SECRET//CANADIAN EYES ONLY

s.15(1) - DEF s.16(2)(c)

From:

Sent:

June-20-16 11:30 AM

To: Cc:

**Subject:** 

1 email, several documents

Classification: SECRET//CANADIAN EYES ONLY

The presentations attached are not only about TOR. Not sure how we would handle them. Just use the pages referring to TOR? The three decks are almost the same. Just updates. There are discussions of a capabilities and the status of their which is fairly sensitive.

I will return the initialled form to

for further distribution?

Cheers,









CSE DG Bilat

Update\_Present... March 16, 201... March 30, 2016....

Timelin...

========Email talking about 

This hash will be sent to CTEC for inclusion in their

Cheers,

From:

**Sent:** April-25-16 9:10 AM

To: Cc:

Subject: RE:

TOR

Classification: SECRET//CANADIAN EYES ONLY

Many people are ops this morning felt this was significant and timely for the on-going discussion over TOR ... What is the outcome a report to from CTEC?

#### SECRET//CANADIAN EYES ONLY

s.15(1) - DEF s.16(2)(c)

Director Cyber Defence Operations/ Directeur Opérations de Cyberdéfense

Rm BLK GRN

From:

Sent: April-25-16 8:38 AM

To: Cc:

Subject: RE:

TOR

Classification: SECRET//CANADIAN EYES ONLY

Yes, the old

network.

Unfortunately even if

From:

Sent: April-25-16 7:33 AM

To: Cc:

Subject: RE:

TOR

Classification: SECRET//CANADIAN EYES ONLY

Very sweet indeed ... we will highlight this perhaps at the Chief's Ops call this morning. So this is the assume.

network I

assume.

Director Cyber Defence Operations/ Directeur Opérations de Cyberdéfense

Rm BLK

GRN

From:

Sent: April-25-16 6:16 AM

To: Cc:

Subject: RE:

TOR

Classification: SECRET//CANADIAN EYES ONLY

Nice!

From:

Sent: April-22-16 2:59 PM

To: Cc:

Subject: FW:

TOR

### SECRET//CANADIAN EYES ONLY

Classification: SECRET//CANADIAN EYES ONLY

s.15(1) - DEF

s.16(2)(c)

FYI, found some

TOR

It's out there. ©

From:

**Sent:** April-22-16 2:24 PM

To:

Cc: CDO Staff

Subject:

TOR

Classification: SECRET//CANADIAN EYES ONLY

Hey

For inclusion in the next

Director Cyber Defence Operations/ Directeur Opérations de Cyberdéfense Rm BLK GRN

### **PROTECTED B**

s.15(1) - DEF s.16(2)(c)

#### **DESCRIPTION:**

TOR

TOR (The Onion Router) is an

anonymous network for routing internet traffic where the Zeus malware family has evolved into.

#### **TIMELINES:**

1. Internal Meeting

2. Initial Meeting 3. Technical Meetings

- 1. Internal meeting
  - Internal briefings conducted and timelines proposed: DATE
- 2. Initial Meeting with

**TOR** 

3. Technical meetings

TOR.

4.

### PROTECTED B

s.15(1) - DEF s.16(2)(c)

5.

TOR

TOR

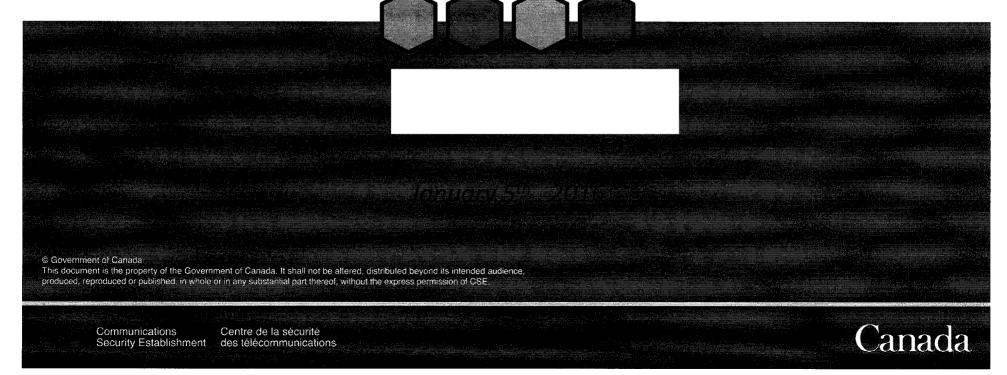
TOR

6.



