

6. INSPIRE ESPUS školenie „INSPIRE interoperabilita“

Príklad praktického využitia INSPIRE harmonizácie



6. INSPIRE ESPUS školenie

"Harmonizáciou k INSPIRE
interoperabilite"



Online formát
Termín: 28.09.2022
Miesto: MS Teams

 Operačný program
Efektívna
verejná správa

 **Európska únia**
Európsky sociálny fond

Tento projekt je podporený z Európskeho sociálneho fondu



6. INSPIRE ESPUS školenie „Harmonizáciou k INSPIRE interoperabilite“ Príklad praktického využitia INSPIRE harmonizácie - téma Adresy

28.09.2022

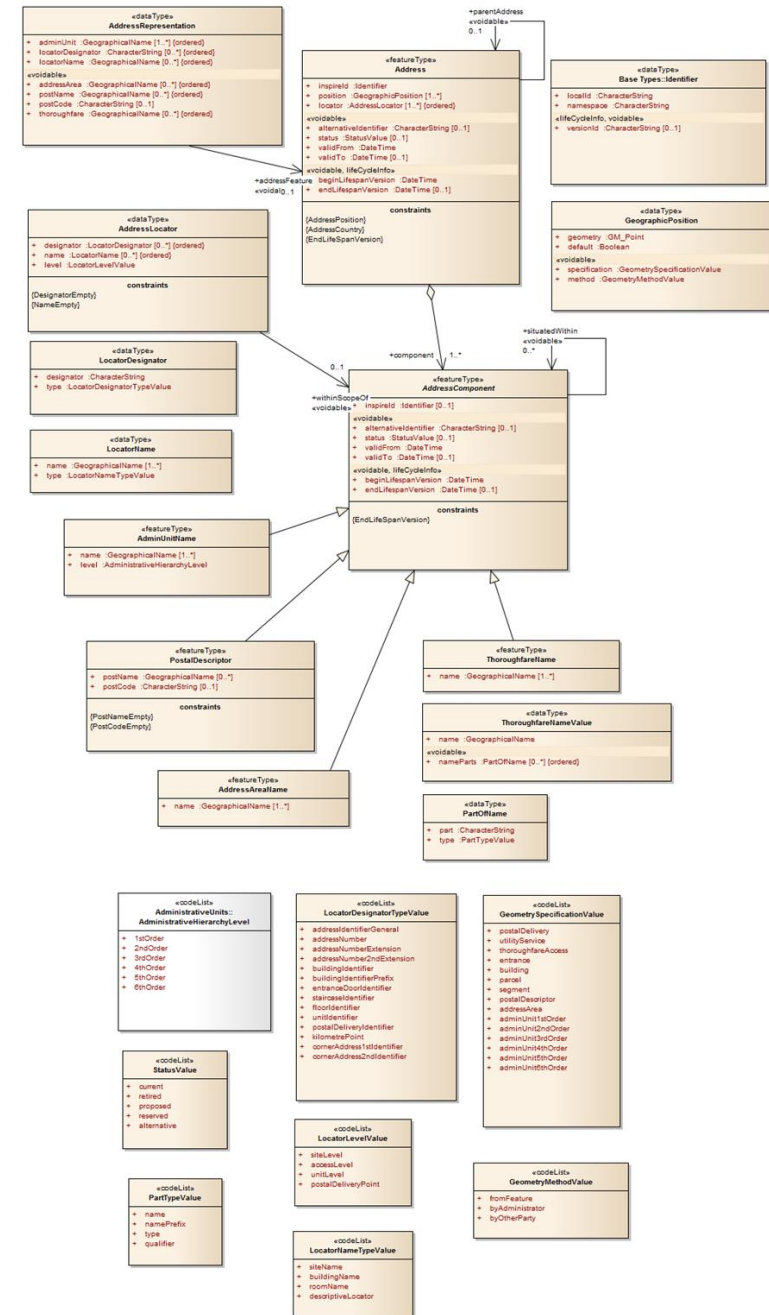
Prehľad

- Zadanie
- Vstupné údaje
- Riešenie
- [Videozáznam](#)



Zadanie

- Harmonizácia údajov Registra Adries v súlade so špecifikáciou pre tému Adresy
- Validácia harmonizovaných údajov INSPIRE validátorom



