



## INDEX

---

### Numerics

40 MHz channel bonding **10-15**  
802.11a policy name **11-57**  
802.11b/g RRM interval template **11-68, 11-70**  
802.11b/g RRM threshold templates **11-66**  
802.11b/g voice templates **11-62**  
802.11 counters report **15-17, 15-18**  
802.11h template  
    configuring **11-69**  
802.11 security trap **11-75**  
802.11 tags layer **5-47**  
802.1n scaling reports **15-5**  
802.1X association **6-39**  
802.1X authentication **6-39**  
802.3 bridging  
    configuring **10-14**  
880 series ISRs **1-6**

---

### A

AAA override **11-17**  
AAA servers **11-16**  
AAA traps **11-75**  
absolute **18-2**  
access control list template **11-42**  
access control list templates **11-56**  
accessing the schedule panel **15-4**  
access point  
    configuring **11-40**  
    configuring for hybrid REAP **13-8**  
    credentials **9-2**  
    friendly **11-48**

access point/radio templates **11-81**  
access point authentication and MFP templates **11-51**  
access point authorization template **11-40**  
access point inventory report **15-14**  
access point layer **5-44**  
access point load  
    avoiding **11-59**  
Access point placement **5-24**  
access point placement **5-24**  
access point positions  
    changing with import or export of file **5-33**  
access point reports **15-5**  
    modifying **15-8**  
    viewing **15-8**  
access points  
    adding **5-23**  
    configuring **9-7**  
    configuring for LOMM **9-14**  
    converting to LWAPP **C-2**  
    detecting **14-12**  
    embedded **1-6**  
    searching **9-16**  
    selecting **11-90**  
access points, adding to maps **5-23 to 5-24**  
access point security statistics  
    for mesh **6-51**  
access point templates  
    adding **11-80**  
access point threats **6-11**  
access point traps **11-75**  
accuracy tool **5-67**  
ACL template **11-42**  
    configuring **11-42**

- ACS server  
 adding WCS to **16-5**
- ACS View Server credentials **6-34**
- active interferer count per channel **9-20**
- active interferers **9-19**
- active interferers count chart **9-20**
- active sessions  
 monitoring **7-4**
- adaptive scan threshold **11-66**
- add config groups **8-18**
- add group members **8-10**
- adding access points **5-22**
- adding access point templates **11-80**
- adding a license **B-5**
- adding a migration template **9-6**
- adding a spectrum expert **9-18**
- adding autonomous access points  
 by CSV file **9-5**
- adding auto-provisioning filter **16-18**
- adding chokepoints **5-34**
- adding controllers **10-1**
- adding controllers from config group **8-20**
- adding guest user account **7-15**
- adding guest user accounts **7-15**
- adding IOS access points **9-4**  
 by device information **9-4**
- adding templates from config group **8-20**
- adding WCS as TACACS+ server **16-6**
- adding WCS to ACS server  
 for use with RADIUS **16-10**
- adding WCS to an ACS server **16-5**
- adding WCS to a non-Cisco ACS server **16-14**
- adding WCS usergroups  
 into ACS for RADIUS **16-11**  
 into ACS for TACACS+ **16-7**
- add known rogue **11-71**
- adjusted link metric **6-42**
- administration menu **2-24**
- advanced debug **5-33, 5-63, 5-68**
- Advanced Options  
 definition **5-19**
- advanced options **5-18**
- Advanced tab  
 on WLAN template **11-18**
- Aironet IE **11-19**
- alarm **14-1**
- alarm dashboard **2-25, 14-1**
- alarm monitor **2-25, 6-17**
- alarms **14-1**  
 config audit **8-25**  
 monitoring **14-4**  
 rogue access point **14-8**  
 rogue adhoc **14-11**
- alarm trigger threshold **11-52**
- all groups window **16-8**
- alternate parent  
 for mesh **15-15**
- altitude **18-2**
- altitude mode **18-2**
- anonymous provisioning **11-34**
- antenna gain **6-33**
- antenna type **6-33**
- AP attack details **2-18**
- AP failover priority  
 setting **9-1, 10-8**
- AP list by location **15-7**
- AP list by location report **15-7**
- AP list by SSID **15-7**
- AP mesh layer info **5-45**
- applying calibration models **5-57**
- applying config groups **8-21**
- applying controller templates **11-79**
- AP policies **3-6**
- AP policies template **11-44**
- AP profile status report **15-7**
- APs not assigned to maps **2-17**
- AP status report  
 viewing for scheduled task **11-85**

- AP template task history  
viewing **11-86**
- AP template tasks **11-85**
- AP up time **6-47**
- assigned virtual domain components **17-8**
- assigning location presence **5-3**
- assigning virtual domains **7-22**
- association request failures **6-54**
- association request success **6-54**
- association request timeouts **6-54**
- attacks  
access points **6-11**
- AUDIT\_STATUS\_DIFFERENCE **14-65**
- auditing config groups **8-22**
- auditing H-REAP groups **13-15**
- audit report **16-34**
- audit reports **15-9**  
configuring **9-16, 10-5**
- audit status **6-50**  
viewing **10-5**  
viewing for access points **9-16**  
viewing for controllers **10-5**
- audit trail  
viewing **7-9**
- audit trails  
enabling for guest user activities **7-11**
- authentication order  
managing **10-5**
- authentication priority **10-5**
- authentication process  
Hybrid REAP **13-2**
- authentication request failures **6-54**
- authentication request success **6-54**
- authentication request timeout **6-54**
- auto key generation **11-23**
- automated upgrade **12-15**
- automatic backups, scheduling **12-3, 16-1**
- automatic client exclusion **11-20**
- automatic client troubleshooting **16-32**
- autonomous access points  
adding by CSV file **9-5**  
viewing **9-5**
- autonomous to LWAPP migration support **9-3**
- auto provisioning **16-17**  
setting **16-22**
- auto provisioning device information  
detailed **16-21**
- auto provisioning filter  
deleting **16-21**  
editing **16-21**
- auto refresh **16-34**
- auto-synchronizing location appliances **12-10**
- avoid access point load **11-59**
- avoid Cisco AP load **11-59**
- avoid foreign AP interference **11-59**
- avoid non-802.11 noise **11-59**
- 
- B**
- background tasks **12-13**  
running **16-1**
- backhaul interface **6-52**
- backing up location appliance data **12-12**
- backing up the WCS database  
on Linux **12-5**  
on Windows **12-4**
- backup and restore license **B-5**
- bandwidth  
making expedited **11-63**
- basic auditing **8-23**
- best practices **A-1**
- bridge group name **6-52**
- Bridging link information **6-57**
- bridging link information **6-57**
- bridging mesh statistics **6-52**
- broadcast deauthentication frame signatures **3-9**
- bronze **11-18**
- bronze queue **6-54**

