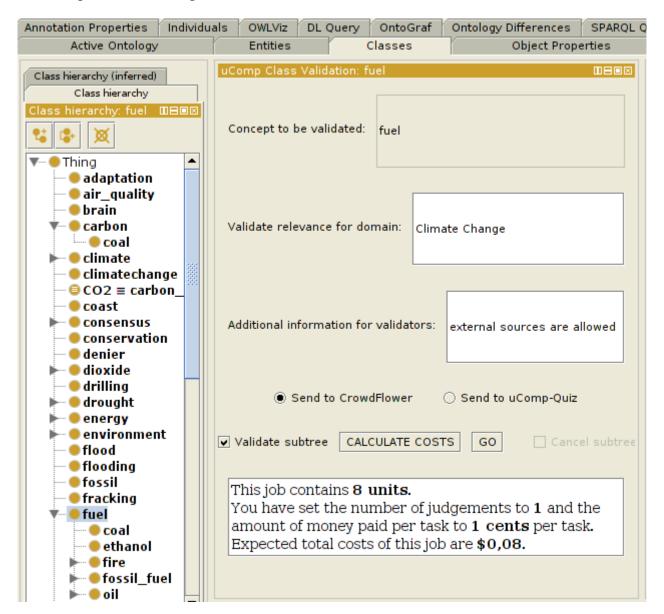
Current Crowdflower Plugin Functionality:

1. Verification of Domain Relevance:

Located in the Ucomp Class Validation View.

<u>Is a Concept relevant for a specific domain?</u>



Validating concept "fuel" against domain "Climate Change" with additional info "external sources are allowed"
Waiting for results from uComp API...please check again later...

Generating The Task

```
"key": "XJItUXEAA5xYfqhqNXrs",
     "task_title": "Check word relevance for a domain",
"task_type": "classification",
     "task_description": "Please decide whether the given word " +
     "(also known as concept) is relevant for the mentioned domain. " +
     "Generally, " + "relevant means that the word comes to ones mind when " +
     'thinking about that domain.
     Class Relevance Check:
     Your task is to decide if a given concept (also called class)
     is relevant for a given domain.
     Examples:
     Is racket relevant to the domain of tennis? - Correct answer: Yes
     Is game relevant to the domain of tennis? - Correct answer: Yes
     Is election relevant to the domain of politics? - Correct answer: Yes
Is racquet relevant to the domain of politics? - Correct answer: No
     Is party system relevant to the domain of politics? - Correct answer: Yes
     Is partysystem relevant to the domain of politics? - Correct answer: No,
     this is no English term!
     Sometimes there is no answer that is clearly correct, because the concept
     may be slightly relevant, too generic, or too specific.
     Examples:
     Is human relevant to the domain of politics? - Unclear, probably;
     Yes, but very generic.
     Is weather relevant to the domain of politics? - Unclear, probably:
     No, only slightly relevant.
     Is event relevant to the domain of politics? - Unclear, but probably:
     Please consult the Web or any external source for additional information
     you might need for completing this task
     (for example, checking the definition of climate related terms on Wikipedia)."
"task_mode": "crowdflower",
"judgements": "1",
     ''ts_default_categories''; {
     "1";, "Yes",
"2";, "No"
ֆ}<u>"</u>,
     "cf_channel"; "cf_internal"
     "cf_payment_per_assignment": "1"
```

generated JSON from the plugin this creates the job on crowdflower

A	В
Is the concept fuel relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept oil relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept tar relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept fire relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept burning relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept fossil_fuel relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept coal relevant for the domain Climate Change? Additional information: external sources are allowed	
Is the concept ethanol relevant for the domain Climate Change? Additional information: external sources are allowed	

locally generated csv file. This file will be sent to crowdflower to add data to the job and contains the necessary items for the task.

