

WISE-PaaS/OTA User Guide

V2.0.5

ADVANTECH

Enabling an Intelligent Planet

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Technical Support and Assistance

Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages.

1 Preface

1.1 Software Applications and Background

Thank you for using WISE-PaaS/OTA Series. It focuses on remote software update. It provides one-stop updates for application, provisioning, firmware, driver and BSP. Upgrade process and status can be tracked and monitored by server. Upgrade schedule can be set by sever to make a planned update. It can roll back to older version when exception happens. Also supports scripting upgrade such as shell or batch which make the update more flexible. In addition, WISE-PaaS/OTA offers RESTful API web service which allows user to integrate OTA functions with other applications

This client-server architecture software allows upgrade schedule setting , upgrade management on the server side and download & deploy on the client.

1.2 Precautions

Supported platform:

Server: Windows Server 2012 64bit

Client: Windows 7 / Windows 8 / Windows10 32bit 64bit

Following items should be installed or configure before using the OTA Server:

1) Java virtual machine. You can download from the following link.

<http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>

2) Note: The default FTP server is not provided in current version, you can use the existing one or download a FTP Server from network, for example FileZilla Server.

3) If your FTP server and OTA server are not on the same machine, you should turn off the firewall of the system where OTA server locates.

4) Please make sure that your FTP server can be accessed externally.

5) Time Correction:Set the correct time and zone for the OS.

6) Only silent installation packages can be supported.

1.3 Product Description

1) OTA Server: It include upgrade management, package management, storage management and event management in server. User can use it to upgrade the software packages. It provides active upgrade and scheduling mode to make the update more flexible.

2) OTA Client: It is installed on Client side and can download or deploy the OTA packages automatically.

1.4 Subject Range

Platform\ Upgrade Service	Windows	Linux (Lib+Demo)	Android (Lib+Demo)
Application	*	*	*
Patch	*	X	X
Provisioning	*	X	X
Driver	*	X	X
Firmware	X	X	X
BSP	X	*	*

Only silent installation packages can be supported.

* Support

X Not support right now

Windows: Application (exe/msi/bat) , Patch (exe/msi/bat) , Provisioning (bat) , Drivers (exe/msi/inf+sys+cat+auto install Tool) .

Linux: Supports upgrade by script.

Android:apk, BSP

2 Operation Description

2.1 System Login& Logout

2.1.1 System Login

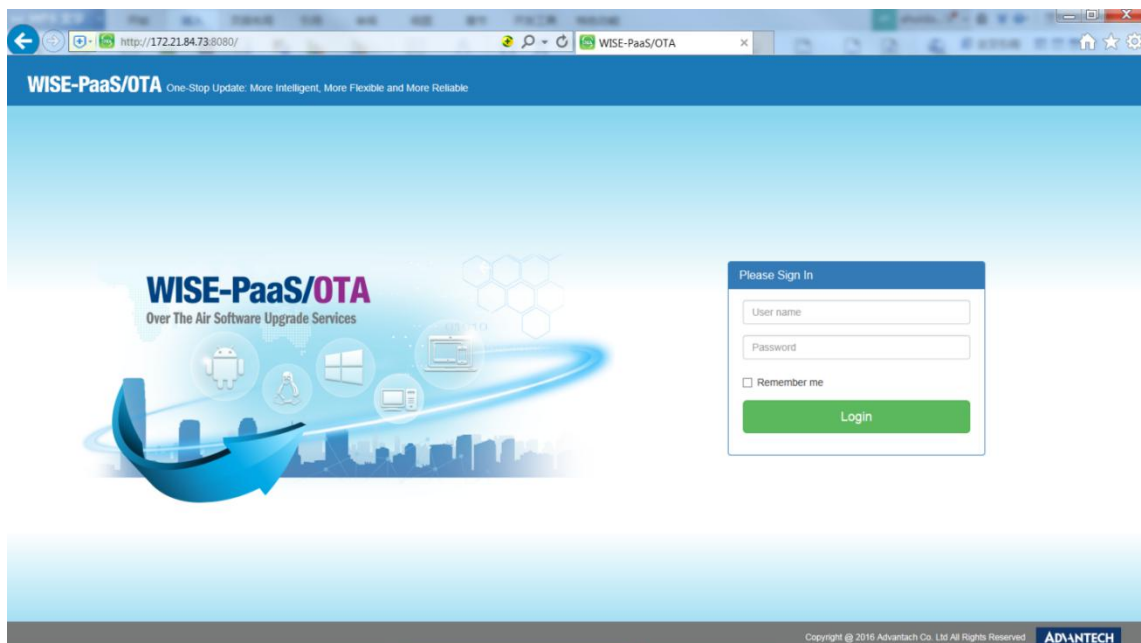
This software is a web-base system. Please click the browser and type in URL: <http://127.0.0.1:8080> to start using the software.

* It is recommended to use Chrome 51 browser or above versions.

*External connection: <http://SeverIP:8080>

* Default user name and password admin/admin

Remember Me: After selecting “Remember Me”, the password is retained for 2 weeks.



2.1.2 System Logout

Click the “Logout” button on the right-top will log out current system. You need to input the password to re-log the software.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upload

Remove

Logout

No.	Type	Version	OS	Arch	Storage	Name
1	OTAPkgLogTest	2.0.11.844	n/a	n/a	default	OTAPkgLogTest-v2.0.11.844-945841b5cdd269e...
2	OTAPkgLogTest	2.0.10.833	n/a	n/a	default	OTAPkgLogTest-v2.0.10.833-9df0c9c1175b89a...
3	win400m	1.0.0.5	n/a	n/a	default	win400m-v1.0.0.5-ea4cc3c878cdab901a891b6...
4	PushServer	1.0.0.0	n/a	n/a	default	PushServer-v1.0.0.0-8479489b841051d18fdaa...
5	POSMonitor	4.0.0.0	n/a	n/a	default	POSMonitor-v4.0.0.0-a7a68b962a34338295b4f...
6	UShop	3.0.0.0	n/a	n/a	default	UShop-v3.0.0.0-ed848c727b4840c1f0866caed...
7	OTATest	3.0.0.0	n/a	n/a	default	OTATest-v3.0.0.0-21e329fad2f9f05b513f1c4da6...
8	OTAType	2.0.0.0	win7/win8/win10	x86_32	default	OTAType-v2.0.0.0-b3f45059de22c54250b3c7b...
9	test_innoSetup	1.0.0.0	n/a	n/a	default	test_innoSetup-v1.0.0.0-b6d5e469a5d30d2075...
10	OTAPkgLogTest	2.0.8.822	n/a	n/a	default	OTAPkgLogTest-v2.0.8.822-7e1f8fdd81161e34c...
11	LinuxPathTest	1.0.0.1	n/a	n/a	default	LinuxPathTest-v1.0.0.1-1f77d4242cb28d3d7598...
12	linuxSmall	1.0.0.1	n/a	n/a	default	linuxSmall-v1.0.0.1-47572c327f09fde687f6eb58...
13	linux400m	1.0.0.5	n/a	n/a	default	linux400m-v1.0.0.5-a2bbde856f426f47dfebbd7...
14	linux100m	1.0.0.1	n/a	n/a	default	linux100m-v1.0.0.1-d1636f51e4c888c3d6b6a7...
15	linux40m	1.0.0.1	n/a	n/a	default	linux40m-v1.0.0.1-1e00820346c9c2344e474007...

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2.2 Device Connection

2.2.1 Add / Delete Device

1) Connect to Server automatically

After setting the server IP and Port successfully , OTA client will connect to server automatically.

Setting

ID:40167E67702E

Server Address: 172.21.84.73

Server Port: 10003

Save Cancel

WISE-PaaS/OTA						
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	No.	Online	Name	OS	Arch	Softwares
	1		40167E67702E	win7	x86_32	0
	2		Alvin	win7	x86_64	1
	3		hello100	win7	x86_64	1
	4		hello101	win7	x86_64	1
	5		hello102	win7	x86_64	2
	6		hello103	win7	x86_64	1
	7		hello104	win7	x86_64	0
	8		hello105	win7	x86_64	1
	9		hello106	win7	x86_64	1
	10		hello107	win7	x86_64	3
	11		hello108	win7	x86_64	2
	12		hello109	win7	x86_64	1
	13		hello110	win7	x86_64	2
	14		hello111	win7	x86_64	2
	15		hello112	win7	x86_64	0
	16		hello113	win7	x86_64	1

You can view the current device information from the “Device Info” card.

