

IM conversation fields

The system by default stores all chat conversations in the database. However, we have a file format that can be stored on the disk. This file format is used for exporting into file-based storage targets, and there is an option on each recorder service to generate them.

Cisco Jabber IM:

Cisco Compliance Service IM Recording Create Transcript and Metadata XML Files

<ul style="list-style-type: none"> ▾ Cisco Compliance Service <ul style="list-style-type: none"> ▶ General ▾ IM Recording 	
Enable Recorder:	No ▼
Internal Domain, Numbers Pattern:	
Enable Notification Message Inside Domains:	No ▼
Notification Subject Inside Domains:	Verba System Message
Notification Message Inside Domains:	Conversation is recorded.
Enable Notification Message Between Domains:	No ▼
Notification Subject Between Domains:	Verba System Message
Notification Message Between Domains:	Conversation is recorded.
Duplicate Recording If Both Parties Are Recorded:	Yes ▼
Call Timeout (seconds):	300
Persistent Chat Segment Length (minutes):	1440
Create Transcript and Metadata XML Files:	No ▼

SfB/Lync IM:

SfB/Lync IM Recorder General Create Transcript and Metadata XML Files

<ul style="list-style-type: none"> ▾ SfB/Lync IM Recorder <ul style="list-style-type: none"> ▾ General 	
Internal Domain, Numbers Pattern:	
Duplicate Recording If Both Parties Are Recorded:	Yes ▼
Create Transcript and Metadata XML Files:	No ▼

Import Service:

Import General Create IM Transcript Files

▲ Import

▲ General

Wait Time Between Query Cycles [sec]:	600
Internal Domain, Numbers Pattern:	
Create IM Transcript Files:	No ▼

The .IM file is generally a zipped XML file. However, the storage service can skip the zipping step when exporting based on configuration.

Storage Management [Export](#) [Compress IM conversations](#)

▲ Storage Management

▶ General

▶ On-demand Recording

▶ Legal hold

▶ Data Retention

▲ Export

Threads Count:	4
Compress IM conversations:	Yes ▼
Processing Batch Size:	1000

The XML files are UTF-8 encoded.

The following table provides a description of the available fields. Not all fields are presented in all cases, only fields marked as mandatory.

Field	Sample value	Description	Mandatory
cdr_id	4a9d5ec0-7a40-11e4-8271-001cc092f276	Unique conversation identifier in the Verba system. It is possible that some recorders write this field with name 'cdr'.	No
messages		The array of 'message' elements.	Yes

The following table provides a description of the message attributes.

Field	Sample value	Description	Mandatory
id	18 ab5d60f8:acb7:4140:9c51:31a04beb73ce 41271025-c517-4b91-a873-252acb6b67f8	Unique message identifier. Some platforms give us these ids. In other cases, we fill it with auto-incremented numeric values.	Yes
conference_id	394WJ6JR	Platform-specific conversation conference identifier.	No

The following table provides a description of the message fields.

Field	Sample value	Description	Mandatory
timestamp	2021.11.04 11:36:48.771	Date and time of the message in UTC timezone in the following format: YYYY.MM.DD HH:mm:ss.SSS	Yes
source	norbi@verbalabs.com	The number/address of the sender of the message.	Yes
source_name	Norber Kakas	The name of the sender of the message.	No
destination	jsikorsky@verbalabs.com	The number/address of the receiver of the message. Can be filled only for peer 2 peer conversation.	No
plain_message	Hello World!	The plain text formatted content of the message.	No
raw_message	Hello World!	The raw message that was received from the platform.	No
message_header	INVITE sip:toth@verbalabs.com; maddr=fepool.verbalabs.com SIP/2.0	Platform-specific message header.	No
subject		Platform-specific message subject.	No
message_id		Platform-specific message identifier. Deprecated. Use the message id attribute.	No
thread_id	48b173dd-ea2b-11eb-9bde-84fdd16620a5	For advanced IM data model, this id connects/links messages to a conversation. (correlation id)	No
ts_original	2021.11.04 11:36:48.771	For advanced IM data model, this is the original message timestamp.	No
update_delete	0	For advanced IM data model, this means the message action. The following values are possible: <ul style="list-style-type: none"> • 0 = created (a new message) • 1 = updated (an already existing message) • 2 = deleted (an already existing message) 	No
is_reply	0	For advanced IM data model, this means if the message is a reply to another message. The following values are possible: <ul style="list-style-type: none"> • 0 = not a reply • 1 = is a reply 	No

