



## Release Notes for AutoMesh™ 7.16(N).0.0

Software and firmware: HotView Pro™ software 10.16.0.0 and HotPort™ firmware 7.16(N).0.0

Effective date: 3/28/2014

Hardware compatibility: The next table lists the product-specific firmware in this release:

Product	Version
HotPort 5020-LNK	7.16(N).0.0
HotPort 5020-E	7.16(N).0.0
HotPort 5020-M	7.16(N).0.0
HotPort 7000	7.16(N).0.0
HotPort 7000-900	7.16(N).0.0
HotPort 6000	4.16(N).0.0
FMC-2000	7.16(N).0.0
HotPoint AP 5000	5.54(E).1.1
HotView Pro	10.16.0.0
This release supports the use of PostgreSQL Database versions 9.0 and newer.	

### Upgrade table

You can upgrade to Automesh 7.16(N).0.0 directly from the versions listed in the next table.

7000	7000-900	5020	6000	FMC-2000	HotView Pro	Hotpoint	PostgreSQL version, Java Ver.	Tested Upgrade Topology
7.15(N).0.0	7.14(N).0.0	7.15(N).0.0	--	7.15(N).0.0	10.15.0.0	5.54(N).0.0	9.0 - 9.2 1.6 and 1.7 (32 Bit)	Static w/out Interop, Mobility w/ FMC
7.9(T).0.0	7.13(T).0.0	--	4.13(T).0.0	7.9(T).0.0	10.9.1.0	5.53(T).0.0	8.2 – 9.0 1.6	Static w/out Interop
7.6.0.0	--	--	4.11.0.0	--	10.6.0.0	--	Update 34 (32 Bit)	

This release supports the use of PostgreSQL Database versions 9.0 and newer.

## New features

### Mobility Features:

- Load balancing for Mobile Nodes
- Cop Car Connectivity
- Support for Multicast traffic from Mobile nodes
- Configurable Scan list (Black list channels)
- Congestion Reduction (on mobile network)
- Mobile Node Management Enhancements - FMC Users Configuration
- Mobile Node Management Enhancements - Mobile Node Statistics
- Mobile Node Management Enhancements - Mobile Node Upgrade
- Mobile node ACL Enhancements
- RAT from FMC
- Spectrum analysis tool on mobile node
- FMC Time Settings
- Mobile Node redundancy Enhancements
- Telnet to Mobile Node
- Tunnel QoS
- VRRP Forwarding
- FMC Statistics
- Mobile Node Event History on FMC
- Mobile Node Name
- Mobile Node Location

### Static Features:

- CLI for 5020-LNK Configuration
- 7000 – 6000 Interop
- PTMP fairness
- Wireless channel/band changes:
  - Changes on 6000:
    - DFS key is no longer required on 6K for configuration of DFS channels
    - Set factory defaults on 6K will not reset country code if country is US.
    - Handling upgrade in 6k where new release does not have configured channels
    - Channels for US and South Korea in 6k are now in sync with 7K
  - Enhancements for Country Code support on 5020-M
    - 5020-M product is now having the same country code support as 7K
- Support for interoperability among HotPort 6000 and HotPort 7000 series Mesh Nodes
- Native SNMP Support on Static Nodes
- Wireless Link Capacity estimator

### Common Features

- Wireless Contention Reduction
- QoS Enhancements
- New bands : 4.9 Canada
- Integrated Documentation
- Backup & Restore of configuration across different Nodes
- MAC address learning per VLAN

- Jumbo Ethernet Frame Support
- MAC Ageing
- Wireless channel/band changes:
  - Changes on 7000:
    - Support for 4.9GHz Canada
    - In UK Country Code, channels 149-165 are added as licensed channels

## Feature enhancements

- 7xxx and 7xxx-900 share a common firmware image
- QoS Enhancements on 7xxx
- ETHSC, GWI Performance Enhancements
- Mobility View Enhancements
- MAC Aging time configuration from HV
- Mobile Node Management Enhancements for:
  - FMC Users Configuration
  - Statistics
  - Mobile Node Upgrade
  - Scan Frequency
  - Transmit power
- Import/Export of Mobile Node ACL in CSV format
- Wireless channel usage enhancements in Mobility scenarios
- Wireless Fairness enhancements for 5020-E/ER
- Jumbo Ethernet Frame Support
- CLI for 5020-LNK Configuration
- Telnet to mobile nodes
- RAT from FMC
- Spectrum analysis tool on mobile node
- FMC Time Settings
- VLAN Verification Tool
- Configurable Scan list (Black list channels)
- Live Channel Utilization

