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IMAGE DISTRIBUTION WITH DATEX II SERVICES

Road cameras at STA



Types cameras

Road surface cameras

- Approx. 400 cameras
- Mounted on weather stations
- Still image, updates once per hour
- Within 2 years all 800 weather stations will have camera

Traffic flow cameras (Stockholm, Gothenburg, Malmö)

- Approx. 400 cameras.
- Still image updates every minute
- Video streams

Other cameras

- Municipalities
- Constructions



Usage of Road cameras

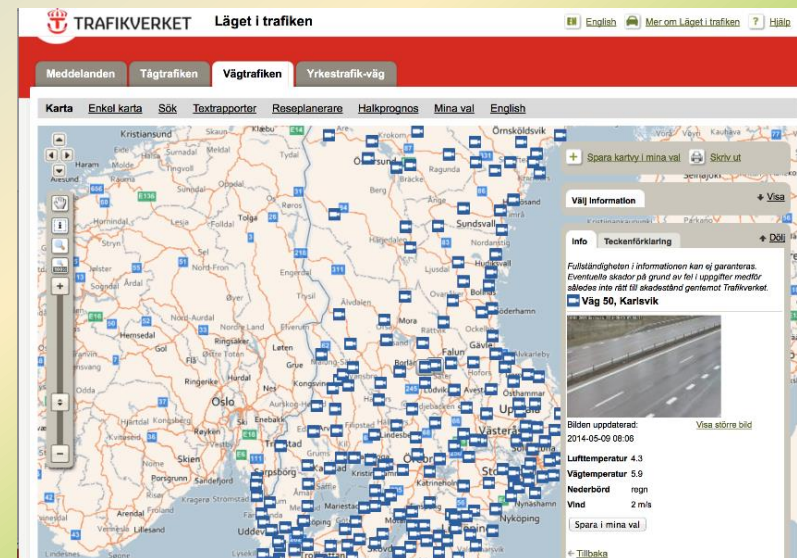


- **Cameras in many systems**
 - ▣ Winter maintenance
 - ▣ TMC/TIC
 - ▣ Web sites
- **Service Providers – images valuable and interesting data**

The problem



- ❑ Metadata about cameras maintained in many systems
- ❑ Metadata merged partly manually once a year
- ❑ Quality not that good, looks different
- ❑ Metadata published via DATEX II services (OK), but URLs points to images on public web page at Trafikverket.se
 - Could lead to many uncontrolled requests
 - Can not guaranty that the site is up because we don't know amount of excepted requests.
 - Clients tends to hard code links in applications



