package com.twitter.frigate.pushservice.params

import com.twitter.finagle.stats.StatsReceiver

import com.twitter.frigate.common.util.{FeatureSwitchParams => Common}

import com.twitter.frigate.pushservice.params.{PushFeatureSwitchParams => Pushservice}

import com.twitter.logging.Logger

import com.twitter.servo.decider.DeciderGateBuilder

import com.twitter.timelines.configapi.BaseConfigBuilder

import com.twitter.timelines.configapi.FeatureSwitchOverrideUtil

import com.twitter.timelines.configapi.decider.DeciderUtils

case class PushFeatureSwitches(

deciderGateBuilder: DeciderGateBuilder,

statsReceiver: StatsReceiver) {

private[this] val logger = Logger(classOf[PushFeatureSwitches])

private[this] val stat = statsReceiver.scope("PushFeatureSwitches")

private val booleanDeciderOverrides = DeciderUtils.getBooleanDeciderOverrides(

deciderGateBuilder,

PushParams.DisableAllRelevanceParam,

PushParams.DisableHeavyRankingParam,

PushParams.RestrictLightRankingParam,

PushParams.UTEGTweetCandidateSourceParam,

PushParams.EnableWritesToNotificationServiceParam,

PushParams.EnableWritesToNotificationServiceForAllEmployeesParam,

PushParams.EnableWritesToNotificationServiceForEveryoneParam,

PushParams.EnablePromptFeedbackFatigueResponseNoPredicate,

PushParams.EarlyBirdSCBasedCandidatesParam,

PushParams.MRTweetFavRecsParam,

PushParams.MRTweetRetweetRecsParam,

PushParams.EnablePushSendEventBus,

PushParams.DisableMlInFilteringParam,

PushParams.DownSampleLightRankingScribeCandidatesParam,

PushParams.EnableMrRequestScribing,

PushParams.EnableHighQualityCandidateScoresScribing,

PushParams.EnablePnegMultimodalPredictionForF1Tweets,

PushParams.EnableScribeOonFavScoreForF1Tweets,

PushParams.EnableMrUserSemanticCoreFeaturesHydration,

PushParams.EnableMrUserSemanticCoreNoZeroFeaturesHydration,

PushParams.EnableHtlOfflineUserAggregatesExtendedHydration,

PushParams.EnableNerErgFeatureHydration,

PushParams.EnableDaysSinceRecentResurrectionFeatureHydration,

PushParams.EnableUserPastAggregatesFeatureHydration,

PushParams.EnableMrUserSimclusterV2020FeaturesHydration,

PushParams.EnableMrUserSimclusterV2020NoZeroFeaturesHydration,

PushParams.EnableTopicEngagementRealTimeAggregatesFeatureHydration,

PushParams.EnableUserTopicAggregatesFeatureHydration,

PushParams.EnableHtlUserAuthorRTAFeaturesFromFeatureStoreHydration,

PushParams.EnableDurationSinceLastVisitFeatures,

PushParams.EnableTweetAnnotationFeaturesHydration,

PushParams.EnableSpaceVisibilityLibraryFiltering,

PushParams.EnableUserTopicFollowFeatureSetHydration,

PushParams.EnableOnboardingNewUserFeatureSetHydration,

PushParams.EnableMrUserAuthorSparseContFeatureSetHydration,

PushParams.EnableMrUserTopicSparseContFeatureSetHydration,

PushParams.EnableUserPenguinLanguageFeatureSetHydration,

PushParams.EnableMrUserHashspaceEmbeddingFeatureHydration,

PushParams.EnableMrUserEngagedTweetTokensFeatureHydration,

PushParams.EnableMrCandidateTweetTokensFeatureHydration,

PushParams.EnableMrTweetSentimentFeatureHydration,

PushParams.EnableMrTweetAuthorAggregatesFeatureHydration,

PushParams.EnableUserGeoFeatureSetHydration,

PushParams.EnableAuthorGeoFeatureSetHydration,

PushParams.EnableTwHINUserEngagementFeaturesHydration,

PushParams.EnableTwHINUserFollowFeaturesHydration,

PushParams.EnableTwHINAuthorFollowFeaturesHydration,

PushParams.EnableAuthorFollowTwhinEmbeddingFeatureHydration,

PushParams.RampupUserGeoFeatureSetHydration,

PushParams.RampupAuthorGeoFeatureSetHydration,

PushParams.EnablePredicateDetailedInfoScribing,

PushParams.EnablePushCapInfoScribing,

PushParams.EnableUserSignalLanguageFeatureHydration,

PushParams.EnableUserPreferredLanguageFeatureHydration,

PushParams.PopGeoCandidatesDecider,

PushParams.TrendsCandidateDecider,

PushParams.EnableInsTrafficDecider,

PushParams.EnableModelBasedPushcapAssignments,

PushParams.TripGeoTweetCandidatesDecider,

PushParams.ContentRecommenderMixerAdaptorDecider,

PushParams.GenericCandidateAdaptorDecider,

PushParams.TripGeoTweetContentMixerDarkTrafficDecider,

PushParams.EnableIsTweetTranslatableCheck,

PushParams.EnableMrTweetSimClusterFeatureHydration,

PushParams.EnableTwistlyAggregatesFeatureHydration,

PushParams.EnableTweetTwHINFavFeatureHydration,

PushParams.EnableRealGraphV2FeatureHydration,

PushParams.EnableTweetBeTFeatureHydration,

PushParams.EnableMrOfflineUserTweetTopicAggregateHydration,

PushParams.EnableMrOfflineUserTweetSimClusterAggregateHydration,

PushParams.EnableUserSendTimeFeatureHydration,

PushParams.EnableMrUserUtcSendTimeAggregateFeaturesHydration,

PushParams.EnableMrUserLocalSendTimeAggregateFeaturesHydration,

PushParams.EnableBqmlReportModelPredictionForF1Tweets,

PushParams.EnableUserTwhinEmbeddingFeatureHydration,

PushParams.EnableScribingMLFeaturesAsDataRecord,

PushParams.EnableAuthorVerifiedFeatureHydration,

PushParams.EnableAuthorCreatorSubscriptionFeatureHydration,

PushParams.EnableDirectHydrationForUserFeatures

)

private val intFeatureSwitchOverrides = FeatureSwitchOverrideUtil.getBoundedIntFSOverrides(

