

# Technologies for E-Commerce

**CAN302**

**Department of Communications and Networking**  
**Xi'an Jiaotong-Liverpool University (XJTLU)**

# Week12 - Legal, ethical and social issues



# Trolley Problem



- **Jeremy Bentham** 1748 – 1832
- **Utilitarianism** is a family of normative ethical theories that prescribe actions that maximize happiness and well-being for all affected individuals.
- **Immanuel Kant** 1724 – 1804  
**Deontological** ethics or deontology is the normative ethical position that judges the morality of an action based on the action's adherence to a rule or rules.

# Trolley Problem



- Social contract theory
- Virtue theory
- 无为
- 齐身修家治国平天下

<https://www.bilibili.com/video/BV13a411b7Ry>

# What is the law?



- **Law** is a system of rules created and **enforced** through social or governmental institutions to regulate behavior, with its precise definition a matter of longstanding debate.
- **Law** has been variously described as a science and the art of justice.



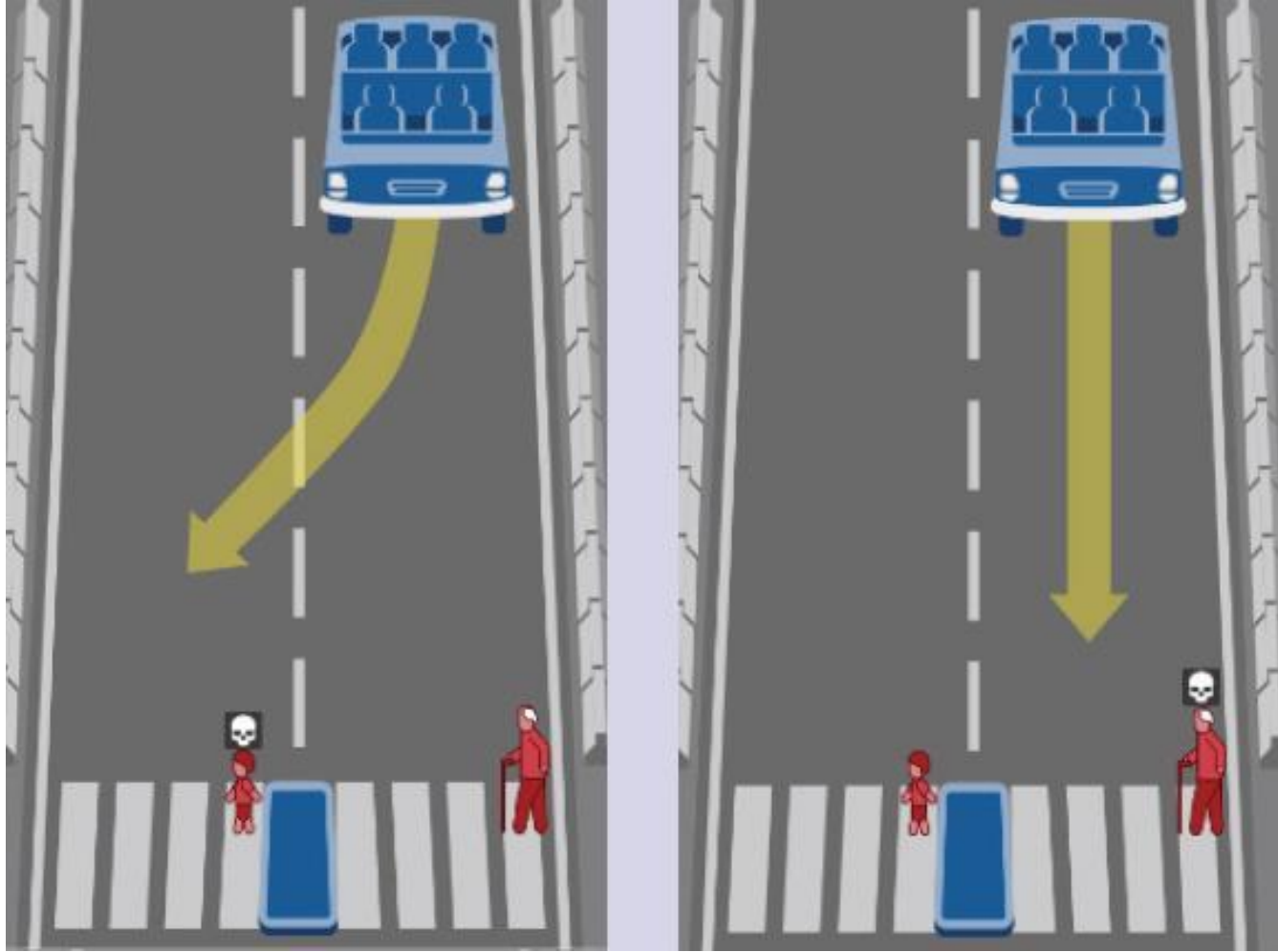
# Legal and ethic



金剛怒目所以降伏四魔，  
菩薩低眉所以慈悲六道！  
沒有霹雳手段，  
難显菩薩心肠！

- Both ethics and laws are found in virtually all spheres of society. They govern actions of individuals around the world on a daily basis.
- Laws **enforce** the behaviors we are expected to follow.
- While ethics **suggest** what we ought to follow.

# Legal and ethic



- AI algorithm must make the choice!

