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## TeleNav Settings for RIM BlackBerry Enterprise Server

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Original: March 28, 2007

Revision 1: May 30, 2007

Revision 2: July 15, 2007

Revision 3: October 10, 2007 (revised statement on allowing 3rd party downloads)

Revision 4: November 20, 2007 (added technique for white-listing TeleNav)

Revision 5: August 1, 2008 (updated network hunting order, changed references from v12 to v24 of the reference, and added v24 features such as IDLE\_TIMER control)

Prepared by TeleNav Engineering

Revisions by TeleNav Customer Care

Reference: BlackBerry Enterprise Server Policy Reference Guide Version 24 (or later)

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### **Objective**

This document is intended to provide guidance to BES administrators who are involved in the management of BlackBerries that host TeleNav GPS Navigator. Many modern BlackBerries include a GPS receiver. However, most older models beginning with a seven (except 7100i) and the 8700 and 8707 require an external Bluetooth-linked GPS receiver.

Other IT Policy Rules apply for the management of telephony and network access.

We suggest following the discussion in the Reference Guide in parallel to reading the following to make sure that the policies you establish are appropriate for your enterprise. Those policy groups that are relevant to the use of TeleNav, or sound like they could be, are discussed in the following subsections.

### **Notice**

TeleNav, Inc. is not responsible for any errors or omissions your enterprise makes in applying the BES policies.

### **TeleNav's Network Usage Priority**

On GPRS or EDGE networks, TeleNav GPS Navigator prefers to use BlackBerry Internet Services (BIS) over BlackBerry Enterprise Server (BES) Mobile Data Services (MDS). If neither is available, TeleNav will use TCP/IP via a carrier Access Point. TeleNav's servers maintain a list of Access Point Names (APNs), but the user may have to enter a new/different APN if the carrier gateway is abruptly changed. For GPS Telcel, no TCP path is open. On CDMA networks, TeleNav GPS Navigator prefers to use TCP since the APN is part of the RIM handheld code, and does not need to be user managed.

## Configuring BES Policies for use with TeleNav

Reference: BlackBerry Enterprise Server Policy Reference Guide Version 24 (or later). This guide is available from [www.blackberry.com](http://www.blackberry.com).

### Location Based Services policy group, page 56

While TeleNav is a location-based service, this group is not relevant to TeleNav. The default setting of FALSE for “Enable Enterprise Location Tracking” is not relevant for TeleNav.

### Bluetooth Policy Group, page 12

The following table addresses only those policies that could have an effect on TeleNav on BlackBerries using an external Bluetooth GPS receiver:

Rule	Setting
Disable Bluetooth	Leave as FALSE so that data from an external GPS receiver will be accessible
Disable Discoverable Mode	Not currently relevant, but in future versions of TeleNav, this option should be set to TRUE to allow TeleNav to “discover” an external Bluetooth GPS receiver.
Disable Pairing	Leave as FALSE, or the GPS receiver cannot be paired with the BlackBerry.
Disable Serial Port Profile	Leave as FALSE or the data from the GPS receiver will not be accessible.
Require encryption	Leave as FALSE or the GPS receiver will not be able to pass location data.
Require Password for Enabling Bluetooth Support	Setting this to TRUE will require the user to know the password to manage the Bluetooth settings. Generally this is best left as FALSE.
Require Password for Discoverable Mode	Passwords on GPS devices are of relatively little value due to the type of data being passed since if the Bluetooth link is within range, the BlackBerry is nearby, but this is not the case with other types of peripheral devices.

### Browser Policy Group, page 28

Rule	Setting
Allow IBS Browser	Leave as TRUE. However, to suppress BIS network access, set to FALSE. TeleNav will then try MDS over BES as its preferred network connection method, and fail over to TCP/IP if MDS is not available.

### Device Only Items, page 45

Rule	Setting
Enable long term timeout	Setting this form of security lock will lock down the BlackBerry regardless of user activity. The user will then need to enter the password to restore functionality. TeleNav has no means of circumventing this security feature.