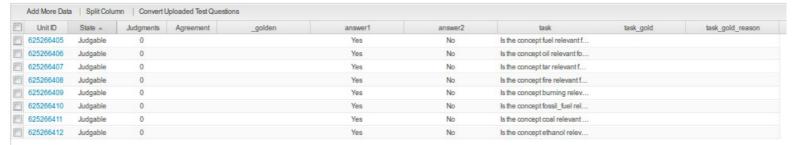
658951 | Check word relevance for a domain (i) 8 units, 0 judgments

Paused

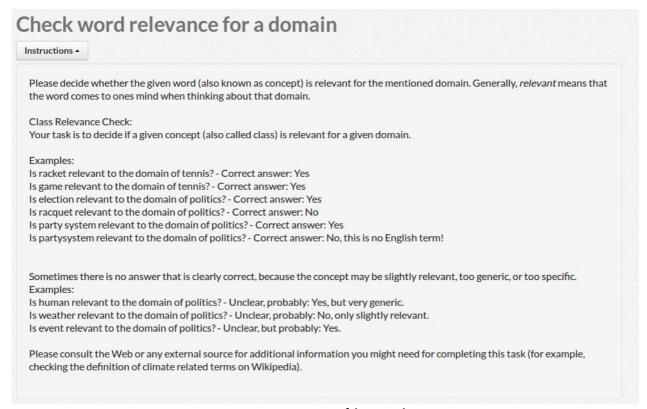


generated crowdflower task

Check word relevance for a domain ①



crowdflower job data (web view)



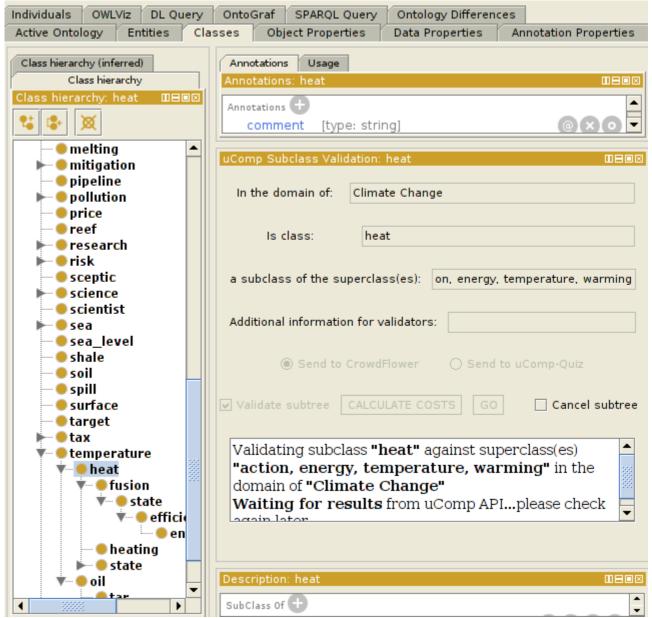
generated instructions

is the concept allowed	tuel relevant for the domain C	limate Change? Additional information: external sources ar
○ Yes		
O No		

generated question for crowdworkers

2. Verification of Relation Correctness - Subsumption

Located in the Ucomp SubClass Validation. Is a class a subclass of of another class?



Created a crowdflower task which is now waiting for the results

Not Launched



```
of"key":"XJItUXEAA5xYfqhqNXrs","task title":"Verify that a term is more specific than another",
    "task type": "classification", "task description": "Task: Your task is to decide if a term" +
" A is more specific than a term B.<br/>br><br/>dr>A term A (e.g., cat) is more specific than a term B" +
" (e.g., animal) if it can be said that <i>every A is a B</i>, but not the other way around." +
" Indeed, every cat is an animal but not every animal is a cat.<br><br>>If A (e.g., cat) " +
"is more specific than B (e.g., animal), we say that A is a subClass of B.<br/>br><br/>Attention! " +
"The order of the terms is important:<br><br><i>cat - is a a subClass of - animal</i> is TRUE" +
" because every cat is also an animal (cats are types of animals)<br><br><i>>ar><i>>animal - is a a " +
"subClass of - cat</i> is FALSE because not every animal is a cat (animals are not types of cats)" \pm
"<br/>br><br/>Examples: Is human a subClass of mammal? Correct answer: Yes<br/>br>Is human a subClass of car? " +
"Correct answer: No<br><br>>Is politician a subClass of human? Correct answer: Yes<br><br>Is water a " +
"subClass of liquid? Correct answer: Yes<br>Is water a subClass of car? Correct answer: No<br><br>Please " +
"consult the Web or any external source for additional information you might need for completing this task " +
"(for example, checking the definition of climate related terms on <u>Wikipedia</u>).",
    "task_mode":"crowdflower", "judgements":"1", "ts_default_categories"; {"1";"Yes", "2";"No"}, "ts_multiple_choice";"false", "cf_channel";"cf_internal", "cf_payment_per_assignment";"1"}
Response from server: {"success": "true", "job_id": 639, "crowdflower_id": 658972}
```

