

# 4.0.1 Logging

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 Events

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
2014-03-25 16:28:10.430	CDR masking policy changed to MASK	SECURITY_CONFIGURATION_CHANGE	True
2014-03-25 16:21:15.952	Successful login	LOG_IN	True
2014-03-25 16:20:47.266	Logout due to session timeout	LOG_OUT	True
2014-03-25 16:16:47.074	Logout due to session timeout	LOG_OUT	True
2014-03-25 16:00:00.260	Heartbeat event	HEARTBEAT	True
2014-03-25 15:46:07.234	Successful login	LOG_IN	True
2014-03-25 15:41:46.232	Logout due to session timeout	LOG_OUT	True
2014-03-25 15:02:08.110	sip.conf.general.reroute_on_trunk changed to yes	APPLIANCE_CONFIGURATION_CHANGE	True
2014-03-25 15:01:52.086	sip.conf.general.reroute_on_trunk changed to no	APPLIANCE_CONFIGURATION_CHANGE	True
2014-03-25 15:00:23.414	Deleted TLS item test for subject myserver.privatewave.com	SECURITY_CONFIGURATION_CHANGE	True
2014-03-25 14:59:26.098	Successful login	LOG_IN	True
2014-03-25 14:47:32.384	Successful login	LOG_IN	True
2014-03-25 14:08:45.956	Logout due to session timeout	LOG_OUT	True
2014-03-25 13:36:23.668	Added new TLS item test for subject myserver.privatewave.com	SECURITY_CONFIGURATION_CHANGE	True
2014-03-25 13:34:16.030	Successful login	LOG_IN	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:	2014-03-25 16:28:10.430
Event Type:	SECURITY_CONFIGURATION_CHANGE
Description:	CDR masking policy changed to MASK
Details:	CEF:0 Internal Application Secure Mobile Voice 12.0 CC02 Security configuration change 2 start=Mar 25 2014 15:28:09 end=Mar 25 2014 15:28:09
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 Events

**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
2014-03-25 16:00:00 CET	Heartbeat event	
2014-03-25 12:00:00 CET	Heartbeat event	
2014-03-25 08:00:00 CET	Heartbeat event	
2014-03-25 04:00:00 CET	Heartbeat event	
2014-03-25 00:00:00 CET	Heartbeat event	
2014-03-24 20:00:00 CET	Heartbeat event	
2014-03-24 16:00:00 CET	Heartbeat event	
2014-03-24 12:00:00 CET	Heartbeat event	
2014-03-24 11:33:43 CET	Appliance updated from version 14.1-4834.fc14 to 14.1-4835.fc14	
2014-03-24 11:33:29 CET	Appliance Software Upgrade	
2014-03-24 08:00:00 CET	Heartbeat event	
2014-03-24 04:00:00 CET	Heartbeat event	
2014-03-24 00:00:00 CET	Heartbeat event	

figure 4. System Events list

Examples are:

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

### Show SystemEvent

Timestamp:	2014-03-24 11:33:43 CET
Description:	Appliance updated from version 14.1-4834.fc14 to 14.1-4835.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. Auditing

The **Auditing** page shows any change to the configuration performed via web console.

