

# AchievaSUITE V6

## Overview

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Paramax presents the latest iteration of our incentive-management technology platform with new updates and features for the enterprise marketplace. The goal with this version is to specifically address the needs of incentive companies currently serving the mid-range market. This solution is designed for large to mid-size programs that don't require a long build and costly set up.

### Executive Overview

Paramax is a leading technology provider of Incentive Management Solutions used in loyalty, incentive, recognition, and awards programs. We provide point-based programs including robust awards catalogs for employees, sales teams, and customers. Our clients include over 150 Global companies based in the U.S., Canada, England, Mexico and Australia.

Paramax's premier software product, AchievaSUITE, was first introduced to the incentive industry in 2000 and has handled over 1000 programs almost exclusively for incentive companies and awards providers.

Our latest offering is the culmination of 12 years' experience and hundreds of customizations and improvements developed for real world applications. From large programs with hundreds of thousands of users and millions of daily records directly connected with client systems, to simple self-service recognition solutions, AchievaSUITE has seen it all.

It's also now connected to The Awards Marketplace with API's connected to Best Buy, Sears/Kmart, Amazon and Giftango.

### Technology

The AchievaSUITE application is a .NET Framework platform written in C#, with a group-segmentation structure that supports grouping with defined permissions. The application runs on .NET 4.0 using IIS 7+ and a MS SQL database. It is designed around a three-tiered structure, which can be seen as:

- Tier 1 – Presentation (front end)
- Tier 2 – Business logic (middle-tier API)
- Tier 3 – Server (back end)

Server software provides email service, logging and file archives, and task scheduling.

## New Features

Leading the industry as a multi-use platform, AchievaSUITE now incorporates, as standard, a group of features previously available only as customizations. Paramax will continue to develop for the needs of larger-audience programs which present greater volumes of data, and require deeper validation, approvals and reporting.

- Redemption Code Submission
- Employee Referral
- Event Reporting for Wellness Programs
- Expanded Quiz Functionality with Question Randomization
- Points Expiration
- Advanced Reporting Plug-In for Fast Generation of New Reports
- Enterprise-Level Customer Service with Ticket Tracking
- Rewards-Catalog Integration  
(The *Awards Marketplace* or your catalog via API development)

## Classic Features

Developed over the last ten years, these represent the staples of an economical multi-use rewards and incentive platform.

### Language Support

AchievaSUITE provides multiple-language support, where all participant-facing text is translated, allowing participant-preferred language to be pre-set for a comfortable site experience. One recent project required 20 languages including Arabic and Mandarin Chinese.

### Multiple Program Types

AchievaSuite features a number standard program types which allow participants to earn points in various ways. Each program is fully customizable with regard to content and award values.

**Basic:** a simple upload program used to award participants with points tabulated offline and uploaded to the system.

**Code Submission:** allows point awards via codes input by the user. Codes can be awarded in person or via email. First-time users may accomplish registration with their first code. This is also useful in a loyalty context, where codes are distributed to consumers.

**Quizzes:** offer the ability to create a quiz and award users for correctly answering questions. Questions and answers can be randomized, and a minimum of correct answers can be set before a user is awarded. Useful as a training tool when paired with educational content pages.

**Recognition:** allows participants to award points and customized certificates to other users. An approval requirement may be imposed, and nominations can be limited to a specific group, or universal.

**Referral:** awards users for referring new hires, new members, new business, etc. For example, a user can submit a referral and attach a resume, and by configurable rules, is awarded if the referral results in a new hire.

**Sales:** awards users who reach a specified sales level. This is configurable to award for selling specific products, or for reaching a quota in units or dollars. Participants may self-report sales, and an approval requirement may be imposed.

**Anniversary or Birthday Award:** when activated, automatically awards users upon reaching a defined anniversary milestone or a birthday.

**Survey:** awards users upon completion of an opinion survey. Questions can be multiple choice, true/false, or based on a rating scale. User feedback can be collected by including a “user-comments” field in survey setup.

## Administration and Setup

**Themes:** provide flexible CSS-based templates for the look and feel of the site. Several standard themes are available, accommodating a range of color, content, and font requirements. Custom themes to meet unique branding requirements are accomplished without substantial development.

**Control Panel:** offers permissions-based access to reporting, user profiles, manual awarding, creation and editing of content and program types, grouping, data upload, and various site-configuration details.

**Groups:** are arranged in a tree-structured hierarchy, and managed by administrators through a Control Panel feature. As the hub of internal site operations, group membership determines visibility of content, images, links, and catalog products, as well as participation in programs and levels of Control Panel access.

**Content Management:** is accomplished through a Control Panel feature which adds content to the homepage, the login page, and program pages, as well as creating stand-alone pages linked from the left menu. The heart of the feature is a WYSIWYG editor which also accepts direct HTML input. Visibility of content sections is governed by Group membership.

**Communications:** are accomplished via email, with content editable through a Control Panel feature. System-generated emails (award notification, order confirmation, approvals, etc.) go to individual users, while ad-hoc administrative emails go to all members of a group, or all participants in a program.

**Reporting:** involves a comprehensive suite of basic reports returning data on active users, nominations, redemptions, awards, budgets, program details, redemptions, taxes, and more. Reports can be displayed onscreen or downloaded as .CSV files. By virtue of the new stored-procedure-based plugin, entirely new custom reports are low-cost and fast, as are customizations to standard reports.

**Data Upload:** is accomplished via dedicated Control Panel features. Users, points, images and on-board catalog products are uploaded by administrators. User, point and catalog data enter as .CSV files, with instructions and file examples available on setup pages. Upload features allow adjustment/correction of user profiles and point balances via manipulation of upload settings.

