

TCP/IP access

Description



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1. Introduction

This document describes the TCP/IP access of eCall. With the Transmission Control Protocol / Internet Protocol (TCP/IP) access from eCall, you can send messages to various call systems using the TCP/IP protocol.

Structure of the document:

- Requirements
- Protocol
- Message Formats
- Connection Data
- Identification
- Access Test

2. Requirements

The following requirements are necessary in order to send messages using TCP/IP:

- You must have a Business account with eCall.
- Access via TCP/IP must be set up in your Business account.
- Your software must be able to send messages using a TCP/IP connection.

3. Protocol

The processing of a transmission order to eCall requires up to four stages.

1. The client sends the transmission order to eCall.
2. eCall sends a result message to the client.
3. eCall sends notification to the client, if requested.
4. eCall sends a mobile phone recipient's return reply, if requested.

4. Message Formats

All messages consist of a command word and a parameter list. The specific elements of a message are separated from each other by tabs. Parameter ID and Value are separated by a colon. The order is completed with CR LF. The Parameter IDs are case insensitive, i.e. it does not matter if you use upper or lower case letters.

General Format

[Command]<TAB>[Parameter ID 1]:[Parameter Value 1]<TAB>[Parameter ID 2]:[Parameter Value 2]...<CR><LF>

4.1 Transmission Order for Text Messages

Command

SendPage Command for a text message.

Must Parameter

Address Complete pager or mobile phone number (internat. format),
or a list of numbers divided by a semicolon,
or a name of a person or a group specified in the address book of the eCall
account.

Message Text to be displayed on the pager/mobile phone, cannot contain any tabs.
CrLfs must be replaced with the <CR> und <LF> characters.

Optional Parameter

JobID Definite identification of the message.

AccountName Name of the eCall business account.

AccountPassword Password for the eCall business account.

Expanded Functions

CallBack Callback number only applicable for mobile phones, up to 16 numerical or up
to 11 alphanumerical characters possible.

You cannot use a business number as a callback number!

Answer Answer function with eCall (mobile phone or pager number, e-mail or IP
address, “ ” in the logbook) only applicable for mobile phones.

Note: If the “Answer” parameter is transmitted, then the “Callback” value is
ignored. Format for an Answer Message described in section 4.7.

Notification For forwarding the send states you can define receiver addresses:

- by SMS to a mobile number (i.e.: „0041791234567“)
- by e-mail to an e-mail-address (i.e.: „hans.muster@mycompany.ch“)
- by socket to a IP/Port (i.e.: „193.93.208.151/12345“)
- by HTTP(S)-request (i.e.: „http://www.mycompany.ch/notifcations.asp“)
- Write to log only (i.e. „“) empty value

You can combine different addresses. Just use a semicolon « ; » as a separator.

i.e.: „0041791234567;0041781234567;hans.muster@mycompany.ch“

Notification (or AlwaysNotification) format is described in section 4.10.

Attention: Validity area of Notification(or AlwaysNotification) ports up to 32767.

AlwaysNotification Receiving address for notification, as soon as something has changed in the notification status (pager or mobile phone).

Note: If the “AlwaysNotification” parameter is transmitted, the “notification” parameter is not needed.

SendDate Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).

MsgType Delivery option for a specific type of message. Defined types are:

- Flash -> Flash-SMS
- PrioSMS+ -> PrioSMS+

NoLog With this parameter delivery, the message will not be written in the logbook.

Example

```
SendPage<TAB>Address:+41791112233<TAB>Message>Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<CR><LF>
```

```
SendPage<TAB>Address:+41791112233<TAB>Message>Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>AllwaysNotification:name@domain.ch<TAB>Answer:name@domain.ch<CR><LF>
```

```
SendPage<TAB>Address:+41791112233<TAB>Message:Hello  
World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>CallBack:+41791234567<TAB>No  
tification:192.168.0.56/15300<TAB>SendDate:2004-12-20 20:31:50<TAB>JobID:123AB<CR><LF>
```

```
SendPage<TAB>Address:+41791112233<TAB>Message:Hello  
World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>MsgType:Flash<TAB>NoLog<CR>  
<LF>
```

Note: The contents of notification or a reply to a mobile phone, pager, or an e-mail address are restricted to the status of notification or the reply of the recipient. An exception is the JobID, if this parameter was used, in which case it will be inserted at the end of an e-mail text.

4.2 Transmission Order for Fax Messages

Command

SendFax Command for a fax message.

