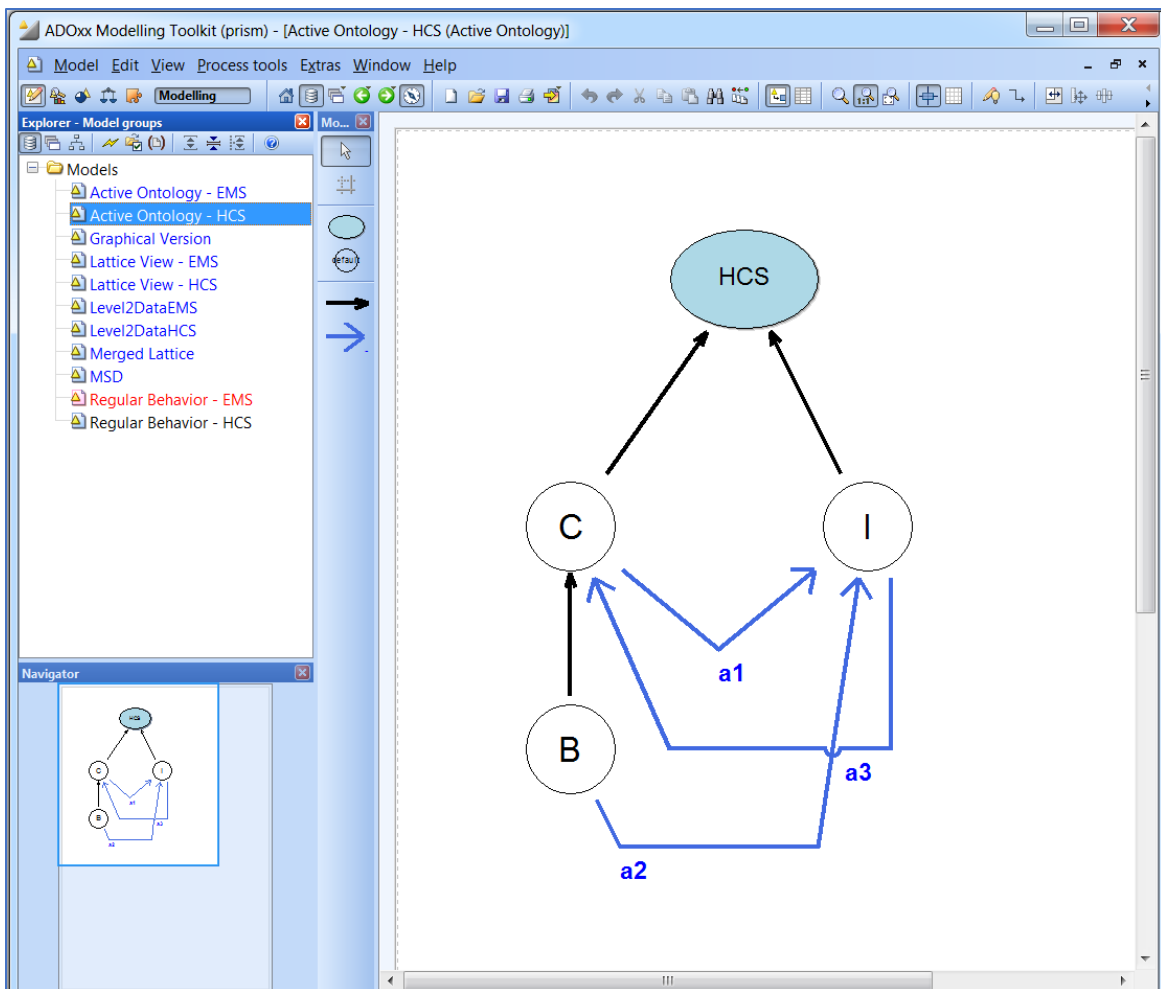


HCS_PRISM

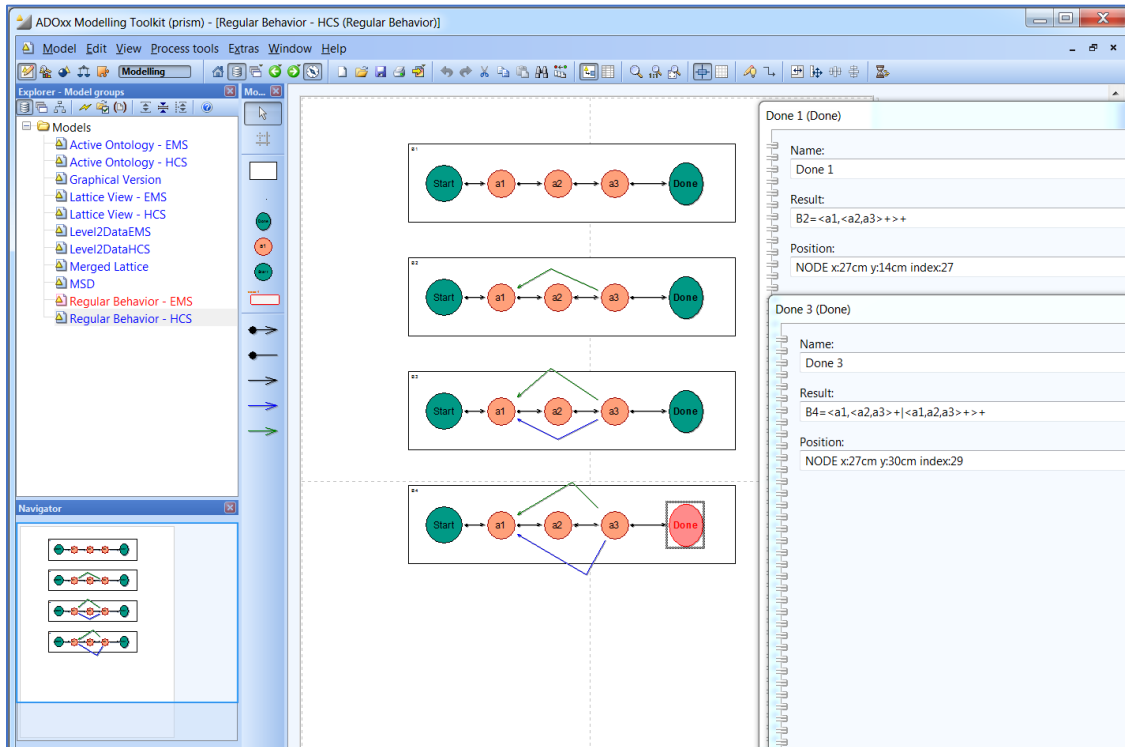
Step 1: Active Ontology

- ① Actors: There are 2 different kinds of actors:
 - i. Customer (*C*): Person to be insured.
 - ii. Insurance Company (*I*): Company to do commitments.
- ② Interactions: There are 3 kinds of interactions:
 - i. $a_1 = \langle C, I \rangle$: Customer contacts to Company.
 - ii. $a_2 = \langle C, B \rangle$: Customer submits the Bill.
 - iii. $a_3 = \langle I, C \rangle$: Insurance Company pays for the Customer.



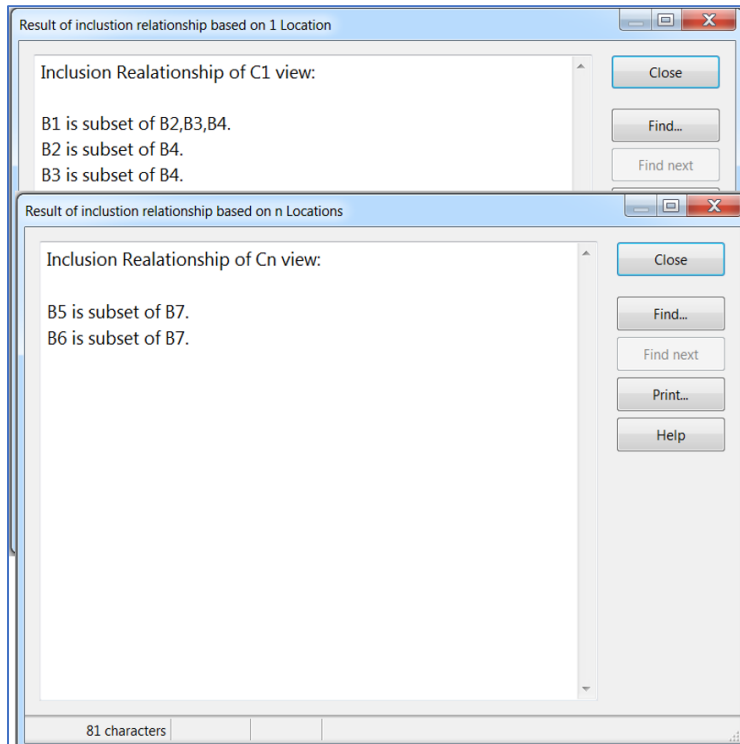
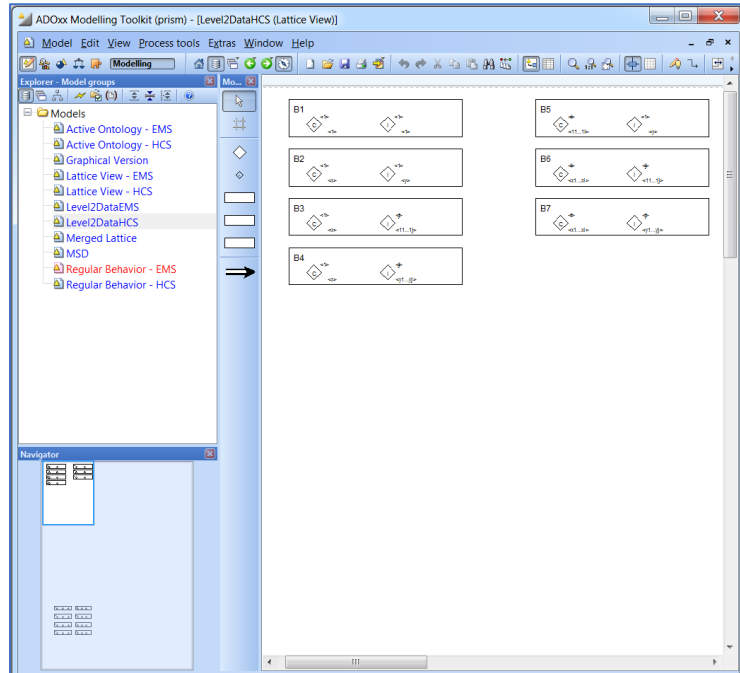
Step 2: Regular Behavior

Each collective behavior is defined based on the two actors in HCS, represented as $B(C, I)$. Here, it is defined that all regular behaviors are based on Customer as the main actor, represented as $B(1, n)$ for 1 Customer and $B(n, n)$ for n Customers.



Step 3: Abstract Behavior

Regular behaviors from prior section are abstracted with respect to a number of actors and their capability similar to the EMS system. Inclusion Relations are calculated for the Customer actor.



Step 4: Behavior Lattice

All the notions of the abstract behaviors follow the semantic notion of the behaviors, behavior lattice and the ontology. Level 2 data, which are defined in the previous section, are organized in the form of $n:2$ -lattice.

