Instructions on Creating COVID-19 Extension

These step-by-step instructions are provided so that you are able to create a COVID-19 Extension application in SAP SuccessFactors Extension Center. A YouTube video showing the steps can be accessed here:

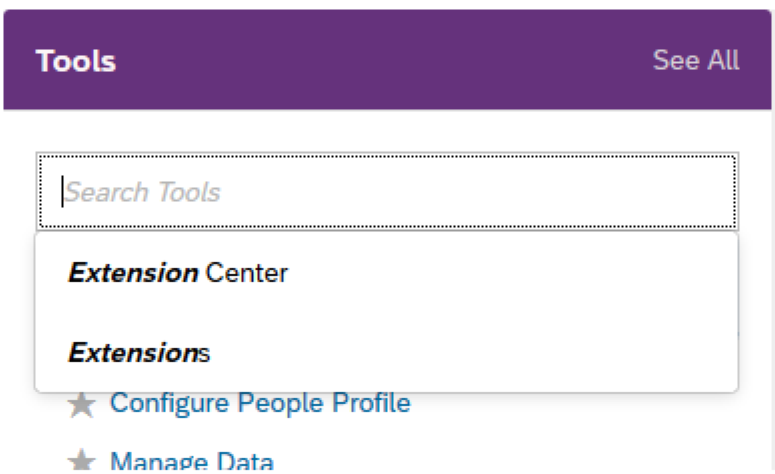
https://www.youtube.com/watch?v=pnQNlg7pjsY

For more information on the Extension, please visit http://www.iXerv.com/covid19 or consult the Additional Information section at the end of this document.

Step 1 – Download Files and Review Requirements

Start the process by downloading these instructions from the iXerv website. These will guide you in setting up this extension and provide links to additional reference documents in case you have questions. We've created a video to demonstrate the process. The link to the video is here.

To begin creating the extension, you will need to verify that your instance has the Extension Center installed. The easiest way to check is to use the Tool Search tile in the Admin Center. You should see Extension Center listed as shown below.

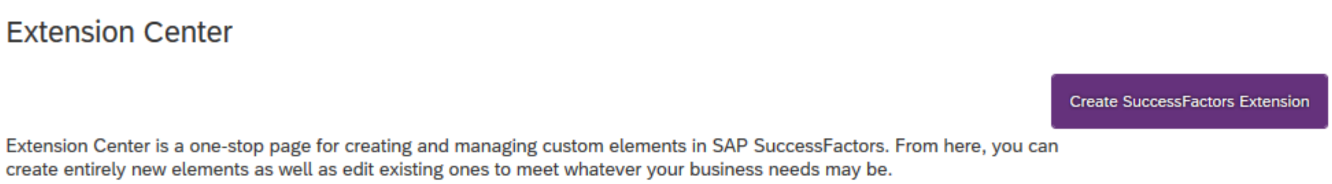


If you do not see it in the Tools Search, you may need to update your permissions in RBP, or you may need to complete the Upgrade via the Upgrade Center.

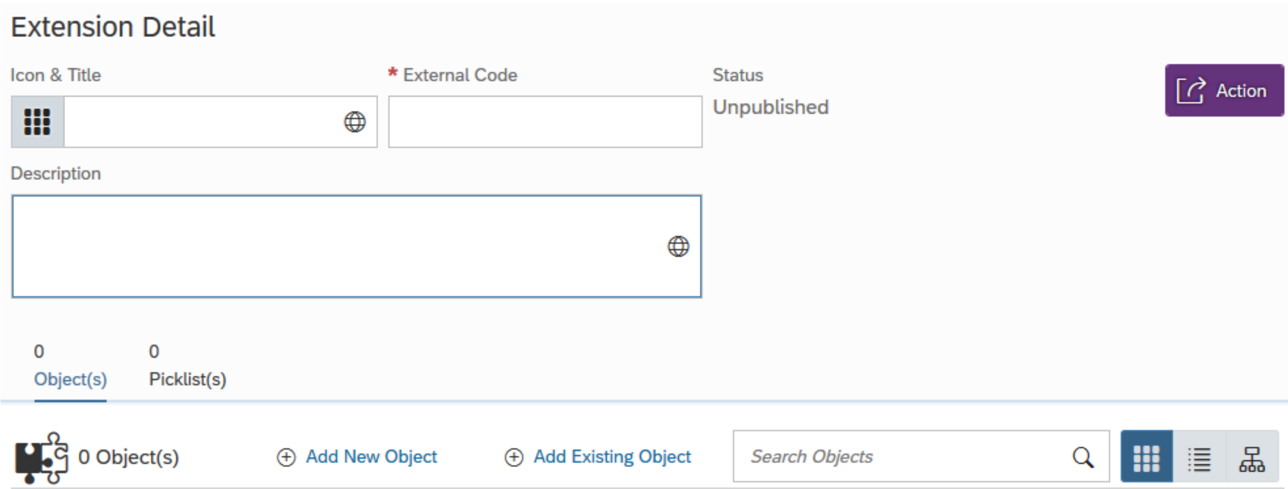
If you have a question on the following steps, please refer to the Extension Center guide on the SAP Help Portal.

Step 2 – Create New Extension in Extension Center

Once you can access the Extension Center, you need to start the process by clicking on the Create SuccessFactors Extension on the top right-hand corner of the Extension Center screen.



You will need to complete these 2 fields: Icon & Title and External Code



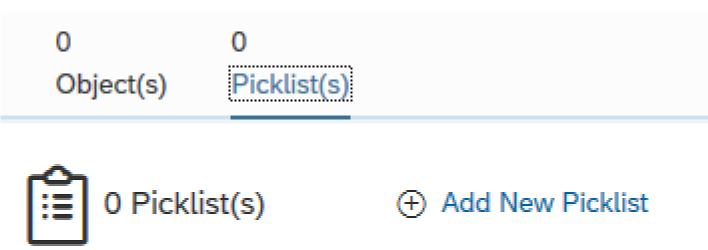
The list of icons can be accessed by clicking on the grid on the left side of the field and selecting on of the many available Icons. This will not be visible outside of the Extension Center. The External Code must be unique and should not contain any spaces. Best practice is to use the underscore symbol, like this: “COVID_HEALTH_EXTENSION”.

