

Monitorando um Equipamento via Zabbix com Simple Check

INTRODUÇÃO:

Muitas vezes precisamos realizar a checagem de embarcados como catracas, no-break, cameras de vigilância, painéis de senhas, etc, ou seja equipamentos que muitas vezes não vem com suporte a SNMP e não suportam a instalação de um agente. Em outras situações precisamos monitorar se determinados serviços estão em execução, como SMTP, FTP, IMAP, POP3, SSH, HTTP, etc.

Para estes casos o Zabbix possibilita o uso de Simple Checks, checagens que não necessitam de SNMP e nem de agentes instalados, checagens que nos retornam "sim" ou "não", 0 ou 1.

Neste tutorial utilizei a distribuição CentOS, mas os procedimentos são genéricos, com exceção da instalação do fping.

PRÉ-REQUISITOS:

O único pré-requisito necessário é a instalação do fping no Servidor Zabbix.

INSTALAÇÃO DO FPING:

```
# yum -y install fping
```

Verifique se o fping possui permissão para o root e a flag SUID habilitada:

```
# ls -las /usr/sbin/fping
24 -rwsr-xr-x 1 root root 23468 Jul 30 2007 /usr/sbin/fping
```

Se for necessário alterar:

```
# chown root:root /usr/sbin/fping
# chmod a+s /usr/sbin/fping
```

TESTANDO O FUNCIONAMENTO DO COMANDO:

```
# /usr/sbin/fping IP
```

A resposta deve ser:

```
IP is alive
```

CONFIGURANDO O ZABBIX SERVER.CONF:

```
# vi /etc/zabbix/zabbix_server.conf
```

Descomente a linha abaixo:

```
FpingLocation=/usr/sbin/fping
```

Reinicie o processo do zabbix_server:

```
# ps -aux | grep zabbix_server
```

```
# kill -15 PID do primeiro processo
```

```
# /etc/zabbix/zabbix_server
```

CONFIGURANDO O SIMPLE CHECK DE UM HOST:

Configuration // Hosts // Create Host

Name: Nome do Host

Groups: Grupo do Host

DNS name: Nome DNS

IP address: IP do Host

Connect to: IP address

Zabbix agent port: 0

Status: Monitored

Linked templates: Template_Standalone

ZABBIX Help | Get support | Print | Profile | Logout

Monitoring | Inventory | Reports | **Configuration** | Administration

Host groups | Templates | **Hosts** | Maintenance | Web | Actions | Screens | Slides | Maps | Discovery | IT services | SEARCH:

History: Configuration of actions » Notification report » Hosts » Latest events » Hosts

CONFIGURATION OF HOSTS

Host

Name:

In groups:

Other groups:

Groups:

DNS name:

IP address:

Connect to:

Zabbix agent port:

Monitored by proxy:

Status:

Use IPMI:

Save Cancel

Linked templates

Template_Standalone

Add Unlink Unlink and clear

Macros

Macro	Value
<input type="checkbox"/> {\${MACRO}}	- <Value>

Add Delete selected

Profile

Use profile

Extended host profile

Use extended profile

Zabbix 1.8.5 Copyright 2001-2011 by SIA Zabbix | Connected as 'Admin'

Configuration // Hosts

Na linha do host catraca, clique em **Graphs**

Create Graph

Name: Ping

Items: Catraca: ICMP ping

Clique em **Save**

The screenshot shows the Zabbix web interface. At the top left is the ZABBIX logo. The navigation menu includes Monitoring, Inventory, Reports, Configuration, and Administration. The 'Configuration' menu is expanded, showing Host groups, Templates, Hosts, Maintenance, Web, Actions, Screens, Slides, Maps, Discovery, and IT services. A search bar is on the right. The breadcrumb trail is: History: Notification report >> Hosts >> Latest events >> Hosts >> Configuration of graphs. The main heading is 'CONFIGURATION OF GRAPHS'. A 'Graph' configuration dialog box is open, showing the following settings:

- Name: Ping
- Width: 900
- Height: 200
- Graph type: Normal
- Show working time:
- Show triggers:
- Percentile line (Left):
- Percentile line (Right):
- Y axis MIN value: Calculated
- Y axis MAX value: Calculated
- Items: [Catraca: ICMP ping](#) avg Simple Left Gradient line

Buttons at the bottom of the dialog are 'Add', 'Delete selected', 'Preview', 'Save', and 'Cancel'. Below the dialog is a preview of the graph titled 'Ping (1h)'. The y-axis ranges from 0.6 to 1.2. A single green bar is visible on the right side of the graph, representing the data point for the selected item.