s.15(1) - DEF

# UPDATE





s.15(1) - DEF s.16(2)(c)

- Defending
- New
- **Future Bilat Topics**
- **Round Table**



# Pages 8 to / à 9 are withheld pursuant to sections sont retenues en vertu des articles

16(2)(c), 15(1) - DEF

Page 10
is withheld pursuant to sections
est retenue en vertu des articles

16(2)(c), 15(1) - DEF, 15(1) - IA

# Page 11 is withheld pursuant to sections est retenue en vertu des articles

16(2)(c), 15(1) - DEF

### TOR?



s.15(1) - DEF s.16(2)(c)

### **Zeus Malware Goes 64 Bit, Includes Tor Connectivity**



NEWS ANALYSIS: Zeus's new variant could be the next logical evolution of crimeware, security researchers say.

The Zeus malware family has been a common sight on the IT threat landscape for years, powering a banking fraud botnet of the same name that U.S. authorities have tried to shut down.

Zeus has now evolved.

The new version of Zeus also includes Tor connectivity, which is inseparable from the 64-bit version, Kaspersky Lab expert Dmitry Bestuzchev told *eWEEK*. Tor (The Onion Router) is an anonymous network for routing Internet traffic. "It connects to an onion domain, which means that the command and control server is well-hidden," Bestuzchev said. "Not all malware includes this functionality."

# Pages 13 to / à 14 are withheld pursuant to sections sont retenues en vertu des articles

16(2)(c), 15(1) - DEF

# Questions





Communications Centre de la sécurité Security Establishment des télécommunications

Canada



s.15(1) - DEF

CSE-BILAT

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Communications Security Establishment

Centre de la sécurité des télécommunications Canada



s.15(1) - DEF s.16(2)(c)

- Updates
- Metrics
- Updates/Round table



Updates

s.15(1) - DEF s.16(2)(c)

Metrics

Updates/Round table

# Pages 19 to / à 21 are withheld pursuant to sections sont retenues en vertu des articles

16(2)(c), 15(1) - DEF

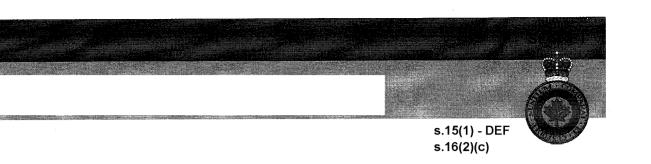


Updates

s.15(1) - DEF s.16(2)(c)

Metrics

Updates/Round table



### **TOR**

- TOR (The Onion Router) is an anonymous network for routing internet traffic where the Zeus malware family has evolved into.
- **CSE**

GC departments Onion Router(TOR)

A-2016-00041--00023

Canada



s.15(1) - DEF s.16(2)(c)

- **Updates**
- **Metrics**
- Updates/Round table



s.15(1) - DEF s.16(2)(c)