Maximum security time out	If this inactivity timer is set to lock the device after a brief period of inactivity, users on long trips may be impacted by having to enter their password. Setting the TeleNav Preferences for Backlight ALWAYS ON should prevent this timer from locking down the BlackBerry.
User can change time out	Users may want to know the maximum security time out so that a device setting is not locking the device more frequently.

#### Global Items, page 54

Rule	Setting
Allow Browser	This should be set as TRUE to allow over-the-air downloads. <sup>1</sup>
Allow Phone	Set to TRUE since setting to FALSE will prohibit dialing business or the automatic voice recognition system for address input system.

#### MDS Policy Group, page 56

This rule set is applicable to an BES MDS that is offered to the public at large. This is not applicable to a BES that is inside your corporate firewall, and administered by your IT department.

Rule	Setting
Disable activation with public MDSS	Set to FALSE since setting to TRUE will block access to the public Internet using the BES Mobile Data Services
Disable user-initiated activation with MDSS	Setting to TRUE will block access to the public Internet using the BES Mobile Data Services

#### Password Policy Group, page 61

Rule	Setting
Periodic challenge time	If this is set to lock the device after a brief period, users on long trips may be impacted by having to enter their password. TeleNav has no means of prohibiting this lock from occurring as scheduled.
Set password time out	If this is set to lock the device after a brief period of inactivity, users on long trips may be impacted by having to enter their password.

#### Security Policy Group, page 76

Rule	Setting
Allow External Connections	Leave as TRUE or TeleNav will not be able to access it servers via the public Internet.
Internal Network Connections	Leave as TRUE or TeleNav will not be able to access it servers via the BlackBerry MDS connection service.
Allow Resetting of Idle Timer <sup>2</sup>	If this policy is FALSE, TeleNav is not able to activate the backlight to preclude the inactivity timer from locking the device. If this policy is TRUE, by setting the Backlight Preference to

<sup>1</sup> Forbidding access to the BlackBerry Internet browser will also block access to the BlackBerry Internet Service (BIS).

<sup>2</sup> This is a new feature, and may not be present using older BES installations.

	ALWAYS ON, the inactivity timer will not lock the device during Navigation.
Allow Split-Pipe Connections	Earlier versions of TeleNav that employed an external Bluetooth receiver required Split-Pipe connections to be allowed.
Allow Third Party Apps to use Persistent Store	Must be TRUE, or TeleNav will not be able to store graphics and audible files it needs for generating its user experience.
Disallow Third Party Application Downloads	TeleNav is NOT signed by RIM to the level of trust required, so this setting must be set to FALSE while loading from BES, the desktop, or over-the-air. <sup>3</sup> To control the unwanted loading of other applications, this control should be returned to TRUE after TeleNav has been installed.

### Service Exclusivity Policy Group, page 102

Rule	Setting
Allow Other Browser Services	Leave as TRUE at least until the application has been loaded over the air. The IBS browser is preferred to carrier-specific services during downloads.

### Application Control Policies, page 103

The following table addresses only those policies that could have an effect on TeleNav:

Rule	Setting
External domains	Leave as NULL to allow TeleNav to access its servers
Disposition	Leave as OPTIONAL or less restrictive.
Interprocess Communications	ALLOW is mandatory
Internal Network Connections	ALLOW or PROMPT – required for using a private BES/MDS for public internet access
External Network Connections	ALLOW or PROMPT – required for using BIS, TCP, or a public BES/MDS for public internet access
Local Connections	ALLOW
Phone Access	ALLOW or PROMPT – TeleNav does use the phone to call businesses, or the automatic voice recognition system for address input.
PIM Data Access	ALLOW – TeleNav does register to access the PIM, and once TeleNav has registered with the BlackBerry, the PIM can be used to launch TeleNav
Event Injection	Not required until TeleNav version 5.1. TeleNav may use event injection to keep the inactivity timer from locking the device.
Bluetooth Serial Profile	ALLOW so that a BlackBerry that needs an external GPS receiver can receive data from the GPS
Device GPS	On devices with internal GPS receivers, this

<sup>3</sup> Prior versions of this guide were incorrect. Although TeleNav is RIM-signed, it is still a third party application.

