

Arvados - Story #11836

[Nodemanager] Improve status.json for monitoring

06/08/2017 02:22 PM - Peter Amstutz

Status:	Rejected	Start date:	05/23/2018
Priority:	Normal	Due date:	
Assigned To:	Peter Amstutz	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:			

Description

11836-nodemanager-status-json

Example status.json

Lists node counts, information about node sizes, and individual node details.

```
{
  "nodes_down": 0,
  "status": "OK",
  "node_compute-ah091aeky2404it-zzzzz": null,
  "timestamp": "2017-06-08T14:26:19Z",
  "nodes_idle": 0,
  "nodes_wish": 4,
  "nodes_shutdown": 0,
  "nodes_booting": 0,
  "size_Standard_D3": {
    "nodes_down": 0,
    "disk": 200,
    "name": "Standard_D3",
    "nodes_unpaired": 2,
    "nodes_idle": 0,
    "ram": 3325,
    "price": 0.56,
    "bandwidth": 0,
    "nodes_shutdown": 0,
    "nodes_booting": 0,
    "nodes_busy": 0,
    "id": "Standard_D3"
  },
  "size_Standard_D4": {
    "nodes_down": 0,
    "disk": 400,
    "name": "Standard_D4",
    "nodes_unpaired": 0,
    "nodes_idle": 0,
    "ram": 6650,
    "price": 1.12,
    "bandwidth": 0,
    "nodes_shutdown": 0,
    "nodes_booting": 0,
    "nodes_busy": 0,
    "id": "Standard_D4"
  },
  "node_compute-sl0mohfw1i58uyx-zzzzz": {
    "state": [
      "unpaired",
      "closed",
      "boot wait",
      "idle exceeded"
    ],
    "arvados": null,
    "id": "compute-sl0mohfw1i58uyx-zzzzz",
```

```

    "size": "Standard_D3"
  },
  "servicetype": "arvados_nodemanager",
  "nodes_unpaired": 2,
  "nodes_max": 8,
  "hostname": "9294ee7bb1cf",
  "node_compute-a2x3cjc8fjzk8qz-zzzzz": null,
  "node_compute-jozp0dj520ovozp-zzzzz": {
    "state": [
      "idle",
      "closed",
      "boot wait",
      "idle exceeded"
    ],
    "arvados": {
      "status": "running",
      "first_ping_at": "2017-06-08T14:26:14.962205000Z",
      "modified_by_client_uuid": "zzzzz-ozdt8-obw7foaks3qjyej",
      "domain": false,
      "owner_uuid": "zzzzz-tpzed-d9tiejq69daie8f",
      "etag": "1d7e4jeyvufmpnr6vr4inin5l",
      "slot_number": 1,
      "crunch_worker_state": "idle",
      "ip_address": null,
      "properties": {
        "cloud_node": {
          "price": 0.56,
          "size": "Standard_D3"
        }
      }
    },
    "info": {
      "ec2_instance_id": "compute-jozp0dj520ovozp-zzzzz"
    },
    "kind": "arvados#node",
    "uuid": "zzzzz-7ekkf-jozp0dj520ovozp",
    "modified_by_user_uuid": "zzzzz-tpzed-d9tiejq69daie8f",
    "nameservers": [
      "192.168.1.1"
    ],
    "created_at": "2017-06-08T14:26:14.926534000Z",
    "hostname": "compute1",
    "modified_at": "2017-06-08T14:26:15.021194000Z",
    "href": "/nodes/zzzzz-7ekkf-jozp0dj520ovozp",
    "last_ping_at": "2017-06-08T14:26:14.962205000Z",
    "job_uuid": null
  },
  "id": "compute-jozp0dj520ovozp-zzzzz",
  "size": "Standard_D3"
},
"nodes_quota": 3,
"version": "0.1.20170608142355",
"node_compute-9qqojgiar0ezj2j-zzzzz": {
  "state": [
    "idle",
    "closed",
    "boot wait",
    "idle exceeded"
  ],
  "arvados": {
    "status": "running",
    "first_ping_at": "2017-06-08T14:26:14.993218000Z",
    "modified_by_client_uuid": "zzzzz-ozdt8-obw7foaks3qjyej",
    "domain": false,
    "owner_uuid": "zzzzz-tpzed-d9tiejq69daie8f",
    "etag": "5qi8mjmfuq5f3bjj8h7kh20x",
    "slot_number": 2,
    "crunch_worker_state": "idle",

