

Contract Management Solution Template User Guide

# Alfresco Workdesk



Copyright 2013 by Alfresco and others.

Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Alfresco. The trademarks, service marks, logos, or other intellectual property rights of Alfresco and others used in this documentation ("Trademarks") are the property of Alfresco and their respective owners. The furnishing of this document does not give you license to these patents, trademarks, copyrights, or other intellectual property except as expressly provided in any written agreement from Alfresco.

The United States export control laws and regulations, including the Export Administration Regulations of the U.S. Department of Commerce, and other applicable laws and regulations apply to this documentation which prohibit the export or re-export of content, products, services, and technology to certain countries and persons. You agree to comply with all export laws, regulations, and restrictions of the United States and any foreign agency or authority and assume sole responsibility for any such unauthorized exportation.

You may not use this documentation if you are a competitor of Alfresco, except with Alfresco's prior written consent. In addition, you may not use the documentation for purposes of evaluating its functionality or for any other competitive purposes.

This copyright applies to the current version of the licensed program.

# **Table of Contents**

Introduction	
About this document	1
Intended audience	2
Typographical conventions used in this guide	
Abbreviations	2
Checklist	3
Management Summary	
The basic ideas	
Generic Approach	
Configurability and Extensibility	
Applicable Out-of-the-box	
• •	
The Concept	
Data Model	
Workflows	
Scope of Configuration	
Configuration of Alfresco Workdesk	
Configuration of the Solution Template	
Account Administrator	11
Contract Management for sales and purchasing	
Contract	
Pre-defined Contract Templates	
Contract types	
Contract types	
Status Management	
Business Roles	
Related Objects	
Data model	
Search	
Reports	
·	
In-Depth Description of the Sample Scenario	
General Remarks	
Working with Documents	
Executing Activiti Workflows	
Involving of External Users	
Business roles defined in the Solution Template	
Contract Manager	
Legal	
Management	
Contract Administrator	
Account Administrator	26
Configuration and adaptation	28
.v::::Eu:u::VII allu auaylaliVII	

Virtual Folder Templates  Document Templates	
Field Controls	
Pre-defined Main Modules	
Intake	
Task Inbox.	
Browse Contracts	
Create Contract	
Search	
Contract	
Add Contract Documents	
Add Contract Partner	
Reports	
Contract Templates	
Create Contract Template	
Document Templates	
Create Contract Template	
Alfresco Folder Structure	
Activiti Workflows	40
Future Plans	41
Activiti Workflow	
Records Management	42
Data Lists	
Appendix	

### Introduction

Besides collaboration centric document challenges there are a lot of process centric business challenges. The goals of automating these processes are increased process efficiency, cost savings, increased customer or employee satisfaction, and achievement of compliance. Many of the analysts also call this Transactional Content Management. Alfresco Workdesk is a purpose-built solution for process centric or transactional content processes.

Alfresco Workdesk helps you streamline document centric business processes and cases. With its business role management feature it provides every user group with the right documents in the right business context and in the right application, that can be created by simple configuration rather than coding. Since documents, processes and cases can be accessed via any standard web browser, from within most Office applications and from mobile devices, processes do not stop at the boundary of an enterprise and users are optimally supported in their way of working. Thus processes are accelerated dramatically and compliance is assured.

Alfresco Workdesk provides **faster time-to-value** because it offers state of the art ECM functionality out of the box and makes the creation of customer specific business applications as easy as possible. Productivity enhancing features like dynamic folders, views and actions, which are determined by the user's role in the process allow that the very same document can live in many different views. Hence, **Alfresco Workdesk** helps your organization to **process cases**, **deals**, **loans**, **claims faster and more efficiently**.

There are 3 modules of Workdesk offering the same functionality on different devices:

- · Alfresco Workdesk Robust features and flexibility on any web browser
- Alfresco Office Workdesk Bypass the browser with seamless desktop integration
- Alfresco Mobile Workdesk Mobilize your business processes on iPads and iPhones

All Alfresco Workdesk products can be adapted to work as unique solution for lots of typical business use cases. Examples are a Case Management solution to work on cases often known as Contract Management, Claims Handling solutions, Loan Origination solutions, Employee Hiring solution and many more. The focus of this document shall be on a Contract Management solution based on Alfresco Workdesk, but other Solution Template documents for other Alfresco Workdesk solutions will be published soon.

### About this document

This guide shall be the entry point for business users, administrators and developers that want to understand and build up a Contract Management Solution based on an Alfresco Workdesk and a corresponding Solution Template.

In Management Summary the idea behind Solution Templates is described.

The chapter *The Concept* describes solutions templates based on Alfresco Workdesk in general and explains common patterns for such solutions, such as data models and workflows.

The chapter *Contract Management for sales and purchasing* gives an overview of the Contract Management Solution Template that we deliver.

The chapter *In-Depth Description of the Sample* Scenario describes in detail the use case scenarios available with the deployed Solution Template.

In chapter *Configuration and adaptation* the configuration of the Contract Management Solution Template is described and possible extension points are listed.

Section *Future Plans* gives an overview on the improvements planned for Alfresco Workdesk 4.2 and the Contract Management Solution Template based on that version.

Finally the *Appendix* will give you an overview of the basic data model used in the Solution Template.

#### Intended audience

This document is intended for everyone who is interested to gain experiences with Solution Templates based on Alfresco Workdesk. This includes

- Business users who plan to introduce a contract management solution and want to take advantage of an existing Solution Template
- ECM Consultants who deployed Alfresco Workdesk and want to build and customize business solutions based on an Alfresco Workdesk Solution Template.
- System Administrators who have to install and manage a vital Alfresco Workdesk solution environment.

Depending on your business role and on the solution you want to implement, you need basic skills to manage

- the underlying Alfresco system
  - deployment of custom data models
- Alfresco Workdesk
  - basic configuration
  - assigning business roles to pages and functions
- the Activiti process engine
  - designing Activiti workflows
  - deployment of custom workflow definitions

Furthermore it is recommended (if you are system administrator) to have experience with:

- Application servers:
  - Deploying web applications (on common application servers, e.g. Apache Tomcat)
  - Classpath configurations
  - Configuration of the libraries used by your web application
  - log4j configuration, reading of log files
  - o xml
- JDBC connections
- Database knowledge (running SQL scripts)
- Web applications in general

▲ In general you must have the authorization to modify and create resources.

# Typographical conventions used in this guide

Convention	Example
Important terms	Alfresco
Classes	OwAppContext
Methods	getName()
Source Code	public void myMethod(){}
// Comments in Source Code	simple source code comment
Java Package	com.wewebu.server.app
Plugins	com.wewebu.ow.server.plug.owdemo.owmain
Path	com/wewebu/ow/server/
XML Attribute	<node></node>
XML value	value
Product-specific terms	Add Document

#### Formatting legend for brackets in Source Code, Paths, File Names, and so on:

Ellipsis (...): Parameter the user must supply

Between brackets [...]: Optional items

Between braces {...}, choices separated by pipe |, example: {even|odd}: Set of choices from which the user must choose only one

#### The following placeholders are used in this document:

- (Alfresco) root directory of Alfresco installation
- (Tomcat) installation root of Tomcat application server
- (Workdesk) root directory of AWD deployment

### **Abbreviations**

AMP Alfresco Module Package

AWD Alfresco Workdesk

AOWD Alfresco Office Workdesk
AMWD Alfresco Mobile Workdesk

BPM Business Process Management

CMIS Content Management Interoperability Services

ECM Enterprise Content Management

All trademarks, trade names, registered trademarks, or registered trade names are property of their respective holders.

