



IBM SOA Architect Summit

***GET PRACTICAL HELP TO MEET THE
DEMANDS OF YOUR BUSINESS.***

Gordon Ramsay does Services –
Cooking up a Service Portfolio

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16th September 2008



SOMA Identification

Populating the Candidate Service Portfolio

pasta 173

cooking 174, 201

dried 174, 176

drying 188-91

egg 174

fresh 174

history 173

making 178, 185, 187-91

test-cooking 174-6

Pasta di Aldo 176, 187

SOMA Identification

Top Down – CBM

	HR	Purchasing	Cooking
<i>Direct</i>		Store Cupboard Management	Cookbook Management M
<i>Control</i>		Shopping List	Recipes M
<i>Execute</i>	Too Many Cooks	Shopping	Starters
		Home Delivery	Mains ★ H
			Desserts

Heat Maps

Hot Component: **★** Hot

HML map: **H** high **M** medium **L** low

General Competency Attachments Attributes Services Over

Component - Mains

▼ **Activities**

Name
boil
bake
fry
grill
poach
steam

SOMA Identification

Top Down - CBM

This screenshot shows the Rational Software Architect interface for a project named "Gordon Ramsay Does SOMA - Service Model". The Project Explorer on the left displays a hierarchical structure of modules and models. The main workspace shows the following structure:

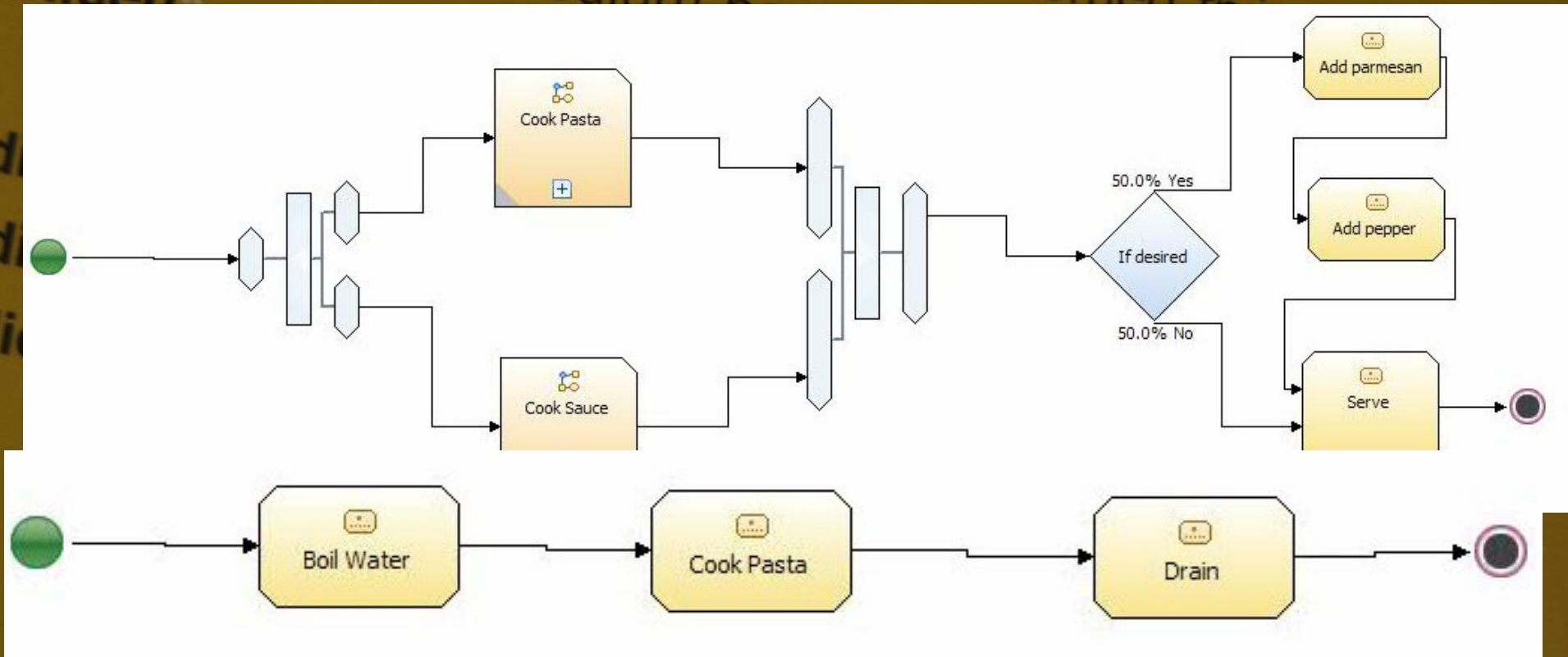
- Diagrams
- Models
 - «ServiceModel» SOMA Service Model *
 - 1. Identification
 - 1.1 Goal-Service Model
 - 1.2 Domain Decomposition
 - 1.3 Existing Assets
 - 1.4 Service Portfolio
 - All Candidate Services
 - «CandidateService» bake
 - «CandidateService» boil
 - «CandidateService» fry
 - «CandidateService» grill
 - «CandidateService» poach
 - «CandidateService» steam
 - «perspective» 1.5 Service Hierarchy

This screenshot shows a detailed view of the "«ServiceModel» SOMA Service Model" structure. The Project Explorer on the left shows the model's hierarchy, and the main workspace displays the following structure:

- 1. Identification
 - 1.1 Goal-Service Model
 - 1.2 Domain Decomposition
 - 1.2.1 Functional Areas Description
 - «Domain» Cooking
 - «FunctionalArea» Desserts
 - «FunctionalArea» Mains
 - «Function» bake
 - «Function» boil
 - «Function» fry
 - «Function» grill
 - «Function» poach
 - «Function» steam
 - «FunctionalArea» Starters
 - «Domain» HR
 - «Domain» Purchasing
 - 1.2.2 Process Definition

