# Документация API

- Evolvex API
- Manager API

# Evolvex API

## Введение

Программный интерфейс разработанный компанией Evolvex. Позволяет взаимодействовать с телефонной станцией через HTTP запросы. Позволяет расширить функциональность стандартного Manager API.

## Проверка доступа

Проверка доступа

GET /api/index/check

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| context | String | Нет | Маршрутизация |
| uniqueid | String | Нет | Уникальный идентификатор звонка |

Ответ в Json:


```
{
  "data": {
    "api_user": {
      "uuid": "5485137a-3c6d-454e-9801-d3b875f7a5e0",
      "name": "API",
      "description": "",
      "enable": "yes",
      "api_key": "84f8fc34-82ad-46b0-b5f3-3cfd0462beeb",
      "group_uuid": "4c343af6-4a91-469a-a717-f682e52c830f"
    },
    "access": {
      "uuid": "0eb1bc58-b259-4c88-be02-a059d50cecc3",
      "name": "incoming",
      "description": "Входящая маршрутизация",
      "group_uuid": "4c343af6-4a91-469a-a717-f682e52c830f"
    },
    "file": true
```

```
}
```

# Получение файла mp3

GET /api/index/get_file_mp3

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| uniqueid | String | Нет | Уникальный идентификатор звонка |

Ответ:

Потоковое аудио

# Получение файла wav

GET /api/index/get_file_wav

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| uniqueid | String | Нет | Уникальный идентификатор звонка |

Ответ:

Потоковое аудио

# Получение статуса звонка

GET /api/index/status

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| calleridnum | String | Нет | АОН |
| connectedlinenum | String | Нет | Соединенная линия |
| context | String | Нет | Маршрутизация |
| exten | String | Нет | Расширение |

Ответ в Json:

```
{
 "data": [
  {
   "Event": "Status",
   "Privilege": "Call",
   "Channel": "PJSIP/user-00000011",
   "ChannelState": "5",
   "ChannelStateDesc": "Ringing",
   "CallerIDNum": "109",
   "CallerIDName": "",
   "ConnectedLineNum": "110",
   "ConnectedLineName": "",
   "Language": "ru",
   "AccountCode": "",
   "Context": "outgoing",
   "Exten": "109",
   "Priority": "1",
   "Uniqueid": "1711279935.61",
   "Linkedid": "1711279935.60",
   "Type": "PJSIP",
   "DNID": "",
   "EffectiveConnectedLineNum": "110",
   "EffectiveConnectedLineName": "",
   "TimeToHangup": "0",
   "BridgeID": "",
   "Application": "AppDial",
   "Data": "(Outgoing Line)",
   "Nativeformats": "(alaw|ulaw)",
   "Readformat": "alaw",
   "Readtrans": "",
   "Writeformat": "alaw",
   "Writetrans": "",
   "Callgroup": "0",
   "Pickupgroup": "0",
   "Seconds": "5",
   "Variable": "DIALEDPEERNUMBER=user/sip:user@1.1.1.1:5937",
   "DIALEDPEERNUMBER": "user/sip:company@1.1.1.1:5937",
   "ActionID": "66000f44594c1"
  },
  {
```

```
"Event": "Status",
"Privilege": "Call",
"Channel": "PJSIP/user",
"ChannelState": "4",
"ChannelStateDesc": "Ring",
"CallerIDNum": "110",
"CallerIDName": "",
"ConnectedLineNum": "109",
"ConnectedLineName": "",
"Language": "ru",
"AccountCode": "",
"Context": "outgoing",
"Exten": "109",
"Priority": "7",
"Uniqueid": "1711279935.60",
"Linkedid": "1711279935.60",
"Type": "PJSIP",
"DNID": "109",
"EffectiveConnectedLineNum": "109",
"EffectiveConnectedLineName": "",
"TimeToHangup": "0",
"BridgeID": "",
"Application": "Dial",
"Data": "PJSIP/user/sip:user@1.1.1.1:5937,60,tT",
"Nativeformats": "(alaw|ulaw)",
"Readformat": "alaw",
"Readtrans": "",
"Writeformat": "alaw",
"Writetrans": "",
"Callgroup": "0",
"Pickupgroup": "0",
"Seconds": "5",
"Variable": "SIPDOMAIN=pbx1.ru",
"RINGTIME_MS": "298",
"RINGTIME": "0",
"PROGRESSTIME_MS": "",
"PROGRESSTIME": "",
"DIALEDTIME_MS": "",
"DIALEDTIME": "",
"ANSWEREDTIME_MS": "",
```

```
      "ANSWEREDTIME": "",
      "DIALEDPEERNAME": "",
      "DIALEDPEERNUMBER": "",
      "DIALSTATUS": "",
      "MIXMONITOR_FILENAME": "/var/spool/asterisk/monitor/1711279935.60.wav",
      "SIPDOMAIN": "pbx1.ru",
      "ActionID": "66000f44594c1"
    }
  ]
}
```