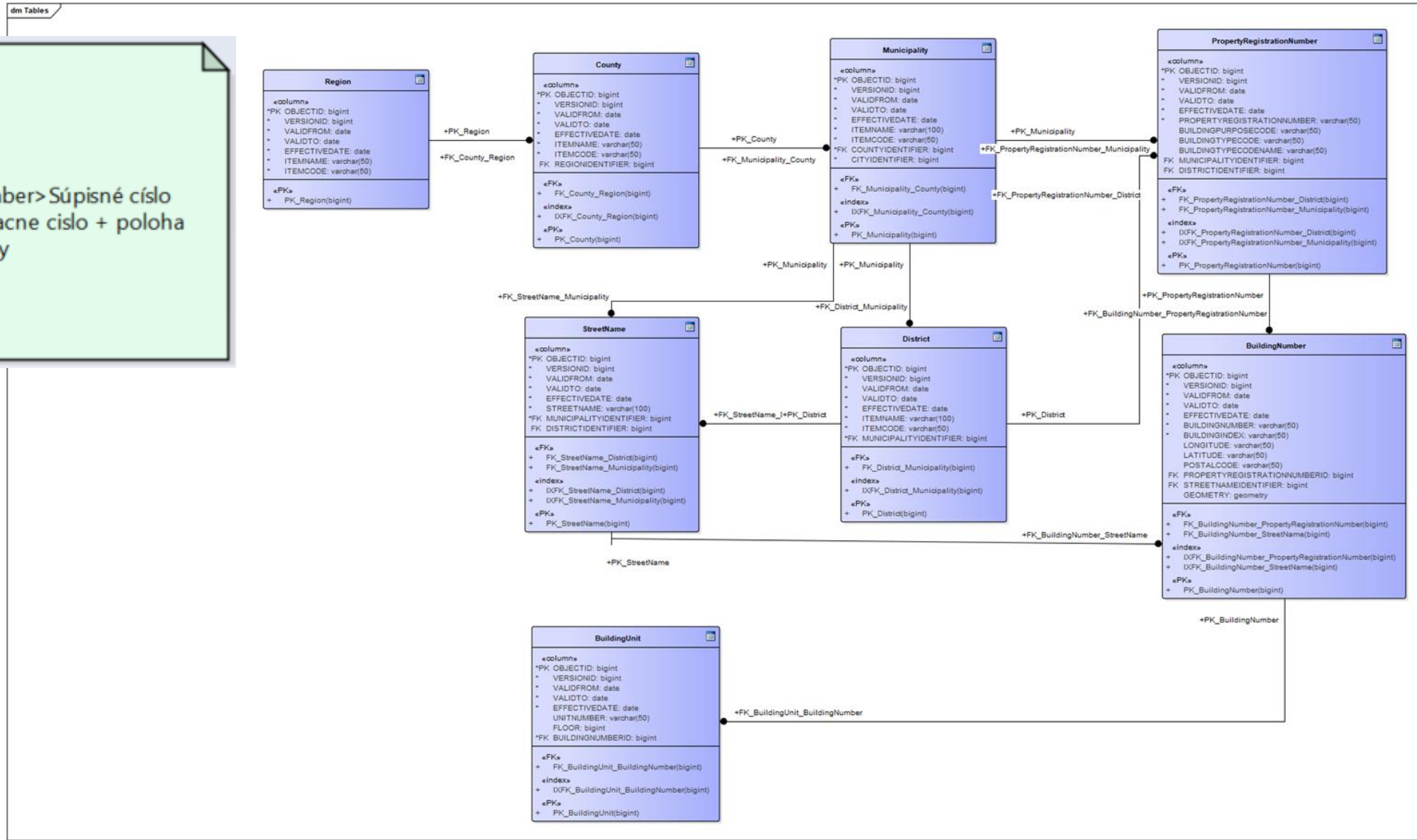
Vstupné údaje

- Open Data Registra Adries dostupné na Portáli otvorených údajov

<https://data.gov.sk/organization/2df13d50-0b6f-48ba-884e-be66dc0a2934?page=1>

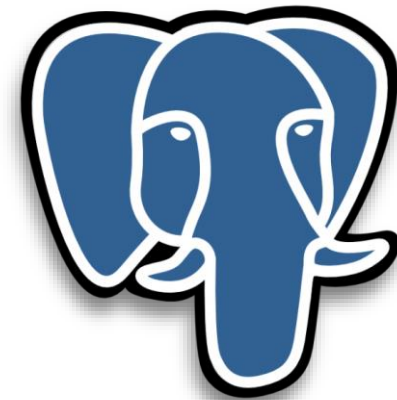
- potrebná migrácia údajov do DB štruktúr (nie je predmetom školenia)

Vstupné údaje



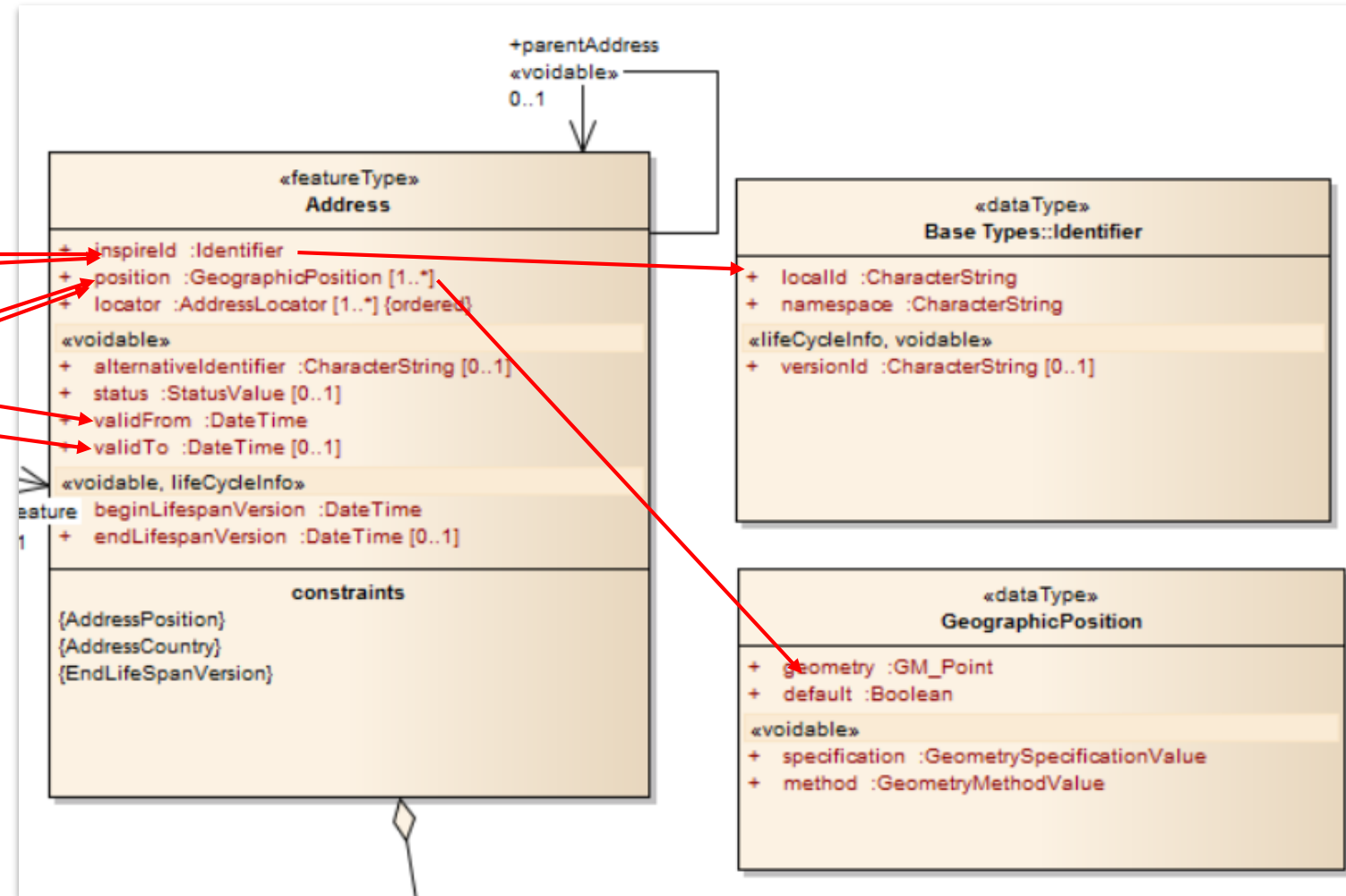
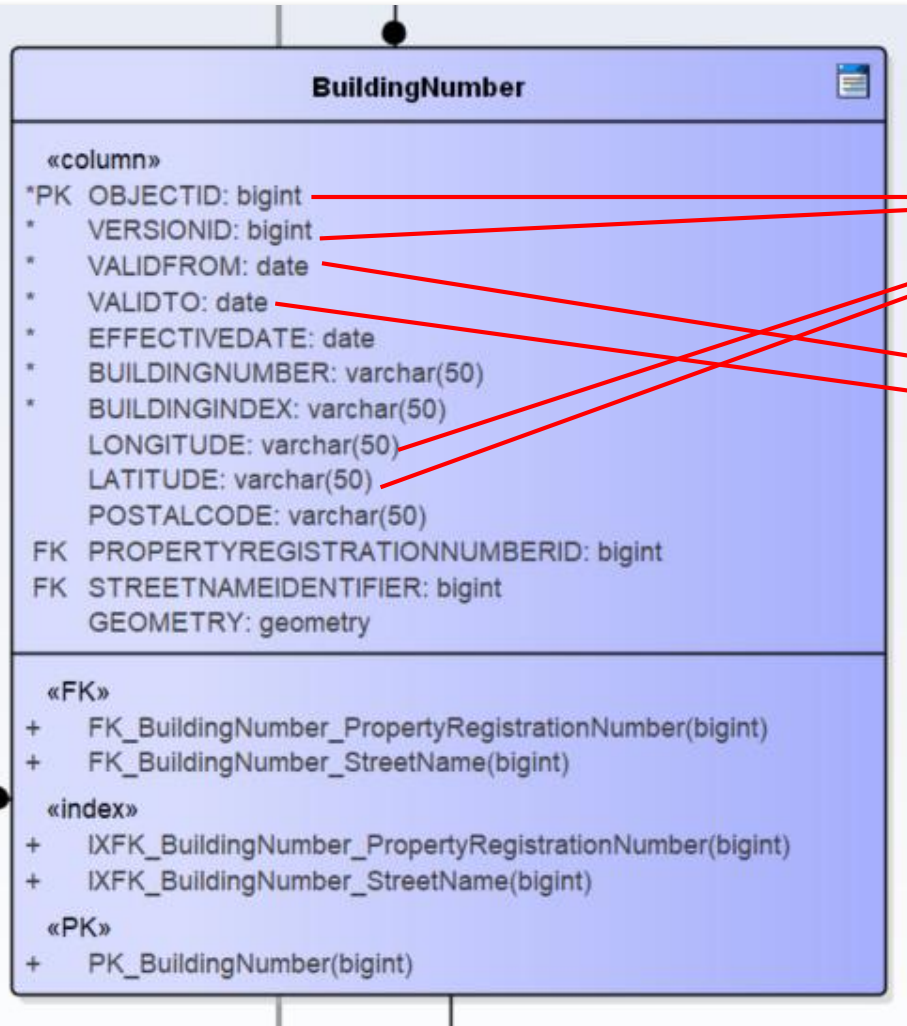
Použité nástroje