Pushservice.SportsMaxNumberOfPushesInIntervalPerEvent,

Pushservice.SportsMaxNumberOfPushesInInterval,

Pushservice.PushMixerMaxResults,

Pushservice.MaxTrendTweetNotificationsInDuration,

Pushservice.MaxRecommendedTrendsToQuery,

Pushservice.NumberOfMaxEarlybirdInNetworkCandidatesParam,

Pushservice.NumberOfMaxCandidatesToBatchInRFPHTakeStep,

Pushservice.MaxMrPushSends24HoursParam,

Pushservice.MaxMrPushSends24HoursNtabOnlyUsersParam,

Pushservice.NumberOfMaxCrMixerCandidatesParam,

Pushservice.RestrictStepSize,

Pushservice.MagicFanoutRankErgThresholdHeavy,

Pushservice.MagicFanoutRankErgThresholdNonHeavy,

Pushservice.MagicFanoutRelaxedEventIdFatigueIntervalInHours,

Pushservice.NumberOfMaxUTEGCandidatesQueriedParam,

Pushservice.HTLVisitFatigueTime,

Pushservice.MaxOnboardingPushInInterval,

Pushservice.MaxTopTweetsByGeoPushGivenInterval,

Pushservice.MaxHighQualityTweetsPushGivenInterval,

Pushservice.MaxTopTweetsByGeoCandidatesToTake,

Pushservice.SpaceRecsRealgraphThreshold,

Pushservice.SpaceRecsGlobalPushLimit,

Pushservice.OptoutExptPushCapParam,

Pushservice.MaxTopTweetImpressionsNotifications,

Pushservice.TopTweetImpressionsMinRequired,

Pushservice.TopTweetImpressionsThreshold,

Pushservice.TopTweetImpressionsOriginalTweetsNumDaysSearch,

Pushservice.TopTweetImpressionsMinNumOriginalTweets,

Pushservice.TopTweetImpressionsMaxFavoritesPerTweet,

Pushservice.TopTweetImpressionsTotalInboundFavoritesLimit,

Pushservice.TopTweetImpressionsTotalFavoritesLimitNumDaysSearch,

Pushservice.TopTweetImpressionsRecentTweetsByAuthorStoreMaxResults,

Pushservice.ANNEfQuery,

Pushservice.NumberOfMaxMrModelingBasedCandidates,

Pushservice.ThresholdOfFavMrModelingBasedCandidates,

Pushservice.LightRankingNumberOfCandidatesParam,

Pushservice.NumberOfDeTopicTweetCandidates,

Pushservice.NumberOfMaxDeTopicTweetCandidatesReturned,

Pushservice.OverrideNotificationsMaxNumOfSlots,

Pushservice.OverrideNotificationsMaxCountForNTab,

Pushservice.MFMaxNumberOfPushesInInterval,

Pushservice.SpacesTopKSimClusterCount,

Pushservice.SpaceRecsSimClusterUserMinimumFollowerCount,

Pushservice.OONSpaceRecsPushLimit,

Pushservice.MagicFanoutRealgraphRankThreshold,

Pushservice.CustomizedPushCapOffset,

Pushservice.NumberOfF1CandidatesThresholdForOONBackfill,

Pushservice.MinimumAllowedAuthorAccountAgeInHours,

Pushservice.RestrictedMinModelPushcap,

Pushservice.ListRecommendationsGeoHashLength,

Pushservice.ListRecommendationsSubscriberCount,

Pushservice.MaxListRecommendationsPushGivenInterval,

Pushservice.SendTimeByUserHistoryMaxOpenedThreshold,

Pushservice.SendTimeByUserHistoryNoSendsHours,

Pushservice.SendTimeByUserHistoryQuickSendBeforeHours,

Pushservice.SendTimeByUserHistoryQuickSendAfterHours,

Pushservice.SendTimeByUserHistoryQuickSendMinDurationInMinute,

Pushservice.SendTimeByUserHistoryNoSendMinDuration,

Pushservice.F1EmojiCopyNumOfPushesFatigue,

Pushservice.OonEmojiCopyNumOfPushesFatigue,

Pushservice.TripTweetMaxTotalCandidates,

Pushservice.InlineFeedbackSubstitutePosition,

Pushservice.HighQualityCandidatesNumberOfCandidates,

Pushservice.HighQualityCandidatesMinNumOfCandidatesToFallback,

Pushservice.ProductLaunchMaxNumberOfPushesInInterval,

Pushservice.CreatorSubscriptionPushMaxNumberOfPushesInInterval,

Pushservice.NewCreatorPushMaxNumberOfPushesInInterval,

Pushservice.TweetReplytoLikeRatioReplyCountThreshold,

Pushservice.MaxExploreVideoTweets,

)

private val doubleFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getBoundedDoubleFSOverrides(

