Project: EduLink Student & Course Management System

Phase 9: Reporting, Dashboards & Security Review

Goal: Deliver powerful reporting & analytics capabilities and implement robust security controls to ensure data is both actionable and protected. This phase focuses on creating meaningful insights from the EduLink system data while maintaining strict security standards for educational data.

1. Reports (Tabular, Summary, Matrix, Joined)

Tabular Reports Tabular reports display data in a simple list format, similar to a spreadsheet view.

- Student List Report Path: Reports Tab → New Report → Contacts and Accounts Purpose: Basic student directory with essential contact information Fields: Full Name, Email, Phone, Student Status, Enrollment Date, Department Filters: Student Status equals "Active"
- Course Assignment Report Path: Reports Tab → New Report → Assignments (Custom Report Type) Purpose: List all assignments with due dates for tracking Fields: Assignment Name, Course, Due Date, Max Points, Assignment Type Sort: Due Date (Ascending)

Summary Reports Summary reports group data and show subtotals, providing insights into trends and patterns.
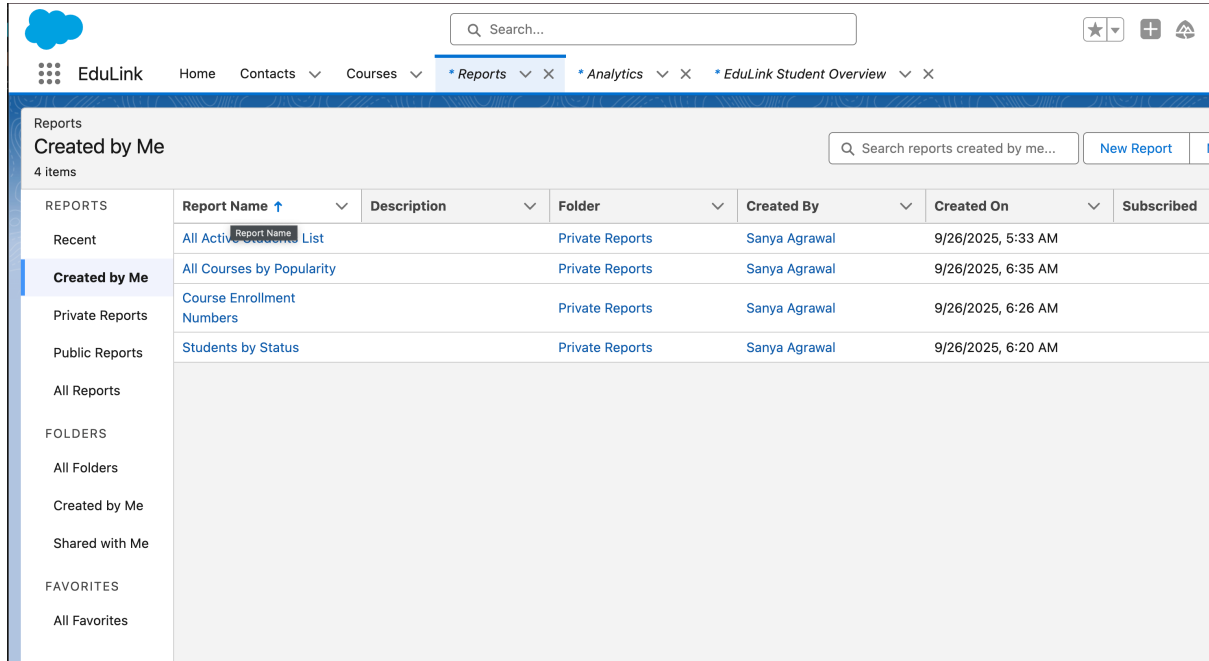
- Student Enrollment by Department Path: Reports Tab → New Report → Contacts with Enrollments Purpose: Track student distribution across academic departments Group By: Course Department Show: Count of students, Average GPA by department Chart Type: Horizontal Bar Chart
- Course Performance Summary Path: Reports Tab → New Report → Enrollments with Progress Purpose: Analyze completion rates and grade distributions Group By: Course Name, Final Grade Show: Count of enrollments per grade category Chart Type: Donut Chart
- Monthly Student Registration Trends Path: Reports Tab → New Report → Contacts Purpose: Track registration patterns over time Group By: Created Date (by Month) Show: Count of new student registrations Chart Type: Line Chart

Matrix Reports Matrix reports show data in both rows and columns, ideal for cross-tabular analysis.