## AuditLogEvent List

Timestamp	Username	Change	Object Type	Object ID
2013-10-09 13:11:46.000		INSERT	User's role	
2013-10-09 13:11:27.000		INSERT	User's role	
2013-10-09 11:02:31.000		INSERT	Asterisk Setting	937
2013-10-09 11:02:31.000		INSERT	Asterisk Setting	936
2013-10-09 11:02:30.000		INSERT	Setting	84
2013-10-09 11:02:30.000		DELETE	Setting	83
2013-10-08 17:16:35.000		INSERT	Asterisk Setting	935
2013-10-08 17:16:35.000		INSERT	Asterisk Setting	934
2013-10-08 17:16:34.000		INSERT	Setting	83
2013-10-08 17:16:34.000		DELETE	Setting	82
2013-10-08 16:34:51.000		UPDATE	privateserver.SmsSenderConfig	5
2013-10-08 15:45:58.000		UPDATE	Repository	11
2013-10-08 15:44:52.000		UPDATE	Repository	11
2013-10-08 15:44:52.000		INSERT	Asterisk Setting	933
2013-10-08 15:44:52.000		INSERT	Asterisk Setting	932
2013-10-08 15:44:51.000		INSERT	Setting	82
2013-10-08 15:44:51.000		DELETE	Setting	81
2013-10-08 15:18:58.000		INSERT	Asterisk Setting	931
2013-10-08 15:18:58.000		INSERT	Asterisk Setting	930
2013-10-08 15:18:57.000		INSERT	Setting	81
2013-10-08 15:18:57.000		DELETE	Setting	80
2013-10-08 15:12:21.000		UPDATE	Account	737
2013-10-08 15:12:02.000		UPDATE	privateserver.SmsSenderConfig	10
2013-10-08 15:12:02.000		UPDATE	privateserver.SmsSenderConfig	9
2013-10-08 15:12:02.000		UPDATE	privateserver.SmsSenderConfig	8
2013-10-08 15:12:02.000		UPDATE	privateserver.SmsSenderConfig	7
2013-10-08 15:10:40.000		UPDATE	Account	737
2013-10-08 15:10:32.000		INSERT	privateserver.SmsSenderConfig	10
2013-10-08 15:10:32.000		INSERT	privateserver.SmsSenderConfig	9
2013-10-08 15:10:32.000		INSERT	privateserver.SmsSenderConfig	8

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figure 6. List of Audit Events Log List

As shown above in [figure 6. List of Audit Events Log List](#), we can collect several informations:

- Timestamp: the exact time the event happened.



Please remember that the timestamp is related to the appliance's time configuration. It's local time which gets reported.

- Username: the user who performed the change is traced by the username used in the login.
- Change: the type of changes performed.
- Object Type
- Object ID

These informations can be used for security checks as for post-issue analysis.

## 4. Web Sessions

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

AuthenticationEvent List

Date Created ▼	Event Type	Principal	IP Address
2013-10-10 13:27:20.000	SUCCESS_INTERACTIVE		
2013-10-10 13:27:20.000	SUCCESS		
2013-10-10 13:23:09.000	SUCCESS_INTERACTIVE		
2013-10-10 13:23:09.000	SUCCESS		
2013-10-10 11:42:56.000	SUCCESS_INTERACTIVE		
2013-10-10 11:42:56.000	SUCCESS		
2013-10-10 09:56:09.000	SUCCESS_INTERACTIVE		
2013-10-10 09:56:09.000	SUCCESS		
2013-10-09 17:48:11.000	SUCCESS		
2013-10-09 17:48:11.000	SUCCESS_INTERACTIVE		
2013-10-09 15:10:57.000	SUCCESS_INTERACTIVE		
2013-10-09 15:10:57.000	SUCCESS		
2013-10-09 13:11:48.000	LOGOUT		
2013-10-09 13:11:35.000	SUCCESS_INTERACTIVE		
2013-10-09 13:11:34.000	SUCCESS		
2013-10-09 13:11:29.000	LOGOUT		
2013-10-09 12:56:33.000	SUCCESS_INTERACTIVE		
2013-10-09 12:56:33.000	SUCCESS		
2013-10-09 12:32:54.000	SUCCESS		
2013-10-09 12:32:54.000	SUCCESS_INTERACTIVE		
2013-10-09 12:32:48.000	FAIL_BAD_CREDENTIALS		
2013-10-09 12:32:45.000	FAIL_BAD_CREDENTIALS		
2013-10-09 10:20:28.000	SUCCESS_INTERACTIVE		
2013-10-09 10:20:28.000	SUCCESS		
2013-10-09 10:20:18.000	FAIL_BAD_CREDENTIALS		
2013-10-09 10:18:40.000	SUCCESS_INTERACTIVE		
2013-10-09 10:18:40.000	SUCCESS		
2013-10-09 10:15:49.000	SUCCESS		
2013-10-09 10:15:49.000	SUCCESS_INTERACTIVE		
2013-10-08 17:12:42.000	SUCCESS_INTERACTIVE		

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figure 7. 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 7. 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".