Pushservice.PercentileThresholdCohort1,

Pushservice.PercentileThresholdCohort2,

Pushservice.PercentileThresholdCohort3,

Pushservice.PercentileThresholdCohort4,

Pushservice.PercentileThresholdCohort5,

Pushservice.PercentileThresholdCohort6,

Pushservice.PnsfwTweetTextThreshold,

Pushservice.PnsfwTweetTextBucketingThreshold,

Pushservice.PnsfwTweetMediaThreshold,

Pushservice.PnsfwTweetImageThreshold,

Pushservice.PnsfwQuoteTweetThreshold,

Pushservice.PnsfwTweetMediaBucketingThreshold,

Pushservice.AgathaCalibratedNSFWThreshold,

Pushservice.AgathaCalibratedNSFWThresholdForMrTwistly,

Pushservice.AgathaTextNSFWThreshold,

Pushservice.AgathaTextNSFWThresholdForMrTwistly,

Pushservice.AgathaCalibratedNSFWBucketThreshold,

Pushservice.AgathaTextNSFWBucketThreshold,

Pushservice.BucketOptoutThresholdParam,

Pushservice.TweetMediaSensitiveCategoryThresholdParam,

Pushservice.CandidateGenerationModelCosineThreshold,

Pushservice.MrModelingBasedCandidatesTopicScoreThreshold,

Pushservice.HashspaceCandidatesTopicScoreThreshold,

Pushservice.FrsTweetCandidatesTopicScoreThreshold,

Pushservice.TopicProofTweetCandidatesTopicScoreThreshold,

Pushservice.SpacesTargetingSimClusterDotProductThreshold,

Pushservice.SautOonWithMediaTweetLengthThresholdParam,

Pushservice.NonSautOonWithMediaTweetLengthThresholdParam,

Pushservice.SautOonWithoutMediaTweetLengthThresholdParam,

Pushservice.NonSautOonWithoutMediaTweetLengthThresholdParam,

Pushservice.ArgfOonWithMediaTweetWordLengthThresholdParam,

Pushservice.EsfthOonWithMediaTweetWordLengthThresholdParam,

Pushservice.BqmlQualityModelPredicateThresholdParam,

Pushservice.LightRankingScribeCandidatesDownSamplingParam,

Pushservice.QualityUprankingBoostForHeavyRankingParam,

Pushservice.QualityUprankingSigmoidBiasForHeavyRankingParam,

Pushservice.QualityUprankingSigmoidWeightForHeavyRankingParam,

Pushservice.QualityUprankingLinearBarForHeavyRankingParam,

Pushservice.QualityUprankingBoostForHighQualityProducersParam,

Pushservice.QualityUprankingDownboostForLowQualityProducersParam,

Pushservice.BqmlHealthModelPredicateFilterThresholdParam,

Pushservice.BqmlHealthModelPredicateBucketThresholdParam,

Pushservice.PNegMultimodalPredicateModelThresholdParam,

Pushservice.PNegMultimodalPredicateBucketThresholdParam,

Pushservice.SeeLessOftenF1TriggerF1PushCapWeight,

Pushservice.SeeLessOftenF1TriggerNonF1PushCapWeight,

Pushservice.SeeLessOftenNonF1TriggerF1PushCapWeight,

Pushservice.SeeLessOftenNonF1TriggerNonF1PushCapWeight,

Pushservice.SeeLessOftenTripHqTweetTriggerF1PushCapWeight,

Pushservice.SeeLessOftenTripHqTweetTriggerNonF1PushCapWeight,

Pushservice.SeeLessOftenTripHqTweetTriggerTripHqTweetPushCapWeight,

Pushservice.SeeLessOftenNtabOnlyNotifUserPushCapWeight,

Pushservice.PromptFeedbackF1TriggerF1PushCapWeight,

Pushservice.PromptFeedbackF1TriggerNonF1PushCapWeight,

Pushservice.PromptFeedbackNonF1TriggerF1PushCapWeight,

Pushservice.PromptFeedbackNonF1TriggerNonF1PushCapWeight,

Pushservice.InlineFeedbackF1TriggerF1PushCapWeight,

Pushservice.InlineFeedbackF1TriggerNonF1PushCapWeight,

Pushservice.InlineFeedbackNonF1TriggerF1PushCapWeight,

Pushservice.InlineFeedbackNonF1TriggerNonF1PushCapWeight,

Pushservice.TweetNtabDislikeCountThresholdParam,

Pushservice.TweetNtabDislikeRateThresholdParam,

Pushservice.TweetNtabDislikeCountThresholdForMrTwistlyParam,

Pushservice.TweetNtabDislikeRateThresholdForMrTwistlyParam,

Pushservice.TweetNtabDislikeCountBucketThresholdParam,

Pushservice.MinAuthorSendsThresholdParam,

Pushservice.MinTweetSendsThresholdParam,

Pushservice.AuthorDislikeRateThresholdParam,

Pushservice.AuthorReportRateThresholdParam,

Pushservice.FavOverSendThresholdParam,

Pushservice.SpreadControlRatioParam,

Pushservice.TweetQTtoNtabClickRatioThresholdParam,

Pushservice.TweetReplytoLikeRatioThresholdLowerBound,

Pushservice.TweetReplytoLikeRatioThresholdUpperBound,

Pushservice.AuthorSensitiveMediaFilteringThreshold,

Pushservice.AuthorSensitiveMediaFilteringThresholdForMrTwistly,

Pushservice.MrRequestScribingEpsGreedyExplorationRatio,

Pushservice.SeeLessOftenTopicTriggerTopicPushCapWeight,

Pushservice.SeeLessOftenTopicTriggerF1PushCapWeight,

Pushservice.SeeLessOftenTopicTriggerOONPushCapWeight,

Pushservice.SeeLessOftenF1TriggerTopicPushCapWeight,

Pushservice.SeeLessOftenOONTriggerTopicPushCapWeight,

Pushservice.SeeLessOftenDefaultPushCapWeight,

Pushservice.OverrideMaxSlotFnWeight,

Pushservice.QualityPredicateExplicitThresholdParam,

Pushservice.AuthorSensitiveScoreWeightInReranking,

Pushservice.BigFilteringThresholdParam,

Pushservice.NsfwScoreThresholdForF1Copy,

Pushservice.NsfwScoreThresholdForOONCopy,

Pushservice.HighOONCThresholdForCopy,

Pushservice.LowOONCThresholdForCopy,

Pushservice.UserDeviceLanguageThresholdParam,

Pushservice.UserInferredLanguageThresholdParam,

Pushservice.SpammyTweetOonThreshold,

Pushservice.SpammyTweetInThreshold,

Pushservice.SpammyTweetBucketingThreshold,

Pushservice.NumFollowerThresholdForHealthAndQualityFilters,

Pushservice.NumFollowerThresholdForHealthAndQualityFiltersPreranking,

Pushservice.SoftRankFactorForSubscriptionCreators,

Pushservice.MagicFanoutSimClusterDotProductHeavyUserThreshold,

Pushservice.MagicFanoutSimClusterDotProductNonHeavyUserThreshold

)

private val doubleSeqFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getDoubleSeqFSOverrides(

