

# Advanced Settings

## Ecosystem Rewards Algorithm

The overall process to set up and deploy a dynamic recommender is detailed in the documentation [No Data Experiments - ecosystem.Ai](#) . Below are tooltips/explanations for the the Advanced Settings options that are not covered in the documentation

### Advanced: Settings

#### Spatial Related Settings

Test options across segment **1**

Cache Duration (Use 0 to ignore) **2**      Processing Window (Millis, eg one week: 604800000, 0 to ignore) **3**      Historical Count (Use 0 to ignore) **4**

Calendar **5**

Calendar: None

#### Repeated Interactions

Decay Parameter (Gamma of 1 for no decay) **6**      Max Interaction Count (Use 0 to ignore) **7**

### Advanced: Success and Fail Reward

#### Engagement Parameters

Epsilon **8**

Success Reward **9**      Prior Success Reward **10**

Fail Reward **11**      Prior Fail Reward **12**

1. If there are options that are configured to only be available for specific values of the contextual variables, electing to test options across segments will occasionally predict those options for contextual variable values where they are not available
2. The period for which it will be guaranteed that a customer will have the same option predicted if multiple predictions occur
3. Restricts the data used when the model updates based on a time period from the present going back a specified in milliseconds
4. Restricts the data used when the model updates based on a count of interactions. The count used is per offer and segment.
5. Select the user created calendar to link to the configuration. The calendar will restrict the data used to update the model to periods with similar social rituals
6. Used to treat repeated interactions from the same customer differently from one off interactions from individual customers. The weight of each interaction from a customer is reduced by a factor of one over the decay parameter, i.e. the latest interaction has a weight of one, the interaction before that has a weight of one over the decay parameter and the interaction before that has a weight of one over the decay parameter squared

7. Used to treat repeated interactions from the same customer differently from one off interactions from individual customers. Restricts the number of interactions from an individual customer that will be used when updating the model - the latest interactions will be used.
8. The portion of options which will be generated at random
9. The size of the increment to the alpha parameter of the beta distributions used in the Thompson Sampling when an interaction is successful. This impacts the rate of convergence.
10. The size of the increment to the alpha parameter of the beta distributions used in the Thompson Sampling when an interaction is successful in the historical data . Used when historical data is used to train the algorithm before deployment.
11. The size of the increment to the beta parameter of the beta distributions used in the Thompson Sampling when an interaction is not successful. This impacts the rate of convergence.
12. The size of the increment to the beta parameter of the beta distributions used in the Thompson Sampling when an interaction is not successful in the historical data . Used when historical data is used to train the algorithm before deployment.

## Bayesian Probabilistic Algorithm

Bayesian Probabilistic Algorithm ▾

The Bayesian Probabilistic and Naive Bayes techniques for constructing classifiers: models that assign class labels to problem instances, represented as vectors of feature values, where the class labels are drawn from some finite set. This algorithm is integrated into the ecosystem.Ai Client Pulse Responder as it uses scoring history and update values (as defined in project deployment) and train models in real-time. **1**

**Advanced: Settings** ^

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**Spatial Related Settings**

Test options across segment **2**

Cache Duration (Use 0 to ignore) **3**      Processing Window (Millis, eg one week: 604800000, 0 to ignore) **4**      Historical Count (Use 0 to ignore) **5**

Calendar **6** ▾

None

1. <To add to the end of the paragraph> All features in the linked feature store besides the response column and the customer key will be used when training the Naive Bayes model.
2. If there are options that are configured to only be available for specific values of the contextual variables, electing to test options across segments will occasionally predict those options for contextual variable values where they are not available
3. The period for which it will be guaranteed that a customer will have the same option predicted if multiple predictions occur

4. Restricts the data used when the model updates based on a time period from the present going back a specified in milliseconds
5. Restricts the data used when the model updates based on a count of interactions. The count used is per offer and segment.
6. Select the user created calendar to link to the configuration. The calendar will restrict the data used to update the model to periods with similar social rituals