Uplevel's Ransomware Protection

uplevel SYSTEMS

Small Business Evolved

How big is the threat?

- Ransomware attacks have risen 350% YoY from 2018
- 71% of attacks hit small businesses
- 25% of cyber insurance claims stem from ransomware
- 72% of victims are without data for 2+ days
- Average ransomware demand is $116,000
- **Paying the ransom does not ensure return of data**
- **Victims are often retargeted!**

- https://healthitsecurity.com/news/71-of-ransomware-attacks-targeted-small-businesses-in-2018
- https://slate.com/technology/2017/02/the-ransomware-attack-that-locked-hotel-guests-out-of-their-rooms.html

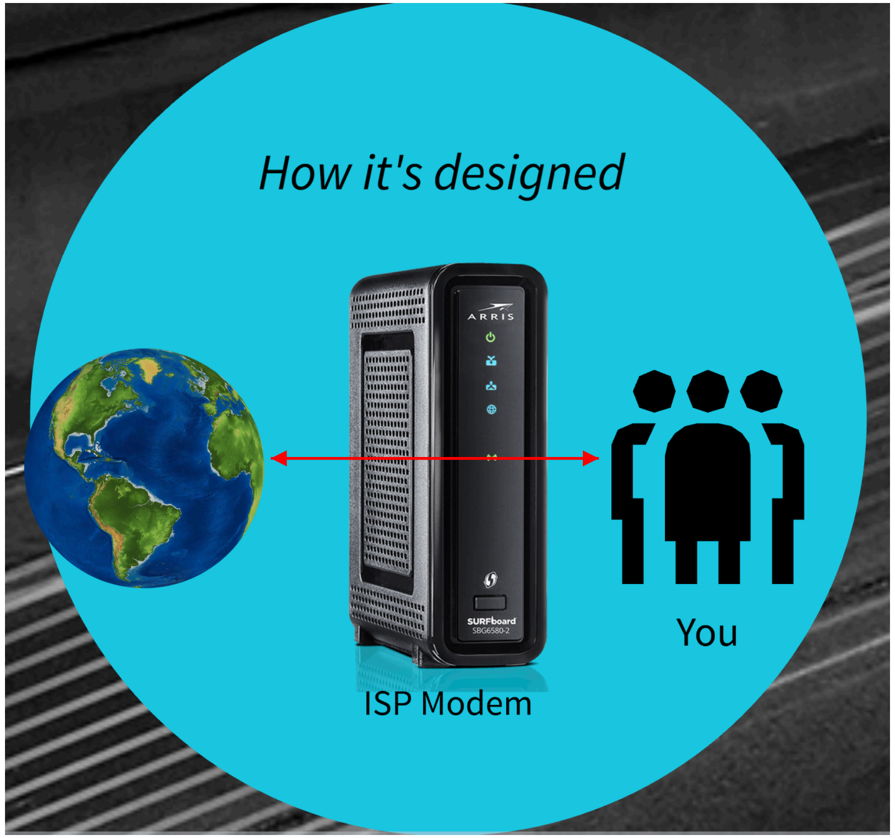
A recent front-page example

In September 2019, Travis County, TX (Austin, Tx) was hit by a major ransomware attack that affected website, phone, email and mass appraisal systems.

Systems were up and running by end of day due to advanced planning and secure backups that helped restore systems and files.

20+ other Texas counties have been targeted.

The problem: ISP modems are a vector for attacks



Internet Service Providers (ISPs) have one goal – to provide customers access to the internet.

This can also provide hackers access to customers as modems are designed to provide as little resistance as possible to connecting to the internet.

This leaves customers vulnerable.

Once they're on the internet…

Hackers can:

- See if a firewall is alive
- Test for vulnerabilities in the firewall
- Embed ransomware attacks into legitimate website traffic (emails, website links, etc)
- Infect devices
- Access, manipulate, encrypt and ransom data
- Transport data out of the network

Uplevel delivers all three

- **WAN protection**
  - Firewall stops probers from accessing the network
  - IPS/IDS, domain filtering and geo-blocking protect users from allowing attacks in
  - Geo-blocking stops foreign hackers from taking data out of the network
- **LAN protection**
  - Security Groups
    - Restrict employee access to resources by need
    - Stop infected computers from accessing data
- **Data protection**
  - Binary Tree File System (BTRFS) stops hackers from encrypting data
  - Snapshots restore data – ***without paying fees to criminals!***

