

# betavine

An open community for mobile application developers

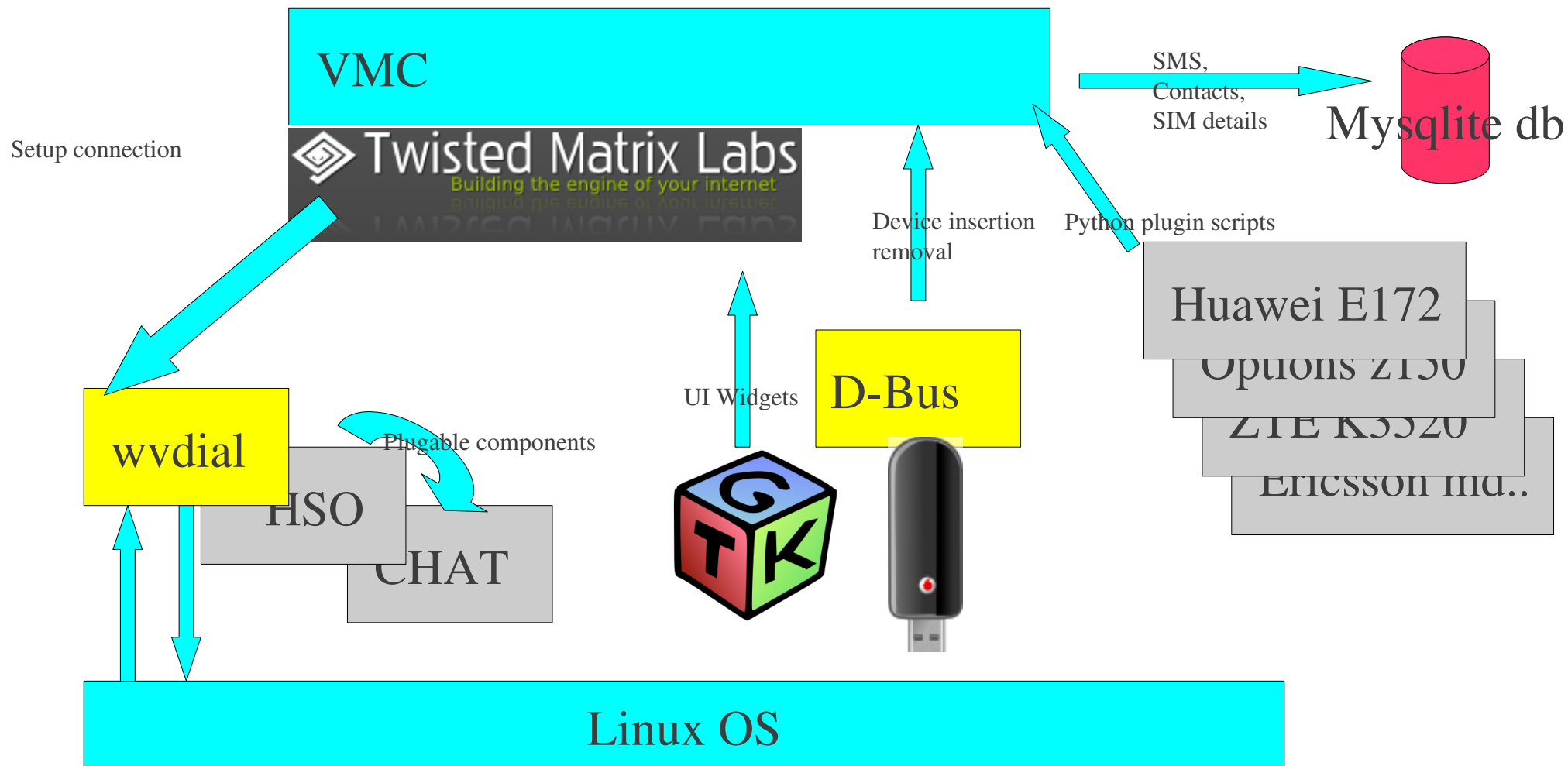
## Vodafone Mobile Connect – for Linux

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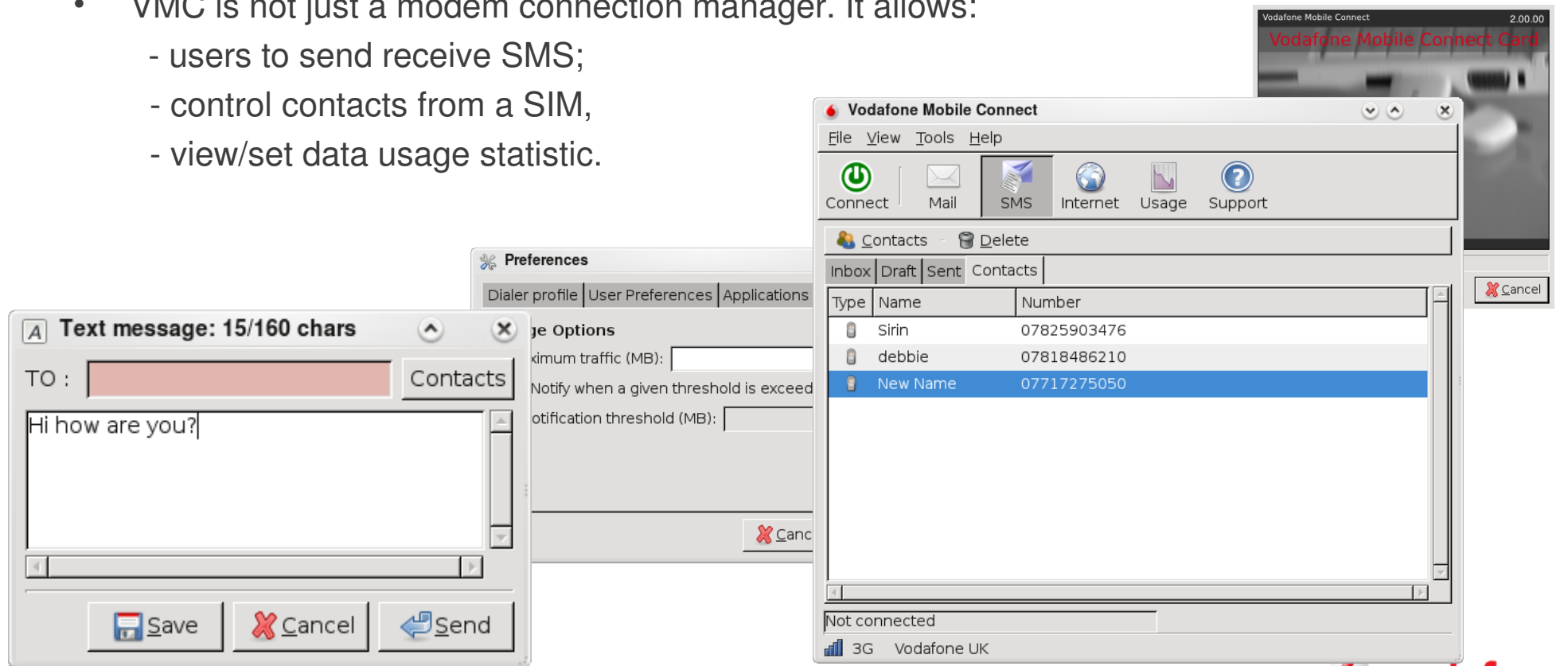


- VMC started as a joint project with the local Spanish Government and Vodafone to supply an Open Source application to run on Linux to help with mobile broadband connectivity.
- In 2007 Vodafone ES removed funding for the project, it was later picked up with Vodafone Group Marketing and R&D as a tactical solution for the Asus 701 being sold in other Op-Co's. The Software was hosted on the new Betavine portal dedicated to the developer community and cutting edge applications.
- In 2008 R&D took the decision into supporting the growing community and decided to build dedicated Linux packages for Linux Netbooks.
- By late 2008 the Linux Driver section of Betavine supported 3 Linux Netbooks and 3 different Linux distributions with over 400,000 downloads.
- Group Marketing are continuing to fund plug-in development for Vodafone USB dongles, and partial support of the Community, while Group R&D (UK & Spain) continue to invest resources for development / testing / hosting / community engagement / support.
- Currently the Software has plugins for over 40 devices – uses components and packages from the OS community – is written in Python a scripting and compilable GPL language – takes its main lead from feedback provided by the community.
- The Betavine Connect software is currently the world lead in mobile connectivity software for Linux in terms of Google importance.