# Checklist

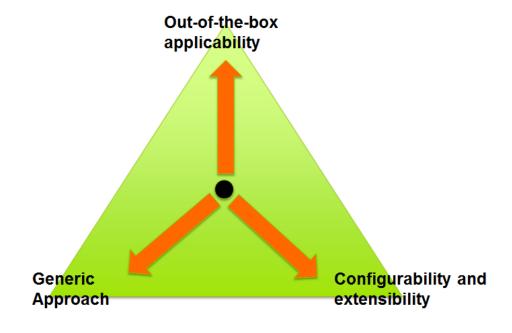
1.	Business Use Cases
	☐ Are the business use cases you want to implement with the Solution Template completely defined?
2.	Prerequisites and checks for initial configuration
	□ Did you obtain valid licenses for Alfresco Workdesk and Alfresco Office Workdesk?
	☐ Was the Solution Template deployed correctly? Did you follow the steps in the Workdesk Contract Management Deployment Guide?
	☐ Can you work on all your processes?
3.	Adaptation and extension
	☐ Have you identified where you have to adapt the Solution Template to your customer needs.
	See also section Configuration and adaptation

# Management Summary

In order to reduce the time to value for Alfresco Workdesk projects the idea of Solution Templates was born: A Solution Template covers a certain business use case and can be deployed, adjusted to a customer situation and set into production rapidly. In order to achieve this Solution Templates consist of a pre-defined data model that is yet very flexible, a set of business roles, solution-specific functionalities, case files, workflows, and reports as well as documentation and an installation package.

The Solution Templates are designed such that they are ready to run and that a business administrator in a short period of time can configure a specific solution using the Workdesk user interface. Solution templates can serve 3 main purposes. First, they are the ideal starting point for configuring custom solutions and dramatically reduce project time and efforts. Second, they can serve as entry point for partners who want to create specific customer ready business solutions. Finally, they are perfect out-of-the-box demo cases for the benefits of Alfresco and Alfresco Workdesk especially for business users and decision makers.

The first Solution Template available is for contract management and contains everything for managing the lifecycles of sales and purchasing contracts. Central to it is a pre-defined contract file with a given folder structure and set of properties, a relationship model, and several document templates. Users belong to different business roles allowing them to create new contracts, approve them – with pre-defined workflows - from the business or legal side and last but not least create new contract templates with customer specific nomenclature and sets of properties by configuration. The advanced relationship model allows very convenient navigation between single documents, contracts and contracting parties and gives together with the reporting functionality an up to now unmatched level of transparency for managers and users alike.



### The basic ideas

The Alfresco Workdesk Solution Templates combine 3 basic ideas that make them extremely useful. All of them are built using a generic approach that leverages the Alfresco base technology and that ensures easy adaptability and configuration – idea number 2. Finally, they are applicable out of the box since the include pre-defined business solutions (idea 3) that can be used with little or no configuration as show cases, starting points for projects or even in real life.

### Generic Approach

Solution Templates add value to Alfresco Workdesk through a reusable data model and business user ready configuration templates.

The concepts behind can be reused for any case management solution and are independent from the business scenario.

There are four essential concepts that make Solution Templates so valuable:

- Case templates
- Object relations
- Extension points
- Configuration by business user

#### Case template

One central concept that makes Solution Templates so valuable is the idea of customizable case template that can be pre-defined for specific business cases.

A case template is an object that contains other objects of any type. Moreover, the case template has a set of use case specific properties assigned. This case template is used to instantiate case files that allow a 360 degree view on a specific business case, e.g.:

- A contract file that contains all documents (contract, signature files, terms and conditions, correspondence ...) and all contract related objects (contract partners, ...).
- A claims file may contain all documents (contract, policy, loss report) and all preceding claims.

#### **Object Relations**

An important added value is the intelligent and flexible management of objects and their mutual relations. This can be reused in any real life scenario, e.g.:

- Contracts are related to one or more contracting partners.
- Claims are related to one or more involved parties.

#### **Extension Points**

Objects often are stored and administrated in an external system (i.e. contracting partners in the CRM system). The generic approach of the Solution Template allows the replacement of the object relation by an extension point to integrate into the external system.

Remark: The implementation is not part of this Solution Template.

#### Configuration by Business User

Based on the pre-defined use cases the business users can select and define their own use case specific templates directly in the Workdesk user-interface.

For example, in the Contract Management Solution Template the Contract Administrator can define solution specific contract files.

### Configurability and Extensibility

Solution Templates are patterns or models that need to be adopted to map them to a concrete business case. Solution Templates are configurable through

- Refinement and enhancement of the data model
  - Container, documents, folder, objects and relations between objects
- Definition of additional workflows
- Configuration of business roles

and many more.

### Applicable Out-of-the-box

Solution Templates are ready to use in a default configuration:

- Ready to use contract management solution with pre-configured sales and procurement contracts
- Includes sample contract template, sample documents and document templates, sample contract partners
- Easy going live!
  - Business Administrator defines own contract template (selects the relevant properties)
  - Business Administrator adds the company specific document templates
- Documentation
- Easy deployment process

# The Concept

Any Solution Template based on the Alfresco Workdesk product suite follows the same principles independent of the specific use case. In this chapter the common principles of Solution Templates are described.

#### Data Model

The heart of every business solution based on Alfresco Workdesk is a data model related to that solution. This data model describes the metadata of folder types, case types and document types.

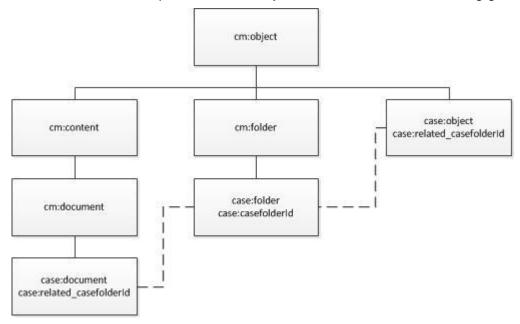
#### Example 1:

For Employee Onboarding, there is an onboarding case folder with the properties hiring date, salary and department. This folder contains the related documents like job description, employee contract or signed confidentially agreements.

#### Example 2:

For Contract Management there is a contract case folder with properties like contract id and contract status. This case folder contains the documents and the related objects (like contract partners). In short we refer to the contract management case folder as "a contract". Please note that a contract can - and in most cases will – consist of several single documents.

The data model for a specific solution is just a refinement of the following generic approach:



### Workflows

Each Alfresco Workdesk Solution Template provides a set of workflows. Some of them are specific to the solution, e.g. the process to setup new employees' system logins (exemplary for an employee onboarding solution) or the process to get an internal legal approval (e.g. in a contract management solution). Additionally, there are general workflows used in every Alfresco Workdesk Solution Template, like review and approval workflows.

Fully structured workflows are often too inflexible and are neither reflecting the reality nor real world business scenarios, e.g. exceptions are not completely covered, which results in non-documented user actions that are not part of the original process.

In most cases a complex structured process can be split up into several separated activities, where each activity is driven or initiated by the business specialist and might be optional or mandatory. Activities typically are simple one or two step workflows. Activities can be processed only once or multiple times depending on the concrete case. Those activities have to be documented as they are relevant for reporting.

The standard Alfresco Activiti integration is a good starting point for this approach. There are already some basic workflows available which can be used in the Solution Template, like *Review and Approve*, *Group Review and Approve* or *Adhoc* processes.

### Scope of Configuration

Although the Solution Template addresses a certain use case (here: Contract Management) a concrete business case is different:

- Nomenclature is different and company specific.
- Data fields used for a certain business case may differ
  - o i.e. employment contracts and procurement contracts use different properties
- Any company has their own document templates
- Object relations always are solution specific
  - o i.e. contracts can have one or more external partner / counter parties
- The business roles in each organization are company specific
- The information accessible via the user interface is solution and business role specific. This applies to – amongst others
  - Case folders
  - Solution specific searches
  - Available inboxes (access workflows)
- The functionality accessible through the user interface is solution and business role specific, for example the functions in the context menu i.e.:
  - View
  - o Edit
  - Launch Workflow
- The look and feel of the user interface has to match the company requirements
- There are typically customer specific workflows which have to be added to the Activiti environment

In order to address these topics there are several ways to adapt a Solution Template and transform it into a concrete "end-user-ready" solution.

