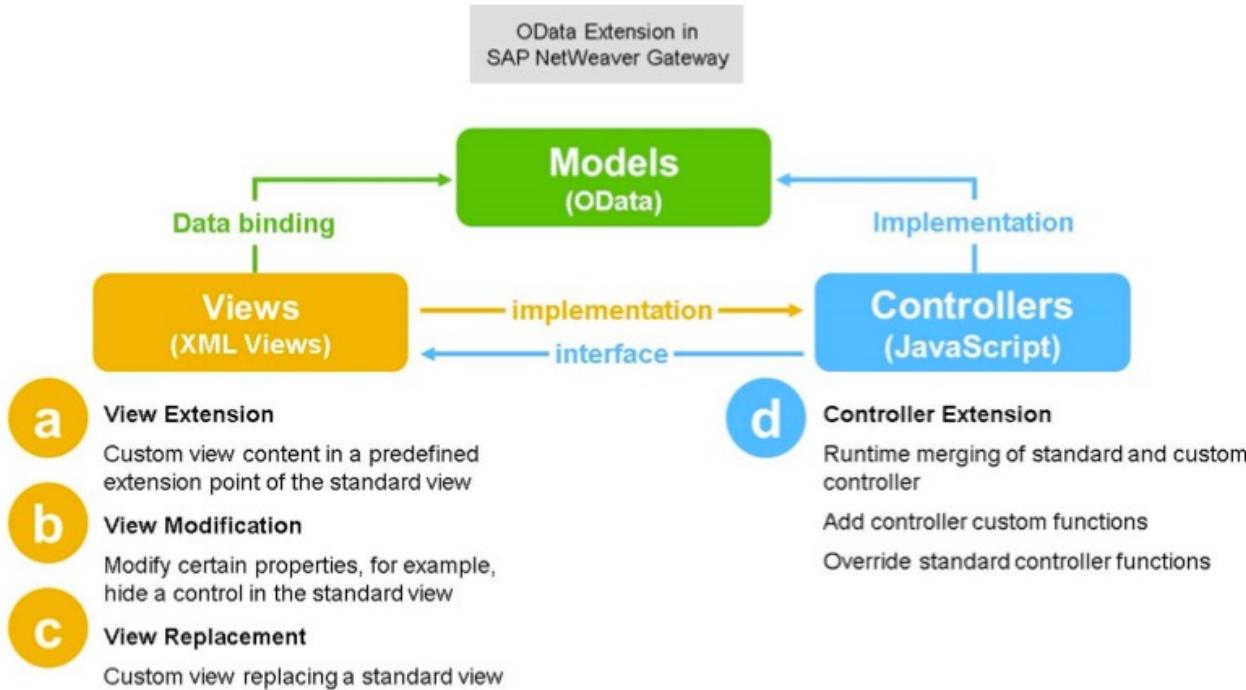
Fiori app extensions with WebIDE

Fiori app extensions



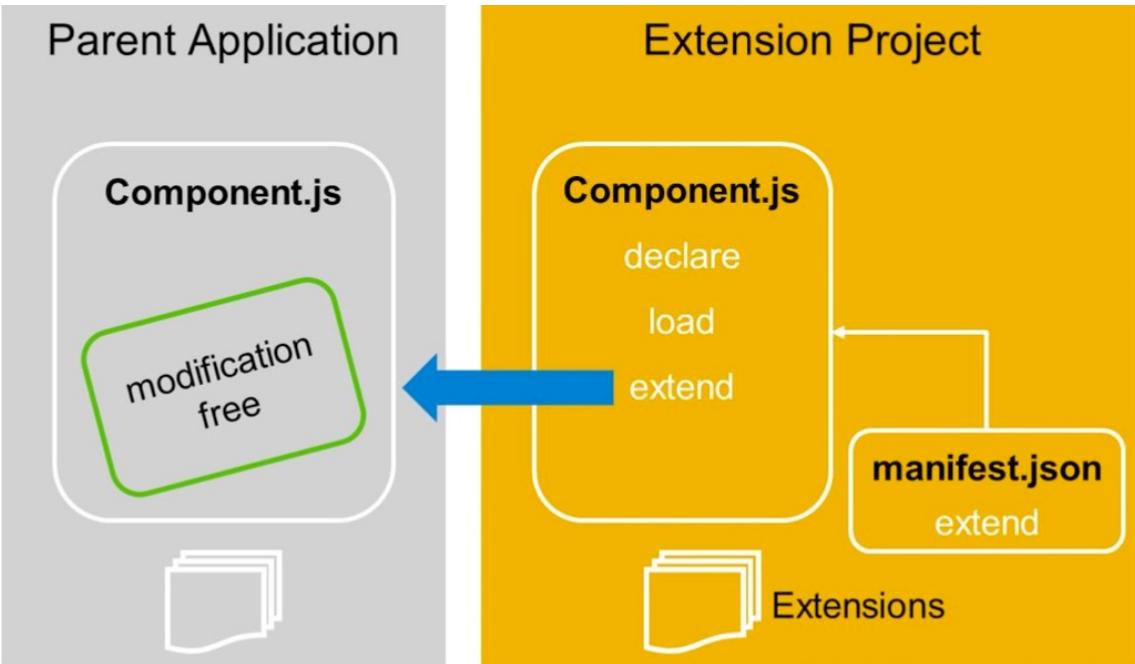
Fiori app extensions with WebIDE

Fiori app extensions



Fiori app extensions with WebIDE

Create an extention project



- **Configuration of Components**

Customization is based on the configuration of Components. A special area of their configuration is dedicated to customization information. This configuration is located in a JavaScript file named **Component.js**

- **Modification free**

The delivered standard application remains unchanged and hence the extension is considered to be modification free.

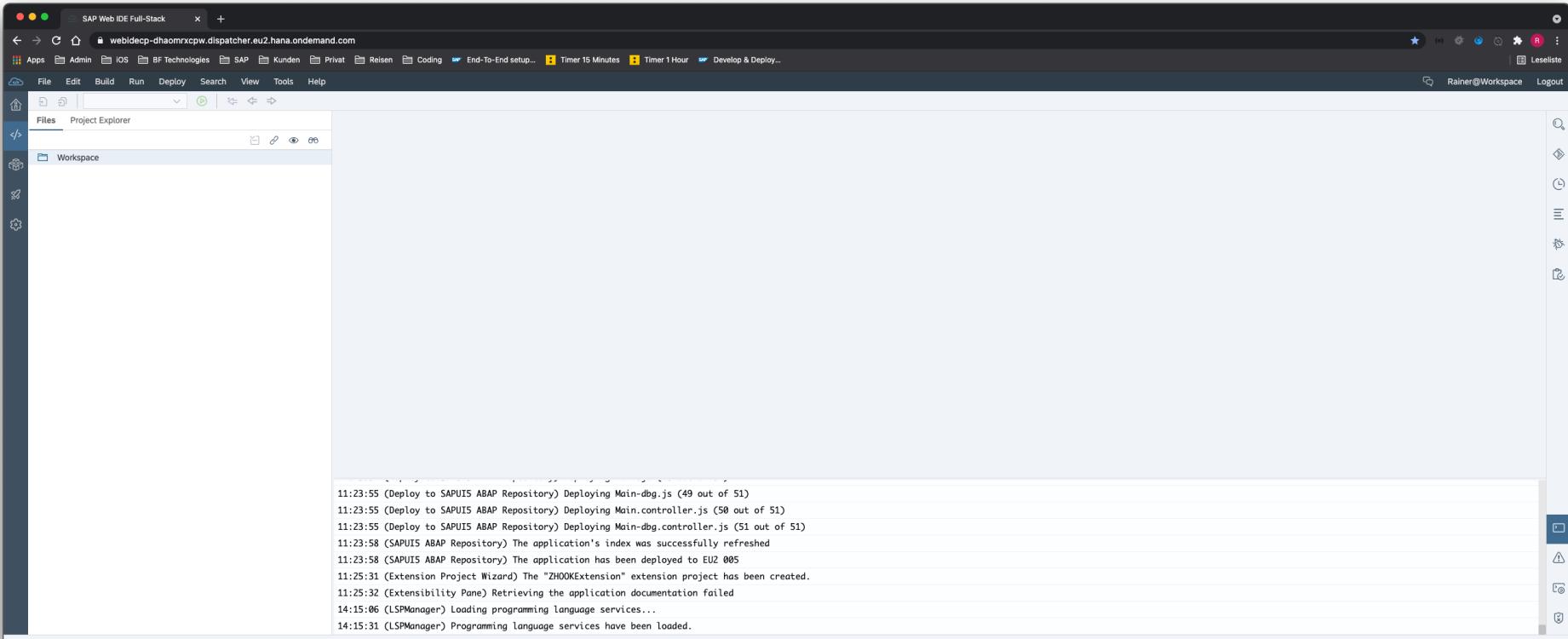
- **Custom application**

The custom application becomes the start-up project which then launches the delivered standard application with the additional customizing configuration.

