Arvados - Feature #8501

[SDKs] Add client-side join switches to `arv foo list`

02/19/2016 05:00 PM - Joshua Randall

Status:	New		Start date:	02/19/2016
Priority:	Normal		Due date:	
Assigned To:			% Done:	0%
Category:	SDKs		Estimated time:	0.00 hour
Target version:	Arvados Future Sprints			

Description

It is possible to do client-side joins using the CLI, but it is very cumbersome, and is hard to write efficiently.

This is especially useful when dealing with links (as one rarely cares about the link itself, but rather wants to know something about the entities that are linked), but I think support should be generic and not specific to links.

For example, one might want to lookup collections having a particular tag and give the collection name and owner information. Today, one can accomplish this using the CLI using numerous invocations to `arv get` and `jq`:

```
$ for collection_uuid in $(arv link list -f '[["link_class","=","tag"],["head_kind","=","arvados#c
ollection"],["name","=","my_favorite_tag"]]' -s '["head_uuid"]' | jq -r '.items[].head_uuid'); do
collection_name=$(arv get "${collection_uuid}" | jq -r '.name') && collection_owner_uuid=$(arv get
 "${collection_uuid}" | jq -r '.owner_uuid') && owner_name=$(arv get "${collection_owner_uuid}" |
jq -r '.name') && owner_kind=$(arv get "${collection_owner_uuid}" | jq -r '.kind') && echo "${coll
ection_owner_uuid} "'{"collection_name":"'${collection_name}'","owner_name":"'${owner_name}'","own
er_kind":"'${owner_kind}'"}'; done
```

One way this could be made simpler would be by adding a "join" option for `arv foo list` along with having extended syntax for select and filter options that allow one to refer to columns namespaced to be within the joined objects.

An example of how an invocation might look:

```
arv link list -s '["collection.name", "owner.name", "owner.kind"]' -j '{"collection":"head_uuid","
owner":"collection.owner_uuid"}' -f '[["link_class","=","tag"],["head_kind","=","arvados#collectio
n"],["name","=","my_favorite_tag"]]'
```

History

#1 - 02/23/2016 04:21 PM - Brett Smith

- Subject changed from `arv foo list` client-side joins to [SDKs] Add client-side join switches to `arv foo list`

#2 - 02/23/2016 04:21 PM - Brett Smith

- Target version set to Arvados Future Sprints