The Description field is optional.

After adding the Title and External Code, click on the “Action” button and save the extension.

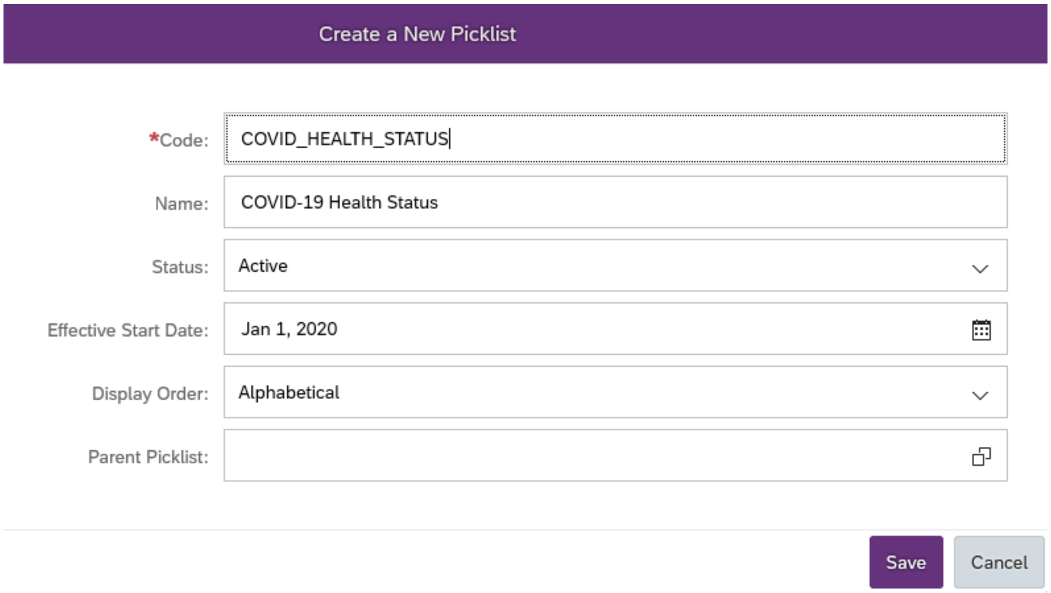
Step 3 – Create New Picklist in Extension

This extension requires you to create a new picklist to capture the current health status of the employee. It is easiest to create or add picklists to the extension before moving into creating the fields that will be tied to the picklist.

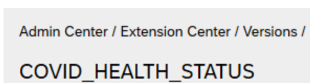


To add the new picklist, select the Picklist tab at the bottom of your new extension. Then click on the + Add New Picklist button.

The Picklist Center initial screen will open, and then you can begin to create a new picklist. The code should be unique and can't contain any spaces. Use something like "COVID_HEALTH_STATUS" as this value. Add the name and then select the calendar picker in the Effective Start Date field and select January 1st, 2020. All MDF picklists are effective dated, so we need to make sure it is set to a date in the past.



After saving the new picklist, you will need to add your desired values to the picklist. Click on the + button in the Picklist Values section to add the desired values to the picklist. You will need to click on the Create button after each new value is added. To return to the Extension Detail screen after you are done editing, click on the link for Extension Center in the upper left corner.



Shown below are the 4 values that I used in my version of the extension. You may modify these after the extension is created.

Picklist Values (4)

External Code	Label	Status
COVID_HEALTH_HEALTHY	Healthy	Active
COVID_HEALTH_QUARANTINED	Quarantined	Active
COVID_HEALTH_FEVER	Fever	Active
COVID_HEALTH_CONFIRMED	Confirmed	Active

If you have a question on these steps, please refer to the Implementing Picklists guide on the SAP Help Portal.

Step 4 – Add Existing Picklist in Extension

In addition to using the new picklist for COVID-19 Health Status, as shown in Step 3, we are also going to use a standard picklist to use with most of the fields that we will be adding to the extension.

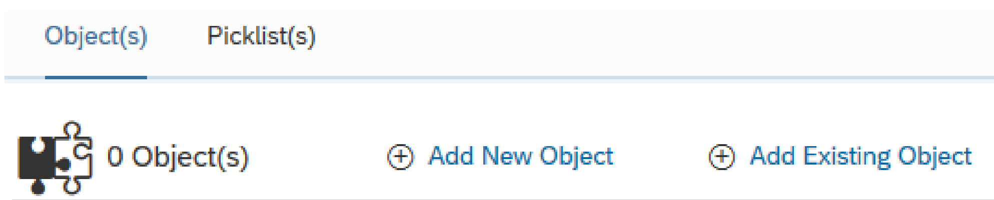
Click on the + Add Existing Picklist button in the extension detail screen. This will open a listing of all available picklists in the instance. In the top search bar, type 'yesNo'. This is a standard SuccessFactors picklist, so it should be available. Click in the box on the left side of the search window and then click the Save button at the bottom. This will add the picklist to the extension and allow you to use it with multiple fields.

After adding the 'yesNo' picklist to the extension, save your progress by clicking on the Action button.

