

Eshkar4_30

Designation List Report



Eshkar, Ramon

2024-08-27

P's Narrowed	00:11:54
D's Counters	00:05:41
TOTAL RUN TIME	00:17:36



Documents linked to video:

P34

P35



Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
7:20 - 7:23	Eshkar, Ramon 2024-08-27 7:20 Q. Thank you. Mr. Eshkar, would you please 7:21 state and spell your full name for the record? 7:22 A. Ramon, R-A-M-O-N, Eshkar, E-S-H-K-A-R, 7:23 Sebban, S-E-B-B-A-N.	00:00:12	Eshkar4_30.1
15:21 - 15:23	Eshkar, Ramon 2024-08-27 15:21 Q. What is the white services department? 15:22 A. It's a department responsible for creating 15:23 accounts and purchasing other services that we need.	00:00:11	Eshkar4_30.2
16:08 - 16:13	Eshkar, Ramon 2024-08-27 16:08 Q. Do you have an understanding of what makes a 16:09 service a white service? 16:10 A. I do. 16:11 Q. What is that? 16:12 A. It means that the service is being set up in 16:13 an anonymized way.	00:00:15	Eshkar4_30.3
17:13 - 17:15	Eshkar, Ramon 2024-08-27 17:13 Does the white services department set up 17:14 WhatsApp accounts in an anonymized way? 17:15 A. They do.	00:00:10	Eshkar4_30.4
18:13 - 18:17	Eshkar, Ramon 2024-08-27 18:13 Q. I'm asking why you set up anonymized WhatsApp 18:14 accounts for your customers? 18:15 A. The entire infrastructure is anonymized to 18:16 protect the customer and the infrastructure that 18:17 they're using.	00:00:13	Eshkar4_30.5
18:18 - 18:19	Eshkar, Ramon 2024-08-27 18:18 Q. Is that to protect the customer from being 18:19 identified?	00:00:07	Eshkar4_30.6
18:21 - 19:13	Eshkar, Ramon 2024-08-27 18:21 THE WITNESS: What do you mean by identified? 18:22 BY MR. BLOCK: 18:23 Q. Let me just ask you. In what regard are you 18:24 trying to protect the customer by anonymizing the 18:25 WhatsApp service? 19:01 A. We want to [Hebrew] to. 19:02 MR. BLOCK: May we have help from the 19:03 translators, please?	00:00:54	Eshkar4_30.7

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	19:04 THE INTERPRETER: Distance. We would like to 19:05 distance. 19:06 THE WITNESS: Would like to distance -- 19:07 I'm not so sure it's the word, but to, let's say, 19:08 distance the customer. 19:09 BY MR. BLOCK: 19:10 Q. From whom? 19:11 A. From the environment so that they can run 19:12 their operation in a secured way, not to expose their 19:13 operation.		
19:14 - 19:22	Eshkar, Ramon 2024-08-27 19:14 Q. You also said you create the accounts in a 19:15 way that will be "op sec aware" to the use of the 19:16 service later on. Did I get that right? 19:17 A. Op sec, operational security. 19:18 Q. Okay, and what does it mean to be op sec 19:19 aware to the use of the service later on? 19:20 A. What I mean is that you apply all the measure 19:21 that you can in order to protect the activity, the 19:22 operation.	00:00:35	Eshkar4_30.8
22:04 - 22:08	Eshkar, Ramon 2024-08-27 22:04 Q. In what circumstances will NSO create 22:05 anonymized WhatsApp accounts? 22:06 A. So for the use of demonstration, to set up a 22:07 customer system, and for internal use mainly for 22:08 testing.	00:00:25	Eshkar4_30.9
27:08 - 27:09	Eshkar, Ramon 2024-08-27 27:08 Q. Are you aware of defendants having created 27:09 an anonymized WhatsApp account in 2024?	00:00:09	Eshkar4_30.10
27:11 - 27:11	Eshkar, Ramon 2024-08-27 27:11 THE WITNESS: Yes.	00:00:00	Eshkar4_30.11
29:01 - 29:13	Eshkar, Ramon 2024-08-27 29:01 Q. You said typically the anonymized account is 29:02 created on a mobile device; correct? 29:03 A. Correct. 29:04 Q. And does that mean that the account is 29:05 associated with a phone number? 29:06 A. Yes. 29:07 Q. Do you use the term MSISDN, M-S-I --	00:00:36	Eshkar4_30.12



Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	29:08 A. MSISDN.		
	29:09 Q. MSISDN?		
	29:10 A. Yes.		
	29:11 Q. So it's MSISDN; correct?		
	29:12 A. MSISDN.		
	29:13 Q. What is an MSISDN?		
29:16 - 29:20	Eshkar, Ramon 2024-08-27	00:00:15	Eshkar4_30.13
	29:16 THE WITNESS: It's a phone number.		
	29:17 BY MR. BLOCK:		
	29:18 Q. And when defendants create anonymized		
	29:19 WhatsApp accounts, each such account is associated		
	29:20 with an MSISDN; is that accurate?		
29:23 - 29:24	Eshkar, Ramon 2024-08-27	00:00:02	Eshkar4_30.14
	29:23 THE WITNESS: To the best of my knowledge,		
	29:24 yes.		
61:13 - 61:15	Eshkar, Ramon 2024-08-27	00:00:06	Eshkar4_30.15
	61:13 Q. Okay. You joined NSO as a director in July		
	61:14 of 2015; correct?		
	61:15 A. Correct.		
61:21 - 61:23	Eshkar, Ramon 2024-08-27	00:00:10	Eshkar4_30.16
	61:21 You are still a vice president at NSO Group		
	61:22 today; correct?		
	61:23 A. Today I'm an SVP of the company. SVP.		
186:02 - 186:10	Eshkar, Ramon 2024-08-27	00:00:32	Eshkar4_30.17
	186:02 (Exhibit 2007 marked for identification.)		
 P34.2	186:03 Mr. Eshkar, you've been handed a document		
	186:04 that's been marked Exhibit 2007 and bears a Bates		
	186:05 number on the first page SHANER_WHATSAPP_00001098.		
	186:06 Do you see that?		
	186:07 A. I see that.		
 P34.2.1	186:08 Q. This is a December 2018 WhatsApp thread;		
	186:09 correct?		
	186:10 A. Yes, looks like it.		
186:11 - 186:14	Eshkar, Ramon 2024-08-27	00:00:26	Eshkar4_30.18
	186:11 Q. Do you know who Mr. Shaner is?		
	186:12 A. I don't recall the last name but there was		
	186:13 Josh, but I don't remember the last name. It's for		
	186:14 sure he wasn't part of my team, so.		

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
186:15 - 186:15	Eshkar, Ramon 2024-08-27 186:15 Q. What role did the Josh who you remember have?	00:00:03	Eshkar4_30.19
186:17 - 186:18	Eshkar, Ramon 2024-08-27 186:17 THE WITNESS: So if I'm not mistaken he would 186:18 have been pre-sale, something like that.	00:00:07	Eshkar4_30.20
186:24 - 186:25	Eshkar, Ramon 2024-08-27 186:24 Q. Who is Yossi Monsingo? 186:25 A. Yossi Monsingo was an employee of NSO.	00:00:08	Eshkar4_30.21
187:01 - 187:03	Eshkar, Ramon 2024-08-27 187:01 Q. What was Mr. Monsingo's role? 187:02 A. He had various roles in the customer support 187:03 department throughout his time at NSO.	00:00:14	Eshkar4_30.22
188:20 - 189:05  P34.2.2	Eshkar, Ramon 2024-08-27 188:20 Q. And Mr. Monsingo writes: 188:21 "Hi all, WhatsApp had made changes in 188:22 their servers that currently fail all 188:23 installations and can cause crashes that 188:24 risk the Hummingbird vector." 188:25 Do you see that? 189:01 A. I see that. 189:02 Q. Do you remember an event in December 2018 189:03 when WhatsApp had made changes in their servers that 189:04 caused installation failure for the Hummingbird 189:05 vector?	00:00:37	Eshkar4_30.23
189:08 - 189:12	Eshkar, Ramon 2024-08-27 189:08 THE WITNESS: I would say that I'm aware 189:09 there were changes to the WhatsApp I don't know 189:10 whether the server or the application or whatever 189:11 element in the WhatsApp system that affected the 189:12 solution.	00:00:15	Eshkar4_30.24
194:05 - 194:09	Eshkar, Ramon 2024-08-27 194:05 Q. But do you recall there being at least one 194:06 instance in which there was a change WhatsApp made 194:07 that caused Hummingbird to stop working and then NSO 194:08 engineered a new solution to be able to use WhatsApp 194:09 as an installation vector?	00:00:20	Eshkar4_30.25
194:12 - 194:16	Eshkar, Ramon 2024-08-27 194:12 THE WITNESS: In the level that I deal with	00:00:15	Eshkar4_30.26

