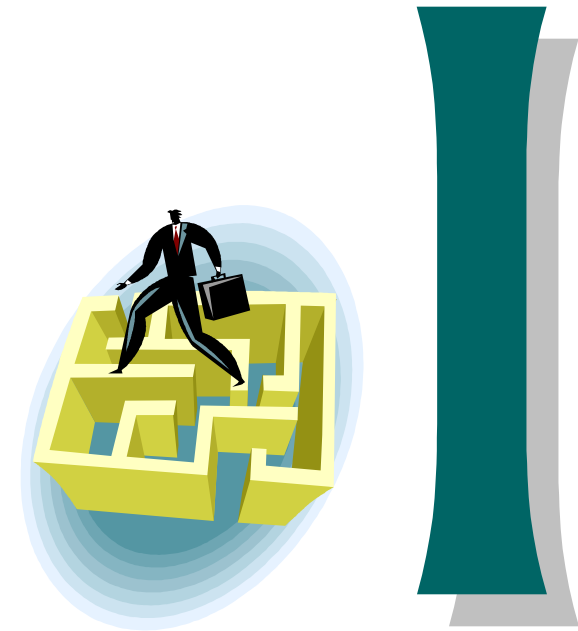


# Using the Visio stencil for RADs



# Aims of section I

- /// Outline how to use the Visio stencil to draw a RAD
- /// Describe the individual RAD blobs on the stencil
- /// Provide hints and tips on the efficient use of the stencil

# How to use the Visio stencil (a)

- /// Start Visio
- /// Use *Open Stencil* button (or *File/Stencils*) to open the **Riva** stencil ('riva visio stencil v3.03')
- /// Use *New* to open a new document
- /// Use *File/Page Set Up* to set the diagram to landscape or portrait as appropriate
- /// Set the *Zoom* figure to 100%
- /// Drag blobs from the stencil to the drawing sheet

# How to use the Visio stencil (b)

## /// In *Tools/Options*

- /// switch on *Snap* and *Glue*
- /// set *Glue To* to (at least) *Connection Points*
- /// set *Snap To* to (at least) *Ruler Subdivisions*, *Grid*, and *Connection Points*

# Using the 'Role' stencil blob

- /// Drag and drop the blob from the stencil to the drawing page
- /// To name the role, select it and type its name
- /// Ensure everything else is on top of the blob by selecting it and clicking the *Send to Back* button (on the *Action* toolbar), or by using *Shape/Send to Back*
- /// To flip the name to the top or bottom, select the role and use the *Flip Vertical* button
- /// Shape the role using the green drag points
- /// To rename a role, select it and type its new name
- /// To edit a role name, select the role, press F2 and edit the name
- /// To annotate the role with the 'pre-existing instances' tick, drag and drop the 'Role tick' blob from the stencil alongside the role name. (NB the 'Role tick' blob cannot be annotated: use the 'Plain Text' blob to place annotation alongside it)

# Using the 'role content' blobs

- /// ('Activity', 'Start Role', 'Encapsulated Process', 'Part Interaction', 'Multi Part-Interaction', 'Driver Part-Interaction', 'Trigger', 'State Description')
- /// Drag and drop the blob from the stencil to the drawing sheet into the desired position
- /// Connect it to any preceding blob by dragging and dropping the green spot above it over a connection point (blue x) on the bottom of the preceding blob, letting go when the connection point turns red
- /// To annotate a blob, select it and type the text of the annotation (the *Return* key starts a new line)
- /// To edit the annotation, select the blob, press F2 and edit the annotation
- /// To flip the side on which the annotation lies, select the blob and click *Flip Horizontal*

# Using the part refinement blob

- /// Drag and drop the blob from the stencil to the drawing sheet, positioning it so that the end of the hook is under the middle of the preceding blob
- /// To connect the part refinement to the previous blob, drag and drop the green spot at the end of the hook over the desired connection point
- /// To move the part refinement in its entirety, drag and drop in the usual way, but avoiding clicking on any green spots
- /// To get a new thread top, drag and drop the green spot in the 'main' thread top to the right (this can be done up to seven times)
- /// To move a thread top (except the main one), drag and drop its green spot to the desired place
- /// To delete a thread top, select the part refinement and then the thread top, and press the *Delete* key
- /// To annotate a replicated part-refinement, drag and drop the 'Replication' blob from the stencil to the drawing sheet alongside the single thread top, annotating it as appropriate

# Using the case refinement blob

- /// Everything that applies to part refinements applies also to case refinements
- /// To annotate a case refinement with a question (eg ‘Resource available?’), select the case refinement, click on the hook, and type the annotation (as usual, the *Return* key starts a new line)
- /// To annotate a case thread, select the case refinement, click on the thread top, and type the annotation
- /// To edit the question or a thread top title, select the case refinement, click on the hook or thread top as appropriate, press F2 and edit the annotation