Step 5 – Add Object #1 to Extension

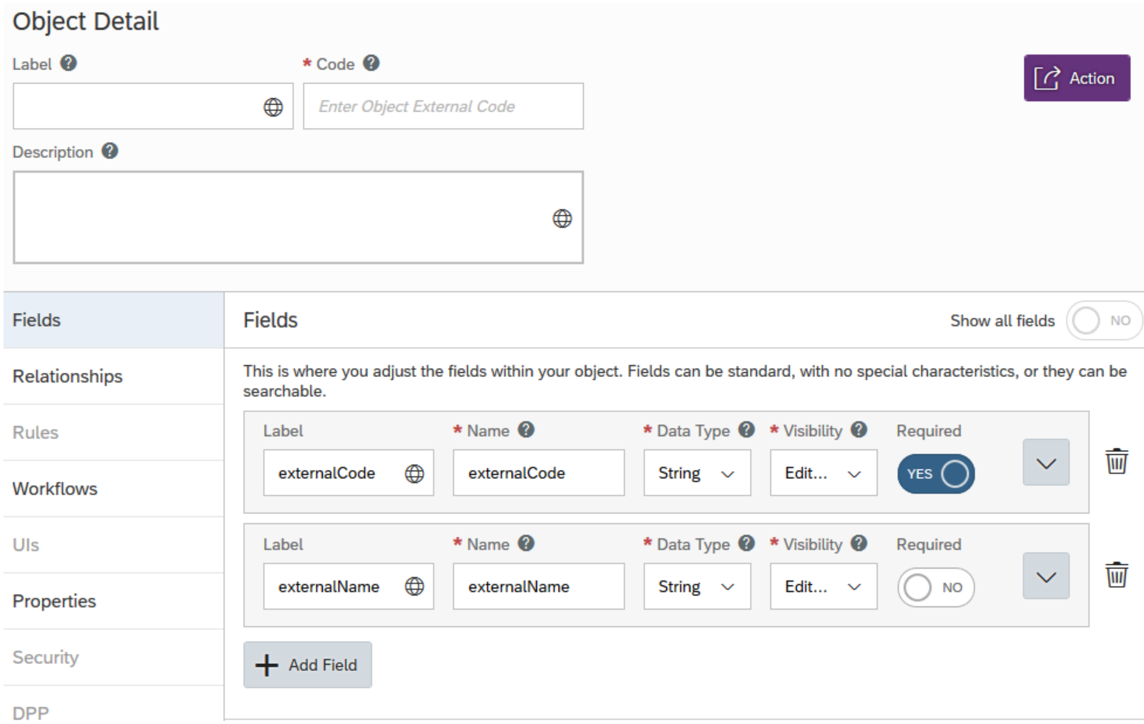
The next step is to create an object, which will be used to hold all the fields of information that we want to know when an employee reports their current health status on their profile. If you have not worked with objects before, you can refer to the Extension Center guide for more information.

Starting from the Extension Detail view, click on the Object(s) tab and then on the + Add New Object button.



The screen shown below is the basic configuration options when creating a new object. You need to provide a Label for the object and a unique Code. The Code should be descriptive and can not contain spaces, so something like COVID_HEALTH_ITEM. The Description field is optional. After adding this information, save the extension using the Action button.

I will walk you through the process of adding fields first, then we will get into refining them with additional information.

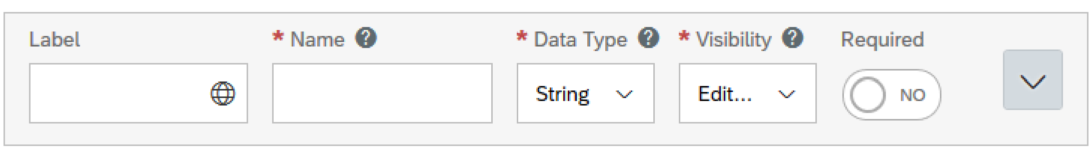


Step 5 Continued – Adding fields to the object

The new object automatically is created with 2 fields for you; those are the externalCode and externalName fields. All MDF objects require these 2 fields in the object definition.

This extension contains a total of 13 fields, 11 fields in addition to the ones added automatically by the system.

You can add a field by clicking on the + Add Field button at the bottom on the fields screen. Each new field is automatically added with the Data Type set to String and the Visibility set to Editable. You will need to add a Label for each field, which will be visible in the Employee Profile. The Name field is the system name and should not contain any spaces. After you type in the desired value, the system will automatically add “cust_” as a prefix to the value. This is standard for MDF objects.



Here is the list of fields that I used in creating this object in the extension:

Health Check-In Data object fields

Label	Name	Data Type	Visibility	Required	Picklist
externalCode	externalCode	AutoNumber	Read Only	Yes	n/a
externalName	externalName	String	Editable	No	n/a
Date	date	Date	Editable	Yes	n/a

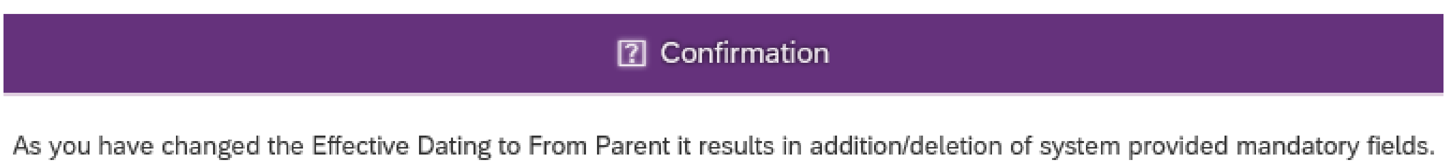
Current Health Status	healthStatus	Picklist	Editable	Yes	COVID_HEALTH_STATUS
Have you been to a heavily infected area in the last 14 days?	contaminated	Picklist	Editable	Yes	yesNo
Have you been in contact with someone that has been diagnosed with coronavirus in the last 14 days?	contact	Picklist	Editable	Yes	yesNo
Do you have any pending personal travel plans?	travelPlans	Picklist	Editable	Yes	yesNo
Are you currently working from home?	WAH_status	Picklist	Editable	Yes	yesNo
Have you seen any colleagues show symptoms of coronavirus?	coworker	Picklist	Editable	No	yesNo
Have you visited another work location in the last 14 days?	otherLocation	Picklist	Editable	No	yesNo
Do you have all of the resources required to complete your work?	resources	Picklist	Editable	No	yesNo
List of other Locations Visited	textLocations	CLOB	Editable	No	n/a
Comments	comments	CLOB	Editable	No	n/a

Once you have added the field and entered the label and name, you need to change the data type as indicated above and highlighted in yellow. For the fields that are Picklists, you must change the data type before you proceed to the next step. To add the picklist to a field, click on the down arrow button on the right side of the field. This opens up the Advanced Options for the field. Click on the Valid Values Source button (third down on the right-hand side) and select the desired picklist. You may also add help text in the Advanced Options by clicking on the Help Text box and adding the desired text.

