



# ***Omada Cloud-Based Controller Deployment Guide***

Omada Cloud-Based Controller is deployed on the Omada Cloud server, providing paid device-based licensing services in managing your network. This guide provides instructions for deploying your Omada Cloud-Based Controller, including the following sections:

- [Introduction to Omada Cloud-Based Controller](#)
- [Deploying Omada Cloud-Based Controller](#)
- [ZTP Deployment Example](#)

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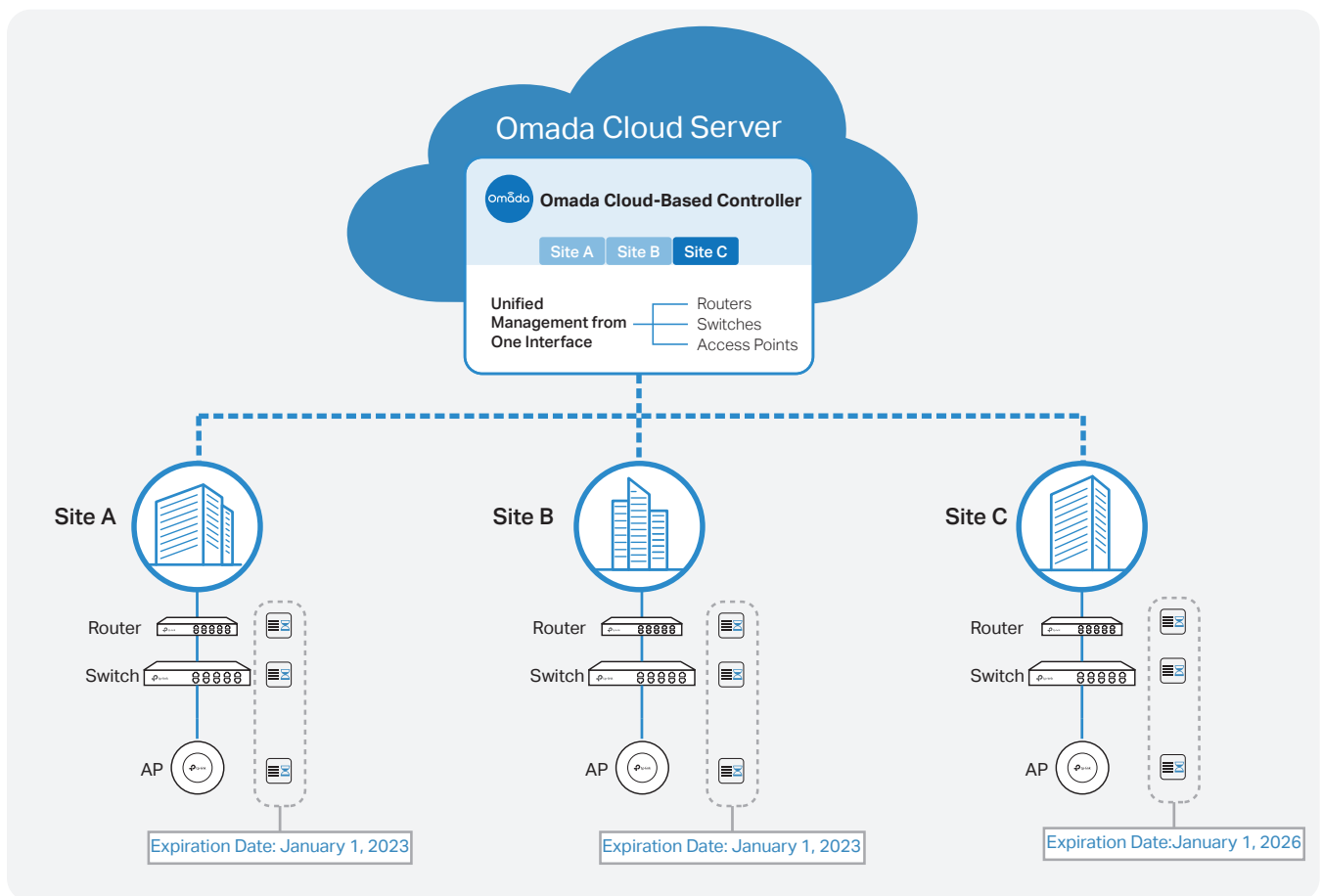
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## Introduction to Omada Cloud-Based Controller