**buildings**

- adding to a campus map **5-2**
- adding to WCS database **5-4**

**busiest APs report** **15-7, 15-8**

**busiest clients report** **15-10**

## C

**CAC**

- enabling **10-9**

**CA certificates** **4-5**

**CAD files** **5-2**

calculating access point requirements **5-15**

**calibration models** **5-57**

calibration models, applying **5-57**

calibration status bar **5-61**

call admission control **11-62**

campus map, adding to WCS database **5-1**

cascade reboot **8-26**

**CCA sensitivity** **11-61**

certificate signing request **3-21**

changing access point positions **5-33**

- by importing or exporting a file **5-33**

channel bonding

- configuring **10-15**

channel change notifications **6-72**

**channels**

- monitoring on a floor map **5-50**

- monitoring on floor map **5-50**

channels on a floor map **5-50**

channel width

- monitoring **6-59**

checking the status of WCS

- on Linux **12-2**

- on Windows **12-1**

**chokepoints** **5-34**

- adding **5-34**

- monitoring **5-42**

- removing **5-41**

using to enhance tag location **5-34**

**Cisco AP load**

- avoiding **11-59**

**Cisco Discovery Protocol** **9-11**

**Cisco UDI** **5-19**

**Cisco Unified Wireless Network Solution** **5-63**

**Cisco WCS base** **B-1**

**Cisco WCS location** **B-1**

**Cisco Wireless LAN Solution**

- overview **1-1 to ??**

- security solutions **3-1 to 3-4**

**civic address** **5-3**

clamped to ground **18-2**

classification rule **11-45**

clear config **9-12**

client alarms

- most recent **2-18**

client association report **15-11**

client authentication provision **11-34**

client count **2-17, 2-22**

client count graph report **15-5**

client count report **15-11**

client devices

- connecting to WLANs **13-11**

client exclusion

- happening automatically **11-20**

client exclusion policies template **11-49**

client MFP **3-6**

client properties **6-26**

client related traps **11-74**

client report

- creating new **15-12**

client reports

- modifying **15-9, 15-11**

- viewing **15-9, 15-11**

**clients**

- finding **6-35 to ??, 6-35, ?? to 6-38**

- manually disabled **2-18**

- map **6-38**

- monitoring on a floor map **5-52**
- monitoring on a floormap **5-52**
- parameters **5-52**
- clients, monitoring on floor map **5-52**
- clients detected by location server **2-21**
- client security component **2-21**
- clients layer **5-46**
- client statistics **6-38**
- client tab
  - home page **2-17**
- client traffic **2-18, 2-22**
- client troubleshooting
  - automatic **16-32**
- combined inventory report **15-14**
- command buttons **2-25**
- components
  - of virtual domain **17-8**
- conducting accuracy testing **5-67**
- config audit **8-24**
- config audit alarms **8-25**
- config group
  - adding controllers **8-20**
  - adding templates **8-20**
  - configuring **8-19**
    - downloading IDS signatures **8-28**
    - downloading sw to controllers **8-27**
    - removing controllers **8-20**
    - removing templates **8-20**
  - config group audits **8-22**
  - config groups
    - applying **8-21**
    - auditing **8-22**
    - creating **8-17**
      - downloading customized webauth **8-29**
      - rebooting **8-26**
      - reporting **8-26**
    - config group task
      - deleting **11-88**
    - config group task history
  - viewing **11-88**
  - config group tasks **11-87**
  - configuration audit summary **8-24**
  - configuration mismatch **6-75**
  - configuration sync **16-4**
  - configure menu **2-23**
  - configuring 40 MHz channel bonding **10-15**
  - configuring 802.3 bridging **10-14**
  - configuring access control lists **11-56**
  - configuring access points **9-7, 10-14**
  - configuring a client exclusion policy template **11-46**
  - configuring a CPU ACL template **11-42**
  - configuring a high throughput template **11-70**
  - configuring alarm severity **14-71**
  - configuring a local EAP general template **11-30**
  - configuring a local EAP profile template **11-31**
  - configuring a manually disabled client template **11-41**
  - configuring a mesh template **11-70, 11-71**
  - configuring an 802.11h template **11-69**
  - configuring an access point **11-40**
  - configuring an access point for hybrid REAP **13-8**
  - configuring an EAP-FAST template **11-33**
  - configuring an RRM interval template **11-68**
  - configuring an RRM threshold template **11-66**
  - configuring a policy name template **11-57**
  - configuring a roaming parameters template **11-64**
  - configuring a rogue policies template **11-43**
  - configuring a TACACS+ server template **11-28**
  - configuring a TFTP server template **11-72**
  - configuring a trusted AP policies template **11-44**
  - configuring audit reports **10-5**
  - configuring a user authentication priority template **11-79**
  - configuring a user login policies template **11-38**
  - configuring a video parameter template **11-63**
  - configuring a voice parameter template **11-62**
  - configuring config group **8-18**
  - configuring EDCA parameters
    - for individual controllers **10-16**
    - through a template **11-64**

- configuring firewall for WCS **3-5**
- configuring general templates **11-4**
- configuring global credentials **9-2**
- configuring global email parameters **16-30**
- configuring high density templates **11-60**
- configuring H-REAP AP groups **11-21**
- configuring Hybrid REAP **13-1**
- configuring hybrid REAP access point groups **13-11**
- configuring Hybrid-REAP groups **13-13**
- Configuring IDS **3-8**
- Configuring IDS signatures **3-8**
- configuring IDS signatures **3-8**
- configuring intrusion detection systems **3-8**
- configuring multiple country codes **8-15**
- configuring NAC out-of-band **10-18**
- configuring radio templates **11-88**
- configuring RADIUS servers **16-24**
- configuring scheduled configuration tasks **11-85**
- configuring SNMPv3 **10-17**
- configuring spectrum experts **9-18**
- configuring TACACS+ servers **16-17**
- configuring template
  - ACL **11-41**
    - for rogue AP rule groups **11-46**
  - 802.11a policy name **11-56**
  - 802.11b/g RRM interval **11-68**
  - 802.11b/g RRM threshold **11-63**
  - 802.11b/g voice **11-62**
  - access point/radio **11-81**
  - access point authentication and MFP **11-44**
  - access point authorization **11-40**
  - file encryption **11-23**
  - guest users **11-37**
  - known rogue access point **11-69**
  - local management user **11-78**
  - MAC filter **11-39**
  - QoS **11-6**
  - RADIUS accounting **11-27**
- RADIUS authentication **11-24**
- syslog **11-76**
- Telnet SSH **11-75**
- traffic stream metrics QoS **11-8**
- trap control **11-73**
- trap receiver **11-72**
- web authentication **11-52**
- WLAN **11-9**
- configuring the controller for hybrid REAP **13-5**
- configuring the switch
  - for hybrid REAP **13-4**
- configuring wired guest access **10-23**
- connecting client devices
  - to WLANs **13-11**
- Connecting to the Guest WLAN **3-20**
- Containment **6-16**
- containment
  - of rogue access points **6-16**
- content
  - customizing **2-20**
- controller
  - configuring for hybrid REAP **13-5**
  - controller audit report **16-34**
  - controller CPU utilization **2-21**
  - controller inventory report **15-14**
  - controller inventory status **2-22**
  - controller memory utilization **2-21**
  - controllers
    - adding **10-1**
    - adding to WCS database **4-1**
    - pinging network devices **10-8**
    - searching **10-4**
    - specified **1-1**
  - controller status report
    - viewing **11-87**
  - controller templates
    - applying **11-80**
  - controller upgrade settings **16-34**
  - controller utilization report **15-18**

