

Samsung TizenOS

Prerequisites

- To test your application on a TV:
- Make sure that the TV has the latest firmware installed.
- Connect your computer and the TV to the same network.
- [Create a certificate profile.](#)

Connecting the TV and SDK

To connect the TV to the SDK as a remote device:

Enable Developer Mode on the TV:

On the TV, open the "Smart Hub".

Select the "Apps" panel.



Figure 1. Apps panel location

In the "Apps" panel, enter "12345" using the remote control or the on-screen number keypad.

The developer mode configuration popup appears.

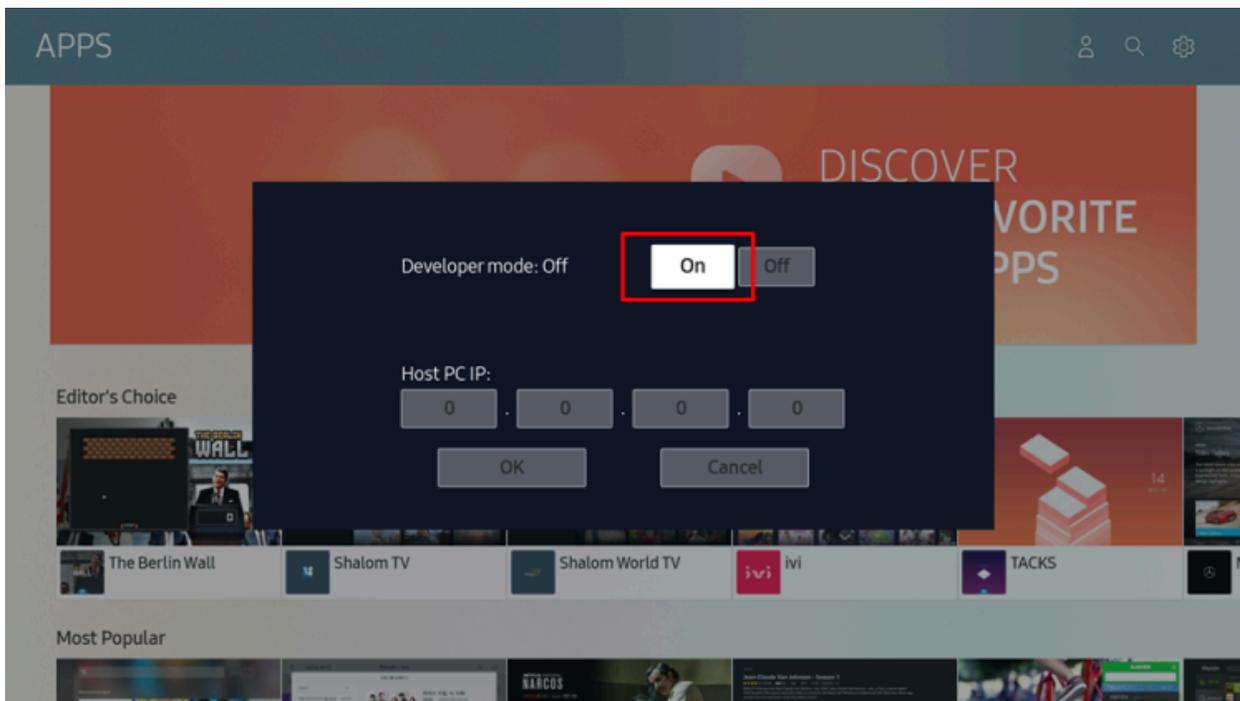


Figure 2. Developer mode configuration

Switch "Developer mode" to "On".

Enter the IP address of the computer that you want to connect to the TV, and click "OK".

Reboot the TV.

