

PANEL SECURWARE/DEPEND/AFIN
20 Aug, 2012 – Rome

**Advances in Security, Trust and Dependability
in Internet**

Panelists

- **Alexey M. Kashevnik**, SPIIRAS, Russia
- **Chikara Ohta**, School of System Informatics,
Kobe University, Japan
- **Rainer Falk**, Siemens AG, Corporate Technology,
Germany

Discussed Topics: Trust, Privacy, and Security

Discussion Topics

- How far can an end user be made responsible for the security of a used web service? E.g., to evaluate trustworthiness to decide whether to provide credit card number?
- Heavy reliance on passwords, but limited capability of users to remember various passwords for different web services
- Need for a secure and efficient management of security infrastructure
- Some Internet services keep passwords in their database. Services only need possibility to have a mechanism to check if the password is correct or not.
- Content Centric Networks (CCN): In-network cache will help efficient content delivery.
- Can we use cache anonymously in CCNs ?

Some critical axes of security

- Usability
- Responsibility, liability
- Security education for end users, administrators, and developers

Chikara Ohta

Kobe University

Graduate School of System Informatics

Emergent Computing Laboratory

- **Provide a topic for discussions on Advances in Security, Trust and Dependability in Internet**
- **How about Privacy Concerns in Content Centric Networks ?**

CCN and Content Name

■ Content Centric Networks

- ◆ People are interested in contents themselves rather than where they come from
- ◆ Content Names are used to find **caches**
- ◆ How can we know content names ?

■ What are you doing ?

- ◆ We find contents according to preference
- ◆ Using search engines (Google, Yahoo,...)
- ◆ We get a list of URLs (content names)
- ◆ And click ← If this action is detected by ...

Content Name plus ...

■ Search engine (Mapping Server) can know

◆ Who (his/her location), Which content, When

→ A content is probably cached near him/her

→ If MS replies content name + cache location, ...

- Judge targets 'piece of s---' lawyer with... - New York Dai...
 - **Law Expanding New York City Taxi System...** - N.Y. Times
 - Queens Residents Outraged By Pricy And Unused... - CBS New York
- ⌵ Show More Local More New York, NY News >>

href="_ylt=ApxzW1W1cpwXcoZE_Oezp0SbvZx4;_ylu=X3oDMTNvZzRINGRnBGEDMQRjY29kZQ NwemJ1YW ;NhaDUEbX

