


Xuan Platform Architecture



Xuan Hub (The STACK Box)

Why STACK Box? The truth is that all our devices speak in different languages. This confusion leads to unnecessary painful experience for end users, business, corporate, organization owners trying to develop, bundle, install and deploy IoT solution.

With current economic and flexibility in mind, bundle devices and services from different brands, vendors and protocols that hardly communicate with each other are in demand and here is where STACK Box come into picture.



The STACK Box
A Smart Home Controller

Today user experience is painful because technology makes things complex. The STACK Box is about reigning in that complexity and making it simple.


Watch the video [▶](#)

Color available :

Develop for STACK Box

We welcome the creative communities of 3rd-party developers, makers, designers and enthusiasts to take part in creating new applications.

You can help users to automate their home and daily life with your Xuan application. For example, energy saving can be tedious and it is not an excuse anymore with the help of the STACK Box. Security and monitoring can be expensive but STACK Box platform is here to change all of that.



Energy Savings

Reduce your energy bill by dimming lights and turning off appliances when they are not in use, all from a single app! Connect your home appliance including TVs, fans, lamps and more by using supported smart switches. Automatically turn off dangerous appliances and unnecessary devices when you aren't using them.

* Coming soon

Security and Monitoring

Alert you when your windows open unexpectedly or remind you to close the window when it's about to rain. It automatically locks your door when you forget to do so or if your hands are full. It can alert you when sensors detect smoke or carbon monoxide in your home.

Receive image alerts via social media or email if there is a break-in.

Reporting **Alerts** **Action**

Appliance	Used Power	Spent So far	Sort by
Aircon (bedroom 2)	80 kWh	\$ 160	35 Hours
Hue Living Room	14 kWh	\$ 50	42 Hours

Other than Home Automation

STACK Box is not just for home automation. It can be creatively integrated into health monitoring system, medical health care, senior home, hotel, office, factory, mall, shops, schools, plantation, farms, tourist attraction, entertainment center and others that required automated process, data collection and real-time execution with least or no human intervention.

We welcome everyone from individual to industry player to reach us and work together to develop and deploy solution on Xuan platform.



Develop on Xuan Platform

Freedom is the key when you develop for Xuan Platform. All our default pre-installed applications on STACK Box are developed from HTML5 (UI) and Python (Daemon). The tools to develop them can be from a very simple text editor to IDE which are freely available.

