

Procedimiento para agregar un nuevo dispositivo en opConfig

Propósito

Se desea extraer la ejecución del comando **cmd8e1 -temperature** en cada uno de los RTGs , esto durante cada hora y que se alerte si hay algún cambio en el threshold que el cliente proporcionarán para cada equipo en específico. De igual forma, desean graficar los datos.

Requisito

Ya se puede acceder a cada uno de los equipos vía consola y ejecutar el comando mencionado:

```
[root@cc_Opmantek ~]# ssh root@192.168.83.131
root@192.168.83.131's password:
Last login: Mon May 20 10:02:03 2019 from 172.24.249.14
root@cdcarmen_rtg8_1 ~ # cmd8e1 -temperature
[cmd8e1] Ambient temperature : 28°C
[cmd8e1] CPU temperature : 26°C
```

Configuración

A continuación, desarrollaremos los pasos a seguir para implementar un plugin en opConfig:

1.- Antes de agregar los equipos a NMIS, comprobamos que sí tenemos acceso vía SSH con las credenciales correspondientes (en donde nos aparece el mensaje 'Are you sure...' escribimos **yes** y damos enter):

```
[root@cc_Opmantek ~]# ssh root@192.168.87.12
The authenticity of host '192.168.87.12 (192.168.87.12)' can't be established.
RSA key fingerprint is bb:a4:ef:36:35:d5:8d:a7:0e:a8:42:b3:58:1f:50:f7.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.87.12' (RSA) to the list of known hosts.
root@192.168.87.12's password:
root@REY_rtg8_1 ~ #
```

2.- Agregamos los equipos a NMIS y, en opConfig, importamos los equipos desde NMIS:

Equipo e Información IP							Add Node	Import new Nodes from NMIS	Refresh all Nodes from NMIS
10	records per page								
Nombre	Grupo	Ubicacion	Cliente	BusinessService	Nodo	Direcciones			
PDN_rtg8_1	RTGs	Cloud	Opmantek		192.168.88.2	192.168.88.2, 192.168.86.66			
PDN_rtg8_2	RTGs	Cloud	Opmantek		192.168.88.3	192.168.88.3, 192.168.86.67			
REY_rtg8_1	RTGs	Cloud	Opmantek		192.168.87.12	192.168.87.12, 192.168.86.6			
REY_rtg8_2	RTGs	Cloud	Opmantek		192.168.87.9	192.168.87.9, 192.168.86.7			
SLP_rtg16_1	RTGs	Cloud	Opmantek		192.168.82.139	192.168.82.139, 192.168.85.166			
SLP_rtg16_2	RTGs	Cloud	Opmantek		192.168.82.140	192.168.82.140, 192.168.85.170			
cdcarmen_rtg8_1	RTGs	Cloud	Opmantek		192.168.83.131	192.168.83.131, 192.168.85.227			
cdcarmen_rtg8_2	RTGs	Cloud	Opmantek		192.168.83.132	192.168.83.132, 192.168.85.226			
celaya_rtg8_1	RTGs	Cloud	Opmantek		192.168.91.4	192.168.91.4, 192.168.85.112			
celaya_rtg8_2	RTGs	Cloud	Opmantek		192.168.91.5	192.168.91.5, 192.168.85.113			

Showing 1 to 10 of 33 entries

Previous 1 2 3 4 Next

3.- Agregamos las credenciales en opConfig > Edit Credential Sets y guardamos.

Nombre	RTGs	?
Descripcion	Credenciales para el grupo RTGs	?
User Name	root	?
Codigo de Acceso	...	?
Current State: Set		
Password (Superuser/Privileged/Enable)	Enter New Password (Superuser/Privileged/Enable)	?
Current State: Not Set!		
Automatically Privileged	No	?
SSH Key	Enter New SSH Key	?
Current State: Not Set!		

4.- Después, en /usr/local/omk/conf/OS_Rules.nmis aplicamos una regla para los nuevos equipos, usando los datos que aparecen en NMIS:

Type	server
Model	net-snmp
Uptime	232 days, 12:58:05
Location	Unknown
Contact	System Administrator
Description	Linux cdcarmen_rtg8_1 2.2.25 #7 SMP Mon Aug 13 14:24:02 CEST 2007 i686

Y el campo 'Personality' que detecta en opConfig:

Personality	bash	?
-------------	------	---

```
120 => {  
    'IF' => {  
        'nodeVendor' => qr/net-snmp/  
        'sysDescr' => 'Linux cdcarmen_rtg8',  
    },  
    'SET' => {  
        'os_info.os' => 'LinuxRTG',  
        'connection_info.personality' => 'bash',  
        BREAK => 'true',  
    }  
},
```