## Bug fixes

- Improvements to throughput performance between Ethernet Direct links
- Improvements to the way licenses are handled during a neighbor node recovery
- A node back-up may now be applied to any node
- Date and time is set on FMC eventlogs
- Improvements to the way aging time is handled on a the head node

## Upgrade Procedures

This section contains the upgrade procedures for each product type.

### Mesh Upgrade Procedures

#### Static Mesh

- Login to the Mesh using existing HotView version and the corresponding firmware on the nodes
- Take backup of mesh-wide configuration, node configurations
- Take a backup of mesh analytics data
- Take DB backup
- Close the existing Hotview
- Install the new HotView 10.16.0.0, and launch the same
- Verify that no DB related errors are seen which ensures that the database tables update happened smoothly
- Load the Mesh into the new HotView 10.16.0.0
- Verify that the complete set of mesh nodes with existing firmware are loaded into HotView 10.16.0.0
- Upgrade the wireless static nodes to 7.16(N).0.0
- Upgrade GWSs and GWI in the mesh to 7.16(N).0.0
- Upgrade APs to 5.54(E).1.1
- Once the upgrade is complete for each product, all the mesh nodes and APs should get loaded in the new HotView 10.16.0.0

IMPORTANT: Downgrading to the original release prior to upgrade is possible but will require resetting the upgraded node to its default settings following the downgrade process.

#### Mobility Mesh

- Login to the FMC & Mesh using existing HotView (eg. 10.15.0.0) and the corresponding firmware on the FMC & nodes (e.g. 7.9.0.0)
- Take backup of mesh-wide configuration, node configurations and FMC configuration
- Take a backup of mesh analytics data (applicable for Hotview 10.9.1.0 upwards)
- If using database, take DB backup, taking care to choose the “role” and format as “tar” when using Postgresql 9.1. The “role” field is the same user configured in DB screen of HV Server and Postgres
- Close the existing Hotview (e.g. 10.15.0.0)
- Install the HotView 10.16.0.0, and launch the same
- Verify that no DB related errors are seen which ensures that the database tables update happened smoothly.
- Load the FMC & Mesh into the new HotView 10.16.0.0
- Verify that the complete set of FMC and mesh nodes with existing firmware (e.g. 7.15.0.0) are loaded into HotView 10.16.0.0
- Disconnect the secondary(standby) FMC
- Upgrade the active/Primary FMC to the latest image 7.16(N).0.0
- Disconnect the primary FMC, and reconnect the secondary FMC
- Wait until the secondary FMC becomes Active and then upgrade it to 7.16(N).0.0
- Reconnect both the FMCs to the setup
- After the FMCs come up in the Hotview, proceed to upgrade the mobile node(s) – through the FMC
- Upgrade the wireless and static nodes to 7.16(N).0.0
- Upgrade GWSs and GWI in the mesh to 7.16(N).0.0
- Once upgrade is complete for each product, all the FMCs, static and mobile mesh nodes should get loaded in the new HotView 10.16.0.0

#### 5020-LNK

- Login to the 5020-LNK network using existing HotView (eg. 10.16.0.0) and the corresponding firmware on the 5020-LNK nodes (e.g. 7.15.0.0)
- Backup all configurations and take database backup.
- Close the existing Hotview (eg. 10.15.0.0).
- Install the HotView 10.16.0.0 and launch the same
- Verify that no DB related errors are seen which ensures that the database tables update happened smoothly.
- Once the HotView is upgraded to latest successfully, then, load the 5020-LNK network into the new HotView
- Upgrade the 5020-LNK network nodes with the new firmware 7.16(N).0.0
- Once upgrade to 7.16.0.0 is complete, both the 5020-LNK nodes would go for a reboot and should be loaded into the HotView 10.16.0.0