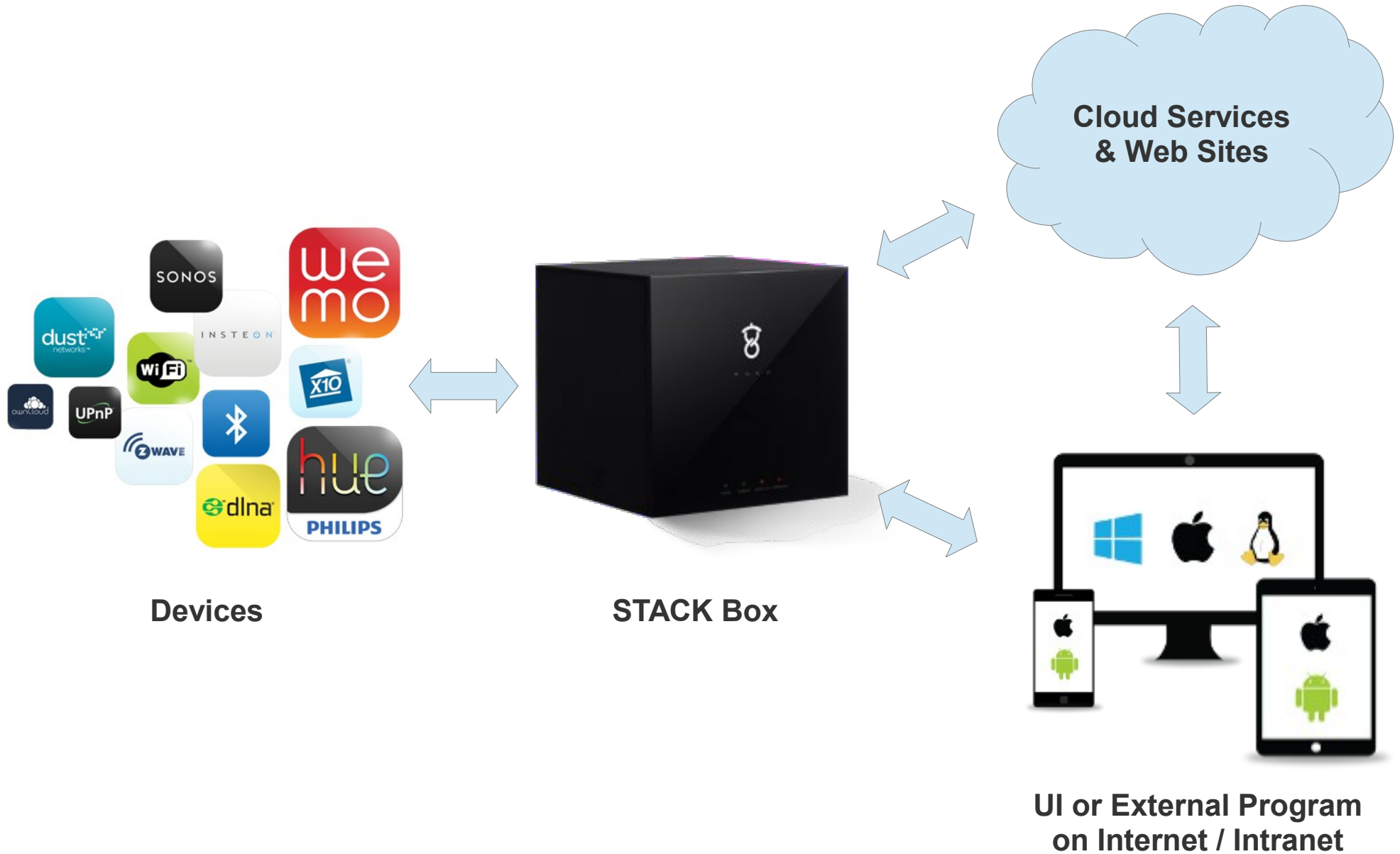
If your solution does not required any special back-end or daemon program, then you only need to develop your own User Interface (e.g. HTML5, iOS, Android and etc) to interact with the existing HTTPS API on the STACK Box.

Why wait? Join us and start develop your own IoT solution on Xuan platform.