# Создание звонка

GET /api/index/originate

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| channel | String | Да | Канал |
| exten | String | Да | Расширение |
| context | String | Да | Маршрутизация |
| priority | Integer | Да | Приоритет |
| callerid | String | Нет | АОН |
| variable | String | Нет | Переменные |
| async | Boolean | Нет | Асинхронный ввод |

variable - позволяет передать несколько переменных через запятую. Например variable=file=123,idcall=456

# Загрузка файла

POST /api/index/uploads

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| file | File | Да | Файл |

Пример загрузки файла:

```
$curl_file = curl_file_create("/home/user/test.wav");


$post = array("file"=> $curl_file);
$ch = curl_init();
curl_setopt($ch, CURLOPT_URL, "http:/192.168.0.2/pbx/api/index/uploads?api_key=11111111-2222-3333-4444-555555555555");
curl_setopt($ch, CURLOPT_POST, true);
curl_setopt($ch, CURLOPT_POSTFIELDS, $post);
$result = curl_exec($ch);
curl_close($ch);
```

# Получение статистики звонков

POST /api/index/get_log_cdr

| **Параметр** | **Тип** | **Обязательный** | **Описание** |
|---|---|---|---|
| api_key | String | Да | API Ключ |
| start | Datetime | Нет | Начало записей логов, если не указано берется начало дня. |
| end | Datetime | Нет | Конец записей логов, если не указано берется конец дня. |

Ответ в Json:


```
{
  "data": [
    {
      "accountcode": null,
      "src": "79123456789",
      "dst": "110",
      "dcontext": "local-evolvex",
      "clid": "\"Сергей\" <79123456789>",
      "channel": "Local/110@local-evolvex-00000167;2",
      "dstchannel": "PJSIP/user-110-evolvex-000002a0",
      "lastapp": "Dial",
      "lastdata": "PJSIP/user-110-evolvex/sip:user-110-evolvex@1.1.1.1:10110,60,t",
```

```
      "start": "2024-10-30 09:59:15",
      "answer": null,
      "end": "2024-10-30 09:59:22",
      "duration": "7",
      "billsec": "0",
      "disposition": "NO ANSWER",
      "amaflags": "DOCUMENTATION",
      "userfield": null,
      "uniqueid": "1730267955.2409",
      "linkedid": "1730267935.2405",
      "peeraccount": null,
      "sequence": "1923",
      "source": null,
      "destination": null,
      "direction": null,
      "group_uuid": null
    }
  ]
}
```

# Manager API

## Введение

Для работы с интерфейсом событий существует несколько вариантов взаимодействия.

/arawman => Raw HTTP Manager Event Interface with Digest authentication
/rawman => Raw HTTP Manager Event Interface
/amxml => XML Manager Event Interface with Digest authentication
/mxml => XML Manager Event Interface

Документация описывает взаимодействие с интерфейсом событий через необработанные HTTP запросы. Аналогичная документация применима и к другим вариантам.

