



Lenovo Gobi 3000 Conflict Detection ODF Firmware Switcher Tech Note

NOVEMBER 2011

Introduction

This document covers the newly developed Conflict Detection ODF Firmware Switcher for Gobi 3000 on Lenovo. This ODF implementation is unique as it uses the Conflict Detector and the Lenovo Gobi Utility for switching firmware, allowing it to run on eight different networks (such as AT&T, Verizon, Vodafone, etc.). A Demo of the Lenovo Gobi Switcher solution on OM 2.0.1 with ROP can be downloaded here: [Solution Lab Link](#).

Technical Requirements

Supported OEM Platform	<ul style="list-style-type: none">■ Lenovo Laptops with:<ul style="list-style-type: none">■ Sierra Wireless, Inc. Gobi 3000 package (standard)■ acFnF5.exe Wireless Control Utility (standard)
Operating System	<ul style="list-style-type: none">■ Windows XP (32-bit or 64-bit)■ Windows Vista (32-bit or 64-bit)■ Windows 7 (32-bit or 64-bit)
Supported iPass Clients	<ul style="list-style-type: none">■ Open Mobile 2.0.1 for Windows or newer
Deployment Requirement	<ul style="list-style-type: none">■ Conflict Detection Configuration■ Run-Once Packaging: ODF Set Deployment

Deployment Options

The following deployment options are available:

- Package may be provisioned through the Enterprise Package Deployment System
- The Default Provider package can be customized for deployment to a profile
- The Available Providers can be customized and limited for deployment to a profile
- The underlying scripts and .zip utility may be customized for deployment to a profile



Known Limitations

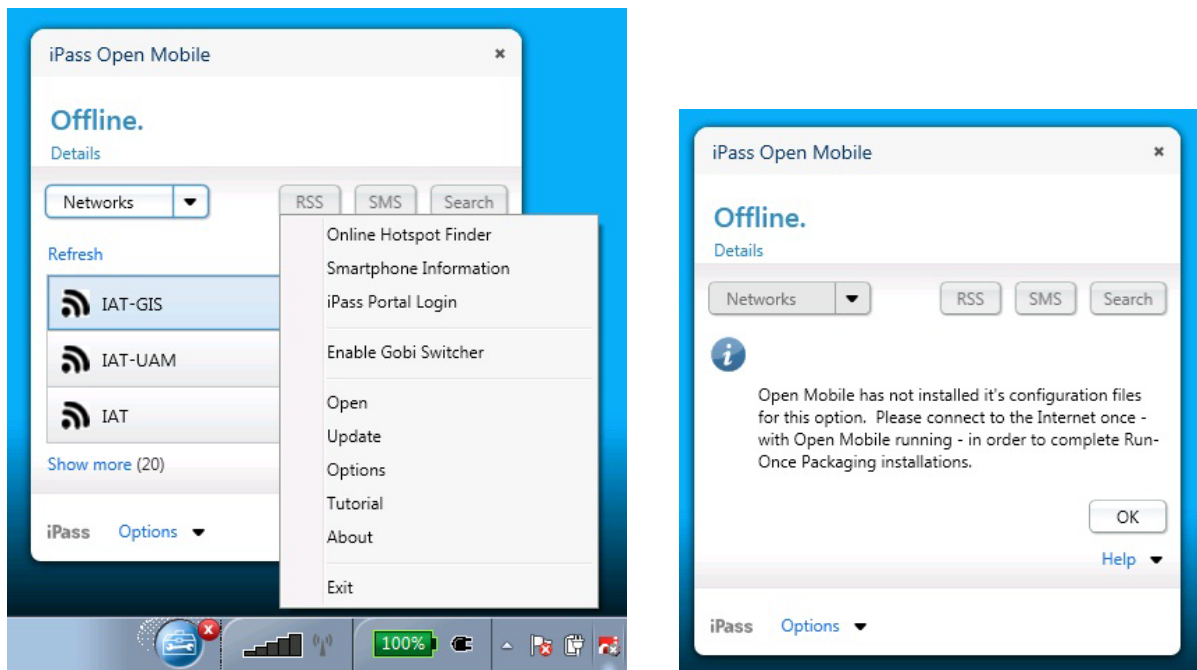
The following limitations are known for the Sierra Wireless 320U ODF Integration:

- SMS Features are not supported
- The native utility should remain installed for context activation, diagnosis and updates, but not configured for a particular provider
- Does not offer Gobi Image #5