# Battle between Giants



- When the growth is ending, it always the time for a WAR!
- Round I : PC age

<https://baike.baidu.com/item/%E8%85%BE%E8%AE%AF360%E4%B9%8B%E4%BA%89/7181338>



# Battle between Giants



知乎 @Ella

- When the growth is ending, it always the time for a WAR!
- Round II : mobile age

# Do not be evil



- Do unto others as you would have them do unto you. – A Gentleman/woman!
- Do you think I would break the law? Absolutely not! I'm very lawful! – A Rascal!

<https://baijiahao.baidu.com/s?id=1728262469984324020>

# Do not be evil

360搜索 新闻 网页 问答 视频 图片 音乐 地图 百科 英文 良医 软件

易保全 × 搜一下 时间: 全部

**易保全领航者——天谷e签宝电子签章系统**

**e签宝** 易保全,天谷科技从2004年开始研发软件,近40万电脑终端安装使用,产品成熟,适应性强**易保全**  
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合作伙伴: [依图](#) [杭州东方公证处](#) [华东政法大学](#)

**易保全电子数据保全中心-让权益保护不再难** [官网](#)

易保全电子数据保全中心是首家将区块链技术应用到电子数据保全领域的数据保全中心,是一站式电子数据存管与在线公证方案的倡导者,提供电子合同原创保护等电子存证服务...  
[www.ebaoquan.org](#) - 依盟

**易保全 互动百科**

**易保全** [ebaoquan.org](#) 易保全,重庆易保全网络科技有限公司原名电子数据保全中心,是国内首次将区块链技术应用于电子数据保全的企业,并在电子数据保全属于领先地位,专注于为不同群体提供取证... [详情>>](#)  
[关于易保全](#) - [产品介绍及服务](#) - [接入流程](#) - [全部](#)  
[www.baik.com/wiki/易保全](#) - [快眼](#) - [互动百科](#)

**菠萝理财携手易保全,电子合同安全升级投资更安心** [互联网](#) [中国信息](#)

2017年3月31日 - 理财安全再升级!菠萝理财携手**易保全**推出的电子合同已正式上线,使用用户在平台每一笔的投资协议都能得到具有法律效力的电子签名认证,投资协议...  
[www.cnii.com.cn/Internetnews/20...](#) - [快眼](#) - [中国信息产业网](#)