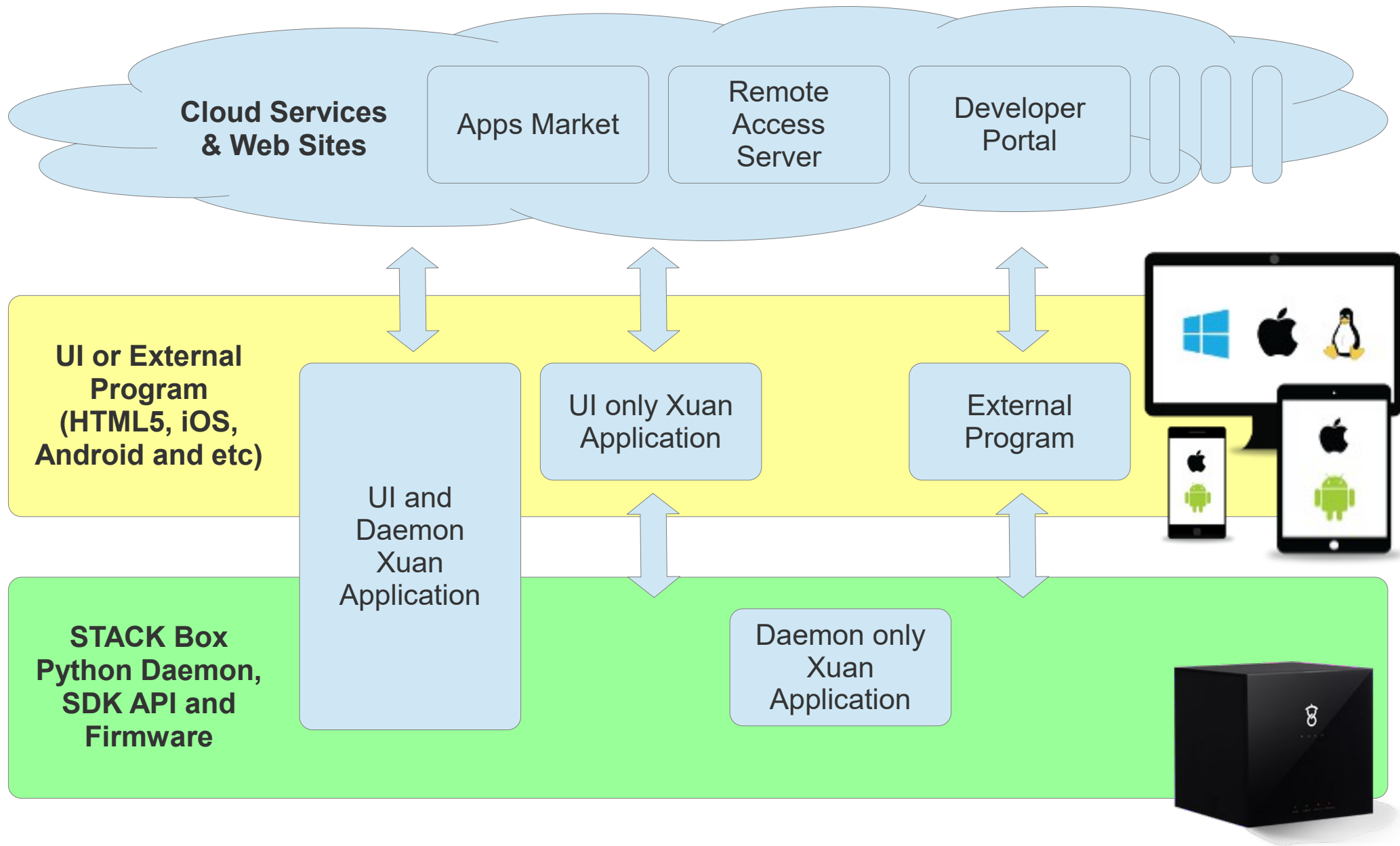


```
Python PSF Docs
python™
# Python 3: Fibonacci series up to n
>>> def fib(n):
>>>     a, b = 0, 1
>>>     while a < n:
>>>         print(a, end=' ')
>>>         a, b = b, a+b
>>>     print()
>>> fib(1000)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
```