Create an Extension Project

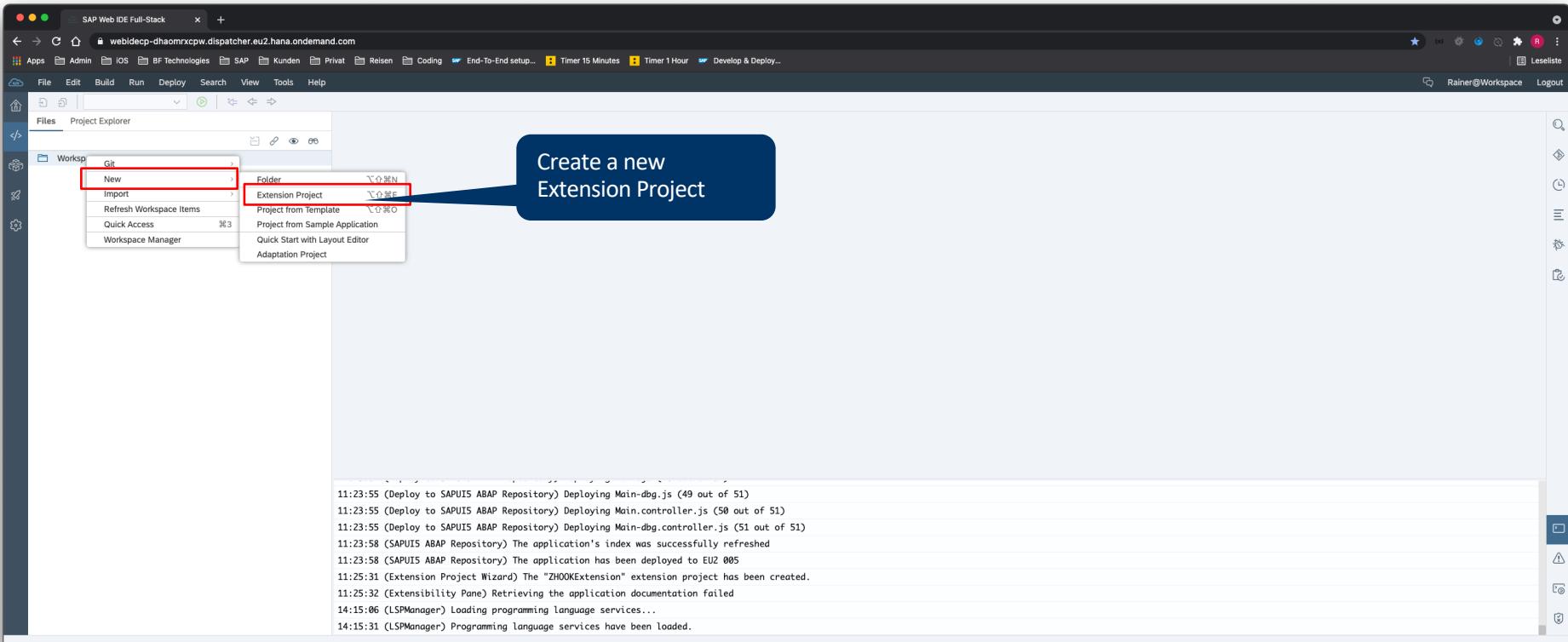
Fiori app extensions with WebIDE

Create an extention project



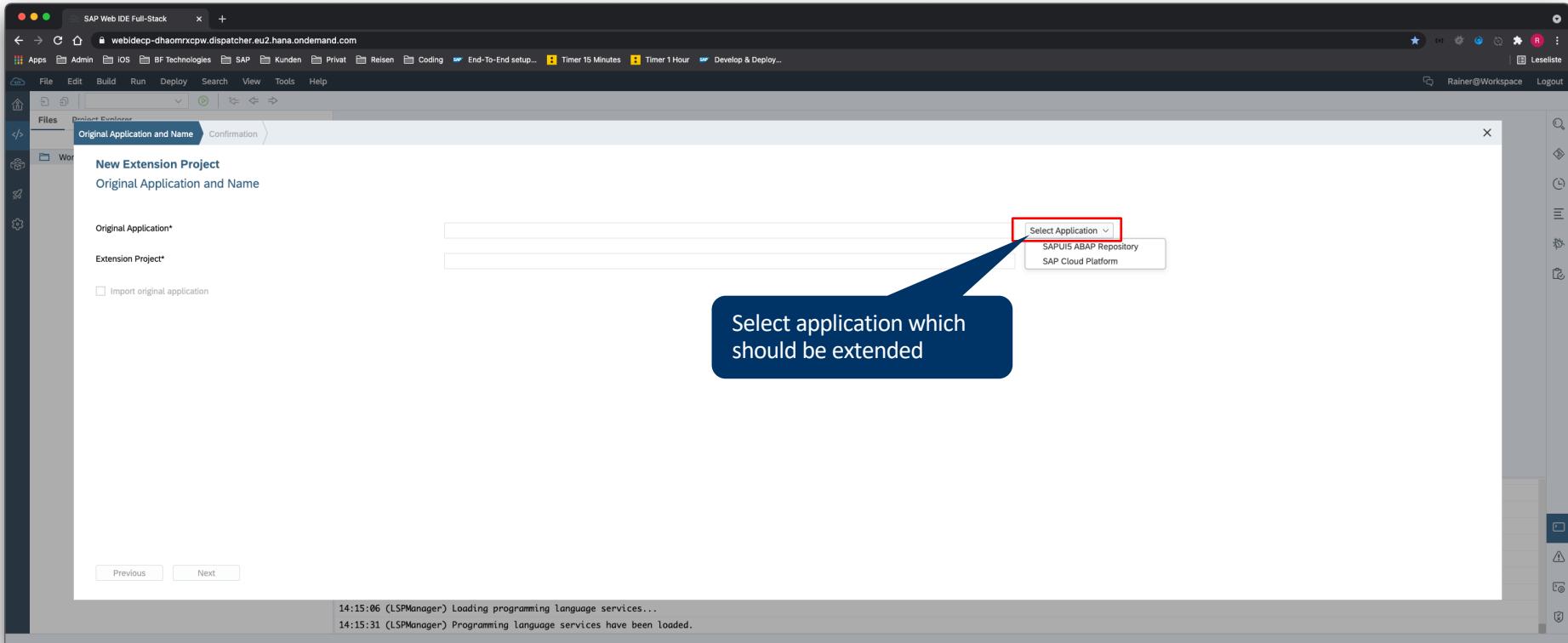
Fiori app extensions with WebIDE

Create an extention project



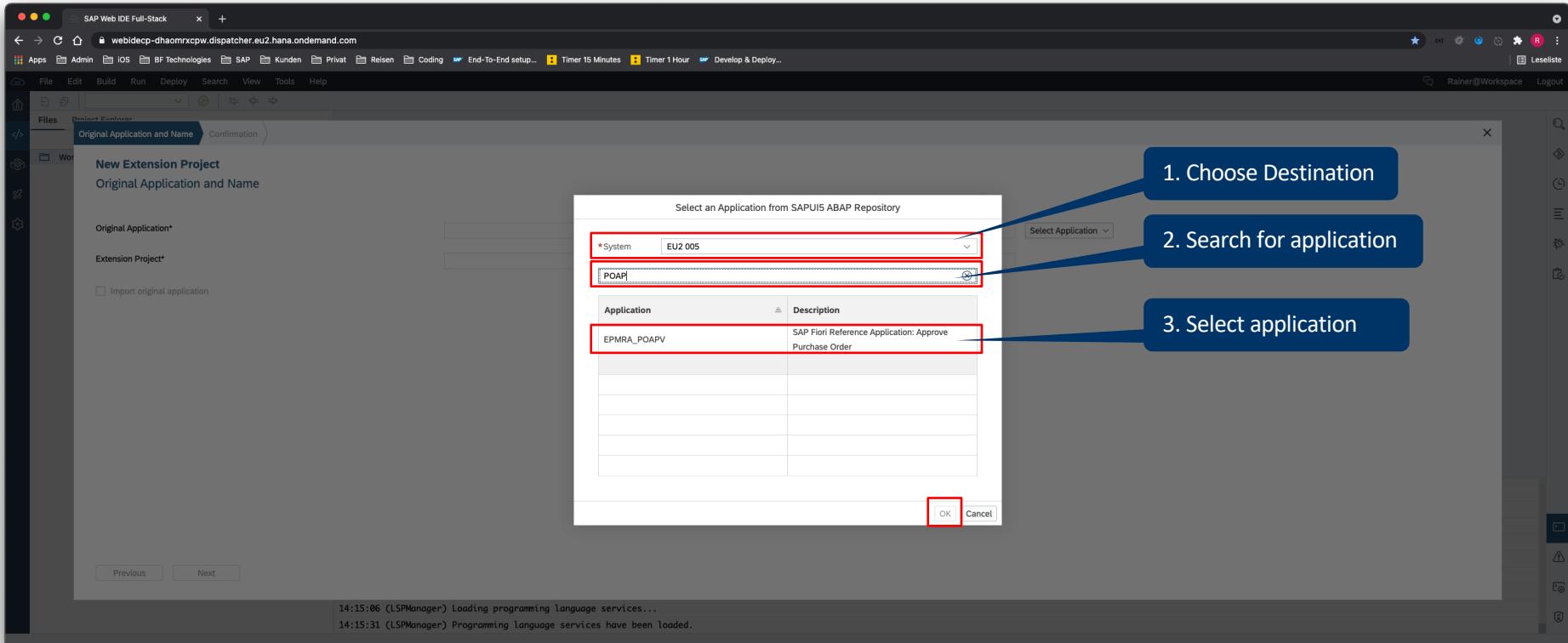
Fiori app extensions with WebIDE

Create an extention project



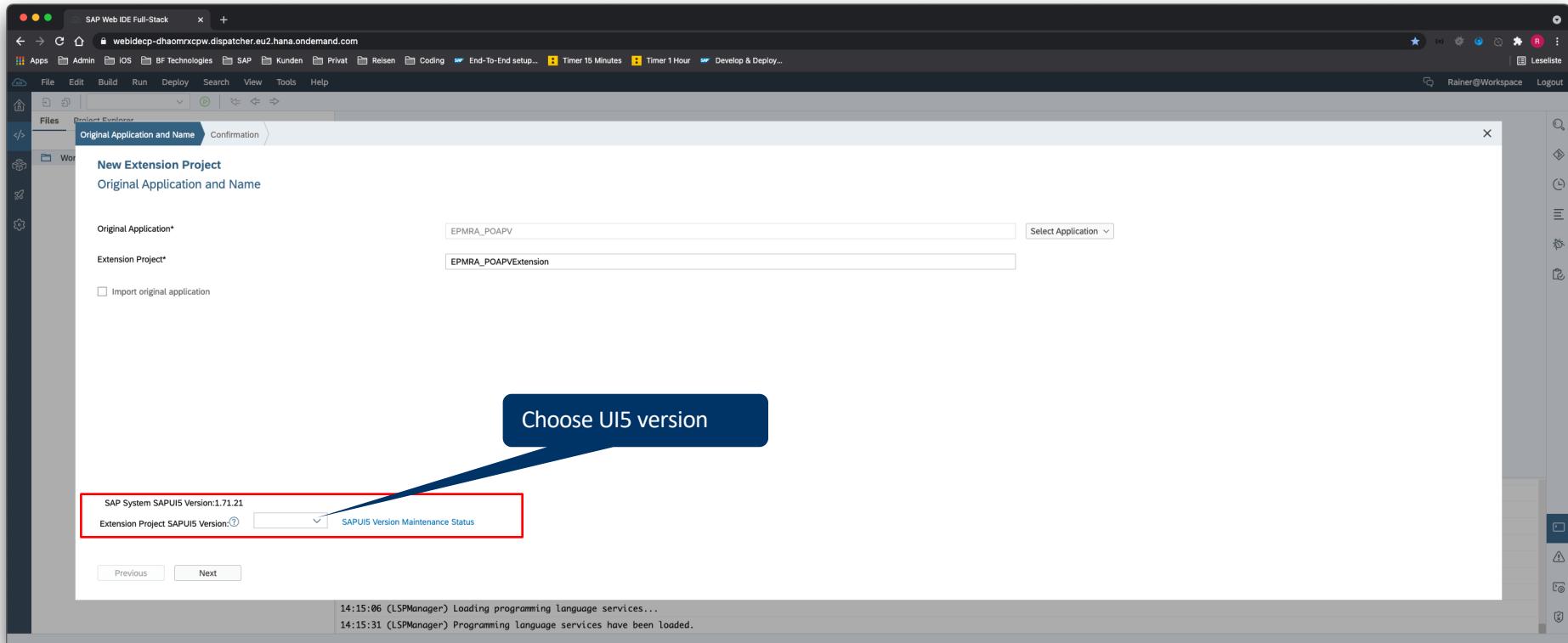
Fiori app extensions with WebIDE

Create an extention project



Fiori app extensions with WebIDE

Create an extention project



The screenshot shows the SAP Web IDE Full-Stack interface for creating a Fiori app extension. The main title bar reads "SAP Web IDE Full-Stack". The address bar shows the URL "webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com". The top navigation bar includes links for Apps, Admin, iOS, BI Technologies, SAP, Kunden, Privat, Reisen, Coding, End-To-End setup..., Timer 15 Minutes, Timer 1 Hour, Develop & Deploy..., File, Edit, Build, Run, Deploy, Search, View, Tools, Help, and a user profile for Rainer@Workspace.

The central workspace displays the "Original Application and Name" configuration screen. It features two tabs: "Original Application and Name" (selected) and "Confirmation".

New Extension Project
Original Application and Name

Original Application*: EPMRA_POAPV (input field) | Select Application (button)

Extension Project*: EPMRA_POAPVExtension (input field)

Import original application

A blue callout bubble with the text "Choose UI5 version" points to the "SAPUI5 Version" dropdown menu. This menu is highlighted with a red border and contains the following items:

- SAP System SAPUI5 Version: 1.71.21
- Extension Project SAPUI5 Version: SAPUI5 Version Maintenance Status

At the bottom of the screen, there are "Previous" and "Next" buttons. The status bar at the bottom shows log messages: "14:15:06 (LSPManager) Loading programming language services..." and "14:15:31 (LSPManager) Programming language services have been loaded."

Fiori app extensions with WebIDE

Create an extention project

The screenshot shows the SAP Web IDE Full-Stack interface. In the center, a confirmation dialog box is displayed with the title "Confirmation". It contains the message "Click Finish. A new extension project named EPMRA_POAPVExtension is created in your workspace." Below this message is a checkbox labeled "Open extension project in extensibility pane". A red rectangular box highlights this checkbox. A blue callout bubble points to the right from the checkbox, containing the text "Select if extensibility pane should open after creating the extension project". At the bottom of the dialog are "Previous" and "Finish" buttons. The status bar at the bottom of the IDE shows log messages: "14:15:06 (LSPManager) Loading programming language services..." and "14:15:31 (LSPManager) Programming language services have been loaded.". The top navigation bar shows the URL "webidecp-dhaomnxcpv.dispatcher.eu2.hana.ondemand.com" and the SAP Fiori application menu.

Fiori app extensions with WebIDE

Create an extention project



Extensibility Pane

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot illustrates the Fiori app extensibility features available in SAP Web IDE. It shows a Fiori application for Purchase Orders (PO) with various extensibility options highlighted:

- Select mode**: A button in the top navigation bar.
- Preview Size / Device**: A dropdown menu for selecting preview dimensions (Large, Medium, Small, Custom) and preview mode.
- Select language**: A button to change the application's language to English.
- Generate QR code for previe on mobile device**: A button to generate a QR code for mobile preview.
- Refresh preview**: A button to refresh the preview of the application.
- Hierarchy of the application**: The Extensibility pane on the right side, which displays the application's structure. It includes sections for Views (Purchase Order, PurchaseOrderDetails, PurchaseOrderSummary), Fragments (ApprovalDialog), and Controllers (PurchaseOrders, PurchaseOrderDetails, PurchaseOrderSummary).
- Preview or Extensiblity of application**: A large callout pointing to the main application area, which shows a list of purchase orders and their details.

Purchase Orders (20)

Purchase Order

South American IT Company 3,913.91 EUR
Ordered by EPM Demo User

South American IT 3,913.91 EUR
Company 4 days ago

Ordered by EPM Demo User
Getränkegroßhand 43,534.96 EUR
el Janssen 4 days ago

Ordered by EPM Demo User
Danish Fish Trading Company 18,142.74 EUR
8 Items 4 days ago

Ordered by EPM Demo User
New Line Design 6,251.07 EUR
5 Items 4 days ago

Ordered by EPM Demo User
Talpa 4,467.94 EUR
5 Items 4 days ago

General Information

Purchase Order ID: 30000000
Delivery Date: Jun 3, 2021 or later
Delivered To: Zeppelinstrasse 2, 85399 Munich, DE Germany

Items (10)

Product	Delivery Date	Quantity	Price	Gross Amount
Play Movie	Jun 3, 2021	1	130.00 ARS	154.70 ARS
Jet Scan Professional	Jun 3, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 6, 2021	2	130.00 ARS	309.40 ARS
Jet Scan Professional	Jun 7, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 8, 2021	3	130.00 ARS	464.10 ARS
Jet Scan Professional	Jun 9, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 10, 2021	2	130.00 ARS	309.40 ARS

Approve Reject

Outline

- Views
 - App
 - EmptyPage
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - detailsPage
 - S3_PurchaseOrderSummary
- Fragments
 - ApprovalDialog
- Controllers
 - App
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - extHookOnDataReceived
 - S3_PurchaseOrderSummary
 - extHookOnTableUpdateFinished

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot shows the SAP Web IDE interface with the Extensibility Pane open. The main area displays a Fiori application for Purchase Orders. A red box highlights the 'Extensibility Mode' dropdown in the top navigation bar. The Extensibility Pane on the right lists various extension points and their status:

- Views**:
 - App
 - EmptyPage
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - detailsPage
 - content
 - objectHeader
 - extensionAfterObjectHeader
 - poHeaderForm
 - extensionAfterForm
 - potentsTable
 - extensionAfterForm
 - footer
 - extensionAfterForm
 - S3_PurchaseOrderSummary
- Fragments**:
 - ApprovalDialog
- Controllers**:
 - App
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - extHookOnDataReceived
 - S3_PurchaseOrderSummary
 - extHookOnTableUpdateFinished

extHookOnDataReceived is selected.

Extend Remove Extension Open

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot shows the SAP Web IDE interface with an open Fiori application titled "Purchase Orders (20)". The application displays a list of purchase orders from various companies, each with a total amount and delivery date. A callout bubble points to two specific extension points in the "General Information" section of the details view, which are highlighted with red boxes.

Indicator for Extension Points

The Extensibility Pane on the right side of the interface lists the structure of the application. It shows the hierarchy of views and components, with specific extension points highlighted by red boxes:

- extensionAfterObjectHeader**: Located under **S3_PurchaseOrderDetails** > **detailsPage**.
- extensionAfterForm**: Located under **S3_PurchaseOrderDetails** > **detailsPage**.
- pointsTable**: Located under **S3_PurchaseOrderDetails** > **detailsPage**.

The pane also includes buttons for "Extend", "Remove Extension", and "Open".

Product	Delivery Date	Quantity	Price	Gross Amount
Play Movie	Jun 3, 2021	1	130.00 ARS	154.70 ARS
Jet Scan Professional	Jun 3, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 6, 2021	2	130.00 ARS	309.40 ARS
Jet Scan Professional	Jun 7, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 8, 2021	3	130.00 ARS	464.10 ARS
Jet Scan Professional	Jun 9, 2021	2	169.00 ARS	402.22 ARS

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot shows the SAP Web IDE interface with a Fiori application open. The application displays a list of purchase orders. A callout bubble points to a control in the application with the text "Select control to extend". Another callout bubble points to the "Hide Control" button in the Extensibility pane with the text "Extend control". The Extensibility pane itself has a red box around the "changedAtStatus" control, and another red box highlights the "Hide Control" button.

SAP Web IDE Full-Stack

Purchase Orders (20)

South American IT Company
Ordered by EPM Demo User
South American IT 3,913.91 EUR
Company
10 Items 4 days ago

Getränkegroßhand 43,534.96 EUR el Janssen
10 Items 4 days ago

Danish Fish Trading Company 18,142.74 EUR
8 Items 4 days ago

New Line Design 6,251.07 EUR
5 Items 4 days ago

Talpa 4,467.94 EUR
5 Items 4 days ago

Purchase Order ID: 30000000
Delivery Date: Jun 3, 2021 or later
Delivered To: Zeppelinstrasse 2, 85399 Munich, DE Germany

General Information

Items (10)

Product	Delivery Date	Quantity	Price	Gross Amount
Play Movie	Jun 3, 2021	1	130.00 ARS	154.70 ARS
Jet Scan Professional	Jun 3, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 6, 2021	2	130.00 ARS	309.40 ARS
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Play Movie	Jun 8, 2021	3	130.00 ARS	464.10 ARS
Jet Scan Professional	Jun 9, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 10, 2021	2	130.00 ARS	309.40 ARS

Approve Reject

Outline

Show all elements

Views

- App
- EmptyPage
- S2_PurchaseOrders
 - masterPage
 - headerContent
 - subheader
 - content
 - pullToRefresh
 - masterList
 - items
 - masterListItems
 - secondStatus
 - changedAtStatus
 - swipeContent
 - footer
- S3_PurchaseOrderDetails
- S3_PurchaseOrderSummary

Fragments

- ApprovalDialog

Controllers

changedAtStatus is selected.

Extend Remove Extension Open Hide Control

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot shows the SAP Web IDE interface with the Extensibility pane open. The main view displays a Fiori application for Purchase Orders. A callout bubble points to the Extensibility pane with the text "Select controller to extend with controller hook". Another callout bubble points to the "Extend UI Controller Hook" button in the bottom right of the pane.

SAP Web IDE Full-Stack

Large 100% × 100% Medium 800 × 600 Small 320 × 480 Custom 480 × 800 Preview Mode Refresh Orientation English

Rainer@Workspace Logout

Purchase Orders (20)

South American IT Company 3,913.91 EUR
Ordered by EPM Demo User
South American IT 3,913.91 EUR
Company 10 Items 4 days ago

Getränkegroßhand 43,534.96 EUR el Janssen 10 Items 4 days ago

Danish Fish Trading Company 18,142.74 EUR 8 Items 4 days ago

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Purchase Order ID: 30000000
Delivery Date: Jun 3, 2021 or later
Delivered To: Zeppelinstrasse 2, 85399 Munich, DE Germany

General Information

Items (10)

Product	Delivery Date	Quantity	Unit Price	Total Price
Play Movie	Jun 3, 2021	1	130.00 ARS	154.70 ARS
Jet Scan Professional	Jun 3, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 6, 2021	2	130.00 ARS	309.40 ARS
Jet Scan Professional	Jun 7, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 8, 2021	3	130.00 ARS	464.10 ARS
Jet Scan Professional	Jun 9, 2021	2	169.00 ARS	402.22 ARS
Play Movie	Jun 10, 2021	2	130.00 ARS	309.40 ARS

Approve Reject

Outline

Show all elements

Views

- App
- EmptyPage
- S2_PurchaseOrders
- S3_PurchaseOrderDetails
- detailsPage
- content
 - objectHeader
 - extensionAfterObjectHeader
 - poHeaderForm
 - extensionAfterForm
 - potentsTable
 - extensionTable
 - footer

Fragments

- ApprovalDialog

Controllers

- App
- S2_PurchaseOrders
- S3_PurchaseOrderDetails
 - extHookOnDataReceived
- S3_PurchaseOrderSummary
 - extHookOnTableUpdateFinished

extHookOnDataReceived is selected.

Extend Remove Extension Open

Extend UI Controller Hook

Fiori app extensions with WebIDE

Extensibility Pane

The screenshot shows the SAP Web IDE interface with a Fiori application open. The left side displays a list of purchase orders, and the right side shows a detailed view of a specific purchase order for 'South American IT Company' with a total amount of 3,913.91 EUR. The Extensibility pane is open on the right, showing the outline of the application's structure. A callout bubble points to the 'extensionAfterForm' node under the 'S3_PurchaseOrderDetails' view, which is highlighted with a red border. Another callout bubble at the bottom points to the 'Extend View/Fragment' button, also highlighted with a red border.

Select extension point for view

extensionAfterForm

Extend View/Fragment

Outline

- Views
 - App
 - EmptyPage
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - detailsPage
 - content
 - objectHeader
 - extensionAfterObjectHeader
 - poHeaderForm
 - extensionAfterForm
 - potiensTable
 - footer
 - S3_PurchaseOrderSummary
 - Fragments
 - ApprovalDialog
 - Controllers
 - App
 - S2_PurchaseOrders
 - S3_PurchaseOrderDetails
 - extHookOnDataReceived
 - S3_PurchaseOrderSummary
 - extHookOnTableUpdateFinished

UI5 InApp Extension with WebIDE

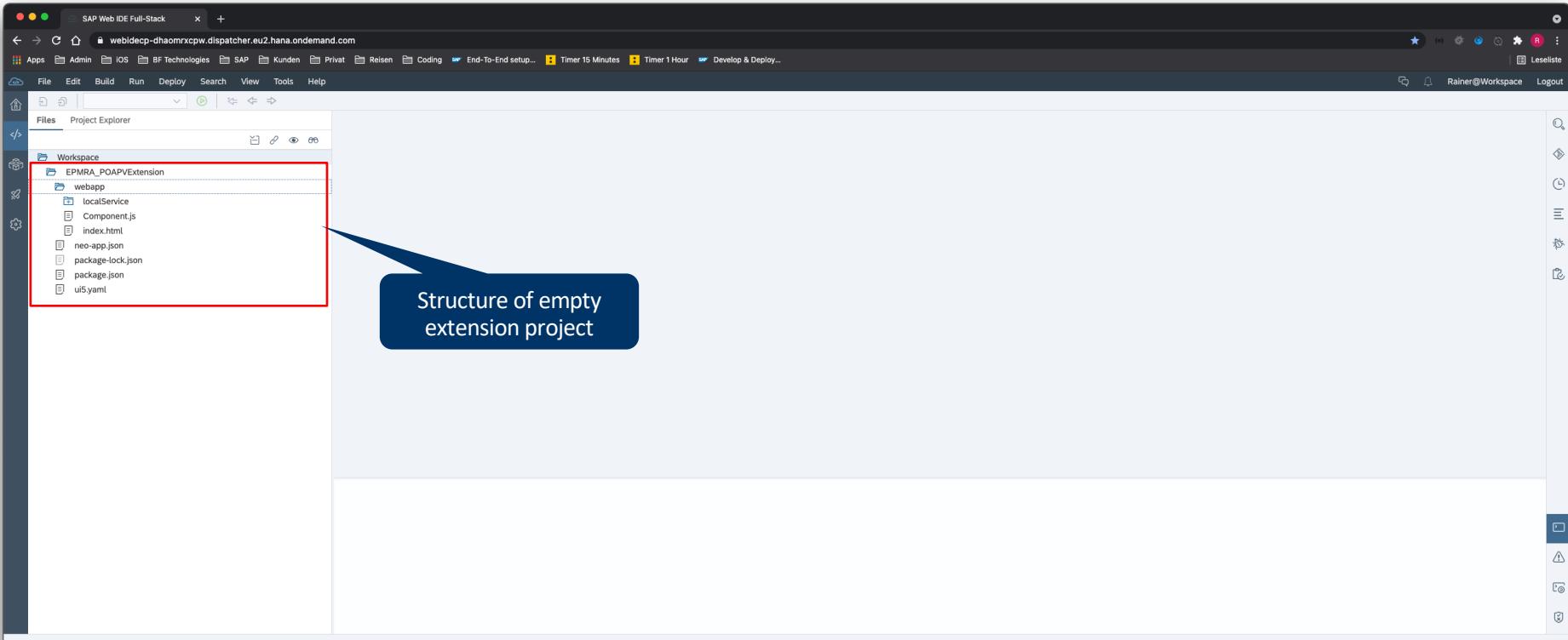
Extensibility Pane



Extension Project

Fiori app extensions with WebIDE

Extension Project



Fiori app extensions with WebIDE

Extension Project

The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPVExtension". The "Component.js" file is open in the editor. The code defines a component extending "nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component". It includes a configuration object with a "sap.ui.component.load" method that specifies a URL relative to the component's own namespace. A "customizing" object is also defined.

```
1 //query.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component");
2
3 // use the _load function for getting the optimized preload file if present
4 sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5/sap/POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
10 });
11
12 + this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component", {
13 -   metadata: {
14     version: "1.0.0",
15     config: {}
16   }
17   customizing: {}
18 });
19
```

A red box highlights the "sap.ui.component.load" section of the code. A blue callout bubble points to it with the text "Reference to the original application". Another blue callout bubble points to the "customizing: {}" section with the text "configuration where all extensions take place".