- controller values  
refreshing **10-6**
- converting WLSE autonomous to WCS controller **C-1**
- counters report  
for 802.11 **15-17**
- country codes  
multiple **8-15, 10-3**  
setting **10-3**
- coverage areas **2-22**
- coverage hole **6-68, 6-75**
- coverage holes **2-17**  
finding **5-9**  
monitoring on a floor map **5-51 to 5-52**  
monitoring on floormap **5-51**
- coverage holes, monitoring **5-51**
- coverage hole summary report **15-18**
- Creating **15-8**  
creating a lobby ambassador account **7-12**
- creating a network configuration audit **15-10**
- Creating a network design **5-27**
- creating a network design **5-27**
- creating a new access point report **15-8**
- creating a new client report **15-12**
- creating a new inventory report **15-15**
- creating a new mesh report **15-10, 15-17**
- creating a new performance report **15-19**
- creating a new security report **15-20**
- creating a virtual domain **17-1**
- creating calibration models **5-45**
- Creating guest user accounts **7-11**
- creating guest user accounts **7-11**
- creating placemarks **18-3**
- creating virtual domains **17-1**
- CSR **3-21**
- CSV file **9-5, 16-19**
- CSV files **18-4**
- current AP template task  
deleting **11-86**  
disabling **11-86**
- enabling **11-86**  
modifying **11-85**
- current config group task  
disabling **11-88**  
enabling **11-88**  
modifying **11-87**
- current templates  
viewing **10-17**
- customized web auth **10-27**
- customized webauth  
downloading **8-29**
- Customized Web authentication **3-17**
- customized web authentication  
downloading **11-54**
- customizing content on WCS Home page **2-20**
- customizing tabs on WCS Home page **2-19**
- Custom signature **3-14**
- 
- D**
- dashboard  
RRM **6-71**
- data/coverage **5-19**
- data management tasks  
performing **16-27**
- data point collection **5-58**
- debug commands **A-3**
- debug strategy **A-4**
- default lobby ambassador credentials  
editing **7-9**
- deleting a current AP template task **11-86**
- deleting a current config group task **11-88**
- Deleting a guest user **3-20**
- deleting a license **B-5**
- deleting a report **15-3**
- deleting guest user templates **7-17**
- deleting WCS user accounts **7-4**
- designing a network **5-27**
- detailed auto provisioning device information **16-21**

- detecting access points **14-12**  
 detecting rogue access points **6-17**  
 device certificates **4-5**  
 device information **9-4**  
 DHCP **6-39**  
 DHCP server  
   overriding **11-20**  
 DHCP statistics **6-70**  
 diagnostic channel **A-1**  
 disable report schedule **15-2**  
 disabling a current config group task **11-88**  
 disabling current AP template task **11-86**  
 disabling IDS signatures **3-13**  
 DNS ping **6-39**  
 DNS resolution **6-39**  
 downloading a customized web authentication page **11-54**  
 downloading customized webauth **8-29**  
 Downloading customized web authentication **3-17**  
 Downloading IDS signatures **3-12**  
 downloading IDS signatures **3-12**  
   from your config group **8-28**  
 downloading sw to controllers  
   after adding config group **8-27**  
 downloading vendor CA certificates **4-5**  
 downloading vendor device certificates **4-5**  
 download logs **5-70**  
 downstream delay **11-9**  
 downstream packet loss rate **11-9**  
 drawing polygon areas  
   using map editor **5-13**  
 DTIM **11-58**
- 
- E**
- EAP-FAST template **11-33**  
 EAPOL flood signature **3-10**  
 EDCA parameters  
   configuring for individual controllers **10-16**  
   configuring through a template **11-64**
- editing guest users **7-16**  
 Editing signature parameters **3-15**  
 editing the default lobby ambassador credentials **7-9**  
 edit link **5-8**  
 edit links  
   home page **2-19**  
 edit location presence information **5-3**  
 edit view **14-5**  
 email  
   configuring parameters **16-29**  
 email notifications  
   monitoring **14-14**  
 embedded access points **1-6**  
 enable background audit **8-18**  
 enable enforcement **8-18**  
 enable report schedule **15-2**  
 enabling a current config group task **11-88**  
 enabling audit trails  
   for guest user activities **7-11**  
 enabling current AP template task **11-86**  
 enabling high density **10-11**  
 enabling IDS signatures **3-13**  
 enabling load-based CAC **10-7**  
 enabling location presence **5-6**  
 Enabling Web login **3-16**  
 enabling Web login **3-16**  
 end user license agreement **B-8 to ??**  
 entry chokepoint **5-42**  
 establishing logging options **16-26**  
 event history **6-22**  
 event notification **1-4**  
 Events **14-1**  
 events **14-1**  
   monitoring **14-13**  
 excluded packets **6-53**  
 exit chokepoint **5-42**  
 expedited **11-63**  
 expedited bandwidth **11-63**  
 exporting a file

to change access point position **5-33**  
 exporting asset information **12-10**  
 exporting WLSE map data **5-54**  
 export task list **16-8**  
 extend to ground **18-2**  
 external web auth **10-27**  
 extracting task list **16-15**

**F**

failed objects  
 monitoring **14-7**  
 feature license **B-2**  
 file encryption template **11-23**  
 filter  
   deleting auto provisioning **16-21**  
   editing current auto provisioning **16-21**  
 filtering  
   using to modify maps **6-57**  
 filter member management **16-19**  
 filter mode **16-18**  
 filter properties **16-19**  
 finding clients **6-34**  
 finding coverage holes **5-9**  
 firewall, configuring for WCS **3-5**  
 floor plans  
   adding to a campus building **5-9 to 5-11**  
   adding to a standalone building **5-11 to 5-12**  
   enhancing with map editor **5-12**  
 foreign access point interference  
   avoiding **11-59**  
 foreign AP interference  
   avoiding **11-59**  
 Frame type **3-14**  
 friendly access point template **11-48**  
 friendly rogue **11-45**  
 friendly rogue access points **6-10**

**G**

general tab  
   client properties **6-26**  
   home page **2-17**  
   RF properties **6-28**  
   security **6-29**  
 general templates  
   configuring **11-4**  
 generate password **11-37**  
 GEO check box **5-8**  
 geographical coordinates **18-1**  
 global credentials  
   configuring **9-2**  
 Global settings  
   for standard and custom signatures **3-15**  
 global username and password  
   overriding **9-11**  
 gold **11-18**  
 gold queue **6-53**  
 Google Earth coordinates **18-2**  
 Google Earth maps **18-1**  
   viewing **6-60**  
 Google KML or CSV  
   importing into WCS **18-5**  
 GPS markers **5-3**  
 grid of plus marks **5-59**  
 groups  
   for hybrid-REAP **13-12**  
   for rogue access point rules **11-46**  
 group setup window on ACS server **16-10**  
 GUEST\_USER\_ADDED **14-62**  
 GUEST\_USER\_AUTHENTICATED **14-63**  
 Guest user  
   deleting **3-20**  
 guest user account  
   scheduling **7-18**  
 Guest user accounts  
   creating **7-11**

guest user accounts  
 adding **7-15**  
 creating **7-11**  
 managing **7-14**  
 guest user activities **7-11**  
 guest user credentials **7-16**  
 guest user details  
   emailing **7-19**  
   print **7-19**  
 guest users  
   viewing and editing **7-16**  
 guest user templates **11-37**  
   deleting **7-17**  
 Guest WLAN  
   connecting **3-20**  
 guidelines  
   for NAC out-of-band integration **10-19**  
 guidelines for using the map editor **5-12**