Must Parameter

Address Complete fax number (internat. format),
or a list of numbers divided by a semicolon,
or a name of a person or a group specified in the address book of the eCall
account.

Message Fax message text, cannot contain any tabs. CrLfs must be replaced with the
<CR> and <LF> characters.

Optional Parameter

JobID Definite message identification.

AccountName Name of the eCall Business account.

AccountPassword Password for the eCall Business account.

Expanded Functions

CallingNumber	Sender number.
Subject	Subject.
FaxHeaderID	Sender in fax header.
FaxHeaderInfo	Info in fax header.
SendDate	Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).
MaxRetries	Number of retries.
RetriesTimeIntervallInMin	Delay between retries.
NoCoversheet	Use no coversheet.

Example

```
SendFax<TAB>Address:+41447873071<TAB>Subject:Hello World!<TAB>Message:Testmessage  
<CR><LF>
```

```
SendFax<TAB>Address:+41447873071<TAB>Subject:Test<TAB>Message:Testmessage<TAB>Acco  
untName:xxx<TAB>AccountPassword:yyy<TAB>FromText:0041431234576<TAB>SendDate:2009-  
12-20 20:50<TAB>JobID:123AB<CR><LF>
```


4.3 Transmission Order for Voice Messages

Command

SendVoice Command for a voice message.

Must Parameter

Address Complete number (internat. format).

Message Fax message text, cannot contain any tabs. CrLfs must be replaced with the <CR> und <LF> characters.

Optional Parameter

JobID Definite message identification.

AccountName Name of the eCall Business account.

AccountPassword Password for the eCall Business account.

Expanded Functions

MessageLanguage Determines the language in which the text is read out. The language parameters are as follows: German=DE, French=FR, Italian=IT, English=EN. Default: Language is automatically recognized.

FromText Contains the client's name, which is read out before the message.

SendDate Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).

Example

```
SendVoice<TAB>Address:+41447873070<TAB>FromText:Sample John<TAB>Message:Test  
Message <CR><LF>
```

```
SendVoice<TAB>Address:+41447873070<TAB>FromText:John  
Doe<TAB>Message:Testmessage<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>Mess  
ageLanguage:FR<TAB>SendDate:2009-12-20 20:50<TAB>JobID:123AB<CR><LF>
```

4.4 Message Status Request

Command

GetState Command for a status request.

Must parameter

JobID Message identification of the send request.

Optional parameter

Address Receiver address (internat. format). Format: international numbering format (+41791234567). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the state of the last job within the Job ID.

AccountName Name of your eCall account.

AccountPassword Password of your eCall account.

4.5 Response Message Request

In order to be able to take advantage of this function, the send request for the message has to be created with an empty „Answer“-Parameter, which means response into the logbook.

Command

GetAnswer Command for getting the answer

Must parameter

JobID Job identification of the Send request

Optional parameter

Address Receiver address (internat. format). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the last job within answer with this Job ID.

AccountName Name of your eCall account.

AccountPassword Password of your eCall account.

4.6 Result Message for Send Requests

Command

ResultPage Command for a result message.

Must Parameter

ResultCode Result code (according to paragraph error codes).

ResultText Result in cleartext (according to paragraph error codes).

Optional Parameter

JobID Definite message identification, if it was included in the transmission order.

Example

ResultPage<TAB>ResultCode:0<TAB>ResultText:Page Accept<CR><LF>

Note: The result message only shows that the transmission order was accepted by eCall. It does not say whether or not the order was successfully transmitted to the appropriate call center or to the recipient.

4.7 Result Message for Status Requests

Command

ResultPage Command for a result message.

Must parameter

ResultCode Result code according to the table „Error Codes“.

ResultText Result in plain text according to the table „Error Codes“.

Optional Parameter

JobID Identification of the message.

Address Receiver address (internat. format).

JobType Jobtype according to table “Job types”.

SendState Send state of the job according to table “Send States”.

ErrorState Error state of the job according to table “Error States.

PointsUsed Number of points used for the message.

FinishDate Finish date of the send request (yyyy-mm-dd hh:mm:ss).

Examples

a) when a job was found:

```
ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:abcdef<TAB>JobID:abcde
Address:+41791234567<TAB>JobType:6<TAB>SendState:44<TAB>ErrorState:0<TAB>PointsUsed:3
<TAB>FinishDate:2006-10-30-08:55:28<CR><LF>
```

b) when no job was found:

```
ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>
```

4.8 Result for a Response Message request

Command

ResultPage Command for a result message.

Must parameter

ResultCode Result code according to the table „Error Codes“.