Pushservice.MfGridSearchThresholdsCohort1,

Pushservice.MfGridSearchThresholdsCohort2,

Pushservice.MfGridSearchThresholdsCohort3,

Pushservice.MfGridSearchThresholdsCohort4,

Pushservice.MfGridSearchThresholdsCohort5,

Pushservice.MfGridSearchThresholdsCohort6,

Pushservice.MrPercentileGridSearchThresholdsCohort1,

Pushservice.MrPercentileGridSearchThresholdsCohort2,

Pushservice.MrPercentileGridSearchThresholdsCohort3,

Pushservice.MrPercentileGridSearchThresholdsCohort4,

Pushservice.MrPercentileGridSearchThresholdsCohort5,

Pushservice.MrPercentileGridSearchThresholdsCohort6,

Pushservice.GlobalOptoutThresholdParam,

Pushservice.BucketOptoutSlotThresholdParam,

Pushservice.BqmlQualityModelBucketThresholdListParam,

Pushservice.SeeLessOftenListOfDayKnobs,

Pushservice.SeeLessOftenListOfPushCapWeightKnobs,

Pushservice.SeeLessOftenListOfPowerKnobs,

Pushservice.PromptFeedbackListOfDayKnobs,

Pushservice.PromptFeedbackListOfPushCapWeightKnobs,

Pushservice.PromptFeedbackListOfPowerKnobs,

Pushservice.InlineFeedbackListOfDayKnobs,

Pushservice.InlineFeedbackListOfPushCapWeightKnobs,

Pushservice.InlineFeedbackListOfPowerKnobs,

Pushservice.OverrideMaxSlotFnPushCapKnobs,

Pushservice.OverrideMaxSlotFnPowerKnobs,

Pushservice.OverrideMaxSlotFnPushCapKnobs,

Pushservice.MagicRecsRelevanceScoreRange,

Pushservice.MagicFanoutRelevanceScoreRange,

Pushservice.MultilingualPnsfwTweetTextBucketingThreshold,

Pushservice.MultilingualPnsfwTweetTextFilteringThreshold,

)

private val booleanFeatureSwitchOverrides = FeatureSwitchOverrideUtil.getBooleanFSOverrides(