WISE-PaaS/OTA						
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	No.	Online	Name	OS	Arch	Softwares
	1		40167E67702E	win7	x86_32	0
	2		Alvin	win7	x86_64	4
	3		hello100	win7	x86_64	4
	4		hello101	win7	x86_64	3
	5		hello102	win7	x86_64	4
	6		hello103	win7	x86_64	4
	7		hello104	win7	x86_64	4
	8		hello105	win7	x86_64	4
	9		hello106	win7	x86_64	4
	10		hello107	win7	x86_64	4
	11		hello108	win7	x86_64	4
	12		hello109	win7	x86_64	4
	13		hello110	win7	x86_64	4
	14		hello111	win7	x86_64	4
	15		hello112	win7	x86_64	4
	16		hello113	win7	x86_64	4

2.2.2 Active Upgrade from Server Side

1) Download & Upgrade

Click the “Upgrade” button to execute the upgrade operation. Client will auto deploy the packages immediately after downloading successfully.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upgrade

Download

Deploy

Upgrade Info

Software Info

Schedule Info

Device Info

Last Failed Information

Time	Package	Action	Message
4 minutes ago	poky_centos_ubuntu_10m-v1.0.0.1...	download	Device download package failed

No.	Name	OS	Arch	Softwares	Upgrade-state
1	40167E67702E	win7	x86_32	0	❌
2	Alvin	win7	x86_64	1	❌
3	hello100	win7	x86_64	1	❌
4	hello101	win7	x86_64	1	❌
5	hello102	win7	x86_64	1	❌
6	hello103	win7	x86_64	1	❌
7	hello104	win7	x86_64	0	❌
8	hello105	win7	x86_64	1	❌

172.21.84.65:8080/page/home.html#

2) Download Only

Click the “Download” button to execute the download operation. Package will be downloaded in client without deploying.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upgrade

Download

Deploy

No.	Name	OS	Arch	Softwares	Upgrade-state
1	40167E67702E	win7	x86_32	0	❌
2	Alvin	win7	x86_64	2	❌
3	hello100	win7	x86_64	4	❌
4	hello101	win7	x86_64	1	❌
5	hello102	win7	x86_64	2	❌
6	hello103	win7	x86_64	3	❌
7	hello104	win7	x86_64	2	❌
8	hello105	win7	x86_64	3	❌
9	hello106	win7	x86_64	4	❌
10	hello107	win7	x86_64	3	❌
11	hello108	win7	x86_64	3	❌
12	hello109	win7	x86_64	3	❌
13	hello110	win7	x86_64	3	❌
14	hello111	win7	x86_64	4	❌
15	hello112	win7	x86_64	1	❌
16	hello113	win7	x86_64	2	❌

172.21.84.65:8080/page/home.html#

3) Deploy Only

Click the “Deploy” button to execute the deploy operation. If the upgrade packages download completely, client will deploy them automatically.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upgrade

Download

Deploy

No.		Name	OS	Arch	Softwares	Upgrade-state	
1		40167E67702E	win7	x86_32	0		>
2		Alvin	win7	x86_64	2		>
3		hello100	win7	x86_64	4		>
4		hello101	win7	x86_64	1		>
5		hello102	win7	x86_64	2		>
6		hello103	win7	x86_64	3		>
7		hello104	win7	x86_64	2		>
8		hello105	win7	x86_64	3		>
9		hello106	win7	x86_64	4		>
10		hello107	win7	x86_64	3		>
11		hello108	win7	x86_64	3		>
12		hello109	win7	x86_64	3		>
13		hello110	win7	x86_64	3		>
14		hello111	win7	x86_64	4		>
15		hello112	win7	x86_64	1		>
16		hello113	win7	x86_64	2		>

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2.2.3 Upgrade Scheduling Setting

Click “🕒” button to set the schedule for different device and different package. Scheduling can be set up in each device independently. It will not affect with each other. Moreover, scheduling can be set by package type and it will not affect with each other. Download schedule and deploy schedule should be set separately. Schedule type includes: daily, weekly, monthly and once.

WISE-PaaS/OTA

Device

Package

Storage

Event

🕒

No.	Online	Name	OS	Arch	Softwares	Upgrade-state	
1		40167E67702E	win7	x86_32	0		>
2		Alvin	win7	x86_64	2		>
3							>
4							>
5							>
6							>
7							>
8							>
9							>
10							>
11							>
12							>
13		hello110	win7	x86_64	3		>
14		hello111	win7	x86_64	4		>
15		hello112	win7	x86_64	1		>
16		hello113	win7	x86_64	2		>

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🕒 Schedule Setting

Package Type: OTAPkgLogTest

Action Type: download deploy

Frequency: daily weekly monthly once

Action Start Time: 00:00

Action End Time: 00:30

Back Confirm

You can view the schedule information via the “Device Schedule Info” Card after you set schedule successfully.

WISE-PaaS/OTA

Device

Package

Storage

Event

Online + upgradeFail

No.	Online	Name	OS	Arch	Softwares	Upgrade-state								
1		40167E67702E	win7	x86_32	0									
<div>Upgrade Info Software Info Schedule Info Device Info</div> <table><thead><tr><th>PackageType</th><th>Action</th><th>Frequency</th><th>Start ~ End</th></tr></thead><tbody><tr><td>OTAPkgLogTest</td><td>download</td><td>daily</td><td>1:0 ~ 23:30</td></tr></tbody></table>							PackageType	Action	Frequency	Start ~ End	OTAPkgLogTest	download	daily	1:0 ~ 23:30
PackageType	Action	Frequency	Start ~ End											
OTAPkgLogTest	download	daily	1:0 ~ 23:30											
2		Alvin	win7	x86_64	4									
3		hello100	win7	x86_64	4									
4		hello101	win7	x86_64	3									
5		hello102	win7	x86_64	4									
6		hello103	win7	x86_64	4									
7		hello104	win7	x86_64	4									
8		hello105	win7	x86_64	4									

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Special Notes on the schedule section:

- The end time should later than start time when you setting the action time, otherwise it is invalid.
- If you select "once" in schedule time, you should ensure that the time which you set is in the future, otherwise it is invalid.
- The start time and end time which you set for action will limit the action execution. The action will enable with the start time and disable with the end time. When the end time is arrived, the download action will suspend and it will be resuming in next schedule time. But end the time will be ignored when the deploy action has been started.
- Daily: Set the start time and end time in a natural day, can not cross the day, that is say the end time can not exceed 23:59:59 to the next day.
- Weekly: The start and end times are set in a natural week and can not be crossed.
- Monthly: The start and end times are set in a natural month and can not be crossed.

Note: the offline device can not set the schedule.

2.2.4 Status Filter

You can filter the connection status and upgrade result by button. This filter allows you to quickly view the device that is not currently online or all update failed devices. As shown in the following figure, select all devices that are offline and fail to update.

Device Filter

Connection Status: All Online Offline

Upgrade Status: All Success Fail

OK

Devices will be displayed with the “Offline + Upgrade failed” condition.






WISE-PaaS/OTA

Device


Package




Storage

Event



Offline + upgradeFail




No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		hello114	win7	x86_64	2	 

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2.2.5 Other Setting

Click “” button to set the Retry times for download or deploy, and whether to enable the backup & roll-back mechanism. Please note, this parameters apply to all devices. By default, download will be retry 3 times, and deploy does not retry and the back-up & roll-back is not enabled.

Device Setting (Settings apply to all devices.)

Download retry times (0-10): - 3 +

Deploy retry times (0-3): - 0 +

Rollback: ☒

OK

2.2.6 View Upgrade Information

Expand the device list and choose the "Upgrade info" card, the download and upgrade process and status will be displayed on this card. The exception information of download or deploy will be retained for 15 days.

The screenshot shows the WISE-PaaS/OTA interface. On the left is a sidebar with navigation options: Device, Package, Storage, and Event. The main area displays a table of devices. The first device, No. 1, is selected, and its 'Upgrade Info' card is expanded. The card shows the 'Last Failed Information' table, which contains one entry: a failed download of 'poky_centos_ubuntu_10m-v1.0.0.1...' 4 days ago. The table has columns for Time, Package, Action, and Message.

No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		40167E67702E	win7	x86_32	0	
Upgrade Info Software Info Schedule Info Device Info						
Last Failed Information						
Time	Package	Action	Message			
4 days ago	poky_centos_ubuntu_10m-v1.0.0.1...	download	Device download package failed			
2		Alvin	win7	x86_64	4	
3		hello100	win7	x86_64	4	
4		hello101	win7	x86_64	3	
5		hello102	win7	x86_64	4	
6		hello103	win7	x86_64	4	
7		hello104	win7	x86_64	4	
8		hello105	win7	x86_64	4	

2.2.7 View Detail Failure Information

If you follow the specification of OTA log which used to monitor the key information of deployed software, the detail exception information can be viewed from the server side when the upgrade exception happens.

The screenshot shows the WISE-PaaS/OTA interface. The main area displays a table of devices. The first device, No. 1, is selected, and its 'Detail Failure Information' card is expanded. The card shows the 'Last Failed Information' table, which contains one entry: a failed download of 'poky_centos_ubuntu_10m-v1.0.0.1...' 4 days ago. The table has columns for Time, Package, Action, and Message.