Extend View/Fragments with Extension Points (View Extension)

Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points

The screenshot shows the SAP Web IDE interface with the title bar "SAP Web IDE Full-Stack" and the URL "webidecp-dhaomnxcpv.dispatcher.eu2.hana.ondemand.com". The left sidebar includes sections for Apps, Admin, iOS, BF Technologies, SAP, Kunden, Privat, Reisen, Coding, End-To-End setup..., Timer 15 Minutes, Timer 1 Hour, Develop & Deploy..., File, Edit, Build, Run, Deploy, Search, View, Tools, Help, and a user profile for Rainer@Workspace.

The main workspace shows a file named "Component.js" with the following code:

```
1 // jQuery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Component");
2
3 // use the load function for getting the optimized preload file if present
4 + sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5_uis5/sap/EPMRA_POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
10 })
```

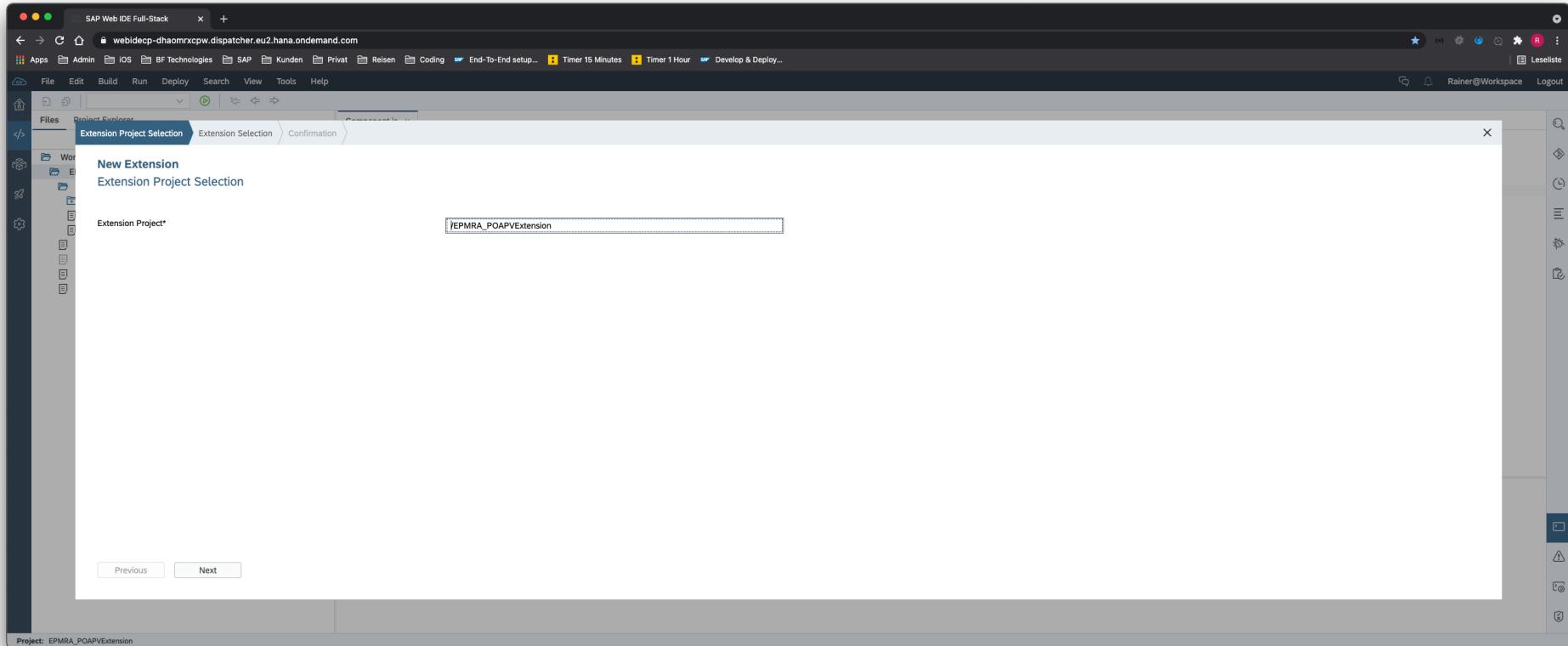
The "Component.js" file is part of a project named "EPMRA_POAPVExtension". The "Project Explorer" view shows the following structure:

- File
- Project Explorer
- Workspace
 - EPMRA_POAPVExtension
 - File
 - Folder
 - OPA Page
 - OPA Journey
 - QUnit Test
 - ODATA Service
 - SAPUI5 View
 - Extension Project
 - Project from Template
 - Project from Sample Application
 - Extension
 - Quick Start with Layout Editor
 - HTML5 Application Descriptor
- neo-a
- Import
- Build
- Deploy
- Git
- ind
- packa
- packa
- Export
- Edit
- Project
- Refresh Workspace Items
- Quick Access

The "Extension" option in the dropdown menu is highlighted with a red box. The bottom status bar indicates the project is "EPMRA_POAPVExtension".

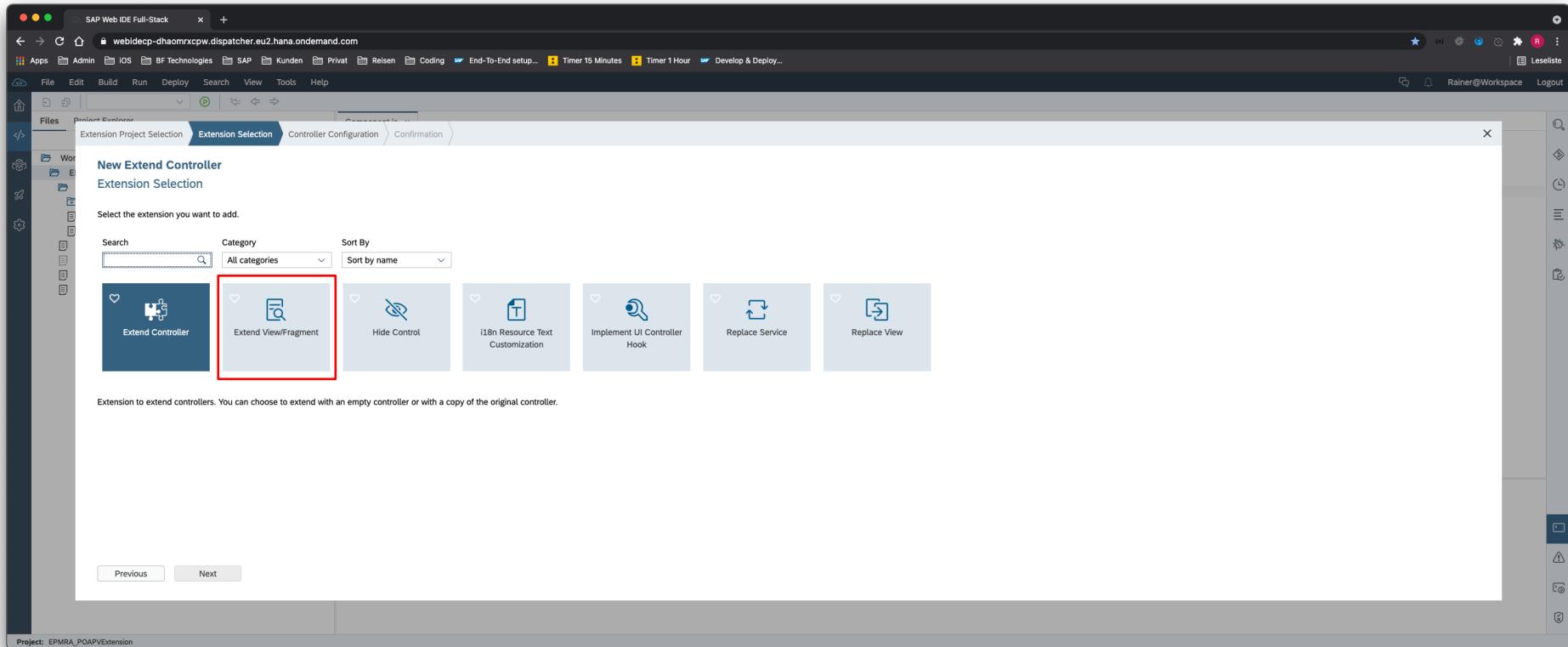
Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points



Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points



SAP Web IDE Full-Stack + webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com

File Edit Build Run Deploy Search View Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Rainer@Workspace Logout

Project Explorer Extension Project Selection Extension Selection Controller Configuration Confirmation

New Extend Controller

Extension Selection

Select the extension you want to add.

Search Category Sort By

All categories Sort by name

Extend Controller Extend View/Fragment Hide Control I18n Resource Text Customization Implement UI Controller Hook Replace Service Replace View

Extension to extend controllers. You can choose to extend with an empty controller or with a copy of the original controller.

Previous Next

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points

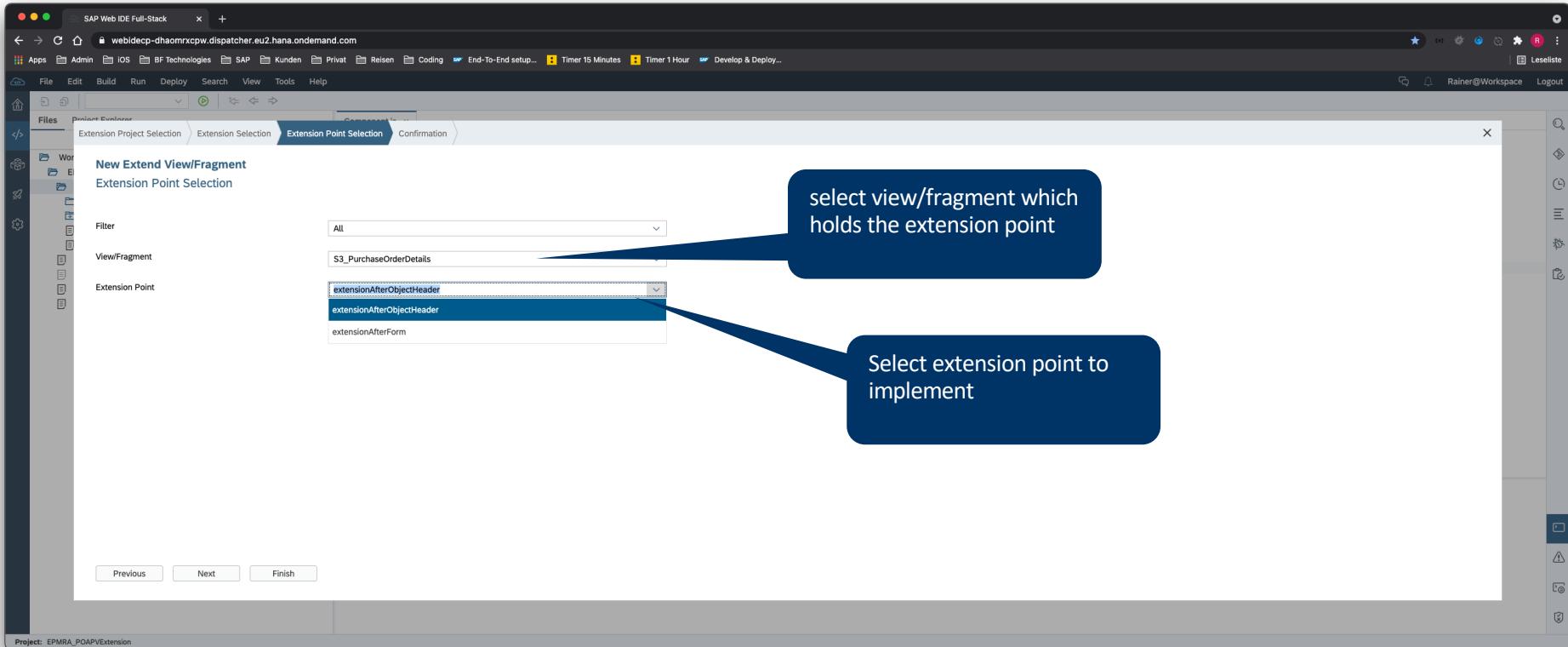
The screenshot shows the SAP Web IDE Full-Stack interface with the title bar "SAP Web IDE Full-Stack" and URL "webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com". The top menu includes File, Edit, Build, Run, Deploy, Search, View, Tools, Help, and a sidebar with icons for Apps, Admin, iOS, BI Technologies, SAP, Kunden, Privat, Reisen, Coding, End-To-End setup..., Timer 15 Minutes, Timer 1 Hour, Develop & Deploy..., and Leseliste.

The main content area displays a wizard titled "New Extend View/Fragment" with the sub-step "Extension Point Selection" highlighted. A message states "There are no extension points available." Below this are three dropdown filters: "Filter" set to "All", "View/Fragment" set to "App", and "Extension Point" which is empty. At the bottom are "Previous", "Next", and "Finish" buttons.

The bottom status bar indicates the project is "EPMRA_POAPVExtension".

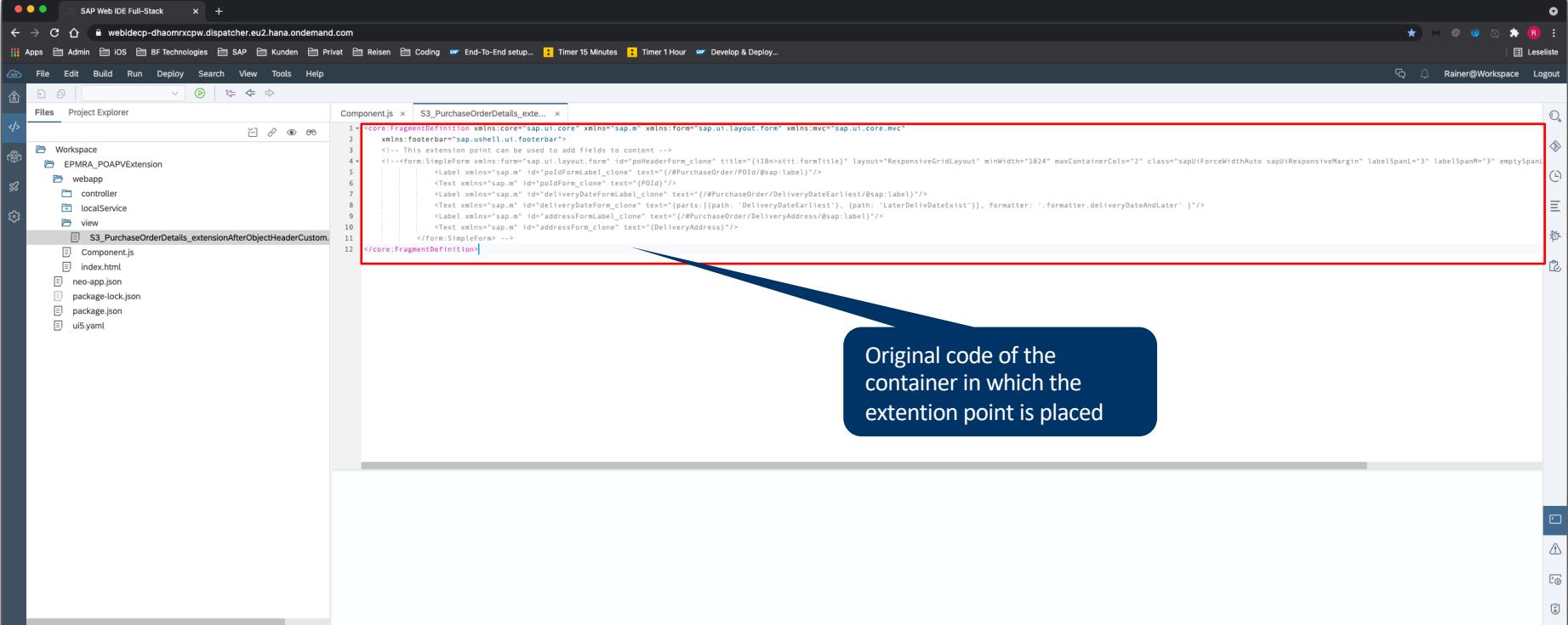
Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points



Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points



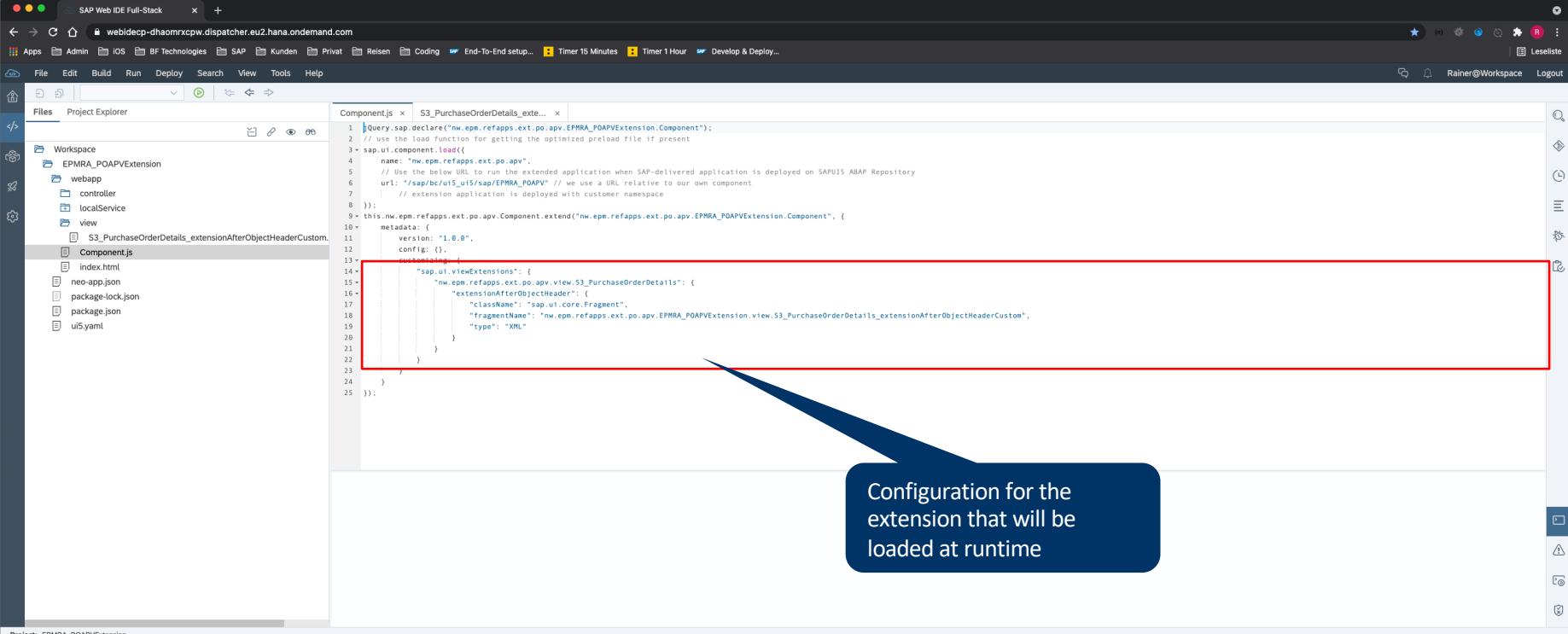
The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPExtension". The "view" folder contains a file named "S3_PurchaseOrderDetails_extensionAfterObjectHeaderCustom.Component.js". The code in this file is highlighted with a red box and a callout pointing to it.

```
<core:FragmentDefinition id="S3_PurchaseOrderDetails_extensionAfterObjectHeaderCustom">
<!-- This extension point can be used to add fields to content -->
<!--<form:SimpleForm xmlns:form="sap.ui.layout.form" id="poHeaderForm_clone" title="(18n><xit.formTitle)" layout="ResponsiveGridLayout" minWidth="1024" maxContainerCols="2" class="sapUiForceWidthAuto sapUiResponsiveMargin" labelSpanL="3" labelSpanM="3" emptySpanL="1" emptySpanM="1">
<!--<Label xmlns="sap.m" id="poIdFormLabel_clone" text="#{PurchaseOrder/POId@sap:label}"/>
<!--<Text xmlns="sap.m" id="poIdForm_clone" text="#{POId}"/>
<!--<Label xmlns="sap.m" id="deliveryDateFormLabel_clone" text="#{PurchaseOrder/DeliveryDateEarliest@sap:label}"/>
<!--<Text xmlns="sap.m" id="deliveryDateForm_clone" text="#(parts:[{path: 'DeliveryDateEarliest'}, {path: 'LaterDelivDateExist'}], formatter: '.formatter.deliveryDateAndLater')"/>
<!--<Label xmlns="sap.m" id="addressFormLabel_clone" text="#{PurchaseOrder/DeliveryAddress@sap:label}"/>
<!--<Text xmlns="sap.m" id="addressForm_clone" text="#(DeliveryAddress)"/>
</form:SimpleForm> -->
</core:FragmentDefinition>
```

Original code of the container in which the extention point is placed

Fiori app extensions with WebIDE

Extend View/Fragments with Extension Points



The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPExtension". The "Component.js" file is open in the editor, displaying the following code:

```
1 // query sap declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component");
2 // use the load function for getting the optimized preload file if present
3 + sap.ui.component.load({
4   name: "nw.epm.refapps.ext.po.apv",
5   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
6   url: "/sap/bc/ui5_ui5/sap/EPMRA_POAPV" // we use a URL relative to our own component
7   | // extension application is deployed with customer namespace
8 });
9+ this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component", {
10+   metadata: {
11     version: "1.0.0",
12     config: {}
13   },
14+   "sap.ui.viewExtensions": {
15+     "nw.epm.refapps.ext.po.apv.view.S3_PurchaseOrderDetails": {
16+       "extensionId": "S3_PurchaseOrderDetails",
17+       "classname": "sap.ui.core.Fragment",
18+       "fragmentName": "nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.view.S3_PurchaseOrderDetails_extensionAfterObjectHeaderCustom",
19+       "type": "XML"
20+     }
21+   }
22+ }
23+ )
24+ )
25+});
```

A red box highlights the "sap.ui.viewExtensions" configuration block. A blue arrow points from this highlighted area to a callout bubble containing the following text:

Configuration for the extension that will be loaded at runtime

UI5 InApp Extension with WebIDE

Extend View/Fragments with Extension Points

DEMO

Replace View

Fiori app extensions with WebIDE

Replace View

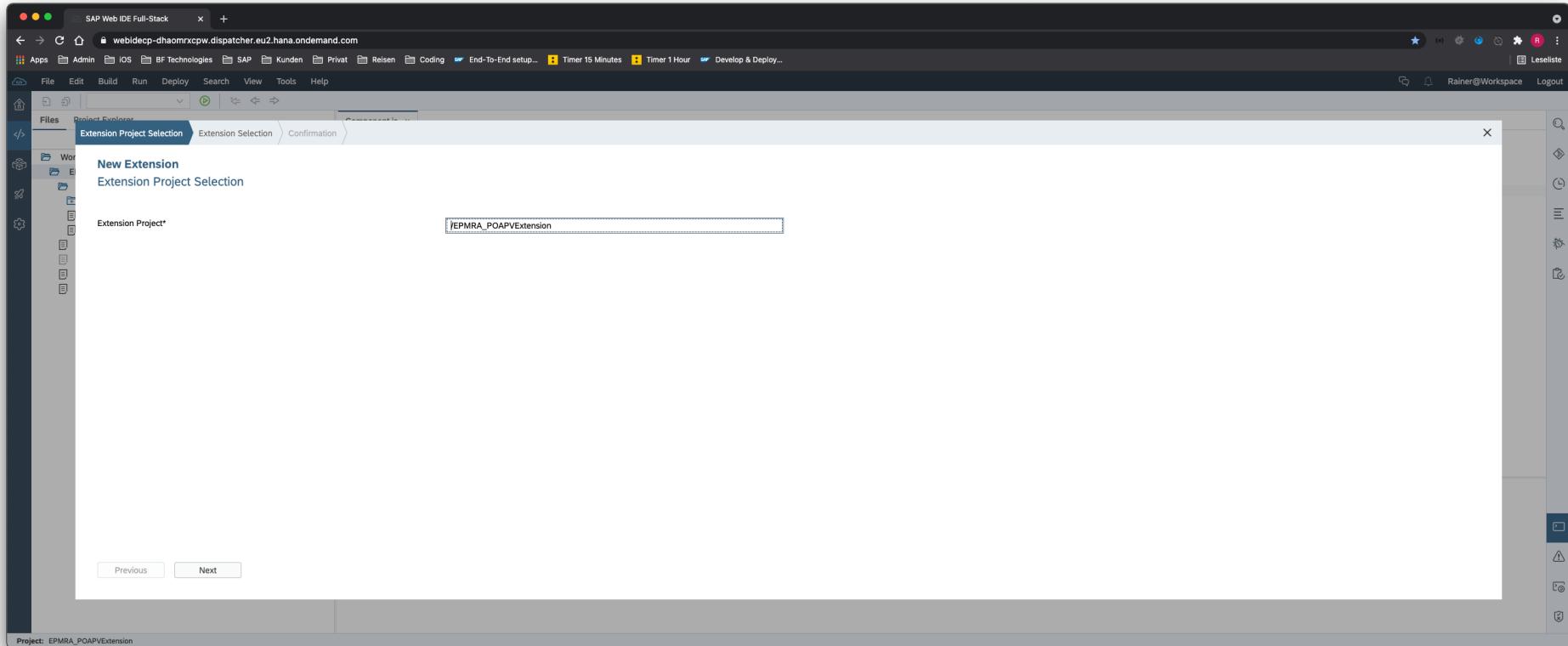
The screenshot shows the SAP Web IDE interface with the title "SAP Web IDE Full-Stack". The URL in the address bar is "webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com". The left sidebar has a "Workspace" section where a project named "EPMRA_POAPVExtension" is selected. A context menu is open over this project, with several items highlighted by red boxes: "New" (under "File"), "Extension" (under "Project"), and "Extension Project" (under "Extension"). The main editor area displays a file named "Component.js" with the following code:

```
1 //!jquery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Component");
2
3 // use the load function for getting the optimized preload file if present
4 + sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5_uis5/sap/EPMRA_POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
10 })
```

The status bar at the bottom left shows "Project: EPMRA_POAPVExtension".

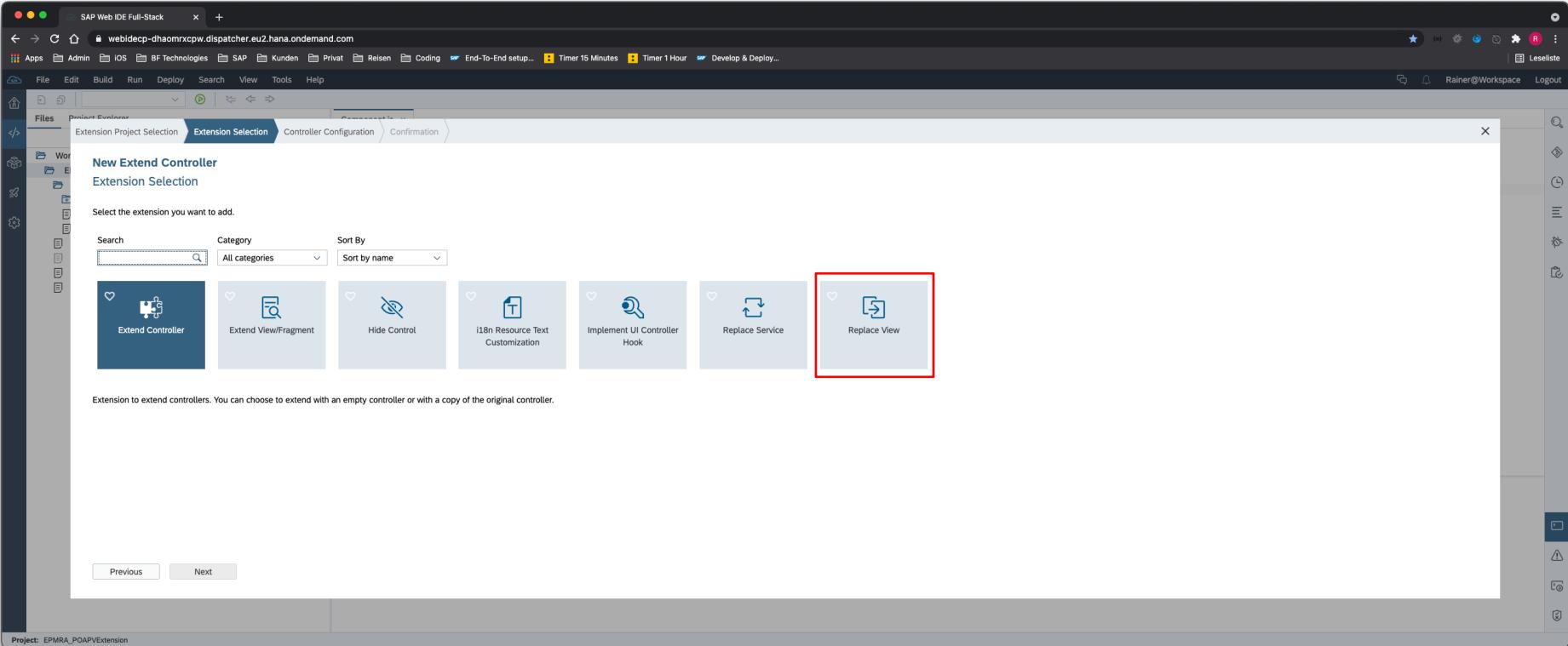
Fiori app extensions with WebIDE

Replace View



Fiori app extensions with WebIDE

Replace View



SAP Web IDE Full-Stack

File Edit Build Run Deploy Search Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Rainer@Workspace Logout

Project Explorer Extension Project Selection Extension Selection Controller Configuration Confirmation

New Extend Controller

Extension Selection

Select the extension you want to add.

Search Category Sort By

All categories Sort by name

Extend Controller Extend View/Fragment Hide Control I18n Resource Text Customization Implement UI Controller Hook Replace Service Replace View

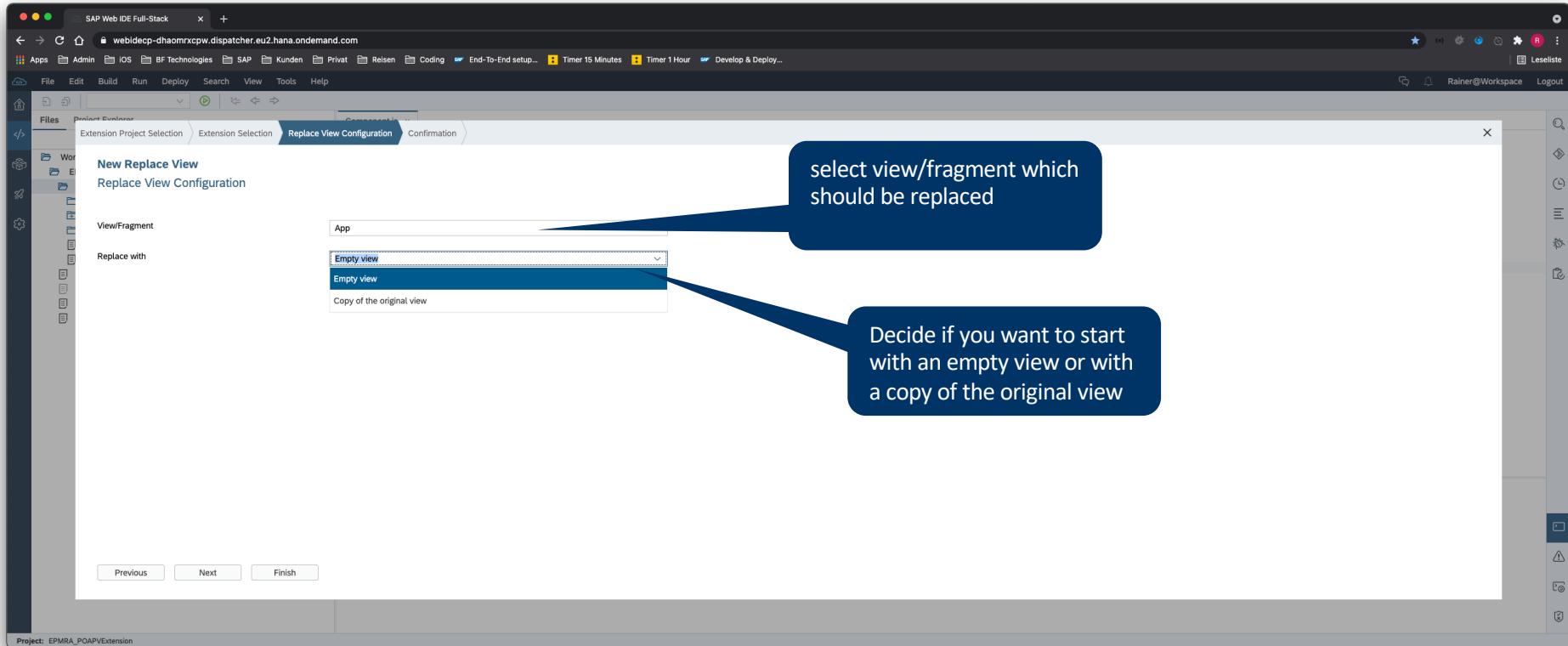
Extension to extend controllers. You can choose to extend with an empty controller or with a copy of the original controller.

Previous Next

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Replace View



Fiori app extensions with WebIDE

Replace View

The screenshot shows the SAP Web IDE interface with the title "SAP Web IDE Full-Stack". The left sidebar displays the project structure for "EPMRA_POAPExtension" under "Workspace", including files like "Component.js", "S2_PurchaseOrdersCustom.view.xml", "index.html", "neo-app.json", "package-lock.json", "package.json", and "ui5.yaml". The main editor area shows the "Component.js" file content:

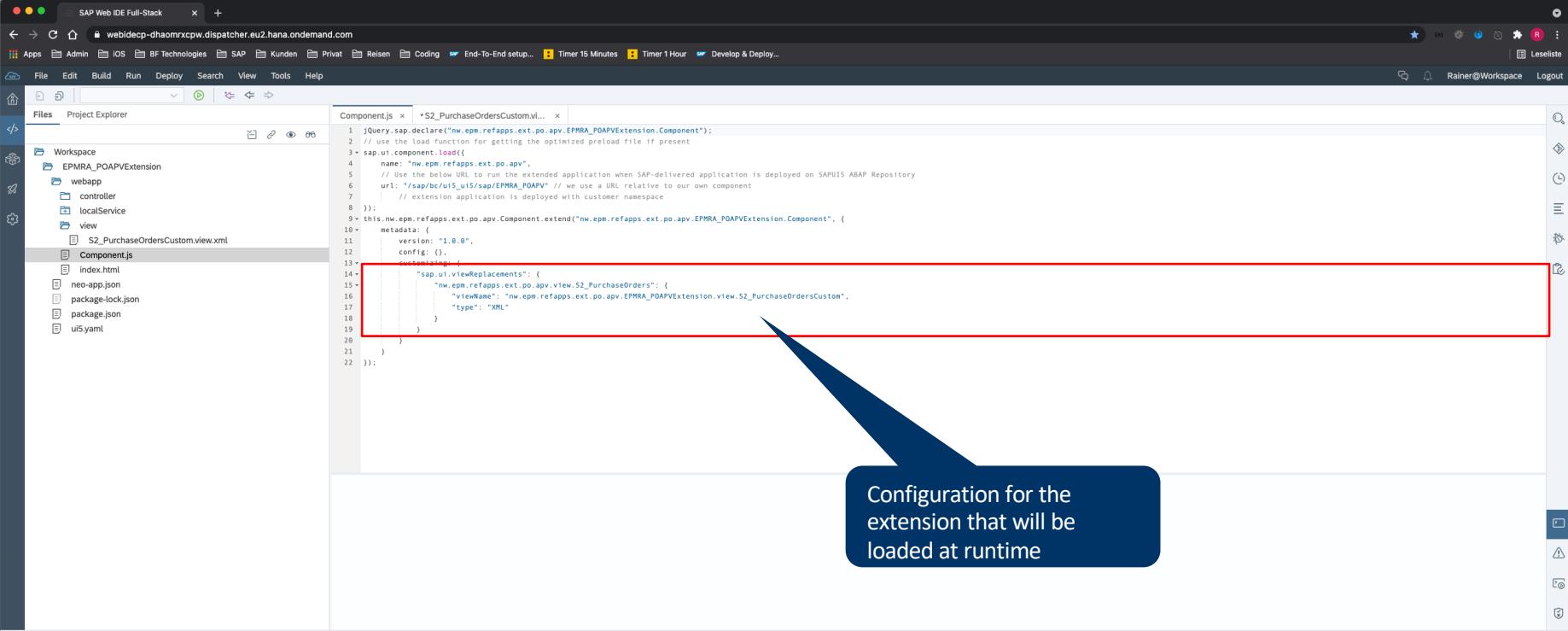
```
1 <!-->
2 <!-->
3 Copyright (C) 2009-2018 SAP SE or an SAP affiliate company. All rights reserved.
4
5 <!-->
6 <mvc:View id="masterView" xmlns:mvc="sap.ui.core.mvc" xmlns="sap.m" controllerName="nw.epm.refapps.ext.po.apv.controller.S2_PurchaseOrders">
7   <Page id="masterPage" title="{path:'viewProperties>/masterListCount', formatter: '.formatter.masterTitle' }" showNavButton="true"
8     navButtonPress="onNavBack">
9     <headerContent>
10       <Button id="multiSelectButton" icon="{${viewProperties>/isMultiSelect} ? 'sap-icon://sys-cancel' : 'sap-icon://multi-select'}"
11         press="onMultiSelectPressed"/>
12     </headerContent>
13     <subHeader>
14       <Bar id="subHeaderBar">
15         <contentMiddle>
16           <SearchField id="searchField" showRefreshButton="{ ${device>/support/touch} }" search="onSearch" width="100%"/>
17         </contentMiddle>
18       </Bar>
19     </subHeader>
20     <content>
21       <!-- On non desktop devices the user triggers the list refresh by pulling down the list (pull to refresh) -->
22       <PullToRefresh id="pullToRefresh" visible="{ ${device>/support/touch} && ${appProperties>/busy}" refresh="onPullToRefresh"/>
23       <!--List of purchase orders that need to be approved. The list entries contain the information supplier name, total value, requester, change date and number of items-->
24       <!-- Note that the select defined for the list items ensures, that all attributes that are required on S3 view are loaded already here -->
25       <List id="masterList" selectionChange="onItemSelect" modeAnimationOn="false" includeItemInSelection="true"
26         mode="{ ${viewProperties>/isMultiSelect} ? 'MultiSelect' : ${device>/system/mobile} ? 'None' : 'SingleSelectMaster' }"
27         updateFinished="onUpdateFinished" noDataText="{i18n>msg.noDataTextMaster}" swipe="onSwipe"
28         items="{path: '/PurchaseOrders', sorter: [{path: 'ChangedAt', descending: true}, {path: 'Old', descending: false}], parameters: {select: 'POId,OrderedByName,SupplierName,GrossAmount,CurrencyCode,ChangedAt,ItemCount'} }"
29         <items>
30           <ObjectListItem id="masterListItem" title="{SupplierName}" type="{ ${device>/system/mobile} ? 'Active' : 'Inactive' }" press="onItemSelect"
31             number="{path: 'GrossAmount', formatter: '.formatter.amountWithOutCurrency'}" numberUnit="{CurrencyCode}">
32             <Text>{SupplierName}</Text>
33             <Text>{GrossAmount}</Text>
34           </ObjectListItem>
35         </items>
36       </List>
37     </content>
38   </Page>
39 </View>
```

A blue arrow points from a callout bubble labeled "Code of original view" towards the bottom of the "Component.js" code, specifically pointing at the "ObjectListItem" section.

Code of original view

Fiori app extensions with WebIDE

Replace View



The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPExtension". The "Component.js" file is open in the editor, displaying the following code:

```
1 //jQuery.sap.require("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component");
2 // use the load function for getting the optimized preload file if present
3 + sap.ui.component.load({
4   name: "nw.epm.refapps.ext.po.apv",
5   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
6   url: "/sap/bc/ui5_ui5/sap/EPMRA_POAPV" // we use a URL relative to our own component
7   // extension application is deployed with customer namespace
8 });
9 + this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component", {
10 - metadata: {
11   version: "1.0.0",
12   config: {}
13   // ...
14 -   "sap.ui.viewReplacements": {
15 -     "nw.epm.refapps.ext.po.apv.view.S2_PurchaseOrders": {
16 -       "viewName": "nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.view.S2_PurchaseOrdersCustom",
17 -       "type": "XML"
18 -     }
19 -   }
20 - }
21 });
22});
```

A red rectangular box highlights the section of code where the "sap.ui.viewReplacements" configuration is defined. A large blue arrow points from this highlighted area to a callout bubble containing the following text:

Configuration for the extension that will be loaded at runtime

UI5 InApp Extension with WebIDE

Replace View



Extend Controller with ControllerHooks



Fiori app extensions with WebIDE

Extend Controller with ControllerHooks

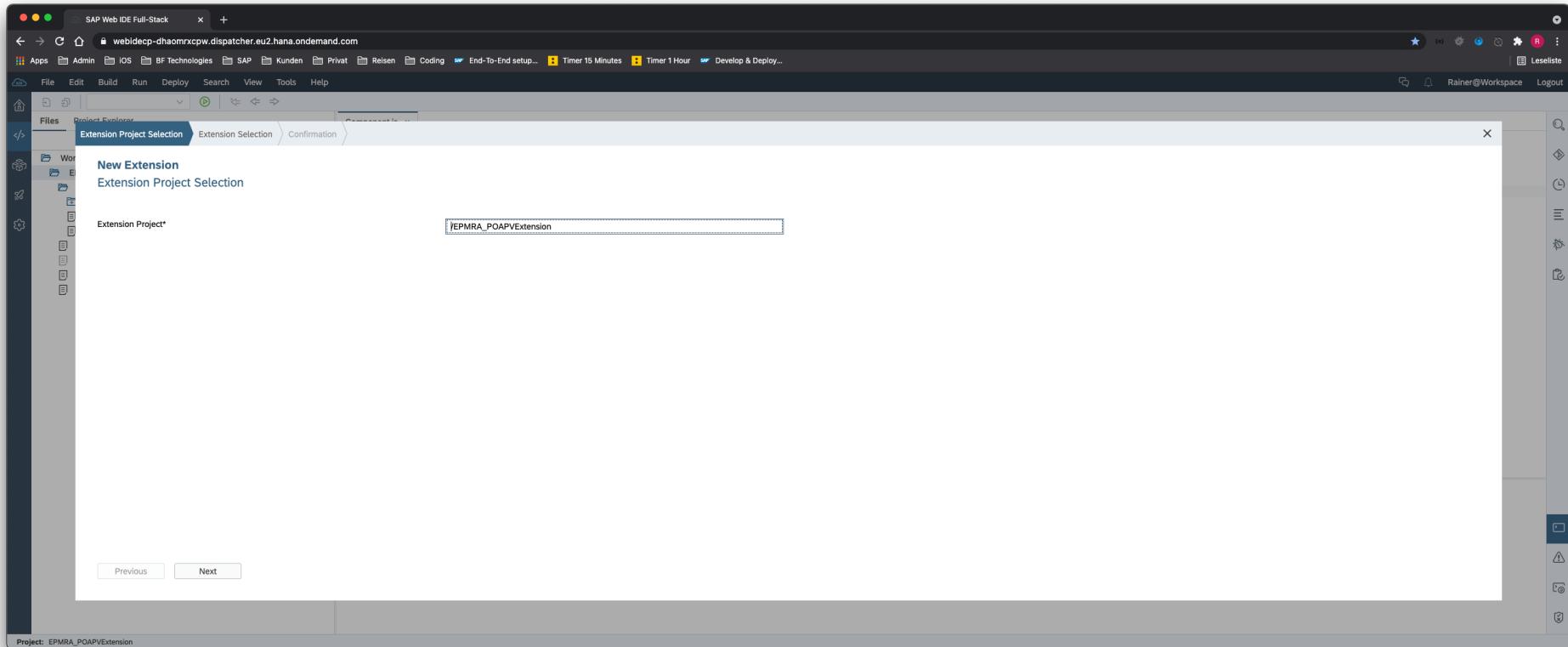
The screenshot shows the SAP Web IDE interface with the title "SAP Web IDE Full-Stack". The URL in the address bar is "webidecp-dhaomnxcpv.dispatcher.eu2.hana.ondemand.com". The left sidebar has a "Workspace" section where a project named "EPMRA_POAPVExtension" is selected. A context menu is open over this project, with several items highlighted with red boxes: "New", "Extension", and "HTML5 Application Descriptor". The main editor area displays a file named "Component.js" with the following code:

```
1 //!jquery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Component");
2
3 // use the load function for getting the optimized preload file if present
4 + sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5_u15/sap/EPMRA_POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
```

The status bar at the bottom left indicates "Project: EPMRA_POAPVExtension".

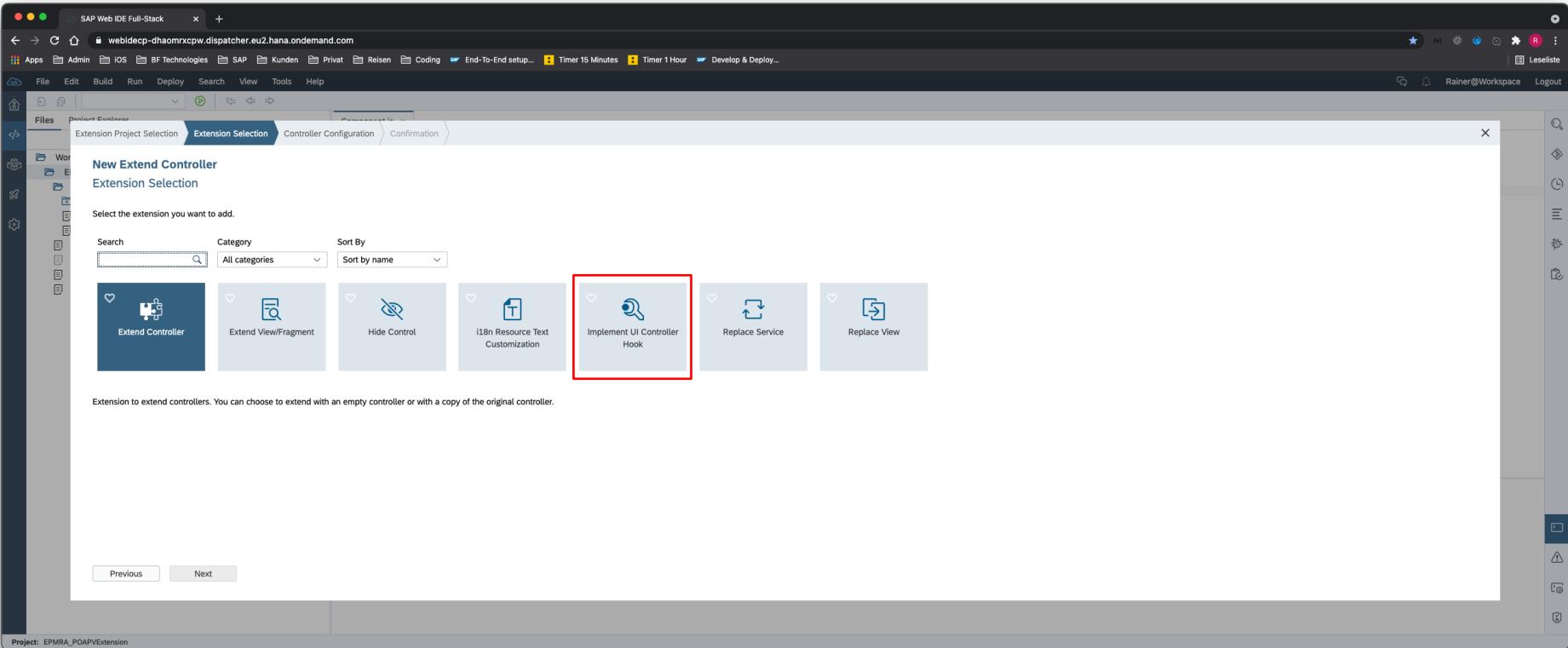
Fiori app extensions with WebIDE

Extend Controller with ControllerHooks



Fiori app extensions with WebIDE

Extend Controller with ControllerHooks



SAP Web IDE Full-Stack + webidecp-dhaomnxcpv.dispatcher.eu2.hana.ondemand.com

File Edit Build Run Deploy Search View Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Rainer@Workspace Logout

Project Explorer Extension Project Selection Extension Selection Controller Configuration Confirmation

New Extend Controller

Extension Selection

Select the extension you want to add.

Search Category Sort By

All categories Sort by name

Extend Controller Extend View/Fragment Hide Control I18n Resource Text Customization Implement UI Controller Hook Replace Service Replace View

Extension to extend controllers. You can choose to extend with an empty controller or with a copy of the original controller.

Previous Next

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Extend Controller with ControllerHooks

SAP Web IDE Full-Stack + webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com

File Edit Build Run Deploy Search View Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Rainer@Workspace Logout

Project Explorer Extension Project Selection Extension Selection UI Controller Hook Configuration Confirmation

New Implement UI Controller Hook

UI Controller Hook Configuration

There are no UI controller hooks available.

Controller

UI Controller Hooks

App

S2_PurchaseOrders

S3_PurchaseOrderDetails

S3_PurchaseOrderSummary

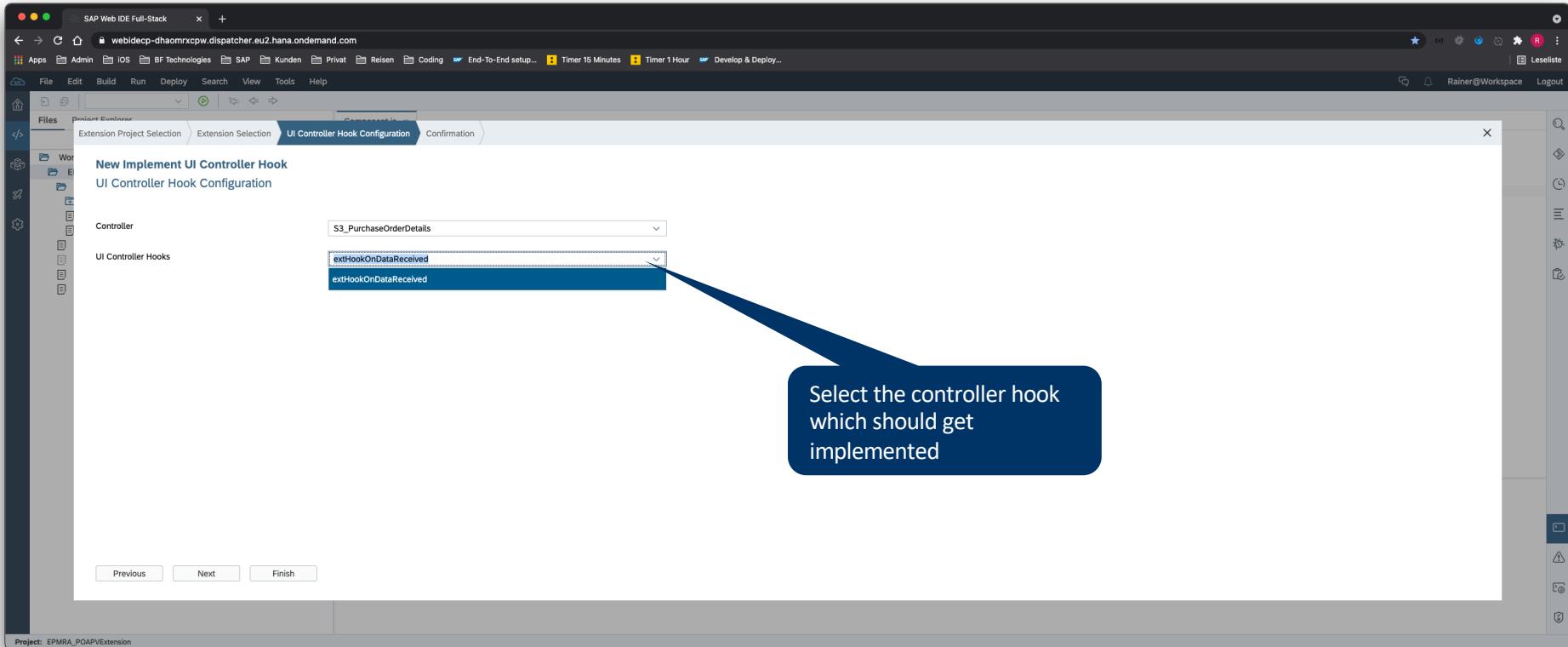
Previous Next Finish

Project: EPMRA_POAPVExtension

Select controller which holds the controller hook

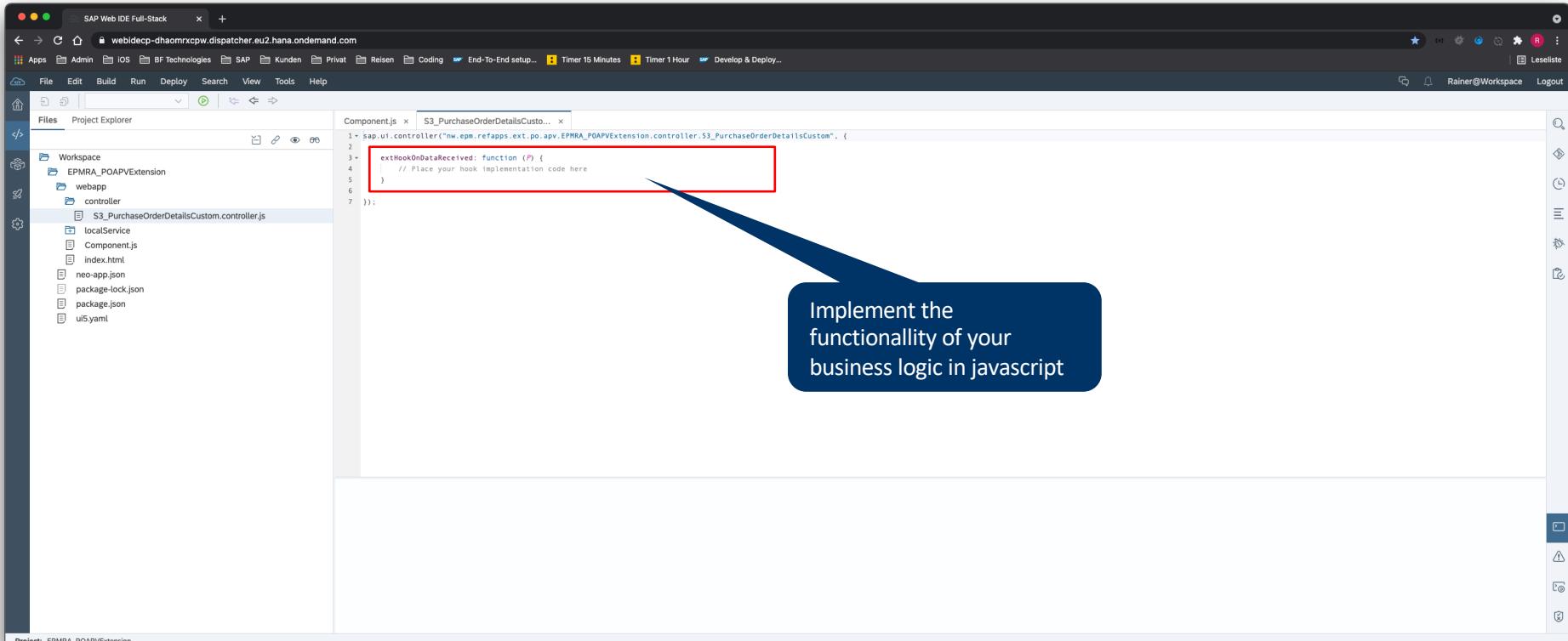
Fiori app extensions with WebIDE

Extend Controller with ControllerHooks



Fiori app extensions with WebIDE

Extend Controller with ControllerHooks



The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPVExtension". The "Component.js" file is open, displaying the following code:

```
1+ sap.ui.controller("nw.epm.reapps.ext.po.apv.EPMRA_POAPVExtension.controller.S3_PurchaseOrderDetailsCustom", {
2+   exthookOnDataReceived: function () {
3+     // Place your hook implementation code here
4+   }
5+ });
6+
7+});
```