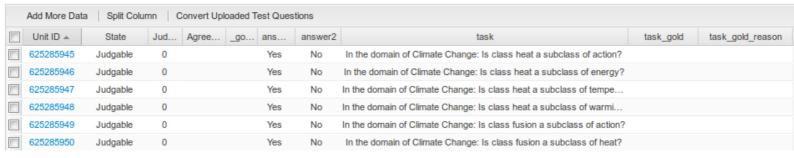
json call to the api to create the job

	A	В
1	In the domain of Climate Change: Is class heat a subclass of action?	
2	In the domain of Climate Change: Is class heat a subclass of energy?	
3	In the domain of Climate Change: Is class heat a subclass of temperature?	
4	In the domain of Climate Change: Is class heat a subclass of warming?	
5	In the domain of Climate Change: Is class fusion a subclass of action?	
6	In the domain of Climate Change: Is class fusion a subclass of heat?	
7	In the domain of Climate Change: Is class state a subclass of action?	
8	In the domain of Climate Change: Is class state a subclass of air_pollution?	
9	In the domain of Climate Change: Is class state a subclass of atmosphere?	
10	In the domain of Climate Change: Is class state a subclass of climate?	
11	In the domain of Climate Change: Is class state a subclass of consensus?	
12	In the domain of Climate Change: Is class state a subclass of drought?	
13	In the domain of Climate Change: Is class state a subclass of electricity?	
14	In the domain of Climate Change: Is class state a subclass of energy?	
15	In the domain of Climate Change: Is class state a subclass of environment?	
16	In the domain of Climate Change: Is class state a subclass of fusion?	
17	In the domain of Climate Change: Is class state a subclass of gas?	
18	In the domain of Climate Change: Is class state a subclass of heat?	
19	In the domain of Climate Change: Is class state a subclass of pollution?	
20	In the domain of Climate Change: Is class state a subclass of storm?	
21	In the domain of Climate Change: Is class efficiency a subclass of state?	
22	In the domain of Climate Change: Is class energy_efficiency a subclass of efficiency?	
23	In the domain of Climate Change: Is class heating a subclass of global_warming?	
24	In the domain of Climate Change: Is class heating a subclass of heat?	
25	In the domain of Climate Change: Is class heating a subclass of warming?	

locally generated csv file which contains the data of the job and gets sent to the api

Verify that a term is more specific than another ①





job data (web view)

Verify that a term is more specific than another Instructions -Task: Your task is to decide if a term A is more specific than a term B. A term A (e.g., cat) is more specific than a term B (e.g., animal) if it can be said that every A is a B, but not the other way around. Indeed, every cat is an animal but not every animal is a cat. If A (e.g., cat) is more specific than B (e.g., animal), we say that A is a subClass of B. Attention! The order of the terms is important: cat - is a a subClass of - animal is TRUE because every cat is also an animal (cats are types of animals) animal - is a a subClass of - cat is FALSE because not every animal is a cat (animals are not types of cats) Examples: Is human a subClass of mammal? Correct answer: Yes Is human a subClass of car? Correct answer: No Is politician a subClass of human? Correct answer: Yes Is water a subClass of liquid? Correct answer: Yes Is water a subClass of car? Correct answer: No Please consult the Web or any external source for additional information you might need for completing this task (for example, checking the definition of climate related terms on Wikipedia).

