

## Course Guide

# Customize the IBM Case Manager Client User Interface (V5.3.2)

Course code F2940G ERC 1.0



**March 2018**

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# Course overview

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## Preface overview

In this course, you will customize IBM Case Manager Client without using much code. In an IBM Case Manager system, you will create pages with custom layout and implement new actions by configuring buttons and menu items. You will use the Calendar widget to track case events and a Script Adapter widget to transform the data. You will learn how to wire two widgets together to establish communication, customize views for case properties including business objects, specify viewers for documents, and implement External Data Services to create dependent choice lists.

## Intended audience

This course is for Solution Architects, Solution Designers, Developers, Solution Builders, System Administrators, and any users who are responsible for building and customizing Case Manager solutions.

## Topics covered

Topics covered in this course include:

- Create custom pages
- Customize toolbar and menu
- Add a Calendar widget
- Wire widgets
- Use Script Adapter widgets
- Customize properties views
- Specify viewers for file types
- Implement External Data Services

## Course prerequisites

Participants should have:

- Knowledge of IBM Case Manager concepts and the ability to manage cases in the client, or
- IBM Case Manager Essentials (V5.3.2) (classroom)(F2900G), or
- IBM Case Manager Essentials (V5.3.2) (self-paced) (F2909G)
- The ability to build an IBM Case Manager solution, or
- Build an IBM Case Manager Solution (V5.3.2) (classroom)(F2910G), or
- Build an IBM Case Manager Solution (V5.3.2) (self-paced) (F2919G)

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## Document conventions

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Conventions used in this guide follow Microsoft Windows application standards, where applicable. As well, the following conventions are observed:

- **Bold:** Bold style is used in demonstration and exercise step-by-step solutions to indicate a user interface element that is actively selected.
- **Courier New font and bold:** This font style is used in demonstration and exercise step-by-step solutions to indicate the text that must be typed by the participant for the data fields.
- **CAPITALIZATION:** All file names, table names, column names, and folder names appear in this guide exactly as they appear in the application.  
To keep capitalization consistent with this guide, type text exactly as shown.
- *Italic:* Used to reference book titles.

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# Exercises

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## Exercise format

Exercises are designed to allow you to work according to your own pace. Content contained in an exercise is not fully scripted out to provide an additional challenge. Refer back to demonstrations if you need assistance with a particular task. The exercises are structured as follows:

### The business question section

This section presents a business-type question followed by a series of tasks. These tasks provide additional information to help guide you through the exercise. Within each task, there may be numbered questions relating to the task. Complete the tasks by using the skills you learned in the unit. If you need more assistance, you can refer to the Task and Results section for more detailed instruction.

### The task and results section

This section provides a task based set of instructions that presents the question as a series of numbered tasks to be accomplished. The information in the tasks expands on the business case, providing more details on how to accomplish a task. Screen captures are also provided at the end of some tasks and at the end of the exercise to show the expected results.

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## Additional training resources

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Visit the IBM Skills Gateway ([www.ibm.com/training/](http://www.ibm.com/training/)) for details on:

- Instructor-led training in a classroom or online
- Self-paced training that fits your needs and schedule
- Comprehensive curricula, learning journeys, and training paths that help you identify the courses that are right for you
- IBM Professional Certification Program (<http://www-03.ibm.com/certify/>)
- For other resources that will enhance your success, bookmark the IBM Analytics Skills Gateway (<https://www-03.ibm.com/services/learning/ites.wss/zz-en?pageType=page&c=C067650S63836C42>)
- Find the IBM Case Manager videos and information in the IBM Case Manager on Cloud Learning Center (<http://ibmtvdemo.edgesuite.net/software/analytics/learning-centers/case-manager-cloud/index.html>)

# IBM product help

Help type	When to use	Location
Task-oriented	You are working in the product and you need specific task-oriented help.	<i>IBM Product - Help link</i>
Books for Printing (.pdf)	<p>You want to use search engines to find information. You can then print out selected pages, a section, or the whole book.</p> <p>Use Step-by-Step online books (.pdf) if you want to know how to complete a task but prefer to read about it in a book.</p> <p>The Step-by-Step online books contain the same information as the online help, but the method of presentation is different.</p>	Start/Programs/ <i>IBM Product/Documentation</i>
IBM on the Web	<p>You want to access any of the following:</p> <ul style="list-style-type: none"> <li>• IBM Skills Gateway</li> <li>• Online support</li> <li>• IBM Web site</li> </ul>	<p><a href="https://www-03.ibm.com/services/learning/ites.wss/zz-en?pageType=page&amp;c=a0011023">https://www-03.ibm.com/services/learning/ites.wss/zz-en?pageType=page&amp;c=a0011023</a></p> <p><a href="https://www.ibm.com/support/home/">https://www.ibm.com/support/home/</a></p> <p><a href="http://www.ibm.com">http://www.ibm.com</a></p>

## Unit 1    Create custom pages

IBM Training



### Create custom pages

IBM Case Manager V5.3.2

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## Unit objectives

- Create a custom Solution page
- Customize the default Case Details page
- Create a page with Free Form page layout

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*Unit objectives*

## Describe a page in IBM Case Manager Client

- A page contains the widgets that are required to complete an activity.
- A page includes:
  - page layout
  - widget configurations
  - flow of events between widgets

[Create custom pages](#)

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### *Describe a page in IBM Case Manager Client*

You can configure your application with a custom page for each case task.

For example, a loan officer needs to submit loan requests and notify customers when a decision is reached. You can add a custom page to submit loan requests and add another page with work items to contact customers with the status of their loan requests. In addition, you can also configure the application so that different roles use different pages.

Communication between different widgets (the flow of events) in a page is achieved either by widgets that broadcast events or by widgets that are wired to other widgets on the page. The widget events are described in detail in a following unit.

## What types of default pages are available?

- The following pages are the most commonly used default pages:
  - Solution pages
  - Case Details pages
  - Add Case pages
  - Add Task pages
  - Work Details pages

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### *What types of default pages are available?*

You can access the pages in IBM Case Manager Builder on the Pages tab and customize the page layout in Page Designer.

Following are the types of pages that are available in IBM Case Manager:

- Solution pages provide case workers with access to cases and work items that are in a solution. The solution pages include the Work page, with the In-baskets and Toolbar widgets, and the Cases page, with the Case Search-related widgets.
- Case Details pages include pages that case workers use to interact with specific cases. IBM Case Manager provides two default Case Details pages, the Case Details page and the Case Details Form page.
- Add Case pages include pages that case workers use to create cases of specific case types. IBM Case Manager provides two default Add Case pages, the Add Case page and the Add Case Form page.
- Split Case pages include pages that case workers use to create cases that are based on existing cases. IBM Case Manager provides one default Split Case page.

- Add Task pages include the step pages that display when a case worker adds a discretionary task to a case. IBM Case Manager provides two default Add Task pages, the Add Task page and the Add Task Form page.
- Work Details pages include step pages that display when a case worker opens a work item. Case workers use the step pages to complete the work items that are assigned to them. IBM Case Manager provides a Work Details page, Work Details Form page, and a Form Attachment Work Details page.
- Custom Task Details pages include the step page that displays when a case worker opens a work item that was defined for a custom task. IBM Case Manager provides one default Custom Task Details page.

## List the default widgets used in a page

- Toolbar widget
- Search widget
- Case List
- In-baskets widget

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### *List the default widgets used in a page*

The following items are examples of default widgets that are available for use on pages:

- Toolbar enables case workers to open a web page, add cases, manage roles, or perform a custom action.
- Search provides case workers with a way to search for cases based on selected property values.
- Case List shows a list of cases that a search returns. Case workers can select a case to view from the list.
- In-baskets enable users to view and work with work items in their personal in-basket and the in-baskets that are associated with their role.

## Create and customize pages

- To create new pages, you can:
  - use existing templates
  - copy existing pages
- To customize page layouts, use Page Designer

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### *Create and customize pages*

IBM Case Manager includes a set of pages that you can use in your solution. You can customize these pages to meet the requirements of your solution. You can use these pages as templates to create additional pages to provide customized views for different roles, case types, and tasks.

For example, you want two versions of the Case Details page, one for managers and one for case workers. For the pages that are used by managers, you include the Timeline Visualizer widget to display the extended case history. For the pages that are used by case workers, you do not include the Timeline Visualizer widget.

## Identify the sections in the Page Designer interface

- Page Designer enables you to create custom page layouts.
- Page Designer interface includes the following sections:
  - Page toolbar
  - Widget toolbar
  - Widget palette
  - Hidden widget layout area

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### *Identify the sections in the Page Designer interface*

The Page toolbar provides the following buttons:

- Page Options: edit the overall page layout
- Edit Wiring: configure wiring events
- Show or Hide Hidden Widgets: display or hide the Hidden Widget layout area
- Show or Hide Border: show or hide borders for the page layout areas

The Widget toolbar provides the following buttons:

- Edit Wiring: configure wiring for this widget
- Edit Settings: make configuration changes to the widget, such as adding buttons or options
- Actions: move, resize, rename, hide, show, or delete the widget

Use the widget palette to select a widget to add to your page. You can drag widgets from the palette to the page area to which you want to add it.

Use the hidden widget layout area to add hidden widgets to your page.

Hidden widgets are widgets that are not displayed to users. These widgets usually perform background functions that are needed for the page to run effectively. For example, you can use the Hidden widget area to add a Script Adapter widget, which translates data from one format to another in order to facilitate communication between widgets.

## List customization options for the Case Information widget

- For the Case Information widget, you can configure:
  - Tab visibility (views)
  - Tab order
  - Documents view

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### *List customization options for the Case Information widget*

For the Case Information widget, you can edit the settings to select the views that you want to display in the widget.

If you configure the widget to display more than one view, each view is shown on a separate tab.

For the Documents view, you can specify whether documents are to open in a separate browser window and whether only document types that are defined in the solution are to be displayed.

## Describe Free Form page layouts

- Free Form page layout:
  - enables you to design custom pages
  - supports a new set of container widgets in the widget palette
  - Allows you to organize many widgets with multiple containers on the page
  - provides more flexibility than reusing the existing pages

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### *Describe Free Form page layouts*

IBM Case Manager includes the ability to customize its user interface with its Page Designer and widgets. A base set of widgets are provided and this set can be extended with custom widgets. Once created and registered, the custom widgets become available in the widget palette and they are ready to be added to the case pages using page layouts.

You can use Free Form page layout to add many widgets for your page. When this layout is selected for your page, a set of new container widgets are listed in the widget palette. The widgets can be wired together, even when they are located on different tabs.

## Use custom pages in IBM Case Manager Client

- A custom page must be assigned to one of the following IBM Case Manager assets depending on the page type:
  - Role
  - Step
  - Case type

[Create custom pages](#)

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### *Use custom pages in IBM Case Manager Client*

After the custom pages are created in the Page Designer, assign them to different IBM Case Manager assets depending on the page type.

Examples include:

- Assign a solution page to a role.
- Assign Work Details page to a step.
- Assign Case Details page to a case type.

## Prepare your system: Start the IBM Case Manager components

The environment that is provided with this course requires that you start the IBM WebSphere Application servers that host the IBM Case Manager components. The WebSphere Admin folder on the desktop includes the scripts that you need to run to start the components. For this course, you will use a Windows Server 2012 R2 operating system, and the server name is VCLASSBASE.edu.ibm.com.

Before doing the demonstrations and exercises in this course, complete the following tasks to ensure that your environment is ready and required services are running.

### **Task 1. Log on to the system.**

1. If the system is powered off, power the system on.
2. Log in to the operating system by using the following credentials:
  - User: **p8admin**
  - Password: **FileNet1**

### **Task 2. Start the WAS deployment manager and nodeagent.**

1. Start **Services** by clicking the **Services**  shortcut on the taskbar.
2. If the **IBM WebSphere Application Server V9.0 - Dmgr01** service does not have the **Running** status, then start it by right-clicking the service and selecting **Start**.
3. If the **IBM WebSphere Application Server V9.0 - Node01** service does not have the **Running** status, then start it by repeating step 2.

### **Task 3. Start the WAS application servers.**

Two application servers are needed to run IBM Case Manager in this environment. The server1 application server runs Content Platform Engine. The ICNserver application server runs IBM Content Navigator. In this task, you will start server1 before you start ICNserver. Server1 usually starts in 2-3 minutes and ICNServer can take longer.

1. On the desktop, open the **WebSphere Admin** folder.
2. Right-click **\_1 Start server1.bat**, and then select **Run as administrator**.
3. Click **Yes** if prompted to allow the program to make changes.  
Wait for the command window to close.
4. Right-click **\_2 Start ICNserver.bat**, and then select **Run as administrator**.
5. Click **Yes** if prompted to allow the program to make changes.  
Wait for the command window to close.

## Task 4. Verify that IBM Case Manager is operational.

When you start the servers, the applications start automatically.

1. Open a **Mozilla Firefox** browser window.
2. On the **Course Portal Links** page, under **System Health**, click **Case Manager Ping**.
3. Log in as **p8admin/FileNet1** and click **OK**.  
The IBM Case Manager Context (Ping Page) is displayed.
4. Verify that you see a two-column table with information like: the Product name, Case Management Build version, and the Operating System.
5. Close the browser window and any other open windows.  
You started your IBM Case Manager system. Your system is ready for the demonstrations and exercises.

### Troubleshooting

If you do not see the IBM Case Manager Context (Ping Page), verify that the following two services are running:

- IBM WebSphere Application Server V9.0 - Dmgr01
- IBM WebSphere Application Server V9.0 - Node01

Stop and start the components

In the WebSphere Admin folder, stop the two application servers and restart them. The list of steps are:

- Right-click \_3 Stop ICNserver.bat and then select **Run as administrator**.  
Wait for the command window to close.
- Right-click \_4 Stop server1.bat and then select **Run as administrator**.  
Wait for the command window to close.
- Right-click \_1 Start server1.bat and then select **Run as administrator**.  
Wait for the command window to close.
- Right-click \_2 Start ICNserver.bat and then select **Run as administrator**.  
Wait for the command window to close.

Do not start the next script until the command window closes for the previous script. Verify that IBM Case Manager is operational.

## Demonstration 1: Create a sample solution (Optional)

You will add and configure the following objects for your Case solution:

- Case solution
- Case properties
- Roles and In-basket
- Case Types
- Document classes
- Folders
- Properties views
- Tasks
- Step map

## Demonstration 1: Create a sample solution (Optional)

The Build a Case Manager Solution course explains how to create a solution in more detail than is presented in this demonstration. If you want to practice creating a Case Solution, do the tasks in this demonstration. If you are already familiar with creating a solution, you may skip this demonstration.

### Purpose:

**As a Solution Builder and a Solution Designer, you create a solution for case management and customize it based on the needs of case workers and other users. In this demonstration, you will create a sample solution to use throughout this course.**

Before doing the demonstrations in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in this unit.

### Task 1. Open IBM Case Manager Builder and create a solution.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder**:

- URL: **http://vclassbase:9081/CaseBuilder**  
You can also use the **Case Builder** bookmark in the browser toolbar.
- User: **P8Admin**
- Password: **FileNet1**

Ignore any warning messages, if you are prompted to update Firefox by clicking **Not Now**.

The IBM Case Manager Builder application opens to the main page.

2. In **IBM Case Manager Builder**, click the **Add Solution**  icon to add a solution.
3. In the **Add a Solution** dialog box, select the **No template** option from the list for the Solution template field.
4. Make sure that the **Use the wizard to define the solution** option is not selected.
5. Type the following values:
  - Name: **PageBuilder**
  - Solution prefix: **PAG**
  - Description: **Solution to use for the labs**

6. Click **OK**.  
A solution window opens for the PageBuilder.
7. Optionally, select a different icon from the **Solution Icon** list on the upper left to associate with the solution.

## Task 2. Add properties.

1. Select the **Properties** tab.
2. Click **Add Property** and then click **New**.
3. Type **Customer name** for the **Name** field.
4. Select **String** from the **Type** list.
5. Leave the default settings for all other fields.
6. Click **OK**.

The new property is listed in the *Properties* tab.

7. Repeat the **steps 2-6** and use the following values (Name, Type) to add more properties:
  - **Premium, Boolean**
  - **Age, Integer**
  - **Price, Float**
  - **Customer Since, DateTime**

## Task 3. Add roles and configure in-basket.

1. Select the **Roles** tab and then click **Add Role**.
2. Type **Service Rep** for the **Role** field and then click **OK**.  
The new role is listed in the Roles tab.
3. Select the **In-baskets** tab, and then click the **Service Rep** in-basket link.
4. In the **In-basket General** tab, click **Select Property**, and then click **Select All**.
5. Click **OK** and verify that the case properties are added.
6. Click **OK** near the **Service Rep** row.
7. Click **Save** at the top of the page to save your solution.

## Task 4. Add document classes.

1. Select the **Documents** tab.
2. Click **Add Document Class** and then click **New**.
3. Type **Claim Document** for the **Name** field and then click **OK**.  
The new document class is listed.
4. Click **Save** at the top of the page to save your solution.

## Task 5. Configure case types and folders.

1. Select the **Case Types** tab and then click **Add Case type**.
2. Type **Service Claim** for the **Case type name** field  
Leave the default values for all other fields.
3. In the left pane, click **Properties**.
4. Click **Add Property > Existing** on the right pane.
5. Click **Select All** and then click **OK**.
6. Click **OK All** in the toolbar.
7. In the left pane, click **Case Folders**.
8. Select the **Service Claim** folder on the right pane and then click **Add Folder**.
9. Type **Correspondence** in the folder name field and then click **OK**.
10. Click **Save** at the top of the page to save your solution.

## Task 6. Add properties to the views.

1. In the **Service Claim** case type page, click **Views** in the left pane.
2. In the **Case Summary** tab, click **Select All** and then click **Add to View**.  
All the properties are added to the **Properties in the Case Summary View** column.  
You will configure the **Properties Layout** in a separate unit.
3. Select the **Case Search** tab.
4. Select **Customer name** from the **Available Properties** pane, hover the cursor over the customer name, and then move it to **Properties in the Case Search view** by using the forward arrow.
5. Repeat **step 4** to move the **Added On** property.
6. Click **Save** at the top of the page to save your solution.

## Task 7. Create tasks.

1. In the left pane, click **Tasks**.
2. Click **Add Task** and then select **Task** from the menu.
3. Type **Open Service Claim** for the name.  
Leave the default values for all other fields.
4. Click the **Preconditions** tab and then verify that the **No preconditions** is selected in the list.
5. Scroll down and then click **OK** at the bottom of the window to add the task to the solution.
6. Click **Save** at the top of the page to save your solution.

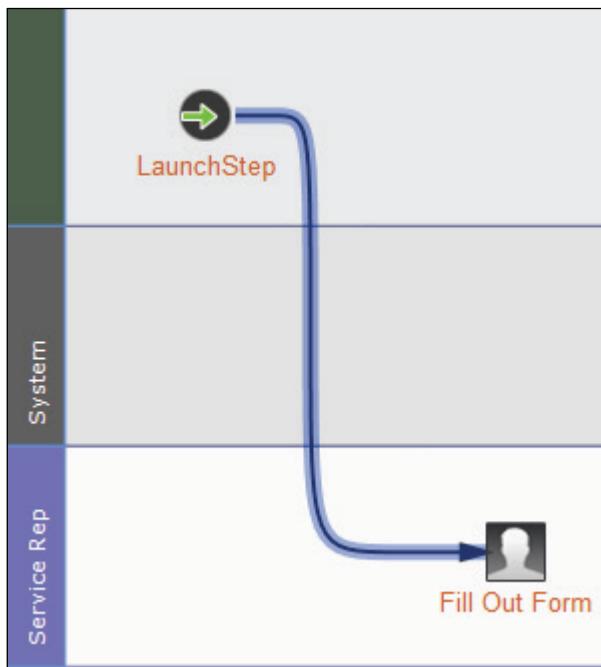
## Task 8. Add a step map.

1. To edit the task in **Step Designer**, hover the cursor over **Open Service Claim**, and then click the **Edit steps**  button.  
The Step Designer window opens.
2. Click the **Role Lane**  icon in the Palette, drag the icon to below the System lane, and then release the left mouse button.  
Verify that a new lane (Service Rep) is created.
3. Scroll down on the left and in the **Role Property** pane, confirm that the Role Lane is automatically assigned to the **Service Rep** role, because it is the only role that is available for this solution.
4. Click the **Step**  icon in the Palette, drag the icon onto the **Service Rep** lane slightly to the right of the LaunchStep, and then release the left mouse button.
5. Select the **Step 1** in the right pane and then type **Fill Out Form** for the **Name** field in the **Step Properties** pane on the left.
6. Click the **Add connectors**  icon on the toolbar at the top to activate the route creation tool.  
Notice that the cursor changes to cross-hairs when you hover the cursor over the right pane.

7. Select **LaunchStep**, hold the left mouse button down and then move the cursor to **Fill Out Form** step.

When you see a line is drawn as you move the cursor to the *Fill Out Form* step, release the left mouse button.

Confirm that a line is drawn between **LaunchStep** and the **Fill Out Form** step.



8. Release the connector by clicking the arrow  icon in the toolbar.
9. Click the  icon on the toolbar to apply any changes to the diagram and validate the workflow.
10. Click **Save Changes** on the confirmation dialog box and then click **Save** at the upper right corner of the page to save the step map.

## Task 9. Add properties to the step.

1. In **Step Designer**, select **Fill Out Form** step in the right pane.
2. In the **Step Properties** pane on the lower left, scroll down and then click the ellipsis for the **Properties** field.
3. In the **Case Properties** tab, click **Select Property** and then click **Select All**. All the available case properties are selected.
4. Click **OK**.

5. Ensure that the case properties have **Read and write** access and then click **OK**.
6. Click **Save** at the upper right corner of the page to save the step map and then click **Close** to close **Step Designer**.
7. Click **Save and Close** at the upper right corner of the page to save the solution.
8. Log out and close the browser.

**Results:**

In this demonstration, you created a sample case solution to use in the course.

## Demonstration 2: Import and deploy a solution

You will complete the following activities:

- Import a case solution
- Deploy the solution
- Manage roles in the Case Manager Client
- Explore the default page layout

*Demonstration 2: Import and deploy a solution*

## Demonstration 2: Import and deploy a solution

### Purpose:

As a Solution Builder and a Solution Designer, after you create a case solution, you need to deploy and test the solution. You created a solution in the previous demonstration. If you skipped Demonstration 1, you can import an existing solution. In this demonstration, you will import, deploy, and test the solution. You will also manage the roles and explore the default page layout in IBM Case Manager Client.

Before doing the demonstrations in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in this unit.

### Task 1. Import the PageBuilder solution.

If you created a Case Solution, and completed Tasks 1 - 9 in Demonstration 1, skip this task and go to Task 2.

1. In the **Firefox** browser, log on to **IBM Case Manager Administration client**:
  - URL: **http://vclassbase:9081/navigator/?desktop=icmadmin**  
You can also use the Case Admin bookmark in the browser toolbar.
  - User: **P8Admin**
  - Password: **FileNet1**
2. In the navigation tree on the left pane, select the design object store (**DEV\_design**).
3. In the **DEV\_design** tab on the left pane, click **Solutions**.
4. In the **Solutions** tab on the right pane, click **Import > Import Solution > From Solution Package**.
5. Click **Browse** and then, in the **File Upload** window, browse to the **C:\Training\F2940\01-Create\_custom\_pages** folder.
6. Select the **PageBuilder\_solution.zip** file and then click **Open**.
7. Click **Next** and then click **Finish**.
8. When the import is complete, click **Close**.
9. Verify that the **PageBuilder** solution is listed in the **Solutions** tab.
10. Log out of the client and close the browser.

## Task 2. Deploy the solution.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder**:

- URL: `http://vclassbase:9081/CaseBuilder`

You can also use the *Case Builder* bookmark in the browser toolbar.

- User: **P8Admin**

- Password: **FileNet1**

The IBM Case Manager Builder application opens to the main page.

2. On the main page, click the **Deploy**  icon for the **PageBuilder** solution.

3. If prompted, click **Deploy** on the **Confirmation** page.

Wait for the deployment to complete as shown by the **Deployment**

**Successful**  icon.

4. Click the **Test**  icon to open **IBM Case Manager Client**.

The Case Manager Client application opens in a new browser window that shows the PageBuilder solution page.

5. Confirm that the user name that you used to log on to **IBM Case Manager Builder** is shown in the upper right corner of the page.

The page has a message *You are not a member....* To add a user as a member, you will configure the role in the next task.

## Task 3. Manage roles for the solution.

You must manage the roles of the solution in order to test your solution. The solution is open in IBM Case Manager Client.

1. Click the down arrow next to **PageBuilder** on the upper right to expand the **PageBuilder** menu, and then select **Manage Roles**.



2. In the **Manage Roles** window on the left pane, ensure that the **Service Rep** role is selected.
3. Click **Add Users and Groups** at the top of the page.
4. Type **p8** in the search field and then click the **Search**  icon.

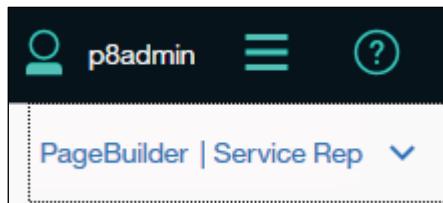
5. Select **p8admin** in the **Available** list.
6. Click the blue forward arrow to add **p8admin** to the **Selected** list and then click **Add**.

The p8admin user is now added to the Service Rep role.

Roles	Add Users and Groups
Service Rep	<a href="#">Add Users and Groups</a>
Members	p8admin

Manage Roles  
You can modify the list of users for each role that is associated with this solution

7. Click **Save** at the bottom of the page save and close the window.
8. Confirm that the role selector at the upper right corner of the page now displays the role (Service Rep) for your application (Page Builder).



If the page still shows the message "You are not a member...", refresh the page by doing a refresh on the browser.

## Task 4. Explore the default page layout.

1. In the **Cases** tab, observe the layout of the page.
2. Open the **Work** tab and notice the layout of the page.  
There are two subtabs: Service Rep and My Work.
3. Open the **My Work** subtab.
4. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
5. Type **Pam Butler** into the **Customer name** field and then click **Add** on the upper right.
6. Select the **Service Rep** subtab and then click the **Fill Out Form** link to open the work item.  
If the item is not listed, refresh the page and select the Work tab again.  
The Complete, Save, and Close buttons are available at the upper right.
7. Click **Complete** on the upper right.  
The work item is cleared from the Service Rep In-basket.

8. Select the **Cases** tab, and then in the Search section, select **Customer name** for the search criteria.
9. Type **Pam** and then click **Search**.  
Your case is listed in the right pane.
10. Click the user name **p8admin** on the upper right to log out of all applications and then close the browser windows.

**Results:**

**In this demonstration, you imported, deployed, and tested a sample case solution. You managed the roles and explored the default page layout in IBM Case Manager Client to become familiar with the default layout.**

## Demonstration 3: Create a custom Solution page

The screenshot shows the IBM PageBuilder interface. At the top, there's a navigation bar with a folder icon labeled 'Cases' and a dropdown arrow, followed by 'PageBuilder | Service Rep' and another dropdown arrow. Below the navigation bar, there are three tabs: 'Cases', 'Work', and 'Customer Solution Page', with 'Customer Solution Page' being the active tab. Underneath the tabs are two buttons: 'Manage Roles' and 'Add Case' with a dropdown arrow. A search bar labeled 'Search:' is followed by a dropdown menu set to 'Customer Name'. To the right of the search area, it says 'No items to display' and has a vertical scroll bar. At the bottom left of the main content area are two buttons: 'Search' and 'Advanced Search'. At the very bottom of the page, there are links for 'Create custom pages' and '© Copyright IBM Corporation 2018'.

*Demonstration 3: Create a custom Solution page*

## Demonstration 3: Create a custom Solution page

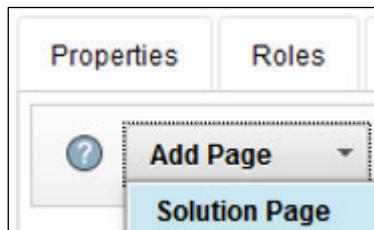
### Purpose:

As a Solution Builder and a Solution Designer, you create custom pages for different roles to provide the users with a personalized user experience. You will use the solution that you completed in the previous demonstration and Page Designer to create a custom solution page, configure page layout, and add widgets to the page. You will then assign the page to a role, redeploy the solution, and test the layout.

### Task 1. Create a custom Solution page.

1. In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.

Click **Add Page > Solution Page**.

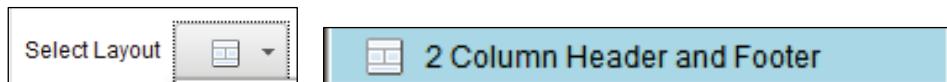


4. Type **Customer Solution Page** for the **Name** field.
  5. Add **Search for cases, view results, access in-baskets** text for the **Description** field and then click **OK**.
- The new page is listed in the Pages tab.
6. Click **Save** at the top of the page to save your solution.

### Task 2. Configure the page layout.

1. Click the **Customer Solution Page** link to open the page in **Page Designer**.
2. Click the **Page Options** button from the toolbar.

In **Page Options**, click **Select Layout** and then select the **2 Column Header and Footer** layout.



3. Select the left column on the layout.

4. For the **Measurements** section, select the **Pixels** option, and then set the **Column width** to 260 pixels.



5. Select the **Footer** area.  
 6. Check both **Collapsible** and **Collapsed by default** options on the right and then click **OK**.