- Geoserver
- PostgreSQL + PostGIS
- INSPIRE ETF validátor
- XML editor

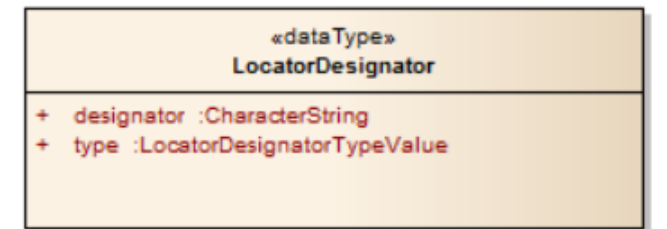
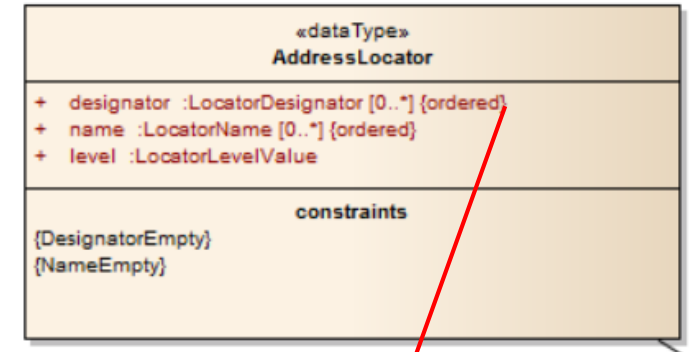
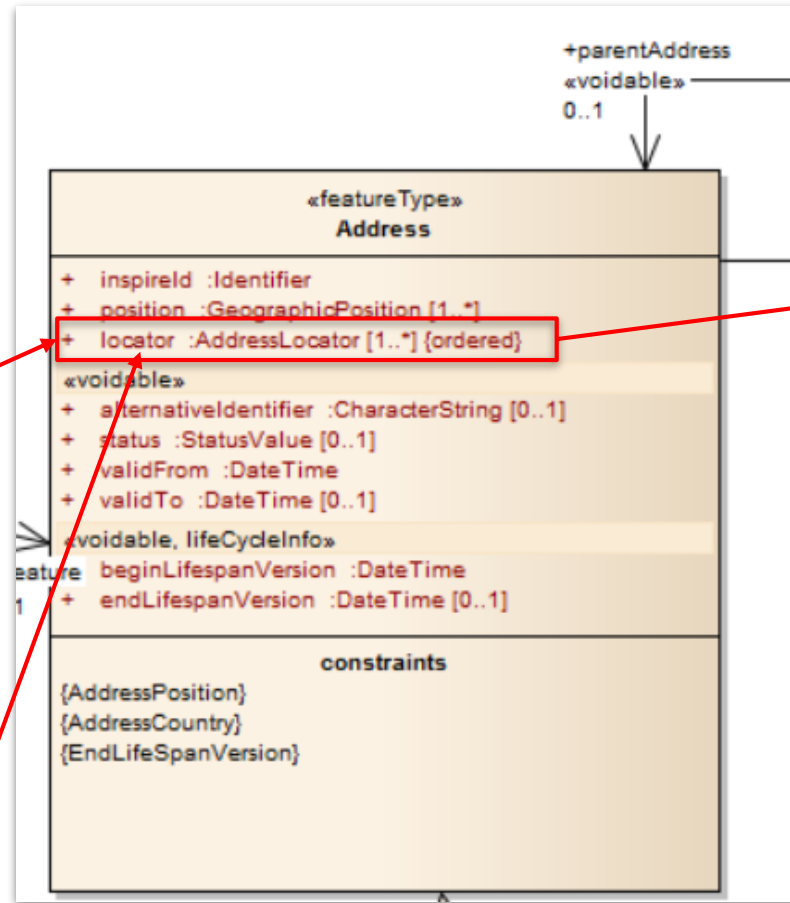
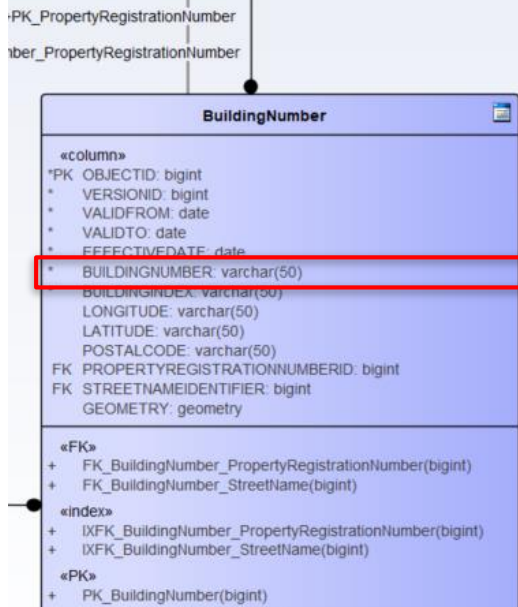
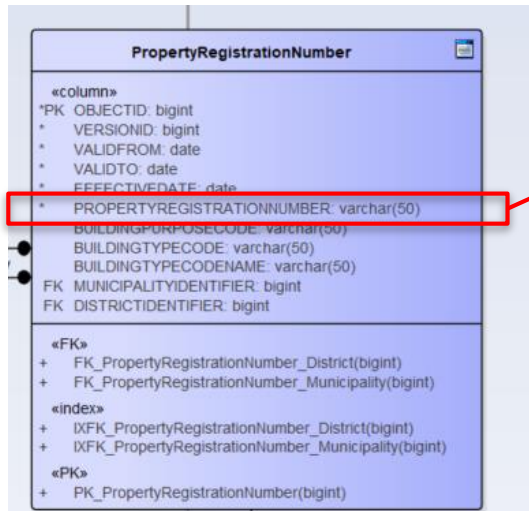


