

Inheritance Extract Class Refactoring Suggestions		
Original Class [N _{split}]	Extract Class	
	New Class [Superclass] [Subclass]	Methods/Fields
AbstractHandle [2]	AbstractHandle_new_1 [-] [BezierControlPointHandle, BezierNodeHandle_new_1, BezierScaleHandle, ChangeConnectionHandle_new_1, LocatorHandle, RotateHandle, RoundRectRadiusHandle, TriangleRotationHandler]	updateBounds() viewTransformChanged() contains(Point) dispose() getCursor() figureAttributeChanged(FigureEvent) addHandleListener(HandleListener) isCombinableWith(Handle) figureRemoved(FigureEvent) getDrawBounds() draw(Graphics2D) createSecondaryHandles() figureAreaInvalidated(FigureEvent) figureRequestRemove(FigureEvent) figureChanged(FigureEvent) trackDoubleClick(Point, int) keyPressed(KeyEvent) invalidate() figureAdded(FigureEvent) keyReleased(KeyEvent) keyTyped(KeyEvent) removeHandleListener(HandleListen er) getOwner() owner setView(DrawingView) view getBounds() bounds AbstractHandle_new_2_Instance
	AbstractHandle_new_2 [-] [-]	fireHandleRequestRemove(Rectangle) drawCircle(Graphics2D,Color,Color) fireHandleRequestSecondaryHandles() drawRectangle(Graphics2D,Color,Col or) listenerList basicGetBounds() fireAreaInvalidated(Rectangle) AbstractHandle(Figure)

		drawDiamond(Graphics2D,Color,Color) getHandlesize() fireUndoableEditHappened(UndoableEdit)
BezierNodeHandle [2]	BezierNodeHandle_new_1 [AbstractHandle_new_1] [-]	index trackEnd(Point,Point, int) getDrawBounds() trackStep(Point,Point, int) getOwner() isCombinableWith(Handle) trackDoubleClick(Point, int) draw(Graphics2D) createSecondaryHandles() trackStart(Point, int) BezierNodeHandle_new_2_Instance
	BezierNodeHandle_new_2 [-] [-]	drawCircle(Graphics2D,Color,Color) drawDiamond(Graphics2D,Color,Color) getHandlesize() BezierNodeHandle(BezierFigure, int) basicGetBounds() fireAreaInvalidated(Rectangle) drawRectangle(Graphics2D,Color,Color) fireHandleRequestRemove(Rectangle) fireHandleRequestSecondaryHandles() getLocation() fireAreaInvalidated(BezierPath\$Node) view edit oldNode getBezierFigure()
ChangeConnectionHandle [2]	ChangeConnectionHandle_new_1 [AbstractHandle_1] [-]	view draw(Graphics2D) trackStep(Point,Point, int) trackStart(Point, int) trackEnd(Point,Point, int) isCombinableWith(Handle) getOwner() getLocation() basicGetBounds() ChangeConnectionHandle(Figure) getHandlesize()

		drawCircle(Graphics2D,Color,Color) ChangeConnectionHandle_new_2_ Instance
	ChangeConnectionHandle_new_2 [-] [-]	start getTarget() liner setLocation(Point2D\$Double) getSource() canConnect(Figure,Figure) findConnector(Point2D\$Double,Figure, ConnectionFigure) findConnectionTarget(Point2D\$Double, Drawing) originalTarget findConnectableFigure(Point2D\$Double, Drawing) connect(Connector) disconnect() targetFigure setConnection(ConnectionFigure) getConnection() setTargetFigure(Figure) connection getTargetFigure()
AbstractFigure [3]	AbstractFigure_new_1 [-] [AbstractCompositeFigure_new_1, AttributedFigure_new_1]	getDrawing() drawing addUndoableEditListener(UndoableEditListener) includes(Figure) getCursor(Point2D\$Double) basicTransform(AffineTransform) addNotify(Drawing) removeNotify(Drawing) drawDecorator(Graphics2D) removeFigureListener(FigureListener) isVisible() invalidate() addFigureListener(FigureListener) basicSetBounds(Point2D\$Double,Point2D\$Double) remap(Map) getBounds() getTooltip(Point2D\$Double) updateDecoratorBounds()