Xuan Ecosystem

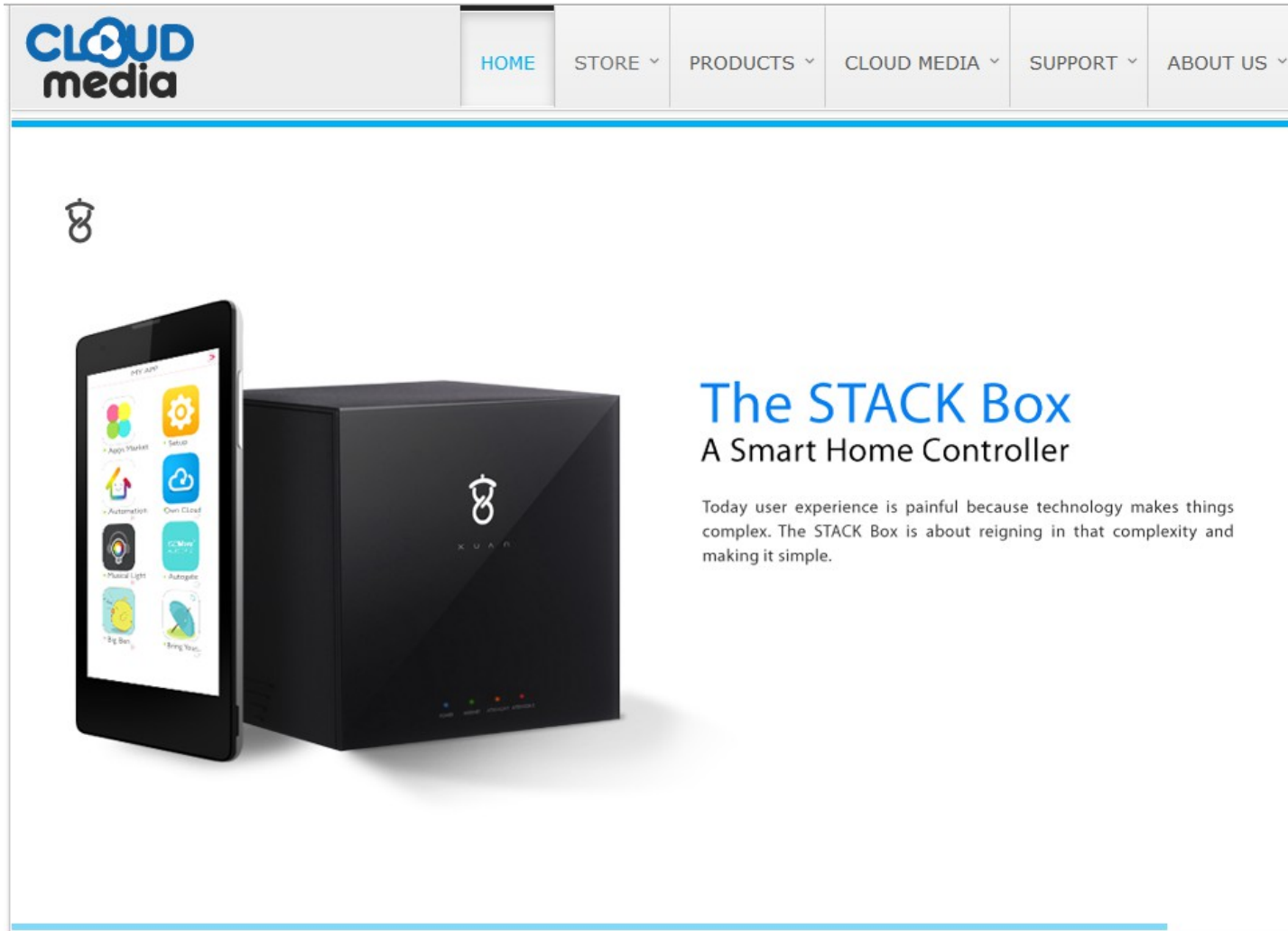


Xuan Platform Software Architecture



Xuan Application Development (1)

Get a STACK Box from cloudmedia.com. Or email to xuan@cloudmedia.com for more complex and special corporate project business requirements.



The screenshot displays the Cloud Media website's navigation bar and a product page for the STACK Box. The navigation bar includes the Cloud Media logo and menu items: HOME, STORE, PRODUCTS, CLOUD MEDIA, SUPPORT, and ABOUT US. The main content area features a large image of the STACK Box, a black cube-shaped device, and a tablet displaying the Xuan application interface. The application interface shows various smart home control icons such as Apps Market, Settings, Automation, Own Cloud, Musical Light, Autogate, Big Ben, and Firing Toys. To the right of the product image, the text reads: "The STACK Box" in blue, followed by "A Smart Home Controller" in black. Below this, a paragraph states: "Today user experience is painful because technology makes things complex. The STACK Box is about reigning in that complexity and making it simple."

