EXHIBIT A

Project Torogoz

Extensive Hacking of Media & Civil Society in El Salvador with Pegasus Spyware

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JANUARY 12, 2022
RESEARCH REPORT #148

munk school
OF GLOBAL AFFAIRS & PUBLIC POLICY
UNIVERSITY OF TORONTO
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Document Version: 1.0

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Suggested Citation

John Scott-Railton, Bill Marczak, Paolo Nigro Herrero, Bahr Abdul Razzak, Noura Al-Jizawi, Salvatore Solimano, and Ron Deibert. "Project Torogoz: Extensive Hacking of Media & Civil Society in El Salvador with Pegasus Spyware," Citizen Lab Research Report No. 148, University of Toronto, January 2022.

Acknowledgements

We thank and acknowledge the many individuals that allowed us to analyze their devices as part of this investigation.

Special thanks to Mohammed Al-Maskati from Frontline Defenders for invaluable assistance.

Special thanks to the staff and incident handlers at the Access Now helpline for their invaluable support to this process and assistance to victims.

Special thanks to all of the organizations participating in this investigative collaboration including SocialTIC and Fundación Acceso.

Thanks to Siena Anstis, Celine Bauwens, Miles Kenyon, Adam Senft, and Mari Zhou for review, copy editing, and publication support.

Special thanks to TNG for invaluable assistance on this project.

About the Citizen Lab, Munk School of Global Affairs & Public Policy, University of Toronto

The Citizen Lab is an interdisciplinary laboratory based at the Munk School of Global Affairs & Public Policy, University of Toronto, focusing on research, development, and high-level strategic policy and legal engagement at the intersection of information and communication technologies, human rights, and global security.

We use a “mixed methods” approach to research that combines methods from political science, law, computer science, and area studies. Our research includes investigating digital espionage against civil society, documenting Internet filtering and other technologies and practices that impact freedom of expression online, analyzing privacy, security, and information controls of popular applications, and examining transparency and accountability mechanisms relevant to the relationship between corporations and state agencies regarding personal data and other surveillance activities.

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rule and many of NSO Group's government clients are illiberal regimes. The voluminous hacking of Salvadoran media organizations and journalists is shocking but should come as no surprise.

Only a little over a year ago, we discovered government operatives used NSO Group's Pegasus spyware to hack 36 personal phones belonging to journalists, producers, anchors, and executives at the news organization *Al Jazeera*. The Citizen Lab and Amnesty International have also documented numerous other cases where journalists' phones were hacked with Pegasus, including *the New York Times*' Ben Hubbard, Sevinc Vaqifqizi, a freelance journalist for independent media outlet *Meydan TV*, Siddharth Varadarajan and MK Venu, co-founders of India's the *Wire*, Dániel Németh, a photojournalist working out of Budapest, and numerous others. According to investigations undertaken as part of the Pegasus Project, at least 180 journalists were selected as targets for potential Pegasus hacking.

Further highlighting the consistent threat posed by Pegasus to journalists, Daniel Lizárraga—a journalist whose phone we confirmed was hacked with Pegasus in this case—was also targeted in 2016 by the Mexican Pegasus operator while in a previous role at a Mexican NGO. Given the lack of due diligence and proper regulations, it should come as no surprise that individual victims of Pegasus hacking may have been targeted by multiple NSO Group clients over time, as Lizárraga's case illustrates.

The lesson from this case is obvious: an unregulated spyware marketplace is a grave threat to media worldwide, and to civil society.

Appendix A: Hacking Timeline

The following table of dates of successful hacking *excludes* dates of attempted but unsuccessful hacking. This table is *not* intended to be a comprehensive inventory of every date that the spyware was active on a phone. Each entry represents a separate instance where NSO's exploits were fired at a phone resulting in successful infection.

Several factors can influence the number of times infections happen. For example, if a target is selected for persistent surveillance, the exploit may be fired more often if the user frequently reboots their phone, as modern versions of the Pegasus spyware are believed to feature persistence via re-exploitation. If the target does not reboot their phone, the spyware may run for some time without the exploit being fired again.