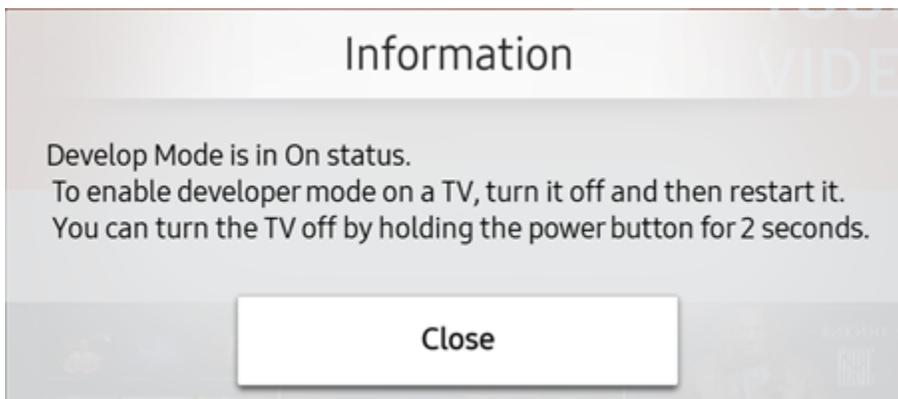


Figure 3. Reboot popup

When you open the "Apps" panel after the reboot, "Develop Mode" is marked at the top of the screen.

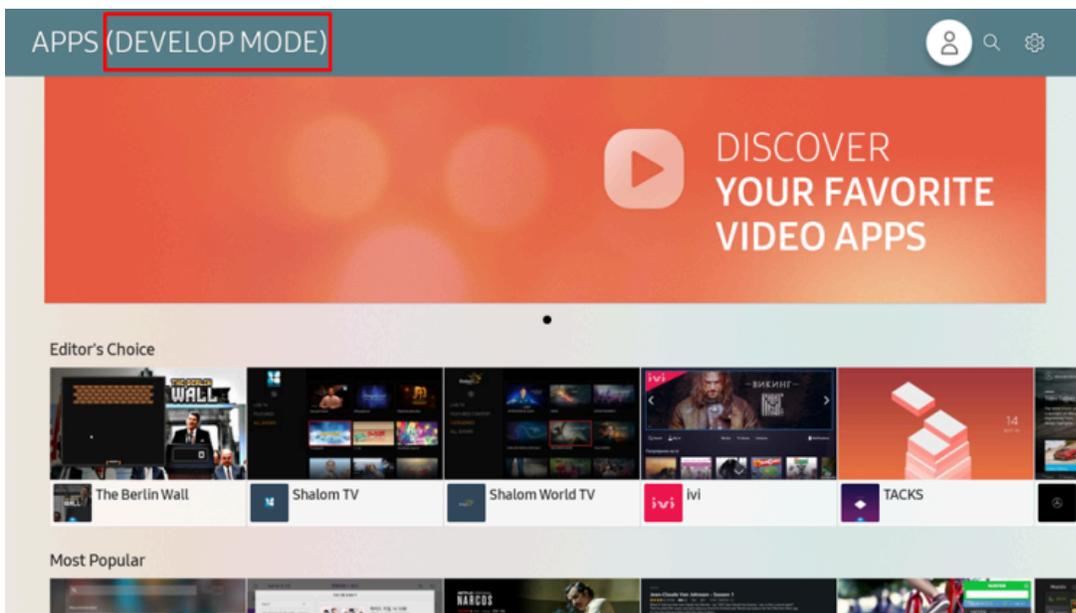


Figure 4. Developer mode enabled
Connect the TV to the SDK:
In the Tizen Studio, select "Tools > Device Manager".
The Device Manager launches.

