Fighting Censorship with TunnelBear



Mission driven development

We think the Internet is a much better place when everyone can browse privately, and browse the same Internet as everyone else.



TunnelBear Apps



TunnelBear



RememBear



TunnelBear for Teams

How VPN can be used to bypass censorship



An open and uncensored internet





Advocating for more security and transparency

- Third-party <u>code audits</u> every year
- Transparency <u>report 2019</u>
- Analytics: our own platform that respects privacy
- Stronger <u>encryption</u>



Four stages of censorship



- Distribution
- Reaching APIs
- Connecting to a VPN
- Maintaining a VPN connection

Example censorship efforts

Distribution	ASL19 (Paskoocheh) Farsi localization
Reach TunnelBear APIs	Domain fronting
Connect + maintain a secure VPN connection	obfs4 None PII telemetry

Connection failures

Localized prompts that show when a connection fails



Censorship happens everywhere

What years of crisis response taught us...



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Turkey Social Media Blockage (2013)



TunnelBear Hearts Turkey (In Turkish)

Distribution

Venezuela Social Media Blockage (2014)



Distribution & API blocking

Iran protests (2018)

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Iran Protesters Evade Censorship With Internet Software

Written by Staff Writer 15th January 2018

Distribution API blocking Connecting to VPN Maintaining VPN connection

Brazil and Uganda (2016)





Good morning. I hope voting is going well at your polling station? To access Twitter, Whatsapp and Facebook use Tunnelbear VPN.



Partners on the ground

- Better understand the nuances of censorship and on-the-ground roadblocks
- Context of how censorship is really being legislated
- Understanding of social, political, and economic dimensions of censorship



Social responsibility

This program is about investing in the human impact of our technical roadmap

Thanks for 'Bear'ing with us

- We are prepared to learn
- We are prepared to collaborate
- We are prepared to move forward

If you'd like to get involved, please email **community@tunnelbear.com**





PaddleBear, Director of VPN



PoohBear, Advocacy & Press Manager

More on Encryption

Device type	Protocol	Data encryption	Data authentication	DH group	
Windows	<u>OpenVPN/IKEv2</u>	<u>AES-256-CBC</u>	<u>SHA256</u>	<u>2048 bit DH</u> g <u>roup</u>	
Android	<u>OpenVPN</u>	<u>AES-256-CBC</u>	<u>SHA256</u>	4096 bit DH group	
macOS	<u>OpenVPN</u>	AES-256-GCM	<u>SHA256</u>	<u>3072 bit DH</u> group	
ios 11+	<u>OpenVPN/IKEv2</u>	AES-256-CBC	<u>SHA256</u>	2048 bit DH group	