

## EZCNAM-OpenSIPS Integration Instructions

### 1. Prerequisites

Installed and working OpenSIPS and libcurl.

### 2. Enable UAC module

Function `uac_replace_from` is used to modify SIP From header. Add to `opensips.cfg`:

```
loadmodule "uac.so"
```

### 3. Install OpenSIPS `rest_client` module and enable it with 2 seconds timeout in `opensips.cfg`:

```
loadmodule "rest_client.so"  
modparam("rest_client", "connection_timeout", 2)  
modparam("rest_client", "curl_timeout", 2)
```

Now in your routing script where you wish to change Display Name for calling number you write:

```
#Store calling number in variable $avp(src)
```

```
$avp(src) = $fU;  
rest_get("http://api.ezcnam.com/v1/?key=<KEY>&phone=$avp(src)&out=text", "$avp(cnam)");  
uac_replace_from("$avp(cnam)", "");
```

Now your From header contains "Name from CNAM" <SIP URI>.

Another simple method is using external curl command.

You need curl installed in system.

UAC module is still needed to modify SIP From header. In `opensips.cfg`:

```
loadmodule "uac.so"
```

To execute curl you need module `exec`.

```
loadmodule "exec.so"
```

```
modparam("exec", "time_to_kill", 5)
```

Now in your routing script where you wish to change Display Name for calling number you write:

```
#Store calling number in variable $avp(src)
```

```
$avp(src) = $fU;  
exec_avp("curl http://api.ezcnam.com/v1/?key=<KEY>\&phone=$avp(src)\&out=text",  
"$avp(cnam)");
```

```
uac_replace_from("$avp(cnam)", "");
```

Now your From header contains "Name from CNAM" <SIP URI>.

## EZCNAM-Kamailio Integration Instructions

### 1. Prerequisites

Installed and working Kamailio and libcurl.

### 2. Enable UAC module in kamailio.cfg

Function `uac_replace_from` is used to modify SIP From header.

```
loadmodule "uac.so"
```

### 3. Enable utils module in kamailio.cfg

```
loadmodule "utils.so"
```

Let 2 seconds timeout to connect to the CNAM service

```
modparam("utils", "http_query_timeout", 2)
```

Now in your routing script where you wish to change Display Name for calling number you write:

```
#Store calling number in variable $avp(src)
```

```
$avp(src) = $fU;
```

```
http_query("http://api.ezcnam.com/v1/?key=<KEY>&phone=$avp(src)&out=text", "$avp(cnam)");
```

```
uac_replace_from("$avp(cnam)", "");
```

Now your From header contains "Name from CNAM" <SIP URI>.

Another simple method is using external curl command.

You need curl installed in system.

UAC module is still needed to modify SIP From header

```
loadmodule "uac.so"
```

To execute curl you need module `exec`. In kamailio.cfg:

```
loadmodule "exec.so"
```

```
modparam("exec", "time_to_kill", 5)
```

Now in your routing script where you wish to change Display Name for calling number you write in kamailio.cfg:

```
#Store calling number in variable $avp(src)
```

```
$avp(src) = $fU;
```

```
exec_avp("curl http://api.ezcnam.com/v1/?key=<KEY>\&phone=$avp(src)\&out=text",  
"$avp(cnam)");
```

```
uac_replace_from("$avp(cnam)", "");
```

Now your From header contains "Name from CNAM" <SIP URI>.

Addition for Kamailio and OpenSIPS. This is a little bit deeper...

It is important to be aware of all the SIP headers that can have a role in establishing the Caller ID. In addition to the **From header**, extensions to the SIP protocol also define two additional headers that may be used to identify the visible Caller ID and the “network id” of the caller. These headers are **Remote-Party-ID** and **P-Asserted-Identity**. In simplest way we can just remove these headers:

```
if(is_present_hf("Remote-Party-ID"))
{
remove_hf("Remote-Party-ID");
}
if(is_present_hf("Privacy"))
{
remove_hf("Privacy");
}
```