Example XML formatted chat records:

```
<?xml version="1.0"?>
<im>
  <cdr_id>4a9d5ec0-7a40-11e4-8271-001cc092f276</cdr_id>
  <messages>
    <message id="28" conference_id="">
```

```
<timestamp>2016.01.19 14:04:30.793</timestamp>
<source>balazs@verbalabs.com</source>
<destination>toth@verbalabs.com</destination>
<message_header>INVITE sip:toth@verbalabs.com;
maddr=fepool.verbalabs.com SIP/2.0
content-length: 244
via: SIP/2.0/TLS 192.168.1.25:52878;ms-received-port=52878;ms-received-
cid=2B7A00
ms-application-via: ms-icr-to;state=ToPrimary;ms-pool=sfbpool.verbalabs.
com;ms-application=http%3A%2F%2Fwww.microsoft.com%2FLCS%
2FInterClusterRouting;ms-server=FE2SFB.VERBALABS.COM
ms-application-via: SIP;ms-urc-target;ms-urc-rs-from;routed-to-
role=registrar;target-hash=0FB1EE9E;ms-server=FE2SFB.VERBALABS.COM;ms-
pool=sfbpool.verbalabs.com;ms-application=ad894dc3-55e0-44bf-a07e-
3c073aaa4a57
from: &quot;Balázs Oláh&quot;&lt; ;sip:balazs@verbalabs.com&gt; ;
tag=6107b9355b;epid=88509262b4
ms-application-via: ms-udc.cdr%3D5aeece7785e9fc5365e0e83e03ef634%3A1;ms-
pool=sfbpool.verbalabs.com;ms-application=http%3A%2F%2Fwww.microsoft.com%
2FLCS%2FUdcAgent;ms-server=FE2SFB.VERBALABS.COM
max-forwards: 70
to: &lt; ;sip:toth@verbalabs.com&gt;
call-id: 4a8a761f58a14a3c9c4a048d2d936095
cseq: 1 INVITE
contact: &lt; ;sip:balazs@verbalabs.com;opaque=user:epid:
sNs9l4AlxlGehv02bvFmGgAA;gruu&gt;
user-agent: UCCAPI/15.0.4779.1000 OC/15.0.4779.1001 (Skype for Business)
supported: ms-dialog-route-set-update
ms-text-format: text/plain; charset=UTF-8; ms-body=VGVzenQNCg==
ms-im-format: text/html; charset=UTF-8; ms-
body=PFNQQU4gc3R5bGU9Im1hcmdpbi1ib3R0b206MHB0OyBsaW5lLWhlaWdodDpub3JtYWw7
IGZvbnc2b216ZToxMHB0OyBmb250LWZhbWlseToiU2Vnb2UgVUkiLHNhbnMtc2VyaWY7IGNvb
G9yOmJsYWNrOyI+VGVzenQ8Ll1NQQU4+
ms-im-format: text/rtf; charset=UTF-8; ms-
body=e1xydGYxXGZiaWRpclxhbnNpXGFuc2l1jcGcxMjUwXGRlZmYwXG5vdWlj21wYXRcZGVm
bGFuZzEwMzh7XGZvbnc2b216ZToxMHB0OyBmb250LWZhbWlseToiU2Vnb2UgVUkiLHNhbnMtc2VyaWY7IGNvb
G9yOmJsYWNrOyI+VGVzenQ8Ll1NQQU4+