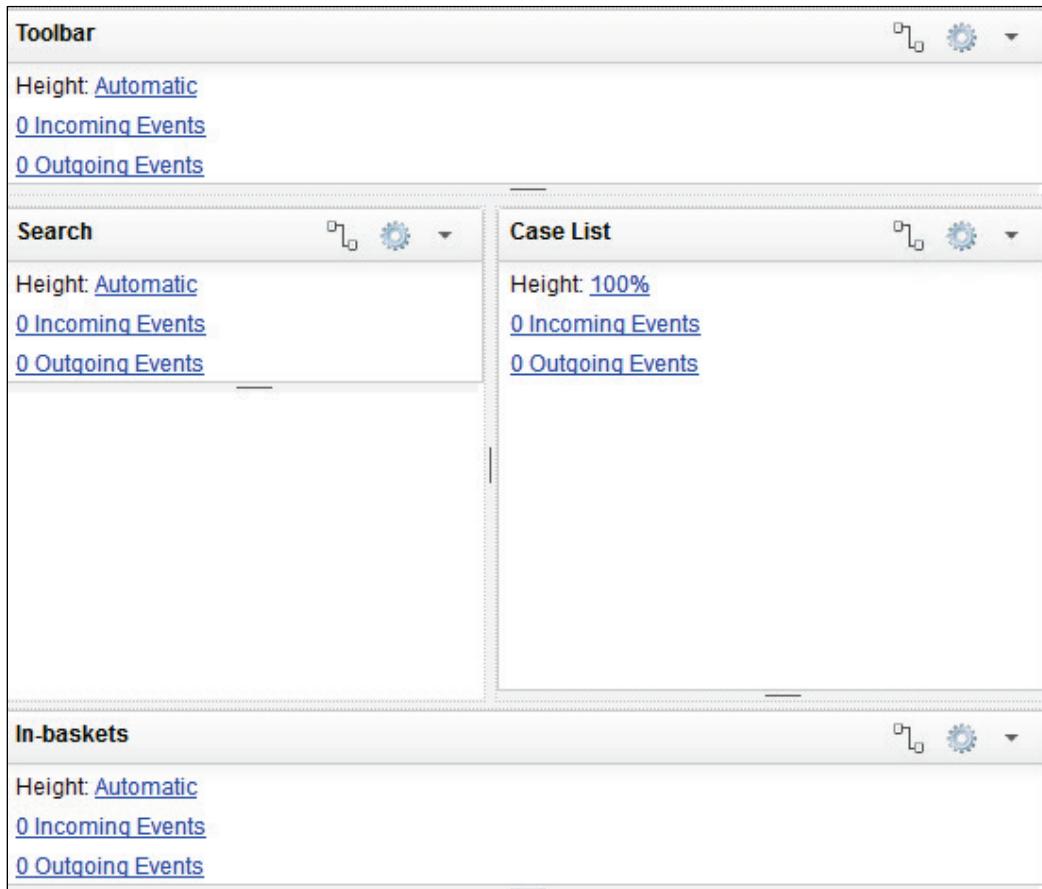
### **Task 3. Add widgets to your solution page.**

The columns, header, and footer areas are containers for widgets. The page is empty until you add widgets to these containers.

1. From the **Case Widgets** panel on the left, drag the following widgets into the container specified for that widget.
  - You may have to scroll down the panel to see the widgets.
  - To move the widget, select the widget, move it to the container and then when you see the dotted blue border lines in the container, release the left mouse button.
    - **Toolbar** widget into header area
    - **Search** widget into left column
    - **Case List** widget into right column
    - **In-baskets** widget into footer area

2. Click **Save**.

The completed page layout result has the Toolbar widget at the top, Search widget on the middle left pane, Case List widget on the middle right pane, and the In-baskets widget at the end of the page.



3. Click **Close**.

#### **Task 4. Assign the custom page to a role.**

To use a custom solution page in IBM Case Manager Client, you need to assign that page to a role.

1. Select the **Roles** tab and then click the **Service Rep** role link.
2. Open the **Pages** tab and then click **Assign Page**.

### 3. Select the Customer Solution Page.

Name	Unique ID
Customer Solution Page	CustomerSolutionPage

4. Click **OK** to close and then click **OK All** to accept the changes to the role.
5. Click **Save and Close**.

## Task 5. Redeploy the solution.

1. On the main page, click the Deploy icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete as shown by the **Deployment Successful** icon.
3. Click the **Test** icon to open **IBM Case Manager Client**.

## Task 6. Test the solution.

You deployed your solution with a custom page layout in the previous tasks. You are in the IBM Case Manager Client.

1. Open the **Customer Solution Page** tab.

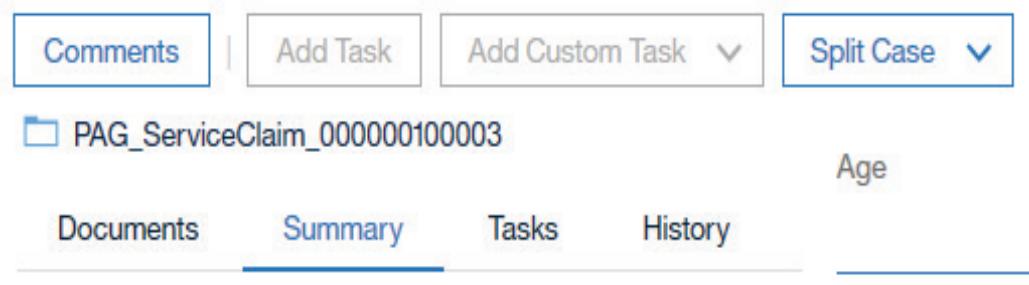
2. Confirm that the page includes the following assets as shown in the above screen capture:
  - A **Toolbar** widget at the top of the page
  - A **Search** widget in the left column
  - A **Case List** widget in the right column
  - A collapsed area at the footer (shown as the ellipsis  icon)
3. Expand the footer by clicking the ellipsis icon to confirm that it shows the **In-baskets** widget.
4. Log out of all applications and then close the browser windows.

**Results:**

**In this demonstration, you created a blank Solution page, configured the page layout, added widgets to the page, assigned the page to a role, and tested the page in IBM Case Manager Client.**

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## Demonstration 4: Customize the default Case Details page



The screenshot shows a customized Case Details page. At the top, there are four buttons: 'Comments' (highlighted with a blue border), 'Add Task', 'Add Custom Task', and 'Split Case'. Below these is a folder icon followed by the case ID 'PAG\_ServiceClaim\_000000100003'. To the right of the case ID is the word 'Age'. Below the case ID are four tabs: 'Documents', 'Summary' (underlined in blue, indicating it is selected), 'Tasks', and 'History'. At the bottom left is a link 'Create custom pages', and at the bottom right is the copyright notice '© Copyright IBM Corporation 2018'.

*Demonstration 4: Customize the default Case Details page*

## Demonstration 4: Customize the default Case Details page

### Purpose:

As a Solution Builder and a Solution Designer, you can edit an existing page to modify the features available on that page to best suit the users. In this demonstration, you will explore the customization options available for the default Case Details page and edit it. This page is, by default, assigned to a Case Type. You will redeploy your solution and test the page.

### Task 1. View the default Case Details page.

1. In the **Firefox** browser, log on to **IBM Case Manager Client**:
  - URL: <http://vclassbase:9081/navigator/?desktop=icm>  
You can also use the **Case Client** bookmark in the browser toolbar.
  - User: **P8Admin**
  - Password: **FileNet1**
2. In the **Cases** tab, click **Add Case > Service Claim** at the top of the page.  
A new case opens.
3. Type **Priya Smith** into the **Customer name** field.
4. Click **Add** on the upper right.
5. In the Search section, select **Customer Name** for the search criteria.
6. Type **Priya** and then click **Search**.  
The case that you added is listed.
7. Click the title link to open the case.  
The default *Case Details* page opens in a separate tab.
8. Check that in the default page, Case ID is not shown and the **Summary** tab (next to the **Documents** tab) is not shown.  
You will customize this page in the following task.
9. Click **Close** on the upper right.
10. Log out of **IBM Case Manager Client**.

## Task 2. Customize the default Case Details page.

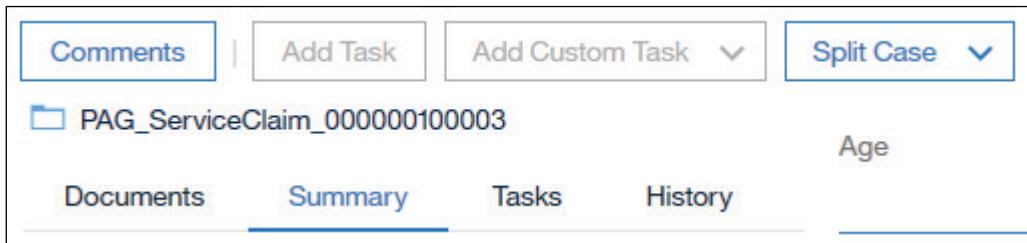
1. In the **Firefox** browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the **PageBuilder** solution link to edit it.
3. Open the **Pages** tab for your solution, expand the **Case Details Pages**, and then click the **Case Details** link.
4. In the **Page Designer**, click the **Edit Settings**  icon for the **Case Information** widget.
5. In the **Case Information** widget **Settings** tab, explore the options available.
6. Select the **Display the Case ID in the Case Information widget** option.
7. Select **Summary** from the **Available Views** list to set its visibility.  
You can also deselect an item to hide it in IBM Case Manager Client.
8. Using the down arrow on the right, move **Summary** below **Documents**.  
 Optionally, expand the **Documents** section below, and notice the options available.
9. Click **OK**, click **Save** and then **Close** at the top of the page in the **Page Designer**.
10. Click **Save and Close** at the top of the page to save your solution.

## Task 3. Test the solution.

1. In the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the Deployment to complete as shown by the **Deployment Successful** icon.
3. Click the **Test** icon to open IBM Case Manager Client.
4. In IBM Case Manager Client, on the **Cases** tab, click **Add Case > Service Claim** at the top of the page.  
A new case opens.
5. Type **Pat Johnson** into the **Customer name** field.
6. Click **Add** on the upper right.  
The new case is added.
7. In the **Search** section, select **Customer name** for the search criteria.
8. Type the name **Pat** that you used to create the case and then click **Search**.
9. Click the title link to open the case.  
The Case Details page opens in a new tab.

10. Confirm that the page includes the following configuration changes that you made as shown in the following screen capture:

- Case ID (**PAG\_ServiceClaim\_000000100003**) in the Case Information widget (below the top toolbar)
- **Summary** tab (next to the Documents tab)



11. Log out of IBM Case manager Client and close the browser window.

**Results:**

In this demonstration, you explored the customization options available for the default Case Details page and edited it. Then, you redeployed your solution and tested the page.

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## Demonstration 5: Create a page with Free Form page layout

Cases Work Customer Solution Page  Custom Case Details

Add Custom Task  Split Case 

Details Documents Tasks Activities History

▼ Properties Related

Properties:  
Age

---

Customer Since  
1/31/2018  12:00 AM 

Customer name  
Custom CaseDetails

Premium

Price

---

Hello, p8admin.



Data pro. Silo slayer.

Everyone in your organization works with data. Help them work together.

Create custom pages  © Copyright IBM Corporation 2018

*Demonstration 5: Create a page with Free Form page layout*

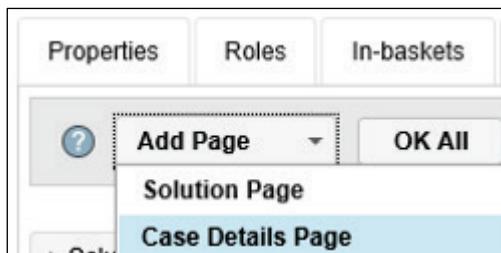
## Demonstration 5: Create a page with Free Form page layout

### Purpose:

As a Solution Builder and a Solution Designer, when you design a page, you need to add many widgets on a page. Case Manager provides a flexible, Free Form page layout to accommodate layout changes. This demonstration is similar to Demonstration 2, but you will create a custom page with the Free Form page layout. You will add many containers to your page in a nested fashion and then add widgets. You will assign the new page to a case type, deploy the solution and test the layout.

### Task 1. Create a custom Case Details page.

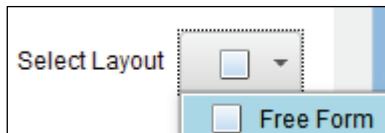
1. In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Click **Add Page > Case Details Page**.



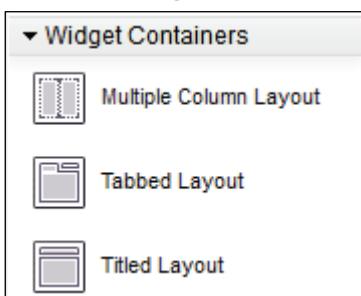
5. Type **Custom Case Details** for the **Name** field.
6. Add a Description: **This page uses the new layout** and then click **OK**. The new page is listed in the Pages tab under the Case Details Pages section.
7. Click **Save** at the top of the page to save your solution.

### Task 2. Add the Free Form page layout.

1. Click the **Custom Case Details** page link to open the page in **Page Designer**.
2. Verify that the left panel shows **Case Widgets** and **Utility widgets**.
3. Click the **Page Options** icon in the toolbar.
4. In **Page Options**, click **Select Layout** and then select the **Free Form** layout.



- Click **OK** and then verify that when you select this layout for your page, a new set of **Widget Containers** are listed in your widget palette on the left.

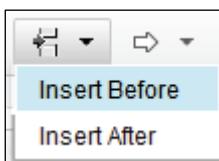


In the following tasks, you will edit the settings and add containers to your new custom page.

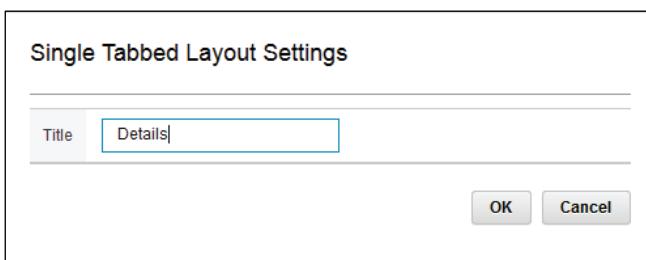
- Click **Save** at the top of the page to save your solution.

### Task 3. Add a container for tabbed layout.

- Select **Tabbed Layout** from the **Widget Containers** palette on the left, drag it below the **Case Toolbar** (and above the **Case Stages** widget) and then when you see a blue line, release the left mouse button.  
Verify that two tabs are added.
- Select a tab.
- Add a tab by clicking the **Insert** icon in the toolbar and then select **Insert Before**.



- Repeat **steps 2-3**, to add 2 more tabs.
- Select the first tab and then click the **Edit Settings** icon in the toolbar to change the default title.
- Type **Details** as the title and then click **OK**.



7. Edit the titles for the next four tabs using **steps 5-6** and the following data.
  - **Documents**
  - **Tasks**
  - **Activities**
  - **History**

8. Click **Save** at the top of the page to save your solution.

The completed page shows the Details, Documents, Tasks, Activities, and History tabs.

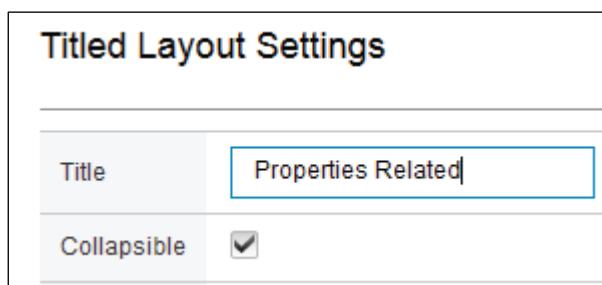


#### **Task 4. Add a container for a multiple column layout.**

1. Select the **Details** tab.
2. Select **Multiple Column Layout** from the **Widget Containers** palette on the left, drag it into the **Details** tab and then release the left mouse button.  
Verify that two columns are added.

#### **Task 5. Add a container for a titled layout.**

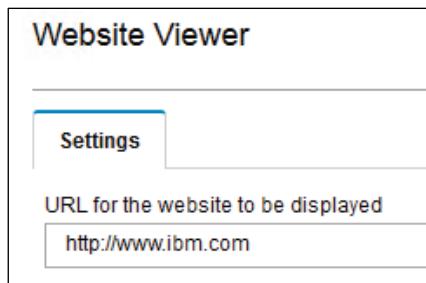
1. Ensure that the **Details** tab is selected.
2. Select **Titled Layout** from the **Widget Containers** palette on the left, drag it into the **Details** tab (first Column) and then release the left mouse button when you see a blue line.
3. Select the Titled Layout (**Untitled**) and then click the **Edit Settings** icon at the top toolbar.
4. In the settings page, type **Properties Related** for the Title field.
5. Leave the default values for the other fields and then click **OK**.



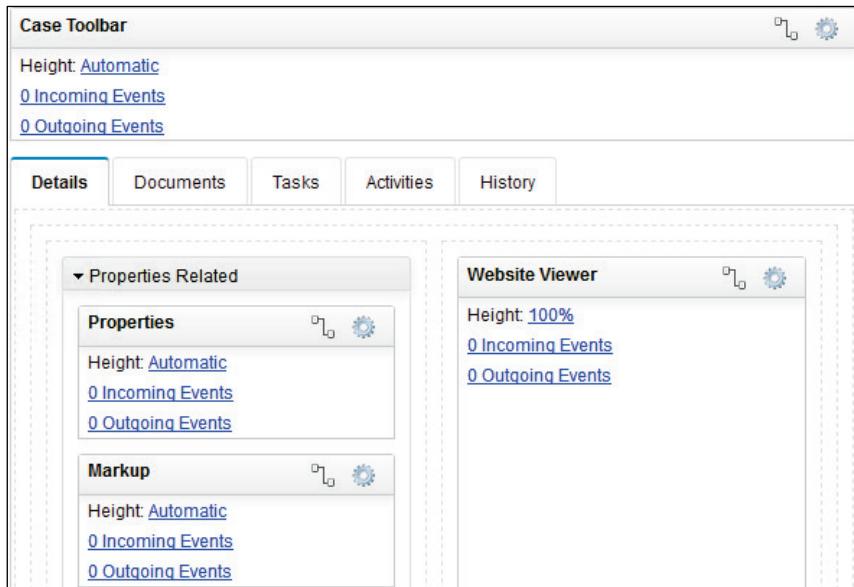
## Task 6. Add widgets to the layout.

In this task, you add widgets to the containers that you created in the previous task.

1. Make sure **Properties Related** is selected.
2. Select the **Properties** widget from the **Case Widgets** palette on the left, drag it into the first column within the **Properties Related** container and then release the left mouse button.
3. To resize the widget, click the **Height: 100%** link.
4. In the dialog box, change to **Automatic** and then click **OK**.
5. Repeat **step 2** and drag the **Markup** widget from the **Utility Widgets** palette to the space below the **Properties** widget in the same column.
6. Repeat **step 3** to resize the widget to **Automatic**, if necessary.
7. Repeat **step 2** to add the **Website Viewer** widget from the **Utility Widgets** palette to the second column.
8. Click the **Edit Settings** icon next to the **Website Viewer** widget.
9. Type the URL: <http://www.ibm.com>



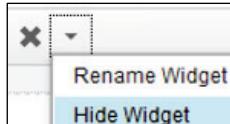
10. Click **OK** and then click **Save** at the top of the page to save your solution. Verify that the completed layout contains the following widgets and sections in the **Details** tab:
  - **Properties Related** section on the left column with **Properties** and **Markup** widgets
  - **Website Viewer** on the right column



## Task 7. Delete or Hide the default widgets.

Since you have added some of the widgets you wanted, you can remove or hide the widgets that were added by default.

1. Scroll down the page, find the **Case Stages** widget, and select it.
2. From the toolbar, click the down arrow and select **Hide Widget**.



The widget is hidden on the page.

3. Scroll down and select the **Case Information** widget.
  4. From the toolbar, click the **Delete** icon.
- The widget is removed from the page.
5. Repeat the step to delete the **Properties**, **Timeline Visualizer** widgets.
  6. Click **Save** at the top of the page to save your solution.
  7. Click **Close** to close the Page Designer.

## Task 8. Assign the custom page to a case type.

1. Select the **Case Types** tab.
2. Click the **Service Claim** case type link to open it.
3. Towards the bottom of the page, for the **Default layout for Case Details page** field, select the new page that you created: **Custom Case Details**

Default layout for Case Details page:
<input type="text" value="Custom Case Details"/> <span style="margin-left: 10px;">▼</span>

4. Click **Save and Close** at the top of the page.
5. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
6. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
7. Click the **Test** icon to open IBM Case Manager Client.

## Task 9. Test the solution.

You will add a case and test the Custom Case Details page that you created. IBM Case Manager Client is opened with the **Cases** tab selected.

1. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Type **Pavan Nobel** into the **Customer name** field.
3. Click **Add** on the upper right.
4. In the Search section, select **Customer name** for the search criteria.
5. Type **Pavan** and then click **Search**.
6. Click the title of your case link to open the case.
7. Verify that the **Custom Case Details** page has the **Free Form** page layout as shown in the following screen capture:
  - The page contains the **Details**, **Documents**, **Tasks**, **Activities**, and **History** tabs below the Case Toolbar.
  - In the **Details** tab on the left column, the Title (**Property Related**) container contains the **Properties** (displays the property values) and **Markup** widgets. The container has a **twisty** to collapse and expand it.
  - At the end of the page on the left, the **Markup** widget displays **Hello, p8admin (Hello + User name)**. This is the default configuration.
  - The **Web Page Viewer** widget on the right column displays a web page (IBM main page).

The screenshot shows a custom case details page. At the top, there are tabs for Cases, Work, Customer Solution Page, and Custom Case Details (which is selected). Below the tabs are buttons for Add Custom Task and Split Case. A navigation bar includes Details, Documents, Tasks, Activities, and History. A section titled "Properties Related" lists Properties: Age. Other fields include Customer Since (1/31/2018, 12:00 AM), Customer name (Custom CaseDetails), Premium (unchecked), and Price. A message at the bottom says "Hello, p8admin." To the right of the main content is a sidebar for "IBM Data Pro. Silo slayer." It features the IBM logo, a search icon, a user icon, and a menu icon. The sidebar also contains a photo of a person wearing glasses and a jacket, and the text "Data pro. Silo slayer." and "Everyone in your organization works with data. Help them work together."

8. Log out of all applications and then close the browser windows.

### Results:

**In this demonstration, you created a page with the Free Form page layout, configured the containers, and added widgets to the page. You then assigned the page to a Case Type and tested the page in the client.**

## Unit summary

- Create a custom Solution page
- Customize the default Case Details page
- Create a page with Free Form page layout

Create custom pages

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*Unit summary*

## Unit 2    Customize toolbar and menu

IBM Training

IBM

### Customize toolbar and menu

IBM Case Manager V5.3.2

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## Unit objectives

- Customize the toolbar to implement actions
- Add a custom action as a menu item

## Customize a widget toolbar

- Use a widget toolbar to specify the actions that caseworkers can take for cases:
  - Implement the actions as buttons in the toolbar or menu items.
  - Configure the settings for the widget to add, remove, and edit the buttons and menu items.

Customize toolbar and menu

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### *Customize a widget toolbar*

You use a widget toolbar widget to specify the actions that case workers can take for cases. These actions can be implemented as buttons or menu buttons in the toolbar.

For example, you can add a toolbar button that will open an external web page.

## Add actions as buttons to the toolbar

- You can add different actions as buttons to the toolbar.
- You can group similar actions nested under one main button.
  - These buttons expand when you click them.

Customize toolbar and menu

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### *Add actions as buttons to the toolbar*

You can configure toolbar items using the following actions that are available on the Toolbar tab:

- Add Button: add a single action to be accessed from the toolbar
- Add Menu Button: add an expandable submenu to the main button
  - For example, the Add button expands into a menu with the following menu items: Add Folder, Add Document from Local System, and Add Document from Repository
- Add Menu Item: add an item to a submenu
- Edit: edit a button or submenu item
- Remove: remove a button or submenu item
- Add Separator: add a horizontal line between buttons
- Add Space: add a space between buttons

## Add menus to the widget

- Right-click an object to display the menu items
- Configure the menu options on the Menu tab
- Group similar actions nested under one main menu

Customize toolbar and menu

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### *Add menus to the widget*

You can configure menu items using the following actions that are available on the Menu tab:

- Add Menu Item: add a single action to be accessed from the menu
- Add Submenu: add an expandable submenu to the main menu
- Add Submenu Item: add an item to a submenu
- Edit: edit the menu or submenu item
- Remove: remove a menu or submenu item
- Add Separator: add a horizontal line between menu items

## Add an event action to a toolbar or menu

- Add an event action to a toolbar or menu to trigger a custom event that is to be handled by a page widget.
- Define the following items for an event action:
  - Menu Id
  - Event Name
  - Event Type
  - Action Context

Customize toolbar and menu

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### *Add an event action to a toolbar or menu*

You can use event actions in a toolbar or menu to trigger a custom event that provide some capabilities. For example, you can add an event action to the In-basket widget toolbar for a custom event that filters work items based on a predefined property value. You can add an event action to the Case Information widget document menu for a custom event that enables users to select and add a case document as an attachment to the case.

The following configurations are required for an event action:

- Menu Id: Identifier that can be used by the event handler to identify the source of the event
- Event Name: Name of the handler for the event
- Event Type: Value that indicates how the event is published.
- This property is set to:
  - Broadcast: if the event is received by any event that has a corresponding incoming event
  - Wiring: if the event must be wired to an incoming event
- Action Context: Action contexts that are set on the page widget from where this event action is triggered

## Add a script action to a toolbar or menu

- Add a script action to run a custom script from a widget toolbar or menu
  - Example: add the selected case documents as attachments to a case

Customize toolbar and menu

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### *Add a script action to a toolbar or menu*

You can add a script action that runs a script to include a custom feature. For example, you can add a script action to the Case Information widget toolbar that enables users to add the selected case documents as attachments to a case.

## Demonstration 1: Edit a page to customize the toolbar

Show Link to Case

### Show Link

PAG\_ServiceClaim\_000000100005

Send email

```
http://vclassbase:9081/navigator/?desktop=icma&feature=Cases&tos=DEV_target&solution=PAG&caseGUID=90205061-0000-CE1A-9E9F-0C8B9863E05B
```

*Demonstration 1: Edit a page to customize the toolbar*

## Demonstration 1: Edit a page to customize the toolbar

### Purpose:

Case workers need to copy the link for a case in IBM Case Manager Client to share it with other team members. As their Solution Builder and Solution Designer, you want to edit the toolbar to include a custom button to show the link to a case. In this demonstration, you will create a page, customize the toolbar, assign the page to a role, and then test it in IBM Case Manager Client.

Before doing the demonstrations and exercises in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

### Task 1. Create a custom page.

1. In the Firefox browser, log on to **IBM Case Manager Builder**:

- URL: <http://vclassbase:9081/CaseBuilder>  
You can also use the *Case Builder* bookmark in the browser toolbar.
- User: **P8Admin**
- Password: **FileNet1**

The *IBM Case Manager Builder* application opens to the main page.

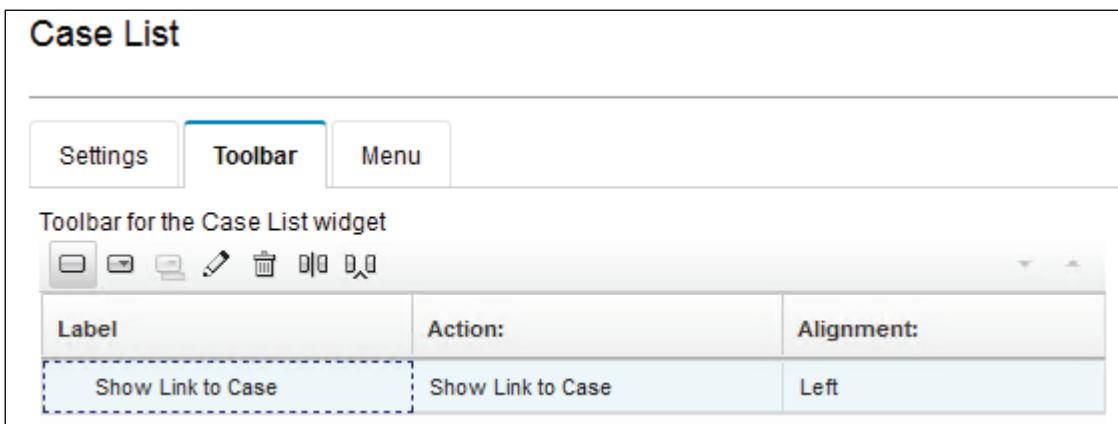
2. In **IBM Case Manager Builder**, click the link for the **PageBuilder** solution to edit it.
3. Select the **Pages** tab and then expand **Solution Pages**.
4. Hover the cursor over the **Cases** page and then click the **Copy**  icon.  
Note: If you click the case link, it opens the Cases page for editing.
5. Type **Custom Toolbar Menu** for the **Name** field.
6. Type **Custom Toolbar Menu** for the **Description** field and then click **OK**.  
The new page is added under the Solution Pages.
7. Click **Save** at the top of the page to save your solution.

### Task 2. Customize the toolbar.

In the Pages tab, the Solution Pages are already expanded.

1. Click the **Custom Toolbar Menu** link.
2. In **Page Designer**, if needed, expand the middle pane to see the tools for the **Case List** widget.

3. Click the **Edit Settings**  icon for the **Case List** widget.
4. Select the **Toolbar** tab and then click the **Add Button**  icon.
5. For the **Action** field, scroll down and then select **Show Link to Case** from the list.  
Leave the default value (**Left**) for the **Alignment** field.
6. Verify that the **Label** field has **Show Link to Case** as the value and then click **OK**.
7. Validate that your Show Link to Case toolbar action is listed as shown below.



8. Click **OK** at the bottom of the dialog box to exit.
9. In **Page Designer**, click **Save** and then **Close** on the upper right.

### **Task 3. Assign the custom page to a role.**

1. Open the **Roles** tab and then click the **Service Rep** role link.
2. Open the **Pages** subtab and then click **Assign Page**.
3. Select **Custom Toolbar Menu** page.
4. Click **OK** to close the dialog box.
5. Verify that your page is listed in the **Pages** tab.
6. Click **OK All** to accept the changes to the role.
7. Click the **Save and Close** button on the solution to exit the solution editor.