**小宝金融牵手易保全,平台数据跨入“保全时代”** [凤凰资讯](#)

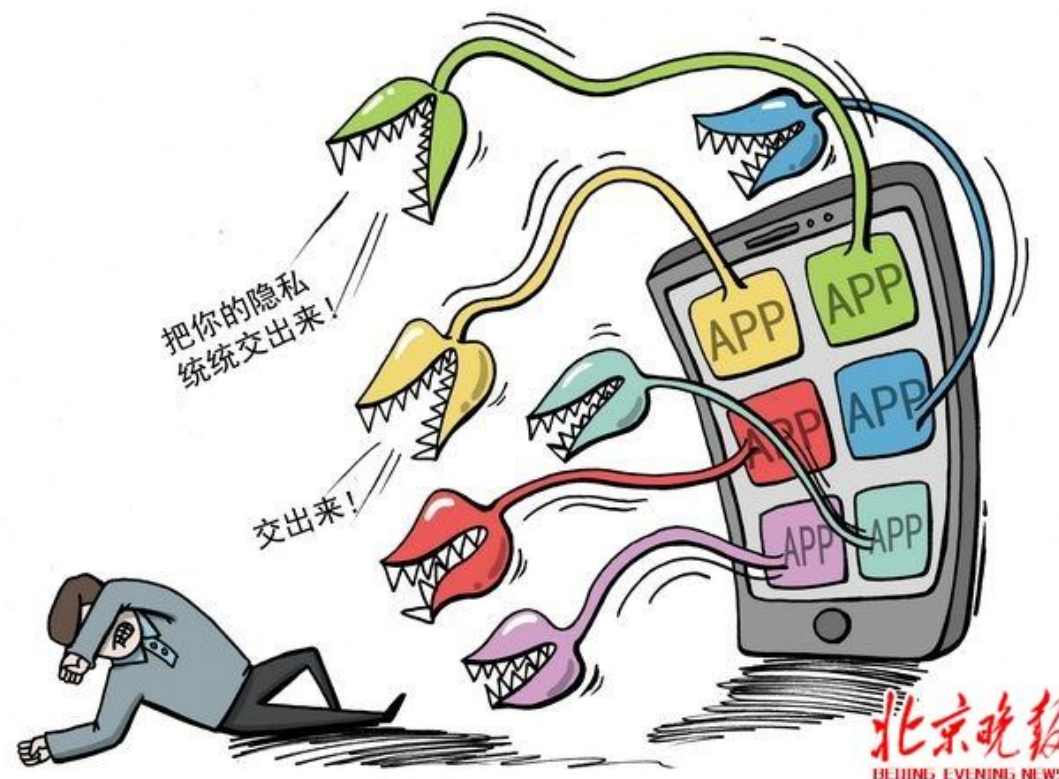
2016年12月29日 - 齐鲁晚报12月29日讯 12月28日上午,小宝金融与国内最大的电子数据取证平台——**易保全**电子数据保全中心(以下简称“**易保全**”)正式签署合作协议,...



- They are all **Rascals!**



# Do not be evil



[https://m.thepaper.cn/baijiahao\\_15232686](https://m.thepaper.cn/baijiahao_15232686)

# Do no be evil

18:27 ... 信号 网络 电量

×

...

## 关于下架“滴滴出行”App的通报

网信中国 昨天

👉 CAC 点击“网信中国”关注官方账号

根据举报，经检测核实，“滴滴出行”App存在严重违法违规收集使用个人信息问题。国家互联网信息办公室依据《中华人民共和国网络安全法》相关规定，通知应用商店下架“滴滴出行”App，要求滴滴出行科技有限公司严格按照法律要求，参照国家有关标准，认真整改存在的问题，切实保障广大用户个人信息安全。

特此通报。

国家互联网信息办公室  
2021年7月4日





# Do no be evil



[https://m.thepaper.cn/baijiahao\\_16598227](https://m.thepaper.cn/baijiahao_16598227)