5.- Después, creamos un nuevo archivo en /usr/local/omk/conf/command_sets.d/linuxrtg.nmis con el comando que se va a ejecutar, en este caso será cada hora:

```

# command sets for RTGs-linux systems

%hash = (


    #LINUXRTGS_HOURLY' => {
    'collect_with_plugin' => {
        'os_info' => {
            'os' => '/(LinuxRTG)/'
        },
        'purging_policy' => {
            'keep_last' => 1000,
            'purge_older_than' => 2592000, # 30 days
            'autoprotect_first_revision' => 'true',
        },

        'scheduling_info' => {
            'run_commands_on_separate_connection' => 'false',
        },
        'commands' => [
            {
                'privileged' => 'false',
                'command' => 'cmd8e1 -temperature',
                '#tags' => [ 'HOURLY', 'temperatura', 'detect-change', 'report-change' ],
                'tags' => [ 'HOURLY', 'temperatura', 'detect-change'],
                '#use_collection_plugin' => "RTGPlugin",
            },
        ],
    },
);

```

6.- Una vez que tengamos todo listo, configuramos cada uno de los nodos en opConfig con los datos que hemos colocado en los dos archivos anteriores:

Editar equipo : cdcarmen_rtg8_1

 Ajustes

General

Conexion

Info OS


Activacion/Licenciamiento

Comentarios

Detalles

Personality	bash	▼ ?
Transport	SSH	▼ ?
Credential Set	RTGs	▼ ?
Privileged Paging	No	▼ ?
Device Preset	Undefined	▼ ?
Line Endings	Line Endings	?
Default Continuation	Default Continuation	?
Connect Options	Connect Options	?

Editar equipo : cdcarmen_rtg8_1

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Detalles

Os	LinuxRTG	?
Version	2.2.25	?
Mayor	2.2	?
Train	#7 SMP Mon Aug 13 14:24:02 CEST 2007	?
Platform	i686	?
Image	Image	?
Featureset	Featureset	?

*Modificamos el Os a LinuxRTG como lo hemos puesto en ambos archivos.

7.- Ahora, en consola aplicamos un `run_command_sets` para comprobar que se ejecute el comando deseado:

```
[root@cc_Opmantek ~]# /usr/local/omk/bin/opconfig-cli.exe act=run_command_sets node=cdcarmen_rtg8_1 debug=true
```

opconfig-cli.pl Version 3.1.0

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Internal NOC, Mexico City

```
[Fri May 17 17:48:43 2019] [info] cli[15139] opconfig-cli running command sets, with mthread=1, max_procs=10
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/asa.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/externals.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/extremexos.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/file_store.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/fortinet.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/ios.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/iosxe.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/iosxr.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/juniper.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/linuxrtg.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/mikrotik.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/nxos.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/qnap.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/redback.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Loading command sets from /usr/local/omk/conf/command_sets.d/screenos.nmis
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Found suitable plugin HighBandwidthPlugin
```

```
[Fri May 17 17:48:43 2019] [error] cli[15139] Ignoring plugin RTGPlugin.pm: doesn't have correct "package" declaration
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] starting run_and_store_commands for node cdcarmen_rtg8_1 and commands cmd8e1 - temperature
```

```
[Fri May 17 17:48:43 2019] [debug] cli[15139] Getting session for node cdcarmen_rtg8_1
```

```
[Fri May 17 17:48:44 2019] [debug] cli[15139] run_and_store_command: Running command "cmd8e1 -temperature" on cdcarmen_rtg8_1 (192.168.83.131)
```

```
[Fri May 17 17:48:44 2019] [debug] cli[15139] Storing first revision for cdcarmen_rtg8_1 (192.168.83.131), command "cmd8e1 -temperature"
```

```
[Fri May 17 17:48:44 2019] [debug] cli[15139] run_and_store_commands node cdcarmen_rtg8_1 done, result success
```

```
[Fri May 17 17:48:44 2019] [debug] cli[15139] run_many_commands is done, waiting for children to finish
```

```
[Fri May 17 17:48:44 2019] [debug] cli[15139] found child process 15141 has finished with status 65280
```

8.- Y comenzaremos a ver el comando requerido en opConfig (el cual se ejecutará cada hora):

Recent Config Changes		
Detected At	Node	Changes
2019-05-17T17:48:43-0500	cdcarmen_rtg8_1	0

Recent Commands			
Last Touch	Node	Command	Revision
2019-05-17T17:48:43-0500	cdcarmen_rtg8_1	cmd8e1 -temperature	1