

## Skinning Guide for phoneAlarm v2.x (PPC and SP)

For anyone interested in building skins for phoneAlarm here are a few tips:

Skin configuration file must be in \Program Files\phoneAlarm directory and must have extension ".SKN"

As shown with example, the files Default.skn and Default\_2.skn, multiple skins can use the same graphics files and source directory, this is useful for multiple versions of same skin.

Any part of filename after "\_" is **ignored** when looking for images.

For landscape skins special logic is applied to automatically load these if the file name ends in "**\_L.skn**" and the screen is rotated.

Check out the skins installed on your device or available on our website to see examples of how this all works! Join the support forum "Skinning Help" section to get answers to your problems!

All .BMP (256 color) .GIF, .JPG and .PNG images are supported.

Starting with v1.60, 32 bit TGA images (including alpha-blending) are also supported and starting with v2.16, 32 and 24 bit alpha-blended PNG images are supported

You can create a skin of any size you wish, currently limiting factor is text size for output - so skin with text can't be less than ~14 pixels.

To create an invisible skin to have functionality without taking up any screen space you can define a skin just with the Height set to 1 pixel (don't use Height=0!!)

Please send any finished skin examples you produce and your details to [support@pocketmax.net](mailto:support@pocketmax.net) and will add a page on website with Credits (and offsite links if you prefer to host your skins).

You only need to add the graphics you wish to have in your skin - all tags are optional. The top, left pixel always defines the transparent color of images UNLESS you specify "Transp\_Color" tag – then ONLY this color is transparent.

NOTE: All skins from v1.62 should work correctly in v2.0 – earlier skins might need Nav\_Order to be updated.

\* [Blue items are new in v2.0](#)

cheers  
Bruce

## GENERAL TAG FORMAT:

tag= active, x-pos (left-right), y-pos (up-down), image [, attributes, x-textPos, y-textPos ]

active	This <b>MUST</b> be “1” or the item is hidden, in v2.04 you can use ‘2’ to show but deactivate the item action
x-pos, y-pos	The positioning commands to correctly position the image
image	The image file (BMP, GIF, JPG, PNG, TGA)
attributes	“t” show text count for alarms, battery/signal “g” graphic meter for battery etc. “s” switchable icon – for Email/SMS in same position or Voice/Missed Call “-1” center text on image (textPos can be used to add offset if wished) “1” right-align text
textPos	Positioning for the text count, also for the signal/battery meter red-bar

## BASIC TAGS:

Today\_Height=xx - Height in pixels reserved on Today screen, **don’t set this to “0”**

VGA\_Skin=1 - Set this if skin is designed for VGA, otherwise skin will be pixel doubled, so that VGA users can use all skins without conversion.  
QVGA devices can then also use VGA skins!

Image\_Background=name.gif- Replace the Today screen background with a custom image (can have transparent areas)

Image\_Selected\_Background - define a custom background to be used when phoneAlarm is selected on Today-screen

Image\_App - Open Settings

Image\_LoadSkin - Load named skin (for min/max or tabbed skin) **Gesture left**

Image\_LoadSkin2 - Second Load named skin link (for min/max or tab skin) **Gesture right**

Image\_LoadSkin3 - Third Load named skin link (for tabbed skin)

Image\_LoadSkin4 - Forth Load named skin link (for tabbed skin)

## ALARM TAGS:

Image\_SMS - SMS icon

Image\_SMS2 - optional SMS icon in alarm state

Image\_Email - Email icon

Image\_Email2 - optional Email icon in alarm state

Image\_Missed - Missed icon

Image\_Missed2 - optional Missed icon in alarm state

Image\_Voice - Voice icon

Image\_Voice2 - optional Voice icon in alarm state

Image\_MMS - MMS icon

Image\_MMS2 - optional MMS icon in alarm state

Image\_Appointment - Reminder icon

Image\_Appointment2 - optional reminder icon in alarm state

Image\_IM - IM (instant messenger) icon

Image\_IM2 - optional IM icon in alarm state

## METER TAGS:

Image_Battery	- Battery level (graphic or text)
Image_BatteryCharge	- Image when charging, overlayed on Image_Battery unless you set the "r" replace attribute
Image_Signal	- Signal level (graphic or text)
Image_Memory	- Memory level icon (graphic or text)
Image_FlashMem	- Storage Card level icon (graphic or text)
Meter_Level	- The general graphic meter image (= 10% of total meter height). Used if other meters below are not defined
Meter_Signal	to allow different graphical images/orientations to be used in the
Meter_Battery	different meters! Same format as for Meter_Level
Meter_Mem	
Meter_FlashMem	

