

One of the features we failed to implement were building and testing *Packages* remotely on the server. Our limited solution attempted to implement this functionality by allowing a user to define a shell script associated with a particular project, which could be run on the server. However, this is a very insecure way of implementing this feature, and could easily be abused by a malicious user, as the shell script execution process has access to the virtually entire file system.

One of the suggestions Brandon Busby provided was utilizing virtualization with baked operating system images. For the Windows operating system, Microsoft provides a tool called [SysPrep](#), which is used by vendors to pre-install software on Windows machines while still providing the out-of-box experience to new users. In particular, it can function in two modes, either a *Generalized* mode to provide an operating system image for general hardware, or a *Specialized* mode for unique particular hardware. A similar process can be utilized for testing packages on the server.