

Salesforce Project Documentation – Deepfake CRM Phase 3: Data Modeling & Relationships

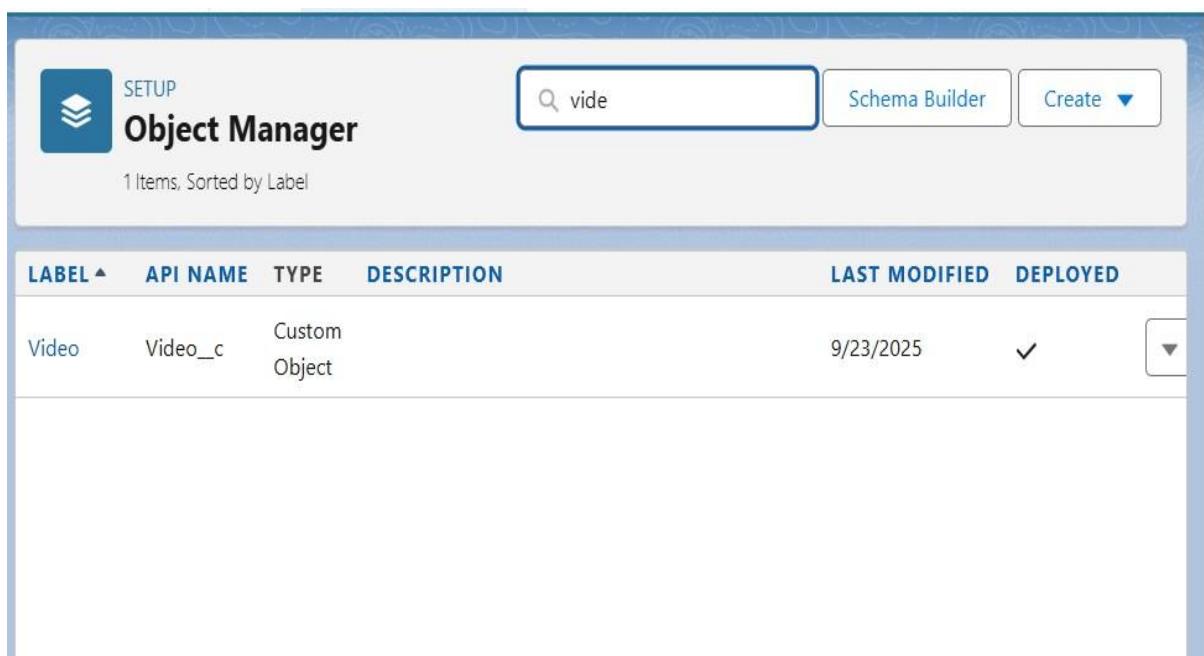
Standard & Custom Objects Standard

Objects:

- **User** → Analysts, Admins, Clients.
- **Case** → For managing flagged deepfake incidents.

Custom Objects:

1. **Video__c** → Stores uploaded video details.



The screenshot shows the Salesforce Object Manager page. At the top, there is a search bar with the text "vide", a "Schema Builder" button, and a "Create" button with a dropdown arrow. Below the header, it says "1 Items, Sorted by Label". The main area is a table with the following data:

Label	API Name	Type	Description	Last Modified	Deployed
Video	Video__c	Custom Object		9/23/2025	✓

2. **Detection_Report__c** → AI analysis reports of videos.

The screenshot shows the Salesforce Object Manager interface. At the top, there is a search bar with the text "detec" and a dropdown menu also showing "detec". Below the search bar is a table header with columns: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEP. There is one row of data in the table:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEP
Detection Report	Detection_Report__c	Custom Object		9/23/2025	✓

3. **Alert__c** → Notifications for deepfake detection.

The screenshot shows the Salesforce Object Manager interface. At the top, there is a search bar with the text "alert" and a dropdown menu also showing "alert". Below the search bar is a table header with columns: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. There is one row of data in the table:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Alert	Alert__c	Custom Object		9/23/2025	✓

4. **Client__c** → Enterprise/individual client details.