A red box highlights the line "exthookOnDataReceived: function () {". A large blue arrow points from this highlighted line to a callout box containing the following text:

Implement the functionality of your business logic in javascript

Fiori app extensions with WebIDE

Extend Controller with ControllerHooks

The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPVExtension". The "Component.js" file is open in the editor, displaying code related to a Fiori app extension. A red box highlights a specific section of the code:

```
1 // query sap declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component");
2 // use the load function for getting the optimized preload file if present
3 + sap.ui.component.load(
4   + sap.name: "nw.epm.refapps.ext.po.apv",
5   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
6   url: "/sap/bc/ui5/sap/EPMRA_POAPV" // we use a URL relative to our own component
7   | // extension application is deployed with customer namespace
8 );
9 + this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.Component", {
10 -   metadata: {
11     version: "1.0.0",
12     config: {},
13     customizing: {
14       "sap.ui.controllerExtensions": [
15         "nw.epm.refapps.ext.po.apv.controller.S3_PurchaseOrderDetails": [
16           "controllerName": "nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension.controller.S3_PurchaseOrderDetailsCustom"
17         ]
18       ]
19     }
20   }
21});
```

A large blue arrow points from a callout bubble to the highlighted code. The callout bubble contains the following text:

Configuration for the extension that will be loaded at runtime

Fiori app extensions with WebIDE

Extend Controller with ControllerHooks

DEMO

Extend Controller

Fiori app extensions with WebIDE

Extend Controller

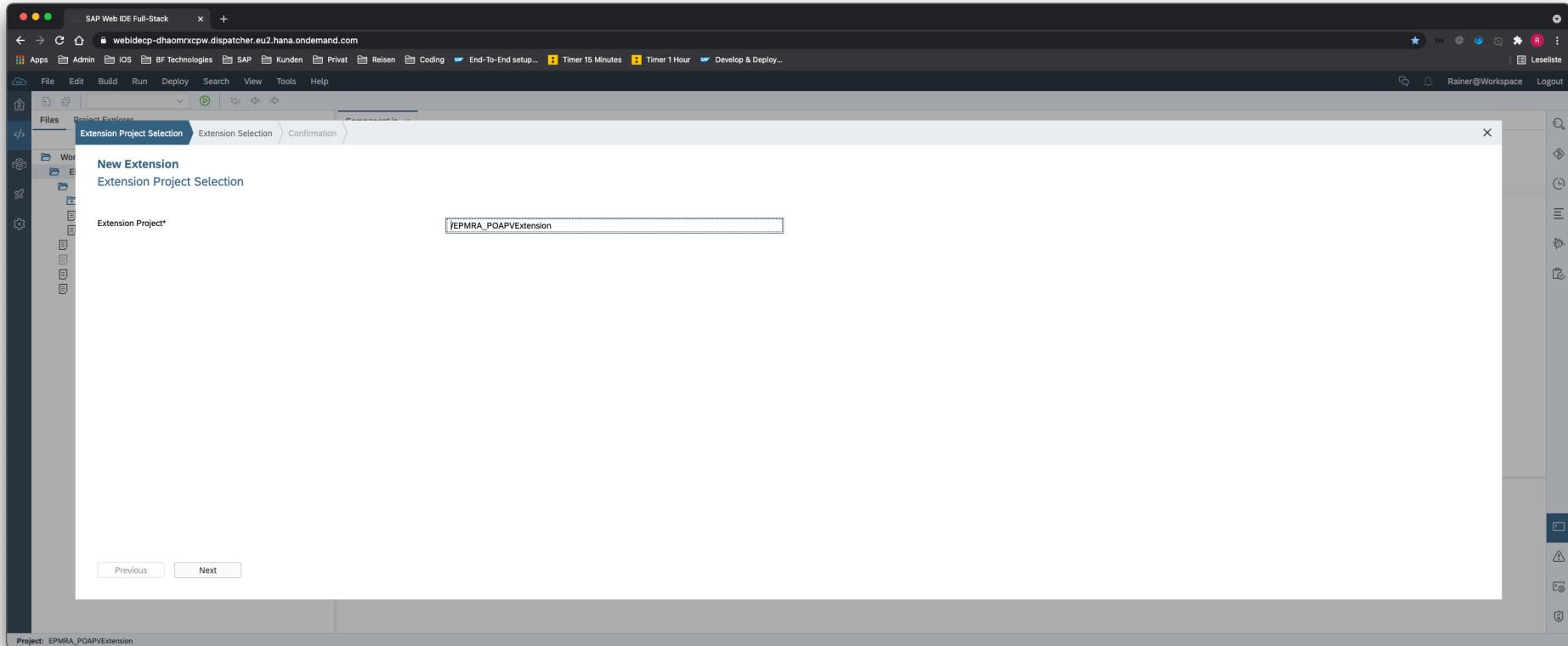
The screenshot shows the SAP Web IDE interface with the title "SAP Web IDE Full-Stack". The URL in the address bar is "webidecp-dhaomnxcpv.dispatcher.eu2.hana.ondemand.com". The left sidebar has a "Workspace" section where a project named "EPMRA_POAPVExtension" is selected. A context menu is open over this project, with several items highlighted by red boxes: "New" (under "File"), "Extension" (under "Project"), and "Extension Project" (under "Extension"). The main editor area displays a file named "Component.js" containing the following code:

```
1 //!jquery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Component");
2
3 // use the load function for getting the optimized preload file if present
4 + sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5_uis5/sap/EPMRA_POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
10 })
```

The bottom status bar shows the project name "Project: EPMRA_POAPVExtension".

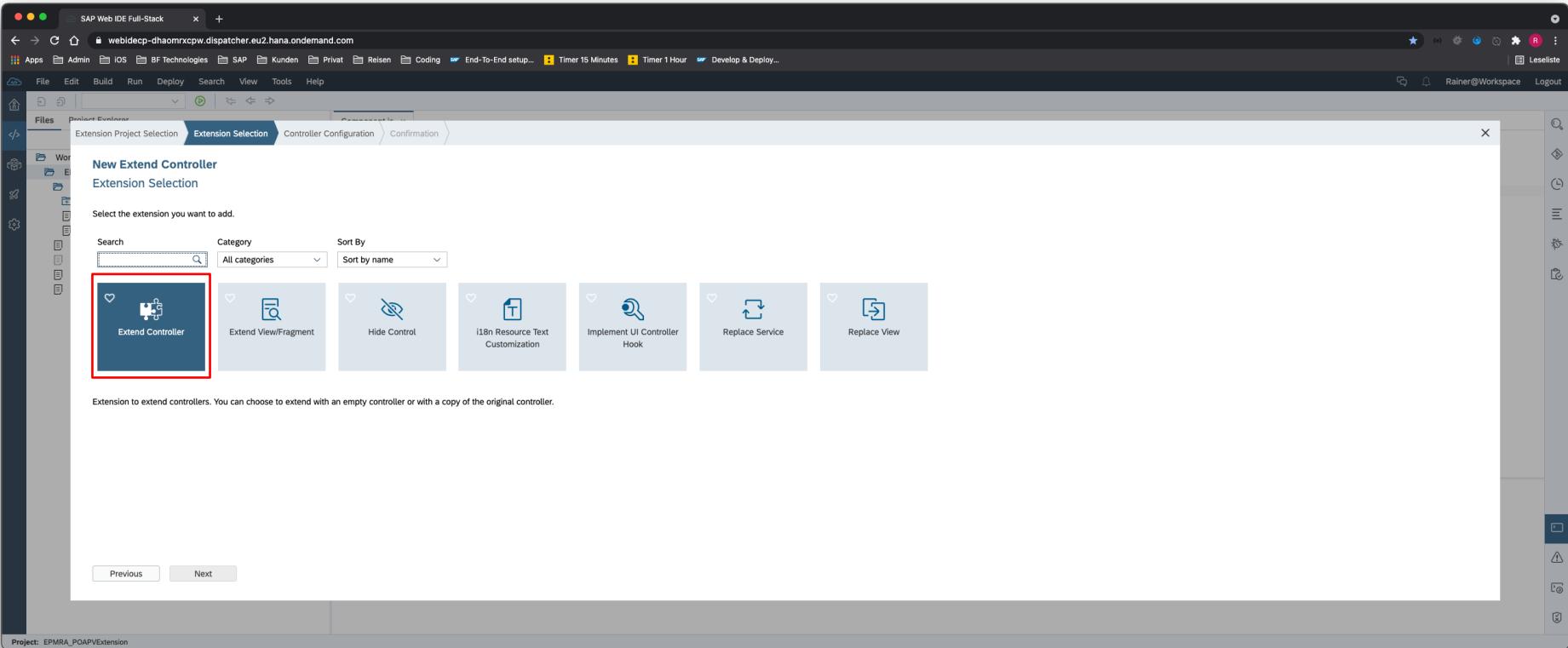
Fiori app extensions with WebIDE

Extend Controller



Fiori app extensions with WebIDE

Extend Controller



SAP Web IDE Full-Stack

Extension Project Selection Extension Selection Controller Configuration Confirmation

New Extend Controller

Extension Selection

Select the extension you want to add.

Search Category Sort By

All categories Sort by name

Extend Controller Extend View/Fragment Hide Control I18n Resource Text Customization Implement UI Controller Hook Replace Service Replace View

Extension to extend controllers. You can choose to extend with an empty controller or with a copy of the original controller.

Previous Next

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Extend Controller

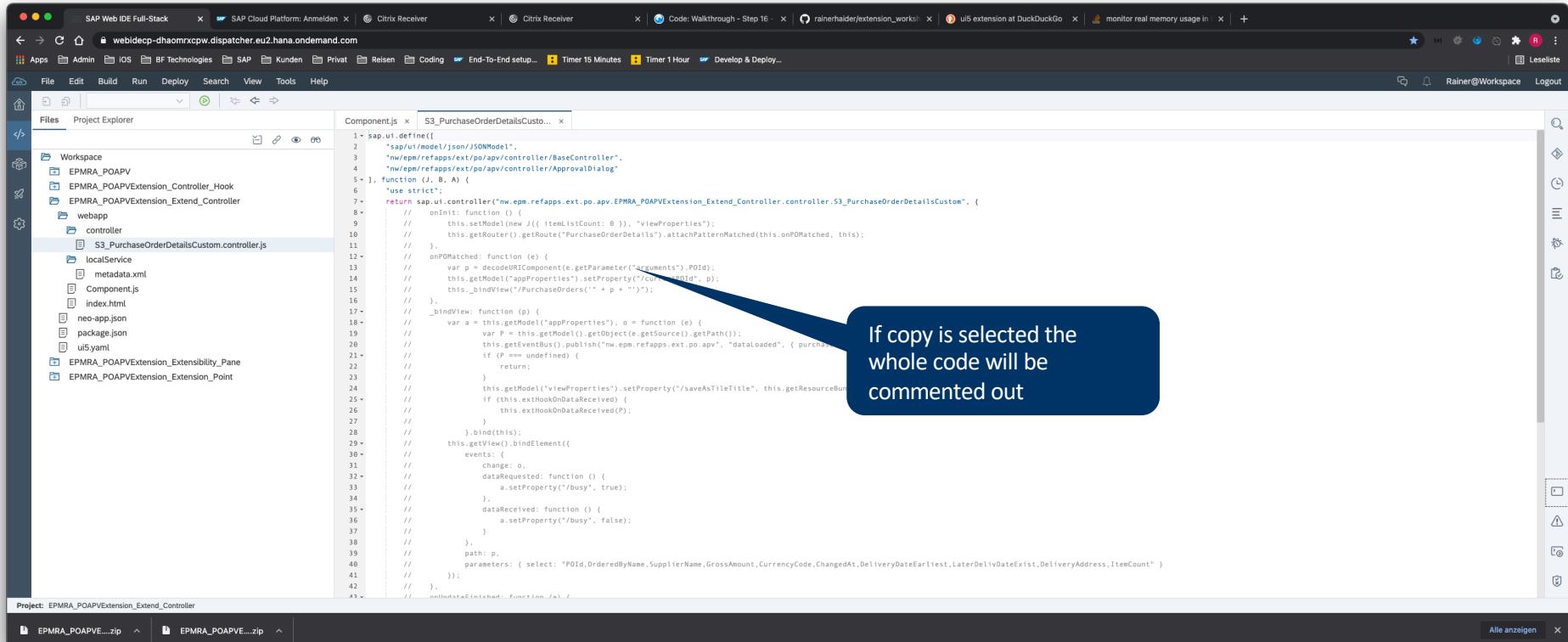
The screenshot shows the SAP Web IDE interface with the title bar "SAP Web IDE Full-Stack" and multiple tabs open. The main area displays the "Controller Configuration" step of a Fiori app extension project. The left sidebar shows the "Project Explorer" with a tree structure under "New Extend Controller". The central panel has a "Controller" section with a dropdown menu set to "S3_PurchaseOrderDetails". Below it is a "Replace with" section containing a dropdown menu with two options: "Empty controller" and "Copy of the original controller", with "Empty controller" currently selected. A tooltip above the dropdown says "select controller which should be extended / replaced". At the bottom of the central panel are buttons for "Previous", "Next", and "Finish". The bottom status bar shows the project name "EPMRA_POAPVE_Extension_Extend_Controller" and a file path "EPMRA_POAPVE...zip". A large blue callout bubble points to the "Empty controller" option in the dropdown, with the text "Decide if you want to start with an empty controller or with a copy of the original controller".

select controller which should be extended / replaced

Decide if you want to start with an empty controller or with a copy of the original controller

Fiori app extensions with WebIDE

Extend Controller



The screenshot shows the SAP Web IDE interface with multiple tabs open. The main focus is on a code editor window displaying a file named `Component.js`. The code is a JavaScript file for a Fiori app extension, specifically for the `S3_PurchaseOrderDetailsCustom` controller. A tooltip with the following text appears over the code:

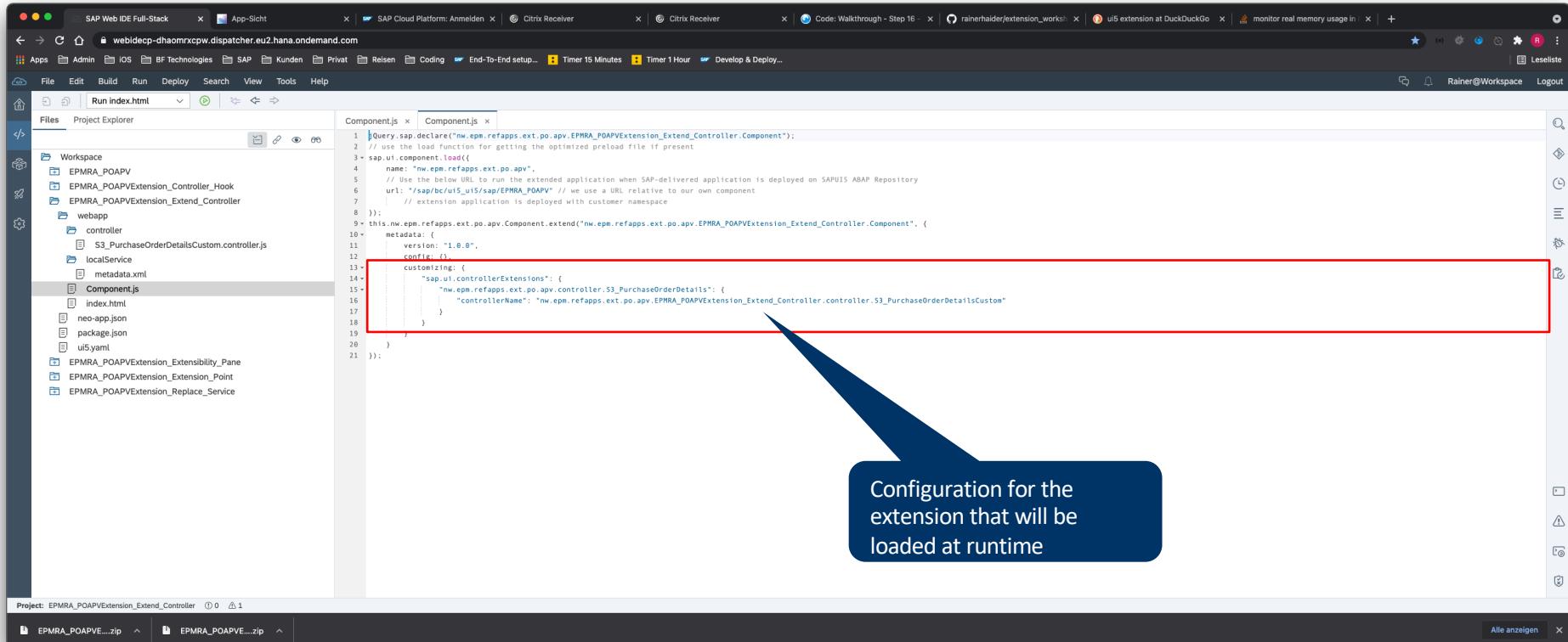
If copy is selected the whole code will be commented out

```
1+ sap.ui.define([
2+   "sap/ui/model/json/JSONModel",
3+   "nw/epm/refapps/ext/po/apv/controller/BaseController",
4+   "nw/epm/refapps/ext/po/apv/controller/ApprovalDialog"
5+ ], function (J, B, A) {
6+   "use strict";
7+   return sap.ui.controller("nw.epm.refapps.ext.po.apv.EPMRA_POAPVExtension_Extend_Controller.controller.S3_PurchaseOrderDetailsCustom", {
8+     // onInit: function () {
9+       // this.setModel(new J({ itemCountCount: 0 }), "viewProperties");
10+      // this.getRouter().getRoute("PurchaseOrderDetails").attachPatternMatched(this.onPOMatched, this);
11+    },
12+    onPOMatched: function (e) {
13+      var p = decodeURIComponent(e.getParameter("arguments").POId);
14+      this.getModel("appProperties").setProperty("/currentPOId", p);
15+      this._bindView("/PurchaseOrders/" + p + "/");
16+    },
17+    _bindView: function (o) {
18+      var a = this.getModel("appProperties"), o = function (e) {
19+        var P = this.getModel().getObject(o.getSource()).getPath();
20+        this.getEventBus().publish("nw.epm.refapps.ext.po.apv", "dataLoaded", { purchaseOrder: P });
21+      };
22+      if (P === undefined) {
23+        return;
24+      }
25+      this.getModel("viewProperties").setProperty("/saveAsTitle", this.getResourceBundle().getText("SaveAsTitle"));
26+      if (this.extendHookOnDataReceived) {
27+        this.extendHookOnDataReceived(P);
28+      }
29+      this.getView().bindElement({
30+        events: {
31+          change: o,
32+          dataRequested: function () {
33+            a.setProperty("/busy", true);
34+          },
35+          dataReceived: function () {
36+            a.setProperty("/busy", false);
37+          }
38+        },
39+        path: p,
40+        parameters: { select: "POId,OrderedByName,SupplierName,GrossAmount,CurrencyCode,ChangedAt,DeliveryDateEarliest,LaterDelivDateExist,DeliveryAddress,ItemCount" }
41+      });
42+    },
43+    onIndataFinished: function (m) {
44+
45+  }
46+});
```

At the bottom left, there are two project files listed: `EPMRA_POAPVExtension_Extend_Controller.zip` and `EPMRA_POAPVExtension_Extend_Controller.zip`. At the bottom right, there is a button labeled "Alle anzeigen".

