

Margin Calculations for Securities in Reg T Margin Accounts

We calculate margin for securities differently for Reg T Margin accounts and Portfolio Margin accounts. Reg T Margin securities calculations are described below. For details on Portfolio Margin accounts, open the Portfolio Margin.

We apply margin calculations to securities in Reg T Margin accounts as follows:

1. [At the time of a trade.](#)
2. [In real-time throughout the trading day.](#)
3. [At the end of the trading day.](#)
4. [Overnight.](#)

One important thing to remember about our margin calculations is that we apply the Regulation T initial margin requirement at the end of the trading day (3:50 PM) as part of our Special Memorandum Account (SMA) calculation. At the time of trade and in real time throughout the trading day, we apply our own margin calculations, which are described below.

You can also use the following liquidation calculations:

5. [How to Determine the Last Stock Price Before We Begin to Liquidate the Position?](#)
6. [How Much Stock Do We Liquidate?](#)

You can monitor most of the values used in the calculations described on this page in real time in the Account Window in CCG Trader.

1. Time of Trade Margin Calculations

When you open a new position, we apply the following:

- Initial Minimum Equity Requirement
- Time of Trade Initial Margin Calculation
- Time of Trade Position Leverage Check

Initial Minimum Equity Requirement

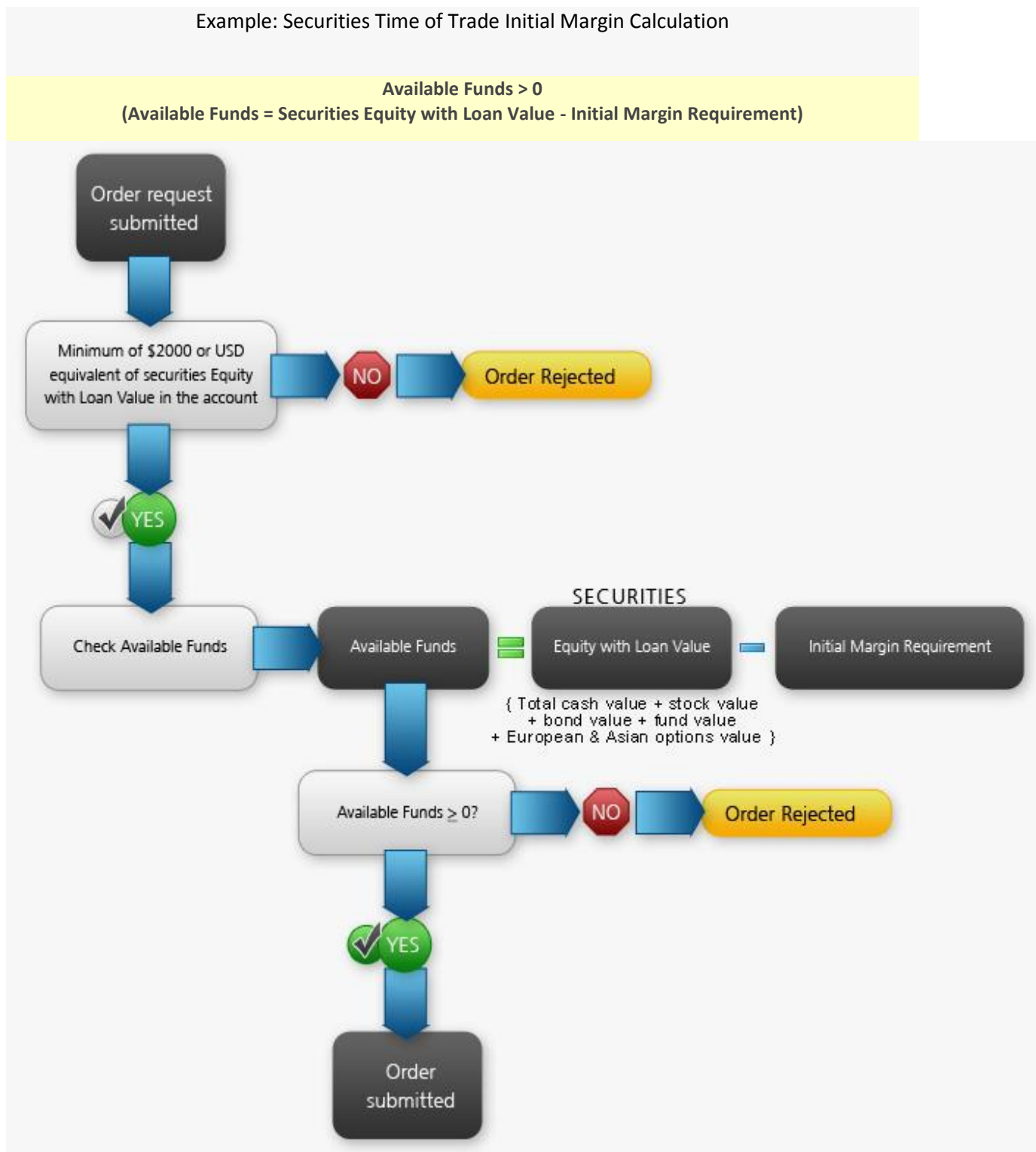
You are required to have a minimum of \$2,000 or USD equivalent of securities equity with loan value or commodities net liquidation value to open a new position. If you do not meet this initial requirement, you will be unable to open a new position in your Reg T Margin securities account.