Step 5 Continued – Updating Effective Dating and Security

Before you can finish creating this object, you will need to complete a few more steps.

Click on the Properties tab and set the Effective Dating field to From Parent. You will get the confirmation message shown below regarding the addition of system provided mandatory fields. Click the OK button to proceed.



Click on the Action button, select "Save Object" from the menu. This will take you back into the Extension Detail screen.

Click on the title of the Object to open up the Object Detail screen again, then click on the Security tab. Change the Secured field to Yes, and then update the Permission Category to Miscellaneous Permissions.

Click on the Action button, select "Save Object" from the menu. Click on the Extension link in the upper left-hand corner to return to the Extension Detail screen.

Step 6 – Add Object #2 to Extension

The next step is to create a second object, which will be used to as a Parent object and it will hold all of the records from Object #1. Another term that can be used is as a "container" for the individual records submitted by the employees.

After you click on the + Add Object Button on the Extension Detail screen, you will need to add the Label and code as described in Step 5.

The field for "externalCode", which will be added automatically, should be changed to the Data Type of User. The label for this field may also be edited for easier reporting, so something like Employee is recommended.

Click on the Properties tab and select Effective Dating as Basic.

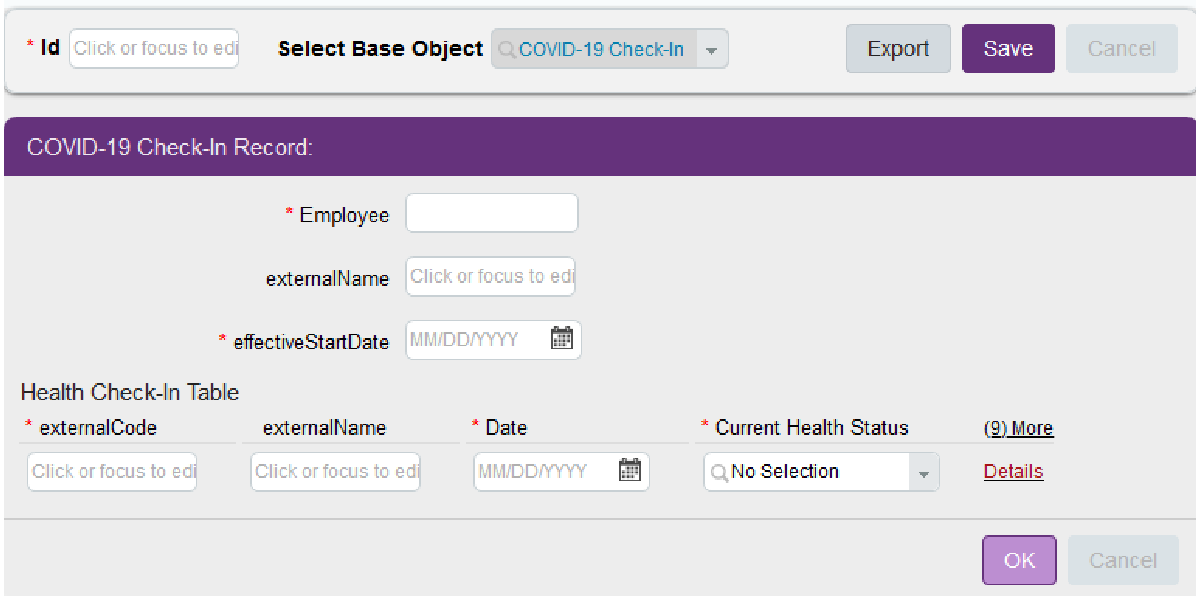
Click on the Action button and select Save Object from the menu. After saving the object, go back into the Object Detail screen again by clicking on the title of the object.

Click on the Security tab and select the Permission Category drop-down. Select Miscellaneous Permissions, just like Object #1.

Click on the Relationships tab and then click on the + Add Relationships button. Enter the Label and Name of the relationship, then select the down-arrow in the Destination field. Find the name assigned to Object #1 and select it. Next set the Multiplicity to "One to Many", which allows many child records to be associated to the parent. Leave the Type to the default of Composite.

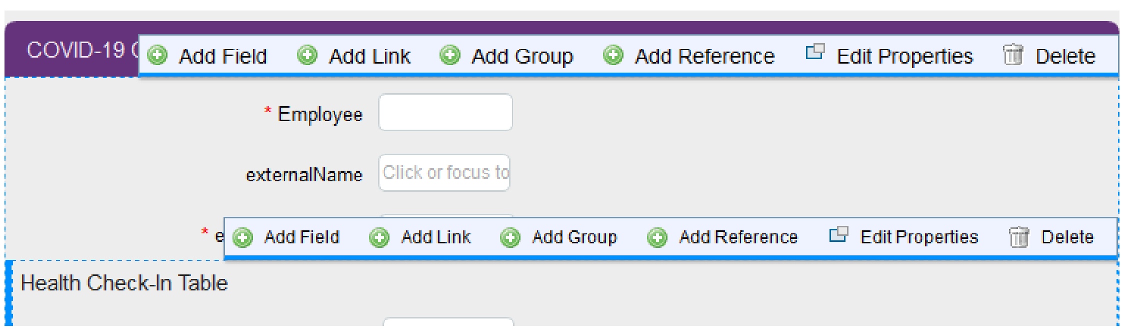
Step 6 Continued – Adding the UI (User Interface)

