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# SMB's vs. Ransomware

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# Ransomware: A Story

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# SMB's in the Cross Hairs

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- 43 percent of 2015 cyber attacks: SMB's
- Ransomware is easily automated
- Ransomware is financially rewarding
- Assumption: SMB's highly vulnerable

# . . . But Are They?

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- How are SMB's disadvantaged?
- What are their cyber strengths?
- How are they similarly positioned?

# Giving SMB's A Level Field

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- Educate SMB's about highest risks
- Equip them with big business tools
- Enlist available strategies

# A Word From Australia

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- ASD: The Top Four
  - Patch apps
  - Harden Java, Flash, and the like
  - Disable untrusted MS Office macros
  - Use Application Whitelisting

# More From Australia

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- ASD: The Essential Eight
  - Restrict admin privileges
  - Patch OS
  - Use multi-factor authentication
  - Perform daily backups

# Final Thought from ASD

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- 85% of threats mitigated by Top Four
- Here's confidence:

***"Any organisation that has been compromised despite properly implementing these [eight] mitigation strategies is encouraged to notify ASD."***



# Why AppLocker?

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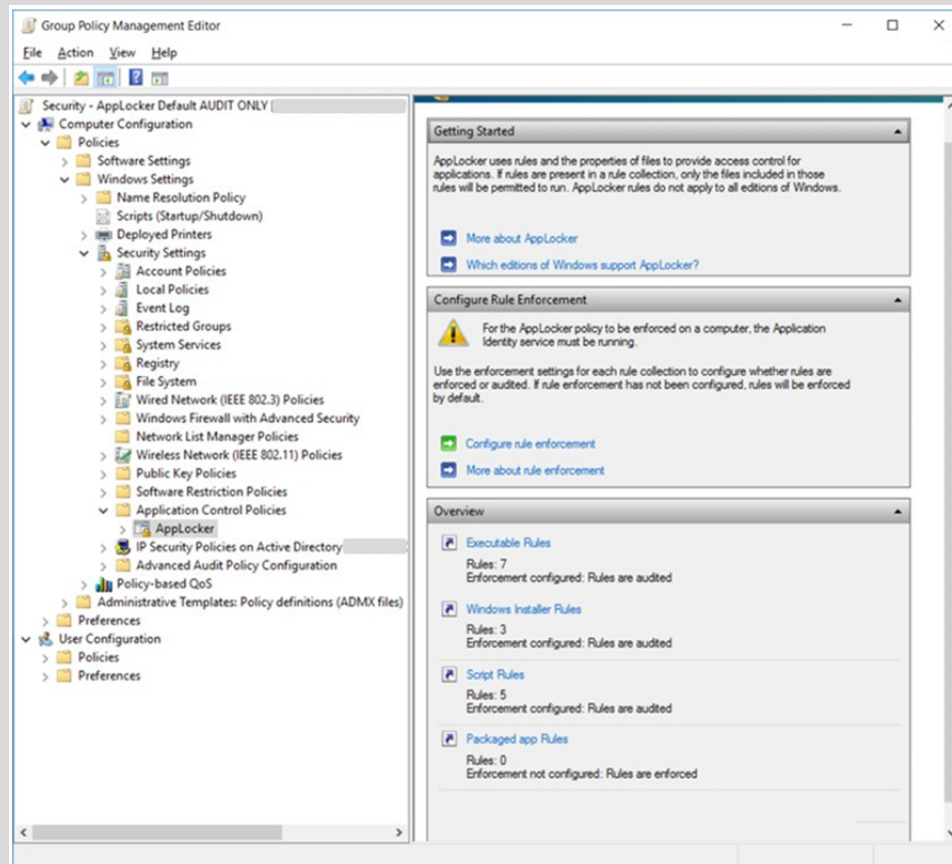
- Whitelisting: Top 4 recommended
- SMB's best handle known good
- Ransomware rarely targeted
- AppLocker best: Free in Windows

# Application Whitelisting

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- SMB's have the advantage!
  - AppLocker = free (Windows Servers)
  - SMB's can easily inventory software
  - SMB's have fewer apps to manage

# AppLocker Walk-Through



# AppLocker Assumptions

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- Users are not local Admins
- UAC settings are in place
- Link AppLocker object to correct OU
- Start slow
  - Create a Global Security Group
  - Add users
  - Apply Security Filtering, under Scope

# AppLocker Limitations

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- Does not include robust logging
- Path rules invite risk
- Whitelisting MS can be dangerous
  - Allows Regsvr32 example
  - Leaves room to invoke PowerShell

# Containing PowerShell

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- File-less attacks utilize PowerShell
- PowerShell is hard to tame
  - Not a single .exe
  - Cannot simply be “turned off”
  - Some constraints easy to bypass

# Summary

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- Stop ransomware with “Essential Eight”
- Application Whitelisting crucial for SMB’s
- AppLocker is logical way to implement
- Well worth time and effort
- Ideally suited to SMB’s
- Discussion/Q&A