

5.1 EVENTS

In this section we collect all the logs about events that has happened. This type of logs are written once the event has finished and do not represent a live photograph of the state of the service or of the appliance. They are mostly useful for debugging user's issues and provide support.

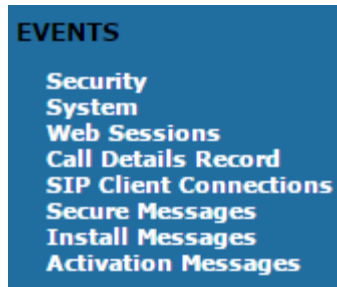


figure 1. the static logs menu

As you can see in [figure 1. the static logs menu](#) all these logs are grouped under the "LOGGING" label into the main menu.

1. Security

Since 14.1 version **Security Events** has been added to PrivateServer logging. This log category lists every event captured by our **Security Information and Event Management (SIEM)** interface, which has been introduced in that version.

SecurityEvent List

Timestamp	Description	Event Type	Processed
2015-05-08 15:20:25.788	Successful login	LOG_IN	True
2015-05-08 14:36:59.830	Successful login	LOG_IN	True
2015-05-08 13:53:12.212	Logout due to session timeout	LOG_OUT	True
2015-05-08 13:22:13.340	Setting NETWORK.TCP_KEEPALIVE_PROBES changed to 3	APPLIANCE_CONFIGURATION_CHANGE	True
2015-05-08 13:22:13.328	Setting NETWORK.TCP_KEEPALIVE_INTERVAL changed to 90	APPLIANCE_CONFIGURATION_CHANGE	True
2015-05-08 13:22:13.310	Setting NETWORK.TCP_KEEPALIVE_TIME changed to 90	APPLIANCE_CONFIGURATION_CHANGE	True
2015-05-08 13:21:38.314	Successful login	LOG_IN	True
2015-05-08 12:00:00.098	Heartbeat event	HEARTBEAT	True
2015-05-08 11:40:12.320	Logout due to session timeout	LOG_OUT	True
2015-05-08 11:10:08.422	Successful login	LOG_IN	True
2015-05-08 10:52:11.956	Logout due to session timeout	LOG_OUT	True
2015-05-08 10:21:21.140	Successful login	LOG_IN	True
2015-05-08 10:21:11.728	Logout due to session timeout	LOG_OUT	True
2015-05-08 10:01:11.622	Logout due to session timeout	LOG_OUT	True
2015-05-08 10:01:11.612	Logout due to session timeout	LOG_OUT	True
2015-05-08 09:50:11.546	Logout due to session timeout	LOG_OUT	True

figure 2. Security Events list

SIEM interface catches and rewrites SIEM style events that are currently managed in underlying event log layers such the one described just after present paragraph. ***This means that each event listed under this section is also present in a specific on but shown in different format, often raw one.*** SIEM formatted events are instead all present here.

Show SecurityEvent

Timestamp:	2015-05-11 12:06:34.492
Event Type:	LOG_IN
Description:	Successful login
Details:	CEF:0 Internal Application Secure Mobile Voice 12.0 LL01 Successful User Login 2 start=May 11 2015 11:06:34 end=May 11 2015 11:06:34 deviceExternalId=76293-1 dhost=
Processed:	True

figure 3. Security Event detail

Just clicking on **Timestamp** you get single event details as shown in [figure 3. Security Event detail](#).

You can tell we're dealing with SIEM formatted log just by reading **Details** part. Consider that we're talking of a generic SIEM format that can be more refined and adapted for being processed by external systems. PrivateServer can generate events in CEF format, compatible with HP Arcsight product.

2. System

System Events list shows all events occurred to PrivateServer but not directly intercepted by Web appliance because triggered out of its scope.