The Omada Cloud-Based Controller (CBC), existing entirely in the cloud for the Omada Software Defined Networking (SDN) platform, provides centralized cloud management of routers, switches, and access points from a single interface.

Omada Cloud-Based Controller uses device-based licensing model to manage the devices and networks. A device license is considered a license that enables full functionality on hardware device configuration and management. These licenses are designed for all Omada managed devices, including routers, switches and access points. Except the license fee, you don't need to purchase an additional hardware device or install the software on the host.

Figure -1 Omada Device-Based Licensing Model

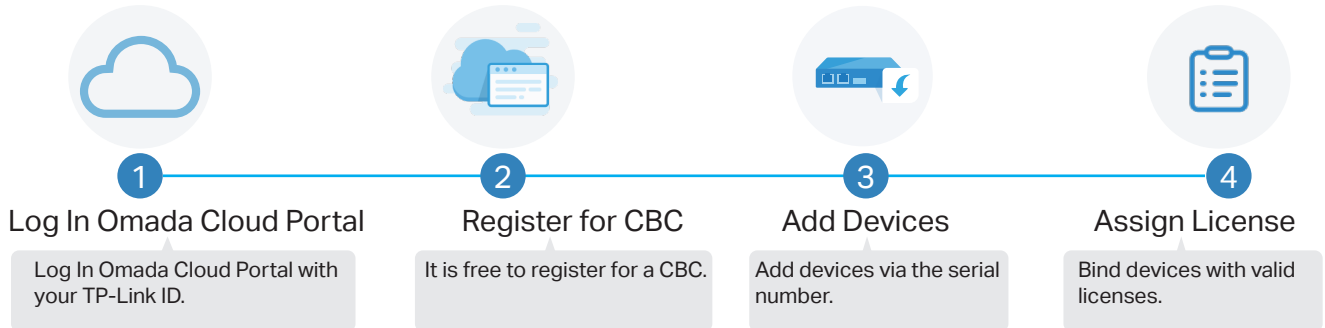


## Deploying Omada Cloud-Based Controller

Deploying a CBC and managing the devices centrally on CBC is straightforward. The deployment process can be summarized into four steps: Log In Omada Cloud Portal, Register for Omada Cloud-Based Controller, Add devices, Assign licenses.

Figure -2 The Process of Cloud-Based Controller Deployment

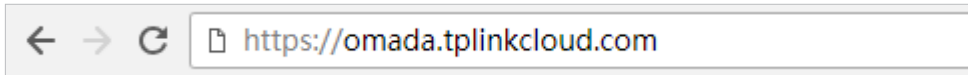
### Deploying Cloud-Based Controller



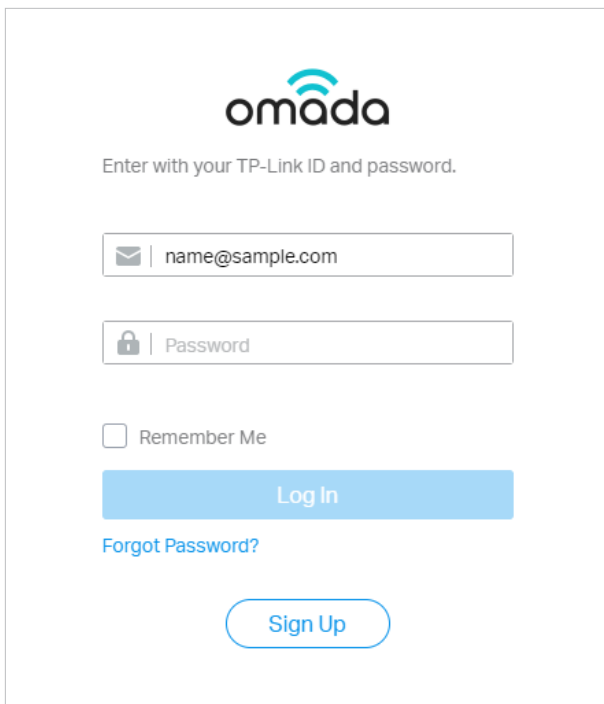
To deploy your Cloud-Based Controller, follow these steps below.

