# Merrill Edge **MarketPro**® Option Chain



For an underlying symbol, the **option chain** shows the various strike prices by put and call designations, as well as expiry dates. You can also view options by specific strategies and analyze data points and strategies using the analysis chart.

## **TOOLBAR GUIDE**



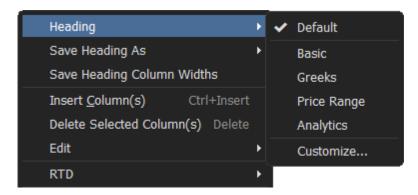
- 1 Symbol Entry allows entry of a symbol for the window
- 2 Go enters symbol
- 3 Symbol Search opens symbol search dialog
- Select to view Calls & Puts, or view by strategy
- 5 Quick filter allows quick filtering by expiration date and delivery type if applicable
- Advanced filter allows detailed filtering by expiration dates, strike prices, delivery type, volume and open interest
- Refresh refreshes the displayed information
- 8 Strike Price filter
- Select to view option chain
- 10 Select to view analysis chart
- Customize opens dialog to customize data elements displayed for **underlying symbol**.

  Right click on Option Chain fields and select Heading > Customize to change fields for the **options**

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#### **CUSTOMIZATION OF OPTION DATA DISPLAYED**

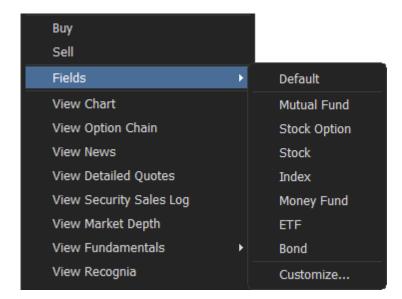
To customize columns for the option contracts, right click on the option column headers and select **Heading**, or select Customize icon from toolbar and click **Customize Option Table Fields**.



- Select from pre-defined views: Basic; Greeks; Price Range and Analytics.
- Select Customize to define your own view

#### CUSTOMIZATION OF STOCK/UNDERLIER DATA DISPLAYED

To customize columns for the underlying symbol header, right click on underlying symbol header and select **Fields**, or select Customize icon from toolbar and click **Customize Equity Fields**.



- Select from pre-defined views: Mutual Fund; Stock Option; Stock; Index; Money Fund; ETF and Bond.
- Select Customize to define your own view

#### **OPTION DATA BAR**

Right click in the Option Chain window and select **Show Selected Option Symbol Details** to enable an option data bar. This will show details for the currently selected option contract. The fields shown in the bar can be customized by right clicking in the bar and selecting **Fields**.

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#### FILTERING RESULTS

#### **Strike Ranges:**

There are built-in filters on the toolbar for the following:

- In the Money: A call option is in the money when the strike price is below the spot price. A put option is in the money when the strike price is above the spot price.
- **Near the Money:** A user definable number of out of the money options that are closest to being at the money. Define "Near the Money" in advanced filter (select icon **1** from toolbar)
- Out of the Money: A call option is out of the money when the strike price is above the spot price. A put option is out of the money when the strike price is below the spot price.
- **All Strikes:** Removes the strike price filters.
- Extended strike price filtering is available using advanced filter (select icon **M** from toolbar)

Due to more complex deliverables, the general in/out of the money rules defined above may not apply to adjusted options which are denoted with symbol [A]

#### **Expiration Dates:**

- ▼01/20/17 | All -Select an individual expiration month from quick filter drop down on toolbar
- Weekly expirations (options that expire on dates other than the third Friday of the month) are noted with "(W)" following expiration date
- Quarterly expirations (options that expire on the last trading day of each quarter) are noted with "(Q)" following expiration date
- Extended expiration date filtering is available using advanced filter (select icon from toolbar)

#### Calls/Puts:

Right click in the Option Chain window and select View Mode > Simple Column Mode (Calls only) or Simple **Column Mode (Puts only)** to enable display of only Calls or Puts.

#### **Delivery Type:**

- Select delivery type of Regular, Mini or All from the quick filter drop down on toolbar

- Filter will only be available if the security supports mini options
- Strike prices will be noted with icons to indicate Mini M and Adjusted A options
- Delivery filtering is available using advanced filter (select icon **1** from toolbar)

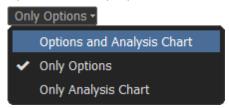
#### **Advanced Filtering:**

Select filter icon III to expand / collapse the filter dialog to filer using a combination of expiration dates, strike prices and delivery types displayed, volume and open interest

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## ANALYSIS CHART (Calls & Puts view)

Select display of option chain only, option chain & analysis chart or analysis chart only from main toolbar



#### **Analysis Chart Toolbar:**



- 1 Analysis Parameter allows user to select analysis parameter to be plotted
- 2 Option Type allows user to select Call or Put for analysis
- 3 Refresh refreshes the displayed data

Analysis chart displays user selected option analysis parameter (Mark Price, Implied Volatility or Greeks) on y-axis against strike price on x-axis for all selected expiration dates

Filters for Expiration Date, Strike Price and Delivery type will filter data displayed in chart