## Awards

**On-Board Awards Catalog:** is included with AchievaSUITE software. Catalog products are visible by group membership, and are easily added or edited by administrators in the Control Panel. As well, the Control Panel allows product-image uploading, order downloading and redemption reporting.

**The Awards Marketplace:** is a separate platform, fully integrated with BestBuy and Sears Holdings, wherein participants can redeem points for millions of merchandise items. It's also integrated with Amazon.com and Giftango for real-time, instant-issue gift codes. The Awards Marketplace is automatically connected to Achieva Suite, and can also connect to any third-party points platform.

## V6 Performance Enhancements

AchievaSUITE recently received the following fundamental enhancements to meet the processing requirements of larger and more complex programs.

- The data access layer (DAL) has received several enhancements to increase performance.
- Class constructors are now cached to reduce reflection each time a record is read from the database.

- Methods that take in string values, e.g. Reading, Saving, Counting etc., now employ format strings for easier generation and reduced manual string concatenation.
- Logging methods support format strings for easier message generation and less manual string concatenation which improves performance when logging is disabled.
- Each website now runs its own server for backend data processing, reducing task blocking as compared to previous versions where all sites used a common server instance.
- Greater emphasis on data relations and data-type cleanup assure the best data type is used for stored data, affording better-tuned queries through the addition of foreign keys and indices.

## Development Tools and Processes

- Mercurial is employed for source control, and central repositories are hosted with Fog Creek using Kiln.
- Where feasible, areas of new development are subjected to unit testing.
- Base instance repositories (development, staging, and stable) contain builds performed via Team City each time a new change is pushed to its respective repository.
- All dependencies now use NuGet packages.
- The website is built using Web Forms, but also runs ASP.NET MVC side-by-side to allow for custom development in either form.
- Participant-facing portions of the site have been updated to use HTML5 and include the ability to add polyfills for features not currently supported by all or older, browsers.
  - Modernizr and YepNope are currently used for this.
  - JSON2 is the only polyfill currently in use out of the box.
- Most fee-based third-party UI components have been retired in favor of jQuery and jQuery UI.
- As well, we've retired many paid 3<sup>rd</sup> party components for our own implementations or open source alternatives.

- JSON serialization – JSON.NET.
- FTP & FTPS transfers – our own implementation.
- A custom DAL, based on our *Awards Marketplace* development, is created on a per-project basis to handle enterprise-level (read: massive) data counts.
  - Built using a repository pattern with LINQ 2 SQL.
  - Interface-based to allow dependency injection and unit testing.

## Examples of Custom Work

These are examples of customizations that we have built to meet the requirements of other programs. These features haven't necessarily been incorporated into the standard software, but represent the scale and scope of enhancement requests that you may encounter.

**Team/Association Awards** – A feature to grant nominators the ability to define their own teams, and then send an award to that team. The team/association is then saved and associated with that nominator in the system, so that the nominator can later send a nomination to that same team.

**Import Budgets** – A recognition program enhancement to include a feature where an administrator can upload budgets into the system, rather than creating them manually. This enhancement provide a key time-saver for the program.

**Multiple Group Assignments** – A feature was built to designate multiple group assignments for participants using an administrative tool.

**Single Sign-On** – Several customers have required automatic login from a corporate intranet site to our incentive site.

**Automated Participant Management** – Customers are increasingly requiring that our system automatically maintains participant data, without the efforts of an administrator handling the data manually. We've set up web services and data feeds with automated processes that keep participant data current directly from the customer data.

**Printable Statement** – We've built a feature that gives participants the ability to download a printable statement of their points activity directly from the My Activity page. The statement can be branded with the customer's logo and include regularly updated content. The feature is helpful for programs where many participants might not have internet access, where an administrator can pull the statement and mail it to a participant.

**Automated Communication** – The system has been configured to generate monthly email messages to the full audience of participants that updates them on their current account status and includes administrator managed content that can be updated easily via the control panel.

**Budget Distribution** – We built this feature based on a requirement where a person can be given a budget in a recognition program and then distribute that budget to other participants in the system. The participant receiving the budget allocation can then use the budget to submit a nomination.



**Report an Event** – The event reporting tool was originally developed for Wellness programs. It allows an administrator to easily create a program that awards points to participants who report an event such as joining a health club, taking a health assessment, or hundreds of other choices. It also included the option of requiring administrative approval before awarding points.

**Create a Promotion** - Originally developed for the car rental industry, the promotion management tool allowed an administrator to quickly create new promotions (and modify existing ones) for travel agents. The tool is a very elaborate mechanism that allowed program administrators to create dynamic promotions for very specific, targeted audiences.

**Multiple Point Types** – This feature was built to allow points be awarded in two distinct types, for taxation purposes. The system allowed users to transfer points from non-taxable to taxable accounts, and participants shopped in distinct catalogs to spend each of the point-type balances.

**Third-Party Redemption System Integration** – In multiple cases, the software has been expanded upon to easily connect to a third-party redemption catalog. Participants are referred with points balances and uniquely identifying data to another redemption system, and our software receives debit transactions and order details in return.

**Points Import Automation** – Several customers require automated processes that feed points data into our system in specific formats and including custom fields. The back-end processor that manages our software has been expanded upon to receive and handle this data in an automated way and without any manual effort by a programmer or administrator.

**PGP Encryption** – The software has been expanded upon to decrypt and handle a PGP encrypted data feeds for additional user data security.

**Nomination Voting** – A nomination has been developed for the client that has special committee voting requirements for all nominations that go through the system.

**Dynamic, Multi-level Approvals** – We've built several systems wherein a nomination must go through a specialized channel of approvals prior to being granted to the nominee as an award. Organizations with varying position titles, reporting structures, and budget managers each come with specialized approval rule structures for nomination programs.