

Autochartist Mobile API Specification

Resources:

The following resources are available in the Autochartst Mobile API:

- `/acmobileapi/{resources|app_id}/favourites`
 - this returns a list of Our Favourites results in JSON format
 - for example: `http://acmobile.autochartist.com/acmobileapi/resources/favourites`
- `/acmobileapi/{resources|app_id}/pattern/{cp|kl|ekl}/{result_uid}`
 - this returns the details required to draw the pattern
 - for example:
`http://acmobile.autochartist.com/acmobileapi/resources/pattern/cp/514532`
- `/acmobileapi/{resources|app_id}/prf/{symbol}`
 - this returns the details required to draw the trumpet image of the price range forecast
 - for example: `http://acmobile.autochartist.com/acmobileapi/resources/prf/EURUSD`

All Dates are in expressed in UTC and standard ISO Date Time format: yyyy-MM-dd'T'HH:mm:ss.SSSZ

Please see Authentication section below for details on {resources|app_id} notation.

Authentication:

An `app_id` and Secret Key must be included in the request - Basic Authentication is used to submit these details, where the `app_id` and the Secret Key should be used as the parameters.

For example: `curl -curl -u {appId}:{secretKey}`

`https://acmobile.autochartist.com/acmobileapi/resources/favourites`

Alternatively the `app_id` can be included in the path and a unique identifier for each user can replace the `app_id` in the header. Example path:

`http://acmobile.autochartist.com/acmobileapi/ef4G5fS/favourites`

For example: `curl -u {username}:{secretKey}`

`https://acmobile.autochartist.com/acmobileapi/{appId}/favourites`

`{resources|app_id}/favourites`

This resource will return JSON results for the latest Our Favourite Opportunities on every instrument for every data interval.

Usage:

`http://acmobile.autochartist.com/acmobileapi/resources/favourites`

(`http://bo.autochartist.com/boV3/resources/favourites`)

Returns:

The following is an example of what is returned.

```
[
  {
    "type": "cp",
    "result_uid": 568271438,
    "exchange": "NASDAQ",
    "symbol": "ODFL",
    "direction": 1,
    "hod": 9,
    "interval": 1440,
    "percent": 60.45,
    "age": 7,
    "length": 117,
    "quality": 0.398503,
    "group_name": "US Equities",
    "pattern_name": "Falling Wedge",
    "symbol_percent": 0.0,
    "pattern_percent": 62.87,
    "hod_percent": 60.22,
    "new": 0,
    "pattern_end_time": "2015-07-22T14:30:00.000Z",
    "prediction_price_from": 71.713425,
    "prediction_price_to": 74.91022,
    "pattern_correct": 320,
    "pattern_total": 509,
    "hod_correct": 3034,
    "hod_total": 5038,
    "symbol_correct": 0,
    "symbol_total": 0,
    "pattern_url": "http://acmobile.autochartist.com/acmobileapi/resources/pattern/cp/568271438",
    "image_url": "http://acmobile.autochartist.com/acmobile/imageViewer?uid=568271438&brokerid=24&w=315&h=200&priceadjustment=0.0&instrumentid=0&locale=en_GB&type=CPPatternImage&offset=0"
  },
  ...
]
```

Here is an explanation of each field:

- type
 - The type of the pattern, should be used in conjunction `result_uid` to retrieve pattern details.
 - Currently supported events are: - `cp` (chart pattern) - `k1` (breakout key level) - `ek1` (emerging key level)
- result_uid
 - Pattern ID to retrieve pattern details.
- exchange
 - The exchange of the instrument for this pattern
- symbol