Individual	Organization	Dates of Successful Hacking
Noah Bullock	Cristosal	1. On or around 2021-09-04
		2. On or around 2021-09-28
		3. On or around 2021-11-12

Individual	Organization	Dates of Successful Hacking
(Individual #1)	Diario El Mundo	1. On or around 2021-06-03
		2. On or around 2021-06-30
Ricardo Avelar	El Diario de Hoy	1. On or around 2020-08-31
		2. On or around 2020-09-22
		3. On or around 2021-02-21
		4. On or around 2021-03-16
		5. On or around 2021-03-26
		6. On or around 2021-04-27
		7. On or around 2021-06-15
		8. On or around 2021-07-14
		9. On or around 2021-09-04
		10. On or around 2021-09-12
Ana Beatriz Lazo	El Faro	1. On or around 2021-10-04
Carlos Dada	El Faro	1. Sometime 2020-07-08 – 2020-07-17
		2. Sometime 2020-07-17 – 2020-07-24
		3. Sometime 2020-07-24 – 2020-07-30
		4. On or around 2020-07-31
		5. Sometime 2020-08-01 – 2020-08-14
		6. Sometime 2020-09-08 – 2020-10-22
		7. Sometime 2021-01-06 – 2021-01-12
		8. Sometime 2021-01-12 – 2021-01-20
		9. Sometime 2021-02-13 – 2021-02-23
		10. Sometime 2021-03-31 – 2021-04-17
		11. Sometime 2021-04-18 – 2021-05-12
		12. Sometime 2021-05-26 – 2021-06-09

Individual	Organization	Dates of Successful Hacking
Carlos Ernesto Martínez D'aubuisson	El Faro	1. Sometime 2020-06-29 – 2020-07-22
		2. Sometime 2020-07-25 – 2020-08-06
		3. Sometime 2020-09-07 – 2020-09-10
		4. Sometime 2020-09-10 – 2020-09-18
		5. Sometime 2020-09-18 – 2020-10-10
		6. Sometime 2020-10-10 – 2020-11-05
		7. Sometime 2020-11-05 – 2020-11-10
		8. Sometime 2020-11-23 – 2020-12-02
		9. Sometime 2020-12-02 – 2020-12-21
		10. Sometime 2020-12-26 – 2021-01-21
		11. Sometime 2021-02-11 – 2021-02-16
		12. Sometime 2021-02-17 – 2021-02-19
		13. Sometime 2021-02-23 – 2021-03-08
		14. Sometime 2021-03-08 – 2021-03-11
		15. Sometime 2021-03-19 – 2021-03-23
		16. Sometime 2021-04-03 – 2021-04-12
		17. Sometime 2021-04-12 – 2021-04-27
		18. Sometime 2021-04-28 – 2021-05-06
		19. Sometime 2021-05-06 – 2021-05-27
		20. Sometime 2021-05-29 – 2021-06-02
		21. Sometime 2021-06-16 – 2021-06-22
		22. Sometime 2021-06-22 – 2021-06-24
		23. Sometime 2021-06-27 – 2021-07-02
		24. On or around 2021-07-08
		25. On or around 2021-08-31
		26. On or around 2021-09-15
		27. On or around 2021-10-07
		28. On or around 2021-10-21
Daniel Lizárraga	El Faro	1. On or around 2021-04-12
		2. On or around 2021-04-15
		3. On or around 2021-04-27
		4. On or around 2021-05-20
		5. On or around 2021-06-04
		6. On or around 2021-06-15
		7. On or around 2021-06-23
		8. On or around 2021-07-08
Daniel Reyes	El Faro	1. Sometime 2020-10-01 – 2020-10-10
		2. On or around 2021-11-04

Individual	Organization	Dates of Successful Hacking
Efren Lemus	El Faro	1. On or around 2021-04-23
		2. On or around 2021-04-26
		3. On or around 2021-04-30
		4. On or around 2021-05-20
		5. On or around 2021-06-01
		6. On or around 2021-06-08
		7. On or around 2021-06-18
		8. On or around 2021-07-10
		9. On or around 2021-09-17
		10. On or around 2021-09-25
Gabriel Labrador	El Faro	1. Sometime 2020-08-06 – 2020-09-07
		2. Sometime 2020-09-11 – 2020-10-30
		3. On or around 2021-03-25
		4. On or around 2021-04-01
		5. On or around 2021-04-06
		6. On or around 2021-04-09
		7. On or around 2021-04-12
		8. On or around 2021-04-14
		9. On or around 2021-04-16
		10. On or around 2021-05-05
		11. On or around 2021-05-07
		12. On or around 2021-05-13
		13. On or around 2021-05-17
		14. On or around 2021-06-01
		15. On or around 2021-08-31
		16. On or around 2021-09-12
		17. On or around 2021-10-06
		18. On or around 2021-10-23
		19. On or around 2021-11-04
		20. On or around 2021-11-11
Gabriela Cáceres	El Faro	1. On or around 2021-04-17
		2. On or around 2021-05-11
		3. On or around 2021-05-15
		4. On or around 2021-05-21
		5. On or around 2021-06-06
		6. On or around 2021-06-15
		7. On or around 2021-06-17
		8. On or around 2021-06-21
		9. On or around 2021-07-14
		10. On or around 2021-08-31
		11. On or around 2021-09-08
		12. On or around 2021-09-17
		13. On or around 2021-09-24

