Working with WMS and WMTS Services

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OGC Web Map Service (WMS)

- The OGC Web Map Service Interface Standard (WMS) provides a simple HTTP interface for requesting geo-registered map images from one or more distributed geospatial databases.

- A WMS request defines the geographic layer(s) and area of interest to be processed. The response to the request is one or more geo-registered map images (returned as JPEG, PNG, etc) that can be displayed in a client application.

- The interface also supports the ability to specify whether the returned images should be transparent so that layers from multiple servers can be combined or not.

- A getfeatureinfo operation allows clients to query/identify features in the map.

WMS Versions: 1.0, 1.1, 1.1.1, 1.3 (ISO 19128)
OGC Web Map Tile Service (WMTS)

- This Web Map Tile Service (WMTS) Implementation Standard provides a standard based solution to serve digital maps using predefined image tiles.

- The service advertises the tiles it has available through a standardized declaration in the ServiceMetadata document common to all OGC web services.

- This declaration defines the tiles available –
  - in each layer (i.e. each type of content),
  - in each graphical representation style,
  - in each format,
  - in each coordinate reference system,
  - at each scale, and over each geographic fragment of the total covered area.

- The ServiceMetadata document also declares the communication protocols and encodings through which clients can interact with the server.

- Clients can interpret the ServiceMetadata document to request specific tiles.

WMTS Versions: 1.0, WMTS – Simple Profile
Products

Desktop
ArcMap, PRO

Server

Portal / Online

Runtime

Apps

Javascript API

Desktop
Web
Device

Portal

Server
Online Content and Services
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WMS, WMTS Demo’s
Demo

- Publish wms services using ArcMap

- Publish wms services using PRO

- Consume wms services using PRO.

- Consume wmts services using PRO

- Consume webmaps (containing wms and wmts services) using PRO

- Work with 3rd party wms and wmts services

- Understanding and working with secured wms and wmts services

- ... Group layers, Legends, Projections, …