ResultText Result in plain text according to the table „Error Codes“.

Optional Parameter

JobID Identification of the message.

FromAddress Sender address (internat. format).

JobType Jobtype according to table “Job types”.

AnswerState Response state according to table „Response types“.

AnswerMessage Response Message.

FinishDate Finish date of the response (yyyy-mm-dd hh:mm:ss).

Examples

a) when an Answer message was found:

```
ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:IPTESTANSWER<TAB>FromAdd  
r  
ess:+41791234567<TAB>JobType:0<TAB>AnswerState:2<TAB>AnswerMessage:Answer from  
ABC<TAB>FinishDate:2006-11-22 08:59:06<CR><LF>
```

b) when no answer message was found:

```
ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>
```

4.9 Notification Message

Command

Notification Command for a notification message.

Must Parameter

NotificationCode Message status code (according to Notification Table).

NotificationText Status in cleartext (according to Notification Table).

Number Contains the notification recipient's number.

TimeStamp Contains the time of receipt of a sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX> In order for us to note the notification message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Optional Parameter

JobID Contains the definite message identification, if it was included in the transmission order.

Example

```
Notification<TAB> NotificationCode:0<TAB> NotificationText:Message has been delivered
<TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>
```

Notification Label

NotificationCode	NotificationText	Description
0	Message has been delivered	The recipient confirmed the receipt of the forwarded message.
1	Message has been buffered	Receipt of the forwarded message could not be confirmed yet.
2	Message has not been been delivered	Receipt of the forwarded message could not be confirmed.
3	Error Code / Error Message	Determines the error at transmission to the appropriate center.
4	Transmission OK	The transmission order was forwarded to the appropriate center.

4.10 Answer Message

Command

Answer Command for an answer message.

Must Parameter

Message Shows the message that we received.

Number Shows the sender number of this reply (internat. format).

TimeStamp Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX> In order for us to note the answer message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Optional Parameter

JobID Shows the definite identification of the sent message, if it was included in the transmission order.

Example

```
Answer<TAB>Message:Time is OK. Say Hi to John<TAB>Number:+41793726262
<TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>
```

Note: For each response message a read receipt is requested. If this receipt is not transmitted, the request will be retransmitted.

4.11 SMS Incoming Message

Command

IncomingSMS Command for a SMS incoming message.

Must Parameter

Message Shows the message that we received.

AddressTo Shows the receiver number of this message (internat. format).

AddressFrom Shows the sender number of this message (internat. format).

TimeStamp Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX> In order for us to note the SMS incoming message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Example

```
IncomingSMS<TAB>Message: Time is OK. Say Hi to John<TAB> AddressFrom:+41790000000
<TAB>AddressTo:+41763332020<TAB>TimeStamp:18.09.2007 12:15:45<CR><LF>
```

Note: For each incoming message a read receipt is requested. If this receipt is not transmitted, the request will be retransmitted.

5. Connection Data

5.1 IP Addresses for Send Requests (Client → eCall)

Primary Access

Dest-IP: tcpipint1.ecall.ch (193.93.208.132)
Dest-Port: 2711

Secondary Access

Dest-IP: tcpipint2.ecall.ch (193.93.208.151)
Dest-Port: 2711

In either case, the connection will be closed again 60 seconds after connection establishment.

5.2 IP Address of Answers or Incomings (eCall → Client)

Source IP-addresses: 193.93.208.200
193.93.208.149
193.93.208.153
Source-Port: undefined (open; 0 till 65535)
Dest-IP: freely definable
Dest-Port: freely definable

Format for transfer: 192.168.0.1/1234

6. Identification

eCall only accepts orders if the sender can be identified. The following criteria can selectively be used in order to identify the sender:

- IP address of sender
- IP address and IP port of sender
- Account name and password

These criteria can, as a matter of course, also be combined. Please contact us for further identification possibilities.

7. Access Test

You can use TELNET, for example, in order to conduct a simple access test. Please note the requirements for access use. In addition, you need to know if the account name and the account password are necessary for identification.

- A) Open a text editor (e.g. Notepad) and write an order (Tabs between the parameters, end with Return), e.g.:
SendPage Address:+41740342686 Message:Test via eCall
AccountName:CompanyXY AccountPassword:123456
- B) Mark the text, including the blank line that follows.
- C) Choose "Copy" in the menu.
- D) Start-up Telnet (with START -> Run -> telnet). Careful: Windows 2000 Telnet does not function faultlessly. You can find a fully functioning version of Telnet at www.ecall.ch, see "help"-> access via TCP/IP.
- E) Choose "Connect" – Remote System in the Telnet menu.
- F) Specify the hostname: tcpipint1.ecall.ch and port: 2711-> Connect.
- G) Choose "Edit" -> "Paste" in the menu.