- **Updates**
- **Metrics**
- Updates/Round table

# Questions





Communications Security Establishment

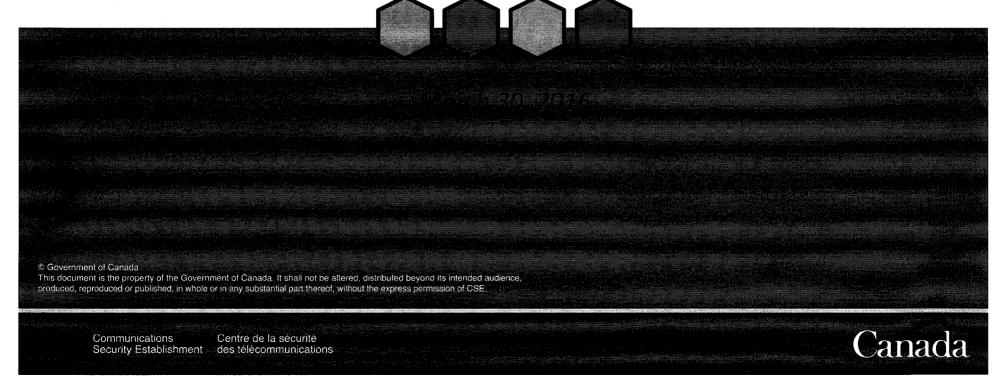
Centre de la sécurité des télécommunications

Canada



s.15(1) - DEF

# CSE-BILAT





**Updates** 

s.15(1) - DEF s.16(2)(c)

Updates/Round table



Updates

s.15(1) - DEF s.16(2)(c)

- •
- Updates/Round table

# Pages 30 to / à 32 are withheld pursuant to sections sont retenues en vertu des articles

16(2)(c), 15(1) - DEF



Updates

s.15(1) - DEF
s.16(2)(c)

•

•

Updates/Round table



### **TOR**

- TOR (The Onion Router) is an anonymous network for routing internet traffic where the Zeus malware family has evolved into.
- **CSE**

GC departments Onion Router(TOR)



**Updates** s.15(1) - DEF s.16(2)(c)

Updates/Round table



# Pages 36 to / à 37 are withheld pursuant to sections sont retenues en vertu des articles

16(2)(c), 15(1) - DEF



**Updates** s.15(1) - DEF s.16(2)(c)

Updates/Round table





Updates

s.15(1) - DEF s.16(2)(c)

•

Updates/Round table



# Questions





Communications Centre de la sécurité Security Establishment des télécommunications

Canada

s.15(1) - DEF s.15(1) - IA

From:

Sent:

June-27-16 4:13 PM

To:

Subject:

FW: Background on

and

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

1<sup>st</sup> message with respect to Access to Information Act request # A-2016-00041.

From:

Sent: May-08-15 5:27 PM

To: Cc:

**Subject:** Background on

and

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

It's a bit more long winded than I would have liked but here is some background on and for

under

The main phenomena that meant to discover be

was meant to address was radicalization and online extremism. It was an effort

. It identified

that could

There were

to focus on

The aim is always displaying a combination of these

Using the Onion Router (TOR) to hide your tracks on the internet is an example.

An example where a

The information from the report was shared

through a 2<sup>nd</sup>

party.

TOP SECRET//SI//CANADIAN EYES ONLY

A-2016-00041--00041

s.15(1) - DEF

s.15(1) - IA

Α		

concern is

Cheers,

s.15(1) - DEF s.15(1) - IA

From:

Sent: November-19-15 10:57 AM

To:

Subject: FW: tech profiing

Classification: TOP SECRET//SI//REL TO CAN,

Do we have anything on technology?

From:

Sent: November-18-15 3:30 PM

To: Cc:

Subject: tech profiing

Classification: TOP SECRET//SI//REL TO CAN,

Curious if we have any indicators about the type of technology used looking for the specific selectors but do we know they used

not

thanks

Director General, Directeur général de Communications Security Establishment | Centre de la sécurité des télécommunications

s.15(1) - DEF s.15(1) - IA

From: Sent:	June-27-16 4:14 PM		
To:			
Subject:	FW: tech profiing		
Classification: TO	P SECRET//SI//CANADIAN EYES O	NLY	
2 <sup>nd</sup> message with respe	ect to Access to Information Act request # A-	2016-00041.	
From: Sent: November-19-15 To: Cc: Subject: RE: tech prof			
Classification: TO	P SECRET//SI//CANADIAN EYES O	NLY	
Many thanks for this also establish some tre Anything that you or th	σ,		where we can help . but
Tks			
From: Sent: November-19-15 To: Cc: Subject: RE: tech prof			
Classification: TO	P SECRET//SI//REL TO CAN,		
Please see mess comms usage of	age below. He attended a VTC today with	where	provided some information on the
Cheers,			
From:			