Time of Trade Initial Margin Calculation

Upon submission of an order, a check is made against real-time available funds. If available funds, after the order request, would be greater than or equal to zero, the order is accepted; if available funds would be negative, the order is rejected.

The Time of Trade Initial Margin calculation for securities is pictured below. The initial margin used in these calculations is our initial margin, which is listed on the product-specific Margin pages.

Example: Securities Time of Trade Initial Margin Calculation



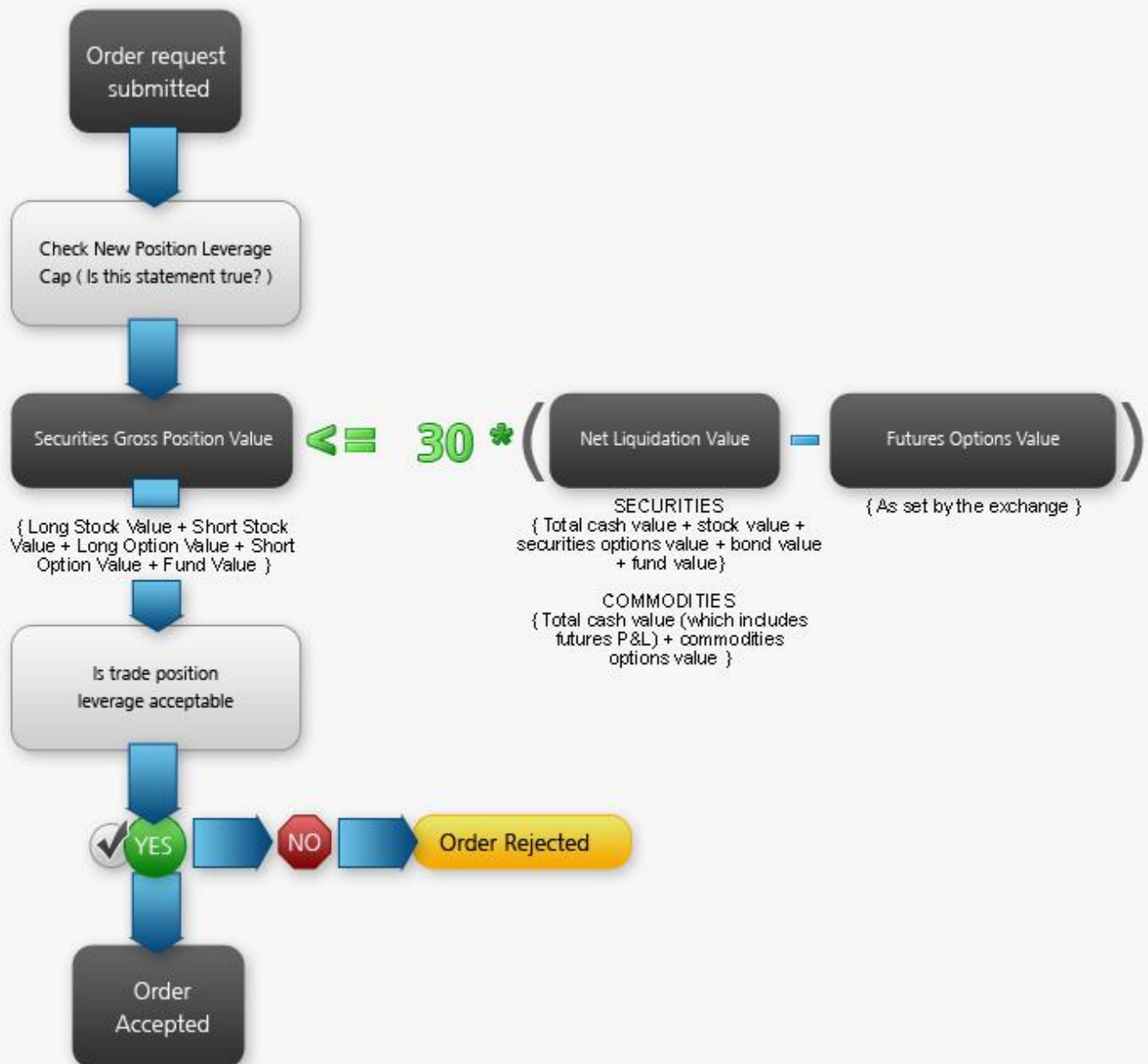
Time of Trade Position Leverage Check

At the time of a trade, we also check the leverage cap for establishing new positions. The leverage limitation is a house margin requirement that limits the risk associated with the close-out of large positions held on margin. We perform the following calculation to ensure that the Gross Position Value is not more than 30 times the Net Liquidation Value minus the futures options value:

Example: Time of Trade Position Leverage Check

$$\text{Securities Gross Position Value} \leq 30 * (\text{Net Liquidation Value} - \text{Futures Options Value})$$

If the result of this calculation is true, then you have not exceeded the leverage cap for establishing new positions. If the trade would put your account over the leverage cap (that is, the calculation is not true), then the order will not be accepted.