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	194:13 the solution then it might have been that after a 194:14 certain version update we had to wait for an update 194:15 from the R&D. 194:16 BY MR. BLOCK:		
194:17 - 194:20	Eshkar, Ramon 2024-08-27	00:00:10	Eshkar4_30.27
	194:17 Q. Are you referring to a version update of 194:18 WhatsApp? 194:19 A. Yeah, I don't know which element within 194:20 WhatsApp but as a general.		
194:21 - 194:23	Eshkar, Ramon 2024-08-27	00:00:09	Eshkar4_30.28
	194:21 Q. And then you referred to waiting for 194:22 an upgrade to Hummingbird from defendants R&D team, 194:23 right?		
195:01 - 195:06	Eshkar, Ramon 2024-08-27	00:00:15	Eshkar4_30.29
	195:01 THE WITNESS: In those cases we would wait 195:02 for a solution from R&D. 195:03 BY MR. BLOCK: 195:04 Q. And in fact in at least one case you remember 195:05 you did wait and defendants R&D team did provide that 195:06 solution, they got Hummingbird working again, right?		
195:09 - 195:09	Eshkar, Ramon 2024-08-27	00:00:01	Eshkar4_30.30
 Clear	195:09 THE WITNESS: Right.		
198:13 - 198:24	Eshkar, Ramon 2024-08-27	00:00:47	Eshkar4_30.31
 P35.2	198:13 (Exhibit 2008 marked for identification.) 198:14 Mr. Eshkar, you've been happened Exhibit 2008 198:15 which bears the Bates number 198:16 DIVITTORIO_WHATSAPP_0000066. And this is a May 12,  P35.2.1 198:17 2019 WhatsApp discussion. Do you see that? 198:18 A. I see that. 198:19 Q. Under "Active Participants" it says, Ramon, 198:20 and then has a phone number at "s.whatsapp.net"; do 198:21 you see that? 198:22 A. I see that. 198:23 Q. Is that you? 198:24 A. Looks like it.		
199:15 - 200:15	Eshkar, Ramon 2024-08-27	00:02:06	Eshkar4_30.32
 P35.2.2	199:15 Q. Will you please read for the record the 199:16 message you sent at time stamp 15:17:01 in the first 199:17 row of the table in Exhibit 2008?		

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	199:18 A. "Dear All, as you might have heard by now, HB 199:19 vector went down falling WhatsApp latest version and 199:20 change. CEs are now communicating the removal of the 199:21 vector as any new attempt will only result with a 199:22 failure and leave a mark on a patched solution which 199:23 once patched being tracked. We all know the field in 199:24 which we work and we know that these kind of 199:25 capabilities comes and go. These kind of situation 200:01 only demonstrate our full power and the difference 200:02 between opportunistic companies to real actors. So 200:03 not trying to make the picture nicer but it is what 200:04 it is and we all work now on: A) update our customers 200:05 and remove the vector. B) understand the impact on 200:06 expected deals. C) Next solution to come. Should 200:07 you have any concern or comment regarding specific 200:08 communication to specific customer or any other 200:09 issue please let me know." 200:10 Q. Does HB in that message refer to Hummingbird? 200:11 A. Yes. 200:12 Q. And if you recall at this time in 2019 did 200:13 Hummingbird refer to Eden, Heaven and Erised? 200:14 A. I don't recall if all of them or to one of 200:15 them but for sure one of them.		
200:19 - 200:20	Eshkar, Ramon 2024-08-27 200:19 Q. At least one of them? 200:20 A. I think so, yes.	00:00:04	Eshkar4_30.33
204:03 - 204:04	Eshkar, Ramon 2024-08-27 204:03 Q. Third line from the bottom. 204:04 A. Yes, I see that, yes.	00:00:04	Eshkar4_30.34
204:08 - 204:20	Eshkar, Ramon 2024-08-27 204:08 When you say "next solution to come", you're 204:09 talking about defendants trying to develop a new 204:10 solution; correct? 204:11 A. Correct. 204:12 Q. But above when you talk about a patched 204:13 solution, you're talking about WhatsApp code or 204:14 something different? 204:15 A. Just let me read it again. 204:16 Q. Thank you. 204:17 A. So what I mean here is the solution that we	00:01:07	Eshkar4_30.35