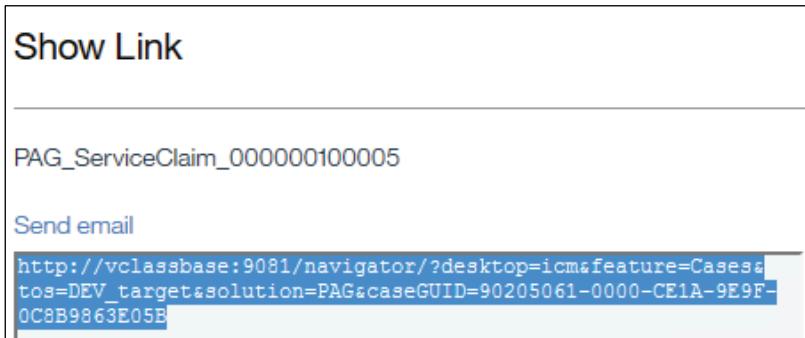
### **Task 4. Redeploy the solution.**

You redeploy the solution for the changes to take effect.

1. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete as shown by the **Deployment Successful** icon.
3. Click the **Test** icon to open **IBM Case Manager Client**.

## Task 5. Test the custom button.

1. In **IBM Case Manager Client**, click the **Custom Toolbar Menu** tab to open the custom page.
2. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
3. Type **Tara Mason** into the **Customer name** field and then click **Add** on the upper right.
4. In the **Search** section, select the **Customer name** for the search criteria, type **Tara** (case sensitive), and then click **Search**.
5. Select the case from the list and then click the **Show Link to Case** button.  
If you click the Title link of a case, the case opens in the Case Details page.  
Select a case by clicking other columns.  
Verify that you get a dialog box with the direct link to the case.



6. Copy the URL and then close the **Show Link** dialog box.
7. In **Firefox**, open a browser tab and then paste the URL into the browser tab.
8. Verify that the Case Details page opens for the case that you selected.  
Since you configured a custom page for Case Details in the previous unit, that custom page is shown.

9. Copy your case title (Example Format: PAG\_ServiceClaim\_000000120002) and the customer name (**Tara Mason**) that you used to create the case, and then save it in a text file.

You will use these values for the next demonstration.

Note: To create a text file, on the desktop, right-click, select **New** and then select **Text Document**. Rename the document, for example, **for\_Menu\_item**. Open the document, enter the values, and then save it.

10. Log out of the applications and then close the browser windows.

**Results:**

**You customized the toolbar by adding a button to show the link to a case. You redeployed the solution for the changes to take effect and tested the custom toolbar in IBM Case Manager Client.**

## Demonstration 2: Edit a page to add the menu item

Title  
PAG\_ServiceClaim\_00000010

**Open Case**  
Show Link to Case  
Send Link to Case  
Comments  
Create Package  
Flag Special Case

This is a special case, please review this case.

OK

This is a normal case, please proceed.

OK

*Demonstration 2: Edit a page to add the menu item*

## Demonstration 2: Edit a page to add the menu item

### Purpose:

The case workers need a feature in IBM Case Manager Client to flag certain cases to take a different action on them. As their Solution Builder and a Solution Designer, you want to add a menu item with custom script action. This script checks against the Case Title that you entered to see whether it matches with a case in the set of available cases and flags a message. In this demonstration, you will create a menu item for this custom action and test it in IBM Case Manager Client.

### Task 1. Open the custom page.

1. In the Firefox browser, log on to **IBM Case Manager Builder**:  
 URL: <http://vclassbase:9081/CaseBuilder>  
 You can also use the bookmark in the browser toolbar: **Case Builder**  
 User: **P8Admin**  
 Password: **FileNet1**
2. In **IBM Case Manager Builder**, click the link for **PageBuilder** solution to edit it.
3. Open the **Pages** tab.
4. Expand the **Solution Pages**.
5. Click the **Custom Toolbar Menu** page to edit it in **Page Designer**.  
 For this demonstration, you will reuse the custom page that you created in the previous demonstration.  
 If the page does not exist, create the page using the steps in Demonstration 1, Task 1.

### Task 2. Edit the page to add the menu item.

1. In **Page Designer > Custom Toolbar Menu** page, click the **Edit Settings** icon for the **Case List** widget in the middle pane.
2. Select the **Menu** tab, and then click the **Add Menu Item**  button.
3. For the **Action** field, select **Script Action** from the list.
4. For the **Label** field, type **Flag Special Case**.

5. Type the following JavaScript for the **Execute** field.

To avoid any type errors, you can copy the text from the **C:\Training\F2940\02-Customize\_toolbar\_and\_menu\MenuItemScript.txt** file and then paste it.

```
var x = this.getActionContext("CaseReference");
var c = "PAG_ServiceClaim_000000100002";
if(c == x[0].getCaseTitle()) {
    alert("This is a special case, please review this case.");
}
else{
    alert("This is a normal case, please proceed.");
}
```

6. Edit the above text to replace the case title value **"PAG\_ServiceClaim\_000000100002"** with the value that you saved in **Demonstration 1, Task 5, Step 10**.

If you do not have the value, you can create a case in IBM Case Manager Client and use the Title of your case.

How does this code work?

- The following line of code retrieves the value of a list of cases, as an array, from the Case List widget: `this.getActionContext("CaseReference");`
- The Case Title value is stored in the variable "c"
- The script checks against the Case Title that you provided to see whether it matches a case in the array (A list of available cases).
- If the title of the first element in the case list array matches your title, the script shows a special message. If it does not match, then it shows a different message.

7. Leave the other fields with the default values, scroll down and then click **OK**.
8. Verify that the **Flag Special Case** menu item is listed for the Case List widget and then click **OK** to exit out of the Case List dialog box.



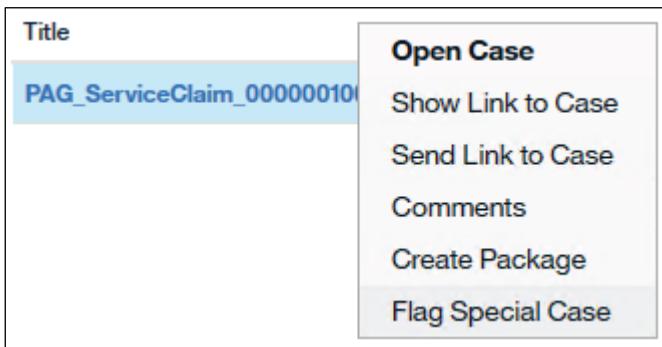
9. Click **Save** and then click **Close** at the upper right of the Page Designer window.
10. Click **Save and Close** to exit the solution editor.

### **Task 3. Redeploy the solution.**

1. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
3. Click the **Test** icon to open **IBM Case Manager Client**.

## Task 4. Validate your custom script action in the menu item.

1. In **IBM Case Manager Client**, select the **Custom Toolbar Menu** tab to open the custom page.
2. In the Search section, select the **Customer name** for the search criteria.
3. Type the customer name **Tara Mason** that you saved in **Demonstration 1 > Task 5** (The customer name for the case that you used in the code) and then click **Search**.  
The case you added earlier is listed.
4. Right-click the case, and then select **Flag Special Case** from the menu.

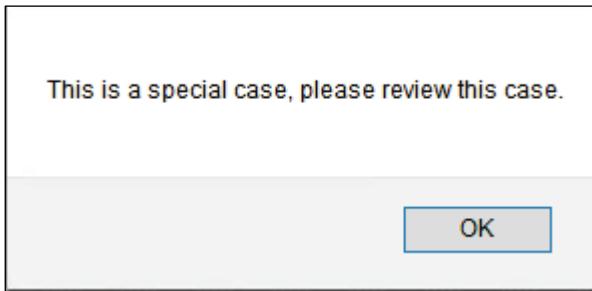


If the menu item is not visible, logout, clear the browser cache, and then close the browser.

To clear the Firefox browser cache, click History from the menu bar and then Clear Recent History. In the Clear Recent History dialog box, click Clear Now and then close the dialog box.

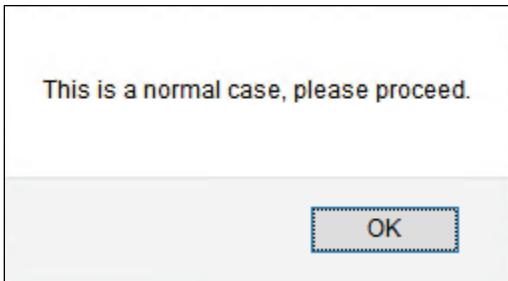
Reopen the browser and then log into IBM Case Manager Client. Repeat Steps 1-4 of this task.

5. Verify that a dialog box is shown with the text that you added in the code: **This is a special case, please review this case.**



6. Click **OK** to close the dialog box.
7. In the Search section, ensure the **Customer name** for the search criteria is selected.
8. Type the customer name of a different case (Example: **Pam**) and then click **Search**. (If you don't have other cases, you can create one).

9. Right-click the case, and then select **Flag Special Case** from the menu. Verify that this time, when you select another case, a different message is shown as you specified in the code.



10. Click **OK** to close the dialog box.
11. Log out of the applications and then close the browser windows.

**Results:**

**You created a menu item with a custom script action on the Case List widget and tested it in IBM Case Manager Client.**

## Unit summary

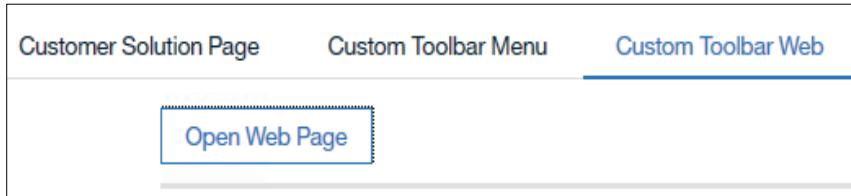
- Customize the toolbar to implement actions
- Add a custom action as a menu item

Customize toolbar and menu

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*Unit summary*

## Exercise 1: Customize the toolbar to implement actions



Customize toolbar and menu

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*Exercise 1: Customize the toolbar to implement actions*

## Exercise 1: Customize the toolbar to implement actions

The users in your company process cases in IBM Case Manager Client. To complete their tasks, they need to access web sites of your company's associates. You, as their IBM Case Manager Solution Designer and Solution Builder, want to add a feature to open a web page with a single-click. The default client does not have this feature, but IBM Case Manager enables you to implement these actions in the Toolbar widget. In the demonstrations, you added a button to show the link to a case. In this exercise, you will add a button to open a web page.

To customize the toolbar, you will perform the following tasks:

- Make a copy of the Cases page to create a custom page
- Edit the Case List widget toolbar for the page and add a button
- Assign the custom page to a role, redeploy the solution, and test the custom button

Use the following data for this exercise:

- IBM Case Manager Builder URL:  
**<http://vclassbase:9081/CaseBuilder>**
- User/Password: **P8Admin/FileNet1**
- Solution Name: **PageBuilder**
- Page Name: **Custom Toolbar Web**
- Fields and values for the new button:
  - Action: **Open Web page**
  - URL: **<https://vclassbase:9043/ibm/console/>**
- Role Name to assign the page: **Customer Service Rep**

For more information about where to work and the exercise results, refer to the Tasks and Results section that follows. If you need more information to complete a task, refer to earlier demonstrations for detailed steps.

## Exercise 1:

### Tasks and results

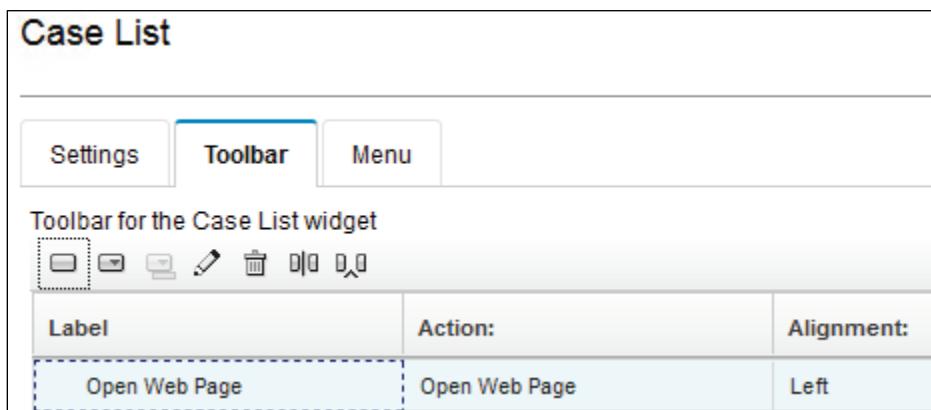
#### Task 1. Create a custom page.

- In the Firefox browser, log on to IBM Case Manager Builder:
 

URL: <http://vclassbase:9081/CaseBuilder>  
 You can also use the bookmark in the browser toolbar: **Case Builder**  
 User: **P8Admin**  
 Password: **FileNet1**
- Open the **PageBuilder** solution for editing.
- In the **Pages** tab, expand **Solution Pages**, make a copy of the **Cases** page and create a custom page named **Custom Toolbar Web**.

#### Task 2. Edit the page to customize the toolbar.

- Open the custom page that you created in **Page Designer** to edit it.
- Select **Edit Settings** for the **Case List widget** and from the **Toolbar menu**, add a button.
- Use the following values for the new button:
  - Action: **Open Web Page**
  - URL: <https://vclassbase:9043/ibm/console/>  
 Note: Ensure you enter https and not http.
- Verify that the list has the action that you added to the toolbar.



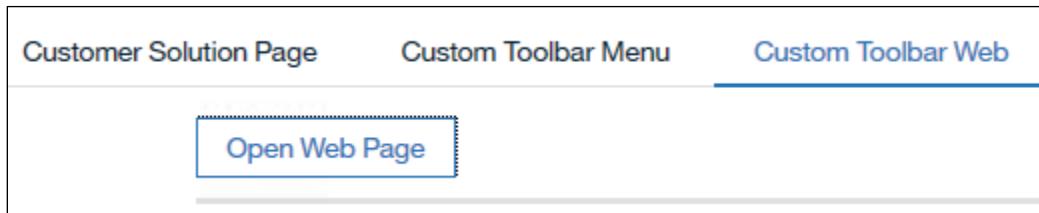
- Save the page and the solution.

### Task 3. Assign your page to a role and redeploy the solution.

- In the **Roles** tab, assign your custom page to the **Service Rep** role.
- Save and redeploy the solution.
- Open your custom page in the Case client to test the custom button in the toolbar.

At the end of the exercise, verify that you get the following results:

- A button named **Open Web Page** is added to the toolbar on the custom page that you configured.



- Click the button to view the web page for the URL you specified (WebSphere Integrated Solutions Console) which opens in a new browser tab.



- Log out of the applications and then close the browser windows.



## **Unit 3     Add a Calendar widget**

IBM Training



### **Add a Calendar widget**

**IBM Case Manager V5.3.2**

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## Unit objectives

- Configure the Calendar widget and subscribe to external calendars
- Create and view quick tasks in the Calendar widget
- Add the Show Calendar action to the toolbar
- Use the Calendar widget in the Free Form page layout

[Add Calendar widget](#)

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*Unit objectives*

## Describe a Calendar widget

- Use the Calendar widget to display events for one or more cases
- Configure the widget to show:
  - the calendar in either a small-style or large-style format
  - the events from imported external calendars
- Select from four types of calendar views in the large-style calendar

[Add Calendar widget](#)

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### *Describe a Calendar widget*

The Calendar widget provides case workers with a calendar view of important case milestones and deadlines. It displays information on pending quick tasks and case stages. The overdue items are highlighted in red.

You can configure Calendar widget to display the external calendars that use the iCalendar file format. For example, Google Calendar, and Apple Calendar can be used.

The following views are supported in the large-style calendar:

- Month
- Week
- Day
- Today

## Add the Calendar widget to a page

- To show the Calendar widget in Case Manager Client, add the widget to a page.
- The widget is supported only on the Case Details page.
- The widget can be arranged as a separate tab in the Case Details page.

[Add Calendar widget](#)

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### *Add the Calendar widget to a page*

You can configure the widget to display the calendar in a small-style format on the Case Details page or in a large-style format as a separate tab on the page.

If a case worker clicks a date in the small-style calendar, IBM Case Manager Client opens a dialog box with the large-style calendar in day view.

If you add the Calendar widget to a page other than the Case Details page, the page does not display the widget at run time.

## Add calendar subscriptions

- Subscribe to internet calendars to display events from these calendars in case calendars.
- Configure these subscriptions in:
  - Case Manager Builder at design time
  - Case Manager Client at run time
- Validate that the URL for the subscription is in an iCalendar (.ics) file format

[Add Calendar widget](#)

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### *Add calendar subscriptions*

In IBM Case Manager Builder, you can configure the subscriptions in the Calendar widget settings for each case type at design time. The calendar subscription is available to all case instances of that case type at run time.

In IBM Case Manager Client, case workers can select the Manage calendar subscriptions option (in the large-style calendar and the calendar that is displayed in the dialog box) to subscribe to other internet calendars. These subscriptions apply only to the specific case where they are configured.

Case workers can perform the following tasks:

- Add new subscriptions
- Delete their existing subscriptions
- Select a subscription to show or clear it to hide the events from that subscription
- Edit their existing subscriptions by changing the value for the name, color, and refresh interval fields except the URL field

If they want to change the URL, they must delete the subscription and create it again.

Case workers cannot modify or delete the calendars that are configured at design time in IBM Case Manager Builder.

## Automatic refresh of events between the widgets

- The events are refreshed automatically between:
  - the Calendar and other widgets
  - the two styles of calendar

[Add Calendar widget](#)

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### *Automatic refresh of events between the widgets*

The events are refreshed seamlessly between the calendar and other widgets such as To-do List and Case Stages.

When you create a quick task in the To-do List widget, the Calendar widget instantly refreshes and shows the quick task. Similarly, when you create a quick task in the calendar, the quick task shows instantly on the To-do List widget.

The events are also refreshed instantly between the two styles of calendar. For example, a user clicks a date in a small-style calendar that opens up the large-style calendar. The user then creates a quick task in the large-style calendar and closes it. The event is automatically shown in the small-style calendar.

## SSL signer certificate for external calendar subscription

- The Calendar subscription URL field shows an SSL Handshake error when you validate the URL.
- The SSL signer certificate for the URL must be configured in the keystore of the Application Server.
- After the Signer Certificate is configured and the servers are restarted, the issue is resolved.

[Add Calendar widget](#)

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### *SSL signer certificate for external calendar subscription*

You can configure subscriptions to external calendars in IBM Case Manager Builder in design time and IBM Case Manager Client at run time. You need to provide a URL from where the external calendar is subscribed.

IBM Training IBM

## Demonstration 1: Configure the Calendar widget and subscribe to external calendars

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	1	2	3
4	5	6	7	8	9	10
2017			2018	2019		

**Manage Subscriptions**

Add	Modify	Remove
<input checked="" type="checkbox"/> US Holidays		
<input checked="" type="checkbox"/> Greece Holidays		

[Add Calendar widget](#)      © Copyright IBM Corporation 2018

*Demonstration 1: Configure the Calendar widget and subscribe to external calendars*

## Demonstration 1: Configure the Calendar widget and subscribe to external calendars

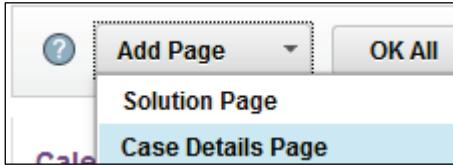
### Purpose:

Case workers use the calendar feature in Case Manager to keep track of important events for cases. You, as a Solution Developer and Solution Designer, want to add the Calendar widget to case pages to display events for the cases and configure subscriptions to use external calendars. You will add the widget to a page and configure subscriptions in IBM Case Manager Builder at design time, and in IBM Case Manager Client at the run time. You will redeploy the solution and test it.

Before doing the demonstrations in this unit, ensure that your environment is ready and required services are running. Refer to the *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

### Task 1. Create a copy of the Case Details page.

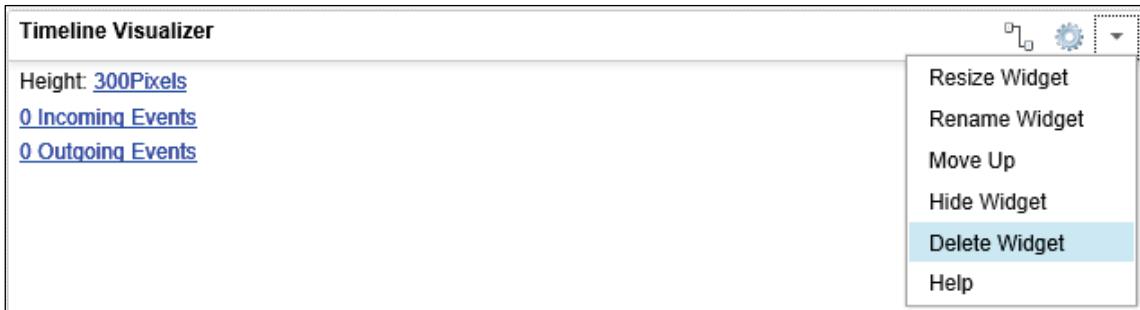
1. In the Firefox browser, log on to IBM Case Manager Builder:
  - URL: <http://vclassbase:9081/CaseBuilder>  
You can also use the *Case Builder* bookmark in the browser toolbar.
  - User: **P8Admin**
  - Password: **FileNet1**
2. In **IBM Case Manager Builder**, click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Click **Add Page > Case Details Page**.



5. Type **Calendar Page** for the **Name** field.
6. Type **Test the Calendar widget** for the **Description** field and then click **OK**.  
The page is added under the *Case Details Pages*.
7. Click **Save** at the top of the page to save your solution.

## Task 2. Add the Calendar widget to the page.

1. In the **Pages** tab, expand the **Case Details Pages** and click the **Calendar Page link**.
  2. In **Page Designer**, select **Delete Widget** from the drop-down list next to the **Timeline Visualizer** widget.
- This step removes the Timeline Visualizer widget and makes space on the page for the Calendar widget.



3. Select the **Calendar** widget from the **Case Widgets** palette on the upper-left, drag it to the bottom of the page where the **Timeline Visualizer** widget was, and release the left mouse button.

## Task 3. Add subscription to the Calendar widget.

1. Click the **Edit Settings** icon for the **Calendar** widget.
2. In the **Calendar** widget **Settings** tab, for **Select the Calendar style to display** field, ensure the default value (**Small**), is selected.
3. Click the **Add** icon to add a calendar subscription for your case type.
4. Select your case type (**Service Claim**) from the list.
5. Type **US Holidays** for the **Name** field.
6. Type the Calendar subscription URL:  
**<http://vclassbase:9081/navigator/Calendars/USHolidays.ics>**  
Starting with IBM Case Manager 5.3.2.0-ICM-IF001, you can also provide an external URL, for example:  
<https://www.mozilla.org/media/caldata/USHolidays.ics> or any internet Calendar.  
The external subscriptions require SSL certificate configuration on the Application Server.  
For this course, a local server in the environment is used. The .ics files are located on the web application server.
7. Leave the default value for the **Auto refresh interval** field, scroll down, and select a color for the Calendar entries.

- Click **OK** to include the Calendar subscription.

The calendar entry you added for the case type is listed.

The screenshot shows the 'Calendar' dialog box with a 'Settings' tab selected. A note says '\* Select the calendar style to display' with a dropdown set to 'Small'. Below it, a table lists a single subscription:

Case Type	Calendar Name	Auto Refresh	Color	Calendar URL
Service Claim	US Holidays	Every Week	<span style="background-color: red;"></span>	http://vclassbase:9081/n...

- Click **OK** to close the dialog box.
- In **Page Designer**, click **Save** and then **Close**.

#### Task 4. Assign the custom page to a case type.

- Select the **Case Types** tab and then click the **Service Claim** case type link to open.
- Select **Calendar Page** from the **Default layout for Case Details page** drop-down list near the bottom of the page.

A screenshot of a dropdown menu labeled 'Default layout for Case Details page:' with 'Calendar Page' selected.

- Click **Save and Close** at the top of the page.
- On the main page, click the **Deploy** icon for the **PageBuilder** solution.
- Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
- Click the **Test** icon to open **IBM Case Manager Client**.

#### Task 5. Test the Calendar widget in the client.

IBM Case Manager Client opens in a new window with the Cases tab selected.

- Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
- Type **Calab Smith** into the **Customer name** field and then click **Add** on the upper right.
- In the **Search** section, select the **Customer name** for the search criteria.
- Type **Calab** and click **Search**.

- Click the title of your case link to open the case.

Verify that the Calendar Page is opened with case details and it shows the Calendar widget at the bottom of the page.

The calendar is shown in the small-style format as you configured in IBM Case Manager Builder.

The dates with the events are high-lighted in yellow and the numbers are in red.

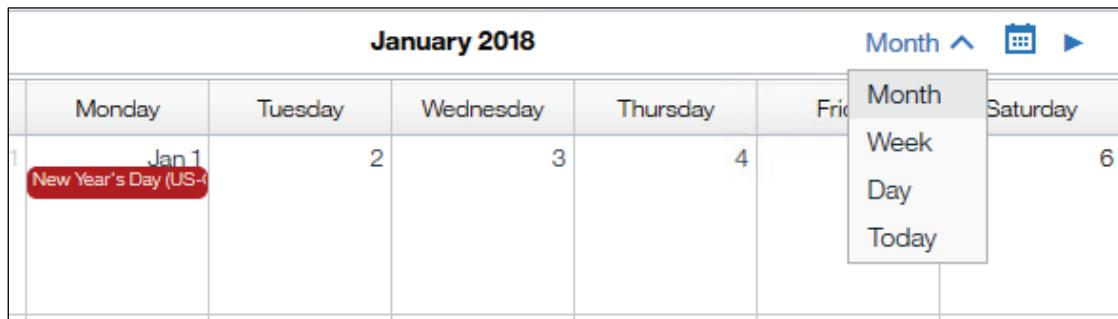
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24

- Click a date that is high-lighted on the Calendar.

If you do not see any high-lighted dates, check other months.

The Calendar opens in a large-style format.

- Verify that the event is listed on that date and that the US Holidays calendar is shown with the highlight color that you selected.
- Explore the display and select **Week** or **Month** from the top toolbar of the Calendar.



- Leave the Calendar open for the next task.

## Task 6. Subscribe to an external calendar from the client.

The Calendar widget is opened from the previous task. If it is not already opened, followed the steps in the previous task to open it.

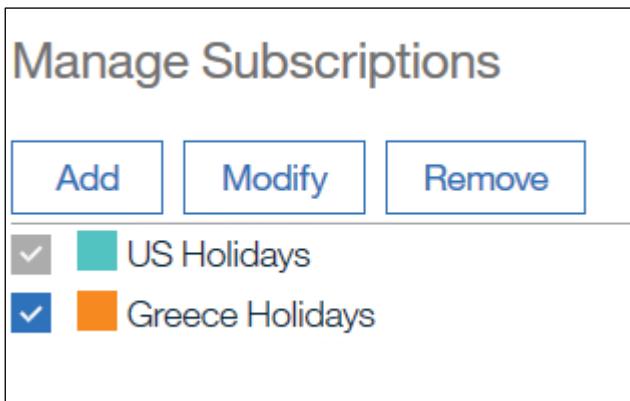
- In the Calendar display, click the calendar icon at the top toolbar.
- In the **Manage Subscriptions** dialog box, verify that **US Holidays** calendar that you configured in Case Builder is already listed.  
The case worker cannot edit this subscription at the runtime. But they can add subscriptions can be added to this case.
- Click **Add** to add a calendar.
- Type **Greece Holidays** for the **Calendar Name** field.

5. Type a **Subscription URL**:  
**[http://vclassbase:9081/navigator/Calendars/  
GreeceHolidays.ics](http://vclassbase:9081/navigator/Calendars/GreeceHolidays.ics)**
6. Select a Calendar color which is different from the one that you selected earlier.

Calendar Name: **Greece Holidays**

Calendar Color: **▼**

7. Click **OK**.
8. In the **Manage Subscriptions** dialog box, ensure that the check boxes for both holidays are enabled.



Notice that when you highlight Greece Holidays that you just added, Modify, and Remove actions are enabled and you are able to modify or remove the Calendar that you added.

9. Click **Close** and then, select **Month** for the display from the top toolbar on the Calendar.
10. Verify that the **Greece Holidays** calendar that you configured is shown with the highlight color that you selected.  
Check different months if the Greece Holidays are not listed for the month you selected.
11. Close the **calendar** and then close the **Calendar Page** tab.

## Task 7. Test the Calendar that was subscribed in the client.

When you configure a subscription to an external calendar in IBM Case Manager Client, it is only applicable to that specific case. In this task, you will create a case and verify that the subscription to an external calendar that you configured in the client is not shown for this new case.

1. In **IBM Case Manager Client**, click the **Cases** tab, if necessary, and then click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Type a name into the **Customer Name** field and click **Add** on the upper right.
3. In the **Cases** tab > Search section on the left, select the **Customer name** for the search criteria.
4. Type the name that you used to create the case and click **Search**.
5. Click the title of your case link to open the case.  
The *Calendar* Page is opened and it shows the *Calendar* widget at the bottom of the page.
6. Click a date in the calendar widget.  
The calendar opens as a *large-style* format.
7. Select the **Month** view from the top toolbar and check different months.
8. Verify that only the **US Holidays** calendar that you configured in Case Builder is shown and not the Greece Holiday calendar that you configured in the client.
9. Close the **calendar**, log out of **IBM Case Manager Client**, and then close the browser.

### Results:

In this demonstration, you added a calendar widget and configured subscriptions in IBM Case Manager Builder at design time and in IBM Case Manager Client at the run time. You redeployed the solution and tested it.