### Configuration of Alfresco Workdesk

Alfresco Workdesk allows building solutions only via configuration (without programming). This covers:

- Nomenclature can be easily defined by localization files
- The look and feel can be adapted through design files
- The information and functionality accessible can be defined and configured at several levels (main modules, files and documents).

For details regarding the configuration of Alfresco Workdesk see the product documentation of Alfresco Workdesk.

### Configuration of the Solution Template

The Solution Template helps you to configure your specific solution very easily by picking from:

- Pre-defined main modules,
- Pre-defined search templates,
- Pre-defined functions,
- Pre-defined Activities (Workflows),
- Pre-defined case templates (i.e. contract template),

Further refinement can be achieved by:

- · Administration of document templates,
- Relationships and handling of relationships between objects,
- Adaptable data lists (i.e. for contract status, regions, ...) (see also forecast regarding data lists in section Outlook)

See the details about configuration of the Solution Template in the following chapters:

What can be configured?

Contract Management for sales and purchasing

How can it be configured?

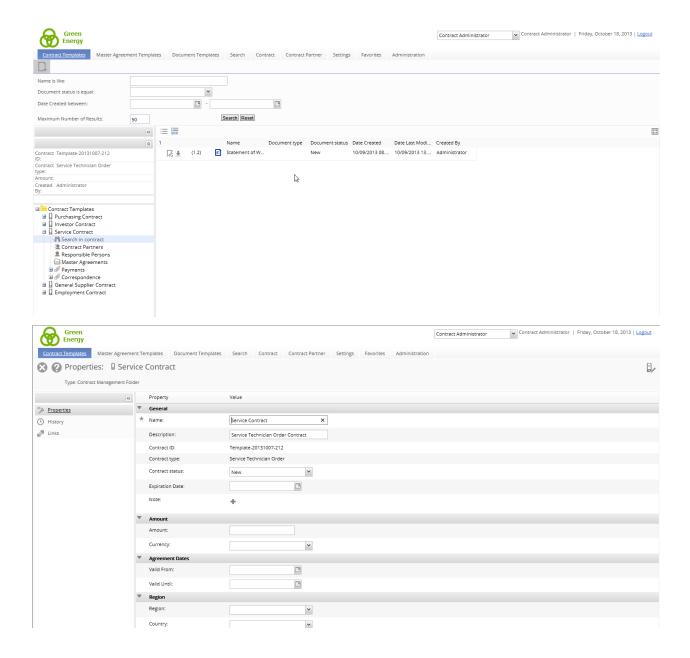
Configuration and adaptationContract Administrator

The Contract Administrator is responsible for the definition of reusable contract templates and for the administration of the document templates.

The following users can act as Contract Administrator:

User	Password
Gary Manager	

Login: cmg	abs
Administrator	
Login: cmgadmin	abs



The Contract Administrator has access to the following main modules:

Contract Templates

Browse the existing contract templates, add new contract templates and edit existing templates.

Master Agreement Templates

Browse the existing master agreement templates, add new master agreement templates and edit existing templates.

Document Templates

Browse the existing document templates and add new document templates.

Search

Select and execute searches

Contract

Browse and work with contracts

Contract Partner

Browse and work with contract partners

Settings

Personal settings

Favorites

Access personal favorites

Administration

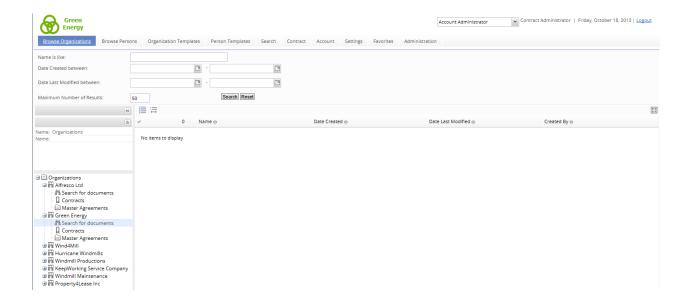
Assign plugins and functionality to roles

#### **Account Administrator**

The Account Administrator is the business administrator who is responsible for the administration of the accounts (contract partners).

The following users can act as Account Administrator:

User	Password
Administrator	
Login: cmgadmin	abs
Select role "Account Administrator"	



The Account Administrator has access to the following pages:

- Browse Organizations
- Browse Persons
- Organization Templates

Browse, add and work with "organization templates".

Person Templates

Browse, add and work with "persons".

Search

Select and execute searches

Contract

Browse and work with contracts

Account

Browse and work with accounts (i.e. to check terms and agreements)

Settings

Personal settings

Favorites

Access personal favorites

Configuration and

**Remark**: In this document you will find the configuration of the solution template. The configuration of Alfresco Workdesk is described in detail in the corresponding product documentation.

# Contract Management for sales and purchasing

Contract Management is a wide area of concrete business use cases and can be shaped into either a vertical solution or one that is independent from industry specific characteristics (horizontal). Contracts are needed everywhere, e.g. employment contracts, purchasing contracts, loan contracts, investment contracts and many more.

The Contract Management Solution Template in principle is independent from a certain contract type. (Refer also to section *Scope of Configuration*)

However, in order to show the functionality and flexibility of the Solution Template in the life system we are providing a sample use case.

In this documentation and for the pre-defined showcase delivered with the Solution Template we chose the example of a sales or procurement contract in order to explain a concrete scenario the Solution Template can be used for.

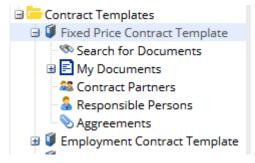
The following section gives an overview of a typical sales or procurement contract and covers the areas where contract management solutions can be customized.

#### Contract

In the Contract Management Solution Template "a contract" is defined as a contract file with a given folder structure, set of properties and initial documents that are present as soon as a new contract is created. Please note that a contract can - and in most cases will – consist of several single documents. New contracts are created using Contract Templates ensuring consistency and completeness of all contracts.

### **Pre-defined Contract Templates**

The Contract Template defines the folder structure, set of properties and initial documents of a specific contract type, e.g. a purchasing contract. Every new contract of a specific type will have this structure, set of properties and initial documents. In the sample Solution Template we deliver some pre-defined contract templates.



The Contract Administrator can define new Contract Templates.

### Contract types

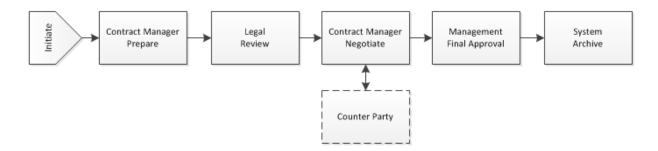
In the Contract Management Solution Template we have pre-defined the following contract types:

- Purchasing contract
- Fixed price contract
- Statement of work
- Indefinite delivery contract
- Cost reimbursement contract
- License contract
- Time and material contract
- Renewal contract

The list of contract types can be adapted to the customer's needs. See also the section *Data Lists*.

# Contract lifecycle

The following diagram shows the lifecycle of a typical procurement contract:

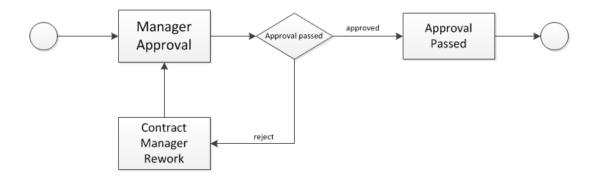


This example shows that the approach of separating the contract lifecycle into smaller units and activities (as described in section *Workflows*) allows solutions to be as flexible as possible: in fact – the management approval and the legal review may be necessary more than once and can be moved around the overall process (i.e. management approval takes place *before* negotiation and a second time *after* negotiation).

