

# Driving High Yield Campaigns with Call Optimization

## Executive Summary

As a contact center manager or system administrator, have you heard about call optimization, a.k.a., “Best Time To Call”, but haven’t felt this technology was right for you? Perhaps your operational model didn’t require faster list penetration or higher right party contact rates? Or perhaps you have been aware of the possible benefits of using call optimization but you haven’t had the time to explore how it works and what type of ROI it will deliver for your contact center.

Since it was first introduced in the 1990’s, call optimization has come a long way. The capabilities previously known as “Best Time to Call” were only the first generation. Today’s call optimization solution conducts sophisticated analysis on a wide spectrum of input factors and builds and executes automated, repeatable strategies based on the analysis results.

This white paper explains how the key patented call optimization capabilities in Aspect® Campaign Optimizer™ (available as a separate solution and as a fully integrated module within Aspect® Enterprise Campaign Manager™) work in conjunction with a unique heuristic scheduling algorithm to achieve the greatest overall productivity lift possible working within the boundaries of your contact center environment.

With Aspect Campaign Optimizer, your dialing strategy is guided by user-defined and system rules built using unique features and data sets such as Priority Parameters™, Adaptive Scheduling™, Demographic Default Probabilities™, Smart-Learn Database™ and Intelligent Number Rotation™. Aspect Campaign Optimizer dynamically learns from automated feedback on the call activities and continually optimizes and adjusts your calling strategy. The end results are proven, repeatable performance improvements that are of benefit to every type of customer service, collections, or telemarketing contact center – whether your staff is large or small, or you have lists of thousands or hundreds of thousands.

## Using Rules for Call Optimization

The Aspect® Campaign Optimizer™ Campaign Rules guide the data being input into the system, the transformation of the data through the internal and customer-driven rules and the data output. Each of these components plays a critical part in delivering increased contact center productivity.

### *Data Used as Input*

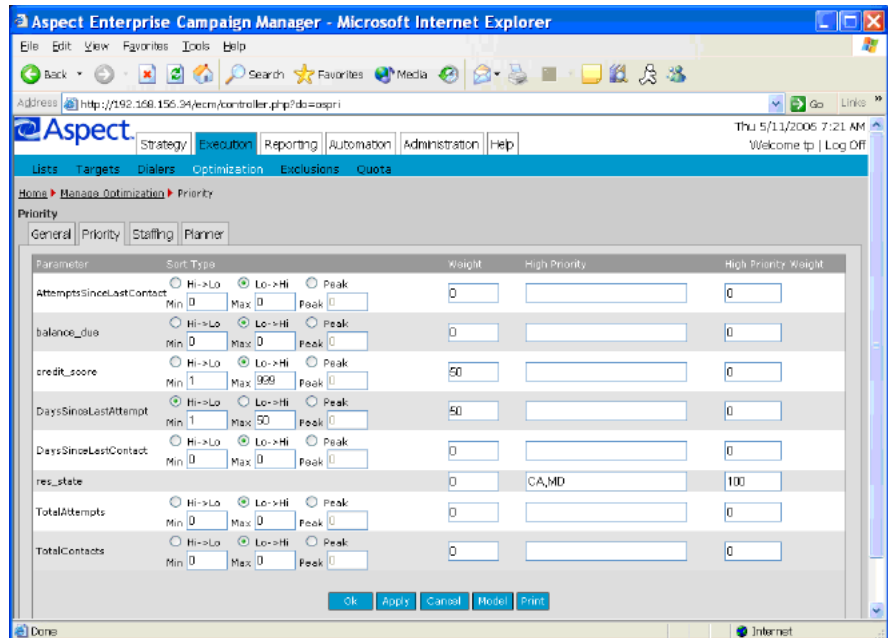
The data that is used within Aspect Campaign Optimizer include the accounts (with up to five phone numbers per account) to be processed for calling, user supplied variables and internal probability variables which have been calculated based on historical trends. These inputs work in cooperation with the user- and system-defined rules to create dialing strategies that enable you to reach the right person at the right time at the right number.