		getDecomposition() setConnectorsVisible(boolean,Connecti onFigure) getLayer() willChange() getTool(Point2D\$Double) findCompatibleConnector(Connector, boolean) findFigureInside(Point2D\$Double) getStartPoint() handleDrop(Point2D\$Double,Collectio n,DrawingView) setVisible(boolean) createHandles(int) getDrawBounds() getActions(Point2D\$Double) contains(Point2D\$Double) removeUndoableEditListener(Undoabl eEditListener) handleMouseClicked(Point2D\$Double,M ouseEvent,DrawingView) isInteractive() clone() isConnectorsVisible() getEndPoint() getPreferredSize() requestRemove() findConnector(Point2D\$Double,Connec tionFigure) changed() canConnect() draw(Graphics2D) getDecorator() setDecorator(Figure) decorator getLock() AbstractFigure_new_2_Instance AbstractFigure_new_3_Instance
	AbstractFigure_new_2 [-] [-]	basicClone(HashMap) setInteractive(boolean) setBounds(Point2D\$Double,Point2D\$D ouble) getFigureDrawBounds() isInteractive

		getFontRenderContext() getCourtingConnection() toString() courtingConnection isConnectorsVisible transform(AffineTransform) remap(HashMap) setBounds(Rectangle2D\$Double)
	AbstractFigure_new_3 [-] [AbstractCompositeFigure_new_2, AttributedFigure_new_2]	validate() drawFigure(Graphics2D) isVisible getChangingDepth() changingDepth isChanging() AbstractFigure() setDrawDecoratorFirst(boolean) isDrawDecoratorFirst isDrawDecoratorFirst() fireAreaInvalidated() fireFigureChanged() fireUndoableEditHappened(Undoable Edit) fireFigureChanged(Rectangle2D\$ Double) fireAreaInvalidated(Rectangle2D\$ Double) fireFigureRemoved() fireFigureAdded() fireFigureRequestRemove() listenerList fireAttributeChanged(AttributeKey, Object,Object) fireFigureChanged(FigureEvent)
MoveHandle [2]	MoveHandle_new_1 [LocatorHandle] [-]	trackEnd(Point,Point, int) fireUndoableEditHappened(Undoable Edit) getOwner() drawRectangle(Graphics2D,Color, Color) MoveHandle(Figure,Locator) draw(Graphics2D) MoveHandle_new_2_Instance
	MoveHandle_new_2 [-]	north(Figure) east(Figure)

	[-]	south(Figure) geometry west(Figure) view trackStart(Point, int) trackStep(Point,Point, int) oldPoint
AbstractCompositeFigure [3]	AbstractCompositeFigure_new_1 [AbstractFigure_new_1] [AbstractAttributedCompositeFigure_new_1, GraphicalCompositeFigure_new_1, GroupFigure]	getChildrenFrontToBack() clone() invalidate() removeNotify(Drawing) remove(Figure) getPreferredSize() createHandles(int) getChild(int) contains(Point2D\$Double) add(Figure) basicSetBounds(Point2D\$Double, Point2D\$Double) addNotify(Drawing) getDrawing() getRestoreData() getStartPoint() basicAdd(int,Figure) restoreTo(Object) isConnectorsVisible() basicRemove(Figure) basicTransform(AffineTransform) basicRemoveChild(int) setAttribute(AttributeKey,Object) removeAllChildren() getEndPoint() basicRemoveAllChildren() getChildCount() basicSetAttribute(AttributeKey,Object) findFigureInside(Point2D\$Double) add(int,Figure) layout() getDecomposition() getAttributes() basicAdd(Figure) willChange() getAttribute(AttributeKey) changed()

		removeChild(int) getDrawBounds() drawBounds getLayouter() setLayouter(Layouter) layouter getChildren() children getBounds() bounds invalidateBounds() remap(HashMap) getFigureDrawBounds() AbstractCompositeFigure_new_2_Instance AbstractCompositeFigure_new_3_Instance
	AbstractCompositeFigure_new_2 [-] [GraphicalCompositeFigure_new_2]	sendToBack(Figure) fireFigureChanged(FigureEvent) AbstractCompositeFigure() drawFigure(Graphics2D) fireAreaInvalidated(Rectangle2D\$Double) isChanging() fireUndoableEditHappened(UndoableEdit) validate() getChangingDepth()
	AbstractCompositeFigure_new_3 [-] [AbstractAttributedCompositeFigure_new_2]	hasAttribute(AttributeKey) addAll(Collection) childHandler sendToFront(Figure) drawConnectors(Graphics2D) findChild(Point2D\$Double) basicAddAll(Collection) findChildIndex(Point2D\$Double) undoableEditHappened(UndoableEditEvent) removeAttribute(AttributeKey) write(DOMOutput) read(DOMInput)
AttributedFigure [4]	AttributedFigure_new_1 [AbstractFigure_new_1] [BezierFigure_new_1,	hasAttribute(AttributeKey) clone() changed()

