# QGIS Application - Feature request #6801
## add "dissolve only adjacent" dissolve option/tool

2012-12-01 03:50 AM - Giovanni Manghi

| | | | |
|---|---|---|---|
| **Status:** | Open | | |
| **Priority:** | Normal | | |
| **Assignee:** | Giovanni Manghi | | |
| **Category:** | Processing/GDAL | | |
| **Pull Request or Patch supplied:** | No | **Resolution:** | |
| **Easy fix?:** | No | **Copied to github as #:** | 15949 |

### Description

It is very common to have to dissolve a polygon layer, but needing to dissolve only geometries that are adjacent.

Right now QGIS dissolves all the features with a common attributes, even the ones that are not adjacent (with a consequent big loss of attribute data).

To tell the truth I would say that is more common the need to dissolve only adjacent features rather than have to dissolve all features with a common attribute.

### History

**#1 - 2014-06-12 05:09 PM - Giovanni Manghi**

*- Priority changed from High to Normal*

**#2 - 2014-06-20 09:40 AM - Giovanni Manghi**

*- Category changed from 44 to 94*

*- Subject changed from add "dissolve only adjacent" option to dissolve tool to add "dissolve only adjacent" dissolve option/tool*

*- Assignee set to Victor Olaya*

adding this options in ftools (or gdal tools) does not make a lot of sense anymore, better add them directly in processing.

**#3 - 2014-11-22 01:32 AM - Alexander Bruy**

*- Category changed from 94 to Processing/QGIS*

**#4 - 2014-11-23 10:27 AM - Giovanni Manghi**

*- File diss2.png added*

*- Assignee changed from Victor Olaya to Giovanni Manghi*

*- Category changed from Processing/QGIS to Processing/GDAL*

*- File diss3.png added*

*- File diss1.png added*

To add this tool it can be used a sql only approach, via ogr2ogr/processing, so I should be able to give it a shot.

A possible query is

```
SELECT
    ST_Union(geom) AS geom,
    a.diss_field,
    null AS oth_field,
```

SUM AS area_ha
FROM
  input a
WHERE
  EXISTS (SELECT id_0 FROM input b WHERE b.id_0 != a.id_0 AND (ST_Intersects(a.geom, b.geom))) GROUP BY  a.diss_field
UNION
SELECT
  geom,
  diss_field,
  oth_field,
  area_ha
FROM
  input a
WHERE
  NOT EXISTS (SELECT id_0 FROM input b WHERE b.id_0 != a.id_0 AND (ST_Intersects(a.geom, b.geom)))

where "oth_field" is the field to be kept untouched in non dissolved features, "diss_field" is the attribute used to dissolve adjacent features and "area_ha" a numeric field where to eventually compute an aggregation stat in dissolve features (and to be kept untouched in non dissolved features).

A slightly different case is when not only physically isolated features are not meant to be dissolved, but also when features that have only neighbours with a different dissolve field are not meant to be dissolved.

SELECT
  ST_Union(geom) AS geom,
  a.diss_field,
  null AS oth_field,
SUM AS area_ha
FROM
  input a
WHERE
  EXISTS (SELECT id_0 FROM input b WHERE b.id_0 != a.id_0 AND (ST_Intersects(a.geom, b.geom)) and b.diss_field = a.diss_field) GROUP BY a.diss_field
UNION
SELECT
  geom,
  diss_field,
  oth_field,
  area_ha
FROM
  input a
WHERE
  NOT EXISTS (SELECT id_0 FROM input b WHERE b.id_0 != a.id_0 AND (ST_Intersects(a.geom, b.geom)) and b.diss_field = a.diss_field)

3 pictures are attached to understand better.


**#5 - 2015-10-22 06:45 AM - Bernhard Ströbl**

I included this issue in #13654, please consider closing this ticket if appropriate.


**#6 - 2015-10-22 07:01 AM - Giovanni Manghi**

Hi Bernhard,

I will add ogr/sql tools regardless of the work being done in native qgis tools, for several reasons: I like the flexibility of having GUI tools purely based on spatial SQL queries and because the tools already available have proven to be overall much quicker than the qgis/ftools counterparts. Cheers!

**#7 - 2017-05-01 12:48 AM - Giovanni Manghi**

*- Easy fix? set to No*

## Files

| | | | |
|---|---|---|---|
| diss1.png | 212 KB | 2014-11-23 | Giovanni Manghi |
| diss2.png | 175 KB | 2014-11-23 | Giovanni Manghi |
| diss3.png | 176 KB | 2014-11-23 | Giovanni Manghi |