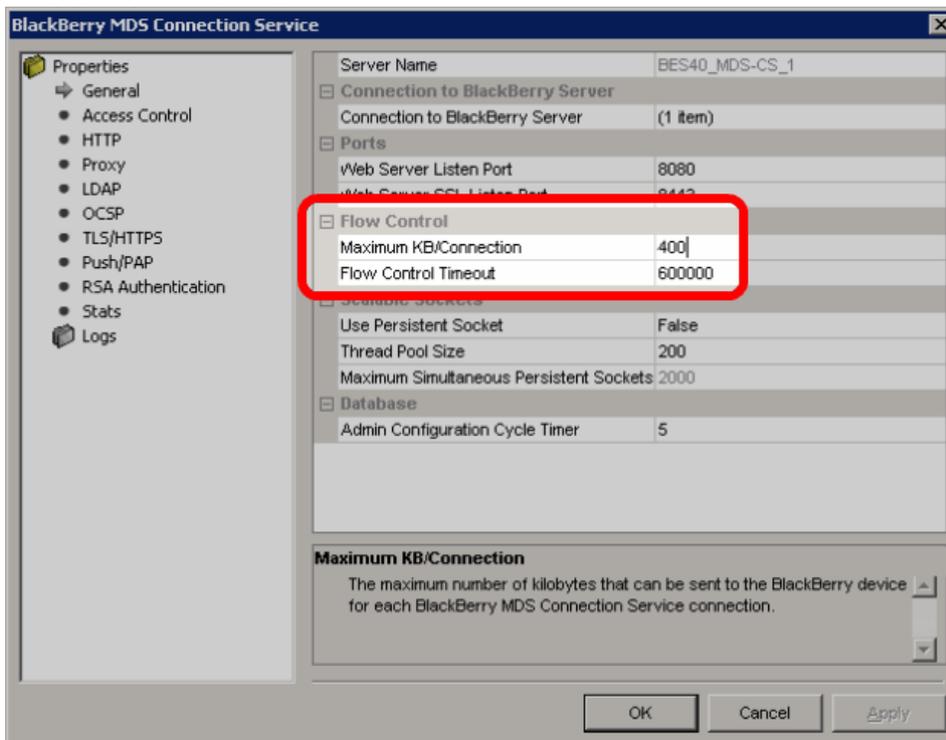
setting must be PROMPT or ALLOW so that TeleNav can obtain GPS fixes.

If you have questions, TeleNav Technical Support may be able to offer assistance, but generally interpretation of these policies is the sole responsibility of the BES administrator.

## File Size Restrictions

**TeleNav requires the BES/MDS to pass large file sizes during its first use. The large files include language and graphical elements used by the application in the chosen spoken language.**

1. Launch the BlackBerry Manager
2. Select the appropriate server name and right-click to edit properties
3. Once you are in the “**BlackBerry MDS Connection Service**” screen, locate the “**Flow Control**” field in the “**General**” tab
4. Set “**Maximum KB/Connection**” to at least **400**
5. Set the “**Flow Control Timeout**” to: **600000**
6. Go to the “**HTTP**” tab and locate the “**Connection Timeout**” field
7. Set the value of “**HTTP Device Connection Timeout & HTTP Server Connection Timeout**” to: **180000**
8. Apply accordingly and close “BB MDS Connection Service” Window
9. At “Tasks” (under “Edit Properties” )- Select “Restart service

