

OGC API Tiles

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118th OGC Member Meeting
Virtual | 23 March 2021

The world's leading and comprehensive
community of experts making location information:



Findable



Accessible



Interoperable



Reusable



OGC®



TILES
ARE THE
FINEST
SOLUTION
TO ALMOST EVERY
SURFACE FINISH
CONSTRUCTION
FACING THE WORLD TODAY

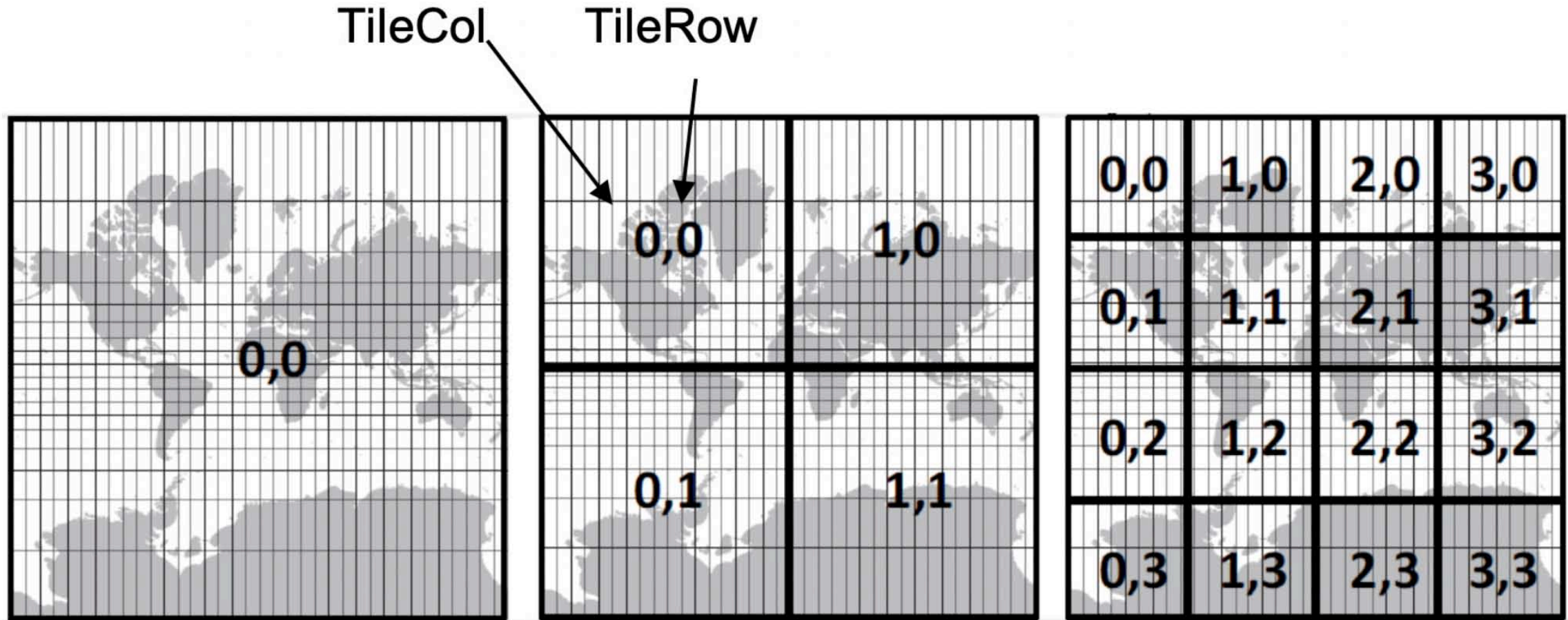
API

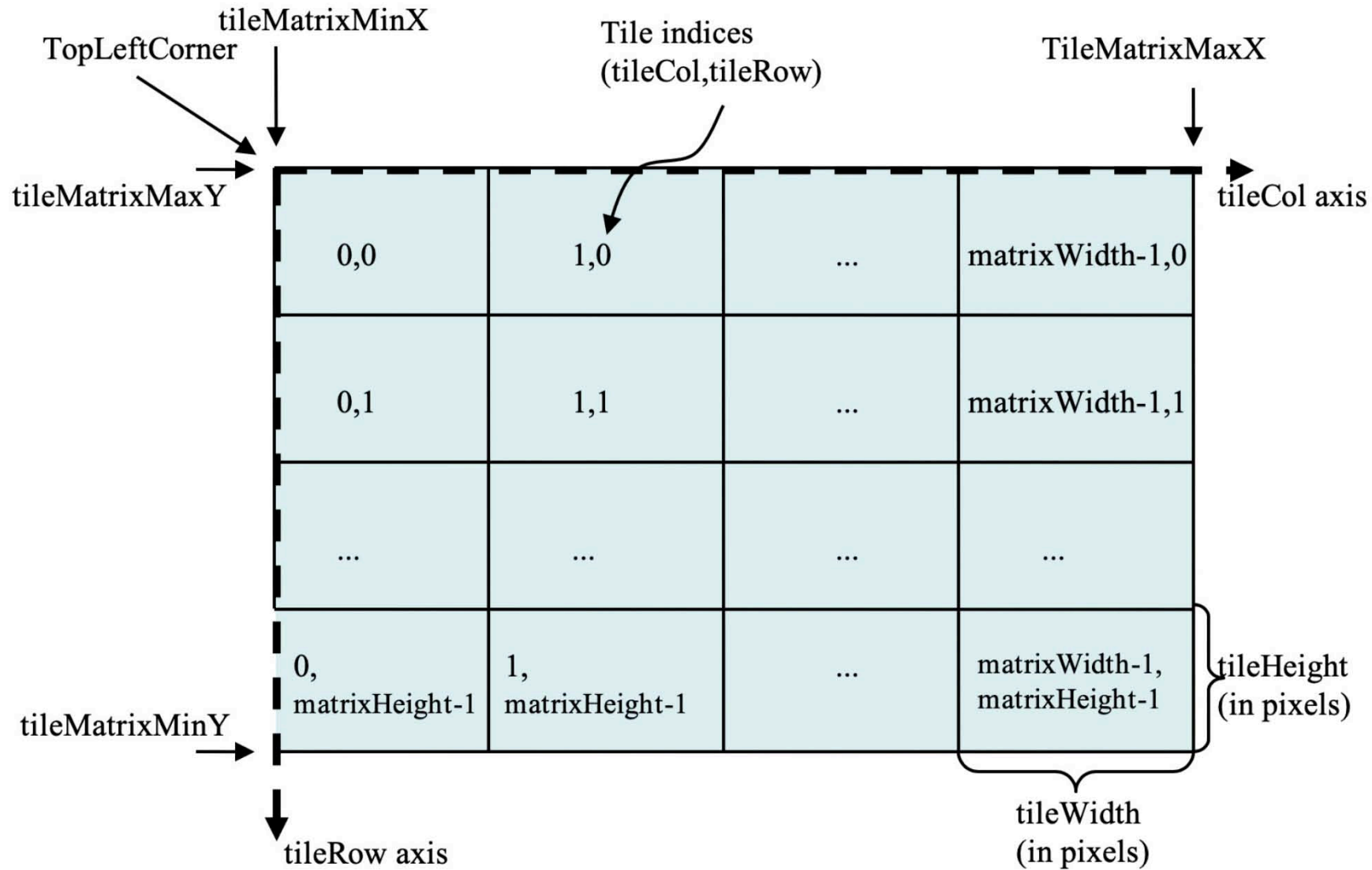
Store opening hours

Monday to Friday 7am - 11pm
Saturday 8am - 11pm
