registrar Module

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Chapter 1. User's Guide

1.1. Overview

The module contains REGISTER processing logic.

1.2. Dependencies

1.2.1. SER Modules

The following modules must be loaded before this module:

- *usrloc - User Location Module*.
- *sl - Stateless Replies*.

1.2.2. External Libraries or Applications

The following libraries or applications must be installed before running SER with this module loaded:

- *None*.

1.3. Exported Parameters

1.3.1. `default_expires` (integer)

If the processed message contains neither Expires HFs nor expires contact parameters, this value will be used for newly created usrloc records. The parameter contains number of second to expire (for example use 3600 for one hour).

Default value is 3600.

Example 1-1. Set `default_expires` parameter

```
...
modparam("registrar", "default_expires", 1800)
...
```

1.3.2. `min_expires` (integer)

The minimum expires value of a Contact, values lower than this minimum will be automatically set to the minimum. Value 0 disables the checking.

Default value is 60.

Example 1-2. Set `min_expires` parameter

```
...
modparam("registrar", "min_expires", 60)
...
```

1.3.3. `max_expires` (integer)

The maximum expires value of a Contact, values higher than this maximum will be automatically set to the maximum. Value 0 disables the checking.

Default value is 0.

Example 1-3. Set `max_expires` parameter

```
...
modparam("registrar", "max_expires", 120)
...
```

1.3.4. `default_q` (integer)

The parameter represents default q value for new contacts. Because ser doesn't support float parameter types, the value in the parameter is divided by 100 and stored as float. For example, if you want default_q to be 0.38, use value 38 here.

Default value is 0.

Example 1-4. Set `default_q` parameter

```
...
modparam("registrar", "default_q", 100)
...
```

1.3.5. `append_branches` (integer)

The parameter controls how lookup function processes multiple contacts. If there are multiple contacts for the given username in usrloc and this parametr is set to 1, Request-URI will be overwritten with the highest-q rated

contact and the rest will be appended to sip_msg structure and can be later used by tm for forking. If the parameter is set to 0, only Request-URI will be overwritten with the highest-q rated contact and the rest will be left unprocessed.

Default value is 1.

Example 1-5. Set `append_branches` parameter

```
...
modparam("registrar", "append_branches", 0)
...
```

1.3.6. `use_domain` (integer)

If set to 1 then the registrar will use username@domain as address of record. If the variable is set to 0 then only username will be used as the address of record.

Default value is 0.

Example 1-6. Set `use_domain` parameter

```
...
modparam("registrar", "use_domain", 1)
...
```

1.3.7. `case_sensitive` (integer)

If set to 1 then AOR comparison will be case sensitive, if set to 0 then AOR comparison will be case insensitive--This is recommended.

Default value is 0.

Example 1-7. Set `case_sensitive` parameter

```
...
modparam("registrar", "case_sensitive", 1)
...
```

1.3.8. `desc_time_order` (integer)

If set to 1 then all contacts will be ordered in descending modification time order. In this case the most recently updated/created contact will be used.

Default value is 0.

Example 1-8. Set `desc_time_order` parameter

```
...
modparam("registrar", "desc_time_order", 1)
...
```

1.4. Exported Functions

1.4.1. `save(domain)`

The function processes a REGISTER message. It can add, remove or modify usrloc records depending on Contact and Expires HFs in the REGISTER message. On success, 200 OK will be returned listing all contacts that are currently in usrloc. On an error, error message will be send with a short description in reason phrase.

Meaning of the parameters is as follows:

- *domain* - Logical domain within registrar. If dababase is used then this must be name of the table which stores the contacts.

Example 1-9. `save` usage

```
...
save("location");
...
```

1.4.2. `save_noreply(domain)`

Same as `save()` but it doesn't send a reply.

Meaning of the parameters is as follows:

- *domain* - Logical domain within registrar. If database is used then this must be na e of the table which stores the contacts.

Example 1-10. `save_noreply` usage

```
...
save_noreply("location");
...
```

1.4.3. `lookup(domain)`

The functions extracts username from Request-URI and tries to find all contacts for the username in usrloc. If there are no such contacts, -1 will be returned. If there are such contacts, Request-URI will be overwritten with the contact that has the highest q value and optionally the rest will be appended to the message (depending on append_branches parameter value).

Meaning of the parameters is as follows:

- *domain* - Name of table that should be used for the lookup.

Example 1-11. `lookup` usage

```
...
lookup("location");
...
```

1.4.4. `registered(domain)`

The function returns true if the AOR in the Request-URI is registered, false otherwise. The function does not modify the message being process, it neither rewrites the Request-URI if a contact is found not append branches.

Meaning of the parameters is as follows:

- *domain* - Name of table that should be used for the lookup.

Example 1-12. `registered` usage

```
...
if (registered("location")) {
    sl_send_reply("100", "Trying");
    ...
};
...
```

Chapter 2. Developer's Guide

The module does not provide any sort of API to use in other SER modules.

Chapter 3. Frequently Asked Questions

1. Where can I find more about SER?

Take a look at http://iptel.org/ser.

2. Where can I post a question about this module?

First at all check if your question was already answered on one of our mailing lists:

- http://mail.iptel.org/mailman/listinfo/serusers
- http://mail.iptel.org/mailman/listinfo/serdev

E-mails regarding any stable version should be sent to <serusers@iptel.org> and e-mail regarding development versions or CVS snapshots should be send to <serdev@iptel.org>.

If you want to keep the mail private, send it to <serhelp@iptel.org>.

3. How can I report a bug?

Please follow the guidelines provided at: http://iptel.org/ser/bugs