---

**H**

heater status **6-47**  
 heat map  
   described **5-24**  
   graphic **5-24**  
 help menu **2-24**  
 hierarchy  
   of mesh network **6-56**  
 Hierarchy of Mesh parent to child **6-58**  
 hierarchy of mesh parent to child **6-58**  
 high density  
   enabling **10-11**  
 high density requirements **10-11**  
 high density templates **11-60**  
 high throughput template  
   configuring **11-70**  
 historical report type **15-1**  
 Home page  
   customizing content **2-20**

customizing tabs **2-19**  
 H-REAP AP groups  
   configuring **11-21**  
 H-REAP configuration tab **11-22**  
 H-REAP groups  
   auditing **13-15**  
 Hybrid REAP  
   configuring **9-1, 10-1, 13-1**  
 hybrid REAP access point groups **13-11**  
 hybrid-REAP groups **13-12**  
 Hybrid REAP local switching **11-19**  
 hysteresis **11-66**

---

**I**

identical audit status **6-50**  
 IDS **3-8**  
   configuring **3-8**  
 IDS sensors **3-8**  
 IDS signature events  
   viewing **3-16**  
 IDS signatures **3-8**  
   disabling **3-13**  
   downloading **3-12**  
   downloading from config group **8-28**  
   enabling **3-13**  
   uploading **3-11**  
 importing a file  
   to change access point position **5-33**  
 importing asset information **12-10**  
 importing coordinates  
   as CSV file **18-4**  
   into Google Earth **18-2**  
 importing Google KML or CSV into WCS **18-5**  
 importing WLSE map data **5-54**  
 indicator of alarms **2-25**  
 information elements  
   Aironet **11-19**  
   infrastructure MFP **3-6**

input type **16-19**  
 inspect location readiness **5-21**  
 inspect VoWLAN readiness **5-22**  
 installer  
   using to upgrade **12-15**  
 installing a license **B-3**  
 installing WCS  
   for WLSE conversion **C-2**  
 insufficient memory **6-53**  
 integrating NAC out-of-band **10-18**  
 interferers  
   summary **9-19**  
 internal web auth **10-27**  
 inter-subnet roaming **8-4**  
 Intrusion Detection Systems **3-8**  
 intrusion detection systems **3-8**  
 invalid association request **6-54**  
 invalid reassociation request **6-54**  
 invalid reauthentication request **6-55**  
 inventory detail status **2-17**  
 inventory reports **15-12**  
   creating **15-15**  
   modifying **15-15**  
   viewing **15-15**  
 inventory status **2-22**  
 IOS access points  
   adding **9-4**  
   adding by device information **9-4**  
 IOSAP\_DOWN **14-64**  
 IOSAP\_LINK\_DOWN **14-63**  
 IOSAP\_LINK\_UP **14-63**  
 IOSAP\_UP **14-64**  
 IP connectivity **6-39**  
 IPSEC failures **6-12**

---

**K**

KEK  
   key encryption key **11-25**

key wrap **11-25**  
 KML file **18-2**  


---

**L**  
 laptop icon **6-37**  
 latest network audit report **10-7**  
 latitude **18-1**  
 Layer 1 security solutions **3-1**  
 Layer 2 **11-11**  
 Layer 2 security solutions **3-2**  
 Layer 3 **11-15**  
 Layer 3 security solutions **3-2**  
 Layer 3 to Layer 2 mode, converting Cisco Wireless LAN Solution **3-4**  
 LBS authorization **11-40**  
 LEAP authentication  
   requirements **8-8**  
 legacy syslog template **11-76**  
 license  
   adding **B-5**  
   backup and restore **B-5**  
   deleting **B-5**  
   license agreement **B-8 to ??**  
   license installation **B-3**  
   license management **B-4**  
   licenses **B-1**  
   license types **B-1**  
   licensing  
    on WLSE network management **C-4**  
   lifetime **7-17**  
   linear point collection **5-58**  
   link aggregation **11-5**  
   link aggregation (LAG)  
    guidelines **13-4 to ??**  
   link metric  
    adjusted **6-42**  
    unadjusted **6-42**  
   link SNR **6-42**

- link stats
    - for mesh **15-16**
  - Link test
    - running **6-63**
  - link test
    - running **6-63**
  - Link test result **6-64**
  - link test results **6-42**
  - list all filters **16-21**
  - list filters **16-21**
  - load **5-42**
  - load-based CAC **11-62**
    - enabling **10-9**
  - Lobby ambassador **7-11**
  - lobby ambassador
    - logging activites **7-19**
  - lobby ambassador account
    - creating **7-12**
    - editing **7-13**
  - lobby ambassador defaults
    - setting **7-7**
  - local authentication
    - for hybrid-REAP groups **13-12**
  - Local EAP check box **11-17**
  - local EAP general template **11-30**
  - local EAP profile template **11-31**
  - local management user template **11-78, 11-79**
  - local net users template **11-35**
  - local password policy **16-23**
  - local switching
    - Hybrid REAP **11-19**
  - locating rogue access points **6-17**
  - location
    - of rogue access points **6-16**
  - location accuracy
    - analyzing **5-63**
    - using testpoints **5-63**
  - location appliance
    - importing **12-7**
  - location appliance data
    - backing up **12-12**
  - location appliance functionality **4-3**
  - location appliance importing **12-7**
  - location appliances
    - adding to WCS database **4-2**
    - auto-synchronizing **12-11**
    - relationship with WCS Location **1-4**
  - location inventory status **2-22**
  - location menu **2-24**
  - location optimized monitor mode **9-9**
  - location presence
    - assigning **5-3**
    - on a location server **5-6**
  - location readiness
    - inspecting **5-21**
  - location server inventory report **15-15**
  - location server utilization **15-18**
  - location tab **6-31**
  - location upgrade **B-2**
  - log analysis **6-21**
  - logging **16-4**
  - logging in
    - to the WCS user interface **7-13**
  - logging into the WCS user interface **2-14 to 2-16**
  - logging options **16-26**
  - logging the lobby ambassador activities **7-19**
  - login.html **3-17**
  - LOMM **9-9**
    - configuring access point radios **9-14**
  - longitude **18-3**
  - long preambles, enabling for SpectraLink NetLink phones **4-6**
  - LWAPP migration **9-3**
- 
- M**
- MAC filtering **11-14**
  - MAC filter template **11-39**