No.	Online	Name	OS	Arch	Softwares	Upgrade-state
7 minutes ago		OTAPkgLogTest-v2.0.11.844...		deploy	[OTAPkgTest][2.0.11.844][result]failed,OTAPkgTest install failed	
13 minutes ago		linux100m-v1.0.0.1...		deploy	Pr	
5		hello100	win7	x86_64	7	
6		hello101	win7	x86_64	5	
7		hello102	win7	x86_64	5	
8		hello103	win7	x86_64	5	
9		hello104	win7	x86_64	5	
10		hello105	win7	x86_64	5	
11		hello106	win7	x86_64	4	
12		hello107	win7	x86_64	4	
13		hello108	win7	x86_64	4	
14		hello109	win7	x86_64	4	
15		hello110	win7	x86_64	4	

2.2.8 View Current Software Version

The name and version of deployed software will be viewed on “Software Info” of the device page. You can check whether they are available currently. (Available means deploy successfully)

The screenshot displays the WISE-PaaS/OTA web interface. On the left is a dark sidebar with navigation links: Device, Package, Storage, and Event. The main area has a top bar with a search filter set to 'Online + upgradeFail'. Below this is a table listing devices. Device 2, named 'Alvin', is selected, and its 'Software Info' tab is active. This tab shows a table of installed software with the following data:

Software Name	Software Version	Software Usability
OTAPkgTest	2.0.8.822	Available
win100m	1.0.0.1	Available
win10m	1.0.0.1	Available
win400m	1.0.0.5	Available

Below the software info table, a list of other devices is visible, including 'hello100' through 'hello105', each with its own set of software details and upgrade status.

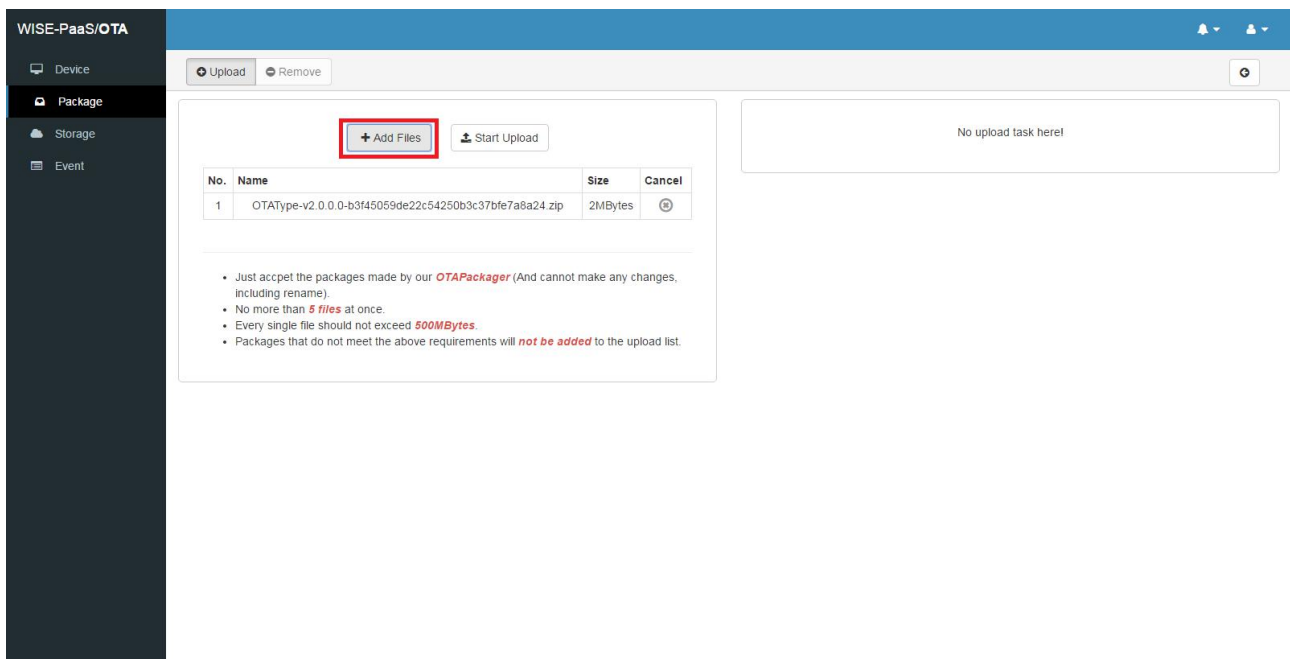
2.3 Package Management

2.3.1 Generate Package

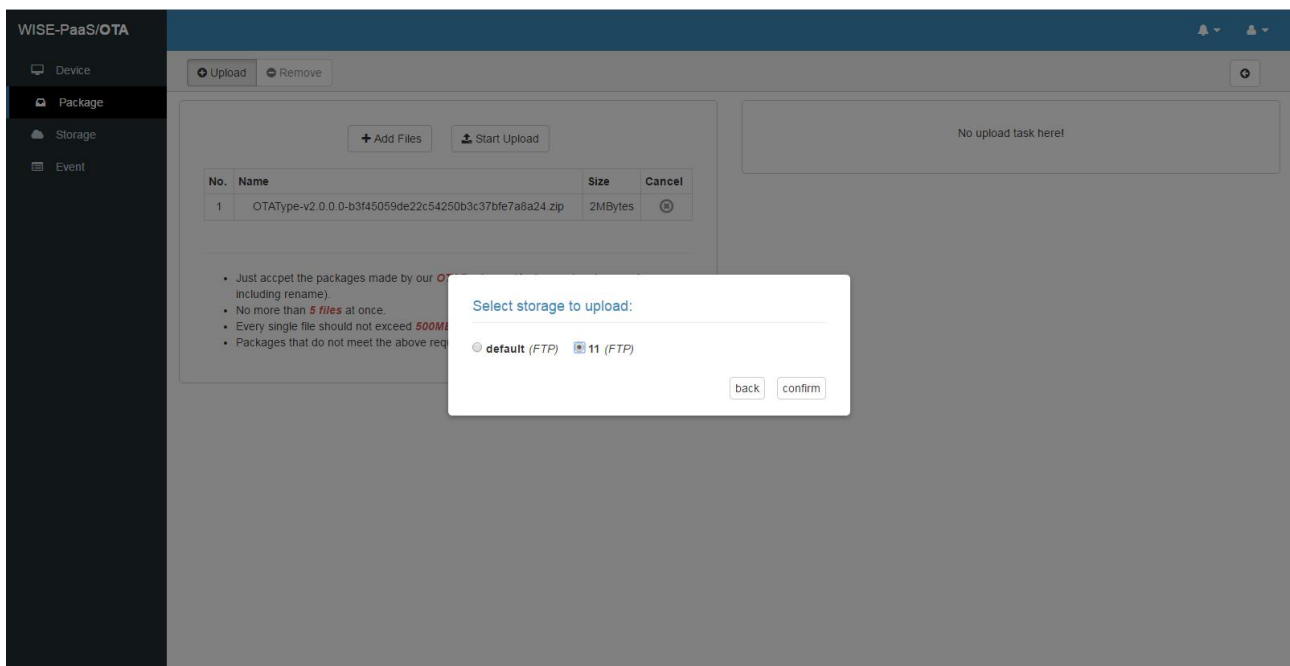
When using WISE-PaaS/OTA system to upgrade, you need to use our OTA Packager Tool to compress your source file which used to deployment. For detail, please refer to “OTAPackager User Guide-English.pdf”.

2.3.2 Upload Package

1) Click “Upload” button will show the file upload page. Use can add files which have generated by OTA Packager Tool though the “Upload” button.



2) After you add the OTA package successful, please click “Start Upload” button to upload the package to storage which you have configured before. Information about how to configure the storage to OTA system please refers to 2.4 section “Storage Management” in this document.



3) The real-time information of upload process and result will be displayed immediately.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upload

Remove

+ Add Files

Start Upload

- Just accept the packages made by our **OTAPackager** (And cannot make any changes, including rename).
- No more than **5 files** at once.
- Every single file should not exceed **500MBytes**.
- Packages that do not meet the above requirements will **not be added** to the upload list.

Upload Files to sub-stg(FTP), Total Progress (2/5)

40.0%

winSmall-v1.0.0.1-ab502c63c85169588e2e6...

Success

100%

win400m-v1.0.0.5-ea4cc3c878cdab901a891...

Upload start

10%

win100m-v1.0.0.1-d68dc360de48ebd9e4c91...

Upload start

50%

win10m-v1.0.0.1-25daa5430eaedac6afc6f82f...

UPLOADING

81%

poky_centos_ubuntu_10m-v1.0.0.1-d2131d7...

Success

100%

4) All packages information can be list on Package page.