Sunday 8am - 10pm

Open baked

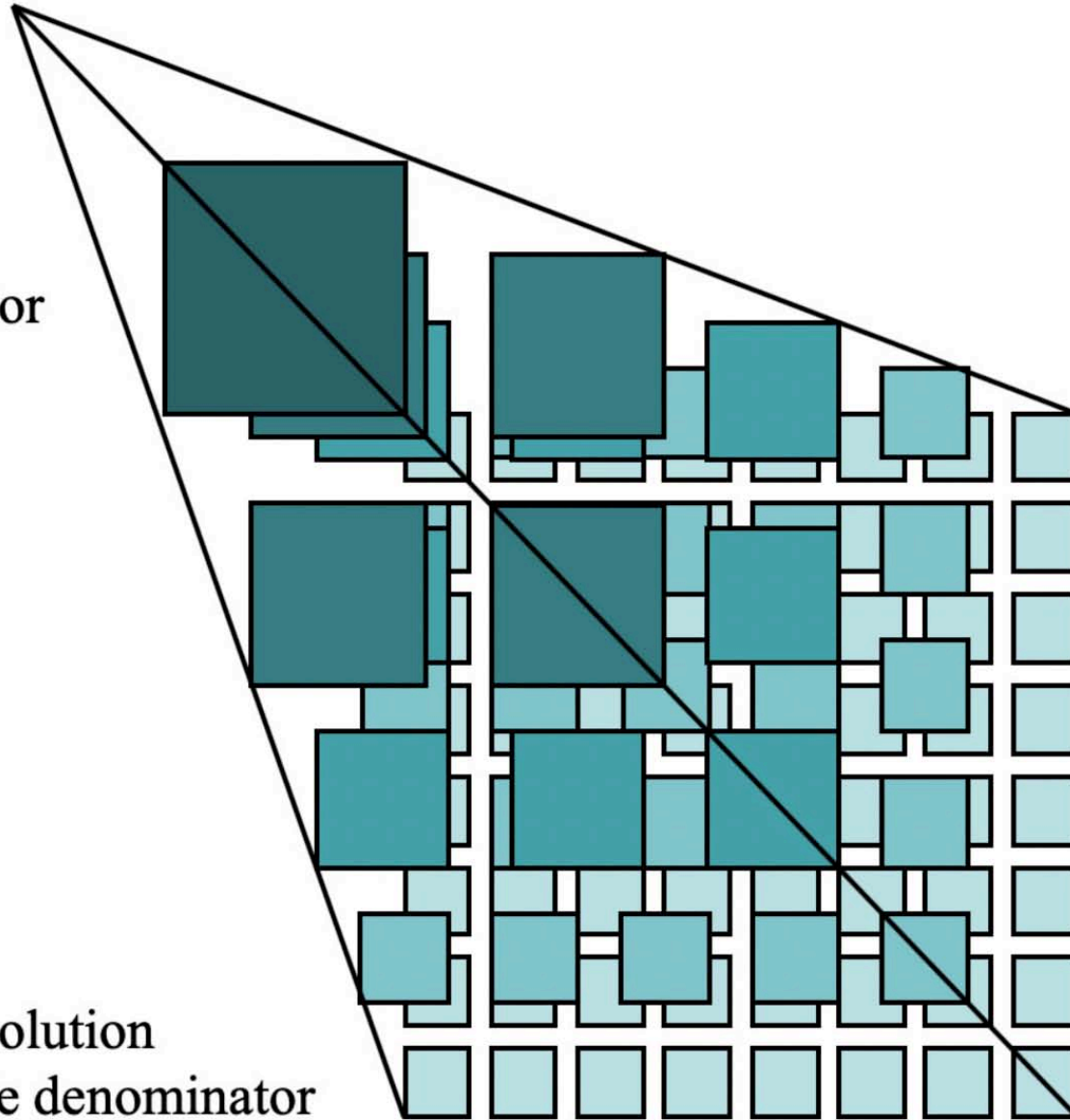
Tiling the world



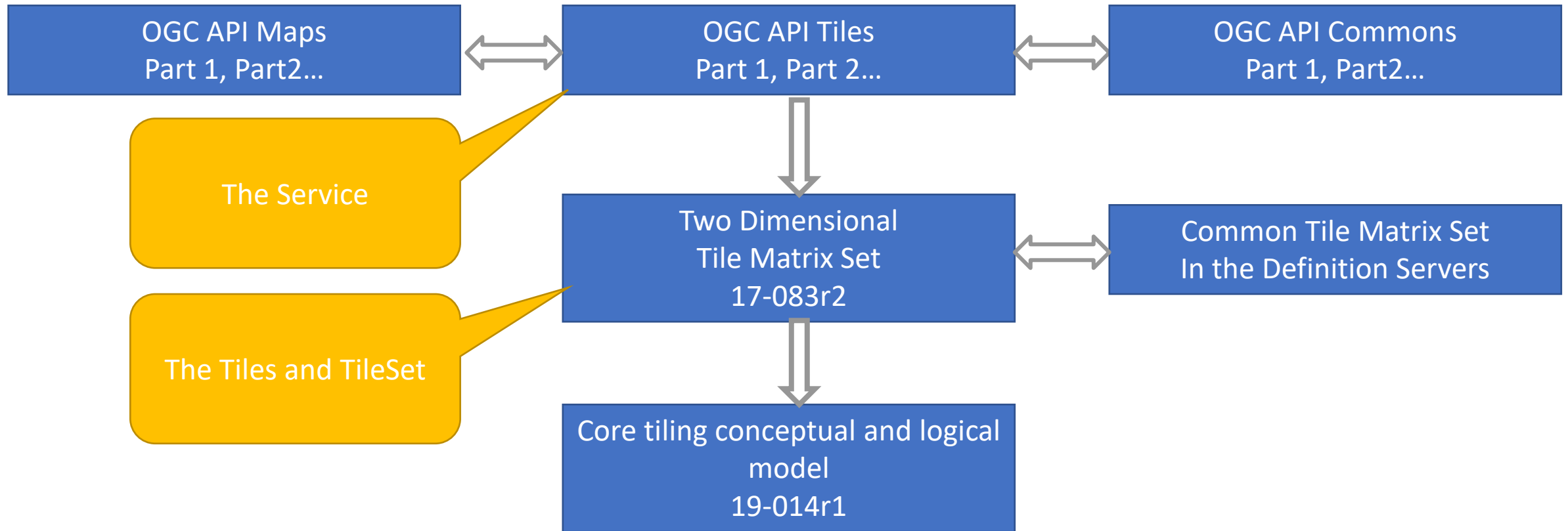


Coarse resolution
Highest scale denominator

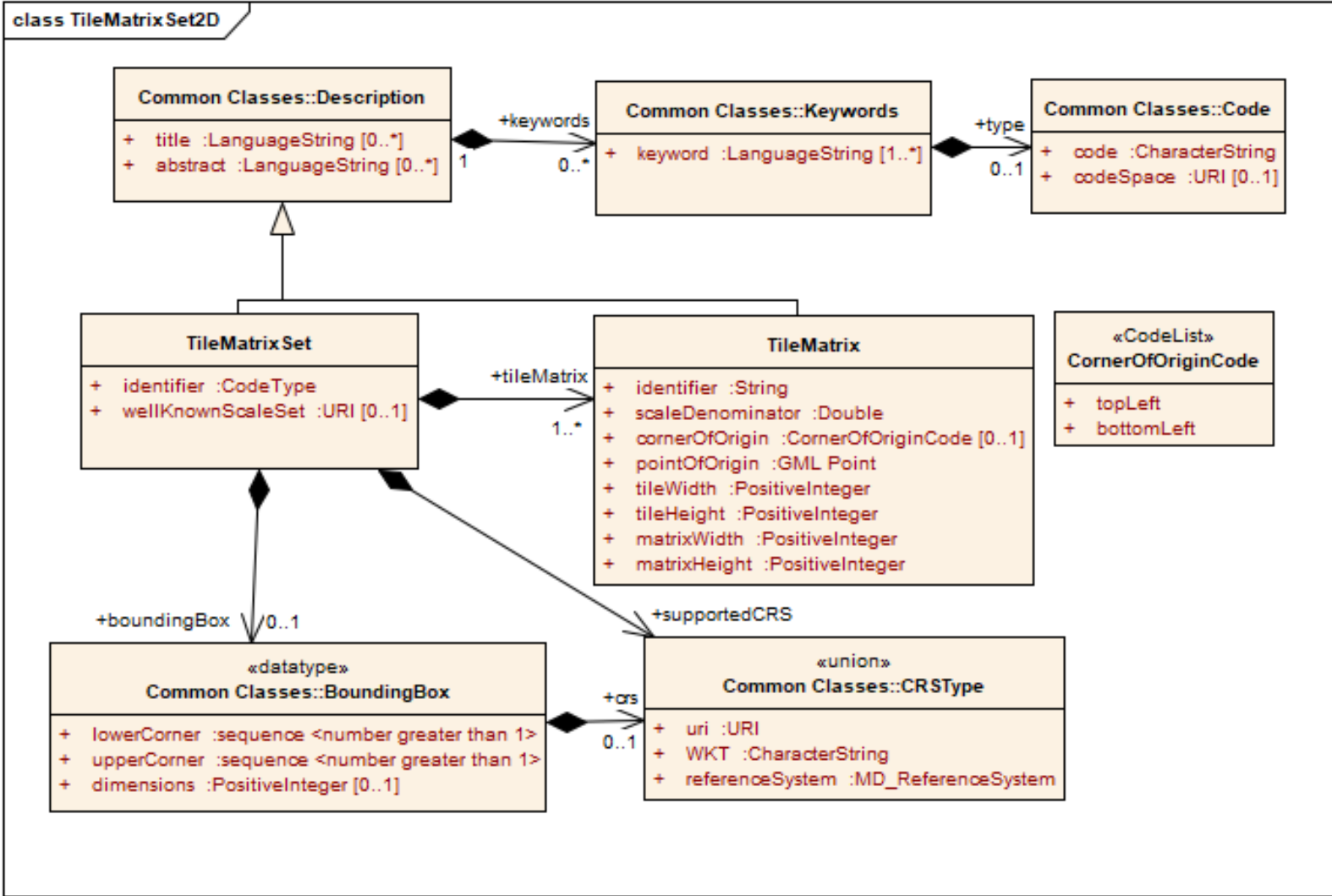
Detailed resolution
Lowest scale denominator



