

AeroSense: Phase 9 Documentation

Phase Title: Reporting, Dashboards & Security Review

Objective: To deliver powerful reports and dashboards for executives and ensure that data security (object-level, field-level, and record-level) is strictly enforced in AeroSense.

1. Custom Report Types

- **Sensor with Readings** → Analyze AQI trends per sensor.
- **Alerts with Sensors** → View high-risk devices.
- **DailyAggregate with Sensor** → Compare daily AQI averages.
- **Calibration with Sensor** → Track calibration history & performance.

The screenshot displays the AeroSense web application interface. On the left is a navigation sidebar with a search bar containing 'report'. The sidebar menu includes 'Feature Settings' (with sub-items 'Analytics' and 'Reports & Dashboards'), 'Security' (with sub-items 'Guest User Sharing Rule Access' and 'Report'), and a search tip at the bottom. The 'Reports & Dashboards' section is expanded, showing 'Access Policies', 'Historical Trending', 'Report Types' (highlighted), 'Reporting Snapshots', and 'Reports and Dashboards Settings'. The main content area is titled 'Sensor with Readings' and includes buttons for 'Preview Layout', 'Edit Layout', 'Clone', 'Delete', and 'Close'. Below the title, a message states: 'Below is the information for this custom report type. You can click the buttons on this to preview or update information for the custom report type'. The main area is divided into two panels: 'Details' and 'Object Relationships'. The 'Details' panel contains a table with the following information:

Display Label	Sensor with Readings
API Name	Sensor_with_Readings
Description	Analyze AQI trends per sensor
Created By	Raksha Kalaskar, 9/24/25, 10:48 PM
Store in Cate...	other
Deployment ...	Deployed
Modified By	Raksha Kalaskar, 9/24/25, 10:48 PM

The 'Object Relationships' panel shows a diagram with a circle labeled 'Sensors (A)' and a rectangle labeled 'A' below it, connected by a downward arrow. The 'Fields' panel is partially visible at the bottom left.

Setup

Home

Object Manager

Search Setup

Star

Plus

Cloud

Help

Settings

Notifications

Profile

report

Feature Settings

Analytics

Reports & Dashboards

Access Policies

Historical Trending

Report Types

Reporting Snapshots

Reports and Dashboards Settings

Security

Guest User Sharing Rule Access

Report

Didn't find what you're looking for? Try using Global Search.

Custom Report Types

Alerts with Sensors

Preview Layout

Edit Layout

Clone

Delete

Close

Below is the information for this custom report type. You can click the buttons on this to preview or update information for the custom report type

Details

Display Label

Alerts with Sensors

API Name

Alerts_with_Sensors

Description

Alerts with Sensors

Created By

Raksha Kalaskar, 9/24/25, 10:53 PM

Store in Cate...

other

Deployment ...

Deployed

Modified By

Raksha Kalaskar, 9/24/25, 10:53 PM

Fields

Object Relationships

Alerts (A)

A

A

Setup

Home

Object Manager

Search Setup

Star

Plus

Cloud

Help

Settings

Notifications

Profile

report

Feature Settings

Analytics

Reports & Dashboards

Access Policies

Historical Trending

Report Types

Reporting Snapshots

Reports and Dashboards Settings

Security

Guest User Sharing Rule Access

Report

Didn't find what you're looking for? Try using Global Search.

Custom Report Types

DailyAggregates with Sensor

Preview Layout

Edit Layout

Clone

Delete

Close

Below is the information for this custom report type. You can click the buttons on this to preview or update information for the custom report type

Details

Display Label

DailyAggregate with Sensor

API Name

DailyAggregate_with_Sensor

Description

DailyAggregate with Sensor

Created By

Raksha Kalaskar, 9/24/25, 10:54 PM

Store in Cate...

other

Deployment ...

Deployed

Modified By

Raksha Kalaskar, 9/24/25, 10:54 PM

Fields

Source Object

DailyAggregates

Included Fields

13

Object Relationships

DailyAggregates (A)

A

A

2. Reports

Example Reports:

1. Sensor Performance Report

- Shows sensors by Trust Score and Last Calibration Date.

2. Critical Alerts Report

- Filters Alerts where Severity__c = "High".

3. AQI Trends Report

- Graph: AQI (Y-axis) vs Time (X-axis) grouped by Sensor.