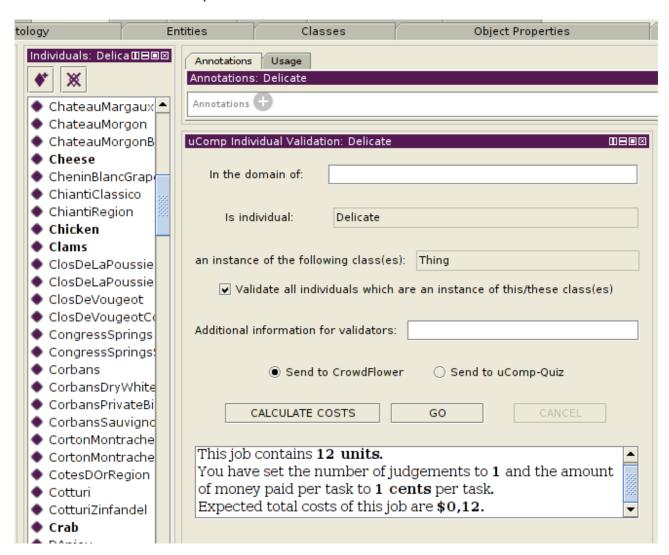
generated instructions

n the domaii	n of Climate Cha	nge: Is class heat	a subclass of energ	y?	
○ Yes					
O No					

generated task

3. Verification of Relation Correctness – InstanceOf

Located in the Ucomp individual validation view is an individual an instance of another class?



Generating a crowdflower job

```
{"key":"XJItUXEAA5xYfghgNXrs","task_title":"Verify that an individual has the " +
   "correct class type", "task_type":"classification",
        "task_description":"Task: Your task is to decide an term (thing) is " +
   "of a certain type (class).<br/>br>Examples: Is <br/>"'sb>Barack Obama</br>
   "b>president</br>
   "correct answer: Yes<br/>br>Is <br/>''sb>person</br>
   "correct answer: Yes<br/>br>Is <br/>''sb>Barack Obama</br>
   "b> a type of " +
   "'sb>location</br>
   "correct answer: No<br/>br>Is <br/>b>Roger Federer</br>
   "b> a type of " +
   "'sb>tennis player</b>
   Correct answer: Yes<br/>br>Is <br/>b>Roger Federer</br>
   "b> a type " +
   "of <br/>b>professional chess player</br>
   "b>? Correct answer: No<br/>br>Is <br/>''a type of <br/>b>soft drink</br>
   "b> Correct answer: Yes<br/>br>Is <br/>b>coa Cola</br>
   "b>person</br>
   "b> Correct answer: Yes<br/>br>Is <br/>''a type of additional information you might need for completing this task " +
   "(for example, checking the definition of climate related terms on Wikipedia).",
        "task_mode":"crowdflower", "judgements":"1", "ts_default_categories": {"1":"Yes", "2":"No"},
   "ts_multiple_choice":"false", "cf_channel":"cf_internal", "cf_payment_per_assignment":"1"}
```

json call to create the job

	A	В
1	In the domain of Food: Is Delicate a type of Thing?	_
2	In the domain of Food: Is Dry a type of Thing?	
3	In the domain of Food: Is Full a type of Thing?	
4	In the domain of Food: Is Light a type of Thing?	
5	In the domain of Food: Is Medium a type of Thing?	
6	In the domain of Food: Is Moderate a type of Thing?	
7	In the domain of Food: Is OffDry a type of Thing?	
8	In the domain of Food: Is Red a type of Thing?	
9	In the domain of Food: Is Rose a type of Thing?	
10	In the domain of Food: Is Strong a type of Thing?	
11	In the domain of Food: Is Sweet a type of Thing?	
12	In the domain of Food: Is White a type of Thing?	
13		

locally generated csv file with job data



Paused



created crowdflower job

Verify that an individual has the correct class type ①



Add More Dat	a Split Coli	umn Conver	t Uploade	d Test Questio	ns				
Unit ID ▲	State	Judgments	Agre	_golden	answ	answer2	task	task_gold	task_gold_reason
625296418	Judgable	0			Yes	No	In the domain of Food: Is Delicate a type of Thing?		
625296419	Judgable	0			Yes	No	In the domain of Food: Is Dry a type of Thing?		
625296420	Judgable	0			Yes	No	In the domain of Food: Is Full a type of Thing?		
625296421	Judgable	0			Yes	No	In the domain of Food: Is Light a type of Thing?		
625296422	Judgable	0			Yes	No	In the domain of Food: Is Medium a type of Thing?		
625296423	Judgable	0			Yes	No	In the domain of Food: Is Moderate a type of Thi		
625296424	Judgable	0			Yes	No	In the domain of Food: Is OffDry a type of Thing?		
625296425	Judgable	0			Yes	No	In the domain of Food: Is Red a type of Thing?		
625296426	Judgable	0			Yes	No	In the domain of Food: Is Rose a type of Thing?		
625296427	Judgable	0			Yes	No	In the domain of Food: Is Strong a type of Thing?		
625296428	Judgable	0			Yes	No	In the domain of Food: Is Sweet a type of Thing?		
625296429	Judgable	0			Yes	No	In the domain of Food: Is White a type of Thing?		