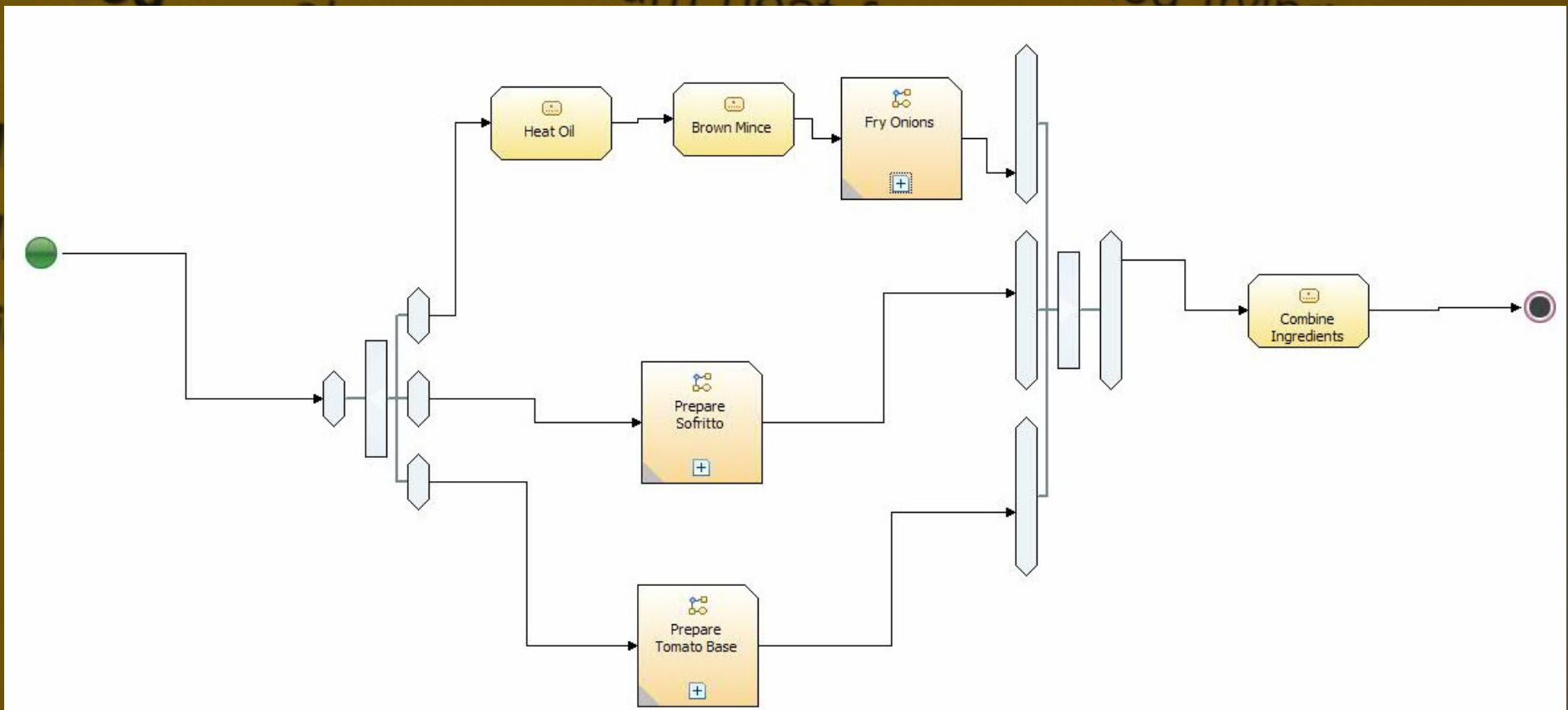
SOMA Identification

Top Down - BPM



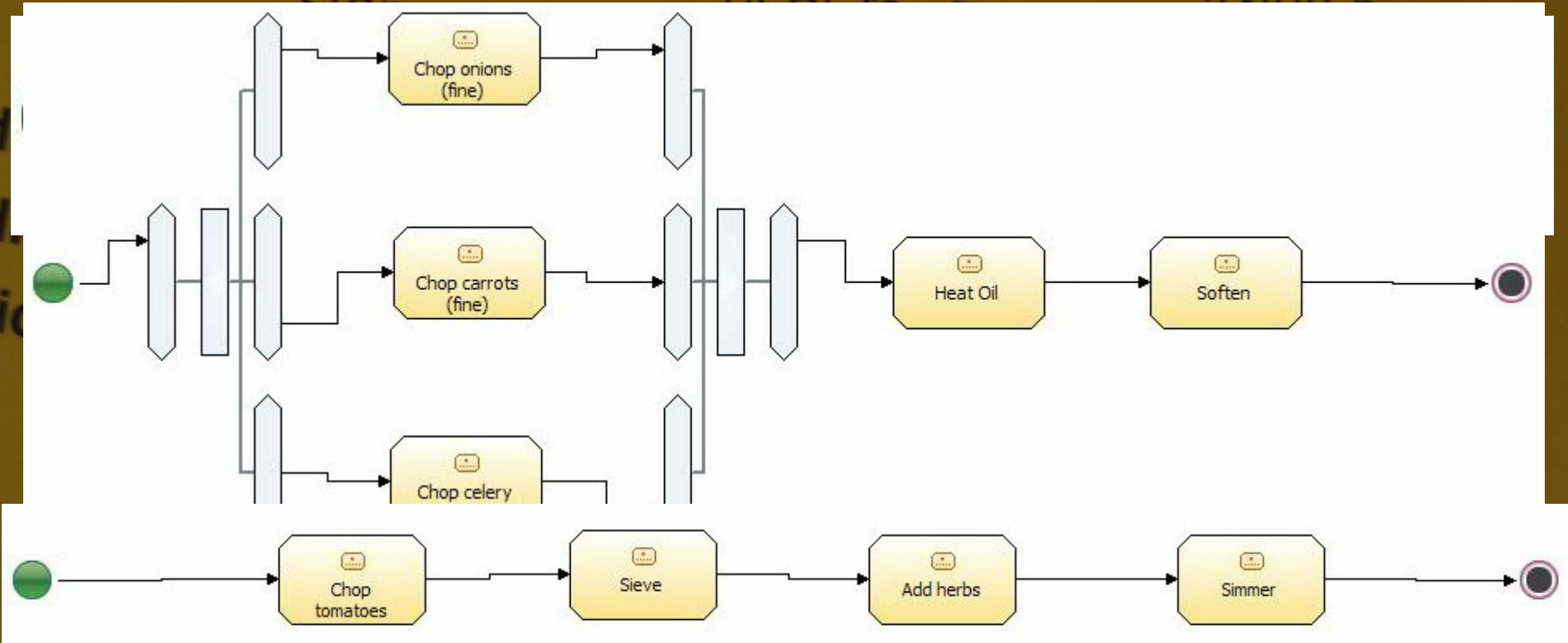
SOMA Identification

Top Down - BPM



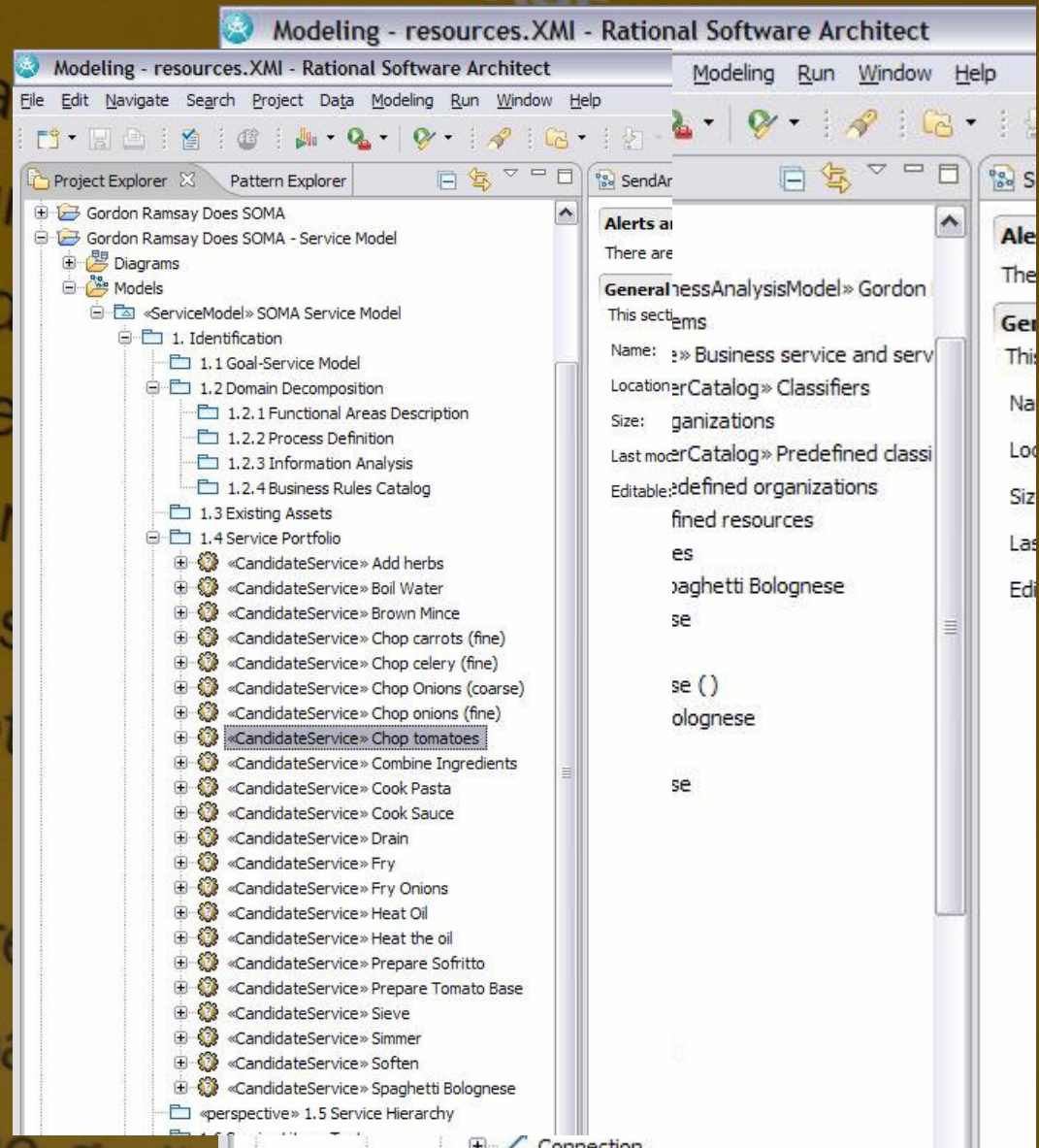
SOMA Identification

Top Down - BPM



SOMA Identification

Top Down - BPM



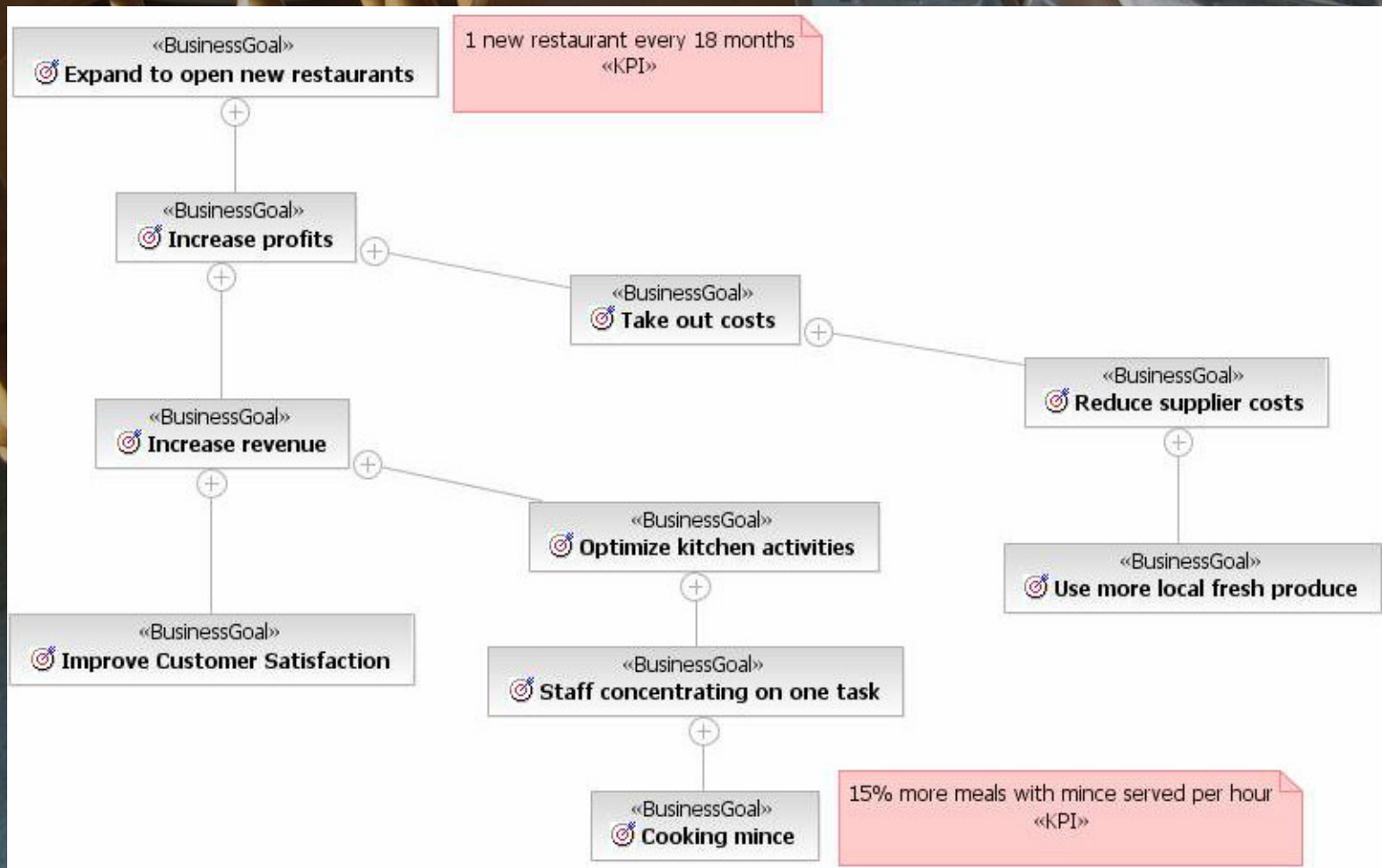
SOMA Identification

Bottom Up

-
- 1.2.4 Business Rules Catalog
 - 1.3 Existing Assets
 - «ExistingAsset, subsystem» Basil
 - «ExistingAsset, subsystem» Colander
 - «ExistingAsset, subsystem» Coriander
 - «ExistingAsset, subsystem» Cumin
 - «ExistingAsset, subsystem» Kettle
 - «ExistingAsset, subsystem» Oregano
 - «ExistingAsset, subsystem» Pan
 - 1.4 Service Portfolio
 - «CandidateService» Add herbs
 - «CandidateService» bake
 - «CandidateService» Basil
 - «CandidateService» boil
 - «CandidateService» Boil Water
 - «CandidateService» Brown Mince
 - «CandidateService» Chop carrots (fine)
 - «CandidateService» Chop celery (fine)
 - «CandidateService» Chop Onions (coarse)
 - «CandidateService» Chop onions (fine)
 - «CandidateService» Chop tomatoes
 - «CandidateService» Colander
 - «CandidateService» Combine Ingredients
 - «CandidateService» Cook Pasta
 - «CandidateService» Cook Sauce
 - «CandidateService» Coriander
 - «CandidateService» Cumin