4. Top 5 Polluted Locations

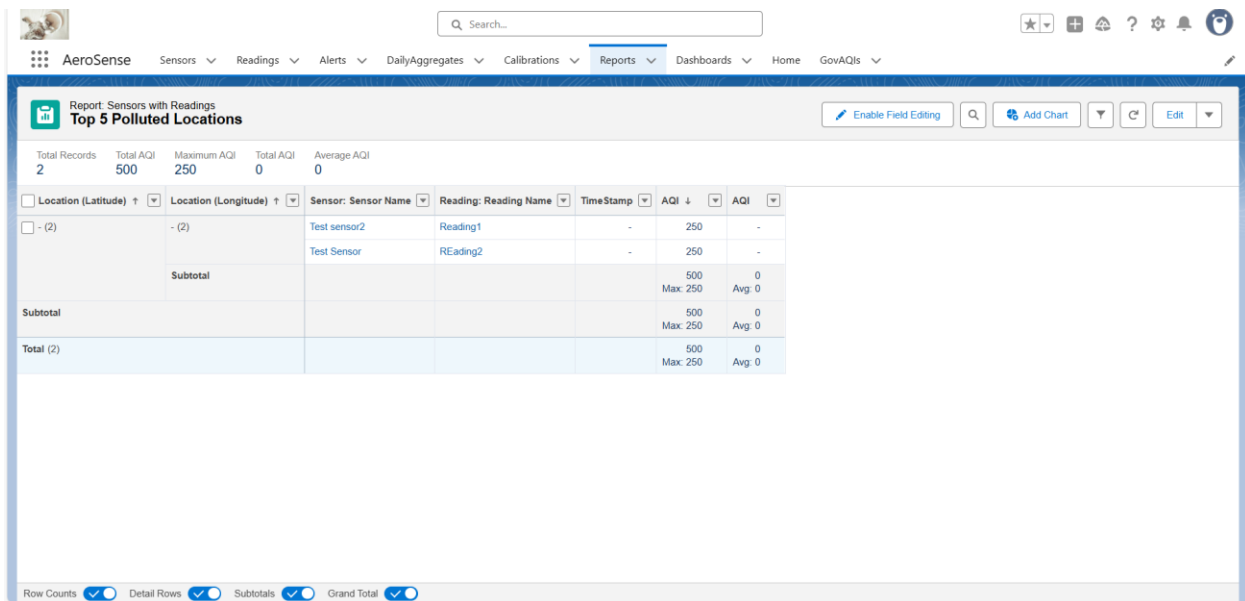
- Groups Readings by Location → Sorts AQI descending.

5. Calibration Effectiveness Report

- Before/after calibration AQI comparison.

The screenshot displays the AeroSense web application interface. At the top, there is a navigation bar with a search bar and various icons. Below the navigation bar, the 'Reports' menu is selected, and the 'Sensor Performance Report' is displayed. The report is titled 'Sensor Performance Report' and includes a sub-tab 'Calibrations with Sensor'. The main content area shows a table with columns: Sensor: Sensor Name, Sensor: Trust Score, Calibration: Last Modified Date, Sensor: Location (Latitude), Sensor: Location (Longitude), and Status. The table contains two rows of data. On the left side, there is a sidebar with a 'Filters' section and a 'Show Me My calibrations' button. The bottom of the interface shows a status bar with 'Update Preview Automatically' and a 'Run' button.