## Авторизация

GET /rawman?action=login

| **Параметр** | **Тип** | **Обязательный** | **Описание** |
|---|---|---|---|
| username | String | Да | Пользователь |
| secret | String | Да | Пароль |

Пример запроса: http://<ip>:8088/rawman?action=login&username=test&secret=test

Пример ответа:

```
Response: Success
Message: Authentication accepted
```

## Проверка доступности

GET /rawman?action=ping

Пример ответа:

```
Response: Success
Ping: Pong
Timestamp: 1711272193.709205
```

## Запрос статуса телефонной станции

GET /rawman?action=status

| Параметр | Тип | Обязательный | Описание |
|---|---|---|---|
| actionid | String | Нет | Идентификатор запроса |
| channel | String | Нет | Канал |
| variables | String | Нет | Переменные |
| allvariables | Boolean | Нет | Все переменные |

Пример ответа:

```
Response: Success
EventList: start
Message: Channel status will follow

Event: Status
Privilege: Call
Channel: PJSIP/user
ChannelState: 6
ChannelStateDesc: Up
CallerIDNum: 110
CallerIDName:
ConnectedLineNum: <unknown>
ConnectedLineName: <unknown>
Language: ru
AccountCode:
Context: outgoing
Exten: 153
Priority: 3
Uniqueid: 1711273253.11
Linkedid: 1711273253.11
Type: PJSIP
DNID: 153
EffectiveConnectedLineNum: <unknown>
EffectiveConnectedLineName: <unknown>
TimeToHangup: 0
BridgeID:
```

Application: Queue

Data: queue

Nativeformats: (alaw)

Readformat: alaw

Readtrans:

Writeformat: slin

Writetrans: (slin@8000)->(alaw@8000)

Callgroup: 0

Pickupgroup: 0

Seconds: 21

Event: StatusComplete

EventList: Complete

ListItems: 1

Items: 1

# Запрос создания звонка

GET /rawman?action=originate

| **Параметр** | **Тип** | **Обязательный** | **Описание** |
|---|---|---|---|
| actionid | String | Нет | Идентификатор запроса |
| channel | String | Да | Канал |
| exten | String | Да | Расширение |
| context | String | Да | Маршрутизация |
| priority | Integer | Да | Приоритет |
| application | String | Нет | Приложение |
| data | String | Да | Данные приложение |
| timeout | Integer | Да | Таймаут |
| callerid | String | Нет | АОН |
| variable | String | Нет | Переменные |
| account | | | |
| earlymedia | | | |
| async | Boolean | Нет | Асинхронный ввод |

| Параметр | Тип | Обязательный | Описание |
| --- | --- | --- | --- |
| codecs | | | |
| channelid | | | |
| otherchannelid | | | |

Пример запроса:
http://<ip>:8088/rawman?action=originate&channel=PJSIP/user&context=outgoing&exten=100&priority=1&async=true

# Список команд

GET /rawman?action=listcommands

Пример ответа:

```
Response: Success
AbsoluteTimeout: Set absolute timeout.  (Priv: system,call,all)
AGI: Add an AGI command to execute by Async AGI.  (Priv: agi,all)
AOCMessage: Generate an Advice of Charge message on a channel.  (Priv: aoc,all)
Atxfer: Attended transfer.  (Priv: call,all)
BlindTransfer: Blind transfer channel(s) to the given destination  (Priv: call,all)
Bridge: Bridge two channels already in the PBX.  (Priv: call,all)
BridgeDestroy: Destroy a bridge.  (Priv: <none>)
BridgeInfo: Get information about a bridge.  (Priv: <none>)
BridgeKick: Kick a channel from a bridge.  (Priv: <none>)
BridgeList: Get a list of bridges in the system.  (Priv: <none>)
BridgeTechnologyList: List available bridging technologies and their statuses.  (Priv: <none>)
BridgeTechnologySuspend: Suspend a bridging technology.  (Priv: <none>)
BridgeTechnologyUnsuspend: Unsuspend a bridging technology.  (Priv: <none>)
CancelAtxfer: Cancel an attended transfer.  (Priv: call,all)
Challenge: Generate Challenge for MD5 Auth.  (Priv: <none>)
Command: Execute Asterisk CLI Command.  (Priv: command,all)
ConfbridgeKick: Kick a Confbridge user.  (Priv: call,all)
ConfbridgeList: List participants in a conference.  (Priv: reporting,all)
ConfbridgeListRooms: List active conferences.  (Priv: reporting,all)
ConfbridgeLock: Lock a Confbridge conference.  (Priv: call,all)
ConfbridgeMute: Mute a Confbridge user.  (Priv: call,all)
ConfbridgeSetSingleVideoSrc: Set a conference user as the single video source
  distributed toall other participants.  (Priv: call,all)
```