	DiamondFigure, EllipseFigure, RectangleFigure, RoundRectangleFigure_new_1, TriangleFigure]	invalidate() setAttribute(AttributeKey,Object) createHandles(int) isConnectorsVisible() getAttribute(AttributeKey) willChange() basicSetAttribute(AttributeKey,Object) getBounds() getAttributes() setAttributes(HashMap) attributes getStrokeMiterLimitFactor() getFigureDrawBounds() setBounds(Point2D\$Double,Point2D\$Double) AttributedFigure_new_2_Instance AttributedFigure_new_3_Instance AttributedFigure_new_4_Instance
	AttributedFigure_new_2 [-] [BezierFigure_new_2, RoundRectangleFigure_new_2]	removeAttribute(AttributeKey) AttributedFigure() fireUndoableEditHappened(UndoableEdit) drawFigure(Graphics2D) fireAttributeChanged(AttributeKey, Object,Object) validate()
	AttributedFigure_new_3 [-] [-]	read(DOMInput) write(DOMOutput) getAttributeKey(String) writeAttributes(DOMOutput) readAttributes(DOMInput) isAttributeEnabled(AttributeKey) forbiddenAttributes setAttributeEnabled(AttributeKey, boolean)
	AttributedFigure_new_4 [-] [-]	getStroke() drawConnectors(Graphics2D) drawStroke(Graphics2D) applyAttributesTo(Figure) drawText(Graphics2D) drawFill(Graphics2D)
LineConnectionFigure e [2]	LineConnectionFigure_new_1 [-] [DependencyFigure]	reverseConnection() getPointCount() getStartPoint()

		removeNotify(Drawing) changed() setPoint(int,Point2D\$Double) basicTransform(AffineTransform) setEndPoint(Point2D\$Double) addNotify(Drawing) canConnect(Figure,Figure) remap(Map) readPoints(DOMInput) getNode(int) writeAttributes(DOMOutput) handleMouseClicked(Point2D\$Double, MouseEvent,DrawingView) willChange() setStartPoint(Point2D\$Double) basicAddNode(int,BezierPath\$Node) fireUndoableEditHappened(UndoableE dit) LineConnectionFigure() canConnect(Figure) clone() basicSplitSegment(Point2D\$Double, float) writePoints(DOMOutput) createHandles(int) write(DOMOutput) updateConnection() basicSetEndPoint(Point2D\$Double) getEndFigure() basicRemoveNode(int) lineout() validate() connectsSame(ConnectionFigure) read(DOMInput) getBezierPath() setPoint(int, int,Point2D\$Double) basicSetNode(int,BezierPath\$Node) basicSetStartPoint(Point2D\$Double) getEndPoint() getStartFigure() readAttributes(DOMInput) getNodeCount() canConnect() getLiner()
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		setLiner(Liner) liner getStartConnector() setStartConnector(Connector) startConnector getEndConnector() setEndConnector(Connector) endConnector LineConnectionFigure_new_2_Instance
	LineConnectionFigure_new_2 [-] [-]	handleConnect(Figure,Figure) connectionHandler basicSetEndConnector(Connector) basicSetStartConnector(Connector) handleDisconnect(Figure,Figure) path writeLiner(DOMOutput) fireFigureRequestRemove() readLiner(DOMInput)
AbstractAttributedCompositeFigure [3]	AbstractAttributedCompositeFigure_new_1 [AbstractCompositeFigure_new_1] [-]	applyAttributesTo(Figure) basicSetAttribute(AttributeKey,Object) getChildren() willChange() basicTransform(AffineTransform) getBounds() changed() isConnectorsVisible() getFigureDrawBounds() fireAttributeChanged(AttributeKey, Object,Object) clone() invalidate() createHandles(int) setAttribute(AttributeKey,Object) getAttribute(AttributeKey) getAttributes() setAttributes(HashMap) attributes drawFill(Graphics2D) AbstractAttributedCompositeFigure() fireUndoableEditHappened(Undoable Edit) drawFigure(Graphics2D) validate() AbstractAttributedCompositeFigure_