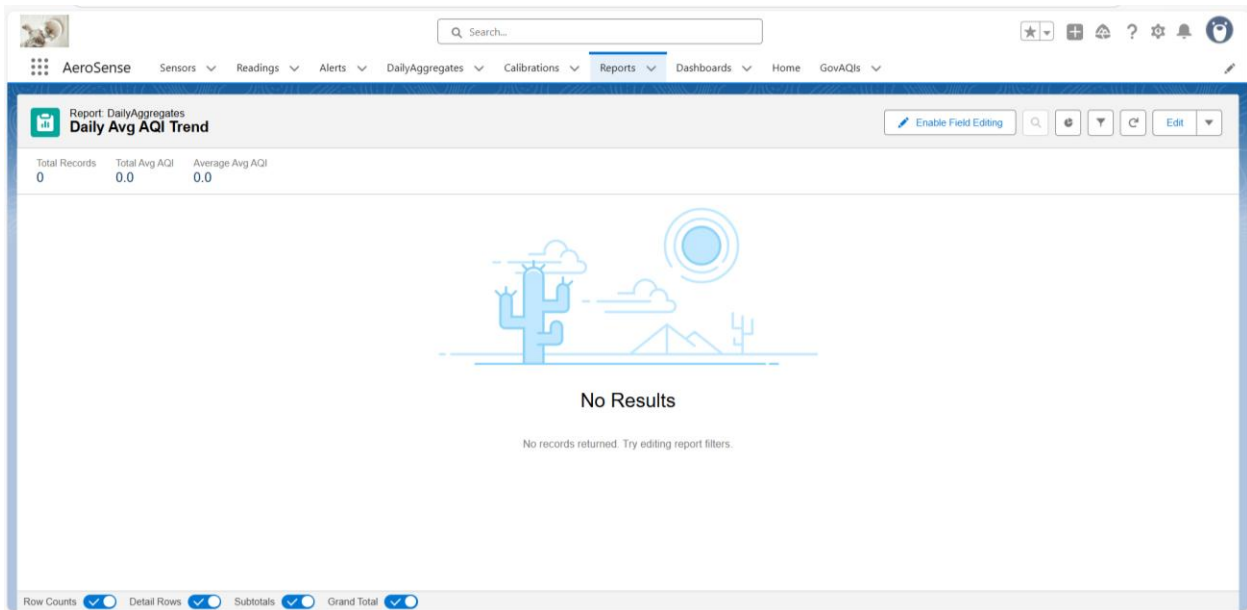
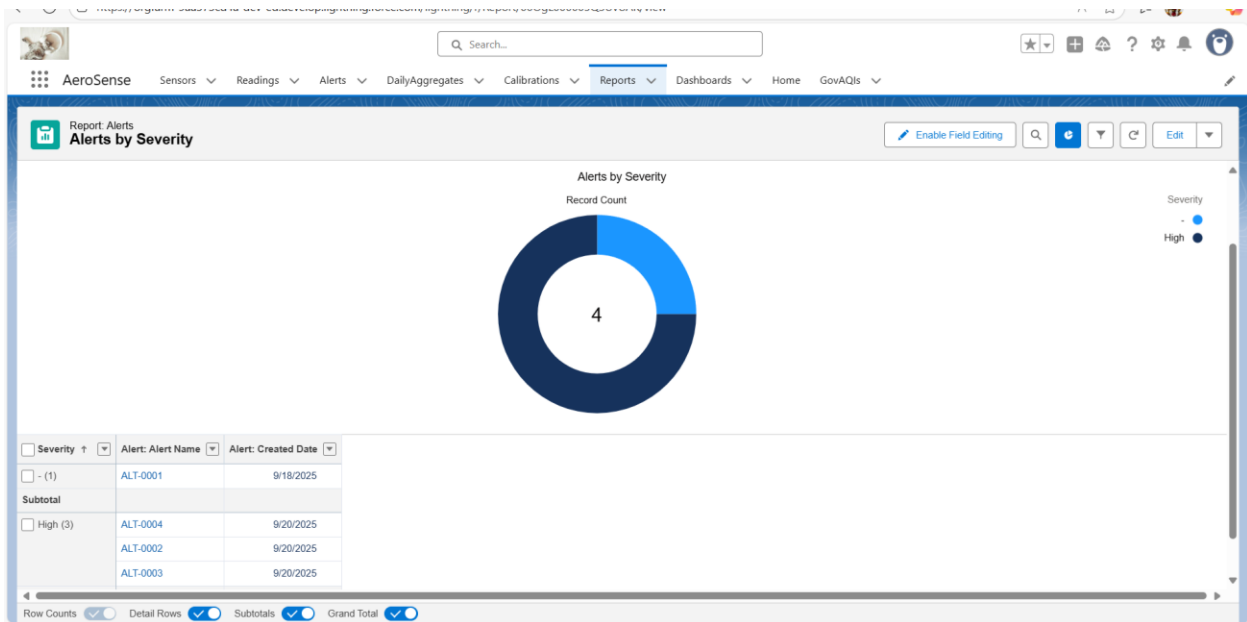
	Sensor: Sensor Name	Sensor: Trust Score	Calibration: Last Modified Date	Sensor: Location (Latitude)	Sensor: Location (Longitude)	Status
1	Test sensor2	40	9/20/2025	-	-	-
2		40		0.00000	0.00000	