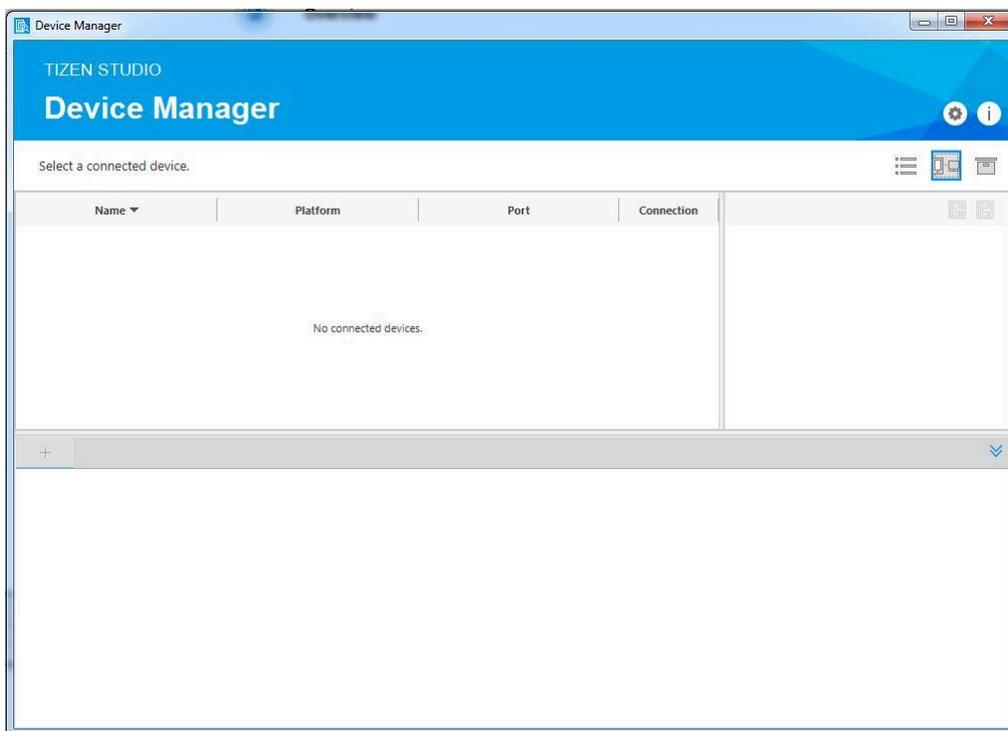


Figure 5. Device Manager
To add a TV, click "Remote Device Manager" and "+".

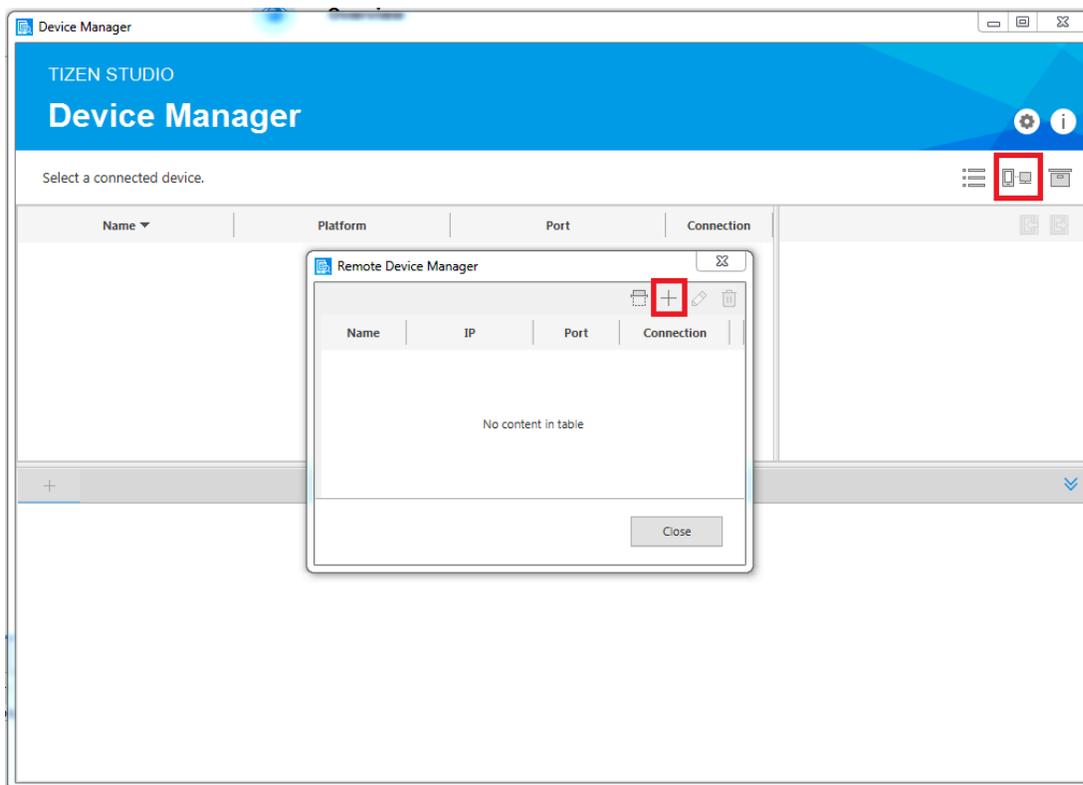


Figure 6. Remote Device Manager

In the "Add Device" popup, define the information for the TV you want to connect to, such as the name, IP address, and port number, and click "Add".