Fiori app extensions with WebIDE

Extend Controller



The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPVExtension_Extend_Controller". The "Component.js" file is open in the editor. A red box highlights the configuration code starting at line 13:

```
1 //query sap declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Extend_Controller.Component");
2 // use the load function for getting the optimized preload file if present
3 + sap.ui.component.load({
4   name: "nw.epm.refapps.ext.po.apv",
5   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
6   url: "/sap/bc/ui5/u5/sap/EPMRA_POAPV" // we use a URL relative to our own component
7   // extension application is deployed with customer namespace
8 });
9+ this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Extend_Controller.Component", {
10+   metadata: {
11     version: "1.0.0",
12     config: {},
13     customizing: {
14       "sap.ui.controllerExtensions": [
15         "nw.epm.refapps.ext.po.apv.controller.S3_PurchaseOrderDetails": {
16           "controllerName": "nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Extend_Controller.controller.S3_PurchaseOrderDetailsCustom"
17         }
18       ]
19     }
20   }
21});
```

A large blue arrow points from a callout bubble to the highlighted code. The callout bubble contains the following text:

Configuration for the extension that will be loaded at runtime

Extend OData Service

UI5 InApp Extension with WebIDE

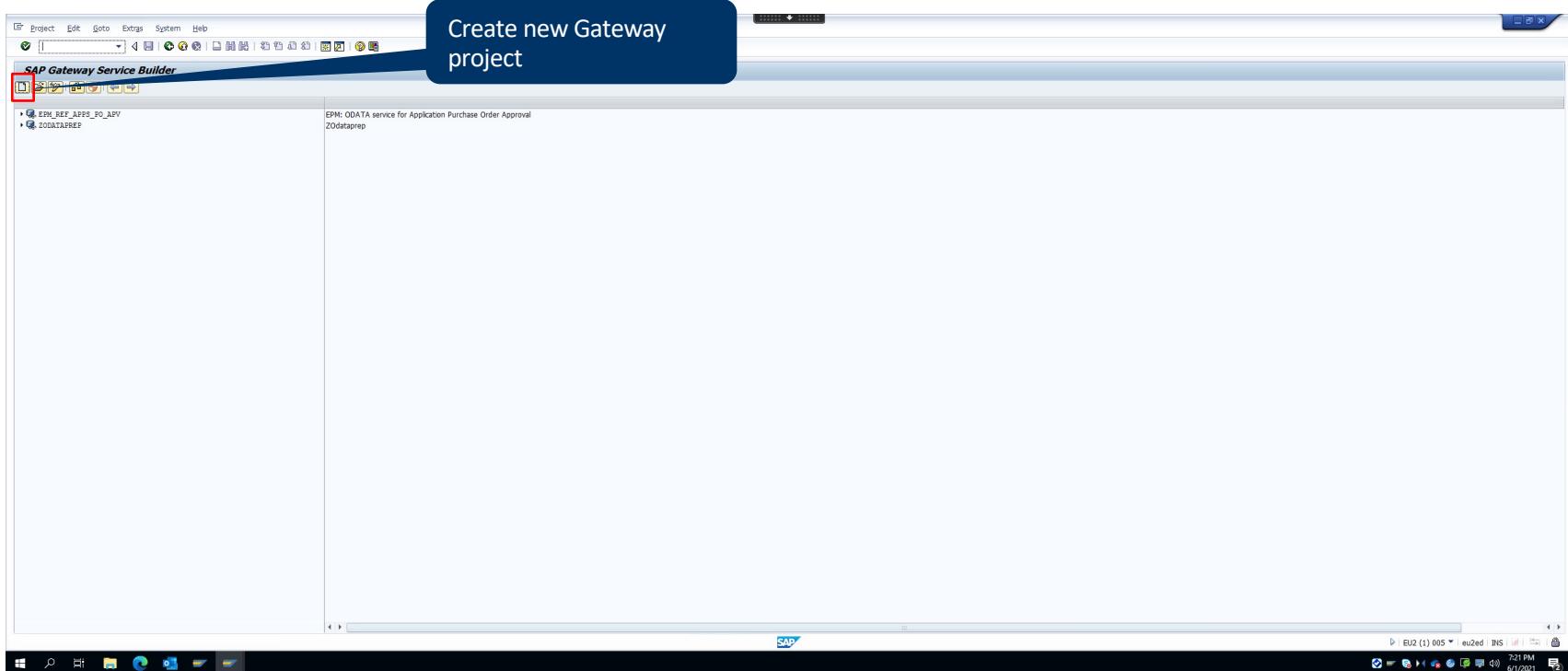
Extend OData Service

Run transaction segw

The screenshot shows the SAP Easy Access interface with a search bar containing 'segw'. A blue callout bubble points to the search bar with the text 'Run transaction segw'. The main content area displays the 'THE S/4HANA Support Information' page. The page features a header with 'Key user to be contacted first!', a 'IT Support' section with a 'myS' logo, and a 'mySupport' section. Below these are three icons: 'myS Tickets', 'Call via Skype', and 'Chat via Skype'. Further down, there's a 'Global Service Desk - Location Selection' section with a world map and buttons for 'EUROPE', 'NORTHAMERICA', 'SOUTHAMERICA', 'AFRICA', 'ASIA', and 'OCEANIA'. At the bottom, there's a feedback section with 'We'd love to hear from you' and 'Send an email'. The status bar at the bottom shows 'SNC logon by 005 RAINERHA for p:CN=RAINERHA@EU.BECKINGER.COM' on the left and 'EU2 (1) 005 eu2ed INS' on the right.

UI5 InApp Extension with WebIDE

Extend OData Service



UI5 InApp Extension with WebIDE

Extend OData Service

UI5 InApp Extension with WebIDE

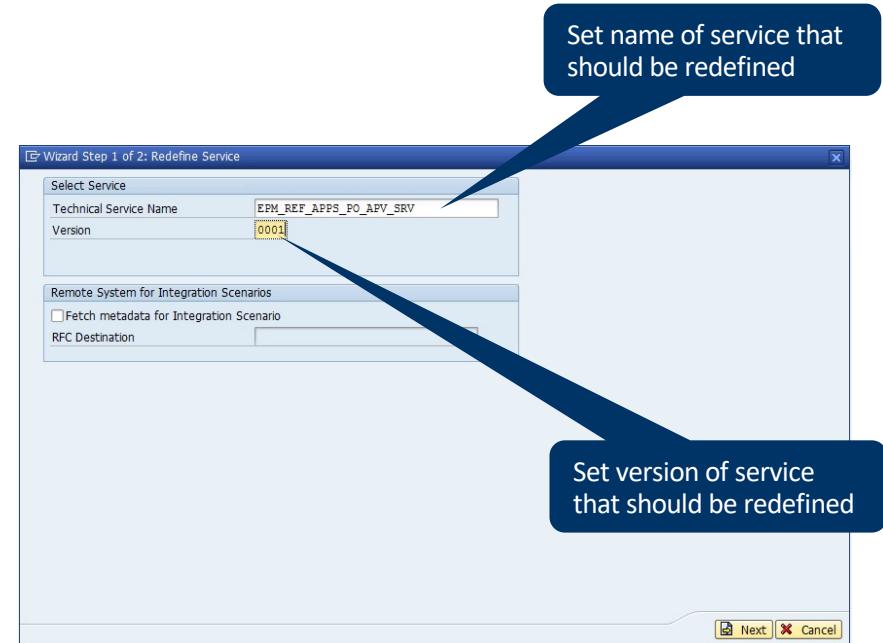
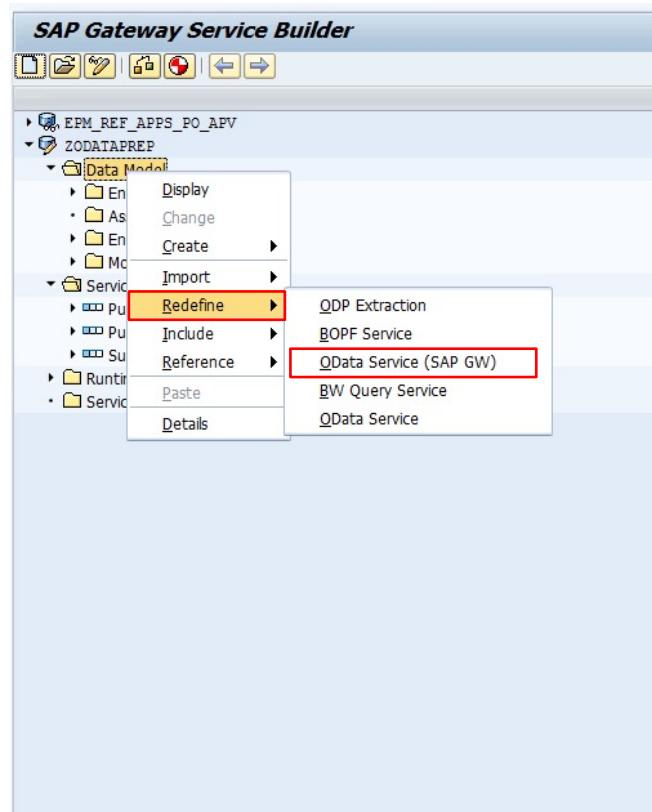
Extend OData Service

Create Project

Project	ZODATAPREP	Set name of project
Description	Extended Odata Service	Set description of project
Attributes		
Project Type	Service with SAP Annotations	
Generation Strategy	Standard	
Object Directory Entry		
Package	ZTRAINING	Set package for project
Person Responsible	RAINERHA	
		<input checked="" type="checkbox"/> Local Object <input type="button"/>

UI5 InApp Extension with WebIDE

Extend OData Service



UI5 InApp Extension with WebIDE

Extend OData Service

Generate Runtime Objects

Wizard Step 2 of 2: Redefine Service

Service	OData Artifacts	Description
• EPM_REF_APPS_PO_APV_MDL		
• PurchaseOrder	Entity Type	PurchaseOrder
• POId	Key Property	PO_ID
• OrderedById	Property	ORDERED_BY_ID
• OrderedByName	Property	ORDERED_BY_NAME
• ChangedAt	Property	CHANGED_AT
• SupplierId	Property	SUPPLIER_ID
• SupplierName	Property	SUPPLIER_NAME
• DeliveryAddress	Property	DELIVERY_ADDRESS
• DeliveryDateEarliest	Property	DELIVERY_DATE_EARLIEST
• LaterDelivDateExist	Property	LATER_DELIV_DATE_EXIST
• GrossAmount	Property	GROSS_AMOUNT
• CurrencyCode	Property	CURRENCY_CODE
• ItemCount	Property	ITEM_COUNT
• PurchaseOrderItem	Entity Type	PurchaseOrderItem
• Supplier	Entity Type	Supplier
• ApprovePurchaseOrder	Function Imports	ApprovePurchaseOrder
• RejectPurchaseOrder	Function Imports	RejectPurchaseOrder
• PurchaseOrderPurchaseOrderItems	Association	PurchaseOrderPurchaseOrderItems
• PurchaseOrderSupplier	Association	PurchaseOrderSupplier

Back Finish Cancel

Select entities for the OData service



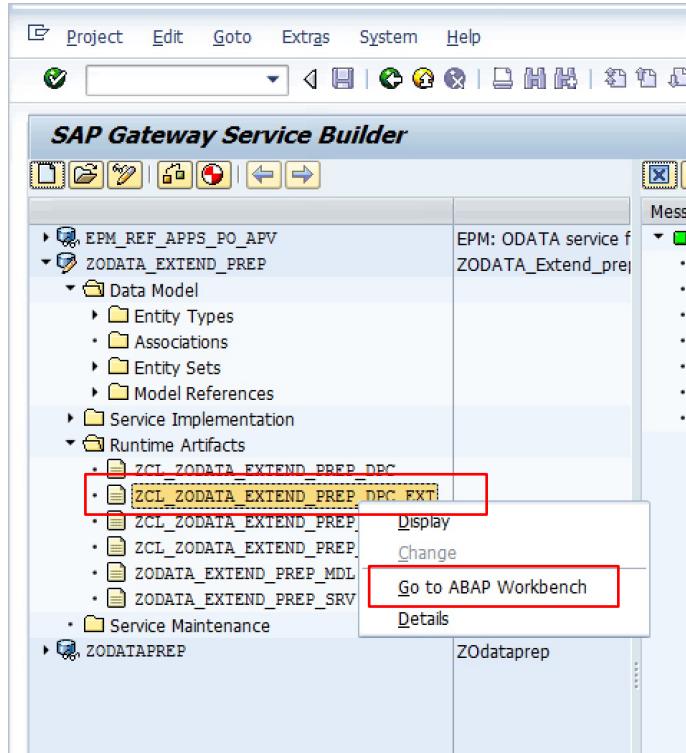
SAP Gateway Service Builder

The screenshot shows the SAP Gateway Service Builder interface with the following project structure:

- Project: ZODATA_EXTEND_PREP
- Data Model:
 - Entity Types
 - Associations
 - Entity Sets
 - Model References
- Service Implementation:
 - Runtime Artifacts
 - Service Maintenance

UI5 InApp Extension with WebIDE

Extend OData Service



The screenshot shows the Class Builder interface for the class **ZCL_ZODATA_EXTEND_PREP_DPC_EXT**. The Methods tab is selected, showing a list of methods:

Method	Level	Visibility	M... D
/IWBEPIF_MGW_SOST_SRV_RUNTIME-OPE...	Instance Method	Public	G
/IWBEPIF_MGN_SOST_SRV_RUNTIME-OPE...	Instance Method	Public	G
/IWBEPIF_MGN_CORE_SRV_RUNTIME-RES...	Instance Method	Public	R
/IWBEPIF_MGN_CORE_SRV_RUNTIME-BAT...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-BAT...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-CHA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-CHA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-CHA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-CLE...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-CRE...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-DEL...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-EXE...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-GET...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-INIT...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-INI...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-REA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-REA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-REA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-REA...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-SET...	Instance Method	Public	O
/IWBEPIF_MGN_CORE_SRV_RUNTIME-UPD...	Instance Method	Public	O
/IWBEPIF_MGN_CONV_SRV_RUNTIME-CHE...	Instance Method	Public	O
/IWBEPIF_MGN_CONV_SRV_RUNTIME-COP...	Instance Method	Public	G

A large blue arrow points from the "Go to ABAP Workbench" option in the SAP Gateway Service Builder to the Methods list in the Class Builder. A callout bubble at the bottom right of the Class Builder window contains the text: "Redefine methods for the OData service".

UI5 InApp Extension with WebIDE

Extend OData Service

Run transaction
`/n/iwfnd/maint_service`

The screenshot shows the SAP WebIDE interface for maintaining services. The main window title is "Activate and Maintain Services". The toolbar includes standard icons for Maintain Service, Edit, Goto, System, Help, and several other maintenance functions. A speech bubble highlights the "Add Service" button in the toolbar, with the text "Run transaction /n/iwfnd/maint_service". The main content area is a "Service Catalog" table listing various SAP services. The columns include Type, Technical Service Name, Ver., Service Description, External Service Name, Namespace, OAuth, Soft State Status, and Processing Mode. Many entries have checkboxes in the OAuth and Soft State Status columns. At the bottom of the catalog table, there are tabs for ICF Node, Call Browser, and SAP Gateway Client. Below the catalog are two smaller tables: "ICF Nodes" and "System Aliases". The status bar at the bottom shows the SAP logo, system information (EU2 (1) 005), and a timestamp (9:19 PM 6/1/2021).

