# Java Interaction

The number keys 2 and 3 are colored amber and green respectively on XP3 Sentinel phones. These phones can be mapped to launch Java applications with MIDlet names Two and Three respectively.

The Java applications can change the mode of the Lone Worker application by the Java class com.sonimtech.LoneWorker. This way, we can make the amber and green buttons behave as shortcuts to change the mode of the Lone Worker application based on some interaction with the user or a server.

By default, the phone is shipped with simple implementations of MIDlets Two and Three, which do nothing other than changing the mode. Java applications can also cause the Lone Worker application to dump its current configuration into a file and also update the current configuration from a file. By this, Java applications can change configuration parameters.

class LoneWorker

{

public static final int DISABLED = 0;

public static final int SIMPLE = 1;

public static final int TRACKING = 2;

public static final int MANDOWN = 3;

public static final int ALARM = 4;

public static final int SUCCESS = 200;

public static final int BAD\_ARGUMENT = 400;

public static final int FORBIDDEN = 403;

public static final int NOT\_AVAILABLE = 404;

public static final int UNKNOWN\_ERROR = 500;

public static int getMode ( );

public static int setMode ( int mode );

public static int getConfiguration ( String filename );

public static int getDefinition ( String filename );

public static int setConfiguration ( String filename );

};

A Java application is provided which uses this API to change configuration parameters and also helps to view and change the mode of the Lone Worker application. This Java application is highly customizable. The list of configurable parameters can be customized.

Sonim provides full technical support for partners to interface their Java applications to the Lone Worker API. Sonim has a portal http://www.sonimdevelopers.com to support partners developing Java applications for Sonim phones. Sonim has a customized J2ME SDK which can be used by partners to develop Java applications on the XP3 Sentinel.

The Java platform on XP3 Sentinel has advanced features like running a Java application in the background, automatically pushing a Java application into background when any other native application comes to foreground, auto start of a Java application on phone power up and defining a Java application as no-exit, in which case, the application cannot be terminated accidentally. However, as the phone supports only one Java application to be running at anytime, if the amber and green keys are mapped to start Java applications, then there should not be any Java application running or suspended in the background. If there is any, then the phone will only ask the user if he wants to terminate or continue the application in the background. This also implies that the application that is mapped to the amber and green keys come up, interact with the user if necessary, do their job (like connect to network, sent SMS, change loneworker mode or/and configuration, etc) and terminate. They should not run in the background.

# Sample Java Code

Here is a sample Java code that changes the mode of the Lone Worker client to Simple.

int result;

result = LoneWorker.setMode(LoneWorker.SIMPLE);

if(result != LoneWorker.SUCCESS)

{

...

}