**QGIS Application - Feature request #2402**  
**Field calculator can’t fill fields with areas in units differ from layer measurements units**  
2010-01-29 09:45 AM - dr -

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
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<tbody>
<tr>
<td>Priority:</td>
<td>Low</td>
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<tr>
<td>Assignee:</td>
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<td>Category:</td>
<td>Vectors</td>
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<tr>
<td>Pull Request or Patch supplied:</td>
<td>No</td>
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<td>Easy fix?:</td>
<td>No</td>
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<tr>
<td>Resolution:</td>
<td>Copied to github as #: 12462</td>
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**Description**

I'm trying to create new field with field calculator and fill it with area of features. But I can't use units differ from layer units.

If set 'Enable on the fly CRS transformation' and choose Settings -> Options -> Map tools and set 'Preferred measurements units' to Meters then using Identify Features tool it is possible to get areas of features in square meters.

It will be great to realise such function in Fields Calculator.

**Related issues:**

- Related to QGIS Application - Feature request # 10170: Calculations should us... Open 2014-05-04
- Related to QGIS Application - Feature request # 12939: make the field calcula... Closed 2015-06-11

**Associated revisions**

**Revision ddbdf8a - 2016-02-14 11:04 AM - Nyall Dawson**

Fix project unit confusion (pt 2): add project distance unit setting

Adds a new option in project properties to set the units used for distance measurements. This setting defaults to the units set in QGIS options, but can then be overridden for specific projects.

The setting is respected for length and perimeter calculations in:
- Attribute table field update bar
- Field calculator calculations
- Identify tool derived length and perimeter values
- Default unit shown in measure dialog

Also adds unit tests to ensure that length and perimeter calculated by attribute table update bar, field calculator and identify tool are consistent wrt ellipsoidal calculations and distance units.

(refs #13209, #12939, #2402, #4857, #4252)

**Revision dfdce89 - 2016-02-15 02:47 AM - Nyall Dawson**

Fix project unit confusion (pt 3): add area unit settings with a ton of available area units (eg m2, km2, mi2, ft2, yd2, ha, ac, etc)

Adds a new option in both the QGIS setting and project properties to set the units used for area measurements. Just like the distance
setting, this defaults to the units set in QGIS options, but can then be overridden for specific projects.

The setting is respected for area calculations in:
- Attribute table field update bar
- Field calculator calculations
- Identify tool derived length and perimeter values

Also adds unit tests to ensure that area calculated by attribute table update bar, field calculator and identify tool are consistent wrt ellipsoidal calculations and area units.

TODO: make measure tool respect area setting

(refs #13209, #4252 and fixes #12939, #2402, #4857)

History

#1 - 2011-12-16 01:57 PM - Giovanni Manghi
- Target version changed from Version 1.7.0 to Version 1.7.4

#2 - 2012-04-15 10:12 AM - Giovanni Manghi
- Target version changed from Version 1.7.4 to Version 2.0.0

#3 - 2012-08-22 03:14 PM - Magnus Homann
- Pull Request or Patch supplied set to No
- Assignee changed from nobody - to Magnus Homann

#4 - 2012-10-06 02:34 AM - Pirmin Kalberer
- Target version changed from Version 2.0.0 to Future Release - Nice to have

#5 - 2014-06-21 07:33 AM - Giovanni Manghi
- Assignee deleted (Magnus Homann)
- Operating System deleted (All)
- Status info deleted (0)

#6 - 2016-02-14 06:53 PM - Nyall Dawson
- Status changed from Open to Closed

Fixed in changeset commit:"dfdcec89223d4167850c7ebbb0af1d65c21135f8".