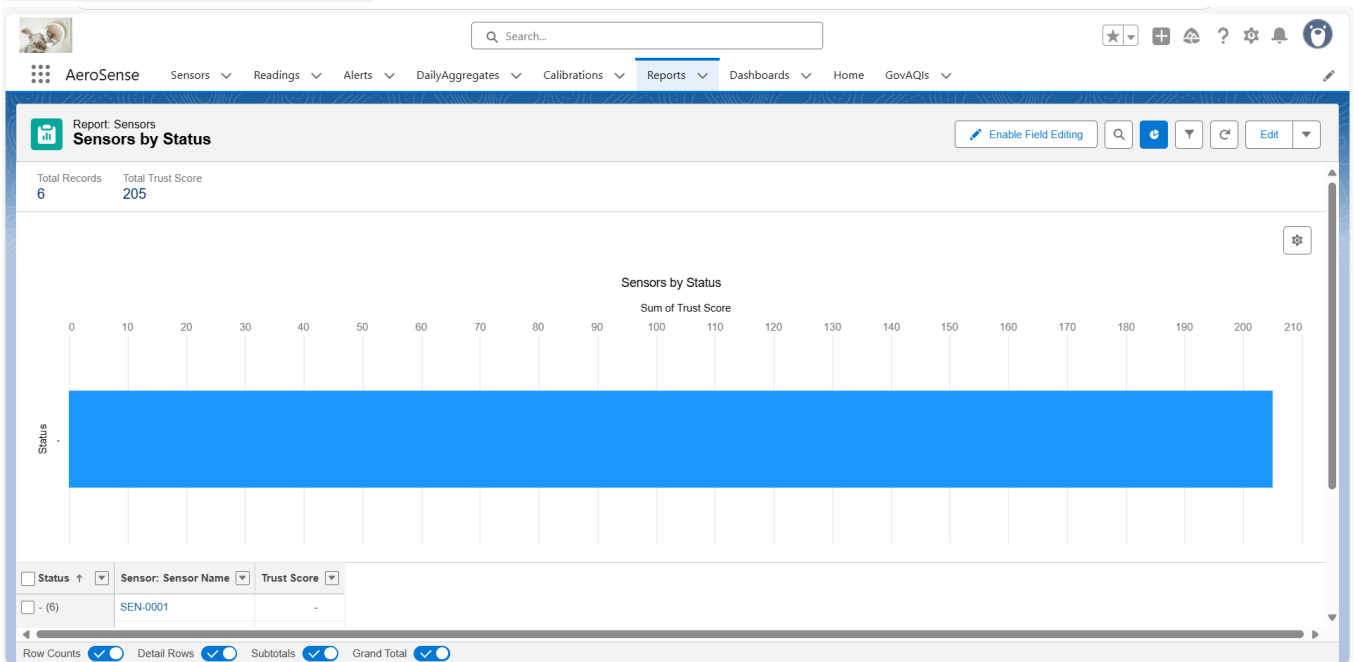
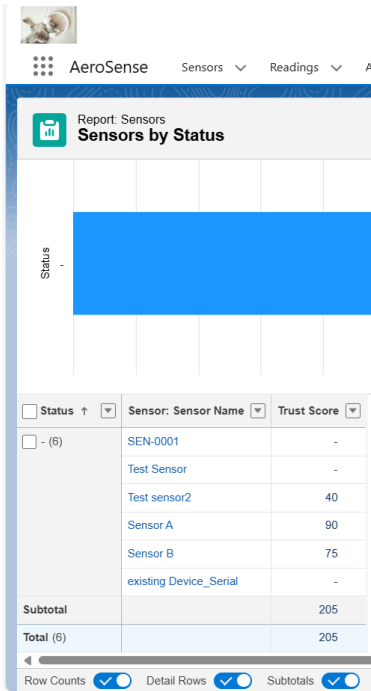


3. Dashboards

AeroSense Executive Dashboard (Examples):

- **Donut Chart** → Alerts by Severity (Low, Medium, High).
 - **Line Chart** → AQI Trend (Daily Avg per Sensor).
 - **Bar Chart** → Sensors by Status (Active, Inactive, Needs Calibration).
 - **Table Widget** → Top 10 Sensors with Critical AQI.
 - **Gauge Chart** → Current Citywide Average AQI (Safe → Hazardous).
- Path: **App Launcher** → **Dashboards** → **New Dashboard** → **Add Components from Reports**.





AeroSense

Sensors

Readings

Alerts

DailyAggregates

Calibrations

Reports

Dashboards

Home

GovAQIs

Q Search...

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Report: Reading History

Top 10 Sensors by Max AQI

Enable Field Editing

Q

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▼

🔄

Edit

▼

Total Records

2

Total AQI

500

Maximum AQI

250

☐

Sensor

↑

▼

▲

▼

▲

▼

▲

▼

☐

Test Sensor (1)

250

-

Subtotal

250

Max 250

☐

Test sensor2 (1)

250

-

Subtotal

250

Max 250

Total (2)

500

Max 250

Row Counts

Detail Rows

Subtotals

Grand Total

AeroSense

Sensors

Readings

Alerts

DailyAggregates

Calibrations

Reports

Dashboards

Home

GovAQIs

Q Search...