Define font, line colors, chart position, line types, grid lines, data view display and data point marker settings for analysis chart from Right Click > Display Properties > Option Analysis Chart

## TRADING FROM OPTION CHAIN (Calls & Puts view)

Right click on option symbol to take one of the following actions. Selectable actions are determined by current holdings and approved option trading level. To select a default account and other trading defaults (order type, duration, quantity), right click in Trade window and choose Trade Defaults and Properties > Option Trade Ticket

- Buy to Open or Close
- Sell to Open or Close
- Buy / Write
- Buy Vertical Spread
- Sell Vertical Spread
- Buy Calendar Spread
- Sell Calendar Spread
- Buy Diagonal Spread
- Sell Diagonal Spread
- Long Strangle
- Long Straddle
- Short Straddle
- Short Strangle
- Roll

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#### Additional trading features:

- Right click on ask price for a Buy Stop or Sell Limit order
- Right click on bid price for a Buy Limit or Sell Stop order
- Highlight a held option and another option (using ctrl or shift), then right click and select Roll to prepopulate the trade ticket with the specified roll order.

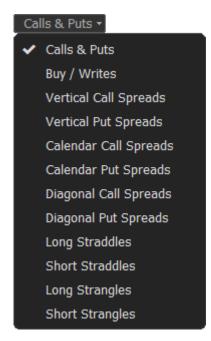
Trading in underlying security:

- Right click on underlying symbol for Buy or Sell
- · Right click on bid price of underlying symbol for a Buy Limit or Sell Stop order
- Right click on ask price of underlying symbol for a Buy Stop or Sell Limit order

#### **OPTION STRATEGIES**

You can use the option chain to perform analysis of several option strategies

To begin, select a strategy from the Calls & Puts menu



Use the quick filters or advanced filters to further refine which options are displayed

The following data elements are shown for each of the option pairs

**Strike** – Strike prices for the pair of options

Symbols – Symbols for the pair of options

**Net Bid** – Net bid for the pair of options

Net Ask - Net ask for the pair of options

Mid – Average of Net Bid and Net Ask

M/G – Maximum Gain. The maximum gain possible for the strategy with the selected options

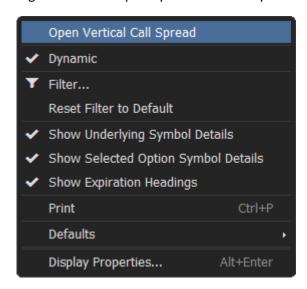
M/L – Maximum Loss. The maximum loss that would be incurred for the strategy with the selected options

**B/E** – Break Even. The stock price (or prices) at which the strategy neither makes nor loses money with the selected options.

R/R Ratio – Risk/Reward Ratio = Maximum Loss divided by Maximum Gain

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• Right click on an option pair and select Open <name of strategy> to trade that option pair



• Enable the analysis chart from the main toolbar to plot the Mid-Point or Risk/Reward Ratio for each expiration date

#### DATA EXPORT

Use RTD (Installation Instructions) to display streaming real time data in Excel (Windows only). Once the plugin is installed, right click > RTD and select which data to copy, which can then be pasted into an Excel worksheet. Data will continue to stream within Excel as long as MarketPro remains active.

## WINDOW LINKING

Select linking icon 2 to adjust window linking settings

- With "Link to All" enabled, window will receive symbols selected from other windows (default)
- With "Link to All" enabled, clicking on any option will send option to linked symbol windows (default setting right click > Display Properties > Symbol Field to change action that takes place when selecting symbols)
- With "Symbol Broadcast Source" enabled, window will send entered stock symbols to other windows
- Colors: If selected, window will only send/receive symbols from windows set to the same color or link to all in link settings
- Right click on the option symbol to launch another symbol-based window with the symbol in context
- Right click on the stock information to launch another symbol-based window with the symbol in context