**To add text to a graphical meter use:** (these use Signal\_xxxx font settings)

BatteryMeter\_Text=x,y

SignalMeter\_Text=x,y

MemoryMeter\_Text=x,y

FlashMeter\_Text=x,y


Guidelines on using meters on signal/battery/memory:

**Meter\_Level** needs to be 10% (can be 100% in v2.0 – see below) of signal length in pixels (it should also include dark areas of meter) and can have transparent area if the "t" attribute is added.

Attribute 'h' is for a horizontal meter, 'v' for vertical

Attribute 'g' means the meter is graphical (image meter), 't' is for text meter.

Attribute 'r' is for a reverse meter (right->left), only supported for horiz. Full meter 'hfr'

If you set the attribute "s" for step on Battery, Signal or Memory image – then a stepped meter is created , You then specify how many steps to use, and the Meter\_level image is 1 step (the smallest). "s5" for 5 steps for example. Attribute "l" forces a linear meter

Example for position the meter\_level image:

Image\_Battery=1,197,30,j\_batt\_level.gif,gh,217,31 <- 217,31 is where the 100% section of Meter\_Level should be drawn

Image\_Battery=1,197,30,j\_batt\_level.gif,gl,5h,217,31 <- for a linear 20% step meter

**New in v2.0:** Add the attribute "f" if Meter\_Level image (or Meter\_Signal etc.) is full 100% image. You can then create a complex multicolour-meter – and have only the visible section automatically drawn over the background image.

That is: Image\_Battery=1,197,30,j\_batt\_level.gif,ghf,199,31 <- 199,31 is 0% location  
Meter\_Battery=meter100.gif ← meter is for 100%

**STATE (ON/OFF) TAGS:**

Image_Blue	- Bluetooth Off icon
Image_Blue2	- Bluetooth On icon
Image_Blue_Disc	- Bluetooth in Discoverable mode
Image_Blue_A2DP	- Bluetooth A2DP stereo headset connected
Image_Blue_Hands	- Bluetooth handsfree / headset connected
Image_Headset	- Headset not connected icon
Image_Headset2	- Headset active icon
Image_WLAN	- WLAN Off icon
Image_WLAN2	- WLAN On icon
Image_Wlan_Conn	- WLAN Connected (optional)
Image_MuteCall	- MuteCall disabled
Image_MuteCall2	- MuteCall active
Image_Disconnect	- Data not connected icon
Image_Disconnect2	- Data connected icon
Image_Speaker	- Speaker phone inactive icon
Image_Speaker2	- Speaker phone active icon
Image_GPS	- State of GPS if using managed interface
Image_GPS2	- GPS active icon

Optional 2<sup>nd</sup> Icons (main icon above MUST also be on skin). See HGS6 for an example.

Image_Blue_Extra	- Bluetooth Off icon
Image_Blue2_Extra	- Bluetooth On icon
Image_WLAN_Extra	- WLAN Off icon
Image_WLAN2_Extra	- WLAN On icon
Image_GPRS_Extra	- GPRS/Data Off icon
Image_GPRS2_Extra	- GPRS/Data On icon

**PROFILE MENU TAGS:**

Image_Profile1	- Home profile (set attribute 't' to use text names instead of graphics on the skin, other Image_Profile tags are then ignored!)
Image_Profile2	- Work profile
Image_Profile3	- Meeting profile
Image_Profile4	- Night profile
Image_Profile5	- Loud profile
Image_Profile6	- Car profile
Image_Profile7	- Flight profile
Image_Pro_Mute	- Show mute state on Profile (This will overlay the profile image – does not need to fully cover profile!)
Image_MenuMute	- Mute icon in profile menu (default = )
Image_MenuCustom	- "Timed mute" icon in profile menu (or else default)
Image_MenuEnable	- "End mute" icon in profile menu (or else default)
Image_ProfileLock	- Profile locked icon (default = small lock)

