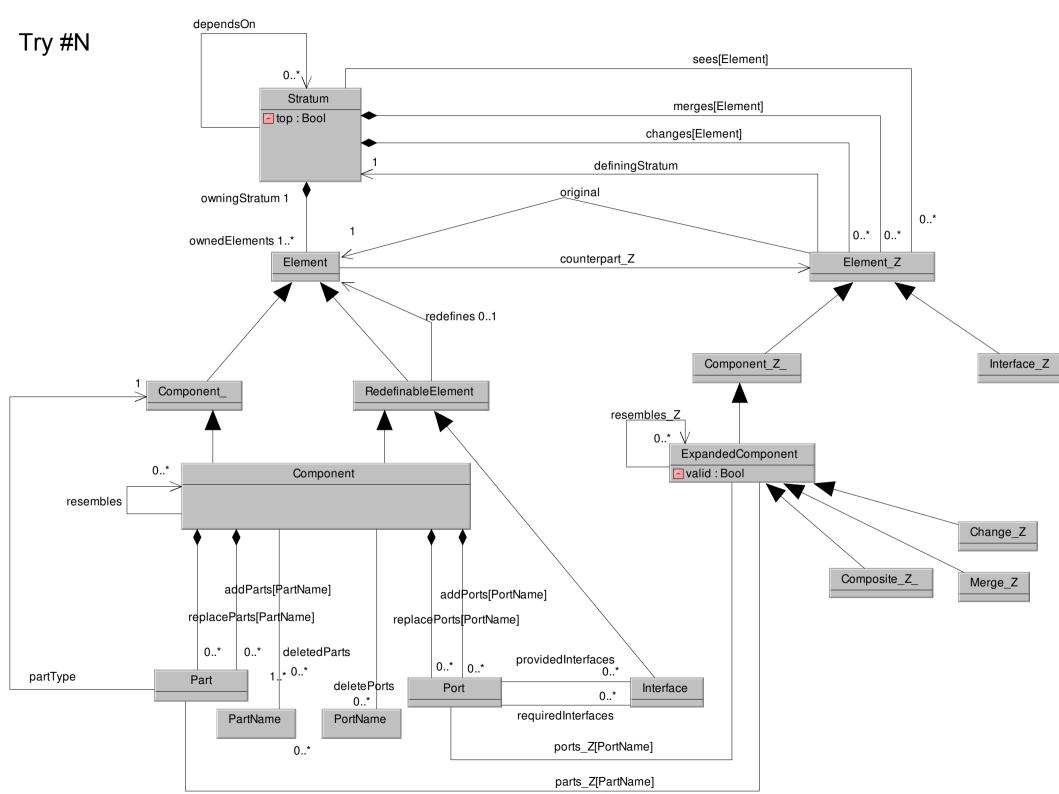
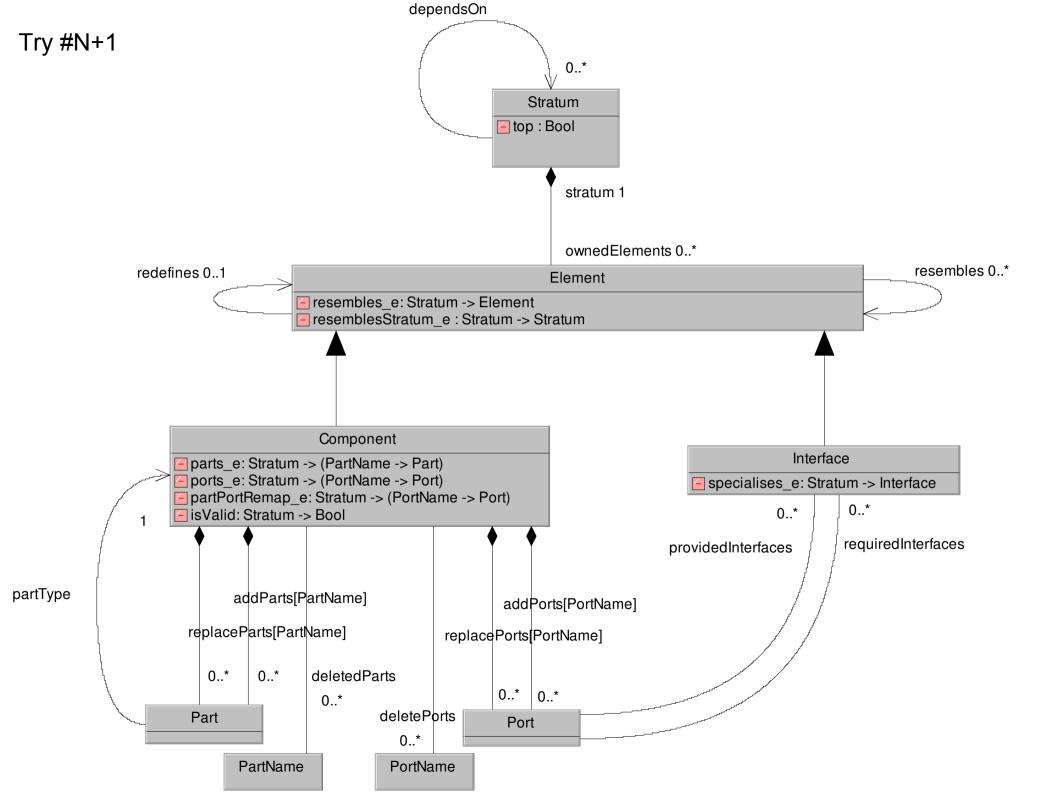
Backbone Alloy Models

20th March 2007 Andrew McVeigh



Fixing the Alloy Backbone model

- Have merged "y" and "z" levels into one
 - Cut down from 20 sigs to 10 sigs
 - Redefinition + resemblance is handled in a common way between components and interfaces
 - Very tricky to handle rewriting of resemblance graph for redefinition
 - Has taken 4 weeks!
 - Is this too much effort for such a return?
 - Is formalisation always so difficult?
 (intuitively it seems very simply to express in 3 models)



What does it do?

- Shows how deltas turn into real components
 - structural semantics of resemblance, redefinition
 - merge rules and reasons for errors
 - well formnedness rules for components
- Can show?
 - that an error can result from 2 independent redefinitions which are merged (yes)
 - that any error can be corrected (should be ok)
 - baselining (not so sure)

To do

- refactor well-formnedness rules
- add port map for part replacement + others
- redo UML graphing software
- Haven't been able to handle local redef yet
 - Don't bother maybe?...

