


Pass The Ticket

Intro

Another Interesting lateral movement technique on Windows Environment that, Although it shares certain similarities with the fundamentals of techniques such as **PTH** and **OPTH**, It has certain peculiarities that made it more effective in some cases of use. This technique is called  **Pass The Ticket**.

One thing that we already know is that we can use techniques to dump **credentials hashed on memory** and then use those credentials to overwrite on a new login and **behave as if we were another user** at the moment to access different services on a network.

Another thing that is generated when we authenticate on a Windows Machine is a **TGT**, if we are using **Kerberos**, and prollly some **TGS**. If we make the command **klist** in a Powershell, we can see all **Kerberos** tickets associated with that user.

Following the same principles that have been raised in previous sections, we can think: "Just like we can dump the credentials of users that are in some part of the memory, **those tickets must be somewhere in the memory**. So, we can dump the TGT of other users, for example the DC Administrator user, if that user had logged in on that machine at some point, and **use that TGT on behalf of this user** to make requests and consume services on the DC".

That could sounds good, but, if we remember, when we pick a **TGT** and we want to request to the **TGS** for a **Service Ticket** we have to accompany the **TGT** with an "**Authenticator**" that will be cypher with **a Session Key** that we had getting on the request process of the **TGT** to the Authentication Service.

So we don't have the **Session Key** we can not encrypt the **Authenticator**, therefore, even having the **TGT** we can not request for the **Services Ticket**. Even so, just having the **TGT**, we can do interesting things, because the **Sessions Key is in the same part of memory where it is the TGT**. And with the **same technique** that we used to dump the **TGT we can also dump the Sessions Key** associated with that **TGT**. To dump this information we just need to be the Local Administrators.

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