WISE-PaaS/OTA

Device

Package

Storage

Event

Upload

Remove

No.	Type	Version	OS	Arch	Storage	Name	
1	win400m	1.0.0.5	n/a	n/a	sub-stg	win400m-v1.0.0.5-ea4cc3c878cdab901a891b6a...	>
2	win100m	1.0.0.1	win7/win8/win10	n/a	sub-stg	win100m-v1.0.0.1-d68dc360de48ebd9e4c911a0...	>
3	win10m	1.0.0.1	n/a	n/a	sub-stg	win10m-v1.0.0.1-25daa5430eaedac6afc6f82fd...	>
4	poky_centos_ub...	1.0.0.1	CentOS-6.5/Ubu...	n/a	sub-stg	poky_centos_ubuntu_10m-v1.0.0.1-d2131d7706...	>
5	winSmall	1.0.0.1	win7/win8/win10	n/a	sub-stg	winSmall-v1.0.0.1-ab502c63c85169588e2e62e1...	>

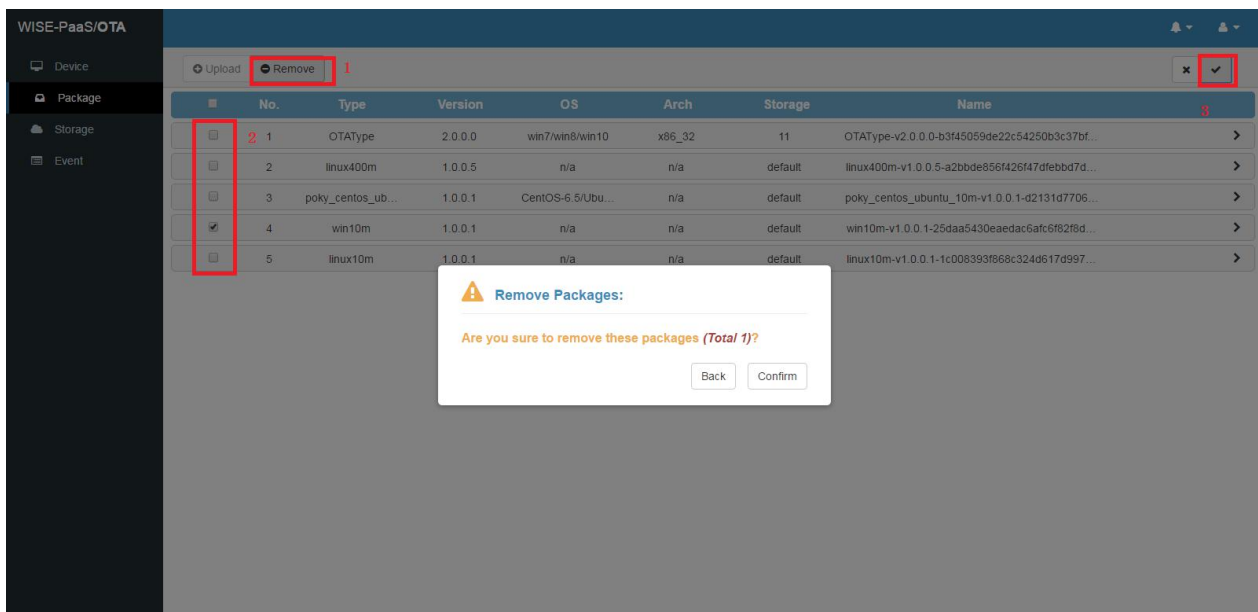
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2.3.3 Delete Package




- 1) Click the "Remove" button;
- 2) Choose the packages which you want to delete;
- 3) confirm to delete.

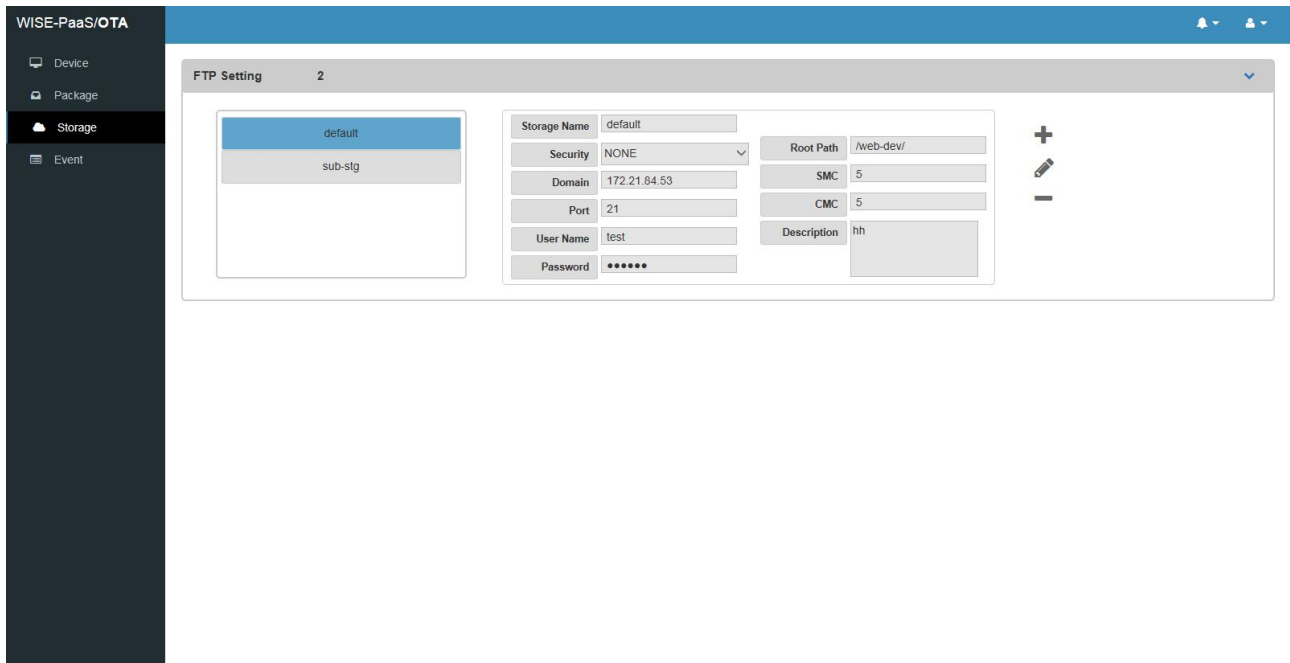


4) Delete completely.



2.4 Storage Management

- 1) Use the  button to add a new FTP Server to OTA system. All fields are required.
- 2) Use the  button to modify the FTP information which you have been added in OTA system.
- 3) User the  button to remove the FTP Server from OTA server. (Removing does not uninstall your FTP server, it means you can't use this server from OTA system) .



2.5 Event Management

2.5.1 Event List

WISE-PaaS/OTA					
Device					
Package					
Storage					
Event					
All					
Timestamp	Module	Target	Level	Message	
2016-10-25 10:39:46.706	Package	linux10m-v1.0.0.1-1c00...	Information	Delete file finished. Success.	>
2016-10-25 10:39:29.065	Package	linux100m-v1.0.0.1-d16...	Information	Delete file finished. Success.	>
2016-10-25 10:36:58.355	Package	linux400m-v1.0.0.5-a2b...	Information	Delete file finished. Success.	>
2016-10-24 18:35:57.613	Package	linux400m-v1.0.0.5-a2b...	Information	Upload file finished. Success.	>
2016-10-24 18:34:18.393	Package	linux100m-v1.0.0.1-d16...	Information	Upload file finished. Success.	>
2016-10-24 18:33:44.314	Package	linux10m-v1.0.0.1-1c00...	Information	Upload file finished. Success.	>
2016-10-24 18:33:41.174	Package	linuxSmall-v1.0.0.1-475...	Information	Upload file finished. Success.	>
2016-10-24 18:33:41.103	Package	LinuxPathTest-v1.0.0.1...	Information	Upload file finished. Success.	>
2016-10-24 18:33:06.911	Package	winSmall-v1.0.0.1-ab50...	Information	Delete file finished. Success.	>
2016-10-24 18:33:06.791	Package	linuxSmall-v1.0.0.1-475...	Information	Delete file finished. Success.	>
2016-10-24 18:33:06.742	Package	win100m-v1.0.0.1-d68d...	Information	Delete file finished. Success.	>
2016-10-24 18:33:06.600	Package	linux400m-v1.0.0.5-a2b...	Information	Delete file finished. Success.	>
2016-10-24 18:33:06.435	Package	win400m-v1.0.0.5-ea4c...	Information	Delete file finished. Success.	>
2016-10-24 18:25:20.189	Package	win400m-v1.0.0.5-ea4c...	Information	Upload file finished. Success.	>
2016-10-24 18:21:12.603	Package	linux400m-v1.0.0.5-a2b...	Information	Upload file finished. Success.	>
2016-10-24 18:18:19.336	Package	LinuxPathTest-v1.0.0.1...	Information	Delete file finished. Success.	>
< 1 2 3 4 5 6 7 ... 23 >					

2.5.2 Search by Time

Click on the calendar to select the date (selected by day), and the events in the selected date will be displayed in the event list.

WISE-PaaS/OTA					
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	<div> <div>2016-10-21</div> <div>Error</div> </div>				
	Timestamp	Module	Target	Level	Message
	2016-10-21 15:27:24.650	Device	C03FD5394405	Error	OTATest-v1.0.0.1-db94761ccd117fa7ad28f572436585fa.zip download...
	2016-10-21 14:45:08.813	Device	C03FD5394405	Error	linux10m-v1.0.0.1-1c008393f968c324d617d997468704bd.zip deploy fi...
	2016-10-21 14:45:07.237	Device	C03FD5394405	Error	linuxSmall-v1.0.0.1-47572c32f709fde687f6eb580e21b7f6.zip deploy fi...
	2016-10-21 10:57:52.430	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:56:57.969	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:56:33.953	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:56:16.707	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:31:18.513	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.936	Package	LinuxPathTest-v1.0.0.1...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.826	Package	linuxSmall-v1.0.0.1-475...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.725	Package	winSmall-v1.0.0.1-ab50...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.632	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:20:38.142	Package	poky_centos_ubuntu_1...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:15:30.450	Package	poky_centos_ubuntu_1...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:14:50.391	Package	winSmall-v1.0.0.1-ab50...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:14:16.515	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	<div> <div><</div> <div>1</div> <div>></div> </div>				

2.5.3 Search by Type

All events will be displayed on this list when you choose “All”. Events which belongs to error type will be filtered out from events. And select “Information” to filter all events of information type.