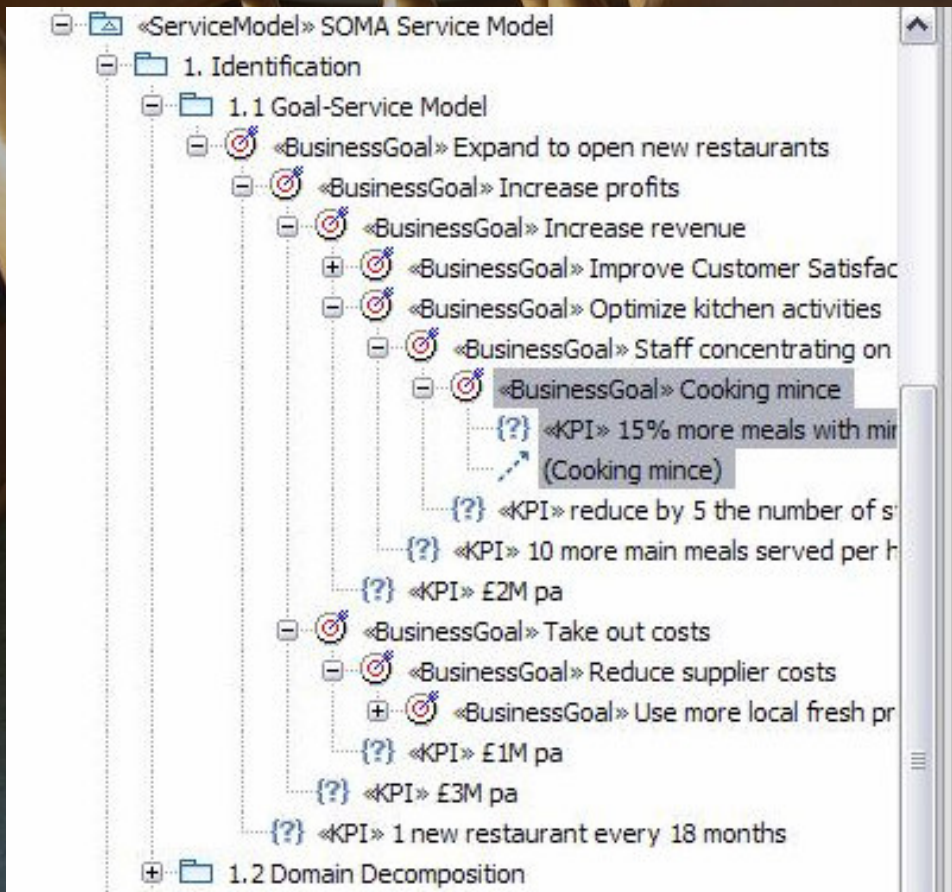
SOMA Identification

Goal Service Modelling



SOMA Identification

Goal Service Modelling

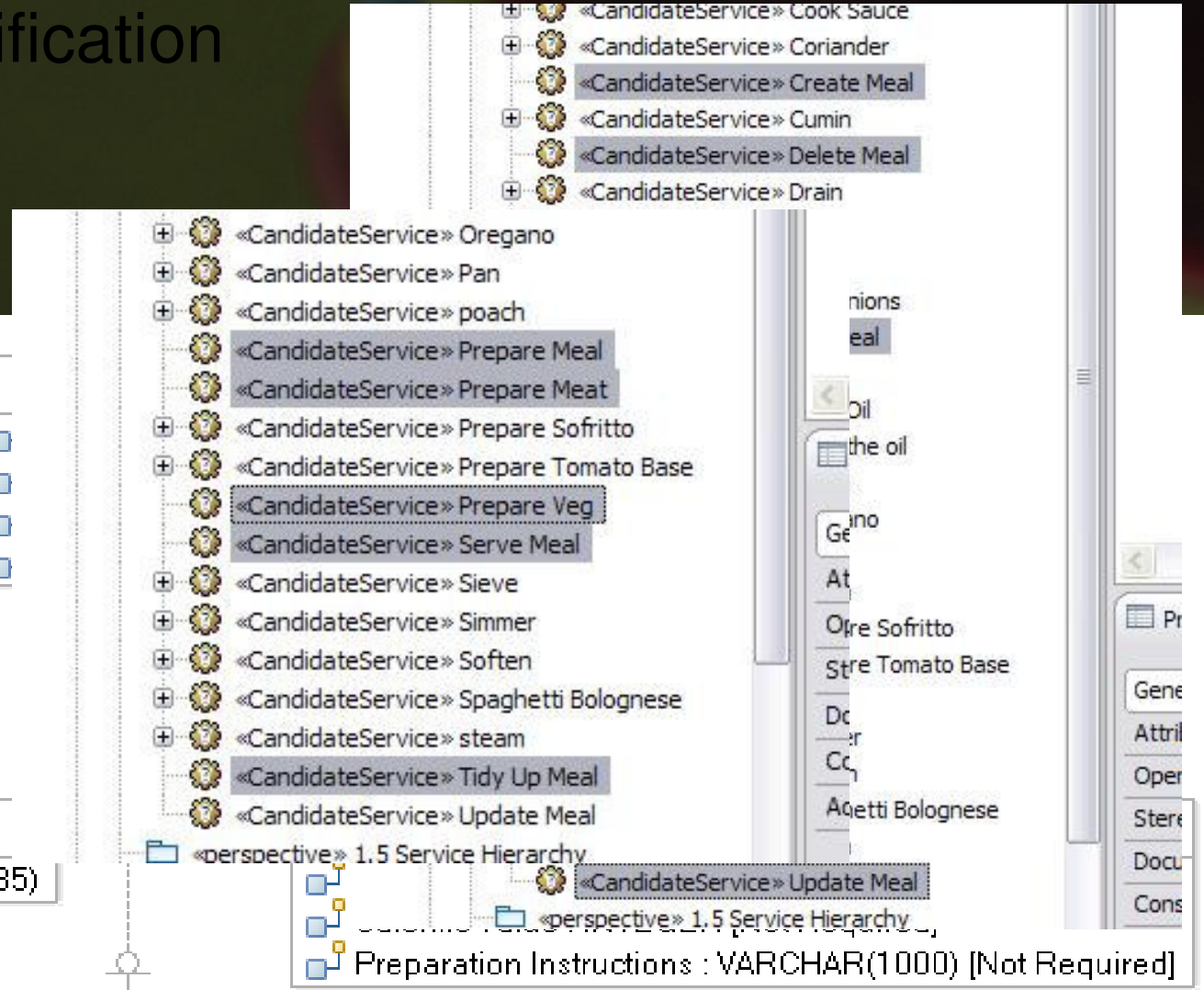
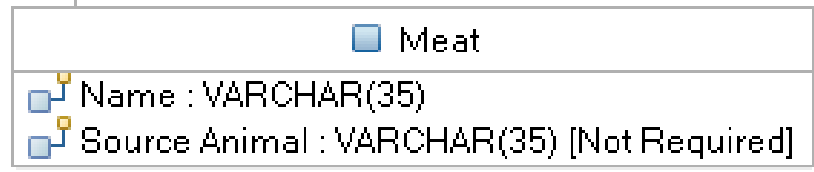
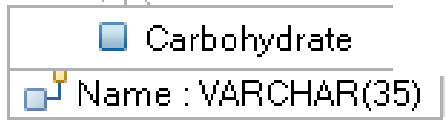


- «CandidateService» boil water
- «CandidateService» Brown Mince
- «CandidateService» Chop carrots (fine)
- «CandidateService» Chop celery (fine)
- «CandidateService» Chop Onions (coarse)
- «CandidateService» Chop onions (fine)
- «CandidateService» Chop tomatoes
- «CandidateService» Colander
- «CandidateService» Combine Ingredients
- «CandidateService» Cooking mince
- «CandidateService» Cook Pasta
- «CandidateService» Cook Sauce

SOMA Identification

LDM

includes



SOMA Identification

VOA



chicken style pieces

Delicious, tender Quorn pieces perfect for stir fries, curries, casseroles and all your favourite recipes