ConfbridgeStartRecord: Start recording a Confbridge conference.  (Priv: system,all)
ConfbridgeStopRecord: Stop recording a Confbridge conference.  (Priv: system,all)
ConfbridgeUnlock: Unlock a Confbridge conference.  (Priv: call,all)
ConfbridgeUnmute: Unmute a Confbridge user.  (Priv: call,all)
CoreSettings: Show PBX core settings (version etc).  (Priv: system,reporting,all)
CoreShowChannelMap: List all channels connected to the specified channel.  (Priv: system,reporting,all)
CoreShowChannels: List currently active channels.  (Priv: system,reporting,all)
CoreStatus: Show PBX core status variables.  (Priv: system,reporting,all)
CreateConfig: Creates an empty file in the configuration directory.  (Priv: config,all)
DBDel: Delete DB entry.  (Priv: system,all)
DBDelTree: Delete DB Tree.  (Priv: system,all)
DBGet: Get DB Entry.  (Priv: system,reporting,all)
DBGetTree: Get DB entries, optionally at a particular family/key  (Priv: system,reporting,all)
DBPut: Put DB entry.  (Priv: system,all)
DialplanExtensionAdd: Add an extension to the dialplan  (Priv: system,all)
DialplanExtensionRemove: Remove an extension from the dialplan  (Priv: system,all)
Events: Control Event Flow.  (Priv: <none>)
ExtensionState: Check Extension Status.  (Priv: call,reporting,all)
ExtensionStateList: List the current known extension states.  (Priv: call,reporting,all)
FAXSession: Responds with a detailed description of a single FAX session  (Priv: call,all)
FAXSessions: Lists active FAX sessions  (Priv: call,all)
FAXStats: Responds with fax statistics  (Priv: reporting,all)
Filter: Dynamically add filters for the current manager session.  (Priv: system,all)
GetConfig: Retrieve configuration.  (Priv: system,config,all)
GetConfigJSON: Retrieve configuration (JSON format).  (Priv: system,config,all)
Getvar: Gets a channel variable or function value.  (Priv: call,reporting,all)
Hangup: Hangup channel.  (Priv: system,call,all)
ListCategories: List categories in configuration file.  (Priv: config,all)
ListCommands: List available manager commands.  (Priv: <none>)
LocalOptimizeAway: Optimize away a local channel when possible.  (Priv: system,call,all)
LoggerRotate: Reload and rotate the Asterisk logger.  (Priv: system,reporting,all)
Login: Login Manager.  (Priv: <none>)
Logoff: Logoff Manager.  (Priv: <none>)
MailboxCount: Check Mailbox Message Count.  (Priv: call,reporting,all)
MailboxStatus: Check mailbox.  (Priv: call,reporting,all)
MessageSend: Send an out of call message to an endpoint.  (Priv: message,all)
MixMonitor: Record a call and mix the audio during the recording.
  Use of StopMixMonitor is required to guarantee the audio file
  is available for processing during dialplan execution.  (Priv: system,all)
MixMonitorMute: Mute / unMute a Mixmonitor recording.  (Priv: system,call,all)