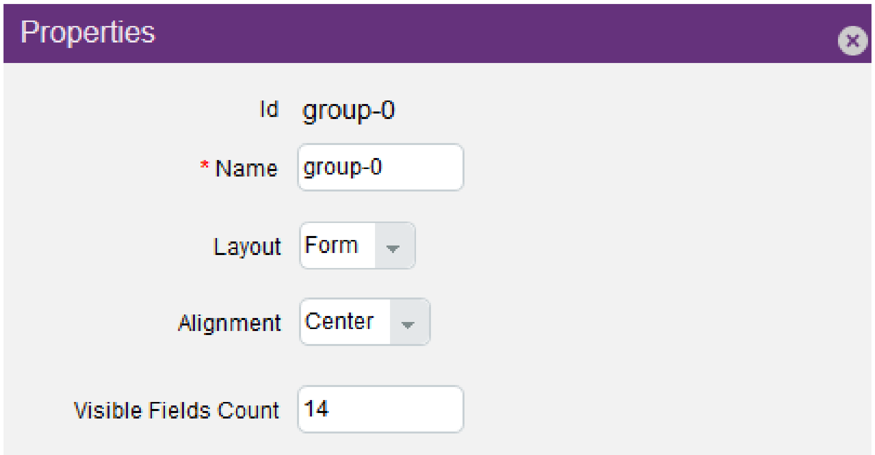
Click on the UIs (User Interface) tab. You should see a window like the one shown below, with the Base Object already selected:



Enter a unique Id for this UI with no spaces and click on the Save button before proceeding. The default layout for the UI is set to Grid, but we want to change it to a Form, plus we want to make more fields visible. To make this change, you need to hover your mouse over the name of the lower section and select on the "Edit Properties" button

Change the "Layout" to Form and update the Visible Fields Count to 14.





Step 6 Continued – Adding the UI (User Interface)

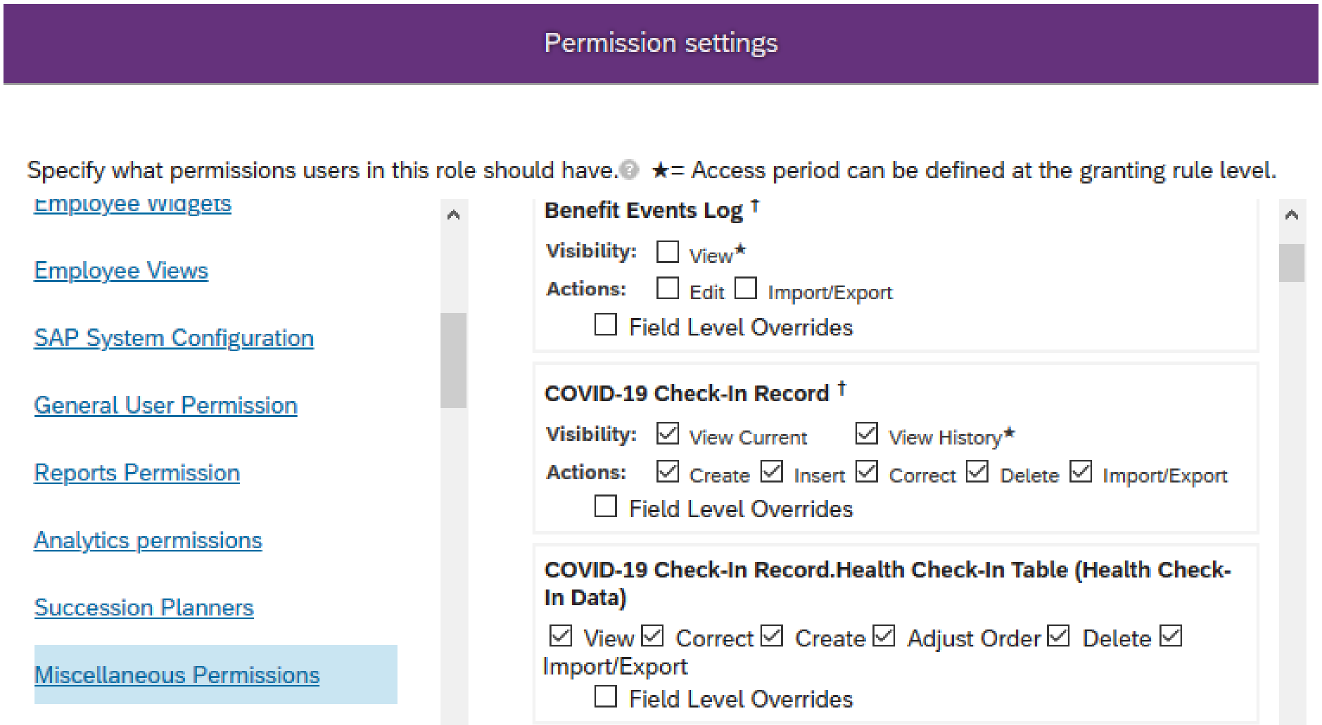
Click on the Save Button in the toolbar where you entered the Id value for the UI, to save the updates to the UI. Save your work by clicking on the Action button in the Object Detail screen. Click on the link at the top left (Back to: Extension) and then click the Action button once again in the Extension Detail Screen. See Step 12 for additional UI enhancements.

You should now see 2 objects and 2 picklists in the Extension Detail Screen, so we can move on to the additional steps to add the extension to the instance.

Step 7 – Update Role-based Permissions for Admin User

Since the 1905 release, MDF objects are secured by default when created in an instance. We'll start by granting permission to these 2 objects for the Admin User role (which might have a different name in your instance).

From the Admin Center, search for the Manage Permission Roles and select the Admin User role. Click on the Permission button. Scroll down to the Miscellaneous Permissions section and click on all of the boxes for both Objects created previously.



Note: You will need to log off and back on for these permissions to take effect.

If you have a question on these steps, please refer to the Using Role-Based Permissions guide on the SAP Help Portal.

Step 8 – Create New Block in People Profile

The next step is to create a new section in the People Profile to house the information in the extension. Using the Search box, search for Configure People Profile.

