```
2 package acme.features.client.contract;
 4 import java.util.Collection;
 6 import org.springframework.beans.factory.annotation.Autowired;
 7 import org.springframework.stereotype.Service;
 9 import acme.client.data.datatypes.Money;
10 import acme.client.data.models.Dataset;
11import acme.client.services.AbstractService;
12 import acme.client.views.SelectChoices;
13 import acme.entities.contract.Contract;
14 import acme.roles.Client;
15
16@Service
17 public class ClientContractUpdateService extends AbstractService<Client,</pre>
  Contract> {
18
19
      @Autowired
20
      private ClientContractRepository repository;
21
22
23
      @Override
      public void authorise() {
24
25
          boolean status;
26
          Contract contract;
          int id = super.getRequest().getData("id", int.class);
27
          contract = this.repository.findContractById(id);
28
29
          status = contract != null && contract.isDraft() && super.getRequest
  ().getPrincipal().hasRole(Client.class) && contract.getClient().getId() ==
  super.getRequest().getPrincipal().getActiveRoleId();
          super.getResponse().setAuthorised(status);
30
31
      }
32
33
      @Override
34
      public void load() {
35
          Contract contract;
36
          int id;
37
          id = super.getRequest().getData("id", int.class);
38
39
          contract = this.repository.findContractById(id);
40
41
          super.getBuffer().addData(contract);
42
      }
43
44
      @Override
45
      public void bind(final Contract contract) {
          assert contract != null;
46
47
```

```
super.bind(contract, "code", "moment", "providerName",
48
  "customerName", "goals", <u>"budget", "isDraft"</u>, "project");
49
50
51
      @Override
      public void validate(final Contract contract) {
52
53
          assert contract != null;
          Collection<Contract> contracts = null;
54
          if (!super.getBuffer().getErrors().hasErrors("code")) {
55
56
              Contract existing;
57
58
              existing = this.repository.findOneContractByCode
  (contract.getCode());
59
              super.state(existing == null || existing.equals(contract),
60
  "code", "client.contract.form.error.duplicated");
61
          if (!super.getBuffer().getErrors().hasErrors("budget"))
62
63
               super.state(contract.getBudget().getAmount() >= 0, "budget",
  "client.contract.form.error.negative-budget");
          if (!super.getBuffer().getErrors().hasErrors("budget")) {
64
               contracts = this.repository.findAllContractsOfAProjectById
65
  (contract.getProject().getId());
              double totalBudget = contracts.stream().filter(p -> p.getId() !
66
  = contract.getId()).mapToDouble(c -> this.eurConverter(c.getBudget())).sum
  ();
67
               double projectCost = contract.getProject().getCost().getAmount
  ();
              totalBudget += this.eurConverter(contract.getBudget());
68
              super.state(totalBudget <= projectCost, "budget",</pre>
69
  "client.contract.form.error.exceeds-project-cost");
70
          }
71
      }
72
73
      private double eurConverter(final Money money) {
74
          String currency = money.getCurrency();
75
          double amount = money.getAmount();
76
77
78
          if (currency.equals("EUR"))
79
               amount = amount;
80
          else if (currency.equals("USD"))
              amount = amount * 0.90; // Tasa aproximada de conversión USD a
81
  EUR
          else if (currency.equals("GBP"))
82
83
               amount = amount * 1.17; // Tasa aproximada de conversión GBP a
  EUR
84
          else
85
               super.state(false, "budget",
  "client.contract.unsopportedCurrency");
```

```
86
           return amount;
 87
 88
       }
 89
90
       @Override
       public void perform(final Contract contract) {
91
92
           assert contract != null;
93
 94
           this.repository.save(contract);
95
       }
96
       @Override
97
       public void unbind(final Contract contract) {
           assert contract != null;
98
           boolean isDraft;
99
100
           SelectChoices choices;
101
           choices =
102
   SelectChoices.from(this.repository.findAllPublishedProjects(), "title",
   contract.getProject());
           isDraft = contract.isDraft() == true;
103
104
105
           Dataset dataset;
106
           dataset = super.unbind(contract, "code", "moment", "providerName",
107
   "customerName", "goals", "budget", "isDraft", "project");
           dataset.put("contractId", contract.getId());
108
           dataset.put("isDraft", isDraft);
109
           dataset.put("projects", choices);
110
111
           super.getResponse().addData(dataset);
112
113
       }
114
115 }
116
```