- Student Performance Matrix Path: Reports Tab → New Report → Students with Progress Records Purpose: Compare student performance across different courses Rows: Student Name Columns: Course Name Values: Average Points Earned Summary: Show averages and totals
- Department Course Offering Matrix Path: Reports Tab → New Report → Courses Purpose: Visualize course offerings by department and semester Rows: Department Columns: Status (Active, Completed, Planned) Values: Count of courses

Joined Reports Joined reports combine multiple report types to create comprehensive views.

- Student Academic Overview Purpose: Holistic view of student progress across all areas Block 1: Student demographics (Contacts) Block 2: Current enrollments (Enrollments) Block 3: Recent progress records (Progress with Assignments) Common Field: Student ID for linking blocks

2. Custom Report Types

Custom report types define which objects and fields are available when creating reports.

Student Academic Performance Report Type

- Path: Setup → Report Types → New Custom Report Type
- Primary Object: Contact (Students)
- Object Relationships:
  - Contact → Enrollment (A to B)
  - Enrollment → Progress (B to C)
  - Progress → Assignment (C to D)
  - Assignment → Course (D to E)
- Available Fields: Student details, enrollment status, assignment scores, course information.

Course Management Report Type

- Path: Setup → Report Types → New Custom Report Type
- Primary Object: Course
- Object Relationships:

- o Course → Assignment (A to B)
- o Course → Enrollment (A to C)
- o Enrollment → Contact (C to D)
- Available Fields: Course details, instructor information, enrollment counts, student lists
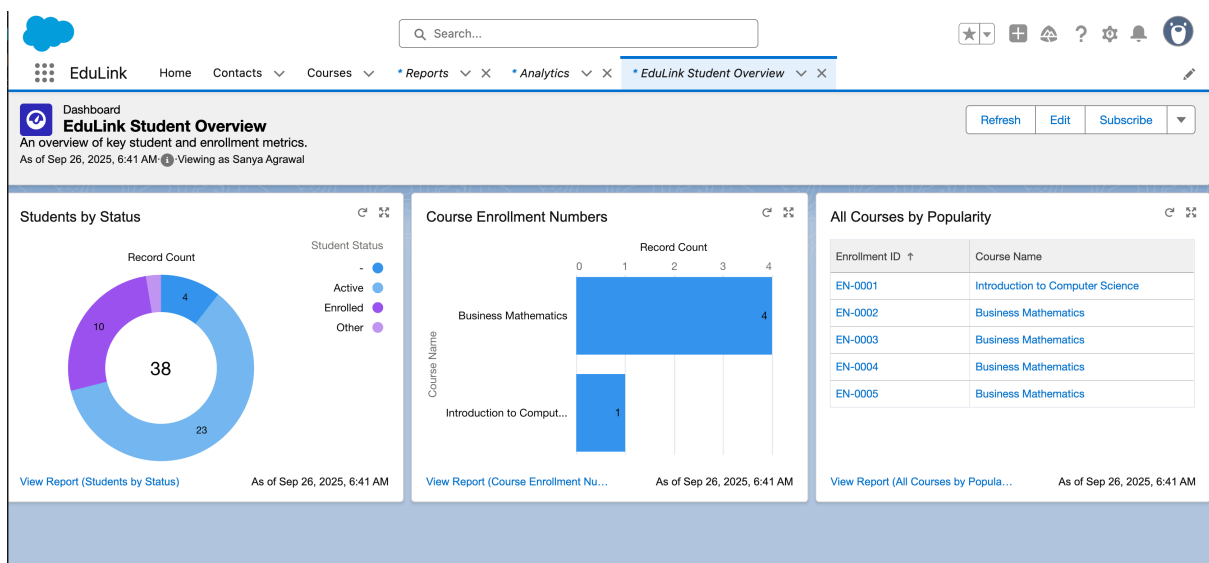
3. Dashboards

Student Overview Dashboard Components:

- Total Students (Metric Component) Source: Count of active Contact records
- New Registrations This Month (Gauge Chart) Source: Contacts created this month vs target
- Student Status Distribution (Donut Chart) Source: Students grouped by status
- Top Performing Students (Table) Source: Students with highest average grades

A. Key Performance Indicators (Charts) 📈: Donut Chart: "Students by Status"

Bar Chart: "Course Enrollment Numbers"

Tables and Lists 📋: "Top 5 Popular Courses"

4. Dynamic Dashboards

Dynamic dashboards show different data based on the viewer's permissions and role.