★

+

🏠

?

⚙️

🔔

👤

Report: DailyAggregates

Citywide Avg AQI Today

Enable Field Editing

Q

🏠

Add Chart

▼

🔄

Edit

▼

Total Records

0

Total Avg AQI

0.0

Average Avg AQI

0.0

AeroSense

Sensors

Readings

Alerts

DailyAggregates

Calibrations

Reports

Dashboards

Home

GovAQIs

Q Search...

★

+

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?

⚙️

🔔

👤

Dashboards

Recent

1 item

Q Search recent dashboards...

New Dashboard

New Folder

⚙️

DASHBOARDS

Dashboard Name

Description

Folder

Created By

Created On

Subscribed

Recent

AeroSense Executive Dashboard

AeroSense Executive Dashboard

Aerosense

Raksha Kalaskar

9/26/2025, 9:26 AM

▼

Created by Me

Private Dashboards

All Dashboards

FOLDERS

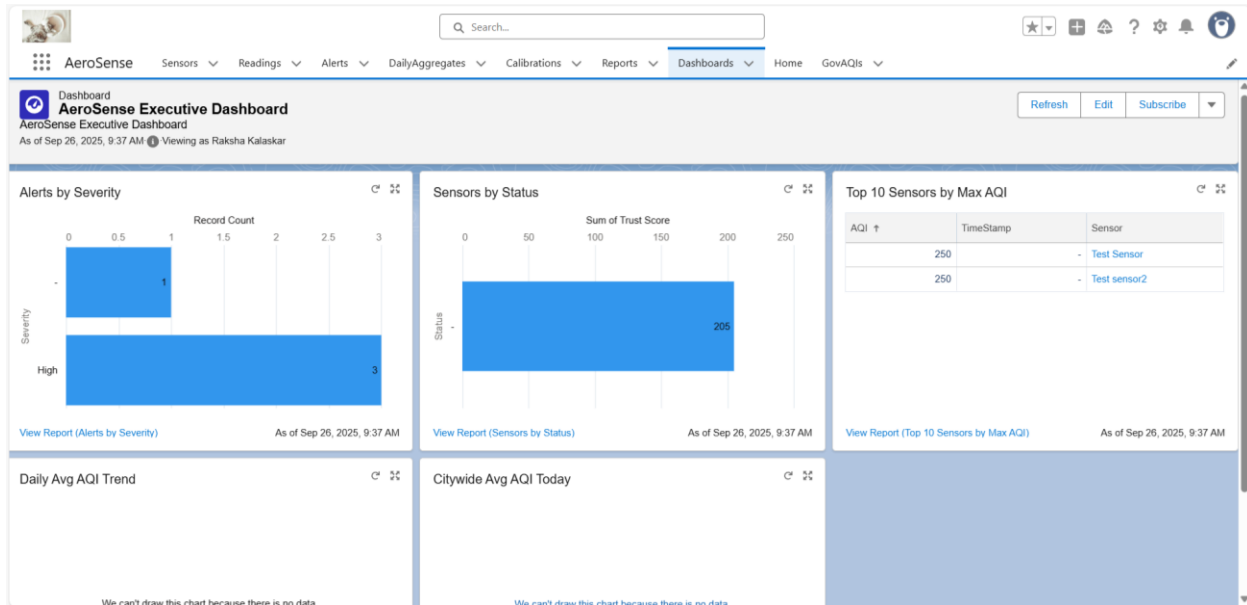
All Folders

Created by Me

Shared with Me

FAVORITES

All Favorites



4. Dynamic Dashboards

- Enable **Run as Logged-In User** → Each user sees only their relevant data.
- Example: Technician sees only Sensors assigned to them; Executive sees all Sensors.

5. Security Review – Object-Level Security (Profiles)

- **Technician Profile:** Read/Write on Sensor & Calibration; Read-only on Alerts.
 - **Executive Profile:** Read-only on all objects; full Dashboard access.
 - **System Admin Profile:** Full access.
- Path: Setup → Profiles → Object Settings.

The image displays two screenshots of the Salesforce Setup interface, specifically the 'Profiles' section. The top screenshot shows the 'Technician' profile, and the bottom screenshot shows the 'Executive' profile. Both profiles are configured with a 'Salesforce' user license and a 'Custom Profile' checked. The 'Technician' profile is associated with the 'AeroSense project', while the 'Executive' profile is associated with 'AeroSense dashboards'. Both profiles were created by 'Raksha Kalaskar' on 9/26/2025 at 9:42 AM and 9:46 AM respectively. The 'Page Layouts' section for both profiles lists various standard object layouts, including Global, Email Application, Home Page Layout, Account, Active Scratch Org, Alternative Payment Method, Location Group Assignment, Macro, Namespace Registry, Object Milestone, Operating Hours, and Opportunity. The 'Executive' profile has a 'Custom Profile' checked, while the 'Technician' profile has a 'Custom Profile' checked.