# Some laws in Europe and UK

- 1. Getting Europe ready for the digital age: updates to the proposed Digital Services Act
- 2. Getting Europe ready for the digital age: updates to the proposed Digital Market Act
- 3. UK's New Digital Task Force targets Big Tech
- 4. Upcoming EU legislation will address AI, robots, and machine learning – and liability issues
- 5. Geo-blocking continues to be a key area of development and enforcement in the EU
- 6. EU regulation of Online Intermediaries begin to takes shape
- 7. Digital consumer law reform in the UK
- 8. European Electronic Communications Code: Delayed implementation extends uncertainty for providers
- 9. UK & German Governments Respond on Online Harms
- 10. Digital Copyright: New (case) law

<https://www.mofo.com/resources/insights/210414-key-digital-regulation.html>

# Some laws in China

- **法律**

- 网络安全法
- 数据安全法
- 个人信息保护法
- 电子商务法
- 电子签名法
- 全国人大常委会关于加强网络信息保护的決定
- 全国人大常委会关于维护互联网安全的決定

- **法规**

- 互联网信息服务管理办法
- 互联网上网服务营业场所管理条例
- 信息网络传播权保护条例
- 计算机信息网络国际联网安全保护管理办法
- 计算机信息系统安全保护条例
- 计算机软件保护条例
- 电信条例
- 网络数据安全管理条例
- 关键信息基础设施安全保护条例

- And many more……

<https://zhuanlan.zhihu.com/p/465031437>

# The importance of evidences



- Truth in the court may not be the truth in the life
- How to let the court believe your evidences?

[https://m.sohu.com/a/334229522\\_100114073](https://m.sohu.com/a/334229522_100114073)



# Digital evidence

## Sources of Electronic Evidence

### Where is the Evidence?

#### Physical Sources

Computers, Servers, Phones, NAS, Flash Drives, Tape Backups, Phones, CD/DVDs, Flash Drives, External Hard Drives, Smart Watches, etc.

BYOD

#### Electronic Sources

Logs, Emails, File Sharing

#### External Sources

Websites, Apps, Cloud, Social Media, etc



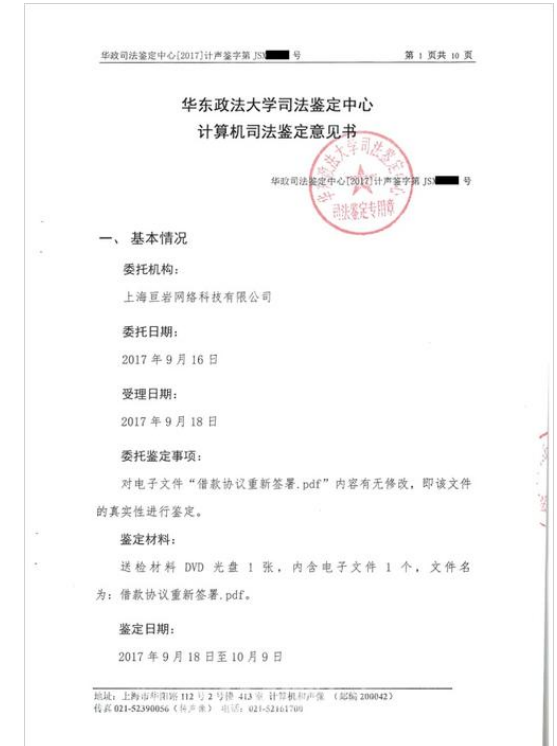
- Digital evidence is **fragile** and
- can be altered, damaged, or destroyed by improper handling or examination.