## OTHER IMAGE TAGS:

Image_Volume	- Volume active
Image_Mute	- Volume muted
Image_Alarm	- Active alarm state 1 for blinking alarm image
Image_Alarm2	- Active alarm state 2
Image_DialFav	- open the quick dialer (sorted list of last 10 telephone contacts)
DialFav_MaxItems	- number of items in pop-up (Default = 10)
Image_Taskswitch	- open a task switcher with list of currently open programs
Image_Phone	- Open the phone application
Image_VoiceCommand	- Open / Activate VoiceCommand
Image_VoiceCommand2	- Shows VoiceCommand is active
Image_VolumePopup	- Open the system volume pop-up
Image_VolumePopup2	- vibrate state for volume icon
Image_VolumePopup3	- mute state for volume icon

## SPECIAL IMAGE TAGS:

Image_Clock	- Display a clock on screen
Image_Date	- Date on screen: Color / Size via Clock tags
Image_OtherDate	- Date / Clock format from Regional Settings or optional Format String (see below)
Image_Operator	- Display operator name as text, use textPos to position the text
Image_Location	- Display current location, use textPos to position the text
Image_WlanInfo	- displays current WLAN info (SSID and signal strength)
Image_PhoneCost	- displays current monthly call cost
Image_TextWindow	- Text window for Missed call / SMS history (up to 10 items), (only in Full version)
Image_Rotator	- Rotating scroller window (only in Full version), add attribute “,t” if rotator is transparent
Image_Conn_Type	- Show current data connection type. For this you provide a single image with all 6 states in one image in a row! The item order is: No connection, GPRS, 1xRTT, EVDO, UMTS, HSPDA

So for example: if you want to use a 16x16 image for each.  
Create a 16 pixel high and 96 pixel long image and set the images you require at the correct offset. Images can be as small or large as you like!

Note the transparent pixel remains the top, left pixel of the entire image (if you don't define Transp\_Color)

In v2.0, upto 8 images are supported: none, GPRS, 1xRTT, 1xEVDO, EDGE, UMTS, EVDV, HSDPA

To use this: Image\_Conn\_Type=1,x,y,connType.tga,, numImages

If numImages is not defined, 6 is assumed

Image_AppLink	Pop-up with 10 application shortcuts – using each applications icon
Image_Applink1-20	Application Icon as shortcut to the specific application, image item (for custom link images) doesn't need to be defined, and will be ignored unless you add the attribute “,g”. In that case normal system icon for the application will be used! Add attribute “,l” to use application large shortcut (32 pixel) images, this just needs to be added to Image_AppLink or Image_Applink1 Users add the applications to be linked via Advanced Settings tab.
Image_PhotoLink	Pop-up with up to 9 photo shortcuts – using each contacts photo
Image_PhotoLink1-16	Photo Icon as shortcut to the specific contact, image item (for custom link images) doesn't need to be defined, and will be ignored (contact photo will be used) unless you add the attribute “,g”. Users add the contact persons to be linked via Extras Settings / Photo-Dialer tab.
Image_PhotoMask	Optional mask / background to be overlaid on photo-bar (it needs transparent cutouts where photos should be visible)
Image_CustomAlarm	- Opens the custom alarm component (for wakeup alarms)
Image_CustomAlarm2	- Active alarm state
Image_AnalogClock	- Analog clock, this is the analog clock image, hands will be centered on image, so it must be symmetrical at the moment. Hands are drawn automatically antialiased in black Set attribute ‘w’ to have wide hands, instead of default narrow version
ClockHand_Color	Color for the clock hands
<del>HourHand</del>	<del>Clock hands (drawn vertically in 12 O’Clock position)</del>
<del>MinHand</del>	<del>Not yet supported</del>
Image_DualSIM	Support for dual SIM Card, shows correct icon based on currently
Image_DualSIM2	connected SIM. Telephone number of second SIM needs to be entered via User.cfg
Image_BacklightToggle	Toggle backlight between Max, Min and profile settings
Image_BacklightPlus	
Image_BacklightMinus	
Image_NextAlarm	Display next alarm (from paAlarm) as text, use textPos to position the text

Note: Clock, Date and Rotator all support center alignment and right-align.