Technician Profile Details:

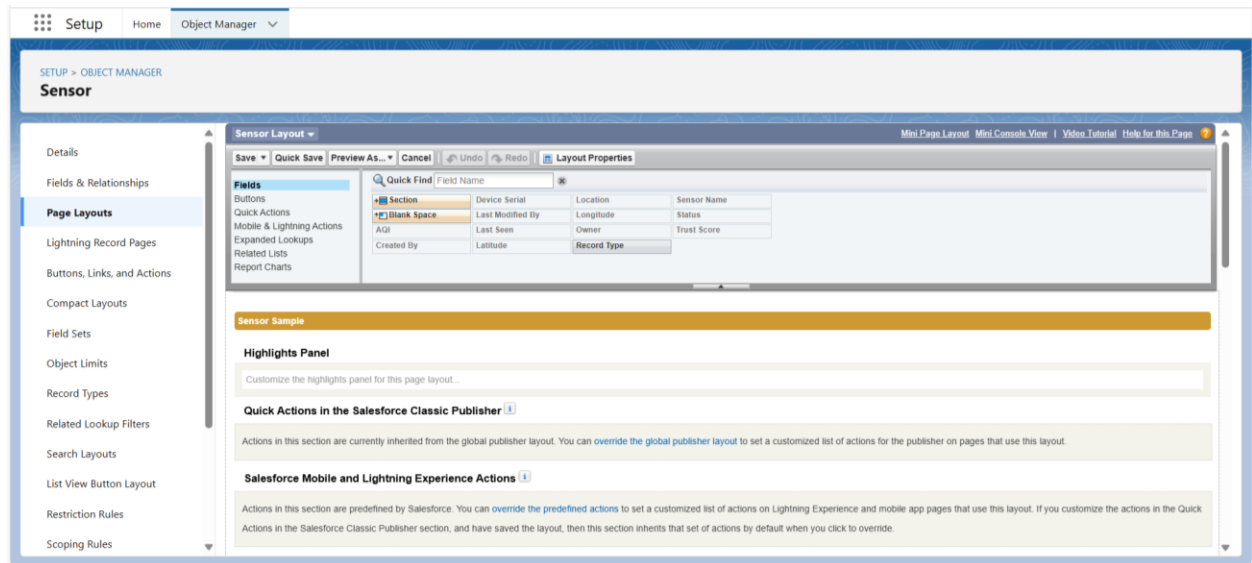
- Name: Technician
- User License: Salesforce
- Description: Technician profile for AeroSense project
- Created By: Raksha Kalaskar, 9/26/2025, 9:42 AM
- Modified By: Raksha Kalaskar, 9/26/2025, 9:42 AM
- Custom Profile: ☒

Executive Profile Details:

- Name: Executive
- User License: Salesforce
- Description: Executive profile for AeroSense dashboards
- Created By: Raksha Kalaskar, 9/26/2025, 9:46 AM
- Modified By: Raksha Kalaskar, 9/26/2025, 9:46 AM
- Custom Profile: ☒