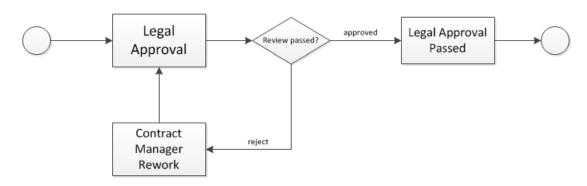
In order to achieve this flexibility we split up the complete process into separate activities.

For the Contract Management Solution Template we pre-define two dedicated workflows:

Manager Approval



#### Legal Approval



Any other customer specific workflow can be added through the Activiti console.

### **Status Management**

For the procurement contract we have defined the following states (pre-defined in the Solution Template):

Preliminary

New contracts are automatically assigned to "Preliminary". In this state all contract metadata can be changed.

New

Similar to the "Preliminary" status, but all important metadata (contract partners etc.) are already set.

Rejected

The contract is rejected by any stakeholder.

Pending

The contract is agreed and approved but the start date (valid from) is in the future.

Effective

The contract is agreed and approved and the start date (valid from) lies in the past

Closed

The end date for the contract is reached.

Archived

The contract is archived for compliance purposes.

State changes can be driven through the Contract Manager itself or through the system.

Sample: The change in state to Effective is driven by the responsible contract manager:



In the Solution Template the status model can be adapted to the customer's needs. See also the section Data Lists.

#### **Business Roles**

In the Solution Template the following business roles are already pre-defined:

Contract Manager

A person in charge of the contract. The Contract Manager is the owner of the contract, is responsible for the process, involves all stakeholders, and works on the contract itself.

Legal

A legal department member who is responsible for contract approvals.

Management

Responsible for management approval of the contract.

Contract Administrator

The Contract Administrator is responsible for the definition of reusable contract templates and for the administration of the document templates.

Account Administrator

The business administrator who is responsible for the internal administration of the accounts (contract partners).

#### Remark:

In the real world Contracting Partners are often defined in external systems, e.g. CRM or ERP. The Solution Template is not integrated with external systems out-of-the-box. However, the Alfresco noderef object can be replaced by an extension point to an external system. Therefore, in a real life implementation we have hooks for the integration of external systems.

See also the concept of related objects as described in the next section Related Objects.

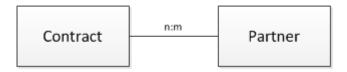
### **Related Objects**

Contracts typically relate to other business objects in the company:

Any contract can be related to one or more contracting partners.

In order to manage contracting partners we enhanced the contract data model with a contract partner object. As described below (in *Business Roles* section) these data are administrated by the Account Administrator in the sample configuration.

The relation between the contract partner object and the contract itself is implemented by a CMIS *noderef* object. This allows to define any n:m relation between contracts and partners.



This concept has giant advantages:

- You can navigate in the system from contract to partner (see all partners related to the contract) and back from partners to contract (which contracts do we have with a certain partner?
- The administration of the related objects uses the same UI as the administration of the contract template. This makes it easy for the business users to manage their business data.

Furthermore, the contract partner object can serve as an example: the underlying data model and functionality can be reused for any other related object i.e. employee object related to an employment contract or "subject of the contract" related to the contract.

The related objects can be adapted to specific use case scenarios through:

- Enhancing of the existing contract partner object
- Refining od the underlying data model and define your own related objects
- Replacing the internal data model through external data (need an adapter).

In the real world Contracting Partners are often defined in external systems, e.g. CRM or ERP. The Solution Template is not integrated with external systems out-of-the-box. However, the Alfresco noderef object can be replaced by an extension point to an external system. Therefore, in a real life implementation we have hooks for the integration of external systems.

### Data model

Besides the contract type, the status and the related object each contract has a set of properties assigned to it. For example, in the procurement contract we have properties like

- Contract ID
- Amount
- Confidentiality
- Cost center
- Period
- Penalty
- Region
- ...

The data model is very flexible since most of the properties are defined as aspects (aspects are properties that are optionally assigned to an object class). Whenever a business user (contract Administrator) defines a contract template he selects the relevant properties. (Please note: A contract template describes the structure of a certain contract type and is selected when a specific contract is created. The contract is the container for all contract related documents and data.).

For a solution the Contract Administrator can define as much contract templates as necessary.

The data model can be enhanced to match the needs of the end customer since it is always based on the same base classes, whereas properties for different use cases are attached as needed. See section A1. Contract Management Data Model.

### Search

Searching for contracts is one of the most important functions in a contract management system. Especially at the end of the contract lifecycle searching and retrieving contracts becomes one of the main features of an end customer solution. With Alfresco Workdesk there are two approaches to search contracts:

- Accessing contracts through browsing a tree view of all existing contracts and partners.
- Searching with pre-defined search templates

The Contract Management Solution Template comes with some pre-defined searches. Additional Searches can be added easily.

### Reports

The Contract Management Solution Template contains one simple pre-configured report that shows (filtered by date range and contract owner) the distribution of contracts according to to contract status. Additional reports can be generated.

# In-Depth Description of the Sample Scenario

After the installation of the Solution Template (as described in the *Deployment Guide*) the Solution Template is ready to use for the business user.

In the following we briefly describe the usage of the Solution Template from different points of views (business roles). Before the business roles are described in detail read here some general remarks.

#### General Remarks

This scenario handles business specific use cases implemented on AlfrescoOne and Alfresco Workdesk and inherits all features and functions from the underlying Alfresco stack. There are some segments where this inheritance becomes important for the use case:

- Working with documents
- Executing Activiti workflows
- Involvement of external users

### Working with Documents

All documents managed within the solution template are stored in the AlfrescoOne repository. Provided that the Alfresco user has the necessary access rights the Contract Management related documents can also be accessed by any other AlfrescoOne user interface like Share. Vice versa any document functionality offered by an AlfrescoOne repository, e.g. rules, e-mail intake, access-control, etc., can be used for the Contract Management use case.

An example where this is practiced is the creation of documents. In addition to the solution specific creation via templates there are several ways to create documents outside the Solution Template: assuming incoming (signed) contracts are scanned through any scan client these documents can be assigned to contracts handled in the Contract Management Solution Template.

### **Executing Activiti Workflows**

The Solution Template uses the standard integration of Activiti Workflow into AlfrescoOne respectively Alfresco Workdesk. Therefore any Activiti workflow that is created for the Solution Template is available through any other AlfrescoOne client like Share. Reverse all standard Workflows defined in Activiti today are visible and can be accessed through the Contract Management Solution Template.

### Involving of External Users

Contract Management is a good example for involvement of external users. Typically a contract has to be negotiated with external parties like customers, suppliers, vendors, et cetera.

There are several ways to address this:

- The external users are licensed users of the Alfresco repository
- Use hybrid cloud and workflows

### Business roles defined in the Solution Template

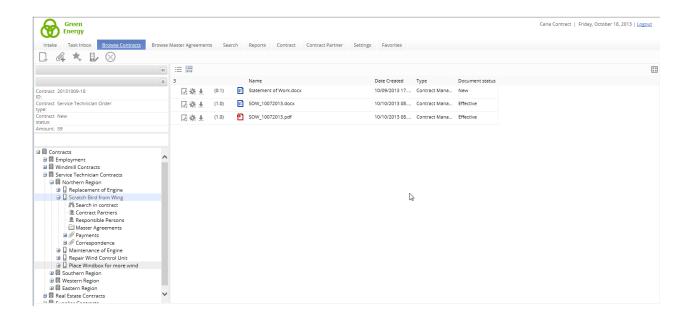
The Solution Template comes with some pre-defined business roles. This chapter describes what the members of these roles are responsible for in the process and what views and functions are assigned to them. For short we just refer to the name of a role when we actually mean a user who is member of that respective role.

