Data Dictionary

- 1. MachineIdentifier Individual machine ID
- 2. **ProductName -** Defender state information
 - a. Windows=1
 - b. MSE=2
 - c. SCEP=3
 - d. FEP=4
- 3. **EngineVersion** Current version of the engine that is installed within the device
- 4. **AppVersion** Current version of Microsoft Windows Defender
- 5. **AvSigVersion** Current version of the antivirus signature learning software
- 6. **IsBeta** Defender state information
 - a. No=0
 - b. Yes=1
- 7. **RtpStateBitfield** The amount of bitfields within device
- 8. **IsSxsPassiveMode** Whether the device is in side-by-side passive mode
 - a. No=0
 - b. Yes=1
- 9. **AVProductStatesIdentifier** The state for the specific configuration of a user's antivirus software
- 10. **AVProductsInstalled** The amount of antivirus products installed
- 11. <u>AVProductsEnabled</u> The number of antivirus products that are activated within the device
- 12. <u>HasTpm</u> If true, this means that the device has a trusted platform module, which is essentially a chip that is engineered for hardware-based security related functions
 - a. No=0
 - b. Yes=1
- 13. <u>CountryIdentifier</u> ID for the country the machine is located within (222 values)
- 14. **CityIdentifier** ID for the city the machine is located in (10,736 values)
- 15. <u>OrganizationIdentifier</u> The ID for what organization the machine belongs within. This can be traced back to specific companies and/or broad industries
- 16. **GeoNameIdentifier** The geographic ID where a machine is located (248 values)
- 17. LocaleEnglishNameIdentifier The English name of the local ID of the user
- 18. <u>Platform</u> Platform name of a machine based off OS-related properties and the processor properties
 - a. Windows7= 7
 - b. Windows8 = 8
 - c. Windows10=10
- 19. **Processor** The type of structure within the installed operating system (either 64 or 86)
- 20. **OsVer** The version of that machines operating system
- 21. OsBuild The build of that machines operating system
- 22. **OsSuite** Product suite mask for the current operating system (8 unique values)
- 23. **IsProtected** A calculated field made from the antivirus products field.
 - a. Yes=1 (which means that there is one active and up-to-date antivirus product running on this machine)

- b. No=0 (which means that no antivirus products are installed or that they are installed, however they aren't updated yet)
- 24. AutoSampleOptIn This is the SubmitSamplesConsent value passed in from the service
 - a. False=0
 - b. True=1
- 25. <u>PuaMode</u> PUA (potentially unwanted application) mode allows user to access adware, installs toolbars, or other features that pose potential security vulnerabilities
 - a. Off (nonexistent) =0
 - b. Audit= 0.5
 - c. On=1
- 26. <u>IeVerIdentifier</u> Microsoft Internet Explorer identifier
- 27. <u>SmartScreen</u> Cloud-based software decided to prevent malware attacks like phishing. It is included within Microsoft packages
 - a. ExistsNotSet=1
 - b. Warn=2
 - c. On=3
 - d. Block=4
 - e. Off=5
 - f. Prompt=6
 - g. RequireAdmin=7
- 28. **Firewall -** Whether firewall is enabled for Window devices
 - a. False=0
 - b. True=1
- 29. <u>UacLuaenable</u> Whether or not the user in the "Admin Approval Mode" type is off or activated in user account control
 - a. True= 1
 - b. False=0
- 30. <u>Census MDC2FormFactor</u> A grouping of different types of machines based on hardware characteristics. The grouping is rooted by how people look at their device and what they would classify it as.
- 31. <u>Census_OEMNameIdentifier</u> Original equipment manager name identifier (2564 unique values)
- 32. <u>Census OEMModelIdentifier</u> Original equipment model identifier (175365 unique values)
- 33. Census_ProcessorCoreCount The quantity of logical cores located in the processor
- 34. <u>Census_ProcessorManufacturerIdentifier</u> The manufacturer ID of the hardware (7 unique values)
- 35. <u>Census_ProcessorModelIdentifier</u> The model identification of the processor
- 36. <u>Census PrimaryDiskTotalCapacity</u> Numerical value for the amount of disk space on the primary disk of the machine
- 37. **Census_PrimaryDiskTypeName** The name of the primary disk type on the device
 - a. HDD=1
 - b. SSD=2
 - c. Unknown = 3
 - d. Unspecified=4