Less than **3% FAT**
CALORIES



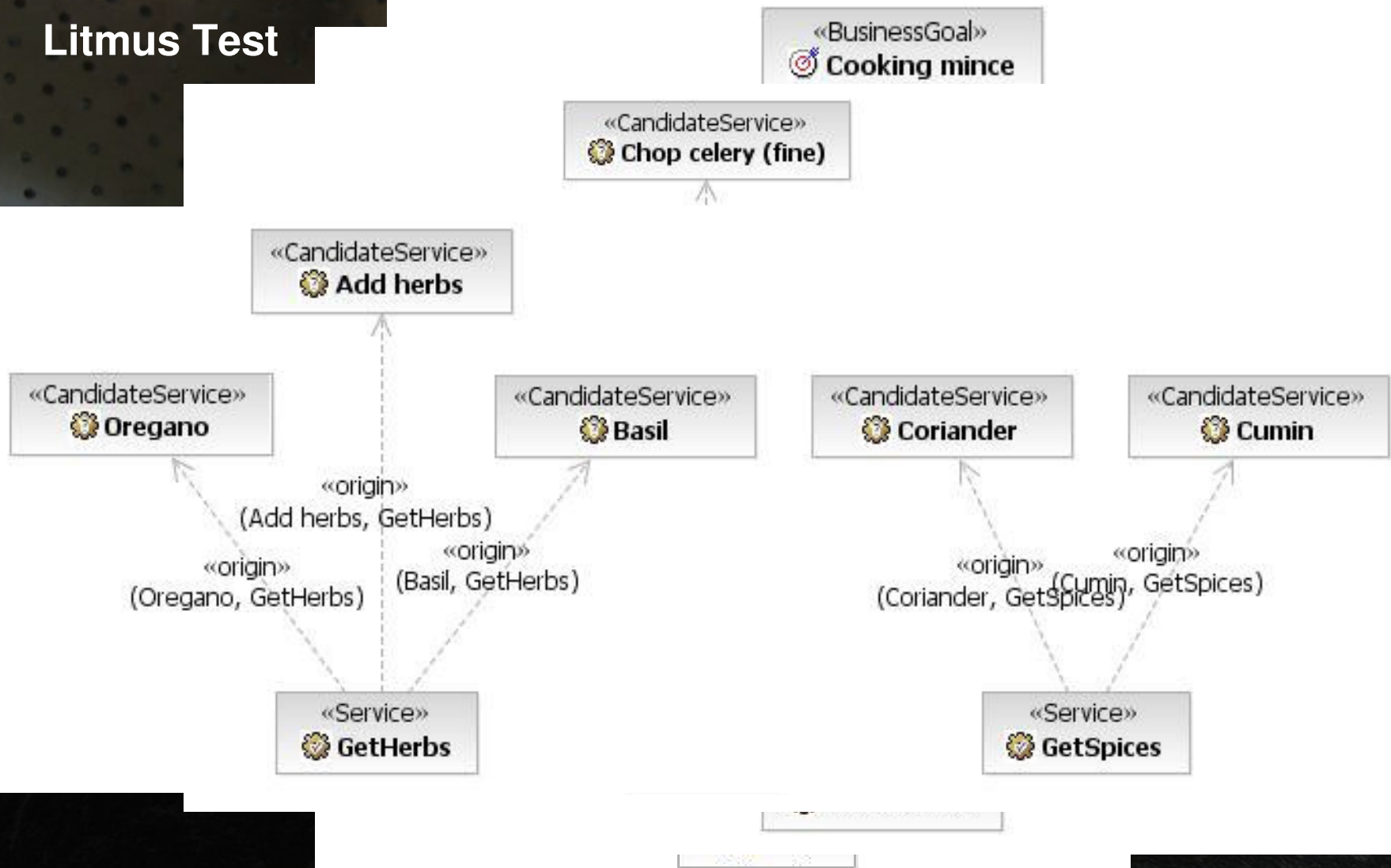
SOMA Identification

Populated the Candidate Service Portfolio?

«CandidateService» 🌻 Add herbs	«CandidateService» 🌻 bake	«CandidateService» 🌻 Basil	«CandidateService» 🌻 boil	«CandidateService» 🌻 Boil Water	«CandidateService» 🌻 Brown Mince
«CandidateService» 🌻 Chop carrots (fine)	«CandidateService» 🌻 Chop celery (fine)	«CandidateService» 🌻 Chop Onions (coarse)	«CandidateService» 🌻 Chop onions (fine)	«CandidateService» 🌻 Chop tomatoes	
«CandidateService» 🌻 Colander	«CandidateService» 🌻 Combine Ingredients	«CandidateService» 🌻 Cooking mince	«CandidateService» 🌻 Cook Pasta	«CandidateService» 🌻 Cook Sauce	
«CandidateService» 🌻 Coriander	«CandidateService» 🌻 Create Meal	«CandidateService» 🌻 Cumin	«CandidateService» 🌻 Delete Meal	«CandidateService» 🌻 Drain	«CandidateService» 🌻 fry
«CandidateService» 🌻 Fry	«CandidateService» 🌻 Fry Onions	«CandidateService» 🌻 Get Meal	«CandidateService» 🌻 grill	«CandidateService» 🌻 Heat Oil	«CandidateService» 🌻 Heat the oil
«CandidateService» 🌻 Kettle	«CandidateService» 🌻 Oregano	«CandidateService» 🌻 Pan	«CandidateService» 🌻 poach	«CandidateService» 🌻 Prepare Meal	«CandidateService» 🌻 Prepare Meat
«CandidateService» 🌻 Prepare Soffritto	«CandidateService» 🌻 Prepare Tomato Base	«CandidateService» 🌻 Prepare Veg	«CandidateService» 🌻 Serve Meal	«CandidateService» 🌻 Sieve	«CandidateService» 🌻 Simmer
«CandidateService» 🌻 Soften	«CandidateService» 🌻 Spaghetti Bolognese	«CandidateService» 🌻 steam	«CandidateService» 🌻 Tidy Up Meal	«CandidateService» 🌻 Update Meal	