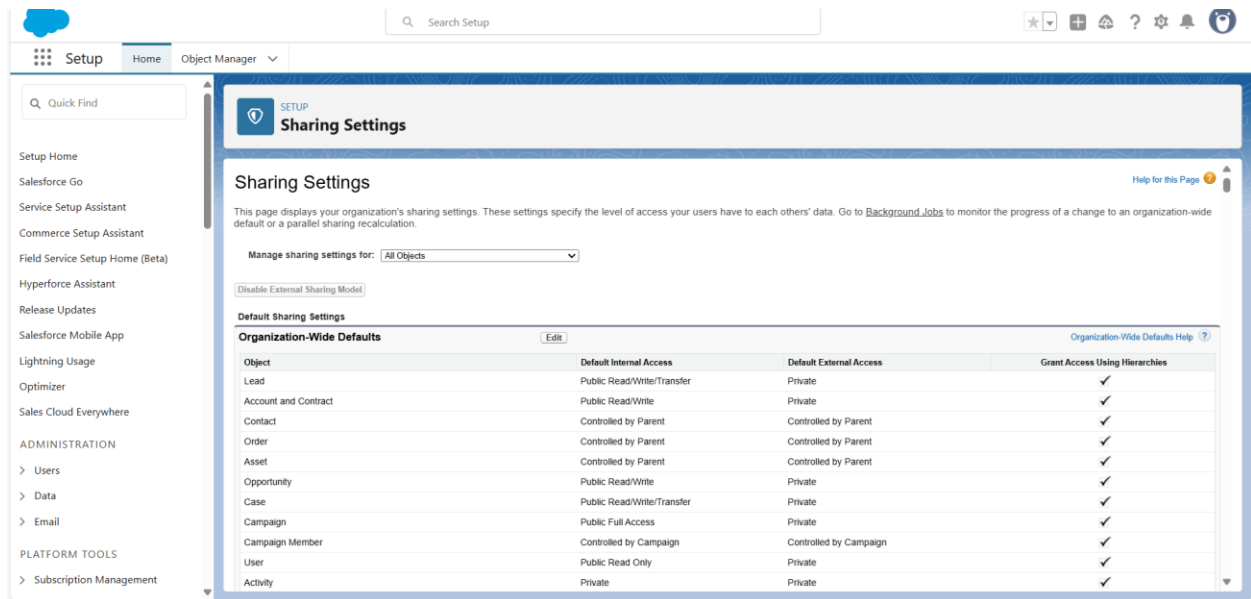
6. Security Review – Field-Level Security

- Hide sensitive fields like:
 - **Sensor Serial Number** → Visible only to Admin.
 - **Trust_Score__c** → Hidden from Attendee role.
- Path: Setup → Field-Level Security.



7. Security Review – Record-Level Security (OWD & Sharing)

- **OWD (Org-Wide Defaults):**
 - Sensors: Private
 - Readings: Controlled by Parent (Sensor)
 - Alerts: Controlled by Parent (Sensor)
 - DailyAggregate: Public Read Only
 - **Sharing Rules:**
 - Share Sensors with “Executive” role (Read-Only).
 - Share Sensors with “Technician” role (Read/Write for Assigned Sensors).
- Path: Setup → Sharing Settings.

