Cisco Virtual Wireless Controller

Q. What is Cisco Virtual Wireless Controller?

A. Cisco® Virtual Wireless Controller is a controller in a virtual form-factor. It can be deployed on any x86 server that supports VMware ESXi 4.x or 5.x.

Q. Where do I position a Cisco Virtual Wireless Controller?

A.

- Small and mid-sized deployments with a virtual infrastructure that requires an on-premises controller.
- Distributed branch environments with a centralized controller supporting - a maximum 200 of branches.

Q. Does the Cisco Virtual Wireless Controller support local mode?

A.

- Cisco Virtual Wireless Controller offers FlexConnect features both in central and local switching.
- FlexConnect central switching provides the similar feature set as local mode.

Q. Does the Cisco Virtual Wireless Controller support bring-your-own-device (BYOD) enhancements in conjunction with Cisco Identity Services Engine (ISE)?

A. Yes. Cisco Virtual Wireless Controller with FlexConnect technology supports device registration, supplicant provisioning, and provisioning and onboarding of personal devices.

Q. Does the Cisco Virtual Wireless Controller support context-aware services?

A. Yes. Cisco Virtual Wireless Controller supports Cisco Mobility Services Engine (MSE) integration for location tracking of Wi-Fi clients, RFID tags, wired and wireless clients, and rogue devices.

Q. What security features does the Cisco Virtual Wireless Controller support?

A. Comprehensive matrix for FlexConnect security support can be found at: http://www.cisco.com/en/US/products/ps10315/products_tech_note09186a0080b3690b.shtml.

Q. When do I position a Cisco Flex7500 Series Controller versus a Virtual Wireless Controller?

A. Position a virtual controller if customer's deployment meets the following requirements and specifications:

- Virtual footprint based on VMware Hypervisor ESXi 4.x and 5.x
- Does not require Data Transport Layer Security (DTLS) support.
- Maximum number of sites limited to 200.
- Performance limited to 500 Mbps per controller.

Q. What are the feature differences between 7500 and Virtual controller?

A. The following table summarizes the feature differences between 7500 and Virtual controller:

Feature	7500	Virtual Controller
Scale	300-6000 AP's	5-200 AP's
Clients	64,000	3,000
Performance (no DTLS)	1 Gbps	500 Mbps
Data DTLS Performance	1 Gbps	Not supported
OEAP Support	Yes	No
Bi-directional Rate Limiting	Yes	No

Q. What is the Virtual Machine specification for Virtual Controllers?

A. Cisco Virtual Controller can be deployed on any x86 server that runs VMWare ESXi 4.x or 5.x.

The resource requirements from the virtualized server hardware:

- CPU: 1 virtual CPU
- Memory: 2 GB
- Disk Space: 8 GB
- Network Interfaces: 2 or more virtual Network Interface cards (vNICs).

Q. What are the requirements for Access Points to join a Virtual Controller?

A.

- The Access Points must be upgraded to 7.3 software, before joining a virtual controller.
- Access points ordered starting Sept/2012, will ship with 7.3 software from manufacturing.

Q. Why do I need to get Access Points upgraded to 7.3 to join a virtual controller?

A.

- Virtual Controller uses Self Signed Certificates (SSC) as against the Manufacturing Installed Certificates (MIC) in the traditional controller.
- Access Point will be able to validate the SSC certificate provided by the virtual controller before joining.

Q. When will manufacturing start shipping Access Points with 7.3 software?

A. Access points ordered starting Sept/2012 will ship with 7.3 software.

Q. How do I upgrade Access Points shipped prior to Sept/2012 to 7.3 software?

A. If the access points are associated with a controller, use the current upgrade process using Cisco Prime or Controller to upgrade the Access Points to 7.3 software.

Q. How is the Cisco Virtual Wireless Controller deployed?

A. The virtual controller software will be posted as .ovf package in the Cisco software center. Customers can download the .ovf package and install similar to any other virtual application. Software comes with a free-60 day evaluation license. After the VM is started, the evaluation license can be activated and later a purchased license can be automatically installed and activated.

Q. How is the Cisco Virtual Wireless Controller purchased?

A. The Cisco Wireless Virtual Controller can be purchased, directly from Cisco or from a reseller.

After purchase of a license, a Product Activation Key (PAK) is delivered to the purchaser. The PAK needs to be provided to a Cisco License Server along with a unique device identifier (that is generated when the Virtual Controller VM boots up) in order for the server to provide the Virtual Controller with a license file. The license file then needs to be installed in the Virtual Controller and activated.

Q. How is the Cisco Virtual Controller managed?

A. Similar to other Cisco Wireless Controllers, Virtual controller can be managed using the controller device GUI or using Cisco Prime.

Q. Does the Cisco Virtual Controller support serial console for out-of-band access?

A. Yes.

The administrator can use the vSphere client to configure the Cisco Virtual Controller. An alternate recommended option is to configure either a physical or virtual serial console. A physical console is bound to the physical ESXi server and can be connected to a terminal console server. A virtual serial port is accessible over the network and can be assigned to each virtual controller; more than one virtual serial console can be setup as required by the number of virtual controllers in each ESXi server. Only one console option (physical or virtual serial) can be used.

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