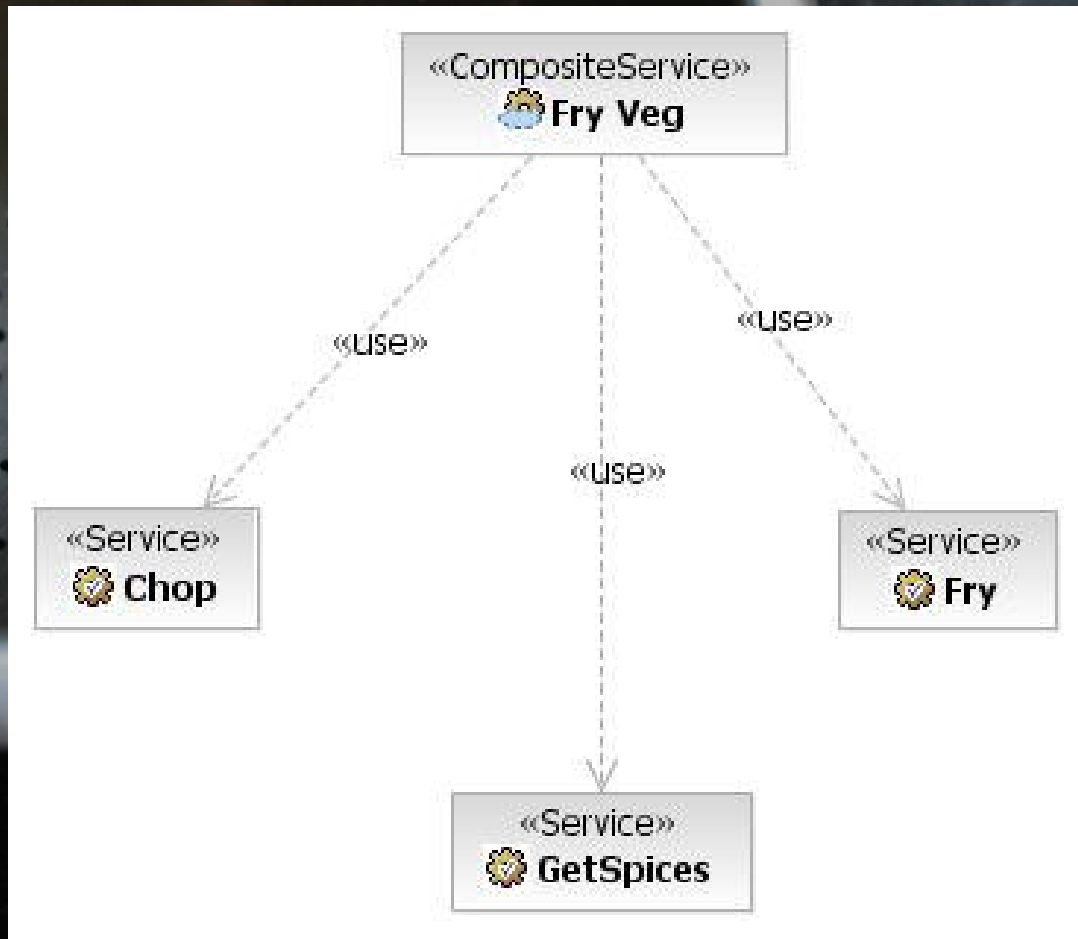
SOMA Identification → Specification

Litmus Test



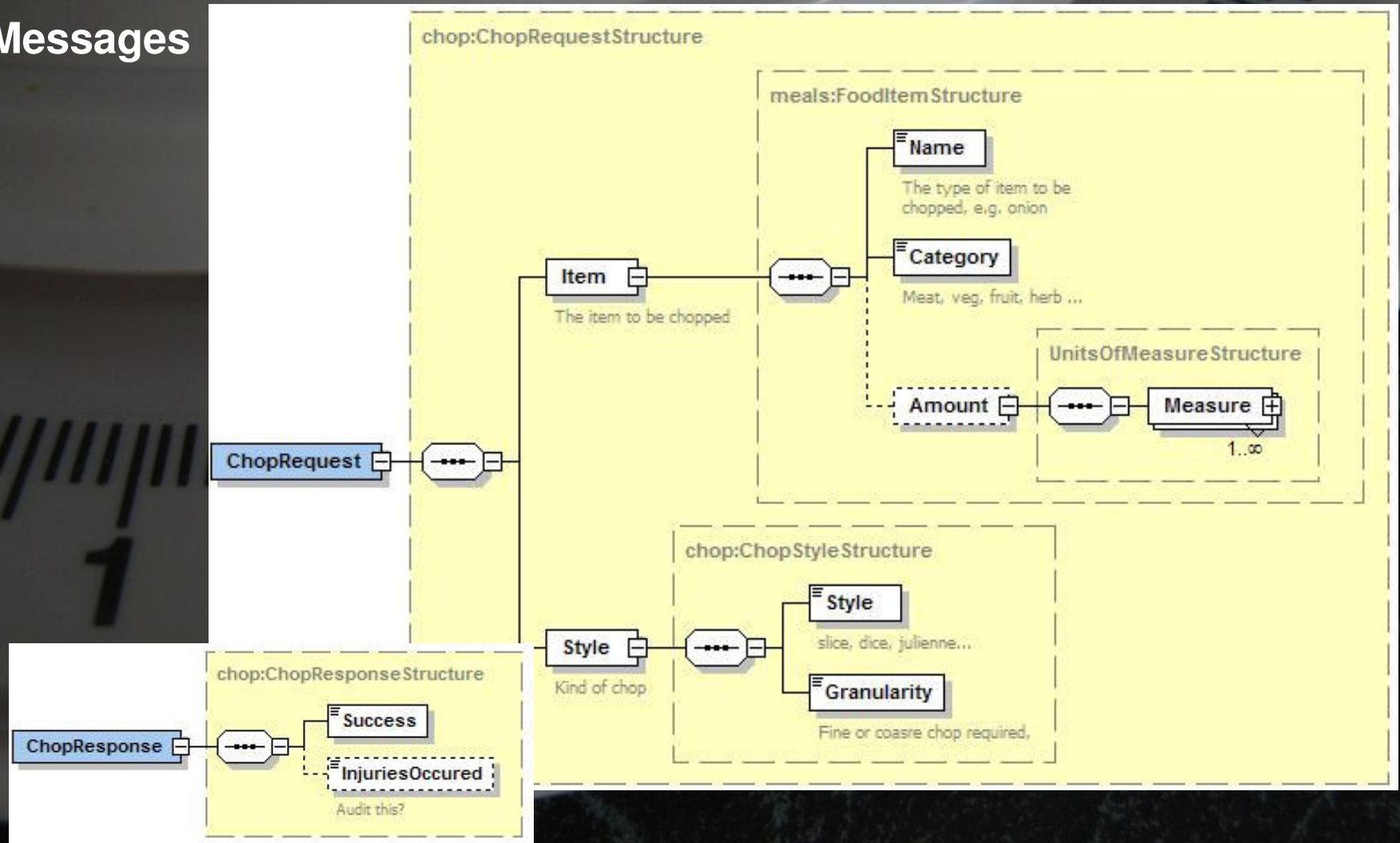
SOMA Identification → Specification

Litmus Test



SOMA Specification

Messages



SOMA Specification

Messages

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!--Sample XML file generated by XMLSpy v2007 sp2 (http://www.altova.com)-->
3 <chop:ChopRequest ...>
4   <Item>
5     <Name>CARROT</Name>