Ransomware mitigation needs multi-faceted approach

- **Uplevel's wide area network (WAN) protection**
  - Stateful Port Blocking Firewall prevents hackers from getting in
  - Content Filtering prevents employees from accessing bad websites
  - IPS IDS firewall adds Deep Packet Inspection (DIP) of inbound and outbound traffic
  - Country blocking:
    - Prevents entire countries from communicating with the network
    - Prevents hackers from taking data out

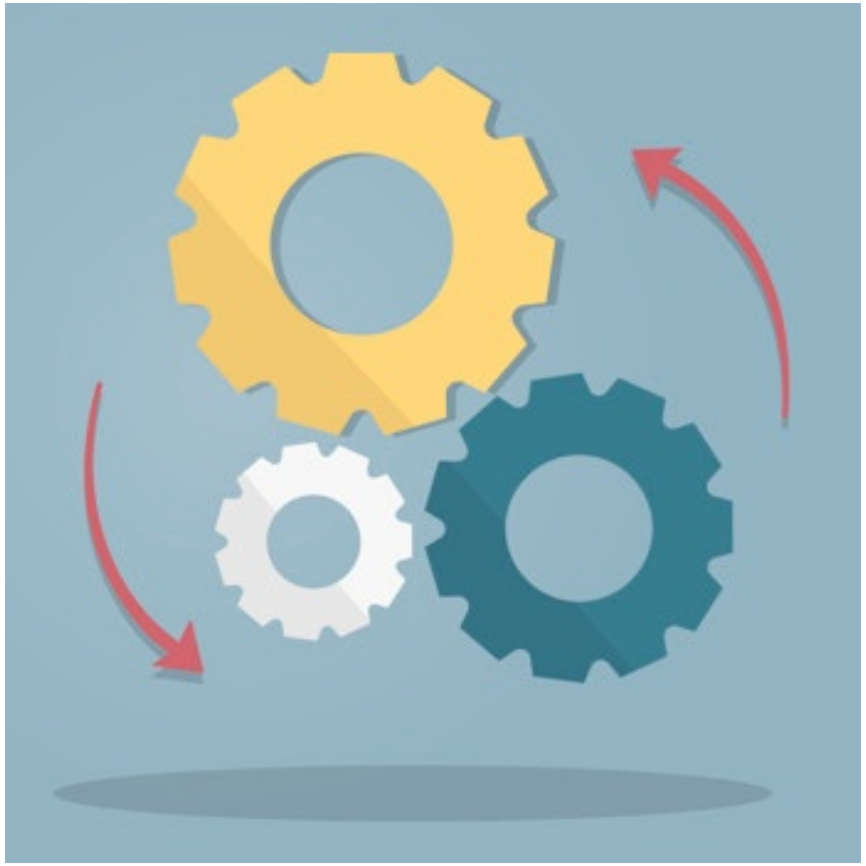
Ransomware mitigation needs multi-faceted approach

- **Uplevel's LAN protection and security groups:**
  - Protect data inside the network
  - Prevent employees from seeing files they should not
  - Segregate user groups and regulate access to resources based on need
  - Stop compromised PCs from accessing additional resources

Ransomware mitigation needs multi-faceted approach

- ## Uplevel’s data protection
  - Binary Tree File System (BTRFS)
    - Automatically creates read-only snapshots of files and folders
    - Include copy-on-Write (CoW) ensuring files are copied
    - Ensure employees have easy access to files
    - Feature local snapshots (encrypted locally)
    - Back up data to the cloud (encrypted in sitting and in transit)

How it works – protecting against ransom



1) Ransomware finds data and begins to encrypt it
2) This encrypting function triggers a copy of files (Copy-on-Write)
3) Copy-on-Write requires enough available space - equal to twice the amount of data
4) Hacker’s encryption fail without enough space
5) Encrypted data can be restored from clean local snapshots
6) Hackers are prevented from taking data out to their servers
7) Business continues as normal

Why and how do you “Uplevel”?

Sold through nationwide network of managed IT service providers (IT) – let the experts handle everything!

No capital outlay for equipment – or upgrades – ***saves customers $3-6K per site*** while upgrading or building out networks

Easy, all-in-one solution: LAN/WAN gateway, Wi-Fi support, server, storage/backup, VPN, SD-WAN ***and firewall***

Learn More!

Contact us to learn more about how you can be protected from costly hacks TODAY!

info@uplevelsystems.com

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