

Keyfactor

Tech Days 2023

How to Reign in PKI and Certificate Sprawl



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Introduction

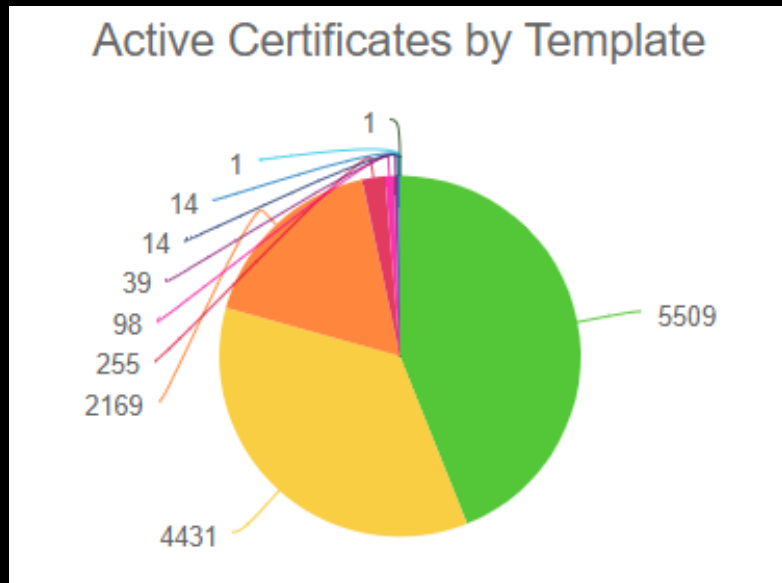


- Network Engineer with American Equity
- Active Member of the United States Air Force
- 9 Years in Network Engineering and Information Security

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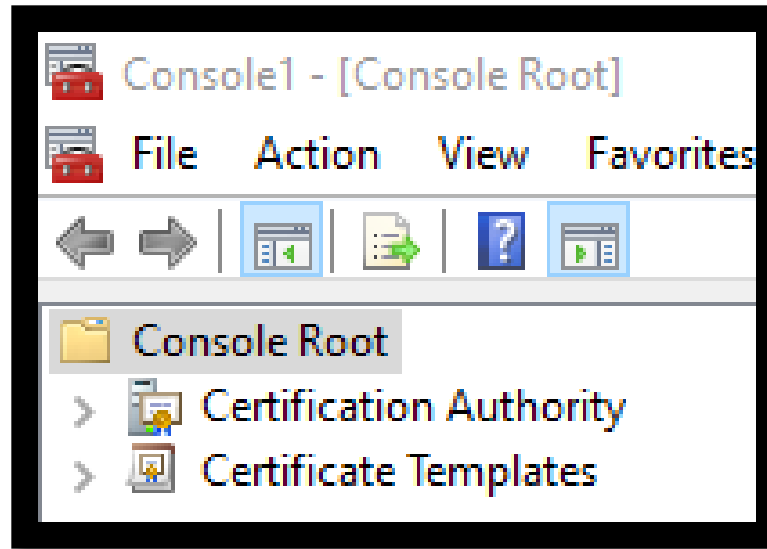
Today we are going to cover how I went from little knowledge of anything PKI to rebuilding my companies certificate infrastructure and everything in-between.

Discovery



What does your certificate landscape look like?

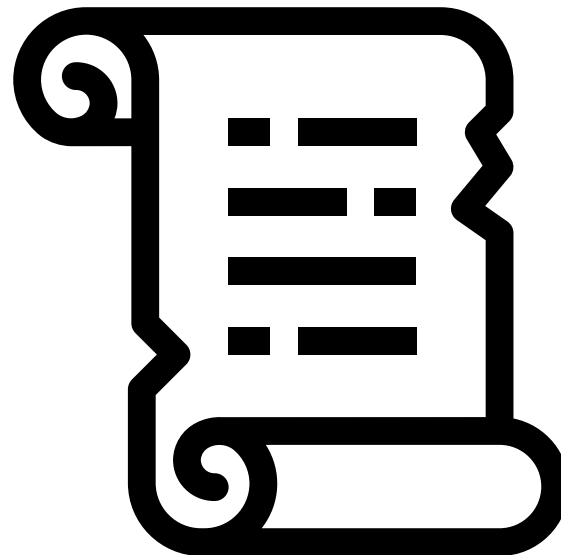
Discovery



- **How many Certificate Authorities do you have?**
- **What templates are active?**
- **Who has access to those templates?**

Discovery

- **What does Group Policy look like?**
- **What certificate usage is affected by Group Policy?**
- **What certificates are pushed by Group Policy?**
 - **i.e. Root Certificates**