# Closing refinements

- /// Drag and drop the 'Refinement Closing' blob so that its hook is vertically below the hook of the refinement being closed
- /// Drag and drop the green spot on the blob to the connection point on the bottom of the last blob of a thread to be closed
- /// Repeat for each thread to be closed
- /// To move the refinement closing, drag and drop it, avoiding clicking on its green spots

# Drawing interactions

- /// Place the necessary part-interactions in their roles, making one a 'driver' part-interaction if appropriate. Ensure the part-interactions are aligned vertically (finally if not immediately)
- /// Drag the 'Interaction' line from the stencil until one end is over the connection point of a part-interaction and drop it when the connection point turns red
- /// Drag the other end of the interaction line until it is over the connection point on the neighbouring part-interaction and drop it when the connection point turns red
- /// Each part-interaction can be annotated in the usual way (see above)
- /// Additionally, the interaction line itself can be annotated: select it and type the annotation
- /// To move the annotation along the line, select the line, and drag the middle green spot to the desired position
- /// To edit the annotation on an interaction line, select the line, press F2 and edit the annotation
- /// Note that the interaction line will 'kink' at the middle green spot position if the part-interactions to which it is connected are not aligned

# Using 'State', 'State Merge' and 'Corner'

- /// You should not need to use 'State', except for purist reasons at the end of threads that are not terminated explicitly with a 'Stop' blob
- /// Use 'State Merge' (with care) to indicate that two paths converge with the same subsequent behaviour
- /// To use 'State Merge', drag and drop the blob from the stencil to the appropriate position on the drawing sheet
- /// Drag and drop its two green spots to connection points on the relevant preceding blobs
- /// Connect the blob following the merge to the connection point at the base of the 'State Merge' blob
- /// The 'Corner' blob can be useful in some circumstances: try it and see how it works

# Using 'Loop'

- /// When drawing the main path, leave a gap at its head where the loop is to re-enter
- /// Drag and drop the 'Loop' blob from the stencil into that gap
- /// Connect the top green spot to the blob that precedes the loop
- /// Connect the green spot at the end of the 'Loop' curve to the blob at the end of the loop (from which we are looping back to the top)
- /// Use the two green spots on the curve to adjust the shape of the loop vertically and horizontally

# Using the two text blobs

- /// The 'Title Text' blob is intended to be used for titling the RAD (eg with the process name, version, and date)
- /// The 'Plain Text' blob is intended for annotation that is not connected to an individual blob
- /// Both sorts of text can be manipulated in all the normal Visio ways

# Miscellaneous blobs

- /// 'Stop', 'Don't care' and 'Token' can be used like other blobs but are not intended to be annotated

# Using the stencil efficiently (a)

- /// Always align blobs to the grid at 100% zoom - this ensures that the blobs align neatly, underneath each other in particular. (If really necessary, use 50% or 200% but never anything else when placing or moving blobs)
- /// Set blobs one grid notch apart (at 100% zoom) initially - this will keep the RAD compact
- /// Never switch off snap and glue - this ensures good alignment
- /// Lay down the blobs first and surround them with 'Role' blobs last - this saves inadvertently picking up a 'Role' blob when you wanted another blob
- /// Over small distances and for fine adjustment, use the cursor control keys to move and nudge things (having selected them) - this ensures they remain aligned to the grid
- /// Note that clicking on a 'Role' blob only selects the role and not its contents - use click and drag to select a role and its contents

# Using the stencil efficiently (b)

- /// Use the *Send to Back* and *Bring to Front* features to get the layering right, eg ensuring that the annotation on a part-interaction is on top of the interaction line
- /// Never feel obliged to make 'Role' blobs big enough to contain all the captions for blobs inside them; as long as they contain the *blobs* for that role, the captions can sit where they will
- /// Use 8pt for blob captions (or 6pt if necessary) - this allows you to set role blobs comfortably apart
- /// Portrait is preferable to landscape but if needed go to landscape
- /// Generally speaking it is possible to fit a RAD on one A4 page; if you have a particularly large model use A3
- /// Put the trigger and goal outcome captions in red and 10pt - it helps people see where things start and end; note that all RADs should have at least one trigger and one goal



# Using the stencil efficiently (c)

- /// Kinking and crossing interaction lines lead to ambiguous diagrams, so adopt the 'no-kink or crossing interaction lines' rule - this produces a nice flow and the underlying logic becomes a lot clearer: the diagram starts to raise questions about the true order of things, which is much harder to see if interactions wander across the page
- /// You can let interaction lines pass through other roles - it does not obscure things
- /// Don't let interaction lines pass through other blobs (eg for activities)
- /// Repeat a 'Role' blob for a particular role if it aids clarity
- /// Allow 'Role' blobs to overlap if it aids clarity
- /// Never connect an activity blob with an interaction blob
- /// Remember *ctrl-Z* will undo a mis-move! (As will *Edit/Undo*)