WISE-PaaS/OTA					
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	<div> <div>2016-10-21</div> <div>Error</div> </div>				
	Timestamp	Module	Target	Level	Message
	2016-10-21 15:27:24.650	Device	C03FD5394405	Error	OTATest-v1.0.0.1-db94761ccd117fa7ad28f572436585fa.zip download...
	2016-10-21 14:45:08.813	Device	C03FD5394405	Error	linux10m-v1.0.0.1-1c008393f968c324d617d997468704bd.zip deploy fi...
	2016-10-21 14:45:07.237	Device	C03FD5394405	Error	linuxSmall-v1.0.0.1-47572c32f709fde687f6eb580e21b7f6.zip deploy fi...
	2016-10-21 10:57:52.430	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:56:57.969	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:56:33.953	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:56:16.707	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:31:18.513	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.936	Package	LinuxPathTest-v1.0.0.1...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.826	Package	linuxSmall-v1.0.0.1-475...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.725	Package	winSmall-v1.0.0.1-ab50...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:29:05.632	Package	linux10m-v1.0.0.1-1c00...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:20:38.142	Package	poky_centos_ubuntu_1...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:15:30.450	Package	poky_centos_ubuntu_1...	Error	Upload file finished. The file transfer failed.
	2016-10-21 10:14:50.391	Package	winSmall-v1.0.0.1-ab50...	Error	Upload file finished. Status is illegal.
	2016-10-21 10:14:16.515	Package	linux100m-v1.0.0.1-d16...	Error	Upload file finished. The file transfer failed.
	<div> <div><</div> <div>1 2</div> <div>></div> </div>				

2.5.4 Event Push

New events will be prompted in the upper right corner. After clicked on it, the event will be added to the event list.

Device

Package

Storage

Event



2016-12-01

Error



12

Timestamp	Module	Target	Level	Message	
2016-12-01 17:24:11.715	Device	hello152	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:21:46.041	Device	hello124	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:17:38.721	Device	hello120	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:15:39.468	Device	hello170	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:15:22.566	Device	hello165	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:13:16.568	Device	hello111	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:50.941	Device	hello184	Error	OTAPkgLogTest-v2.0.6.0-610fb5f70c51a206c33522ae63942f51.zip ...	>
2016-12-01 17:12:49.921	Device	hello182	Error	OTAPkgLogTest-v2.0.6.0-610fb5f70c51a206c33522ae63942f51.zip ...	>
2016-12-01 17:12:23.369	Device	hello146	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:18.271	Device	hello115	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:14.702	Device	40167E67702E	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:13.167	Device	hello135	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:09.562	Device	hello102	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:09.559	Device	Alvin	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:09.556	Device	hello100	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>
2016-12-01 17:12:09.051	Device	hello101	Error	poky_centos_ubuntu_10m-v1.0.0.1-d2131d77064a00a1ac0e8b666...	>

3 Simple Demonstration

3.1 Active Upgrade from Server Side

Usage 1 : Active Upgrade from Server Side——Centralized software upgrade management, to make everything under control

Software A has important bug fixed. Customers need to upgrade the software on all device. Zhang is owner of this project. He hopes he can control the upgrade process. When the exception happens, he can resolve the problem immediately. He start to implement the upgrade task after coordinating the upgrade time with the relevant personnel.

Zhang prepares the source file which used to upgrade, and compresses them using the OTA Package Tool. In accordance with the following items, he will be able to complete the entire upgrade process.

For more information on how to use the about OTA Packager Tool, please refers to “OTAPackager User Guide-English.pdf”.



1. Device Connection

Because all devices in this project have built in OTA client, device will connect to OTA server automatically. User can see all the online devices in device page.(Information about how to ensure the device connect to OTA server successfully, please refers to WISE-PaaS/OTA Installation Guide or 2.2 section "Device Connection" of this document)

WISE-PaaS/OTA						
Device						
No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		40167E67702E	win7	x86_32	0	
2		Alvin	win7	x86_64	1	
3		hello100	win7	x86_64	1	
4		hello101	win7	x86_64	1	
5		hello102	win7	x86_64	2	
6		hello103	win7	x86_64	1	
7		hello104	win7	x86_64	0	
8		hello105	win7	x86_64	1	
9		offline hello106	win7	x86_64	1	
10		hello107	win7	x86_64	3	
11		hello108	win7	x86_64	2	
12		hello109	win7	x86_64	1	
13		hello110	win7	x86_64	2	
14		hello111	win7	x86_64	2	
15		hello112	win7	x86_64	0	
16		hello113	win7	x86_64	1	

2. Storage Configuration

Enter the Storage page to configure the FTP Storage. Because the FileZilla server has been installed, so Zhang only need to configure the FTP server to the existing OTA system. Before using this storage, Zhang has confirmed that the FTP server can be accessed by other machines. If you don't remember how to configure the FTP server, please refer to section 2.4 Storage Configuration. If you are not familiar with how to install and configure the FTP server, you can refer to the following link.