Proactive Measures

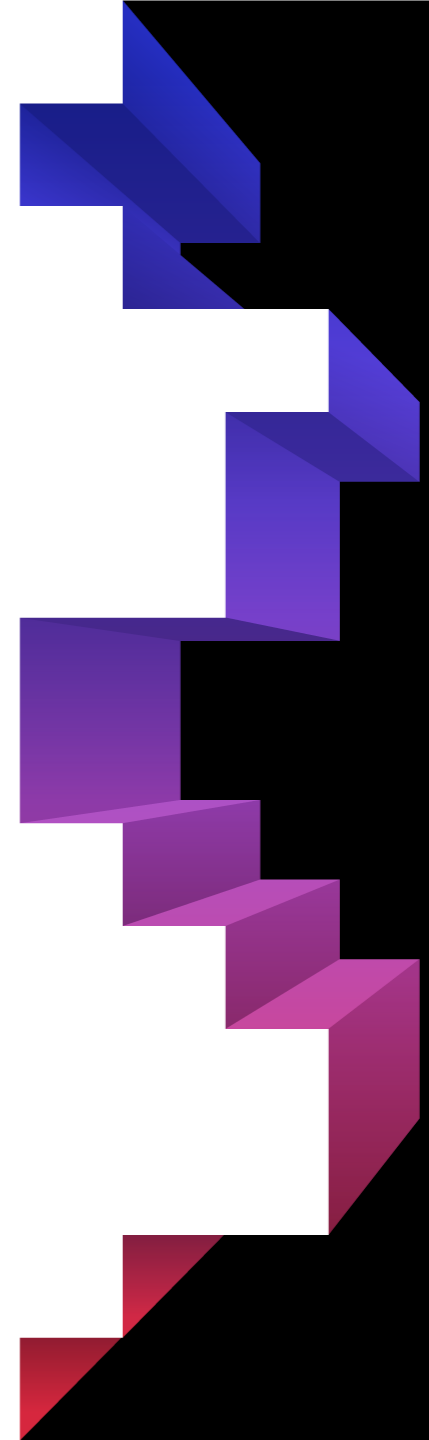
INVALID SSL CERTIFICATE



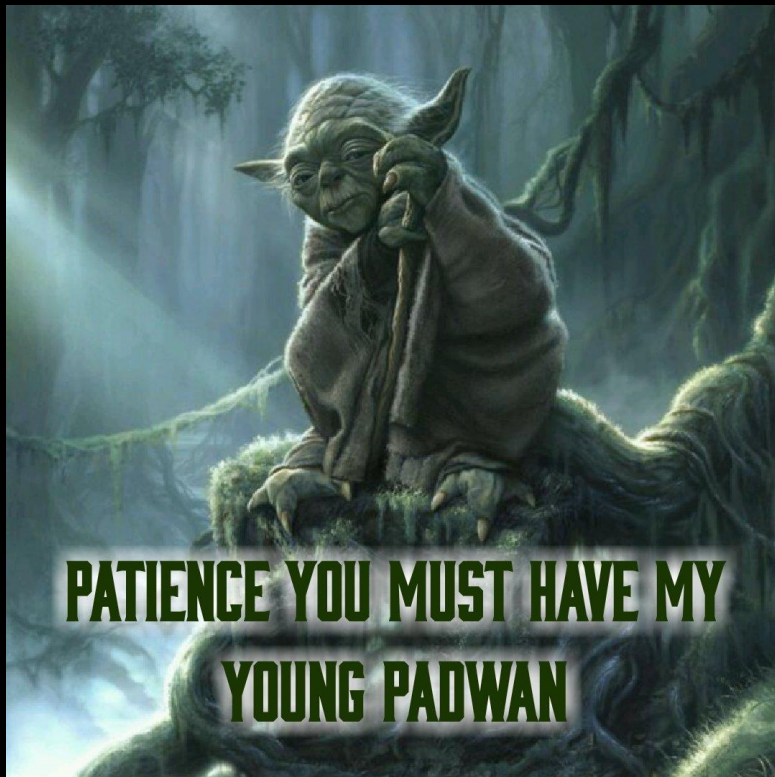
YOU SHALL NOT PASS

Proactive Measures

- **SSL certificate automation**
- **Evaluate template permissions**
- **Watch out for legacy setups**
- **Sometimes it is better to start with a new certificate authority**

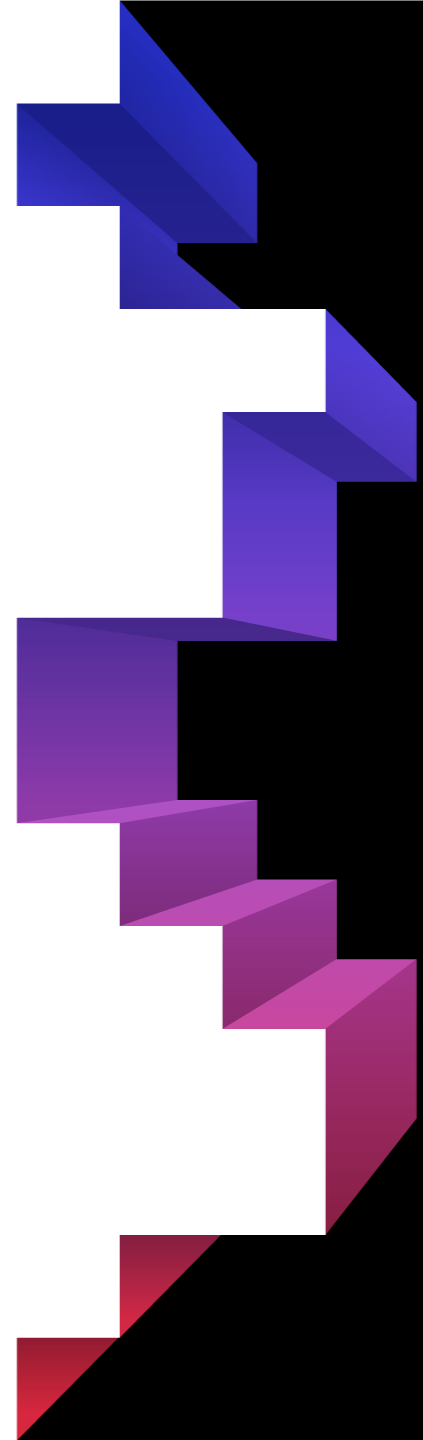


Steady State



Steady State

- **Continued Monitoring**
- **Environment Change**
- **Best Practices Implemental**
- **Disable templates not needed**
- **Remove certificates that are no longer in use**





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With any environment certificates can easily get out of control, but with time and effort this can be corrected.



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