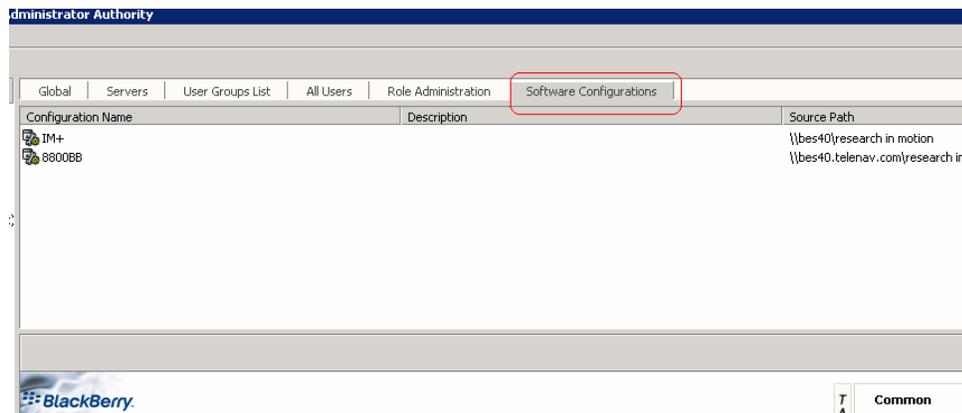


## Pushing Applications from the BES

TeleNav provides application loader extension (ALX) and executable (COD) files for distribution by the BES to the different carrier-provided and device models supported by the company IT group. To obtain these files, call TeleNav support at 888-353-6284.

When you setup the BlackBerry Enterprise Server it installs an application called “BlackBerry Handheld Configuration Tool” this is used to send BlackBerry applications to the handheld wirelessly over the air.

NOTE: MDS *must* be enabled for this to work.



1. Select a computer that you will use to store the BlackBerry applications you want to send out wirelessly. This computer should have the BlackBerry desktop manager installed on it. It will also work on the actual BES server without the desktop manager
2. On this computer go to c:\program files\common files\research in motion\
3. Create a new folder in this directory and call it “Shared”. Within this directory create another folder and call it “applications”. In this applications folder you will create a folder for each BlackBerry application you want to send.
4. Now download the program you would like to send to the BlackBerry. Most likely this file will be compressed as a zip file. Extract it to a folder within c:\program files\common files\research in motion\shared\applications\

Once you have done this, you will need to re-index the list of programs.

5. From the same computer open a command prompt window.
6. Go to c:\program files\common files\research in motion\apploader
7. In this directory type “loader /reindex”

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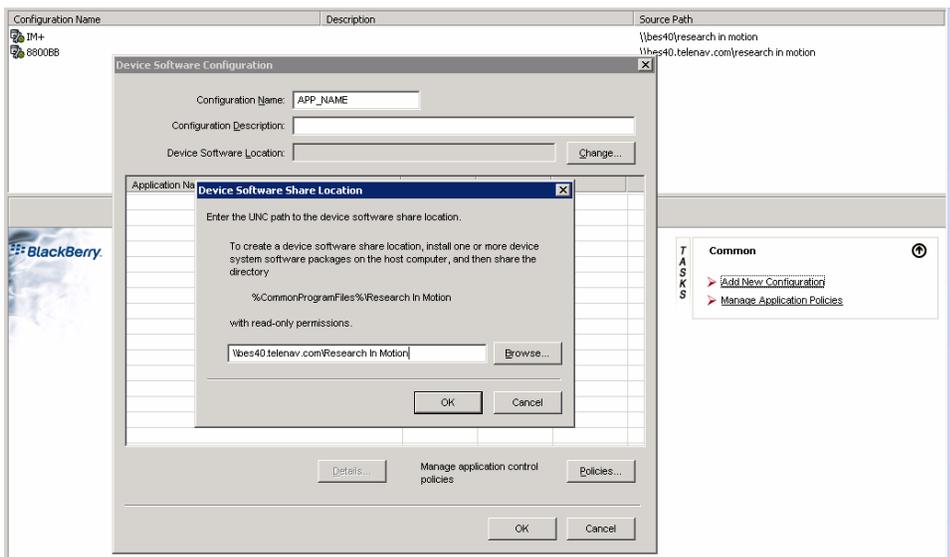
C:\WINDOWS\system32\cmd.exe
04/18/2007 05:25 PM          389,203 GE.dll
03/08/2007 11:28 AM           9,043 Device.xml
04/18/2007 05:33 PM      4,843,032 Loader.exe
04/18/2007 05:33 PM          411,160 LoaderRes1028.dll
04/18/2007 05:33 PM          452,120 LoaderRes1029.dll
04/18/2007 05:33 PM          464,408 LoaderRes1031.dll
04/18/2007 05:33 PM          468,504 LoaderRes1034.dll
04/18/2007 05:33 PM          468,504 LoaderRes1036.dll
04/18/2007 05:33 PM          456,216 LoaderRes1038.dll
04/18/2007 05:33 PM          464,408 LoaderRes1040.dll
04/18/2007 05:33 PM          427,544 LoaderRes1041.dll
04/18/2007 05:33 PM          419,352 LoaderRes1042.dll
04/18/2007 05:33 PM          460,312 LoaderRes1045.dll
04/18/2007 05:33 PM          460,312 LoaderRes1046.dll
04/18/2007 05:33 PM          456,216 LoaderRes1049.dll
04/18/2007 05:33 PM          452,120 LoaderRes1055.dll
04/18/2007 05:33 PM          407,064 LoaderRes2052.dll
03/08/2007 11:28 AM      1,226,264 MailServerMAPI.dll
03/08/2007 11:28 AM      1,672,728 MailServerNotes.dll
04/18/2007 05:33 PM          153,112 rimprogram.dll
09/13/2004 11:27 AM           47 Vendor.xml
      21 File(s)      14,561,669 bytes
       2 Dir(s)      144,185,991,168 bytes free

