



## Technical Release Notes – March 24, 2026

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This March release represents a **major step forward in USA Swimming’s technology modernization efforts**, delivering significant advancements across data infrastructure, reporting, and system integration. The release is anchored by the continued expansion of the Snowflake Data Warehouse and the rollout of Kendo-based reporting, alongside the development of core infrastructure supporting the upcoming USA Swimming API Program. These foundational enhancements are complemented by improvements to identity management, Sisense dashboards, reporting capabilities, and overall system stability.

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**Snowflake Data Warehouse:** As part of the ongoing Data Warehouse modernization effort, significant enhancements were made to the Snowflake times data model. This work establishes a comprehensive and scalable foundation for swim times, standards, records, and performance data, while also supporting mobile application functionality through optimized procedures and materialized views.

### Times Data Model & Mobile Procedures

- (6633) Created Meet table in Snowflake.
- (6634) Created Time Standard table.
- (6638) Created SwimEvent table.
- (6639) Built Materialized View for Swimmer Meets to improve query performance.
- (6640) Added Swim Time Splits within the SwimTime table.
- (6641) Created USA Swimming Relay table.
- (6644) Created table for USAS Lifetime Best Times.
- (6645) Developed procedure for Swimmer Best Times (Mobile).
- (6646) Developed procedure for Swimmer Meets (Mobile).
- (6647) Developed procedure for Swimmer All Times (Mobile).
- (6648) Created Records table.
- (6649) Developed procedure for Swim Time Detail (Mobile).
- (6636) Created OrgUnit table.
- (6659) Created TimesProgression table.
- (6661) Created ReportingYear table.
- (6662) Created table for USAS Season Best Times.
- (7283) Created FinaSwimTime table.
- (6660) Created Medals table.
- (6637) Created Person table.
- (6642) Created NcaaSwimTime table.
- (6635) Created Time Standard Cut table.
- (6632) Created UsasSwimTime table.
- (6853) Built pipelines and procedures to support courses, events, and standards by swimmer.
- (7921) Added PowerPoints and FinaPoints logic to Snowflake.
- (7926) Updated logic for Relay Lifetime Best Times.

### Program Data & Pipeline Migration

- (7896) Updated Find a Team endpoints to point to Snowflake.

- (6655) Migrated VCC Summary data and established Snowflake pipeline.
- (6656) Migrated VCC Detail data and established Snowflake pipeline.
- (6657) Migrated IMX Summary data and established Snowflake pipeline.
- (6658) Migrated IMX Detail data and established Snowflake pipeline.
- (6653) Migrated Club Excellence Summary data and established Snowflake pipeline.
- (6654) Migrated Club Excellence Detail data and established Snowflake pipeline.
- (7022) Built Snowflake pipeline supporting Find a Team functionality.
- (7893) Created DBT pipeline for dimension.Facility.
- (7894) Created DBT pipeline for Fact.MeetEntry.
- (7829) Updated IMX pipeline to rely solely on the Data Warehouse instead of transactional sources.
- (7897) Created table function to support Find a Team endpoint.

### **Membership Data Model & Analytics Enhancements**

- (6777) Created Retention table to support membership retention analysis.
- (6778) Rebuilt Retention Dashboards to align with Snowflake data structures.
- (7021) Created CompetingAthletes table for participation tracking.
- (6773) Created ClubRegistration table.
- (6774) Created Club table.
- (7640) Updated Person pipeline to include Race/Ethnicity data.
- (6775) Created Member Summary materialized view for performance and reporting efficiency.
- (6776) Created MembershipPacing table to support trend analysis.
- (6768) Created PersonRole table.
- (6769) Created Swimmer Search table.
- (6770) Developed Swimmer Search procedure.
- (6771) Created ClubRoster table.
- (6772) Created MemberRegistration table.

