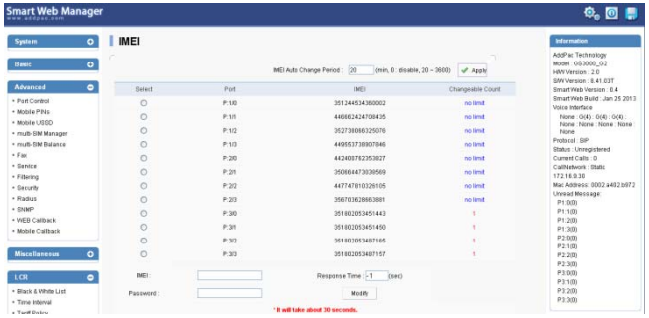
GSM Gateway Series



BTS Auto Change Service

(This software feature is only applicable in model which can change BTS)

AddPac Technology

2013, Sales and Marketing

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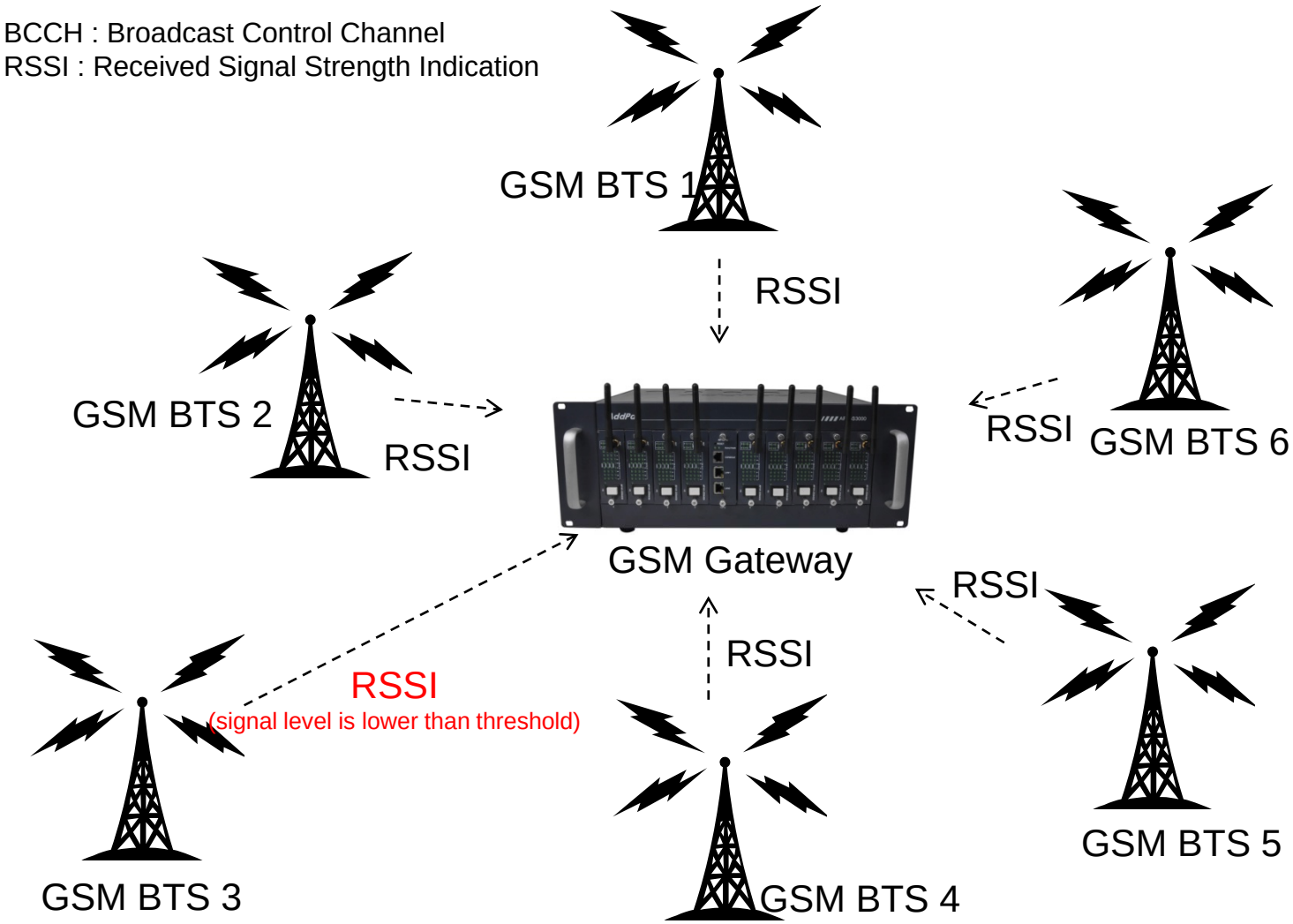
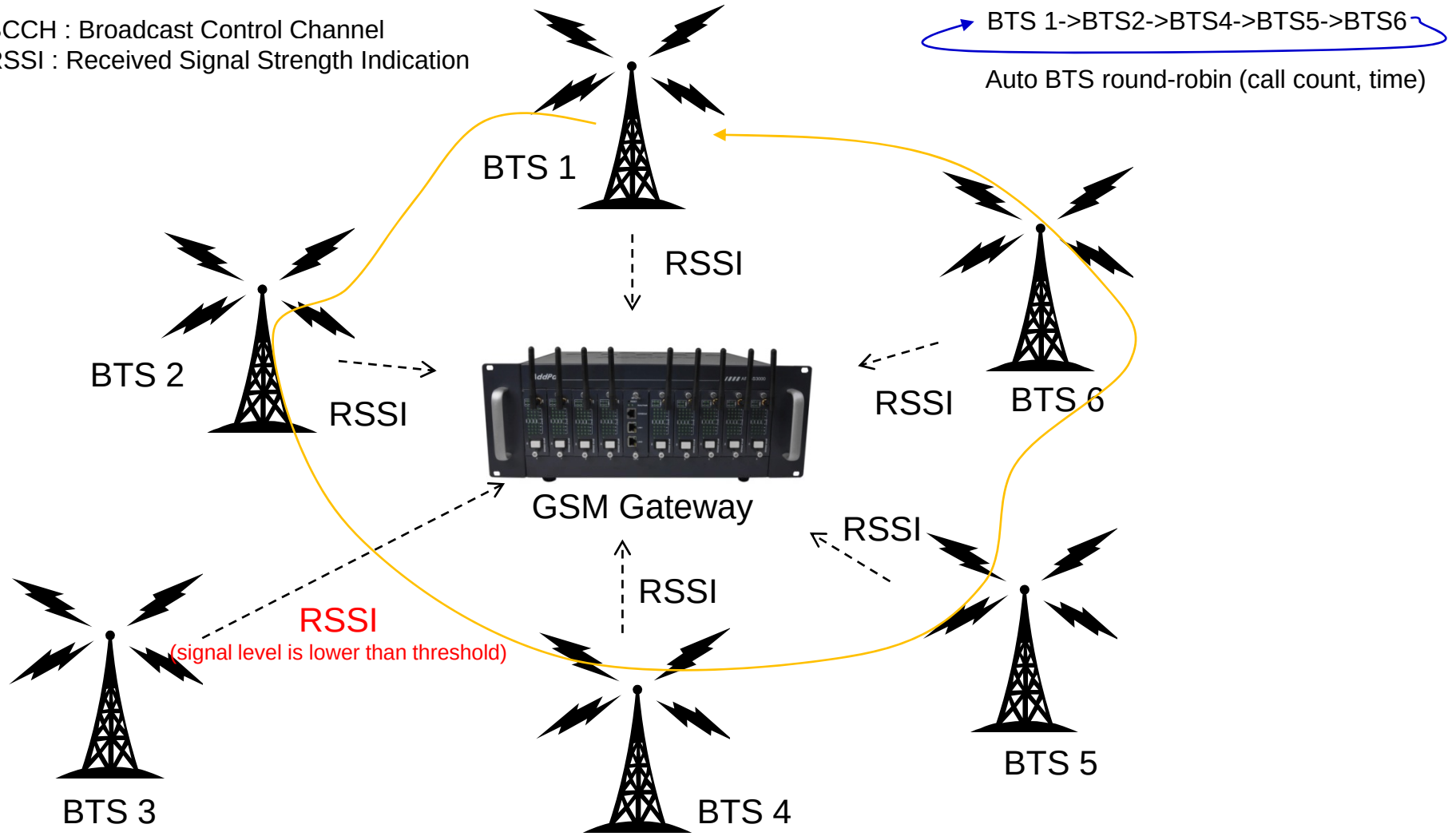
GSM BTS Structure