“Modern” standards we have

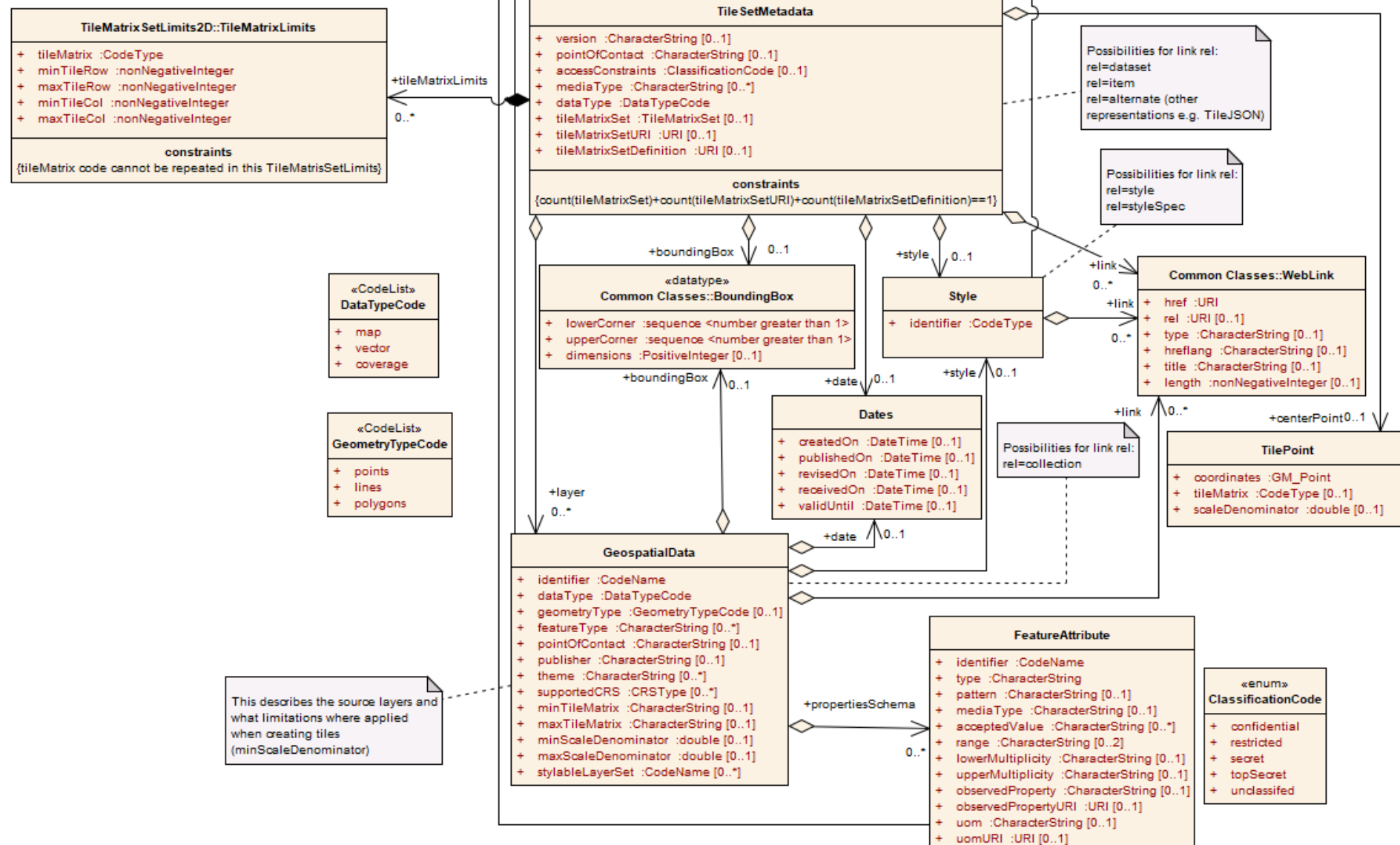


12 : 45 : 87
FEB - 05 - 3254
167 78 894



TileSet MD

class TileSetClean



It is all about Paths

Like in real life...

...your path is not fixed.