SETUP

Object Manager

1 Items, Sorted by Label

Search: cli

Schema Builder

Create ▾

LABEL ▾	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED	⋮
Client	Client_c	Custom Object		9/23/2025	✓	▼

Fields Video__c

1. Video ID

2. Uploaded By
3. Title
4. Status
5. Video Name

SETUP > OBJECT MANAGER

Video

Details	Fields & Relationships		
Page Layouts	Owner	OwnerId	Lookup(User,Group)
Lightning Record Pages	Source URL	Source_URL_c	URL(255)
Buttons, Links, and Actions	Status	Status_del_c	Picklist
Compact Layouts	Title	Title_c	Text(10)
Field Sets	Uploaded By	Uploaded_By_c	Lookup(User)
Object Limits	Video ID	Video_ID_c	Auto Number
Record Types	Video Name	Name	Text(80)
Related Lookup Filters			
Restriction Rules			

Detection_Report_c

1. Video
2. Report ID
3. Findings
4. Detection Report Name
5. AI Model

SETUP > OBJECT MANAGER

Detection Report

Fields & Relationships		
8 Items, Sorted by Field Label		
	FIELD LABEL	FIELD NAME
Details	DATA TYPE	
Fields & Relationships	AI Model	AI_Model__c
Page Layouts	Created By	CreatedById
Lightning Record Pages	Detection Report Name	Name
Buttons, Links, and Actions	Findings	Long Text Area(32768)
Compact Layouts	Last Modified By	LastModifiedById
Field Sets	Owner	Lookup(User,Group)
Object Limits	Report ID	Auto Number
Record Types	Video	Lookup(Detection Report)
Related Lookup Filters		
Restriction Rules		
Scoping Rules		

Alert_c

1. Alert ID
2. Alert Type
3. Alert Name

4. Severity

The screenshot shows the Salesforce Object Manager interface for the 'Alert' object. The top navigation bar displays 'SETUP > OBJECT MANAGER'. Below it, the title 'Alert' is shown. On the left, a sidebar lists various setup options under 'Fields & Relationships': Details, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Restriction Rules. The main area contains a table of fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING
Alert ID	Alert_ID_c	Auto Number	
Alert Type	Alert_Type_c	Picklist	
Alerts Name	Name	Text(80)	
Created By	CreatedById	Lookup(User)	
Last Modified By	LastModifiedById	Lookup(User)	
Owner	OwnerId	Lookup(User,Group)	
Severity	Severity_c	Picklist	

Client__c

1. Client ID
2. Client Name
3. Company Name

4. Contact Person

5. Industry

SETUP > OBJECT MANAGER		
Client		
Details	Quick Find	
	New	Deleted Fields
		Field Dependencies
Fields & Relationships	Client ID	Client_ID__c
Page Layouts	Client Name	Name
Lightning Record Pages	Company Name	Company_Name__c
Buttons, Links, and Actions	Contact Person	Contact_Person__c
Compact Layouts	Created By	CreatedBy
Field Sets	Industry	Industry__c
Object Limits	Last Modified By	LastModifiedBy
Record Types	Owner	OwnerId
Related Lookup Filters		
Restriction Rules		

Relationships

- **Detection_Report__c → Video__c → Master-Detail** (Each report belongs to one video; delete parent deletes reports).
- **Alert__c → Video__c → Master-Detail** (Alerts are tightly linked to videos).
- **Video__c → Client__c → Lookup** (If video uploaded by an enterprise client; public uploads may have blank lookup).
- **Case (Standard) → Lookup or Related to Video__c** (Used for incident tracking and remediation workflows).
- **User → Video__c** (Uploaded_By lookup links to the user who uploaded/triggered the scan).

Record Types

- **Video_c:**
 - **Public Scan** — for individual/public uploads.
 - **Enterprise Scan** — for client uploads with SLA/metadata.
 - **API Upload** — for programmatic uploads via REST.
 - **Detection_Report_c:**
 - **Quick Scan** — lightweight, fast analysis.
 - **Forensic Report** — detailed frame-level / audio analysis and XAI outputs.
 - **Alert_c:**
 - **General Alert** — informational/low severity.
 - **Critical Alert** — high-severity incidents that require immediate action.
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Page Layouts (Suggested Sections & Fields) Video Layout

(Video Detailed Layout)

- Section: Video Information → Video_ID, Title, Source_URL, Uploaded_By, Upload_Date, Duration, File_Size_MB
- Section: AI Results → Status, Confidence_Score, Processing_Time_sec, Primary_AI_Model
- Section: Related Records → Related list of Detection Reports, Related list of Alerts, Related Cases
- Section: Actions → Buttons for “Re-scan”, “Create Case”, “Download Evidence”