BvcwM0BHE **A click is diverted to another URL via Yahoo** \zcmQR3b

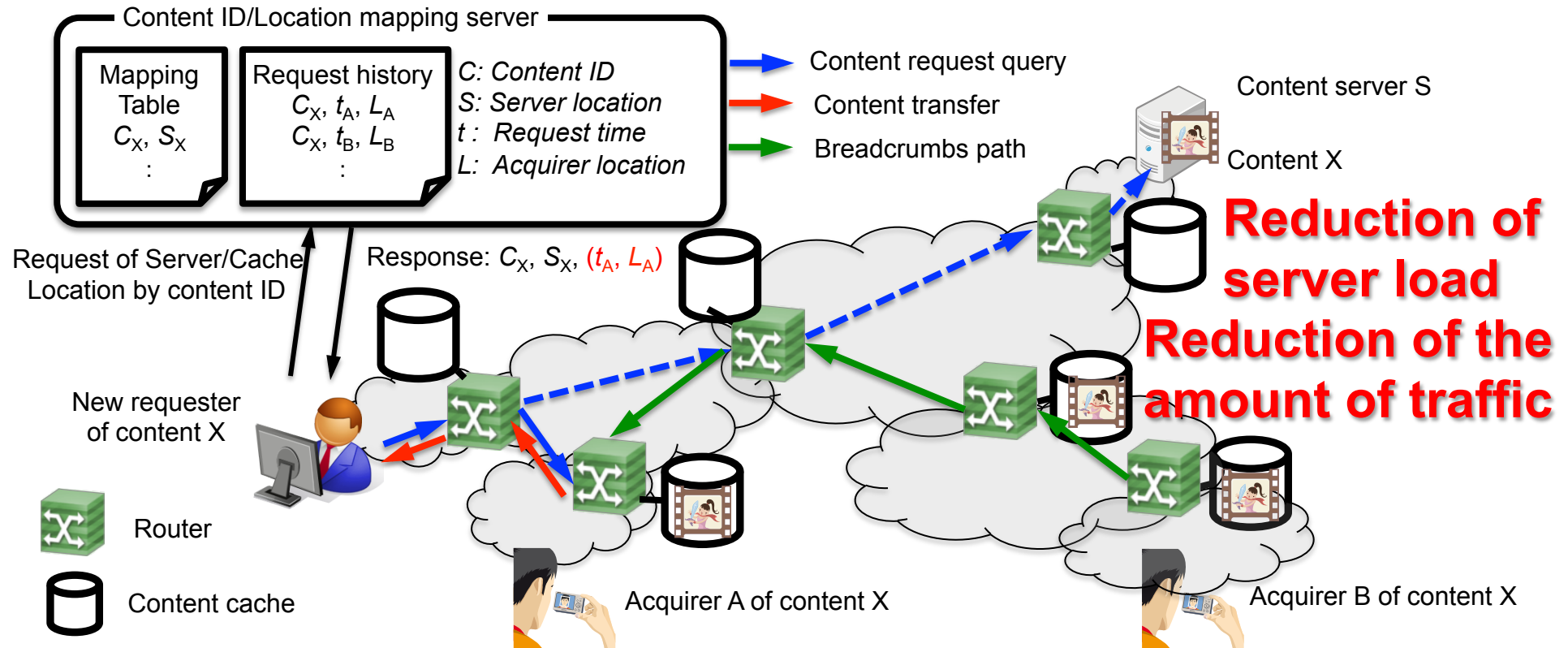
2UDMjQ1OTExNQ--/SIG=13vus6p2b/EXP=1345370068/**[http%3A//www.nytimes.com/](http://www.nytimes.com/)

[2012/08/18/nyregion/law-expanding-new-york-city-taxi-system-overturned-by-court.html](http://www.nytimes.com/2012/08/18/nyregion/law-expanding-new-york-city-taxi-system-overturned-by-court.html)

class="bullet y-fp-pg-controls y-link-1 medium" title="Law Expanding New York City Taxi System Overturned by Court">[Law Expanding New York City Taxi System...](#)<cite class="citation

small y-txt-3" >- N.Y. Times</cite>

Benefits and Concerns



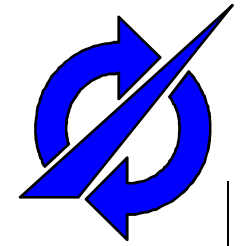
■ Privacy/Security Concerns

- ◆ MS knows who requests which content
- ◆ Fake mapping request → wrong history

Discussions

- MS collects a history
 - ◆ MS server can know your preference
- To get contents from caches means
 - ◆ Cache managers also can know who obtains which content
 - ◆ Who is a cache manager ? Just anyone else ?

**We just want to get contents from anywhere.
Can we use cache anonymously ?**



August 13, 2012

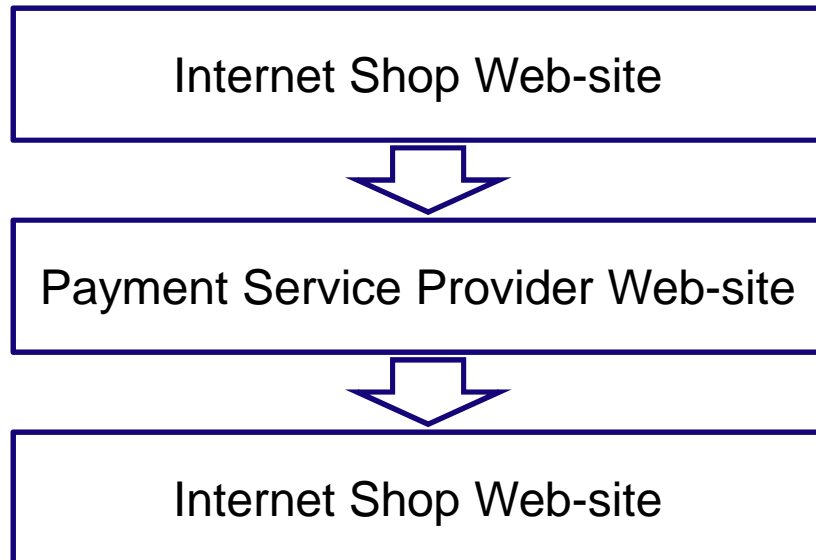
Trust Issues During Paying for Goods and Services via Internet Using Credit Cards