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# WINDOW OPTIONS

Select the options icon 

to adjust window options

- **New** Creates a new window. Select the window type, then select the position of the new window, or choose "In this window" to replace existing window with the new window.
- **Show Window Title** Un-selecting this option hides the window description. Re-check to display window description.
- Maximize/Restore Only displayed if window does not fill entire page. Maximize expands the window to fill the current page. Restore will set back to original size.
- Show Titlebar Un-selecting this option hides the title bar that is displayed at the upper left. To show the title bar again, move cursor up to the top of the window until the cursor pointer turns to a hand, then right click and recheck Show Titlebar, or from main menu select View > Show Title Bars (this will restore all hidden title bars)
- Show Titlebar description Display custom description as defined using Customize Titlebar Description
- **Customize Titlebar Description...** Replaces default description and titlebar controls with a customizable description. For symbol specific windows, use #sym to insert currently selected symbol into custom description. Click anywhere on the titlebar to restore default description and titlebar controls.
- **Show Footer** Un-selecting this option hides the footer. Re-select to display the footer again.
- **Copy Out** (displayed when window is docked) Copies this window as a floating (stand alone) window. This action can also be performed using the Copy Out icon
- Attach (displayed when window is un-docked) Moves a floating (stand alone) window inside the active page
- Cut Window copies the window to the clipboard, and removes the window from the workspace. Once copied, click Edit > Paste Options Chain to add the window to the workspace using default settings for adding a new window (use View > Preferences > Workspace > Open new window by default to change how new windows are added to the workspace)
- Copy Window copies the window to the clipboard, with all settings. Once copied, click options icon and choose Paste Options Chain, then choose a position for copy of window. Or click Edit > Paste Options Chain to add the window to the workspace using default settings for adding a new window
- **Copy Window Image** copies an image of the window to the clipboard, which can then be pasted into an email, document or image editing application
- Send Image by E-mail... creates new email message using default email client with screenshot of current window attached
- Take Custom Screenshot drag mouse to define an area to copy, then paste into image editor
- **Print** Prints this window
- Help loads this help file
- Display Properties
  - Text & Colors font setting for display elements
  - Direction define colors and columns for quote display based on price direction, volume and open interest
  - Symbol field turn on/off indicators for open positions / active orders, and default actions on click / double click
  - Gridlines display and color of gridlines
  - Formatting general window formatting
  - Black Scholes define parameters used in Black Scholes calculation
  - Heat Map enable/disable heat map display and configure columns to display using heatmap coloring
  - Quotes define display properties for quote information
  - Option Analysis Chart define font, line colors, chart position, line types, grid lines, data view display and data point marker settings for analysis chart
- **Empty** (displayed when window is docked) removes the window and leaves an empty space in which a new window can be added
- Close removes the window. Any remaining windows will be adjusted to fill empty space

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# FIELD DEFINITIONS

# Fields for Option Data displayed

% Change	Percentage price change for current trading session
% In/Out of Money	Percent difference between last price and strike price
Ask	Ask price (lowest available selling price)
Ask Exchange	Exchange of ask price
Ask Size	Quantity available to sell at ask price
Basecode	Determines the method of Price base code translation (1/10, 1/100, etc)
Bid	Bid price (highest available buying price)
Bid Exchange	Exchange of bid price
Bid Size	Quantity available to buy at bid price
Bid/Ask Size	The bid and asks size (side-by-side in same cell)
Bid-Ask	The bid and ask price (side-by-side in same cell)
Contract Deliverable	Number of shares represented by an option contract
Contract High	The High over the life of the Contract
Contract High Date	The Date that the Contract High was set
Contract Low	The Low over the life of the Contract
Contract Low Date	The Date that the Contract Low was set
Date	Date of last update - can be trade or quote update
Days Til Expiration	Options: Number of days until the expiration of an option contract
Delta	The neutral hedge ratio, or the expected change in the option premium given a one point change in the price of the underlying Instrument (Measure of the options sensitivity to changes in the Underlying Instrument)
Description	Equities, Indices, futures: Name. ETFs, ETNs & Mutual Funds: Issuer. Currency: Base Currency. Options: Underlying, Month, Strike, Type.
Description2	For mutual funds, the name of the fund (i.e., the "issue"). Equities with SEDOLs will display SEDOL
Exchange	Exchange security is listed
Expiration	Options and futures: Date of expiration.
Gamma	Measure the expected change in Delta, given a one point change in the value of the underlying Instrument (Measures the stability of the options Delta)
High	Highest trading price for the current session
ImpVol	Calculated by using an option pricing model and is the amount of price change that can be expected over a given period of time, expressed as a percentage.
Intrinsic Value	Difference between the last price for underlying security and the option strike price. Only calculated for options in the money
Issue Description	ETFs: Part of Instrument's name.

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Last	Last price the asset has traded
Last Trade Time	Date and Time of Last Trade
Last+Change	Combination of the Last and the Change between the Last traded price, and the previous session's close
Last+Settle	Last settlement
Low	Lowest price traded in the current session
Market	The Average of the Bid & Ask. If Bid=0 it will be Ask. If Ask=0 it will be Bid. If neither are present than Market will equal Recent.
Mid Price	The Average of the Bid & Ask. If Bid=0 it will be Ask. If Ask=0 it will be Bid. If neither are present than Market will equal Recent.
Mid Price Change	Percentage Mark Price change for current session
Midpoint	Mid price between session's High and Low prices
Net Change	Difference between the Last traded price, and the previous session's close
NewSettlement	
Old Set IV	Yesterday's Implied Volatility at the close price.
OldSettlement	
Open	Opening price
Open Interest	Options: The number of outstanding option contracts in the exchange market
Option Type	For options only, either Put or Call
Option Type (S/NS)	Option delivery type, S=Standard, NS=Non Standard, i.e. Adjusted deliverable
Previous Close	Last price the asset traded in the previous trading session
Recent	Last Trade or Settlement, whichever is more current.
Rho	Measures the expected change in the option Premium, given a 1% change in the Domestic Interest Rate.
Root	Options: Complete symbol of the underlying asset
Strike	Options: Strike price
Theoretical Price	The value of an option as calculated by the option pricing model using the previous sessions closing implied volatility.
Theta	Reflects expected change in the option Premium, over one day (Measure of time value decay).
Tick	Either + or - to representing the change from the previous Trade Price when instrument is currently trading and a "C" when the session is closed for Equities and Options and a "S" when Futures contracts are settled
Time	Time of the last update (Includes Bids / Asks)
Time Value	Difference between the option last price and its intrinsic value. Only calculated when intrinsic value is defined.
Trade Exchange	Exchange, market center, where last trade occurred
Trade Size	Quantity of last trade
Underlying symbol	Options: Complete symbol of the underlying asset
Vega	Measures the expected change in the option Premium, given a 1% change in the Implied Volatility of the option (Measures sensitivity to shifting volatility levels).