## 4.1. 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

## 5. Call Detailed Records

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
2013-10-08 10:10:45 CEST							3	0	NO_ANSWER	NOT_DEFINED	382364640	CALL	
2013-10-08 10:05:31 CEST							1	0	NO_ANSWER	NOT_DEFINED	3236640	CALL	
2013-10-08 10:04:21 CEST							4	0	NO_ANSWER	NOT_DEFINED	1446674440	CALL	
2013-10-08 09:52:28 CEST							1	0	NO_ANSWER	NOT_DEFINED	1738603319	CALL	
2013-10-08 09:40:06 CEST							22	16	ANSWERED	NORMAL_CLEARING	1722744606	CALL	
2013-10-08 09:38:26 CEST							0	0	NO_ANSWER	BEARERCAPABILITY_NOTAVAIL	1496614704	CALL	
2013-10-08 09:34:52 CEST							0	0	NO_ANSWER	BEARERCAPABILITY_NOTAVAIL	804418868	CALL	
2013-10-08 09:34:04 CEST							0	0	NO_ANSWER	BEARERCAPABILITY_NOTAVAIL	1098623582	CALL	
2013-10-08 09:32:22 CEST							0	0	NO_ANSWER	NO_ROUTE_DESTINATION	1094947334	CALL	
2013-10-08 09:31:55 CEST							0	0	NO_ANSWER	BEARERCAPABILITY_NOTAVAIL	346160100	CALL	
2013-10-08 09:31:25 CEST							0	0	NO_ANSWER	BEARERCAPABILITY_NOTAVAIL	1618394262	CALL	
2013-10-07 15:35:23 CEST							28	18	ANSWERED	NORMAL_CLEARING	1149887073	CALL	
2013-10-07 15:34:51 CEST							26	26	ANSWERED	NOT_DEFINED	2130864756	CALL	
2013-10-07 15:29:27 CEST							14	10	ANSWERED	NORMAL_CLEARING	1161212827	CALL	
2013-10-07 15:28:30 CEST							10	3	ANSWERED	NORMAL_CLEARING	122586015	CALL	

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figure 8. 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.


### 5.1. 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 hung 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.

## 6. 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

Received ▼	From	To	Status	Sent
2014-01-20 14:12:30.712	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:28.80	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:24.176	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:19.216	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:13.368	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:13.344	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:12.912	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:10.200	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:07.344	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:06.216	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 14:12:05.752	HTC One X	Samsung Galaxy SII	DELIVERED	1
2014-01-20 13:40:37.416	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:36.372	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:36.788	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:34.732	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:34.468	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:34.216	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:32.20	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:31.580	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:31.376	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:29.212	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:29.976	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:28.732	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:27.336	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:26.776	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:25.576	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:23.140	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:23.304	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:22.376	Samsung Galaxy SII	HTC One X	DELIVERED	1
2014-01-20 13:40:21.296	Samsung Galaxy SII	HTC One X	DELIVERED	1

Previous
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Next

figure 9. list of Secure Messages

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

- **Received:** when PrivateServer actually received the Secure Message
- **From:** sender's account name
- **To:** recipient's account name
- **Status:** status of the message. Secure Message Statuses are described in next paragraph

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. SIP Sessions

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
2014-01-22 16:55:15.116	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.2233-iphone iPhone-5/7.0.3		AES256-SHA	TLS
2014-01-22 16:55:00.182	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.3611-android samsung-GT-I9300/4.1.2		AES256-SHA	TLS
2014-01-22 16:55:00.162	DISCONNECT	UNKNOWN			REPLACED	PGSM_ENT-14.0.3611-android samsung-GT-I9300/4.1.2		AES256-SHA	TLS
2014-01-22 16:54:59.594	CONNECT	CLIENT				PGSM_ENT-14.0.3611-android samsung-GT-I9300/4.1.2		AES256-SHA	TLS
2014-01-22 16:54:49.718	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.3627-android samsung-GT-I9505/4.3		AES256-SHA	TLS
2014-01-22 16:54:49.212	CONNECT	CLIENT				PGSM_ENT-14.0.3627-android samsung-GT-I9505/4.3		AES256-SHA	TLS
2014-01-22 16:54:39.074	UNREGISTER	SERVER			DISCONNECTION	PGSM_ENT-14.0.3627-android samsung-GT-I9505/4.3		AES256-SHA	TLS
2014-01-22 16:54:39.028	DISCONNECT	SERVER			CLOSED	PGSM_ENT-14.0.3627-android samsung-GT-I9505/4.3		AES256-SHA	TLS
2014-01-22 16:54:39.010	UNREGISTER	SERVER			EXPIRATION	PGSM_ENT-14.0.3627-android samsung-GT-I9505/4.3		AES256-SHA	TLS
2014-01-22 16:49:51.484	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.2233-iphone iPhone-5/7.0.3		AES256-SHA	TLS
2014-01-22 16:49:31.608	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.2262-iphone iPhone-4/7.0.2		AES256-SHA	TLS
2014-01-22 16:47:57.102	REGISTER	CLIENT			200 OK	PGSM_ENT-14.0.2233-iphone iPhone-4/7.1		AES256-SHA	TLS

figure 10. 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.