UI5 InApp Extension with WebIDE

Extend OData Service

1. Select backend system

Get Services

System Alias: LOCAL

2. Get all available services

Select Backend Services

Type	Technical Service Name	Version	Service Description	External Service Name	Namespace
BEP	UPS_FC_CALC_FCST	1	Odata Service for Calculate forecast	UPS_FC_CALC_FCST	
BEP	UPS_FC_GATHERDATA	1	Forecasting Gather Data Project	UPS_FC_GATHERDATA	
BEP	UPS_FC_MNG_ACCESS	1	Manage Access Odata	UPS_FC_MNG_ACCESS	
BEP	UPS_FC_MNG_PROJECT	1	Manage Project Odata	UPS_FC_MNG_PROJECT	
BEP	UPS_FC_VIEW_RES	1	Upstream Forecasting View Results	UPS_FC_VIEW_RES	
BEP	UPS_FIELD_DATA_CAPTURE	1	ODATA package for Upstream Field Data Capture	UPS_FIELD_DATA_CAPTURE	
BEP	UPS_FIX_ERROR	1	ODATA Project for Upstream Fix Error Services	UPS_FIX_ERROR	
BEP	UPS_HCA_RESULT	1	Odata project for Upstream Hydro Carbon Allocation	UPS_HCA_RESULT	
BEP	UPS_HCA_STATUS	1	ODATA project for Upstream Hydro Carbon Allocation	UPS_HCA_STATUS	
BEP	UPS_MNG_HIERARCHY	1	Manage Hierarchy	UPS_MNG_HIERARCHY	
BEP	UPS_MODEL_PRODUCTION_NETWORK	1	Model Production Network and Cluster structure ODATA	UPS_MODEL_PRODUCTION_NETWORK	
BEP	US	1		US	
BEP	USERDEFAULTS	1	User Default Settings	USERDEFAULTS	
BEP	V_CNV_2010C_COA_VALUE_HELP_CDS	1	CDS View for Chart of Account Value Help	V_CNV_2010C_COA_VALUE_HELP_CDS	
BEP	VALIDATE_COST_OBJECT_ASSIGN_SRV	1	Validate and Derive Cost Object Assignments	VALIDATE_COST_OBJECT_ASSIGN_SRV	
BEP	VBI_APPL_DEF_SRV	1	CL_VBI_APPL_DEF_01_DPC_EXT	VBI_APPL_DEF_SRV	
BEP	VBI_APPL_DEF2_SRV	1	Service for VBI Application Definition	VBI_APPL_DEF2_SRV	
BEP	VBI_CONTENT_UPLOAD_SRV	1	Service for VBI GeoJSON Content Upload	VBI_CONTENT_UPLOAD_SRV	
BEP	VBI_GEOCODER_SRV	1	GeoCoding Service	VBI_GEOCODER_SRV	
BEP	VOCABULARY_OUTBOUND_SRV	1	FDT CP; Vocabulary Outbound Service	VOCABULARY_OUTBOUND_SRV	
BEP	WSD_TCAPPROVAL_SRV	1	Trading Contract Approval	WSD_TCAPPROVAL_SRV	
BEP	XL_SVC_INTG_SRV	1	ODATA service for Excel Integration	XL_SVC_INTG_SRV	
BEP	ZDTIME_TC_MAINT_SRV_IS_OII	1	Maintenance of data model	ZDTIME_TC_MAINT_SRV_IS_OII	
BEP	ZODATA_EXTEND_PREP_SRV	1	ZODATA_Extend_prep	ZODATA_EXTEND_PREP_SRV	

1. Select service to expose

SAP

EU2 (1) 005 eu2ed INS 9:22 PM 6/1/2021

Fiori app extensions with WebIDE

Extend OData Service

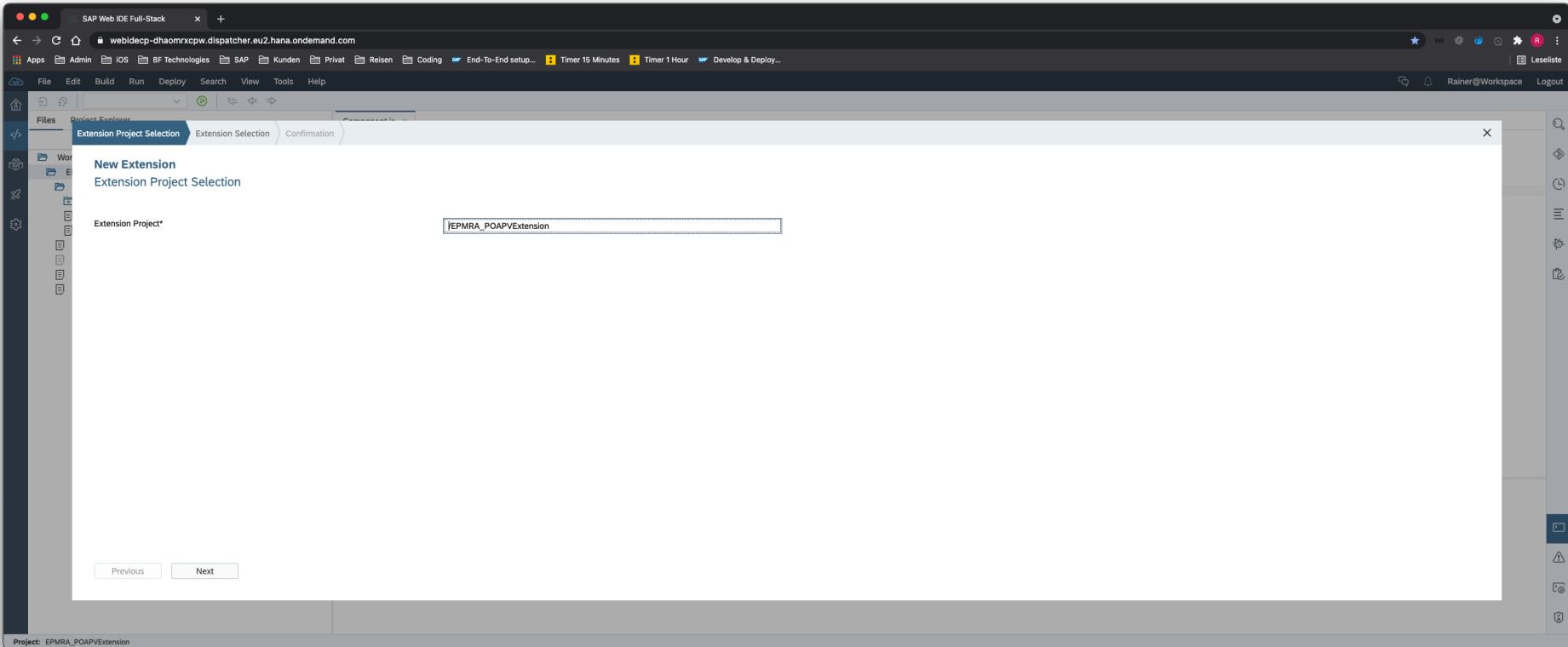
The screenshot shows the SAP Web IDE interface with the title "SAP Web IDE Full-Stack". The URL in the address bar is "webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com". The left sidebar shows a project structure under "Workspace" with a red box around the "EPMRA_POAPVExtension" folder. A context menu is open over this folder, with a red box around the "New" option. The submenu under "New" has a red box around the "Extension" option. The main editor area displays a file named "Component.js" with the following code:

```
1 //!jquery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Component");
2
3 // use the load function for getting the optimized preload file if present
4 + sap.ui.component.load({
5   name: "nw.epm.refapps.ext.po.apv",
6   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
7   url: "/sap/bc/ui5_uis5/sap/EPMRA_POAPV"
8   // we use a URL relative to our own component
9   // extension application is deployed with customer namespace
```

The bottom status bar shows the project name "Project: EPMRA_POAPVExtension".

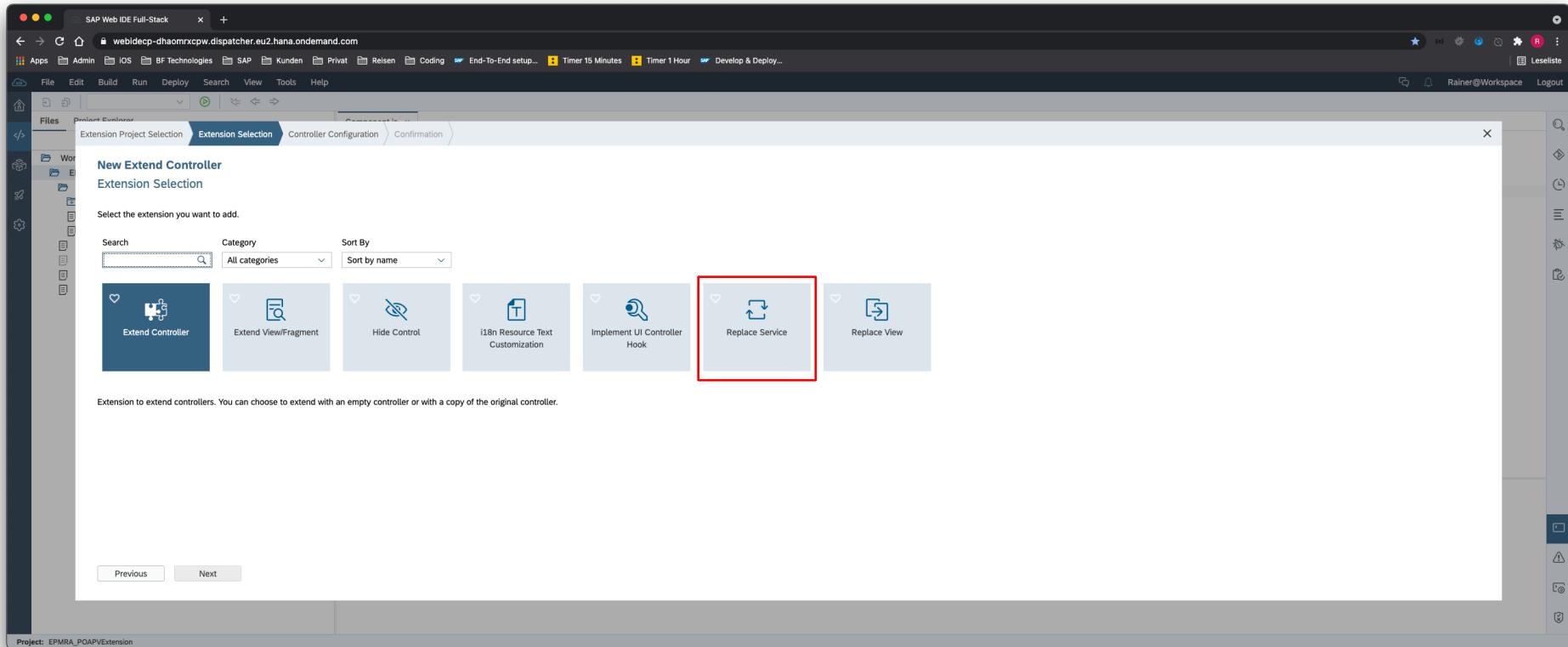
Fiori app extensions with WebIDE

Extend OData Service



Fiori app extensions with WebIDE

Extend OData Service



SAP Web IDE Full-Stack + webidecp-dhaomnxcpw.dispatcher.eu2.hana.ondemand.com

File Edit Build Run Deploy Search View Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Rainer@Workspace Logout

Project Explorer Extension Project Selection Extension Selection Controller Configuration Confirmation

New Extend Controller

Extension Selection

Select the extension you want to add.

Search Category Sort By

All categories Sort by name

Extend Controller Extend View/Fragment Hide Control I18n Resource Text Customization Implement UI Controller Hook Replace Service Replace View

Extension to extend controllers. You can choose to extend with an empty controller or with a copy of the original controller.

Previous Next

Project: EPMRA_POAPVExtension

Fiori app extensions with WebIDE

Extend OData Service

1. Select the destination for the backend connectivity

2. Search for the service

3. Select the new OData Service

SAP Web IDE Full-Stack App-Sicht SAP Cloud Platform: Anmelden Citrix Receiver Citrix Receiver Code: Walkthrough - Step 16 rainerhaider/extension_workshop ui5 extension at DuckDuckGo monitor real memory usage in ...

File Edit Build Run Deploy Search Tools Help

Apps Admin iOS BI Technologies SAP Kunden Privat Reisen Coding End-To-End setup... Timer 15 Minutes Timer 1 Hour Develop & Deploy...

Project Explorer Extension Project Selection Extension Selection Data Connection Confirmation

New Replace Service

Data Connection

Service: ZODATAPREP_SRV is selected.

Choose a service from one of the sources listed below.

If no service exists, create a new data source.

Sources

Service Catalog

eu2005 - EU2 005

Services ZO

Show Details

Service	Description	System
ZODATAPREP_SRV	ZODATAPREP_SRV	eu2005

Previous Next Finish

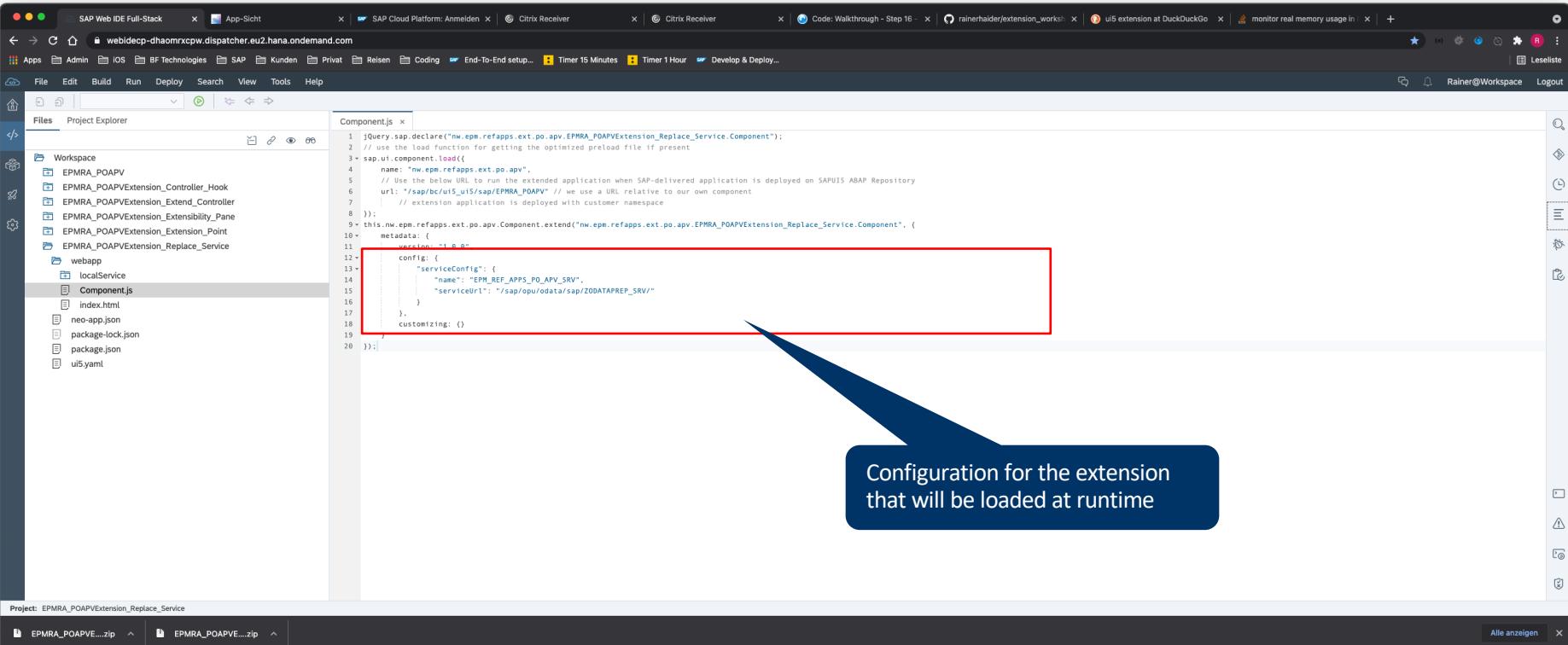
Project: EPMRA_POAPVEExtension_Replace_Service

EPMRA_POAPVE.zip ^ EPMRA_POAPVE.zip ^ Alle anzeigen

The screenshot shows the SAP Web IDE interface for creating a Fiori app extension. The current step is 'Data Connection'. A callout box on the right side guides the user through three steps: 1. Select the destination for the backend connectivity (highlighting the 'Service Catalog' dropdown), 2. Search for the service (highlighting the search input field 'ZO'), and 3. Select the new OData Service (highlighting the table row for 'ZODATAPREP_SRV'). The 'Service Catalog' dropdown shows 'eu2005 - EU2 005'. The 'Services' table lists 'ZO' with the service 'ZODATAPREP_SRV' selected. Navigation buttons 'Previous', 'Next', and 'Finish' are visible at the bottom.

Fiori app extensions with WebIDE

Extend OData Service



The screenshot shows the SAP Web IDE interface with a project titled "EPMRA_POAPVExtension_Replace_Service". The "Component.js" file is open in the editor, displaying the following code:

```
1 //jQuery.sap.declare("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Replace_Service.Component");
2 // use the load function for getting the optimized preload file if present
3 + sap.ui.component.load({
4   name: "nw.epm.refapps.ext.po.apv",
5   // Use the below URL to run the extended application when SAP-delivered application is deployed on SAPUI5 ABAP Repository
6   url: "/sap/bc/ui5/u15/sap/EPMRA_POAPV" // we use a URL relative to our own component
7   // extension application is deployed with customer namespace
8 });
9+ this.nw.epm.refapps.ext.po.apv.Component.extend("nw.epm.refapps.ext.po.apv.EPMRA_POAPVextension_Replace_Service.Component", {
10+   metadata: {
11     version: "1.0.0"
12+     config: {
13+       "serviceConfig": {
14         "name": "EPM_REF_APPS_P0_APV_SRV",
15         "serviceUrl": "/sap/opu/odata/sap/ZODATAPREP_SRV/"
16       }
17     },
18     customizing: {}
19   }
20});
```

A red rectangular box highlights the configuration section of the code, specifically the "config" object and its "serviceConfig" property. A large blue arrow points from this highlighted area to a callout bubble containing the following text:

Configuration for the extension
that will be loaded at runtime

Fiori app extensions with WebIDE

Extend OData Service

The screenshot shows a browser window with multiple tabs open, illustrating the development and deployment process of a Fiori app extension using SAP Web IDE.

The main content area displays a Fiori app titled "Purchase Orders (19)". The interface shows a list of purchase orders, with the top entry being "South American IT Company" worth 3.913,91 EUR. Below this, there are sections for "General Information" and "Items". At the bottom right of the Fiori screen are "Approve" and "Reject" buttons.

Below the Fiori app, the SAP Web IDE interface is visible, specifically the Network tab of the developer tools. A red box highlights the "Request URL" field, which contains the URL: `https://webidetesting4188698-dhaomrxcpw.dispatcher.eu2.hana.ondemand.com/sap/opu/odata/sap/Z00ATAPREP_SRV/$batch`. A blue callout bubble points from this URL to the Fiori app's purchase order list.

The Network tab also shows a timeline of request and response times, with most requests taking between 5ms and 65ms, and one response taking 105ms. The Headers, Preview, Response, Initiator, Timing, and Cookies tabs are also visible in the developer tools.

Bring all together



Fiori app extensions with WebIDE

Bring all together