## Create and view quick tasks in the Calendar widget

- In large-style calendar, you can:
  - see the pending quick tasks or the case stage of the current case instance
  - create a quick task with the selected date as the due date

[Add Calendar widget](#)

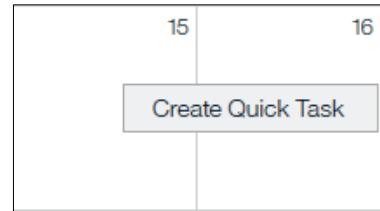
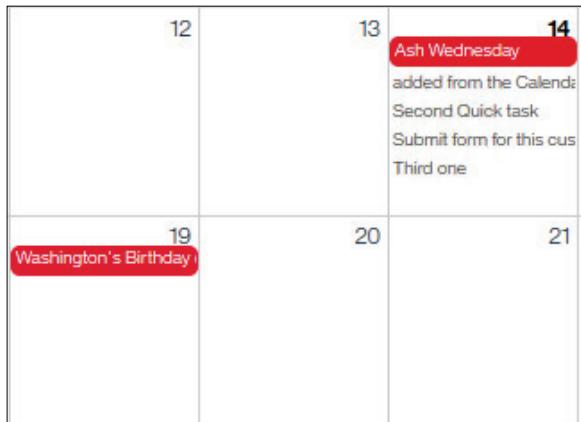
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### *Create and view quick tasks in the Calendar widget*

In large-style calendar, the menu is disabled for dates before the current date.

In small-style calendar, the dates with the events are highlighted. When you click a date that is highlighted, the calendar is opened in the large-style day view.

## Demonstration 2: Create and view quick tasks in the Calendar widget



Add Calendar widget

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*Demonstration 2: Create and view quick tasks in the Calendar widget*

## Demonstration 2: Create and view quick tasks in the Calendar widget

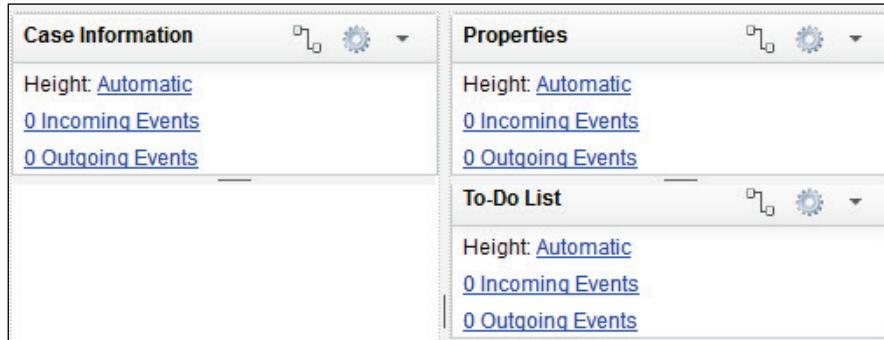
### Purpose:

Case workers want to view existing quick tasks and add new ones in the calendar. As a Solution Developer and Solution Designer, you want to configure the To-Do List widget to add quick tasks in IBM Case Manager Client. You will view these quick tasks in Calendar widget and also add quick tasks directly in the Calendar widget.

### Task 1. Configure the To-Do List widget.

1. In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab, expand the **Case Details Pages**, and then click the **Calendar Page** link.
4. In **Page Designer > Properties** widget, click the **Height: 100%** link, change to **Automatic** in the dialog box, and then click **OK**.
5. In the **Case Widgets** palette on the top, scroll down, select the **To-Do List** widget, drag it below the **Properties** widget, and release the left mouse button.
6. Repeat **step 4** to set the **Height** for the **To-Do List** widget to **Automatic**.

The completed page contains the To-Do List widget just below the Properties widget.



7. Optionally, click the **Edit Settings** icon for the **To-Do List** widget and view the setting options.  
No changes are required.
8. Close the Edit Settings dialog box.
9. Click **Save** and then click **Close**.

## Task 2. Enable case workers to create quick tasks.

This task is necessary to enable case workers to add quick tasks in IBM Case Manager Client.

1. In **IBM Case Manager Builder**, select the **Case Types** tab.
2. Click **Service Claim**.
3. On the **Case type Attributes** page, select the **Enable case workers to create quick tasks** option.

<input checked="" type="checkbox"/>	Enable case workers to create quick tasks
<input type="checkbox"/>	Enable case workers to create custom tasks

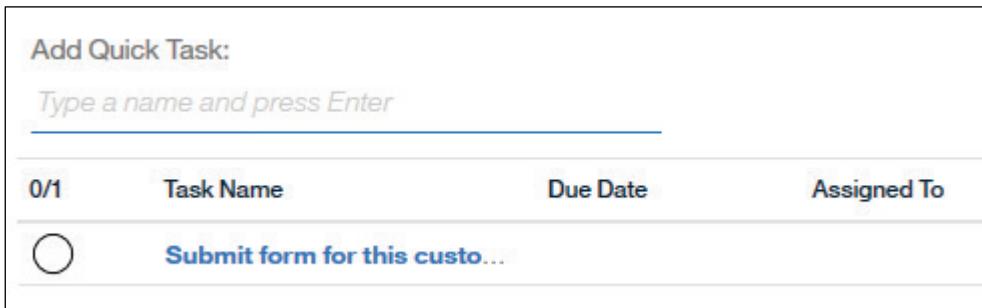
4. Click **Save and Close** at the top of the page.
5. Click the **Deploy** icon for the **PageBuilder** solution.
6. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
7. Click the **Test** icon to open IBM Case Manager Client.

## Task 3. Add quick tasks in IBM Case Manager Client.

1. In IBM Case Manager Client, click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Type **Caden Jones** for the **Customer name** field and then click **Add** on the upper right.
3. In the **Search** section, select the **Customer name** for the search criteria.
4. Type **Caden** and then click **Search**.
5. Click the title of your case link to open the case.  
The Calendar Page opens.  
Scroll down if you are not able to see the **To-Do List** widget on the right.

- For the **Add Quick Task** field, type **Submit form for this customer** and press **Enter**.

Verify that the Quick task is listed.



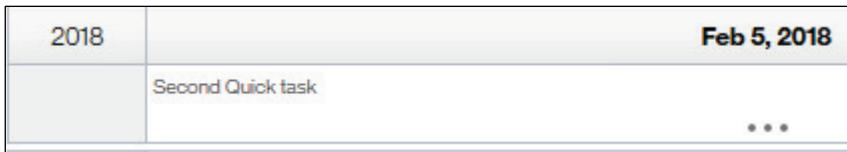
0/1	Task Name	Due Date	Assigned To
<input type="radio"/>	Submit form for this custo...		

- Right-click the quick task that you created, and select **open**. You can also click the quick task name to open it.
- In the dialog box, click the **Calendar** icon and select a due date for the current month.
- Type **this is a quick task** for the Description field and a comment and then click **Done**.
- Repeat the **steps 6-9** to add three more quick tasks.  
Keep the same due date for all of them to see the layout in the Calendar widget.

## Task 4. Display quick tasks in the Calendar widget.

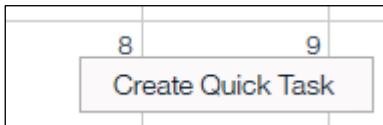
You are on the Calendar Page. The due date that you used for the quick tasks is highlighted in the Calendar widget.

- Click the due date.  
The Calendar (large-style) opens.  
When many items are listed for a date on the Calendar, they are collapsed as shown by the ellipsis  icon.



- Click the ellipsis icon to expand the list of calendar items.
- Verify that you are able to see all the quick tasks that you added.  
You can also add a quick task directly on the Calendar dialog box.
- Select the **Month** display from the list at the top.

5. Right-click a date and then click the **Create Quick Task** link from the context menu.



Notice that the due date is automatically filled out.

6. Change the title to **Calendar Quick Task** and then click **Done**.
7. Right-click a past date and then click the **Create Quick Task** link from the context menu.
8. Verify that the Create Quick Task link is disabled.  
You can only create quick tasks for the current or future dates.
9. Click **Close** to close the calendar, close the page, log out of **IBM Case Manager Client**, and then close the window browsers.

#### Results:

**In this demonstration, you added quick tasks to the To-Do List widget in IBM Case Manager Client and viewed them in Calendar widget. You also directly added quick tasks to the Calendar widget.**

## Add the Show Calendar action

- The Show Calendar action can be added to:
  - The toolbar or menu of the Case List widget
  - The Case toolbar of the Case Details page
- At run time, this action allows the large-style calendar to display in a dialog box.

[Add Calendar widget](#)

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### *Add the Show Calendar action*

You can use the Calendar widget in IBM Case Manager Client in two ways:

- Add the Calendar widget to the Case Details page to display it in IBM Case Manager Client. The Calendar widget can be shown only on the Case Details page.
- Add the Show Calendar action to the toolbar or menu of the Case List widget in the Cases page. This action displays the calendar in a separate dialog box. Users do not have to add the Calendar widget to a Case page.

For the Case Details page, you can use either one of the options (add the Calendar widget directly to the page or add the action to the toolbar). Use the Case toolbar to add the show calendar as an action. The action shows all events that are related to that case instance only.

When the Show Calendar action is implemented for the Cases page, case workers can see the events across all the selected cases in the Calendar view.

## View events for multiple cases in the case calendar

- Show Calendar action displays the large-style calendar.
- Users can view the events across multiple cases.
- When users select multiple cases, they cannot:
  - create quick tasks
  - add or modify the subscriptions

[Add Calendar widget](#)

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### *View events for multiple cases in the case calendar*

If you implement the Show Calendar action in the Cases page, case workers can select multiple cases and see the events across all the selected cases in the Calendar view.

## Demonstration 3: Add the Show Calendar action to the toolbar

Solution Page      Custom Toolbar Menu

Show Link to Case      Show Calendar

Title	Customer name
PAG_ServiceClaim_000000100004	Custom CaseDetails
PAG_ServiceClaim_000000100005	Toolbar Check
PAG_ServiceClaim_000000110001	Calendar test 1
PAG_ServiceClaim_000000110002	<b>Open Case</b>
PAG_ServiceClaim_000000110003	Show Link to Case
PAG_ServiceClaim_000000110004	Send Link to Case
PAG_ServiceClaim_000000120001	Comments
PAG_ServiceClaim_000000120002	Create Package
	Flag Special Case
	Show Calendar

returned 13 items.

[Add Calendar widget](#)

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*Demonstration 3: Add the Show Calendar action to the toolbar*

## Demonstration 3: Add the Show Calendar action to the toolbar

### Purpose:

Case workers want to see events for multiple cases when they open the calendar in IBM Case Manager Client. You, as a Solution Developer and Solution Designer, want to display the calendar in a dialog box for the Cases page in IBM Case Manager Client. In this demonstration, you will configure the toolbar and menu of the Case List widget to add the Show Calendar action, redeploy the solution, and test the action.

### Task 1. Open the Custom Toolbar Menu Page.

For this demonstration, you are going to use the custom Case page (Custom Toolbar Menu) that you created in the Unit 2: Customize toolbar and menu, Demonstration 1: Edit a page to customize the toolbar, Task 1.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Expand the **Solution Pages** and then click the **Custom Toolbar Menu** link to open the page in **Page Designer**.

### Task 2. Configure the Case Toolbar widget.

In this task, you will add the Show Calendar action as the toolbar button and also as the menu item.

1. In **Page Designer**, click the **Edit Settings** icon for the **Case List** widget.
2. Select the **Toolbar** tab and then click the **Add Button**  icon.
3. For the **Action** field, scroll down and select **Show Calendar** from the list.
4. Leave the default values for the **Alignment (Left)** and **Label (Show Calendar)** fields.
5. Click **OK** to include the action to the list.  
Verify that the action is listed.



6. Select the **Menu** tab, and then click the **Add Menu Item** button.

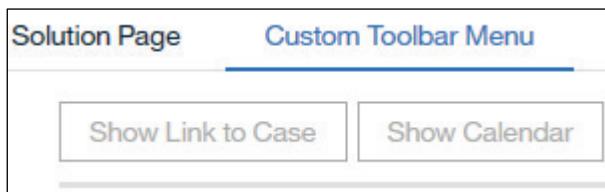
7. For the **Action** field, scroll down and then select **Show Calendar** from the list. Leave the default values for the **Alignment (Left)** and **Label (Show Calendar)** fields.
8. Click **OK** to include the action to the list and then verify that the action is listed in the list.
9. Click **OK** at the bottom of the dialog box to exit.

### **Task 3. Save and redeploy the solution.**

1. In **Page Designer**, click **Save** and then **Close** on the upper right side of the page.
2. Click **Save and Close** at the top of the page.
3. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
4. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
5. Click the **Test** icon to open **IBM Case Manager Client**.

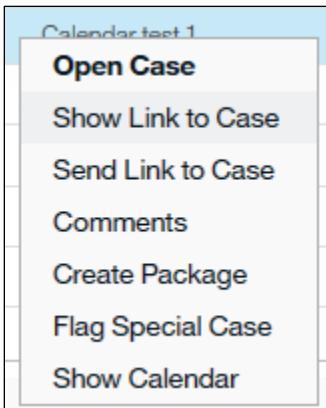
### **Task 4. Test the Show Calendar action.**

1. In **IBM Case Manager Client**, click the **Custom Toolbar Menu** tab to open the custom page.



- Verify that the **Show Calendar** button shows in the toolbar.
2. In the Search section, select **Customer name** for the search criteria, type % (percent) and then click **Search**.
3. Select a case that you added in the previous demonstration and click the row outside the title.  
If you click the title link, it opens the case.
4. Click the **Show Calendar** button and verify that the Calendar is opened in a dialog box in the *large-style* format.
5. Verify that the **US Holidays** calendar that you configured in Demonstration 1 is shown with the highlight color that you selected.  
If you select older cases that were added before configuring the Calendar widget, those cases will not show the US holidays.
6. Click **Close** to close the calendar.

7. In the **Custom Toolbar Menu** tab, select multiple cases (Shift-click) and then click the **Show Calendar** button, to see events for many cases at the same time.
8. Explore the display, select **Week** or **Month** from the top toolbar of the Calendar and then click **Close** to close the calendar.
9. Select another case, right-click and select the **Show Calendar** menu item from the list.



Verify that the Calendar dialog box opens.

10. Close the calendar, log out of IBM Case Manager Client, and then close the browser windows.

### Results:

In this demonstration, you configured the toolbar and menu of the Case List widget to add the Show Calendar action, redeployed the solution, and tested the action.

IBM Training 

## Demonstration 4: Use the Calendar widget in the Free Form page layout

Details	Calendar	Documents	Tasks	Activities	History		
<span style="float: left;">◀ Today</span> <span style="float: right;">Month ▾  ▶</span>							
<b>February 2018</b>							
2018	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
4	Jan 28	29	30	31	Feb 1	2	3
5	4	5	6	7	8	9	10
6	11	12	13	<b>14</b> Ash Wednesday	15	16	17
7	18	19 Washington's Birthday	20	21	22	23	24
8	25	26	27	28	Mar 1	2	3

Add Calendar widget © Copyright IBM Corporation 2018

*Demonstration 4: Use the Calendar widget in the Free Form page layout*

## Demonstration 4: Use the Calendar widget in the Free Form page layout

### Purpose:

You, as a Solution Developer and Solution Designer, want to add the Calendar widget to a custom page with Free Form page layout. To view details, you want to display the calendar in large-style format. You will add the widget in the large-style format to a separate tab on the page and test it on IBM Case Manager Client.

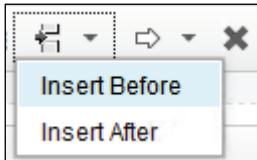
### Task 1. Open the custom Case Details page.

Recall that in Unit 1: Create custom pages, Demonstration 5: Create a page with Free Form page layout, you created a custom page with Free Form page layout. You will use that page for this unit.

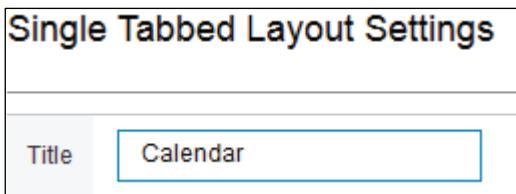
1. In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Expand the **Case Details Pages** and then click the **Custom Case Details** page link to open the page in **Page Designer**.

### Task 2. Configure the Calendar widget.

1. In **Page Designer**, click the **Documents** tab.
2. Add a tab by clicking the **Insert** icon in the toolbar and then select **Insert Before** from the list.



3. Select the **Untitled** tab and click the **Edit Settings** icon in the toolbar.
4. Type **Calendar** for the **Title** field and click **OK**.

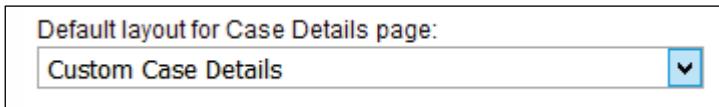


5. Make sure that the **Calendar** tab is selected.

6. Click the **Calendar** widget from the **Case Widgets** palette on the left, drag it to the **Calendar** tab, and release the left mouse button.
7. Click the **Edit Settings** icon for the **Calendar** widget.
8. In the **Calendar** widget **Settings** tab, select **Large** from the list for the **Select the Calendar style to display** field.  
Recall that in the previous task, you selected *Small* for this field.
9. Optionally, click the plus sign and then add a calendar subscription for your case type by using the steps from **Demonstration 1, Task 3**.
10. Click **OK** to close the dialog box, click **Save** and then **Close** at the top of the page.

### **Task 3. Assign the custom page to a case type.**

1. Select the **Case Types** tab and then click **Service Claim**.
2. Towards the bottom of the page, for the **Default layout for Case Details page** field, select the page that you edited: **Custom Case Details**.



3. Click **Save and Close** at the top of the page.
4. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
5. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
6. Click the **Test** icon to open **IBM Case Manager Client**.

### **Task 4. Test the Calendar widget in the client.**

IBM Case Manager Client opens in a new window with the **Cases** tab selected.

1. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Type **chris Dayton** into the **Customer name** field.
3. Click **Add** on the right.
4. In the **Search** section, select the **Customer name** for the search criteria.
5. Type **chris** and click **Search**.
6. Click the title of your case link to open the case.  
The Custom Case Details page opens.
7. Select the **Calendar** tab.

8. Verify that the calendar opens in the *large-style* format.
9. Optionally, add a quick task and verify that it is listed in the calendar.
10. Log out of the application and then close the browser windows.

**Results:**

**In this demonstration, you used the custom page with Free Form page layout to add a calendar widget in the large-style in a separate tab and tested it on IBM Case Manager Client.**

## Unit summary

- Configure the Calendar widget and subscribe to external calendars
- Create and view quick tasks in the Calendar widget
- Add the Show Calendar action to the toolbar
- Use the Calendar widget in the Free Form page layout

[Add Calendar widget](#)

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*Unit summary*

## Unit 4      Wire widgets

IBM Training



### Wire widgets

IBM Case Manager V5.3.2

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## Unit objectives

- Describe widgets
- Define types of events available for widgets
- Wire two widgets together

Wire widgets

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*Unit objectives*

## Describe widgets

- Widgets
  - are portable, reusable components
  - display dynamic content
  - are placed in a web page
  - receive and send data to applications or other widgets
- Widgets are used in pages to:
  - manage content
  - process work items

### Describe widgets

In the previous units, you learned about the use of different IBM Case Manager widgets.

For example, in Unit 1, the Toolbar, Search, Case List, Case Information, Properties, and In-baskets widgets were introduced to include a toolbar to a page, to search for cases, to display a list of cases that are returned by the search, to show the Case details, to display case properties, and to display the work items respectively. You also learnt about other utilities widgets such as Markup and Website Viewer widgets.

In Unit 3, you configured the Calendar widget.

In this unit, you learn how to wire two widgets to enable communication between them.

## Identify the widget configurations

- In Page Designer, you can:
  - adjust the size of the widget
  - rename the widget
  - move the widget to different locations
  - hide or delete the widget
  - open the Edit Settings or Edit Wiring pages

[Wire widgets](#)

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### *Identify widget configurations*

The Actions menu provides the following actions for the widget:

- Resize Widget: Specify a height
- Rename Widget: Change the title of a widget
- Move: Move a widget to a different area  
You can also drag the widget by using the title bar.
- Hide Widget: Move a widget into the Hidden Widget area
- Delete Widget: Remove a widget from the page

Edit Settings enables you to configure the items on the following tabs:

- Settings
- Menu
- Toolbar

Edit Wiring allows you to configure the following items:

- Add or modify Wiring events
- Disable broadcasting

The Widget Information Panel shows the number of incoming and outgoing events. You can click the links to go directly to the Edit Wiring page.

## What widget settings options are available for editing?

- The setting options for each widget are different based on their function.
- Examples:
  - In-baskets widget
  - Case Information widget

Wire widgets

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*What widget settings options are available for editing?*

The In-baskets widget provides the following settings:

- Role
- Show work item counts
- Show or hide work items in role in-baskets
- Options to display locked work items

The Case Information widget provides the following settings:

- Specify the default view for the list
- Configure whether users can switch between views
- Open documents in a separate browser window

## How do Widgets communicate?

- Widgets communicate by:
  - publishing (generating) Outgoing events
  - handling (receiving or processing) Incoming events
- An Outgoing event can carry a payload
- A widget uses the payload of an Incoming event to cause an update on a page

### *How do Widgets communicate?*

An event is a mechanism that provides a transitory means of sharing information.

There are two types of events:

- A published event is an event in which a widget publishes some data.
- A handled event is an event in which a widget receives some data from another widget.

A payload is a data object that widgets can use to update a page. For example, Case Search widget can publish a SearchCases event, with a payload of type CaseSearch that lists the search criteria that user entered.

## Define Outgoing events

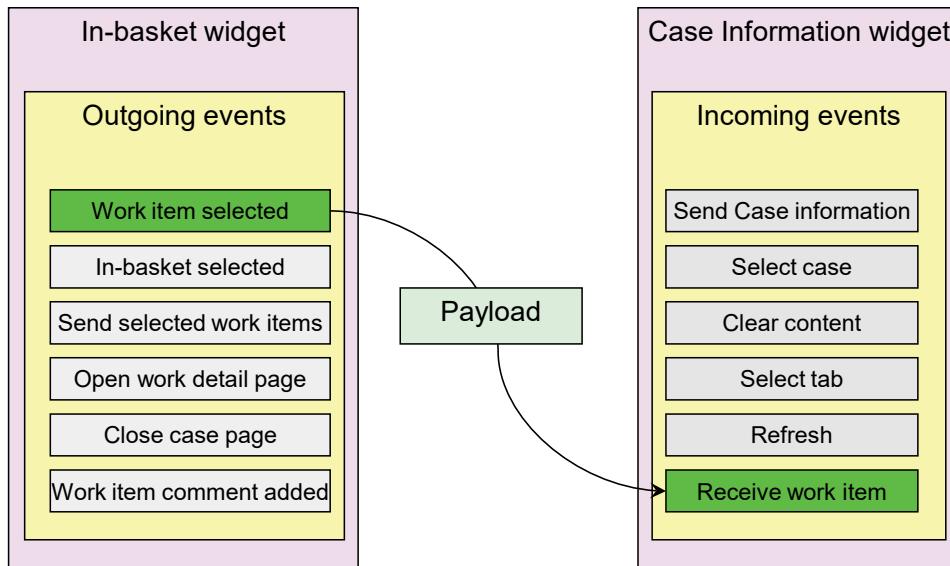
- Broadcast events
  - Widgets publish events to any receiving widgets on the page
- Wired events
  - connect an Outgoing event of one widget to an Incoming event of another widget

### *Define Outgoing events*

For broadcast events, any widget on the page that handles that event automatically receives the event. IBM Content Manager standard widgets broadcast events by default.

You can disable broadcast events if you need to assign specific wired behavior to a widget. For example, you want the users to include a comment before they can complete a work item. To meet this requirement, you disable the broadcast event that occurs when the user clicks Complete. You wire that event to another widget that prompts the user to add a comment. You can then add the broadcast event that dispatches the work item when the user completes the Comment field and clicks OK. You can configure the disable option in the Event Broadcasting tab on the Edit Wiring page.

## Wire the events between two widgets



Wire widgets

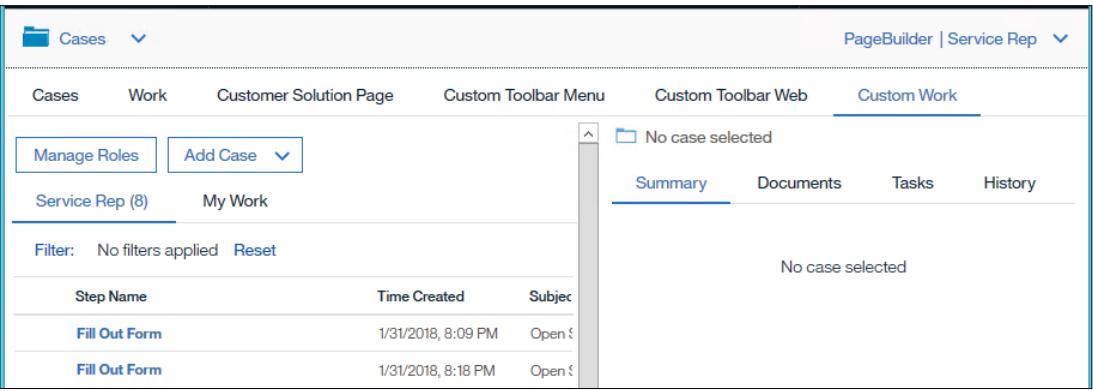
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### Wire the events between two widgets

The diagram shows a simplified concept of wiring widgets. Each widget has Incoming and Outgoing events. To wire an event, you add a wire that includes the Outgoing event of the source widget and the Incoming event of the target widget. When the event is triggered, a payload is sent to the receiving widget, which causes some change on the page.

IBM Training 

## Demonstration 1: Wire two widgets together



The screenshot shows a web-based application interface. At the top left is a blue header bar with the text "IBM Training". On the right side of the header is the "IBM" logo. Below the header, the main content area has a title "Demonstration 1: Wire two widgets together". The main content area contains a "Cases" dashboard. On the left, there's a sidebar with "Manage Roles" and "Add Case" buttons, and tabs for "Service Rep (8)" and "My Work". Below this is a "Filter" section with "No filters applied" and "Reset" buttons. A table lists "Step Name", "Time Created", and "Subject" for two entries: "Fill Out Form" created on 1/31/2018, 8:09 PM and "Fill Out Form" created on 1/31/2018, 8:18 PM. Both subjects are "Open". To the right of the sidebar is a "Custom Toolbar Web" section with tabs for "Summary" (which is selected), "Documents", "Tasks", and "History". The "Summary" tab displays the message "No case selected". At the bottom of the page, there are copyright notices: "Wire widgets" on the left and "© Copyright IBM Corporation 2018" on the right.

### Demonstration 1: Wire two widgets together

## Demonstration 1: Wire two widgets together

### Purpose:

As a Solution Builder, you want to design a feature to include case details in the Work page. When the case workers select a work item, the Case Information widget is populated with the data from the selected case. You will add a Case Information widget to the Work page and wire it to the In-basket widget. When the Case Information sends a payload, only the In-basket widget can receive the information to display it.

Before doing the demonstration in this unit, ensure that your environment is ready and required services are running. Refer to the *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

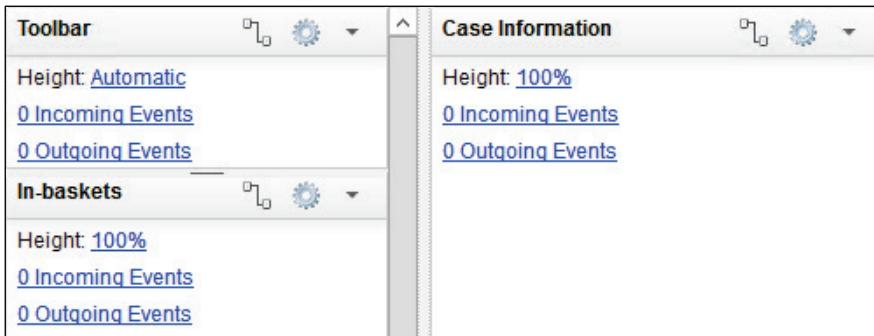
### Task 1. Make a copy of the Work page.

IBM Case Manager Client, by default, does not include the Case Details widget on the Work page. You want to customize the page to include this widget on the Work page to show the Case details.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder**:  
 URL: <http://vclassbase:9081/CaseBuilder>  
 You can also use the Case Builder bookmark in the browser.  
 User: **P8Admin**  
 Password: **FileNet1**
2. In **IBM Case Manager Builder**, click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Expand the **Solution Pages**.
5. Hover the cursor over the **Work** page and click the **Copy**  icon.  
 Note: If you click the case link, it opens the Cases page for editing.
6. Type **Custom Work** for the **Name** field.
7. Type **Test the wiring** for the **Description** field and click **OK**.  
 The new page is added under the *Solution Pages*.
8. Click **Save** at the top of the page to save your solution.

## Task 2. Add a Case Information widget to the Work page.

1. In the **Pages** tab, expand the **Solution Pages** and click the **Custom Work** link.
2. In **Page Designer**, click the **Page Options**  icon in the toolbar.
3. In the **Page Options** dialog box, for the **Select Layout** field, change the page layout to **2 Column** and click **OK**.
4. In **Page Designer**, select the **In-baskets** widget on the right column (the cursor changes to cross-hair), drag it to the left column below the **Toolbar**, and release it.
5. Drag the **Case Information** widget from the **Case Widgets** palette on the left pane to the right column.
6. Verify that your layout is configured as shown in the screen capture.
  - **Toolbar** on the top and the **In-baskets** on the bottom in the left column
  - **Case Information** is on the right column

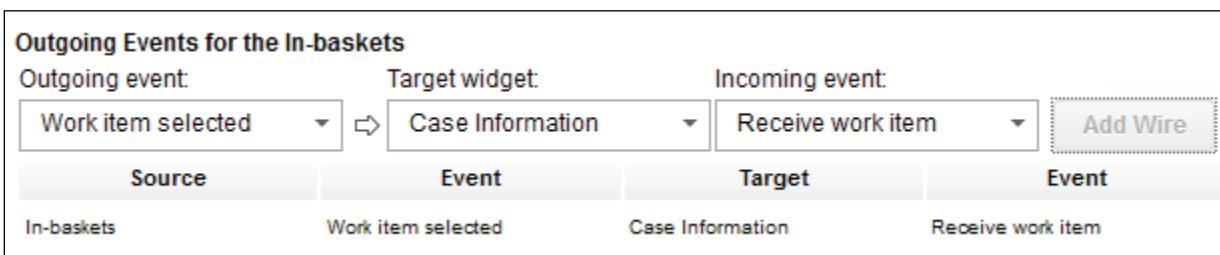


7. Click **Save**.

## Task 3. Wire an event.

Wire an outgoing event from the In-baskets widget to the Case Information widget.