PostgreSQL

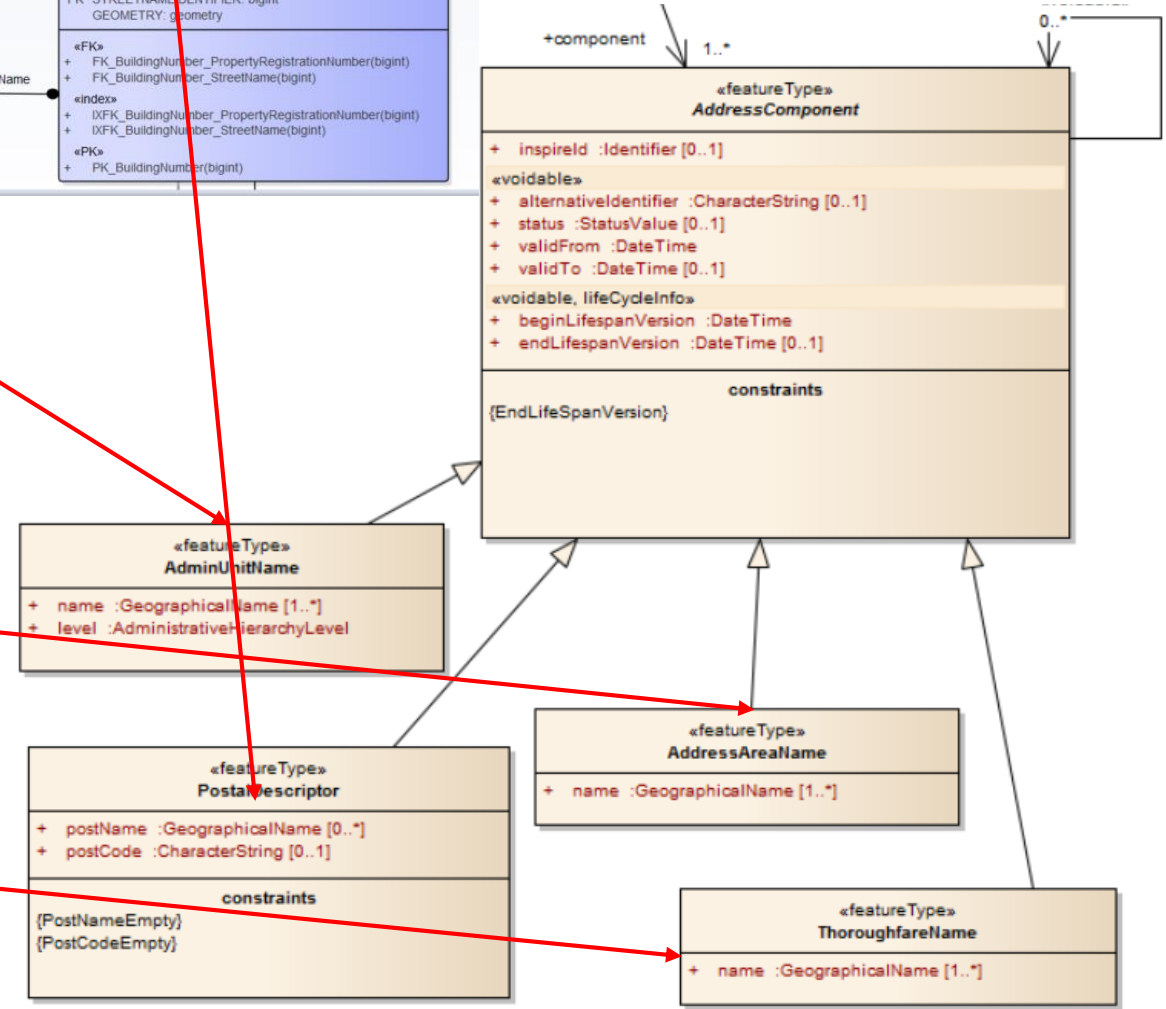
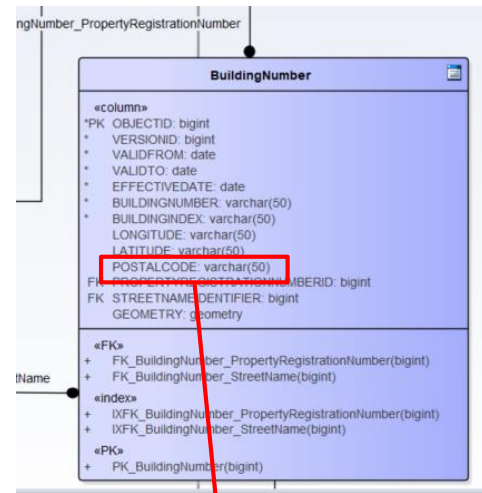
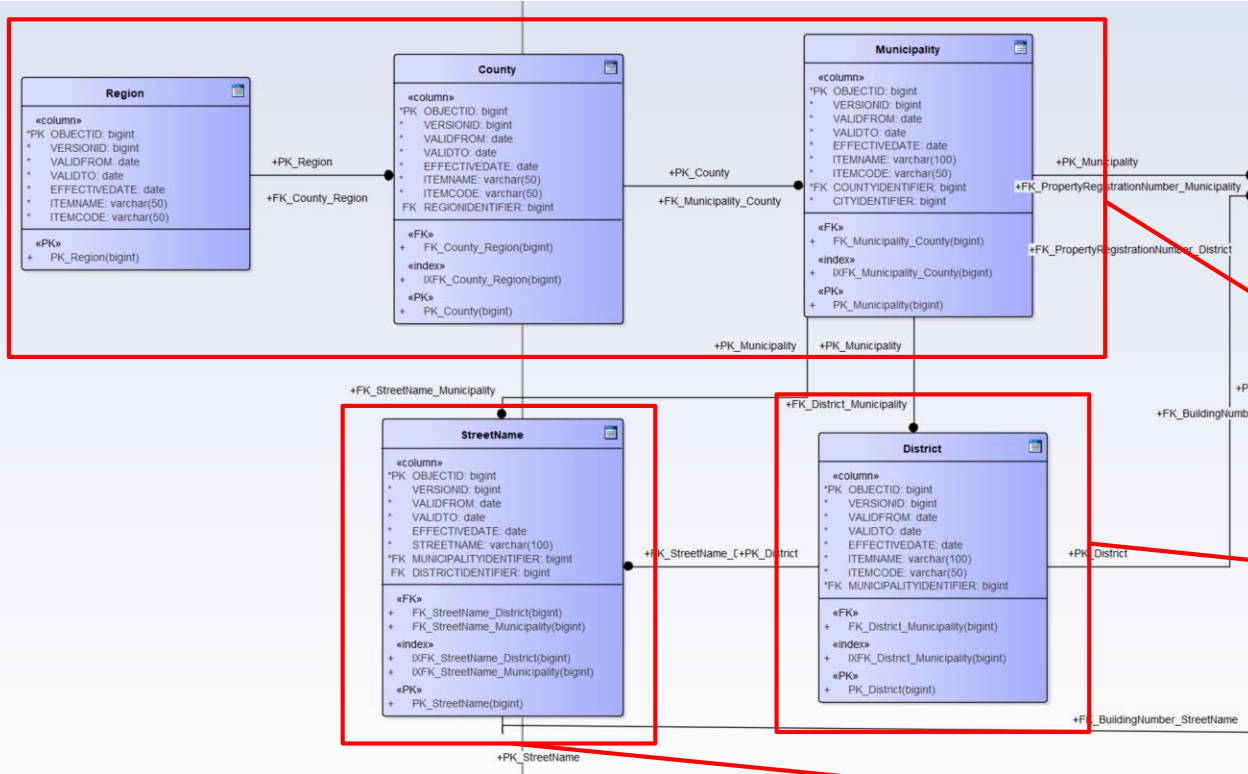
Mapovanie