Pushservice.EnablePushRecommendationsParam,

Pushservice.DisableHeavyRankingModelFSParam,

Pushservice.EnablePushMixerReplacingAllSources,

Pushservice.EnablePushMixerReplacingAllSourcesWithControl,

Pushservice.EnablePushMixerReplacingAllSourcesWithExtra,

Pushservice.EnablePushMixerSource,

Common.EnableScheduledSpaceSpeakers,

Common.EnableScheduledSpaceSubscribers,

Pushservice.MagicFanoutNewsUserGeneratedEventsEnable,

Pushservice.MagicFanoutSkipAccountCountryPredicate,

Pushservice.MagicFanoutNewsEnableDescriptionCopy,

Pushservice.EnableF1TriggerSeeLessOftenFatigue,

Pushservice.EnableNonF1TriggerSeeLessOftenFatigue,

Pushservice.AdjustTripHqTweetTriggeredNtabCaretClickFatigue,

Pushservice.EnableCuratedTrendTweets,

Pushservice.EnableNonCuratedTrendTweets,

Pushservice.DisableMlInFilteringFeatureSwitchParam,

Pushservice.EnableTopicCopyForMF,

Pushservice.EnableTopicCopyForImplicitTopics,

Pushservice.EnableRestrictStep,

Pushservice.EnableHighPriorityPush,

Pushservice.BoostCandidatesFromSubscriptionCreators,

Pushservice.SoftRankCandidatesFromSubscriptionCreators,

Pushservice.EnableNewMROONCopyForPush,

Pushservice.EnableQueryAuthorMediaRepresentationStore,

Pushservice.EnableProfanityFilterParam,

Pushservice.EnableAbuseStrikeTop2PercentFilterSimCluster,

Pushservice.EnableAbuseStrikeTop1PercentFilterSimCluster,

Pushservice.EnableAbuseStrikeTop05PercentFilterSimCluster,

Pushservice.EnableAgathaUserHealthModelPredicate,

Pushservice.PnsfwTweetMediaFilterOonOnly,

Pushservice.EnableHealthSignalStorePnsfwTweetTextPredicate,

Pushservice.EnableHealthSignalStoreMultilingualPnsfwTweetTextPredicate,

Pushservice.DisableHealthFiltersForCrMixerCandidates,

Pushservice.EnableOverrideNotificationsForAndroid,

Pushservice.EnableOverrideNotificationsForIos,

Pushservice.EnableMrRequestScribingForTargetFiltering,

Pushservice.EnableMrRequestScribingForCandidateFiltering,

Pushservice.EnableMrRequestScribingWithFeatureHydrating,

Pushservice.EnableFlattenMrRequestScribing,

Pushservice.EnableMrRequestScribingForEpsGreedyExploration,

Pushservice.EnableMrRequestScribingDismissScore,

Pushservice.EnableMrRequestScribingBigFilteringSupervisedScores,

Pushservice.EnableMrRequestScribingBigFilteringRLScores,

Pushservice.EnableEventPrimaryMediaAndroid,

Pushservice.EnableEventSquareMediaIosMagicFanoutNewsEvent,

Pushservice.EnableEventSquareMediaAndroid,

Pushservice.EnableMagicFanoutNewsForYouNtabCopy,

Pushservice.EnableMfGeoTargeting,

Pushservice.EnableRuxLandingPage,

Pushservice.EnableNTabRuxLandingPage,

Pushservice.EnableGraduallyRampUpNotification,

Pushservice.EnableOnboardingPushes,

Pushservice.EnableAddressBookPush,

Pushservice.EnableCompleteOnboardingPush,

Pushservice.EnableOverrideNotificationsSmartPushConfigForAndroid,

Pushservice.DisableOnboardingPushFatigue,

Pushservice.EnableTopTweetsByGeoCandidates,

Pushservice.BackfillRankTopTweetsByGeoCandidates,

Pushservice.PopGeoTweetEnableAggressiveThresholds,

Pushservice.EnableMrMinDurationSinceMrPushFatigue,

Pushservice.EnableF1FromProtectedTweetAuthors,

Pushservice.MagicFanoutEnableCustomTargetingNewsEvent,

Pushservice.EnableSafeUserTweetTweetypieStore,

Pushservice.EnableMrMinDurationSinceMrPushFatigue,

Pushservice.EnableHydratingOnlineMRHistoryFeatures,

Common.SpaceRecsEnableHostNotifs,

Common.SpaceRecsEnableSpeakerNotifs,

Common.SpaceRecsEnableListenerNotifs,

Common.EnableMagicFanoutProductLaunch,

Pushservice.EnableTopTweetsByGeoCandidatesForDormantUsers,

Pushservice.EnableOverrideNotificationsScoreBasedOverride,

Pushservice.EnableOverrideNotificationsMultipleTargetIds,

Pushservice.EnableMinDurationModifier,

Pushservice.EnableMinDurationModifierV2,

Pushservice.EnableMinDurationModifierByUserHistory,

Pushservice.EnableQueryUserOpenedHistory,

Pushservice.EnableRandomHourForQuickSend,

Pushservice.EnableFrsCandidates,

Pushservice.EnableFrsTweetCandidatesTopicSetting,

Pushservice.EnableFrsTweetCandidatesTopicAnnotation,

Pushservice.EnableFrsTweetCandidatesTopicCopy,

Pushservice.EnableCandidateGenerationModelParam,

Pushservice.EnableOverrideForSportsCandidates,

Pushservice.EnableEventIdBasedOverrideForSportsCandidates,

Pushservice.EnableMrModelingBasedCandidates,

Pushservice.EnableMrModelingBasedCandidatesTopicSetting,

Pushservice.EnableMrModelingBasedCandidatesTopicAnnotation,

Pushservice.EnableMrModelingBasedCandidatesTopicCopy,

Pushservice.EnableResultFromFrsCandidates,

Pushservice.EnableHashspaceCandidates,

Pushservice.EnableHashspaceCandidatesTopicSetting,

Pushservice.EnableHashspaceCandidatesTopicAnnotation,

Pushservice.EnableHashspaceCandidatesTopicCopy,

Pushservice.EnableResultFromHashspaceCandidates,

Pushservice.EnableDownRankOfNewUserPlaybookTopicFollowPush,

Pushservice.EnableDownRankOfNewUserPlaybookTopicTweetPush,

Pushservice.EnableTopTweetImpressionsNotification,

Pushservice.EnableLightRankingParam,

Pushservice.EnableRandomBaselineLightRankingParam,

Pushservice.EnableQualityUprankingForHeavyRankingParam,

Pushservice.EnableQualityUprankingCrtScoreStatsForHeavyRankingParam,