-1 = center, 1 = right-align, default = left-align

*Image\_Clock=1,162,3,BWP\_ClockBG.png,HH:mm,-1*

*Image\_Rotator=1,0,0,miminek\_rotator3.png,t-1,5,3*

*Support for graphic Font for Time/Short Date is now added.*

*For that you need to define 15 (optionally 17) images, and add “g” attribute to clock / date tag*

*See “Nixi-tube” skin for a great example of what is possible with this!*

`time_0=1_image.gif`

`time_1`

`time_2`

`time_3`

`time_4`

`time_5`

`time_6`

`time_7`

`time_8`

`time_9`

`time_dot = ‘.’`

`time_colon = ‘:’`

`time_slash = ‘/’`

`time_comma = ‘,’`

`time_minus = ‘-’`

`AM / PM is optional:`

`time_am = ‘AM’`      ← these are aligned with bottom of image after time

`time_pm = ‘PM’`

## Weather Plugin:

Image\_Weather: set this to be one of the weather images - it MUST be same size as weather images)

use attrib,TextX, TextY to position the Hi/Low temperature (-1 for center, 1 for right-align), TextY to push text down

Image\_Weather1 -> Image\_Weather5 allow showing next 1-5 days forecast. Use the attribute 'l' or 's' to define whether large or small weather images should be used.

Weather\_Sunny=image.gif

Weather\_MostlySunny=image2.tga

Weather\_MostlyCloudy....

Weather\_Cloudy

Weather\_ChanceRain

Weather\_Rain

Weather\_ChanceStorm

Weather\_Storm

Weather\_ChanceSnow ('Weather\_Snow' is used if this is not defined)

Weather\_Snow

Weather\_Icy ('Weather\_Snow' is used if this is not defined)

*NOTE: A second smaller series of weather images can be defined if you wish to have a smaller forecast bar showing multiple days at once, using Image\_Weather1,*

*Image\_Weather2...*

*Define the full series of 11 weather images "Weather~~Small~~\_Sunny=image.gif", these can only be used if the main weather images are also defined.*

Weather\_Font=tahoma

Weather\_TempSize <- for Temperature Hi/Lo

Weather\_DaySize <- for 3 character day name

Weather\_TempColor

Weather\_DayColor

*The text for current day is positioned in the bottom, middle of image by default, to manually position the text use:*

Weather\_DayXOffset > 0 to position text from left edge, -1 = Center, -2 = Right align

Weather\_DayYOffset > 0 to position text from top edge, -1 = Vert.Center, -2 = Bottom align

*To reposition the current and minimum temperature text from default vertical row use:*

Weather\_CurrXOffset > 0 to position text from left edge, -1 = Center, -2 = Right align

Weather\_CurrYOffset > 0 to position text from top edge, -1 = Vert.Center, -2 = Bottom align

Weather\_MinXOffset > 0 to position text from left edge, -1 = Center, -2 = Right align

Weather\_MinYOffset > 0 to position text from top edge, -1 = Vert.Center, -2 = Bottom align

*Small Forecast images support simple automatic text formatting! Add the attribute 't' = temp. on top, or 'b' = temp.at bottom*

*This shows "max° / min°", day text will then automatically be added above or below*

Image\_Weather1=1,x,y,WeatherSmall\_Sun.tga,st use small image, with temp. above image, and day text below it.

## FONTS, COLORS & STYLES:

Text_Font	- Font for "count"
Text_Size	- Size
Text_Style	- 'Bold' or 'Normal'
Text_Color	- Color for "count" text <i>text (if not defined is taken from Theme!)</i>
Text_Alarm	- Color for "count" text on alarm

*(All text elements use the Text\_Font as base if defined, otherwise System font)*

Skin_HiliteColor	- Color for the hilite when phoneAlarm selected on Today screen <i>(if not defined is taken from Theme!)</i>
Nav_HiliteColor	- Color for the hilite on skin navigate (Default = red)
Profile_BackColor	- Background color of active profile in selector (Default = white)
Profile_BackColor2	- Gradient background color for profile ( <u>MUST</u> be set to same as Profile_BackColor if you want single color background)
Profile_HiliteColor	- Hilite color of active profile in selector (Default = blue)
Text_SelectedColor	- Hilite color of text (Default = white)

Profile_TextSize	- Size
Profile_TextColor	- Color for profile text (if activated via Image_Profile1 tag)

ScrollWindow_Font	- Font for the Rotator text
ScrollWindow_Size	- Font size
ScrollWindow_Style	- "Bold" or "Normal"
ScrollWindow_Color	