CLOUD media

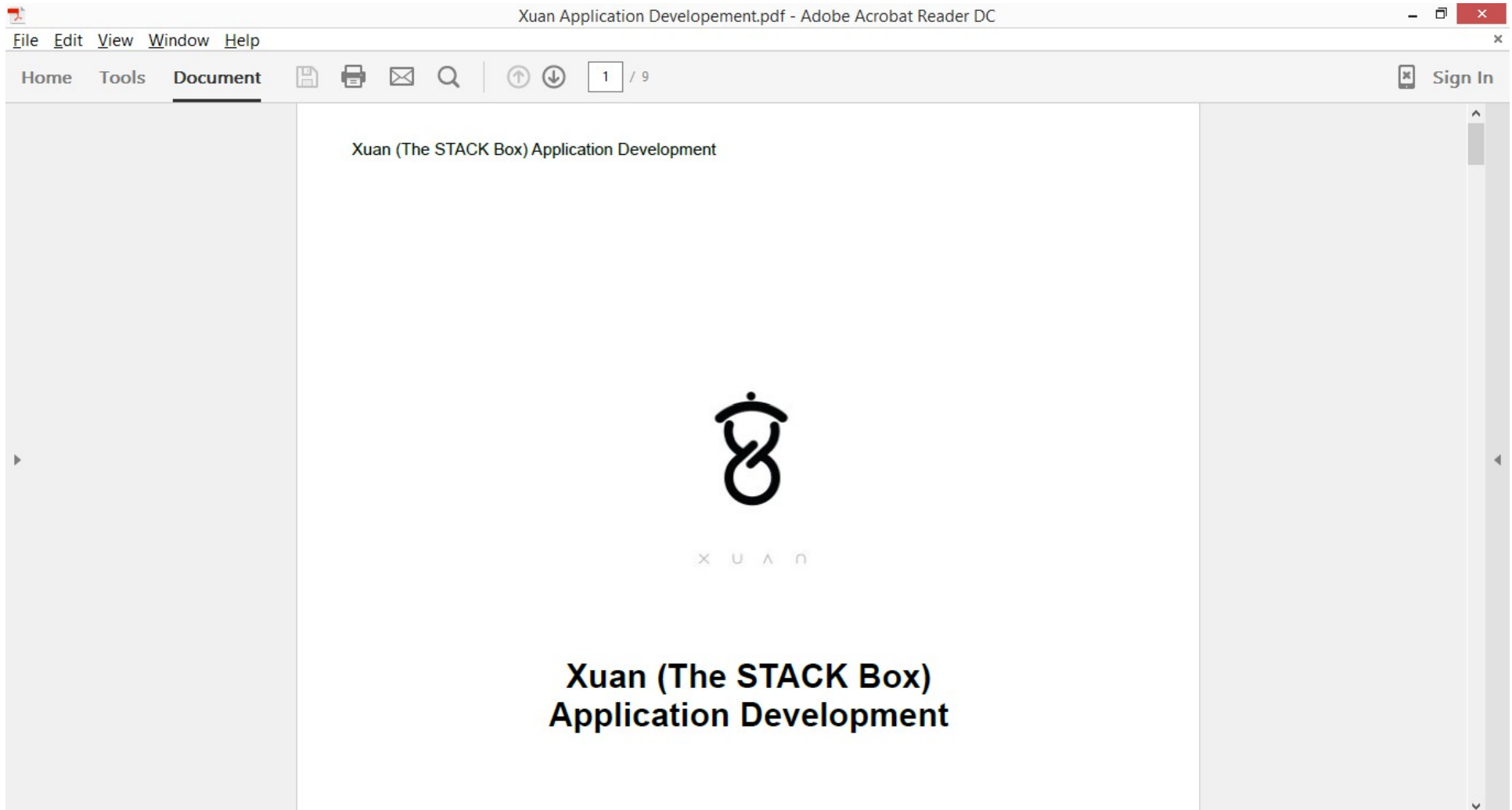
HOME STORE PRODUCTS CLOUD MEDIA SUPPORT ABOUT US

The STACK Box
A Smart Home Controller

Today user experience is painful because technology makes things complex. The STACK Box is about reigning in that complexity and making it simple.

Xuan Application Development (2)

Go through the Xuan Application Development PDF which can be downloaded from developer.thexuan.com.



Xuan Application Development (3)

Refer to the API Documentation on developer.thexuan.com while developing your Xuan Application.