Monitoring // Graphs

Group: Grupo que o host faz parte

Host: Catraca

Graph: Ping



Ping

Group Windows servers Host Catraca Graph Ping

Filter

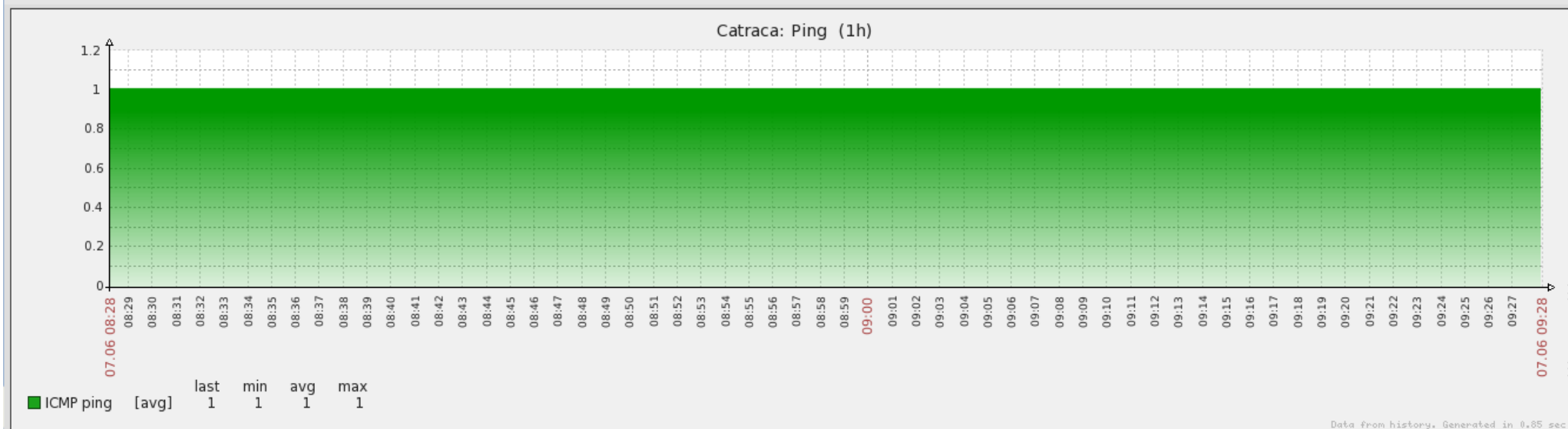
Zoom: 1h 2h 3h 6h 12h All

07.06.2011 08:28 - 07.06.2011 09:28 (now!)



« 12h 1h | 1h 12h »»

01h 00m (fixed)



Exemplo de gráfico de Ping da catraca

CRIANDO O GRÁFICO PARA RESPOSTA DO PING EM MILISEGUNDOS:

Além de monitorar o estado da conexão é interessante também monitorar a resposta em milisegundos do ping, isto pode ser usado inclusive para monitorar a qualidade do sinal da sua rede sem fio ;-)

CRIANDO UM ITEM PARA MONITORAR A RESPOSTA DO PING EM MILISEGUNDOS:

Configuration // Hosts

Na linha do host catraca, clique em **Items**

Clique no item **Template_Standalone:ICMP ping**

Clique em **Clone**

Faça as seguintes alterações:

Description: ICMP ping ms

Key: icmpingsec

Type of information: Numeric (float)

Marque a opção "Use custom multiplier" e preencha com valor "1000"

Clique em **Save**

The screenshot shows the Zabbix web interface for configuring a new item. The breadcrumb trail is: Hosts >> Configuration of graphs >> Latest events >> Hosts >> Configuration of items. The page title is 'CONFIGURATION OF ITEMS' with a 'Create Item' button. The main form is titled 'Item "Catraca : ICMP ping ms"'. The configuration fields are as follows:

Host	Catraca	Select
Description	ICMP ping ms	
Type	Simple check	
Key	icmpingsec	Select
Type of information	Numeric (float)	
Units		
Use custom multiplier	<input checked="" type="checkbox"/>	1000
Update interval (in sec)	30	
Flexible intervals (sec)	No flexible intervals	
New flexible interval	Delay: 50	Period: 1-7,00:00-23:59
	Add	
Keep history (in days)	90	Clear history
Keep trends (in days)	365	
Status	Active	
Store value	As is	
Show value	Service state	show value mappings
New application		
Applications	-None-	
	Save Clone Delete Cancel	
Group	Discovered Hosts	
	Add to group	Do

Precisamos alterar o Custom multiplier para 1000 pois o fping responde em Milissegundos e o icmpingsec como o próprio nome já diz responde em Segundos, por isso precisamos multiplicar por 1000, para recebermos o valor correto nos gráficos.

