



ScriptX

User Guide

v1.00



Document Conventions

	Note: Provides related information or information of special importance.
 Caution	Caution: Indicates potential damage to hardware or software, or loss of data.
	Warning: Indicates a risk of personal injury.

Document Status

Doc Status: User Document Template	Technical Publication: v1.00
------------------------------------	------------------------------

For more information, visit our website at: www.asrmicro.com

Disclaimer

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of Asrmicro. ASR retains the right to make changes to this document at any time, without notice. ASR makes no warranty of any kind, expressed or implied, with regard to any information contained in this document, including, but not limited to, the implied warranties of merchantability or fitness for any particular purpose. Further, ASR does not warrant the accuracy or completeness of the information, text, graphics, or other items contained within this document.

ASR products are not designed for use in life-support equipment or applications that would cause a life-threatening situation if any such products failed. Do not use ASR products in these types of equipment or applications.

Copyright © 2020. ASR International Ltd. All rights reserved..

Table of Contents

1	PREFACE.....	5
1.1	FUNCTION.....	5
1.2	ABBVS AND TERMS.....	5
2	INSTALLATION & USAGE.....	6
2.1	SYSTEM REQUIREMENTS.....	6
2.1.1	<i>Hardware.....</i>	<i>6</i>
2.1.2	<i>Operation System.....</i>	<i>6</i>
2.2	INSTALLATION.....	6
2.3	HOW TO USE.....	6
3	APPENDIX.....	12
3.1	REPORT ISSUES.....	12
3.2	UPDATE THIS DOCUMENT.....	12
3.3	REVISION HISTORY.....	12

1 Preface

1.1 Function

ScriptX is a module of CATStudio, its main function is to execute user customized scripts to interact with other modules of CATStudio such as Logger, and to send adb commands to UE(adb root, adb pull, adb push etc). ScriptX has a Python interpreter embedded, so the script should follow the grammar and syntax of Python.

1.2 Abbs and terms

Abbs and Terms	Discription
ScriptX	The main module
AP	Application Processor
CATStudio	Cellular Analysis & Test Studio
CP	Communication Processor
UE	Mobile phone, ASR DKB/EVB
adb	Android Debug Bridge
Python	A popular programming lauguage
ICL	ASR UE Log that saved by CATStudio

2 Installation & Usage

2.1 System Requirements

2.1.1 Hardware

Processor: Pentium IV $\geq$ 1GHz.

Memory: 512MB.

Hard Disk: 128MB.

2.1.2 Operation System

OS: MS Windows XP, Windows 7;

2.2 Installation

ScriptX is a dll shipped with CATStudio formal release.

Name	Description
ScriptX.dll	Main function file of ScriptX
ADB/temp/	Folder that contains the temporary files during the execution of the script
CAT-Audio/Scripts	Folder that contains the default scripts

Table 1

2.3 How to Use

Normally the usage could be summarized as follows:

1. Open **CATStudio** and choose an arbitrary online settings according the ASR dkb board you are using (Figure 1 CATStudio main UI).