[Architecture](#) | [API Documentation](#) | [Download SDK](#) | [Manage Apps](#) | [Developer & Customer Support Forum](#)

o Stackbox System API

o **Adv Device Controller Manager**

- oAffinex FTDI
- oApplication Manager
- oBLE
- oBluetooth
- oBroadLink
- oDC Moto Autogate
- oDevice Controller Manager
- oDevice Manager
- oDimmer
- oDimmer Stepper
- oDoor Lock
- oDriver Manager
- oDust
- oEvent Log Manager
- oFile Browser
- oFile Operation
- oFoscam F19821w
- oFoscam FI8910w
- oFTDI
- oGoogle Nest
- oHorn
- oHue
- oInsteon Hub
- oIP Camera
- oLifx
- oLocation Manager
- oLogitech Harmony
- oMedia Player
- oNotification Manager
- oPanasonic IP Camera
- oPoncorn Hour

Get Advance Device Controller Details By Id

com.cloudMedia.theKuroBox.sdk.service.manager.advDeviceControllerManagerService
AdvDeviceControllerManagerService.get_advance_device_controller_details_by_id(...)

Get advance device controller details.

Parameters

	type/value	description
advanceDeviceControllerId	String	Advance Device Controller ID
language	String	[Optional] Preferred language. Default is en.