- MAC frequency **3-14**
- MAC information **3-14**
- MACK
  - message authenticator code keys **11-25**
- Maintain Image Aspect Ratio **5-53**
- maintaining WCS **12-1 to 12-19**
- malformed neighbor packets **6-52**
- malicious rogue **11-45**
- malicious rogue access points **6-3**
- managed network
  - security index **6-3**
- management frame flood signatures **3-9**
- Management Frame Protection **3-6**
- management frame protection **11-51**
- management queue **6-54**
- managing a virtual domain **17-6**
- managing guest user accounts **7-14**
- managing licenses **B-4**
- managing multiple WCSs **1-7**
- managing user authentication order **10-5**
- managing virtual domains **17-6**
- manually disabled client
  - template for **11-41**
- manually disabled clients **2-18**
- manufacturer information **6-33**
- map
  - adding chokepoints **5-34**
  - removing chokepoints **5-41**
- Map Editor
  - general notes and guidelines **5-12**
- map editor
  - general notes **5-12**
  - guidelines for using **5-12**
  - using to draw polygon areas **5-13**
- map editor, enhancing floor plans **5-12**
- maps
  - creating **5-1 to 5-24**
  - monitoring **5-42, 5-42 to 5-53**
  - searching **5-8**
- using to monitor link stats **6-40**
- using to monitor mesh AP neighbors **6-45**
- map view
  - updating **6-58**
- menu bar **2-23**
- mesh access point neighbors
  - monitoring **6-45**
- mesh access points
  - monitoring **6-43**
- mesh alarms
  - most recent **2-19**
- mesh alternate parent **15-15**
- mesh health **6-47**
  - monitoring **6-47**
- mesh link statistics **6-40**
  - monitoring **6-40**
- mesh link stats **15-16**
- mesh neighbors **6-46**
- mesh network
  - monitoring using maps **6-40**
- mesh network hierarchy **6-56**
- mesh networks
  - monitoring **6-40**
- mesh node hops **15-16**
- mesh packet error statistics **15-16**
- mesh packet statistics **15-16**
- mesh parent-child hierarchical view **5-45**
- mesh report
  - creating **15-10, 15-17**
  - mesh reports **15-15**
  - modifying **15-16**
  - viewing **15-16**
- mesh security statistics
  - for an AP **6-47**
- mesh statistics
  - for an access point **6-51**
- mesh stranded APs **15-16**
- mesh tab
  - home page **2-19**

- mesh template
  - configuring **11-71**
- Mesh tree
  - viewing **6-56**
- mesh tree
  - viewing **6-56**
- mesh worst node hops **15-16**
- mesh worst SNR links **15-16**
- message integrity check information element **11-51**
- metrics
  - in QoS **11-8**
- MFP **3-6**
  - for clients **3-7**
- MFP client protection **11-20**
- MFP signature generation **11-20**
- MFP templates **11-51**
- MIC IE **11-51**
- minimum RSSI **11-66**
- mirror mode **9-10**
- mismatched audit status **6-50**
- mobile announce messages **8-8**
- mobility **8-1**
  - mobility anchors **8-12**
  - mobility groups **8-7**
    - prerequisites **13-4 to ??**
  - mobility groups, configuring **8-8**
  - mobility scalability **8-11**
- modifying access point reports **15-8**
- modifying a current AP template task **11-85**
- modifying a current config group task **11-87**
- modifying a migration template **9-6**
- modifying audit reports **15-9**
- modifying client reports **15-9, 15-11**
- modifying inventory reports **15-15**
- modifying map displays **6-57**
  - using filters **6-57**
- modifying mesh reports **15-16**
- modifying performance reports **15-18**
- modifying security reports **15-20**
- monitoring active sessions **7-5**
- monitoring alarms **14-4**
- monitoring channels
  - on a floor map **5-50**
- monitoring channel width **6-59**
- monitoring chokepoints **5-42**
- monitoring clients
  - on a floormap **5-52**
- monitoring email notifications **14-14**
- monitoring events **14-13**
- monitoring failed objects **14-7**
- monitoring maps **5-42**
- monitoring mesh access point neighbors **6-45**
  - using maps **6-45**
- monitoring mesh health **6-42, 6-47, 6-59**
- monitoring mesh link statistics
  - using maps **6-40**
- monitoring mesh networks
  - using maps **6-40**
- Monitoring outdoor areas **5-45**
- monitoring outdoor areas **5-53**
- monitoring pre-coverage holes **6-68**
- monitoring predicted coverage **5-43**
- monitoring rogue access point alarms **14-8**
- monitoring rogue access point details **14-9**
- monitoring rogue access points **6-12**
- monitoring rogue adhoc alarms **14-10**
- monitoring rogue adhocs **6-14**
- monitoring rogue clients **6-14, 14-13**
- monitoring security configurations **14-14, 16-32**
- monitoring shunned clients **6-15**
- monitoring spectrum experts **9-18**
- monitoring transmit power levels **5-45**
  - on a floormap **5-50**
- monitor menu **2-23**
- monitor mode
  - location optimized **9-9**
- most recent AP alarms **2-21**
- most recent audit alarms **8-25**

most recent client alarms **2-18**  
 most recent mesh alarms **2-19**  
 most recent rogue adhocs **3-3**  
 most recent security alarms **2-18**  
 multicast mobility mode **8-12**  
 multiple country codes  
   configuring **8-15**  
   setting **10-3**  
 multiple syslog template **11-77**

---

**N**

N+1 redundancy **8-5**  
 NAC out-of-band  
   configuring **10-18**  
 NAT **8-11**  
 Navigator **1-7**  
 NetStumbler signature **3-10**  
 network address translation **8-11**  
 network audit report  
   viewing latest **10-7**  
 network design **5-27**  
 network protection **3-8**  
 Network Summary page **2-15**  
 new rogue AP count **15-19**  
 new rogue AP count report **15-19**  
 new rogue APs **15-19**  
 new rogue APs report **15-19**  
 new search **5-8**  
 node hop count  
   worst **2-19**  
 node hops **6-53**  
   for mesh **15-16**  
 noise  
   avoiding non-802.11 types **11-59**  
   avoid non-802.11 **11-59**  
 non-802.11 noise  
   avoiding **11-59**  
 non-Cisco ACS server

for use with RADIUS **16-14**  
 notifications  
   of channel change **6-72**  
   of RF grouping **6-73**  
   of transmission power change **6-73**  
 NTP server template **11-3**  
 null probe response signatures **3-9**

---

**O**

on-demand accuracy testing **5-67**  
 optimizing the controller for high density **10-11**  
 organizationally unique identifier **6-33**  
 Outdoor areas  
   monitoring **5-53**  
 outdoor areas  
   monitoring **5-53**  
 outdoor areas, adding to a campus map **5-5 to 5-6**  
 outdoor location  
   creating with Google Earth **18-1**  
 override global username password **9-11**  
 overview  
   Cisco Wireless LAN Solution **1-1 to ??**  
   WCS **1-2**