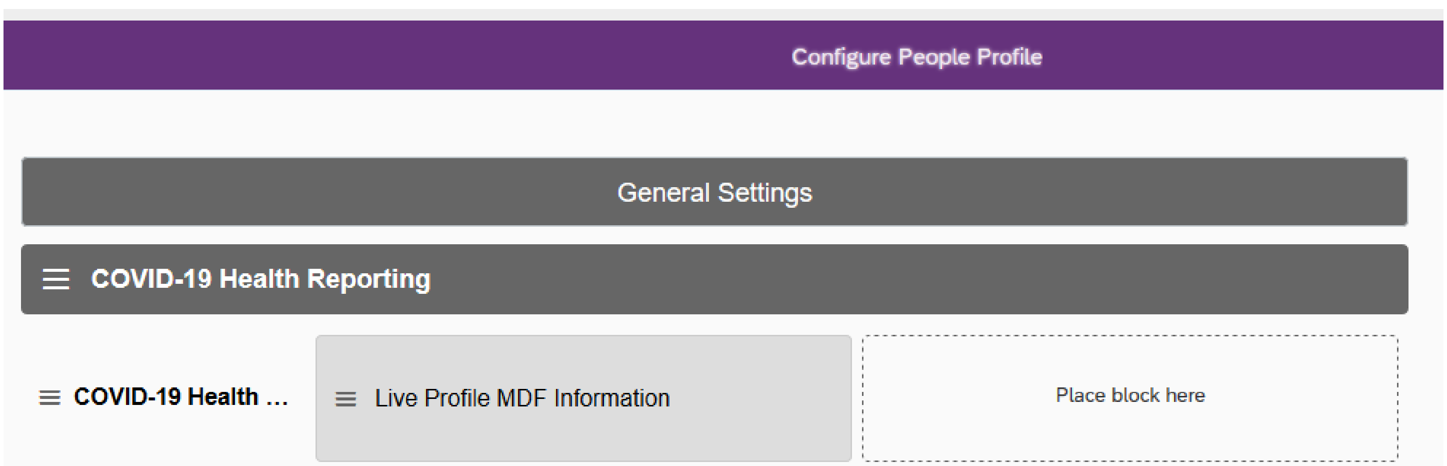
Scroll all of the way to the bottom of the screen until you see a dark gray bar with "Add a new section". Click on this bar and it will add a new section to the Profile. Add a title for the section, such as COVID-19 Health Reporting, click on the Apply to All Languages button and then click the Save button in the bottom right-hand corner.

Click on the header for the subsection under the new section header and add a title, COVID-19 Health Check-In. Close the Edit dialog window and find the block for "Live Profile MDF Information". Click on the 3 lines on the left side of the block and drag on top of the left most "Place block here" section in the new subsection.

After you drop the block, the right-hand dialog will show you the available "MDF Screen ID" options. Click on the drop-down and select the UI that you created in Step 6.

If desired, you may also add Links to the top of this section, and they will be displayed to the employee when they enter data as a reference.

One consideration is where to place this new section in the Profile. It will appear on the top menu, immediately under the Header. If you have a large number of sections in your profile, you may want to move the new section up to the top of your profile for easy access.



If you have a question on these steps, please refer to the [People Profile] guide on the SAP Help Portal.

Step 9 – Create New Custom Tile for Home Page

If you want to make it convenient for your employees to access this new section in the Profile, you may create a custom tile for the Home Page. This will act as a short-cut to the profile, as well as communicating to your users how important this information effort is to the company.

Search for Manage Home Page in either the Tool Search in the Admin Center or in the Search box.

Click on the Add Custom Tile button on the top right tool bar. Add Custom Tile

Add the Tile Name on the General tab of the Tile Wizard, then click Next

On the Tile section, change the Type to Graphical and provide a title for the tile. You may also add a subtitle, if desired. Click on the Size box if you want to increase the size to 2 X 1. Next click on the Browse button and select an image file for your tile.

Click on the Navigation section and select URL for the Target and enter "/sf/employmentinfo" into the URL box. This will take the employee directly to the top of the People Profile.

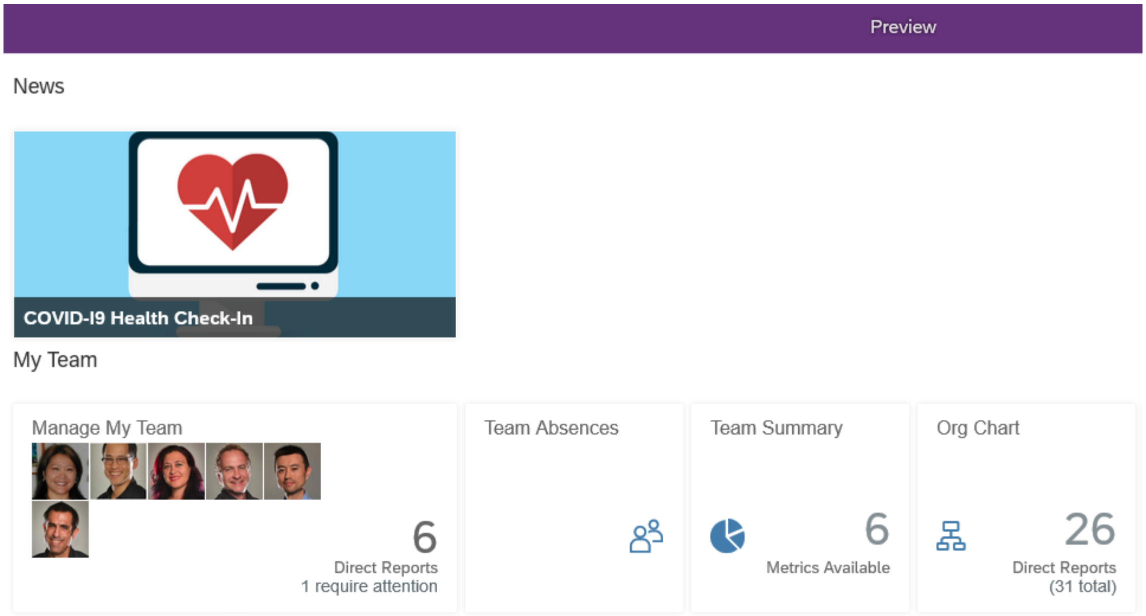
Next on the Assignments tab, you may select the Section that you want the new tile to appear in on the Home Page. The News section is always at the top of the page, so I suggest placing it here. Click on the User Group and select All Employees and make the tile Active by clicking on the Always radio button.