You should now receive a result message from eCall.

Appendix-Tables

Job-Type

Number	Description
1	SMS or pager-message
2	Mail-message
3	IP-message
4	Delete request
5	Voice-message
6	Fax-message
7	Picture
8	Logo
9	Ringtone
10	MMS-message

Answer-state

Number	Description
1	Waiting for answer
2	Answer received
3	Holding time for answer expired
4	SMS answer to eCall not possible
5	SMS received

Send state

Type	No.	Description
SMS / Pager	0	Transmitting
	1	Transmission OK
	2	Error
	3	The error detail can be found in the field ErrorState, the description in chapter 7.3
	8	Scheduled transmission time
	9	Transmission OK (reception confirmed)
	10	Transmission OK (reception not yet confirmed, waiting to deliver message)
Voice	30	Message is being transferred to voice system.
	31	Message successfully transferred to voice system.
	32	Transfer of message to voice system was not successful.
	33	Message played successfully
	34	Message played successfully and feedback received
	35	Message with invalid phone number.
	36	Message reception confirmed
	37	No connection within defined time range.
	38	Receiver is being called
	39	Receiver could not be reached, retry pending
Fax	101	Job group successfully assigned at gateway
	201	Started converting
	202	Single file converted
	301	Merging documents of fax message
	401	Fax message is being processed
	402	Processing Single Job finished
	501	Processing Job group finished
	41	Fax message successfully transmitted
	42	Error. Details can be found in the Field ErrorState, the description in chapter 7.3
	43	Transmission waiting
	44	Request newly issued

Error state

Type	No.	Description
SMS / Pager	71	No Job accepted message from gateway
	1000	Connection cancelled
	1001	Timeout: The message could not be sent.
	5111	The text is too long
	5112	Invalid call number
	5120	Ziel-Rufnummer ist eine Tonrufnummer: Meldung unzulässig
	5121	Ziel-Rufnummer ist eine Numeriknummer: Unzulässiges Zeichen
	5155	Zu starker Verkehr
	5164	Call system troubled
	5502	Message from provider: Syntax error
	5504	Message from provider: Operation not allowed - Maximum messages for the address exceeded
	5506	Message from provider: ADC invalid
	5509	Invalid call number
	Fax	6000
6002		Error converting the documents
6004		No response
6005		Empty order
6006		Line busy
6007		Call rejected
6009		Unknown calling number
6010		Invalid calling number
6011		Number changed
6013		The receiver is not a fax device
6014		Connection dropped by sender
6015		Connection dropped by receiver
6016		Fileformat not supported
6017		No access to file

Error code

ErrorCode	ErrorText	Description
11000	SyntaxError	Syntax error
11001	PermissionDenied	Access is denied
11100	AdrAdCInvalid	Invalid or incorrect recipient's address
11101	AdrNAdInvalid	Invalid or incorrect confirmation address
11102	AdrAdCMissing	Recipient address missing
11103	AdrNAdMissing	Notification address missing
11104	AdrAdCTooMany	Too many recipient addresses transmitted
11105	AdrAdCNotAllowed	Recipient address is not within defined area
11200	MsgNoCharacters	No message existent
11201	MsgInvalidCharacters	Invalid characters in the message
11202	MsgSendTimeInvalid	Invalid sending time given
11203	MsgSendTimeNotAllowed	Sending time is not within time slot
11204	MsgNoNewMsg	No new incoming message available
11300	AccNoUser	Unknown user
11301	AccNoUnits	Not enough credits in account
11303	AccNoFreeUnits	Not enough free credits in account
11400	CallSystemInvalid	Invalid call system
11401	CallSystemInvalidForUser	Invalid call system for this user
11402	CallSystemNotSupported	Call system is not supported
11403	CallSystemConfused	Call system is temporarily out of order
11500	IDMissing	ID is missing
11501	IDInvalid	ID could not be found
11502	IDDoesNotExist	ID does not exist in the system
11600	StateAlreadyTransmitted	Message already transmitted
11700	DataReadError	Data contents could not be read
11800	CBMsgError	Callback contains a forbidden number or text
11911	JobIDRequired	The status request does not contain a JobID
11912	JobIDNotFound	No job was found with the supplied ID