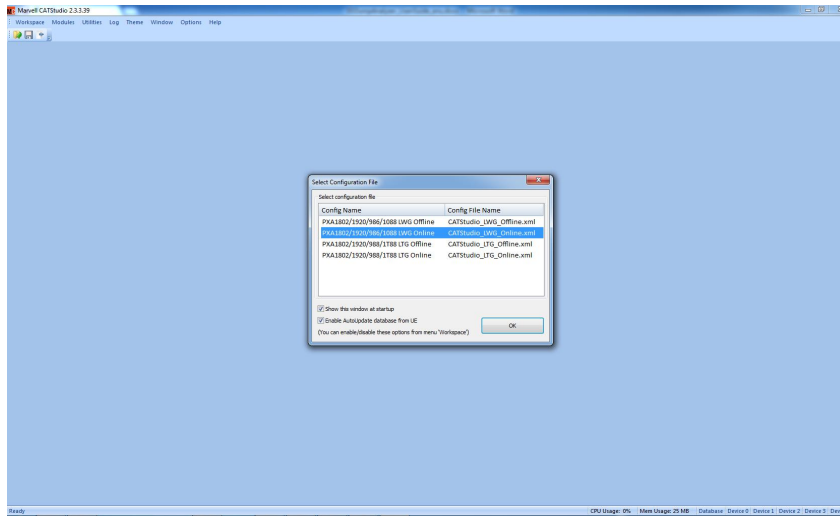


Figure 1 CATStudio main UI

2. Click menu **“Modules”** on the main menu, select **“ScriptX”** and then click(Figure 2 Menuitem of ScriptX).

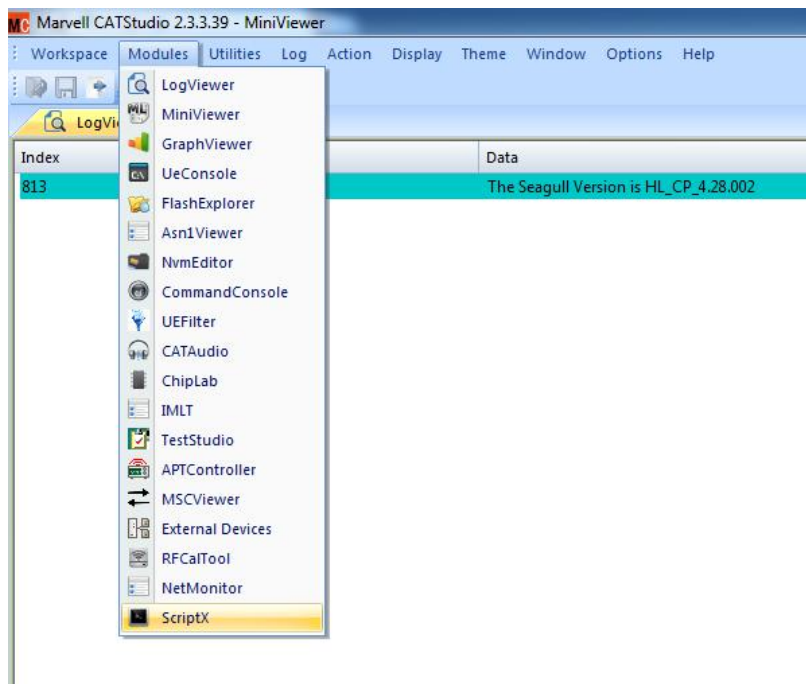


Figure 2 Menuitem of ScriptX

3. The main UI(Figure 3 ScriptX Main UI) includes three major areas. The “**Script files tree**”(Figure 4 Script files tree) contains all the default scripts files which are already shipped with CATStudio formal release. When you click on any of the script files appearing in the tree, the content of the script file would be presented in the “**Edit Area**”(Figure 5 Edit Area). When executing the script file, the log will be printed in the “**Log Panel**”(Figure 6 Log Panel).