### **Contract Manager**

The Contract Manager is the person in charge of the contract management process. The Contract Manager is the owner of the contract, is responsible for the process, involves all stakeholders and works on the contract itself.

The following users are members of the Contract Manager business role and can act accordingly:

User	Password
Carla Contract	
Login: ccm	abs
Stefan Legal	
Login: sle	abs
Gary Manager	
Login: cmg	abs
Administrator	
Login: cmgadmin	abs



The Contract Manager has access to the following main modules:

#### Intake

All incoming documents (like scanned documents) that come into the system are placed into this generic inbox unless they are created via the functions of the Solution Template. It is the responsibility of the user to assign these unassigned documents to the matching contract file.

#### Task inbox

Access all incoming Activiti tasks. The Contract Manager gets here the responses to the approvals he/she sent out to Legal and Management.

#### Browse Contracts

Browse and work with contracts and contract containers: access to all contract related objects.

Browse Contract Master Agreements

In case Master agreements are used access them here.

Search

Select and execute the pre-defined searches.

Reports

Generate and configure the pre-defined report.

Contract

Browse and work with contracts

Contract Partner

Browse and work with contract partners

Settings

Personal settings

Favorites

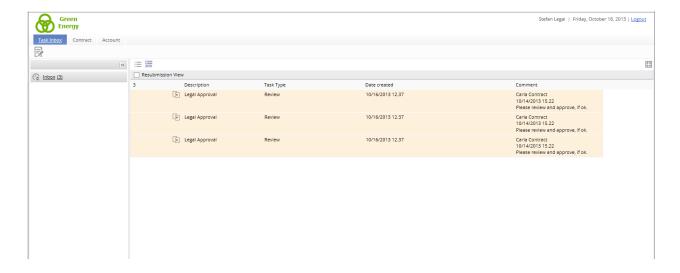
Access personal favorites

### Legal

Legal is the business role for legal department members who are responsible for contract legal approvals.

The following users can act as Legal:

User	Password
Stefan Legal	
Login: sle	abs
Administrator	
Login: cmgadmin	abs



Legal has access to the following main modules:

Task inbox

Access all incoming Activiti tasks. The Contract Manager gets here the responses to the approvals he/she sent out to Legal and Management.

Contract

Browse and work with contracts

Account

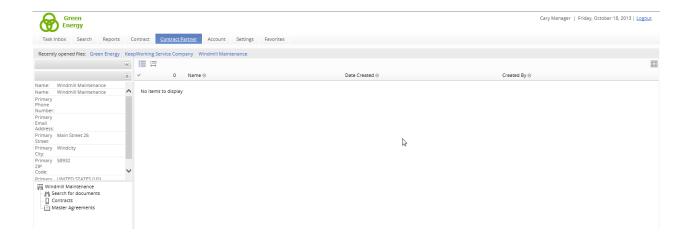
Browse and work with accounts (i.e. to check terms and agreements)

### Management

The Management group is responsible for the management approval of the contract

The following users can act as Manager:

User	Password
Carla Contract	
Login: ccm	abs
Gary Manager	
Login: cmg	abs
Administrator	
Login: cmgadmin	abs



Management has access to the following main modules:

- Task inbox
  - Access all incoming Activiti tasks. The Manager gets here tasks for approving contracts.
- Search
  - Select and execute searches
- Reports
  - Generate and configure the pre-defined report.
- Contract

Browse and work with contracts

**Contract Partner** 

Browse and work with contract partner

Account

Browse and work with accounts (i.e. to check terms and agreements)

Settings

Personal settings

**Favorites** 

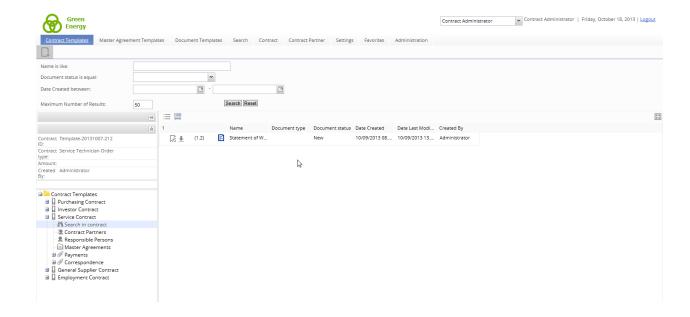
Access personal favorites

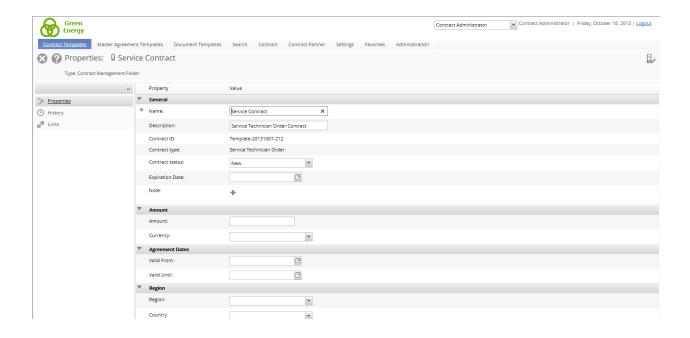
#### **Contract Administrator**

The Contract Administrator is responsible for the definition of reusable contract templates and for the administration of the document templates.

The following users can act as Contract Administrator:

User	Password
Gary Manager	
Login: cmg	abs
Administrator	
Login: cmgadmin	abs





The Contract Administrator has access to the following main modules:

Contract Templates

Browse the existing contract templates, add new contract templates and edit existing templates.

Master Agreement Templates

Browse the existing master agreement templates, add new master agreement templates and edit existing templates.

Document Templates

Browse the existing document templates and add new document templates.

Search

Select and execute searches

Contract

Browse and work with contracts

Contract Partner

Browse and work with contract partners

Settings

Personal settings

Favorites

Access personal favorites

Administration

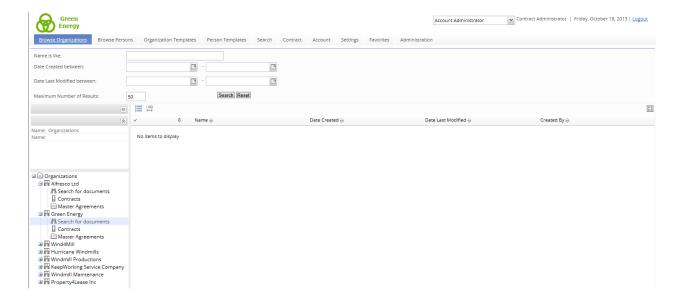
Assign plugins and functionality to roles

#### **Account Administrator**

The Account Administrator is the business administrator who is responsible for the administration of the accounts (contract partners).

The following users can act as Account Administrator:

User	Password
Administrator	
Login: cmgadmin	abs
Select role "Account Administrator"	



The Account Administrator has access to the following pages:

- Browse Organizations
- Browse Persons
- Organization Templates

Browse, add and work with "organization templates".

Person Templates

Browse, add and work with "persons".

Search

Select and execute searches

Contract

Browse and work with contracts

Account

Browse and work with accounts (i.e. to check terms and agreements)

Settings

Personal settings

Favorites

Access personal favorites

# Configuration and adaptation

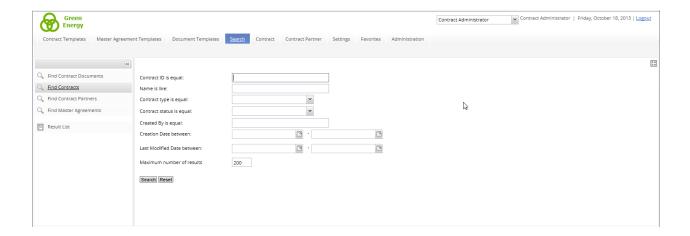
The Contract Management Solution Template provides many pre-configured Alfresco Workdesk features, which are listed in the following sections. Those pre-configured features can server as examples for how to further adapt the solution to customer needs

### **Search Templates**

In any Contract Management solution one must be able to search for contracts and the respective documents. The Solution Template delivers those two search templates in the owsearchtemplates folder of the Solution Template configuration set folder. The search templates are kept as generic as possible. If you are using a customized data model and your own properties related to your specific business cases, you can extend the existing search templates or create new search templates based on the exemplary ones.