1. Click the **Edit Wiring**  icon for the **In-baskets** widget.
2. In **Wire Events** page > **Outgoing Events for the In-Baskets**, edit the following fields:
  - Outgoing event: **Work item selected**
  - Target widget: **Case Information**
  - Incoming event: **Receive work item**



3. Click **Add Wire** and then click **OK**.
4. Confirm that the **In-baskets** widget shows **1 Outgoing Event** and the **Case Information** widget shows **1 Incoming Event**.
5. Click **Save** and then click **Close**.

## **Task 4. Add properties to the Case Summary.**

1. Click the **Case Types** tab.
  2. Click the **Service Claim** link for editing.
  3. Click **Views** from the left pane.
  4. Verify that all the properties are listed under the **Properties in the Case Summary view** column.
- If all the properties have been verified, skip to step 7.
5. If it is not already listed, on the **Case Summary** tab, click **Select All**.
  6. Click **Add to View** to add all of the properties to the **Case Summary** view.

Case Summary	Properties Layout	Case Search				
<table border="1"> <tr> <th>Available Properties</th> <th>Properties in the Case Summary view</th> </tr> <tr> <td>There are no more properties to add to the Case Summary view.</td> <td> <input type="checkbox"/> Added On  <input type="checkbox"/> Added by  <input type="checkbox"/> Age  <input type="checkbox"/> Case Identifier  <input type="checkbox"/> Case State  <input type="checkbox"/> Case Type  <input type="checkbox"/> Customer Name  <input type="checkbox"/> Customer Since  <input type="checkbox"/> Modified On  <input type="checkbox"/> Modified by  <input type="checkbox"/> Premium  <input type="checkbox"/> Price         </td> </tr> </table>			Available Properties	Properties in the Case Summary view	There are no more properties to add to the Case Summary view.	<input type="checkbox"/> Added On <input type="checkbox"/> Added by <input type="checkbox"/> Age <input type="checkbox"/> Case Identifier <input type="checkbox"/> Case State <input type="checkbox"/> Case Type <input type="checkbox"/> Customer Name <input type="checkbox"/> Customer Since <input type="checkbox"/> Modified On <input type="checkbox"/> Modified by <input type="checkbox"/> Premium <input type="checkbox"/> Price
Available Properties	Properties in the Case Summary view					
There are no more properties to add to the Case Summary view.	<input type="checkbox"/> Added On <input type="checkbox"/> Added by <input type="checkbox"/> Age <input type="checkbox"/> Case Identifier <input type="checkbox"/> Case State <input type="checkbox"/> Case Type <input type="checkbox"/> Customer Name <input type="checkbox"/> Customer Since <input type="checkbox"/> Modified On <input type="checkbox"/> Modified by <input type="checkbox"/> Premium <input type="checkbox"/> Price					

7. Click **Save** and then click **Back**.

## Task 5. Assign the custom page to a role.

Your solution is already opened in IBM Case Manager Builder.

1. Open the **Roles** tab.
2. Click the **Service Rep** role link and then open the **Pages** subtab.
3. Click **Assign Page** and then select **Custom Work** page.
4. Click **OK** to close the dialog box.  
Verify that your page is listed in the **Pages** tab.
5. Click **OK All** to accept the changes to the role.
6. Click **Save and Close** to save the solution.

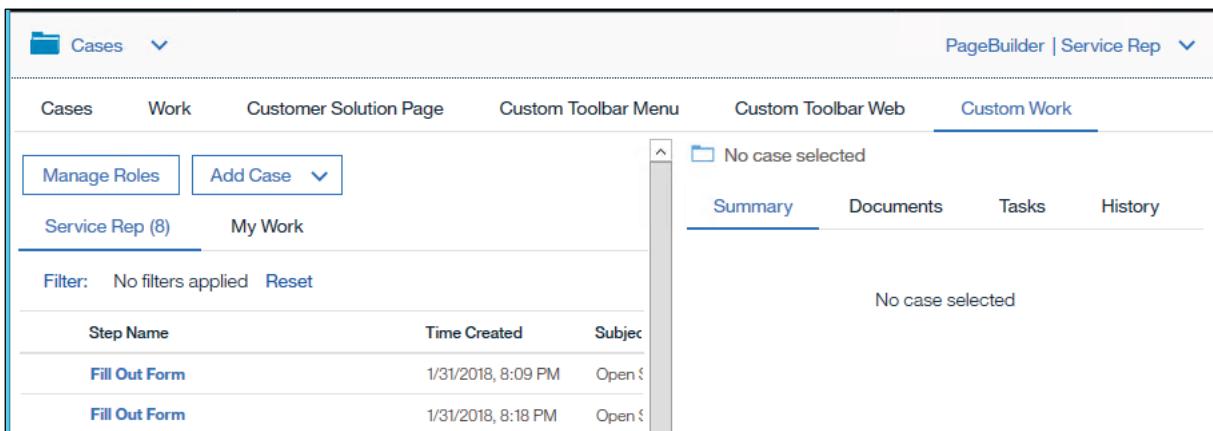
## Task 6. Redeploy the solution.

You redeploy the solution for the changes to take effect.

1. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
3. Click the **Test** icon to open IBM Case Manager Client.

## Task 7. Test the widget wiring.

1. In **IBM Case Manager Client**, open the **Custom Work** tab.
2. Confirm that the page now has a **Case Information** widget (with **Summary**, **Documents**, **Tasks**, and **History** tabs).



Verify that you have a few work items listed in the *Service Rep* subtab on the left pane.

If no work item is listed, add a case by using the following steps (3-5).

3. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.

4. Type some values for the **Customer Name**, **age**, and **Price** fields and select a date for the **Customer Since** field.
5. Click **Add** on the right.
6. Click the **Service Rep** tab to refresh the In-basket.
7. Select a work item in the **Service Rep** In-basket.  
If you click directly on the title link, it opens the work item in the Work Details page. Click outside the link.
8. Confirm that the **Case Details** widget on the right is populated with case data from the selected case.
9. Log out of all applications and then close all browser windows.

**Results:**

You added a Case Information widget to the Work page, wired it with the In-baskets widget, redeployed the solution, and tested it. You verified that after wiring, when you select a work item, the Case Details widget is populated with case data from the selected case.

## Unit summary

- Describe widgets
- Define types of events available for widgets
- Wire two widgets together

Wire widgets

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*Unit summary*



## **Unit 5      Use Script Adapter widgets**

IBM Training



### **Use Script Adapter widgets**

**IBM Case Manager V5.3.2**

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## Unit objectives

- Describe a Script Adapter widget
- Use a Script Adapter widget to transform data

[Use Script Adapter widget](#)

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*Unit objectives*

## Characteristics of a Script Adapter widget

- Script Adapters:
  - are wired to other widgets
  - receive events from the other widgets to which they are wired
  - enable you to enter JavaScript that runs when it is called

[Use Script Adapter widget](#)

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### *Characteristics of a Script Adapter widget*

A Script Adapter is a special widget that the user can place on a page. They can enter JavaScript in the widget that runs when it is called. Script Adapter widgets receive events from the other widgets to which they are wired whereas other widgets can receive events that are broadcast.

## Use a Script Adapter widget

- Use a Script Adapter widget to:
  - transform the data
  - insert logic between widget event communication
  - debug your solution

[Use Script Adapter widget](#)

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### Use a Script Adapter widget

A Script Adapter widget transforms the data that one widget publishes into a different format for another widget.

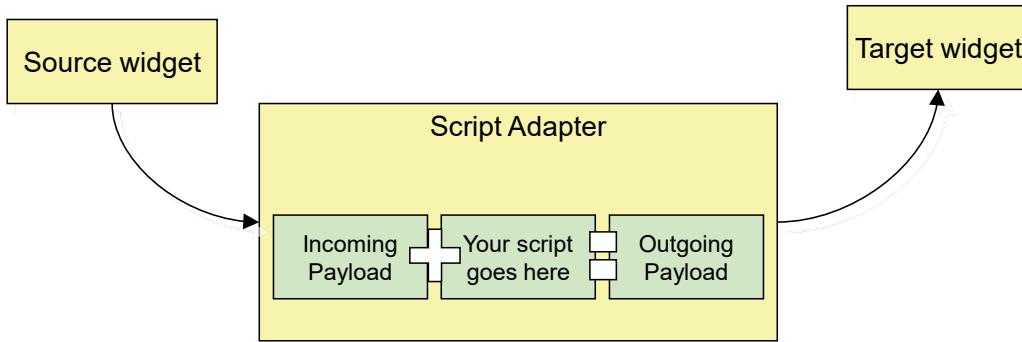
When wiring two widgets, if the widgets have the same event and the same format for the event data, you can wire one widget to another. However, if the format for the event data is not the same, you need to transform the data in the source event into a format that the target widget expects. The Script Adapter widget is the way that you achieve this transformation. The Script Adapter widget is included in the Cases page by default. For example, the Script Adapter transforms the data that the Properties widget publishes into a format that a custom widget on a Case Details page can understand.

A Script Adapter widget inserts logic between widget event communications. For example, you can use the widget to run a custom validation on the data that the Properties widget publishes.

You can debug your solution with Script Adapter widget. You can configure the Script Adapter widget to display source event payload at run time for debugging.

## Insert logic using a Script Adapter widget

- The Script Adapter widget:
  - shows event details from the source widget
  - runs a script that transforms the data
  - sends the transformed data as the payload for the outbound event



Use Script Adapter widget

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### Insert logic using a Script Adapter widget

The following process describes how you can insert a logic by using a Script Adapter:

- When the Script Adapter widget receives an event from a widget to which it is wired, it displays the event details in the Received Event section.
- The Script Adapter then runs a script that transforms the data as a function with a payload parameter.
- You can manipulate the incoming payload by implementing any type of logic in a script.
- The value that your custom script returns is the payload of the outbound event of this Script Adapter widget.
- The Sent Event section in the Script Adapter widget displays the payload of the outbound event.

For example, a Script Adapter widget receives a wired event with a payload of some test data (a string value). The Script Adapter has the following script:

```
alert("The value of the payload is: " + payload);
return "Event Payload: " + payload + "!";
```

The Sent Event section displays "Event Payload: test data!" as the payload for the outbound event.

## Debug the events with the Script Adapter widget

- Show Script Text
- Block Outbound Event

[Use Script Adapter widget](#)

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### *Debug the events with the Script Adapter widget*

You can use a Script Adapter to view event data to debug problems with the wires between two widgets. The Script Adapter displays the source event payload so that you can see the data that the script needs to transform.

In Page Designer, select the following settings for the Script Adapter widget:

- Show Script Text: Select this option to show the text of the script when the script runs.
- Block Outbound Event: Select this option to prevent the Script Adapter widget from sending the outgoing event.
- If you wired the Send event payload event to another widget, you can select this option to temporarily stop the Script Adapter widget from sending the event while you are debugging the script.

## Describe a payload

- A payload is an object that is passed from, or received by, a widget.
- Most payloads are in the following formats:
  - JSON
  - Text

Use Script Adapter widget

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### *Describe a payload*

A payload is an object that is passed from, or received by, a widget when an event happens in the system.

- Most payloads are JSON objects
- A payload can be a simple string

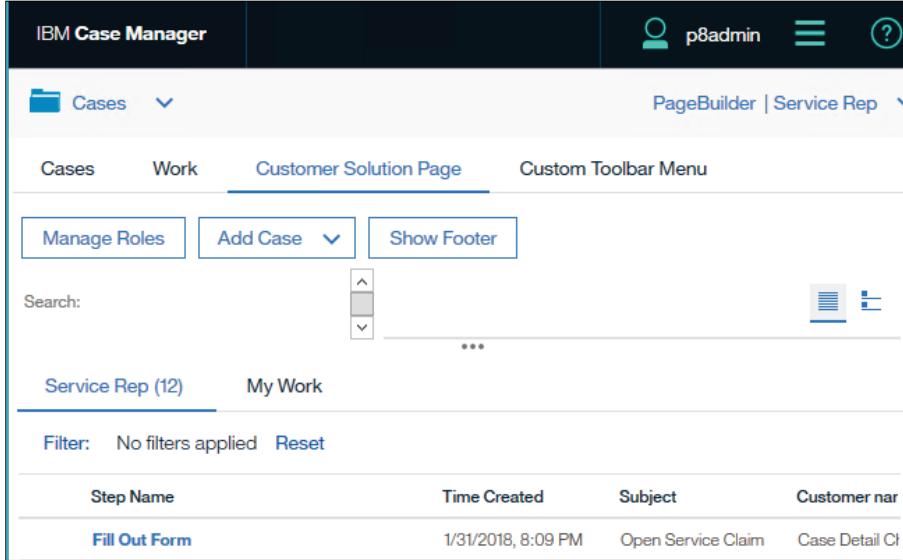
When you configure a Script Adapter for the first time:

- You can create the event wiring with the other widget, and display the payload that is received by the Script Adapter to verify what is in the payload.
- To display the payload use the following lines of code:

```
if (payload)  
alert("payload= ", JSON.stringify(payload));
```

IBM Training 

## Demonstration 1: Use a Script Adapter widget to transform data



The screenshot shows the IBM Case Manager interface. At the top, there's a navigation bar with 'IBM Case Manager', a user icon 'p8admin', and a 'PageBuilder | Service Rep' dropdown. Below the navigation bar, there are tabs: 'Cases', 'Work', 'Customer Solution Page' (which is selected), and 'Custom Toolbar Menu'. A toolbar below the tabs includes buttons for 'Manage Roles', 'Add Case', and 'Show Footer'. There's also a search bar labeled 'Search:' with up and down arrows, and a 'Service Rep (12)' link. The main content area displays a table with columns: 'Step Name', 'Time Created', 'Subject', and 'Customer nar'. One row is visible: 'Fill Out Form' created on '1/31/2018, 8:09 PM' with subject 'Open Service Claim' and customer 'Case Detail CI'. At the bottom of the interface, there's a footer with links for 'Use Script Adapter widget' and '© Copyright IBM Corporation 2018'.

*Demonstration 1: Use a Script Adapter widget to transform data*

## Demonstration 1: Use a Script Adapter widget to transform data

### Purpose:

As a Solution Designer, you want to edit a solution page to add buttons that will expand and collapse the In-Baskets widget to enhance the user experience. To complete this customization, you will use a Script Adapter widget to convert the outgoing event from one widget into an appropriate incoming event for another widget and create buttons.

Before doing the demonstration in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

### Task 1. Open the Customer Solution Page.

You will reuse the Customer Solution Page that you created in Unit 1.

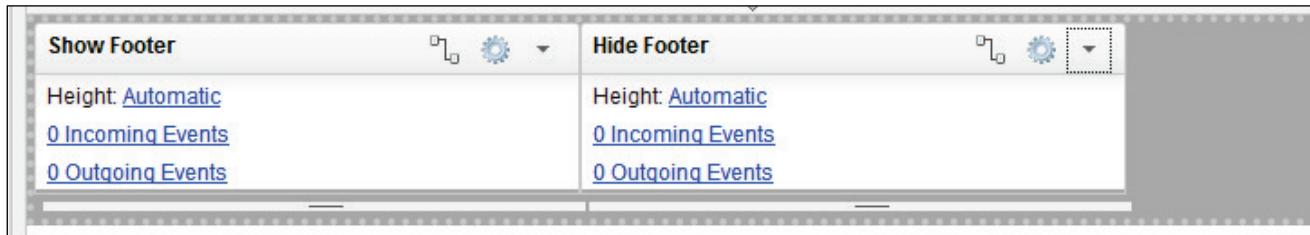
1. In the **Firefox** browser, log on to **IBM Case Manager Builder**:
  - URL: <http://vclassbase:9081/CaseBuilder>
  - You can also use the bookmark in the browser toolbar: **Case Builder**
  - User: **P8Admin**
  - Password: **FileNet1**
2. In **IBM Case Manager Builder**, click the link for **PageBuilder** solution to edit it.
3. Select the **Pages** tab.
4. Expand **Solution Pages**.
5. Open the **Customer Solution Page** for editing.

### Task 2. Add Script Adapter widgets.

1. In **Page Designer**, select the **Show or Hide Hidden Widgets**  icon.
2. Verify that a hidden area (dark grey) is now visible at the bottom of the page.
3. Drag a **Script Adapter** widget from the **Utility Widgets** palette to the Hidden Widgets area.
4. Click **Actions** (down arrow) for the widget and then select **Rename Widget**.
5. In the **Rename Widget** dialog box, type **Show Footer** for the widget name and then click **OK**.

6. Repeat **steps 3-5** to add another Script Adapter widget to the Hidden Widgets area and then name it as **Hide Footer**

The results appear similar to the following (part of the page is shown) with the two widgets that you added.



### Task 3. Add a button to expand the footer.

1. Click **Edit Settings** on the **Toolbar** widget at the top of the page.
2. Click the **Add Button** icon and then complete with the following settings:
  - Action: **Event Action**
  - Alignment: **Left**
  - Label: **Show Footer**
  - Menu Identifier: **Show Footer**
  - Event Name: **ShowFooter**
  - Event Type: **Wiring**
3. Scroll down and click **OK** to add the action.
4. Verify that the action is added to the list.

Show Footer	Event Action	Left
-------------	--------------	------

5. Click **OK** on the Toolbar settings to close it.

## Task 4. Wire the Show Footer event to the Script Adapter.

You will wire an event from the Show Footer button to the Show Footer Adapter.

1. Click the **Edit Wiring**  button on the **Show Footer** widget.
2. Add an **Incoming Event** wire with the following settings:
  - Source widget: **Toolbar**
  - Outgoing event: **\*ShowFooter**
  - Incoming event: **Receive event payload**
3. Click **Add Wire**.

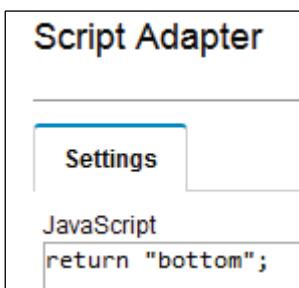
Incoming Events for the Show Footer			
Source widget:	Outgoing event:	Incoming event:	
Toolbar	*ShowFooter	Receive event payload	<b>Add Wire</b>
Source	Event	Target	Event
Toolbar	*ShowFooter	Show Footer	Receive event payload

4. In the **Wire Events** dialog box, add an **Outgoing Event** wire with the following settings:  
Field and value are given as pairs:
  - Outgoing event: **Send event payload**
  - Target widget: **Page Container**
  - Incoming event: **Restore region**

Outgoing Events for the Script Adapter			
Outgoing event:	Target widget:	Incoming event:	
Send event payload	Page Container	Restore region	<b>Add Wire</b>
Source	Event	Target	Event
Show Footer	Send event payload	Page Container	Restore region

5. Click **Add Wire**.
6. Click **OK** to exit the Edit Wiring window.
7. Click the **Edit Settings** button for the **Show Footer** widget.

8. In the dialog box, change the JavaScript text to the following line:  
`return "bottom";`

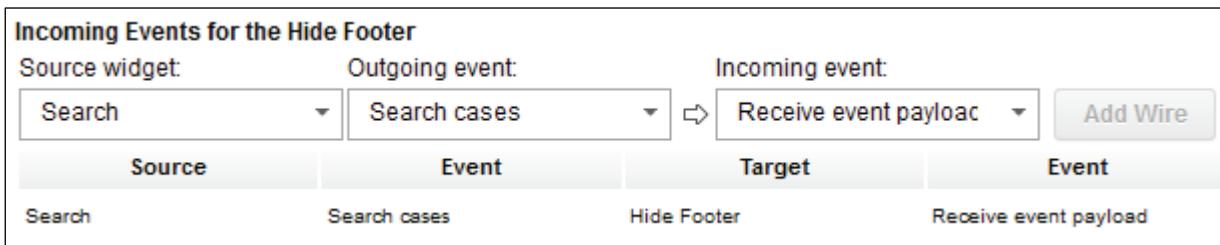


9. Click **OK** to close the dialog box.

## Task 5. Wire the Hide Footer event to Script Adapter.

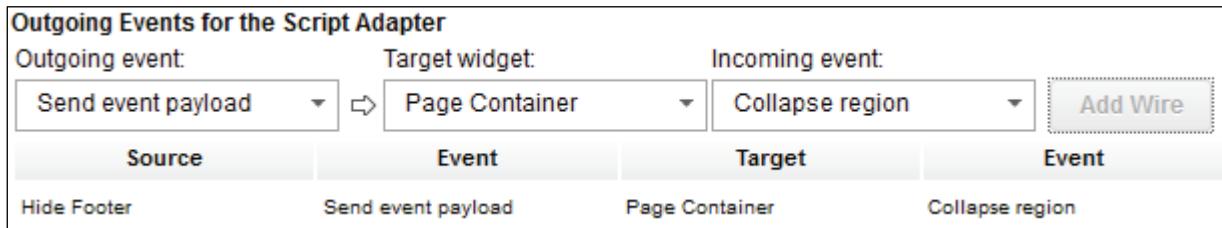
You will wire the Search widget to the Script Adapter widget so that a case search collapses the footer.

1. Click the **Edit Wiring** button on the **Hide Footer** widget.
2. In the **Wire Events** dialog box, add an **Incoming event** with the following settings:  
 Field and value are given as pairs:
  - Source widget: **Search**
  - Outgoing event: **Search cases**
  - Incoming event: **Receive event payload**
3. Click **Add Wire**.



4. Add an **Outgoing event** with the following settings:  
 Field and value are given as pairs:
  - Outgoing event: **Send event payload**
  - Target widget: **Page Container**
  - Incoming event: **Collapse region**

**5. Click Add Wire.**



6. Click **OK** to exit the **Wire Events** dialog box.
7. Click the **Edit Settings** button for the **Hide Footer** widget.
8. In the **Script Adapter > Settings** dialog box, change the JavaScript text to the following line:  
`return "bottom";`
9. Click **OK** to close the dialog box, click **Save** and then click **Close**.
10. Click **Save and Close**.

**Task 6. Redeploy the solution.**

1. In the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
3. Click the **Test** icon to open IBM Case Manager Client.

**Task 7. Test the script adapter functions.**

1. In **IBM Case Manager Client**, select the **Customer Solution** page tab.
2. Click **Show Footer** button at the top toolbar.

3. Confirm that the **Service Rep** in-basket widget opens at the bottom of the page.

The screenshot shows the IBM Case Manager interface with the 'Customer Solution Page' selected in the top navigation bar. The main content area displays search results for 'Service Rep (12)'. At the bottom of the page, there is a 'Service Rep' in-basket widget containing a single item: 'Fill Out Form' created on 1/31/2018, 8:09 PM. The widget has a collapse/expand button and a 'Show Footer' button.

4. In the Search area on the left, type % (percent sign as the value) for the search criteria.
5. Click **Search**.
6. Confirm that the **Service Rep** in-basket widget collapses when the search returns are displayed.
7. Log out of all applications and close the browser windows.

#### Results:

In this demonstration, you added buttons that expand and collapse the In-Baskets widget. You used Script Adapter widgets to convert the outgoing event from one widget into an appropriate incoming event for another widget.

## Unit summary

- Define a Script Adapter widget
- Use a Script Adapter widget to transform data

[Use Script Adapter widget](#)

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*Unit summary*

## Unit 6    Customize properties views

IBM Training



### Customize properties views

IBM Case Manager V5.3.2

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## Unit objectives

- Create a custom properties view
- Assign the properties view to a page
- Create a properties view for business objects

Customize properties views

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*Unit objectives*

## Describe properties views

- Properties views define how properties, for a case type, are displayed in the Case Manager Client.
- You can use the IBM Case Manager default properties view.
- You can also define views to provide custom layouts.

Customize properties views

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### *Describe properties views*

For each case type, you can customize property displays and specify which properties are displayed in Case Summary, searchable, and displayed in the Properties widgets.

- In Case Summary view, select and order the properties that are displayed in the Summary tab of the Case Information widget and in the Case List widget.
- In Case Search view, select and order the properties that are available for building a search in the Search widget.
- In Properties Layout view, define different layouts for the Properties widgets that are used for the case type.

## What is a Properties widget?

- You use the Properties widget to enable caseworkers to view and edit the property values for a case or a work item.
- The Properties widget is included on several pages:
  - Add Case page
  - Add Task page
  - Case Details page
  - Custom Task Details page
  - Work Details page

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### *What is a Properties widget?*

The Properties widget is included by default on the following pages:

- Add Case page: to set the initial property values for a new case
- Add Task page: to set the initial values for step (work item) parameters when you are creating a task
- Case Details page: to view and modify the property values for a case
- Custom Task Details page: to view and modify the values for step (work item) parameters that are defined for a custom task
- Work Details page: to view and modify the values for step (work item) parameters

## Explore system-generated layout

- For each case type, IBM Case Manager provides a system-generated layout for the Properties widget in
  - Case pages
  - Work Details pages

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### *Explore system-generated layout*

For a case, in the system-generated layout, the property controls are organized vertically in the Properties widget and the properties are listed in alphabetical order

On Work Details pages, in the system-generated layout: workgroups are sorted at the top of the list.

## Design a custom layout

- You can design custom layouts for the Properties widget by defining:
  - which properties are displayed to different roles
  - the order in which the properties are displayed
  - the way the properties are arranged in the Properties widget
  - the format for each property

## Compare system-generated and custom properties views

- **System-generated view**

- displays all properties
- alphabetical order
- organized vertically
- same layout for all pages

- **Custom view**

- displays selected properties
- user-specified order
- User-specified organization
- different layout for different pages

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### *Compare system-generated and custom properties views*

Defining a view for the Properties widget is optional. If you would like to have more flexibility in how properties are displayed in IBM Case Manager Client, for example, you want to show only selected properties for a role, you can consider designing a custom property layout. The following list shows the differences between the system generated and custom properties views.

The system-generated properties view:

- shows all of the properties that are defined for the case type, regardless of the role or page
- displays the properties in alphabetical order down the page, and they all have the default format
- shows the same properties widget in the Add Case page and the Work Details page, and for all users

The custom properties view:

- shows only relevant properties that user specifies
- displays properties in a different order and with different formats as designed by the user
- includes new property labels

## Process for defining a custom properties view

- Use Properties View Designer in Case Manager Builder
- Define a view at a case type level
- Select the required layout
- Configure properties display
- Assign the custom view to a page
- Specify the case type and the custom view in the Properties widget

### *Process for defining a custom properties view*

The slide shows high-level process steps required to define a custom properties view.

## Configure containers in Properties View Designer

- Use containers to organize the content of the view.
  - Each container provides a different layout for the properties.
  - Add containers to the root container.
  - You can add multiple containers or containers inside other containers.

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### *Configure containers in Properties View Designer*

By default the canvas contains a single layout container. This container is the root in which you add other containers and properties.

Examples of available containers are:

- Multiple column Layout
- Property List
- Property Table
- Tabbed Layout
- Tiled Layout

## Guidelines to create custom layouts

- Display only necessary properties for each role or step
- Format the layout to avoid scroll bars if possible
- Configure each view separately when you place multiple Properties widgets on a single page
- Set a view as the default view, if you use the same view in multiple places

### *Guidelines to create custom layouts*

As you design a view, consider the space that is available in the user interface. If the Properties widget is too wide or too high, you might see scroll bars that make editing the properties awkward for the user. Use the different layout containers such as the tabbed layout container or the titled layout container to organize the content of the view efficiently.

## Demonstration 1: Create a custom properties view

The screenshot shows a custom properties view window. At the top, there are two tabs: 'Information' (selected) and 'Extra Information'. Below the tabs, there are three input fields: 'Age' (empty), 'Price' (empty), and 'Customer Since' (containing '1/23/2018' and a time picker set to '12:00 AM').

Customize properties views

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*Demonstration 1: Create a custom properties view*

## Demonstration 1: Create a custom properties view

### Purpose:

Case workers need to view certain case properties more frequently than other properties. As a Solution Builder, you will create a custom view for case properties in Properties Layout Designer and redeploy the solution.

Before doing the demonstrations and exercises in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

### Task 1. Open Properties View Designer.

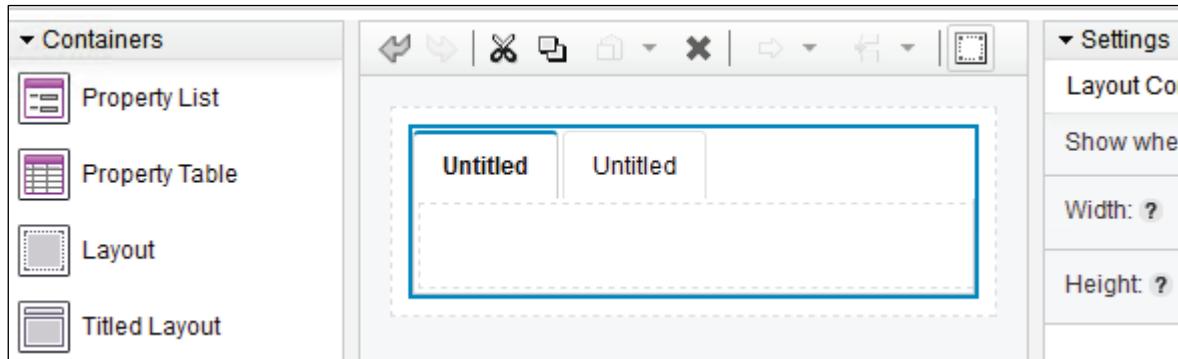
1. In the Firefox browser, log on to **IBM Case Manager Builder**:
  - URL: <http://vclassbase:9081/CaseBuilder>You can also use the bookmark in the browser toolbar: **Case Builder**
  - User: **P8Admin**
  - Password: **FileNet1**
2. In **IBM Case Manager Builder**, click the **PageBuilder** solution link to edit it.
3. Select the **Case Types** tab.
4. Click **Service Claim**.
5. Click **Views** from the left pane.
6. Select the **Properties Layout** tab.
7. Click **Add View**.
8. Type **EduPropView** in the **Name** field.
9. Click **OK** and then click **Save**.
10. Click the **EduPropView** link.  
It opens in the Property View Designer.

