LESS AGGRESSIVE, MORE EFFECTIVE: SOCIAL ENGINEERING WITH PAID ARCHIVES

Sergey Chernyshev & Daniel Chipiristeanu Microsoft Malware Protection Center (MMPC)

Microsoft Malware Protection Center

Who, What, & Where

Protection points

Home:

- Microsoft Security Essentials (MSE)
- Malicious Software Removal Tool (MSRT)
- Windows Defender

Corp:

 System Center Endpoint Protection (SCEP)

Cloud:

- Intune
- Hotmail
- Exchange
- Azure

Strategy:

Ensure all of Microsoft's customers are protected Security vendor agnostic

Disrupt the malware ecosystem

Support the security industry

Security content, sharing

Investments:

safe future systems, processes scale

Protect through the **cloud**

Collaborate with security industry Operationalize research with BI, automation

Background: social engineering attacks











Fake software installers (paid archives)

авствуйте! Спасибо, что загрузил

Ransomware



Если в течении 12 часов с момента появления данного сообщения, не будет введён код, все данные, включая Windows и Bios будут БЕЗВОЗВРАТНО УДАЛЕНЫІ Попытка переустановить систему приведет к нарушениям работы компьютера.

What are paid archives?



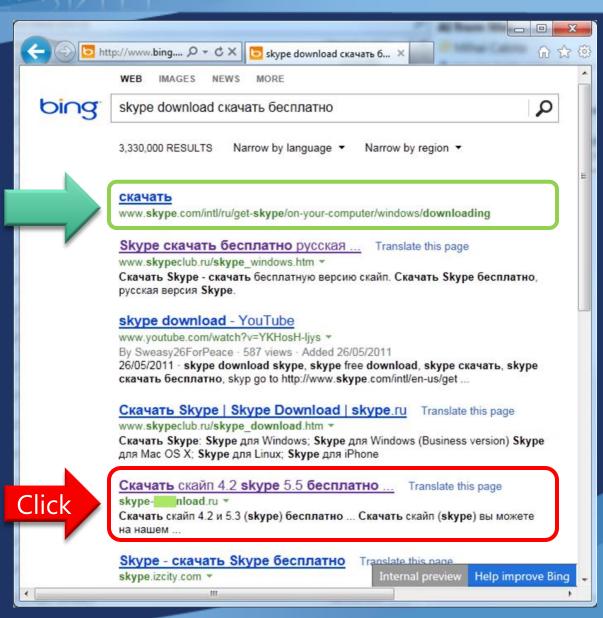






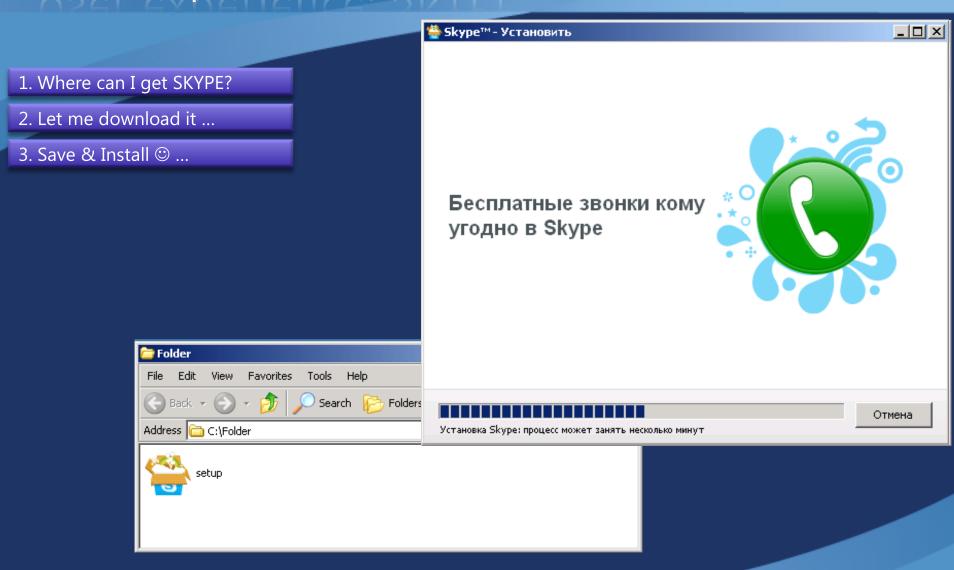


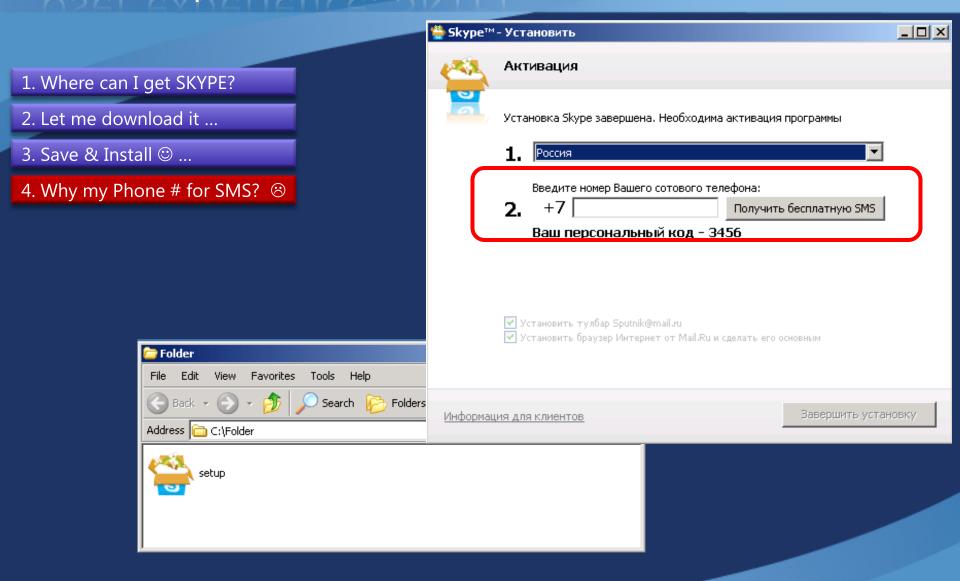
1. Where can I get SKYPE?



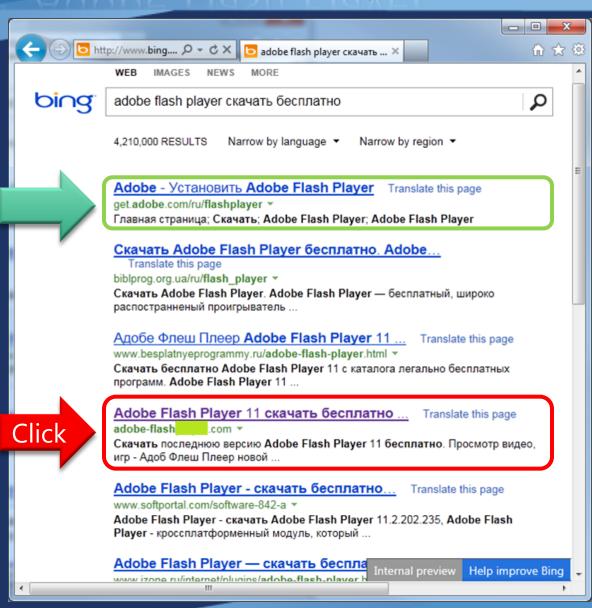
- 1. Where can I get SKYPE?
- 2. Let me download it ...







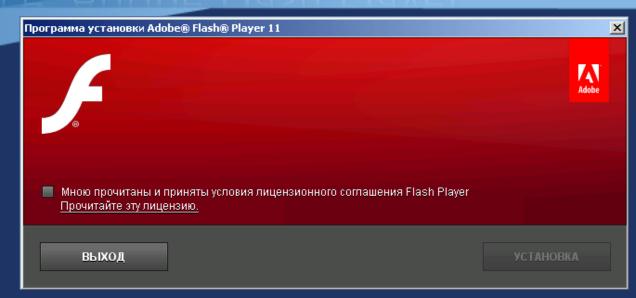
1. Where can I get FLASH?



- 1. Where can I get FLASH?
- 2. Let me download it ...