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Volume	The number of shares traded from the current day's market opening until the reported trade	
	time.	

# Fields for underlying security

\$ Change Week	\$ change of current price to closing price 1 week ago.
% Change	Percentage price change for current trading session
% Change 1 Month	% Price change of current price to the mean of high & low price from one month ago
% Change 3 Month	% Price change of current price to the mean of high & low price from three months ago
% Change 6 Month	% Price change of current price to the mean of high & low price from six months ago
% Change Month	% Price change of current price compared to closing price from one month ago
% Change Week	% Price change of current price compared to closing price from one week ago
% In/Out of Money	Percent difference between last price and strike price
12Mo % Return	Percent difference between last night's close and the close 52 weeks ago.
12Mo %Tot Return	Percent difference between last night's close and the close 52 weeks ago, plus any dividends received.
12Mo Div Pd	Value of dividends paid per share over 12 month period.
12Mo Prev Close	A security's closing price from 12 months ago
1Mo % Ret Adj	% return over 1 month
1Mo % Tot Ret Adj	% return over 1 month with the addition of any dividends paid out over 1 month.
1Mo Begin Pr Adj	A security's closing price from 1 month ago
1Mo Cash Div Pd	Sum of dividends paid for 1 share over the past 1 month
1Mo SpinOff	Returns the following values of which are applied to return calculations based on a spinoff corporate action.  • S = The return has been zeroed out due to a spinoff  • N = The return is zero for other reasons (likely, no price on one of the two dates)  • Y = the return is present
3Mo % Ret Adj	% return over 3 month
3Mo % Tot Ret Adj	% return over 3 months with the addition of any dividends paid out over 3 months.
3Mo Begin Pr Adj	A security's closing price from 3 months ago
3Mo Cash Div Pd	Sum of dividends paid for 1 share over the past 3 months
3Mo SpinOff	Returns the following values of which are applied to return calculations based on a spinoff corporate action.  • S = The return has been zeroed out due to a spinoff  • N = The return is zero for other reasons (likely, no price on one of the two dates)  • Y = the return is present
52Wk H Date	Date the maximum price was reached in the previous 52 weeks
52Wk High	Maximum price for the last 52 weeks
52Wk High Percent Below	Percent Below 52 Week High using current price

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52Wk L Date	Date the minimum price was reached in the previous 52 weeks
52Wk Low	Minimum price for the last 52 weeks
52Wk Low Percent Above	Percent Above 52 Week Low using current price
52Wk Range with Last	Display the 52 week price range, low to high, along with the last trading price's relative position in the range
6Mo % Ret Adj	% return over 6 months
6Mo % Tot Ret Adj	% return over 6 months with the addition of any dividends paid out over 6 months.
6Mo Begin Pr Adj	A security's closing price from 6 months ago
6Mo Cash Div Pd	Sum of dividends paid for 1 share over the past 6 months
6Mo SpinOff	Returns the following values of which are applied to return calculations based on a spinoff corporate action.  • S = The return has been zeroed out due to a spinoff  • N = The return is zero for other reasons (likely, no price on one of the two dates)  • Y = the return is present
Annual Dividend	If regularly paid (i.e., quarterly, monthly), this is the total dividends expected to be paid over the next 12 months. In some cases, the amount and timing of dividends are irregular, and therefore impossible to forecast - in those cases, we sum up dividends paid over the last 12 months.
Annual Revenue	Annual Revenue in millions
Ask	Ask price (lowest available selling price)
Ask Exchange	Exchange of ask price
Ask Size	Quantity available to sell at ask price
Average Volume	Average volume for previous 20 days
Basecode	Determines the method of Price base code translation (1/10, 1/100, etc)
ВЕТА	A measurement of the sensitivity of a company's stock price to the overall fluctuation in the S&P 500 (S&P 500), or for Canadian listings, the Toronto Stock Exchange 300 Index. For example, a beta of 1.5 indicates that a company's stock price tends to rise (or fall) 1.5 percent, with a 1 percent rise (or fall) in the index price.
Bid	Bid price (highest available buying price)
Bid Exchange	Exchange of bid price
Bid Size	Quantity available to buy at bid price
Bid/Ask Size	The bid and asks size (side-by-side in same cell)
Bid-Ask	The bid and ask price (side-by-side in same cell)
BlockTrade1	Number of trades between 1 and 49,999 shares
BlockTrade2	Number of trades between 50,000 and 99,999 shares
BlockTrade3	Number of trades over 100,000 shares
BlockTradeTotalCount	Aggregate number of block trades
BlockTradeTotalVol	Aggregate volume of block trades
BlockTradeVol1	Aggregate volume of shares traded in trades between 1 and 49,999 shares
BlockTradeVol2	Aggregate volume of shares traded in trades between 50,000 and 99,999 shares

