

Working with WMS and WMTS Services

Srinivas Vinnakota

Satish Sankaran

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.

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.

Products

Desktop

ArcMap , PRO

Server

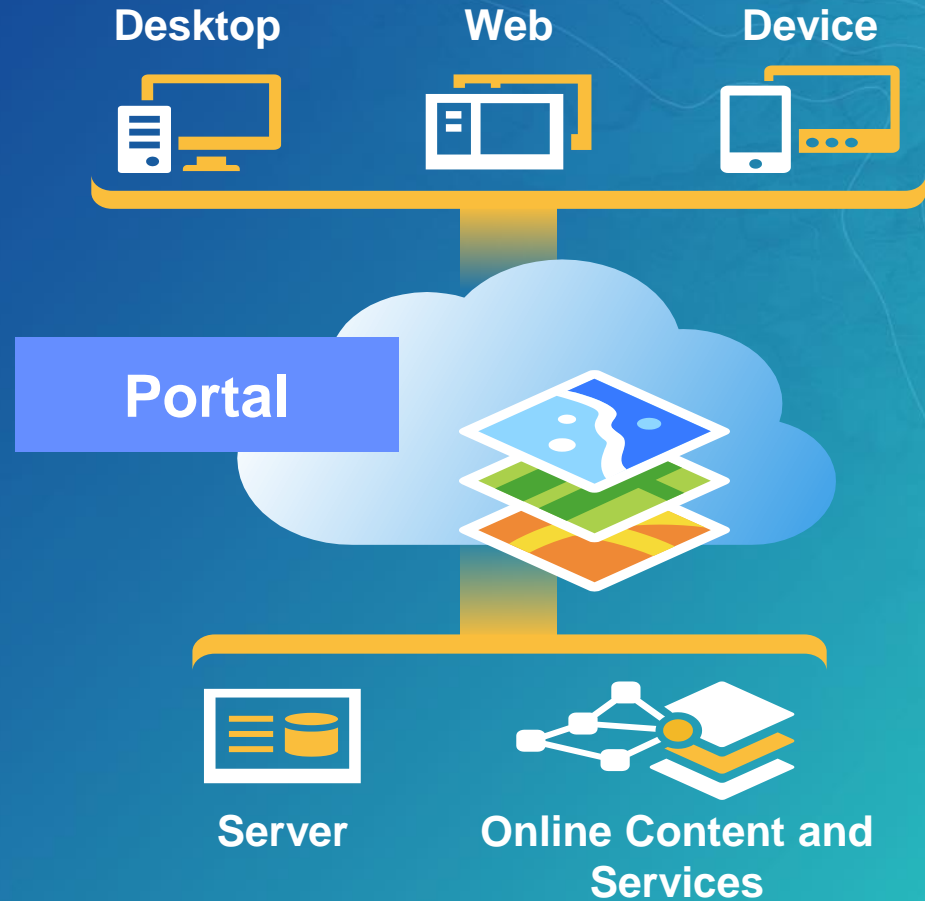
Portal / Online

Runtime

Apps

Javascript API

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Concepts

Specification

Style Layer Descriptors (SLD)

Legends

Projections

Group layers

Dimensions

Vendor Specific

- Custom Parameters

- Layerdef (definition expression)

- Custom Projections -
represented using WKT or an
ID.

- XSLT templates to customize
getfeatureinfo

- Secured Services

WMS, WMTS Demo's

Demo

- Publish wms services using ArcmMap
- 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, ...



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