BUILD A CUSTOM APPLICATION TO MANAGE ALL QUERIES

Presented by Stephen Hume, MaxTECH Chair

Agenda
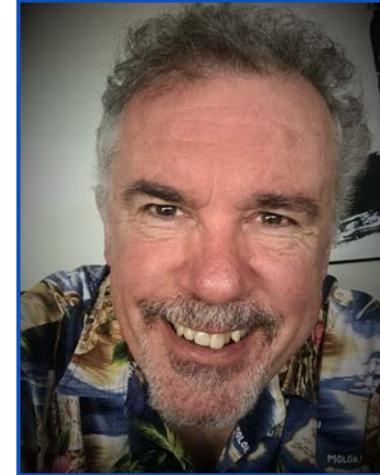
Stephen Hume

Stephen has been working with IBM Maximo for over ten years in a variety of industries (Oil and Gas, Utilities). He has taught Maximo courses to end users for both Technical and Functional audiences and chairs the MaxTECH User Group.

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Background

The purpose of this new application Is an administrative tool to allow an admin user the ability to modify queries which have been created by any users in Maximo. The admin user will be able to set a user query as public or private, modify the SQL, and change the Query Description. The admin user will NOT be able to delete any queries created by another user using this application. (The MBO rules are still enforced).

This application is very useful for managing all queries in all applications in Maximo. It allows the admin user to see where queries have been used on start centers. It allows the admin user to see all queries created by users that may no longer be active in Maximo.

One use case for this tool is that when a user has left the company, the admin user can grant that user access to the query management application, reset the users password, login as that user, go to the query management application and then delete that users queries one at a time. This allows the admin user the ability to keep on top of user queries.

Much of what this application makes possible used to need to be done using backend database updates for query management.

Problem Scenario

Maximo allows users to create queries in applications that can be used on Start Centre Portlets:

- These queries can only be edited by the owner of the query;
- There is no central application to manage all the queries;
- There is no way to clearly see where a query is being used.

Proposed Solution

- Create an application to centrally manage queries

- Clearly show which Start Centers the query is used on

- Allow Maximo Administrators to change the query clause

Out of Scope – Deleting queries owned by another user

Creating the new Application

Information you need before you create the app:

- Name and Description of the new application
- Module where the new application is going to reside

1. Go to Application Designer

2. Insert a New Application Definition

3. Enter the details of your new app

4. The Module Name determines where in the menu your app will reside

5. Click Power App to create your app

Create a New Application

*Application:
BPD_QUERY

*Description:
Query Manager

*Main Object:
QUERY

*Key Attribute:
QUERYID

*Module Name:
SETUP

Viewport:

Is Mobile?

Select the type of app you wish to create.

Power App | Single Page App | Self Service App

When adding this application into other environments you can use migration manager to move all changes, or you can replicate the steps manually.

Add Additional Columns

1. We want to be able to search the List Tab for Public Queries

2. From the Control Palette add a new Table Column

3. Open the Control Properties and set the value of the attribute to ISPUBLIC

Table Column

Table Column Properties

| General | Advanced |

Control ID 1541679376567

Default Label Table Column...

Label Is Public?

Attribute ISPUBLIC

Type

Sortable?

Turn Smart Fill Off?

Show Filter? ✔

Filterable?

Event

Target ID

Event Description

Event Icon

Change Event

CSS Class Name

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Adding Related Data

- Display the Owner's Status and Name:

- Go To Database Configuration for the Query Object

- In the Relationships Tab create a relationship to the MAXUSER Object called BPD_OWNER linking the OWNER attribute to the USERID attribute

Adding Related Data

Adding the related attributes to the List Tab and the Details Tab:

- Status – BPD_OWNER.STATUS

- Display Name – BPD_OWNER.PERSON.DISPLAYNAME

Making the attributes read only:

- Setting the Input Mode to READONLY ensures that the name/status of the owner can't be altered

Adding Related Data

Display the Start Centres the Query is used on:

1. Go To Database Configuration for the Query Object

2. In the Relationships Tab create a relationship to the SCTEMPLATE Object called BPD_SCTEMP linking where the CLAUSENAME is in the PRESENTATION

Adding Related Data

Add a new table to the Main tab on your new App:

1. Relationship – BPD_SCTEMP

2. Label – Start Centres

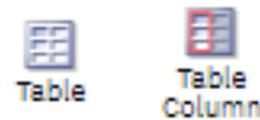3. Input Mode – Read Only
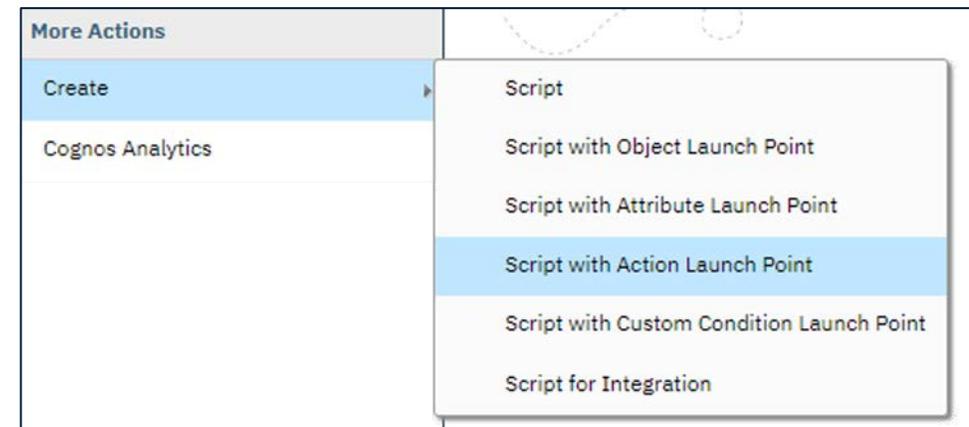
4. Add Table Columns for:
   - NAME
   - DESCRIPTION

Creating an Automation Script

We need a script to unlock the read only fields:

- CLAUSE
- DESCRIPTION
- ISPUBLIC

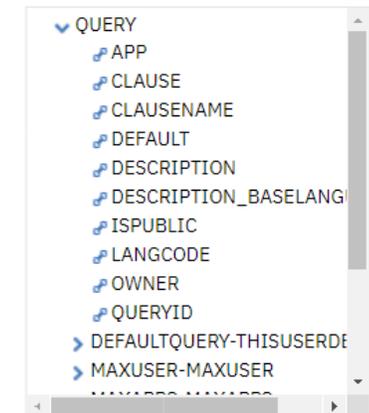1. Go to Automation Scripts and Create a Script with an Action Launch Point

Creating an Automation Script

Add Variables for:

- clause

- description

- ispublic

1. Bind them to the corresponding fields on the QUERY object

Creating an Automation Script

Create the Script with the code:

        description_readonly = False

        clause_readonly = False

        ispublic_readonly = False

Link the Action to the App

1. Open Application Designer for your app

2. Select Action > Add/Modify Signature Options

3. Add a new row with the same Option Name as your new Action

4. Select "This is an action that must be invoked by user in the UI"

Link the Signature Option to a Button

1. Add a new Button Group from the Control Palette

2. Open the Control Properties for the button

3. Set the Label to Unlock

4. Set the Event to BPD_QUERY

5. Grant your user the Signature Option in Security Groups app

6. Sign out and back in for it to take effect

Button
Group

Pushbutton Properties

General   Advanced

Control ID 15422943626762

Label Unlock

Event BPD_QUERY

Target ID

Value

Default Button? ☐

Menu Type NONE

Testing the Application

1. Go to the Query Manager Application

2. Open a query owned by someone else

3. Click [Unlock] to see if the fields become editable

UNLOCK

THANK YOU!

Success! You have learned the following skills through this training class:

- How to create a new custom application against an existing Maximo Object
- How to create relationships and use those relationships to display data from related tables
- How to create a table of related data in an application
- How to add new signature options
- How to create an action triggered automation script
- How to add a pushbutton to an application to trigger an action
- How to give access to the pushbutton through security
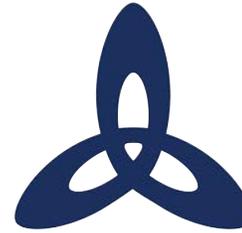
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Ask us a technical question:

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www.bpdzenith.com/maxtech

MaxTECH is the first ever dedicated Maximo Technical User Group aimed at Maximo Administrators, Developers and Technical Support staff.

It is a great place for users to ask and answer technical questions, learn from each other, collaborate and help improve Maximo in your organization.

MaxTECH was founded in 2017 by BPD Zenith and is chaired by Maximo Consultant Stephen Hume. We host several events every year (Calgary, St. Louis, MaximoWorld, Houston, MUWG, Northern California MUG, Maximo UK & Ireland User Group) including digital events.

MaxTEACH is a free online user group designed to go in depth into a Maximo topic.