---

**P**

packet error rate  
   worse **2-19**  
 packet error rate link color **6-58**  
 packet error statistics  
   for mesh **15-16**  
 packet jitter **11-8**  
 packet latency **11-8**  
 packet loss **11-8**  
 packet loss rate **11-9**  
 packets received **6-55**  
 packet statistics

for mesh **15-16**  
 packets transmitted **6-55**  
 parent changes **6-53**  
 parent TSF **6-39**  
 passthrough **11-15**  
 password rules  
   turning on or off **16-23**  
 PEAP **11-33**  
 peer-to-peer blocking **11-20**  
   guidelines **10-19**  
 performance reports **15-17**  
   creating **15-19**  
   modifying **15-18**  
   viewing **15-18**  
 performing data management tasks **16-27**  
 pico cell mode **11-58**  
 pinging network devices from a controller **10-8**  
 placemarks  
   creating **18-3**  
 placement of access points **5-25**  
 planning mode **5-17**  
   to calculate access point requirements **5-15**  
 planning mode, calculating access point requirements **5-15**  
 platinum **11-18**  
 platinum queue **6-53**  
 PLR **11-9**  
 POE status **6-50**  
 policy manager solutions **3-2**  
 policy name template  
   configuring **11-57**  
 polygon areas  
   drawing with map editor **5-13**  
 poor neighbor SNR **6-52**  
 position testpoints **5-68**  
 power-over-ethernet status **6-50**  
 pre-coverage holes  
   monitoring **6-68**  
 predicted coverage, monitoring **5-43 to ??, 5-43**

predictive tool  
   distance based **5-21**  
 Prerequisites **2-1**  
 presence parameters **5-7**  
 Present map **6-37**  
 print guest user details **7-19**  
 protection type **11-52**  


---

**Q**  
 QoS **11-17**  
 QoS templates **11-6**  
 quarantine **10-21**  
 Queue **15-16**  
 queues  
   silver, gold, platinum, bronze, management **6-53**  
 Quiet time **3-14**

---

**R**  
 radio inventory status **2-22**  
 radio measurements  
   receiving **6-39**  
 radio receiver sensitivity **6-33**  
 radio resource management **11-59**  
 Radio Resource Management statistics **6-72**  
 radio status  
   scheduling **9-15**  
 radio templates  
   configuring **11-88**  
 radio utilization report **15-18**  
 RADIUS accounting template **11-27**  
 RADIUS and TACACS+ attributes  
   for virtual domain **7-23, 17-7**  
   virtual domains **7-23, 17-7**  
 RADIUS authentication template **11-24**  
 RADIUS servers  
   configuring **16-24**

- reachability status **9-18**  
 reassociation request failures **6-55**  
 reassociation request success **6-55**  
 reassociation request timeouts **6-55**  
 reauthentication request failures **6-55**  
 reauthentication request success **6-55**  
 reauthentication request timeout **6-55**  
 rebooting config groups **8-23**  
 receiving radio measurements **6-39**  
 recent alarms **2-21**  
 recent coverage holes **2-17, 2-22**  
 Recent map **6-37**  
 recent rogue adhoc alarm **2-18**  
 recent rogue AP alarms **2-18**  
 recovering the WCS password **12-20**  
 refresh  
     automatically **16-34**  
 refresh browser **5-42**  
 refresh controller values **10-6**  
 refresh from network **5-42**  
 refresh heatmap **5-42**  
 relative to ground **18-2**  
 removing chokepoints **5-41**  
 removing controllers from config group **8-20**  
 removing switches **10-30**  
 removing templates from config group **8-20**  
 report  
     802.11 counters **15-17**  
     access point inventory **15-14**  
     busiest APs **15-8**  
     busiest clients **15-10**  
     client association **15-11**  
     client count **15-11**  
     combined inventory **15-14**  
     controller inventory **15-14**  
     controller utilization **15-18**  
     coverage hole summary **15-18**  
     deleting **15-3**  
     location server inventory **15-15**  
     location server utilization **15-18**  
     mesh alternate parent **15-15**  
     mesh worst node hops **15-16**  
     radio utilization **15-18**  
     security summary **15-20**  
     traffics stream metrics **15-8**  
     traffic stream metrics **15-11**  
     Tx power level and channel **15-18**  
     unique client **15-11**  
     voice statistics **15-18**  
     reporting tag location **5-34**  
 Reports **15-7**  
 reports  
     802.11n scaling **15-5**  
     access point type **15-7**  
     disable schedule **15-2**  
     enable schedule **15-2**  
     mesh link stats **15-16**  
     mesh node hops **15-16**  
     mesh packet error statistics **15-16**  
     mesh packet statistics **15-16**  
     mesh worst SNR links **15-16**  
     running **15-1**  
     reset AP now **9-12**  
     restore WCS values **10-6**  
     restoring WCS database on Linux **12-7**  
     retain WCS value **8-23**  
     retention expiration **5-8**  
     retransmission rule enable **5-8**  
     Retrieving UDI **6-64**  
     RF calibration model, creating **4-7**  
     RF calibration tool **1-7**  
     RF grouping notifications **6-73**  
     RF prediction heat map **5-24**  
     RF profile traps **11-75**  
     RF properties **6-28**  
     RF update traps **11-75**  
     RLDP **11-44**  
     roaming **8-1**

- roaming parameters template
  - configuring **11-65**
- roaming time **11-8, 11-9**
- rogue access point alarms
  - monitoring **14-8**
- rogue access point details **14-9**
- rogue access point location **6-16**
- rogue access point rule groups **11-46**
- rogue access point rules
  - configuring a template **11-44**
  - viewing or editing **9-17**
- rogue access points
  - alarm monitor **6-17**
  - detecting **6-17**
  - detecting and locating **6-17 to 6-18**
  - friendly **6-10**
  - locating **6-17**
  - malicious **6-9**
  - monitoring **6-1 to ??, 6-12**
  - solutions for **3-2**
  - unclassified **6-10**
- rogue adhoc alarm **2-18**
- rogue adhoc alarms
  - monitoring **14-10**
- rogue adhocts
  - monitoring **6-14**
  - most recent **3-3**
- rogue adhocs event report **15-20**
- rogue AP alarms **2-18**
- rogue AP detail summary **2-21**
- rogue APs event report **15-19**
- rogue APs layer **5-48**
- rogue APs report **15-19**
- rogue clients
  - monitoring **6-14, 14-13**
- rogue clients layer **5-49**
- rogue detector **9-10**
- rogue location discovery protocol **11-44**
- rogue management **3-3**
- rogue policies
  - template for **11-43**
- rogues detected by APs **15-19**
- routing state **6-52**
- RRM **11-59**
  - RRM dashboard **6-71**
  - RRM DCA **10-15**
  - RRM intervals **11-68, 11-69, 11-70**
  - RRM interval template
    - configuring **11-68, 11-70**
  - RRM thresholds **11-66**
  - RRM threshold template
    - configuring **11-66**
- rules
  - for rogue access point **11-44**
  - viewing or editing for rogue access points **9-17**
- Running **6-63**
  - Running a link test **6-62**
  - running a link test **6-63**
  - running background tasks **16-1**
  - running report **15-1**
  - RX neighbor requests **6-53**
  - RX neighbor responses **6-53**
  - Rx sensitivity **11-61**