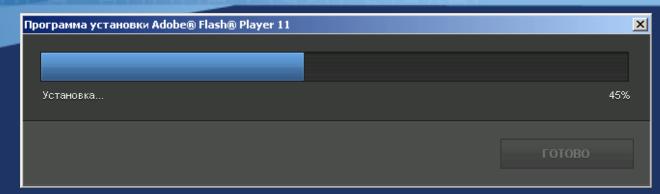


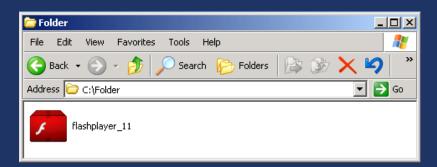
- 1. Where can I get FLASH?
- 2. Let me download it ...
- 3. Save & Install © ...

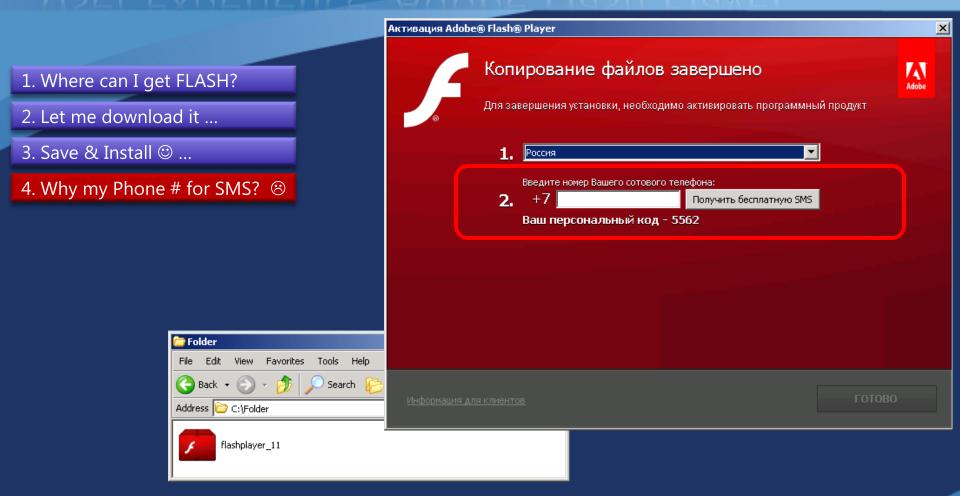




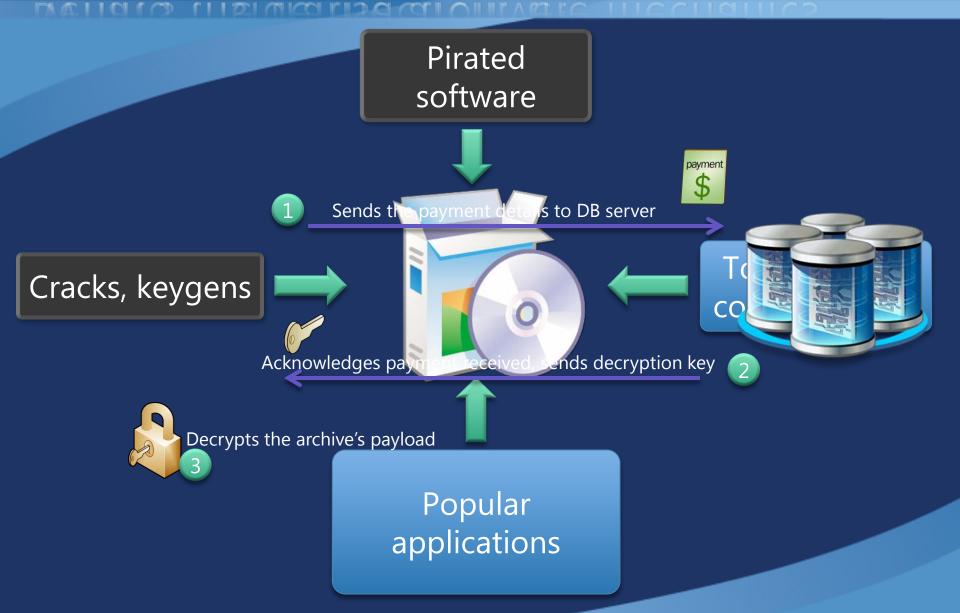
- 1. Where can I get FLASH?
- 2. Let me download it ...
- 3. Save & Install 🙂 ...