BlockTradeVol3	Aggregate volume of shares traded over 100,000 shares
Book Value	The book value of a company, in millions.
Book Value per Share	Book Value / Common Shares Outstanding
BuyerID	The TSX assigned ID number for the broker on the buy-side of a trade (Canadian securities only)
Category Name	Type of security
Contract Deliverable	Number of shares represented by an option contract
Contract High	The High over the life of the Contract
Contract High Date	The Date that the Contract High was set
Contract Low	The Low over the life of the Contract
Contract Low Date	The Date that the Contract Low was set
Currency	Currency the security trades in
Current Inside Match Price	The Current Inside Match Price reflects the price for which the number of Paired Shares and the number of Imbalance Shares are calculated. Please note that the Current Inside Match Price is determined by the price within the NASDAQ Inside where the maximum number of shares are paired, the imbalance is minimized and the distance from the bid-ask midpoint is minimized, in that order. If this field is null or blank, it is because there is no Current Inside Match Price for the specific security.
	Note: Market Depth qualification is required to use this field
Current Ratio	Total Current Assets / Total Current Liabilities, on a trailing 12-month basis
CUSIP	The 9-character identifier for North American securities
Date	Date of last update - can be trade or quote update
Days Til Expiration	Options: Number of days until the expiration of an option contract
Delta	The neutral hedge ratio, or the expected change in the option premium given a one point change in the price of the underlying Instrument (Measure of the options sensitivity to changes in the Underlying Instrument)
Description	Equities, Indices, futures: Name. ETFs, ETNs & Mutual Funds: Issuer. Currency: Base Currency. Options: Underlying, Month, Strike, Type.
Description2	For mutual funds, the name of the fund (i.e., the "issue"). Equities with SEDOLs will display SEDOL
Div, Date Annc	Date the dividend was announced
Div, Pay Date	Date the dividend was/will be paid
Div, Prev XDate	Date of the previous ex-dividend date
Div, Rec Date	Record date of the dividend
Div, Xdate	The ex-dividend date of the most recently announced or paid dividend  See <b>Fundamentals</b> window > <b>Dividend History</b> for more information on
	dividends
Dividend	The dividend farthest out in the future - almost always the most recently paid or announced dividend.
Dividend Interval	Number of days between dividend payments
Dividend Yield	Dividend Yield = (indicated annual dividend / current price) * 100
EBITDA (TTM)	Earnings before interest, taxes, depreciation, and amortization on a trailing 12-month basis

EPS	Earnings per share (TTM). Sum of last 4 recently reported earnings (excluding extraordinary items and discontinued operations), divided by outstanding shares.
EPS, Current FY	Earnings per share for the current fiscal year
EPS, Exp NextQ	Estimated Amount of Upcoming Earnings
EPS, Next FY	Estimated earnings per share for the next fiscal year
EPS, Next FYDt	Estimated date for the release of the fiscal year's earnings per share
EPS, Next Two FY	Estimated earnings per share for the fiscal year after next
EPS, NextQDt	Estimated Announcement Date for Upcoming Quarterly Earnings
EPS, PrevQ	Most Recently Reported Quarterly Earnings
EPS, PrevQDt	Announcements Date of Most Recently Reported Quarterly Earnings
Exchange	Exchange security is listed
Expiration	Options and futures: Date of expiration.
ExtHours	Last Price during extended hours trading
ExtHours Change %	Extended hours Percentage Change Value
ExtHours Net Change	Extended hours \$ change Value
Far indicative clearing price	This field indicates the price level at which buy orders and sell orders match in the opening/ closing book. If this field is null or blank, this indicates one of two circumstances:  • There are no on-open (or on-close) orders entered for the security; or  • There is no substantial on-open (or on-close) interest on the opposite side of the market to execute all of the MOO (or MOC) orders on the other side.  When this occurs, the No Indicative Price field displays either a Market Buy or Market Sell indicating that offsetting imbalance only orders should be entered on the other side of the market.  For the midday opening process, the Current Inside Match Price, the Near Indicative Clearing Price and the Far Indicative Clearing Price will be equal.
	Note: Market Depth qualification is required to use this field

