

Cisco CleanAir 과 MetaGeek Chanalyzer 연동

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Cisco CleanAir 과 MetaGeek Chanalyzer 연동

Cisco CleaAir AP, MetaGeek Chanalyzer르 사용 하여, 네트워크 관리자는 특정 시간 기간으로 2.4Ghz 및 5Ghz 대역 모든 기능과 Video Recorder(DVR)를 명확하게 그래픽 시각화로 표시, 간섭(블루투스, DECT among a few) 및 RF 대역 내에서의 정보를 캡처, 보고서, 시각화 할 수있습니다.

Tech Top

MetaGeek Chanalyzer 제품은 7일간 무료로 다운받아 사용 할 수있습니다.

URL: http://www.metageek.net/support/downloads/

1. Install MetaGeek Chanalyzer

URL:http://www.metageek.net/products/chanalyzer-cleanair

1.1 MetaGeek Chanalyzer 소프트웨어 실행



1.2 파일을 실행 후 실행 보안 경고 메시지에서 "Run"(실행)을 선택합니다.



1.3

Next를 눌	러 Chanaly	zer 설치	마법사	설치를	시작합니다.
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1.4 사용권 계약 동의, 라이선스 계약에 대한 "동의" 선택 후 Next



1.5 기본 설치 위치가 올바른지 확인하고 Next 클리

😭 Chanalyzer Setup	
Destination Folder	\succ
Click Next to install to the default folder or click Change to choose another.	
Install Chanalyzer to:	
C:\Program Files (#86)\MetaGeek\Chansiyzer\	
Change	
Back Next	Cancel

1.6 사용자 환경 개선프로그램에 참여 할 수 있는 권한 부여 선택하고 Next 클릭

🚰 Chanalyzer Setup	
User Experience Improvement Program Help Improve Chanalyzer	
Join the Customer Experience Improvement Program and help improve the quality, reliability, and performance of MetaGeek software and services. Participation will not degrade the performance of your software. If you choose to participate, MetaGeek will: * Collect information about your software and hardware configurations. * Collect information on how you use our software and service	p •
to identify trends and usage patterns.	w
Ves, I am willing to participate (Recommended)	
Back Next	Cancel

1.7 MetaGeek Chanalyzer 소프트웨어 설치를 시작하려면 Install를 클릭



1.8 설치 완료되면, Finish를 클릭

😭 Chanalyzer Setup	
	Completed the Chanalyzer Setup Wizard
chanalyzer	Click the Finish button to exit the Setup Wizard.
	Back Finish Cancel

MetaGeek Chanalyzer 및 Cisco CleaAir를 사용하여 RF 환경분석

Cisco CleaAir 가능한 AP는 2.4Ghz와 5Ghz 대역을 볼 수 있습니다.

Spectrum Expert Connect(SE-Connect) mode를 사용 하도록 AP를 구성하여 합니다.

Cisco CleanAir AP는 Spectrum Intelligence KEY 값과 IP Address를 MetaGeek Chanalyzer에 제공합니다.

1.1 웹브라우저를 통해 무선랜컨트롤러에 로그인 하여 상단 "WIRELESS" 탭으로 이동

1.2 간섭이 의심되는 구간에서 가까운 Cisco CleanAir AP를 선택

cisco	MONITOR WLANS		SECURITY MANAGEME	NT C <u>o</u> mmands He <u>l</u> p	Saye <u>F</u> EEDBACK	Configuration <u>P</u> ing	Logout <u>R</u> efresh
Wireless	All APs					Ent	tries 1 - 3 of 3
Access Points All APs	Current Filter	None	[Cha	nge Filter] [Clear Filter]			
 Radios 802.11a/r/ac 802.11b/g/n Dual-Band Radios 	Number of APs	3					
Global Configuration	AP Name	IP Address	AP Model	AP MAC	AP Up Time	Admin Status	Operational Status
Mash	AP7 cad.74ff.7b5	10.4.8.21	AIR-CAP3702I-A-K9	7c:ad:74:ff:7b:5e	28 d, 06 h 33 m 36 s	Enabled	REG
RE Drofilos	APe02f.6da3.524-	10.4.8.22	AIR-CAP2602I-A-K9	e0:2f:6d:a3:52:44	28 d, 05 h 51 m 29 s	Enabled	REG
FlexConnect Groups	AP4403.a7a2.fe2c	10.4.8.20	AIR-CAP3602I-A-K9	44:03:a7:a2:fe:2c	28 d, 06 h 00 m 25 s	Enabled	REG