Pushservice.EnableProducersQualityBoostingForHeavyRankingParam,

Pushservice.EnableMrScribingMLFeaturesAsFeatureMapForStaging,

Pushservice.EnableMrTweetSentimentFeatureHydrationFS,

Pushservice.EnableTimelineHealthSignalHydration,

Pushservice.EnableTopicEngagementRealTimeAggregatesFS,

Pushservice.EnableMrUserSemanticCoreFeatureForExpt,

Pushservice.EnableHydratingRealGraphTargetUserFeatures,

Pushservice.EnableHydratingUserDurationSinceLastVisitFeatures,

Pushservice.EnableRealGraphUserAuthorAndSocialContxtFeatureHydration,

Pushservice.EnableUserTopicAggregatesFS,

Pushservice.EnableTimelineHealthSignalHydrationForModelTraining,

Pushservice.EnableMrUserSocialContextAggregateFeatureHydration,

Pushservice.EnableMrUserSemanticCoreAggregateFeatureHydration,

Pushservice.EnableMrUserCandidateSparseOfflineAggregateFeatureHydration,

Pushservice.EnableMrUserCandidateOfflineAggregateFeatureHydration,

Pushservice.EnableMrUserCandidateOfflineCompactAggregateFeatureHydration,

Pushservice.EnableMrUserAuthorOfflineAggregateFeatureHydration,

Pushservice.EnableMrUserAuthorOfflineCompactAggregateFeatureHydration,

Pushservice.EnableMrUserOfflineCompactAggregateFeatureHydration,

Pushservice.EnableMrUserSimcluster2020AggregateFeatureHydration,

Pushservice.EnableMrUserOfflineAggregateFeatureHydration,

Pushservice.EnableBqmlQualityModelPredicateParam,

Pushservice.EnableBqmlQualityModelScoreHistogramParam,

Pushservice.EnableBqmlHealthModelPredicateParam,

Pushservice.EnableBqmlHealthModelPredictionForInNetworkCandidatesParam,

Pushservice.EnableBqmlHealthModelScoreHistogramParam,

Pushservice.EnablePNegMultimodalPredicateParam,

Pushservice.EnableNegativeKeywordsPredicateParam,

Pushservice.EnableTweetAuthorAggregatesFeatureHydrationParam,

Pushservice.OonTweetLengthPredicateUpdatedMediaLogic,

Pushservice.OonTweetLengthPredicateUpdatedQuoteTweetLogic,

Pushservice.OonTweetLengthPredicateMoreStrictForUndefinedLanguages,

Pushservice.EnablePrerankingTweetLengthPredicate,

Pushservice.EnableDeTopicTweetCandidates,

Pushservice.EnableDeTopicTweetCandidateResults,

Pushservice.EnableDeTopicTweetCandidatesCustomTopics,

Pushservice.EnableDeTopicTweetCandidatesCustomLanguages,

Pushservice.EnableMrTweetSimClusterFeatureHydrationFS,

Pushservice.DisableOutNetworkTweetCandidatesFS,

Pushservice.EnableLaunchVideosInImmersiveExplore,

Pushservice.EnableStoringNtabGenericNotifKey,

Pushservice.EnableDeletingNtabTimeline,

Pushservice.EnableOverrideNotificationsNSlots,

Pushservice.EnableNslotsForOverrideOnNtab,

Pushservice.EnableOverrideMaxSlotFn,

Pushservice.EnableTargetIdInSmartPushPayloadForMagicFanoutSportsEvent,

Pushservice.EnableOverrideIdNTabRequest,

Pushservice.EnableOverrideForSpaces,

Pushservice.EnableTopicProofTweetRecs,

Pushservice.EnableHealthFiltersForTopicProofTweet,

Pushservice.EnableTargetIdsInSmartPushPayload,

Pushservice.EnableSecondaryAccountPredicateMF,

Pushservice.EnableInlineVideo,

Pushservice.EnableAutoplayForInlineVideo,

Pushservice.EnableOONGeneratedInlineActions,

Pushservice.EnableInlineFeedbackOnPush,

Pushservice.UseInlineActionsV1,

Pushservice.UseInlineActionsV2,

Pushservice.EnableFeaturedSpacesOON,

Pushservice.CheckFeaturedSpaceOON,

Pushservice.EnableGeoTargetingForSpaces,

Pushservice.EnableEmployeeOnlySpaceNotifications,

Pushservice.EnableSpacesTtlForNtab,

Pushservice.EnableCustomThreadIdForOverride,

Pushservice.EnableSimClusterTargetingSpaces,

Pushservice.TargetInInlineActionAppVisitFatigue,

Pushservice.EnableInlineActionAppVisitFatigue,

Pushservice.EnableThresholdOfFavMrModelingBasedCandidates,

Pushservice.HydrateMrUserSimclusterV2020InModelingBasedCG,

Pushservice.HydrateMrUserSemanticCoreInModelingBasedCG,

Pushservice.HydrateOnboardingInModelingBasedCG,

Pushservice.HydrateTopicFollowInModelingBasedCG,

Pushservice.HydrateMrUserTopicInModelingBasedCG,

Pushservice.HydrateMrUserAuthorInModelingBasedCG,

Pushservice.HydrateUserPenguinLanguageInModelingBasedCG,

Pushservice.EnableMrUserEngagedTweetTokensFeature,

Pushservice.HydrateMrUserHashspaceEmbeddingInModelingBasedCG,

Pushservice.HydrateUseGeoInModelingBasedCG,

Pushservice.EnableSpaceCohostJoinEvent,

Pushservice.EnableOONFilteringBasedOnUserSettings,

Pushservice.EnableContFnF1TriggerSeeLessOftenFatigue,

Pushservice.EnableContFnNonF1TriggerSeeLessOftenFatigue,

Pushservice.EnableContFnF1TriggerPromptFeedbackFatigue,

Pushservice.EnableContFnNonF1TriggerPromptFeedbackFatigue,

Pushservice.EnableContFnF1TriggerInlineFeedbackFatigue,

Pushservice.EnableContFnNonF1TriggerInlineFeedbackFatigue,

Pushservice.UseInlineDislikeForFatigue,

Pushservice.UseInlineDismissForFatigue,

Pushservice.UseInlineSeeLessForFatigue,

Pushservice.UseInlineNotRelevantForFatigue,

Pushservice.GPEnableCustomMagicFanoutCricketFatigue,

Pushservice.IncludeRelevanceScoreInIbis2Payload,

Pushservice.BypassGlobalSpacePushCapForSoftDeviceFollow,

Pushservice.EnableCountryCodeBackoffTopTweetsByGeo,

Pushservice.EnableNewCreatorPush,

Pushservice.EnableCreatorSubscriptionPush,

Pushservice.EnableInsSender,

Pushservice.EnableOptoutAdjustedPushcap,