Individual	Organization	Dates of Successful Hacking
José Luis Sanz	El Faro	1. Sometime 2020-07-04 – 2020-07-09
		2. Sometime 2020-07-09 – 2020-07-14
		3. On or around 2020-07-16
		4. On or around 2020-09-10
		5. On or around 2020-09-23
		6. On or around 2020-11-14
		7. On or around 2020-11-21
		8. On or around 2020-11-28
		9. On or around 2020-12-03
		10. On or around 2020-12-07
		11. On or around 2020-12-10
		12. On or around 2020-12-16
		13. On or around 2020-12-19
Julia Gavarrete (Phone #1)	El Faro	1. On or around 2021-03-16
		2. On or around 2021-04-08
		3. On or around 2021-04-13
		4. On or around 2021-04-14
		5. On or around 2021-04-16
		6. On or around 2021-04-18
		7. On or around 2021-04-20
		8. On or around 2021-04-23
		9. On or around 2021-04-26
		10. On or around 2021-05-05
		11. On or around 2021-05-20
		12. Sometime 2021-05-30 – 2021-06-06
		13. On or around 2021-06-10
		14. On or around 2021-06-28
		15. On or around 2021-09-08
Julia Gavarrete (Phone #2)	El Faro	1. On or around 2021-02-23
		2. On or around 2021-09-09
		3. On or around 2021-09-27
María Luz Nóchez	El Faro	1. On or around 2021-02-17
		2. On or around 2021-05-21
		3. On or around 2021-06-09
Mauricio Ernesto Sandoval Soriano	El Faro	1. Sometime 2020-08-19 – 2020-10-20
		2. On or around 2021-07-02
		3. On or around 2021-07-06
		4. On or around 2021-10-01
Nelson Rauda	El Faro	1. Sometime 2021-04-30 – 2021-05-01
		2. On or around 2021-05-18
		3. On or around 2021-06-16
		4. Sometime 2021-06-18 – 2021-08-11
		5. On or around 2021-08-31
		6. On or around 2021-09-10

Individual	Organization	Dates of Successful Hacking
Óscar Martínez	El Faro	1. On or around 2020-07-15
		2. On or around 2020-07-21 – 2020-07-28
		3. On or around 2020-08-12
		4. On or around 2020-08-17
		5. On or around 2020-08-19
		6. On or around 2020-09-12
		7. On or around 2020-09-29
		8. On or around 2020-10-01
		9. On or around 2020-10-03
		10. On or around 2020-10-29
		11. On or around 2020-11-12
		12. On or around 2020-11-16
		13. On or around 2020-11-18
		14. On or around 2020-12-07
		15. On or around 2020-12-10
		16. On or around 2020-12-18
		17. On or around 2020-12-20
		18. On or around 2020-12-22
		19. On or around 2021-01-08
		20. On or around 2021-01-10
		21. On or around 2021-01-13
		22. On or around 2021-01-26
		23. On or around 2021-01-27
		24. On or around 2021-02-21
		25. On or around 2021-03-08
		26. On or around 2021-03-15
		27. On or around 2021-03-18
		28. On or around 2021-03-25
		29. On or around 2021-04-01
		30. On or around 2021-05-03
		31. On or around 2021-05-21
		32. On or around 2021-06-02
		33. On or around 2021-06-16
		34. On or around 2021-06-22
		35. On or around 2021-06-23
		36. On or around 2021-07-07
		37. On or around 2021-08-30
		38. On or around 2021-09-08
		39. On or around 2021-09-27
		40. On or around 2021-10-08
		41. On or around 2021-10-25
		42. On or around 2021-10-30
Rebeca Monge	El Faro	1. On or around 2021-10-07