---

- S**
- saved searches **5-8**
- scalability parameters **8-11**
- scaling reports
  - 802.11n **15-5**
- scan threshold **11-66**
- scheduled accuracy testing **5-67**
- scheduled configuration tasks
  - configuring **11-85**
- scheduled tasks
  - viewing **9-15**
- schedule panel
  - accessing **15-4**

- scheduling guest user account **7-18**
- scheduling radio status **9-15**
- search
  - using for alarms **14-6**
- search clients **6-36**
- searching controllers **10-4**
- searching maps **5-6**
- security alarms
  - most recent **2-18**
- security color range **6-3**
- security configurations
  - monitoring **14-14, 16-32**
- security index **6-3**
- security index detailed report **6-4**
- security mesh statistics **6-54**
- security reports **15-19**
  - creating **15-20**
  - modifying **15-20**
  - viewing **15-20**
- security solutions **3-1 to 3-4**
- security statistics
  - for mesh **6-51**
- security summary report **15-20**
- security summary window **6-2**
- security tab
  - home page **2-18**
- selecting access points **11-90**
- sending mobile announce messages **8-8**
- sensors
  - viewing IDS types **3-8**
- sequence parameter **11-57**
- serial number **6-33**
- servers
  - synchronizing WCS and location servers **12-8**
- Service Options
  - definitions **5-19**
- service options **5-19**
- setting AP failover **9-1**
- setting AP failover priority **10-8**
- setting lobby ambassador defaults **7-7**
- setting multiple country codes **10-3**
- shunned clients
  - monitoring **6-15**
- shutting switch port **10-30**
- sidebar area **2-24**
- signature attacks **6-11**
- signature attacks summary **2-18**
- silver **11-18**
- silver queue **6-53**
- single device **16-19**
- skull-and-crossbones indicator **6-18**
- sniffer **11-82**
- sniffer mode **9-10**
- SNMP authentication **11-74**
- SNMPv3
  - configuring **10-17**
- SNR definition **6-58**
- SNR down **6-42**
- SNR link
  - worst **2-19**
- SNR UP **6-42**
- SNR up **6-42**
- software
  - downloading config groups to controllers **8-27**
  - software, updating **4-4**
- SpectraLink NetLink phones, enabling long preambles **4-6**
- spectrum expert
  - adding **9-18**
- spectrum expert details **9-20**
- spectrum experts
  - configuring **9-18**
  - monitoring **9-18**
  - summary **9-19**
- Standard signature **3-14**
- standard signatures **3-9**
- starting WCS
  - on Linux **2-14**

- on Windows **2-13**
- statistics
  - DHCP **6-70**
  - statistics tab **6-30**
  - status, checking **12-1**
  - status report
    - AP profile **15-7**
  - stopping WCS
    - on Linux **12-3**
    - on Windows **12-2**
  - supported Cisco WLSE management stations **C-2**
  - switch
    - configuring for hybrid REAP **13-4**
  - switches
    - removing **10-30**
  - switch port
    - shutting **10-30**
  - switch port tracing
    - using **10-27**
  - symmetric mobility tunneling **11-5**
  - symmetric tunneling **8-5**
  - synchornization
    - of configuration **16-4**
  - synchronize servers **12-8**
  - syslog templates **11-76, 11-77**
  - System requirements **2-2**

---

**T**

  - TACACS+ server
    - configuring a template for **11-29**
  - TACACS+ servers
    - configuring **16-23**
  - tagging
    - of rogue access points **6-16**
  - tag location reporting **5-34**
  - Target **6-39**
  - target TSF **6-39**
  - tasks
  - importing into ACS **16-5**
  - Telnet SSH templates **11-75**
  - temperature **6-47**
  - template
    - configuring for rogue AP rules **11-44**
    - template-based auditing **8-23**
    - template for configuring network user credentials **11-35**
    - templates
      - using **11-1**
    - test analysis **6-39**
    - testing
      - accuracy **5-67**
    - Testpoints **5-63**
    - TFTP server **3-11**
    - TFTP server template
      - configuring **11-72**
    - thermometer color range **6-3**
    - threats
      - access points **6-11**
    - throughput report **15-6**
    - tilt **18-2**
    - tool to conduct accuracy testing **5-67**
    - top APs by client count **2-17**
    - top security issues **6-3**
    - total APs not assigned to maps **2-17**
    - total interferer count **9-20**
    - total mismatched controllers **8-25**
    - trace switch port **10-28**
    - traffic indicator message **11-58**
    - traffic stream metrics **11-63**
    - traffic stream metrics QoS status **11-8**
    - traffic stream metrics QoS template **11-8**
    - traffic stream metrics report **15-8, 15-11**
      - graphical **15-8**
    - transition time **11-66**
    - transmission power change notifications **6-73**
    - transmit power level **11-59**
    - transmit power levels
      - monitoring on a floor map **5-50**

- monitoring on a floormap **5-50**
- trap**
  - 802.11 security **11-75**
  - trap control templates **11-73**
  - trap receiver template **11-73**
  - traps
    - AAA **11-75**
    - access point **11-75**
    - client related **11-74**
    - RF profile **11-75**
    - RF update **11-75**
    - unsupported **14-70**
    - WPS **11-75**
  - traps added in 2.1 **14-35**
  - traps added in 2.2 **14-39**
  - traps added in 3.0 **14-42**
  - traps added in 3.1 **14-44**
  - traps added in 3.2 **14-47**
  - traps added in 4.0 **14-48**
  - traps added in 4.0.96.0 **14-53**
  - traps added in 4.1 **14-55, 14-62**
  - trend report type **15-1**
  - troubleshooting **A-1**
  - troubleshooting voice RF coverage **5-22**
  - trusted AP policies
    - template for **11-44**
  - trusted AP policies template **11-44**
  - tunneling **8-5**
  - turning password rules on or off **16-17**
  - Tx channel report **15-18**
  - TX neighbor requests **6-53**
  - TX neighbor responses **6-53**
  - Tx power level report **15-18**

---

- U**
- UDI
  - retrieving on controllers and access points **6-64**
- unadjusted link metric **6-42**
- unclassified rogue **11-45**
- understanding virtual domains **7-24, 17-8**
- uninstalling WCS
  - on Linux **12-14**
  - on Windows **12-14**
- unique client report **15-11**
- unique device identifier **6-64**
- unknown association requests **6-55**
- unknown reassociation request **6-55**
- unknown reauthentication request **6-55**
- Update map view **6-58**
- update map view **6-58**
- updating system software **4-4**
- upgrading the network **12-20**
- upgrading to Linux 4
  - during WLSE conversion **C-3**
- upgrading WCS
  - on Linux **12-19**
  - on Windows **12-19**
- Uploading IDS signatures **3-11**
- uploading IDS signatures **3-11**
- upstream delay **11-8**
- upstream packet loss rate **11-9**
- User accounts
  - for guest **7-11**
- user accounts
  - for guest **7-11**
- user authentication order
  - managing **10-5**
- user authentication priority template
  - configuring **11-79**
- user credential retrieval priority **11-35**
- user details
  - emailing **7-19**
  - printing **7-19**
- user groups **7-2**
- User Interface **2-22**
- user login policies
  - configuring a template **11-38**