```

```

    "ip_address": "127.0.0.1",
    "properties": {
      "cloud_node": {
        "price": 0.56,
        "size": "Standard_D3"
      }
    },
    "info": {
      "ec2_instance_id": "compute-9qqojgiar0ezj2j-zzzzz"
    },
    "kind": "arvados#node",
    "uuid": "zzzzz-7ekkf-9qqojgiar0ezj2j",
    "modified_by_user_uuid": "zzzzz-tpzed-d9tiejq69daie8f",
    "nameservers": [
      "192.168.1.1"
    ],
    "created_at": "2017-06-08T14:26:14.966885000Z",
    "hostname": "compute2",
    "modified_at": "2017-06-08T14:26:15.062881000Z",
    "href": "/nodes/zzzzz-7ekkf-9qqojgiar0ezj2j",
    "last_ping_at": "2017-06-08T14:26:14.993218000Z",
    "job_uuid": null
  },
  "id": "compute-9qqojgiar0ezj2j-zzzzz",
  "size": "Standard_D3"
},
"nodes_busy": 0
}

```

Subtasks:

Task # 11845: Review 11836-nodemanager-status-json

Closed

Related issues:

Related to Arvados - Story #11349: [Node Manager] Add status URL for node man...

Resolved

04/10/2017

Related to Arvados - Story #12085: Add monitoring/alarm for failed/slow job d...

Resolved

08/08/2017

History

#1 - 06/08/2017 02:29 PM - Peter Amstutz

- Description updated

#2 - 06/08/2017 02:41 PM - Nico César

Does this status.json queries the API server to get the information on the "arvados" key? or is something that is already stored in node manager?

we've talked about having 2 URLs (/status.json and /status-full.json)

https://dev.arvados.org/projects/ops/wiki/Status_URL_for_all_services#Improvements

The idea behind that is to have minimum impact on the service for a periodic status retrieve (every second or few second for example, and also save storage on the kibana side)

maybe per node detail isn't needed in the status.json.

#3 - 06/08/2017 03:14 PM - Peter Amstutz

Nico César wrote:

Does this status.json queries the API server to get the information on the "arvados" key? or is something that is already stored in node manager?

It is already stored in node manager.

we've talked about having 2 URLs (/status.json and /status-full.json)

https://dev.arvados.org/projects/ops/wiki/Status_URL_for_all_services#Improvements

That makes sense.

The idea behind that is to have minimum impact on the service for a periodic status retrieve (every second or few second for example, and also save storage on the kibana side)

For node manager, generating status.json is just turning cached dict into a json string, it doesn't wait for any other parts of the programs.

maybe per node detail isn't needed in the status.json.

Ok. However I think we do want these new fields in status.json: "status", "timestamp", "servicetype", "version", "nodes_max" and "nodes_quota".

#4 - 06/09/2017 01:19 PM - Peter Amstutz

- *Assigned To set to Peter Amstutz*

#5 - 06/13/2017 03:19 PM - Nico César

I'm looking at [1227ea2b5795e34a75c62cb9eae91d46ef7cfb6a](https://github.com/1227ea2b5795e34a75c62cb9eae91d46ef7cfb6a)

Once thinkg I notice is that we set updates["status"] = "OK", but if anything goes wrong we don't have a "ERROR" or "WARNING" that we can monitor. (of course stack traces end up in the log, but I'm talking about monitoring not about post-mortem)

So one option is to add more try:...except blocks and reflect that there is something with the creation of the status page (WARNING) or a major error that we should address (ERROR).

Any fatal() or warning() should be updating this on the status page too.

Adding a started_at with the GMT time when the daemon was started is a good thing

(added this to the doc)

#6 - 06/21/2017 06:37 PM - Peter Amstutz

- *Target version changed from 2017-06-21 sprint to Arvados Future Sprints*

#7 - 05/23/2018 03:03 PM - Tom Morris

- *Status changed from In Progress to Rejected*

#8 - 07/03/2018 03:58 PM - Tom Morris

- *Target version deleted (Arvados Future Sprints)*