job data crowdflower (web view)

Verify that an individual has the correct class type

Instructions -

Task: Your task is to decide an term (thing) is of a certain type (class).

Examples: Is Barack Obama a type of president? Correct answer: Yes

Is Barack Obama a type of person? Correct answer: Yes

Is Barack Obama a type of location? Correct answer: No

Is Roger Federer a type of tennis player? Correct answer: Yes

Is Roger Federer a type of professional chess player? Correct answer: No

Is Coca Cola a type of soft drink? Correct answer: Yes

Is Coca Cola a type of person? Correct answer: No

Please consult the Web or any external source for additional information you might need for completing this task (for example, checking the definition of climate related terms on Wikipedia).

generated instructions

In the domain of Food: Is Delicate a type of Thing?

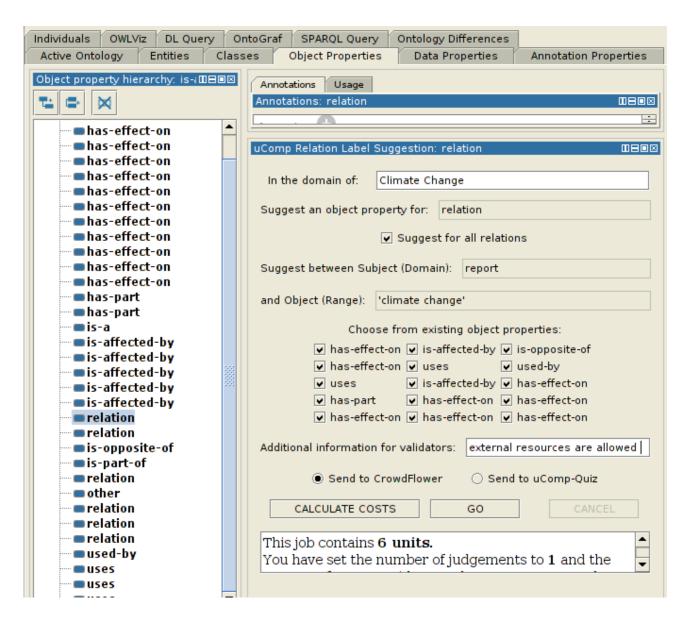
O Yes

O No

generated task for workers

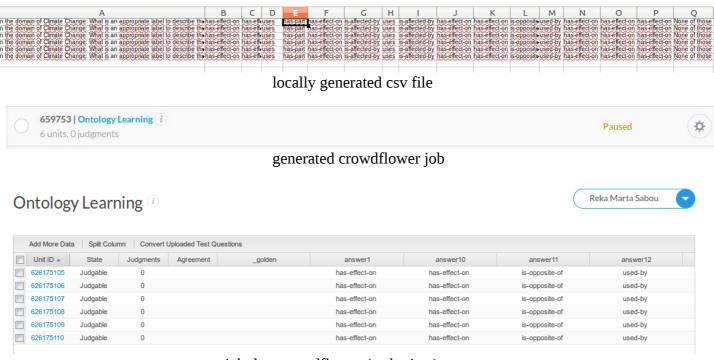
4. Specification of Relation Type:

Located in the Object Property Views with the name uComp Relation Label Suggestion. Assigns relation types to unlabeled object properties.