http://ess-wiki.advantech.com.tw/view/How_to_configure_your_FTP_server_to_OTA

WISE-PaaS/OTA	
Device	
Package	
Storage	
Event	

FTP Setting

2

default

sub-stg

Storage Name

default

Security

NONE

Domain

172.21.84.53

Port

21

User Name

test

Password

Root Path

/web-dev/

SMC

5

CMC

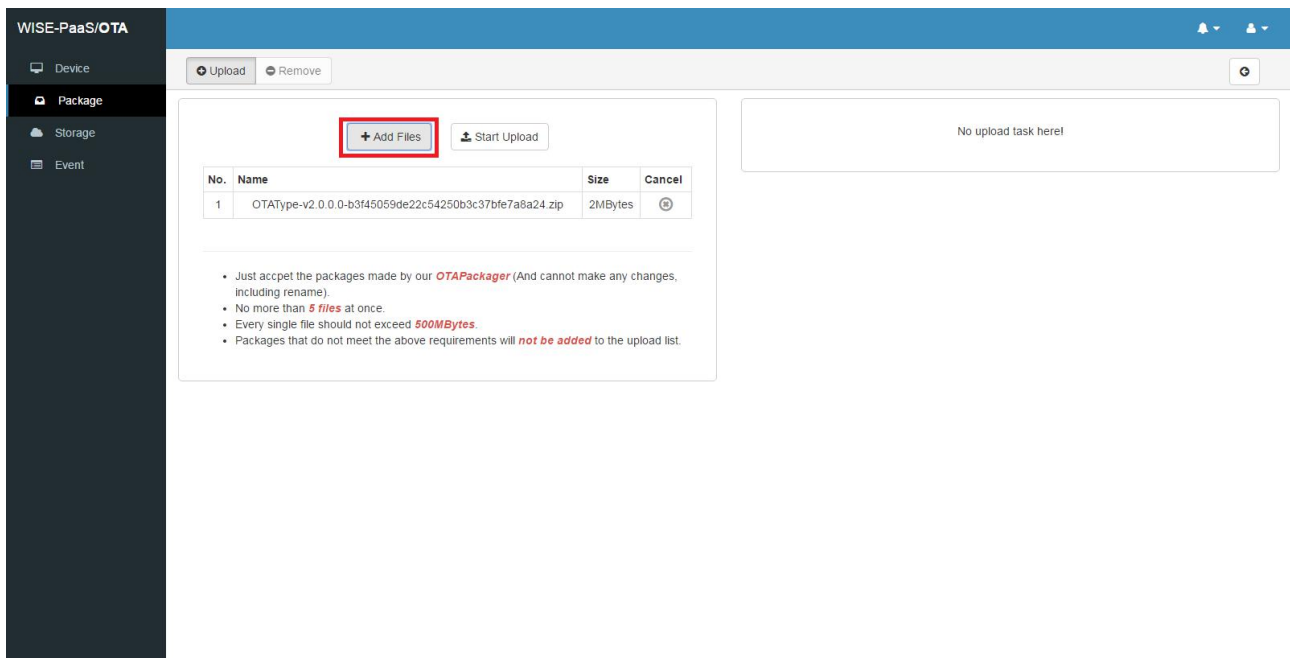
5

Description

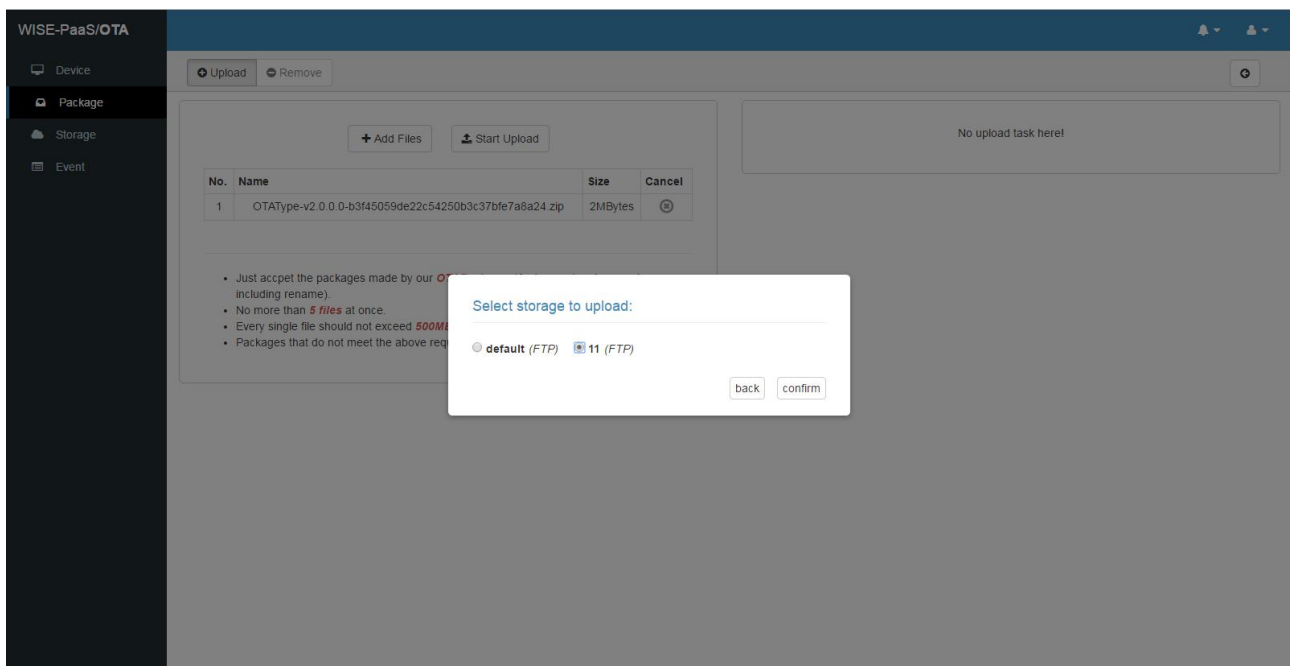
hh

3.Upload Package

Enter the Package Page to upload the OTA package to OTA Server. Before you upload the files, you should configure the FTP storage.



If you have configured multiple FTP servers, remember to select the correct storage device when uploading.



After the upload is complete, you can view all the packages on the server.

WISE-PaaS/OTA

Device

Package

Storage

Event

UploadRemove

+ Add Files

Start Upload

- Just accept the packages made by our **OTAPackager** (And cannot make any changes, including rename).
- No more than **5 files** at once.
- Every single file should not exceed **10MBytes**.
- Packages that do not meet the above requirements will **not be added** to the upload list.

Upload Files to **FileZillaFTPServer(FTP)**, Total Progress (0/1)

OTAType-v2.0.0-97da7c024f59c554e574f4... PKG_PARSE_START

50%

WISE-PaaS/OTA

Device

Package

Storage

Event

UploadRemove

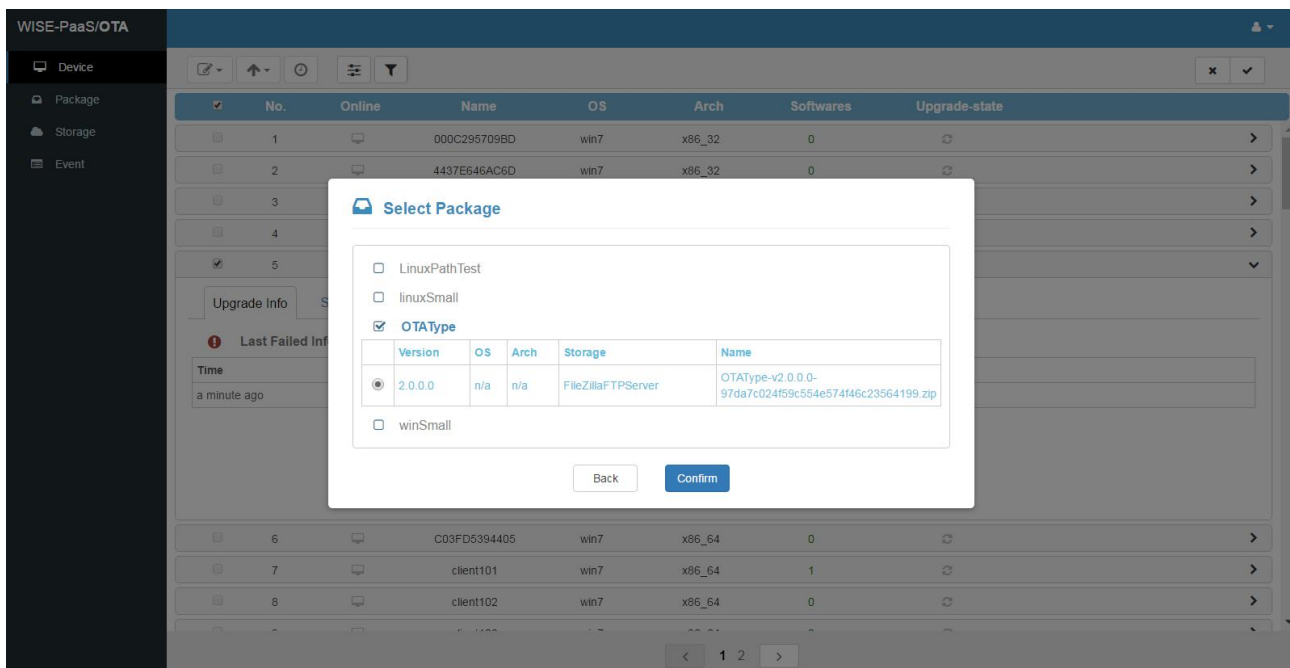
No.	Type	Version	OS	Arch	Storage	Name
1	OTAType	2.0.0.0	n/a	n/a	FileZillaFTPServer	OTAType-v2.0.0-97da7c024f59c554e574f46c2...>
2	LinuxPathTest	1.0.0.1	n/a	n/a	FileZillaFTPServer	LinuxPathTest-v1.0.0.1-1f77d4242cb28d3d7598...>
3	linuxSmall	1.0.0.1	n/a	n/a	FileZillaFTPServer	linuxSmall-v1.0.0.1-47572c32f709fde687f6eb58...>
4	winSmall	1.0.0.1	win7/win8/win10	n/a	FileZillaFTPServer	winSmall-v1.0.0.1-ab502c63c85169588e2e62e1...>

<1>

4.Execute Upgrade

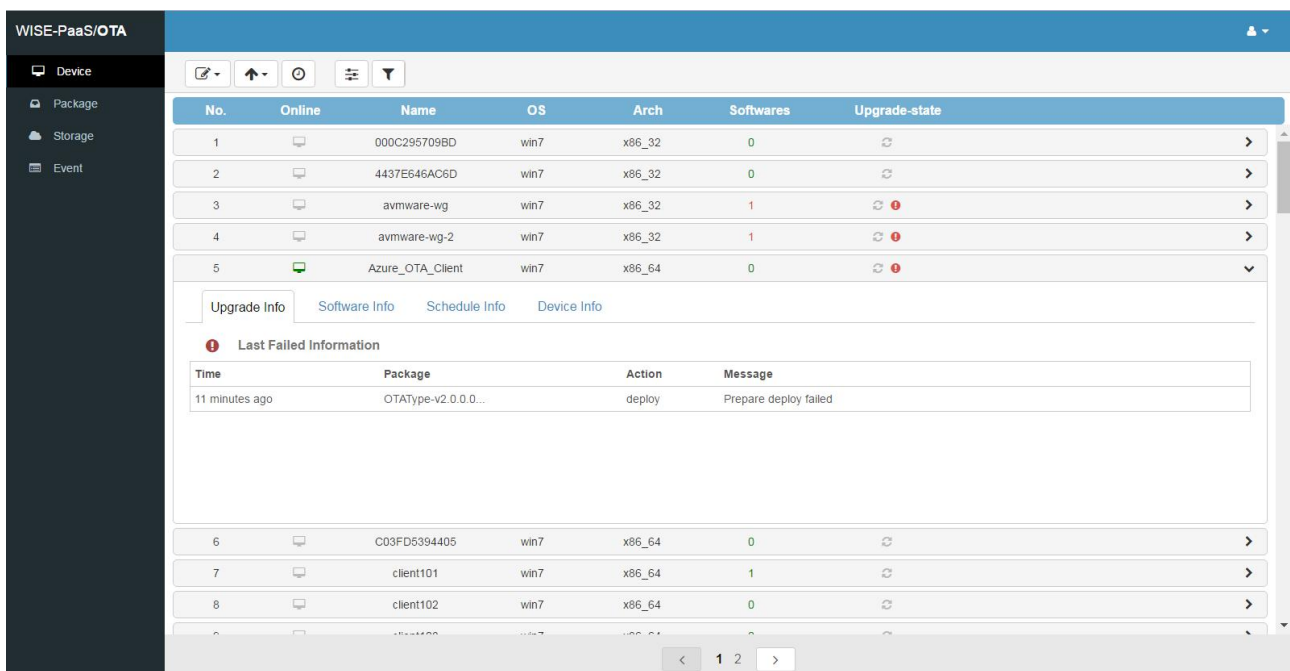
Enter the Device page to execute the upgrade operation.Just in case, Zhang tries it on one device.

