

Lambda Functions

Use **handler.py** for Python code that defines lambda function. Please match function inside handler.py with source code (directory) name under src/.

| Name | Source code name | Input Trigger | Output bucket | Deployed by | Purpose | Performance (second) |
|-----------------------------------|-----------------------------|---------------------|--|-------------|---|----------------------|
| cmr2ncml-dev-cmr2ncmllambda | cmr2ncml | API Gateway | ncml | Serverless | Generate NcML based on CMR search result. Write NcML to ncml-lambda bucket to trigger ncml-dev-ncmllambda. | 0.3 |
| cog2geos-dev-cog2geoslambda | cog2geos | mop03t-007-cog | n/a | Serverless | Update Mosaic dataset in AWS RDS via GeoServer REST API call | 3 |
| mop02j2tif-dev-mop02j2tiflambda | mop02j2tif-mop02j2tif-layer | mop02j-007 | mop02j-007-tif | Serverless | Generate GeoTIFF from 1-d Swath using the (unreleased) latest GDAL. | 1.1 |
| mop03t2tif-dev-mop03t2tiflambda | mop03t2tif | mop03t-007 | mop03t-007-tif | Serverless | Run GEE vsis3 driver to create GeoTIFF file. | 1.9 |
| mdcs-dev-mdcsambda | mrf2mdcs | sdt-data | n/a | Serverless | Run MDCS batch file to create mosaic dataset on Windows Server via SSM. It doesn't work because there is no ArcGIS Portal license. Use Powershell service instead. | n/a |
| mrf2vrt-dev-mrf2vrt | mrf2vrt | ceres-mrf | ceres-vrt | Serverless | Generate 24 VRT files from a single MRF for GeoServer Mosaic. | 2.9 |
| ncml2sync-dev-ncml2sync | ncml2sync | ncml | ncml2tif ncml2mrf | Serverless | Make ssh connection to Hyrax server and synchronize local ncml directory with ncml2tif and ncml2mrf S3 buckets. | 2 |
| ncml2tif-dev-ncml2tif | ncml2tif | ncml2tif | cer-syn1deg-1hour-terra-aqua-modis-tif | Serverless | Generate CERES GeoTIFF from Hyrax NcML module. This uses GDAL DODS driver. | 40 |
| tif2cog-dev-tif2coglambda | tif2cog | mop03t-007-tif | mop03t-007-cog | Serverless | Generate CoG from GeoTIFF. | 0.9 |
| ncml2mrf-dev-HourlyMRF | ncml2mrf | Not Implemented Yet | | Serverless | Convert an hourly NCML to MRF and uploads to a user specified S3 bucket. | |
| ncml2mrf2-dev-ncml2mrf2 | ncml2mrf2 | ncml2mrf | ceres-mrf | Serverless | Convert an CERES NCML to MRF. | 20.6 |
| rasterproxy-dev-HourlyRasterProxy | rasterproxy | Not Implemented Yet | | Serverless | Creates 24 individual raster proxy XML files from a 24 hour MRF and uploads to a user specified S3 bucket | 3.7 |

Layers

| Name | Source | Deployed by | Purpose | Functions that use the layer | ARN |
|--------------|----------------------------|-------------|---|---|--|
| gdal | gdal-layer | Serverless | Latest GDAL with vsis3 support for 1-d swath HDF-EOS5 and Python 3.6. | mop02j2tif-layer ncml2mrf2-dev-ncml2mrf2 | arn:aws:lambda:us-east-1:811315030605:layer:gdal:10 |
| netcdf4-py36 | | | NetCDF4 Python 3.6 | ncml2mrf-dev-HourlyMRF ncml2mrf2-dev-ncml2mrf2 | arn:aws:lambda:us-east-1:811315030605:layer:netcdf4-py36:2 |

References

1. <https://docs.aws.amazon.com/lambda/latest/dg/limits.html>