



Figure 2. Refinement of the model types into various orchestrations of enterprise and IT services. Developers implement single services either by reusing legacy applications or through realizations based on the NetBeans IDE.

scenarios, to be checked against desired and undesired behavioral properties and to be refined successively and cooperatively with the help of business or IT analysts, until the features are clear.

The technical realization starts from this model, concretizing it within the IT realm. Our one-thing approach, however, offers the advantage that the IT tasks at this point are much better defined, put in the proper context, and already partitioned. Typically, once a concrete architecture and platform have been chosen, the remaining implementation tasks involve programming in the small, against the services provided by the platform of choice.

In the XMDD setting, a product is defined in terms of the features and services it provides, those it uses, a

behavioral model of their orchestrations/choreography, and the policies and constraints it must fulfill.

The technical realization then concerns the implementation of the missing services, maybe as new components or their mapping to already available services, and the realization of the underlying business objects in an adequate data model and persistency layer. In our setting, the early phases of product design—as well as the platform-independent technical refinement and validation and testing—are done with jABC. Meanwhile, the NetBeans software supports technical development, platform-dependent modeling, and coding.

As Figure 2's coloring indicates, no clear division exists between the two realms—jABC and NetBeans IDE