```
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.entities.project.Project;
15 import acme.features.client.progresslog.ClientProgressLogRepository;
16 import acme.roles.Client;
17
18@Service
19 public class ClientContractPublishService extends AbstractService Client,
  Contract> {
20
21
      @Autowired
      private ClientContractRepository
22
                                           repository;
23
      @Autowired
24
      private ClientProgressLogRepository plRepo;
25
26
27
      @Override
28
      public void authorise() {
29
          boolean status;
30
          Contract contract;
          int id = super.getRequest().getData("id", int.class);
31
          contract = this.repository.findContractById(id);
32
33
          status = contract != null && contract.isDraft() && super.getRequest
  ().getPrincipal().hasRole(Client.class) && contract.getClient().getId() ==
  super.getRequest().getPrincipal().getActiveRoleId();
          super.getResponse().setAuthorised(status);
34
35
      }
36
37
      @Override
38
      public void load() {
39
          Contract contract;
40
          int id;
41
          id = super.getRequest().getData("id", int.class);
42
43
          contract = this.repository.findContractById(id);
44
45
          super.getBuffer().addData(contract);
46
      }
47
```

```
48
      @Override
49
      public void bind(final Contract contract) {
50
           assert contract != null;
           int projectId;
51
           Project project;
52
53
54
           projectId = super.getRequest().getData("project", int.class);
55
           project = this.repository.findOneProjectById(projectId);
56
  super.bind(contract, "code", "moment", "providerName",
"customerName", "goals", "budget", "isDraft", "project", "isDraft");
57
           contract.setProject(project);
58
59
       }
60
61
      @Override
      public void validate(final Contract contract) {
62
63
           assert contract != null;
           Collection<Contract> contracts = null;
64
65
           if (!super.getBuffer().getErrors().hasErrors("code")) {
66
               Contract existing;
67
               existing = this.repository.findOneContractByCode
68
  (contract.getCode());
69
               super.state(existing == null || existing.equals(contract),
70
          "client.contract.form.error.duplicated");
71
           }
           if (!super.getBuffer().getErrors().hasErrors("budget"))
72
               super.state(contract.getBudget().getAmount() >= 0, "budget",
73
  "client.contract.form.error.negative-budget");
74
           if (!super.getBuffer().getErrors().hasErrors("budget")) {
               contracts = this.repository.findAllContractsOfAProjectById
75
  (contract.getProject().getId());
76
               double totalBudget = contracts.stream().filter(p -> p.getId() !
  = contract.getId()).mapToDouble(c -> this.eurConverter(c.getBudget())).sum
  ();
77
               double projectCost = contract.getProject().getCost().getAmount
  ();
78
               totalBudget += this.eurConverter(contract.getBudget());
               super.state(totalBudget <= projectCost, "budget",</pre>
79
  "client.contract.form.error.exceeds-project-cost");
80
           }
81
82
83
84
      private double eurConverter(final Money money) {
           String currency = money.getCurrency();
85
           double amount = money.getAmount();
86
87
88
           if (currency.equals("EUR"))
```

```
89
               amount = amount;
 90
           else if (currency.equals("USD"))
 91
               amount = amount * 0.90; // Tasa aproximada de conversión USD a
   EUR
92
           else if (currency.equals("GBP"))
93
               amount = amount * 1.17; // Tasa aproximada de conversión GBP a
   EUR
94
           else
 95
                super.state(false, "budget",
   "client.contract.unsopportedCurrency");
 96
           return amount;
 97
       }
 98
99
       @Override
100
       public void perform(final Contract contract) {
           assert contract != null;
101
102
           contract.setDraft(false);
103
           this.repository.findAllProgressLogsByContractId(contract.getId
104
   ()).stream().forEach(x -> {
               x.setDraft(false);
105
               this.plRepo.save(x);
106
107
           });
           this.repository.save(contract);
108
109
       }
110
111
       @Override
112
       public void unbind(final Contract contract) {
           assert contract != null;
113
114
           boolean isDraft;
115
           SelectChoices choices;
116
           choices =
117
   SelectChoices.from(this.repository.findAllPublishedProjects(), "title",
   contract.getProject());
           isDraft = contract.isDraft() == true;
118
119
120
           Dataset dataset;
121
           dataset = super.unbind(contract, "code", "moment", "providerName",
122
   "customerName", "goals", "budget", "isDraft", "project");
123
           dataset.put("contractId", contract.getId());
           dataset.put("isDraft", isDraft);
124
           dataset.put("projects", choices);
125
           super.getResponse().addData(dataset);
126
127
       }
128
129 }
130
```