## 8. 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
2013-12-20 14:45:12 CET		ANDROID	SDES	true		+39	SMS
2013-12-20 14:47:09 CET		ANDROID	SDES	true		+39	SMS
2013-12-20 14:51:59 CET		ANDROID	SDES	true		+39	SMS
2013-12-24 12:46:39 CET		IPHONE	ZRTP	true		+39	SMS
2013-12-24 12:49:34 CET		IPHONE	ZRTP	true		+39	SMS
2013-12-24 12:50:24 CET		IPHONE	ZRTP	true		+39	SMS
2013-12-24 12:55:39 CET			ZRTP	true		+39	SMS
2014-01-07 15:26:15 CET		ANDROID	SDES	true		+39	SMS
2014-01-15 11:25:10 CET		ANDROID	SDES	true		+39	SMS
2014-01-20 16:08:55 CET			SDES	false			EMAIL
2014-01-21 17:12:52 CET			SDES	false		@gmail.com	EMAIL
2014-01-21 17:18:23 CET			SDES	true		@gmail.com	EMAIL
2014-01-22 16:26:29 CET			SDES	false		@gmail.com	EMAIL
2014-01-22 16:26:56 CET			SDES	true		@gmail.com	EMAIL
2014-01-22 16:28:05 CET	Samsung Galaxy SII		SDES	true		@privatewave.com	EMAIL
2014-01-22 16:29:12 CET	Samsung Galaxy SII	ANDROID	SDES	true		@privatewave.com	EMAIL

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CSV

figure 11. 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: <a href="https://dev.madama.at/services/d/?token=131fe1304d72d75a3fe9c43fd3470131">https://dev.madama.at/services/d/?token=131fe1304d72d75a3fe9c43fd3470131</a>	
Timestamp:	2014-01-22 16:29:12 CET
Token:	131fe1304d72d75a3fe9c43fd3470131
Sent:	True
Account:	Samsung Galaxy SII
Platform:	ANDROID
Variant:	SDES
Sent by:	
Recipient:	
Message type:	EMAIL

figure 12. 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 12. details of one install message](#).



#### Tip

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

## 9. Provisioning 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
2014-01-22 15:57:01 CET	True		True		@gmail.com	EMAIL
2014-01-22 12:17:19 CET	True		True		+393	SMS
2014-01-22 10:57:17 CET	True	Samsung Galaxy SII	True		+393	SMS
2014-01-22 10:56:14 CET	True	iPhone 4s	True		+393	SMS
2014-01-21 17:18:13 CET	True		False		@gmail.com	EMAIL
2014-01-21 17:15:38 CET	True		False		@gmail.com	EMAIL
2014-01-20 16:09:40 CET	False		False		@gmail.com	EMAIL
2014-01-20 16:02:44 CET	True	iPhone 4s	True		+393	SMS
2014-01-20 15:54:37 CET	True	iPhone 4s	True		+393	SMS
2014-01-20 15:05:30 CET	True	Samsung Galaxy SII	True		+393	SMS
2014-01-20 15:05:07 CET	True	null	True		+393	SMS

figure 13. Log list of the provisioning messages

Clicking on the **Provisioning Messages** link brings you to the logs list shown in [figure 13. 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

### Show Activation message

Message link: <a href="https://madama.at/services/a?token=084">https://madama.at/services/a?token=084</a>	
Timestamp:	2014-01-22 10:57:17 CET
Consumed:	True
Account:	Samsung Galaxy SII
Token:	084
Sent:	True
Validity:	24
Sent by:	
Recipient:	+393
Message type:	SMS

figure 14. 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 14. 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**

[4.0.2 Real-Time management](#)