# **PSOM 4.0 Logs**

There are several kind of logs on PrivateServer:

- 1. SIP activity logs
- 2. Registered Accounts
- 3. Web Authorization accesses
- 4. Call Detailed Records

Each one is suitable to monitor a different part of the service.

### 4.0.1 SIP activity logs

The SIP Sessions page show the activities each Account did with the server.

#### SessionLogEntry List

| Timestamp                  | Event      | Source | Peername | Account                                 | Details       | Useragent                     | Remoteaddr | Tiscipher      |
|----------------------------|------------|--------|----------|---|---------------|-------------------------------|------------|----------------|
| 2012-11-06<br>16:47:40.530 | REGISTER   | CLIENT | 7        |   | 200 OK        | PGSM-11.0.1712-iphone         | 2 5:35418  | AES256-<br>SHA |
| 2012-11-06<br>16:47:38.470 | DISCONNECT | CLIENT |          | +                                       | NETWORK_ERROR | PGSM-10.5.1508-iphone         | 1:19095    | AES256-<br>SHA |
| 2012-11-06<br>16:47:38.610 | UNREGISTER | CLIENT |          | +====================================== | REQUEST       | PGSM-10.5.1508-iphone         | 8 31:19095 | AES256-<br>SHA |
| 2012-11-06<br>16:47:35.206 | REGISTER   | CLIENT | 1        |   | 200 OK        | PGSM-10.4.2293-<br>blackberry | :51856     | AES256-<br>SHA |
| 2012-11-06<br>16:47:34.710 | REGISTER   | CLIENT | 7        |   | 200 OK        | PGSM-11.0.1712-iphone         | 2:5:35418  | AES256-<br>SHA |

figure 1. List of SIP Session Activities

To get this list just click on the SIP Sessions entry in the main menu. The activities are listed by date and they give you a detailed overview of the SIP status for each one. These logs are very useful for debugging the networking issues on the client side.



In figure 1. List of SIP Session Activities you can read that a NETWORK\_ERROR has caused the DISCONNECT event for one user.

The **Event** column lists the SIP events:

- CONNECT: PrivateGSM client opened a connection to PrivateServer. This usually means the client has been activated
- REGISTER: The Account has been correctly registered and is now on line
- UNREGISTER: The Account has been correctly unregistered and is now off line
- DISCONNECT: PrivateGSM client closed the connection. This usually means the client has been stopped.

 $\label{lem:continuous} \textbf{Each one has its } \textbf{Details} \ \textbf{column which explains the exact message provided by the PrivateServer}.$ 

**CONNECT/DISCONNECT** event are bound to a remote address, not directly related to a specific VoIP account. A periodic background task analyses the SIP session logs and, when possible, reconcile them binding these events to a specific account.

Reconciliation is very useful while debugging SIP session for a specific user: clicking on username field will show a filtered list of SIP session events.

# 4.0.2 Registered Accounts

If you want a full list of all the Accounts who are on line, then you click on the Registered Accounts entry in the main menu.

### Registered Accounts

| Username  | IpAddr   | Port                    | Description   | Registration Expires   | UserAgent  |
|-----------|--|-------------------------|---|--|--|
| 822208948 | 93.186.30.117                                    | 23,665                  | Selfregistration user (822208948)   | 2012-05-10 17:33:11 CEST   | PGSM-10.3.1626-blackberry  |
| 055129664 | 176.81.235.232                                   | 60,104                  | Selfregistration user (055129664)   | 2012-05-10 17:32:08 CEST   | PGSM-10.2.1493-blackberry  |
| 519178286 | 94.175.55.145                                    | 55,998                  | Selfregistration user (519178286)   | 2012-05-10 17:33:07 CEST   |  |
| 592023684 | 62.196.64.113                                    | 52,034                  | Selfregistration user (592023684)   | 2012-05-10 17:49:20 CEST   | PGSM-10.3.5-iphone   |
| 951318993 | 82.78.218.22                                     | 53,142                  | Selfregistration user (951318993)   | 2012-05-10 17:44:55 CEST   | PGSM-10.5.1508-iphone  |
| -         | 822208948<br>055129664<br>519178286<br>592023684 | 822208948 93.186.30.117 | 822208948 93.186.30.117 23,665<br>055129664 176.81.235.232 60,104<br>519178286 94.175.55.145 55,998<br>592023684 62.196.64.113 52,034 | 822208948 93.186.30.117 23,665 Selfregistration user (822208948) 055129664 176.81.235.232 60,104 Selfregistration user (055129664) 519178286 94.175.55.145 55,998 Selfregistration user (519178286) 592023684 62.196.64.113 52,034 Selfregistration user (592023684) | 822208948 93.186.30.117 23,665 Selfregistration user (822208948) 2012-05-10 17:33:11 CEST 055129664 176.81.235.232 60,104 Selfregistration user (055129664) 2012-05-10 17:32:08 CEST 519178286 94.175.55.145 55,998 Selfregistration user (519178286) 2012-05-10 17:33:07 CEST 592023684 62.196.64.113 52,034 Selfregistration user (592023684) 2012-05-10 17:49:20 CEST |

figure 2. Registered Account list

The list shows all the user actually on line and thus reachable on your PrivateServer. To read more detail about each user just click on its Id.