Detection Report Layout

- Section: Report Information → Report_ID, Video (lookup), Report_Generated_On, AI_Model_c, Confidence_Score_c
- Section: Findings → Findings_c, Key_Frames_c, Evidence_File_c
- Section: Analyst Notes → Internal comments, remediation suggestions

Alert Layout

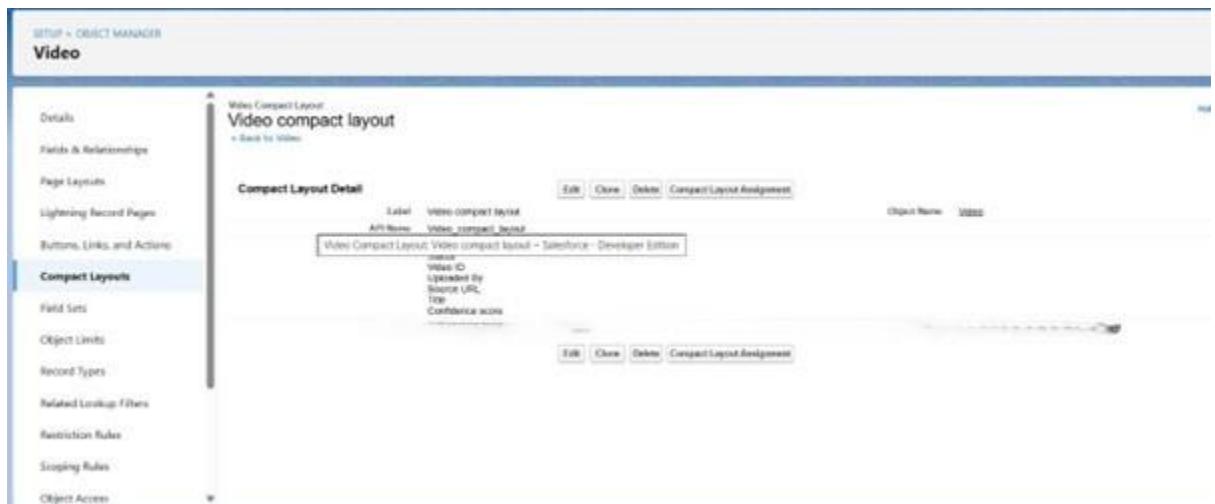
- Section: Alert Info → Alert_ID, Video (lookup), Alert_Type, Severity, Alert_Date
- Section: Notification History → Notified_To, Notification Status, Delivery Log

Client Layout

- Section: Client Info → Client_ID, Company_Name, Industry, Contact_Person, Contact_Email, Onboarded_On
- Section: Integration → API_Key (masked), Integration Notes, Assigned Account Manager

Compact Layouts (Highlight Panel Fields)

- **Video (Compact):** Video_ID | Title | Status__c | Confidence_Score__c | Uploaded_By



- **Detection Report (Compact):** Video | Report ID | Findings | Detection Report Name | AI Model
- **Alert (Compact):** Alert_ID | Severity__c | Alert_Type__c | Alert Name | Video



- **Client (Compact):** Client_ID | Company_Name | Industry | Contact_Person

Validation & Field-Level Rules (Examples)

- **Confidence_Score__c** must be between 0 and 100 (validation rule).
- **Status__c** cannot be set to “Deepfake” unless there is at least one **Detection_Report__c** with **Confidence_Score__c ≥ threshold** (flow or trigger enforcement).
- **API_Key** stored as encrypted and not visible to profiles without permission set.