## 1 Log In Omada Cloud Portal with Your TP-Link ID

1. Launch a web browser and type <https://omada.tplinkcloud.com> in the address bar, then press **Enter** (Windows) or **Return** (Mac).

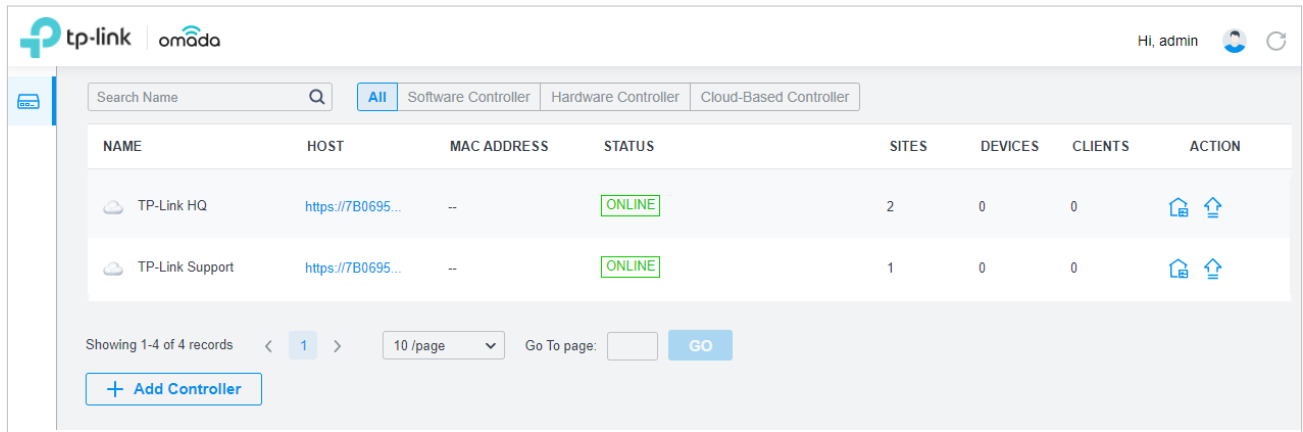


2. Enter your TP-Link ID and password and click Log In. If you don't have a TP-Link ID, click **Sign Up** and follow the instructions to register a TP-Link ID.