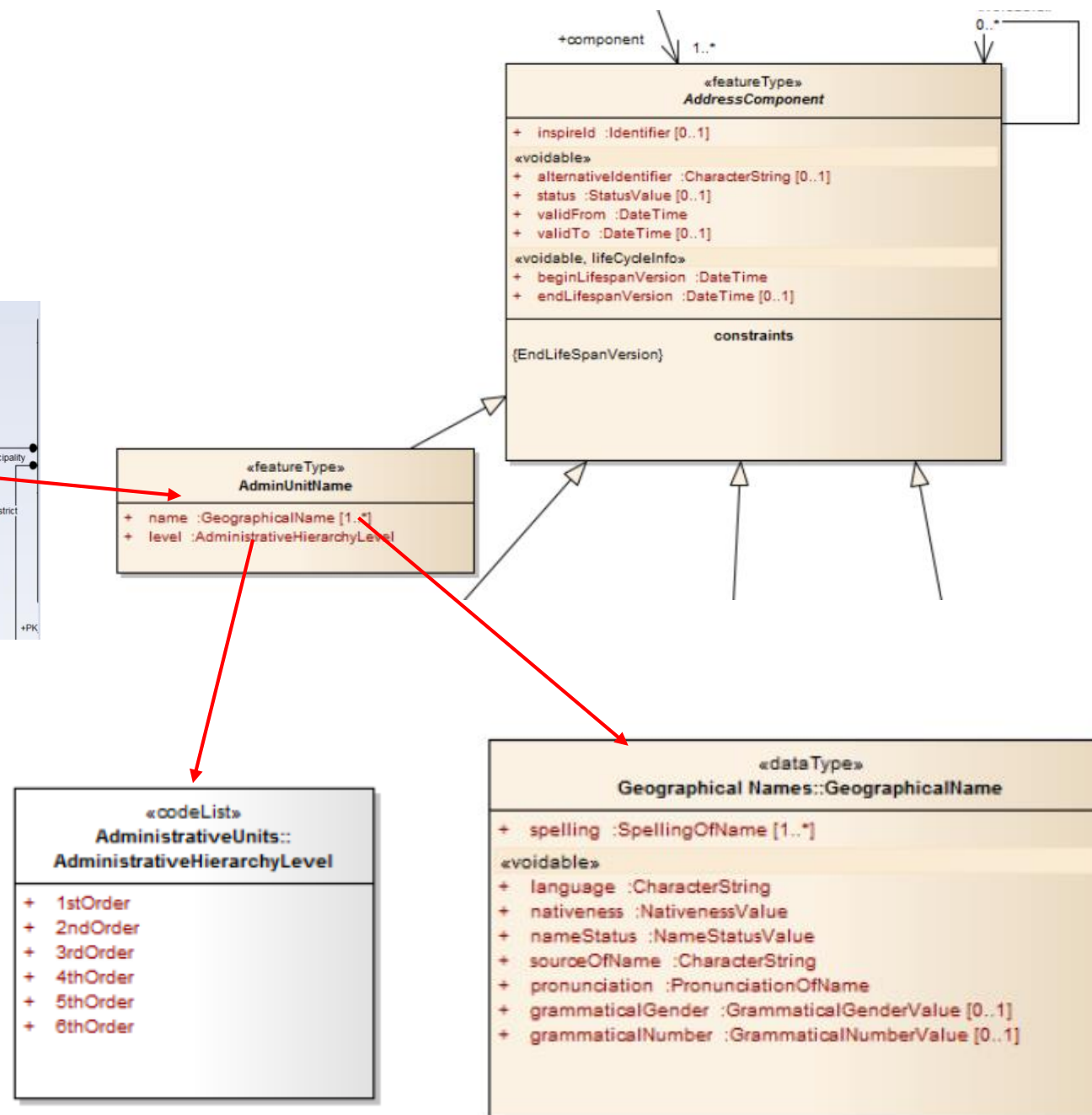
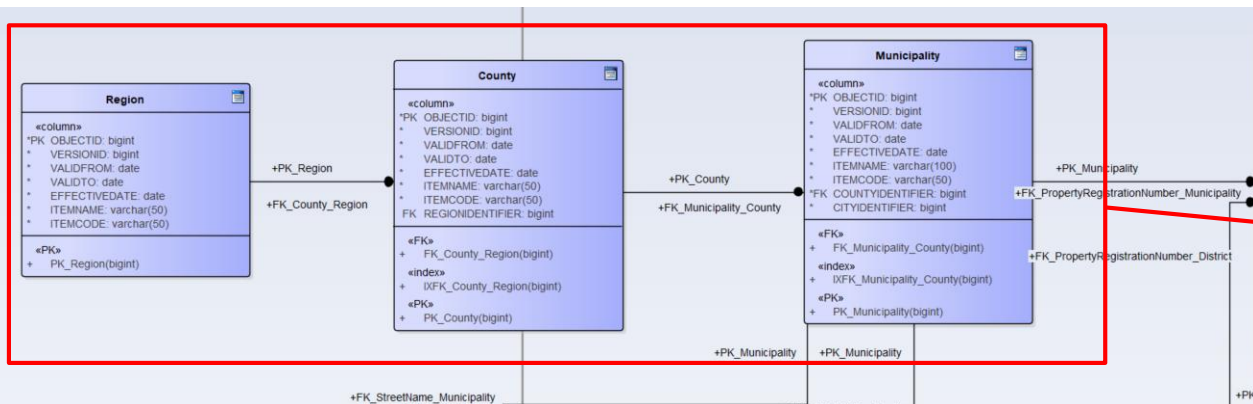
Mapovanie