Click on the Save button in the bottom right corner to save the tile configuration. Change the Removable by User switch to No to prevent it from being removed by users and then click Save on the bottom bar to save the changes.

News

Tile Name	Move To	Active	Removable by User
COVID-19 Health Check-In	-- Select --	Always	NO

You may preview the new tile by clicking on the Preview button on the bottom bar, which will open a Preview window of the current configuration.



If you have a question on these steps, please refer to the [Home Page] guide on the SAP Help Portal.

Step 10 – Update Role-based Permissions for Applicable Users

Now that you've created the Extension, including the objects and UI, plus added the section to the People Profile, the last step is to add these pieces to the Role-based Permission roles that should have access to these items.

First, go back to the Manage Permission Roles tool in the Admin Center and select the Admin User role that we granted access to the 2 objects in Step 7. You will need to grant one additional permission to this role. Click on the Permission button and then select the Employee Views permission group. Click the box for the new section of the People Profile (COVID-19 Health Reporting in the example) and then click done. Click on the Save Changes to finish updating the permissions for this role.

Note: you'll need to log out and then back into the instance for these permissions to be updated. I recommend that you do this and verify that the Home Tile is showing up and that you have access to the new section in the People Profile before proceeding to add permissions for your employees to access the Extension.

Next you need to determine which RBP roles will need access to the extension. This will vary from client to client and depends on how you plan to deploy this within the system.

Option 1: If you are using Employee Central, you should have an Employee Self-Service role(s), and this would be the logical role to grant access to enter their data. If you also want to have Managers or HR Business Partners involved in this effort, then those roles would also need to be granted the same access.

Option 2: If you are not using Employee Central, you may still use an existing role for employees to access the profile section. Typically, there will be an RBP role for granting access to edit some portions of the Profile and this would be the logical choice for granting the permission. If you are not sure which role to use, you can always create a dedicated role for this purpose and only grant the sections that we've created for the extension.

If you have a question on these steps, please refer to the Using Role-Based Permissions guide on the SAP Help Portal.

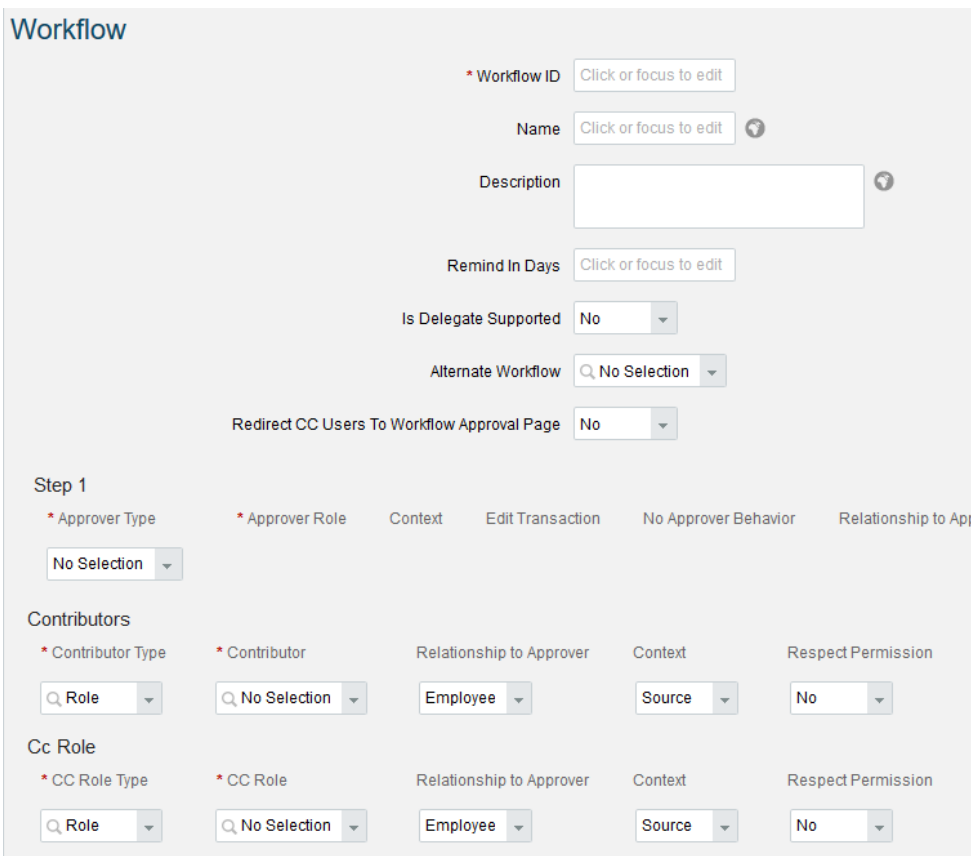
Step 11 – Additional Enhancements (Adding a Workflow)

You may add a workflow to the extension, which can be used for either an “approval” or as a “notification” of the submitted information. If you configure it as an approval, the approver must act on the request before it is added to the object history. If you configure it as a notification, one or more people can be notified that an employee has submitted information. The information is saved to history as no approval is required. It is also possible to “reuse” an existing workflow by attaching it to the object in the extension. **Note: If you are concerned about exposing sensitive health information, please omit a workflow or remove any questions from the object before implementing.**

Creating an Approval Workflow

To create a new approval workflow, you need to open Object #2 (from Step 6 above) inside of the Extension Center. Click on the Workflows tab and select the + Create New Workflow button.

The Workflow configuration screen will open, allowing you to set-up the desired items in the workflow.



Enter a unique Workflow ID, with no spaces in the entry. Enter the desired name, which will be visible in the Workflow notification emails and on the To Do tile on the Home Page.