supported: ms-embedded-first-message
supported: ms-delayed-accept
supported: ms-renders-isf
supported: ms-renders-gif
supported: ms-renders-mime-alternative
Ms-Conversation</message_header>
<plain_message>Teszt</plain_message>
<raw_message>&lt; ;SPAN style=&quot; margin-bottom:
0pt; line-height:normal; font-size:10pt; font-family:&quot; Segoe
UI&quot; ,sans-serif; color:black;&quot; &gt; Teszt&lt; ;/SPAN&gt; <
/ raw_message>
</message>
```

```

      <message id="29" conference_id="">
        <timestamp>2016.01.19 14:04:55.967</timestamp>
        <source>balazs@verbalabs.com</source>
        <destination>toth@verbalabs.com</destination>
        <message_header>MESSAGE sip:toth@verbalabs.com;
opaque=user:epid:1cTFqkG_-V26ZHP5x_TS9gAA;gruu SIP/2.0
via: SIP/2.0/TLS 192.168.1.25:52878;ms-received-port=52878;ms-received-
cid=2B7A00
content-length: 295
max-forwards: 70
from: &lt;sip:balazs@verbalabs.com&gt;;tag=6107b9355b;epid=88509262b4
to: &lt;sip:toth@verbalabs.com&gt;;epid=747d7f1c7a;tag=62be4425f9
call-id: 4a8a761f58a14a3c9c4a048d2d936095
cseq: 2 MESSAGE
route: &lt;sip:fepool.verbalabs.com:5061;transport=tls;ms-fe=FE2.
VERBALABS.COM;opaque=state:T;lr&gt;
user-agent: UCCAPI/15.0.4779.1000 OC/15.0.4779.1001 (Skype for Business)
supported: ms-dialog-route-set-update
supported: timer
content-type: text/rtf
ms-application-via: ms-udc.cdr%3D5aeece7785e9fc5365e0e83e03ef634%3A1;ms-
pool=sfbpool.verbalabs.com;ms-application=http%3A%2F%2Fwww.microsoft.com%
2FLCS%2FUdcAgent;ms-server=FE2SFB.VERBALABS.COM
ms-routing-phase: from-uri-routing-done
      </message_header>
      <plain_message>IM test.</plain_message>
      <raw_message>
{\rtf1\fbidis\ansi\ansicpg1250\deff0\nouicompat\deflang1038{\fonttbl
{\f0\fnil\fcharset238 Segoe UI;}{\f1\fnil Segoe UI;}}
{\colortbl ;\red0\green0\blue0;}
{\*\generator Riched20 15.0.4737}{\*\mwrapPr\mwrapIndent1440 }
\viewkind4\uc1
\pard\cf1\f0\fs20 IM test.\f1\par
{\*\lyncflags&lt;rtf=1&gt;}}
      </raw_message>
    </message>
  </messages>
</im>