(essential building block also for not OGC "people")

.../{tilematrix}/{tilerow}/{tilecol}

A tile

(building block with tileset metadata)

.../tiles defined in OGC API tiles; tileset lists conformance class

.../tiles/{tilematrixsetid} defined in OGC API tiles; tileset metadata conformance class

TileSet(s) MD

.../tiles/{tilematrixsetid}/{tilematrix}/{tilerow}/{tilecol}

A tile in a tileset

(building block)

.../map defined in the OGC API maps; core (default style)

.../map?BBOX=... defined in the OGC API maps; bbox conformance class (default style)

A map

(how to combine the two building blocks (maps, tiles))

.../map/tiles defined in the OGC API maps; tiles conformance class (has a default style)

A tile
(rendered)

(how to apply the tiles building block to a {datasetAPI})

{datasetAPI}/collections/{collectionId}/tiles defined in OGC API tiles; collection

{datasetAPI}/tiles defined in OGC API tiles; root (dataset)

{datasetAPI}/tiles?collections= defined in OGC API tiles; collections

(how to combine the two building blocks and apply them to a {datasetAPI} to get map tiles)

{datasetAPI}/collections/{collectionId}/map/tiles defined in OGC API tiles;

collection

{datasetAPI}/map/tiles defined in OGC API tiles; root (dataset, default style)

