# <u>Tizen Studio Web Inspector to Install & Debug Tizen 6.5 TEP Hotel</u> <u>TV App</u>

The Tizen Studio provides the Web Inspector as a debugging tool. This topic describes how to use the Web Inspector to test applications running on a Target Device.

#### 1.) <u>Tizen Studio Setup</u>

- The Google Chrome<sup>™</sup> Web browser is required to use the Web Inspector. Before using the Web Inspector, you must first configure the Tizen Studio settings:
- In the Tizen Studio menu, select "Window > Preferences > Tizen Studio > Web > Chrome".

🙀 Preferences					×
type filter text	Chrome			<> ▼ 0	⇒ ▼ ▼
✓ Tizen Studio	Settings for the Chrom	e:			
Appearance Automatic Upd	Chrome Settings				
Logging	Location:	C:\Program Files\Google\Chrome\Application\chrome.exe		Browse.	
NaCl Rapid Developr	Extra parameters:	no-first-runactivate-on-launchno-default-browser-checkallow-file-access-from-filesdisable-	web-secur	itydisab	le-trar
<ul> <li>REST Viewer</li> </ul>	Profile data location:	C:\tizen-studio-data\chrome-user-data		Browse.	
Sample Security Profiles > Tools > Web Chrome > Editor JavaScript An Live Editing > Simulator WebWidget > C/C++ > Web > General > Others					
< >		Restore D	efaults	Appl	у
		Apply and C	lose	Cancel	

- In the "Location" field, enter the path to your Google Chrome™ browser installation. The Tizen Studio automatically detects your installation, but if you have installed the browser in a custom location, you must set the location manually.
- In the "Extra parameters" field, enter the following parameters:
- --no-first-run --activate-on-launch --no-default-browser-check --allow-file-accessfrom-files --disable-web-security --disable-translate --proxy-auto-detect --proxybypass-list=127.0.0.1 --enable-blink-features=ShadowDOMV0 --enable-blinkfeatures=CustomElementsV0
- The extra parameters are needed for the application to work properly.
- In the "Profile data location", enter the path as below: "C:\tizen-studio-data\chrome-user-data"

#### 2.) Samsung Certificate in Tizen Studio

- In Tizen Studio, click "Tools > Package Manager".
- Install "Samsung Certificate Extension".

IZEN STUDIO Package Mar Please make sure Tizen IDE and Tool	ager s are closed before Installation	<b>?</b> © (
Main SDK	Extension SDK	Progress
View installed packages		
	License Upo	date Status Action
> IOT-Headless-5.5		( 🛃 install )
> IOT-Headless-6.0		(± install)
> IOT-Headless-6.5		(± install)
Samsung Certificate Extension		(telete)
Samsung Wearable Extension	R	( Install )
> TV Extensions Tools		(ā delete)
amsung Certificate Extension (Extras)		
escription		

- In Tizen Studio, click "Tools > Certificate Manager"
- Click "+" button.

You can create, select, remove You can also change the certif	and edit certificate profiles. icate information of the certificate profile.			
op Signing				
Certificate Profile		¢ +	Ū ~	/
	No profile			
Author Certificate	Distributor Certificate			

## • Select "Samsung" certificate



## • Select "TV" device type

😧 Create Certificate Pro	ofile				×
1 Device Type	O Certificate Profil	e 🔰 🗿 Aut	thor Certificate	<ul> <li>Distribu</li> </ul>	tor Certificate
Step 1. Select the de	evice type.				
🔿 Mobile / Weara	able				
<ul> <li>TV</li> </ul>					
?		< Previous	Next >	Finish	Cancel

• Enter a name for the certificate profile

😫 Create Certificate Profile				×
Oevice Type 2 Certificate Prof	ile 🛛 🕄 Aı	uthor Certificate	🕢 🕢 Distribu	itor Certificate
Step 2. The certificate profile consists of the auth create a certificate profile and sign the applicatio	or and distributor n with it.	certificates. To dis	tribute your applica	tion, you must
Create a new certificate profile				
Sample				
O Select an existing certificate profile				
(?)	< Previous	Next >	Finish	Cancel

- Add an author certificate
- You can create a new author certificate or import an existing one

😧 Create Certificate Profile	$\times$
Device Type     Certificate Profile     Author Certificate     Distributor Certificate	
Step 3-1. The author certificate provides a unique signature that is used when you sign your applications with a certificate profile.	
<ul> <li>Create a new author certificate</li> <li>Advanced options</li> <li>Select an existing author certificate</li> </ul>	
? < Previous Next > Finish Cancel	