## Task 2. Configure a container.

The containers hold the properties. Each container provides a different layout for the properties. You can add multiple containers or even add containers inside other containers.

1. In **Property View Designer**, select **Tabbed Layout** from the **Containers** palette on the left, hold the mouse, drag it to the small white rectangle at the top on the canvas in the middle pane and release it.

It adds 2 tabs to the canvas.



2. Click the first tab.
3. In the **Layout container Settings** area, set the values using the following:
  - Title: **Information**
  - Layout direction: **Vertical**
  - Label position: **Beside**
4. Click the second tab.
5. In the **Layout container Settings** area, set the values using the following:
  - Title: **Details**
  - Layout direction: **Vertical**
  - Label position: **Above**
6. Click **Save**.

## Task 3. Add properties to the container.

1. Open the **Information** tab.
2. Drag the following properties from the **Properties** palette on the left to the **Information** tab:
  - **Customer Name**
  - **Premium**

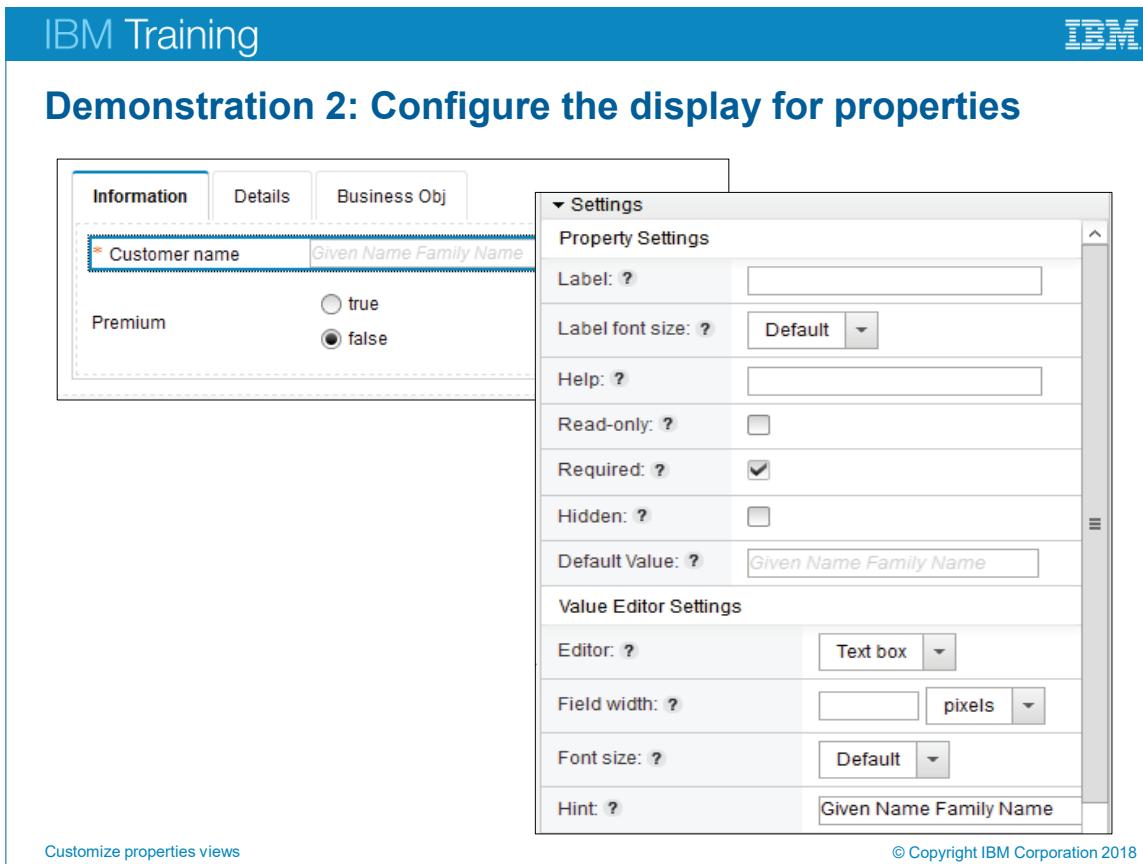
3. Open the **Details** tab.
4. Drag the following properties to the **Details** tab:
  - **Age**
  - **Price**
  - **Customer since**
5. Optionally, order the properties in any order you prefer by dragging them within the container.  
You can use the Toolbar to undo, redo, cut, copy, paste, and delete properties from the canvas.
6. Click **Save** and then click **Close** to close the **Property View Designer**.  
You will configure the properties in the next demonstration.
7. Click **Save and Close** to close the solution.
8. Logout of **IBM Case Manager Builder** and close the browser.

**Results:**

You configured a container in Properties Layout Designer and added the case properties to create a custom view.

IBM Training 

## Demonstration 2: Configure the display for properties



Information Details Business Obj

\* Customer name Given Name Family Name

Premium  true  false

▼ Settings

Property Settings

Label: ?

Label font size: ? Default

Help: ?

Read-only: ?

Required: ?

Hidden: ?

Default Value: ? Given Name Family Name

Value Editor Settings

Editor: ? Text box

Field width: ? pixels

Font size: ? Default

Hint: ? Given Name Family Name

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Demonstration 2: Configure the display for properties

## Demonstration 2: Configure the display for properties

### Purpose:

Each type of property has different display options. As a Solution Builder, you will configure how each property is presented in the custom view.

### Task 1. Configure a String property.

1. Log on to **IBM Case Manager Builder** and open the **PageBuilder** solution.
2. Select the **Case Types** tab, click **Service Claim**, and then click **Views** form the left pane.
3. Select the **Properties Layout** tab and click **EduPropView** to open it in the **Properties View Designer**.
4. Click the **Information** tab on the middle pane.
5. Select the **Customer Name** property.
6. In the **Settings** pane on the right, if it is not already expanded, expand the **Settings** node.
7. In the **Property Settings** section, select the **Required** option.  
With this setting, this property needs to have a value to create a case.
8. In the **Editor Settings** section > **Editor** field, verify and select **Text box**.
9. In the **Hint** field, type **Given Name Family Name**.
10. Click **Save**.

### Task 2. Configure a Boolean property.

1. On the **Information** tab, select the **Premium** property.
2. In the **Editor Settings** section > **Editor** field on the right, select **Radio button set** from the list.
3. Select the **False when empty** option.
4. Click **Save**.

### Task 3. Configure an Integer property.

1. Open the **Details** tab on the middle pane.
2. Select the **Age** property.
3. In the **Editor Settings** section > **Minimum value** field on the right, type 0(zero).
4. In the **Maximum value** field, type 110.
5. Click **Save**.

## Task 4. Configure a Float property.

1. In the **Details** tab, select the **Price** property.
2. In the **Property Settings** section > **Label** field, type **Price (USD)**.
3. In the **Editor Settings** section > **Editor** field, select **Number text box**.
4. In the **Decimal Places** field, type **2**.
5. Select the **Zero when empty** option.
6. Click **Save**.

## Task 5. Configure a DateTime property.

1. In the **Details** tab, select the **Customer Since** property.
2. In the **Editor Settings** section > **Editor** field, select **Date time text box**.
3. In the **Minimum value** field, type **1/5/2000**
4. Click **Save** and then click **Close**.
5. Click **Save and Close** to close the solution.
6. Logout of **IBM Case Manager Builder** and close the browser.

### Results:

You configured properties of different datatypes in the Property View Designer to create a custom view.

## Demonstration 3: Assign the custom properties view to a page

The image displays three separate windows of a custom properties view, each showing different fields and validation messages.

- Top Window:** Shows tabs for "Information" and "Details". Under "Information", there is a field labeled "Customer name" with a red asterisk (\*) and a placeholder "Given Name Family Name". A red exclamation mark icon in a circle is positioned next to the field, with the message "This value is required." displayed in a tooltip.
- Middle Window:** Shows tabs for "Information" and "Details". Under "Information", there is a field labeled "Age" with the value "47". Under "Details", there is a field labeled "Customer Since" with the date "2/10/2015" and a time picker showing "12:00 AM".
- Bottom Window:** Shows tabs for "Information" and "Details". Under "Information", there is a field labeled "Age" with the value "120". A red exclamation mark icon in a circle is positioned next to the field, with the message "This value cannot be less than 0 or greater than 110." displayed in a tooltip.

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*Demonstration 3: Assign the custom properties view to a page*

## Demonstration 3: Assign the custom properties view to a page

### Purpose:

After you create a properties view, you need to associate it with a page to be able to display it in IBM Case Manager Client. You, as a Solution Builder, will associate the view to a page.

### Task 1. Create a copy of the Case Details page.

1. In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** credentials.
2. Click the link for **PageBuilder** solution to edit it.
3. Open the **Pages** tab and expand **Case Details Pages**.
4. Hover over the **Case Details** page and click the **Copy**  icon.
5. Type **Prop View Page** for the **Name** field.
6. Type **Test the prop view** for the **Description** field.
7. Click **OK**.

The new page is added under the **Case Details Pages**.

### Task 2. Add the properties view to a page.

1. Click the link for the **Prop View Page** to open it for editing.
2. Click the **Edit Settings**  icon for the **Properties** widget.
3. In the **Properties** dialog box, click the **Add**  button to add a property layout view.
4. Select **Service Claim** for the **Select case type**, **EduPropView** for the **Select view** fields and click **OK**.
5. Verify that the new property layout is listed.

Case Type	View Name
Service Claim	EduPropView

6. Click **OK** to close the **Properties** window.
7. In **Prop View Page**, click **Save** and then click **Close**.

## Task 3. Assign the custom page to a case type.

1. Click the **Case Types** tab.
2. Click the **Service Claim** case type link to open it.
3. Select **Prop View Page** from the **Default layout for Case Details page** drop-down menu near the bottom of the page.

Default layout for Case Details page:
<input style="border: 1px solid #ccc; padding: 2px 10px; width: 150px; height: 20px; margin-right: 10px;" type="button" value="Prop View Page"/> <input style="border: 1px solid #ccc; padding: 2px 5px; width: 20px; height: 20px;" type="button" value="▼"/>

4. Click **Save and Close** at the top of the page.

## Task 4. Redeploy the solution.

1. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
3. Click the **Test** icon to open IBM Case Manager Client.

## Task 5. Test the solution.

IBM Case Manager Client is opened with the **Cases** tab selected.

1. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Type the following data into the **Customer name**, **Age**, **Customer since** and **Price** fields respectively: **Kevin Smith**, **45**, **2/10/2015**, and **216**  
You configured the Case Details page to show the custom property layout. The properties for Add Case are displayed by using the default layout.
3. Click **Add** on the right.
4. In the **Search** section, select the **Customer name** for the search criteria.
5. Type **Kevin** and click **Search**.
6. Click the title of your case link to open the case.  
The Prop View Page (Case Details) opens.

7. Confirm that the properties are displayed in the custom layout (that you configured in IBM Case Manager Builder) as shown in the following screen captures.

- Two tabs are shown: **Information** and **Details**
- In the **Information** tab, the **Premium** property value has radio button format and by default **false** is selected.

Information	Details
* Customer name	Kevin Smith
Premium	<input type="radio"/> true <input checked="" type="radio"/> false

- You set the **Customer Name** as the required field. Verify that it has a red asterisk to indicate that this property is required.
- If you remove the value, you get a validation error. Also notice that the hint that you added for the field is shown (**Given Family Name**)

Information	Details
* Customer name	Given Name Family Name

! This value is required.

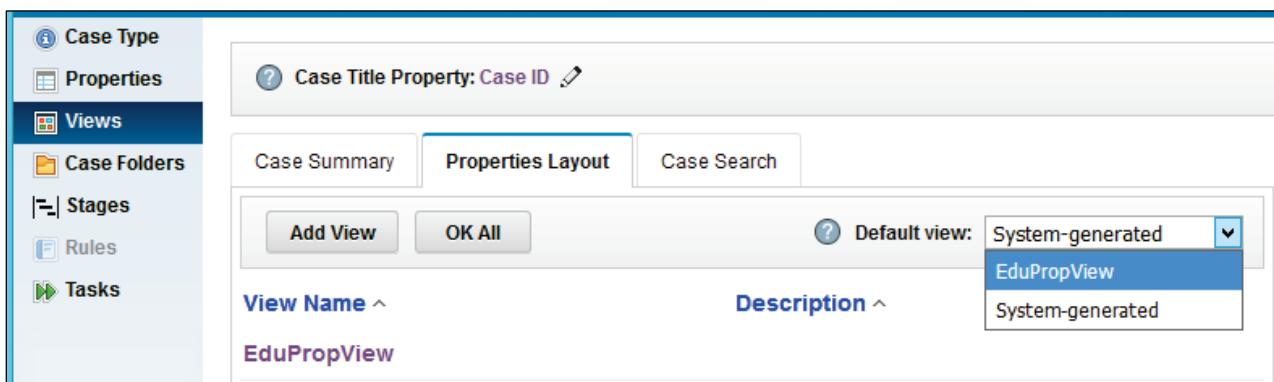
- In the **Details tab**, the value for the **Price** field is formatted in US Dollars format.

Information	Details
Age	45
Price (USD)	216.00
Customer Since	2/10/2015 <span style="margin-left: 20px;">12:00 AM</span> <span style="margin-left: 20px;">(Clock icon)</span>

- In the **Details tab**, if you type a value for the **Age** field above 110, a validation error is shown since the value exceeds the limit that you set.

The screenshot shows a 'Case' view in the IBM Case Manager Client. The 'Information' tab is selected. In the 'Details' tab, there is a form field for 'Age' with the value '120'. To the right of the field, a red-bordered callout box contains the validation error message: 'This value cannot be less than 0 or greater than 110.'

- Click **Close**, log out of all applications, and then close all browser windows. If you want the same custom property layout view to be used throughout your solution, you can set that view as the Default view in the Properties Layout tab in IBM Case Manager Builder.



### Results:

You associated the custom property view that you created in the previous demonstration with a page to display the view in IBM Case Manager Client.

## What are business objects?

- A business object is:
  - a structured data type
  - represents a case entity as a collection of properties
  - used in the case solutions

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### *What are business objects?*

A business object is a structured data type and can be used to hold arrays of information. For example, use business objects to hold information for different types of insurance policies for a person.

Define a business object (for example, Insured) to represent a person who is covered by an insurance policy. Assign the object properties that apply to any person who is insured, such as surname, given name, and insured ID. To use this business object, define a multivalued property (called: Insured Parties), and set the type to Insured. In a case, the Insured Parties contains one or more instances of the Insured business object. To reference a specific instance, you select one of the Insured business object properties as a title. Because the title must uniquely identify the instance, you select the insured ID.

## Define a custom properties view for business objects

- Use a business object as a data type for a property
- Define the properties views for business object similar to other properties.
- Display for each property that is associated with a business object is configured same as any other properties.

*Define a custom properties view for business objects*

## Demonstration 4: Create a properties view for business objects

Information	Details	Business Obj
Products Ordered		
Product Name	Product ID	Quantity
Keyboard	KB734	1
Mouse Pad	MP230	3
Monitor	MO784	1
		

Products Ordered: Keyboard, Mouse Pad, Monitor ▾

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*Demonstration 4: Create a properties view for business objects*

## Demonstration 4: Create a properties view for business objects

### Purpose:

You, as a Solution Builder, created business objects for your case solution and need to display them in IBM Case Manager Client based on a user experience specification. You will create a custom view for case properties that have business objects in Properties Layout Designer.

### Task 1. Open the solution for editing.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** credentials.
2. Click the link for **PageBuilder** solution to edit it.

### Task 2. Create a business object.

1. Click the **Business Objects** tab and then click **Add Business Object > New**.
2. In the **Name** field, type **Product**.
3. In the **Description** field, type **Product information** and then click **OK**.  
After you click OK, the page displays a Properties tab for the business object.
4. Select the **Properties** tab for the business object and then click **Add Property > New**.
5. In the **Name** field, type **Product Name**.
6. Select **String** for **Type** and then click **OK**.
7. Repeat **steps 4-6** to add more properties to the **Product** business object by using the following Name and Type:
  - Product ID: **String**
  - Quantity: **Integer**
8. Click **OK All**.
9. On the right, for **Product title**, select **Existing > Product Name**.



For the Product title field, you can select any of the properties that is associated with this business object. The value of the selected property is displayed in the client user interface when all the properties of the business object cannot be rendered. You are going to test this in Task 7, Step 10 and 11.

10. Click **Save**.

## Task 3. Create a business object property.

1. Select the **Properties** tab.

Name	Type	Attributes	Description
* Name:	Type: String		

2. Click **Add Property > New**.
3. In the **Name** field, type **Products Ordered**.
4. For the **Type** field, select the **Business Object** type from the list.
5. Confirm that **Product** is shown in the **Business Object** field.
6. Click **OK** and then click **OK All**.
7. Click **Save**.

## Task 4. Add the business object property to a case.

1. Select the **Case Types** tab and click **Service Claim**.
2. Click **Properties** from the left pane.
3. Click **Add Property** and select **Existing**.
4. Select **Products Ordered**, click **OK**, and then click **OK All**.
5. Ensure that the business object property (**Products Ordered**) is added to the case type and shown in the list.
6. Click **Views** from the left pane.
7. In the **Case Summary** tab, hover over **Products Ordered** and then click the forward arrow to move it to the **Properties in the Case Summary view** column.
8. Click **Save**.

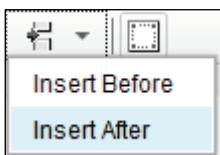
## Task 5. Configure the container and add the business object.

For this task, you reuse the custom property layout view that you created earlier.

1. Click **Views** from the left pane and then select the **Properties Layout** tab.
2. Click the **EduPropView** link.

It opens in the Properties View Designer.

3. In the **Properties View Designer**, select **Details** tab.
4. Click the **Insert** icon and then select **Insert After**.

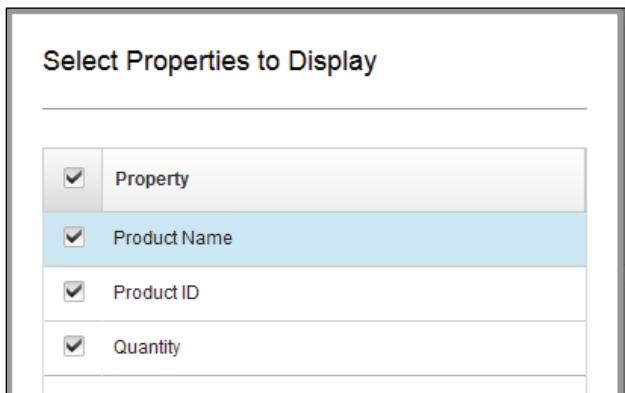


A new tab is added.

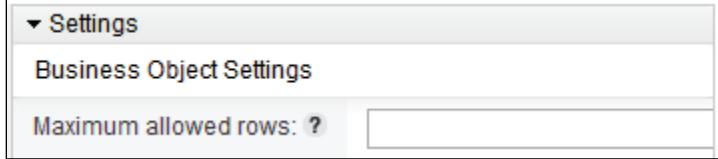
5. Select the **Untitled** tab and in the **Layout container Settings** pane on the right, set the values by using the following:
  - Title: **Business Obj**
  - Layout direction: **Vertical**
  - Label position: **Above**
6. Select the **Product Ordered** business object from the **Properties** palette on the lower left pane, hold the mouse and drag it to the **Business Obj** tab.

- Verify that the business object is added with its 3 properties. Expand the middle pane if all the properties are not displayed.
- If you have more than 5 properties, only the first five properties are shown in the canvas.

- Optionally, you can add or remove any business object properties from the view by clicking the **Select properties**  icon in the lower right corner of the **Business Obj** tab and then clearing the check box for that property.



- You can rearrange the properties order, by dragging a property.
  - Configuring each property for the business object is the same as the tasks that you completed in Demonstration 2. For this demonstration, these steps are not repeated.
7. In the **Business Obj** tab, select the entire block to see the **Business Object settings** on the right pane.
- Notice that you can set **Maximum allowed rows**. This number determines how many rows of values can be set. If you don't set any values there will be no restriction.



8. Click **Save** and then **Close**.
9. Click **Save and Close** at the top of the page.

## Task 6. Redeploy the solution.

In Demonstration 3, you created a copy of the Case Details page (Prop View Page) and added the EduPropView layout to that custom page. You also already assigned the Prop View Page to a case type. The solution is ready to be deployed and tested.

1. On the main page, click the **Deploy** icon for the **PageBuilder** solution.
2. Click **Deploy** on the **Confirmation** page.  
Wait for the deployment to complete.
3. Click the **Test** icon to open **IBM Case Manager Client**.

## Task 7. Test the solution.

IBM Case Manager Client is opened with the **Cases** tab selected.

1. Click **Add Case > Service Claim** at the top of the page.  
A new case opens.
2. Enter the following data into the **Customer name**, **Age**, **Customer since** and **Price** fields respectively: **Jane Maples**, **45**, **4/15/2015**, and **412**
3. Click **Add** (plus symbol) below the **Products Ordered** table.  
To add values to the **Products Ordered** business object, you must add a business object instance.
4. In the **Products Ordered** dialog box, type values for the following properties and then click **OK**.
  - Product Name: **Keyboard**
  - Product ID: **KB734**
  - Quantity: **1**
5. Repeat **steps 3-4** to add two more products using the following data.  
Data for business object 2:
  - Product Name: **Mouse Pad**
  - Product ID: **MP230**
  - Quantity: **3**Data for business object 3:
  - Product Name: **Monitor**
  - Product ID: **MO784**
  - Quantity: **1**Verify that you can see values for the **Products Ordered** business object.
6. Click **Add** on the right.
7. In the **Cases** tab > **Search**, on the left, select the **Customer name** for the search criteria.
8. Type the name (**Jane Maples**) that you used to create the case and click **Search**.
9. Click the title of your case link to open the case.  
The Prop View Page (Case Details) opens.

10. Select the **Business Obj** tab. Verify that the properties are displayed in the custom layout as shown in the following screen capture.

Information	Details	Business Obj
Products Ordered		
Product Name	Product ID	Quantity
Keyboard	KB734	1
Mouse Pad	MP230	3
Monitor	MO784	1

11. Optionally, select **Summary** tab in the left pane and verify that the Business object (**Products Ordered**) has a list of **Product Name** values (only one of the properties is shown).

Products Ordered: **Keyboard, Mouse Pad, Monitor**

You configured the Product Name property for the Product title field in Task 2, Step 9.

12. Click **Close**, log out of all applications, and then close all browser windows.

**Results:**

**You created a custom view for case properties that has business objects in Properties Layout Designer.**

## Unit summary

- Create a custom properties view
- Assign the properties view to a page
- Create a properties view for business objects

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*Unit summary*

## Exercise 1: Assign the custom properties view to a page

Information	Details	Business Obj
* Customer name Premium	Given Name Family Name <input type="radio"/> true <input checked="" type="radio"/> false	

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*Exercise 1: Assign the custom properties view to a page*

## Exercise 1: Assign the custom properties view to a page

As a Solution Designer, you want to display properties differently in IBM Case Manager Client for each role. You created properties views to achieve this customization. You must associate a custom properties view with a page to be able to use the view in IBM Case Manager Client. In the demonstrations, you created a custom view and associated it with the Case Details page. You will use those skills to configure the Add Case page to use the custom view.

Use IBM Case Manager Builder to complete this exercise:

- Create a copy of the Add Case page.
- Add your custom properties view to the new page.
- Assign the custom page to a case type.
- Redeploy and test the solution.

Use the following data to complete this exercise:

- IBM Case Manager Builder URL: **http://vclassbase:9081/CaseBuilder**
- User/Password: **P8Admin/FileNet1**
- Solution Name: **PageBuilder**
- Name of the custom view: **EduPropView**
- Name of the custom page: **Add Case View**

For more information about where to work and the exercise results, refer to the Tasks and Results section that follows. If you need more information to complete a task, refer to earlier demonstrations for detailed steps.

## Exercise 1: Tasks and results

### Task 1. Create a copy of the Case Details page.

- In the Firefox browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** credentials.
- Click the link for **PageBuilder** solution to edit it.
- In the **Pages** tab, expand **Add Case Pages**.
- Create a copy of the **Add Case** page with the name: **Add Case View**

<b>▼ Add Case Pages</b>	
<b>Page Name</b>	<b>Description</b>
<b>Add Case View</b>	Add a case and edit its properties.

- Save the solution.

### Task 2. Add the properties view to a page.

- Open the **Add Case View** page for editing.
- Edit Settings for the **Properties** widget.
- Add the custom property view (**EduPropView**) for the **Service Claim** case type.
- Verify that your property layout is listed.

<b>Case Type</b>	<b>View Name</b>
Service Claim	EduPropView

### Task 3. Assign the custom page to a case type.

- In the **Case Types** tab, open the **Service Claim** case type.
- For the **Default layout for Add Case page** field, select the new page that you created: **Add Case View**.

<b>Default layout for Add Case page:</b>
<b>Add Case View</b>

## Task 4. Redeploy and test the solution.

- Deploy the **PageBuilder** solution and test the **Add Case View** page in the Case Manger Client.
- Add a Case of **Service Claim** case type.
- In the new case page, verify that the custom properties view is shown as below.

Information	Details	Business Obj
* Customer name Premium	Given Name Family Name <input type="radio"/> true <input checked="" type="radio"/> false	

- Log out, and then close all browser windows.



## Unit 7    Specify viewers for file types

IBM Training



# Specify viewers for file types

IBM Case Manager V5.3.2

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## Unit objectives

- Describe a Viewer Map
- Create a Viewer Map for PDF files

## Describe Viewer Maps

- Viewer Maps:
  - specify which viewer is used to open each file type
  - can be customized
  - need to be associated with Case Manager client

Specify viewers for file types

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### *Describe Viewer Maps*

The IBM Case Manager administration tool, based on IBM Content Navigator, includes a default Viewer Map. The default Viewer Map includes Viewer Mappings for each repository type.

Some viewers support only specific file types, such as Adobe Reader that is used for the PDF file type and others support many file types such as Web Browser that is used for many file types.

## Create custom Viewer Maps

- Create a custom Viewer Map to:
  - use a different viewer for a file type from the assigned viewer by default
  - add more file types to the mapping

[Specify viewers for file types](#)

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### *Create custom Viewer Maps*

You cannot edit the default Viewer Map but you can create copies of the default Viewer Map and customize them.

You can create one or more Viewer Maps but you can associate only one Viewer Map with IBM Case Manager Client.

You can create custom viewers programmatically and configure them in IBM Content Navigator. They then become available to include in Viewer Maps for IBM Case Manager Client.

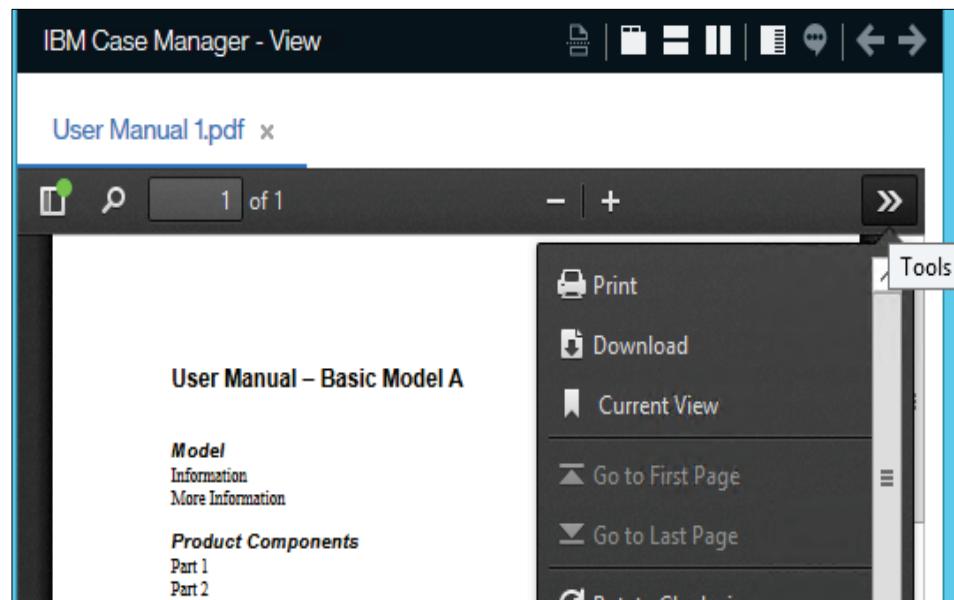
## Identify Fallback viewers

- If the primary viewer selected is not supported in a system, you can add a second viewer to your map.
  - The second viewer is called Fallback viewer.
- When you create a custom viewer map for a file type, you need to edit both the primary viewer as well as the Fallback viewer.

### *Identify Fallback Viewers*

Each viewer supports a specific set of file types. Some viewers are not supported on every server or client platform that IBM Content Navigator supports. IBM Content Navigator can automatically select a different viewer to use if another viewer is included in your Viewer Map. This behavior is called the Fallback behavior, and the second viewer is called a Fallback viewer. You can include multiple Fallback Viewers in your Viewer Map.

## Demonstration 1: Create a Viewer Map for PDF files



Specify viewers for file types

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*Demonstration 1: Create a Viewer Map for PDF files*

## Demonstration 1: Create a Viewer Map for PDF files

### Purpose:

As a Solution Designer and as an Administrator, you want to replace the default viewers for the PDF files with Adobe Reader. You will create a custom Viewer Map and associate it with IBM Case Manager Client.