### **Dynamic Kendo Report Integration**

- (7140) Added API endpoints to set stored procedure parameters, execute procedures, and return results as JSON.
- (7141) Designed a method for dynamically setting procedure parameters based on user context.
- (7147) Designed database tables to support management and security of dynamic report grids.

### **Standard Kendo Report Integration**

- (7136) Added logic and procedures to track Kendo report usage within the SWIMS database.
- (7138) Performed load testing to validate Kendo report performance and scalability.
- (7158) Completed Kendo license procurement to support reporting capabilities.
- (7134) Conducted analysis to leverage existing report tables for Kendo reports.
- (7135) Added API endpoints to initialize and execute Kendo reports and manage parameters.

### **Mobile Endpoint Migration**

- (7447) Updated all mobile endpoints to point to Snowflake table functions.
- (7446) Migrated all mobile stored procedures to Snowflake table functions.
- (7641) Standardized Snowflake mobile table functions using CamelCase naming conventions.
- (7730) Updated all search, grid, and table views to use Snowflake data sources.
- (7724) Updated table and grid components to support the new data format.

### **Virtual Club Championship (VCC) Conversion to Snowflake**

(8184) Created a pipeline to reduce VCC source data query complexity.

(8185) Updated VCC Summary and VCC Detail pipelines to align with the new VCC processing framework.

(8186) Converted the VCC processing workflow to Snowflake and Python. High School times are now included in VCC Calculations.

### **Times Anomaly Detection Migration**

(8106) Implemented a Logic App to add detected anomalies to the Anomaly table.

(8104) Created a DBT pipeline to identify anomalies within swim time data.

(8105) Introduced an improved anomaly resolution process by setting up replication from Snowflake to SQL Server to support downstream processes.

### **Development Environment & Deployment Framework**

(8191) Created a new development database and updated DBT connections.

(8192) Updated API settings to support separate Dev and Prod Snowflake connections.

(8193) Created a release script to deploy functions and dynamic tables from Dev to Prod.

(8194) Implemented a clone script to refresh Dev data from Production.

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**Develop Kendo Reports - Phase 1:** This release introduces the first phase of Kendo-based reporting within SWIMS, delivering a modern, Snowflake-powered reporting experience. These updates provide improved performance, enhanced filtering and sorting capabilities, and a more intuitive interface for interacting with performance data.

### **Kendo Reporting Framework Migration**

(7449) Developed mechanism to leverage Kendo reports with Snowflake.

(7450) Migrated all existing Kendo reports to Snowflake and updated Kendo design.

### **Kendo - IMX/IMR Detail Report**

(7044) Migrated Club IMR Certificate Report.

(7045) Migrated Club IMX Certificate Report.

(7046) Migrated Club IMX/IMR Detail Report.

(7047) Migrated Club Missing IMX Events Report.

(7062) Migrated LSC Club IMX/IMR Detail Report.

(7064) Migrated LSC IMR Certificate Report.

(7065) Migrated LSC IMX Certificate Report.

(7673) Migrated IMX/IMR Report.

(7672) Designed IMX/IMR Detail Report.

(7674) Developed Snowflake table function to support report queries.

(7704) Added database entries for Snowflake report configuration and report listing.

### **Kendo - Club Excellence Detail Report**

(7677) Migrated Club Excellence Detail Report.

(7676) Designed Club Excellence Detail Report.

(7678) Developed Snowflake table function to support report queries.

(7870) Added filterable Org Unit columns to DBT.

(7871) Added competition gender type to DBT.

(7707) Added database entries for Snowflake report configuration and report listing.

#### **Kendo - VCC Detail Report**

(7684) Migrated VCC Detail Report.

(7683) Designed VCC Detail Report.

(7685) Developed Snowflake table function to support report queries.

(7706) Added database entries for Snowflake report configuration and report listing.

#### **Kendo - Additional Report Creation**

(7679) Created Kendo Club Excellence Detail Report.

(7675) Created Kendo IMX/IMR Report.

(7686) Created Kendo VCC Detail Report.