ModuleCheck: Check if module is loaded.  (Priv: system,all)
ModuleLoad: Module management.  (Priv: system,all)
Originate: Originate a call.  (Priv: originate,all)
Ping: Keepalive command.  (Priv: <none>)
PJSIPHangup: Hangup an incoming PJSIP channel with a SIP response code  (Priv: system,call,all)
PJSIPQualify: Qualify a chan_pjsip endpoint.  (Priv: system,reporting,all)
PJSIPRegister: Register an outbound registration.  (Priv: system,reporting,all)
PJSIPShowAors: Lists PJSIP AORs.  (Priv: system,all)
PJSIPShowAuths: Lists PJSIP Auths.  (Priv: system,all)
PJSIPShowContacts: Lists PJSIP Contacts.  (Priv: system,all)
PJSIPShowEndpoint: Detail listing of an endpoint and its objects.  (Priv: system,all)
PJSIPShowEndpoints: Lists PJSIP endpoints.  (Priv: system,all)
PJSIPShowRegistrationInboundContactStatuses: Lists ContactStatuses
  for PJSIP inbound registrations.  (Priv: system,all)
PJSIPShowRegistrationsInbound: Lists PJSIP inbound registrations.  (Priv: system,all)
PJSIPShowRegistrationsOutbound: Lists PJSIP outbound registrations.  (Priv: system,reporting,all)
PJSIPShowResourceLists: Displays settings for configured resource lists.  (Priv: system,all)
PJSIPShowSubscriptionsInbound: Lists subscriptions.  (Priv: system,all)
PJSIPShowSubscriptionsOutbound: Lists subscriptions.  (Priv: system,all)
PJSIPUnregister: Unregister an outbound registration.  (Priv: system,reporting,all)
PresenceState: Check Presence State  (Priv: call,reporting,all)
QueueAdd: Add interface to queue.  (Priv: agent,all)
QueueChangePriorityCaller: Change priority of a caller on queue.  (Priv: <none>)
QueueLog: Adds custom entry in queue_log.  (Priv: agent,all)
QueueMemberRingInUse: Set the ringinuse value for a queue member.  (Priv: agent,all)
QueuePause: Makes a queue member temporarily unavailable.  (Priv: agent,all)
QueuePenalty: Set the penalty for a queue member.  (Priv: agent,all)
QueueReload: Reload a queue, queues, or any sub-section of a queue or queues.  (Priv: <none>)
QueueRemove: Remove interface from queue.  (Priv: agent,all)
QueueReset: Reset queue statistics.  (Priv: <none>)
QueueRule: Queue Rules.  (Priv: <none>)
QueueStatus: Show queue status.  (Priv: <none>)
QueueSummary: Show queue summary.  (Priv: <none>)
QueueWithdrawCaller: Request to withdraw a caller from the queue back to the dialplan.  (Priv: <none>)
Redirect: Redirect (transfer) a call.  (Priv: call,all)
Reload: Send a reload event.  (Priv: system,config,all)
SendText: Sends a text message to channel. A content type
  can be optionally specified. If not set it is set to an empty
  string allowing a custom handler to default it as it sees fit.  (Priv: call,all)
Setvar: Sets a channel variable or function value.  (Priv: call,all)

```
ShowDialPlan: Show dialplan contexts and extensions  (Priv: config,reporting,all)
Status: List channel status.  (Priv: system,call,reporting,all)
StopMixMonitor: Stop recording a call through MixMonitor,
  and free the recording's file handle.  (Priv: system,call,all)
UpdateConfig: Update basic configuration.  (Priv: config,all)
UserEvent: Send an arbitrary event.  (Priv: user,all)
WaitEvent: Wait for an event to occur.  (Priv: <none>)
```

# Описание команд

GET /rawman?action=command&command=manager show command waitevent

Пример ответа:

```
Response: Success
Message: Command output follows
Output: [Syntax]
Output: Action: WaitEvent
Output: [ActionID:] <value>
Output: Timeout: <value>
Output:
Output: [Synopsis]
Output: Wait for an event to occur.
Output:
Output: [Description]
Output: This action will elicit a 'Success' response. Whenever a manager event is
Output: queued. Once WaitEvent has been called on an HTTP manager session, events will
Output: be generated and queued.
Output:
Output: [Arguments]
Output: ActionID
Output:     ActionID for this transaction. Will be returned.
Output: Timeout
Output:     Maximum time (in seconds) to wait for events, '-1' means forever.
Output:
Output: [See Also]
Output: Not available
Output:
Output: [Privilege]
Output: <none>
Output:
Output: [List Responses]
Output: None
Output:
Output: [Final Response]
Output: None
Output:
Output:
```