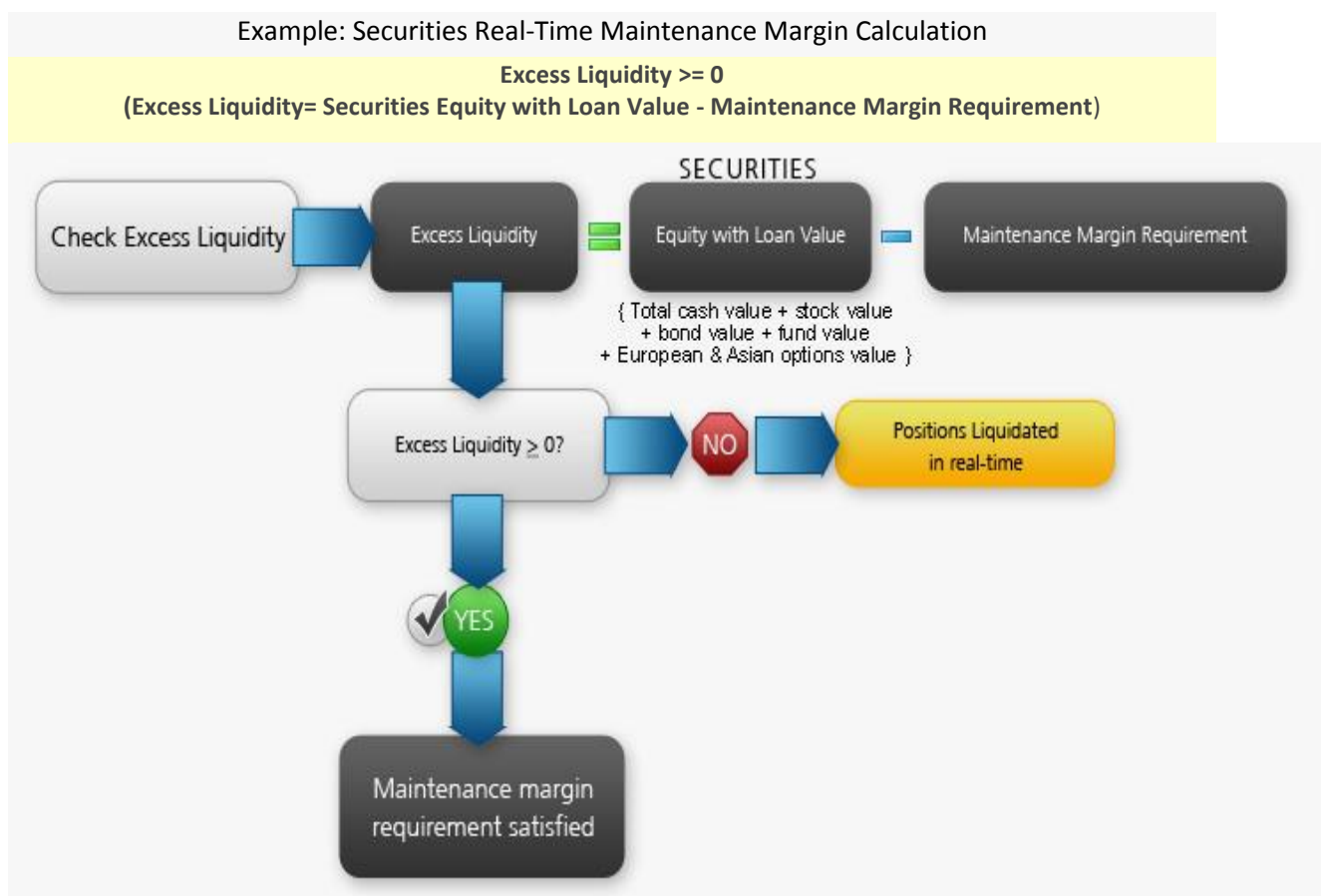
2. Real-Time Margin Calculations

Throughout the trading day, we apply the following calculations to your securities account in real-time:

- Real-Time Maintenance Margin Calculation
- Real-Time Position Leverage Check
- Real-Time Cash Leverage Check
- Decreased Marginability Calculations
- Real-Time SMA Calculation
- Soft Edge Margining

Real-Time Maintenance Margin Calculation

Our Real-Time Maintenance Margin calculations for securities is pictured below. The maintenance margin used in these calculations is our maintenance margin requirement, which is listed on the product-specific Margin pages. In the calculations below, "Excess Liquidity" refers to excess maintenance margin equity.