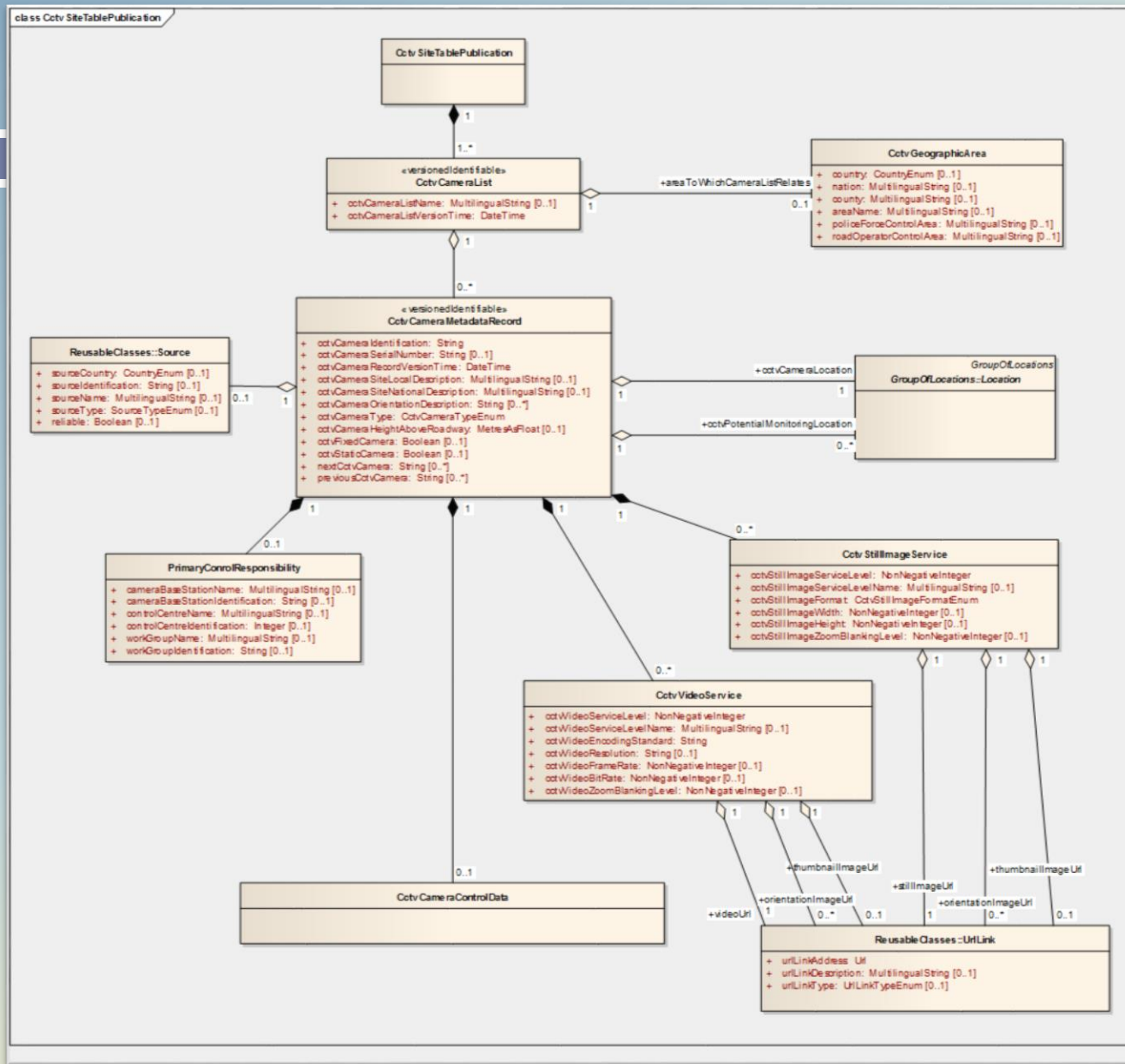


- ❑ Create one system responsible for maintaining all metadata about cameras (one source)
- ❑ One system responsible for delivery of images and metadata externally.
- ❑ Deliver metadata based on DATEX II services (extensions)
- ❑ Separate image delivery to clients from public web pages
- ❑ Require authentication to access image (Datex II clients) -> controlled number of users and load
- ❑ Clients download images before they re-publish
- ❑ System should be scalable