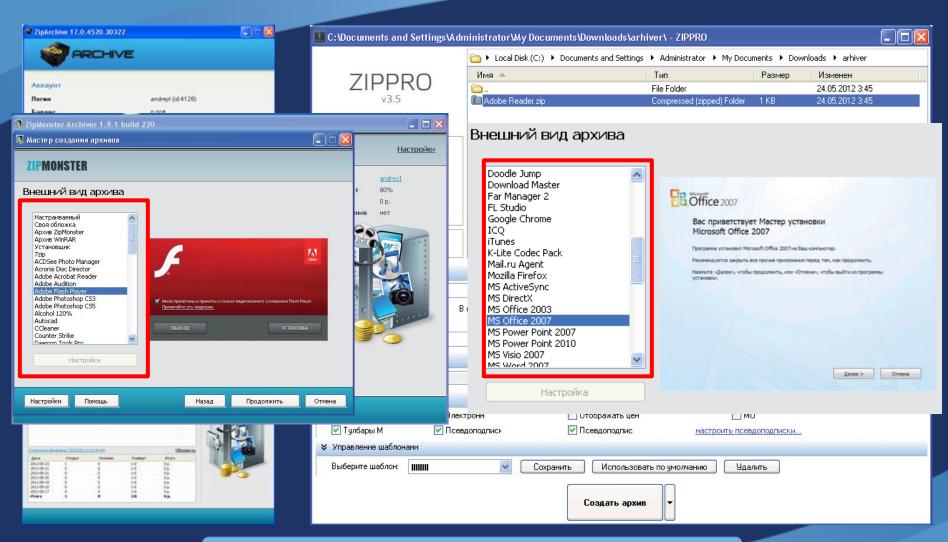




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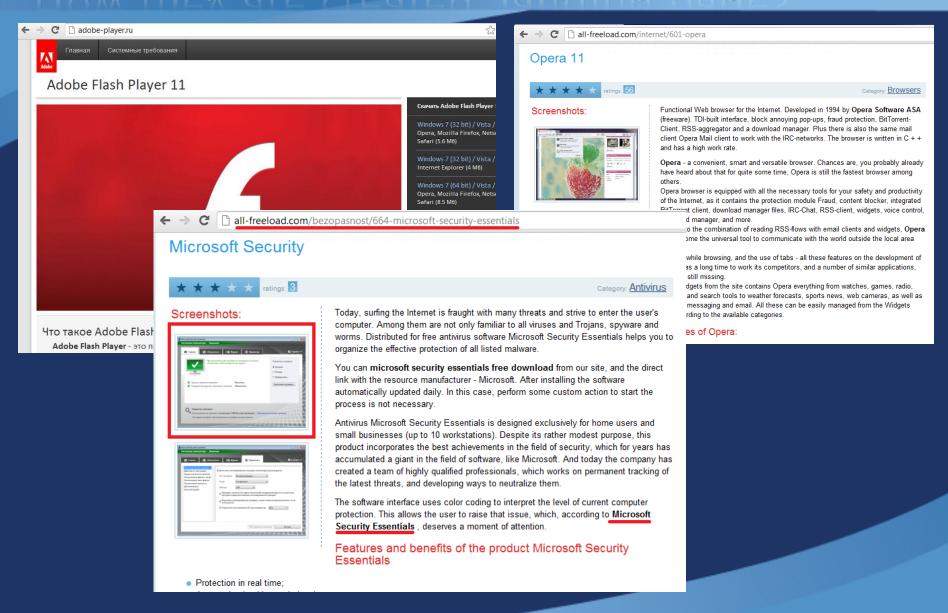


How they are created: builder toolkit



Integrated Development Environment (IDE)

