

➤ Topic: **Difference between Code Activity and Plugin**

Sources: <https://softchief.com/2021/06/08/plugin-v-s-custom-workflow-in-dynamics-365/>
<https://balugajjala.wordpress.com/2017/02/21/difference-between-custom-workflow-and-plugin/>
<https://carldesouza.com/dynamics-crm-workflows-vs-plugins/>
<https://cloudblogs.microsoft.com/dynamics365/no-audience/2010/06/25/plugin-vs-workflows-in-microsoft-dynamics-crm/>

Explanation:

<i>Custom Work Flow</i>	<i>Plug-in</i>
Custom Workflow triggers are limited for record changes which are: Create, Update, Status Change, Delete and assign.	When using Plugins, we have a number of triggers available from the Message options that activates the plugin execution
Workflows and by extension, custom workflow activities, execute totally asynchronously.	Plugins can execute both asynchronously and synchronously.
Takes longer in execution	Less execution time and is totally preferred if validations are required to be performed
Workflows can be manually executed, or automatically triggered by selected events. Workflows can be limited to automatically execute within specific organizational scopes (ie. Org, BU, Parent and Child BUs, or for the Owner only).	Plugins are always triggered by the messages to which they're subscribed, though some Messages allow limiting execution based on whether certain attributes have been passed into the Message.
Workflows can be turned off (by unpublishing).	Plugins are always on.
No Timeout restrictions	Timeout after 2 minutes
Good for long running codes	Good for short logic which executes faster
Can be called on-demand to execute	Can't be called on-demand
Can't run offline	Can run offline
Custom workflows are preferred when the requirement is more focused on flexibility and functionality re-usability.	Plugins are more preferred when the requirement is more focused on speed of execution, security of process, validity of data.