CAP XML Feed Integration Guide for Agencies

Efficient Consumption of CAP-XML Using ETag & Client-Side Caching

This guide describes how external agencies should consume the CAP XML feed efficiently. To reduce unnecessary load on Sachet National Disaster Portal Alerting System, it is required that all-consuming systems follow the ETag-based caching mechanism described below.

1. Overview

Our CAP XML endpoint supports the following modern web caching standards:

- **ETag (Entity Tag)** for change detection in CAP XML File
- **HTTP 200 OK** when CAP XML content has changed
- **HTTP 304 Not Modified** when CAP XML content is unchanged

To reduce network traffic and server load, agencies must implement **client-side caching** using ETags.

2. Expected Consumer Behaviour

STEP 1 — First Request (No ETag)

- Consumer calls the URL:

GET
https://sachet.ndma.gov.in/cap_public_website/FetchXMLFile?identifier=XXXXXXXXXXX

Server returns:

- **HTTP 200 OK**
- XML Content
- **Response Header**

  ETag: "<etag-value>"

STEP 2 — Cache the response

Consumer must store:

- The XML data

- The ETag value returned by the server

3. Subsequent Requests (With ETag)

Every subsequent request **must include**:

If-None-Match: "<etag-value-from-last-response>"

Depending on server response:

CASE A: Server returns 304 Not Modified

Server response: **HTTP 304 Not Modified**

Consumer should:

- NOT download anything
- Use the **previously cached XML**
- Continue processing normally

This avoids unnecessary load and saves bandwidth.

CASE B: Server returns 200 OK

Server response: **HTTP 200 OK , ETag: "<new-etag>" in Response Header**

Consumer must:

- Replace the cached XML with the new XML
- Replace the stored ETag with the new ETag

This means the alert has changed or new alerts added.

4. Mandatory Requirements for Agencies

a) MUST send ETag in request

All consumers **must** pass ETag after the first request:

If-None-Match: "<etag-value>"

b) MUST use cached XML for 304

If 304 is received:

- Do NOT call again
- Use cached XML immediately

c) MUST properly handle both 200 and 304 Response Codes

5. Benefits for Agencies

- Faster consumption
- Reduced network usage
- Reduced API load
- More stable alert delivery
- No rate-limiting issues
- More reliable operations

6. Server Response Summary

Scenario	Response Code	Meaning	What Agency Must Do
First call	200	New content	Store XML + ETag
Next call, unchanged CAP XML	304	No update	Use cached XML
Next call, updated CAP XML	200	Updated alert	Replace XML + NEW ETag