### 4.0.3 Web Authorization accesses

You can have a full view of all the access made to the management console.

# AuthenticationEvent List

| Date Created ▼          | Event Type           | Principal | IP Address  |
|-------------------------|----------------------|-----------|-------------|
| 2012-05-10 17:29:42.000 | SUCCESS_INTERACTIVE  | admin     | 93.57.41.37 |
| 2012-05-10 17:29:42.000 | SUCCESS              | admin     | 93.57.41.37 |
| 2012-05-10 17:29:37.000 | FAIL_BAD_CREDENTIALS | admin     | 93.57.41.37 |

Just click on the **Web Sessions** entry in the **main menu** and you get a list as in figure above. It shows up the detail about the user (**principal**), the **IP** address used to connect, the date of each authentication and the outcome (**Event Type**).

#### 4.0.4 Call Detailed Records



#### **NEW FEATURE**

In this version the CDR has been completely rearrange to better show the valuable informations

Despite its name the CDR is a debugging and quality assurance facility. It saves all the calls status, meaning it is very useful to understand is something is going wrong with you Secure Call Service.

To access the CDR you must click on the Call Detailed Record in the main menu. You'll get the "Cdr List" page which includes all the calls recorded.

#### Cdr List

| Call Date                         | Caller Number | Caller | Caller<br>Group | Callee Number | Callee | Callee<br>Group | Total<br>Duration | Call<br>Duration | Disposition | Hangup cause         | Call id    | Call<br>type |
|-----------------------------------|---------------|--------|-----------------|---------------|--------|-----------------|-------------------|------------------|-------------|----------------------|------------|--------------|
| 2012-11-<br>06<br>14:31:13<br>CET | +39           |        |                 | 003           | 9360   |                 | 0                 | 0                | FAILED      | NO_ANSWER            | 283851119  | CALL         |
| 2012-11-<br>06<br>14:31:08<br>CET | +323          |        |                 | 003           | 9360   |                 | 0                 | 0                | FAILED      | NO_ANSWER            | 1200254168 | CALL         |
| 2012-11-<br>06<br>13:40:59<br>CET | +34           |        |                 |               |        |                 | 0                 | 0                | NO_ANSWER   | NO_ROUTE_DESTINATION | 814793281  | CALL         |
| 2012-11-<br>06<br>13:13:46<br>CET | +3            |        |                 |               |        |                 | 0                 | 0                | NO_ANSWER   | NO_ROUTE_DESTINATION | 709477779  | CALL         |
| 2012-11-<br>06<br>13:02:38<br>CET | +39           |        |                 |               |        |                 | 438               | 424              | ANSWERED    | NORMAL_CLEARING      | 875064962  | CALL         |
| 2012-11-<br>06<br>11:55:56<br>CET | +35           |        |                 | 7             |        |                 | 110               | 101              | ANSWERED    | NORMAL_CLEARING      | 2040234946 | CALL         |

Figure 1. Call Detailed Record List

If the table is empty, please place a phone call between the two SIp Accounts. Then come back on this page and check that the call has been correctly registered. The shown fields are:

- Call Date: when the call has been placed
- Caller Number: The virtual phone number used to place the call
- Caller: The caller description, if any
- Caller Group: The caller's group description, if any
- Callee Number: The virtual phone number called
- Callee: The callee description, if any
- Callee Group: The callee's group description, if any
- Total Duration: how long the call lasted. Time elapsed from the moment the "Call Button" is pressed on the caller's client to the one in which the communication is closed at all
- Call Duration: how long the call lasted, just the voice
- **Disposition**: which result the call had
- Hangup Cause: how long the call lasted
- Call id: a unique number that identifies the call
- Call type: nature of the call performed

## Relevant fields in CDR

The **Disposition** is very important because it tells you the exit code of each call. Possible codes are:

1. ANSWERED: the call was taken by the callee

- 2. NO\_ANSWER: nobody picked up the phone to answer (mostly this is a time out code)
- 3. BUSY: the callee refused the call
- 4. FAILED: for some reason the call was not able to be placed

The Hangup Cause describes in details what caused the hangup. Possible causes are:

- 1. NO\_ROUTE\_DESTINATION: The callee is not reachable because of network issues.
- 2. NORMAL CLEARING: Call closed normally.
- 3. USER\_BUSY: The user is busy.
- 4. NO\_ANSWER: The callee didn't answer and the call was closed for timeout reason.
- 5. **CALL\_REJECTED**: The callee rejected the call, as by pressing the "hold" button.
- 6. BEARERCAPABILITY\_NOTAVAIL: The caller and the callee were using different security models that are not compatible.
- 7. NO\_USER\_RESPONSE: The same as in "NO\_ANSWER", but this happens when the call goes out by Trunk.

