

QGIS Application - Feature request #3583
patch to use the same pal instance for labeling-ng and for diagrams

2011-03-09 05:39 AM - Marco Hugentobler

Status:	Closed	
Priority:	Low	
Assignee:	nobody -	
Category:	Build/Install	
Pull Request or Patch supplied:		Resolution: fixed
Easy fix?:	No	Copied to github as #: 13643
Description		
Attached is a patch that implements a new diagram mechanism using [[QgsPalLabling]], thus considering the positions of diagrams and labels. It is the idea to remove the vector overlay classes and its diagram implementation after 1.7		

History

#1 - 2011-03-09 07:06 AM - Tim Sutton

Hi MArco

I tried to test your patch against trunk commit:caa0cae3 (SVN r15389) but it fails to compile with:

```
[ 68%] Building CXX object src/providers/grass/CMakeFiles/grassprovider.dir/provider.cpp.o
In file included from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsdiagramrendererv2.h:10,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsvectorlayer.h:29,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsvectordataprovder.h:29,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/qgsgrassprovider.h:24,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/provider.cpp:38:
/home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/pal/layer.h:50: error: expected '>' before numeric constant
In file included from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsdiagramrendererv2.h:10,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsvectorlayer.h:29,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/qgsvectordataprovder.h:29,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/qgsgrassprovider.h:24,
    from /home/timlinux/dev/cpp/qgis/src/providers/grass/provider.cpp:38:
/home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/pal/layer.h:108: error: wrong number of template arguments (6, should be 3)
/home/timlinux/dev/cpp/qgis/src/providers/grass/../../core/pal/layer.h:50: error: provided for 'template<class DATATYPE, class ELEMTYPE, int
<anonymous> > struct pal::RTree'
maker2: *** [src/providers/grass/CMakeFiles/grassprovider.dir/provider.cpp.o] Error 1
maker1: *** [src/providers/grass/CMakeFiles/grassprovider.dir/all] Error 2
make: *** [all] Error 2
```

Regards

Tim

#2 - 2011-03-09 08:27 AM - Marco Hugentobler

Hi Tim

Please try the second patch. It should fix the build issue (by removing the vectorlayer include in the provider class). Hopefully it works...

Regards,
Marco

#3 - 2011-03-09 08:32 AM - Marco Hugentobler

Wait, better go with the third one

#4 - 2011-03-09 09:26 AM - Tim Sutton

With patch 3 I now get:

```
[ 12%] Building CXX object src/core/CMakeFiles/qgis_core.dir/qgspallabeling.cpp.o
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:195: error: redefinition of 'QgsTextDiagram::QgsTextDiagram()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:7: error: 'QgsTextDiagram::QgsTextDiagram()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:203: error: redefinition of 'QgsTextDiagram::~QgsTextDiagram()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:15: error: 'QgsTextDiagram::~QgsTextDiagram()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:207: error: redefinition of 'void [[QgsTextDiagram]]::renderDiagram(const
[[QgsAttributeMap]]&, [[QgsRenderContext]]&, const [[QgsDiagramSettings]]&, const QPointF&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:19: error: 'virtual void [[QgsTextDiagram]]::renderDiagram(const [[QgsAttributeMap]]&,
[[QgsRenderContext]]&, const [[QgsDiagramSettings]]&, const QPointF&)' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:292: error: redefinition of 'void [[QgsTextDiagram]]::lineEllipseIntersection(const QPointF&,
const QPointF&, const QPointF&, double, double, QList<QPointF>&) const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:104: error: 'void [[QgsTextDiagram]]::lineEllipseIntersection(const QPointF&, const
QPointF&, const QPointF&, double, double, QList<QPointF>&) const' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:323: error: redefinition of 'QgsPieDiagram::QgsPieDiagram()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:135: error: 'QgsPieDiagram::QgsPieDiagram()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:329: error: redefinition of 'QgsPieDiagram::~QgsPieDiagram()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:141: error: 'QgsPieDiagram::~QgsPieDiagram()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:333: error: redefinition of 'void [[QgsPieDiagram]]::renderDiagram(const
[[QgsAttributeMap]]&, [[QgsRenderContext]]&, const [[QgsDiagramSettings]]&, const QPointF&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagram.cpp:145: error: 'virtual void [[QgsPieDiagram]]::renderDiagram(const [[QgsAttributeMap]]&,
[[QgsRenderContext]]&, const [[QgsDiagramSettings]]&, const QPointF&)' previously defined here
maker2: *** [src/core/CMakeFiles/qgis_core.dir/qgsdiagram.cpp.o] Error 1
maker2: *** Waiting for unfinished jobs....
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:313: error: redefinition of 'void [[QgsDiagramLayerSettings]]::readXML(const
QDomElement&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:8: error: 'void [[QgsDiagramLayerSettings]]::readXML(const QDomElement&)'
previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:324: error: redefinition of 'void
[[QgsDiagramLayerSettings]]::writeXML(QDomElement&, QDomDocument&) const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:19: error: 'void [[QgsDiagramLayerSettings]]::writeXML(QDomElement&,
QDomDocument&) const' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:337: error: redefinition of 'void [[QgsDiagramSettings]]::readXML(const
QDomElement&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:32: error: 'void [[QgsDiagramSettings]]::readXML(const QDomElement&)'
previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:362: error: redefinition of 'void
[[QgsDiagramSettings]]::writeXML(QDomElement&, QDomDocument&) const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:57: error: 'void [[QgsDiagramSettings]]::writeXML(QDomElement&,'
```