- VMC uses standard Open Source components where possible



- Device 'differences' can be accommodated with a Python script within the plugins directory. No re-compile is needed. This lowers the level which Open Source developers, contributors and OEM's have to understand to build in compatibility.
- All components used are GPL or such like, hence '0' licence costs.
- VMC is not just a modem connection manager. It allows:
  - users to send receive SMS;
  - control contacts from a SIM,
  - view/set data usage statistic.



# Configuration Options

- VMC also allows easy setup of several OEM USB Dongles, taking care of the many differences and non-standard / proprietary configuration problems observed in cards;
- Allows easy setup and configuration of APN's for our mobile broadband customers;
- Integration with new services like PAYT broadband as they come on line.

The image shows three overlapping configuration windows from a software interface:

- APN selection:** A window titled 'APN selection' with a sub-header 'Preconfigured APNs for...'. It contains a table with columns 'Name', 'Country', and 'Type'. Two rows are visible, both for 'Vodafone UK' in the 'United Kingdom'. The first row is highlighted in blue.
 

Name	Country	Type
Vodafone UK	United Kingdom	Con...
Vodafone UK	United Kingdom	Prep...
- Device selection:** A window titled 'Device selection' with a sub-header 'Select a device for your connection.'. It has two radio buttons: 'Known devices' (selected) and 'Custom device settings'. Under 'Known devices', 'Novatel MC950D' is selected in a list. Under 'Custom device settings', there are fields for 'Device type:', 'Data port device:', 'Control port device:', and 'Speed connection:' (with '115200' entered).
 

Device Settings

☒ Known devices

☐ Custom device settings

Device type: [dropdown]

Data port device: [text box]

Control port device: [text box]

Speed connection: 115200
- New Profile:** A window titled 'New Profile' with a sub-header 'Create a new profile for your device.'. It contains text about contacting customer support. Below, there are fields for 'Name:' (filled with 'NovatelMC950D-3Gpre') and 'Model:' (filled with 'Novatel MC950D'). There are also sections for 'preferences' (with dropdowns for 'web', '3G preferred', and 'Default') and 'DNS settings' (with checkboxes for 'Use static DNS', 'Primary DNS', and 'Secondary DNS').
 

Create a new profile for your device.

If you are not sure about what should you fill in, contact your customer support center and they should provide you with the relevant information.

Name: NovatelMC950D-3Gpre

Model: Novatel MC950D

preferences

web [dropdown]

web [dropdown]

connection: 3G preferred [dropdown]

on mode: Default [dropdown]

internet [text box]

DNS settings

☐ Use static DNS

Primary DNS: [text box]

Secondary DNS: [text box]

# betavine | Support / Community / Hosting

- VMC has been hosted on Betavine since 2007. A community of:
  - developers
  - Linux enthusiasts
  - computer literate users and general users now actively participate in:
    - download
    - trial
    - test
    - submit views
    - offer suggestion and tips
    - contribute content
    - fixes and help.

betavine

the **open** mobile application community (more...)

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Resources > Datasheets

## Get connected with Linux!

Datasheets

Devices

Help

Netbooks

Operating Systems

### Connecting Netbooks to Mobile Broadband



Get your Linux Netbook connected to Mobile Broadband



### Datasheet Devices



Find out what cards we test & specific datacard software



### Packages for different flavours of Linux



Find our Mobile Connect software for different distributions of the Linux OS



### Get access to our community help



Help pages, forums blogs and work arounds to help you get connected



# betavine | Partner Networks

- Betavine and VMC's success has allowed us to work with partner networks such as Entel due to the visibility it's obtained.
- Betavine currently host a Linux app designed to connect 'Entel' subscribers using the Ericsson MD-300 USB Modem – This in turn has allowed us to collaborate with Entel on ways to split features / resources across a common Modem Driver.

