

SOLUTION BULLETIN

P6 Resource Codes/Project Codes/Activity Codes/User Defined Fields/Categories At-A-Glance

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For Release 17

| | Resource Codes | Project Codes | Activity Codes | User Defined Fields (UDFs) | Categories | Notes | |
|---|----------------|-----------------------|---|----------------------------|----------------|--|---|
| Are assigned to | Resources | Projects | Activities | Various (Note 4) | Various | | |
| Recommended Prefix (Note 2) | R_ | P_ | A_G_Global A_E_EPS A_P_Project (Note 3) | U_ (Note 4) | Not applicable | | |
| Available UDCs and Categories for Grouping, Sorting, and Filtering | | | | | | | Available UDCs & Cat. for Column Display |
| Global data windows | | | | | | | |
| Projects | | P_ (Note 5) | | U_P_ | WBS Categories | | P_ U_P_ Can't show WBS Cat. |
| Resources (Filter options are fixed) (Note 3, 7) | R_ | | | U_R_ | | | R_ U_R_ |
| Tracking (Note 8) | | P_ | | U_P_ U_WBS_ | WBS Categories | Group and sort by WBS is default on top left pane. | P_ (view only) U_P_ (view only) U_WBS (view only) WBS Cat. (view only) |
| EPS | | | | | | Note 6 | |
| Project Portfolio | | | | | | Note 6 | |
| Roles | | | | | | Note 6 | |
| OBS | | | | | | Note 6 | |
| Project data windows | | | | | | | |
| Activities | | P_ | A_G_ A_P_ | U_A_ | WBS Categories | | P_ (view only) A_G_ A_P_ U_A_ |

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|---|----------------|-----------------------|----------------|----------------------------|--------------------------------|----------------------------------|---|
| | | | | | | | WBS Cat. (view only) |
| WBS (No filter option) | | P_ (Note 5) | | | Can't group on WBS Categories | No Customize option for grouping | P_ (view only) U_WBS_ WBS Categories |
| Resource Assignments | R_ | | A_G_ A_P_ | U_RA_ | | (Note 9) | R_ (view only) A_G_ (view only) A_P_ (view only) U_RA_ |
| Project Expenses (No filter option) | | | | | Expense Categories | No Customize option for grouping | Expense Categories U_E_ |
| WPs and Docs (Group and Filter options are fixed) | | | | | Doc. Categories Doc. Status | No Customize option for grouping | Doc. Categories Doc. Status U_WP_ |
| Risks (Group and Filter options are fixed) | | | | | Risk Categories | No Customize option for grouping | Risk Categories U_RK_ |

In P6, under **Enterprise** menu option, there are four sub-options under the third group down named: **Resource Codes**, **Project Codes**, **Activity Codes**, and **User Defined Fields (UDFs)**. Despite of the different names, they are all user defined codes (I call them UDCs in short) essentially. The names of Resource, Project, Activity, or UDFs just refer to the nature of data sets (tables) which user defined codes as additional columns (fields) are added to the table (see **Note 1** below). Once those codes (fields or columns) are set up and code values are assigned to various data, data can then be grouped, sorted, and filtered for presentation. Specifically, Resource Codes and values are assigned to resources for further grouping, sorting and filtering purpose. Project Codes and values are assigned to projects. Activity codes and UDFs and their values are assigned to activities. (UDFs can also be assigned to projects, etc., see **Note 4** below for more details.)

P6 also provides another set of codes called Categories, which can also be used to organize related data. In summary, I don't see any difference between UDCs with various Categories. I believe that they both are added column to the same table (or set) in terms of database design. However, P6 provides more visibilities on Categories than UDFs without doubt. For example, both WBS Categories and WBSs of UDFs are assigned to WBS nodes (not to activities). However, Activities tab window can't show WBSs of UDFs as columns or as grouping options. Also, since activities are assigned to WBS nodes, WBS categories are passed to activities as a result. WBS Categories can be viewed at activities level (but not editable). The only window can see WBSs of UDFs as columns is WBS tab window. In this case, it is better to use WBS Categories, not WBSs of UDFs.

P6 allows users to create Categories (specifically) under the following data sets:

- a. **(Project) Expenses Categories** – Users can assign Categories to Project Expense items. The Expense item can then be assigned to an activity. An activity can be assigned with more than one expense (one-to-many). Expense Category is one of the preset options to be used to group/sort data (no filter option), not Expenses of UDFs. Also, no Customize option is provided for grouping. Both Expense Category and Expenses of UDFs can be shown as columns.
- b. **WBS (nodes) Categories** - Users can assign Categories to WBS nodes. It appears to me that users should assign categories to the last (Bottom) level of WBS nodes. If you assign category to an upper node inconsistent with lower nodes, P6 will ask you whether to overwrite the lower node entries or not. If you answer No, the entry still stay and will create unpredictable results. WBS Category is one of the preset options to be used to group/sort data (no filter option), not WBS of UDFs. Also, no Customize option is provided for grouping. Both WBS Category and WBSs of UDFs can be shown as columns.
- c. **Documents Categories** - see table above
- d. **Risk Categories** - see table above

Similarly, users can create categories (different names are used) under the following data sets:

Document Status - See table above

Baseline Type – This is used to set up general categories for baseline (target schedule) types, which are entered at **Maintain Baselines** window.

Notebook Topics - This is used to set up general topic categories for activity, project, EPS, and WBS notes, which are normally entered at bottom detail tab windows named **Notebook**.