Information on how search templates are used in Alfresco Workdesk in general can be found in the Alfresco Workdesk Configuration and Planning guide section Search Templates.

Search templates available to a business role will appear in the navigation pane to the left of the search page:



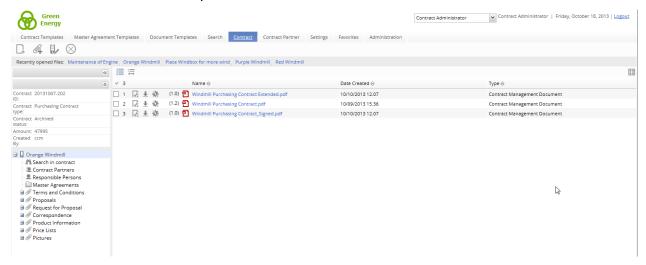
### Virtual Folder Templates

The key functionalities of any Contract Management solution are adding new contracts, opening existing contracts and searching for contract related documents. The Solution Template delivers virtual folder templates for those use cases in the other folder of the Solution Template configuration set folder. The search behavior for those templates and the properties that might be inherited from physical to virtual nodes are configured in the node

<SemiVirtualRecordClasses> in owbootstrap.xml in the configuration set folder. The virtual folder templates are kept as generic as possible. If you are using a customized data model and your own properties related to your own business cases, you can extend the existing virtual folder templates or create new virtual folder templates based on the exemplary ones.

Information on how virtual folder templates are used in Alfresco Workdesk in general can be found in the Alfresco Workdesk Configuration and Planning guide section *Electronic Files*.

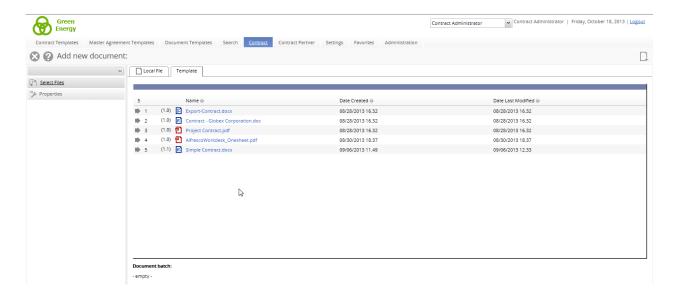
The virtual folder templates define the structures of the different contracts, with subfolders for different documents that comprise the whole contract. (Actually, clicking on a sub-folder just executes a search and its result is displayed as contents of this "folder".) The screenshot below shows a contract with the respective virtual sub-folders:



# **Document Templates**

In order to facilitate adding new contract documents document templates are used instead of creating new document from scratch. To this end the Solution Template makes use of the standard "Add documents" function, with a new so called document importer (which defines a pre-configured Alfresco path in the background, where all the document templates are located) that allows the selection of a document template which is copied into the contract folder and serves as a starting point for the actual contract related document. The Solution Template provides some sample document templates, that can be used a blueprints for customer and project specific templates. When a new contract document is added to a contract, properties of the contract, e.g. the contract number, are inherited to the document's metadata. If the contract document is a MS-Word document, Alfresco Office Workdesk will fill in these properties into fields in the document saving the user from doing this by hand.

The screenshot below shows the selection screen for the document templates.



## Field Controls

Another feature of Alfresco Workdesk used for the Solution Template are the so called Field Controls (see also section *Controlling Fields and their content* in Alfresco Workdesk Configuration and Planning guide). By utilizing Field Controls, the Field Manager processes field contents after they have been sent to the server. The definition of the field controls can be found in the node <FieldControls> in owbootstrap.xml of the contract management configuration set.

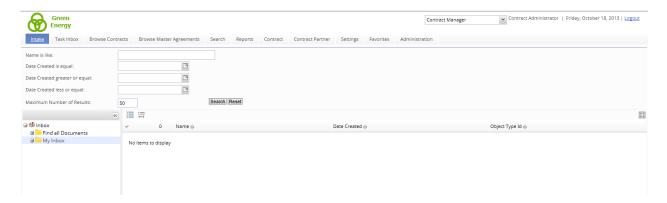
# **Pre-defined Main Modules**

The Contract Management Solution Template makes use of several Alfresco Workdesk main modules. The user can select these main modules from the line of horizontal tabs in the user interface. The most important ones and the ones related the most to Contract Management use cases are listed in this section. Of course there is the possibility to add additional modules depending on the solution use cases that have to be fulfilled.

#### Intake

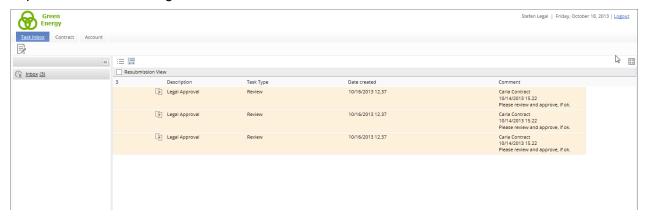
The module "Intake" (class com.wewebu.ow.server.plug.owrecord.OwRecordDocument) is using a semi-virtual folder template to define an inbox folder structure listing contract documents located in the physical Alfresco folder configured as root folder <startupFolder>. It displays documents that need to be worked on by currently logged-in user or that are assigned him. Additional properties can be used by the user to filter the list.

This module is used i.e. for assigning incoming scanned contract documents to existing contracts.



#### Task Inbox

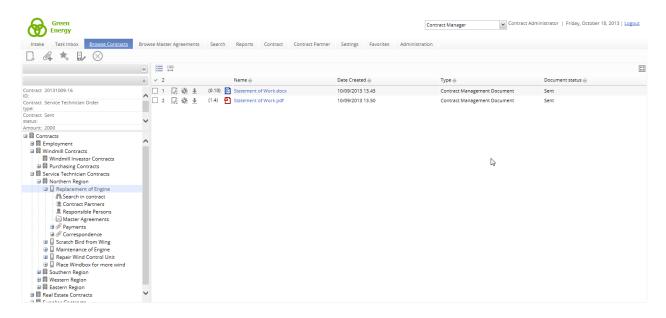
The "Task Inbox" (class com.wewebu.ow.server.plug.owbpm.OwBPMDocument) is used to display the Alfresco Activiti inbox and is listing the workflow tasks assigned to the currently logged in user. Users can start to work on their assigned tasks from there. Displaying the tasks in different colors based on their priority or other properties (please see also the sections BPM and Highlighting in the Alfresco Workdesk Configuration and Planning guide for further information on advanced BPM functionalities) makes it easy for the user to select the most important task and to organize his work.



## **Browse Contracts**

#### The module "Browse Contracts" (class

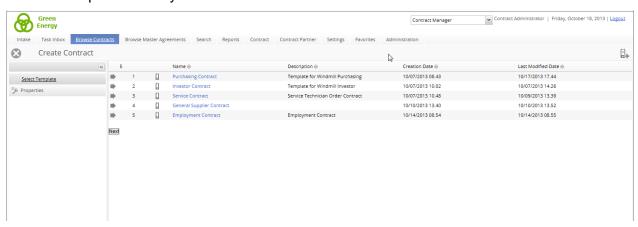
com.wewebu.ow.server.plug.owrecord.OwRecordDocument) is using a virtual folder template to define a contract overview based on a folder structure defined by the searches in the template. Users can edit existing contracts; they can add new contracts or even delete expired contracts if required.