### *User-Defined Rules*

Aspect Campaign Optimizer enables you to build rules within the system based on their business process flow and goals. These rules are used to ultimately determine the dialing strategy by campaign.

- **Priority Parameters** - The priority parameter screen is used to set strategies to prioritize accounts within their best times to call. Any information included in the download record such as balance, credit score, or promise to pay score can be configured to be used as a Priority Parameter. Additional Aspect Campaign Optimizer-supplied information such as days since last contact can also be used. Multiple parameters can be used simultaneously with weighting to modify strategies. High Priority can be assigned to ranges of values or specific values and priorities can be sorted high to low or low to high.

## Priority parameters screen



- Staffing levels** - Aspect® Enterprise Campaign Manager™ supports staffing levels being part of the variables and rules. Users can specify staffing levels across the day, by hour, so Aspect® Campaign Optimizer™ can calculate the available workload by campaign and by the number of records required to be delivered each hour. This workload calculation allows for adaptive scheduling in multi-pass campaigns. During the processing day, if the expected staff levels change, the inputs can be changed and a re-optimization can be run. This allows contact center management to react to intra-day changes and still optimize productivity.
- Filters** - In addition to priority parameters, filters can be used to specify data fields within the record to either include or exclude accounts from being dialed. Filter fields could include items such as investor codes, foreclosure stops, state, account type, and more.
- Recall Rules** - A user can configure how they want accounts to be dialed in terms of recall rules.

When you combine recall rules with your business-based filter rules, priority parameters and staffing guidelines, you can see significant improvements in your right party contact rates.

### **Aspect Campaign Optimizer Rules**

Aspect Campaign Optimizer includes several internal data sets that work in conjunction with your user-defined rules to further increase the probability of successful contact on each attempt.

- **Probabilities** - Aspect Campaign Optimizer calculates probabilities for up to five phone numbers per account based upon data returned from your predictive dialer's call results. Agents spend different amounts of time for different results and for different phone destinations. Probabilities are tracked by phone number for no answer, answering machine, busy, right party contact, wrong party contact, call success (promise or sale for instance) and manual. The expected productivity is calculated for all combinations of hour and phone destinations. The key variables are probabilities for different call results. Greater probability granularity by phone number provides more accurate scheduling of future calls.
- **Demographic Default Probabilities** - In the 2000 Census, the United States Census Bureau published 200 demographic attributes by zip code. Based on this attribute data and on previous contact outcome historical data from over 320 million call attempts across the Aspect Campaign Optimizer customer base, Aspect Software developed statistical models that identified 11 contact models by area code and NNX that allow Aspect Campaign Optimizer to slot a phone number within a customer record into the higher probability contact time on the first attempt.
- **Smart-Learn Database™** - The Smart-Learn Database is a contact history database for your individual accounts and telephone numbers built over time based upon the call results returned from each dial attempt on that account and each phone number. Probability vectors for multiple numbers on an hour-by-hour basis and weekdays versus weekends are calculated based on the behavior values stored for each individual account. In addition, other call history data is stored which allows you to use certain information as a priority parameter or filter.

Unique capabilities of the Smart-Learn Database include the ability to store history indefinitely and to track probability by phone number. The database learns from every dial attempt, stores this history indefinitely and uses it as the basis of future call scheduling. Up to five telephone numbers per account, categorized by phone type, are tracked in the SmartLearn Database allowing individual phone number probabilities to be used in developing dialing schedules.

- **Behavior Models** - The Behavior Models are provided "out-of-the-box" as a standard data set based on the history of millions of call attempts across many types of Aspect Campaign Optimizer customers. The more calling history that is available in the SmartLearn Database for a particular phone number, the better the fit will be with the Behavior Models.