		new_2_Instance AbstractAttributedCompositeFigure_ new_3_Instance
	AbstractAttributedCompositeFigure _new_2 [-] [-]	removeAttribute(AttributeKey) hasAttribute(AttributeKey) drawConnectors(Graphics2D) write(DOMOutput) read(DOMInput) drawChildren(Graphics2D) drawText(Graphics2D) drawStroke(Graphics2D)
	AbstractAttributedCompositeFigure _new_3 [-] [-]	forbiddenAttributes writeAttributes(DOMOutput) getStrokeMiterLimitFactor() setAttributeEnabled(AttributeKey, boolean) getAttributeKey(String) readAttributes(DOMInput) isAttributeEnabled(AttributeKey) getStroke() basicSetAttributeOnChildren(Attribute Key,Object)
GraphicalComposite Figure [3]	GraphicalCompositeFigure_new_1 [AbstractCompositeFigure_new_1] [ListFigure, TaskFigure_new_1]	applyAttributesTo(Figure) changed() basicSetAttribute(AttributeKey,Object) clone() superBasicSetBounds(Point2D\$Double, Point2D\$Double) fireAttributeChanged(AttributeKey, Object,Object) getLayouter() createHandles(int) getFigureDrawBounds() basicSetBounds(Point2D\$Double,Point2 D\$Double) remove(Figure) setAttribute(AttributeKey,Object) getBounds() getDrawing() remap(HashMap) contains(Point2D\$Double) basicTransform(AffineTransform) removeNotify(Drawing) addNotify(Drawing)

		getAttribute(AttributeKey) willChange() invalidate() getAttributes() attributes GraphicalCompositeFigure_new_2_ Instance GraphicalCompositeFigure_new_3_ Instance
	GraphicalCompositeFigure_new_2 [AbstractCompositeFigure_new_2] [-]	fireAreaInvalidated(Rectangle2D\$Double) isChanging() GraphicalCompositeFigure(Figure) fireFigureChanged(FigureEvent) drawFigure(Graphics2D) fireUndoableEditHappened(UndoableEdit) getPresentationFigure() setPresentationFigure(Figure) presentationFigure presentationFigureHandler
	GraphicalCompositeFigure_new_3 [-] [-]	drawPresentationFigure(Graphics2D) readAttributes(DOMInput) chop(Point2D\$Double) GraphicalCompositeFigure() writeAttributes(DOMOutput) getAttributeKey(String) forbiddenAttributes setAttributeEnabled(AttributeKey, boolean) basicSetPresentationFigureBounds(Point2D\$Double, Point2D\$Double)
BezierFigure [4]	BezierFigure_new_1 [AttributedFigure_new_1] [LineFigure_new_1]	basicSplitSegment(Point2D\$Double, float) canConnect() handleMouseClicked(Point2D\$Double, MouseEvent, DrawingView) findCompatibleConnector(Connector, boolean) getBounds() contains(Point2D\$Double) basicSetAttribute(AttributeKey, Object) changed() basicTransform(AffineTransform)

		getEndPoint() createHandles(int) getAttribute(AttributeKey) invalidate() setAttribute(AttributeKey,Object) getStartPoint() getFigureDrawBounds() basicSetBounds(Point2D\$Double,Point2D\$Double) clone() willChange() findConnector(Point2D\$Double,ConnectionFigure) writePoints(DOMOutput) writeAttributes(DOMOutput) write(DOMOutput) read(DOMInput) readAttributes(DOMInput) chop(Point2D\$Double) drawStroke(Graphics2D) drawFill(Graphics2D) BezierFigure_new_2_Instance BezierFigure_new_3_Instance BezierFigure_new_4_Instance
	BezierFigure_new_2 [AttributedFigure_new_2] [-]	fireUndoableEditHappened(UndoableEdit) validate() BezierFigure(boolean) setClosed(boolean) CLOSED static {} isClosed()
	BezierFigure_new_3 [-] [LineFigure_new_2]	setPoint(int, int,Point2D\$Double) removeAllNodes() basicJoinSegments(Point2D\$Double) readPoints(DOMInput) basicAddNode(int,BezierPath\$Node) findSegment(Point2D\$Double) removeNode(int) basicRemoveAllNodes() basicSetPoint(int,Point2D\$Double) basicRemoveNode(int) basicSetBezierPath(BezierPath) getBezierPath()