Clock_Font	- Font face for clock text
Clock_Color	- Text color for clock
Clock_Size	- Text size for clock
Clock_Style	- Bold or Normal
Date_Font	- Font face for date text
Date_Color	- Text color for date <i>(uses Clock settings if not defined)</i>
Date_Size	- Text size for date

Operator_Color	- Text color for operator and location
Operator_Size	- Text size for operator and location
Operator_Style	- Bold or Normal

Signal_Color	- Text color for signal/battery/memory items
Signal_Font	- Font for the Signal/Battery/Memory text
Signal_Size	- Signal Font size
Signal_Style	- Bold or Normal

Battery_Color	- used for battery meter text instead of "Signal_Color" if defined
Memory_Color	- used for memory meter text instead of "Signal_Color" if defined

Popup\_BackColor - Background color for popup dialer, task-switcher and photo-bar  
 Popup\_Backcolor2 - Gradient background color for popup (MUST be set to same as Popup\_BackColor if you want single color background)  
 Popup\_TextColor - Text color for popup  
 Popup\_SelectColor - Selected color for popup  
 Popup\_TextSize - Text size for popups  
 Popup\_Style - Bold or Normal  
  
 Transp\_Color - RGB Color to treat as transparent (*1,1,1 = Top, left pixel of image*)  
 Transp\_NoHit - Click ignores any transparent areas of skin. Use this when overlapping items.

Skin\_Rotate\_NoReload - Ignore the “\_L” landscape version of skin – this allows MUCH quicker rotation in v1.57+ (after v2.14 this is no longer needed)

Nav\_HiliteWidth - Width of navigation Border in pixels (default = 3)  
 Debug\_Skin - This debugging tag will show borders for all major skin items at once to help positioning

You can define how pressed buttons are handled:

Pressed\_Action=0 - Default, moves icon down and right 2 pixels  
 Pressed\_Action=1 - transparent overlay UNDER the button, looks good, but will only work if button has transparent background  
 Pressed\_Action=2 - transparent overlay OVER the button

NOTE: If you have transparency issues in your v2.0 skin, check the color of top, left pixel or try defining “Transp\_color” tag!

v2.16 skins require 32 bit images to have a valid alpha-blend layer, if you have problems with 32 bit PNG images save them as 24 bit, or as GIF.

Nav\_Order - 1-handed navigation order!! See installed skins for example.  
Nav\_Order2 - 2<sup>nd</sup> row of navigation (if defined use up/down to navigate between rows)  
Nav\_Default - The action to perform on default action (when no skin icon is selected)  
By default this is the quick dialer

'Image Order for Nav\_Order and Nav\_Default

APP\_ITEM = 1, SMS\_ITEM = 2, EMAIL\_ITEM = 3, MISSED\_ITEM = 4,  
VOICE\_ITEM = 5, BLUE\_ITEM = 6, BATT\_ITEM = 7, SIGNAL\_ITEM = 8,  
MEMORY\_ITEM = 9, FLASHMEMORY\_ITEM = 10, VOLUME\_ITEM = 11,  
DIAL\_FAV\_ITEM = 12, TASKSWITCH\_ITEM = 13, CLOCK\_ITEM = 14,  
DATE\_ITEM = 15, LOADSKIN\_ITEM = 16, SPEAKER\_ITEM = 17,  
DISCONNECT\_ITEM = 18, PHONE\_ITEM = 19, VOICECOMMAND\_ITEM = 20,  
HEADSET\_ITEM = 21, WLAN\_ITEM = 22, MUTE\_CALL\_ITEM = 23  
MMS\_ITEM = 24, BLUE\_EXTRA\_ITEM = 25, GPRS\_EXTRA\_ITEM = 26,  
WLAN\_EXTRA\_ITEM = 27, APPOINTMENT\_ITEM = 28, OPERATOR\_ITEM = 29  
APP\_LINK\_ITEM = 30, APP\_LINK\_ITEM1 = 31, APP\_LINK\_ITEM2 = 32,  
APP\_LINK\_ITEM3 = 33, APP\_LINK\_ITEM4 = 34, APP\_LINK\_ITEM5 = 35,  
APP\_LINK\_ITEM6 = 36, APP\_LINK\_ITEM7 = 37, APP\_LINK\_ITEM8 = 38,  
APP\_LINK\_ITEM9 = 39, PUSHEMAIL\_ITEM = 40  
LOADSKIN2\_ITEM = 41, LOCATION\_ITEM = 42  
NOTIFY\_ITEM = 44, PROFILE1\_ITEM = 45

