

NextGIS Web Workshop, FOSS4G 2026 Japan

0 Preparation

- Download data (hopefully before the workshop): https://nextgis.com/foss4g2026_ngw.zip
- Install docker (hopefully before the workshop) for your OS
- Pull docker image (hopefully before the workshop) `docker pull nextgis/nextgisweb-ce:26.07.0`

1 Presentation

2 NextGIS Web CE Deployment

2-1

- Follow Compose steps at the workshop:
https://github.com/nextgis/nextgisweb_ce/blob/master/README.md#docker-compose

For local docker image installation:

- Download tar file
- Load with docker load -i your-image-name.tar

Problems with docker?

- Register at nextgis.com
- Create your Web GIS
- Send the email you used to register to edu@nextgis.com with FOSS4G Workshop subject

3 NextGIS Web basics

3 -1 Authorize with administrator / admin or with OAuth on the cloud

3-2 What's a resource

3-3

- Create vector layer from **hiroshima/naka_ward_boundary.gpkg**
- Create user-defined style
- Explore preview, table, MVT and TMS endpoints
- Create feature
- Remove it
- Add photos and PDF to an existing feature from **hiroshima/files**

3-4

- Create vector layer from **hiroshima/poi-point.gpkg**
- Create style from **poi-point-cluster.qml**
- Preview style from QGIS QML

3-5

- Create raster layer from **hiroshima/map1916.tif** and default style
- Explore COG and TMS endpoints

3-6

- Create a web map with all these layers (two vectors one raster)
- Explore attributes table
- Apply filter
- Edit feature on the map
- Identify ward boundary
- View and edit attachments

3-7* optional

- Create raster layer from **hiroshima/S2B...tif**
- Create two styles from **sentinel2-nir-style.qml** and **sentinel2-rgb-style.qml**, add to the map

3-8* optional

- Create vector layer from **building-polygon.gpkg**
- Create user-defined style
- Create style from **buildings-advanced-style.qml**
- Add both styles to the map

3-9* optional

- Create empty vector layer, polygon, name: Zones of Interest, add string Description attribute

4 Publish a QGIS project

4-1

- Open **itsukutshima/Itsukushima.qgs** in QGIS
- Explore multilevel styles
- Custom icons
- Expression based colors
- Data collection forms for Viewpoints layer

4-2

- Install NextGIS Connect
- Add connection to NGW

4-3

- Publish a project, DECLINE reconnecting layers for now

4-4

- Explore similar styles in QGIS and Web
- Explore identification

4-5

- Explore in NGW: layers, styles, basemaps

5 Publish data as a service

5-1

- Blank project in QGIS

5-2

- Note MVT, TMS, COG for vector, style, raster

5-3

- Create OGC API - Features service for highways
- Create WMS for DEM

5-4

- Connect OGC API in QGIS
- Connect WMS in QGIS

6 Manage users

6-1

- Create new local user Alex Bell

6-2

- Give Alex full access rights to itsukutshima group
- Give Alex Read:resource permission for root resource 0, no propagation

6-3

- Explore effective rights for highways layer under admin for admin, guest, Alex

6-4

- Open private browser tab
- Log in as Alex Bell, explore whats available

7 Collaborate on the published project

7-1

- Empty QGIS project

7-2

- Connect with Connect as Alex Bell

7-3

- Download itsukutshima Web map with Connect

7-4

- Make sure everything got transferred to QGIS, vectors, rasters

7-5

- Start editing Viewpoints layer and add new point
- Note the data editing form

7-6

- Identify new point with Connect identify tool
- Add description
- Add two photos from **itsukutshima/photos**
- Save

7-7

- Return to Web map in browser
- Look for ne point
- Identify and see photos

7-8

- Repeat for highway layer, add new HIGHWAY=primary
- Check Web map for new features

7-9

- Edit via Web map
- Start sync in QGIS
- Check for new features

7-10

- Open highway layer as NGW resource
- Open versioning, turn of grouping
- Check out two last edits. Explore versioning

7-11

- Revert highways layer to initial state
- Check out layer on Web map and QGIS (sync)

7-12

- Choose a prominent feature in Ports/Port layer
- Activate editing in QGIS (important to start in first!)
- Activate editing on Web Map
- Make changes to geometry and attributes on Web Map
- Save edits
- Make changes to layer in QGIS, geometry and attributes but different.
- Save edits
- Explore conflicts resolution

7-13

- Change style to green hatch and update with Connect
- Checkout Web Map for new style