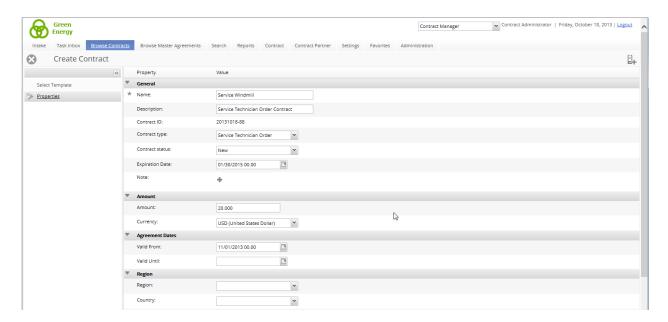


## Create Contract

## The function "Create Contract" (class

com.wewebu.ow.server.plug.owaddobject.OwAddObjectRecordFunction) is used to create new contract objects. The contract types a user can choose from when creating a new contract are predefined by the business administrator.

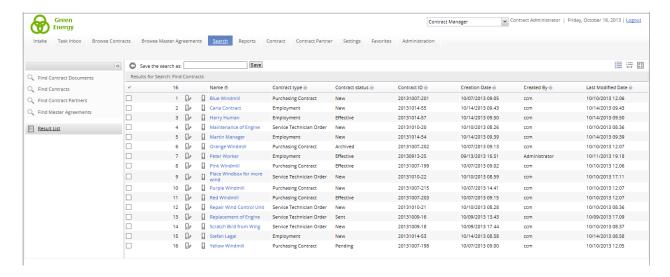




## Search

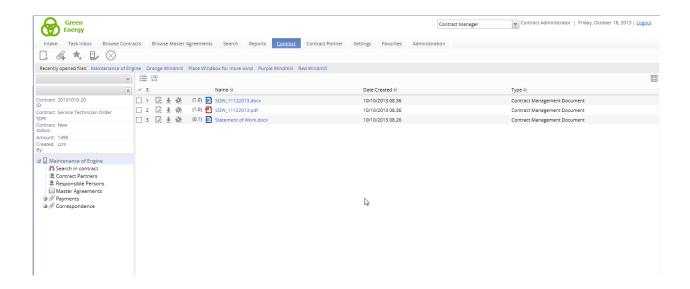
The module "Search" (class com.wewebu.ow.server.plug.owsearch.OwSearchDocument) lists all the search templates to search for contracts and contract documents (see also section Search Templates).

The following screen shows a typical search result screen:



#### Contract

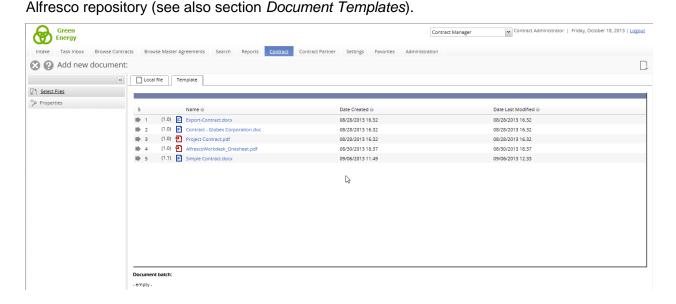
The page "Contract" (class <code>com.wewebu.ow.server.plug.owrecord.OwRecordDocument)</code> is used to open a specific contract and the contained documents. Users can edit, add or delete contract documents from there. The folder structure of any contract is again based on the respective contract template.



#### Add Contract Documents

## The function "Add Contract Documents" (class

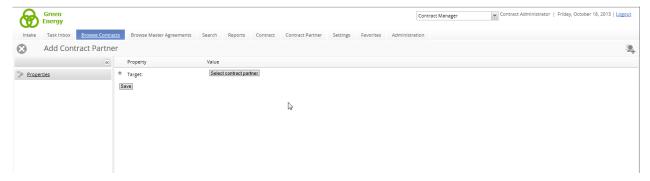
com.wewebu.ow.server.plug.owaddmultidocuments.OwAddMultipleDocumentsRecordFun ction) is used to add new documents to existing contracts. The document types a user can choose from when creating a new contract document are defined in the <ObjectClassSelection> configuration. By utilizing two different <Importer> configuration nodes, users can either upload a document from their local hard drive or can select from several document templates. Of course, these pre-configured templates are stored in the



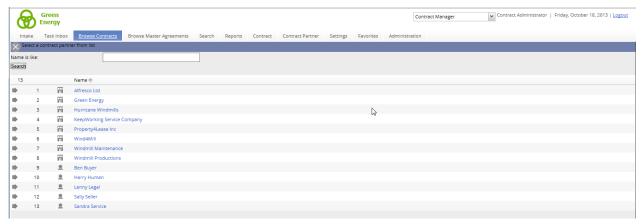
### Add Contract Partner

The function "Add Contract Partner" (class

com.alfresco.ow.server.plug.owaddobject.OwDocumentFunctionVFAddObject) is used to add a "relationship" object, which links a contract object as source object and the corresponding contract partner (type configured in node <ObjectClassSelection>) as target object.



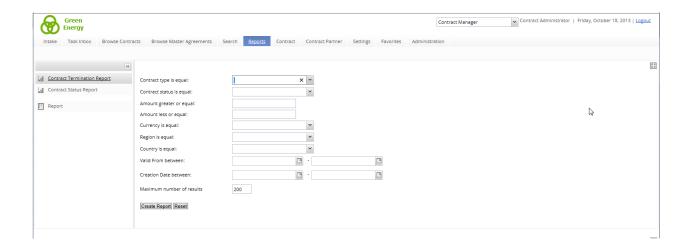
Using the button "Select Contract Partner" searches for all available Partner objects in the system and lets the Contract Manager select the partner for a contract. This functionality is provided in fact by a Field Control (see section *Field Controls*).

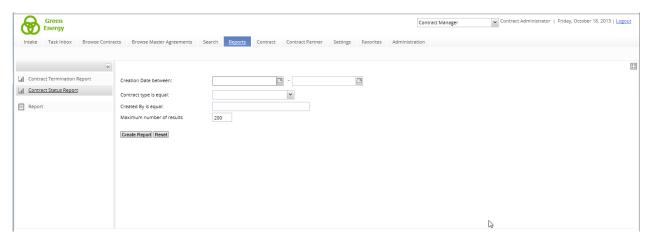


## Reports

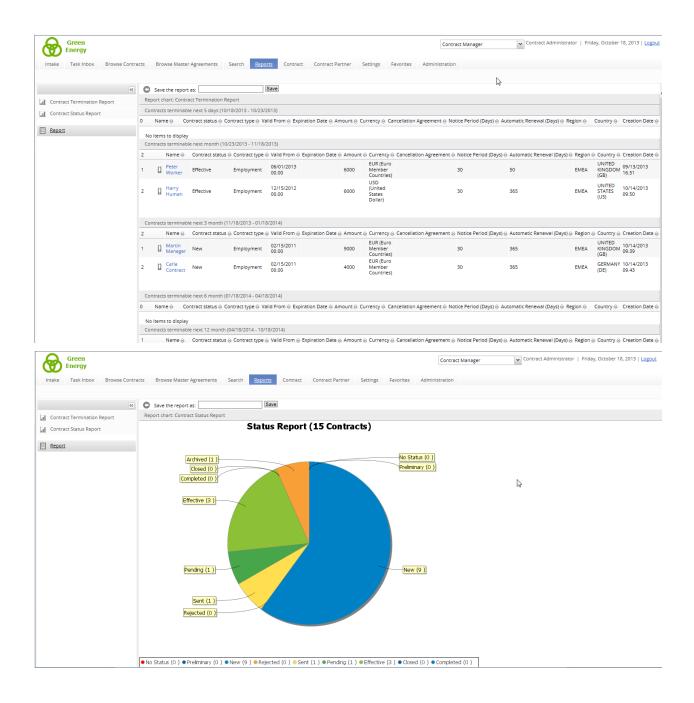
The module "Reports" (class com.alfresco.ow.server.plug.owreport.OwReportDocument) is used to search for contracts and contract documents using different search templates located under the path defined in the node SearchTemplatesName> and displays graphical representations of the search results, e.g. pie charts or columns.