C:\Program Files\Common Files\Research In Motion\AppLoader>Loader.exe /reindex_

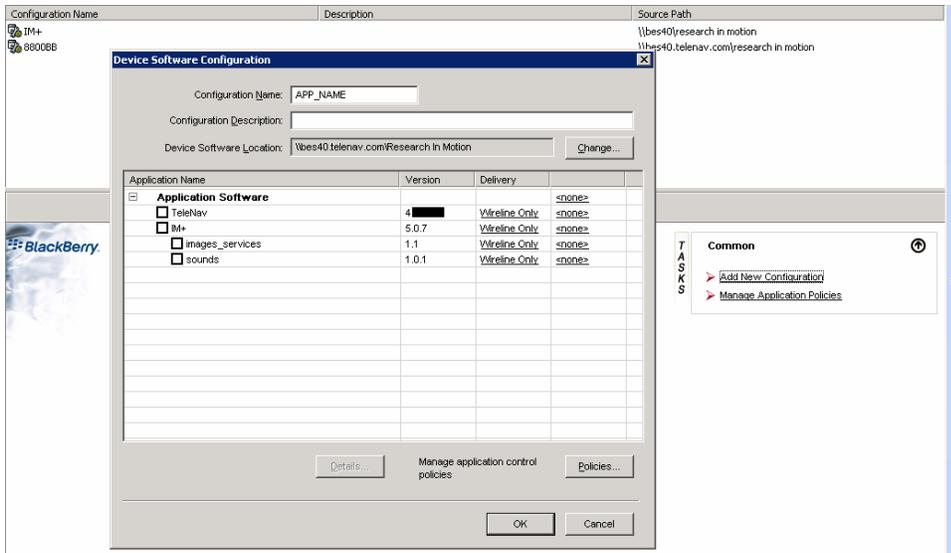
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Now that we have a program to send out, go to the BlackBerry Enterprise Server and open “BlackBerry Handheld Configuration Tool” (Blackberry enterprise server 4.1 has this included in the main admin console.