BCCH : Broadcast Control Channel
RSSI : Received Signal Strength Indication

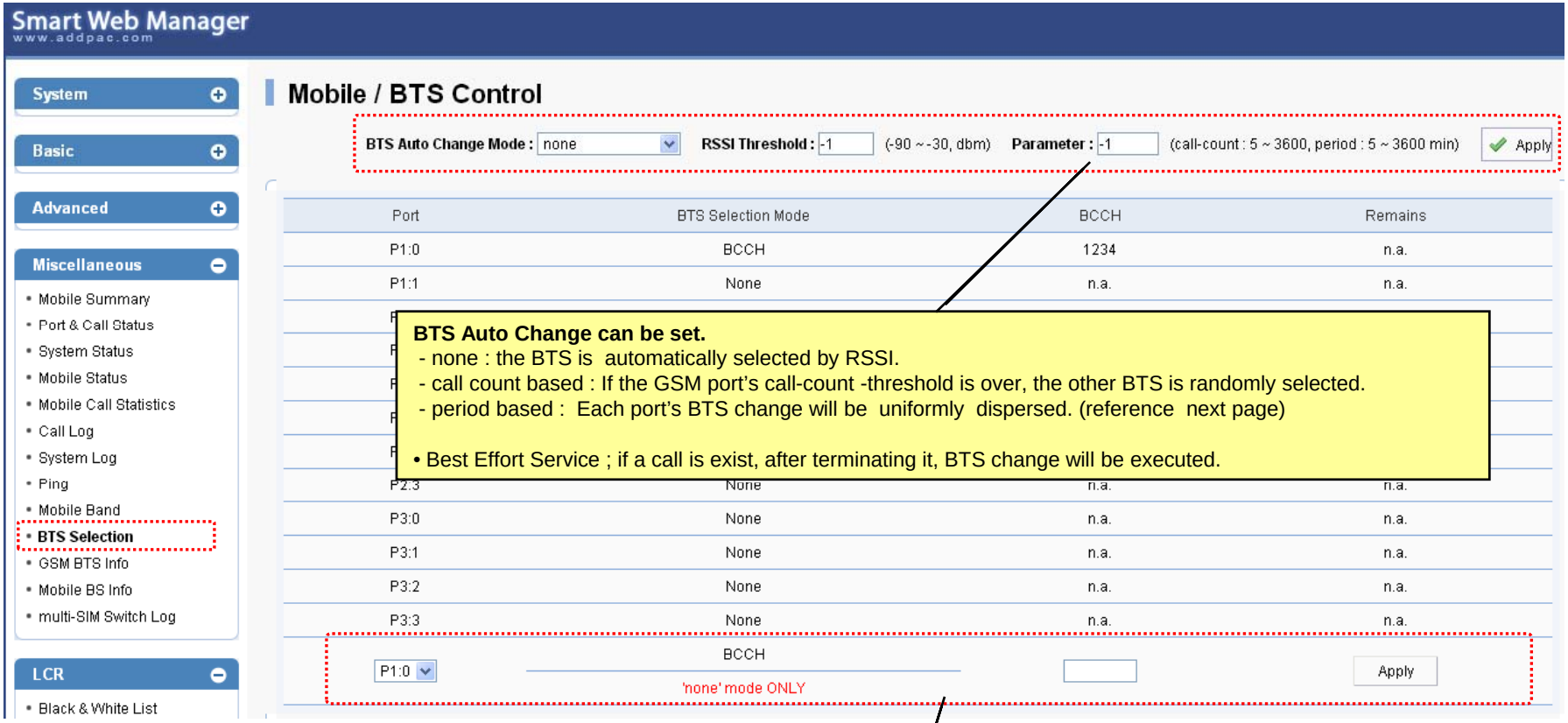


GSM Auto BTS Structure (call count, time)

BCCH : Broadcast Control Channel
RSSI : Received Signal Strength Indication

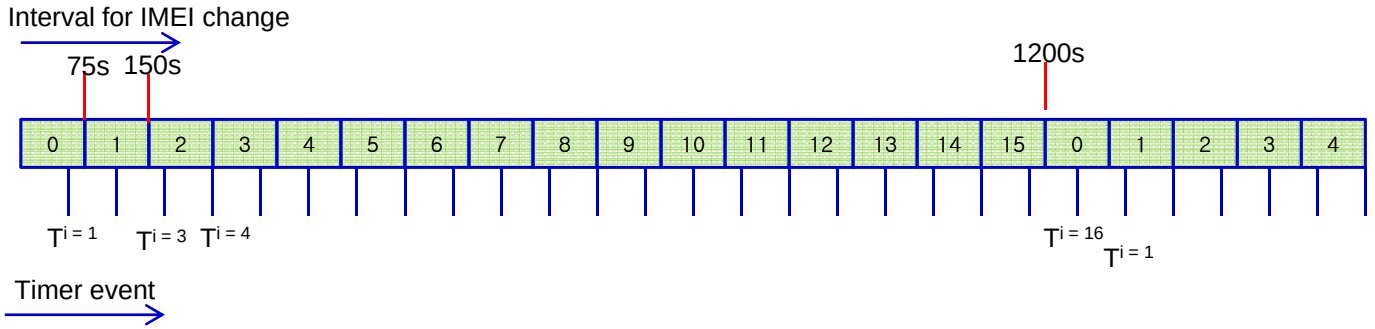


Smart Web Manager for BTS Auto Change



GSM BTS Auto Change Algorithm

If GSM Gateway has 16 GSM ports as below.



A timer(T^i) is called for BTS change every 60 seconds.
If a auto BTS change period is configured to 20 minutes,
Each Port's Interval is calculated as follows.

*(Period * 60) / (number of port) = (20 *60) / 16 = 75 seconds.*

When $T^{i=1}$ event is occurred, BTS change is not executed.
When $T^{i=2}$ event is occurred, BTS change is executed for Port 0.
When $T^{i=3}$ event is occurred, BTS change is executed for Port 1.
When $T^{i=16}$ event is occurred, BTS change is executed for Port 15.
Each port's BTS change will be uniformly dispersed.

GSM BTS Auto Change Algorithm

- BTS random selection

Port	Information	SVC	N(1)	N(2)	N(3)	N(4)	N(5)	N(6)
0:0	BCCH	77	71	63	68	595	586	0
	RSSI(dbm)	-62	-78	-78	-89	-79	-82	-111

Random Selection Sequence

1. Read RSSI threshold parameter from manager
2. Discard neighbor cell that RSSI is lower than threshold
3. Random selection BCCH number
4. Registration to selected BTS

BCCH : Broadcast Control Channel
RSSI : Received Signal Strength Indication

Thank you!

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