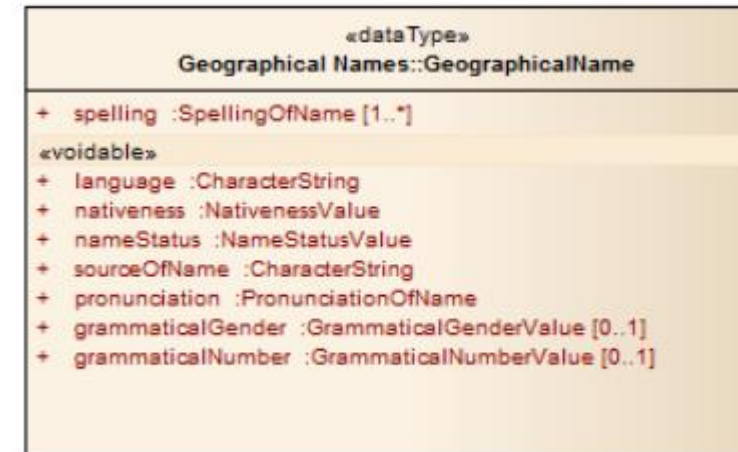
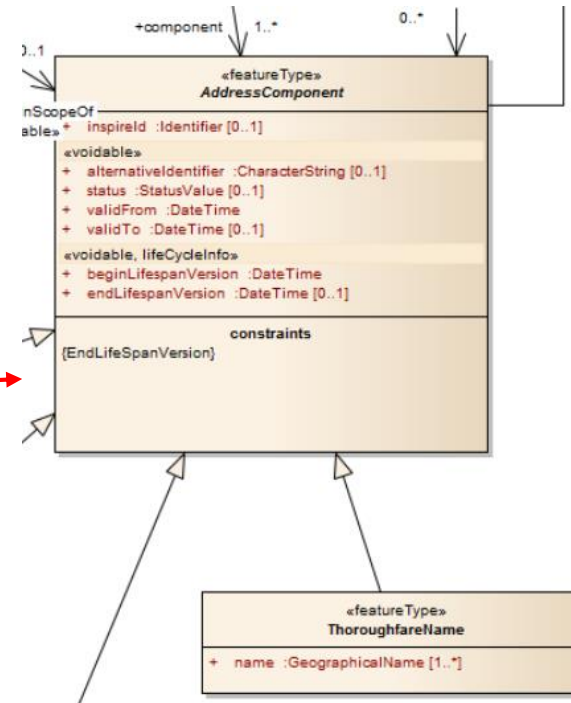
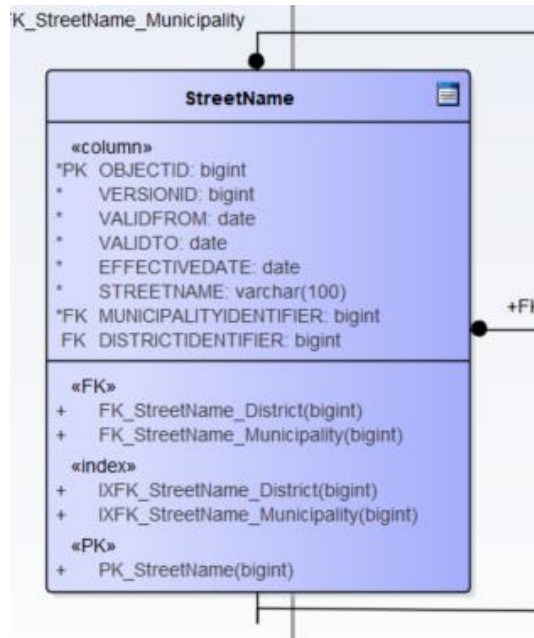
Mapovanie



Mapovanie

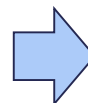
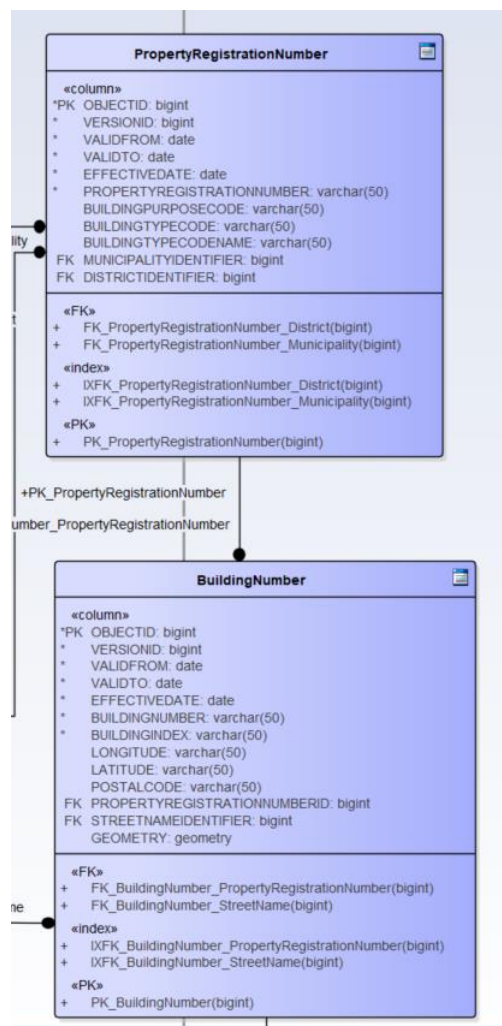


Mapovanie



Úprava zdrojových DB štruktúr

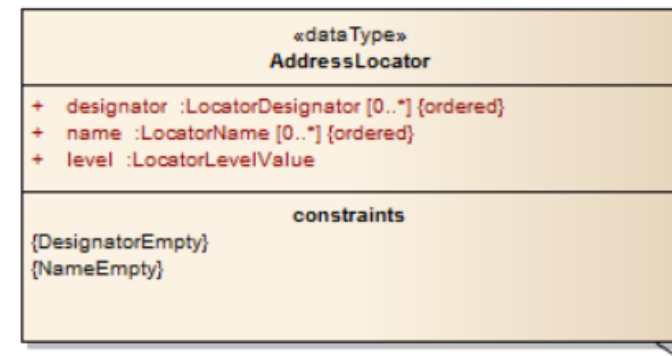
- Materializované pohľady
- Ľahšie mapovanie a prispôbenie cieľovému modelu
- automatizovaná aktualizácia



