

## Admins - Demande #1017

Anomalie # 978 (Fermé): remonté des alertes lorsqu'un service ou une machine est planté

### ajout d'une alerte zabbix via les API

11/10/2012 12:51 PM - Loïc Dachary

<b>Status:</b>	Fermé	<b>Start date:</b>	11/10/2012
<b>Priority:</b>	Immédiate	<b>Due date:</b>	11/11/2012
<b>Assignee:</b>	Loïc Dachary	<b>% Done:</b>	100%
<b>Category:</b>	Task	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Novembre 2012	<b>Spent time:</b>	3.70 hours
<b>Difficulté:</b>	2 Facile		

#### Description

Expérimentations avec [l'API zabbix](#)

## Utilisation

Ajout d'un host.

### Obtention du [token d'auth](#)

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"user.authenticate", "params":{"user":"admin", "password":"XXX"}, "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php {"jsonrpc":"2.0", "result":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2}
```

### Obtention de l'ID du [template](#)

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"template.get", "params":{"output":"extend", "filter":{"host":"Template_Linux"}}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php {"jsonrpc":"2.0", "result":{"10001":{"hostid":"10001", "proxy_hostid":"0", "host":"Template_Linux", "dns":"","useip":"0", "ip":"","port":"10050", "status":"3", "disable_until":"0", "error":"","available":"0", "errors_from":"0", "lastaccess":"0", "inbytes":"0", "outbytes":"0", "useipmi":"0", "ipmi_port":"623", "ipmi_authtype":"0", "ipmi_privilege":"2", "ipmi_username":"","ipmi_password":"","ipmi_disable_until":"0", "ipmi_available":"0", "snmp_disable_until":"0", "snmp_available":"0", "maintenanceid":"0", "maintenance_status":"0", "maintenance_type":"0", "maintenance_from":"0", "ipmi_ip":"","ipmi_errors_from":"0", "snmp_errors_from":"0", "ipmi_error":"","snmp_error":"","templateid":"10001"}}, "id":2}
```

### Obtention de l'ID du [groupe](#)

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"template.get", "params":{"output":"extend", "filter":{"host":"Linux servers"}}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php {"jsonrpc":"2.0", "result":[], "id":2}
```

### Creation du [host](#)

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"host.create", "params":{"host":"TEST1", "ip":"192.168.44.44", "port":10050, "useip":1, "groups":[{"groupid":2}], "templates":[{"templateid":10001}], "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php {"jsonrpc":"2.0", "result":{"hostids":["10075"]}, "id":2}
```

### [Import du host](#)

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"configuration.import", "auth":"9f50b272bd93ef2ca775a9565f7888d9", "id":2, "params":{"format":"xml", "rules":{"hosts":{"createMissing":true, "updateExisting":true}}, "templates":{"createMissing":true, "updateExisting":true}, "templateLinkage":{"createMissing":true}}, "source":"<?xml version=\\"1.0\\" encoding="
```

```
g="\UTF-8\"?> <zabbix_export> <version>2.0</version> <date>2012-11-17T21:23:31Z</date> <groups> <group> <name>Zabbix servers</name> </group> </groups> <hosts> <host> <host>HOST1</host> <name>HOST1</name> <proxy/> <status>0</status> <ipmi_authtype>-1</ipmi_authtype> <ipmi_privilege>2</ipmi_privilege> <ipmi_username/> <ipmi_password/> <templates> <template> <name>Template OS Linux</name> </template> </templates> <groups> <group> <name>Zabbix servers</name> </group> </groups> <interfaces> <interface> <default>1</default> <type>1</type> <useip>1</useip> <ip>127.0.0.1</ip> <dns/> <port>10050</port> <interface_ref>if1</interface_ref> </interface> </interfaces> <applications/> <items> </items> <discovery_rules/> <macros/> <inventory/> </host> </hosts> </zabbix_export>}}' http://127.0.0.1/zabbix/api_jsonrpc.php
```

## Installation

```
apt-get install rubygems
gem install zabcon
```

## Credentials

Dans [l'interface web](#) s'assurer que l'utilisateur a accès à l'API. Il y a une ligne **Api Access** et quand on click sur le lien **Users** sur la même ligne, on doit voir l'utilisateur qui va servir pour l'API.

## Configuration

```
cp /var/lib/gems/1.8/gems/zabcon-0.0.392/zabcon.conf.default ~/zabcon.conf
```

Edition pour ajouter (tout est en commentaire par défaut):

```
server[april][server]=http://192.168.1.33/zabbix/
server[april][username]=admin
server[april][password]=XXXXX
default_server=april
```

Attention: essayer de faire la même chose via la ligne de commande avec **login** comme par exemple:

```
ephedrine:/# ruby1.8 /var/lib/gems/1.8/bin/zabcon.rb --no-login -
Unable to find a default configuration file
i486-linux
Welcome to Zabcon. Build Number: 392
Use the command 'help' to get help on commands
-> login http://192.168.1.33/zabbix/ admin XXXX
WARNING: Initialization has changed, backwards compatability is being used.
WARNING: Use ZabbixAPI.new(url,:debug=>n,:returntype=>:result) to have the
WARNING: same capability as previous versions.
WARNING: This deprecated functionality will be removed in a future release
Runtime error detected
(NoMethodError): undefined method `[]=' for nil:NilClass
```

va échouer parceque **/var/lib/gems/1.8/gems/zabcon-0.0.392/.libs/zabbix\_server.rb** fait référence a un nom qui n'existe pas:

```
ServerCredentials.instance[@credentials["name"]]["auth"]=
@connection.auth
```

et qui correspond au nom **april** dans le fichier de conf. C'est un signe que zabcon n'est utilisé qu'avec un fichier de conf.

## Debug

### Zabcon tracker fermé

Probablement pour des questions d'anti-spam le tracker est fermé (on ne peut pas s'enregistré) donc il n'est pas possible de remonter un bug. Il faudrait contacter les auteurs mais on dirait que c'est pas super actif.

## Curl

Exemple de ligne de commande pour interagir avec l'API en direct:

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"user.authenticate", "params":{"user":"admin", "password":"XXXX"}, "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php
{"jsonrpc":"2.0","result":"08a3b7bd27b5d7bbfcc1e75111d75c16","id":2}
```

## Logs

Il n'y a pas de logs de l'API sur le serveur zabbix par défaut (peut-être augmenter la verbosité ?). On voit passer les requêtes dans les logs apache de l'interface web **tail -f /var/log/apache2/.log\*** qui se trouve sur le vserver dokuwiki de ns1.april.org dans **/var/www/april.lan/www/zabbix**

```
92.168.1.50 - - [11/Nov/2012:14:34:17 +0100] "POST /zabbix//api_jsonrpc.php HTTP/1.1" 200 39 "-" "Zbx Ruby CLI"
```

## History

### #1 - 11/10/2012 09:55 PM - Loïc Dachary

irc.freenode.net#zabbix

```
(12:54:00 PM) dachary: Hi, I would like to use puppet to add items/triggers to zabbix. Any suggestions as to where I could start reading about this ?
```

```
(12:54:58 PM) f0: dachary: http://www.zabbix.com/documentation/2.0/api
```

### #2 - 11/10/2012 09:56 PM - Loïc Dachary

- % Done changed from 0 to 10

Je préfère ruby parce que puppet est en ruby. Donc je tente d'abord l'option API implémenté en ruby et ça tombe bien parce que c'est la seule API qui semble avoir une command line.

Installation de zabcon.

<http://trac.red-tux.net/>

```
ephedrine:~# apt-get install rubygems
```

```
...
```

```
ephedrine:~# gem install zabcon
```

### #3 - 11/11/2012 12:47 AM - Loïc Dachary

Quid d'un upgrade vers zabbix-2.0.x ? irc.freenode.net#zabbix says:

```
(09:33:24 PM) dachary: volter: I guess my question is about how safe an upgrade from 1.8.x to 2.0.x is. It is 100% safe and moron proof ? Or does it require some kind of plan.
```

```
(09:57:40 PM) Richlv: some plan. and a backup.
```

```
(10:01:35 PM) Steki: and most of your templates will not work correctly
```

```
(10:01:45 PM) Steki: or better say they will but new functionality will not
```

```
(10:01:52 PM) Steki: so plan ahead
```

```
(10:50:00 PM) volter: dachary: Some items were dropped in 2.0, so you might also see that.
```

```
(10:50:23 PM) volter: If you use DM, be aware you must upgrade other nodes or proxies as well.
```

### #4 - 11/11/2012 10:33 AM - Loïc Dachary

browse les [release notes](#) et recherche les améliorations d'API pour voir s'il est mieux de partir sur 2.0 ou pas.

