Windchill Development Best Practice

**Name:** *Customizing Change Tables Designed for Workflow.*

<INTERNAL>

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Change History:

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| **Date** | **Author** | **Description** |
| 08/29/2014 | Saritha Mathai | Initial draft |
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# Best Practice Name and Classification

## Name

Customizing Change Tables Designed for Workflow.

## Classifications

Customization/configuration options available for the "Configurable Task Page" layouts designed for the Change Management process.

# Objective

## Problem Statement

As an administrator I need to configure the resulting or change summary table to have different views, actions, etc. that are specific to a workflow task.

## Scope/Applicability/Assumptions

This document assumes familiarity with, creating new actions, action models, xconf entries and using xconfmanager, resource bundles. Supported tables for configuration are

* Resulting Objects table
* Change Notice summary table

## Intended Outcome

This document describes on how to create a new component which is a variant of resulting or change summary table.

# Solution

This solution will be a walk through example of adding a variant of Resulting Objects or Change Summary table.

## Prerequisite Knowledge

To apply this best practice, you need to have an understanding of the following:

* Creation of new actions, action model via customizations
* The management of RBINFO files customizations
* Adding xconf entries and running xconfmanager
* Java Language

## Define a new table component

### Define a new table id for new table component

The table id for new component is”customTask.resultingItems”.

### Register a table view class for the new table

The table views lited below are the default table views defined for change tables designed to be rendered in workflow pages.

|  |  |
| --- | --- |
| Table | View Class |
| Resulting Object | com.ptc.windchill.enterprise.change2.tableViews.WorkflowTaskResultingItemsTableViews |
| Change Notice Summary | com.ptc.windchill.enterprise.change2.tableViews.WorkflowTaskChangeSummaryTableViews |

Register the appropriate table view to the new table by creating a new entry in the custom service.properties.xconf file. Refer to the Section 3.4 – How to add custom xconf entries for details on how to add xconf entries for registering a table view. You can extend the listed table view classes in case you need to change the behavior of the view.

<Service **context=**"default"

**name="**[**com**](http://ah-opengrok/s?path=com&project=x-24-M030)**.**[**ptc**](http://ah-opengrok/s?path=com/ptc&project=x-24-M030)**.**[**core**](http://ah-opengrok/s?path=com/ptc/core&project=x-24-M030)**.**[**htmlcomp**](http://ah-opengrok/s?path=com/ptc/core/htmlcomp&project=x-24-M030)**.**[**tableview**](http://ah-opengrok/s?path=com/ptc/core/htmlcomp/tableview&project=x-24-M030)**.**[**ConfigurableTable**](http://ah-opengrok/s?path=com/ptc/core/htmlcomp/tableview/ConfigurableTable&project=x-24-M030)**">**

<Option serviceClass=

"com.ptc.windchill.enterprise.change2.tableViews.WorkflowTaskResultingItemsTableViews" selector="customTask.resultingItems"

requestor="[java](http://ah-opengrok/s?path=java&project=x-24-M030).[lang](http://ah-opengrok/s?path=java/lang&project=x-24-M030).[Object](http://ah-opengrok/s?path=java/lang/Object&project=x-24-M030)"/>

</Service>

Please refer to “Adding a Custom Service Provider Property File” section of “Best Practices for Adding New Packages and Files” in Windchill Help center for more details on creating custom xconf entries.

### Define action models for the new table component

The action model that defines the list of actions for tool bar actions and row object actions needs to be defined in custom-actionmodels.xml. The expected action model name for the table tool bar and row object actions should have follow the convention.

|  |  |  |
| --- | --- | --- |
| Component | Action Model Name | Example |
| Tool Bar | table id + “.table.view" | "customTask.resultingItems.table.view" |
| Row Object | table id + “.row.actions.view" | "customTask.resultingItems.row.actions.view" |

Note that if the action model for the row object actions is not defined, the default action model for the row object type will be used.

## Define workflow action for the new component

### Define an action as a component to be added in Workflow layouts.

An action needs to be defined for the new table component to be shown in workflow task pages. Note that the resource bundle entries for all custom actions should be defined in “com.ptc.windchill.enterprise.object.CustomRB” file. Refer to Section 3.4 on how to create a new resource bundle file.