# Judicial Expertise



中华人民共和国司法部监制



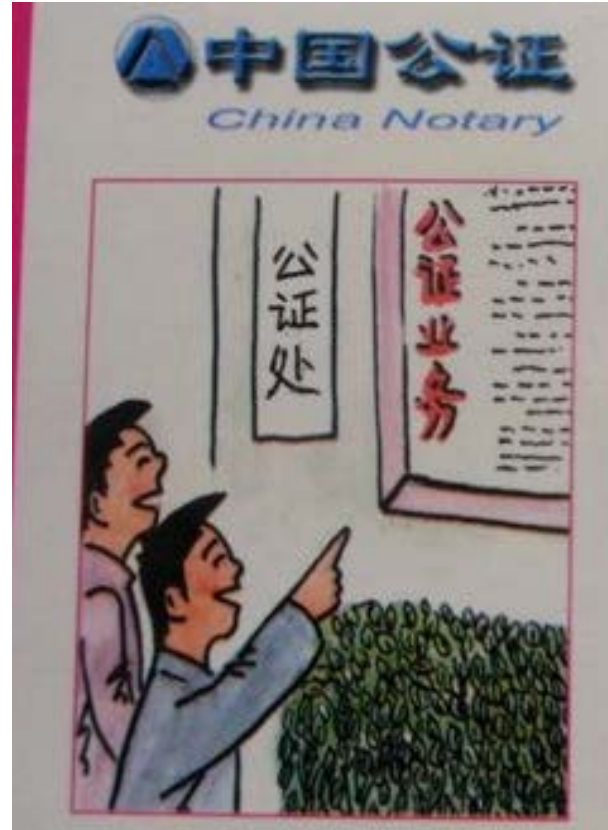
- Judicial Expertise center is a lab with the judicial permission
- Expert Report by Judicial Expertise can **increase** the creditable
- **Cannot** work for the **disappeared** evidence

# Preservation of evidence



- Let witnesses to prove the data is true
- Store the data in blockchain

# The notarial institute



(电子)

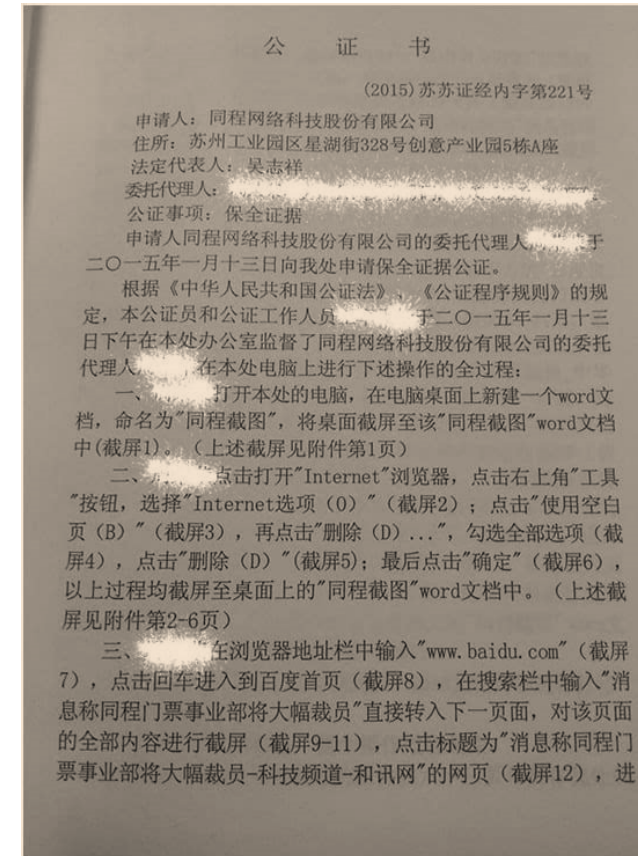
公 证 书

中华人民共和国广东省深圳市前海公证处

- Notarial officers are special witnesses
- Notarial report have a strong creditable by the law



# Notarial preservation of evidence



- Full process under surveillance
- Using the computer and network provided by the notarial institute
- Reduce the unsure factors