Description

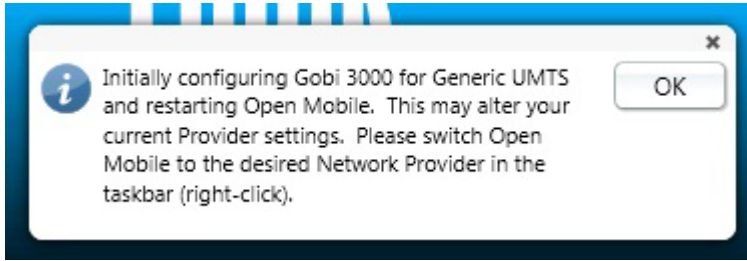
Run-Once Packaging not provisioned

If the station has not completed its Run-Once Packaging installation, “**Enable Gobi Switcher**” is available on the OM User Context Menu. Should the supporting packages not be available to enable the feature, a dialog box is displayed instructing the user to connect to the internet in order to complete ROP.



Run-Once Packaging provisioned

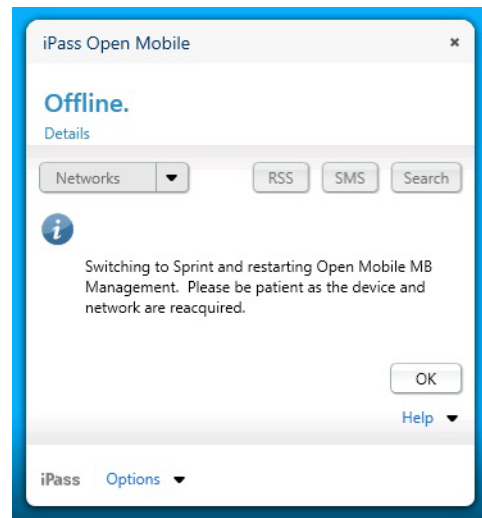
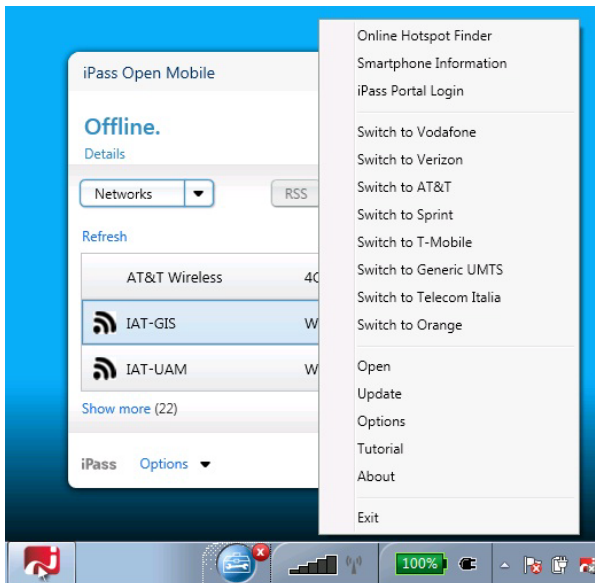
If the station has completed its Run-Once Packaging, “**Enable Gobi Switcher**” is available on the OM User Context Menu. Selecting this option bootstraps the configuration, sets the state-machine, and displays the appropriate User Inform to switch to the desired Provider. This default provider can be customized. It currently sets the station to Generic UMTS and deletes all firmware from the Gobi device cache.



ODF and Gobi 3000 Firmware Switching

Once enabled, all available Network Providers are listed in the Open Mobile User Context Menu. Only the Network Providers not currently selected are offered. Selecting a provider performs the following functions through Conflict Detection and local scripts:

1. Informs the user of the switch through the Open Mobile Main Window or a Toast Message and requests that they wait as the operation is performed.
2. Unpacks the necessary ODF Configuration into the Open Mobile bin.
3. Sets the requested Gobi Firmware (to DEFAULT) through the OEM platform's Sierra Wireless GobilmgMgr.exe utility.
4. Stops and Starts the Open Mobile Mobile Broadband Management.
5. Starts the OEM platform's WWAN radio.



Firmware and Network switching can take up to a Minute for the network to appear.

Windows 7 NDIS 6.2 Support

The solution currently disables WWANSVC on detection of Windows7 so that the ODF capabilities apply to all Operating Systems equally. However, when the native NDIS support is supported in Open Mobile, the package can be customized to enforce WWANSVC instead and still be used to switch the current firmware.