SystemEvent List

Timestamp	Description	Details
2015-05-11 12:00:00.014	Heartbeat event	
2015-05-11 08:00:00.012	Heartbeat event	
2015-05-11 04:00:00.019	Heartbeat event	
2015-05-11 00:00:00.013	Heartbeat event	
2015-05-10 20:00:00.013	Heartbeat event	
2015-05-10 16:00:00.013	Heartbeat event	
2015-05-10 12:00:00.014	Heartbeat event	
2015-05-10 08:00:00.013	Heartbeat event	
2015-05-10 04:00:00.027	Heartbeat event	
2015-05-10 00:00:00.014	Heartbeat event	
2015-05-09 20:00:00.013	Heartbeat event	
2015-05-09 16:00:00.011	Heartbeat event	

figure 4. System Events list

Examples are:

- Web appliance updates
- Web appliance reboot
- Appliance backup and restores
- Heartbeat

Show SystemEvent

Timestamp:	2015-05-08 10:15:37.000
Description:	Appliance updated from version 15.0-5950.fc14 to 15.0-6098.fc14
Details:	

figure 5. System Event details

Clicking on **Timestamp** part of the log shows you System Event's details as show in [figure 5. System Event details](#).

3. Web Sessions

In the **web sessions** it's possible to read the list of all the access made to the web console.

Web Sessions

Timestamp	Result	Username	IP Address
2015-05-11 12:06:34.000	SUCCESS		
2015-05-11 09:38:50.000	SESSION_TIMEOUT		
2015-05-11 09:08:34.000	SUCCESS		
2015-05-11 09:08:29.000	FAIL_BAD_CREDENTIALS		
2015-05-08 15:51:12.000	SESSION_TIMEOUT		
2015-05-08 15:25:12.000	SESSION_TIMEOUT		
2015-05-08 15:20:24.000	SUCCESS		
2015-05-08 14:36:59.000	SUCCESS		
2015-05-08 13:53:12.000	SESSION_TIMEOUT		
2015-05-08 13:21:38.000	SUCCESS		
2015-05-08 11:40:11.000	SESSION_TIMEOUT		
2015-05-08 11:10:07.000	SUCCESS		
2015-05-08 10:52:11.000	SESSION_TIMEOUT		
2015-05-08 10:21:21.000	SUCCESS		
2015-05-08 10:21:11.000	SESSION_TIMEOUT		
2015-05-08 10:01:11.000	SESSION_TIMEOUT		
2015-05-08 10:01:11.000	SESSION_TIMEOUT		
2015-05-08 09:50:11.000	SESSION_TIMEOUT		
2015-05-08 09:49:10.000	SUCCESS		
2015-05-08 09:30:51.000	SUCCESS		
2015-05-08 09:22:28.000	SUCCESS		
2015-05-08 09:22:20.000	FAIL_BAD_CREDENTIALS		
2015-05-08 09:20:11.000	SESSION_TIMEOUT		
2015-05-08 09:00:24.000	SUCCESS		
2015-05-08 08:49:52.000	SUCCESS		
2015-05-07 17:32:08.000	SESSION_TIMEOUT		
2015-05-07 17:01:56.000	SUCCESS		
2015-05-07 14:28:07.000	SESSION_TIMEOUT		
2015-05-07 13:55:55.000	SUCCESS		
2015-05-07 10:00:06.000	SESSION_TIMEOUT		

1 2 3 4 5 6 7 8 9 10 .. 33 Next Filter No filters applied

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figure 6. List of Web Session Logs

Just click on the **Web Sessions** entry in the **main menu** and you get a list as in figure [figure 6. List of Web Session Logs](#). Fields shown are:

- **Date Created:** this is when the event occurred
- **Event Type:** there are several type of Events (see specifications below)
- **Principal:** the username used to log in.
- **IP Address:** the IP address from which the connection has been performed.



If the user listed is "anonymousUser" then this is an event triggered by the system. This is specifically true for events like the "SESSION_TIMEOUT".

3.1. Event Types

Here follows a list of all the event types logged in this table:

- **SESSION_TIMEOUT** : pretty self explanatory
- **LOGOUT** : The user performed a logout
- **SUCCESS_INTERACTIVE / SUCCESS** : these two events always come together and indicates a login has successfully performed. The former one points out the login happened through the web interface ("interactive"), the latter is a generic successful login log.
- **FAIL_USER_NOT_FOUND** : the login used was not found among the users configured.
- **FAIL_CREDENTIALS_EXPIRED** : the password or the credentials used are set as expired
- **FAIL_BAD_CREDENTIALS** : wrong password

4. Call Details Record

CDR is a debugging and quality assurance tool: it lists all calls statuses, which is very useful to understand if something went wrong with your Secure Call Service.