<objecttype **name=**"object" **class=**"" **resourceBundle=**"com.ptc.windchill.enterprise.object.CustomRB">

<action **name=**"customTask\_ResultingDataTable">

<description>Resulting data table for a new workflow

task</description>

<component **name=**"workflowTask.pbo"

**urlParams=**"pboCompId=changeTask.resultingItemsTable&amp;useTypeBased=true&amp;changeableTableId=customTask.resultingItems&amp;changeableLabel= com.ptc.windchill.enterprise.object.CustomRB.CUSTOM\_TASK\_RESULTING\_ITEMS\_TABLE&amp;enableAddToWorkspace=true"/>

<includeFilter **name=**"configurableTypeBaseFilter"/>

</action>

|  |  |
| --- | --- |
| Tag Elements | Description |
| action | name - name for the new action for workflow pages. |
| component | name - Should be "workflowTask.pbo" which denotes it’s a subject(pbo) component on workflow pages. |
| urlParams | Parameters to build the new table component.   * pboCompId – the id of the component of subject(pbo). The below table refers to the pboCompId for resulting objects and summary table.  |  |  | | --- | --- | | component | pboCompId | | Resulting Object | “changeTask.resultingItemsTable” | | Change Summary | “[changeNotice.changeSummary](http://ah-opengrok/s?path=changeNotice.changeSummary&project=x-24-M030)”. |  * useTypeBased is true as both resulting object and summary table component are defiend as TypeBased. Refer to Workflow Task Configuration Guide for more details. * changeableTableId – The table id for the new component. Example for table id is ”customTask.resultingItems”. * changeableLabel= the resource bundle entry of title for the new table component.You need to add an entry in CustomRB * enableAddToWorkspace = flag that need to be passed for enabling add to workspace action on change tables. |
| includeFilter | * name - configurableTypeBaseFilter ; You need to add entries to type based action filter properties if the component needs to be filtered by type. Refer to Workflow Task Configuration Guide for more details. |

## How to add new resource bundle entries.

A new file needs to be created under <Windchill>/wtCustom/<custom-subdirectories>, (for instance CustomRB.java needs to be added under <Windchill>/wtCustom/com/ptc/windchill/enterprise/object folder), if a resource bundle does not exist for custom resource bundle entries.

Expected resource bundle entries for actions are

@[RBEntry](http://ah-opengrok/s?defs=RBEntry&project=x-24-M030)("Custom Resulting Objects")

@[RBComment](http://ah-opengrok/s?defs=RBComment&project=x-24-M030)("Used as the label for the action")

**public** **static** **final** [String](http://ah-opengrok/s?defs=String&project=x-24-M030) **[CUSTOM\_RESULTING\_DESC](http://ah-opengrok/s?refs=REVIEW_RESULTING_DESC&project=x-24-M030)** = "changeTask.customTask\_ResultingDataTable.description";

@[RBEntry](http://ah-opengrok/s?defs=RBEntry&project=x-24-M030)("Custom resulting objects")

@[RBComment](http://ah-opengrok/s?defs=RBComment&project=x-24-M030)("Used as the tooltip for the action")

**public** **static** **final** [String](http://ah-opengrok/s?defs=String&project=x-24-M030) **[CUSTOM\_RESULTING\_TOOLTIP](http://ah-opengrok/s?refs=REVIEW_RESULTING_TOOLTIP&project=x-24-M030)** = "changeTask.customTask\_ResultingDataTable.tooltip";

@[RBEntry](http://ah-opengrok/s?defs=RBEntry&project=x-24-M030)("Custom Resulting Objects")

@[RBComment](http://ah-opengrok/s?defs=RBComment&project=x-24-M030)("The table title for the custom resulting objects table on a custom workflow task.")

public static final [String](http://ah-opengrok/s?defs=String&project=x-24-M030) [CUSTOM\_TASK\_RESULTING\_ITEMS\_TABLE](http://ah-opengrok/s?refs=REVIEW_TASK_RESULTING_ITEMS_TABLE&project=x-24-M030) = "CUSTOM\_TASK\_RESULTING\_ITEMS\_TABLE";

Please refer to **“Compiling Custom Classes”** section of **“Best Practices for Adding New Packages and Files”** in **Windchill Help center** for more details on creating custom xconf entries.

## Add new action to Worflow Task Components List

Add the new action/component to respective action models as instructed in Workflow Task Configuration Guide in order to make the component an available component to be rendered in workflow task pages.

## Build and Test

Once you compiled the new classes and propagated the xconf entries, restart the method server. You should be able to configure the new component via the workflow task form templates, so that the component is rendered in the specified workflow task pages.