CRIAR UM GRÁFICO COM O NOVO ITEM:

Configuration // Hosts

Na linha do host catraca, clique em **Graphs**

Create Graph

Name: Ping ms

Items: Catraca: ICMP ping ms

Clique em **Save**

The screenshot shows the Zabbix web interface. At the top left is the ZABBIX logo. The navigation menu includes Monitoring, Inventory, Reports, Configuration, and Administration. The Configuration menu is expanded, showing Host groups, Templates, Hosts, Maintenance, Web, Actions, Screens, Slides, Maps, Discovery, and IT services. A search bar is on the right. The breadcrumb trail is: History: Custom graphs >> Hosts >> Configuration of items >> Hosts >> Configuration of graphs. The main heading is CONFIGURATION OF GRAPHS. A modal window titled 'Graph "Ping ms"' is open, showing the following configuration:

Name	<input type="text" value="Ping ms"/>
Width	<input type="text" value="900"/>
Height	<input type="text" value="200"/>
Graph type	Normal
Show working time	<input type="checkbox"/>
Show triggers	<input type="checkbox"/>
Percentile line (Left)	<input type="checkbox"/>
Percentile line (Right)	<input type="checkbox"/>
Y axis MIN value	Calculated
Y axis MAX value	Calculated
Items	<input type="checkbox"/> Catraca: ICMP ping ms avg Simple Left Gradient line <input checked="" type="checkbox"/>

Buttons at the bottom of the modal: Add, Delete selected, Preview, Save, Clone, Delete, Cancel.

Below the modal is a preview graph titled 'Ping ms (1h)'. The y-axis ranges from 15 to 30. A single green data point is visible at approximately x=50, y=28.

Monitoring // Graphs

Group: Grupo que o host faz parte

Host: Catraca

Graph: Ping ms



Ping ms

Group Windows servers | Host Catraca | Graph Ping ms

Filter

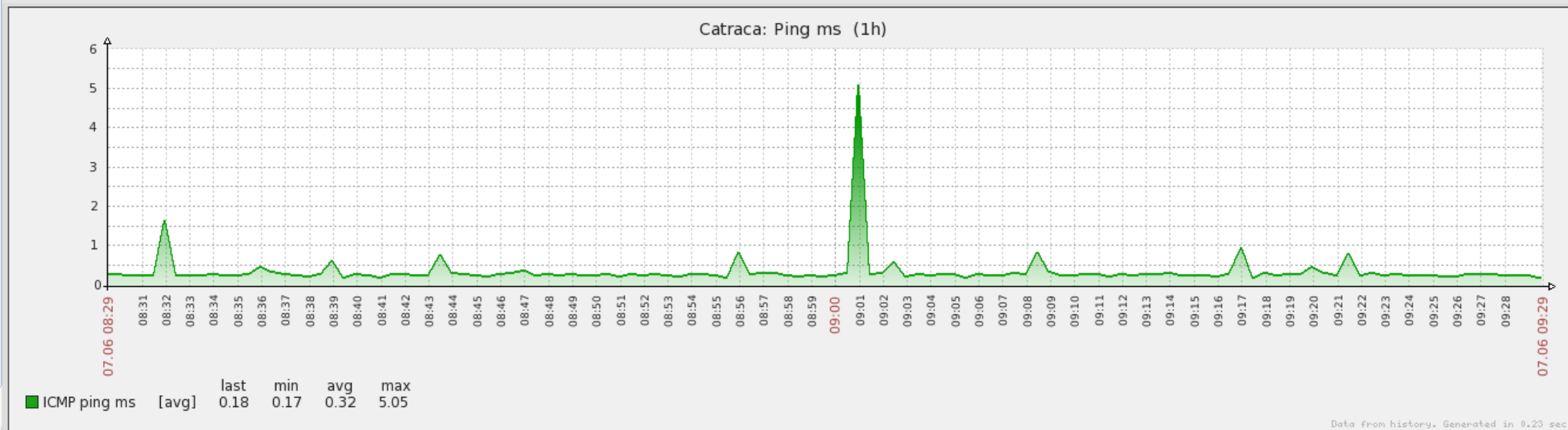
Zoom: 1h 2h 3h 6h 12h All

07.06.2011 08:29 - 07.06.2011 09:29 (now!)



« 12h 1h | 1h 12h »»

01h 00m (fixed)



Exemplo de gráfico de tempo de resposta em ms do ping da catraca.

Agradecimentos ao Redhate (Luiz Sales), que me deu a dica do fping e me disse que dava para pegar também o tempo de resposta. O parâmetro icmpingsec foi encontrado no forum do Zabbix.

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