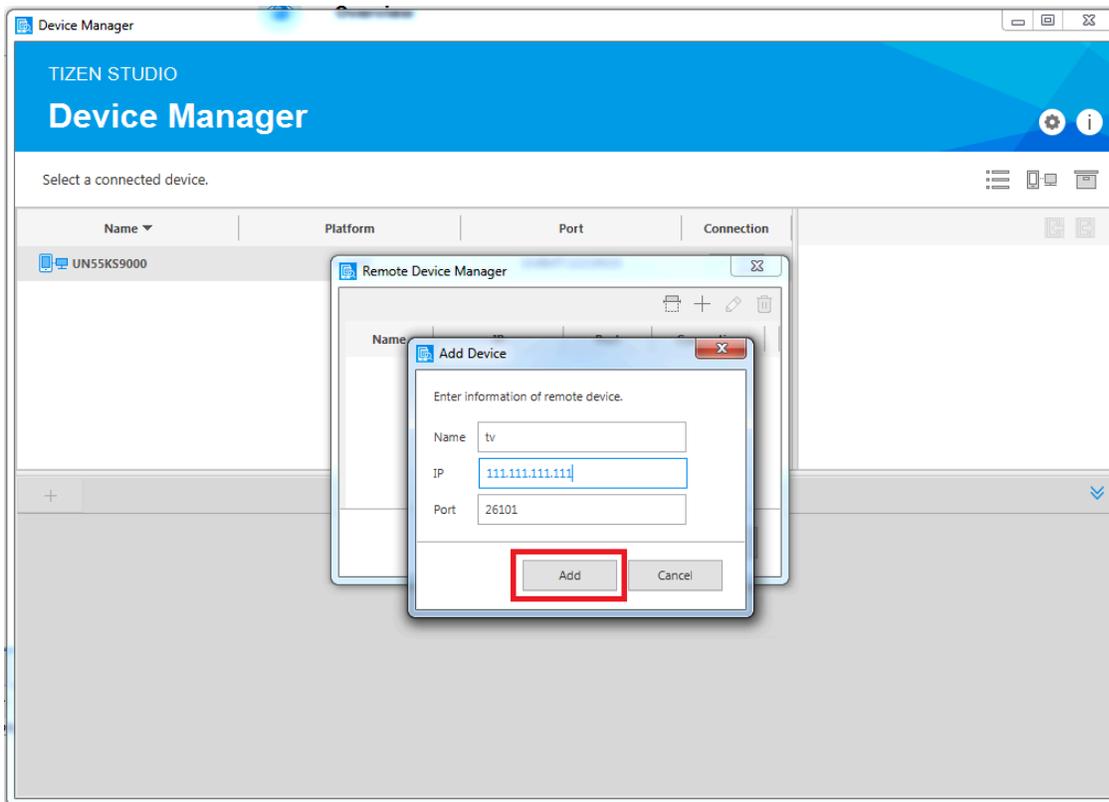


Figure 7. Add Device dialog

In the Device Manager window, select the TV from the list, and switch "Connection" to "On".