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Flage	Flags
Flags	Flags
	N News article today
	S Split Today
	R Record Date is today
	X XDiv Date is today
	P Pay Date is today
	S <sub>E</sub> Significant event for security
	NASDAQ Filing Status codes. Off by default - right click > Display Properties > Flags to enable
	D - Deficient: Issuer Failed to Meet NASDAQ Continued Listing Requirements
	E - Delinquent: Issuer Missed Regulatory Filing Deadline
	Q - Bankrupt: Issuer Has Filed for Bankruptcy
	G - Deficient and Bankrupt
	H - Deficient and Delinquent
	J - Delinquent and Bankrupt
	K - Deficient, Delinquent, and Bankrupt
Float	Shares outstanding, less restricted shares
Forward Earnings Date	Date which the next earnings announcement is expected
Forward P/E Current Fiscal Year	Price per Share / Expected Earnings per Share, for Current Fiscal Year
Forward P/E Current Quarter	Price per Share / Expected Earnings per Share, for Current Quarter
Forward P/E Next Fiscal Year	Price per Share / Expected Earnings per Share, for Next Fiscal Year
Forward P/E Next Quarter	Price per Share / Expected Earnings per Share, for Next Quarter
Forward P/E Next Two Fiscal Year	Price per Share / Expected Earnings per Share, for next Two Fiscal Years
Forward P/E Next Two Quarter	Price per Share / Expected Earnings per Share, Next Two Quarters
Gamma	Measure the expected change in Delta, given a one point change in the value
	of the underlying Instrument (Measures the stability of the options Delta)
Headline Count	Number of headlines available
High	Highest trading price for the current session
16	rightest trading price for the current session
Historical Volatility	20 day close-to-close volatility
ImpVol	Calculated by using an option pricing model and is the amount of price change
	that can be expected over a given period of time, expressed as a percentage.
Industry	Industry group (sub section of Sector)
Insider Owned %	Insider Owned % = Shares owned by insiders / Shares outstanding
Institution Owned %	Institution Owned % = Shares owned by institutions / Shares outstanding
Intrinsic Value	Difference between the last price for underlying security and the option strike price. Only calculated for options in the money
ISIN	International Securities Identification Number. A unique international code which identifies a securities issue.
Issue Description	ETFs: Part of Instrument's name.
Last	Last price the asset has traded

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Last News Update	Timestamp of the last news update
Last Trade Time	Date and Time of Last Trade
Last+Change	Combination of the Last and the Change between the Last traded price, and the previous session's close
Last+Settle	Last settlement
Low	Lowest price traded in the current session
Margin Code	Y = Marginable, N = Not marginable
Market	The Average of the Bid & Ask. If Bid=0 it will be Ask. If Ask=0 it will be Bid. If neither are present than Market will equal Recent.
Market Cap	Market capitalization - outstanding, non-diluted number of shares, multiplied by the current share price
Mid Price	The Average of the Bid & Ask. If Bid=0 it will be Ask. If Ask=0 it will be Bid. If neither are present than Market will equal Recent.
Mid Price Change	Percentage Mark Price change for current session
Midpoint	Mid price between session's High and Low prices
Minutes Delayed	Reports number of minutes a quote is delayed.
Month Prev Close	The price as of the last workday of the previous month
Mov Avg 150	The average trade price over the most recent 150 business days, U.S. holidays and weekends excluded
Mov Avg 20	The average trade price over the most recent 20 business days, U.S. holidays and weekends excluded
Mov Avg 200	The average trade price over the most recent 200 business days, U.S. holidays and weekends excluded
Mov Avg 50	The average trade price over the most recent 50 business days, U.S. holidays and weekends excluded
MTD \$ Change	\$ change of current price to closing price at the end of the previous month
MTD % Change	Percentage Change since the 1st of the Current Month
MTD Div Paid	The MTD dividend will be the sum of the cash dividends which have gone ex in the current month.
MTD%RetAdj	Percentage change between current price and last price of previous month - $[(current price / previous month's end price) - 1] * 100$
MTD%TotRetAdj	Percentage price change between current price and last price of previous month, plus any dividends received for that period [(current price + MTD cash dividends) / previous price] * 100
Mutual Fund Category	Type of Mutual Fund
NAV	Mutual Funds: Net asset value

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Near indicative clearing price	The crossing price at which orders in the NASDAQ opening/closing book and continuous book clear against each other. If this field is null or blank, this indicates one of two circumstances:
	There are no on-open (or on-close) orders entered for the security; or
	• There is no substantial on-open (or on-close) or continuous book interest on the opposite side of the market to execute all of the MOO (or MOC) orders on the other side. When this occurs, the No Indicative Price field displays either a Market Buy or Market Sell indicating that offsetting imbalance-only or continuous market orders should be entered on the other side of the market.
	For the midday opening process, the Current Inside Match Price, the Near Indicative Clearing Price and the Far Indicative Clearing Price will be equal.
	Note: Market Depth qualification is required to use this field
Net Change	Difference between the Last traded price, and the previous session's close
No indicative clearing price	The No Indicative Price field displays either a Market Buy or Market Sell when there is no substantial on-open (or on-close) or continuous book interest on the opposite side of the market to execute all of the MOO (or MOC) orders on the other side. This indicates that offsetting imbalance-only or continuous market orders should be entered on the other side of the market.  Note: Market Depth qualification is required to use this field
Note	Displays note for security. Add and edit notes from Tools > Notes
Number of Market Shares Imbalanced	This field is used for an IPO or trading halt opening process. The only time that an imbalance will be disseminated will be when there is a Market Buy or Market Sell condition.
	Note: Market Depth qualification is required to use this field

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#### Number of Shares Imbalanced

For the Opening Cross, this field indicates the absolute difference between the number of shares for early "Regular Hours", Market On Open, Limit On Open and Imbalance Only orders on the buy side and the number of shares for early "Regular hours", Market On Open, Limit On Open and offsetting Imbalance Only orders on the sell side eligible to be matched at the Current Inside Match price.