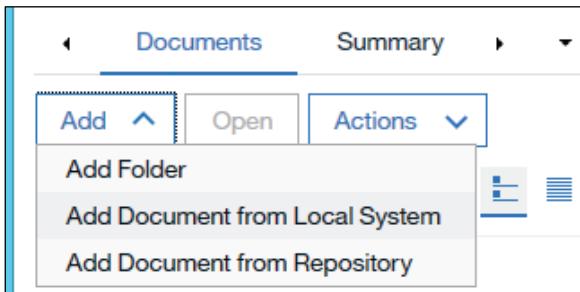
Before doing the demonstration in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

### Task 1. Open a Case.

1. In the Firefox browser, log on to **IBM Case Manager Client**:
  - URL: <http://vclassbase:9081/navigator/?desktop=icm>  
You can also use the bookmark in the browser toolbar: **ICM Client**
  - User: **P8Admin**
  - Password: **FileNet1**
2. Verify that **PageBuilder | Service Rep** is selected on the upper right of the page.
3. In the **Cases** tab, click **Add Case > Service Claim**.  
The Add Case page opens.
4. Type **Amy Hunter** for the **Customer name** field and then click **Add**.  
The case is added.
5. In the **Search** section, select the **Customer name** for the search criteria.
6. Type **Amy** and then click **Search**.  
The case you added is listed.
7. Click the title of your case link to open the case.  
The Case Details page (Prop View Page) for that case is opened in a separate tab.

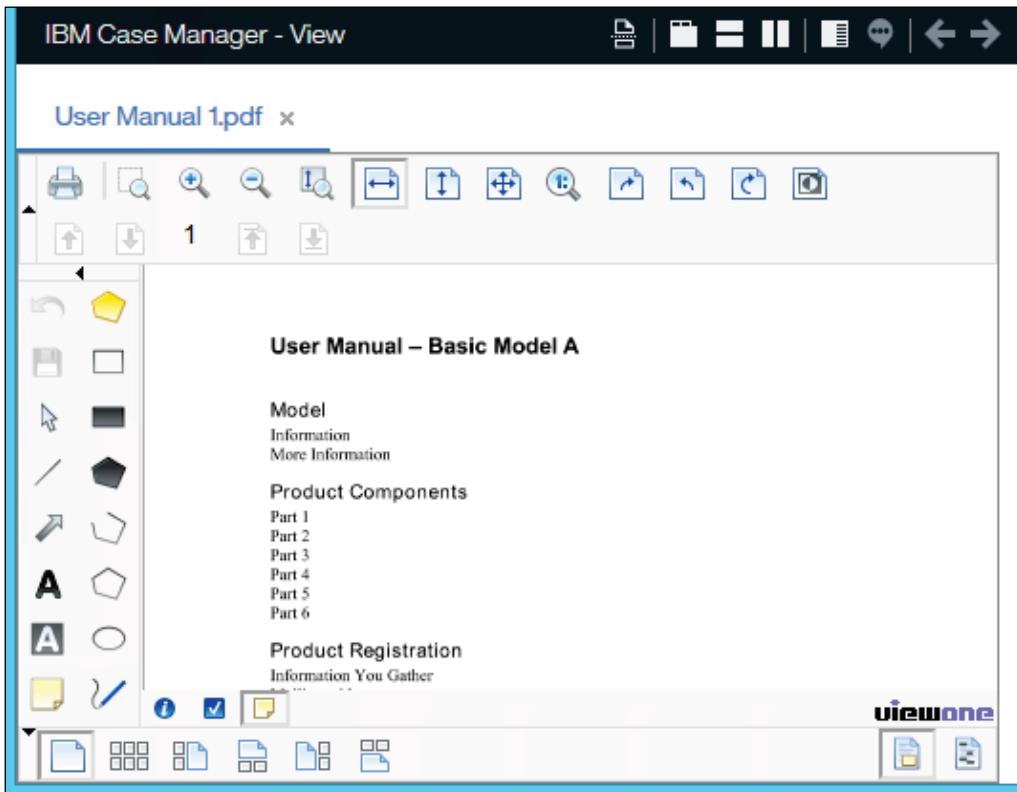
## Task 2. Check the existing viewer for Adobe PDF files.

1. In the **Prop View Page**, select the **Documents** subtab, and then click the **Correspondence** folder.
2. Click **Add** and then select **Add Document from Local System**.



3. In the **Add Document** page, click **Browse**.
4. In the **File Upload** window, browse to the **C:\Training\F2940\Sample\_documents** folder, select a PDF file (User Manual 1.pdf), and then click **Open**.
5. In the **Add Document** page, click **Add**.
6. In the **Prop View Page > Documents** subtab > **Correspondence** Folder, verify that the document is listed.
7. Double-click the PDF document to open it.

The Document opens in the default viewer.



You will change the default viewer that is assigned to the PDF documents.

8. Close the viewer.
9. In the **Prop View Page**, click **Save** and then click **Close**.
10. Log out of **IBM Case Manager Client** and close the browser.

### Task 3. Create a Viewer Map.

1. In the **Firefox** browser, log on to **IBM Case Manager administrator** client:  
URL: **http://vclassbase:9081/navigator/?desktop=icmadmin**  
You can also use the bookmark in the browser toolbar: **Case Admin**  
User name: **P8Admin**  
Password: **FileNet1**
2. In the IBM Case administration client, select the **Administration**  icon from the list on the top left toolbar.
3. Click **Viewer Maps** on the left pane.
4. In the **Viewer Maps** tab on the right pane, click **New Viewer Map**.  
The New Viewer Map contains a copy of all the mappings from the default Viewer Map.
5. In the **New Viewer Map** tab, type **EDU viewer map** in the **Name** field.  
The ID value is populated automatically.
6. Type **It maps Adobe Reader for the PDF files** for the Description field and then click **Save**.
7. In the search field, type **FileNet** to search for the **FileNet Content Manager** repository type.
8. Check the mappings for the following two mappings:
  - **Daeja ViewONE Virtual**
  - **Web Browser**
9. Examine the **application/pdf** file type.

Repository Type	Viewer	File Type
FileNet Content Manager	Daeja ViewONE Virtual	application/pdf, image/bmp, image/gif, image/jpeg, image/jpg, image/pjpeg, image/png, image/tiff, image/x-png
FileNet Content Manager	Web Browser	All file types

You will modify these mappings in the next task.

## Task 4. Modify the default mapping.

Remove the application/pdf file type from the **Daeja ViewONE Virtual** Viewer mapping using the following steps.

1. Select the **Daeja ViewONEVirtual** row for **FileNet Content Manager** and then click **Edit**.
2. In the **Mapping** page > **Selected file types** pane, select **application/pdf**.
3. Move it to the **Available file types** pane by clicking the backward arrow  icon and then click **OK**.

This step removes the option to view the PDF files in the Daeja ViewONE Virtual Viewer.

4. In the **EDU viewer map** tab, verify that the change is updated and then click **Save**.

The application/pdf file type is removed from the list.

IBM Case Manager Client selects **Web Browser** as the first Fallback Viewer.

For the client to use the new mapping, you must also remove the application/pdf file type from the Web Browser mapping by using the following steps.

5. Select the **Web Browser** Viewer row for **FileNet Content Manager** and then click **Edit**.
6. In the **Mapping** page, clear **All file types** option.

This step is important. Only after clearing the option, you will be able to edit the mapping.

The following steps 7-9 move all the items in the **Available file types** pane except **application/pdf**.

7. Select an item in the **Available file types** pane, press **Ctrl+A** to select all and then move them to the **Selected file types** pane by clicking the forward arrow.
8. In the **Selected file types** pane, select the **application/pdf** and then move it from the **Selected File types** pane back to the **Available File types** pane by using the arrow.
9. Click **OK** at the lower right of the page.

Steps 5-9 removed the option to view the PDF files in the Web Viewer.

10. In the EDU viewer map, verify that the change is updated and then click **Save**. A list of file types is shown and application/pdf is removed.

## Task 5. Create a mapping for pdf.

1. Click **New Mapping**.
2. In the **New Mapping** page, select **FileNet Content Manager** for the **Repository type** field.
3. Select **Adobe Reader** for the **Viewer** field.
4. Move **application/pdf** from the **Available file types** pane to the **Selected file types** pane by using the forward arrow.
5. Click **OK** at the bottom, right of the page.
6. In the **EDU viewer map** tab > search field, type **FileNet** to search for the **FileNet Content Manager** repository type.
7. Verify that the new mapping is listed.

FileNet Content Manager	Adobe Reader	application/pdf
-------------------------	--------------	-----------------

8. Click **Save and Close**.
9. In the **Viewer Maps** tab, verify that **EDU viewer map** is listed.

<a href="#">New Viewer Map</a>	<a href="#">Edit</a>	<a href="#">Copy</a>	<a href="#">Delete</a>	<a href="#">Refresh</a>	<a href="#">Close</a>	<a href="#">Name contains</a>
Name	ID	Description				
 Default viewer map	default	A viewer map that contains a list of viewers and their associated file types.				
 EDU viewer map	EDUviewermap	It maps Adobe Reader for the PDF files				

## Task 6. Assign the new viewer map to IBM Case Manager Client.

In this task, you will replace the default viewer map that is assigned to IBM Case Manager Client with the new one that you created.

1. In the **Administration** page, select the **Desktops** tab.
2. Select **Case Manager** (**Description**: Default desktop for IBM Case Manager Client) and click **Edit**.
3. In the **General** tab, scroll down to **Desktop configuration** section.

4. For the **Viewer map** field, select **EDU viewer map** from the list.

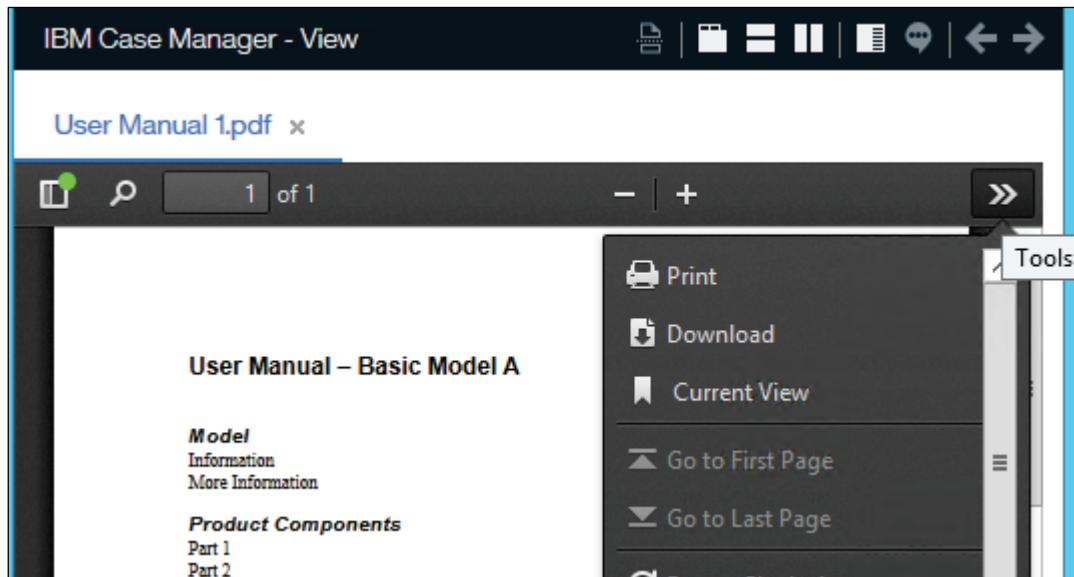
The screenshot shows a configuration dialog for 'Desktop Configuration'. On the left, there are two fields: 'Viewer map:' with a help icon and 'Merge and Split:' also with a help icon. On the right, a dropdown menu titled 'Default viewer map' is open, showing two options: 'Default viewer map' and 'EDU viewer map'. The 'EDU viewer map' option is highlighted with a blue selection bar.

5. Click **Save and Close** and if prompted, click **Close** in the **Information** dialog box.  
 6. Log out of the IBM Case Manager administrator client and close the browser.

## Task 7. Test the new viewer map.

In this task, you will test the Viewer Map by opening a PDF file.

1. Refer to Task 1 and 2, to search for the case you added in **Task 1** and then open the PDF document that you added.
2. Verify that the PDF file is opened in the Adobe Reader.



3. Optionally, right-click the document, select **This Frame > View Frame Info**.
4. Verify that the Referring URL shows that adobeReader is used.

Referring URL: <http://vclassbase:9081/navigator/viewers/adobeReader.jsp>

If the changes that you made are not reflected, and you are not able to see the pdf document in Adobe Reader, clear the browser cache, close and reopen the browser.

5. Close the viewer.
6. Log out of IBM Case Manager Client and then close the browser.

**Results:**

**You created a custom Viewer Map to replace the default viewers for the PDF files with Adobe Reader. You then associated the custom Viewer Map with IBM Case Manager Client.**

## Unit summary

- Describe a Viewer Map
- Create a Viewer Map for PDF files



## **Unit 8      Implement External Data Services**

IBM Training



# **Implement External Data Services**

**IBM Case Manager V5.3.2**

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## Unit objectives

- Describe External Data Services (EDS)
- Change the field status dynamically for a property
- Create choice lists and dependent choice lists

## Access case data from an External Data Service (EDS)

- IBM Case Manager stores case data in the FileNet Content Manager repository.
- Use an EDS with a case solution to access data from a different repository or other data source.
- The external data is incorporated into the case.

### *Access case data from an External Data Service (EDS)*

The external data is incorporated into the case and stored with the rest of the case data in the FileNet Content Manager repository. The data in the EDS is not modified by IBM Case Manager.

## Typical uses of EDS

- Define dependencies between properties to implement dynamic behavior in your solution
  - Change the field status dynamically for a property
  - Create dependent choice lists
- Set a property as required
- Create choice lists
- Show or hide a property
- Data Validation
- Modify property attributes such as minimum value or maximum value

### *Typical uses of EDS*

#### Define dependencies:

You can define dependencies between properties to implement dynamic behavior in your solution. For example, you can specify a dependency between a state property and a city property. When a case worker selects a state, the choice list that is associated with the city property contains only cities that are in that state.

#### Get property values:

For example, your customer records are stored in a database. When a case worker enters the serial number for a customer, the external data service can get the name and address of the customer from that database. These values are then incorporated into the case data and stored in the FileNet Content Manager repository.

#### Modify property attributes such as minimum value or maximum value:

The external data service must work within any constraint that are placed on the property attributes in the FileNet Content Manager repository. For example, if a minimum value is specified for the property in FileNet Content Manager, the external data service can set the minimum only within the allowed value for the FileNet Content Manager.

Implementing EDS does not modify the IBM Case Manager solution and thus does not require redeployment of case solution. You need to configure it only in the EDS solution.

## Identify the required steps to implement EDS

- Use the IBM Case Manager APIs to implement a service and create an application, or
  - Use the IBM Case Manager provided sample EDS application.
- Deploy the EDS application.
- Register the external data service.

### *Identify the required steps to implement EDS*

Use the IBM Case Manager APIs to implement a service to extract case data from the external data source.

Register the external data service in the IBM Case Manager administration client to use with your solution. You can register only one external data service for a solution.

For this course, you use sample EDS application that is provided by IBM Case Manager to get data from an external source.

## How is the data from the EDS handled?

- Case Manager Client communicates with the service to get case data.
- The communication is handled through the IBM Case Manager APIs.
- The EDS retrieves the data from the external data source.
- Case Manager Client saves the data in the FileNet Content Manager repository.

### *How is the data from the EDS handled?*

After you register the external data service, IBM Case Manager Client communicates with the service to get case data whenever case worker create cases or modify cases. This communication is handled automatically through the IBM Case Manager APIs.

If the case worker modifies the data, IBM Case Manager Client does not update the corresponding data in the external data source.

IBM Case Manager Client saves the data that was received from the external data source only in the FileNet Content Manager repository.

## Use Sample EDS package

- IBM Case Manager provides a sample External Data Service package
- The sample is available from the developerWorks website

### *Use Sample EDS package*

IBM Case Manager provides a sample External Data Service (EDS) that you can use it as a starting point for your application to implement EDS.

The Sample External Data Service package is available from the developerWorks website.

You can download it at this URL:

[https://www.ibm.com/developerworks/community/blogs/e8206aad-10e2-4c49-b00c-fee572815374/entry/  
sample\\_external\\_data\\_service\\_for\\_ibm\\_case\\_manager\\_by\\_dave\\_hanson6?lang=en\\_us](https://www.ibm.com/developerworks/community/blogs/e8206aad-10e2-4c49-b00c-fee572815374/entry/sample_external_data_service_for_ibm_case_manager_by_dave_hanson6?lang=en_us)  
You need an IBM ID for downloading the sample.

## External data configuration in the sample EDS

- The sample EDS is deployed with an XML file
- Edit this ExternalData.xml file to control the EDS
- The XML file is embedded in the WAR file that is deployed

### *External data configuration in the sample EDS*

The sample external data service is deployed with an XML file that defines what case types and properties the sample data service manages.

You can edit this XML file to control the external data service.

For this unit, following case properties of a case type (MyCase) in the sample XML file are used:

- State:
  - A string property that controls the information of the City property.
  - State has a choice list with a few state names that can be selected.
- City:
  - A string property that changes depending on the value of the State property.
  - The City property has a different choice list for each value of the State property.

The ExternalData.xml file is embedded in the WAR file that is deployed. This file can be modified to match the sample external data that you want to configure.

## Demonstration 1: Check the sample EDS configuration

The screenshot shows a browser window with a blue header bar containing the URL 'vclassbase:9080/CaseEDS/ICMED' and a close button. Below the header is a navigation bar with icons for 'Case Client' (a globe), 'Case Builder' (a folder), 'Case Admin' (a wrench), and 'CaseEDS' (a globe). The 'Case Admin' icon is highlighted with a blue border. A tab bar below the navigation bar has three tabs: 'JSON' (selected and highlighted in blue), 'Raw Data', and 'Headers'. Underneath the tabs are 'Save' and 'Copy' buttons. The main content area displays a JSON object with one item, indexed by '0'. The key 'symbolicName' is shown in blue, and its value '"DH2\_MyCase"' is shown in red.

```
0:
  symbolicName: "DH2_MyCase"
```

*Demonstration 1: Check the sample EDS configuration*

## Demonstration 1: Check the sample EDS configuration

### Purpose:

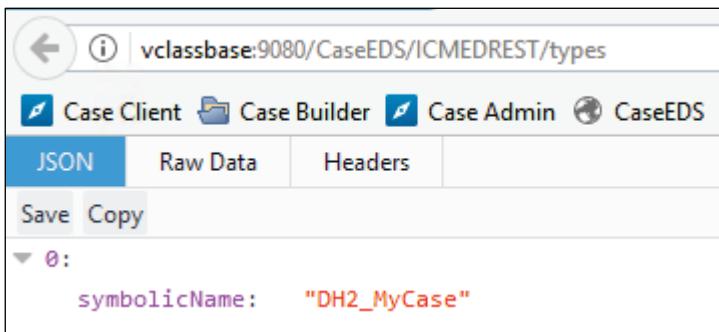
**As a Developer and a Solution Designer, you want to use an External Data Services (EDS) with a case solution to access data from a different repository. You will verify the deployment to implement the service.**

Before doing the demonstrations in this unit, ensure that your environment is ready and required services are running. Refer to *Prepare your system: Start the IBM Case Manager components* section in Unit 1.

The EDS web Application deployment is already completed on this system, for your convenience.

### Task 1. Verify the sample EDS deployment.

1. In a **Firefox** browser, navigate to the following URL:  
**http://vclassbase:9080/CaseEDS/ICMEDREST/types**  
The URL is case-sensitive.  
You can also use the *CaseEDS* bookmark in the Bookmarks toolbar.
2. Verify that the browser displays the symbolic name for the case type (**DH2\_MyCase**) that is used for EDS implementation.



The image for this course contains an IBM Case Manager solution with a case type: called MyCase.

*DH2* is used for solution prefix.

3. Close the browser.

### Task 2. Check the case properties for the EDS solution.

1. In the **Firefox** browser, log on to **IBM Case Manager Builder** with **P8Admin/FileNet1** Credentials.
2. Click the link for **EDS** solution to edit it.

3. If you are prompted with a warning *The solution that you are trying to edit is either being edited ...*, click **OK**.  
This error occurs if the application is closed without logging out.
4. Ensure that the **Properties** tab is selected and then check the following case properties: **State, City**
5. Click the link for **State** and then verify that the **Choice list** field has **None** as the value to indicate that no choice list is attached to this property.

The screenshot shows the 'Properties' dialog for a 'State' property. At the top, there are fields for 'Name' (containing 'State'), 'Type' (set to 'String'), and 'Description'. Below this is a section titled 'Define Property Values' with the following settings:

- 'This property can have:' radio button selected for 'A single value'.
- 'Maximum length:' set to '64'.
- 'Choice list:' dropdown set to 'None'.
- 'Default value:' field contains an empty box.
- 'Unique Identifier:' field contains 'DH2\_State'.

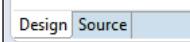
Buttons for 'OK' and 'Cancel' are visible at the bottom right of the dialog.

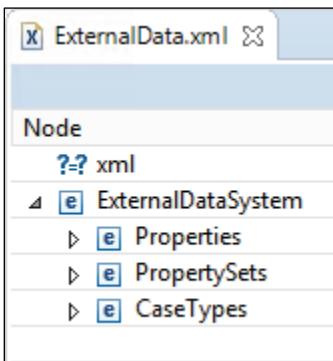
6. Click **Cancel** and then repeat step 4 for **City** and verify that there is no choice list attached to it.  
In the following demonstrations, you will check the implementation of EDS which provides choice lists to the **State** and **City** properties.
7. Click **Cancel** and then select **Case Types** tab.
8. Click **MyCase** and then select **Properties** on the left pane.  
The EDS is implemented for this case type.
9. Verify that the **State** and **City** properties are included for this case type.
10. Logout of **IBM Case Manager Builder** and then close the browser.

## Task 3. Check the ExternalData.xml file in Eclipse project.

An XML file in the sample external data service defines what case types and properties the sample data service manages. In this task, you will open this file in Eclipse.

Optionally, you can open this file (ExternalData.xml) in Notepad++ from the C:\Training\F2940\08-Implement\_External\_Data\_Services\Config folder directly.

1. Open **Eclipse** by double-clicking the **Eclipse** icon on your desktop.
2. In the Workspace Launcher page, leave the default workspace directory (**C:\Training\F2940\workspace**) and then click **OK**.
3. In the **Package Explorer** pane on the left, expand the **SampleExternalDataService** project > **config** folder.
4. Double-click the file **ExternalData.xml** to open it.
5. On the middle pane in the **Design**  tab (shown at the bottom), verify that the file contains **Properties**, **PropertySets**, and **CaseTypes** top-level nodes.



6. Expand the **CaseTypes** > **CaseType** and then verify that **DH2\_MyCase** is listed for the **Name** node.



This is the value that you saw in the browser in Task 1.

7. Click the **Source** tab at the bottom and then scroll down to the end of the page to see **DH2\_MyCase** case type.

```

470<CaseTypes>
471  <CaseType>
472    <Name>DH2_MyCase</Name>
473    <PropertySetRef identifier="Top" />
474  </CaseType>
475</CaseTypes>
476</ExternalDataSystem>

```

8. Leave the file open in **Eclipse** for this unit to compare the configuration with the results in IBM Case Manager Client.

**Results:**

You verified the sample external data service deployment and checked the case type and properties that are used for EDS implementation. You also checked the ExternalData.XML that defines what case types and properties the sample data service manages.

## Demonstration 2: Change the field status dynamically for a property

The image displays two side-by-side screenshots of a user interface titled 'MyCase'. Both screenshots show the same set of fields: 'MVInt' (with value '0, 100'), '\* MVString' (with dropdown menu 'No items to display'), 'PropOne' (with a long input field), and '\* State' (with dropdown menu). In the left screenshot, all fields are in a normal state. In the right screenshot, the 'City' field has turned red, indicating an error. A red exclamation mark is placed next to the 'City' field's input field, and a red circle with a question mark is positioned above the 'City' field.

Implement External Data Services

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*Demonstration 2: Change the field status dynamically for a property*

## Demonstration 2:

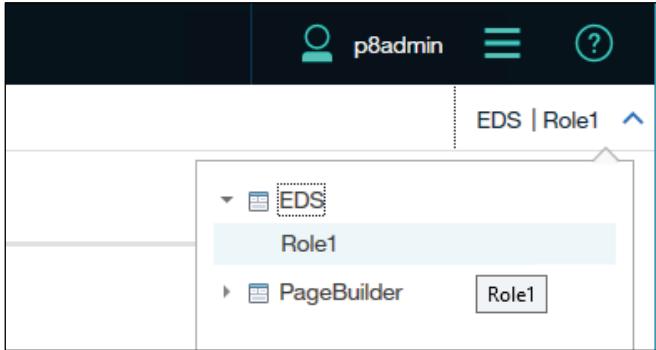
### Change the field status dynamically for a property

#### Purpose:

As a Developer and a Solution Designer, you want to hide the City property of your case type (MyCase) when users add a case in IBM Case Manager Client. The property is visible only after the State property value is selected from a choice list. To dynamically change the field status (hidden or not hidden) for a case property (City) depending on the value of another property (State), you need to configure the ExternalData.XML file in the sample EDS application. This configuration is already completed. In this demonstration, you will verify (1) the dynamic change to the City field status, (2) choice lists that are associated with State property, and (3) required status for City property. You will explore the configuration in the sample EDS application.

#### Task 1. Test the EDS Service for the field status.

1. In the Firefox browser, log on to **IBM Case Manager Client**:
  - URL: <http://vclassbase:9081/navigator/?desktop=icm>  
You can also use the *Case Client* bookmark in the browser toolbar.
  - User: **p8Admin**
  - Password: **FileNet1**
2. Click **EDS > Role1** from the upper right of the page from the list.



3. In the **Cases** tab, click **Add Case > My Case** to start the new case. Verify that the **City** property is not visible in the new case page.

4. For the **State** field, select **California** from the list.

Notice that the State property has a choice list even though it is not defined in IBM Case Manager Builder as you verified in the Demonstration 1.

The choice list data is coming from EDS.

5. Verify that the **City** field is visible after you selected a value for the **State** property.

Observe that the status of the **City** field is required as indicated by a red circle.

If you click on it, an annotation displays that this value is required.

The show and hide behavior and required status are defined in EDS.

6. Click the down arrow and notice that the **City** field has a choice list with choices of cities in California even though it is not defined in IBM Case Manager Builder as you verified in the Demonstration 1

The choice list data is coming from EDS.

7. Select **Los Angeles** for **City**.

8. To change the value for **State** field, select **New York** from the list. Notice that the **City** property changes to **New York**. Verify that the **City** field contains choice values from **New York** State.

\* City  
New York  
Buffalo  
New York  
Rochester

To summarize, the following screen captures show the field status for **City** under different conditions.

If the value of the **State** property is not selected, then the **City** property is hidden from the display when you add a case in IBM Case Manager Client (The screen capture on the left). When you select a value for State (California), the **City** property is shown (The screen capture on the right).

Property	Value (Left Screenshot)	Value (Right Screenshot)
MVInt	0, 100	0, 100
MVString	No items to display	No items to display
PropOne		
* State		California
* City		(Hidden)

9. Logout of IBM Case Manager Client and close the browser.

## Task 2. Check the configuration in the XML file for choice list.

The choice lists are pre-configured so that users avoid errors from typing the data. You can add a choice list to a case property in IBM Case Manager Builder when you design a solution (internal choice lists). In this demonstration, you will review how to add an external choice list with EDS.

1. In Eclipse, if the **ExternalData.xml** file is not already opened, open the file by following steps 1-4 in Demonstration 1, Task 3.
2. In the middle pane, click the **Source** tab at the bottom and then observe the property node for State **<Property identifier="St">** from **line 66-90**:
  - The symbolic name (**DH2\_State**) for this property is shown as defined in the solution on **line 67**.
  - Property data type is **String** on **line 68**.

```

66<Property identifier="St">
67  <SymbolicName>DH2_State</SymbolicName>
68  <PropertyType>string</PropertyType>
69  <Cardinality>single</Cardinality>
70  <MaximumLength>2</MaximumLength>
71  <Required>true</Required>
72  <HasDependentProperties>true</HasDependentProperties>

```

- In **lines 73 - 89**, a choice list is defined for this property.

```

73<ChoiceList>
74  <DisplayName>StateChoiceList</DisplayName>
75  <Choices>
76    <Choice>
77      <Name>New York</Name>
78      <Value>NY</Value>
79    </Choice>
80    <Choice>
81      <Name>California</Name>
82      <Value>CA</Value>
83    </Choice>
84    <Choice>
85      <Name>Nevada</Name>
86      <Value>NV</Value>
87    </Choice>
88  </Choices>
89 </ChoiceList>

```

- Within the **<ChoiceList>** node, there is a **<Choices>** node.
- Within the **<Choices>** node, there are individual **<Choice>** nodes with a name and value.

These names are displayed as the values for the choice list for the State property in IBM Case Manager Client.

Leave the file open for the next task.

### Task 3. Check the configuration for change of field status.

1. Observe the **City** property from **line 94**:
  - The **Property** node has a symbolic name as defined in the solution (**DH2\_City**), property data type (**String**), and Cardinality (**single**).
  - The **Hidden** element can be set true or false.
  - The **Required** element decides if a value for a property is required.
2. Notice that the **Hidden** element is **false** when the State name is **NY** as defined in the Property identifier (**Ct@St=NY**) on **line 94**.

This value makes it possible for the City field to show when New York is selected for the State property.

```

94 | <Property identifier="Ct@St=NY">
95   <SymbolicName>DH2_City</SymbolicName>
96   <PropertyType>string</PropertyType>
97   <Cardinality>single</Cardinality>
98   <Hidden>false</Hidden>
99   <Required>true</Required>

```

3. Check the other elements for the property such as **<HasDependentProperties>**, **<ChoiceList>** and **<ValueIfNewOrInvalid>**.
4. Observe that there are a few more nodes of **City** property in this file:

- In each node, the Property identifier is different.
- In **line 122**, the Property identifier is **Ct@St=CA** for the state California.
- For this block, the **Hidden** element is set **false**.

This value makes it possible for the **City** field to show when **California** is selected.

