

## FAQs-PRM-01

1. Do we have to get the exchange approval as an individual to trade algorithms?

Obtaining approval for trading depends from geography to geography. We advise you to check the regulations for markets where you intend to trade.

2. What is the unit of the volatility of a stock?

Volatility is usually referred to the standard deviation of stock returns which is generally in percentage terms. We know that standard deviation follows the same unit as the variable. Hence, the unit of the volatility is the same as the stock returns.

3. How to intuitively think about alpha and beta?

Alpha is a measure of the skill of the trader/portfolio manager. Beta is just the sensitivity of the portfolio to the benchmark return and represents passive return.

They are terms that come from the CAPM (Capital Asset Pricing Model), the Beta is the excess of returns related to the index or benchmark and the Alpha is the residual which according to CAPM tends to zero, however their traders/managers capable of achieving a little Alpha, a little extra return that contradicts the efficient market hypothesis.

4. If an algorithm starts taking extreme positions due to an unseen bug, how can we stop it?

Every algorithm we design should have a kill switch (software) that can be fired when something unwanted happens. Most professionally designed algorithms have one that can be executed, which stops trading and, in some cases, even squares off the market positions.

An automatic system does not mean that it should not be monitored. Although we cannot watch the screen 24/7 like the big banks do, we must implement notification systems and alerts to keep track of the status of the system.

5. How do you handle regulatory risks in real-time? For example, when an exchange stops trading for a few hours?

In such a case, the market data that we receive usually stops and alerts the system to stop the trading. Or it might also happen that we keep getting the last price (which is stale), and we can check if we are getting the same price repeatedly and handle it accordingly.

6. For avoiding virus attacks, which is better: Linux, MAC or Windows?

Most production servers use Linux OS mainly for two reasons:

- Security: The way Linux handles user security; it forbids any unauthorized users from executing any kind of files.
- Open source: Developers can tweak the code to optimize it's working.