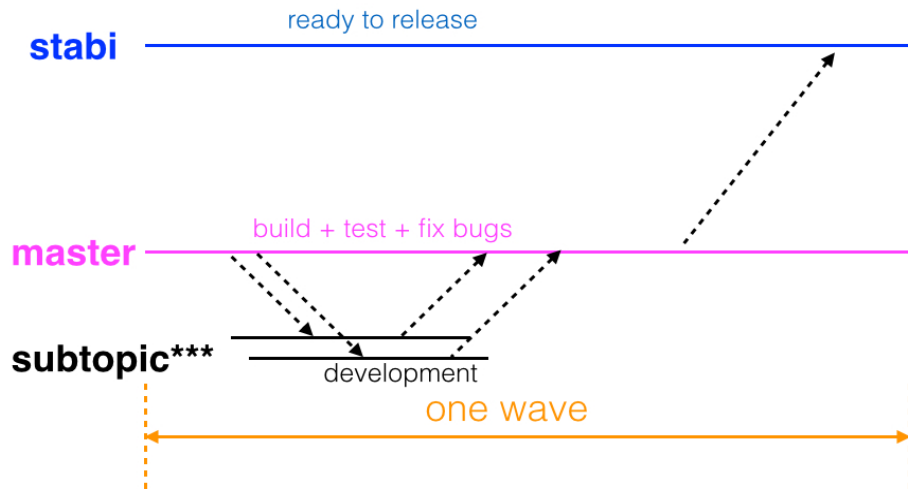


Branch-Based & Flag-Based

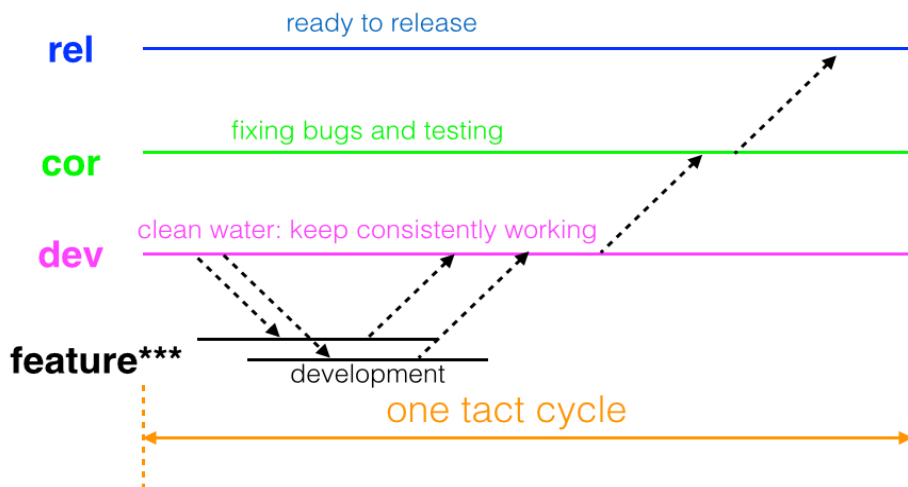
Group		KPI	Feature flag-based	Branch-based
1	One code line (From Gerrit)	Average TAT (Turn Around Time)	<p>For each sub-topic branch: time between two merges into master branch.</p> <p>For a whole turnaround: the cycle within which each sub-topic branch got merged into master branch at least once.</p>	<p>For each sub-topic branch: from the feature branch checking out dev branch until it's merged back to dev branch ("end of dev").</p> <p>For a whole turnaround (2 possibilities):</p> <ol style="list-style-type: none"> for all feature branches required for one release, the duration between the 1st and last merge into dev branch. from "Start of Dev" until "End of Dev" (if they are not hard deadline but depend on if a task is finished or not?)
		Success rates	# of commits merged into master branch	# of commits merged into dev branch
		Average build time	The build time on master branch (total build time/# of non-trivial patch-sets)	The build time on dev branch (total build time/# of non-trivial patch-sets)
		Size of merge commit (Indication of effort)	X	X
2	High velocity (From Git)	Average LOC	X	X
		Average build time	X	X
		Success rate per subtopic/feature branch	X	X
3	Frequent delivery (From JIRA)	# of cherry-pick	X	X
		Regression rate of cherry-pick fixes	X	X
		Incoming and outgoing defect rate	X	X

Flag-based Development Process



Each feature branch works separately. Check in to the master branch at anytime. If not complete, set the flag “off”. Until all subtopic branches set the flag “on”. One turnaround is done.

Branch-based Development Process



Each feature branch works on its own task separately. Check in to the dev branch until the whole feature is completed.