Individual	Organization	Dates of Successful Hacking
Roman Gressier	El Faro	1. On or around 2021-05-17
		2. On or around 2021-05-21
		3. On or around 2021-06-21
		4. On or around 2021-06-23
Roxana Lazo	El Faro	1. On or around 2021-04-19
		2. On or around 2021-04-27
		3. On or around 2021-06-02
		4. On or around 2021-06-07
		5. On or around 2021-06-23
		6. On or around 2021-06-24
		7. On or around 2021-07-06
		8. On or around 2021-09-10
		9. On or around 2021-09-24
		10. On or around 2021-10-02
		11. On or around 2021-10-21
		12. On or around 2021-11-02
Sergio Arauz	El Faro	1. Sometime 2020-08-12 – 2020-08-19
		2. Sometime 2020-09-10 – 2020-09-11
		3. Sometime 2020-09-13 – 2020-09-14
		4. Sometime 2020-09-18 – 2020-09-22
		5. On or around 2021-05-07
		6. On or around 2021-06-02
		7. Sometime 2021-06-09 – 2021-06-10
		8. On or around 2021-06-11
		9. On or around 2021-06-17
		10. On or around 2021-06-24
		11. On or around 2021-06-25
		12. On or around 2021-07-02
		13. On or around 2021-07-09
		14. On or around 2021-10-21
Valeria Guzmán	El Faro	1. Sometime 2020-07-04 – 2020-07-14
		2. On or around 2021-09-03
		3. On or around 2021-09-29
		4. On or around 2021-10-12
		5. On or around 2021-10-25
		6. On or around 2021-11-04
		7. On or around 2021-11-11
		8. On or around 2021-11-19
Víctor Peña	El Faro	1. Sometime 2021-11-22 – 2021-11-23
(Individual #2)	El Faro	1. Sometime 2020-09-09 – 2020-09-16
		2. On or around 2021-09-30
		3. Sometime 2020-11-16 – 2020-11-26

Individual	Organization	Dates of Successful Hacking
(Individual #3)	El Faro	1. Sometime 2020-09-07 – 2020-10-17
		2. Sometime 2020-11-30 – 2021-01-16
		3. On or around 2021-05-21
Jose Marinero	Fundación DTJ	1. On or around 2021-04-08
		2. On or around 2021-09-12
Xenia Hernandez	Fundación DTJ	1. On or around 2021-02-23
		2. On or around 2021-03-17
		3. On or around 2021-04-29
		4. On or around 2021-05-01
		5. On or around 2021-05-04
		6. Sometime 2021-05-04 – 2021-05-07
		7. On or around 2021-05-07
		8. On or around 2021-05-11
		9. On or around 2021-05-17
		10. On or around 2021-05-21
		11. On or around 2021-06-02
		12. On or around 2021-06-13
		13. On or around 2021-06-15
		14. On or around 2021-06-28
		15. On or around 2021-06-30
		16. On or around 2021-11-09
		17. On or around 2021-11-16
Beatriz Benitez	GatoEncerrado	1. On or around 2021-07-01
Ezequiel Barrera	GatoEncerrado	1. Sometime 2020-09-10 – 2020-09-11
		2. Sometime 2021-04-06 – 2021-04-11
		3. Sometime 2021-04-13 – 2021-04-16
		4. Sometime 2021-04-23 – 2021-04-25
		5. On or around 2021-06-07
		6. On or around 2021-06-21
		7. On or around 2021-06-30
		8. On or around 2021-07-08
		9. On or around 2021-09-19
Xenia Oliva (Phone #1)	GatoEncerrado	1. Sometime 2020-11-12 – 2020-11-25
		2. Sometime 2021-02-17 – 2021-02-26
		3. Sometime 2021-02-28 – 2021-03-09
		4. On or around 2021-04-08
		5. On or around 2021-05-21
Xenia Oliva (Phone #2)	GatoEncerrado	1. On or around 2021-10-26
		2. On or around 2021-11-04
(Individual #4)	La Prensa Gráfica	1. On or around 2021-09-27
Oscar Luna	Revista Digital Disruptiva	1. On or around 2021-04-18
		2. On or around 2021-09-29
(Individual #5)	(NGO #1)	1. On or around 2021-05-21

Individual	Organization	Dates of Successful Hacking
Mariana Belloso	(Independent Journalist)	1. On or around 2021-09-29
		2. On or around 2021-10-09
Carmen Tatiana Marroquín	(Economist and Columnist for Independent Media)	1. On or around 2021-09-05