**Sent:** November-19-15 1:18 PM

To:

Subject: RE: tech profiing

s.13(1)(a)

s.15(1) - DEF

s.15(1) - IA

Classification: TOP SECRET//SI//REL TO CAN,

During the VTC

mentioned

was used to

From:

Sent: November-19-15 12:42 PM

To: Cc:

Subject: RE: tech profiing

Classification: TOP SECRET//SI//REL TO CAN,

We have not seen specifics from

below by the extended network (i.e. those

Please let me know if you need any additional info.

From:

Sent: November-19-15 11:21 AM

To:

Subject: RE: tech profiing

Classification: TOP SECRET//SI//REL TO CAN,

On 21 October,

are used for

are by far the method of choice.

Another

known to be used in

population;

but it's hard to assess because

But nonetheless it illustrates that

has provided a summary of typical

but

however I believe that

although this is more among the

2

s.15(1) - DEF s.15(1) - IA

s.21(1)(a)

From:

Sent:

February-12-16 1:12 PM

To: Cc:

Subject:

RE: GCHQ-CSE

Meeting (2016-02-12)

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

Howdy,

Firstly, well done

team.

Second, this is a really awesome meeting summary, and I have passed it along to

unchanged. So doublely well done

Cheers,

From:

Sent: February-12-16 10:36 AM

To: Cc:

**Subject:** FW: GCHQ-CSE

Meeting (2016-02-12)

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

I think

last two paragraphs reflect the value of having such high quality analysts. I am very proud of our

team right now.

"Overall, the GCHQ Leads were \*very impressed\* with what our team was doing, and how we were doing it

In my opinion, I believe

I think that they have seen

From:

Sent: February-12-16 10:28 AM

To:

**Subject:** GCHQ-CSE

Meeting (2016-02-12)

s.13(1)(a)

s.15(1) - DEF

s.15(1) - IA

s.19(1)

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

GCHQ-CSE

Meeting (2016-02-12)

Attendees (GCHQ):

Attendees (CSE):

Just myself

Lay of the land:

headed the conversation for GCHQ...

Following a quick roundtable, the main focus/interest was heavily weighted on wanted to know about

I kept having to

jump back and forth with what we were doing (to answer his questions), and explaining things like the resources we have and the mandates / policies / teams / departments we work with. Operationally, I talked about

A whole section of talks revolved around

and the report we released.

On their end, they were are currently looking at

In regards to upcoming meetings:

Regarding

And in Canada, there was a

just last week.]

Everyone was especially interested with the work we've been doing with detailed breakdown of what we know - how we

They asked, and I provided, a

They

also wanted to know what we don't know about

Because of NSA/GCHQ capabilities with

see my previous e-mail on

updates), they said we can work together to provide

and suggested that

this would be a great way CSE can contribute to the community - And potentially highlight how our two organizations worked together, if we can

From our end, wanted to know if we could assist them with some of their

So long as they were relevant national security

priorities for us. I also asked for a list of any other

Overall, the GCHQ Leads were \*very impressed\* with what our team was doing, and how we were doing it

In my opinion, I believe

I think that they have seen

Cheers.

s.13(1)(a)

s.15(1) - DEF

s.15(1) - IA

s.19(1)

s.21(1)(a)

Communications Security Establishment

s.13(1)(a)

s.15(1) - DEF

s.15(1) - IA

From:

Sent:

February-12-16 1:02 PM

To: Cc:

Subject:

Classification: TOP SECRET//SI//CANADIAN EYES ONLY

Hi

The following is a summary from what has been reported back to us from for a workshop on During one of his bilats, GCHQ told him about

He spent the last week at GCHQ

Thank you,