		basicAddNode(BezierPath\$Node) basicSetPoint(int, int,Point2D\$Double) getNodeCount() getNode(int) basicSetNode(int,BezierPath\$Node) setNode(int,BezierPath\$Node) getPoint(int, int) getPointCount() restoreTo(Object) getPointOnPath(float, double) getPoint(int) findNode(Point2D\$Double) basicJoinSegments(Point2D\$Double, float) path getOutermostPoint() getCenter() getRestoreData() drawCaps(Graphics2D) getCappedPath() cappedPath invalidateCappedPath()
	BezierFigure_new_4 [-] [-]	basicSetStartPoint(Point2D\$Double) basicSetEndPoint(Point2D\$Double) layout() addNode(int,BezierPath\$Node) basicSplitSegment(Point2D\$Double) addNode(BezierPath\$Node) BezierFigure()
RoundRectangleFigure re [2]	RoundRectangleFigure_new_1 [AttributedFigure_new_1] [-]	setArc(double, double) willChange() getEndPoint() basicTransform(AffineTransform) basicSetBounds(Point2D\$Double,Point2D\$Double) getBounds() getDrawBounds() findCompatibleConnector(Connector, boolean) getStartPoint() clone() createHandles(int) changed() fireFigureChanged(Rectangle2D\$Double)

		e) contains(Point2D\$Double) findConnector(Point2D\$Double,Connec tionFigure) getFigureDrawBounds() roundrect read(DOMInput) write(DOMOutput) getRestoreData() drawStroke(Graphics2D) drawFill(Graphics2D) RoundRectangleFigure() DEFAULT_ARC RoundRectangleFigure_new_2_ Instance
	RoundRectangleFigure_new_2 [AttributedFigure_new_2] [-]	chop(Point2D\$Double) fireUndoableEditHappened(UndoableE dit) RoundRectangleFigure(double, double, double, double) restoreTo(Object) getArcWidth() getArcHeight()
TaskFigure [2]	TaskFigure_new_1 [GraphicalCompositeFigure_new_1] [-]	getDependencies() dependencies write(DOMOutput) add(Figure) createHandles(int) getBounds() setLayouter(Layouter) clone() read(DOMInput) getChild(int) LAYOUT_INSETS getPresentationFigure() TaskFigure() setName(String) writeAttributes(DOMOutput) readAttributes(DOMInput) setAttributeEnabled(AttributeKey, boolean) getNameFigure() TaskFigure_new_2_Instance
	TaskFigure_new_2	getName()

LineFigure [2]	[-] [-]	toString() setDuration(int) getDurationFigure() getDuration() getStartTime() startTime getStartTimeFigure() getPredecessors() isDependentOf() getSuccessors() updateStartTime() fireAreaInvalidated() getLayer() setBounds(Point2D\$Double,Point2D\$Double) applyAttributes(Figure)
	LineFigure_new_1 [BezierFigure_new_1] [SeparatorLineFigure]	path willChange() clone() setBounds(Point2D\$Double,Point2D\$Double) handleMouseClicked(Point2D\$Double,MouseEvent,DrawingView) basicSplitSegment(Point2D\$Double,float) basicTransform(AffineTransform) canConnect() createHandles(int) writePoints(DOMOutput) changed() fireUndoableEditHappened(UndoableEdit) validate() LineFigure() removeNotify(Drawing) draw(Graphics2D) addNotify(Drawing) remap(Map) LineFigure_new_2_Instance
	LineFigure_new_2 [BezierFigure_new_3] [-]	basicAddNode(BezierPath\$Node) basicAddNode(int,BezierPath\$Node) basicSetNode(int,BezierPath\$Node) readPoints(DOMInput) basicRemoveNode(int)

		getNode(int)
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