{datasetAPI}/map/tiles?collections= defined in OGC API tiles;
collections

{datasetAPI}/collections/{collectionId}/styles/{styleId}/map

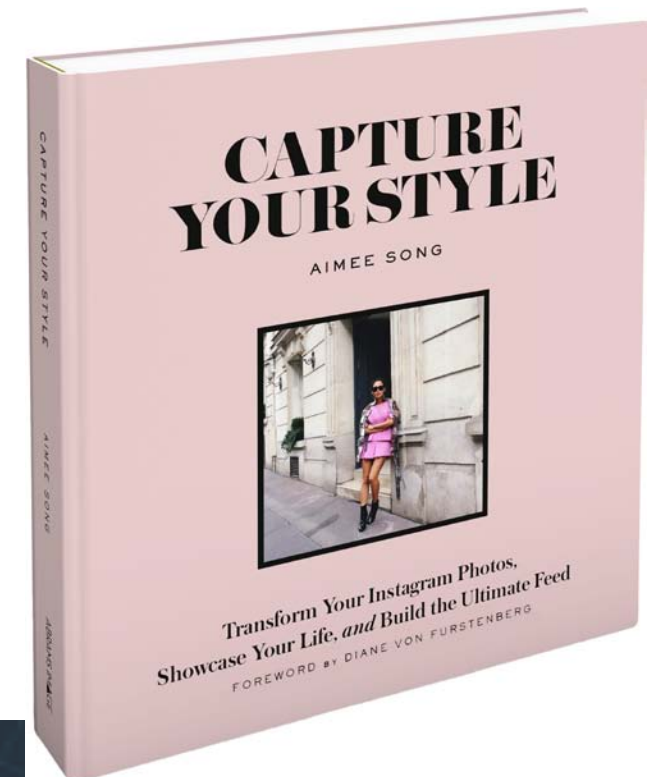
A map

{datasetAPI}/collections/{collectionId}/styles/{styleId}/map/tiles

A tile

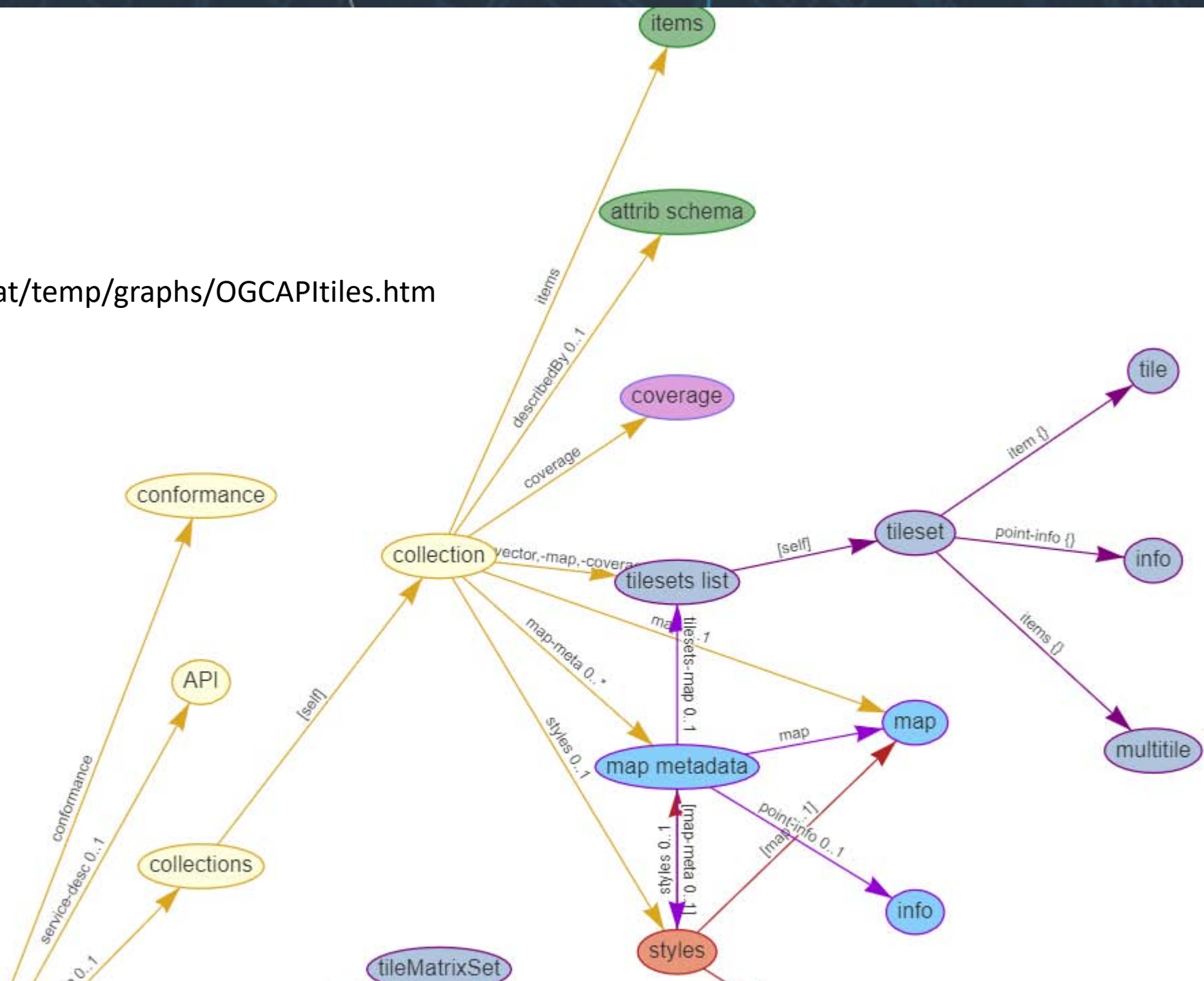
{datasetAPI}/styles/{styleId}

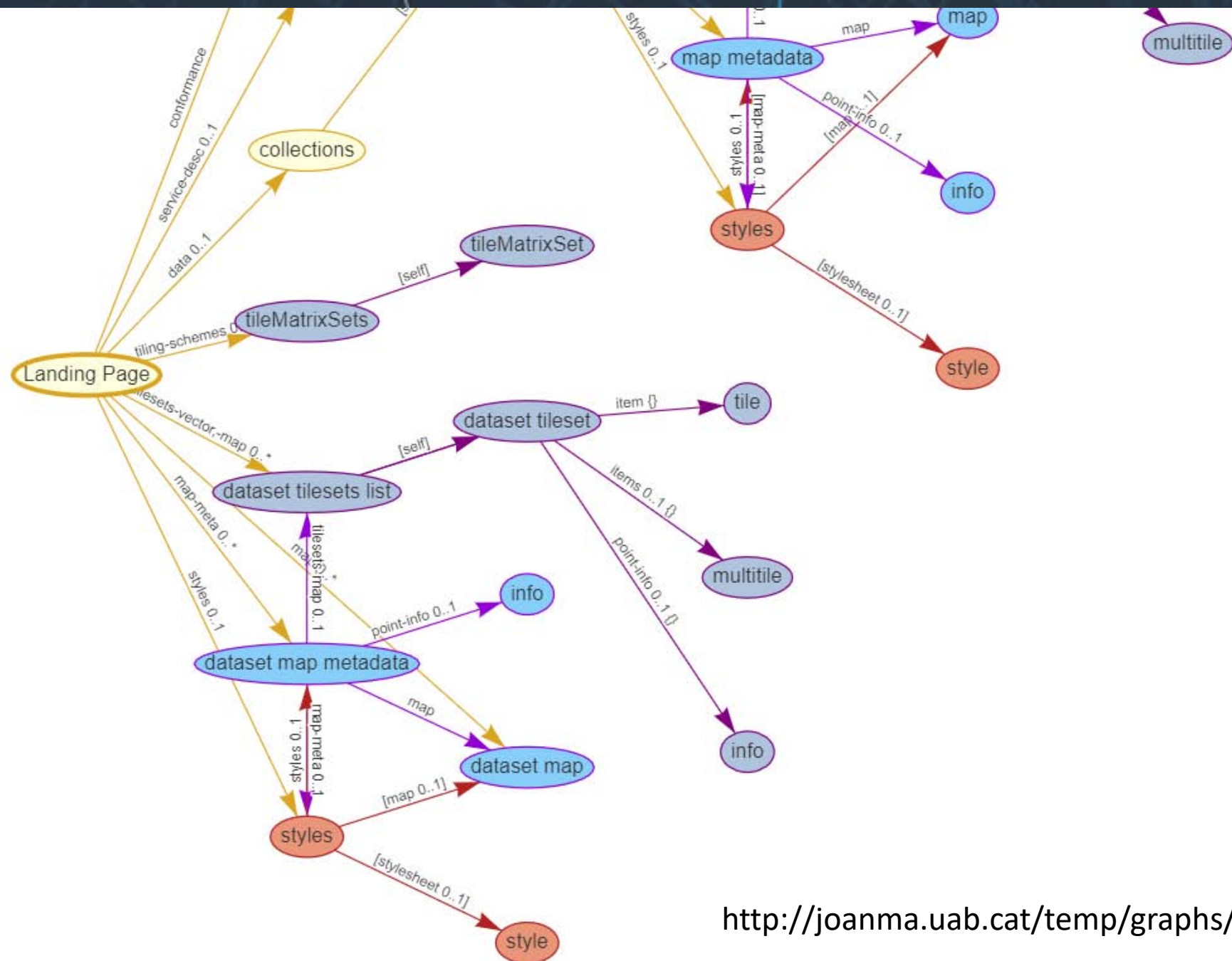
A style (SLD/SE)



- Improvise:
 - Just follow the lead of the links you discover
- Plan ahead:
 - The OpenAPI agenda

<http://joanma.uab.cat/temp/graphs/OGCAPItiles.htm>





<http://joanma.uab.cat/temp/graphs/OGCAPItiles.htm>

Direct access to paths

← ogcapi-features... 1.0.0

Info

Tags

Servers

Search

GET /

GET /conformance

GET /collections

GET /collections/buildings

Data ^

GET /collections/buildings/iter

GET /collections/buildings/iter

Schemas ^

SCHEMA buildingCollectionGeoJSC

SCHEMA buildingGeoJSON

62 '500':

63 \$ref: 'https://api.swaggerhub.com/domains/cportele/ogcapi-features-1/1.0.0#/components/responses/ServerError'

64 '/collections':

65 get:

66 tags:

67 - Capabilities

68 summary: the feature collections in the dataset

69 operationId: getCollections

70 responses:

71 '200':

72 \$ref: 'https://api.swaggerhub.com/domains/cportele/ogcapi-features-1/1.0.0#/components/responses/Collections'