Alexey Kashevnik

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St.-Petersburg Institute for Informatics and Automation of RAS (SPIIRAS)

General Scheme of Buying Goods or Services via Internet Using Credit Card



User chooses needed good or service (e.g. chooses hotel room for a trip)

User checks web site of payment service Provider if it is possible to trust it and enter credit card information (make payment).

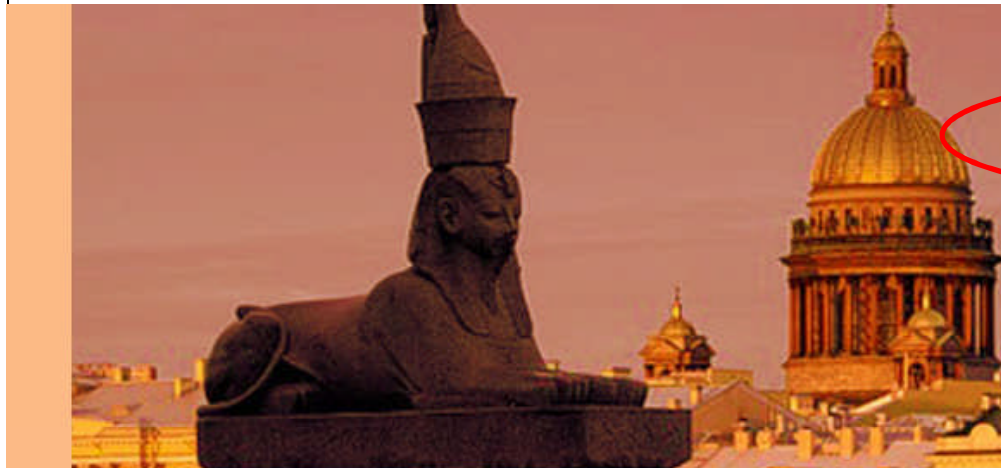
User gets confirmation of pay order

Well-known payment service providers:

- Amazon Payments
- Authorize.net
- CyberSource
- Google Wallet

- PayPal
- Assist
- WebMoney
- WorlPay

Hotel Booking Using Credit Card



русский english française

- ★ Главная
- ★ Об отеле
- ★ Номера и цены
- ★ Партнёрам
- ★ Услуги
- ★ Достопримечательности
- ★ Образы и цитаты
- ★ Расположение и контакты
- ★ Забронировать номер



Payment details.
You are paying for the room: №09 Suite
(Suite room) which price is: 5000 RUB.

First Name:	<input type="text" value="Alexey"/>
Last Name:	<input type="text" value="Kashevnik"/>
Email:	<input type="text" value="alexey.kashevnik@gmail.com"/>

</pay/pay.cfm?CFSID=LyZNVzYjSFMxWi0nX1dKTCBYPiMjCg%3D%3D>

Разное | Дана | В Контакте | Алекс... | Платёжные системы | Путешествия | Nokia | Telco

ASSIST
провайдер электронных платежей

Предприятие: central-inn
Номер заказа: CEI000A19654000B1344870627
Сумма платежа: 5 000,00 RUB (5 000,00 RUB)

ВВЕДИТЕ ДАННЫЕ БАНКОВСКОЙ КАРТЫ

Тип карты:*	VISA
Пример: 4111 1111 1111 1112	
Номер банковской карты:*	4111111111111112
Срок действия карты:	08 2012
Вводится латинскими буквами. Пример: TITOV IVAN	
Держатель карты:*	Alexey Kashevnik
Проверочный номер карты (CVC2/CVV2/4DBC)	111
Пример: VTБ24	
Название банка:	

Безопасность передачи вводимой Вами информации гарантируется использованием протокола SSL и серт...

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