# Global Variables

* BtrConfig – Global config data (Stored in Registry HKLM:/DaveWare/Beater)
  + LogFile – Location of log file
  + LogLevel – Detail level of log file
  + ConsoleLevel – Detail level of console output
  + RootPath – Root path for everything
  + AppFolder – Folder to store apps in
  + CertFolder – Folder with certificates to install
  + OscdimgPath – Path to oscdimg.exe
  + BaseImageFolder – Folder to store Base Images in
  + HDDFolder – Folder to store VM HDD files in
  + SnapShotFolder - Folder to store VM snapshots in
  + WorkingFolder – Temp folder
  + VMFolder – Folder to store VM config files in
  + VMTempFolder – Temp folder on the VMs
* BtrApplications – List of installable applications (Stored in Registry HKLM:/DaveWare/Beater/Applications)
  + Apps (Array)
    - Name – Name of application to install
    - Installer – Name of installer
    - Transform
    - Patch
    - AdditionalFiles
    - InstallSwitches
    - PatchSwitches
    - URL
    - HardInstall
* BtrDefaults (Stored in config/Defaults.json)
  + RootPath
  + AppFolder
  + CertFolder
  + OscdimgPath
  + BaseImagePath
  + HDDPath
  + SnapShotPath
  + WorkingFolder
  + VMPath
  + VMTempFolder
  + TimeZone
  + Network
    - UseNAT
    - IPPrefix
    - SubnetMask
    - SubnetLength
    - Gateway
    - DHCPStart
    - DHCPEnd
  + BaseImage
    - LocalAdmin
    - LocalPassword
    - CustomUpdateSource
    - OSList (Array)
      * Name
      * Key
      * ImageIndex
      * AppsToInstall (Array)
  + Domains
    - Name
    - NBName
    - DomainAdmin
    - DomainPassword
  + Apps (Array)
    - VMName
    - Name
    - Installer
    - AdditionalFiles
    - InstallSwitches
    - URL
    - HardInstall
    - PreInstall
    - PostInstall
* BtrApps (Array)
  + VMName – Name of VM to install software on
  + Name – Descriptive name of product to install
  + Installer – Name of Installer. A \* means to find latest version that matches pattern in the folder
  + AdditionalFiles – Additional files to copy over to temp folder
  + InstallSwitches – Switches to apply to installer
  + URL – Url to download software from if it’s not in AppFolder
  + HardInstall – Switch use psexec to install remotely
  + PreInstall – Array of powershell commands to run before the installer
  + PostInstall – Array of powershell commands to run after the installer
* BtrNetworks (Array) (Stored in json under Notes on vSwitch)
  + UseNAT – Y/N use NAT on switch
  + IPPrefix – first 3 octets of network
  + SubnetMask – 255.255.255.0 version of subnet mask
  + SubnetLength - /24 version of subnet mask
  + Gateway – IP of gateway on network
  + DHCPServer – Name of VM hosting DHCP
  + DHCPStart – Start of DHCP range
  + DHCPEnd – end of DHCP range
* BtrBaseImages (Array) (Stored in JSON file in same folder as .vhdx)
  + Name – Name of Base image
  + OS – Type of OS installed
  + LocalAdmin – Local admin username
  + LocalPassword – Password for local admin
  + Apps (Array) – List of installed apps
  + Roles (Array) – List installed apps
  + <Role config> - Same as BtrVMs
* BtrVMs (Array) Stored per VM (Stored in json under Notes)
  + Domain – Blank or domain it’s a member of
  + LocalAdmin – Local admin username
  + LocalPassword – Password for local admin
  + Roles – Array of installed roles
    - DC
    - CertServer
    - DNS
    - DHCP
    - Exchange
    - SQL
  + Domain (DC Only)
    - Name – Name of domain
    - NBName – NetBios name of domain
    - DomainAdmin – Domain admin account name
    - DomainPassword – Domain admin password

# Functions

* Generic
  + Write-BTRLog – Write info to log and/or console
    - Parameters
      * **Entry** – text to log
      * Level
        + Error
        + FunctionProgress
        + Progress
        + Debug
  + Import-BtrConfig – Refreshes Global Variables from registry/files/notes
    - Returns T/F
  + Connect-BTRPSSession – Connect PS Session to VM
    - Parameters
      * **VMName**  - Name of VM to connect to
    - Returns - PSSession
  + Install-BTRSoftware – Install software, downloading if required
    - Parameters
      * **VMName** – Name of VM to install software on
      * Name – Descriptive name of product to install
      * **Installer** – Name of Installer. A \* means to find latest version that matches pattern in the folder
      * InstallSwitches – Switches to apply to installer
      * URL – Url to download software from if it is not in AppFolder
      * HardInstall – Switch use psexec to install remotely
      * PreInstall – Array of powershell commands to run before the installer
      * PostInstall – Array of powershell commands to run after the installer
    - Returns T/F
  + Wait-BTRVMOnline – Wait for VM to come online
    - Parameters
      * **VMName** – Name of VM
      * MaxWaitTime – Max time to wait in minutes. Default 5
      * WaitForLogin – Wait for logon to succeed
    - Returns T/F
  + Wait-BTRVMOffline – Wait for VM to go offline
    - Parameters
      * **VMName** – Name of VM
      * MaxWaitTime – Max time to wait in minutes. Default 10
    - Returns T/F
  + Wait-BTRVMReboot – Wait for VM to finish rebooting
    - Parameters
      * **VMName** – Name of VM
      * MaxWaitTime – Max time to wait in minutes. Default 10
      * WaitForLogin – Wait for logon to succeed
    - Returns T/F
  + Get-BtrNextIP – Get next available IP on switch
    - Parameters
      * **SwitchName** – Name of VSwitch
    - Returns – Next IP
  + New-BTRVirtualDisk – Creates a new Virtual Disk on an existing VM. VM must be powered on.
    - Parameters
      * **VMName** – Name of VM to add disk too
      * Size – Size of disk defaults to 10 GB
      * Letter – Letter of disk – Defaults to next available
      * Label – Label of disk
    - Returns True/False
  + New-BTRDNSRecord
    - Parameters
      * **Name** – Name to add
      * **Domain** – Name of domain to add record to
      * Zone – zone name. Defaults to domain zone
      * Data – Date to add
      * SkipReverse – No not add reverse record on A
      * Type – Type of record. Defaults to A
    - Returns True/False
  + Remove-BTRDNSRecord
    - Parameters
      * **Name** – Name to remove
      * **Domain** – Name of domain to remove record from
      * Zone – zone name. Defaults to domain zone
      * SkipReverse – No not remove reverse record on A
      * Type – Type of record. Defaults to A
    - Returns True/False
* Base Image
  + NewBaseImage – Creates a new base image