73 '500':

74 \$ref: 'https://api.swaggerhub.com/domains/cportele/ogcapi-features-1/1.0.0#/components/responses/ServerError'

75 '/collections/buildings':

76 get:

77 tags:

78 - Capabilities

79 summary: |-

80 information about the buildings

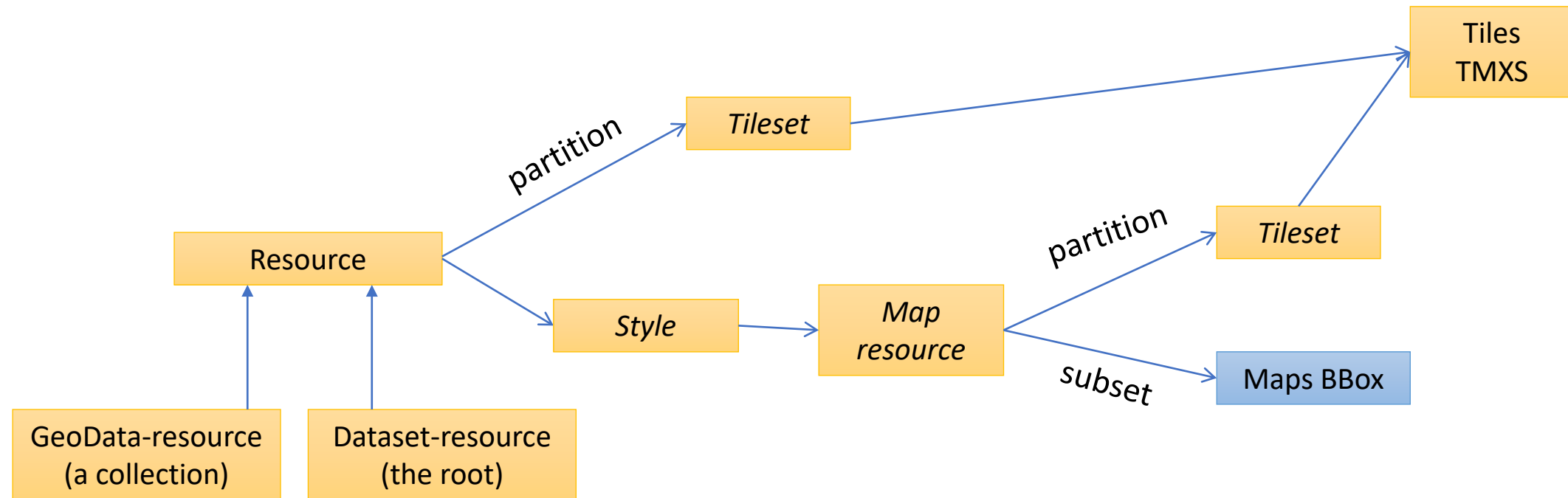
81 operationId: describeCollection

82 responses:

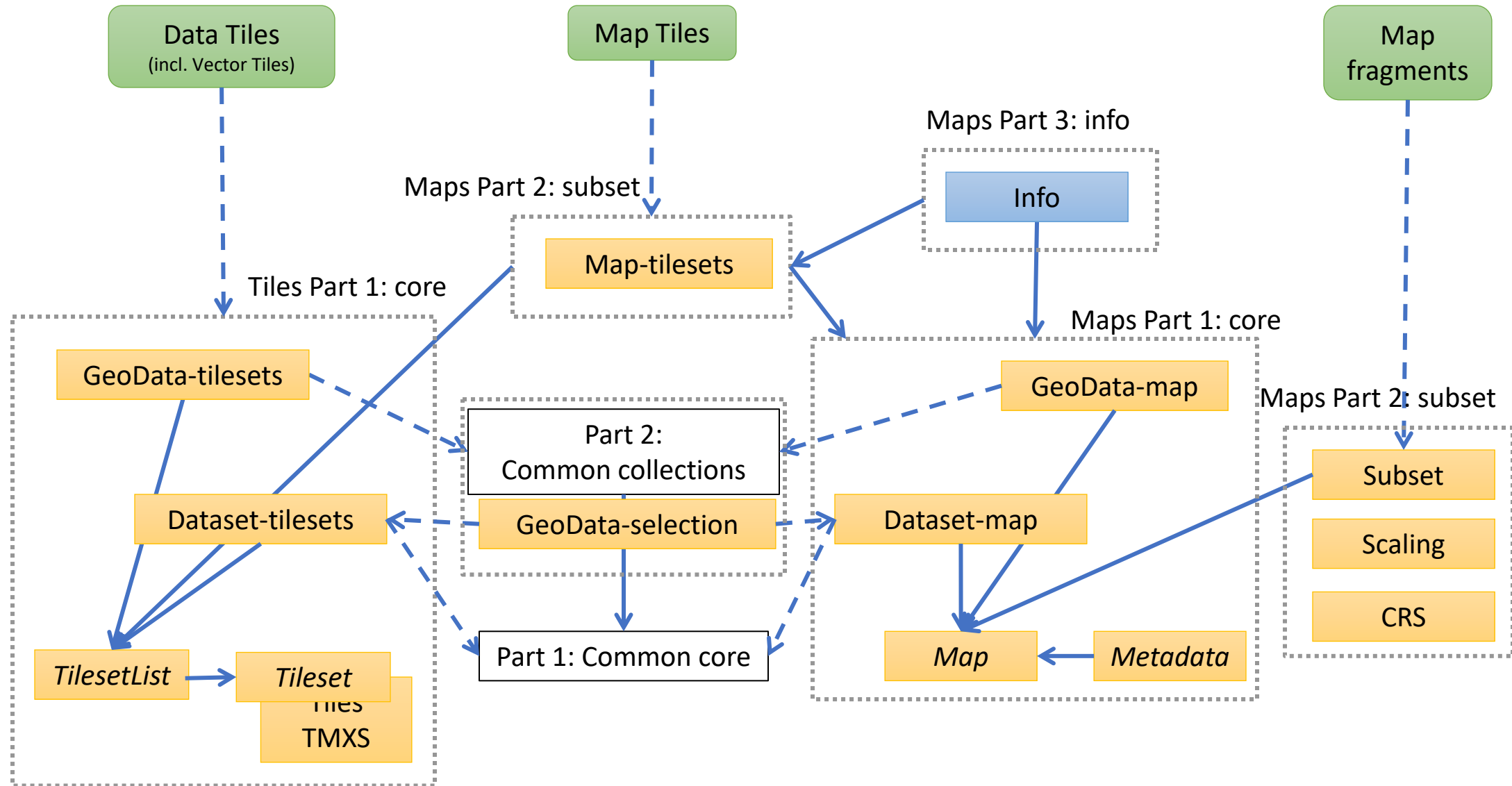
Last Saved: 12:54:04 pm - Sep 16, 2019

VALID

Tiles and Maps applied to *any* resource



Requirements classes

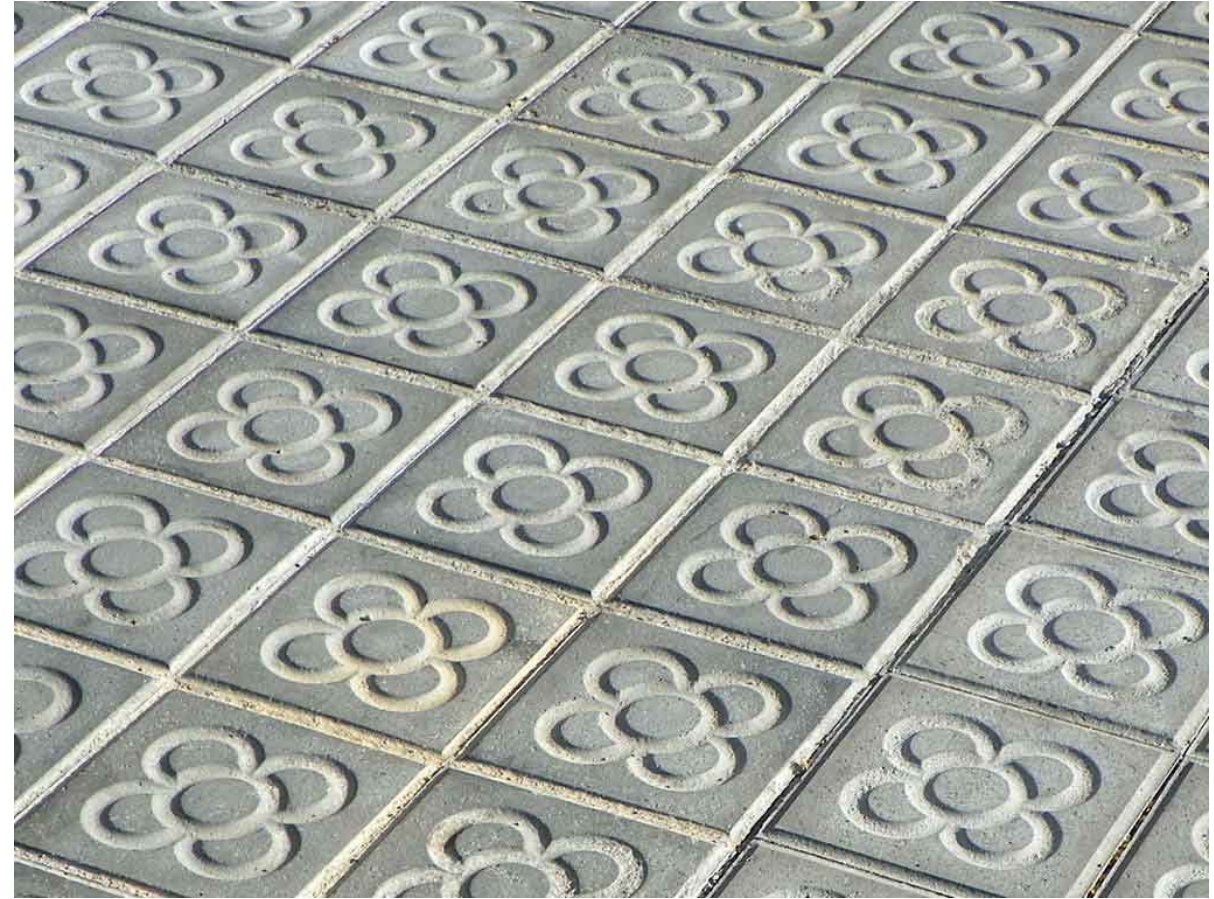


- <https://github.com/opengeospatial/OGC-API-Tiles>
- <https://github.com/opengeospatial/OGC-API-Maps>
- <https://github.com/opengeospatial/2D-Tile-Matrix-Set>
- OpenAPI Materials
 - API's examples
 - <https://app.swaggerhub.com/apis/UAB-CREAF/ogc-api-map-tiles-opf-xmp-mt-more-1-collection/1.0.0>
 - <https://app.swaggerhub.com/apis/UAB-CREAF/ogc-api-maps-opf-xmp-more-1-collection/1.0.0>
 - ...
 - Domains
 - <https://app.swaggerhub.com/domains/UAB-CREAF/ogc-api-maps/1.0.0>
 - <https://app.swaggerhub.com/domains/UAB-CREAF/ogc-api-tiles/1.0.0>
 - ...

OGC



Thank You!



MAX - 34 - 685
K2 - IT - 3678 - 966