The differences among various Categories and UDCs: (note carefully on UDCs, UDFs, and RPA Codes)

- My definition in this article UDCs = Resource Codes + Project Codes + Activity Codes + UDFs.
RPA Codes = Resource Codes + Project Codes + Activity Codes
- Categories are neither directly assignable nor editable at activities level. Some UDCs are not assignable to activities either just like Categories. Activity level of UDFs and Activity Codes are assignable and editable to activities.
- Various Categories are under “General” heading in the picklist. UDCs are under their own heading such as Project Codes, etc. or each UDC just showing up as an individual choice depending on windows you opened.
- In my opinion, P6 provides more grouping/sorting/filtering features for Categories and RPA Codes than UDFs. User should set up Categories and RPA Codes more for grouping purpose and use UDFs for otherwise.
- Categories input window is under **Admin** menu while all UDCs input windows are under **Enterprise** menu.

Notes

1. A database table is made of columns and rows just like a spreadsheet. Horizontal rows are records. Vertical column are fields.

2. Lost in the ocean of codes:

P6 extends the concept of Activity Code to project activities in P3 to other three sets of data – Resources, Projects and User Defined Fields. However, when users want to select one of codes to organize the data in layouts, they get lost easily since browsing through the right one in a pick list becomes a time consuming process. Here are some tips to make codes much organized in the picklist by just adding a structured prefix in front of each intended code name as suggested above. First, users can easily tell all UDCs from system P6 fields, and duplicate names are therefore avoided. Secondly, users can easily identify which group of UDCs the fields belong to. Thirdly, users can easily find the one you need since the same group of UDCs will be arranged together and alphabetically sorted by their intended names. Without prefix, the UDCs are always placed randomly throughout the entire pick list due to the default sorting of alphabetic order. P6 is shipped with many predefined UDCs. It is also suggested to delete all the unused UDCs to avoid future confusion.

3. Resource Codes: (No Resource Categories)

In short, Resource Codes are resource categories and used to group, sort, and filter resources.

Project Codes: (No Project Categories)

In short, Project Codes are project categories and used to group, sort, and filter projects.

Activity Codes: (No Activity Categories, Activity Codes is activity categories)

Users can create Activity Codes under three classes – Global, EPS, and Project. Global and Project Activity Codes are self-explanatory. The tricky one is EPS Activity Codes. The classification of those three classes is based on accessibility by user. EPS Activity Codes once are set up can only be accessed by all the projects/activities under the same EPS node where the Activity Codes are placed to. Any other projects outside (parallel or above) of this EPS node can't access those Activity Codes. Just like Project Activity Codes can only be accessed by activities under one project. Note that all Activity Codes are only assignable and editable at Activity level regardless classification. You will see the options shown up once you have the access to them. Otherwise, they won't be shown.

4. User Defined Fields (UDFs):

Users can create UDFs under ten sets of related data. (I don't want to use the term - categories so that you are not confused with other P6 system Categories.) Each set of related data can be referred to as a database "table" in terms of database design. Due to the nature of database design, users can only access one or two sets of UDFs in each tab window. For example, users can only see UDFs created under Projects (i.e. U_P_xxxx) in Project window.

| | Recommended Prefix | Are added columns to the table of |
|-------------------------------|--------------------|-----------------------------------|
| Activities | U_A_ | Activities |
| Activity Resource Assignments | U_RS_ | Activity Resource Assignments |
| Activity Steps | U_S_ | Activity Step |
| Issues | U_I_ | Issues |
| Project Expenses | U_E_ | Project Expenses |
| Projects | U_P_ | Projects |
| Resources | U_R_ | Resources |
| Risks | U_RK_ | Risks |
| WBS | U_WBS_ | WBS |
| Work Products and Documents | U_WP_ | Work Products and Documents |

5. Once Project Codes are set up, they will appear as the menu options under **Layout>Group and Sort by>**. However, you won't see the changes until you exit and get back in the program.
6. On EPS, Project Portfolio, Roles and OBS tab windows, P6 does not provide grouping, sorting and filtering features on any UDCs or Categories and can't show any UDCs or Categories columns either.
7. Filter on Resources tab window only has the following options: By All Active Resources, All Resources, Current Project's Resources and Timesheet Manager.
8. Get to **Group and Sort By** option in Tracking tab window is tricky. You click the **Display** option bar on the top of top right pane, and select **Top Layout Options**, then **Group and Sort By** option will show up. The **Display** option bar on the top left pane can only be grouped by WBS. All UDCs and Categories are not editable in Tracking tab window.
9. Resource Assignments tab window is a tricky window. In terms of database design, as you know that activity to resource is a "one-to-many" table relationship. However, this layout is placing "many" side of table in the front and links back to "one" side of table. So if you sort the layout by activity, you will see many repeated activities on the left column and same resource on the right, which is meaningless even the options are provided. Normally, we group data by resource and sort them by activity start date, etc. to perform the resource assignment analysis on spreadsheet-like platform. If you have assigned Resource Codes to resources, then you can also group or sort by Resource

Codes and Resource, etc., which may be more meaningful. Resource Codes are not editable but can be viewed at this window, while Resource Assignments of UDFs are editable.

Note that this window is used for users to play around the resources units or costs assigned to activities, and other factors for resource analysis. However, this window is also crazy! Do not run any official schedule layout as reports out of this window. Users can easily change Start/Finish dates in this window and the dates stay even after calculating schedule, and have no impact of Start/Finish dates in Activities window (sometimes do). Therefore you have two different sets of Start/Finish Dates on the same activity! The result is really unpredictable! In this window, Start/Finish dates behave just like Planned Start/Finish dates. Not sure whether this is a mistake or an intention. I need to have an article just covering all the subjects of this window.

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