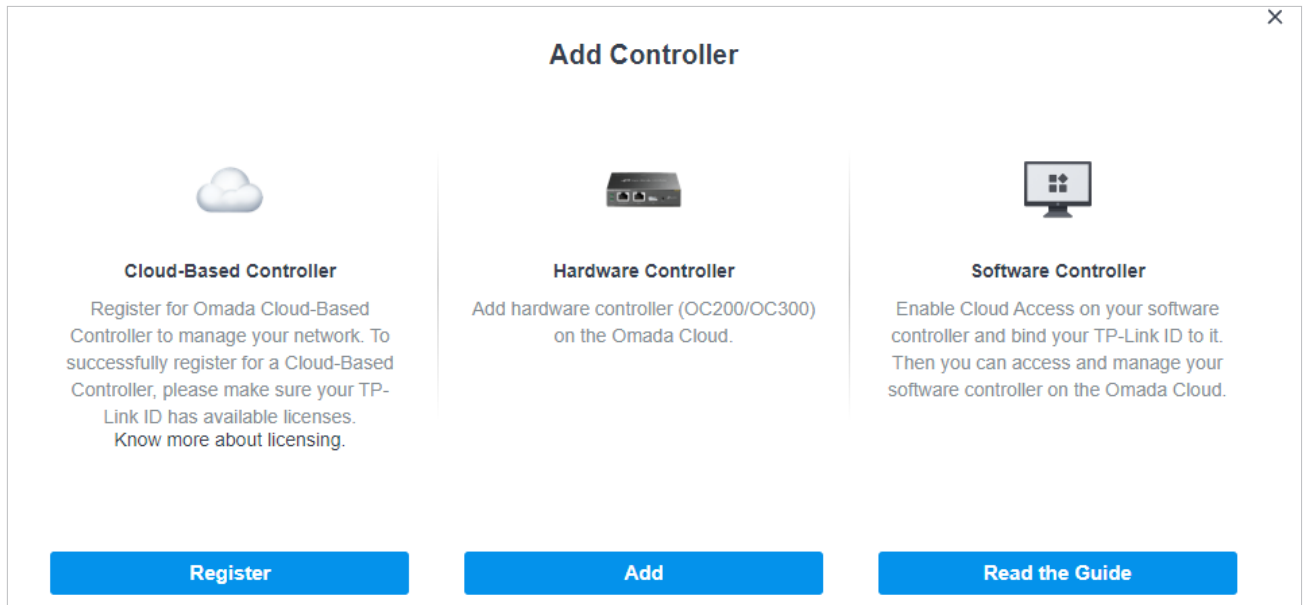


## 2 Register for Omada Cloud-Based Controller

1. Click [Add Controller](#), and then click [Register](#) in the pop up window to register for an Omada Cloud-Based Controller.



The screenshot shows the Omada Cloud-Based Controller management interface. At the top, there are logos for tp-link and omada, and a user profile for 'Hi, admin'. Below the logos is a search bar and a navigation menu with tabs for 'All', 'Software Controller', 'Hardware Controller', and 'Cloud-Based Controller'. The main content is a table with columns: NAME, HOST, MAC ADDRESS, STATUS, SITES, DEVICES, CLIENTS, and ACTION. Two records are visible: 'TP-Link HQ' and 'TP-Link Support', both with a status of 'ONLINE'. Below the table, there is a pagination control showing 'Showing 1-4 of 4 records' and a 'Go To page:' field. A blue button labeled '+ Add Controller' is located at the bottom left of the interface.



The screenshot shows the 'Add Controller' pop-up window. It has a title bar with a close button (X). The window is divided into three columns, each representing a different controller type:

- Cloud-Based Controller:** Represented by a cloud icon. The text says: 'Register for Omada Cloud-Based Controller to manage your network. To successfully register for a Cloud-Based Controller, please make sure your TP-Link ID has available licenses. Know more about licensing.' Below this is a blue button labeled 'Register'.
- Hardware Controller:** Represented by a hardware controller icon. The text says: 'Add hardware controller (OC200/OC300) on the Omada Cloud.' Below this is a blue button labeled 'Add'.
- Software Controller:** Represented by a software controller icon. The text says: 'Enable Cloud Access on your software controller and bind your TP-Link ID to it. Then you can access and manage your software controller on the Omada Cloud.' Below this is a blue button labeled 'Read the Guide'.

2. Specify a name for the controller, and set your region and timezone, then click [Next](#).

1 Omada Setup Wizard — 2 Add Devices — 3 Assign Licenses — 4 Summary

## Omada Setup Wizard

Set Your Controller Name:

Select your country/region:

Select Your Timezone:

**Next**

### 3 Add Devices to the Controller with the Serial Numbers

Before adding devices, power on the devices and connect them to the internet.