(7904) Created Kendo Retention Detail Report.

#### **Kendo - Retention Detail Report**

(7902) Designed Retention Detail Report.

(7903) Developed Snowflake table function to support report queries.

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**Data Build Tool (DBT) Integration:** Enhancements were made to the DBT (Data Build Tool) integration to improve pipeline performance, streamline data processing, and better align Snowflake data models with reporting and application needs. These updates focus on converting pipelines to dynamic tables, refining data inputs, and improving development and documentation practices.

(7936) Applied DBT updates from code review to improve pipeline quality and consistency.

(8110) Updated Facility dimension to include additional columns.

(8173) Converted Member Retention DBT pipeline to a dynamic table.

(8174) Converted Swimmer Search DBT pipeline to a dynamic table.

(8175) Removed National Junior Team Eligible Ranked Times from DBT pipeline.

(8176) Removed National Team Eligible Ranked Times from DBT pipeline.

(8177) Converted Club Roster DBT pipeline to a dynamic table.

(8178) Removed USAS Swim Time Standards from DBT pipeline.

(8180) Created development testing schema for reporting in Snowflake.

(8181) Updated Membership Pacing DBT pipeline from a 3-hour mart to a nightly mart.

(8179) Added tags and documentation for dynamic tables, materialized views, and views in Snowflake Database Explorer.

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**Third-Party API Infrastructure:** This release introduces the foundational infrastructure for the USA Swimming API Program, enabling secure, scalable integration between SWIMS and trusted external developers. The program is designed around a tiered access model that aligns vendor capabilities with appropriate data access, validation, and compliance requirements.

These initial updates establish the technical framework required to support external integrations, including dedicated repositories, application services, and deployment pipelines. This work lays the groundwork for a controlled and secure API ecosystem that supports team management, data synchronization, and future real-time verification services.

### **Third-Party API - Core Infrastructure Setup**

- (7433) Created new Third-Party API repository in Azure DevOps.
- (7434) Provisioned new App Services in Azure to support the Third-Party API.
- (7409) Created new Release Pipelines

### **Third-Party API - Endpoint Replication & Security Framework**

- (7456) Established API classes and folder structure to support the new Third-Party API.
- (7457) Configured App Role–based security to control endpoint access.
- (7458) Created Third-Party API endpoints aligned with existing functionality.
- (7411) Defined new security AppRoles to support role-based access control.

### **Third-Party API - Event Processing & Integration Enhancements**

- (7527) Identified all methods used to send events across the platform.
- (7559) Refactored Third-Party event processing for improved consistency and maintainability.
- (7642) Created new endpoints to retrieve and send events.
- (7836) Implemented Logic Apps to call new event endpoints.
- (7560) Added a new event triggered when a club changes club code or name.

### **Third-Party API - Expanded Endpoint Development**

- (7634) Created new endpoint for Member Verification.
- (7635) Created new endpoint for Member Times Verification.
- (7643) Created new endpoint for Salesforce National Team Alumni integration.
- (7644) Created new endpoint for Salesforce National Team constituent codes.

### **Third-Party API - Internal Documentation & Developer Resources**

- (7722) Created documentation for Third-Party API endpoints.
- (7723) Created documentation for Third-Party events.

### **Third-Party API - Endpoint Review & Refactoring**

- (7496) Reviewed existing Third-Party API logic to identify improvement opportunities.
- (7837) Created new tables to audit vendor endpoint usage.
- (7510) Refactored GetMemberDetails for a club endpoint.
- (7518) Enhanced POST MemberRegistration to include validation error messaging.
- (7519) Removed GetSwimmingWorldDonationOptIns endpoint.
- (7509) Refactored GetVendorClubs endpoint.
- (7514) Refactored GetRegistrationLink endpoint.
- (7515) Refactored GetNcaaTeams endpoint.
- (7517) Refactored GetNcaaTeamRosterByOUId endpoint.