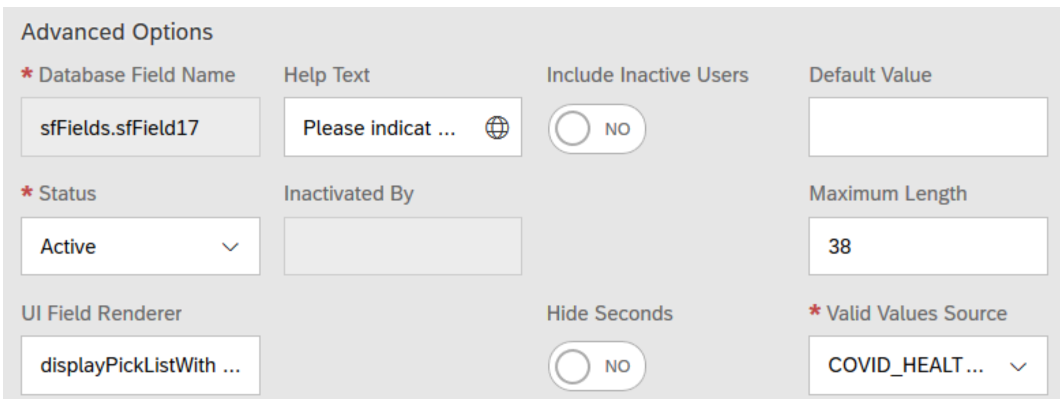
In Step 1, select the Approver Type, which is typically “Role” and the Approver Role. Manager and HR Manager roles will work for most clients, even without Employee Central as a data source. The other roles may be available, depending on the configuration of your system.

If you have a question on these steps, please refer to the Extension Center guide on the SAP Help Portal. Additional information is also available in the Employee Central Workflows guide on the SAP Help Portal.

Step 12 – Additional Enhancements (Adjustment to UI)

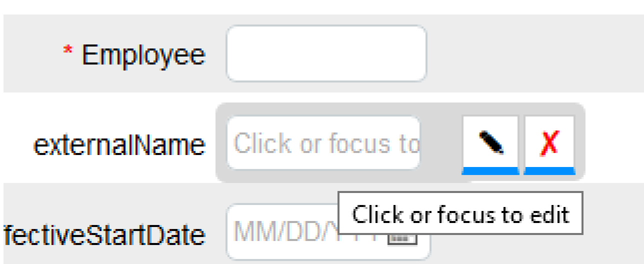
As mentioned in Step 6, there are several adjustments you can make to the UI that we created in Step 6. The first one is to add some code to each field that is using a Picklist. This will display only the Label value in the drop-down and not the default, which shows both the Label and the External Code together.

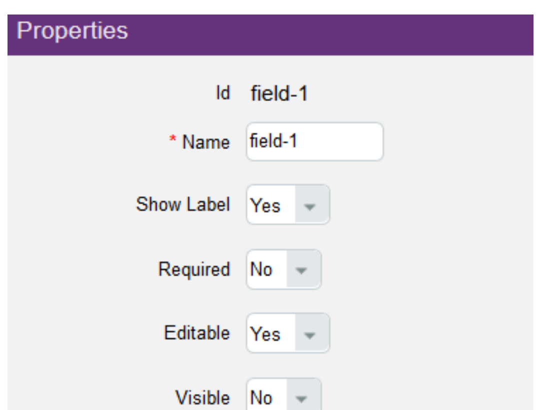
To make this change, go back to the Extension Center and open up the new extension. Then click into the “child” object with all of the data fields.



Open the Advanced Options for each field using a picklist and enter displayPickListWithoutExternalCode into the UI Field Renderer field. It is okay to cut and paste, just make sure you don’t have any blank spaces before or after the value. Do this for each field with the Data Type of Picklist and then Save the object by clicking on the Action button.

The second adjustment is to change the visibility in several fields in the UI that we created in Step 6. To do this, you will need to open the “parent” object, which has the UI associated with it. Click on the UI tab, and then hover your mouse over the externalName field in the top section. Click on the Pencil icon and change the Visible field in the Properties to No. You can follow the same steps to hide the effectiveStartDate field in the top section too.





After making these changes, click on the Save button to the right of the UI screen to save your changes. Then click on the Action button to save the Object and finally click on the Extension link on the top left and click on the Action button to save the Extension.

Additional Information

Please review the additional information provided in this section.

Reporting

Reporting on the data being collected by the extension is available by a variety of means, some of which may not apply to all clients. The exact tool to use will depend on your instance configuration, so you may need to refer to the links in each option for more information.

Clients with Employee Central: You can use Advanced Reporting to report on these “custom” MDF objects. Create a new canvas report and select Advanced Reporting as the Query source. If you do not see the new MDF objects in the available objects, you may need to work with SAP Support to refresh the Metadata cache to add the new objects to your instances reporting data. Some clients can manually trigger the refresh after completing the steps above and ensuring several test records have been added to the system.

Please refer to KBA 2776882 in the SAP Support Portal for additional information on this topic.

Clients without Employee Central: You have 2 options to extract the information from the system. The first option would be for you to use the standard Import and Export Data tool in the Admin Center and export the data records from the system. The second option is to develop an Integration within the Integration Center and export the data using that tool.

Additional information on the Integration Center is available on the SAP Help Portal.

Data Privacy

Each client is responsible for ensuring the extension complies with the applicable Data Privacy and Data Protection laws within the countries covered by their employee population.

Please consult with your Chief Privacy Officer or Legal Counsel if you have any questions or concerns on this topic.

You may find the latest Data Protection and Privacy guide on the SAP Help Portal.

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Contact

If you have any questions or comments regarding these instructions or anything else related to the COVID-19 SAP SuccessFactors Extension, please contact iXerv at covid19@iXerv.com. For more information on iXerv or our services, please contact Juan Albelo at Juan.Albelo@iXerv.com or +1 305 495 3598.