QDomDocument&) const' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:396: error: redefinition of 'QgsDiagramRendererV2::QgsDiagramRendererV2()'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:91: error: 'QgsDiagramRendererV2::QgsDiagramRendererV2()' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:400: error: redefinition of 'QgsDiagramRendererV2::~QgsDiagramRendererV2()'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:95: error: 'virtual [[QgsDiagramRendererV]]2::~QgsDiagramRendererV2()' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:405: error: redefinition of 'void [[QgsDiagramRendererV]]2::setDiagram(QgsDiagram*)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:100: error: 'void [[QgsDiagramRendererV]]2::setDiagram(QgsDiagram*)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:411: error: redefinition of 'void [[QgsDiagramRendererV]]2::renderDiagram(const [[QgsAttributeMap]]&, [[QgsRenderContext]]&, const QPointF&)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:106: error: 'void [[QgsDiagramRendererV]]2::renderDiagram(const [[QgsAttributeMap]]&, [[QgsRenderContext]]&, const QPointF&)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:427: error: redefinition of 'QSizeF [[QgsDiagramRendererV]]2::sizeMapUnits(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:122: error: 'virtual QSizeF [[QgsDiagramRendererV]]2::sizeMapUnits(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:434: error: redefinition of 'void [[QgsDiagramRendererV]]2::convertSizeToMapUnits(QSizeF&, const [[QgsRenderContext]]&) const'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:129: error: 'void [[QgsDiagramRendererV]]2::convertSizeToMapUnits(QSizeF&, const [[QgsRenderContext]]&) const' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:452: error: redefinition of 'static int [[QgsDiagramRendererV]]2::dpiPaintDevice(const QPainter*)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:147: error: 'static int [[QgsDiagramRendererV]]2::dpiPaintDevice(const QPainter*)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:465: error: redefinition of 'void [[QgsDiagramRendererV]]2::_readXML(const QDomElement&)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:160: error: 'void [[QgsDiagramRendererV]]2::_readXML(const QDomElement&)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:483: error: redefinition of 'void [[QgsDiagramRendererV]]2::_writeXML(QDomElement&, QDomDocument&) const'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:178: error: 'void [[QgsDiagramRendererV]]2::_writeXML(QDomElement&, QDomDocument&) const' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:491: error: redefinition of 'QgsSingleCategoryDiagramRenderer::QgsSingleCategoryDiagramRenderer()'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:186: error: 'QgsSingleCategoryDiagramRenderer::QgsSingleCategoryDiagramRenderer()' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:495: error: redefinition of 'QgsSingleCategoryDiagramRenderer::~QgsSingleCategoryDiagramRenderer()'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:190: error: 'virtual [[QgsSingleCategoryDiagramRenderer]]::~QgsSingleCategoryDiagramRenderer()' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:499: error: redefinition of 'bool [[QgsSingleCategoryDiagramRenderer]]::diagramSettings(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&, [[QgsDiagramSettings]]&)'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:194: error: 'virtual bool [[QgsSingleCategoryDiagramRenderer]]::diagramSettings(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&, [[QgsDiagramSettings]]&)' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:505: error: redefinition of 'QList<QgsDiagramSettings> [[QgsSingleCategoryDiagramRenderer]]::diagramSettings() const'

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:200: error: 'virtual QList<QgsDiagramSettings> [[QgsSingleCategoryDiagramRenderer]]::diagramSettings() const' previously defined here