How they are created: landing pages



WhidtahralpipensploystoSdWStltheparainsipatrion

Please send me \$1 SMS

1

Keep \$1 Pay out \$3



Victim/user

Mobile phone

Money

Sure. Charged \$5



Premium SMS service

Collect and distribute payments



Archive creator

- Create paid archive
- Ensuring number of down ds

3



o \$3 5

Toolkit supplier

- Builder toolKit
- Hosting
- Archives database

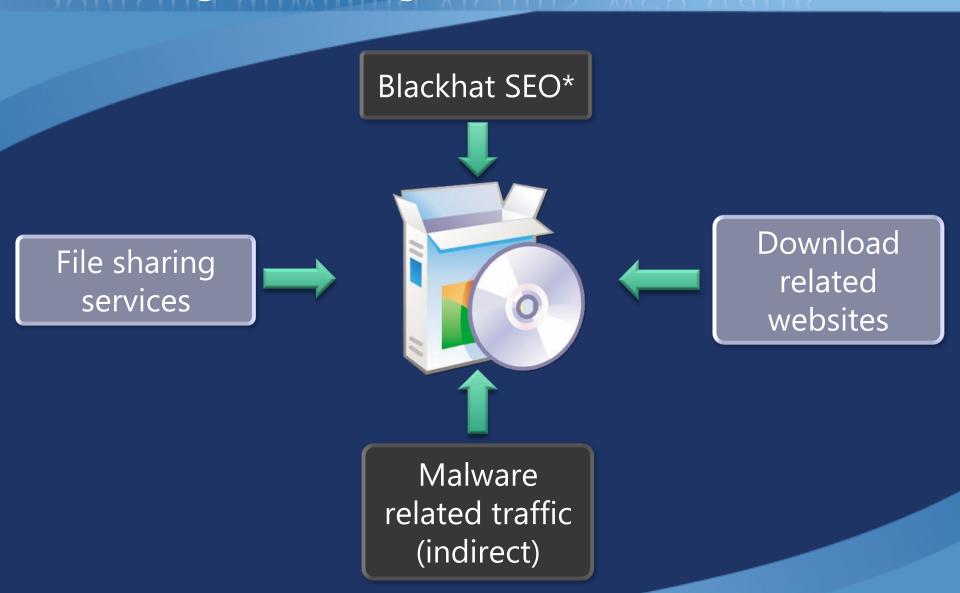
Keep \$1 Pay out \$4

creator

- Create paid archive
- Ensure a big number of downloads

Trustworthy Computing

Sourcing unwilling victims: web traffic



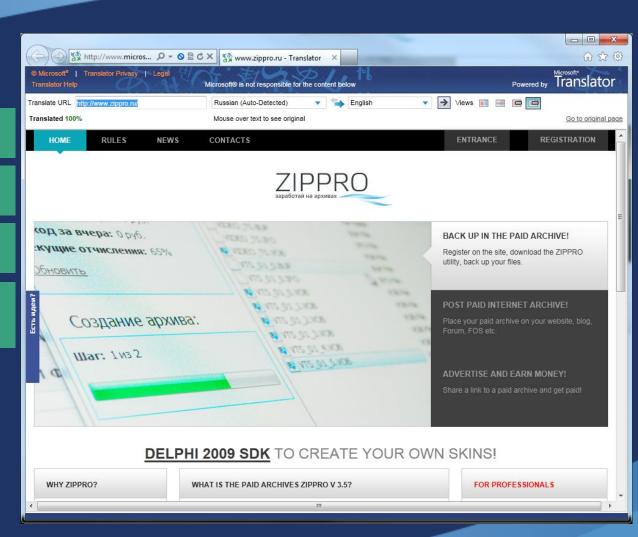
Profile: ZIP PRO

12 000+ partners from 2009

\$6 400 000 revenue

120 templates

Installs Mail.Ru Sputnik (\$0.06)