Return Type

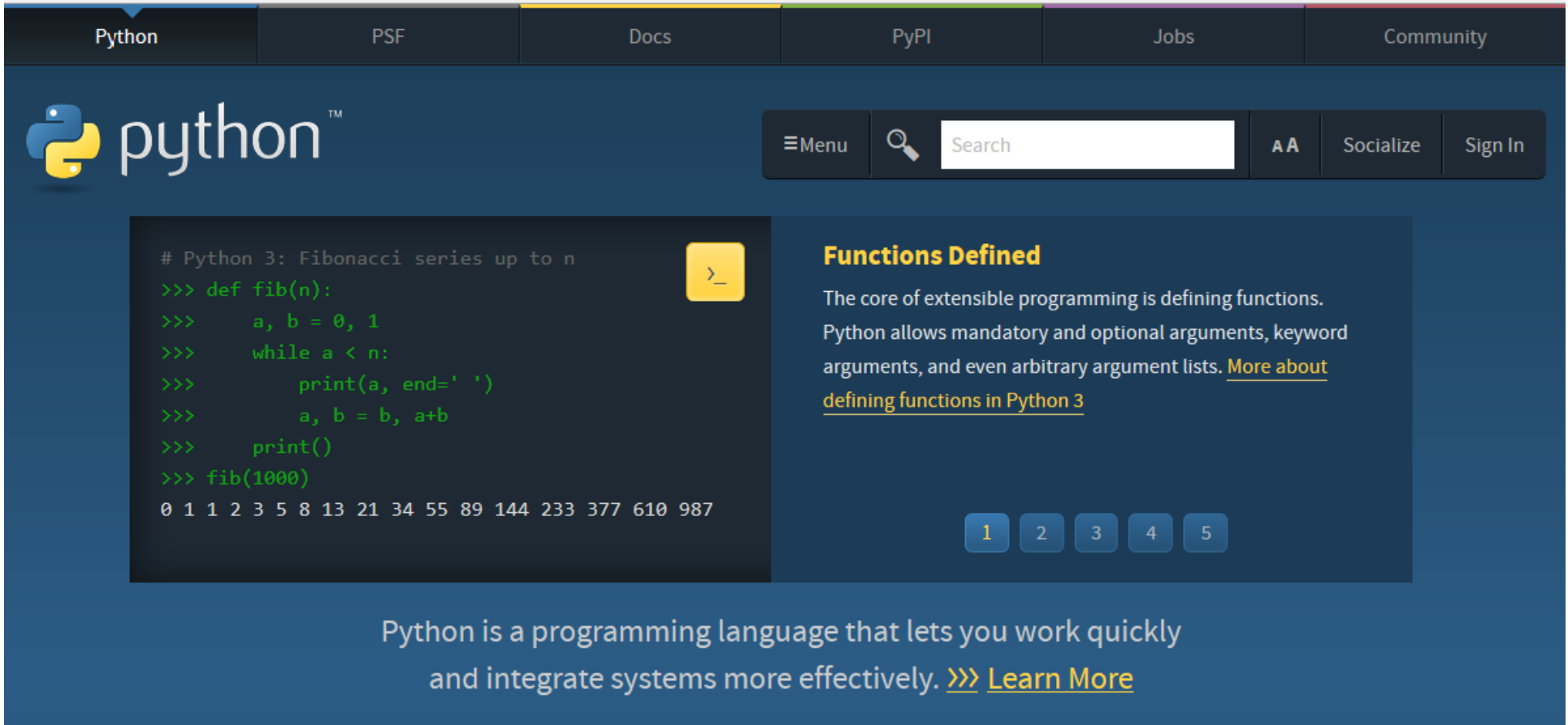
Dictionary

Example Request

GET `https://{{HOST}}/cgi-bin/syb_reqresp.cgi?app_id=2000100&module=advance_device_controller_manager&method=get_advance_device_controller_details_by_id&advanceDeviceControllerId=advanceDeviceControllerId&language=language`

Xuan Application Development (4)

Daemon Xuan Application required technical knowledge on Python (python.org).



The screenshot shows the Python.org website interface. At the top, there is a navigation bar with links for Python, PSF, Docs, PyPI, Jobs, and Community. Below the navigation bar is the Python logo and a search bar. The main content area features a code editor on the left with a yellow run button, and an article snippet on the right titled "Functions Defined".

```
# Python 3: Fibonacci series up to n
>>> def fib(n):
>>>     a, b = 0, 1
>>>     while a < n:
>>>         print(a, end=' ')
>>>         a, b = b, a+b
>>>     print()
>>> fib(1000)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
```

Functions Defined

The core of extensible programming is defining functions. Python allows mandatory and optional arguments, keyword arguments, and even arbitrary argument lists. [More about defining functions in Python 3](#)

1 2 3 4 5

Python is a programming language that lets you work quickly and integrate systems more effectively. [>>> Learn More](#)

Xuan Application Development (5)

Download the Xuan SDK from <https://github.com/TheStackBox/xuansdk> for Daemon Xuan Application Python development.

The screenshot displays the GitHub interface for the repository `TheStackBox / xuansdk`. At the top, the GitHub logo and navigation links are visible. The repository name is followed by statistics: 3 Watchers, 6 Stars, and 0 Forks. Below this, the repository description is "The STACK Box - Xuan Development SDK".

Repository statistics:

- 19 commits
- 1 branch
- 1 release
- 1 contributor

Current branch: `master`. The file tree shows the following structure:

File/Folder	Version	Last Commit
Automation	v1.1 Beta Release	2 months ago
SDKLibrary	v1.1 Beta Release	2 months ago
SampleApp	v1.1 Beta Release	2 months ago
LICENSE		2 months ago
README.md		2 months ago


The README.md content is displayed below the file tree, showing the word `xuansdk` in a large font.

On the right side, the sidebar contains navigation options: Code, Issues (0), Pull requests (0), Pulse, and Graphs. Below these are the HTTPS clone URL (`https://github.com/1`) and buttons for "Clone in Desktop" and "Download ZIP".

Xuan Application Development (6)

Register Xuan developer account on apps.thexuan.com. Develop your Xuan application and deploy it on apps.thexuan.com.

LOG-IN



Welcome to the Xuan (The STACK Box) Apps Market Developer Program

Xuan: An Apps Driven IoT Hub (Gateway)

- **Registration and Apps Submission:** We are open for registration. Stay tune by subscribing to our Facebook (<http://facebook.com/xuanbox>) or Twitter page (<http://twitter.com/xuanbox>).
- **Engage in Developer Program:** If you are a devices maker or automation solution provider or system integrator. Contact us now on email at xuan@cloudmedia.com to grasp an engineering sample of our box for jumpstart application development.
- **Developer Portal:** Visit developer.thexuan.com and forum.thexuan.com for getting started information, documentation, tutorials and to ask questions.