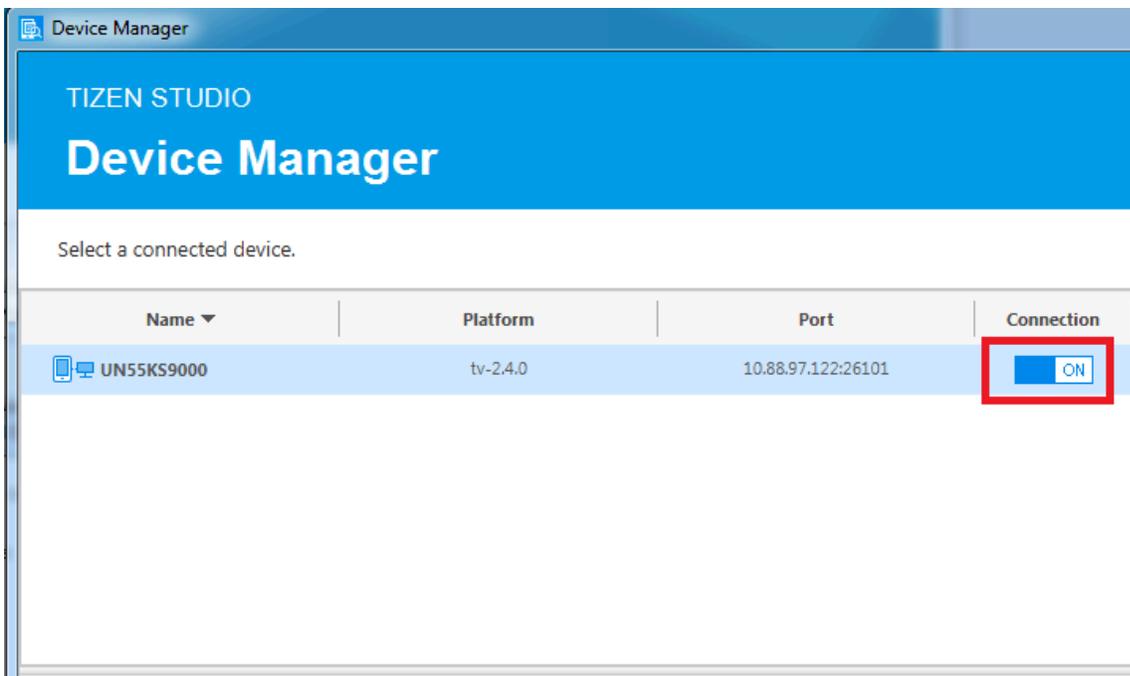


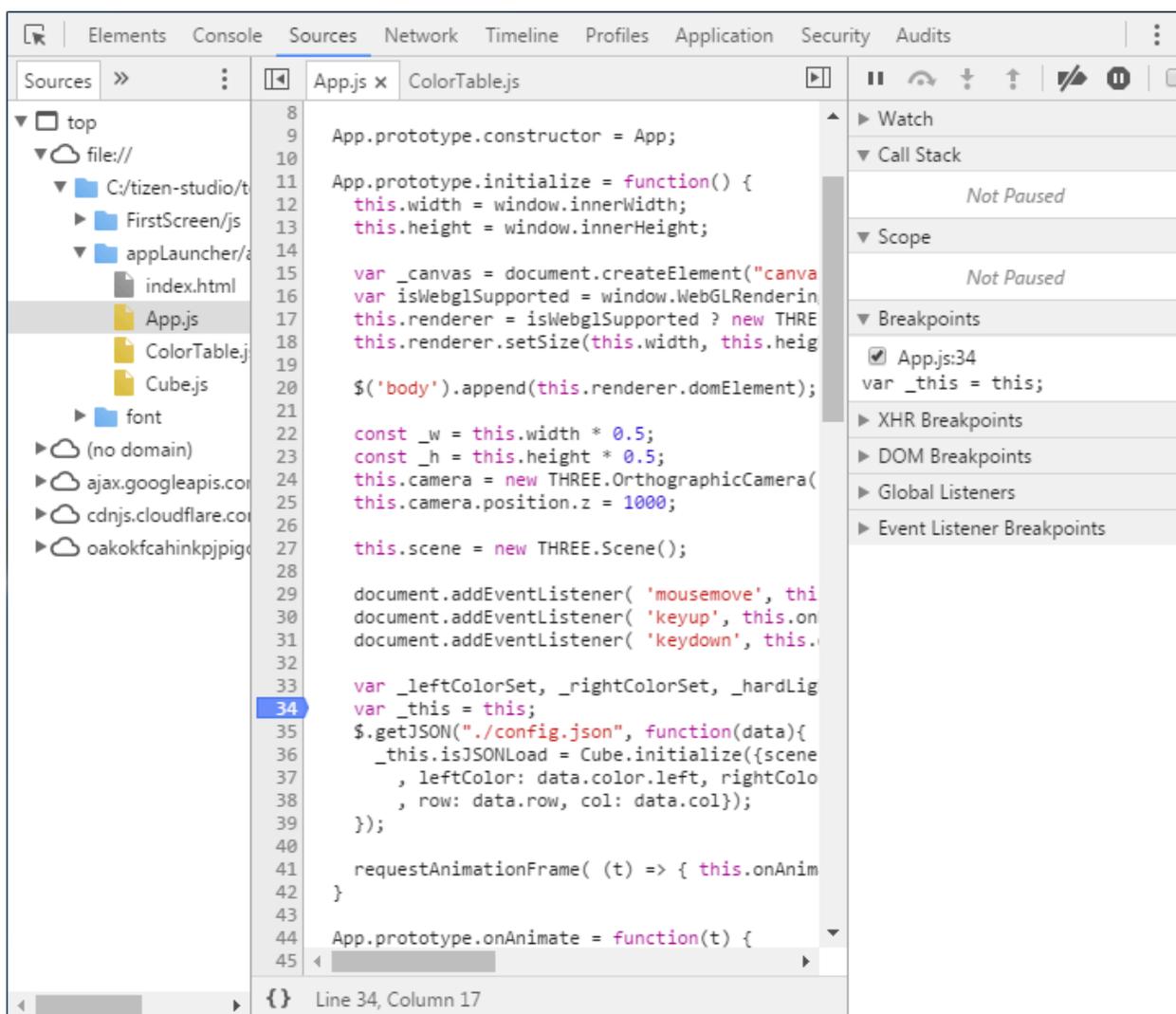
Figure 8. Switch connection on

Now you can launch applications on the TV directly from the Tizen Studio.

Launching Applications on the TV

- You can launch your application on the target device in normal or debug mode:
- To launch the application in normal mode, right-click the project in the "Project Explorer" view, and select "Run As" and a specific launch mode:
- **"Tizen Web Application"**: Run the application on the connected device.
- **"Tizen Web Unit Test Application"**: Run the application with [unit tests](#).
- To launch the application in debug mode, right-click the project in the "Project Explorer" view, and select "Debug As > Tizen Web Application".

The Web Inspector runs automatically when you launch the application in debug mode. It is based on the WebKit Web Inspector, and has been modified to support remote debugging.



The screenshot displays the Tizen Web Inspector interface. The 'Sources' panel on the left shows a file tree with 'App.js' selected. The main editor shows the JavaScript code for 'App.js', with line 34 highlighted: `var _this = this;`. A breakpoint is set at this line, as indicated by the 'App.js:34' entry in the 'Breakpoints' panel on the right. The