Select a device, click "Upgrade", choose the package which you want to upgrade.



5. Confirm the Upgrade Result

Upgrade failed! View the reason of failure quickly and fix them immediately.



Retry again. View the process of upgrade, check the software version. OK, everything is normal. More than a few to try.

WISE-PaaS/OTA						
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>						
No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		C03FD5394405	win7	x86_64	1	
<div>Upgrade Info</div> <div>Software Info</div> <div>Schedule Info</div> <div>Device Info</div>						
Software Name		Software Version		Software Usability		
OTAType		2.0.1.0		Available		
2		client101	win7	x86_64	1	
3		client102	win7	x86_64	1	
4		client103	win7	x86_64	1	
5		client104	win7	x86_64	1	
6		client105	win7	x86_64	1	
7		client106	win7	x86_64	1	
8		client107	win7	x86_64	1	
9		client108	win7	x86_64	1	
<div>< 1 2 ></div>						

View update results, one-time update is successful.

3.2 Scheduling Upgrade

Usage 2: Scheduling Upgrade——Reasonable arrangements update time, effectively reduce the loss brought about by software update

Software A has important bug fixed. Customers need to upgrade the software on all device. Because there is business during the day, so them don't want to upgrade the software which will make some loss. Not only to solve this problem effectively, but also to upgrade the new version, Zhang decided to use the scheduling Upgrade.

Zhang prepares the source file which used to upgrade, and compresses them using the OTA Package Tool. In accordance with the following items, he will be able to complete the entire upgrade process.

For more information on how to use the about OTA Packager Tool, please refers to “OTAPackager User Guide-English.pdf”.



1. Device Connection

Because all devices in this project have built in OTA client, device will connect to OTA server automatically. User can see all the online devices in device page.(Information about how to ensure the device connect to OTA server successfully, please refers to WISE-PaaS/OTA Installation Guide or 2.2 section "Device Connection" of this document)

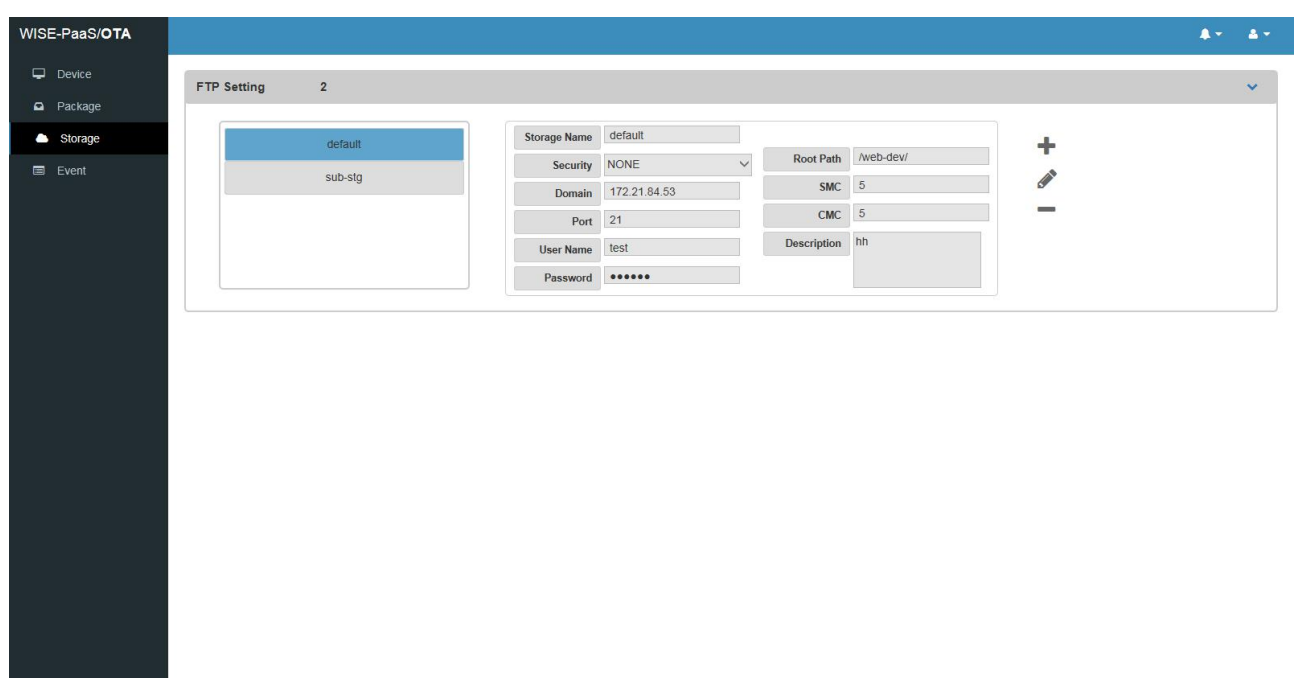
WISE-PaaS/OTA						
<div> <div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div> </div>						
No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		40167E67702E	win7	x86_32	0	
2		Alvin	win7	x86_64	1	
3		hello100	win7	x86_64	1	
4		hello101	win7	x86_64	1	
5		hello102	win7	x86_64	2	
6		hello103	win7	x86_64	1	
7		hello104	win7	x86_64	0	
8		hello105	win7	x86_64	1	
9		hello106	win7	x86_64	1	
10		hello107	win7	x86_64	3	
11		hello108	win7	x86_64	2	
12		hello109	win7	x86_64	1	
13		hello110	win7	x86_64	2	
14		hello111	win7	x86_64	2	
15		hello112	win7	x86_64	0	
16		hello113	win7	x86_64	1	

2. Storage Configuration

Enter the Storage page to configure the FTP Storage. Because the FileZilla server has been installed, so Zhang only need to configure the FTP server to the existing OTA system. Before using this storage, Zhang has confirmed that the FTP server can be accessed by other machines. If you don't remember how

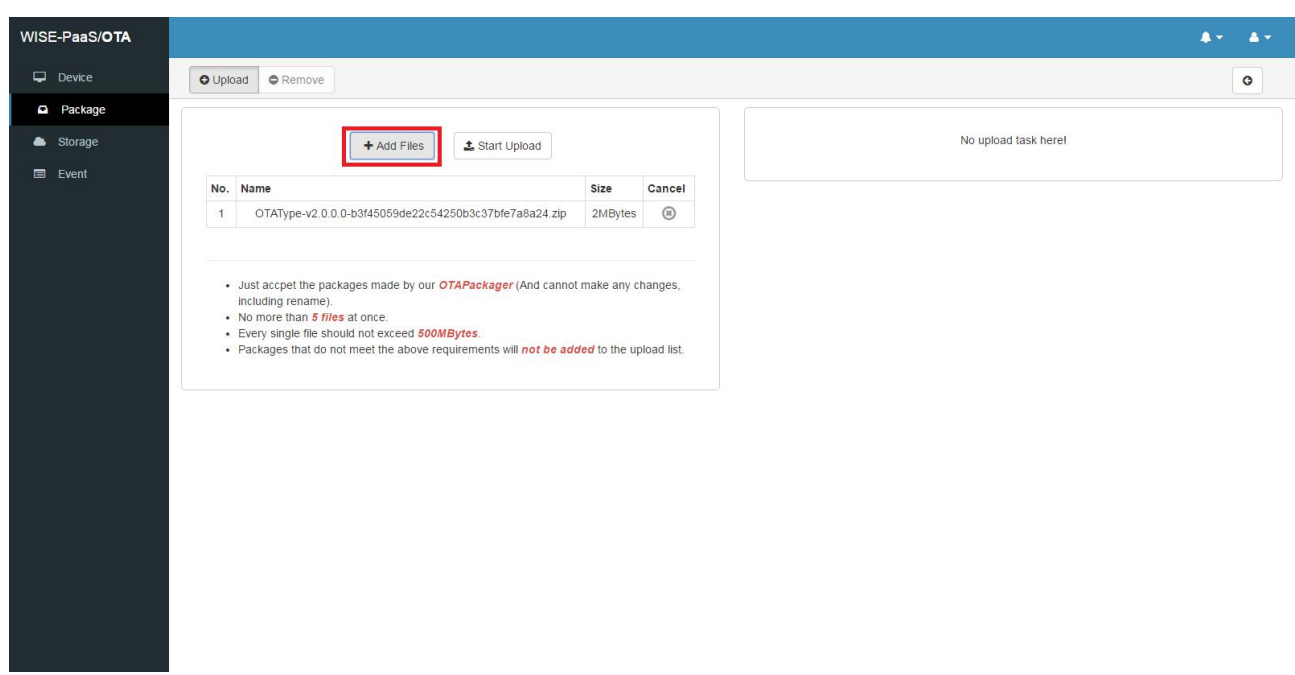
to configure the FTP server, please refer to section 2.4 Storage Configuration. If you are not familiar with how to install and configure the FTP server, you can refer to the following link.