Create your account

Email

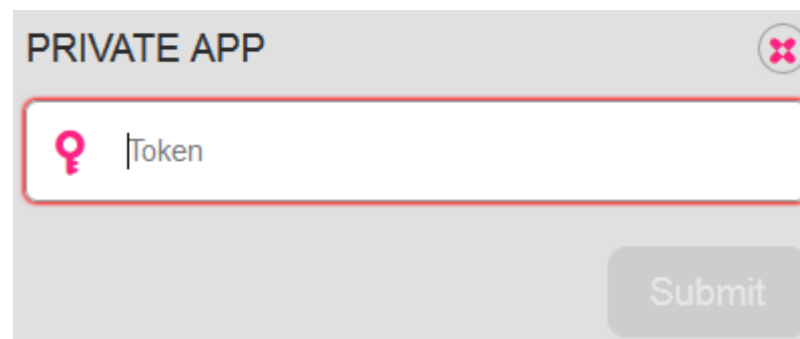
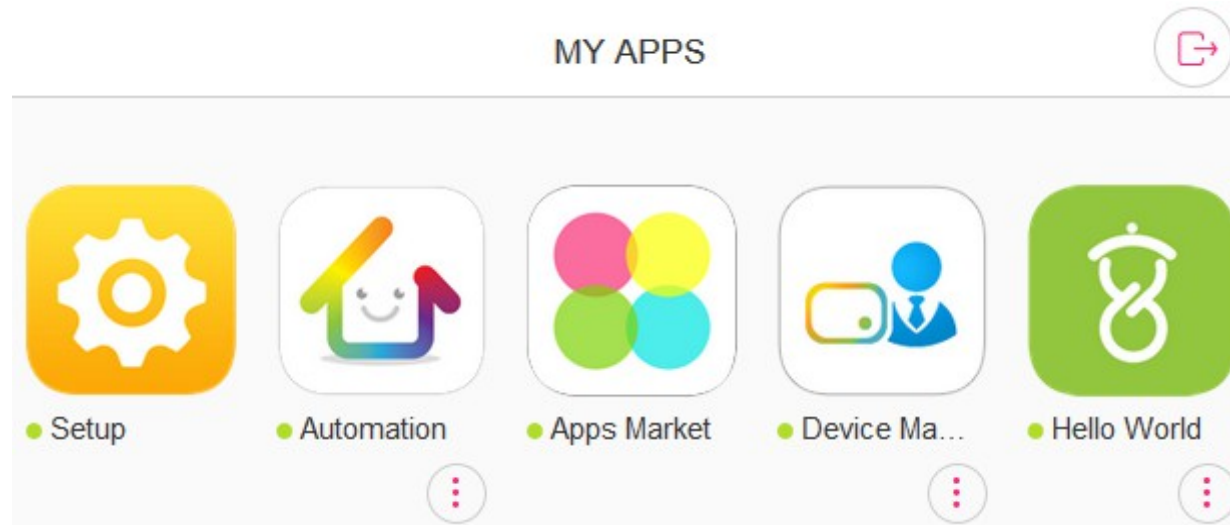
Password (use 6 to 20 characters.)

Re-type Password

[Log In](#) / [Forgot Password?](#)

Xuan Application Development (7)

Install the “Xuan App” from Apple App Store or Google Play Store. Use “MY APPS”, “Apps Market” and “PRIVATE APP” to install and test your Xuan Application.



The screenshot shows the 'PRIVATE APP' interface. At the top, the text 'PRIVATE APP' is displayed in a grey header, with a close icon in a circle to its right. Below the header is a text input field with a red border. Inside the field, there is a pink key icon followed by the text 'Token'. Below the input field is a grey 'Submit' button.

Xuan Application Development (8)

Get help and feedback from the community on forum.thexuan.com.



Search Member

Hello There, Guest! ([Login](#) — [Register](#))

Cur

The Xuan Forum

General			
Forum		Threads	Posts
	Official News Mods/Admin created threads with comments invited from all	12	166
	General Discussion Got a query or always wondered why? Then post it in here.	48	328
	Guides & Tutorials Guides, Tips and Tools to get the best from your device.	5	41
	Order Status Updates Kick Starter pre-order status updates	4	167

Xuan - The STACK Box			
Forum		Threads	Posts
	Apps Reviews & Feedbacks	12	160