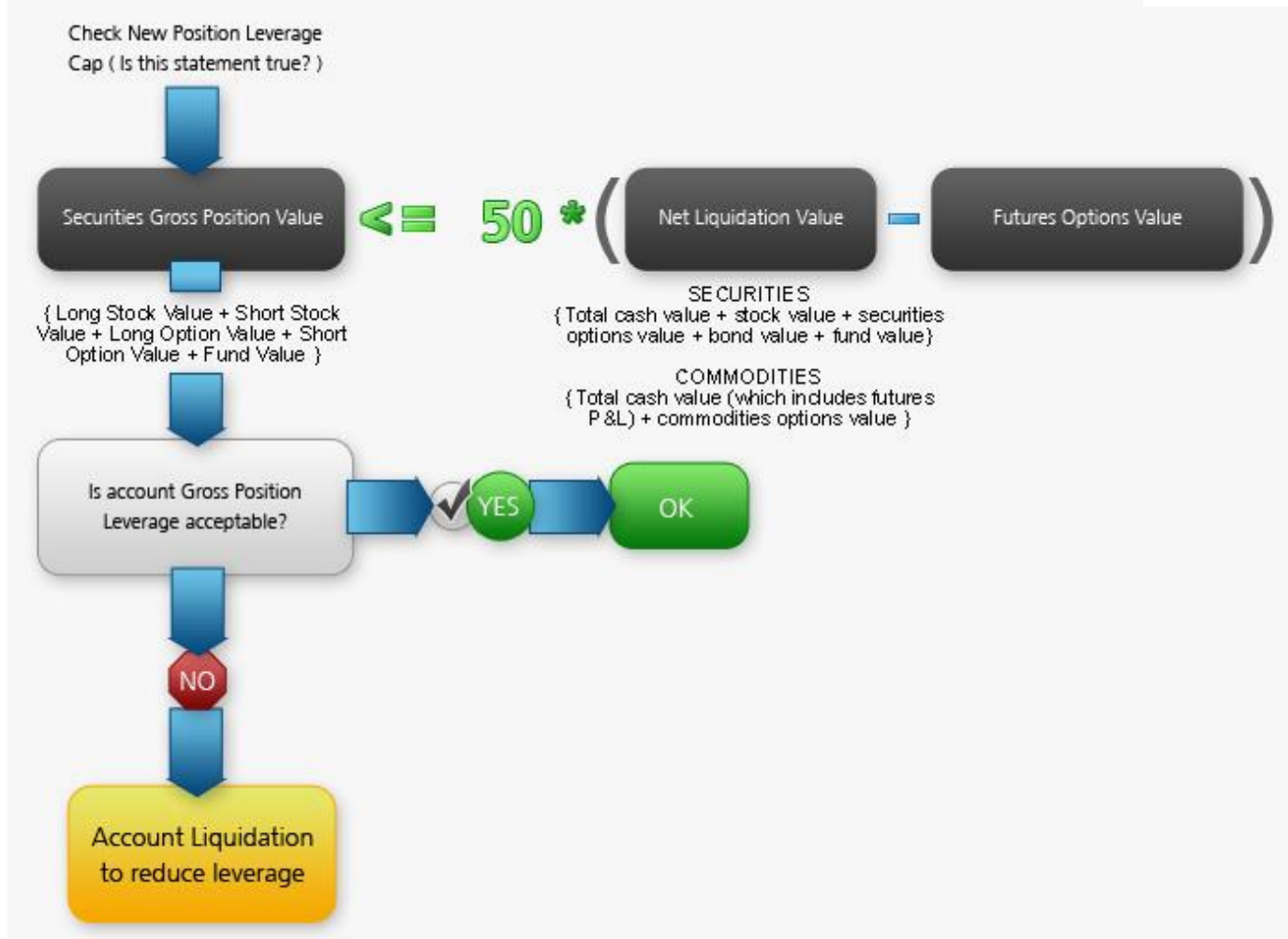
Real-Time Gross Position Leverage Check

There is a real-time check on overall position leverage to ensure that the Gross Position Value is not more than 50 times the Net Liquidation Value minus the futures options value. The leverage limitation is a house margin requirement that