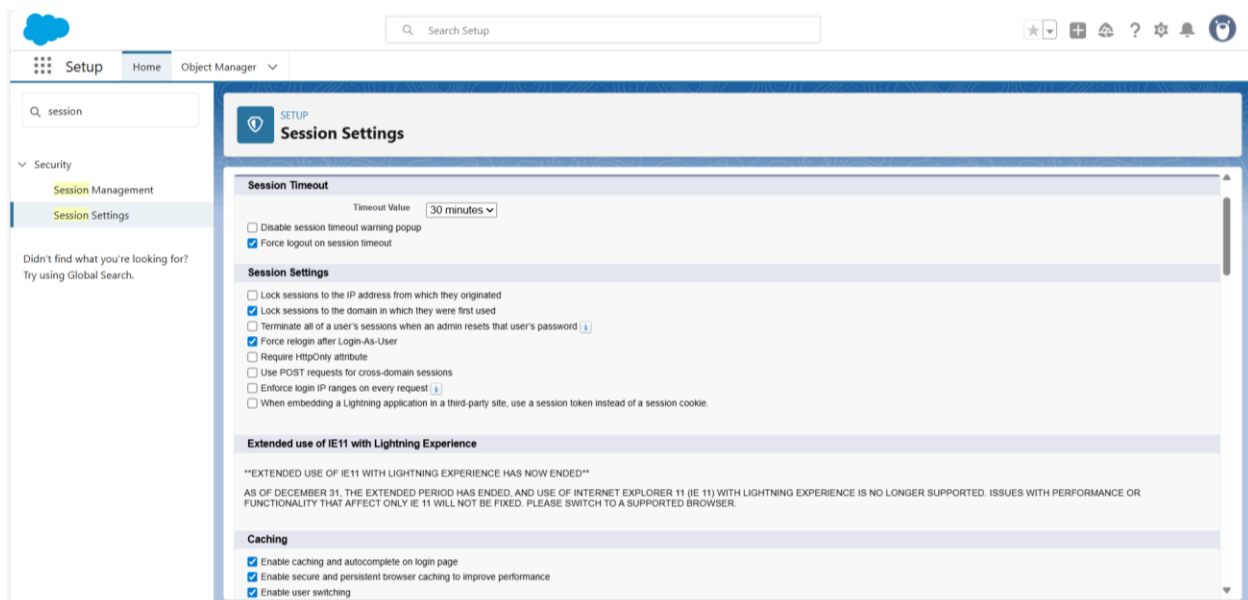


The screenshot shows the Salesforce Setup interface with the 'Sharing Settings' page selected. The left sidebar contains navigation links for Setup Home, Salesforce Go, Service Setup Assistant, Commerce Setup Assistant, Field Service Setup Home (Beta), Hyperforce Assistant, Release Updates, Salesforce Mobile App, Lightning Usage, Optimizer, Sales Cloud Everywhere, ADMINISTRATION (Users, Data, Email), and PLATFORM TOOLS (Subscription Management). The main content area is titled 'Sharing Settings' and includes a search bar, a 'Manage sharing settings for' dropdown set to 'All Objects', and a 'Default Sharing Settings' section. The 'Default Sharing Settings' section contains a table of 'Organization-Wide Defaults'.

Object	Default Internal Access	Default External Access	Grant Access Using Hierarchies
Lead	Public Read/Write/Transfer	Private	✓
Account and Contract	Public Read/Write	Private	✓
Contact	Controlled by Parent	Controlled by Parent	✓
Order	Controlled by Parent	Controlled by Parent	✓
Asset	Controlled by Parent	Controlled by Parent	✓
Opportunity	Public Read/Write	Private	✓
Case	Public Read/Write/Transfer	Private	✓
Campaign	Public Full Access	Private	✓
Campaign Member	Controlled by Campaign	Controlled by Campaign	✓
User	Public Read Only	Private	✓
Activity	Private	Private	✓

8. Session & Login Security

- Configure:
 - **IP Ranges** → Allow only office networks.
 - **Session Timeout** → 30 minutes for non-admins.
 - **Audit Trail** → Track setup changes.



The screenshot shows the Salesforce Setup interface with the 'Session Settings' page selected. The left sidebar shows the 'Security' section expanded, with 'Session Management' and 'Session Settings' visible. The main content area is titled 'Session Settings' and includes a search bar. The 'Session Timeout' section shows a 'Timeout Value' of '30 minutes' and checkboxes for 'Disable session timeout warning popup' (unchecked) and 'Force logout on session timeout' (checked). The 'Session Settings' section includes checkboxes for 'Lock sessions to the IP address from which they originated' (unchecked), 'Lock sessions to the domain in which they were first used' (checked), 'Terminate all of a user's sessions when an admin resets that user's password' (unchecked), 'Force relogin after Login-As-User' (checked), 'Require HttpOnly attribute' (unchecked), 'Use POST requests for cross-domain sessions' (unchecked), 'Enforce login IP ranges on every request' (unchecked), and 'When embedding a Lightning application in a third-party site, use a session token instead of a session cookie' (unchecked). The 'Extended use of IE11 with Lightning Experience' section contains a warning message: '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.' The 'Caching' section includes checkboxes for 'Enable caching and autocomplete on login page' (checked), 'Enable secure and persistent browser caching to improve performance' (checked), and 'Enable user switching' (checked).

View Setup Audit Trail

The last 20 entries for your organization are listed below. You can [download](#) your organization's setup audit trail for the last six months (Excel .csv file).

Date	User	Source Namespace Prefix	Action	Section	Delegate User
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Changed Session Timeout Value from 120 to 30 minutes	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Multi-Factor Authentication was set to High Assurance	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Passwordless Login was set to Standard	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Lightning Login was set to Standard	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Activation was set to Standard	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Delegated Authentication was set to Standard	Session Settings	
9/26/2025, 10:20:11 AM PDT	rakshakalaskar2598372@agentforce.com		Session Security Level for Username Password was set to Standard	Session Settings	
9/26/2025, 10:14:57 AM PDT	rakshakalaskar2598372@agentforce.com		Completed Criteria Rule: Sensor recalculation: Technician_Sensor_Sharing	Sharing Rules	
9/26/2025, 10:14:57 AM PDT	rakshakalaskar2598372@agentforce.com		Initiated Criteria Rule: Sensor recalculation: Technician_Sensor_Sharing	Sharing Rules	
9/26/2025, 10:13:44 AM PDT	rakshakalaskar2598372@agentforce.com		Created Sensor Criteria-Based Sharing Rule Technician_Sensor_Sharing	Sharing Rules	
9/26/2025, 10:13:44 AM PDT	rakshakalaskar2598372@agentforce.com		Created new role Technician	Manage Users	

9. Example Use Case in AeroSense

- **Executive Login** → Opens Dashboard → Views real-time AQI trend across regions.
- **Technician Login** → Sees only their assigned Sensors and Calibrations.
- **Admin Login** → Can see all records and manage profiles/permissions.