- <http://www.zabbix.com/documentation/1.8/api>
- <http://www.zabbix.com/documentation/2.0/manual/appendix/api/api>
- support de zabbix API 2.0 avec ruby <https://groups.google.com/forum/?fromgroups=#!topic/zabcon/ldq2awH78SI>  
Lecture de la [documentation de zabcon](#)

### #5 - 11/11/2012 02:14 PM - Loïc Dachary

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"user.authenticate", "params":{"user":"admin", "password":"XXXX"}, "id":2 }' http://127.0.0.1:8080/zabbix//api_jsonrpc.php
```

```
{"jsonrpc":"2.0","error":{"code":-32602,"message":"Invalid params.,"data":"No API access"},"id":2}
```

C'est parceque l'utilisateur n'a pas les droits d'accès à l'API, bien qu'il soit admin comme on le voit dans "l'interface de gestion des utilisateurs": <http://127.0.0.1:8080/zabbix/usergrps.php>

#### #6 - 11/11/2012 02:56 PM - Loïc Dachary

- % Done changed from 10 to 50

#### #7 - 11/11/2012 03:02 PM - Vincent-Xavier JUMEL

Visiblement, Wheezy contiendra encore la version 1.8 de Zabbix

([source](#))

On peut backporter une version 2.0 depuis sid

([source](#))

#### #8 - 11/11/2012 03:47 PM - Loïc Dachary

Pour avoir la liste des commandes zabcon **help commands**. Mais ça ne dit pas ce que ça fait ni quels sont les arguments. Pour avoir la liste des hosts c'est **get host** alors que la fonction d'API correspondante est [host.get](#). Je laisse tomber zabcon parcequ'il me faudrait lire le code pour arriver à l'utiliser de la façon la plus simple.

En utilisant curl (voir plus haut pour l'obtention du token **auth**):

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"host.get", "params":{"filter":{"host":["host_ns1"]},"output":"extend"}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix/api_jsonrpc.php
{"jsonrpc":"2.0","result":[{"hostid":"10047","proxy_hostid":"0","host":"host_ns1","dns":"","useip":"1","ip":"192.168.1.254","port":"10050","status":"0","disable_until":"0","error":"","available":"1","errors_from":"0","lastaccess":"0","inbytes":"0","outbytes":"0","useipmi":"0","ipmi_port":"623","ipmi_authtype":"-1","ipmi_privilege":"2","ipmi_username":"","ipmi_password":"","ipmi_disable_until":"0","ipmi_available":"0","snmp_disable_until":"0","snmp_available":"0","maintenanceid":"0","maintenance_status":"0","maintenance_type":"0","maintenance_from":"0","ipmi_ip":"","ipmi_errors_from":"0","snmp_errors_from":"0","ipmi_error":"","snmp_error":""}], "id":2}
```

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"host.exists", "params":{"hostid":"10047"}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix/api_jsonrpc.php
{"jsonrpc":"2.0","result":true,"id":2}
```

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"template.get", "params":{"output":"extend", "filter":{"host":"Template_Linux"}}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix/api_jsonrpc.php
{"jsonrpc":"2.0","result":{"10001":{"hostid":"10001","proxy_hostid":"0","host":"Template_Linux","dns":"","useip":"0","ip":"","port":"10050","status":"3","disable_until":"0","error":"","available":"0","errors_from":"0","lastaccess":"0","inbytes":"0","outbytes":"0","useipmi":"0","ipmi_port":"623","ipmi_authtype":"0","ipmi_privilege":"2","ipmi_username":"","ipmi_password":"","ipmi_disable_until":"0","ipmi_available":"0","snmp_disable_until":"0","snmp_available":"0","maintenanceid":"0","maintenance_status":"0","maintenance_type":"0","maintenance_from":"0","ipmi_ip":"","ipmi_errors_from":"0","snmp_errors_from":"0","ipmi_error":"","snmp_error":"","templateid":"10001"}}, "id":2}
```

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"template.get", "params":{"output":"extend", "filter":{"host":"Linux servers"}}, "auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix/api_jsonrpc.php
{"jsonrpc":"2.0","result":[],"id":2}
```

```
curl -H content-type:application/json --data '{ "jsonrpc":"2.0", "method":"host.create", "params":{"host":"TEST1","ip":"192.168.44.44","port":10050,"useip":1,"groups":[{"groupid":2}],"templates":[{"templateid":10001}],"auth":"a74d1f3f4c4e83ac2a6bbe704a49bc6", "id":2 }' http://127.0.0.1:8080/zabbix/api_jsonrpc.php
{"jsonrpc":"2.0","result":{"hostids":["10075"]}, "id":2}
```

#### #9 - 11/11/2012 04:15 PM - Loïc Dachary

- Status changed from Nouveau to Fermé

- % Done changed from 50 to 100

#### #10 - 11/26/2012 11:27 PM - Loïc Dachary

- Priority changed from Normale to Immédiate