http://ess-wiki.advantech.com.tw/view/How_to_configure_your_FTP_server_to_OTA

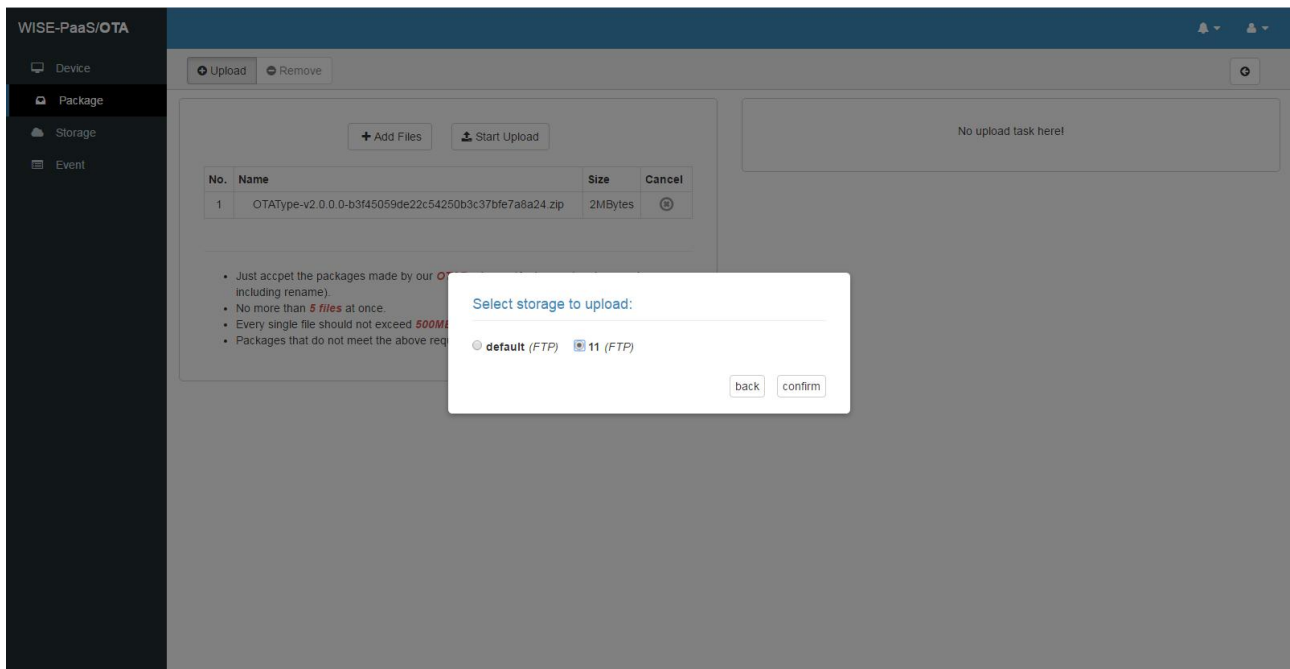


3.Upload Package

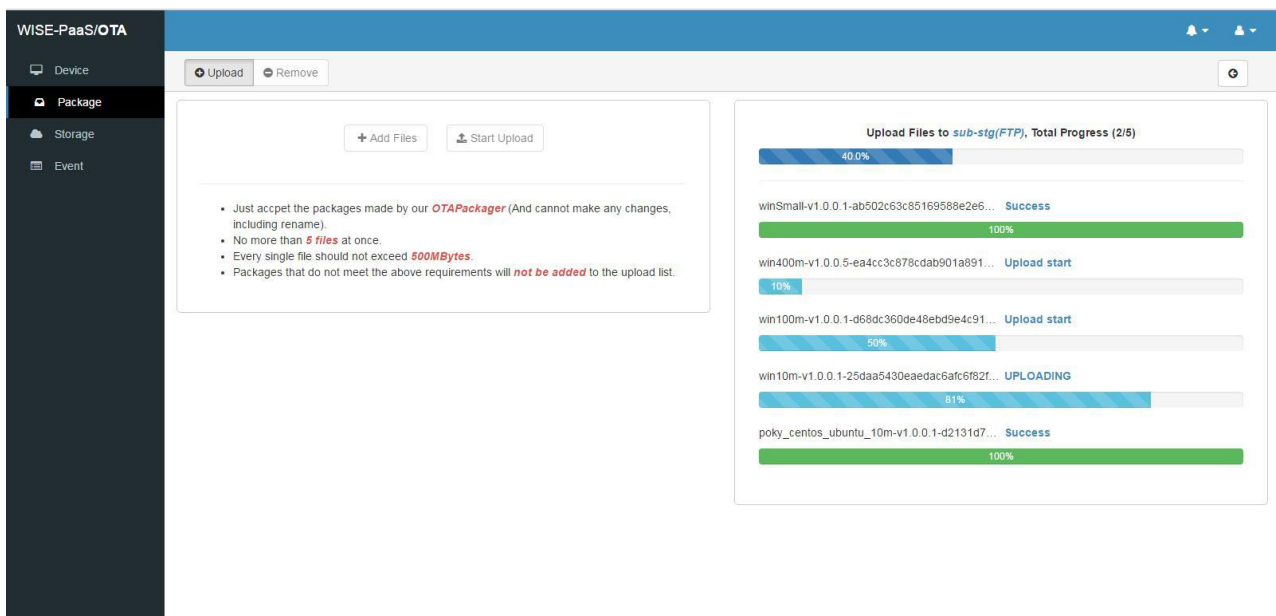
Enter the Package Page to upload the OTA package to OTA Server. Before you upload the files, you should configure the FTP storage.



If you have configured multiple FTP servers, remember to select the correct storage device when uploading.



After the upload is complete, you can view all the packages on the server.



WISE-PaaS/OTA						
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	<div>Upload Remove</div>					
	No.	Type	Version	OS	Arch	Storage
	1	win400m	1.0.0.5	n/a	n/a	sub-stg
	2	win100m	1.0.0.1	win7/win8/win10	n/a	sub-stg
	3	win10m	1.0.0.1	n/a	n/a	sub-stg
	4	poky_centos_ub...	1.0.0.1	CentOS-6.5/Ubu...	n/a	sub-stg
	5	winSmall	1.0.0.1	win7/win8/win10	n/a	sub-stg

4. Set Upgrade Schedule

Enter the Device page to execute the upgrade operation.Just in case, Zhang tries it on one device.

Select a device, choose the package which you want to upgrade and set the download and deploy schedule.
(3 minutes later to download and 15 minuter later to deploy)

WISE-PaaS/OTA						
<div>Device</div> <div>Package</div> <div>Storage</div> <div>Event</div>	<div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> <div></div> </div> </div>					
	No.	Online	Name	OS	Arch	Softwares
	1		000C295709BD	win7	x86_32	0
	2		4437E646AC6D	win7	x86_32	0
	5					
	<div> <div>Upgrade Info</div> <div>Software Info</div> <div>Last Failed Information</div> <div>Time</div> <div>a few seconds ago</div> </div>					
	6		C03FD5394405	win7	x86_64	0
	7		client101	win7	x86_64	1
	8		client102	win7	x86_64	0

5.Confirm the Upgrade Result

After the time, check the update result in “ Upgrade Info” card.

OK, you can set the scheduling for other devices, so that device can upgrade in different batches.

WISE-PaaS/OTA

Device

Package

Storage

Event

No.	Online	Name	OS	Arch	Softwares	Upgrade-state
1		C03FD5394405	win7	x86_64	1	
<div><div>Upgrade Info</div><div>Software Info</div><div>Schedule Info</div><div>Device Info</div></div> <div><div>Software Name</div><div>Software Version</div><div>Software Usability</div></div> <div><div>OTAType</div><div>2.0.1.0</div><div>Available</div></div>						
2		client101	win7	x86_64	1	
3		client102	win7	x86_64	1	
4		client103	win7	x86_64	1	
5		client104	win7	x86_64	1	
6		client105	win7	x86_64	1	
7		client106	win7	x86_64	1	
8		client107	win7	x86_64	1	
9		client108	win7	x86_64	1	

<

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>

4 FAQ

1. How many devices can be connected to OTA system. How about other specification?

Answer: OTA system supports 500 devices connected at the same time. Each update package is not more than 500; Five packages can be uploaded simultaneously and 20 packages can be download simultaneously. (Use of bandwidth=numbers of simultaneous download * package size - other use) .The uploaded and downloaded numbers has something to do with both the band width on the site (field) and the max. connection count of FTP server that you have configured.The default maximum upload connection is 10 and the download connection is 30. Detail information please refer to section 2.4 Storage Management.

2. What kind of device can the OTA system be deployed on?

Answer: Server side: Windows Server 2012 64bit / Windows 7 64bit
Intel Core i3 2.3 Ghz CPU or above 4GB

Windows 7 / 8 /10 32bit or 64bit

3. What about the requirement of upgrade files?

Answer: OTA system requires all deployment or upgrade files are able to support silent mode, and contains at least one executable file, such as, exe, msi, bat etc. .

Only the OTA packages which generated by OTA Packager Tool can be used in our system. We will encrypt your deployment package to prevent transmission damage and tampering.

The package size which generated by OTA Packager Tool can not exceed 500M.

4. What about the requirement of browser?

Answer: Browser supports

Chrome: 51+

Firefox: 45

IE 11