## -Background-

Steady growth in download counts from our repositories shows higher downloads for countries such as Brazil, Hungary, Romania and Indonesia than even United States. We suspect that Linux is a far more popular operating system in emerging markets.

### Tested Datacards using the Betavine Mobile Connect software



Huawei: E172, E220, E270, E272, K2540, K3520, K3565, K3715, E870, E9735, B970, EM770V  
ZTE: K2525, K3520-Z, K3565-Z, K3565-Z(II)  
Options: Colt, QuadLite, Nozomi, Fujitsu(RAS), Etna(RAS), K3760, E9720  
Novatel: U630, U740, XU870, X950D, MC950D, MFI 2352  
Ericsson: F3507  
Dell: D5530

### ENTEL PCS Drivers Linux para tarjeta de datos Sony Ericsson MD300



ENTEL PCS lanzó en Chile el nuevo módem Sony Ericsson MD300. Este módem USB permite acceder al nuevo servicio 3.5G. El software "md300config" es una pequeña aplicación desarrollada para la utilización del módem 3G MD300 de Sony Ericsson en algunas distribuciones del Sistema Operativo Linux. Esta aplicación configura adecuadamente algunos parámetros del sistema, permitiendo conectarse con redes GPRS, UMTS y HSDPA de ENTTEL PCS. Para esto, el software escribe el archivo de configuración para utilizar el módem 3G MD300 de Sony Ericsson provisto

por ENTTEL PCS. Luego invoca a wvdial para conectarse a internet. El software instala las configuraciones udev y wvdial para poder utilizar el MD300 Sony Ericsson en distribuciones Linux. Md300config es una aplicación bajo licencia GPL.

### MD300 Sony Ericsson Driver



Plataforma: Linux Redhat CentOS  
Versión: 0.1-1  
Liberada el: 05/11/2008

[Download](#)

- Proposals are to continue supporting new Linux Netbooks from OEM's.
- Language support provided by the community and partner networks.
- Funding of developer API's for messaging (SMS and MMS) pushed through Betavine.
- Incorporation of other Operator APN's, MMSC and SMSC settings.
- Full integration with an OS Linux Network Manager.
- Integration with Wader and support from an OS developer house like Warp.
- Engagement with a Linux Distributor such as Canonical to submit the App into a main line Linux repository.
- Development of USSD API.
- Re-skinning UI, and building of a better messaging interface.
- Development or sponsorship/prize for SMS integration with IM app's like Pidgeon.
- Development of tighter integration with ZIP and SIM Contacts integration.
- Development of drivers to work with Mobile devices as modems out the box.
- Integration with MID's / Change UI to use clutter.
- Tight integration with Betavine – show data usage – logging – network – signal strength for users with account on Betavine for their card.



- In the short term we believe there will be a continuing need for this type of application as emerging markets continue to experiment with Linux devices.
- There will be less need for a connect/disconnect type application as this becomes a 'default' behaviour by the OS and more manufacturers build driver support into the Linux Kernel. Further to this, many devices will have an inbuilt datacard, meaning the onus will be on the OEM and OS to make the card work. Never the less this does not negate the usefulness on devices such as Netbooks or larger form factor machines.
- We think integration with SMS and IM will be taken up by the community, it could be an enabler to encourage SMS usage from IM.
- Having a presence in this area keeps Vodafone as an 'enabler' for connectivity of devices to mobile networks. Pushing our brand across all Linux machines and all mobile operators could be reason enough to continue.
- The project has allowed Betavine to gain an insight into problems with installing, finding and downloading applications on MID's and Netbooks for Linux. In medium to long term we could build and push a betavine market place app that allows easy installation of app's provided by Betavine to MID's and Netbooks. This would leverage the work done with Bondi, pushing Widgets to Netbooks and MID's.

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Thank You!



[www.betavine.net](http://www.betavine.net)

[betavine.mobi](http://betavine.mobi)

[forge.betavine.net](http://forge.betavine.net)

A Vodafone Group R&D Lab