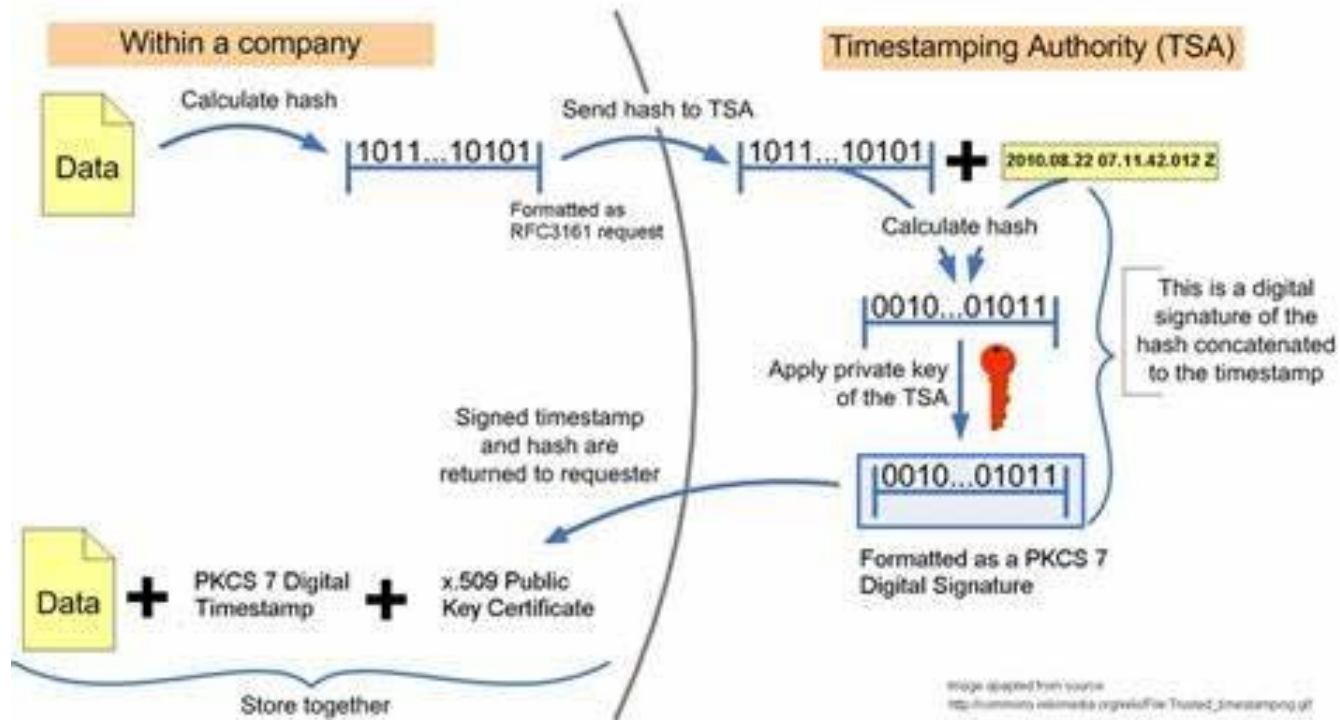
# Notarial preservation of evidence



- Manually service cannot satisfy the 7x24 hours demands
- For example, living broadcast of European football games



# Preservation of evidence




**time  
stamp**

capturing this moment in time



- TSA should be the authorized organization

# Preservation of evidence

 中国科学院国家授时中心

**检测证书**  
证书编号: NTSC SFJ1101-J2

送检单位: 时间用户系统研究室  
设备名称: 时间戳服务器  
型号规格: SFJ1101  
制造厂商: 北京安信天行科技有限公司

测试人: 朱青  
验证人: 张涛  
检验员: 徐01  
(质检专用章)

检测日期: 2012 年 12 月 27 日  
检测单位: 中国科学院国家授时中心  
地址: 西安市临潼区书院东路 3 号 邮编: 710600  
电话: 029-83890287  
传真: 029-83890326

