dxFeed C and C# API 5.9.0 Release Notes

API Changes

dxFeed C API and dxFeed C# API version 5.9.0 with fixes and improvements are already available at our [website](#).

C API Changelog

- Added the ability to override the type of data the application subscribes to:
  - Added the API functions: `dxf_create_subscription_with_flags` and `dxf_create_subscription_timed_with_flags` which accept an additional parameter `subscr_flags`.
    - `dx_esf_force_ticker` flag forces subscription to ticker data
    - `dx_esf_force_stream` flag forces subscription to stream data
    - `dx_esf_force_history` flag forces subscription to history data
  - [Samples] Added an additional command line parameter `"[-s <subscr_data>]"` to `CommandLineSample` (to describe how to use the new function with flags). This parameter accepts the following values:
    - `TICKER` to force subscription to ticker data
    - `STREAM` to force subscription to stream data
    - `HISTORY` to force subscription to history data
- Added the candle price level attribute support. The candle price level (pl) defines additional axis to split candles within particular price corridor in addition to candle period attribute with the default value Double.NaN. So a one-minute candles of "AAPL" with price level 0.1 shall be specified as `"AAPL{=m,pl=0.1}"`.

  Example: `` `CandleSample demo.dxfeed.com:7300 AAPL{=m,pl=0.1} -t 2020-01-01` ``

- Added ability to retrieve regional TnS. Now API backend (C-API) subscribes to both composite and regional TimeAndSale events. Sometimes, server may send equal composite and regional TnS that differ by suffix only (for example: TimeAndSale and TimeAndSale&K). To allow filtering out duplicates, the `scope` field was added with possible values: `dxf_osc_composite` and `dxf_osc_regional`. The same field was added for Summary events.

C# API Changelog

- [Samples] Added the ability to connect with token in a `dxf_events_sample`
- Added the ability to override the type of data the application subscribes to:
  - Added `EventSubscriptionFlag` enum with possible values:
    - `Default` for default subscription behavior
    - `ForceTicker` to force subscription to ticker data
    - `ForceStream` to force subscription to stream data
    - `ForceHistory` to force subscription to history data
  - Added the new `NativeSubscription` constructors and `NativeConnection.CreateSubscription` methods with additional parameter `eventSubscriptionFlags`.
  - [Samples] Added an additional command line parameter "`[-s <subscr_data>]`" to `dxf_client` (to describe how to use the new function with flags). This parameter accepts the following values:
    - `'TICKER'` or `'ticker'` to force subscription to ticker data
    - `'STREAM'` or `'stream'` to force subscription to stream data
    - `'HISTORY'` or `'history'` to force subscription to history data
- Added the `Tick` field to non-ETH Trades. The `Tick` field returns Trend indicator (in which direction price is moving). The values are: Up (Tick = 1), Down (Tick = 2), and Undefined (Tick = 0). The `Tick` field should be used if `IDxTradeBase.TickDirection` is `Undefined`
- Fixed the `Direction` enum. Now `Down` = 1 and `ZeroDown` = 2
- Added the candle price level attribute support. The candle price level (pl) defines additional axis to split candles within particular price corridor in addition to candle period attribute with the default value Double.NaN. So a one-minute candles of "AAPL" with price level 0.1 shall be specified as "AAPL{=m,pl=0.1}".
  - Added the `CandlePriceLevel` attribute class
  - Added the `PriceLevel` field to `CandleSymbol` class
  - Added additional utility methods to `CandleSymbolAttributes`:

o The static constructor method `PriceLevel.NewPriceLevel` to construct `PriceLevel` from double precision floating point value
o The static constructor method `PriceLevel.NewPriceLevel` to construct `PriceLevel` by string parsing

```
Example: `dxf_client demo.dxfeed.com:7300 Candle
AAPL{=m,pl=0.1} 2020-01-01`
```

- Added ability to retrieve regional TnS. Now API backend (C-API) subscribes to both composite and regional TimeAndSale events. Sometimes server may send equal composite and regional TnS that differ by suffix only (for example: TimeAndSale and TimeAndSale&K). To allow filtering out duplicates, the `Scope` field was added with possible values: `Composite` and `Regional` to `IDxTimeAndSale`, `NativeTimeAndSale`. The same field was added to `IDxSummary` and `NativeSummary` events.

Please contact support@dxfeed.com if you have any questions.