Please be aware that CDR can only list past calls. Calls that are currently ongoing are not listed or are partially shown if they are conference rooms.

To access CDR you must click on **Call Detailed Record** in main menu. You'll get "Cdr List" page which lists all details of performed calls.

Cdr List

Call Date	Caller Number	Caller	Caller Group	Callee Number	Callee	Callee Group	Total Duration	Call Duration	Disposition	Hangup cause	Call id	Call type	Call route
2015-04-29 09:39:47.000	+4418591930	Arthur Doyle	Screenshot	12561321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1246742280	CALL	
2015-04-28 16:49:04.000	+3912651321	Dante Alighieri	Screenshot	+4418591930	Arthur Doyle	Screenshot	1	0	BUSY	USER_BUSY	1443095664	CALL	
2015-04-28 16:48:53.000	+3912651321	Dante Alighieri	Screenshot	18591930			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	659230697	CALL	
2015-04-28 16:28:42.000	+3912651321	Dante Alighieri	Screenshot	18591930			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	87124315	CALL	
2015-04-28 16:26:35.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1995717955	CALL	
2015-04-28 16:26:17.000	+4418591930	Arthur Doyle	Screenshot	600			3	3	ANSWERED	NOT_DEFINED	1661633350	CALL	
2015-04-28 16:25:56.000	+4418591930	Arthur Doyle	Screenshot	600			2	2	ANSWERED	NOT_DEFINED	1986451023	CALL	
2015-04-28 16:24:59.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	11	0	CANCEL	NOT_DEFINED	2128358268	CALL	
2015-04-28 16:24:53.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1784827147	CALL	
2015-04-28 16:23:38.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	2023353405	CALL	
2015-04-28 16:22:54.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	349858591	CALL	
2015-04-28 16:21:44.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1172325511	CALL	
2015-04-28 16:20:51.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1208099776	CALL	
2015-04-28 16:12:17.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	18	18	ANSWERED	NORMAL_CLEARING	1998267691	THREE_WAY	
2015-04-28 16:12:03.000				3912651321			0	0	STOP_CONF		1251498178	TRANSFER	
2015-04-28 16:11:27.000				4418591930			0	0	STOP_CONF		1251498178	TRANSFER	
2015-04-28 16:11:18.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	21	7	ANSWERED	NORMAL_CLEARING	1251498178	TRANSFER	
2015-04-28 16:11:08.000				3912651321			0	0	STOP_CONF		15341336	TRANSFER	
2015-04-28 16:11:02.000	+4418591930	Arthur Doyle	Screenshot	4418591930	Arthur Doyle	Screenshot	0	0	BUSY	USER_BUSY	1251498178	TRANSFER	
2015-04-28 16:10:23.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	21	14	ANSWERED	NORMAL_CLEARING	15341336	TRANSFER	
2015-04-28 16:09:44.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	4	0	CANCEL	NOT_DEFINED	1971331170	CALL	
2015-04-28 16:08:02.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	1	0	CANCEL	NOT_DEFINED	782243311	CALL	
2015-04-28 16:07:55.000	+4418591930	Arthur Doyle	Screenshot	3912651321	Dante Alighieri	Screenshot	2	0	CANCEL	NOT_DEFINED	1438686164	CALL	
2015-04-28 16:07:45.000	+4418591930	Arthur Doyle	Screenshot	12651321			0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1284177999	CALL	

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12345678910...94Next

Filter

No filters applied

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figure 7. Call Detailed Record List



If the table is empty, please perform one phone call between two PrivateWave s and then come back on this page to check that the call has been correctly registered.

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.

- **Call route:** if the call transited on a trunk this field would show the trunk's name.

4.1. Relevant fields in CDR

The **Disposition** field reports the final state of the call, whether it reached the called number or not (eg: callee canceled the call, called was busy, etc...). Possible codes are:

1. **ANSWERED:** callee answered
2. **NO_ANSWER:** callee did not answer
3. **BUSY:** callee refused the call
4. **FAILED:** for some reason the call was not able to be placed (eg: User was off-line)
5. **CANCEL:** caller hunged up during ringing

The **Hangup Cause** describes from Secure Voice Engine's point of view how or why the call ended. Possible causes are:

1. **NOT_DEFINED:** No informations received or no information listed in known causes (ie: don't know why)
2. **NO_ROUTE_DESTINATION:** The callee was not known to the system (and there's no trunk to route out).
3. **NORMAL_CLEARING:** Call closed normally.
4. **USER_BUSY:** The user is busy.
5. **NO_ANSWER:** The callee didn't answer and the call was closed for timeout reason.
6. **CALL_REJECTED:** The callee rejected the call, as by pressing the "hold" button.
7. **BEARERCAPABILITY_NOTAVAIL:** The caller and the callee were using different security models that are not compatible.
8. **NO_USER_RESPONSE:** [when call goes out by Trunk] The same as in "NO_ANSWER".
9. **NORMAL_CIRCUIT_CONGESTION:** [when call goes out by Trunk] as in "NO_ROUTE_DESTINATION".
10. **SUBSCRIBER_ABSENT:** [when call goes out by Trunk] callee is temporary not reachable.



To understand what happened in each call row you should always put together informations shown in Disposition and Hangup Cause.

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:** Regular call between two persons
2. **3-WAY:** Conference Call, meaning one regular call on which has been invited more participants.
3. **CONFERENCE:** Conference Room, meaning one number to call in order to have more persons talking together
4. **TRANSFER:** Regular call that has been 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).



It's possible to avoid any call record, as a Privacy option. To enable the "No-CDR" option, you just have to set the CDR Period to "DAY" and the duration to '0' (zero).



The above statement about the CDR Privacy option is true only for the DIRECT calls (which are the calls between two users). Conferences and 3-way calls will be logged as ever, though.

5. SIP Client Connections

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

SessionLogEntry List

Timestamp	Event	Source	Peername	Account	Details	Useragent	Remoteaddr	Tlscipher	Transport
2015-05-10 14:42:29.676	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 14:13:05.728	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 14:12:28.844	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 13:43:05.124	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 13:42:28.206	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 13:13:05.632	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 13:12:28.490	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 12:43:05.024	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 12:42:27.912	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 12:13:04.534	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 12:12:27.232	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 11:43:04.930	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 11:42:27.618	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 11:13:04.446	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 11:12:26.912	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 10:43:03.792	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 10:42:26.348	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 10:13:03.302	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 10:12:26.558	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 09:43:03.724	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 09:42:25.872	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 09:13:03.224	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 09:12:25.180	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 08:43:02.600	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 08:42:25.562	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 08:13:02.108	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 08:12:24.808	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 07:43:02.498	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS
2015-05-10 07:42:24.190	REGISTER	CLIENT			200 OK	snom300/8.7.3.19		RC4-SHA	TLS
2015-05-10 07:13:02.006	REGISTER	CLIENT			200 OK	snom820/8.7.3.25.5		RC4-SHA	TLS

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CSV

figure 8. 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.

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

- **CONNECT:** PrivateWave 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:** PrivateWave client closed the connection. This usually means the client has been stopped.

Each one has its **Details** 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.

6. Secure Messages

The **Messages** page lists Secure Messages managed by PrivateServer .



Only transport data are listed in this view: no payload or other data about Secure Messages are showed up

Message List

UUID	From	To	Tech message	API version	Status	Send attemps	Received	Processed
e315040e-2a9c-440b-a44d-e9b0d51e017d	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:16.888	2016-02-04 17:13:16.454
f7be968d-7269-4395-999c-f3735a7cc13b	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:15.988	2016-02-04 17:13:15.407
bee87446-8f1b-499b-ba23-bb0d1f192bab	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:15.120	2016-02-04 17:13:14.486
2936cd3c-2d30-4a96-a2dc-879f4d2b300f	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:14.724	2016-02-04 17:13:13.647
6599693d-89b2-4881-9625-dcc8ca2de179	Note 4	Note 4	false	1	DELIVERED	1	2016-02-04 17:13:13.280	2016-02-04 17:13:13.422
36f1752c-d26f-4913-a058-65a17f1f5823	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:12.088	2016-02-04 17:13:12.198
a39f76d4-c46b-4b1f-aecf-8f7abebf6cf4	Note 4	Note 4	false	1	DELIVERED	1	2016-02-04 17:13:11.884	2016-02-04 17:13:11.048
fd37ea34-ec68-4d40-833e-a9aaebf004ce	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:11.388	2016-02-04 17:13:11.500
2ff4446d-f14c-4ee5-8d4c-f0516640d290	Note 4	Note 4	true	1	DELIVERED	1	2016-02-04 17:13:11.832	2016-02-04 17:13:10.196
76e67d7d-aebd-4fd1-9ff9-89ac19c6b7ab	Note 4	Note 4	false	1	DELIVERED	1	2016-02-04 17:13:10.816	2016-02-04 17:13:09.938