Enter the serial numbers of the devices to add devices manually. Or you can click [Import](#) to import the file that records the your devices' information to import a batch of devices. Then, click [Next](#).

✓ Omada Setup Wizard — 2 Add Devices — 3 Assign Licenses — 4 Summary

## Add Devices

Please add devices manually or import a batch of devices.

**i** Please make sure the device is powered on and not being managed by another controller.

Manually Add  Import

INDEX	S/N	DEVICE NAME (OPTIONAL)	RESULT
1	<input type="text" value="2020083122501"/>	<input type="text" value="AP"/>	✓
2	<input type="text"/>	<input type="text"/>	✗

[← Back](#) **Next**

#### **i** Note:

To add devices successfully, make sure the device is not being managed by another controller.

## 4 Assign the Appropriate Licenses to the Devices

After adding the devices to the controller, bind them with valid licenses. Only when you have available licenses, can you register for the Cloud-Based Controller and manage the devices. If you do not have available licenses, click [Purchase License](#) to purchase licenses first.

If there are licenses that are eligible to be assigned to the selected device(s), they will appear in the table. Select the license for each device by the duration in the drop-down list. For the unassigned licenses, select which license key that you want to use first.

### Assign Licenses

Assign the appropriate licenses to the devices, then you can manage and monitor the devices with the Cloud-Based Controller.

	1-Year	2-Year	5-Year	Unassigned Licenses
Available Licenses after Activation	48	8		3
Required Licenses	1			

[Purchase License](#) [Batch Activate](#)

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DEVICE NAME	S/N	MAC ADDRESS	LICENSE TYPE
AP	2020083122501	00-00-FF-FF-0F-4B	1-Year

[Back](#) [Activate](#)

Once you've selected the licenses, click [Activate](#) to assign the licenses to the devices.

Omada Setup Wizard — Add Devices — Assign Licenses — Summary

### Assign Licenses

Assign the appropriate licenses to the devices, then you can manage and monitor the devices with the Cloud-Based Controller.

	1-Year	2-Year	5-Year	Unassigned Licenses
Available Licenses after Activation	49	8		3
Required Licenses				

[Purchase License](#) [Batch Activate](#)

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DEVICE NAME	S/N	MAC ADDRESS	LICENSE TYPE
AP	2020083122501	00-00-FF-FF-0F-4B	<div style="border: 1px solid #ccc; padding: 5px; width: 150px;">                     Please Select...                     <ul style="list-style-type: none"> <li>TP-ROPIM-UT6Y-W13K-JDR3 <span style="float: right;">345 days left</span> <span style="float: right;">1-Year</span></li> <li>TP-IL66-303G-QMHF-PAVD <span style="float: right;">710 days left</span> <span style="float: right;">2-Year</span></li> <li>TP-00GJ-8PYB-BMPK-6062 <span style="float: right;">710 days left</span> <span style="float: right;">5-Year</span></li> <li style="background-color: #e0e0e0;">Unassigned Licenses <span style="float: right;">Assign Later</span></li> </ul> </div>

[Back](#) [Activate](#)

Wait until the controller is deployed on the Omada Cloud server successfully. Then you can log in to the management interface of the controller to configure the devices and network.

## ♥ ZTP Deployment Example

Based on Omada Cloud Service, Omada Cloud-Based Controller realizes Zero-Touch Provisioning (ZTP) in deploying the network, which ensures efficient deployment and high scalability.

Omada Zero-Touch Provisioning allows remote deployment and configuration of multi-site networks, so system integrator (SI) can efficiently create networks of any size, without sending out an engineer for on-site configuration.