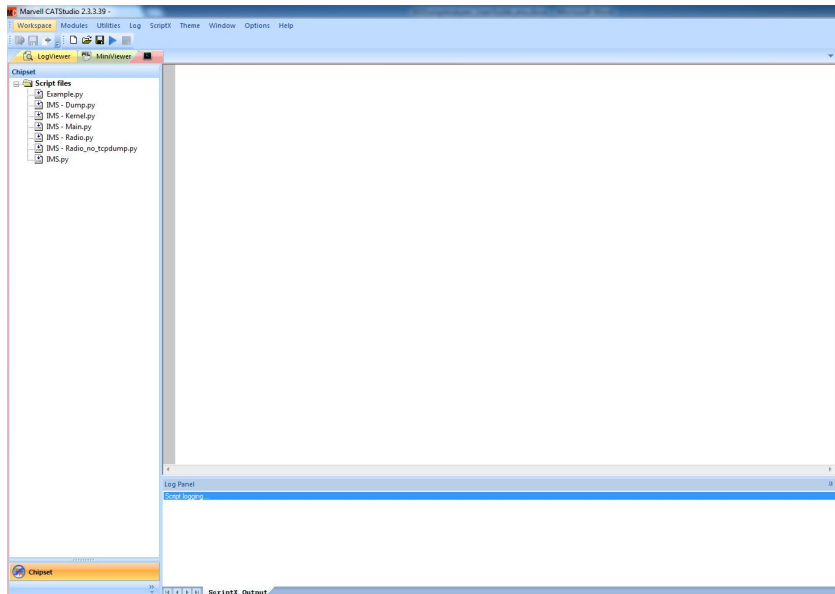


Figure 3 ScriptX Main UI

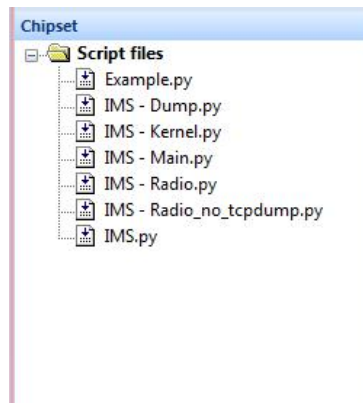


Figure 4 Script files tree

```
import sys
import time
import os
import subprocess
import ctypes
import time
import shutil
import zipfile
import repr
cats = CATSProxy.Init()
sys.stdout = cats
sys.stderr = cats
#get current working directory
#print os.getcwd()

##### Delete Old Logs #####
#delete old local files and create temp directory
temp_dir = 'temp'
shutil.rmtree(temp_dir, ignore_errors=True)
os.mkdir(temp_dir)

filename_prefix = time.strftime('%Y-%m-%d-%H-%M-%S', time.localtime(time.time()))
#print current_time

#require for root
cmd = 'adb wait-for-device root'
print cmd
p = subprocess.Popen(cmd, stdout=subprocess.PIPE, stderr=subprocess.PIPE, shell=True)
(output, err) = p.communicate()
p_status = p.wait()
#print output
#print p_status

#delete old files
cmd = 'adb wait-for-device shell rm -rf /data/DKEx_x.cap'
print cmd
p = subprocess.Popen(cmd, stdout=subprocess.PIPE, stderr=subprocess.PIPE, shell=True)
(output, err) = p.communicate()
p_status = p.wait()
#print output
```

Figure 5 Edit Area

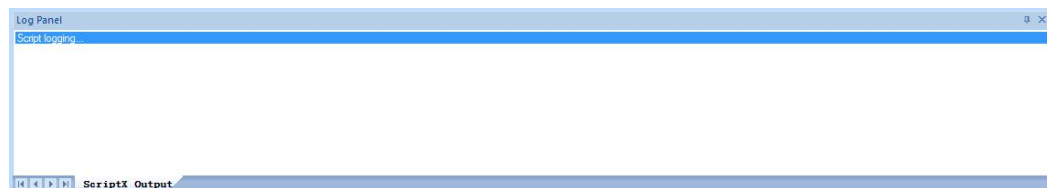


Figure 6 Log Panel

4. How to execute a script file.

- 1) Make sure CATStudio is connecting to a ASR dkb board using DIAG and the database is matched.
- 2) Double click any of the files appearing in the “**Script files tree**”, the content of the script file would appear in “**Edit Area**”.
- 3) Click “**Run**” (Figure 7 “Run” button) at the toolbar of ScriptX.

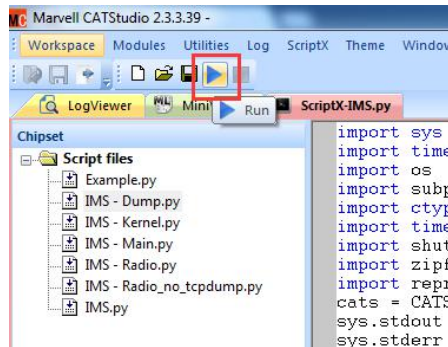


Figure 7 “Run” button

- 4) When the script is running, the arrow indicates the current code line which the interpreter is executing (Figure 8 Snapshot of script execution process), and the log would appear in the “**Log Panel**” (Figure 9 Log output of executing script).

```
#require for root
cmd = 'adb wait-for-device root'
print cmd
p = subprocess.Popen(cmd, stdout=subprocess.PIPE, stderr=subprocess.PIPE, shell=True)
➔ (output, err) = p.communicate()
p_status = p.wait()
#print output
#print p_status
```