**商用密码产品型号证书**  
(证书编号: SXH2011123 号)

单位名称: 北京安信天行科技有限公司  
批准型号: SFJ1101  
产品名称: 时间戳服务器

国家密码管理局  
2011 年 7 月 8 日

- TSA servers' certificate
- The “**official time**” for the birth of evidence

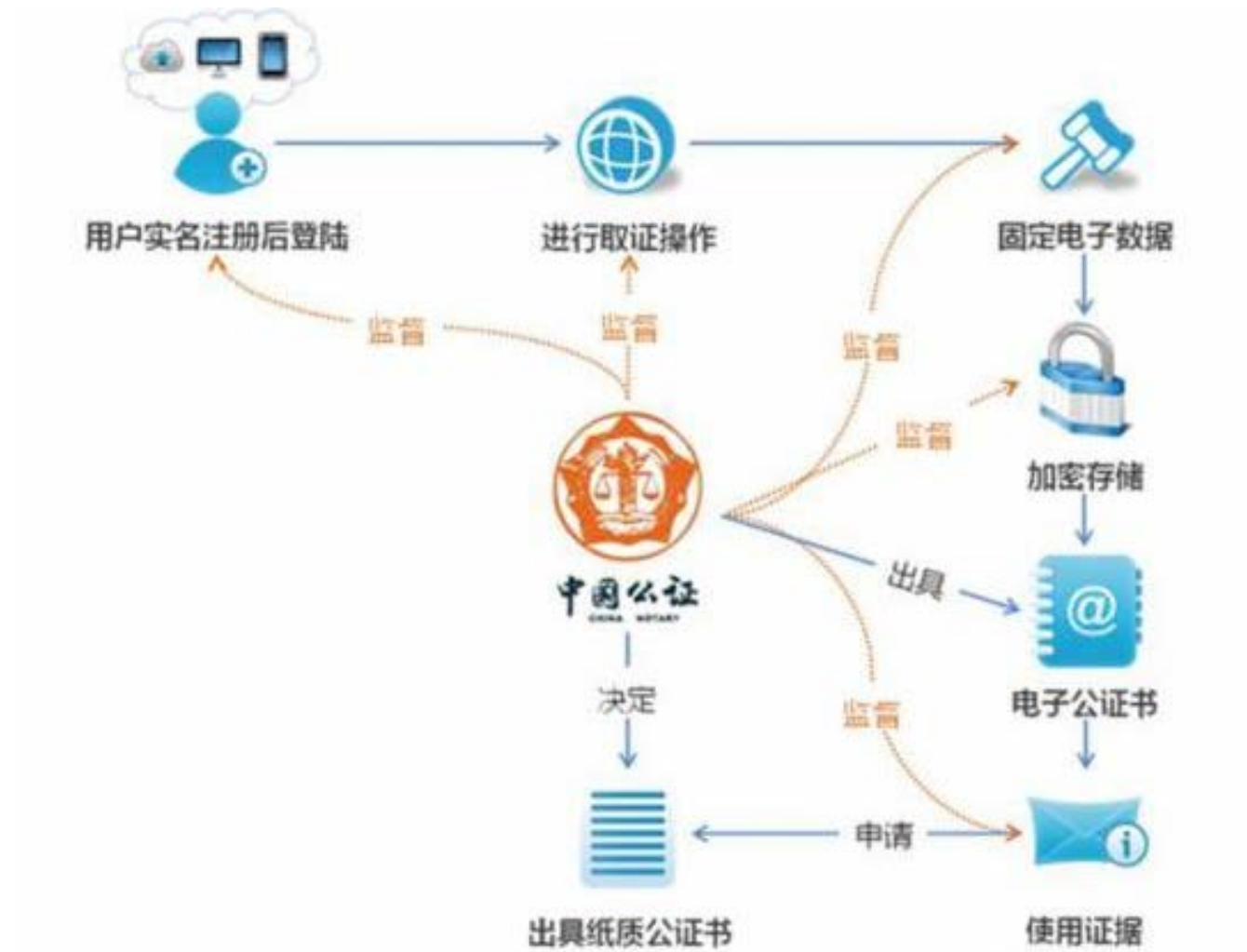
# Preservation of evidence



- Blockchain is a hot technology. For Preservation, its function is similar to TSA
- If one organization hold the chain, the credit cannot beyond the credit of that organization