limits the risk associated with the close-out of large positions held on margin. The calculation is shown below.

Example: Real-Time Gross Position Leverage Check

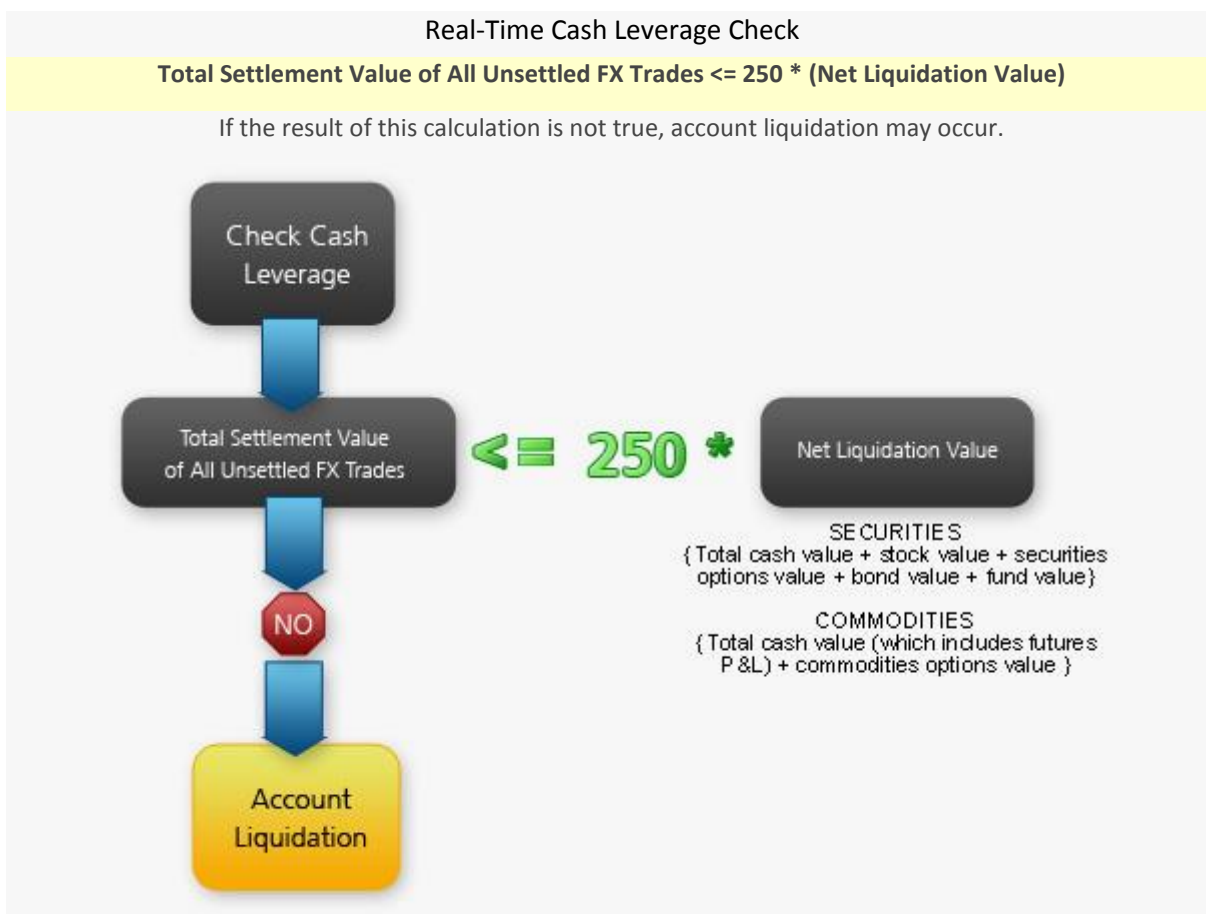
$$\text{Securities Gross Position Value} \leq 50 * (\text{Net Liquidation Value} - \text{Futures Options Value})$$