- user preferences **16-35**
  - using chokepoints **5-33**
    - to enhance tag location reporting **5-33**
  - using edit view **14-5**
  - using filtering **6-57**
  - using maps
    - to monitor mesh AP neighbors **6-45**
    - to monitor mesh link statistics **6-40**
  - using maps to monitor mesh networks **6-40**
  - using planning mode **5-13**
  - using search **14-6**
  - using switch port tracing **10-27**
  - using template
    - ACL **11-42**
      - for friendly access point **11-48**
    - using templates **11-1**
      - 802.11a policy name **11-57**
      - 802.11b/g RRM interval **11-68, 11-70**
      - 802.11b/g RRM threshold **11-66**
      - 802.11b/g voice **11-62**
      - access point/radio **11-81**
      - access point authentication & MFP **11-51**
      - access point authorization **11-40**
      - file encryption **11-23**
      - for legacy syslog **11-76**
      - for multiple syslog **11-77**
      - guest users **11-37**
      - local management user **11-78, 11-79**
      - local net users **11-35**
      - MAC filter **11-39**
      - NTP server **11-3**
      - QoS **11-6**
      - RADIUS accounting **11-27**
      - RADIUS authentication **11-24**
      - syslog **11-76, 11-77**
      - Telnet SSH **11-75**
      - traffic stream metrics QoS **11-8**
      - trap control **11-73**
      - trap receiver **11-73**
    - web authentication **11-52**
    - WLAN **11-9**
      - using testpoints
        - to analyze element location accuracy **5-63**
      - using the installer to upgrade **12-15**
      - utilization report
        - for controllers **15-18**
- 

**V**

- V5 Client Statistics Report **15-11**
- V5 client statistics report **15-11**
- vendor CA certificates
  - downloading **4-5**
- vendor device certificates
  - downloading **4-5**
- video parameter template
  - configuring **11-63**
- video parameter templates
  - configuring **11-63**
- view audit reports **10-5**
- View Filters icon **5-44, 5-50, 5-51, 5-52**
- viewing access point reports **15-8**
- viewing all current templates **10-17**
- viewing an AP template task history **11-86**
- viewing AP status report
  - for scheduled task **11-85**
- viewing audit reports **15-9**
- viewing audit status **10-5**
  - for access points **9-16**
- viewing autonomous access points **9-5**
- viewing client reports **15-11**
- viewing clients
  - identified as WGBs **6-62**
- viewing controller status report
  - for the scheduled task **11-87**
- viewing DHCP statistics **6-70**
- viewing Google Earth maps **6-59, 18-6**
- viewing guest users **7-16**

- Viewing IDS signature events **3-16**  
 viewing IDS signature events **3-16**  
 viewing inventory reports **15-15**  
 viewing mesh reports **15-16**  
**Viewing Mesh tree 6-48**  
 viewing mesh tree **6-51**  
 viewing MFP events **14-4**  
 viewing performance reports **15-18**  
 view in grid **2-21**  
 viewing security reports **15-20**  
**Viewing shunned clients 3-8**  
 viewing shunned clients **3-8**  
 viewing the audit trail **7-9**  
 viewing the RRM dashboard **6-73**  
 virtual domain  
   managing **17-6**  
 virtual domain hierarchy **17-3**  
 virtual domains **17-1**  
   assigning **7-22**  
   attributes **7-23, 17-7**  
   creating **17-1**  
   hierarchy **17-3**  
   managing **17-6**  
   understanding **7-24, 17-8**  
 voice parameter template  
   configuring **11-62**  
 voice RF coverage  
   troubleshooting **5-22**  
 voice statistics report **15-18**  
 voice traffic **5-19**  
 VoWLAN readiness  
   inspecting **5-22**
- 
- W**
- WCS  
   checking status  
     on Linux **12-2**  
     on Windows **12-1**  
   installing **2-4**  
   maintaining **12-1 to 12-19**  
   overview **1-2**  
   servers supported **1-2**  
   starting  
     on Linux **2-14**  
     on Windows **2-13**  
   stopping  
     on Linux **12-3**  
     on Windows **12-2**  
   uninstalling  
     on Linux **12-14**  
     on Windows **12-14**  
   upgrading  
     on Linux **12-19**  
     on Windows **12-19**  
   versions **1-3 to 1-5**  
**WCS\_EMAIL\_FAILURE 14-64**  
**WCS-ADV-SI-SE-10 B-2**  
 WCS Base, described **1-3, 1-5**  
 WCS controller deployment  
   from WLSE autonomous **C-1**  
 WCS database  
   adding chokepoints **5-34**  
   adding controllers **4-1**  
   adding location appliances **4-2**  
   backing up  
     on Linux **12-5**  
     on Windows **12-4**  
   removing chokepoints **5-41**  
   restoring  
     on Linux **12-7**  
     on Windows **12-5**  
   scheduling automatic backups **12-3, 16-1**  
 WCS home **2-14**  
 WCS Home page  
   customizing content **2-20**  
   customizing tabs **2-19**  
 WCS licenses **B-1**

- WCS Location
  - described [1-4 to 1-5](#)
  - relationship with Cisco location appliances [1-4](#)
- WCS Navigator [1-7](#)
- WCS on WLSE
  - licensing [C-7](#)
- WCS password
  - recovering [12-20](#)
- WCS user accounts
  - adding [7-1](#)
  - changing passwords [7-4](#)
  - deleting [7-4](#)
- WCS user interface [7-14](#)
  - described [1-2, 1-6](#)
  - logging into [2-14 to 2-16](#)
- WCS values
  - restoring [10-6](#)
- web authentication template [11-52](#)
- Web authentication types [3-17](#)
- web auth security [A-2](#)
- web auth types [10-27](#)
- web login
  - enabling [3-16](#)
- Wellenreiter signature [3-10](#)
- WGB [9-6](#)
- WGBs
  - viewing those clients [6-62](#)
- wired guest access
  - configuring [10-23](#)
- Wireless Control System (WCS)
  - See WCS
- WLANS
  - web auth security [A-2](#)
- WLAN templates [11-9](#)
- WLSE autonomous deployment conversion [C-1](#)
- WLSE management stations [C-2](#)
- WLSE map data
  - exporting [5-54](#)
  - importing [5-54](#)
- WLSE upgrade [B-2](#)
- WLSE upgrade license [C-7](#)
- WMM policy [11-18](#)
- work group bridge mode [9-6](#)
- worst node hop count [2-19](#)
- worst node hops
  - for mesh [15-16](#)
- worst packet error rate [2-19](#)
- worst SNR link [2-19](#)
- worst SNR links
  - for mesh [15-16](#)
- WPS traps [11-75](#)