status of the breakpoint is 'Not Paused'. The code in the editor includes: `App.prototype.constructor = App;`, `App.prototype.initialize = function() { this.width = window.innerWidth; this.height = window.innerHeight; var _canvas = document.createElement("canvas"); var isWebglSupported = window.WebGLRenderingContext.prototype.isWebglSupported ? new THREE.WebGLRenderer({ canvas: _canvas, antialias: true }) : null; this.renderer = isWebglSupported ? new THREE.WebGLRenderer({ canvas: _canvas, antialias: true }) : null; this.renderer.setSize(this.width, this.height); $('body').append(this.renderer.domElement); const _w = this.width * 0.5; const _h = this.height * 0.5; this.camera = new THREE.OrthographicCamera(-_w, _w, -_h, _h, 1000); this.scene = new THREE.Scene(); document.addEventListener('mousemove', this.onMouseMove); document.addEventListener('keyup', this.onKeyUp); document.addEventListener('keydown', this.onKeyDown); var _leftColorSet, _rightColorSet, _hardLight; var _this = this; $.getJSON("../config.json", function(data) { _this.isJSONLoad = Cube.initialize({scene: this.scene, leftColor: data.color.left, rightColor: data.color.right, row: data.row, col: data.col}); }); requestAnimationFrame((t) => { this.onAnimate(t); }); App.prototype.onAnimate = function(t) {`