Figure 8 Snapshot of script execution process

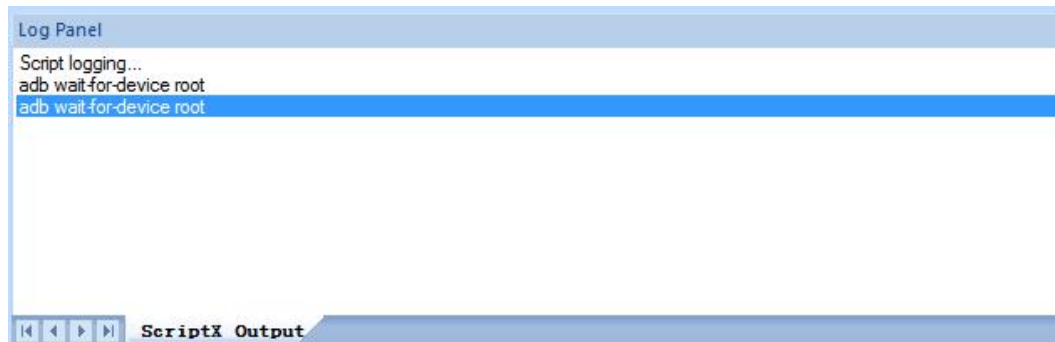


Figure 9 Log output of executing script

- 5) When you want to stop executing the script, just click the “**Stop capturing**” (Figure 10 “Stop capturing” button) in the toolbar.

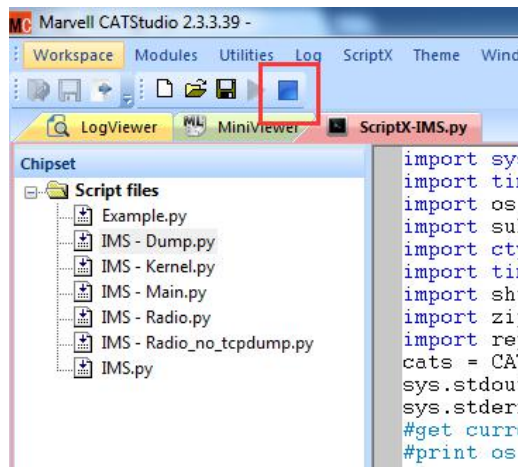


Figure 10 "Stop capturing" button

5. How to open an outside script file.

- 1) Click the **"Open script file"**(Figure 11 "Open script file" button) in the toolbar, and navigate to the directory where your desired script file is located, and open it.

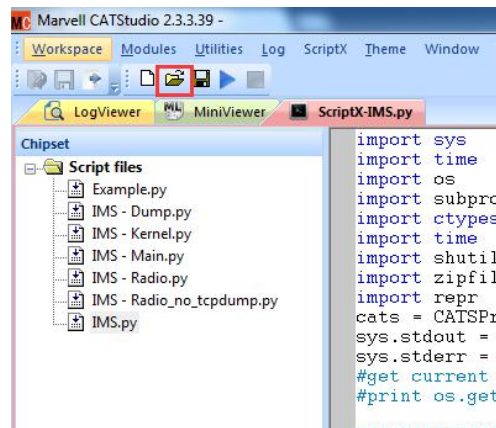


Figure 11 "Open script file" button

6. How to save the modified script file.

- 1) Open any script file you would want to modify.
- 2) Make some modifications to the script file in the edit box area.
- 3) Click the **"Save script to file"**(Figure 12 "Save script to file" button) in the toolbar and save the modified file to another file.

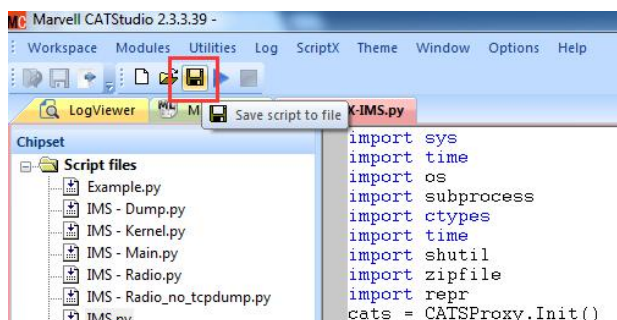


Figure 12 "Save script to file" button

7. How to let script file appear in the "Script files tree" like those default files.
 - 1) Copy the script file you want to appear in the Script files tree.
 - 2) Navigate to the CATStudio Exec/CAT-Audio/Scripts directory.
 - 3) Paste the copy file to this directory and restart ScriptX.

3 Appendix

3.1 Report issues

Please visit webs: <http://support.asrmicro.com>.

Or contact ASR FAE/AE

Or please send email to lianghuxu@asrmicro.com with "PC Tools User Doc Issue/Update: ..." title

Or submit an issue at CQ web: <http://sh2-cq01.asrmicro.com/cqweb/login>.

3.2 Update this document

Please send updated document to lianghuxu@asrmicro.com with "PC Tools User Doc Issue/Update: ..." title for merging, and you will receive merged latest version.

3.3 Revision History

Rev	Description	Date
1.00	Initial version	2014-12-22