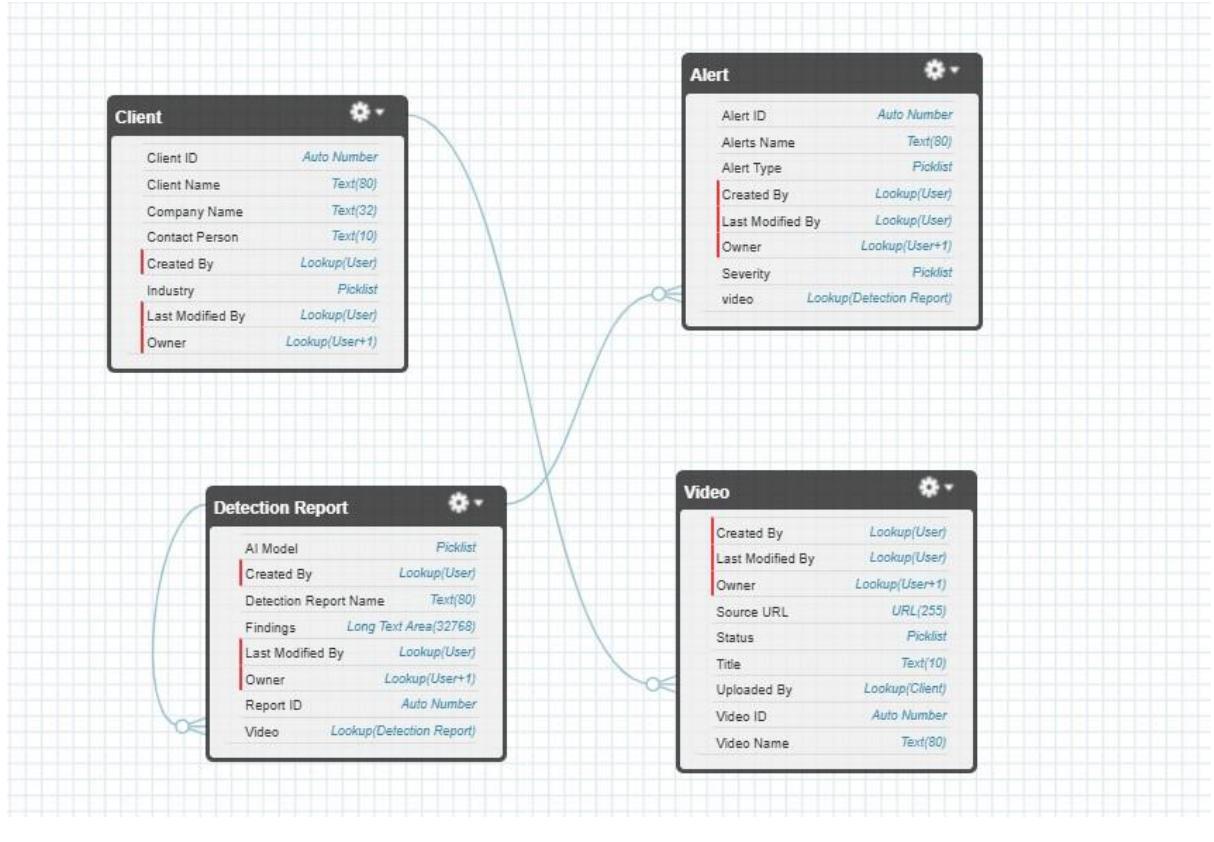
Indexing & Performance Tips

- Index commonly queried fields: **Video_ID**, **Status__c**, **Confidence_Score__c**, **Uploaded_By** (external ID where appropriate).
- Use skinny tables / selective filters for reports if data volume is large (videos can be heavy).
- Store media files externally (AWS S3) and keep only references/URLs inside **Video__c**.

Schema Builder Guidance (Where to place objects visually)

- Place **Video__c** at the center. Draw **Master-Detail** links to **Detection_Report__c** and **Alert__c** (1-to-many).
- Draw **Lookup** from **Video__c** to **Client__c** (optional link for enterprise uploads).

- Make sure each Master-Detail shows roll-up summary opportunities (e.g., Video → roll up count of Reports, highest Severity of Alerts).



Example Use Scenarios & Data Flow

- **Public upload:** User uploads video → Video__c record created (Status=Pending) → Asynchronous ML call runs → Detection_Report__c created → If Confidence ≥ threshold, Video Status updated to Deepfake and Alert__c created → Case created for analyst review.
- **Enterprise upload via API:** External system posts video with Client reference → Video__c (Enterprise Scan) created with Client__c lookup → Priority queue processing → Forensic Report generated and delivered to client via webhook + Salesforce Case for SLA tracking.

Deliverables for Phase 3 (What to implement)

- Create custom objects: **Video__c**, **Detection_Report__c**, **Alert__c**, **Client__c**.
- Define fields as described above and set appropriate data types.
- Implement Master-Detail relationships: Video → Detection Report, Video → Alert.

- Implement Lookup: Video → Client.
- Create Record Types and Page Layouts per user role (Analyst, Client, Admin).
- Configure Compact Layouts and assign to profiles.
- Build Schema Builder diagram and include as documentation screenshot.
- Add validation rules and permission sets for API_Key security.