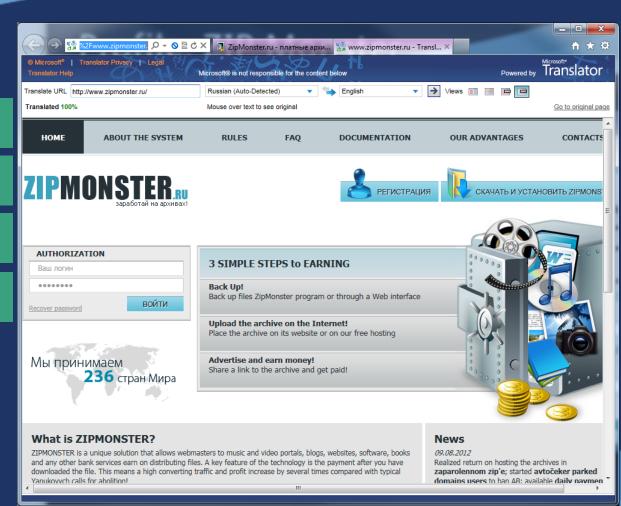
Profile: ZIP Monster

Active since 2010

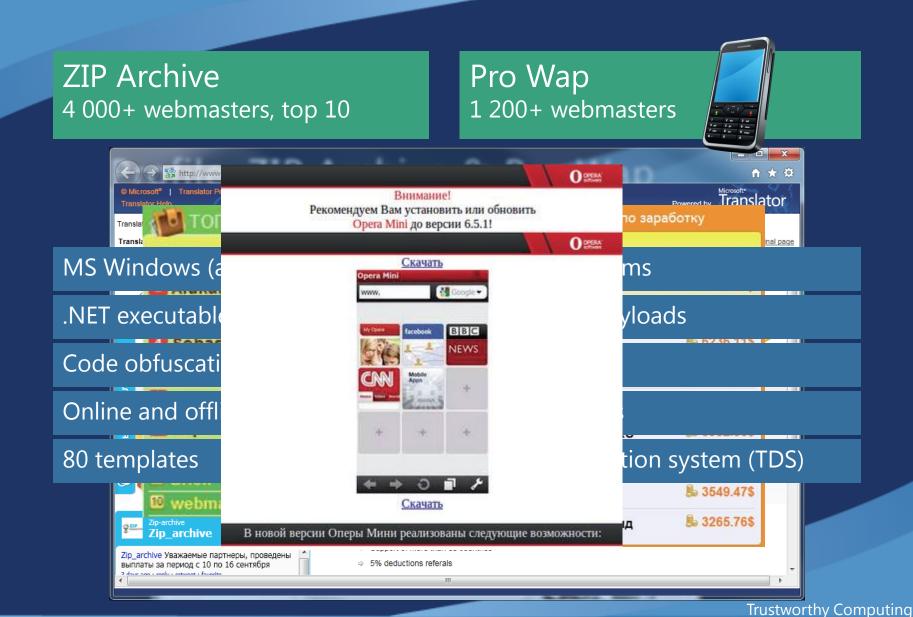
Offline and online versions

60 templates

AV detection evasion



Profile: ZIP Archive & Pro Wap



Profile: StimulProfit

StimulProfit

36 000+ registered partners since 2010

Traffic only partnership (server side); paid archives are only seen by users

Plugins for *DataLife Engine* (DLE), *WordPress* and *uCoz*

Domain parking



Detection evasion methods

Employs obfuscation packers to avoid Detection

• Same packers commonly found in: Zeus (Zbot), Reveton, Kanots, Dofoil

Builder Supplier	MS Detection Name	Anti-Detection Techniques
Zip Monster	Program:Win32/Pameseg.BU	 Search bytes in system DLLs Check OS environment Use infinite loops
Zip Pro	Program:Win32/Pameseg.(AK AZ)	 Search bytes in system DLLs String obfuscation
Zip Archive	Program:MSIL/Pameseg.G	NET assembly obfuscation (use commercial obfuscators)
Pro Wap	Trojan:AndroidOS/VolterSms.A	APK code and string tempering
Stimul Profit	Program:Win32/Pameseg.CF	TCrypt packer

Conclusion

Use less agressive behaviors

Attract less attention

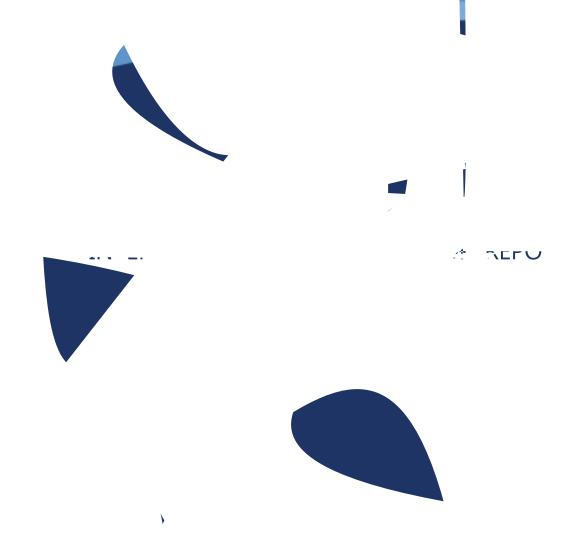
Lower cost for victim

Longer lifetime – longer victim exposure

Long-term effectiveness

Split responsibility

Use EULAs as legal buffers





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