### **Third-Party API - TeamUnify Endpoint Integration**

- (8202) Created new Third-Party API endpoints for TeamUnify integration.

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**Sisense Dashboard Updates:** This release includes continued enhancements to Sisense dashboards, further advancing USA Swimming’s analytics capabilities through Snowflake integration. These updates improve data consistency, performance, and scalability while enabling more timely and actionable insights across membership, competition, retention, and performance analytics.

### **VCC Rankings Dashboard Enhancements**

- (7738) Refactored VCC Rankings Dashboard to improve structure and performance.
- (7739) Updated VCC Rankings data model to point to Snowflake.

### **Meet Summary Dashboard Enhancements**

- (7741) Refactored Meet Summary Dashboard.
- (7742) Updated Meet Summary data model to point to Snowflake.

### **LSC & Club Membership Profile Enhancements**

- (7778) Refactored Club Profile Dashboard.
- (7779) Refactored LSC Profile Dashboard.
- (7780) Updated Club/LSC Profile data models to point to Snowflake.
- (8051) Club Profile: Joined the drill-down details to the original dashboard to provide a better high-level summary of the data.
- (8052) LSC Profile: Joined the drill-down details to the original dashboard to provide a better high-level summary of the data.
- (7759) Refactored HQ Historical Club Membership Dashboard.
- (7760) Updated Historical Club Membership data model to point to Snowflake.

### **Member Retention Dashboard Enhancements**

- (7773) Refactored National Retention Dashboard.
- (7774) Refactored Club Retention Dashboard.
- (7775) Refactored LSC Retention Dashboard.
- (7776) Updated Retention data model to point to Snowflake.

### **Times Progression Dashboard Enhancements**

- (7771) Updated Times Progression data models to point to Snowflake.
- (7768) Refactored Club Times Progression Dashboard.
- (7769) Refactored LSC Times Progression Dashboard.
- (8053) LSC Time Progression: Joined the drill-down details to the original dashboard to provide a better high-level summary of the data.
- (8054) Times Progression: Joined the drill-down details to the original dashboard to provide a better high-level summary of the data.
- (7770) Refactored HQ Times Progression Dashboard.

### **Club Performance Dashboard Enhancements**

- (7735) Refactored Club Performance Dashboard.
- (7736) Updated Club Performance data model to point to Snowflake.

### **DEI Report Card Enhancements – Merged with the Membership Dashboard**

- (7782) Refactored DEI Scorecard Dashboard.
  - (7783) Refactored LSC Demographics Dashboard.
  - (7784) Refactored Club Demographics Dashboard.
  - (7785) Updated DEI data models to point to Snowflake.
  - (8055) Added DEI Report Card drill-down functionality.
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**Sanction Process Enhancements:** Enhancements were made to the Sanction Process to improve flexibility during meet approval workflows. This update allows administrators to edit the Meet Name during the approval process, improving efficiency and reducing administrative overhead.

(7952) Updated Meet Approval process to allow editing of the Meet Name during approval.

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**Identity & Access Management - Transition to Duende:** This release includes continued enhancements following the transition to Duende Identity and Access Management, focusing on improving account reliability, user experience, and administrative control. Updates in this cycle address account creation, authentication workflows, and identity management functionality, while also resolving key issues identified post-release.

#### **Contact Verification Enhancements**

(7909) Implemented Contact Verification screen hotfix to support user confirmation of contact information.

#### **Post-Release Fixes & Stability Improvements**

- (8113) Resolved Under 16 email requirement issue in the new login experience.
- (8122) Fixed issue with AspNetUser record creation.
- (8123) Created process to remove records from AspNetUsers.
- (8147) Fixed issue where username was not saving during account setup.
- (8197) Resolved 404 error on hub landing page.
- (8228) Added ability to change user account email.
- (8229) Added Change Password functionality.
- (8230) Added Change Username functionality.
- (8231) Fixed issue where UserAccount and Person records were not created during account creation.
- (8232) Corrected password reset prompt to use username instead of email.
- (8234) Resolved member merge issue.
- (8235) Updated duplicate check logic to use first name instead of preferred name.
- (8236) Fixed Duende search tool issue.
- (8244) Fixed issue allowing duplicate accounts linked to existing members.
- (8249) Fixed duplicate check issue incorrectly associating users without selection.
- (8250) Fixed duplicate check issue when multiple results were returned.
- (78) Moved user account creation logic to a stored procedure.
- (8254) Investigated and addressed MFA expiration issue causing login conflicts.

