

W3C Automotive WG/BG

Proposed Collaborative Work Procedures for Security & Privacy Consideration



- Overview of Security Incidents
- Attack Vectors & Threat in Security Aspects
- Security Case Study Methodology
- Overview of Privacy Protection Functions (TBD)
- Points to be considered in Privacy Issues (TBD)
- Privacy Case Study Methodology (TBD)
 - An Example of Security Case Study Sheet
 - An Example of Privacy Case Study Sheet (TBD)

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Overview of Security Incidents in Automotive

<u>THREAT</u>		Properties to be Protected	<u>RISK</u>					
Unauthorized Access	• UA	In-Car Hardware, Firmware & Software	Crush, Fatal Accident					
Unauthorized Use	• UU		Broken Down					
Unauthorized Setting	• US	In-Car Dynamic Data	Driving Disable					
Unauthorized Copy	• UC		Driving Obstruction & Driver's Distraction					
False Message	• FM	Nodel, and Setting Info.)	Degradation of Running Performance					
Tamper & Deletion	• TD							
Tapping	• TP	IVI Apps	Vehicle Theft					
Disclosure	• DS		Infringement on intellectual property rights					
DOS Attack	• DA	IVI Contents	Invasion of Privacy					
Virus	• VR	Dercenal Infe	Infringement on					
Bug & Install Mistake	• BG	(Key ID, Access Log, etc.)	portrait rights					

Attack Vectors & Threat in Security Aspects



	UA	UU	US	UC	FM	TD	TP	DS	DA	VR	BG
Part A: Intra-IVI											
A1: Web apps itself		~	~	~	~	~	~	~	~	~	~
A2: Apps to Apps	✓	~	~		~	~		~	~	•	~
A3: Apps to Native Apps	✓	~	~		~	~			~	•	~
A4: Apps to WRT	•		~		~	~			~	~	~
A5: Apps to IVI OS	•		~		~	•			•	~	•
Part B: IVI to In-Car	•	•	~		•	•	•		~	~	V
Part C: IVI to External Devices	•	•	~		~	•	•	•	~	•	V



Security Case Study Methodology



- 1. TF member, to write down the following content in "Security Case Study Sheet" on an Onesheet-one-incident basis;
 - Part ID (A1-A5, B, C)
 - Attack Vector (From X to Y, or internal)
 - Threat
 - Actual or Envisioned Incident & Title
 - Best Practice and desirable measures in Web layer (if possible)
 - Bibliography
- 2. Moderator, to gather, sort and manage the above sheets from TF members.
- 3. TF members, to exchange and discuss case studies in the sheet, focusing on the automotive web technologies.

- 4. Moderator, to draft findings and recommendation from the work sheet.
- 5. TF member, to generate the technical descriptions in the specs by year end of 2015. (to be in time for LC/CR)
- 6. Moderator, to clarify issues to be discussed beyond LC/CR timing.



An Example of Security Case Study Sheet



Serial#000-R00	Part		Attack Vector (From)	Attack Vector (To)	Threat
A studies E stiste set beside at		T U			
Actual or Envisioned Incident		litle:			
Best Practice and desirable r	neasures	in Web	layer (if possible)		
(Key words of measures)					
D'hl's sweet het					
Bibliography					
Edit record					
Edit record					