From Concept to Deployment
The Life (and Death) of Security Features

January 25, 2016
Glenn Wurster

BlackBerry Public

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Stack Cookies

Smashing the Stack for
Fun and Profit

Aleph One

StackGuard: Automatic Adaptive Detection
and Prevention of Buffer-Overflow Attacks

Crispan Cowan et. al.

1996　　　　　2000　1997 2002　　2004　　200 1998　2008　　2010　199 2012　　2014

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Stack Cookies

-fstack-protector-strong

StackGuard v2

Visual Studio

Attack

ProPolice

GCC Adopts ProPolice

1996   1998   2000   2002   2004   2006   2008   2010   2012   2014

Linux Expo

Arch

GCC Developers Summit, v3

StackGuard

Usenix Test of Time

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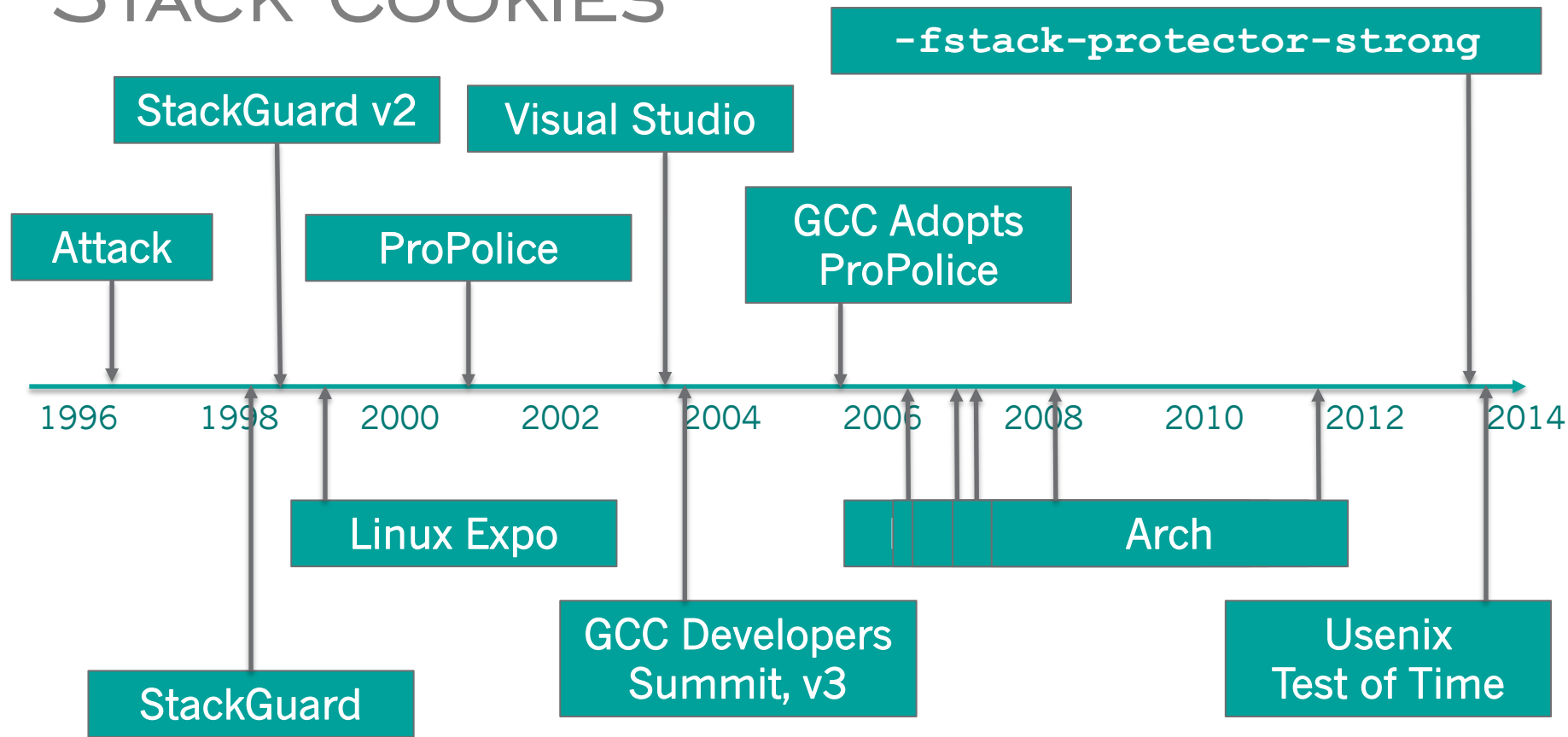
LIMITING ACCESS TO AN ANDROID SERVICE

```xml
<permission
  android:name="android.permission.READ_CALL_LOG"
  android:protectionLevel="dangerous"
/>
```

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Selling Security Features

Is Entrepreneurship

The Diaper Bag

The Diaper Bag

1. Limited Space

2. Little/No Training

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WHICH WOULD YOU WANT?

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The Diaper Bag

1. Limited Space

2. Little/No Training

3. Already Partially Filled
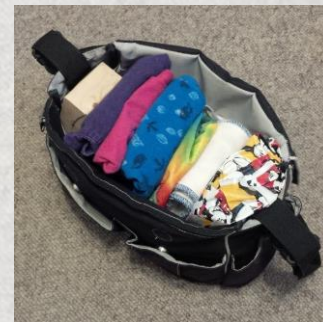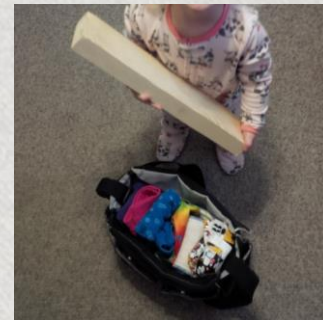
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Getting a Tool in the Diaper Bag

Getting a Tool in the Diaper Bag

1. Replace something
2. Make it Small
3. Add to something
4. Put it on the baby

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Tipping Points

1. Get it in the Diaper Bag

2. Legislative Changes

3. Public Pressure

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