For the IPO and trading halt opening process, imbalance information will only be disseminated when there is a Market Buy or Market Sell condition.

For the Closing Cross, this field indicates the absolute difference between the number of shares for Market On Close, Limit On Close and offsetting Imbalance Only orders on the buy side and the number of shares for Market On Close, Limit On Close, and offsetting Imbalance Only orders on the sell side eligible to be matched at the Current Inside Match Price.

For the opening and closing crosses, the Number of Shares of Imbalance may be zero-filled under the following scenarios:

- There are no on-open/on-close orders in the NASDAQ book. In this case, the Imbalance Side field would be set to "O".
- There is no imbalance; all shares in eligible orders can be paired at current inside match price. In this case, the Imbalance Side would be set to "Nolmb".

Note: Market Depth qualification is required to use this field

Number of Shares Paired	The total number of shares that are eligible to be matched at the Current Inside Match Price.
	For the Opening Cross, this calculation will include early "Regular Hours", Market On Open, Limit On Open, and Imbalance Only orders that are eligible to be matched at the Current Inside Match Price.
	For the IPO and trading halt opening process, this calculation would include regular hour orders and quotes that are eligible to be matched at the Current Inside Match Price.
	For the Closing Cross, this calculation will include Market On Close, Limit On Close, and Imbalance Only Orders that are eligible to be matched at the Current Inside Match Price.
	The Number of Shares Paired may be zero-filled under the following two scenarios:
	• There are no on-open/on-close orders in the NASDAQ book. In this case, the Imbalance Side field would be set to "O".
	There are no shares in the eligible order types that match at the Current Inside Match Price
	Note: Market Depth qualification is required to use this field
Old Set IV	Yesterday's Implied Volatility at the close price.
Open	Opening price
Open Interest	Options: The number of outstanding option contracts in the exchange market
Option Type	For options only, either Put or Call
Option Type (S/NS)	Option delivery type, S=Standard, NS=Non Standard, i.e. Adjusted deliverable
Optional Security	Defines if options are available for the security
Payout Ratio	Common and Preferred Stock Dividends Paid / Net Income, on a trailing 12- month basis
PE	Price per Share / Earnings per Share
PEG Ratio	(( Last Close Price / Mean EPS Estimate Current FY ) / Long Term Growth Rate ). If this result is less than zero, PEGRatio is set to null/blank.
Prev Net Change	Price change during the previous trading session
PrevDay High	Highest trading price during the previous trading session
PrevDay Low	Lowest price traded during the previous trading session
PrevDay Open	Opening price from the previous trading session
Previous Close	Last price the asset traded in the previous trading session
Price to Book	Stock Price / (Total Assets – Intangible Assets and Liabilities), for the last fiscal year
Price to Book (TTM)	Stock Price / (Total Assets – Intangible Assets and Liabilities) on a trailing 12-month basis

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Price to Book Qtr	Stock Price / (Total Assets – Intangible Assets and Liabilities), for the most recent reported quarter.
Price to Sales	Stock Price / Revenue per Share, on a trailing 12-month basis
Price Variance Indicator	This field indicates the absolute value of the percentage of deviation of the Near Indicative Clearing Price to the nearest Current Reference Price.
	Price Variance Indicator = (Near Indicative Clearing Price – Current Inside Price)
	This field indicates the % difference between the indicative Opening/ Closing Cross price (Near Clearing Price) and the price where the market is currently trading. A high value indicates there will be a large price difference between the Opening/ Closing Cross price and the continuous market if sufficient offsetting interest is not entered. This field will display a percent difference or percent range as listed below:
	Code Percentage Range L Less than 1% 1 1 to 1.99% 2 2 to 2.99% 3 3 to 3.99% 4 4 to 4.99% 5 5 to 5.99% 6 6 to 6.99% 7 7 to 7.99% 8 8 to 8.99% 9 9 to 9.99% A 10 to 19.99% B 20 to 29.99% C 30% or greater Space Cannot be calculated  Note: Market Depth qualification is required to use this field
Profit Margin %	Profit Margin = Net Income / Net Sales (revenue)
QTD \$ Change	\$ change of current price to closing price at the end of the previous quarter
QTD % Change	% change of current price to closing price at the end of the previous quarter
QTD Div Paid	The sum of the cash dividends which have gone ex in the current quarter.
QTD%RetAdj	Percentage change between current price and last price of previous quarter -  [(current price / previous quarter's end price) – 1] * 100
QTD%TotRetAdj	Percentage price change between current price and last price of previous quarter, plus any dividends received for that period [(current price + QTD cash dividends) / previous price] * 100
Qtr Prev Close	The price as of the last workday of the previous quarter
Quick Ratio	(Total Cash and Short Term Investments + Accounts Receivables + Other Receivables) / Total Current Liabilities, on a trailing 12-month basis
Recent	Last Trade or Settlement, whichever is more current.
Rho	Measures the expected change in the option Premium, given a 1% change in the Domestic Interest Rate.
ROA (TTM)	(EBIT * 0.625) / ((Total Assets (t) + Total Assets (t-1)) /2), on a trailing 12-month basis