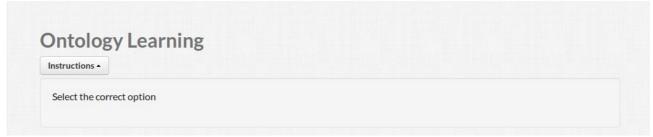


Generating the crowdflower job

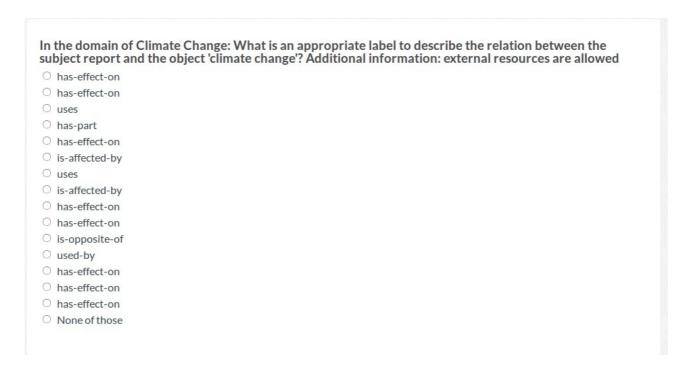
json call to create the crowdflower job



job data crowdflower (web view)



generated instructions

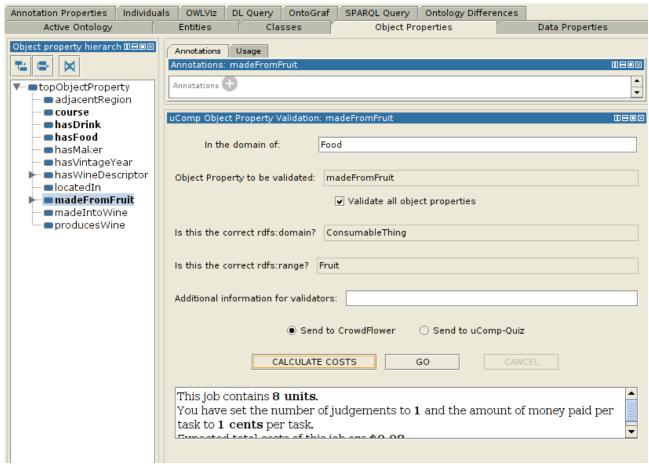


generated task for workers

5. Verification of Domain and Range:

Located in the Ucomp Object Property Validation view.

Verifies the correctness of domain and range restrictions. For each property two validation units are generated, one of the properteis domain, and one for the range axiom.



Generating the crowdflower job

```
[{"key":"XJItUXEAA5xYfghgNXrs","task_title":"Ontology Learning",
    "task_type":"classification", "task_description";"Select the correct option",
    "task_mode":"crowdflower", "judgements":"1",
    "ts_default_categories":={"1":"Yes", "2":"No"},
    "ts_multiple_choice":"false",
    "cf_channel":"cf_internal",
    "cf_payment_per_assignment":"1"}
```

json call to create the crowdflower job

	A
n the domain of Food	d: Is the subject of property course of type Meal?
	d: Is the object of property course of type MealCourse?
n the domain of Food	d: Is the subject of property hasDrink of type MealCourse?
n the domain of Food	d: Is the object of property hasDrink of type PotableLiquid?
n the domain of Food	d: Is the subject of property madeFromFruit of type ConsumableThing?
n the domain of Food	d: Is the object of property madeFromFruit of type Fruit?
n the domain of Food	d: Is the subject of property hasFood of type MealCourse?
n the domain of Food	d: Is the object of property has Food of type Edible Thing?

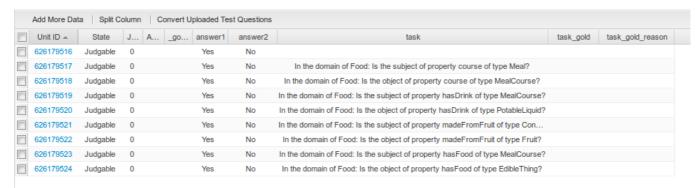
locally generated csv file



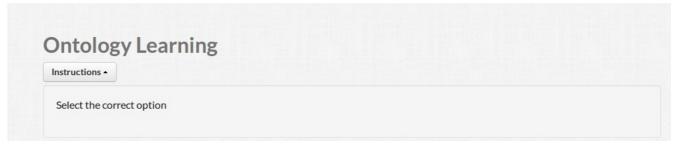
generated crowdflower job

Ontology Learning ①





job data crowdflower (web view)



generated instructions

In the domain of Food: Is the subject of property course of type Meal?

O Yes

O No

generated task for workers