- 38. <u>Census SystemVolumeTotalCapacity</u> The size of the system volume that the machine is installed on, measured in megabytes
- 39. <u>Census_HasOpticalDiskDrive</u> Whether or not the device has an optical disk drive
 - a. False=0
 - b. True=1
- 40. <u>Census TotalPhysicalRAM</u> The total physical RAM reported in megabytes
- 41. <u>Census_InternalPrimaryDiagonalDisplaySizeInInches</u> Diagonal length of the primary display of the machine (measured in inches)
- 42. <u>Census_InternalPrimaryDisplayResolutionHorizontal</u> Number of pixels within the horizontal direction of the internal display
- 43. <u>Census InternalPrimaryDisplayResolutionVertical</u> Number of pixels within the vertical direction of the internal display
- 44. **Census OSVersion** Operating system version that is currently on device
- 45. **Census_OSBranch** Taken from the operating system version
 - a. Rs (and Khmer OS)=1
 - b. Th=2
 - c. Win=3
- 46. **Census_OSBuildNumber** Operating system build number of a machine
- 47. **Census_OSBuildRevision** Operating systems build revision of a machine
- 48. <u>Census_OSEdition</u> Edition of the current operating system of the machine
 - a. Education=1
 - b. Enterprise=2
 - c. Professional=3
 - d. Home=4
 - e. Core=5
 - f. Cloud=6
 - g. Server=7
- 49. **Census OSInstallTypeName** What install type was used on the device
 - a. Clean=1
 - b. Upgrade=2
 - c. Other=3
 - d. Reset=4
 - e. Update=5
 - f. Refresh=6
- 50. <u>Census_OSInstallLanguageIdentifier</u> The numerical identifier used to determine the language of the operating system (39 unique values)
- 51. Census_OSUILocaleIdentifier The identifier of the OS user interface
- 52. <u>Census OSWUAutoUpdateOptionsName</u> The name of the settings on the operating system windows update/auto update device
 - a. Full Auto=1
 - b. Unknown=2
 - c. AutoInstallAndRebootAtMaintenanceTime=3
 - d. Off=4
 - e. Notify=5
 - f. DownloadNotify=6

- 53. <u>Census_IsPortableOperatingSystem</u> If true, then the operating system is on and running through via Windows-To-Go on a USB drive
 - a. False=0
 - b. True=1
- 54. <u>Census GenuineStateName</u> Whether or not the operating system's state is genuine
 - a. Offline=1
 - b. IsGenuine=2
 - c. InvalidLicense (tampered)= 3
 - d. Unknown=4
- 55. <u>Census_ActivationChannel</u> The retail or volume license key for the Microsoft device
 - a. Volume=1
 - b. OEM=2
 - c. Retail=3
- 56. <u>Census_IsFlightsDisabled</u> Indicates whether the machine user has currently disabled participating in flighting
 - a. True=1
 - b. False=0
- 57. **Census_FlightRing** The ring that the user would like to receive flights for
 - a. Retail, RP= 1
 - b. Disabled, NotSet=2
 - c. Canary, Invalid, OSG=3
 - d. WIF & WIS=4
- 58. Census_FirmwareManufacturerIdentifier Software manufacturer ID
- 59. **Census_FirmwareVersionIdentifier** The version of the firmware
- 60. <u>Census IsSecureBootEnabled</u> Whether or not the "Secure Boot" function, a security standard which ensures a device boots using only software that is trusted by the Original Equipment Manufacturer (OEM), is on
 - a. False= 0
 - b. True= 1
- 61. **Census_IsVirtualDevice** Indicates whether the device is a virtual machine
 - a. False=0
 - b. True=1
- 62. **Census_IsTouchEnabled** If true, the machine has a touch device
 - a. False=0
 - b. True=1
- 63. **Census_IsPenCapable** If true, the machine is capable of pen input
 - a. False=0
 - b. True=1
- 64. <u>Census_IsAlwaysOnAlwaysConnectedCapable</u> If true, this indicates whether the battery allows the Microsoft device to be on the "AlwaysOnAlwaysConnected" mode
 - a. False=0
 - b. True=1
- 65. Wdft IsGamer Binary classifier that specifies whether the user is a gamer or not
 - a. Gamer= 1
 - b. Non-gamer= 0

- 66. <u>Wdft_RegionIdentifier</u> Region identifier of the "windowed discrete fourier transform" (15 unique values)
- 67. **ExistsNotSet-** Using the value within the SmartScreen observation, this value is true when a user has the smart screen capability but has not enabled it yet
 - a. True=1
 - b. False=0
- 68. <u>IOT-</u> "Internet of things", created by using the Census_MDC2Factor variable to classify size of computer notebooks/tablets
 - a. Small tablet=1
 - b. Large tablet=2
 - c. Notebook and IOTOther=3
 - d. All other values not listed above =0
- 69. <u>PC-</u> Created by using the Census_MDC2Factor variable to classify what type of PC a machine was
 - a. Detachable=1
 - b. Convertible=2
 - c. All in One=3
 - d. Desktop & PcOther=4
- 70. <u>Server-</u> Created by using the Census_MDC2Factor variable in order to understand the server size
 - a. Large server= 1
 - b. Medium server= 2
 - c. Small server & server other =3
 - d. All other values that were not mentioned above =0