### **Hotpoint-5000 Upgrade Procedures**

#### **Upgrade using Hotview**

- Load to the Hotpoint-5000 APs into the existing HotView (eg. 10.9.1.0/10.15.0.0) and the corresponding firmware on the Hotpoint-5000 devices (e.g. 5.53.0.0/5.54.0.0)
- Close the existing Hotview (eg. 10.9.1.0/10.15.0.0)
- Install the HotView 10.16.0.0, and launch the same
- Verify that no DB related errors are seen which ensures that the database tables update happened smoothly.
- Once the HotView is upgraded to latest successfully, then, load the Hotpoint-5000 APs in the new HotView 10.16.0.0
- Upgrade the Hotpoint-5000 devices to the firmware 5.54(E).1.1 by initiating upgrade using upgrade scheduler
- Once upgrade to 5.54(E).1.1 is complete, the Hotpoint-5000 APs would go for a reboot and should be loaded into the HotView 10.16.0.0 (login in case AP gets logged out after upgrade).

#### **Upgrade Procedure using AP HTTP**

- Open a web browser and enter AP's IP Address in address bar and press Enter.
- Enter username and Password as "admin" and "firetide" respectively for login.
- Go to maintenance -> Upgrade and then click on "choose file" to select the desired firmware file.
- Click on Apply Button.
- This process can take 2-3 minutes.
- Check firmware version again using AP http. It should show correct firmware version.

#### **Upgrade Procedure using script**

- Copy upgrade\_5.54.1.1.zip file somewhere in Win-7 Machine (Desktop) and unzip it.
- It will create a folder called "AP\_UPGRADE\_5.54(E).1.1", Go inside the folder.
- Open IP\_LIST.cfg file and add IP Addresses of APs which needs upgrade, each on a separate line
- Do not enter any IP Address twice
- Save and close the file
- All IP Addresses should be mentioned in the correct IP Address format.
- Double click on AP\_FW\_Upgrade.exe file to start the upgrade procedure.
- This process can take up to 4-5 minutes.

- After upgrade verify that the latest firmware version no. is getting displayed in Hotview

## Appendix A

System requirements:

The following Operating Systems, Java versions, and database versions are approved for use with this software and firmware release:

Operating System	Java Version	DB version
Windows 7, 8 Professional – 64-bit, Windows 7 Professional – 32 bit, Windows 2008 Server – 64 bit, Linux Fedora FC16 – 64 bit, FC17 – 32 bit	Java 1.6, Update 34 - 32-bit Java 1.7 32 bit	PostgreSQL 9.0 or greater is recommended

## Appendix B

This appendix lists the country-specific channel changes between releases 7.6.0.0 and 7.15.0.0. If a radio in your network uses a channel that is no longer supported in the country of operation, and you let HotView Pro automatically change the radio settings, HotView Pro will change the channel settings to a supported channel during the upgrade process.

*How to use these tables:* Find the country list, and then compare the channels that are in use in your network to the channels in the Unsupported channel list. If you are using channels that are unsupported in 7.15.0.0, do one of these procedures:

- Before you upgrade, manually change the unsupported channels to supported ones.  
OR
- During the upgrade, let HotView Pro make the changes for you. The table states the channels that HotView Pro will use. There is a risk that in mesh nodes with two radios that need different channels, HotView Pro will assign the same replacement channel.

### USA—affected channels

120, 124, 128 - all modes

16, 17, 23, 24, 26, 27, 116 – 40 MHz

### USA—default values for automatic configuration during upgrade to 7.15.0.0

Unsupported channel	Change to supported channel
16 4.9 40 MHz	16 4.9 20 MHz
17 4.9 40 MHz Minus	17 4.9 20 MHz

23 4.9 40 MHz Plus	23 4.9 20 MHZ
24 4.9 40 MHz Plus	24 4.9 20 MHZ
26 4.9 40 MHz Minus	26 4.9 20 MHZ
27 4.9 40 MHz Minus	27 4.9 20 MHZ
116 NA 40 MHz Plus	36 NA 40 MHZ PLUS
120 A (OFDM)	36 A (OFDM)
124 A (OFDM)	36 A (OFDM)
128 A (OFDM)	36 A (OFDM)
120 NA20 MHZ	36 NA 20 MHZ
124 NA20 MHZ	36 NA 20 MHZ
128 NA20 MHZ	36 NA 20 MHZ
120 NA40 MHZ MINUS	40 NA 40 MHZ MINUS
124 NA40 MHZ PLUS	36 NA 40 MHZ PLUS
128 NA40 MHZ MINUS	40 NA 40 MHZ MINUS

