

Custom Percent Complete

CPC v1.1

PACKAGE DOCUMENTATION AND GUIDES

**Broadcom Limited**

Web: www.broadcom.com

Corporate Headquarters: San Jose, CA

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**Revision History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Revision** | **Package Version** | **Date** | **Description** | **Author** |
| 1 | 1.0 | 08/15/2019 | First version of the document. | Thiago Bottoni |
| 2 | 1.0 | 08/16/2019 | Added how to populate null values with the defaul attribute value | Thiago Bottoni |
| 3 | 1.1 | 20/08/2019 | Added on demand process and how to add it to the actions menu | Thiago Bottoni |
|  |  |  |  |  |

## **Installation Guide**

Pre-requisites

* Install XOG Client for the proper Clarity version

Follow these steps to install CPC successfully:

1. Download the latest release of CPC
2. Extract the ZIP file to the **C:\temp** directory
3. Open the file **cpc\_vx\_install.bat** with your preferred text editor
4. Change the following variables:
   1. **XOG\_HOME** = Installation directory of the XOG client, i.e. *c:\apps\xog\bin*
   2. **SERVERNAME** = Clarity hostname or IP, i.e. *cappm1561*
   3. **PORTNUMBER** = Clarity port, i.e. *80, 443*
   4. **SSLENABLED** = Inform if Clarity is running over HTTPS or not, i.e *true* or *false*
   5. **USERNAME** = User with XOG rights, i.e. *admin, xog*
   6. **PASSWORD** = User password
5. Save and close the file
6. Run the file **cpc\_vx\_install.bat**
7. Check the output files for errors at **C:\temp\cpc\_vx\output**

## **Configuration Guide**

Follow these steps to configure CPC successfully:

1. Log in to Clarity as an administrator
2. Navigate to **Administration > CA PPM Studio > Objects**
3. Go to the **Project** object
4. Click on Attributes
5. Navigate to the definition of the attribute **Custom % Complete Calculation**
6. Flag the field **Populate Null Values with the Default**
7. Save and return
8. Click on **Views**
9. Choose the correct partition
10. Click on **[Layout:Edit]** of the project properties row
11. Add the attribute **Custom % Complete Calculation** to the section **Settings > General**
12. Save
13. (Optional) To adjust the lookup view:
    1. Return to the project **Views** tab
    2. Click on **[Fields]** of the project properties row
    3. Go to the properties of the field **Custom % Complete Calculation**
    4. Change the Display Type to **Pull-Down**
    5. Save
14. Return to the **Views** tab
15. Click on **[Actions Menu]** of the project properties row
16. Click on **Processes**
17. Add the action called **CPC – Update Pct Complete**
18. Save
19. Return to **Administration > CA PPM Studio > Objects**
20. Go to the **Task** object
21. Click on Attributes
22. Navigate to the definition of the attribute **Update Custom % Complete**
23. Just save and return (This will populate null values with the default)
24. Navigate to the definition of the attribute **Exclude from % Complete**
25. Just save and return (This will populate null values with the default)
26. Click on **Views**
27. Choose the correct partition
28. Click on **[Layout:Edit]** of the task properties row
29. Add the attribute **Exclude from % Complete** to the section **Settings > Settings**
30. Save
31. Navigate to **Administration > Data Administration > Processes**
32. **Validate** and **Activate** the following processes:
    1. CPC - Calculate Custom % Complete – DURATION
    2. CPC - Flag Tasks to Update
    3. CPC - Calculate Pct Complete - On Demand
33. Navigate to **Home > Personal > Reports and Jobs**
34. Go to the tab **Jobs**
35. Access the job **Execute a Process**
36. Set the parameters as following:
    1. Name: CPC Process
    2. Process ID: CPC - Calculate Custom % Complete – DURATION
    3. Immediately: NO
    4. Scheduled: YES
    5. Start Date: Today
    6. Start Time: Now
    7. Recurrence: Unix crontab **0 1,13 \* \* \***
37. Submit

## **User Guide**

In order to use CPC in your projects, you’ll need to set them up as follows:

1. Navigate to the project page
2. Go to **Properties > Settings**
3. The native attribute **% Complete Calculation** must be set to **Manual**
4. The custom attribute **Custom % Complete Calculation** must be set to **Duration**

If you would like to exclude a task from the % Complete calculation, follow these steps:

1. Navigate to the task
2. Go to **Properties > Settings**
3. Flag the attribute **Exclude from % Complete**

To visualize the projects that are currently using CPC and all of the calculations, follow these steps:

1. Navigate to **Home > Custom Objects > Custom % Complete Control Panel**
2. The first portlet shows all projects that are using CPC a brief description of the calculation
3. The second portlet needs a filter to work properly, you can use any of the IDs of the first portlet. It will show the project tasks and a brief description of the calculations

How to use the project schedule

1. You can use the project schedule as you wish
2. You’ll need to update only the duration and % complete for the **detail tasks**
3. **Summary tasks** and **projects** will be updated automatically by the package

**NOTE:** The attribute % Complete will be calculated only when the configured job finishes, as mentioned under the section **User Guide** of this document.

