

.NET PE File structure

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| DOS Header |
| COFF Header |
| Optional header |
| Data directories |
| Net Directory : <ul style="list-style-type: none">located at offset [.text section Raw offset + (Com+ Header RVA) - .text section Virtual offset] where [Com+ Header] is a field in Data directories headerSize = 72 bytes |
| Net resources and embedded streams <ul style="list-style-type: none">Made up of an array of blocks where each block is headed by a Dword representing the resource size.A field in Net directory called "ResourcesRVA" gives the offset for the first managed resource |
| IL instructions bytes [.net code] <ul style="list-style-type: none">Every method has its own bytes and the actual bytes of the method are headed by 12 byte header |
| Metadata header <ul style="list-style-type: none">This is a dynamic header, its size = 20 + value of "VersionLength" field in this headerA field in Net directory called "MetaDataRVA" gives the offset for the header |
| Metadata streams header <ul style="list-style-type: none">This is a static header which size equals 20 bytes |
| Metadata tables header <ul style="list-style-type: none">This is a static header which size equals 24 bytes |
| Metadata tables Rows Count table <ul style="list-style-type: none">This is an array of Dword values that gives the number of rows in every metadata table, For example if you read these value : { 1 , 20 , 32 ,... } then the first table in metadata tables has 1 row and the second has 20 and the third has 32 and so on |
| Metadata tables <ul style="list-style-type: none">A table is made of an array of rows; a row is a structure, After the rows of a given table end, the rows of the next table follow |
| Native import table |
| Native entry point [EP] |
| .rsrc section |
| .reloc section |