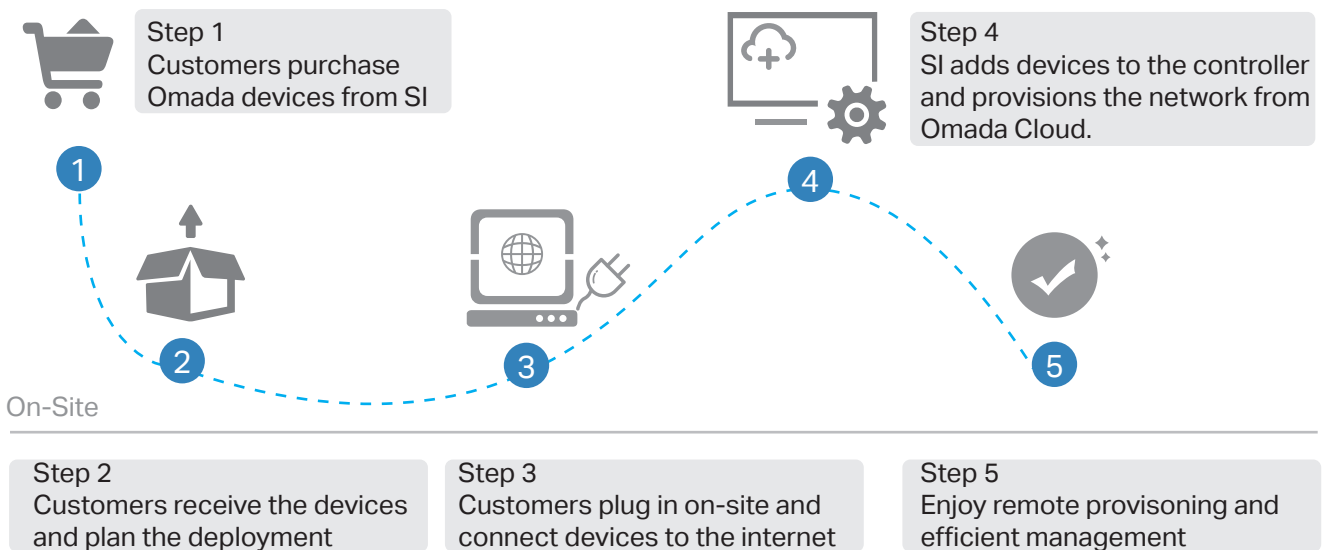
Omada Zero-Touch Provisioning offers the following advantages in deploying networks:

- Simple deployment
- Reduced operational costs
- Limits provisioning errors

Figure -3 The Workflow of Zero-Touch Provisioning

### Zero-Touch Provisioning Workflow

Online



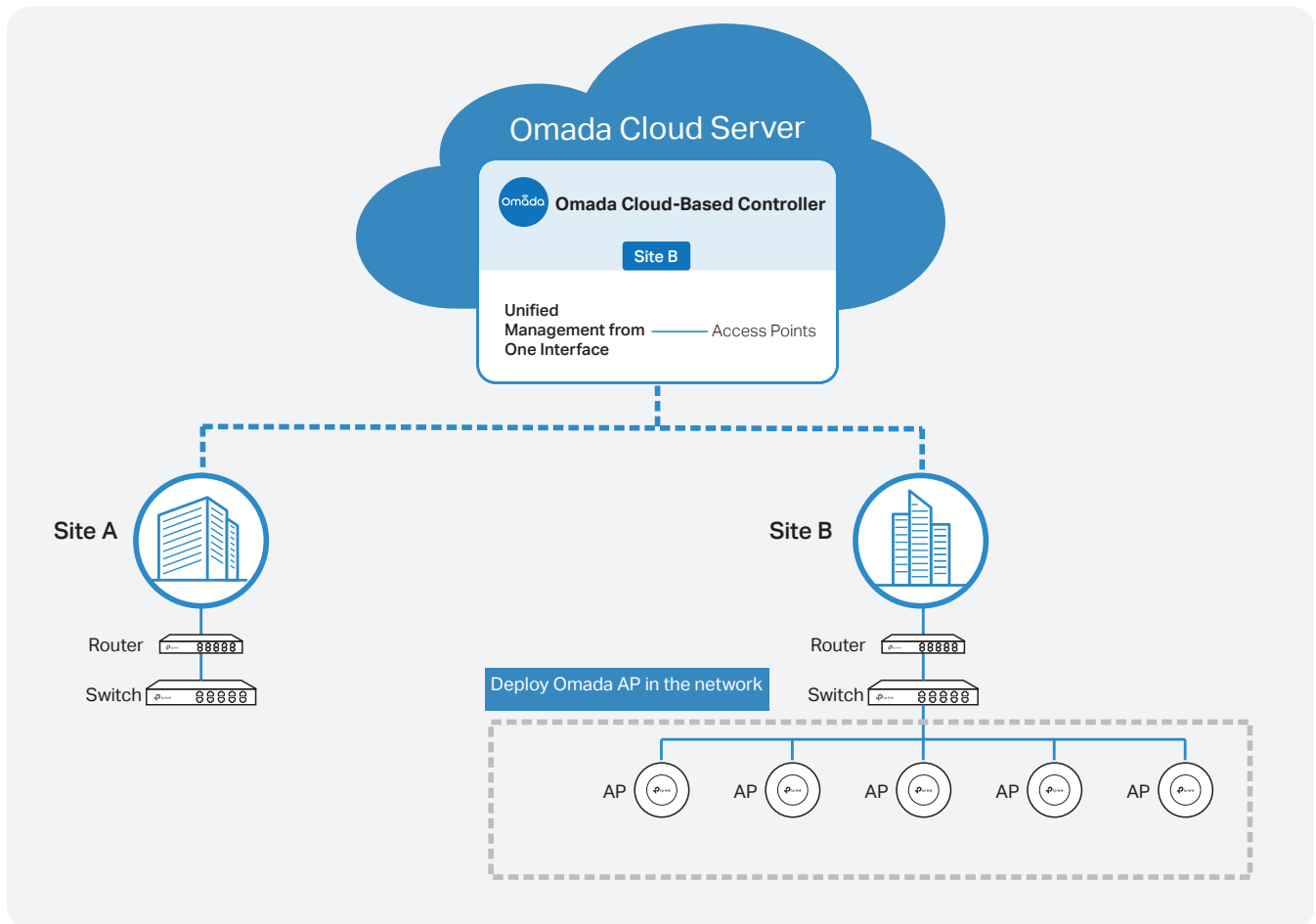
The following section describes the provisioning workflow in two typical use cases, and the process to prepare your network for ZTP to manage devices.

- Case 1: To Deploy Omada EAPs in the network with third-party devices.

A company needs to set up wireless networks for its new branch office. As the following figure shows, the routers and switches already exist the network, the task for the system integrator is to deploy the network using Omada access points.



Figure -4 The Network Topology of Deploying Omada EAPs



SI follows the three steps to deploy the network:

1) Preparation before shipment:

Note down the serial numbers of all EAPs. The serial numbers are required when adding devices to the cloud-based controller.

2) After the customer has received all devices:

The Omada EAPs only need to be connected to the network topology and powered on.