If you need to calculate it immediately:

- The user can navigate to the project **Properties**, click on the **Actions** menu and run the action called **CPC – Update Pct Complete** (This will update the current project only)

- Or the administrator can navigate to **Home > Personal > Organizer**, go to the **Processes** tab and manually run the process called **CPC - Calculate Custom % Complete – DURATION** (This will update all projects)

## **Configured Calculations**

The calculations set to the custom **Duration** method were the following:

For **DETAIL TASKS**

**Days Complete = Detail Task Duration \* % Complete**

Where:

Detail Task Duration = Native duration attribute, informed by the user

% Complete = Native % Complete attribute, informed by the user

For **SUMMARY TASKS**

**% Complete = Total Childs Days Complete / Total Childs Duration**

Where:

Total Childs Days Complete = Sum of days complete of all child tasks

Total Childs Duration = Sum of duration of all child tasks

For **PROJECTS**

**% Complete = Total Level 1 Tasks Days Complete / Total Level 1 Tasks Duration**

Where:

Total Level 1 Tasks Days Complete = Sum of days complete of all tasks at the first level of the WBS

Total Level 1 Tasks Duration = Sum of duration of all tasks at the first level of the WBS

**EXAMPLE:**

Consider a project with one summary task (S1) and two detail tasks (T1 and T2). T1 lasts 10 business days and is 50% complete and T2 lasts 5 business days and is 10% complete:

- S1

-- **T1** | Days Complete = 10 days \* 0.5 complete = 5

-- **T2** | Days Complete = 5 days \* 0.1 complete = 0.5

The summary task S1 considers the sum of duration and days complete of the tasks T1 and T2, then:

- **S1** | % Complete = (5 + 0.5 days complete) / (Duration of 10 + 5 days) = 36%

-- T1 | Days Complete = 5

-- T2 | Days Complete = 0.5

The project will receive 36% of % Complete, because in this example there’s only one task at the first level of the WBS (S1).

## **Created Elements**

The following elements were created to make the package work properly. All of the elements were translated in two languages: **English** and **Brazilian Portuguese**.

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Name | ID | DESCRIPTION |
| TASK | Days Complete | cpc\_days\_complete | Stores days Complete = Duration \* Percent Complete |
| TASK | Exclude from % Completed | cpc\_exclude | Exclude task from % Completed |
| TASK | Custom Duration | cpc\_duration | Stores the task total duration. If it's a summary task, stores the total duration of the child tasks |
| TASK | Update Custom % Complete | cpc\_update | Flag task to update % Complete |
| ProjeCt | Custom % Complete Calculation | cpc\_calc\_method | Custom % Complete calculation method |
| PROJECT | CPC – Update Pct Complete | cpc\_update\_pct | This is an action that allows the user to run the CPC process per project |
| LOOKUP | Custom Calculation Methods | cpc\_calc\_methods | List of custom % Complete calculation methods |
| Process | CPC - Calculate Custom % Complete - DURATION | cpc\_calc\_duration | Calculates % Complete for Summary Tasks and Projects which Custom % Complete Calculation Method is set to Duration. It excludes marked tasks from the calculation. |
| Process | CPC - Flag Tasks to Update | cpc\_to\_update | Flag tasks which need to re-calculate the % Complete attribute |
| PROCESS | CPC – Calculate Pct Complete – On Demand | cpc\_calc\_on\_demand | Calculates % Complete for Summary Tasks and Project. It excludes marked tasks from the calculation. Users can run it on demand. |
| QUERY | Custom % Complete Calculation by Project | cpc\_calc\_prj | Lists tasks and % Complete calculations by project |
| QUERY | Projects Using Custom % Complete Calc | cpc\_prj\_custom | Lists projects using the custom % Complete package |
| Portlet | Custom % Complete Calculation by Project | cpc\_prj\_calc | Configures the query “Custom % Complete Calculation by Project” |
| Portlet | Projects Using Custom % Complete Calculation | cpc\_prj\_calcs | Configures the query “Projects Using Custom % Complete Calc” |
| Portlet PAGE | Custom % Complete Control Panel | cpc\_transp\_calc | Shows the portlets “Projects Using Custom % Complete Calculation” and Custom % Complete Calculation by Project” |
| Menu | Custom % Complete Control Panel | N/A | Link to the portlet page “Custom % Complete Control Panel” which contains important information about projects using the CPC package |

## **Screenshots**