Pushservice.EnableOONBackfillBasedOnF1Candidates,

Pushservice.EnableVFInTweetypie,

Pushservice.EnablePushPresentationVerifiedSymbol,

Pushservice.EnableHighPrioritySportsPush,

Pushservice.EnableSearchURLRedirectForSportsFanout,

Pushservice.EnableScoreFanoutNotification,

Pushservice.EnableExplicitPushCap,

Pushservice.EnableNsfwTokenBasedFiltering,

Pushservice.EnableRestrictedMinModelPushcap,

Pushservice.EnableGenericCRTBasedFatiguePredicate,

Pushservice.EnableCopyFeaturesForF1,

Pushservice.EnableEmojiInF1Copy,

Pushservice.EnableTargetInF1Copy,

Pushservice.EnableCopyFeaturesForOon,

Pushservice.EnableEmojiInOonCopy,

Pushservice.EnableTargetInOonCopy,

Pushservice.EnableF1CopyBody,

Pushservice.EnableOONCopyBody,

Pushservice.EnableIosCopyBodyTruncate,

Pushservice.EnableHTLBasedFatigueBasicRule,

Pushservice.EnableTargetAndEmojiSplitFatigue,

Pushservice.EnableNsfwCopy,

Pushservice.EnableOONCopyBody,

Pushservice.EnableTweetDynamicInlineActions,

Pushservice.EnablePushcapRefactor,

Pushservice.BigFilteringEnableHistogramsParam,

Pushservice.EnableTweetTranslation,

Pushservice.TripTweetCandidateReturnEnable,

Pushservice.EnableSocialContextForRetweet,

Pushservice.EnableEmptyBody,

Pushservice.EnableLocalViralTweets,

Pushservice.EnableExploreVideoTweets,

Pushservice.EnableDynamicInlineActionsForDesktopWeb,

Pushservice.EnableDynamicInlineActionsForMobileWeb,

Pushservice.EnableNTabEntriesForSportsEventNotifications,

Pushservice.EnableNTabFacePileForSportsEventNotifications,

Pushservice.DisableIsTargetBlueVerifiedPredicate,

Pushservice.EnableNTabEntriesForProductLaunchNotifications,

Pushservice.DisableIsTargetLegacyVerifiedPredicate,

Pushservice.EnableNTabOverrideForSportsEventNotifications,

Pushservice.EnableOONCBasedCopy,

Pushservice.HighQualityCandidatesEnableCandidateSource,

Pushservice.HighQualityCandidatesEnableFallback,

Pushservice.EnableTweetLanguageFilter,

Pushservice.EnableListRecommendations,

Pushservice.EnableIDSListRecommendations,

Pushservice.EnablePopGeoListRecommendations,

Pushservice.SkipLanguageFilterForMediaTweets,

Pushservice.EnableSpammyTweetFilter,

Pushservice.EnableTweetPushToHomeAndroid,

Pushservice.EnableTweetPushToHomeiOS,

Pushservice.EnableBoundedFeatureSetForSocialContext,

Pushservice.EnableStpBoundedFeatureSetForUserSocialContext,

Pushservice.EnableCoreUserHistoryBoundedFeatureSetForSocialContext,

Pushservice.SkipPostRankingFilters,

Pushservice.MRWebHoldbackParam,

Pushservice.EnableIsTargetSuperFollowCreatorPredicate

)

private val longSeqFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getLongSeqFSOverrides(

Pushservice.MagicFanoutEventAllowlistToSkipAccountCountryPredicate

)

private val longSetFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getLongSetFSOverrides(

Pushservice.ListOfAdhocIdsForStatsTracking

)

private val stringSeqFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getStringSeqFSOverrides(

Pushservice.ListOfCrtsForOpenApp,

Pushservice.ListOfCrtsToUpRank,

Pushservice.OONCandidatesDisabledCrTagParam,

Pushservice.ListOfCrtsToDownRank,

Pushservice.MagicFanoutDenyListedCountries,

Pushservice.GlobalOptoutModelParam,

Pushservice.BqmlQualityModelBucketModelIdListParam,

Pushservice.CommonRecommendationTypeDenyListPushHoldbacks,

Pushservice.TargetLevelFeatureListForMrRequestScribing,

Pushservice.MagicFanoutSportsEventDenyListedCountries,

Pushservice.MultilingualPnsfwTweetTextSupportedLanguages,

Pushservice.NegativeKeywordsPredicateDenylist,

Pushservice.TripTweetCandidateSourceIds,

Pushservice.NsfwTokensParam,

Pushservice.HighQualityCandidatesFallbackSourceIds

)

private val intSeqFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getIntSeqFSOverrides(

Pushservice.BucketOptoutSlotPushcapParam,

Pushservice.GeoHashLengthList,

Pushservice.MinDurationModifierStartHourList,

Pushservice.MinDurationModifierEndHourList,

Pushservice.MinDurationTimeModifierConst

)

private val enumFeatureSwitchOverrides = FeatureSwitchOverrideUtil.getEnumFSOverrides(

stat,

logger,

Pushservice.MRBoldTitleFavoriteAndRetweetParam,

Pushservice.QualityUprankingTransformTypeParam,

Pushservice.QualityPredicateIdParam,

Pushservice.BigFilteringNormalizationTypeIdParam,

Common.PushcapModelType,

Common.MFCricketTargetingPredicate,

Pushservice.RankingFunctionForTopTweetsByGeo,

Pushservice.TopTweetsByGeoCombinationParam,

Pushservice.PopGeoTweetVersionParam,

Pushservice.SubtextInAndroidPushHeaderParam,

Pushservice.HighOONCTweetFormat,

Pushservice.LowOONCTweetFormat,

)

private val enumSeqFeatureSwitchOverrides = FeatureSwitchOverrideUtil.getEnumSeqFSOverrides(

stat,

logger,

Pushservice.OONTweetDynamicInlineActionsList,

Pushservice.TweetDynamicInlineActionsList,

Pushservice.TweetDynamicInlineActionsListForWeb,

Pushservice.HighQualityCandidatesEnableGroups,

Pushservice.HighQualityCandidatesFallbackEnabledGroups,

Pushservice.OONCandidatesDisabledCrtGroupParam,

Pushservice.MultilingualPnsfwTweetTextBucketingModelList,

)

private val stringFeatureSwitchOverrides = FeatureSwitchOverrideUtil.getStringFSOverrides(