**AUSTRALIA—affected channels**

120, 124, 128 - all modes

116 - ht40

**AUSTRALIA—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
120 A (OFDM)	36 A (OFDM)
124 A (OFDM)	36 A (OFDM)
128 A (OFDM)	36 A (OFDM)
120 NA20 MHZ	36 NA 20 MHZ
124 NA20 MHZ	36 NA 20 MHZ
128 NA20 MHZ	36 NA 20 MHZ
120 NA40 MHZ MINUS	40 NA 40 MHZ MINUS
124 NA40 MHZ PLUS	36 NA 40 MHZ PLUS
128 NA40 MHZ MINUS	40 NA 40 MHZ MINUS
116 NA40 MHZ PLUS	36 NA 40 MHZ PLUS

**CANADA—affected channels**

165 - all modes

**CANADA—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
165 A (OFDM)	36 A (OFDM)
165 NA 20 MHZ	36 NA 20 MHZ

**IRELAND—affected channels**

145, 149, 153, 157, 161, 165, 169, 173 - all modes

**IRELAND—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
145 A (OFDM)	36 A (OFDM)
149 A (OFDM)	36 A (OFDM)
153 A (OFDM)	36 A (OFDM)
157 A (OFDM)	36 A (OFDM)
161 A (OFDM)	36 A (OFDM)
165 A (OFDM)	36 A (OFDM)
169 A (OFDM)	36 A (OFDM)
173 A (OFDM)	36 A (OFDM)
145 NA 20 MHZ	36 NA 20 MHZ
149 NA 20 MHZ	36 NA 20 MHZ
153 NA 20 MHZ	36 NA 20 MHZ
157 NA 20 MHZ	36 NA 20 MHZ
161 NA 20 MHZ	36 NA 20 MHZ
165 NA 20 MHZ	36 NA 20 MHZ
169 NA 20 MHZ	36 NA 20 MHZ
173 NA 20 MHZ	36 NA 20 MHZ
145 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
149 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
153 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
157 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS



161 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
165 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
169 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
173 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS

**JAPAN\_JP1\_1—not supported**

WE DO NOT SUPPORT JAPAN\_JP1\_1 (395 CC)

**JAPAN—affected channels**

34, 38, 42, 46 ,185, 186, 187, 189 - all modes

6, 7, 9, 10, 11 - 802.11 A

**JAPAN 392—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
34 A (OFDM)	8 A (OFDM)
38 A (OFDM)	8 A (OFDM)
42 A (OFDM)	8 A (OFDM)
46 A (OFDM)	8 A (OFDM)
6 A (OFDM)	8 A (OFDM)
7 A (OFDM)	8 A (OFDM)
9 A (OFDM)	8 A (OFDM)
10 A (OFDM)	8 A (OFDM)
11 A (OFDM)	8 A (OFDM)
34 NA 20 MHZ	8 NA HT 20
38 NA 20 MHZ	8 NA HT 20
42 NA 20 MHZ	8 NA HT 20
46 NA 20 MHZ	8 NA HT 20
6 NA 20 MHZ	8 NA HT 20
7 NA 20 MHZ	8 NA HT 20
9 NA 20 MHZ	8 NA HT 20
10 NA 20 MHZ	8 NA HT 20
11 NA 20 MHZ	8 NA HT 20
34 NA 40 MHZ PLUS	8 NA 40 MHZ PLUS
38 NA 40 MHZ MINUS	12 NA 40 MHZ MINUS
42 NA 40 MHZ PLUS	8 NA 40 MHZ PLUS
46 NA 40 MHZ MINUS	12 NA 40 MHZ MINUS
6 NA 40 MHZ PLUS	8 NA 40 MHZ PLUS
7 NA 40 MHZ PLUS	8 NA 40 MHZ PLUS
10 NA 40 MHZ MINUS	12 NA 40 MHZ MINUS
11 NA 40 MHZ MINUS	12 NA 40 MHZ MINUS
185 4.9	184 4.9
186 4.9	184 4.9
187 4.9	184 4.9
189 4.9	184 4.9
185 4.9n 20 MHz	184 4.9 20 MHz