- The instrument name
- direction
 - The direction of the forecast. 1 = Long, -1 = Short
- hod
 - The hour of day the pattern ends 0-23
- interval
 - The data interval in minutes
- percent
 - The success rate for this pattern type, symbol and hour of day
- age
 - The amount of candles since the `pattern_end_date`
- length
 - The length of the pattern in candles.
- quality
 - The overall quality of the pattern.
- group_name
 - The group name the pattern belongs to
- pattern_name
 - The name of the pattern
- pattern_percent , hod_percent , symbol_percent
 - The past rate of success for this pattern type, patterns in this hour of day or patterns for this symbol
- pattern_correct , hod_correct , symbol_correct
 - The number of times this pattern type, patterns in this hour of day or patterns for this symbol was correct in the past
- pattern_total , hod_total , symbol_total
 - The number of times this pattern type, patterns in this hour of day or patterns for this symbol have been identified in the past
- new
 - 1 = This pattern was recently identified, 0 = this is an older pattern
- pattern_end_time
 - The time the pattern was identified at
- prediction_price_from
 - This represents the bottom price level of the prediction area for the current pattern
- prediction_price_to
 - This represents the top price level of the prediction area for the current pattern
- pattern_url
 - URL to retrieve details needed to draw the pattern
- image_url
 - URL to 315px by 200px image of this pattern

`{resources|app_id}/pattern/{cp|kl|ekl}/{result_uid}`

This resource returns the details needed to draw a specific pattern.

Usage:

<http://acmobile.autochartist.com/acmobileapi/resources/pattern/cp/1234>
(<http://acmobile.autochartist.com/acmobileapi/resources/pattern/cp/1234>)

Path Parameters:

- {cp|k1|ek1} type of the pattern as given in the favourites opportunity
- {result_uid} unique id of the pattern as given in the favourites opportunity

Returns:

Shared Properties:

The following is an example of shared properties returned for all pattern types:

```
{
  "symbol_id": 355723,
  "symbol": "ODFL",
  "long_name": "Old Dominion Freight Line Inc.",
  "granularity": 1440,
  "pattern_end_time": "2015-07-20T14:30:00.000Z",
  "pattern_start_time": "2015-02-02T15:30:00.000Z",
  "pattern_name": "Falling Wedge",
  "direction": 1,
  "length": 117,
  "result_uid": 568271438
  "complete": true,
  "exchange": "NASDAQ",
  "age": 0,
  ...
}
```

Here is an explanation of each field:

- symbol_id
 - Unique identifier for symbol
- symbol
 - The symbol the result belongs to
- long_name
 - Long form name for the symbol
- granularity
 - The data interval in minutes
- pattern_end_time
 - The end time of the pattern
- pattern_start_time
 - The start time of the pattern
- pattern_name
 - Descriptive name of the pattern
- direction
 - The direction of the forecast. 1 = Long, -1 = Short

- length
 - The length of the pattern in candles.
- result_uid
 - Unique identifier for this result
- complete
 - Whether the pattern is completed or emerging
- exchange
 - The exchange the instrument belongs to
- age
 - The amount of candles since the pattern_end_date

Properties for Chart Patterns

The following is an example of the properties returned for Chart Patterns(cp):

```
{
  ...,
  "resistance_y0": 80.96,
  "resistance_y1": 72.29,
  "resistance_x0": "2015-03-19T14:30:00.000Z",
  "resistance_x1": "2015-06-18T14:30:00.000Z",
  "support_y0": 69.5,
  "support_y1": 66.46,
  "support_x0": "2015-02-02T15:30:00.000Z",
  "support_x1": "2015-07-08T14:30:00.000Z",
  "prediction_time_to": "2015-11-13T15:30:00.000Z",
  "trend_change": "Reversal",
  "quality": 0.398503,
  "volume": 0.410747,
  "uniformity": 0.812417,
  "initial_trend": 0.213805,
  "prediction_price_from": 71.713425,
  "prediction_price_to": 74.91022,
  "clarity": 0.33126500000000003,
  "breakout": 0.236527
}
```

Here is an explanation of each field:

- resistance_y0
 - The first price-point of the pattern resistance line.
- resistance_y1
 - The last price-point of the pattern resistance line.
- resistance_x0
 - The first time-point of the pattern resistance line.
- resistance_x1
 - The last time-point of the pattern resistance line.
- support_y0

- The first price-point of the pattern support line.
- support_y1
 - The last price-point of the pattern support line.
- support_x0
 - The first time-point of the pattern support line.
- support_x1
 - The last time-point of the pattern support line.
- prediction_time_to
 - The oldest time (right side) of the prediction area. This value is only set if the pattern is a completed pattern
- prediction_price_from
 - The bottom price of the prediction area. This value is only set if the pattern is a completed pattern
- prediction_price_to
 - The top price of the prediction area. This value is only set if the pattern is a completed pattern
- clarity
 - The level of "noise" in the price graph -more spiky price movements mean a lower clarity score, ranging from 0 to 1
- breakout
 - Momentum with which the price broke through the support or resistance level, ranging from 0 to 1

Graphical explanation:



- P1 point determined by coordinates support_x0 and support_y0
- P2 point determined by coordinates support_x1 and support_y1
- P3 point determined by coordinates resistance_x0 and resistance_y0
- P4 point determined by coordinates resistance_x1 and resistance_y1

- L1 support line drawn between P1 and P2
- L2 resistance line drawn between P3 and P4
- L3 vertical line at pattern_end_time
- L4 horizontal line at prediction_price_from
- L5 horizontal line at prediction_price_to
- L6 vertical line drawn for prediction_time_to

Note: * L1 and L2 are drawn from the earliest of resistance_x0 and support_x0 to pattern_end_time * L4, L5 and L6 only applies if the pattern is complete

Properties for Key Levels

The following is an example of the properties returned for Key Levels(kl) and Emerging Key Levels(ekl):

```
{
  ...,
  "x0": "2015-07-10T18:30:00.000Z",
  "x1": "2015-07-06T14:30:00.000Z",
  "x2": "2015-06-09T14:30:00.000Z",
  "x3": "2015-05-26T14:30:00.000Z",
  "x4": "2015-04-17T18:30:00.000Z",
  "x5": "2015-04-01T14:30:00.000Z",
  "x6": "2015-03-26T14:30:00.000Z",
  "x7": "2015-03-10T14:30:00.000Z",
  "x8": "2015-03-04T15:30:00.000Z",
  "x9": "2015-03-04T15:30:00.000Z",
  "pattern_price": 28.52989959716797,
  "qty_tp": 9,
  "prediction_price_from": 20.360000610351562,
  "prediction_price_to": 24.635000228881836,
  "prediction_time_from": "2015-07-30T14:30:00.000Z",
  "prediction_timeBars": 900
}
```

Here is an explanation of each field:

- x0 to x9
 - Time of each point with x0 being the youngest point. Note that points 0 to 2 are always given, but 4 –10 can be empty or absent
- pattern_price
 - Price of the resistance or support line
- qty_tp
 - The number of points given
- prediction_price_from
 - The bottom price of the prediction area. This value is only set if the pattern is a completed pattern.
- prediction_price_to
 - The top price of the prediction area. This value is only set if the pattern is a completed pattern.

- prediction_time_from
 - The youngest time (left side) of the prediction area. This value is only set if the pattern is a completed pattern.
- prediction_timeBars
 - The number of bars that the prediction area is valid for.

Graphical explanation



- P points as provided by pattern_price and x0 to x9
- L1 horizontal line at pattern_price
- L2 horizontal line at prediction_price_from

{resources|app_id}/prf/{symbol}

This returns the Price Range forecast information for the specified symbol.