1.3 AP Mode 에서 "SE-Connect" 선택

ာါကျက cisco	MONITOR WLANS CONTR	OLLER WIRELESS SECURITY	MANAGEMENT COMMANDS HE	ELP EEEDBACK	Sawe Configuration Bing Logout Befresh
Access Points All AP+ CISCO Wireless Access Points All AP+ Padios 000.110/r/sc a02.110/g/n Dual-Dand Redios Global Cenfiguration Advanced Mesh RF Profiles FlexConnect Groups FlexConnect ACLs B02.110/g/n Media Stream aenciates winthumper	MONITOR WLANS CONTR All APS > Details for AP7 General Credentials General AP Name Location AP NAME Location AP NAC Address Base Radio MAC Admin Status AP Node AP Sub Mode Operational Status Port Number Venue Group	OLLER WIRELESS SECURITY cad.74ff.7b5e Interfaces High Availability AP7cad.74ff.7b5e defoult location 7c:ed:74.ff.7b5e DBiccr68:b5:43:90 Enable • local Fix Connect monitor R ogue Detector Suffer Bridge	MANAGEMENT COMMANDS HE Inventory Advanced Versions Primary Software Version Backup Software Version Predownload Status Predownload Status Predownload Next Retry Time Predownload Next Retry Time Predownload Next Retry Time Predownload Retry Count Boot Version IOS Version Nini IOS Version IP Config	ELP EEEDBACK 7.5.120.0 0.0.0.0 None None NA NA 15.2(4.)00 15.2(4.)00 15.2(4.)00 15.2(4.)00 15.2(4.)00 15.2(4.)0000000000000000	< Back Apply
Application visibility And Control Country Timers	Venue Type Venue Name Language	Unspecified ♥	IP Address Static IP	104.8 21	

Warning: Changing AP Mode will reboot the AP and will rejoin the controller afer a few minutes. Are you sure you want to continue?

OK Cancel

1.4 AP Name, Network 2	Spectrum Intelligence	KEY, IP address	기재하여	둡니다(복사하여 .	보관)
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սիսիս						Sa <u>⊻</u> e Configuration <u>P</u> ing	Logout <u>R</u> efresh
CISCO	MONITOR WLANS O	ONTROLLER WIRELESS	SECURITY MANAGEMENT	C <u>o</u> mmands he <u>l</u> p	FEEDBACK		
Wireless	All APs > Details for	AP7cad.74ff.7b5e				< Back	Apply
Wireless	All AP's > Details for General Credent General AP Name Location AP NAME Base Radio MAC Admin Status AP Node AP Sub Mode Operational Status Port Number Venue Group Venue Type Name Name	AP7 cad.74ff.7b5e lais Interfaces Hi AP7cad.74ff.7b5e default location 7c; ad;74.ff.7b5e 08:co:68:b5:43:90 Enable - SE-Connect - REG LAG Unspecified - Unspecified -	igh Availability Inventory Versions Primary So Backup Sol Predownice Predownice Predownice Boot Versio IOS Versio Mini IOS Versio IP Config IP Address	Advanced ftwaro Version 7. tware Version 0. dd Status Ni dd Status Ni dd Version Ni dd Retry Time Ni dd Retry Count Ni n 15 n 15 rsion 7. 10	6.120.0 0.0.0 one A A 5.2.4.0 5.2.(4)1855 6.1.118		Apply
Country Timers	Language Network Spectrum		Static IP Time Statisti				
▶ QoS	Interface Key		Lindo Cuş		0 h 01 m 58 s 0 h 00 m 18 s		
			Copy Deste		0 h 01 m 39 s		

Network Spectrum Interface Key : 51294C37CB54AE2F5369873258127280 AP—IP Address 10.4.8.21 AP Name : AP7cad74ff7b5e