1 2 3 4 5 6 7 8 9 10 .. 12 Next Filter No filters applied
Item to show 10 Refresh

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figure 9. list of Secure Messages

The list represent the log of Secure Messages transaction happened, so that it's showed:

- **UUID:** universally unique identifier is to enable distributed systems to uniquely identify information without significant central coordination.
- **From:** sender's account name
- **To:** recipient's account name
- **Tech message:**
- **API version:**
- **Status:** status of the message. Secure Message Statuses are described in next paragraph
- **Send attempts:**
- **Received:** when PrivateServer actually received the Secure Message
- **Processed:** When PrivateServer actually sent message to client.

Each Secure Message managed by PrivateServer is represented on one single line, as shown in [figure 9. list of Secure Messages](#).

6.1. Secure Message Status

Each Message walks through different statuses, each one representing a **milestone towards its delivery**:

1. **ENQUEUED:** PrivateServer received the request to deliver one Secure Message and put it in its queue to be managed
2. **DELIVERED:** Secure Message has been delivered to recipient's device which sent back a receive confirmation.

There are statuses describing **issues** raised **during the delivery**, such as:

1. **EXPIRED:** the message has been in queue for more than 72 hours and thus it's no more considered valid.
2. **INVALID_RECIPIENT:** recipient's cannot deal with Secure Messages
3. **INVALID_DEVICE:** recipient's device does not support Secure Messaging
4. **INVALID_PAYLOAD:** message content is empty or bigger than 600 byte (this should never happen)

7. Install messages

Install messages are one amongst the numerous means for installing PrivateWave on the customers' mobile device.



To make the Install messages work fine you have to configure the [Application download URL](#).

What we accomplish sending an Installation message is to help the customer to find out the correct edition of PrivateWave application and automatically install it.

Install messages

Timestamp	Account	Platform	Variant	Sent	Sent by	Recipient	MessageType
2015-05-07 13:36:16.000		BLACKBERRY	SDES	true			SMS
2015-05-07 13:21:43.000		ANDROID	SDES	true			EMAIL
2015-05-07 13:18:27.000		IPHONE	SDES	true			EMAIL
2014-04-04 10:59:17.000		ANDROID	SDES	true			EMAIL
2014-03-18 11:53:55.000		IPHONE	SDES	true			SMS
2014-03-13 14:19:00.000		ANDROID	SDES	true			EMAIL
2014-02-28 17:29:26.000		IPHONE	SDES	true			SMS
2014-02-04 10:13:10.000		IPHONE	SDES	true			SMS
2014-01-22 16:26:56.000			SDES	true			EMAIL
2014-01-22 16:26:29.000			SDES	false			EMAIL
2014-01-21 17:18:23.000			SDES	true			EMAIL
2014-01-21 17:12:52.000			SDES	false			EMAIL
2014-01-20 16:08:55.000			SDES	false			EMAIL
2014-01-15 11:25:10.000		ANDROID	SDES	true			SMS
2014-01-07 15:26:15.000		ANDROID	SDES	true			SMS
2013-12-20 14:51:59.000		ANDROID	SDES	true			SMS
2013-12-20 14:47:09.000		ANDROID	SDES	true			SMS
2013-12-20 14:45:12.000		ANDROID	SDES	true			SMS

Filter No filters applied

CSV

figure 10. list of the install messages sent

main features of the logs of the install messages are:

- **Timestamp:** the exact date & time when the message has been sent
- **Account:** to who the message has been sent to
- **Platform:** which mobile platform
- **Variant:** this could be either:
 - **ZRTP:** this is the end-to-end security model
 - **SDES:** this is the end-to-site security model
- **Sent:** if the message results to be effectively sent or if there were issues in sending it
- **Sent by:** the User who sent the Install Message.
- **Recipient:** the number of mobile device or the email address to whom message has been sent to
- **Message Type:** this could be either:
 - **EMAIL:** Installation message was sent by email (user's mailbox must be set up)
 - **SMS:** Installation message was sent by Text Message (SMS) using user's virtual phone number

Install message

Message link:

Timestamp: 2015-05-07 13:36:16.000
Token:
Sent: True
Account:
Platform: BLACKBERRY
Variant: SDES
Sent by:
Recipient:
Message type: SMS

figure 11. details of one install message

Clicking on the **Timestamp** field it becomes possible to reveal details about each message. You can have an example in [figure 11. details of one install message](#).