- In **line 151**, the Property identifier is **Ct@St=NV** for the state Nevada.
- For this block, the **Hidden** element is set **false**.

This value makes the **City** field to show when Nevada is selected.

5. Locate **line 437** and verify that the default value (when there is no value for the **State** property) for **Hidden** element is **true** for the **City** property.

This value makes the City field not to show when no value is selected for the State property.

```
432<Property>
433    <SymbolicName>DH2_City</SymbolicName>
434    <PropertyType>string</PropertyType>
435    <Cardinality>single</Cardinality>
436    <RenderedReadOnlyValue/>
437    <Hidden>true</Hidden>
438    <Required>true</Required>
```

Leave the file open for the next Demonstration.

### Results:

You verified that the City property dynamically changes the field status (hidden or not hidden) depending on the value of the State property. You checked the required status and choice list for a property. You explored the configuration for this feature in the ExternalData.XML of the sample EDS application.

## Demonstration 3: Create dependent choice lists with EDS

The figure consists of three side-by-side screenshots of a form titled "MyCase". Each screenshot shows a different state of a dependent choice list.

- Screenshot 1:** The first screenshot shows the initial state. The "City" field is set to "Los Angeles". The "State" dropdown below it shows "California" selected, with other options "New York" and "Nevada" listed below it.
- Screenshot 2:** The second screenshot shows the state has changed to "New York". The "State" dropdown now shows "New York" selected, with other options "New York" and "California" listed below it.
- Screenshot 3:** The third screenshot shows the state has changed to "Las Vegas". The "State" dropdown now shows "Nevada" selected, with other options "Nevada" and "New York" listed below it.

Implement External Data Services

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*Demonstration 3: Create dependent choice lists with EDS*

## Demonstration 3: Create dependent choice lists with EDS

### Purpose:

You, as a Solution Designer and a Developer, want to configure a feature when a user selects a State from the choice list. The choice list values for the City need to be updated automatically to match the State value. The State and the City represent dependent choice lists, and are implemented with the EDS. You will check this feature in IBM Case Manager Client and explore the configuration used in the EDS application.

### Task 1. Check the EDS Service for dependent choice lists.

If the values of one choice list depend on the selection of a value for another property, the two choice lists are called as dependent choice lists. Recall the State and City example from the previous demonstration.

Recall the **State** and **City** properties from the previous Demonstration.

When you select New York or California or Nevada as a value for the State property, the values for the **City** property choice list dynamically change to match the State value.

1. Optionally, repeat the steps in Demonstration 2, Task 1, to log in to IBM Case Manager Client and add a case.
2. In Eclipse, if the **ExternalData.xml** file is not already opened, open the file by following steps 1-4 in Demonstration 1, Task 3.
3. In the middle pane, click the **Source** tab at the bottom and observe the property node for State **<Property identifier="St">** from **line 66**.

In **line 72**, **<HasDependentProperties>** element with the value **true** defines that other property values change depending on the value of this property.

```

66<
67   <Property identifier="St">
68     <SymbolicName>DH2_State</SymbolicName>
69     <PropertyType>string</PropertyType>
70     <Cardinality>single</Cardinality>
71     <MaximumLength>2</MaximumLength>
72     <Required>true</Required>
73     <HasDependentProperties>true</HasDependentProperties>
    <ChoiceList>

```

4. Locate the **<DynamicPropertySets>** node in **line 379** and their sub-nodes.

```

379<
380  <DynamicPropertySets>
381    <DynamicPropertySet>
382      <ConditionalPropertyName>DH2_State</ConditionalPropertyName>
383      <ConditionalPropertySets>
        <ConditionalPropertySet>

```

5. Check that the condition is **<Equals> NY </Equals>** for the **State** property (line 386) and it is linked to: **<PropertyRef identifier="Ct@St=NY" />** (line 401).  
This condition instructs IBM Case Manager Client to use the choice list that contains cities in the **New York** state.
6. As you observed in the previous Demonstration, the **<Property identifier="Ct@St=NY">** choice list is defined in lines 101 -117.  
This definition enables the City field to list the cities in the New York state.  
For the State value California, the city values are defined in lines 129-145, and for Nevada in lines 158-170.  
For more information about the structure and options of this XML file, see the **ConfiguringSampleExternalDataXML.pdf** file located in the sample package, C:\Training\F2940\SampleExternalDataService folder.
7. Close Eclipse.

**Results:**

**You explored the dependent choice lists using the State and the City example that is implemented in the sample EDS.**

For more details about the EDS sample package and how to configure the sample EDS application, refer to Appendix A: About the sample External Data Services package.

The environment that is provided with this course is already configured with the sample External Data Service package for your convenience. The information in the Appendix unit is for your reference only.

## Unit summary

- Describe External Data Services (EDS)
- Change the field status dynamically for a property
- Create choice lists and dependent choice lists

## **Appendix A     About the sample External Data Services package**

The slide has a blue header bar with 'IBM Training' on the left and the IBM logo on the right. The main content area has a light blue diagonal striped background. The title 'About the sample External Data Services package' is centered in large blue font. Below it, the text 'IBM Case Manager V5.3.2' is also in blue. At the bottom, there is a small copyright notice: '© Copyright IBM Corporation 2018' and 'Course materials may not be reproduced in whole or in part without the written permission of IBM.'

### **About the sample External Data Services package**

**IBM Case Manager V5.3.2**

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The environment that is provided with this course is already configured with the sample External Data Service package. The information in this Appendix section is for your reference only.

## Set up the sample External Data Service

This section provides you the information about the sample External Data Service.

- The Sample External Data Service package is available from the developerWorks website. You can download it at this URL:  
[https://www.ibm.com/developerworks/community/blogs/e8206aad-10e2-4c49-b00c-fee572815374/entry/sample\\_external\\_data\\_service\\_for\\_ibm\\_case\\_manager\\_by\\_dave\\_hanson6?lang=en\\_us](https://www.ibm.com/developerworks/community/blogs/e8206aad-10e2-4c49-b00c-fee572815374/entry/sample_external_data_service_for_ibm_case_manager_by_dave_hanson6?lang=en_us)  
 An IBM ID is required to download the sample.
- This setup requires an IDE (example: Eclipse) and jboss-servlet-api\_3.1\_spec-1.0.0.Final.jar file for compiling the sample EDS application. To run the Eclipse, you need to define the JAVA\_HOME path.
- The following instructions assumes that you have created the following folder structure: C:\Training\F2940 folder.

### Task 1. Create a Java Project in Eclipse.

The sample is a Java servlet-based web application. You must create a War file. You will create an Eclipse project first.

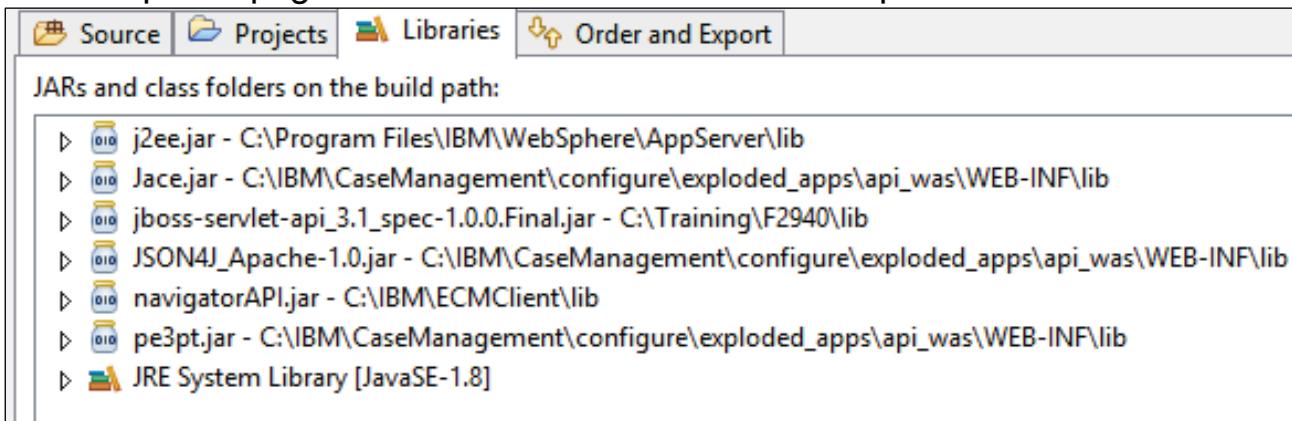
- Open **Eclipse**.
- In the Workspace Launcher page, leave the default workspace directory (**C:\Training\F2940\workspace**) and click **OK**.  
 If this folder path is not already selected, enter this directory.
- To create a Java Project, click **File > New > Project**.
- In the **Select a wizard** page, select **Java Project** and click **Next**.
- For the **Project Name** field, type: **SampleExternalDataService** and click **Next**.
- Leave the default values for all other fields.

### Task 2. Add required libraries and files to the Project.

- In the **Java Settings** page, select the **Libraries** tab.
- Click **Add External JARs**.
- In the **JAR Selection** window, go to the following directory:  
**C:/IBM/CaseManagement/configure/exploded\_apps/api\_was/WEB-INF/lib**

4. Select the following Jar files and click **Open**:
  - **Jace.jar**
  - **pe3pt.jar**
  - **JSON4J\_Apache-1.0.jar**
5. Repeat **steps 2-4** to include **navigatorAPI.jar** from the **C:\IBM\ECMClient\lib** folder.
6. Repeat **steps 2-4** to include **J2ee.jar** from the **C:\Program Files\IBM\WebSphere\AppServer\lib** folder.
  - Repeat **steps 2-4** to include **jboss-servlet-api\_3.1\_spec-1.0.0.Final.jar** from the **C:\ Training\F2940\lib** folder.

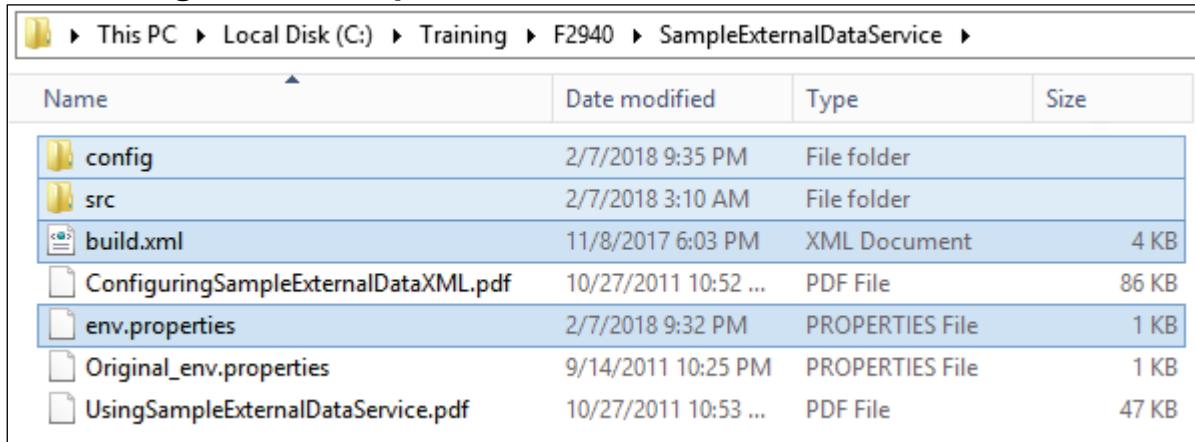
The completed page looks like the one in the screen capture:



7. Click **Finish** to complete the project wizard.
8. Click **Yes** when prompted to open an associated perspective.
9. Leave Eclipse open for the next task.

## Task 3. Copy files to the Project.

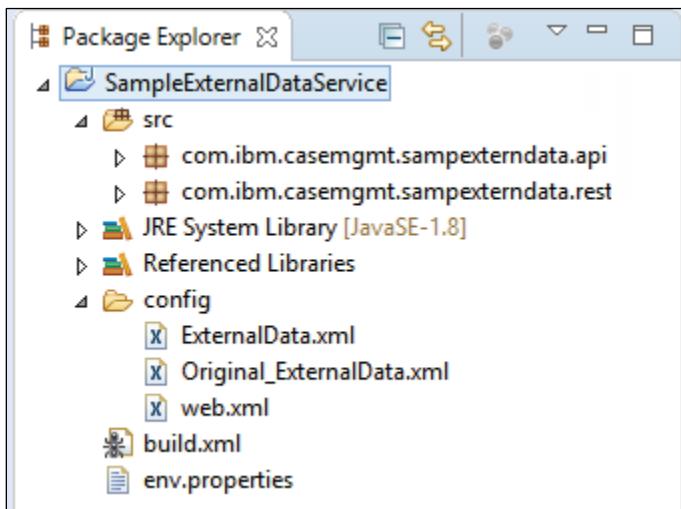
1. In Windows Explorer, copy the highlighted (in blue) files and folders from the C:\Training\F2940\SampleExternalDataService folder.



Name	Date modified	Type	Size
config	2/7/2018 9:35 PM	File folder	
src	2/7/2018 3:10 AM	File folder	
build.xml	11/8/2017 6:03 PM	XML Document	4 KB
ConfiguringSampleExternalDataXML.pdf	10/27/2011 10:52 ...	PDF File	86 KB
env.properties	2/7/2018 9:32 PM	PROPERTIES File	1 KB
Original_env.properties	9/14/2011 10:25 PM	PROPERTIES File	1 KB
UsingSampleExternalDataService.pdf	10/27/2011 10:53 ...	PDF File	47 KB

2. In Eclipse IDE, right-click SampleExternalDataService in the Package Explorer tab on the left, and click Paste.

3. If you are prompted to overwrite the src folder, click Yes.  
 Your project structure in Eclipse looks like the following screen capture.  
 The folder nodes are expanded to show the files.



## Task 4. Create a WAR file for the sample in Eclipse.

1. Right-click the **build.xml** and select **Run As > 1.Ant Build** from the context menu list.
2. Verify that the console tab at the bottom pane displays that the Build was successful.
3. Verify that the message indicates that the WAR file is created.
4. Ignore the “includeanruntime” warning.

```

Problems @ Javadoc Declaration Console X
<terminated> SampleExternalDataService build.xml [Ant Build] C:\Program Files\IBM\WebSphere\AppServer\java\8.0\bin\javaw.exe (Feb 8, 2018, 12:34:23 AM)
[copy] Copying 1 file to C:\F2940\workspace\SampleExternalDataService\tmpwar\WEB-INF\lib
[copy] Copying 1 file to C:\F2940\workspace\SampleExternalDataService\tmpwar\WEB-INF
[copy] Copying 1 file to C:\F2940\workspace\SampleExternalDataService\tmpwar\WEB-INF
[jar] Building jar: C:\F2940\workspace\SampleExternalDataService\lib\sampleexternaldataservice.war
[delete] Deleting directory C:\F2940\workspace\SampleExternalDataService\tmpwar
build:
builddone:
[echo] Build finished at 2018.February.08 12:34:33 AM
BUILD SUCCESSFUL
Total time: 9 seconds

```

## Task 5. Deploy the sample EDS WAR file to WAS.

The sample is a Java servlet-based web application. You must deploy it to a WebSphere Application Server environment.

1. Log into the WebSphere Integrated Solutions Console.  
URL: <http://vclassbase:9043/ibm/console/logon.jsp>  
User name: **wasadmin**  
Password: **FileNet1**
2. In the left pane, expand **Applications** and then select **New Application**.
3. In the right pane, click **New Enterprise Application**.  
Make sure that the **Local file system** option is selected and click **Browse**.
4. Browse to the **C:\Training\F2940\workspace\SampleExternalDataService\lib\** folder and select the **sampleexternaldataservice.war** file and then click **Open**.

Note: There is another file with the same name but jar extension.

sampleexternaldataservice.jar	2/8/2018 12:34 AM	Executable Jar File	94 KB
sampleexternaldataservice.war	2/8/2018 12:34 AM	WAR File	7,668 KB

5. Click **Next** and accept the defaults (**Fast Path**) in the wizard and for **Step 1 Installation options**, leave all other fields default, edit the application name to **CaseEDS**, and click **Next at the end of the page**.

- For **Step 2 Map modules to servers** > the **Select** column, select the option and click **Next**.

Select	Module	URI	Server
<input checked="" type="checkbox"/>	ICM Sample External Data Service	sampleexternaldataservice.war, WEB-INF/web.xml	WebSphere:cell=EDUCell01,node=EDUNode01,server=server1

- For **Step 3 Map virtual hosts** > the **Select** column, select the option and click **Next**. (like the previous step)
- For **Step 4 Map context roots** > the **ContextRoot** column, enter **/CaseEDS**

**Map context roots for Web modules**

Configure values for context roots in web modules.

Web module	URI	Context Root
ICM Sample External Data Service	sampleexternaldataservice.war, WEB-INF/web.xml	/CaseEDS

You use this value in the URL path to register the service.

- Click **Next** and in the **Summary** page, click **Finish**.  
It takes a few minutes.
- After the wizard completes, select **Save directly to the master configuration** (towards the end of the page) to complete the installation and configuration.

## Task 6. Start the external data service (**CaseEDS**).

- The WAS console is still opened. If not, Log into the WebSphere Integrated Solutions Console using Step 1 in Task 5.
- In the left pane, expand **Servers > All servers**.
- In the right pane, verify, it has the start status. If needed, select **server1** in the **Select** column and click **Start** from the top toolbar.  
Takes a few minutes.  
Click the refresh icon in the Status column title to see the start status.
- In the left pane, expand **Applications** and then click **All applications**.
- In the right pane, select **CaseEDS** in the **Select** column.

<input checked="" type="checkbox"/>	CaseEDS	Base edition	Active	Java 2 Platform, Enterprise Edition	X	<b>Start</b>
-------------------------------------	---------	--------------	--------	-------------------------------------	---	--------------

- Select **Start** in the **Action** column, and then click **Submit Action** in the toolbar.  
Verify that the application is started as shown by green arrow in the **Status** column.

7. Click the **CaseEDS** and then click **Context Root for Web Modules** (under the **Web Module Properties** section).

The Context Root must be **/CaseEDS** as you configured.

8. Click **OK** and in another browser tab, enter the following URL in a browser to test the service:

**http:// vclassbase: 9080/CaseEDS/ICMEDREST/types**

Verify that the browser shows a response with the case type in your solution. (**DH2\_MyCase**).

A screenshot of a browser window displaying a JSON response. The URL in the address bar is `vclassbase:9080/CaseEDS/ICMEDREST/types`. The browser has tabs for Case admin, Case Builder, Case Client, and WAS. Below the tabs, there are buttons for Save and Copy. The main content area shows a single item under a heading '0':

```

0:
symbolicName: "DH2_MyCase"

```

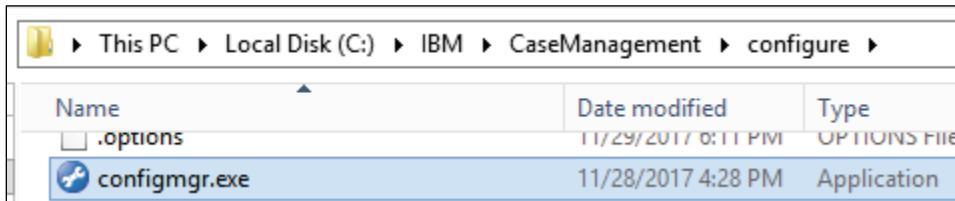
9. Create a bookmark for this URL (`http:// vclassbase:9080/CaseEDS/ICMEDREST/types`) with a name: CaseEDS
10. Logout all the applications and close the browser.

## Task 7. Import the Solution.

1. In the **Firefox** browser, log on to IBM Case Manager administration client:  
URL: **http://vclassbase:9081/navigator/?desktop=icmadmin**  
You can also use the browser shortcut on the toolbar : **Case Admin**  
User: **P8Admin**  
Password: **FileNet1**
2. In the navigation tree on the left pane, select the design object store (**DEV\_design**).
3. In the left pane, click **Solutions**.
4. In the right pane > **Solutions** tab, click **Import > Import Solution > From Solution Package**.
5. Browse and select **EDS\_Solution.zip** in the **C:\Operations\Eclipse\_EDS** folder.
6. Click **Next** and then click **Finish**.
7. Click **Close**.
8. Verify that the **EDS** solution is listed under **Solutions**.
9. Logout of the IBM Case Manager administration client and close the browser.

## Task 8. Register the external data source.

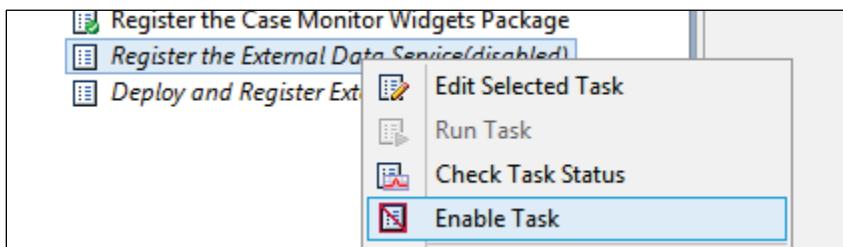
1. In Windows Explorer, navigate to C:\IBM\CaseManagement\configure folder.
2. Right-click **configmgr.exe** and select **Run as administrator**.



3. Click **Yes** on the **User Account Control** window.

Two windows open for this application (one is command line); leave both the windows open.

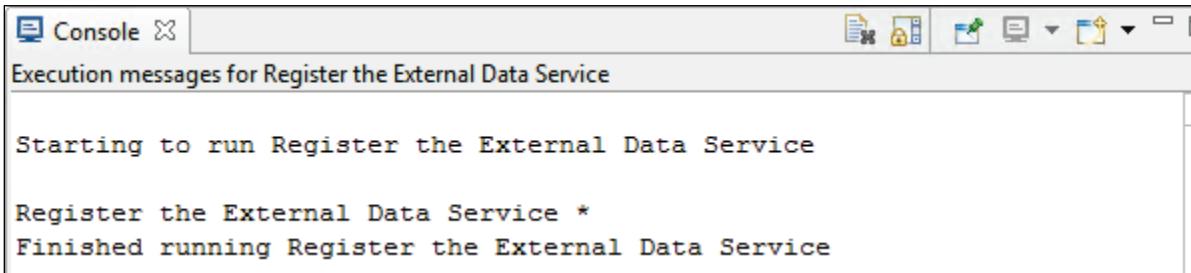
4. In the **IBM Case Manager configuration tool**, select **File > Open Profile** to open the configuration profile.
5. In the **Open** window, browse to the **C:\IBM\FileNetP8\config\ICM532-config** folder, select **ICM532-config.cfgp** and then click **Open**.
6. Expand the **ICM532-config** node and right-click **Register the External Data Service(disabled)** and select **Enable Task**.



7. Verify that the **disabled** is removed from the name and double-click the task to edit it:
8. In the right pane, select **EDS** from the list for the **Solution name** field and enter **http://vclassbase:9080/CaseEDS/ICMEDREST** for the **External data service URL** field.

Solution name: <a href="#">?</a>	EDS
External data service URL: <a href="#">?</a>	http://vclassbase:9080/CaseEDS/ICMEDREST

- Click **Save** and then click **Run Task**. It takes a few moments. In the lower panel, make sure **Finished Running...** message is displayed.



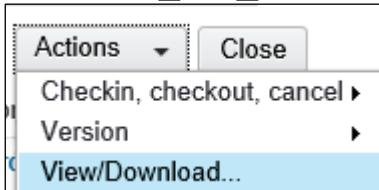
The screenshot shows a 'Console' window with the title 'Console'. The window displays the following text:

```
Execution messages for Register the External Data Service
Starting to run Register the External Data Service
Register the External Data Service *
Finished running Register the External Data Service
```

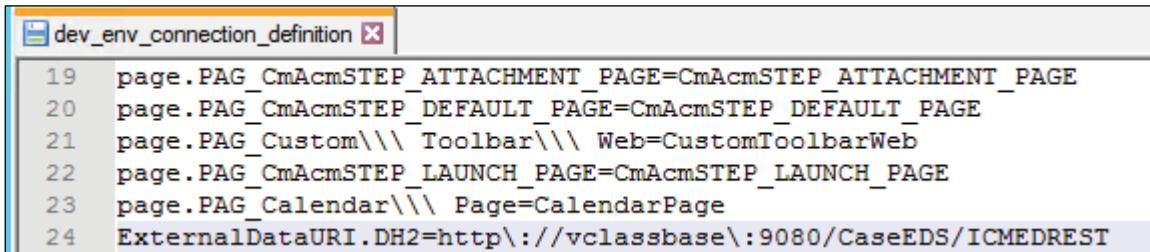
- Click **File > Exit** to close the tool.

## Task 9. Verify the external data source registration.

- In a browser, open **ACCE**.  
URL: **http://vclassbase:9080/**  
Login/password: **P8Admin/FileNet1**
- In the left pane, expand **Object Stores**, double-click **DEV\_design** to open.
- In the **DEV\_design** tab > Left pane, expand **DEV\_design > Browse > Root Folder > IBM Case Manager** and click **Connection Definitions**
- In the right pane > **Connection Definitions** tab, double-click **dev\_env\_connection\_definition** to open in a new tab.
- In the **dev\_env\_connection\_definition** tab, click Actions > View/Download.



- Select **Save** when you are prompted.
- Browse to **Downloads**, open the **dev\_env\_connection\_definition** file in NotePad++ and then verify that the **ExternalDataURI** property is added in the last line.



The screenshot shows a Notepad++ window with the title 'dev\_env\_connection\_definition'. The code editor displays the following lines:

```
19 page.PAG_CmAcmSTEP_ATTACHMENT_PAGE=CmAcmSTEP_ATTACHMENT_PAGE
20 page.PAG_CmAcmSTEP_DEFAULT_PAGE=CmAcmSTEP_DEFAULT_PAGE
21 page.PAG_Custom\\Toolbar\\Web=CustomToolbarWeb
22 page.PAG_CmAcmSTEP_LAUNCH_PAGE=CmAcmSTEP_LAUNCH_PAGE
23 page.PAG_Calendar\\Page=CalendarPage
24 ExternalDataURI.DH2=http://vclassbase:9080/CaseEDS/ICMEDREST
```

- Close the file, log out and close the browser tab.

## Task 10. Deploy the EDS solution.

1. In the **Firefox** browser, log on to IBM Case Manager Builder:

You can also use the bookmark: **Case Builder**

URL: **http://vclassbase:9081/CaseBuilder**

User: **P8Admin**

Password: **FileNet1**

IBM Case Manager Builder application opens.

2. Click the **Deploy**  icon for the **EDS** application.

Wait for the deployment. The deployment status indicator changes from not deployed (blue) to the deployed (green) icon on the upper left.

## Task 11. Verify EDS after Solution deployment.

1. In a browser, open ACCE.

URL: **http:// vclassbase:9080/acce**

Login/password: **P8Admin/FileNet1**

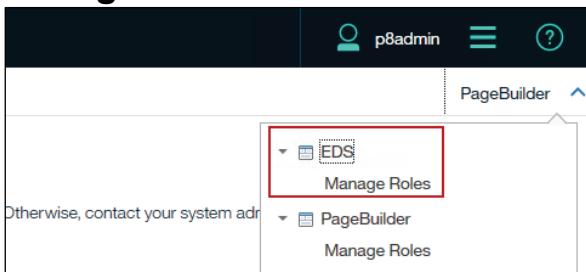
2. In the left pane, expand **Object Stores**, double-click **DEV\_target** to open.
3. In the **DEV\_target** tab on the left pane, expand **DEV\_target > Data Design > Classes > Folder > Base Case > Case Folder** and click **MyCase**
4. In the **MyCase** tab on the right pane, select **Property Definitions** subtab.
5. Select the **Display Inherited Properties** option.
6. Scroll down, and double-click **External Data URI** property.
7. In the External Data URI **Property Definition** window, select the **More** tab.
8. Verify that the **Default Value** field contains the URL that you entered earlier in the IBM Case Manager Configuration tool.

Maximum string length: <a href="#">?</a>	<input type="text" value="255"/>
Default value: <a href="#">?</a>	<input type="text" value="http://vclassbase:9080/CaseEDS/ICMEDREST"/>
<input type="checkbox"/> Use long-string table column <a href="#">?</a>	

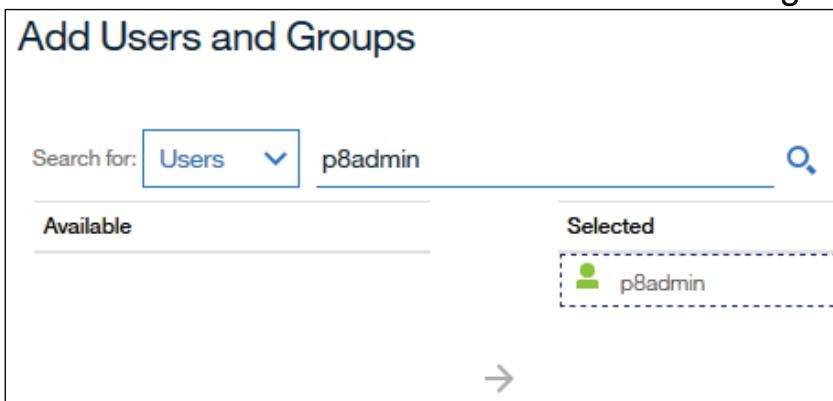
9. Click **Cancel**, log out, and close the browser tab.

## Task 12. Setup the ICM Client.

1. In a Firefox browser, open IBM Case Manager Client.  
URL: <http://vclassbase:9081/navigator/?desktop=icm>  
You can also use the *Case Client* browser shortcut:  
Login/password: **P8Admin/FileNet1**
2. Click the **EDS** down arrow from the upper right of the page and select **EDS > Manage Roles**



3. Verify **Role1** is selected and click **Add Users and Groups**.
4. In the **Add Users and Groups** dialog box, ensure that **Users** are selected for the **Search for** field.
5. Type **P8Admin** and click the Search icon.
6. Move **P8Admin** from **Available** to **Selected** using the forward arrow.



7. Click **Add** and verify that **P8Admin** is listed.
8. Click **Save** at the lower right of the page.
9. Log out and close the browser tab.







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