/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:512: error: redefinition of 'void

```

[[QgsSingleCategoryDiagramRenderer]]::readXML(const QDomElement&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:207: error: 'virtual void [[QgsSingleCategoryDiagramRenderer]]::readXML(const
QDomElement&)' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:524: error: redefinition of 'void
[[QgsSingleCategoryDiagramRenderer]]::writeXML(QDomElement&, QDomDocument&) const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:219: error: 'virtual void
[[QgsSingleCategoryDiagramRenderer]]::writeXML(QDomElement&, QDomDocument&) const' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:533: error: redefinition of
'QgsLinearlyInterpolatedDiagramRenderer::QgsLinearlyInterpolatedDiagramRenderer()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:228: error:
'QgsLinearlyInterpolatedDiagramRenderer::QgsLinearlyInterpolatedDiagramRenderer()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:537: error: redefinition of
'QgsLinearlyInterpolatedDiagramRenderer::~QgsLinearlyInterpolatedDiagramRenderer()'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:232: error: 'virtual
[[QgsLinearlyInterpolatedDiagramRenderer]]::~QgsLinearlyInterpolatedDiagramRenderer()' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:541: error: redefinition of 'QList<QgsDiagramSettings>
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSettings() const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:236: error: 'virtual QList<QgsDiagramSettings>
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSettings() const' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:548: error: redefinition of 'bool
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSettings(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&,
[[QgsDiagramSettings]]&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:243: error: 'virtual bool
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSettings(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&,
[[QgsDiagramSettings]]&)' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:555: error: redefinition of 'QList<int>
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramAttributes() const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:250: error: 'virtual QList<int>
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramAttributes() const' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:565: error: redefinition of 'QSizeF
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSize(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:260: error: 'virtual QSizeF
[[QgsLinearlyInterpolatedDiagramRenderer]]::diagramSize(const [[QgsAttributeMap]]&, const [[QgsRenderContext]]&)' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:580: error: redefinition of 'void
[[QgsLinearlyInterpolatedDiagramRenderer]]::readXML(const QDomElement&)'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:275: error: 'virtual void
[[QgsLinearlyInterpolatedDiagramRenderer]]::readXML(const QDomElement&)' previously defined here
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:597: error: redefinition of 'void
[[QgsLinearlyInterpolatedDiagramRenderer]]::writeXML(QDomElement&, QDomDocument&) const'
/home/timlinux/dev/cpp/qgis/src/core/qgsdiagramrendererv2.cpp:292: error: 'virtual void
[[QgsLinearlyInterpolatedDiagramRenderer]]::writeXML(QDomElement&, QDomDocument&) const' previously defined here
maker2: *** [src/core/CMakeFiles/qgis_core.dir/qgsdiagramrendererv2.cpp.o] Error 1
/home/timlinux/dev/cpp/qgis/src/core/qgspallabeling.cpp: In member function 'virtual int [[QgsPalLabeling]]::addDiagramLayer(QgsVectorLayer*,
[[QgsDiagramLayerSettings]]&)':
/home/timlinux/dev/cpp/qgis/src/core/qgspallabeling.cpp:764: warning: 'const [[QgsCoordinateReferenceSystem]]& [[QgsMapLayer]]::srs()' is
deprecated (declared at /home/timlinux/dev/cpp/qgis/src/core/qgsmaplayer.h:227)
maker1: *** [src/core/CMakeFiles/qgis_core.dir/all] Error 2
make: *** [all] Error 2

```

Sorry I didnt have time to try to work out the problem myself.

Regards

Tim

#5 - 2011-03-09 10:57 AM - Marco Hugentobler

Hi Tim

With svn patches, you always need to remove added files before applying a second time (otherwise, the content of the added file is just appended to the existing one and you get the redefinition errors).

the following should work:

```
rm src/core/qgsdiagram.h
rm src/core/qgsdiagram.cpp
rm src/core/qgsdiagramrendererv2.h
rm src/core/qgsdiagramrendererv2.cpp
svn revert -R .
patch -p0 < patchfile
```

then compile again

#6 - 2011-03-10 02:12 AM - Tim Sutton

Replying to [comment:6 mhugent]:

Hi Tim

With svn patches, you always need to remove added files before applying a second time (otherwise, the content of the added file is just appended to the existing one and you get the redefinition errors).

Hi. Sorry I did git reset --hard before building but I didnt notice your patch added new files so those never got cleaned away. It built successfully now.

Regards

Tim

the following should work:

```
rm src/core/qgsdiagram.h
rm src/core/qgsdiagram.cpp
rm src/core/qgsdiagramrendererv2.h
rm src/core/qgsdiagramrendererv2.cpp
svn revert -R .
patch -p0 < patchfile

then compile again
```

#7 - 2011-03-14 08:24 AM - Tim Sutton

Hi Marco

I wanted to comment that the 'Fixed Size' box was checked for me by default, but the size defaults to 0. In the beginning of testing I couldnt figure out why no diagrams were rendering and I am sure 'normal' users will be caught out by this too.

Lastly I had issues trying to make it work together with labels for the same layer. When I enabled labelling, no diagrams showed (no matter what scale). Even after turning off labels, you have to go back to layer properties and press apply before the diagrams reappear.

Lastly it seems priority for the diagrams is set to 0 by default which I thought might be the cause of the above, but changing priority had no effect.

I'm going to attach the sample dataset I used.

Regards

Tim

#8 - 2011-03-15 09:45 AM - Marco Hugentobler

- Status changed from Open to Closed
- Resolution set to fixed

Applied in commit:c3ac6df9 (SVN r15504). The mentioned issues are fixed, however there is still a couple of smaller problems that will need to be adresssed in trunk (e.g. printing).

#9 - 2011-03-24 09:19 AM - John Tull

I've no idea if this might be related, but I now seem to have very few labels showing on the canvas. I.e., for a point file, labels seem to not be drawing as if collision avoidance is coming into play. Ticking the "Features don't act as obstacles" option does not change anything.

Files			
110309_qgis_diagrams.diff	81.9 KB	2011-03-09	Marco Hugentobler
110309_qgis_diagrams_2.diff	70.5 KB	2011-03-09	Marco Hugentobler
110309_qgis_diagrams_3.diff	86.8 KB	2011-03-09	Marco Hugentobler
vector.tar.bz2	211 KB	2011-03-14	Tim Sutton