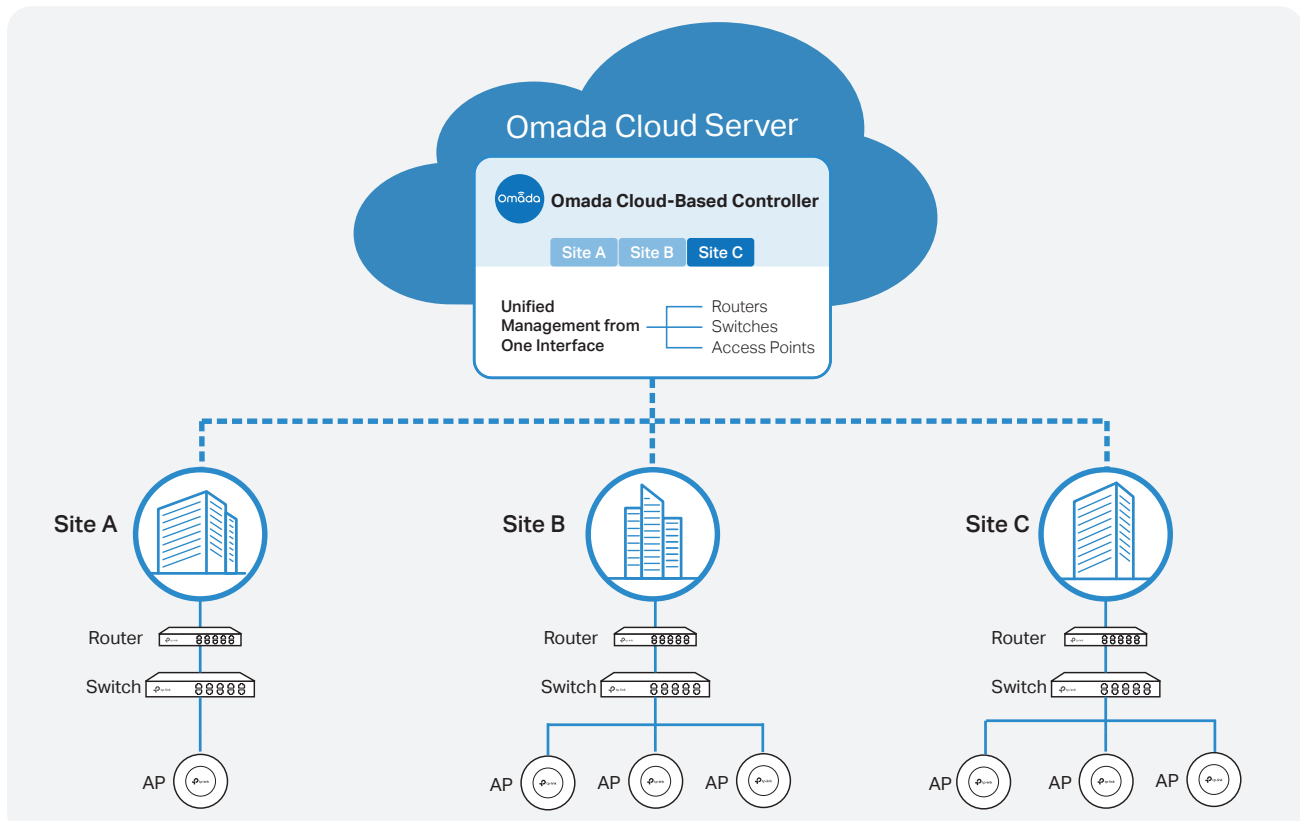
3) SI takes over the EAPs and configures the network remotely:

SI adds the EAPs to the cloud-based controller via the serial numbers and configures the devices through cloud-based controller.

■ Case 2: To deploy the full Omada topology with supported TP-Link devices

A system integrator is planning a network for its customer, a company with three buildings. As the following figure shows, the SI needs to deploy all Omada supported devices and the network from scratch.

Figure -5 The Network Topology of Deploying Full Omada Supported Devices



SI follows the three steps to deploy the network:

**1) Preparation before shipment:**

Note down the serial numbers of all devices. The serial numbers are required when adding devices to the cloud-based controller.

**2) After the customer has received all devices:**

**Step 1** Configure the routers. Omada Cloud-Based Controller delivers configuration files to all devices via Omada Cloud. To successfully receive the configurations, the router at each site should be pre-configured in its own management interface and can access the internet once powered on.

**Step 2** Connect all devices to the network according to the topology and power on all the devices.

**3) SI takes over the EAPs and configures the network remotely:**

SI adds the EAPs to the cloud-based controller via the serial numbers and configures the devices through cloud-based controller.