186 4.9n 20 MHz	184 4.9 20 MHz
187 4.9n 20 MHz	184 4.9 20 MHz
189 4.9n 20 MHz	184 4.9 20 MHz

**SAUDI ARABIA—affected channels**

149, 153, 157, 161 - all modes

**SAUDI ARABIA**

Unsupported channel	Change to supported channel
149 A (OFDM)	36 A (OFDM)
153 A (OFDM)	36 A (OFDM)
157 A (OFDM)	36 A (OFDM)
161 A (OFDM)	36 A (OFDM)
149 NA 20 MHz	36 NA 20 MHz
153 NA 20 MHz	36 NA 20 MHz
157 NA 20 MHz	36 NA 20 MHz
161 NA 20 MHz	36 NA 20 MHz

**UNITED KINGDOM—affected channels**

149, 153, 157, 161, 165 - all modes

**UNITED KINGDOM—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
149 A (OFDM)	36 A (OFDM)
153 A (OFDM)	36 A (OFDM)
157 A (OFDM)	36 A (OFDM)
161 A (OFDM)	36 A (OFDM)
165 A (OFDM)	36 A (OFDM)
149 NA 20 MHz	36 NA 20 MHz
153 NA 20 MHz	36 NA 20 MHz
157 NA 20 MHz	36 NA 20 MHz
161 NA 20 MHz	36 NA 20 MHz
165 NA 20 MHz	36 NA 20 MHz

149 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
153 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
157 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
161 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS

**MOROCCO—affected channels**

151, 155, 159, 163 - all modes

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 – NG HT40

**MOROCCO—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
1 NG 40 MHZ PLUS	1 NG 20 MHZ
2 NG 40 MHZ PLUS	2 NG 20 MHZ
3 NG 40 MHZ PLUS	3 NG 20 MHZ
4 NG 40 MHZ PLUS	4 NG 20 MHZ
5 NG 40 MHZ PLUS	5 NG 20 MHZ
6 NG 40 MHZ PLUS	6 NG 20 MHZ
7 NG 40 MHZ PLUS	7 NG 20 MHZ
8 NG 40 MHZ PLUS	8 NG 20 MHZ
9 NG 40 MHZ PLUS	9 NG 20 MHZ
5 NG 40 MHZ MINUS	5 NG 20 MHZ
6 NG 40 MHZ MINUS	6 NG 20 MHZ
7 NG 40 MHZ MINUS	7 NG 20 MHZ
8 NG 40 MHZ MINUS	8 NG 20 MHZ
9 NG 40 MHZ MINUS	9 NG 20 MHZ
10 NG 40 MHZ MINUS	10 NG 20 MHZ
11 NG 40 MHZ MINUS	11 NG 20 MHZ
12 NG 40 MHZ MINUS	12 NG 20 MHZ
13 NG 40 MHZ MINUS	13 NG 20 MHZ
151 A (OFDM)	36 A (OFDM)
155 A (OFDM)	36 A (OFDM)
159 A (OFDM)	36 A (OFDM)
163 A (OFDM)	36 A (OFDM)

151 NA 20 MHZ	36 NA 20 MHZ
155 NA 20 MHZ	36 NA 20 MHZ
159 NA 20 MHZ	36 NA 20 MHZ
163 NA 20 MHZ	36 NA 20 MHZ

**BRAZIL—affected channels**

149, 153, 157, 161, 165 - all modes

**BRAZIL—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
149 A (OFDM)	36 A (OFDM)
153 A (OFDM)	36 A (OFDM)
157 A (OFDM)	36 A (OFDM)
161 A (OFDM)	36 A (OFDM)
165 A (OFDM)	36 A (OFDM)
149 NA 20 MHZ	36 NA 20 MHZ
153 NA 20 MHZ	36 NA 20 MHZ
157 NA 20 MHZ	36 NA 20 MHZ
161 NA 20 MHZ	36 NA 20 MHZ
165 NA 20 MHZ	36 NA 20 MHZ
149 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
153 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
157 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
161 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS

**IRAQ—affected channels**

100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 - all modes

**IRAQ—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
100 A (OFDM)	36 A (OFDM)
104 A (OFDM)	36 A (OFDM)

108 A (OFDM)	36 A (OFDM)
112 A (OFDM)	36 A (OFDM)
116 A (OFDM)	36 A (OFDM)
120 A (OFDM)	36 A (OFDM)
124 A (OFDM)	36 A (OFDM)
128 A (OFDM)	36 A (OFDM)
132 A (OFDM)	36 A (OFDM)
136 A (OFDM)	36 A (OFDM)
140 A (OFDM)	36 A (OFDM)
100 NA 20 MHZ	36 NA 20 MHZ
104 NA 20 MHZ	36 NA 20 MHZ
108 NA 20 MHZ	36 NA 20 MHZ
112 NA 20 MHZ	36 NA 20 MHZ
116 NA 20 MHZ	36 NA 20 MHZ
120 NA 20 MHZ	36 NA 20 MHZ
124 NA 20 MHZ	36 NA 20 MHZ
128 NA 20 MHZ	36 NA 20 MHZ
132 NA 20 MHZ	36 NA 20 MHZ
136 NA 20 MHZ	36 NA 20 MHZ
140 NA 20 MHZ	36 NA 20 MHZ
100 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
104 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
108 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
112 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
116 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
120 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
124 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
128 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
132 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
136 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS

**SOUTH AFRICA—affected channels**

140, 161, 153 – NA 40 MHZ PLUS  
149, 157, 165 – NA 40 MHZ MINUS

**SOUTH AFRICA—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
140 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
153 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
161 NA 40 MHZ PLUS	36 NA 40 MHZ PLUS
149 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
157 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS
165 NA 40 MHZ MINUS	40 NA 40 MHZ MINUS

**SOUTH KOREA—affected channels**

165 - all modes

**SOUTH KOREA—default values for automatic configuration during upgrade to 7.15.0.0**

Unsupported channel	Change to supported channel
165 A (OFDM)	36 A (OFDM)
165 NA 20 MHZ	36 NA 20 MHZ

**Appendix B**

Firetide mobility solutions are not supported in the countries/channels listed in the next tables.

**AUSTRALIA (36), RUSSIA (643), SOUTH AFRICA (710)**

<b>CHANNEL</b>	<b>CHANNEL(MHz)</b>
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700

**FRANCE2 (255), INDIA (356), OMAN (512), SINGAPORE (702), TURKEY (792)**

<b>CHANNEL</b>	<b>CHANNEL(MHz)</b>
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320

**AUSTRIA (40), BELGIUM (56), DENMARK (208), FINLAND (246), FRANCE (250), GERMANY (276), GHANA (288), GREECE (300), HUNGARY (348), IRAQ (368), ITALY (380), IRELAND(372), LUXEMBOURG (442), NETHERLANDS (528), NORWAY (578), POLAND (616), PORTUGAL (620), ROMANIA (642), SERBIA (688), SPAIN (724), SWEDEN (752), SWITZERLAND (756), U.A.E (784)**

<b>CHANNEL</b>	<b>CHANNEL(MHz)</b>
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540
112	5560



116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700

**JAPAN (392)**

CHANNEL	CHANNEL(MHz)
8	5040
12	5060
16	5080
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
184	4920
185	4925
186	4930
187	4935
188	4940
189	4945

**SOUTH KOREA (410)**

CHANNEL	CHANNEL(MHz)
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540

112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
149	5745
153	5765
157	5785
161	5805

**VIETNAM (704)**

<b>CHANNEL</b>	<b>CHANNEL(MHz)</b>
36	5180
40	5200
44	5220
48	5240

## Appendix C Documentation Addendum

This section contains new technical information related to this release.

### Cross reference to new content

You can set the time on the primary and redundant FMC devices:

- 1) Start and then log into HotView Pro
- 2) Go to **FMC > Add FMC**
- 3) Right-click the primary FMC > **FMC Time Settings**.