When an account has been attempted at least once, a history of the attempt outcomes is created in the SmartLearn Database. The call history is tracked for up to five separate phone numbers per account. This history, in conjunction with the Behavior Models, determine the most likely time to achieve the calling objective for each attempt. The account call history is compared with probability clusters for like destination numbers through maximum best fit/minimum fit analysis to determine what the likely outcome of attempts on that number is at different hours of the day.

- **Precision Tuner** - The Precision Tuner uses the history that is built over time in your SmartLearn Database to tune the Behavior Models to reflect the attributes of your portfolio. By default, assuming there are at least a million call results, Precision Tuner automatically runs every 13 weeks. As a result, after several months of operation, the Aspect® Campaign Optimizer™ Behavior Models become customized for your installation and continue to evolve with the calling patterns of your site.
- **Filters** - Using the values calculated within the system, you can build call list filters guided by your business needs. These filters can be based on data such as probability percentile, scheduled hour, priority and days since last contact.

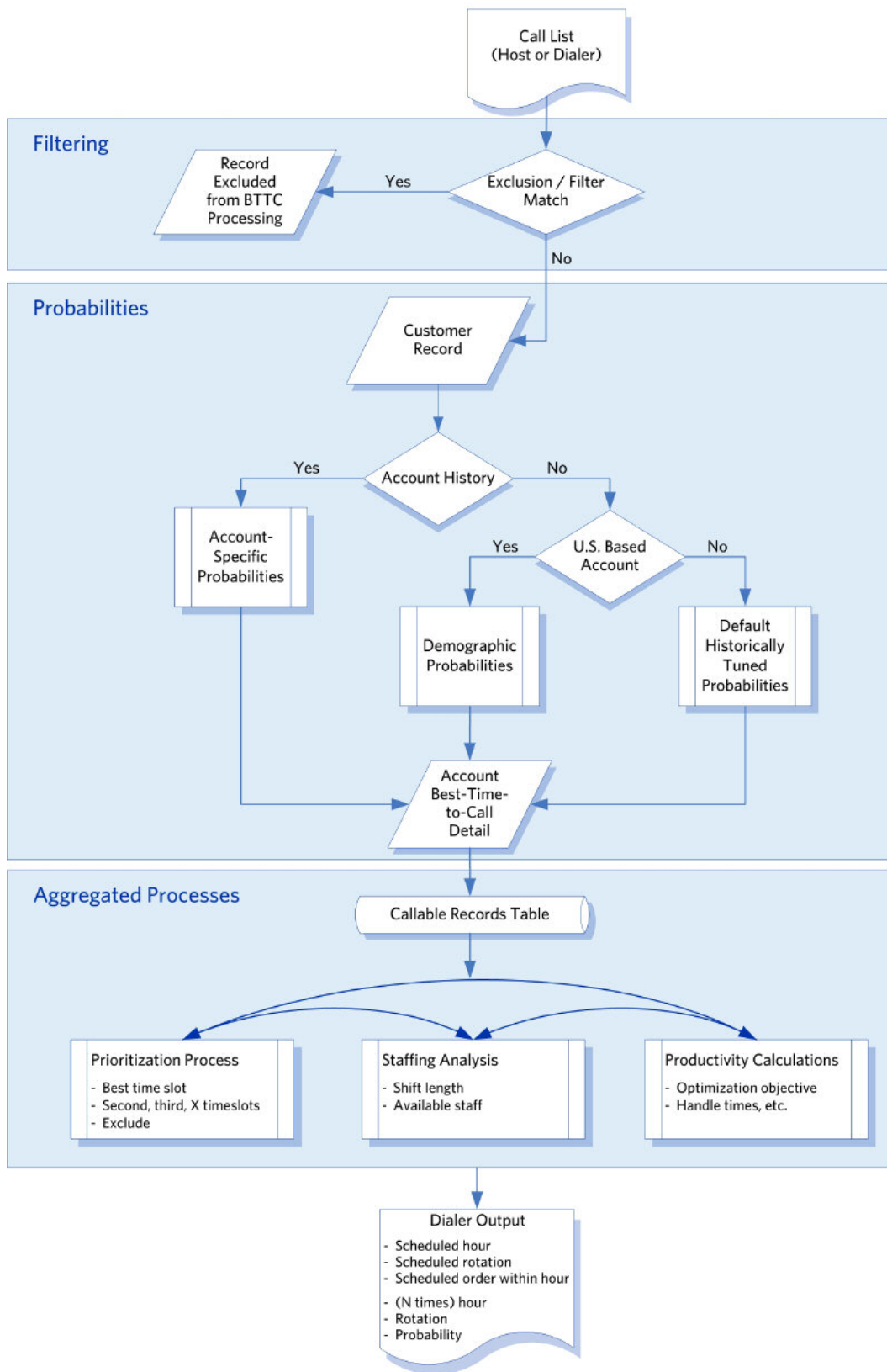


### Putting It All Together

Integrating seamlessly with all Aspect Software predictive dialing products, as well as with non-Aspect predictive dialers, Aspect® Campaign Optimizer™ builds an intelligence database of times and phone numbers when each account can and cannot be successfully contacted. Then, applying the powerful proprietary algorithms, calls are scheduled into optimal calling times.

Aspect Campaign Optimizer dynamically learns during the calling process and adjusts your call optimization strategy accordingly. Automated activities that continually occur include:

- **Intra-day change distribution** - If a change gets made intra day, you only have to do it once. The dialer knows about the change immediately and, if you have multiple sites, immediately distributes the change to all other dialers.
- **Callback scheduling** - If there is a scheduled callback and there is no answer, Aspect Campaign Optimizer immediately recognizes this and evaluates the record to determine the next best time and number to call.
- **Ongoing probability adjustments** - Ongoing data import ensures that the SmartLearn Database is as intelligent as possible. The Probability Plus algorithm calculates probability by phone number for every hour of the day and feeds this information back to the SmartLearn Database so the probabilities associated with a record can be adjusted.