#### • Add an author certificate

😫 Create Certificate Profile		×
📀 Device Type	Certificate Profile 3 Author Certificate 3 Distributor Certific	ate
Step 3-2. Create a new auth	or certificate. The fields marked with * are mandatory.	
Author name*	Sample	
Password*	•••••	
Confirm password*	Apply the same password for the distributor certificate	
Additional Fields		
?	< Previous Next > Finish Canc	el

# • Login with Samsung account

<u>R</u>	×
SAMSUNG Account	1
Sign in to your Samsung account	
Email	
banpei.lim@samsung.com	
Remember my ID	
Next	
Find ID	
Create account	
G Sign in with Google	
	<ul> <li>.</li> </ul>

- Keep your certificates backup in a safe location. When you update your published applications, the update must be signed with the same author certificate as the original application.
- If the applications are signed with different author certificates, the update can be recognized as a different application and not an update.

👷 Create Certificate Profile	×
Device Type     Certificate Profile     Author Certificate     Distributor Certificate	
Step 3-3. The author certificate is complete.	
Congratulations!	
Your new author certificate is located in [ C:/Users/banpei.lim/SamsungCertificate/Sample ]. Remember to register or update your application in the seller site. It is also recommended to make a backup of the certificate and store it in a secure location.	
Backup path         Certificate backup path         Browse	
Next you must create a distributor certificate to be able to install applications to Samsung devices.	
? < Previous Next > Finish Cancel	

- Add a distributor certificate
- Select "Create a new distributor certificate"

😧 Create Certificate Pro	file				×
Oevice Type	🔷 🗸 Certificate Profi	le 🔷 🗸 Ai	uthor Certificate	4 Distribu	tor Certificate
Step 4. Distributor ce	rtificate				
Create a new dis	stributor certificate				
O Select an existin	ng distributor certificate			Prouse	
Password Conf	firm			browse	
	L				
?		< Previous	Next >	Finish	Cancel

- For Tizen API please select "Partner" privilege
- Add the device ID (DUID) for the target device

Create Certificate Pr	rofile				
Device Type	🔷 🗸 Certificate Pro	file 🔷 🗸 A	uthor Certificate	💊 👍 Distribut	or Certificate
Step 4-1. To install a distributor certifica	applications to a Samsung de te.	vice, the device DL	IID (Device Unique Ide	entifier) must be inc	cluded in the
Privilege*	Partner			•	
Password*	Public				
	Partner				
Password Confirm	*				
O Import a DUID	list file*			Browse	
~					
Add individual	DUIDs*				
Ent	er DUID manually or connect	to a device			<b>^</b>
Ent	er DUID manually or connect	to a device			
	er boib manaaliy or connect				J
Ent	er DUID manually or connect	to a device			
Ente	er DUID manually or connect	to a device			
Ent	er DUID manually or connect	to a device			]
Ent	er DUID manually or connect	to a device			~
?		< Previous	Next >	Finish	Cancel

• Check the Target Device DUID as below

	About This TV		
<ul> <li>Sub-micom Version: T-NLBHDTV-</li> <li>Wired MAC Address: a0:d0:5b:f2:</li> <li>Wireless MAC Address: d0:c2:4e:</li> <li>Bluetooth Address: D0:C2:4E:2F://</li> <li>Smart Control Bluetooth MAC Add</li> <li>Smart Control Battery Status: Hig</li> <li>TVkey Device ID: 000000216096</li> <li>Smart Hub Information</li> <li>Unique ID: GFC6B5YJ4AYIX</li> <li>Unique Device ID: BDCOGBCPBY</li> </ul>	1001 53:2c 2f:a9:bc A9:BD dress: D8:A3:5C:1D:96:D8 Jh 674		
Open Source Licence	QR Code	Close	