Tip

Clicking on the **Account** field brings you straight to the Account's detail.

8. Activation messages

Provisioning messages are basically the mean for delivering the download URI of the provisioned configuration. Long story short: whenever you push an automatic activation by sending the provisioning message you're sending a text message that contains the URI to the user's configuration. Part of this configuration is created by the [Provisioning Profile](#), part of it is taken by the [Account configuration](#). Nevertheless, it's always a configuration file to be downloaded and then installed in your PrivateWave .

Activation Messages

Timestamp	Consumed	Account	Sent	Sent by	Recipient	Message type
2015-05-07 13:47:00.000	True		True			EMAIL
2015-05-07 13:45:36.000	True		True			EMAIL
2015-05-07 13:42:47.000	True		True			EMAIL
2015-05-07 13:40:21.000	True		True			EMAIL
2015-05-07 13:39:09.000	True		True			EMAIL
2015-05-07 13:14:56.000	True		True			EMAIL
2015-05-07 13:14:02.000	True		True			EMAIL
2015-02-25 13:44:59.000	True		True			EMAIL
2015-02-25 13:27:09.000	True		True			EMAIL
2015-02-25 13:21:43.000	True		True			EMAIL
2015-02-20 12:17:38.000	True		True			SMS
2015-02-20 12:15:42.000	True		True			SMS
2015-02-20 12:03:37.000	True		True			SMS
2015-02-20 11:53:44.000	True		True			SMS
2015-02-20 11:53:30.000	True		True			SMS
2015-01-19 16:29:55.000	True		True			EMAIL
2015-01-19 16:28:05.000	True		True			EMAIL
2015-01-16 13:24:41.000	True		True			EMAIL
2015-01-16 11:12:00.000	True		True			EMAIL
2015-01-14 15:57:47.000	True		True			EMAIL
2015-01-09 14:31:01.000	True		True			EMAIL
2015-01-09 14:30:36.000	True		True			EMAIL
2015-01-09 13:23:53.000	True		True			EMAIL
2015-01-09 13:11:12.000	True		True			EMAIL
2015-01-08 13:33:54.000	True		True			EMAIL
2015-01-07 14:05:22.000	True		True			EMAIL
2014-10-17 18:39:25.000	True		True			SMS
2014-10-17 13:42:52.000	True		True			SMS
2014-10-15 16:33:57.000	True		True			SMS
2014-10-15 16:30:29.000	True		True			SMS

123456789NextFilter

No filters applied

CSV

figure 12. Log list of the provisioning messages

Clicking on the **Provisioning Messages** link brings you to the logs list shown in [figure 12. Log list of the provisioning messages](#). Here you have all the primary informations about the automatic activation performed:

- **Timestamp:** when each message has been sent

- **Consumed:** status of the message, or else either it's been used (consumed) or not. This means if the customer has ever clicked on the link inside the text message/email
- **Account:** user to whom the message has been sent
- if the text message has been **Sent** or not, meaning if any problem arose during the delivery and the text never left the server.
- **Sent by:** the web console user who sent this provisioning message
- **Recipient:** the number of mobile device or the email address to whom message has been sent to
- **Message Type:** this could be either:
 - **EMAIL:** Installation message was sent by email (user's mailbox must be set up)
 - **SMS:** Installation message was sent by Text Message (SMS) using user's virtual phone number



figure 13. detail of provisioning message

Clicking on the **Timestamp** field it becomes possible to reveal details about each message. You can have an example in [figure 13. detail of provisioning message](#).

Tip

Clicking on the **Account** field brings you straight to the Account's detail.

Three are the contents shown in the detail form that are not present in the list above:

1. The **Message link**
2. The **Token**
3. The **Validity**