- ❑ Possibility to stop publishing a camera
- ❑ Should handle metadata for still image and video streams, but for now only deliver still images



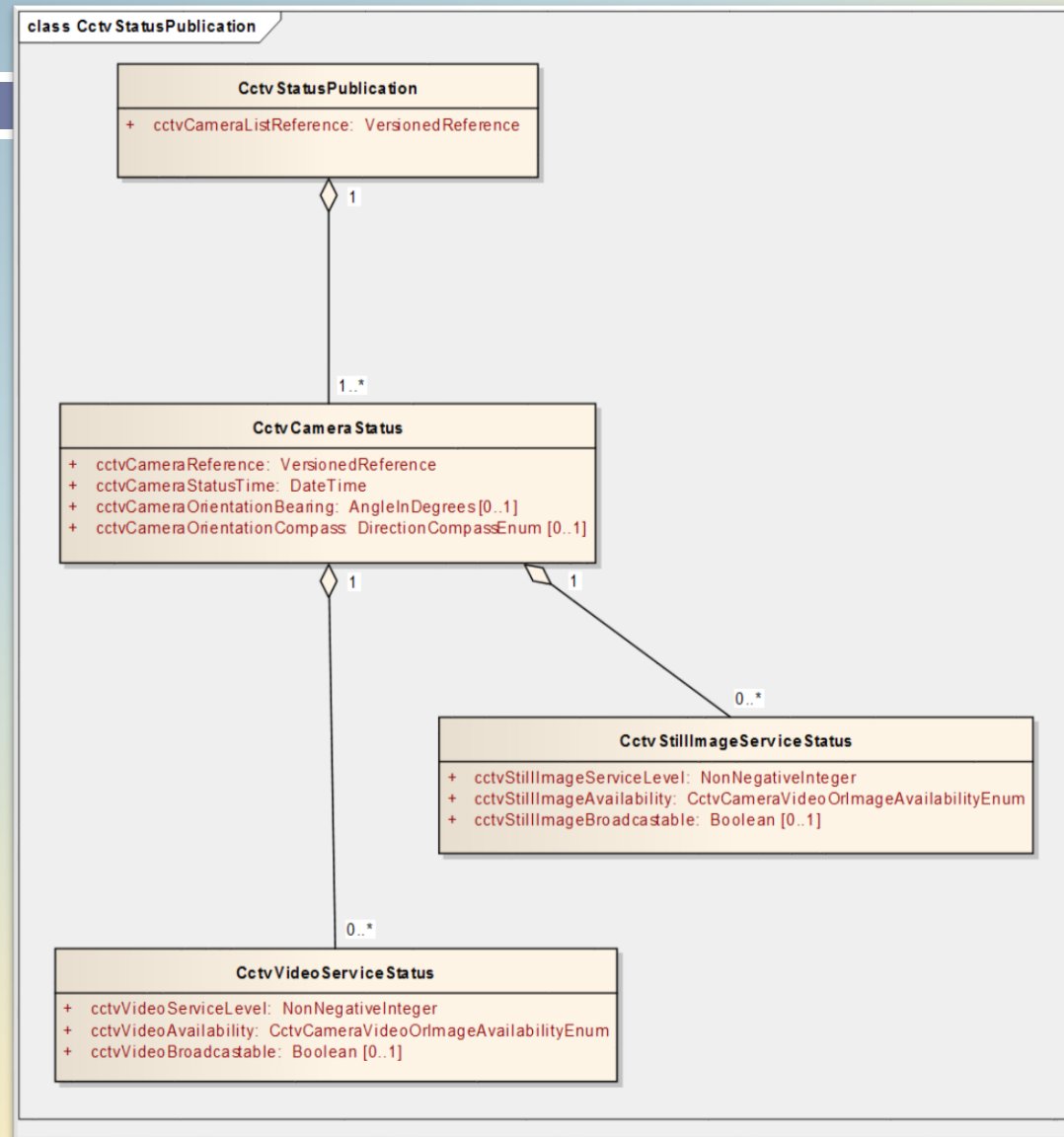
- ❑ Based on CCTV camera extension available at datex2.eu site
- ❑ Level B extension
- ❑ Covering static and dynamic information associated with CCTV cameras.
- ❑ No camera control functionality
- ❑ Actual access of image or video stream - not part of the publications. URL point to actual image/stream.