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ROE (TTM)	Earnings From Continuing Operations / ((Total Equity (t) + Total Equity (t-1)) /2), on a trailing 12-month basis	
Root	Options: Complete symbol of the underlying asset	
RSI	The internal strength of an instrument as compared to former prices over a period of 14 days.	
Sales (TTM)	Total Revenue on a trailing 12-month basis	
Sector	Economic sector	
SEDOL	The Stock Exchange Daily Official List number, a code used by the London Stock Exchange to identify foreign stocks, especially those that aren't actively traded in the U.S. and don't have a CUSIP number.	
SellerID	The TSX assigned ID number for the broker on the sell-side of a trade	
Shares	Number of outstanding shares	
Shares Outstanding	Number of outstanding shares, in millions	
Short Int Mo % Chg	Compares short interest from two months. If the latest reported short interest is midmonth, it will be compared to the previous midmonth short interest. If the latest reported short interest is end-of-month, it will be compared to the previous end-of-month short interest. The month short interest percent is a percentage.	
Short Int Mo Chg	Compares short interest from two months. If the latest reported short interest is midmonth, it will be compared to the previous midmonth short interest. If the latest reported short interest is end-of-month, it will be compared to the previous end-of-month short interest. The month short interest change is an absolute value	
Short Int Ratio	Latest reported short interest divided by 25-day average daily trading volume	
Short Int YTD % Chg	The percent change between latest reported short interest and the last short interest reported the previous year.	
Short Int YTD Chg	The YTD short interest change is the absolute change between the latest reported short interest and the last short interest reported the previous year.	
Short Interest	Latest exchange reported short interest (mid-monthly periodicity)	
Short Volume	Short Volume is a daily value, derived from short sale activity occurring in the US markets. We currently support the composite volume occurring on Nasdaq and its Boston Stock Exchange for trades of NYSE and Nasdaq-listings.	
Side of Imbalance	The Imbalance Side field indicates the market side for of the imbalance. This field will display the following values for a specific security:  Code Description	
	B Buy-side imbalance S Sell-side imbalance Nolmb No imbalance (buy side equals sell side) O No marketable on-open (or on-close) orders in NASDAQ, thus no imbalance.	
	Note: Market Depth qualification is required to use this field	
Split Date	Date of Split ("Ex-Date")	
Split Ratio	Total Current Assets / Total Current Liabilities, on a trailing 12-month basis	
Strike	Options: Strike price	
SV Date	The previous trading session's date	

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Symbol	A unique alpha numeric value used to identify the security.	
Theoretical Price	The value of an option as calculated by the option pricing model using the previous sessions closing implied volatility.	
Theta	Reflects expected change in the option Premium, over one day (Measure of time value decay).	
Tick	Either + or - to representing the change from the previous Trade Price when instrument is currently trading and a "C" when the session is closed for Equities and Options and a "S" when Futures contracts are settled	
Time	Time of the last update (Includes Bids / Asks)	
Time Value	Difference between the option last price and its intrinsic value. Only calculated when intrinsic value is defined.	
Tot D/E (TTM)	Total Debt / Total Equity on a trailing 12-month basis	
Trade Exchange	Exchange, market center, where last trade occurred	
Trade Size	Quantity of last trade	
Underlying symbol	Options: Complete symbol of the underlying asset	
Vega	Measures the expected change in the option Premium, given a 1% change in the Implied Volatility of the option (Measures sensitivity to shifting volatility levels).	
Vol Avg 10D	The average volume over the most recent 10 business days, U.S. holidays and weekends excluded.	
Vol Avg 25D	The average volume over the most recent 25 business days, U.S. holidays and weekends excluded.	
Vol Avg 3Mo	The average volume over the most recent 90 business days, U.S. holidays and weekends excluded.	
Vol Avg 50D	The average volume over the most recent 50 business days, U.S. holidays and weekends excluded.	
Vol Avg MTD	The average month-to-date volume for the business days in the current month	
Volume	The number of shares traded from the current day's market opening until the reported trade time.	
VWAP	Volume weighted average price, based on 3 minute frequency.	
Yield	Indicated annual dividend divided by the last trade	
Yr Prev Close	A security's prior closing price on the last workday of the previous year	
YTD \$ Change	\$ change of current price to closing price at the end of the previous year	
YTD % Change	Percentage Change since Jan 1 of Current Year	
YTD Div Pd	The sum of the cash dividends which have gone ex in the current year.	
YTD%RetAdj	Percentage change between previous closing price and last price of previous year - [(current price / year-end price) – 1] * 100	
YTD%TotRetAdj	Percentage price change between previous closing price and last price of previous year, plus any dividends received for that period - [(current price + YTD cash dividends) / year-end price] * 100	

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Options involve risk and are not suitable for all investors. Certain requirements must be met to trade options. Before engaging in the purchase or sale of options, investors should understand the nature of and extent of their rights and obligations and be aware of the risks involved in investing with options. Prior to buying or selling an option, clients must receive the options disclosure document <u>"Characteristics and Risks of Standardized Options."</u> Call the Investment Center at 1.877.653.4732 for a copy. A separate client agreement is needed. Multi-leg option orders are charged one base commission per order, plus a per contract charge.

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