If the result of this calculation is not true, positions may be liquidated to reduce the Gross Position Leverage.



Real-Time Cash Leverage Check

An additional leverage check on cash is made to ensure that the total FX settlement value is no more than 250 times the Net Liquidation Value as shown below.



Decreased Marginability Calculations

We reduce the marginability of stocks for accounts holding concentrated positions relative to the shares outstanding (SHO) of a company. For Reg T securities accounts, this algorithm increases the margin requirement for stock positions exceeding 1% of the published SHO from its default to 100% (in other words, decreases the amount of money that can be borrowed against a stock position toward zero). At 5% concentration, positions have a 100% margin requirement.

Large bond positions relative to the issue size may trigger an increase in the margin requirement. The review of bond marginability is done periodically to consider redemptions and calls, as well as other factors, which may affect the remaining liquidity of the particular bond instrument. Less liquid bonds are given less favorable margin treatment.

Soft Edge Margining

We will automatically liquidate when an account falls below the minimum margin requirement. However, to allow a customer the ability to manage risk prior to a liquidation, we calculate Soft Edge Margin (SEM) during the trading day. From the start of the trading day until 15 minutes before the close of the trading day, Soft Edge

Margin allows for an account's margin deficit to be within a specified percentage of the account's Net Liquidation Value, currently 10%. When SEM ends, the full maintenance requirement must be met. When SEM is not applicable, the account must meet 100% of maintenance margin.

Soft Edge Margin start time of a contract is the latest of:

- the market open, the latest open time if listed on multiple exchanges;
- or the start of liquidation hours, which are based on trading currency, asset category, exchange and product.

Soft Edge Margin end time of a contract is the earliest of:

- 15 minutes before market close, the earliest close time if listed on multiple exchanges;
- or 15 minutes before the end of liquidation hours;
- or the start of Reg T enforcement time.

If an account falls below the minimum maintenance margin, it will not be automatically liquidated until it falls below the Soft Edge Margin. This allows a customer's account to be in margin violation for a short period of time. Soft Edge Margin is not displayed in CCG Trader. Once the account falls below SEM however, it is then required to meet full maintenance margin.

Please note that we reserve the right to restrict soft edge access on any given day, and may eliminate SEM completely in times of heightened volatility.

3. SMA and End of Day Calculations

Real-Time SMA

On a real-time basis, we check the balance of a special account associated with your Reg T Margin securities account called the Special Memorandum Account (SMA). We calculate a running balance of your SMA throughout the trading day, then enforce Regulation T initial margin requirements at the end of the trading day. No cash withdrawal will be allowed that causes SMA to go negative on a real-time basis.

End of Day SMA

As described above, we calculate SMA in real time throughout the trading day, but we enforce Regulation T initial margin requirements (typically 50% for stocks or 100% for nonmarginable securities) at the end of the trading day. Whenever you have a position change on a trading day, we check the balance of your SMA at the end of the US trading day (15:50-17:20 ET), to ensure that it is greater than or equal to zero.

We use the following calculation to check your SMA balance in real time and apply Regulation T initial margin requirements to securities that can be purchased on margin. Note that this is the same SMA calculation that is used throughout the trading day. In the first calculation, "today's trades initial margin requirements" are added for SELL orders and subtracted for BUY orders, and are based on US Regulation T Initial Margin requirements.

$$\begin{aligned} \text{SMA} = & ((\text{Prior Day SMA} +/- \text{Change in Day's Cash} +/- \text{Today's Trades Initial Margin Requirements}) \\ & \text{or} \\ & (\text{Equity with Loan Value} - \text{Reg T Margin})) \\ & \text{whichever is greater} \end{aligned}$$



SMA Rules

SMA is calculated based on the following rules:

- Cash deposits are credited to SMA.
- Cash withdrawals are debited from SMA.
- Dividends are credited to SMA.
- Trades are netted on a per contract per day basis.
 - Realized pnl, i.e. day trading pnl are posted to SMA.
 - Commission and tax are debited from SMA.
 - All trades (one per contract) are posted to the portfolio at the end of the trading day, if RegTMargin of the portfolio increases, the increased amount is debited from SMA, if RegTMargin of the portfolio decreases, the decreased amount is credited to SMA. The current price of the underlying, if needed, is used in this calculation.
 - Option sales proceeds are credited to SMA.
 - Premiums for options purchased are debited from SMA.

The change to SMA resulting from trades is effectively the change in RegTEquity minus the change in RegTMargin.

- Universal transfers are treated the same way cash deposits and withdrawals are treated.
- Market appreciation: If RegTExcess of a margin account is greater than SMA at the close (normally 16:00 US/Eastern), SMA is set to equal to RegTExcess. Note that SMA balance will never decrease because of market movements. $\text{RegTExcess} = 0 \text{ or } (\text{RegTEquity} - \text{RegTMargin}), \text{ whichever is greater.}$
- Currency trades do not affect SMA.
- Fees, such as order cancellation fee, market data fee, etc. do not affect SMA.
- Exercises and assignments (EA) are reported to the credit manager when we receive reports from clearing houses. They will be treated as trades on that day. For example, on expiration, we receive EA notices on the weekend; these trades have Friday as trade date in the clearing system, but they will be treated as Monday's trade for SMA purposes by the credit manager. Exercise requests do not change SMA. DVP transactions are treated as trades.

4. Overnight Margin Calculations

Stocks have additional margin requirements when held overnight. For overnight margin requirements for stocks, click the **Stocks** tab above.

5. How to Determine the Last Stock Price Before We Begin to Liquidate the Position?

Use the following series of calculations to determine the last stock price of a position before we begin to liquidate that position. Note that this calculation applies only to single stock positions.

$$(\text{Cash Borrowed} / \# \text{ of Shares}) / (1 - \text{margin rate}) = \text{Last Price Before Liquidation}$$

To see an example click the Examples link at top of page.

6. How Much Stock Do We Liquidate?

As shown on the Margin Calculations page, we calculate the amount of Excess Liquidity (margin excess) in your Reg T Margin account in real time. If your Excess Liquidity balance is less than zero, we will liquidate positions in your account to bring the Excess Liquidity balance up to at least zero.

You can use the following calculation to determine how much stock equity we will liquidate in your Reg T Margin account to bring your Excess Liquidity balance back to zero. Note that this calculation applies only to stocks.

Liquidation Amount



Excess Liquidity Deficit * 4

To see an example click the Examples link at top of page.

Disclosures

1. All liquidations are subject to the normal [commission schedule](#). Advisor clients will not be subject to advisor fees for any liquidating transaction.
2. Calculated at the end of the day under US margin rules.
3. See Reg T End of Day Initial Margin [calculation](#).
4. Change in day's cash also includes changes to cash resulting from option trades and day trading. Changes in cash resulting from other trades are *not* included.

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- Note that the credit check for order entry always considers the initial margin of existing positions. Therefore, although an account may be holding an existing position at 35%, for example, it is the initial margin requirement of that position that is used in the credit check calculation for order acceptance.
 - Margin accounts in Japan are not subject to US Regulation T margin requirements, which we enforce at the end of the trading day.
 - Our system is designed to liquidate Customer's most recent transactions in a minimum of 100 share increments, or such amount of shares held by customer that, following liquidation, will provide the account with equity in excess of our minimum maintenance margin requirement at the time of liquidation.