CctvSiteTablePublication (parts of)

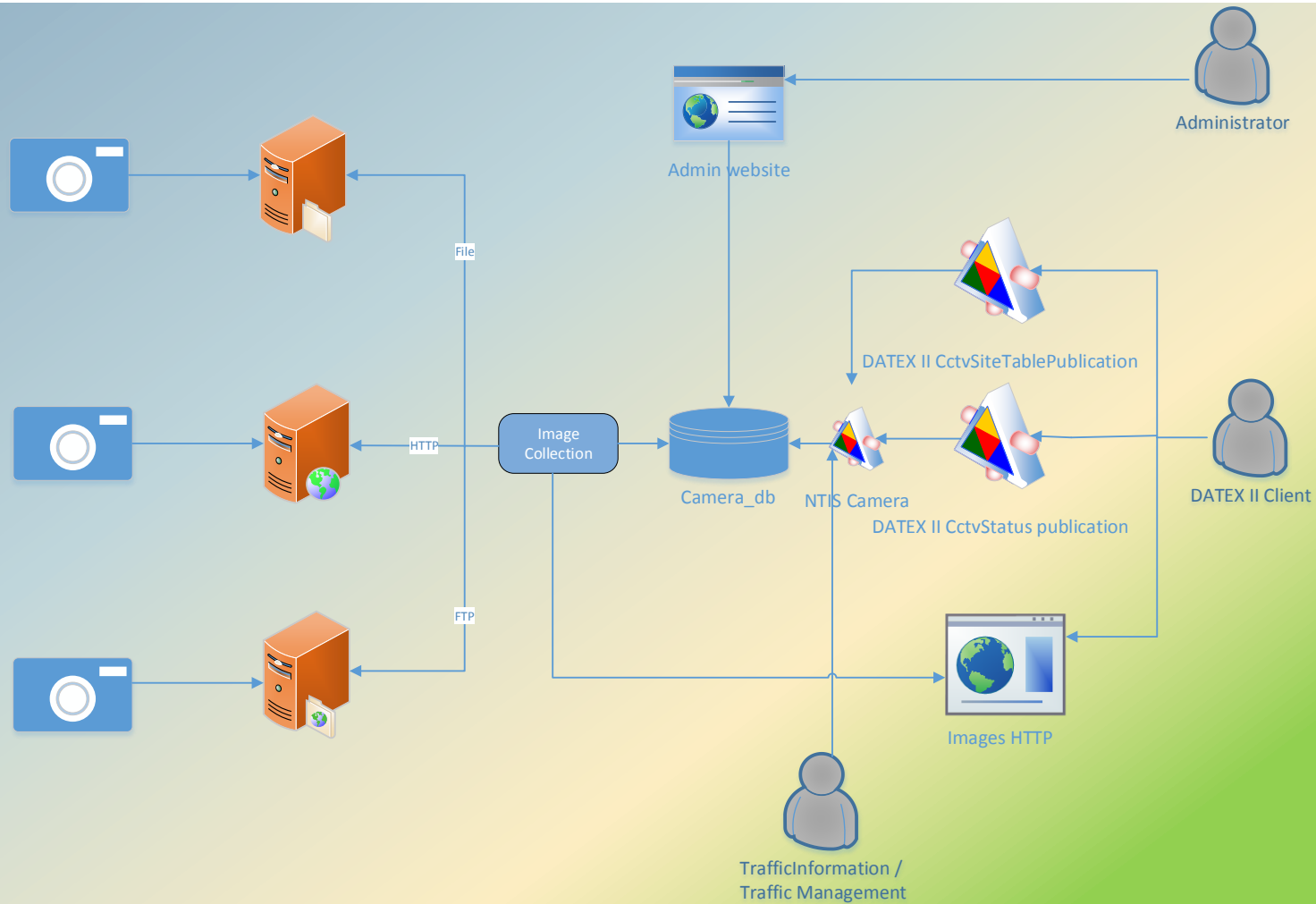


CctvStatusPublication (parts of)

- ❑ Dynamic content
- ❑ Could be queried often
- ❑ Only download images that has been updated



Overview of system



Admin web site



Browser address bar: http://trv8020/BildDistWebAdmin/ | Listvy - My ASP.NET MVC ...





TRAFIKVERKET **Bilddistribution** Inloggad som JÄnderberg Jonas, ITauti Konsult | [Logga ut](#)

Kamerahantering **Användarhantering**

Kameror ▼ Kameraplaceringar ▼ Kameragrupper ▼ Bildkällor ▼

Kameror - Listvy

Id	Namn	Län	Kameragrupp	Kameratyp	
		Stockholms län ▼	Välj kameragrupp ▼	Välj kameratyp ▼	<input type="button" value="Filtrera"/>

Publicerad		Id	Namn	Län	Grupp	Typ		Redigera
Ja		39626119	K1 - Dalarö	Stockholms län	Publik grupp	Väglagskamera	Visa bild	Visa Ändra Ta bort Visa i kartan
Ja		39626120	K1 - Gustavsberg	Stockholms län		Väglagskamera	Visa bild	Visa Ändra Ta bort Visa i kartan
Ja		39626121	K1 - Rådmansö	Stockholms län		Väglagskamera	Visa bild	Visa Ändra Ta bort Visa i kartan
Ja		39626122	K1 - Sigtuna	Stockholms län		Väglagskamera	Visa bild	Visa Ändra Ta bort

Admin web site



Browser address bar: <http://trv8020/BildDistWebAdmin/Camera/Details/39626119>

Browser tabs: Details - My ASP.NET MVC ...

Page Title: TRAFIKVERKET Bilddistribution

User: Inloggad som Jäderberg Jonas, ITauti Konsult | [Logga ut](#)


Navigation: **Kamerahantering** | Användarhantering

Filters: Kameror | Kameraplaceringar | Kameragrupper | Bildkällor


Section: Visa kamera

Kamera	
Kamera ID	39626119
Externt ID	247
Kameranamn	K1
Beskrivning	
Bildupplösning	800x560
Kameraplacering	42338566 - Dalarö
Bildkälla	\\bl-triss2\CamPics_Trini
Kameratyp	Väglagskamera
Uppdateringsintervall	600 s
Riktning	120°

Referensbild



2013-07-10 10:20:05



Admin website



Browser address bar: <http://trv8020/BildDistWebAdmin/Camera/IndexCameraMap>

Browser tabs: Kartvy - My ASP.NET MVC ... trafikverket.se

Navigation menu: Kameror ▼ Kameraplaceringar ▼ Kameragrupper ▼ Bildkällor ▼

Kameror - Karta

The map displays the Stockholm region, including parts of Stockholm Län, Uppsala Län, and Värmdö. Major cities like Stockholm, Sigtuna, and Norrtälje are visible. Camera locations are marked with blue icons and numbers (e.g., 55, 77, 273, 264, 220). The map includes a search bar, zoom controls, and a compass.

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Current statuses



- ❑ End of testing phase
- ❑ Performance testing
- ❑ Trafikverket public web page first implementer
- ❑ Merging / configuration of approx. 800 cameras
- ❑ In production before September



Questions?