Implementation:

- Path: Dashboard → Edit → Properties → Running User
- Setting: "Let authorized users change running user"

- Options: "Dashboard viewer" or "Specified user"

5. Sharing Settings Review

Organization-Wide Defaults (OWD):

- Contact (Students): Private - Protects student personal information
- Course: Public Read Only - Allows visibility of course catalog
- Enrollment: Controlled by Parent - Inherits security from Contact
- Progress: Private - Protects grade information
- Assignment: Public Read Only - Allows general assignment visibility

SETUP
Sharing Settings

Shift	Private	Private	✓
Shipment	Private	Private	✓
Shipping Carrier	Public Read Only	Private	✓
Shipping Carrier Method	Public Read Only	Private	✓
Shipping Configuration Set	Public Read Only	Private	✓
Streaming Channel	Public Read/Write	Private	✓
Tableau Host Mapping	Public Read Only	Private	✓
User Presence	Public Read Only	Private	✓
User Provisioning Request	Private	Private	✓
Waitlist	Private	Private	✓
Web Cart Document	Private	Private	✓
Work Order	Private	Private	✓
Work Plan	Private	Private	✓
Work Plan Template	Private	Private	✓
Work Step Template	Private	Private	✓
Work Type	Private	Private	✓
Work Type Group	Public Read/Write	Private	✓
Assignment	Public Read/Write	Private	✓
Course	Public Read Only	Private	✓
Enrollment	Controlled by Parent	Controlled by Parent	
Mentor	Public Read/Write	Private	✓
Progress	Controlled by Parent	Controlled by Parent	
Student	Controlled by Parent	Controlled by Parent	

Other Settings   Other Settings Help ?

Sharing Rules:

- Instructor Course Access Rule Type: Owner-based sharing rule Shares: Course records owned by instructors With: All users in instructor roles Access Level: Read/Write
- Department Student Access Rule Type: Criteria-based sharing rule Shares: Student records where Department equals user's department With: Department-specific roles Access Level: Read Only
- Academic Performance Sharing Type: Owner-based sharing rule Shares: Progress records With: Course instructors and department heads Access Level: Read Only

6. Field-Level Security

Sensitive Field Protection: Configure field-level security to hide sensitive information from unauthorized users.

Contact Object Security:

- SSN/National ID: Visible to System Admin only
- Personal Phone: Hidden from Student profile
- Emergency Contact: Visible to Admin and Student Services only
- Financial Aid Status: Admin and Admissions Staff only

Profile-Based Access:

- EduLink Student Profile: Limited field access, read-only on most fields
- EduLink Instructor Profile: Full access to assigned course data
- EduLink Admin Profile: Full access to all fields
- EduLink Admissions Staff Profile: Access to application and enrollment fields

7. Session Settings

Security Configuration:

- Path: Setup → Session Settings

Session Timeout:

- Timeout: 2 hours of inactivity
- Timeout Warning: 10 minutes before timeout
- Force logout: Enabled

Session Security:

- Lock sessions to IP address: Enabled
- Lock sessions to domain: Enabled
- Require secure connections (HTTPS): Enabled
- Enable clickjack protection: Enabled
- Enable CSRF protection: Enabled

Password Policies:

- Path: Setup → Password Policies
- Minimum length: 8 characters
- Complexity requirements: Must contain letters and numbers
- Password history: Remember last 3 passwords
- Expiration: 90 days

SETUP
Session Settings

Session Settings   Help for this Page ⦾

Set the session security and session expiration timeout for your organization.