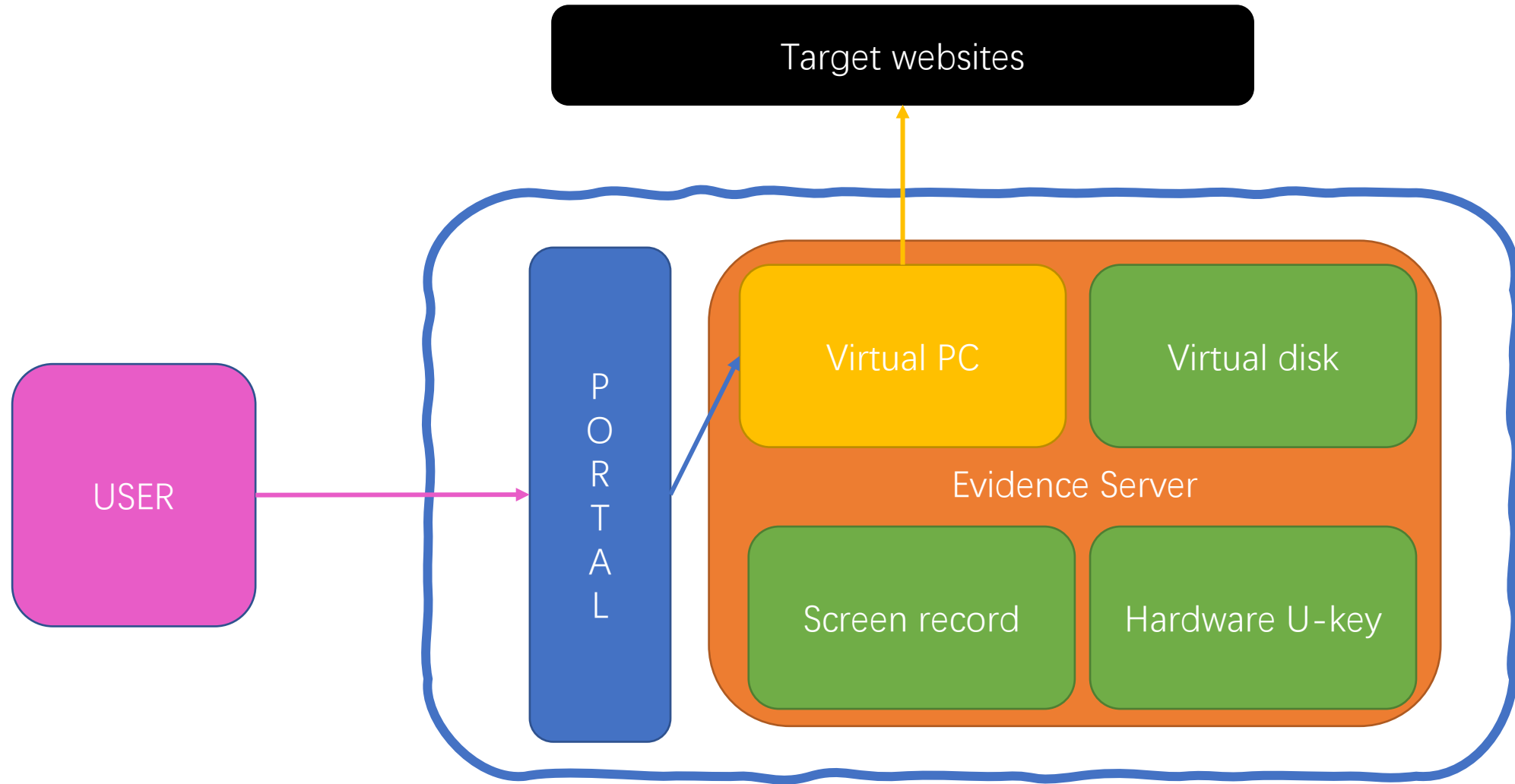


# Preservation of evidence



- Special cloud for preservation purpose

# Preservation of evidence



- The notarial cloud for preservation purpose