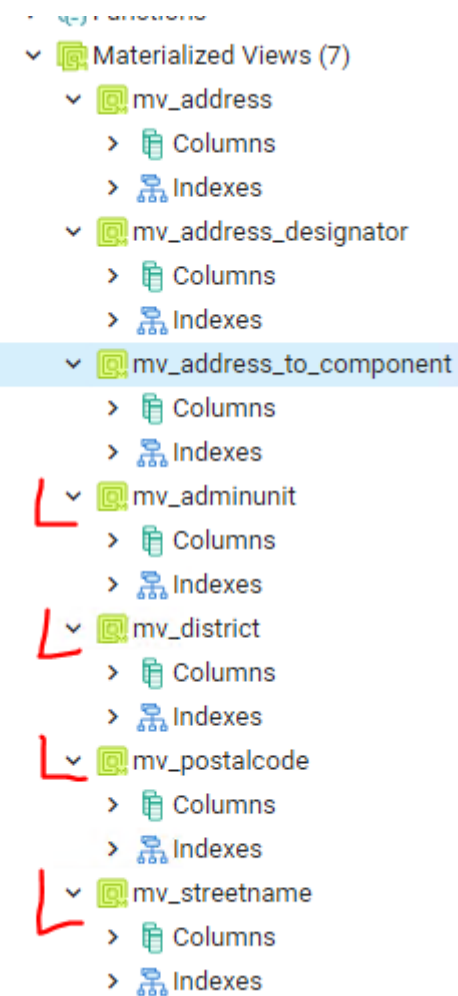
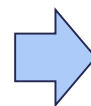
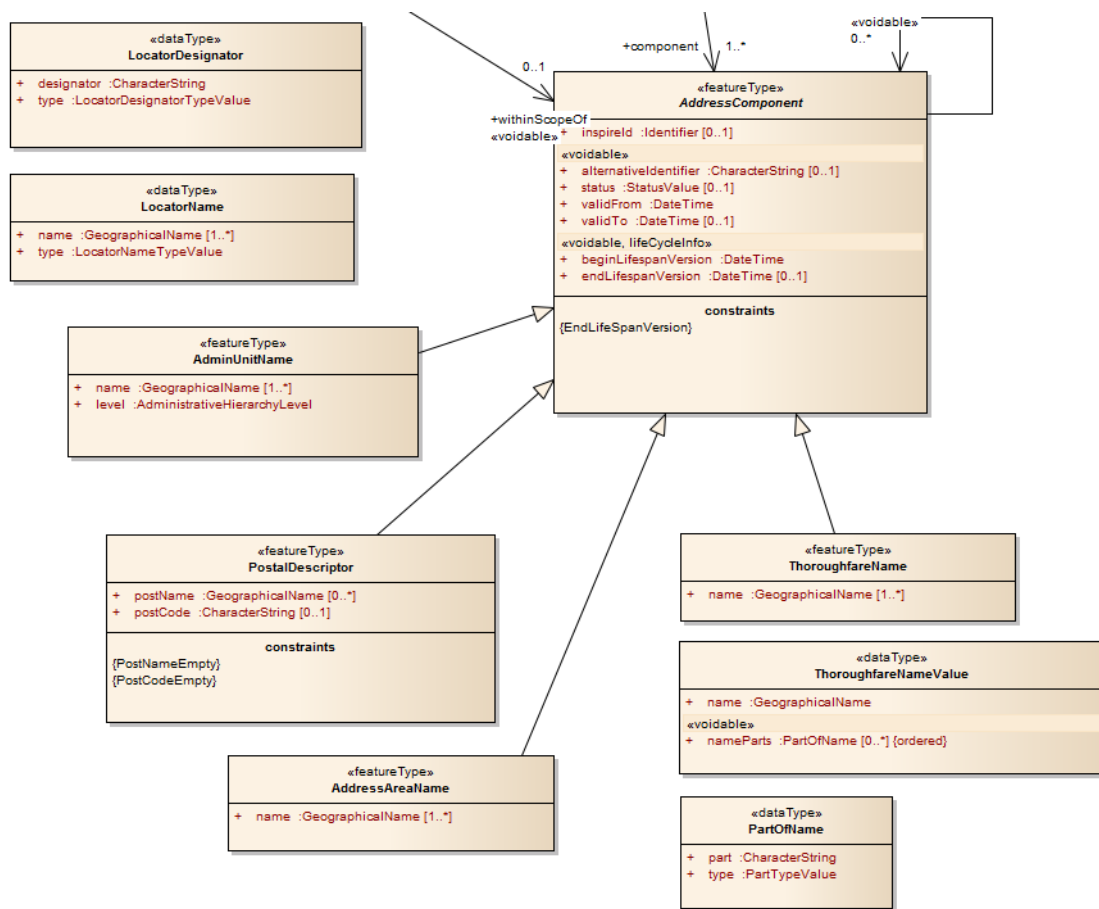
```

CREATE MATERIALIZED VIEW adresyprod.mv_address_designator
TABLESPACE pg_default
AS
SELECT buildingnumber.objectid AS id,
       buildingnumber.buildingnumber AS number,
       'http://inspire.ec.europa.eu/codelist/LocatorDesignatorTypeValue/buildingIdentifier'::text AS code,
       'buildingIdentifier'::text AS codetext
FROM adresyprod.buildingnumber
WHERE buildingnumber.buildingnumber IS NOT NULL
UNION
SELECT ad.objectid AS id,
       nm.propertyregistrationnumber AS number,
       'http://inspire.ec.europa.eu/codelist/LocatorDesignatorTypeValue/addressNumber'::text AS code,
       'addressNumber'::text AS codetext
FROM adresyprod.buildingnumber ad
       JOIN adresyprod.propertyregistrationnumber nm ON ad.propertyregistrationnumberid = nm.objectid
WHERE nm.propertyregistrationnumber IS NOT NULL

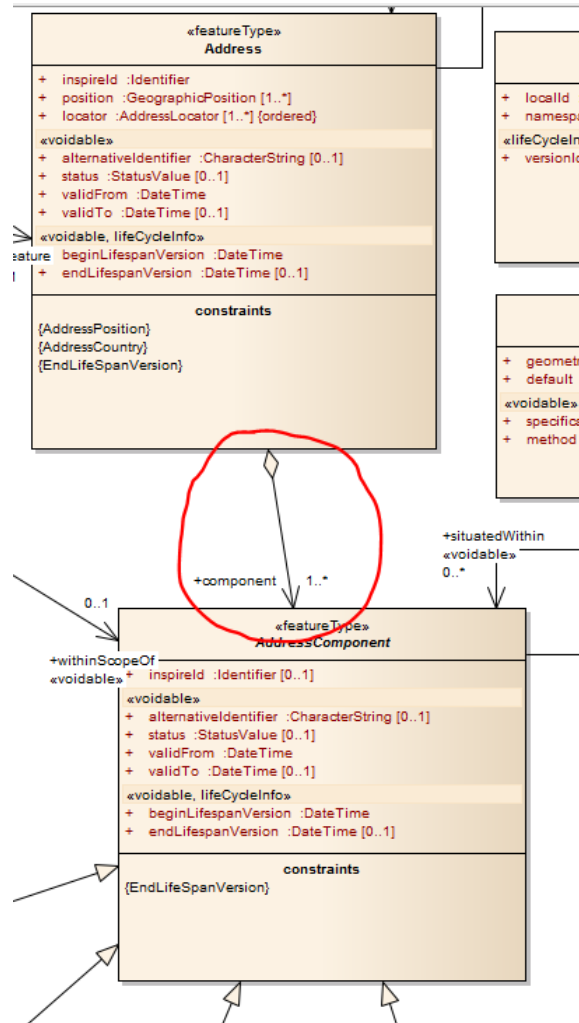
```



Úprava zdrojových DB štruktúr



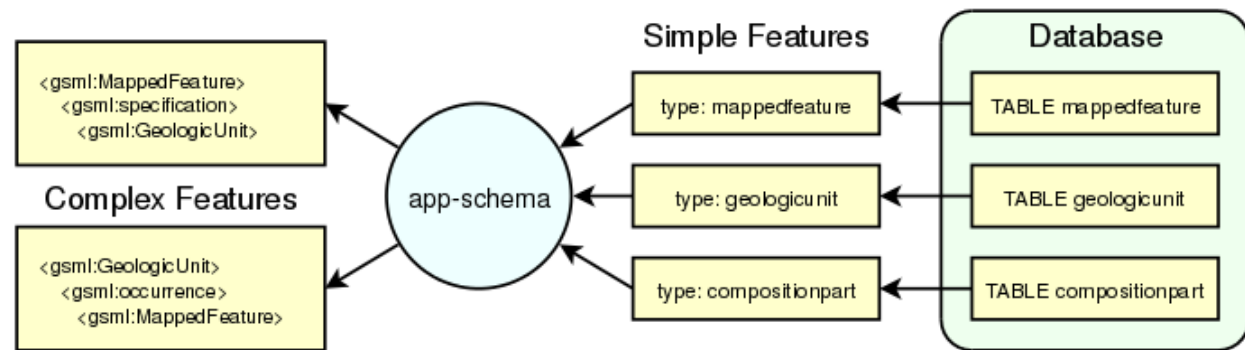
Úprava zdrojových DB štruktúr



- Materialized Views (7)
 - mv_address
 - Columns
 - Indexes
 - mv_address_designator
 - Columns
 - Indexes
 - mv_address_to_component**
 - Columns
 - Indexes
 - mv_adminunit
 - Columns
 - Indexes
 - mv_district
 - Columns
 - Indexes
 - mv_postalcode
 - Columns
 - Indexes
 - mv_streetname
 - Columns
 - Indexes