#### **Identity Account Management Enhancements**

- (8226) Added Resend Parent Notification function.
- (8227) Added Delete Account function.
- (8233) Removed Delete Account function to align with updated policy.
- (8326) Updated Delete User Account endpoint.
- (8327) Added ability to administratively update username and email.
- (8435) Added UI pill to update username and email for identity accounts.
- (8441) Implemented process to rematch LMS account data when a user recreates an account.

#### **User Account Management Updates**

(7929) Redirected Manage User Account to the new Identity Management system.

(7928) Updated Manage User Account interface (pills) to align with the new identity experience.

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### **Reporting Updates and Enhancements - Q1 2026**

This release includes a range of reporting updates and enhancements to improve data accuracy, expand analytical capabilities, and support operational and stakeholder reporting needs. These updates span dashboards, compliance reporting, competition data, and data-driven communications.

(7271) Updated Swim-A-Thon Dashboard to improve reporting accuracy and usability.

(8140) Updated filter for OTS “Meet Type Attendance” to improve data precision.

(8456) Enhanced Accounting Reconciliation Report (OME Meet Host Reports) to include additional meet information.

(7625) Added Coaching Retention Data (ASCA Fellows) to support retention analysis.

(8318) To improve the Marketing Cloud Competition logic to better support time standard email campaigns, we updated stored procedure logic to improve data processing and reporting accuracy.

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**Production Support & Maintenance – March 2026:** This release includes a set of production support updates and maintenance improvements aimed at resolving issues, improving data consistency, and enhancing overall system reliability. These updates address operational gaps and ensure smoother day-to-day functionality across competition and identity workflows.

(8117) Improved handling to recognize swim times more accurately.

(8443) Automated the process for updating SIS ID, LMS User ID, and Identity ID to ensure data consistency across systems.

(8035) Fixed issue in Meet Creation validation to ensure meets do not exceed 9 days.

(8223) Resolved issue where Meet Sessions pill was not updating correctly in OME templates.

(8224) Fixed OME Team Entry submitted time formatting issue.

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### **Hot Fixes – Q1 2026**

Several urgent fixes were implemented during Q1 2026 to address production-impacting issues across Snowflake configuration, Kendo reporting endpoints, identity workflows, and competition data. These updates ensure system stability, restore expected functionality, and improve reliability across core workflows.

(8120) Updated Snowflake configuration to resolve production issues.

(8150) Updated Common API and Times API endpoints supporting Kendo reports to ensure proper data retrieval.

(8225) Added Unlock Account functionality to support user account recovery.

(8454) Fixed Relay Override bug impacting competition data accuracy.

(8246) Resolved issue where new account creation failed to insert UserInvite when username and DOB matched an existing account.

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### **Upcoming Features**

**New Mobile App:** The new Mobile App will see exciting new features, offering improved usability and enhanced member experiences on the go.

**Data Hub Modernization Project:** Improved performance, personalization, and overall experience of the Data Hub by moving off Sisense, adding authentication-aware views, and modernizing the UI/UX.

**Third Party API Vendor Access Project:** This feature implements the technical and procedural framework for the new Third Party API system. It will cover the creation of new repositories, pipelines, and services, apply updated security models, and build the necessary endpoints. Additionally, it will support vendor onboarding, establish policies, and deliver both internal and external documentation. The result will be a single, secure, and maintainable Third-Party API ecosystem.