6     <Category>VEG</Category>
7     <Amount>
8       <Measure System="METRIC">
9         <Amount>450</Amount>
10        <Unit>g</Unit>
11      </Measure>
12      <Measure System="IMPERIAL">
13        <Amount>1</Amount>
14        <Unit>lb</Unit>
15      </Measure>
16    </Amount>
17  </Item>
18  <Style>
19    <Style>JULIENNE</Style>
20    <Granularity>COARSE</Granularity>
21  </Style>
22 </chop:ChopRequest>
```

SOMA Specification

NFRs for a Chop Service

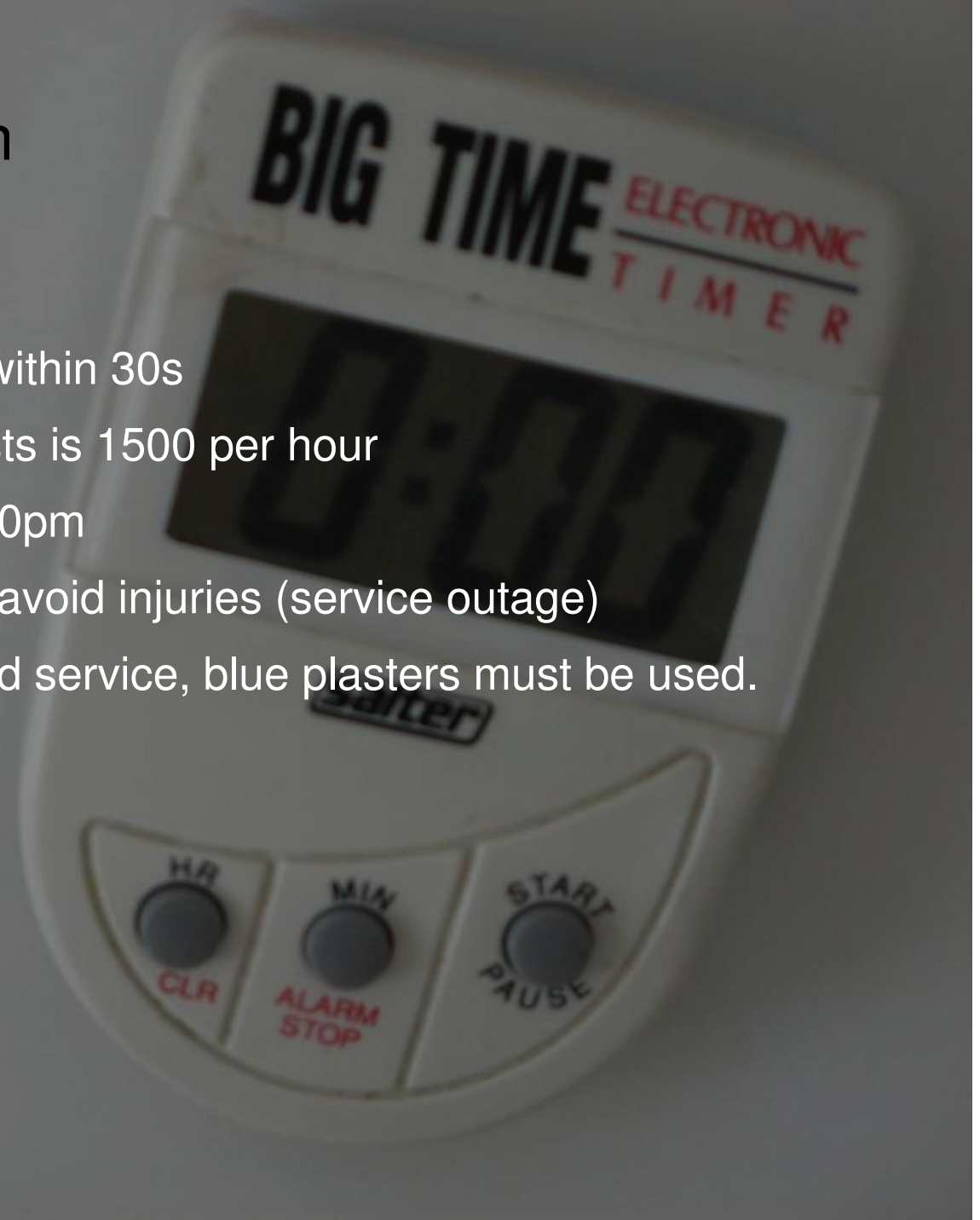
Service must respond within 30s

Peak number of requests is 1500 per hour

Must be available 7 – 10pm

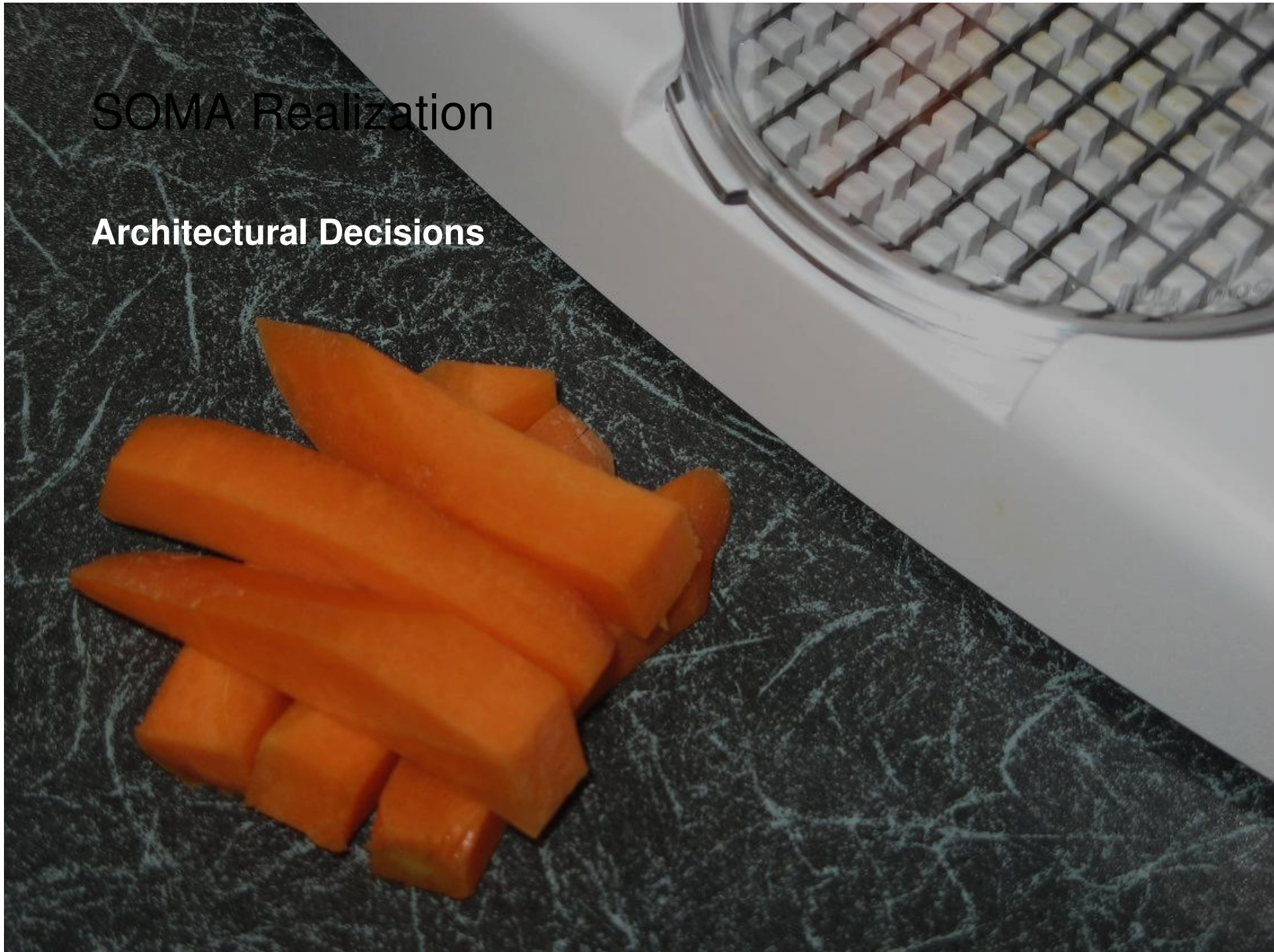
Knife must be sharp to avoid injuries (service outage)

In the event of degraded service, blue plasters must be used.



SOMA Realization

Architectural Decisions



SOMA Realization

Proof of Concept



Summary