Session Timeout

Timeout Value   [2 hours ▾]

☐ Disable session timeout warning popup
☑ Force logout on session timeout

Session Settings

☑ Lock sessions to the IP address from which they originated
☑ Lock sessions to the domain in which they were first used
☐ Terminate all of a user's sessions when an admin resets that user's password ⓘ
☑ Force relogin after Login-As-User
☐ Require HttpOnly attribute
☐ Use POST requests for cross-domain sessions
☐ Enforce login IP ranges on every request ⓘ
☐ When embedding a Lightning application in a third-party site, use a session token instead of a session cookie.

Extended use of IE11 with Lightning Experience

EXTENDED USE OF IE11 WITH LIGHTNING EXPERIENCE HAS NOW ENDED

AS OF DECEMBER 31, THE EXTENDED PERIOD HAS ENDED, AND USE OF INTERNET EXPLORER 11 (IE 11) WITH LIGHTNING EXPERIENCE IS NO LONGER SUPPORTED. ISSUES WITH PERFORMANCE OR FUNCTIONALITY THAT AFFECT ONLY IE 11 WILL NOT BE FIXED. PLEASE SWITCH TO A SUPPORTED BROWSER.

Caching

☑ Enable caching and autocomplete on login page
☑ Enable secure and persistent browser caching to improve performance
☑ Enable user switching

8. Login IP Ranges

Network Access Configuration:

- Path: Setup → Network Access

Organizational IP Ranges:

- University Campus Network: 192.168.1.0 - 192.168.1.255
- Administrative Building: 10.0.0.0 - 10.0.0.255

Profile-Specific IP Restrictions:

- EduLink Admin Profile: Office network + VPN ranges
- EduLink Instructor Profile: Campus network only
- EduLink Student Profile: No IP restrictions (allow home access)
- EduLink Admissions Staff Profile: Campus network + remote work IPs

Trusted IP Ranges: Configure trusted IP ranges to bypass additional login verification:

- Campus WiFi networks
- Administrative VPN connections
- Designated remote work locations

9. Audit Trail

Setup Audit Trail:

- Path: Setup → Audit Trail

- Retention Period: 6 months (maximum available)
- Download Options: Available for compliance reporting

Field History Tracking: Enable tracking on critical fields to maintain data integrity audit trails.

Contact Object Tracking:

- Student Status changes
- Contact information updates
- Enrollment date modifications

Contact Field History

Help for this Page

☑ Enable Contact History

This page allows you to select the fields you want to track on the Contact History related list. Whenever a user modifies any of the fields selected below, the old and new field values are added to the History related list as well as the date, time, nature of the change, and user making the change. Note that multi-select picklist and large text field values are tracked as edited; their old and new field values are not recorded.

Save   Cancel

Deselect all fields

Track old and new values

Account Name	☐		Assistant	☐
Asst. Phone	☐		Birthdate	☐
Buyer Attributes	☐		Clean Status	☐
Contact Owner	☐		Creation Source	☐
Data.com Key	☐		Department	☑
Do Not Call	☐		Email	☑
Email Bounced Date	☐		Email Bounced Reason	☐
Email Opt Out	☐		Fax	☐
Fax Opt Out	☐		Gender Identity	☐
Home Phone	☐		Individual	☐
Languages	☐		Lead Source	☐
Level	☐		Mailing Address	☑
Mobile	☐		Name	☑
Other Address	☐		Other Phone	☐
Phone	☑		Pronouns	☐

Course Object Tracking:

- Instructor assignments
- Course status changes
- Enrollment capacity modifications

Course Field History

This page allows you to select the fields you want to track on the Course History related list. Whenever a user modifies any of the fields selected below, the old and new field values are added to the History related list as well as the date, time, nature of the change, and user making the change. Note that multi-select picklist and large text field values are tracked as edited; their old and new field values are not recorded.

Save   Cancel

Deselect all fields

Track old and new values

Approval Status	☑	Course Code	☐
Course Name	☐	Credits	☐
Department	☐	End Date	☑
Instructor	☑	Owner	☐
Record Type	☐	Start Date	☑
Status	☑	Thesis Supervisor	☐

Track changes only

Description	☐

Save   Cancel