```

```

<?xml version="1.0" encoding="utf-8"?>
<im>
  <cdr>ea643f69-9750-4d69-b914-ce18107bb0cb</cdr>
  <messages>
    <message id="41271025-c517-4b91-a873-252acb6b67f8">
      <timestamp>2021-07-22T15:38:19.8252288Z</timestamp>
      <source>kakas@verbalabs.com</source>
      <destination>columbo@verbalabs.com</destination>

```

```
<plain_message>4864</plain_message>
<raw_message>4864</raw_message>
<message_header>INVITE sip:columbo@verbalabs.com SIP/2.0
content-length: 242
via: SIP/2.0/TLS 10.110.77.11:52952;branch=z9hG4bKDAC5B8C4.
DE48301CFE2FF8FB;branched=FALSE;ms-received-port=52952;ms-received-
cid=52ED00
via: SIP/2.0/TLS 10.95.71.38:1078;ms-received-port=1078;ms-received-
cid=4B6800
ms-application-via: ms-udc.cdr%3D9013333e5089eac0bebfdf56c591306b%3A3%
3Barch%3D9013333e5089eac0bebfdf56c591306b%3A3;ms-pool=devsfbpool.
verbalabs.com;ms-application=http%3A%2F%2Fwww.microsoft.com%2FLCS%
2FUdcAgent;ms-server=DEVFE2SFB.VERBALABS.COM
record-route: &lt; sip:devsfbpool.verbalabs.com:5061;transport=tls;ms-
fe=DEVFE1SFB.VERBALABS.COM;opaque=state:T;lr&gt;;
tag=3A98EE90947CB2BBC79A0580CE644BB9
max-forwards: 69
ms-application-via: SIP;ms-urc-target;ms-urc-rs-from;target-
hash=5113A4A8;ms-server=DEVFE1SFB.VERBALABS.COM;ms-pool=devsfbpool.
verbalabs.com;ms-application=ad894dc3-55e0-44bf-a07e-3c073aaa4a57
from: "Norbert Kakas"&lt; sip:kakas@verbalabs.com&gt;;tag=7a7bf9ca6b;
epid=a0586a87b7;verbasession=verbaim%7c3;verbaimrecorder=verbaim%7cdev-
rs1.verbalabs.com
ms-application-via: ms-udc.cdr%3D9013333e5089eac0bebfdf56c591306b%3A1%
3Barch%3D9013333e5089eac0bebfdf56c591306b%3A1;ms-pool=devsfbpool.
verbalabs.com;ms-application=http%3A%2F%2Fwww.microsoft.com%2FLCS%
2FUdcAgent;ms-server=DEVFE1SFB.VERBALABS.COM
to: &lt; sip:columbo@verbalabs.com&gt;
call-id: 6fbab6557277490d9b0de0822d2bd5a9
cseq: 1 INVITE
contact: &lt; sip:kakas@verbalabs.com;opaque=user:epid:
2CUGOjm8rlquPhxd21p37AAA;gruu&gt;
user-agent: UCCAPI/16.0.14131.20010 OC/16.0.14131.20320 (Skype for
Business)
supported: ms-dialog-route-set-update
ms-text-format: text/plain; charset=UTF-8; ms-body=NDg2NA==
ms-im-format: text/html; charset=UTF-8; ms-
body=PFNQQU4gc3R5bGU9J2ZvbnQtY2l6ZToxMHBoYB3b3JkLXdyYXA6YnJlYWstd29yZDsg
bWFyZ2luLWJvdHRvbTowY207IGZvbnQtZmFtaWx5OjEJTZWdvdzSBVSSlsc2FucylzZXJpZjsgY
29sb3I6YmxhY2s7IGxpbnUtaGVpZ2h0Om5vcmlhbDsnPjQ4NjQ8L1NQQU4+
ms-im-format: text/rtf; charset=UTF-8; ms-
body=e1xydGYxXGZiaWRpclxhbnNpXGFuc2l2cGcxMjUyXGRlZmYwXG5vdWlj21wYXRcZGVm
bGFuZzEwMzN7XGZvbnR0Ymx7XGYwXGZuaWxcZmNoYXJzZXQwIFNlZ29lIFVJ0317XGYxXGZua
WwgU2Vnb2UgVUk7fX0NCntcy29sb3J0YmwwO1xyZWQwXGdyZWVumFxiHVLMDt9DQp7XCpcZ2
VuZXJhdG9yIFJpY2hlZDIwIDE2LjAuMTQxMzF9XHZpZXdraW5kNFx1YzEgDQpccGFyZFxjZjF
cZjBcZnMyMCA0ODY0XGYxXHBhcg0KellwqXGx5bnNmbGFnczxydGY9MT59fQ0K
supported: ms-embedded-first-message
supported: ms-delayed-accept
supported: ms-renders-isf
supported: ms-renders-gif
supported: ms-renders-mime-alternative
Ms-Conversation-ID: Add/D5eRuGPd4+k4T8eoSj8NHHI0FA==
```

```
supported: timer
supported: histinfo
supported: ms-safe-transfer
supported: ms-sender
supported: ms-early-media
Roster-Manager: sip:kakas@verbalabs.com
EndPoints: &lt; sip:kakas@verbalabs.com&gt;; , &lt; sip:columbo@verbalabs.
com&gt;;
supported: com.microsoft.rtc-multiparty
ms-keep-alive: UAC;hop-hop=yes
allow: INVITE, BYE, ACK, CANCEL, INFO, MESSAGE, UPDATE, REFER, NOTIFY,
BENOTIFY
ms-subnet: 10.95.70.0
supported: ms-conf-invite
content-type: application/sdp
Verba-ImRecorder: dev-rsl.verbalabs.com:10220
ms-routing-phase: from-uri-routing-done
ms-user-data: ms-publiccloud=TRUE;ms-federation=TRUE
</message_header>
  <subject />
</message>
</messages>
</im>
```