Common.PushcapModelPredictionVersion,

Pushservice.WeightedOpenOrNtabClickRankingModelParam,

Pushservice.WeightedOpenOrNtabClickFilteringModelParam,

Pushservice.BucketOptoutModelParam,

Pushservice.ScoringFuncForTopTweetsByGeo,

Pushservice.LightRankingModelTypeParam,

Pushservice.BigFilteringSupervisedSendingModelParam,

Pushservice.BigFilteringSupervisedWithoutSendingModelParam,

Pushservice.BigFilteringRLSendingModelParam,

Pushservice.BigFilteringRLWithoutSendingModelParam,

Pushservice.BqmlQualityModelTypeParam,

Pushservice.BqmlHealthModelTypeParam,

Pushservice.QualityUprankingModelTypeParam,

Pushservice.SearchURLRedirectForSportsFanout,

Pushservice.LocalViralTweetsBucket,

Pushservice.HighQualityCandidatesHeavyRankingModel,

Pushservice.HighQualityCandidatesNonPersonalizedQualityCnnModel,

Pushservice.HighQualityCandidatesBqmlNsfwModel,

Pushservice.HighQualityCandidatesBqmlReportModel,

Pushservice.ProductLaunchLandingPageDeepLink,

Pushservice.ProductLaunchTapThrough,

Pushservice.TweetLanguageFeatureNameParam

)

private val durationFeatureSwitchOverrides =

FeatureSwitchOverrideUtil.getBoundedDurationFSOverrides(

Common.NumberOfDaysToFilterMRForSeeLessOften,

Common.NumberOfDaysToReducePushCapForSeeLessOften,

Pushservice.NumberOfDaysToFilterForSeeLessOftenForF1TriggerF1,

Pushservice.NumberOfDaysToReducePushCapForSeeLessOftenForF1TriggerF1,

Pushservice.NumberOfDaysToFilterForSeeLessOftenForF1TriggerNonF1,

Pushservice.NumberOfDaysToReducePushCapForSeeLessOftenForF1TriggerNonF1,

Pushservice.NumberOfDaysToFilterForSeeLessOftenForNonF1TriggerF1,

Pushservice.NumberOfDaysToReducePushCapForSeeLessOftenForNonF1TriggerF1,

Pushservice.NumberOfDaysToFilterForSeeLessOftenForNonF1TriggerNonF1,

Pushservice.NumberOfDaysToReducePushCapForSeeLessOftenForNonF1TriggerNonF1,

Pushservice.TrendTweetNotificationsFatigueDuration,

Pushservice.MinDurationSincePushParam,

Pushservice.MFMinIntervalFatigue,

Pushservice.SimclusterBasedCandidateMaxTweetAgeParam,

Pushservice.DetopicBasedCandidateMaxTweetAgeParam,

Pushservice.F1CandidateMaxTweetAgeParam,

Pushservice.MaxTweetAgeParam,

Pushservice.ModelingBasedCandidateMaxTweetAgeParam,

Pushservice.GeoPopTweetMaxAgeInHours,

Pushservice.MinDurationSincePushParam,

Pushservice.GraduallyRampUpPhaseDurationDays,

Pushservice.MrMinDurationSincePushForOnboardingPushes,

Pushservice.FatigueForOnboardingPushes,

Pushservice.FrigateHistoryOtherNotificationWriteTtl,

Pushservice.FrigateHistoryTweetNotificationWriteTtl,

Pushservice.TopTweetsByGeoPushInterval,

Pushservice.HighQualityTweetsPushInterval,

Pushservice.MrMinDurationSincePushForTopTweetsByGeoPushes,

Pushservice.TimeSinceLastLoginForGeoPopTweetPush,

Pushservice.NewUserPlaybookAllowedLastLoginHours,

Pushservice.SpaceRecsAppFatigueDuration,

Pushservice.OONSpaceRecsFatigueDuration,

Pushservice.SpaceRecsFatigueMinIntervalDuration,

Pushservice.SpaceRecsGlobalFatigueDuration,

Pushservice.MinimumTimeSinceLastLoginForGeoPopTweetPush,

Pushservice.MinFatigueDurationSinceLastHTLVisit,

Pushservice.LastHTLVisitBasedNonFatigueWindow,

Pushservice.SpaceNotificationsTTLDurationForNTab,

Pushservice.OverrideNotificationsLookbackDurationForOverrideInfo,

Pushservice.OverrideNotificationsLookbackDurationForImpressionId,

Pushservice.OverrideNotificationsLookbackDurationForNTab,

Pushservice.TopTweetImpressionsNotificationInterval,

Pushservice.TopTweetImpressionsFatigueMinIntervalDuration,

Pushservice.MFPushIntervalInHours,

Pushservice.InlineActionAppVisitFatigue,

Pushservice.SpaceParticipantHistoryLastActiveThreshold,

Pushservice.SportsMinIntervalFatigue,

Pushservice.SportsPushIntervalInHours,

Pushservice.SportsMinIntervalFatiguePerEvent,

Pushservice.SportsPushIntervalInHoursPerEvent,

Pushservice.TargetNtabOnlyCapFatigueIntervalHours,

Pushservice.TargetPushCapFatigueIntervalHours,

Pushservice.CopyFeaturesHistoryLookbackDuration,

Pushservice.F1EmojiCopyFatigueDuration,

Pushservice.F1TargetCopyFatigueDuration,

Pushservice.OonEmojiCopyFatigueDuration,

Pushservice.OonTargetCopyFatigueDuration,

Pushservice.ProductLaunchPushIntervalInHours,

Pushservice.ExploreVideoTweetAgeParam,

Pushservice.ListRecommendationsPushInterval,

Pushservice.ProductLaunchMinIntervalFatigue,

Pushservice.NewCreatorPushIntervalInHours,

Pushservice.NewCreatorPushMinIntervalFatigue,

Pushservice.CreatorSubscriptionPushIntervalInHours,

Pushservice.CreatorSubscriptionPushhMinIntervalFatigue

)

private[params] val allFeatureSwitchOverrides =

booleanDeciderOverrides ++

booleanFeatureSwitchOverrides ++

intFeatureSwitchOverrides ++

doubleFeatureSwitchOverrides ++

doubleSeqFeatureSwitchOverrides ++

enumFeatureSwitchOverrides ++

stringSeqFeatureSwitchOverrides ++

stringFeatureSwitchOverrides ++

durationFeatureSwitchOverrides ++

intSeqFeatureSwitchOverrides ++

longSeqFeatureSwitchOverrides ++

enumSeqFeatureSwitchOverrides ++

longSetFeatureSwitchOverrides

val config = BaseConfigBuilder(allFeatureSwitchOverrides).build()

}