Usage:

<http://acmobile.autochartist.com/acmobileapi/resources/prf/EURUSD>
 (<http://acmobile.autochartist.com/acmobileapi/resources/prf/EURUSD>)

Path Parameters:

- {symbol} The symbol name as given in the pattern details or favourites opportunity

Returns:

The following is an example of what is returned:

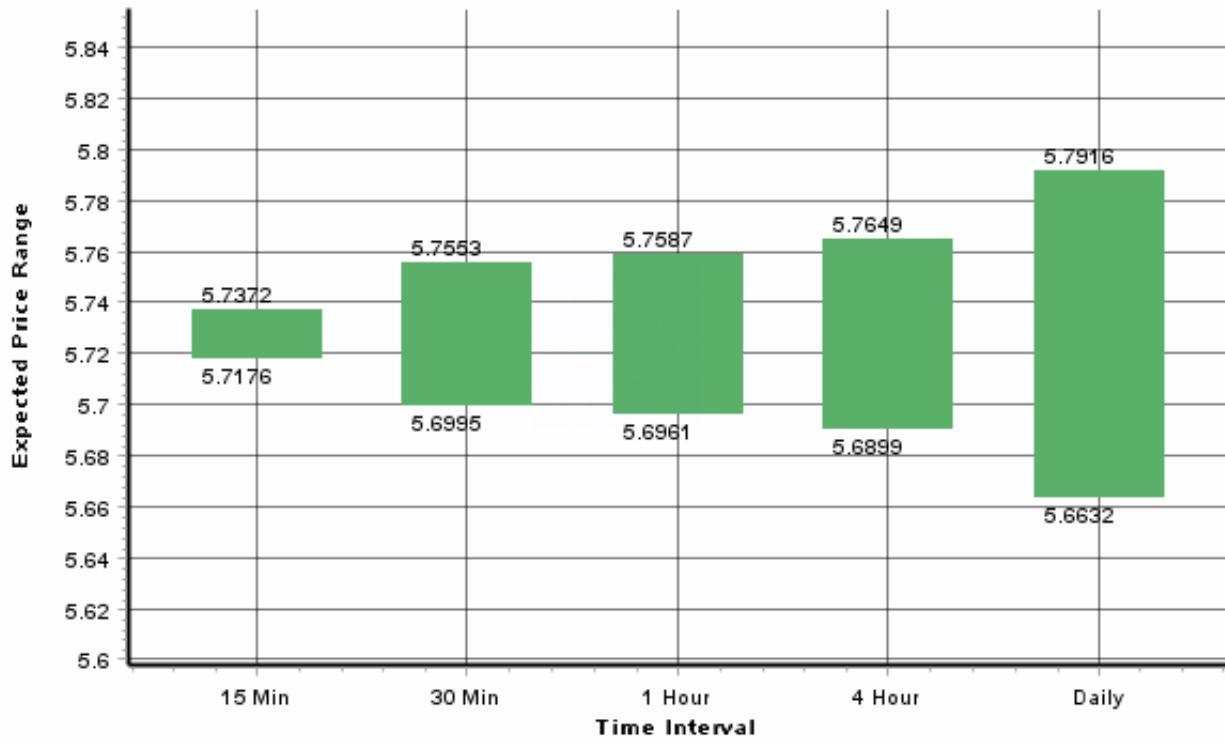

```
{
  "symbol": "EURUSD",
  "min_15": {
    "low": 1.0963266167820476,
    "high": 1.0989733832179525
  },
  "min_30": {
    "low": 1.0960599619375724,
    "high": 1.0992400380624276
  },
  "min_60": {
    "low": 1.095504088354794,
    "high": 1.099795911645206
  },
  "min_240": {
    "low": 1.0933318503258778,
    "high": 1.1019681496741223
  },
  "min_1440": {
    "low": 1.0871110829202315,
    "high": 1.1081889170797685
  }
}
```

Here is an explanation of each field:

- symbol
 - The instrument name
- min_{x}
- The low and high price forecast for the next 15, 30, 60, 240 and 1440 minutes

Graphical explanation

Expected Price Range for AUDHKD At Friday 14h15



Each $\min_{\{x\}}$ matches one Time Interval with each low and high drawn horizontally to form the block for that time interval.