

Callmon Server Installation

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Prerequisites: Zabbix 3.0 s web frontend, MySQL database –
https://www.zabbix.com/documentation/3.0/manual/installation/install_from_packages

Installation of the dependencies and Callmon server scripts:

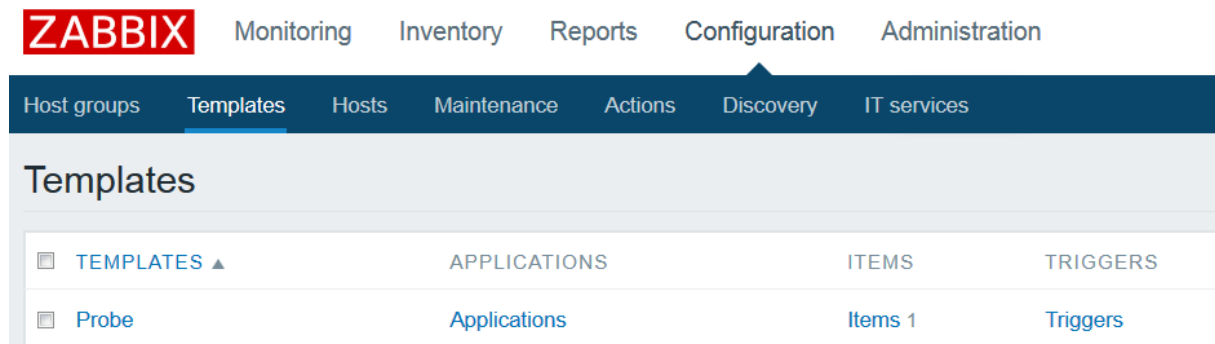
```
# cd /opt/  
# apt-get install git  
# git clone https://bitbucket.org/liptel/callmon_server.git  
# apt-install python-pip python-mysqldb python-networkx python-paramiko zabbix-sender  
# pip install zabbix-api pygeoip
```

Compilation of the PESQ algorithm (not necessary if running on Debian or Ubuntu x64 distribution):

```
# git clone https://github.com/dennisguse/ITU-T_pesq.git  
# cd /ITU-T_pesq/source  
# gcc -o PESQ *.c
```

Making a template and item for probes in Zabbix 3.0:

Go to Zabbix section *Configure* -> *Templates* -> *Create template*. Create a template with the name *Probe* and *Zabbix servers* group. All other parameters should remain default. You can see a new created template:



The screenshot shows the Zabbix web interface. At the top, there is a navigation bar with the ZABBIX logo and menu items: Monitoring, Inventory, Reports, Configuration, and Administration. Below this is a secondary navigation bar with Host groups, Templates (selected), Hosts, Maintenance, Actions, Discovery, and IT services. The main content area is titled 'Templates' and contains a table with the following structure:

	APPLICATIONS	ITEMS	TRIGGERS
<input type="checkbox"/> TEMPLATES ▲			
<input type="checkbox"/> Probe	Applications	Items 1	Triggers

Then click on the *Item* link and *Create item* with the following parameters:

Name

Type

Key

Type of information

Update interval (in sec)

History storage period (in days)

New application

Applications

Populates host inventory field

Description

Enabled

Running the init script:

```
# cd /opt/callmon_server/shell  
# bash init-helper.sh
```

Callmon Server configuration:

```
# nano /opt/callmon_server/python/config/config.py
```

Set the correct parameters into *zabbix_password* and *mysql_pass*.

Generating a key pair for Callmon server (temporary):

```
# ssh-keygen -t rsa -b 4096
```

id_rsa.pub public key from the server must be inserted on each probe to be able to connect on it.
Send the content of the *id_rsa.pub* to each probe.

Inserting the public keys from probes (temporary):

id_rsa.pub public keys from the probes have to be inserted on the server to be able to connect on it.
Copy the content of the *id_rsa.pub* from the probes and insert it into:

```
# vi /callmon-probe/.ssh/authorized_keys
```