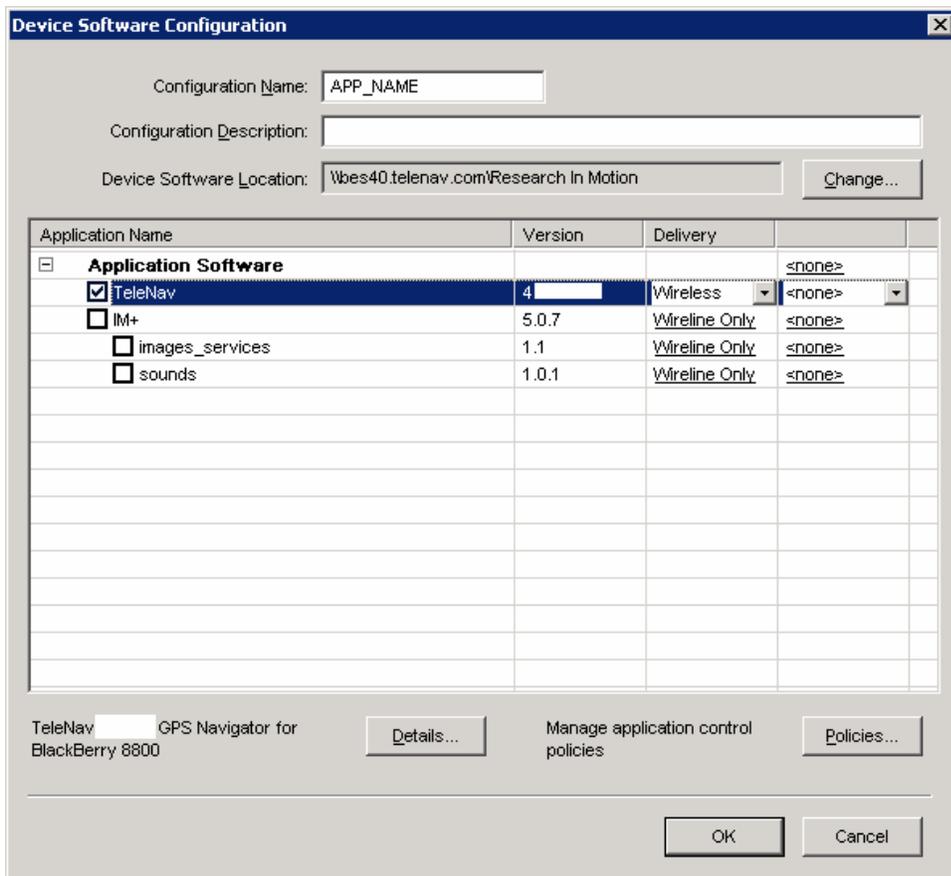
1. Click on the “Configuration” tab
2. Click on “New Configuration”
3. Give the configuration a name and description
4. For Software location, you MUST type in [\\computername\Research in Motion\](#) Then press Enter



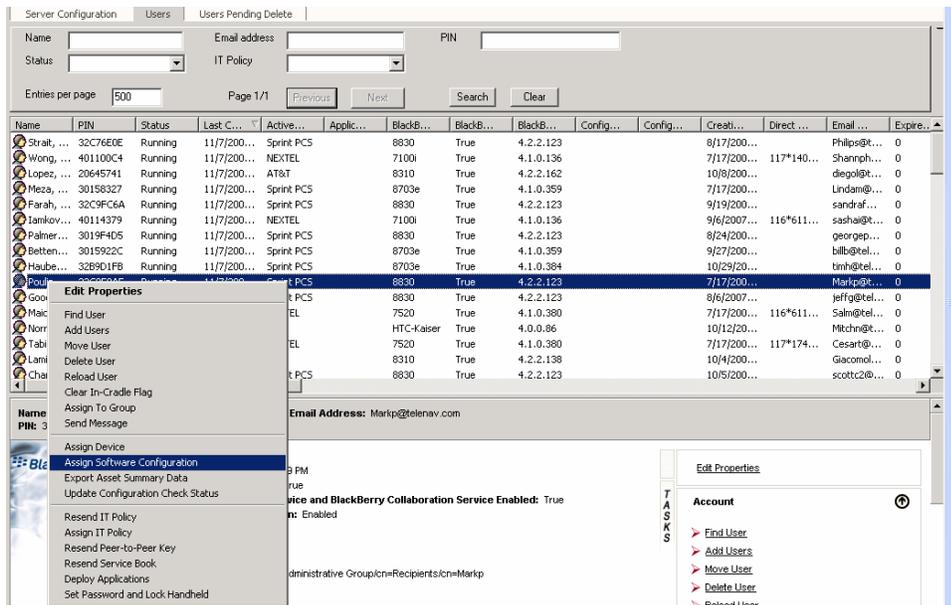
After selecting the location, the screen will refresh leaving you with “Application Software” Click the + sign next to it and it should reveal the applications you wish to send.



