Malware is not a computer “virus”, although both malware and virus infections can cripple your PC, or worse. Malwarebytes Lab explains how PUP (potential unwanted programs) are identified and isolated below.

Analyzing and categorizing potentially unwanted software is a complex problem. Developers of potentially unwanted software rapidly evolve their products. Some even contain a few characteristics that resemble legitimate software to mask the unwanted functionality. It's an on-going process, and we work hard to identify common behaviors that help provide you the highest level of protection. In some cases, where the behavior is questionable, we will list the application even if it does not neatly fit into the listed criteria. In other words, we use our judgment.

While we highlight potentially unwanted programs, you then make a choice in the exclusions list and select what you want to keep or remove.

Here are some of the criteria we use:

- obtrusive, misleading, or deceptive advertising, branding, or search practices
- using pop-ups, pop-unders, ad-insertion, ad-overlays, ad replacement
- excessive or deceptive distribution, affiliate or opt-out bundling practices which may or may not include SEO poisoning techniques
- aggressive or deceptive behavior especially surrounding purchasing or licensing, including using affiliates & third parties who use different tactics or techniques to get users to purchase, than what is available from the manufacturer’s website
- unwarranted, unnecessary, excessive, illegitimate, or deceptive modifications of system settings, security settings or configuration (including browser settings and toolbars that bring no additional value over standard Operating System and legitimate application settings)
- using fake installers for commonly used software (such as Adobe Flash Player) to push your product
- using exaggerated findings (such as claiming temp files, cookies, registry entries, etc are harmful) as scare tactics to get users to purchase
- using technical support scam tactics
• difficulty uninstalling or removing the software
• predominantly negative feedback or ratings from the user community
• in general hurting or diminishing end user experience
• other practices generally accepted as riskware, scareware, adware, greyware, or otherwise commonly unwanted software by the user community

For the most part, publishers of potentially unwanted software are not hobbyists. They are sophisticated businesses with big budgets and infrastructure. Given this, new forms of potentially unwanted software frequently emerge and proliferate. To respond promptly, we reserve the right to adjust, expand and update our criteria without prior notice or announcements.

Control those things you can, and keep the surprises to a minimum!