• Must include DUID, else the application cannot be installed to Samsung devices

Create Certificate Pr	ofile				×
Device Type	Certificate Pro	ofile 🔷 🗸 A	uthor Certificate	🛛 👍 Distri	butor Certificate
Step 4-1. To install a distributor certificat	applications to a Samsung d te.	evice, the device DL	IID (Device Unique l	dentifier) must be	e included in the
Privilege* Password*	Partner			v	
Password Continue	* ibutor Certificate				×
O Impo 🕜	You defined no DUIDs. This certificate, and it does not you sure you want to cont	s profile only conta allow applications inue?	ins the SDK default to be installed to Sa	distributor msung devices.	Are
			ОК	Cancel	^
Ente	er DUID manually or connec	t to a device			
Ento	er DUID manually or connec er DUID manually or connec	t to a device			-
Ente	er DUID manually or connec	t to a device			
Ente	er DUID manually or connec	t to a device			~
		< Previous	Next >	Finish	Cancel
Create Certificate	Profile	te Profile	Author Cor	lificata	A Distributor (
Stop 4.2. The dig	tributor cortificato is com		Author Cer		4 Distributor C
Step 4-2. The dis		ipiete.			
Warning!					
You have selecte [C:\tizen-studio	d to use the SDK default \tools\certificate-gene	distributor certifi rator\certificate	cate located in s\distributor\tiz	en-distributor	-signer.p12].
You cannot insta application insta	III applications to Samsur Ilations, click Previous ar	ng devices with t nd add the device	his distributor cer DUIDs.	tificate. To get	a certificate that all

?

< Previous Next >

Cancel

Finish

X

#### 3.) Connect the Target Device to Tizen Studio Device Manager

- In Tizen Studio, click "Tools > Device Manager"
- In "Device Manager", click the red circled button

🔯 Device Manager	- 🗆 X
TIZEN STUDIO	
Device Manager	<b>0</b> ()
Select a connected device.	
Name  Platform Port Connection	G E
No connected devices.	
+	♦

• Click "+"

TIZEN STUDIO	
	(
Device Manager o	Ú
Select a connected device.	
Name IP Port Connection	
No content in table	
+	*
Close	

#### • Check the TV IP Address

	IP Set	tings	
IP setting		Get autom	atically
• IP Addr	ess	192.168.	1.100
• Subnet	Mask	255.255.2	255.0
• Gatew	ay	192.168	3.1.1
DNS settir	ng	Get automatic	ally
• DNS S	erver	8.8	.8.8
	ок	Cancel	

- Input the TV Name
- Input the TV IP Address
- Input the Port Number

<u> R</u> emo	ote Device	Manager			$\times$
	<u> A</u> dd D	evice	×	0	
Na	Enter in	formation of remote device.	:t	ion	
	Name	HBU8000			
	IP	192.168.1.100			
	Port	26101			
-					
		Add Cancel	se	<u>,</u>	
L					

• Click TV "App" icon



- Using Remote, Press "1 2 3 4 5"
- Switch On "Developer Mode"
- Key in Tizen Studio Host PC IP address



• TV "Developer Mode" is switched on

ſ	Apps(DEVEL	OP MODE)		8 xm
			0	D
	Editor's Choice		An upp mode just for kide.	
	Netfix Installed	Vourus and installed	VouTube Kids	Annel News

• Go to Tizen Studio Device Manager, turn on the "Connection

<u> R</u> emote D	evice <mark>Man</mark> ager				$\times$
				$\Box + \Diamond$	Ü
Name	IP		Port	Connection	
HBU8000	192.168	1.100	26101	ON	
				$\checkmark$	
				Close	
				Close	

• Right click the device, click "Permit to install applications"

Device Manager			-	- 0
TIZEN STUDIO				
Device Man	ager			0
Select a connected device.				
Name 🔻	Platform	Port	Connection	192.168.1.100:261
HG55BU800AWXXT	tv-6.5 192.168.	.1.100:26101	ON	
	Install app			
	Add log tab			
	Delete log tabs			
	Connect			
+ 192.168.1.100:26101	(HG5: Disconnect			
Message Enter keywords for sear	hing i			
	Open shell			
Time Level 🔻 Pid	Permit to install applications		Message	

• Message "Succeeded to upload a certificate" is shown

Device Manager	- 🗆 X
TIZEN STUDIO	
Device Manager	0 i
Select a connected device.	
Name   Key Message   Key Connection	192.168.1.100:261
Succeeded to upload a certificate	
+ 192.168.1.100:26101 (H	*
Message Enter keywords for searching messages.	
Time Level <b>v</b> Pid <b>v</b> Tid <b>v</b> Tag <b>v</b> Mess	age

#### 4.) Debugging

• In Tizen Studio, Click "Debug As → Tizen Web Application".



• App is uploaded in TV



• User debug the App using Chrome DevTools as shown below