The Call Type identifies the nature of the call. Used with the Call id fields this value is useful to trace down complex calls like three-way calls, conferences or transferred calls. Possible values are:

- 1. CALL: Usual call between two persons
- 2. 3-WAY: Usual call (as above) with an added person during the call
- 3. CONFERENCE: Conference call
- 4. TRANSFER: Usual call that is transferred to a third person

The **Call id** is a number that identifies uniquely the call. It can be used to trace a call if it changes its nature (ie becoming a three-way call) or to group all the participants (ie in a conference room).

### 4.0.5 Data Retention



#### **NEW FEATURE**

The "Data Retention" feature has been introduced in the present version.

The "Data Retention" is the new possibility that EVSS gives you to archive and store away some of the older data for consultation purposes.

Data Retention Archived Data

figure 3. Menu access to the Data Retention

You can access the functions of "Data Retention" using the menu entries shown in figure 3. Menu access to the Data Retention under the "SERVER CONFIGURATION" voice.

The first one is used to configure the Retention features, the latter for retrieving the information stored on the hard disk of PrivateServer.

#### 4.0.5.1 Setup of Data Retention

You can create a retention policy for some important logs provided by the appliance.

# **Data Retention Policy**

| Data Type          | Enabled | <b>Period Duration</b> | Period/s Online |
|--------------------|---------|------------------------|-----------------|
| Web Session        | False   | YEAR                   | 1               |
| Call Detail Record | False   | YEAR                   | 1               |
| SIP Session        | True    | WEEK                   | 4               |

figure 4. Data Retention Policy list

In figure 4. Data Retention Policy list is shown the list of the available logs to be stored. What happens when you start the Data Retention on a log is that the system checks all the entries older than the date configured (let's say older than one year from the present day) and move them out the regular logging system to a compressed archive that could be later downloaded.

# Edit Data Retention Policy

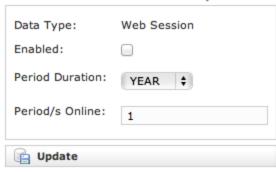


figure 5. Data Retention Policy editor

Each log entry listed in figure 4. Data Retention Policy list has an editor form as the one shown in figure 5. Data Retention Policy editor. Using the mentioned form you can:

- enable the Data Retention(Enabled checkbox)
- select the period to be kept on-line (Period Duration)
- choose how many archives you want to keep online (Period/s Online)

#### 4.0.5.2 Retrieve the Data Archives

As said in the previous paragraph (4.0.5.1), there are two left menu entries to manage the Data Retention feature (see figure 3. Menu access to the Data Retention). If you want to access to the stored archives just press the "Archived Data" link.

### Data Archive List

| Name  | Timestamp ▼           | Size             |  |
|---|-----------------------|------------------|--|
| sessionLogEntry-2012-10-08-20121104040000.zip | 2012-11-04 04:00:37.0 | 3.326 megabytes  |  |
| sessionLogEntry-2012-10-01-20121031040000.zip | 2012-10-31 04:18:03.0 | 30.634 megabytes |  |
| sessionLogEntry-2012-10-01-20121030040000.zip | 2012-10-30 04:19:53.0 | 30.634 megabytes |  |

figure 6. Data Archive List

The "Data Archive List" is shown in the page body (see figure 6. Data Archive List). Each archive row shows its Name, its Creation Timestamp and its Si ze (all the columns are pretty self explaining).

The last two columns shows two icons: the first one is for downloading the archive, the second one is for deleting it.



If you choose to delete the archive, press the last column icon.

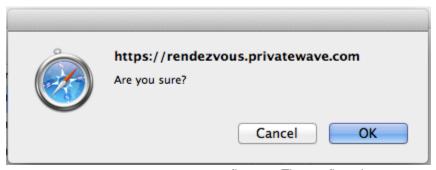


figure 7. The confirmation pop-up window

A confirmation is requested (see figure 7. The confirmation pop-up window). If you approve the action then the archive is removed from both the list and the hard disk of the appliance.



# Point of no return action!

Please be aware that this action is not undoable! Once confirmed the deletion, the archive is lost forever!

PSOM 3.0 Administrative Roles and Users
PSOM Appendix A - How to contact us