1.4 MetaGeek Chanalyzer 실행



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1.5 MetaGeek Chanalyzer의 상단 메뉴에서 "CleaAir" 클릭

1.6 Connect to CleanAir AP에서 IP Addres, NSI KEY(Network Spectrum Interface Key), Friendly Nam를 기재후 Connect 클릭

Connect to CleanAir AP	X
IP ADDRESS:	10.4.8.21
NSI KEY:	51294C37CB54AE2F5369873258127280
FRIENDLY NAME:	My-Field-Office-1st-Floor
CONNECT TO WSSI MODULE:	Connect 💦



CISCO CleanAir 단독형 제품 사용시

Networks Interfaces – Radio – Settings 에서

Role in radio Networks – Spectrum Spectrum Information 클릭

NSI KEY 값 확인

RADICO-802.11N ^{2.4GHZ} STATUS	DETAILED STATUS	SETTINGS	CARRIER BUSY TEST	
ostname ap				ap uptime is 13 minute
Network Interfaces: Radio0-802.11N ^{2.4GH}	^z Settings			
Operating Mode:	Mixed			
Enable Radio:	Enable	Disable		
Current Status (Software/Hardware):	Enabled	Up		
Role in Radio Network:	Access Point Access Point (Fallback to Radio Shute Access Point (Fallback to Repeater) Repeater Root Bridge Non-Root Bridge Root Bridge with Wireless Clients Non-Root Bridge with Wireless Clients Workgroup Bridge Universal Workgroup Bridge Universal Workgroup Bridge Universal Workgroup Bridge Client I Scanner	lown)	(НИНИ, НИНИ, НИНИ)	
11r Configuration:	 ○ enable	time:	(20-1200 ms)	
Data Rates:	Best Range Best Throughput Defaul	0		
1.0Mb/s	ec Require	C Enable	Oisable	
2.0Mb/s	ec Require	Enable	Disable	
5.5Mb/s	ec Require	Enable	Oisable	
11.0Mb/s	ec	Enable	Disable	
6.0Mb/s	ec Require	Enable	Disable	
Spectrum Status				
NSI Key : 17895	20A43527A338D3C5B551224DDC5			
NSI State in Dot11Radio 0 : configu	ured			
NSI State in Dot11 Radio 1 : config	red			

Close

MetaGeek Chanalyzer를 사용하여 원격 스펙트럼 분석



위 그래프에서 채널 6과 채널 11번은 상대적으로 많은 이용된다.

채널 사용 부분을 그래프 및 %로 표시.



5Ghz 대역을 현재 세션에 기본 밴드로 할려면 상단에 "화살표"를 선택



5Ghz 대역에서 채널 149이 사용 되고 있음을 볼 수 있다. 약 50% 사용 수준



5Ghz 대역에 사용 장치를 하단에 Interfering Devices를 통해 확인 할 수 있다

Chanalyzer						C 💌
File View Wi-Spy Wi-Fi OleanAin® Report My-Field-Office-1st-Floor	(Builder Help	1946E - 🐺 MAX - (% DENSITY) 🚦	N9PECTOR			
	▶ → Н 0 -0 - мсянк 5.00 + - 0 - 0 -	Frequency: 524 Amphiluse: -55 Density: 0.9 Carment: -122 Avertage: -30	65 Minz ៨5 m 3 ៨ដែក ៨ ភ្នំ គ			
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	FLTERS	+ Device Type	> Severity	> Duty Cycle	> Signal Strengtl	Show Inactive
	■ Device Type ✓ 902 11 ■ 902 11 ✓ 902 11 ✓ 902 11	Signel Stron Is Active -75 Tr -32 Tr -56 Tr	Channels Affe	Discovered Trive 1 7:49 PM 7:49 PM 7:52 PM	0.0% C.0%	n Severity 9:37 PM 3 8:37 PM 3 8:37 PM 4
2.4 GHz	5 GH2					

오른쪽 상단에서 "평균, 최대 및 검사"를 클릭하여 볼 수 있다.

이를 각각 선택하여 평균, 최대를 선택, 각 부분 진폭그래프는 마우스를 통해 상세 정보를 볼 수 있다.