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	204:18 had is not functioning any more following the latest 204:19 WhatsApp version. Therefore we need to work on the 204:20 next solution.		
228:13 - 229:03	 Clear Eshkar, Ramon 2024-08-27	00:01:12	Eshkar4_30.36
	228:13 Q. The question was, does Pegasus have a data 228:14 extraction ability to extract the entire data that 228:15 exists on the device upon agent installation today? 228:16 A. So the Pegasus has the capacity to download 228:17 the user data of the phone, today. 228:18 Q. What do you understand to be the data on the 228:19 phone that is not user data? 228:20 A. Such as -- and here I would give my 228:21 understanding, okay, like the OS of the phone. 228:22 Q. Other than the operating system of the phone, 228:23 can you think of any other kind of data on the device 228:24 that Pegasus is unable to download today? 228:25 A. Not that I'm aware of. 229:01 Q. And your testimony is that Pegasus can 229:02 download every kind of user data on the phone as it 229:03 exists today?		
229:06 - 229:10	Eshkar, Ramon 2024-08-27	00:00:25	Eshkar4_30.37
	229:06 Q. As Pegasus exists today? 229:07 A. This is my understanding. 229:08 Q. Was it also the case with respect to the 229:09 operation of Pegasus in 2018 and 2019? 229:10 A. Yes.		
262:03 - 262:05	Eshkar, Ramon 2024-08-27	00:00:11	Eshkar4_30.38
	262:03 I'm asking whether there's a group at 262:04 defendants who is responsible for helping to set up 262:05 the Pegasus system for a customer?		
262:07 - 262:09	Eshkar, Ramon 2024-08-27	00:00:20	Eshkar4_30.39
	262:07 THE WITNESS: If I understand you correctly 262:08 then there is a group named deployment responsible 262:09 for the installation of the system and the customer.		
262:11 - 262:12	Eshkar, Ramon 2024-08-27	00:00:06	Eshkar4_30.40
	262:11 Q. In a typical installation what does the 262:12 deployment team do?		
262:15 - 263:11	Eshkar, Ramon 2024-08-27	00:01:56	Eshkar4_30.41
	262:15 THE WITNESS: In general terms what they will		

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	262:16 do, they will provide the customer prior to the 262:17 actual physical installation the prerequisite 262:18 required from the customer side so an on site 262:19 installation can take place. That will include the 262:20 coolant required for the servers, the size of the 262:21 room, so on so forth, the electricity requirements. 262:22 Once all those, let's say, checkbooks are covered 262:23 they will do a site survey so they will show up at 262:24 the customer premises and they will check that what 262:25 they've asked is a prerequisite indeed happen and 263:01 exist. If there are any gaps they will ask the 263:02 customers to close those gaps. If there are no gaps 263:03 they will physically install the servers at the 263:04 designated place at the customer premises. That 263:05 means unboxing of the servers, putting them in what 263:06 we call a rack, power them, interconnect between 263:07 them, power them up. Test there is no, what we call 263:08 "dead on arrival". They will put software on it. 263:09 They will run a test to make sure that their 263:10 installation is in order. And they will move it to 263:11 the next team.		
263:12 - 263:15	Eshkar, Ramon 2024-08-27	00:00:17	Eshkar4_30.42
	263:12 Q. Does the deployment team's activity include 263:13 setting up the remote connection between the customer 263:14 installation and NSO's NOC? 263:15 A. Yes.		
263:16 - 263:22	Eshkar, Ramon 2024-08-27	00:00:27	Eshkar4_30.43
	263:16 Q. The servers that the deployment team installs 263:17 at the customer premises, that's different from the 263:18 VPS we discussed earlier, right? 263:19 A. Yes, those are physical hardware. 263:20 Q. And what purpose does the physical hardware 263:21 at the customer premise serve other than to run the 263:22 software executed on it?		
263:25 - 264:06	Eshkar, Ramon 2024-08-27	00:00:26	Eshkar4_30.44
	263:25 THE WITNESS: So again in general it will 264:01 mean that it will run the software. It will allow 264:02 the user interface to work. It will contain the 264:03 storage and the electricity back-up. 264:04 BY MR. BLOCK:		

Eshkar4_30

DESIGNATION	SOURCE	DURATION	ID
	264:05 Q. Do those servers receive and store 264:06 information collected from target devices?		
264:09 - 264:14	Eshkar, Ramon 2024-08-27	00:00:11	Eshkar4_30.45
	264:09 THE WITNESS: The information that is being 264:10 collected is stored to the best of my knowledge on 264:11 the storage which is part of the hardware setup. 264:12 BY MR. BLOCK: 264:13 Q. On the customer premises? 264:14 A. On the customer premises.		

P's Narrowed	00:11:54
D's Counters	00:05:41
TOTAL RUN TIME	00:17:36



Documents linked to video:

P34

P35