' v2.0 items

LOADSKIN3\_ITEM = 46, LOADSKIN4\_ITEM = 47,  
APP10\_LINK\_ITEM = 48, APP11\_LINK\_ITEM = 49, APP12\_LINK\_ITEM = 50,  
APP13\_LINK\_ITEM = 51, APP14\_LINK\_ITEM = 52,  
APP15\_LINK\_ITEM = 53, APP16\_LINK\_ITEM = 54, APP17\_LINK\_ITEM = 55,  
APP18\_LINK\_ITEM = 56, APP19\_LINK\_ITEM = 57,  
APP20\_LINK\_ITEM = 58  
CONN\_TYPE\_ITEM = 59, USERALARM\_ITEM = 60, WLAN\_INFO\_ITEM = 61,  
COST\_INFO\_ITEM = 62,  
IM\_ITEM = 63, ANALOGCLOCK\_ITEM = 64, DUALSIM\_ITEM = 65,  
WEATHER\_ITEM = 66, PHOTO\_LINK\_ITEM = 67  
PHOTO1\_LINK\_ITEM = 68, PHOTO2\_LINK\_ITEM = 69, PHOTO3\_LINK\_ITEM = 70  
PHOTO4\_LINK\_ITEM = 71, PHOTO5\_LINK\_ITEM = 72, PHOTO6\_LINK\_ITEM = 73  
PHOTO7\_LINK\_ITEM = 74, PHOTO8\_LINK\_ITEM = 75, PHOTO9\_LINK\_ITEM = 76

WEATHER1\_ITEM = 77, WEATHER2\_ITEM = 78, WEATHER3\_ITEM = 79,  
WEATHER4\_ITEM = 80, WEATHER5\_ITEM = 81,  
BACKLIGHT\_PLUS\_ITEM = 82, BACKLIGHT\_MINUS\_ITEM = 83,  
BACKLIGHT\_TOGGLE\_ITEM = 84, VOLUME\_POP\_ITEM = 85,  
PHOTO10\_LINK\_ITEM = 86, PHOTO11\_LINK\_ITEM = 87, PHOTO12\_LINK\_ITEM = 88  
PHOTO13\_LINK\_ITEM = 89, PHOTO14\_LINK\_ITEM = 90, PHOTO15\_LINK\_ITEM = 91  
PHOTO16\_LINK\_ITEM = 92, NEXTALARM\_ITEM = 93, GPS\_ITEM = 94,

NOTE: All v1.62 skins will work correctly without any changes in v2.0, earlier skins might need the navigation updated to work correctly.

### Optional Date Format String:

d	Day of month as digits with no leading zero for single-digit days.
dd	Day of month as digits with leading zero for single-digit days.
ddd	Day of week as a three-letter abbreviation. The function uses the LOCALE_SABBREVDAYNAME value associated with the specified locale.
dddd	Day of week as its full name. The function uses the LOCALE_SDAYNAME value associated with the specified locale.
M	Month as digits with no leading zero for single-digit months.
MM	Month as digits with leading zero for single-digit months.
MMM	Month as a three-letter abbreviation. The function uses the LOCALE_SABBREVMONTHNAME value associated with the specified locale.
MMMM	Month as its full name. The function uses the LOCALE_SMONTHNAME value associated with the specified locale.
yy	Year as last two digits, with a leading zero for years less than 10.
yyyy	Year represented by full four digits.

### Optional Time Format String:

h	Hours with no leading zero for single-digit hours; 12-hour clock
hh	Hours with leading zero for single-digit hours; 12-hour clock
H	Hours with no leading zero for single-digit hours; 24-hour clock
HH	Hours with leading zero for single-digit hours; 24-hour clock
m	Minutes with no leading zero for single-digit minutes
mm	Minutes with leading zero for single-digit minutes
s	Seconds with no leading zero for single-digit seconds
ss	Seconds with leading zero for single-digit seconds
t	One character time marker string, such as A or P
tt	Multicharacter time marker string, such as AM or PM