WebSocket Server API Documentation

WebSocket server for inbound call handling. Processes call-related events and handles binary audio data streaming. You need to implement your own WebSocket server and handle the events and actions during the WebSocket communication process.

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Server Information

- **Port**: `4143` (Customizable - define your own port and inform the development team)
- **Protocol**: `ws://` (Can be either `ws://` or `wss://`)

Message Formats

The server handles two types of messages:

1. **JSON Text**: For signaling and control events
2. **Binary**: For audio data streaming

API Events

Client → Server Events

`incoming_call`

Sent when a new call is received by the server.

Payload:

```
{
  "event": "incoming_call",
  "callerId": "string",
  "didNumber": "string",
  "sessionId": "string"
}
```

Parameters:

- `callerId`: Caller phone number
- `didNumber`: Destination phone number
- `sessionId`: Unique session identifier for the call

`dtmf`

Sent when a DTMF digit is pressed by the caller.

Payload:

```
{
  "event": "dtmf",
  "digit": "string"
}
```

Valid Digits: `0-9`, `*`, `#`, `A-D`

`hangup`

Sent when client terminates the call.

Payload:

```
{
  "event": "hangup"
}
```

`cdr`

Sent after the call ends with call detail record information.

Payload:

```
{
  "event": "cdr",
  "sessionId": "string",
  "destination": "string",
  "startTime": "string",
  "answerTime": "string",
  "endTime": "string",
  "duration": number,
  "billableSeconds": number,
  "disposition": "string",
  "hangupBy": "string",
  "hangupCauseCode": string,
  "hangupCauseText": "string"
}
```

Parameters:

- `sessionId`: Unique session identifier for the call

- `destination`: Destination phone number
- `startTime`: Call start time (ISO format)
- `answerTime`: Call answer time (ISO format)
- `endTime`: Call end time (ISO format)
- `duration`: Total call duration in seconds
- `billableSeconds`: Billable duration in seconds
- `disposition`: Call disposition status
- `hangupBy`: Who initiated hangup
- `hangupCauseCode`: Hangup cause code
- `hangupCauseText`: Hangup cause description

Server → Client Events

`answer`

Sent to answer the incoming call.

Payload:

```
{
  "event": "answer"
}
```

`dtmf`

Sent to initiate DTMF tone to the caller.

Payload:

```
{
  "event": "dtmf",
  "digit": "string",
  "duration": number
}
```

Parameters:

- `digit`: DTMF digit to send (`0-9`, `*`, `#`)
- `duration`: Tone duration in milliseconds (max 1000ms)

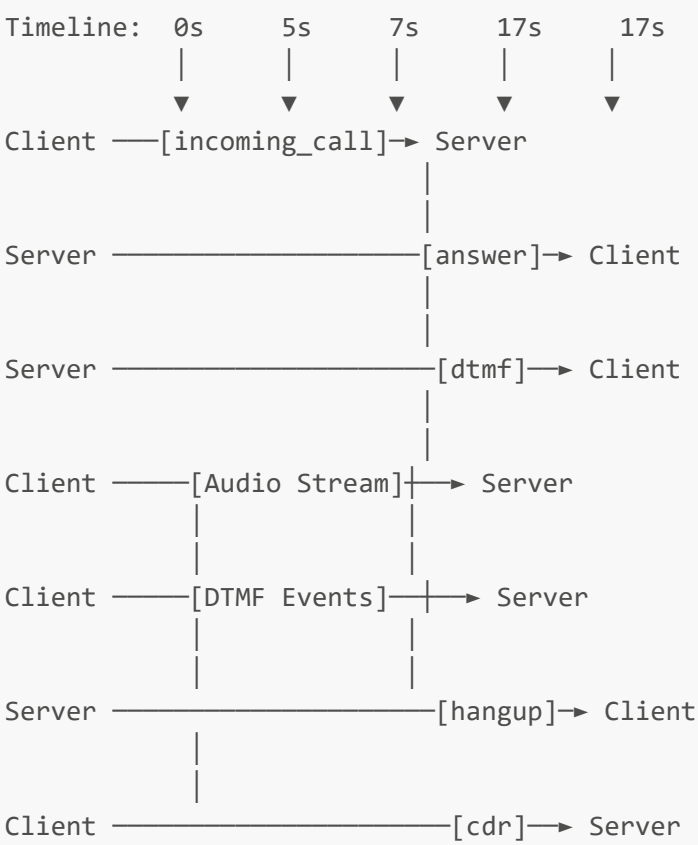
`hangup`

Sent to terminate the call.

Payload:

```
{
  "event": "hangup"
}
```

Call Flow



Detailed Flow:

1. **Connection** (0s)
   - Client connects to `ws://localhost:4143`
2. **Incoming Call** (5s)
   - Client sends `{ "event": "incoming_call", "callerId": "...", "didNumber": "...", "sessionId": "..." }`
3. **Answer** (5s)
   - Server sends `{ "event": "answer" }`
4. **Send DTMF** (7s)
   - Server sends `{ "event": "dtmf", "digit": "1", "duration": 200 }`
5. **Audio Stream & DTMF** (7s - 17s)

- Client streams binary audio data
- Server echoes audio data back
- Client sends DTMF events: `{ "event": "dtmf", "digit": "1" }`

6. **Hangup** (17s)

- Server sends `{ "event": "hangup" }`

7. **CDR** (17s)

- Client sends call detail record: `{ "event": "cdr", "sessionId": "...", "duration": ..., "billableSeconds": ..., "disposition": "...", "hangupBy": "...", "hangupCauseCode": "...", "hangupCauseText": "..." }`
- Connection closes