Remark: this is only a sample how to integrate reporting functionality and the features are limited.





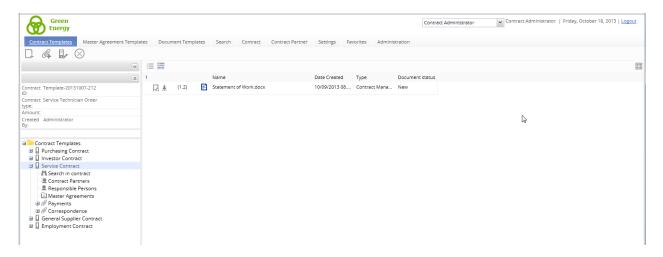
The search results are displayed as graphs based on property values as defined in the corresponding search template in the node <code><reportprops></code>. Exemplary reporting search templates can be found in the Contract Management Solution Template bundle under <code>C:/AlfrescoContractManagement/ABS/config/Workdesk/ContractManagement/owreport</code> templates.



# **Contract Templates**

### The module "Browse Contract Templates" (class

com.wewebu.ow.server.plug.owrecord.OwRecordDocument) is used to browse through, edit and create contract templates.



## **Create Contract Template**

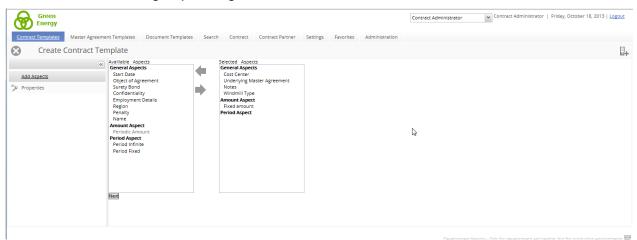
The function "Create Contract Template" (class

com.wewebu.ow.server.plug.owaddobject.OwAddObjectRecordFunction) is used to create new contract templates from which a user later can select one when he wants to create a new contract (see section *Create Contract*). The contract template types are defined in the <ObjectClassSelection> configuration node and contract administrators can only create contract templates from the type defined in this node.

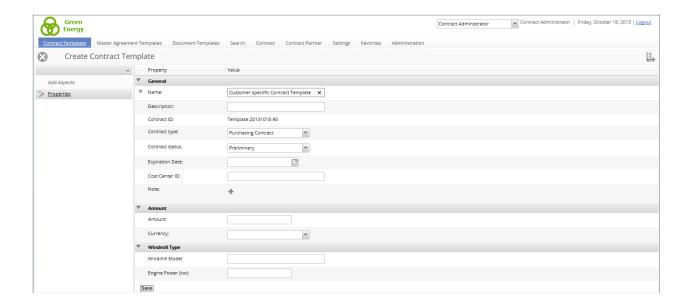
See in the following the steps necessary to create a new contract template:

By configuring the node <aspectsAssociations> it is possible to configure Aspects properties that are attached to the contract template depending on the selected contract type. Using the <DialogHandler> (class

com.alfresco.ow.server.plug.owrecordext.OwCreateContractDialogAddAspects) enables the contract administrator to select only mandatory Aspects properties for each contract template, whereas all Aspect properties available from the <a href="AspectsAssociations">AspectsAssociations</a> node can be added to groups using the subnode <a href="AssociationGroup">AssociationGroup</a>:



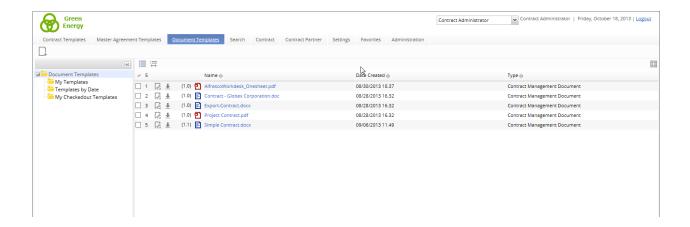
See in the following screenshot how to assign values to the selected properties:



# **Document Templates**

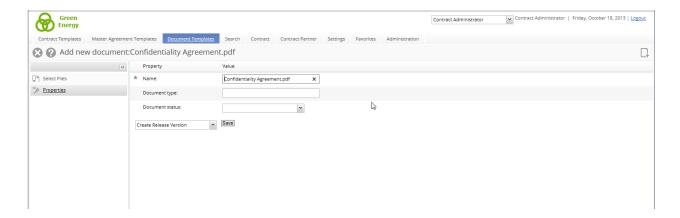
The module "Browse Document Templates" (class

com.wewebu.ow.server.plug.owrecord.OwRecordDocument) is used to browse, edit and create new document templates from which a user later can select one when he wants to create a new contract document.



# **Create Contract Template**

The function "Create Contract Template" is used to create new document templates from which a user later can select one when he wants to create a new contract document.



## Alfresco Folder Structure

The Contract Management Solution Template comes already with a ready to use pre-defined folder structure in the Alfresco repository.

## Activiti Workflows

The Contract Management Solution Templates comes with all Activiti workflow definitions and corresponding task models needed to implement the typical Contract Management processes (see section Contract lifecycle). All required process definitions and the Activiti task model are pre-configured and are coming with the Contract Management Solution Template. Depending on the business use cases those processes and models can be extended.

## **Future Plans**

Alfresco 4.2 (including Workdesk) will bring some new features that will help us to round-up the Contract Management Solution Template.

## Activiti Workflow

AlfrescoOne 4.2 will contain many improvements and enhancements of the Activiti API. We shall use them in order to improve the workflow based functionalities of the Solution Template.

Here is an outlook on the new features planned in Alfresco Workdesk 4.2:

- Enhanced Case Files
  - Tasks & Workflows available in a virtual Folder
  - Nested Case Files
  - Dynamic virtual Folders
- Activiti
  - Public Workflow API (no support for jBPM engine)
  - Improved searching & filtering of tasks
  - Business role based workflow
  - Dynamic assignee on initiate & Proxies
- Basic Reports & Charts
  - Improved Configuration

All these features are relevant and important for the Contract Management Solution Template!

Especially the implementation of activities as described in chapter *Contract Management for sales and purchasing* will be considerable improved as soon as Alfresco Workdesk 4.2 will be available.

Here a list of the improvements planned for the Contract Management Solution Template as it will be delivered with Alfresco Workdesk 4.2:

- Business role specific inbox view
  - All contract management related business roles have their business role based view of the inbox.
- Workflow selection list
  - Every business role can only select the workflows relevant in a certain step of the contract lifecycle
- Configurable reports
  - We will replace the fixed reports in the existing Solution Template with the configurable reports.

# **Records Management**

The execution of a contract often is supported or driven by typical Records Management functions. It is planned to support Alfresco Records Management 2.1 with Alfresco Workdesk 4.2.

- Leverage "Inplace Records" Link to the Fileplan
- Create Record
- Utilize Rules & Actions, e.g. add an Aspect
- Display Record data (e.g. Retention, Classification, ...)
- Display a Records View

With Alfresco Workdesk 4.2 all these functions will be also available for the Contract Management Solution Template.

## **Data Lists**

Today data lists have to be adapted directly in the XML files of the underlying Alfresco data model. With Alfresco Workdesk 4.2 it is planned to make the configuration more comfortable.

# A1. Contract Management Data Model