Mapovanie v Geoserveri

- Application Schema rozšírenie
- INSPIRE rozšírenie
- vygenerovanie vzorových XML
- <https://gitlab.com/mzpsr/podpora-inspire-implement-cie/ostatn-t-my/navody/-/wikis/Geoserver-Application-schema-konfigur%C3%A1cia>



Mapovanie v Geoserveri

```

</sourceDataStores>
<targetTypes>
  <FeatureType>
    <!-- <schemaUri>./Addresses.xsd</schemaUri> -->
    <schemaUri>https://inspire.ec.europa.eu/schemas/ad/4.0/Addresses.xsd</schemaUri>
  </FeatureType>
</targetTypes>
<typeMappings>
  <FeatureTypeMapping>
    <mappingName>MV_ADDRESS</mappingName>
    <sourceDataStore>datastore</sourceDataStore>
    <sourceType>mv_address</sourceType>
    <targetElement>ad:Address</targetElement>
    <defaultGeometry>ad:position/ad:GeographicPosition/ad:geometry</defaultGeometry>
    <attributeMappings>
      <AttributeMapping>
        <targetAttribute>ad:Address</targetAttribute>
        <idExpression>
          <!-- <OCQL>strConcat('Address.',localid)</OCQL> -->
          <OCQL>strConcat('Address.',id)</OCQL>
        </idExpression>
      </AttributeMapping>
      <AttributeMapping>
        <targetAttribute>ad:inspireId/base:Identifier/base:localId</targetAttribute>
        <sourceExpression>
          <OCQL>localid</OCQL>
        </sourceExpression>
      </AttributeMapping>
      <AttributeMapping>
        <targetAttribute>ad:inspireId/base:Identifier/base:namespace</targetAttribute>
        <sourceExpression>
          <OCQL>'https://data.gov.sk/set/rpi/dat/151866/SK_MVSR_INSPIRE_AD'</OCQL>
        </sourceExpression>
      </AttributeMapping>
      <AttributeMapping>
        <targetAttribute>ad:inspireId/base:Identifier/base:versionId</targetAttribute>
        <sourceExpression>
          <OCQL>versionid</OCQL>
        </sourceExpression>
      </AttributeMapping>
      <AttributeMapping>
        <targetAttribute>ad:validFrom</targetAttribute>
        <sourceExpression>
          <OCQL>validfrom</OCQL>
        </sourceExpression>
      </AttributeMapping>
      <AttributeMapping>
        <targetAttribute>ad:validTo</targetAttribute>
        <sourceExpression>
          <OCQL>validto</OCQL>
        </sourceExpression>
      </AttributeMapping>
    </attributeMappings>
  </FeatureTypeMapping>
</typeMappings>

```

Address

<http://46.229.225.194/geoserver/ad/ows?service=WFS&version=2.0.0&request=GetFeature&typeName=ad%3AAddress&outputFormat=gml32&count=10>

AdminUnit

http://46.229.225.194/geoserver/ad/ows?service=WFS&version=2.0.0&request=GetFeature&storedQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureById&id=AdminUnitName.1043

Validácia

Configure your test

Select the INSPIRE resource you would like to test

- Metadata
- View Service
- Download Service
- Discovery Service
- Data set

Select the data theme(s) relevant to the data set

- You can select more than one theme at a time.
- If no theme is selected, the data set will be only tested against the Conformance Classes for general requirements.

Annex I	Annex II	Annex III
Addresses (AD)	-	-

Advanced options ▼

Provide the resource to test

Select the input type and upload or link the resource

Provide a URL to a remote XML/GML file or a ZIP file containing one or multiple XML/GML files, either from a request to an INSPIRE Spatial Data Service endpoint or a file repository. The download will be initiated after clicking on the 'Start' button. This download has a timeout of 120s.

Remote file ▼	<input type="text" value="http://46.229.225.194/geoserver/ad/ows?service=WFS&version=2.0.0&req"/>
----------------------------	---

Credentials ▼

Provide a label for your test report (optional)

Your test report will appear with the label below; edit the text if you wish to change it.

Test run on 11:23 - 27.09.2022 with test suite Annex I - Addresses (AD)

Start test >

Address

<http://46.229.225.194/geoserver/ad/ows?service=WFS&version=2.0.0&request=GetFeature&typeName=ad%3AAddress&outputFormat=gml32&count=1>

AdminUnit

http://46.229.225.194/geoserver/ad/ows?service=WFS&version=2.0.0&request=GetFeature&storedQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureById&id=AdminUnitName.1043

European Commission > INSPIRE > Validator > Test reports

INSPIRE Validator - Test reports

Home Test selection Test reports Get support ▼ More on the INSPIRE Reference Validator ▼

RADO 1 Test run on 11:34 - 27.09.2022 with test suite Annex I - Addresses (AD)

Status	Failed	Total	Count	Skipped	Failed	Warnings	Manual
Started	27/09/2022 09:35:43 GMT	Test suites	10	0	2	0	3
Duration	4 s	Test cases	25	0	2	0	6
		Assertions	66	0	2	0	8

Show: All Only failed Only manual All details Less information Simplified

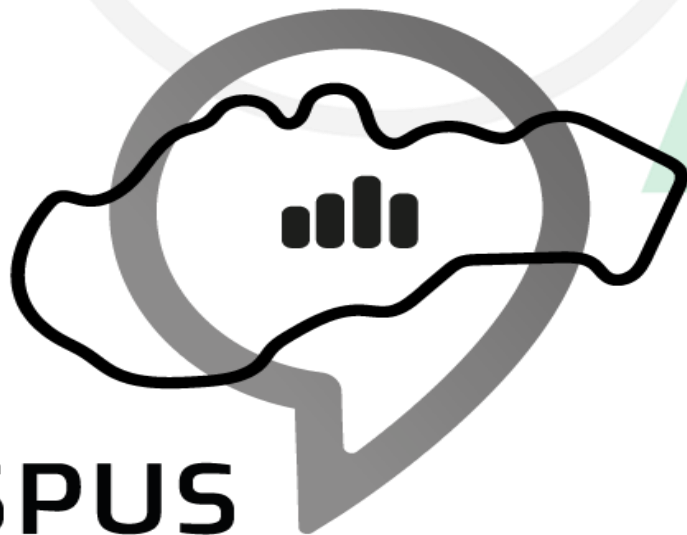
- + Conformance class: INSPIRE GML encoding 1
- + Conformance class: Reference systems, General requirements Failed: 1/2
- + Conformance class: Reference systems, Addresses 1
- + Conformance class: Information accessibility, General requirements Failed: 1/1
- + Conformance class: Information accessibility, Addresses 2
- + Conformance class: Data consistency, General requirements 2
- + Conformance class: Data consistency, Addresses 1
- + Conformance class: INSPIRE GML application schemas, General requirements 8
- + Conformance class: GML application schemas, Addresses 2
- + Conformance class: Application schema, Addresses 7



Ďakujem za pozornosť!

Radoslav Chudý
rado.chudy@gmail.com

ESPUS



ESPUS

Efektívna správa priestorových údajov a služieb

<https://inspire.gov.sk/projekty/espus>