- **Continuous optimization** - Aspect Campaign Optimizer continuous optimization ensures that if the strategy settings within a campaign change intra-day, the product can adjust the accounts delivered within each hour based on this change.
- **Demographics-based Behavior Models** - Demographics-based Behavior Models activate when an account appears that has never been seen before. Utilizing these models improves the probability of determining the best time to call an account versus relying solely on an algorithm.
- **Probability tuning** - Aspect Campaign Optimizer tunes the probabilities so they match the customer/country of the contact center, regardless of whether an account has history.
- **Account prioritization** - The Priority Parameters and filters add intelligence by prioritizing accounts within their best hours by your customized criteria.



### Summary

Using a layered set of rules around list management, heuristic algorithms and a tight integration with your predictive dialer, Aspect Campaign Optimizer increases your blended or outbound contact center productivity by increasing your right party contact and list penetration rates. The unique Aspect Campaign Optimizer features generate proven performance improvements that benefit every type of contact center operation and result in a rapid return on your investment.

To learn more about the benefits call optimization can bring to your contact center, contact your Aspect Software Account Executive and request a complimentary Call Optimization Productivity Lift Analysis.

#### About Aspect Software

Aspect Software, Inc., the founder of the contact center industry, is the world's largest company solely focused on providing proven, innovative contact center products and services that enable the key business processes of customer service, collections, and sales and telemarketing. Each day, thousands of in-house and outsourced contact centers around the globe conduct more than 125 million customer interactions using Aspect Software products. Aspect Software believes in using the power of technology to positively transform the customer-company experience. That belief has led Aspect Software to accept the challenge of developing the world's most reliable automatic call distributors (ACDs), most trusted dialers, most widely-used and respected workforce management (WFM) solutions, most flexible voice self service systems and the industry's first and most comprehensive unified, multichannel contact center solution. Headquartered in Westford, Mass., Aspect Software has operations across the Americas, Europe, Africa, the Middle East and Asia Pacific. For more information, visit [www.aspect.com](http://www.aspect.com).

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