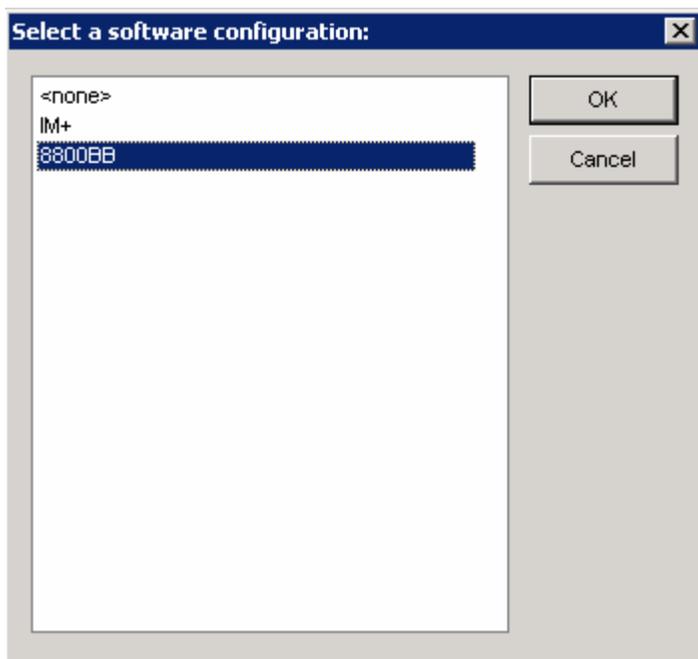
For each application you wish to send check mark the box and change the delivery option to wireless. Click OK to save.



Now select the “Handhelds” tab and select the BlackBerry unit you would like the application installed on. With the unit selected, select “Assign Software Configuration” If you are using Version 4.0 or newer, go to your users list and assign the configuration by right-clicking on the username.



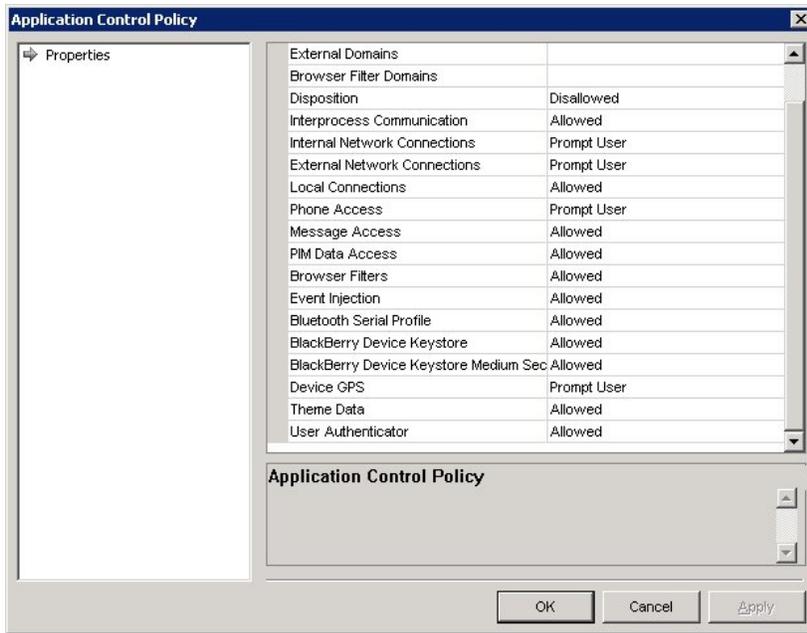
Select the configuration you want to use and select ok. This will assign the software configuration to the device and will wirelessly install the applications.



Installation may take up to 4 hours. Check back often on the BlackBerry unit and eventually you will see the new applications.

To check on the status of the configuration, select the unit from the list of handhelds and at the bottom of the unit information box it should display "Application Status"





Now that you have a parent Application Control Policy, you can create an “exception” policy for TeleNav GPS Navigator.

Create this as a child policy and set the properties as you see in the screenshot below:

