

Intel AppUpSM

Getting Your Windows and MeeGo Apps Into AppUp



Andreas Breitschopp



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AB-Tools.com

End User Products Based on .NET
Targeting the Online and Retail Market



Overview

- **Windows Apps**
 - Example Project
 - Preparations
 - Add AppUp SDK Code
 - Build an Installer
 - Digitally Sign the Installer
 - Published After Validation
- MeeGo Apps
- Conclusion





Example Project


- “Energy Costs Calculator”:
Free power and water
consumption calculator
- Development environment:
Microsoft .NET Framework 2.0 (C#)





Example Project

Power






Select an appliance from the list

You can easily add your own items to the list: specify the appliance name, power rating in watts and the number of hours the appliance is used daily, and then click on the icon next to the list. The price per kilowatt-hour of energy can also be modified.


Check out also our software "Energy Saving" which will help you record and review the costs of electric energy.

[Show more info on energy saving](#)

Calculator
Appliance:  
Or enter the consumption directly: Watt
Each day is used on average for: h
Price per kilowatt-hour: \$

Total consumption during a year: kWh
Total cost during a year: 

Water






Select an appliance from the list






You can easily add your own items to the list: specify the appliance name, water consumption in gallons and the number uses per week, and then click on the icon next to the list. The price per gallon of water can also be modified.

Check out also our software "Energy Saving" which will help you record and review the costs of water.

[Show more info on energy saving](#)

Calculator
Appliance:  
Or enter the consumption directly: gallons
Number of uses a week: times
Price per gallon: \$

Total consumption during a year: gal.
Total cost during a year: 

 Show tip
 Change settings
Save money by recording and reviewing energy consumption
This will be made possible by simple and easy-to-use software Energy Saving
 [More info on Energy Saving](#)
 Show info
 Close program





Preparations

Windows*

Download SDK 1.1.2 for Windows C/C++

Posted 10th June, 2011

[Download](#) (login required)

- Download the [Intel AppUp™ SDK Microsoft Visual Studio* IDE Plug-in](#) (.MSI file)

Download SDK 1.1.2 for .NET*

Posted 10th June, 2011

[Download](#) (login required)

- Download the [Intel AppUp™ SDK Microsoft Visual Studio* IDE Plug-in](#) (.MSI file)

Download SDK 1.1.2 for Java*

Posted 10th June, 2011

[Download](#) (login required)

- Download the [Intel AppUp™ SDK Plug-In for Eclipse*](#) Software (.ZIP file)

Download Adobe AIR InMarket SDK

[Download](#) (login required)

<http://appdeveloper.intel.com/en-us/sdk>

- Download the AppUp SDK for the Microsoft .NET Framework
- Add a reference to the “AdpLibrary.dll” assembly in your project





Add AppUp SDK Code

Insert only few lines of code:

```
// [...]  
  
InitializeComponent();  
  
useIntelAdp = File.Exists(Application.StartupPath + "\\AdpLibrary.dll");  
if (useIntelAdp)  
{  
    try  
    {  
        var app = new AdpApplication(new AdpApplicationId(0x11111111, 0x11111111, 0x11111111, 0x11111111));  
        var app = new AdpApplication(new AdpApplicationId(0x0E5AF5E4, 0xD81D43BC, 0x832C0571, 0x1D9041D0));  
    }  
    catch (AdpException e)  
    {  
        MessageBox.Show(e.Message, "Error");  
        System.Environment.Exit(1);  
    }  
}  
  
// [...]
```





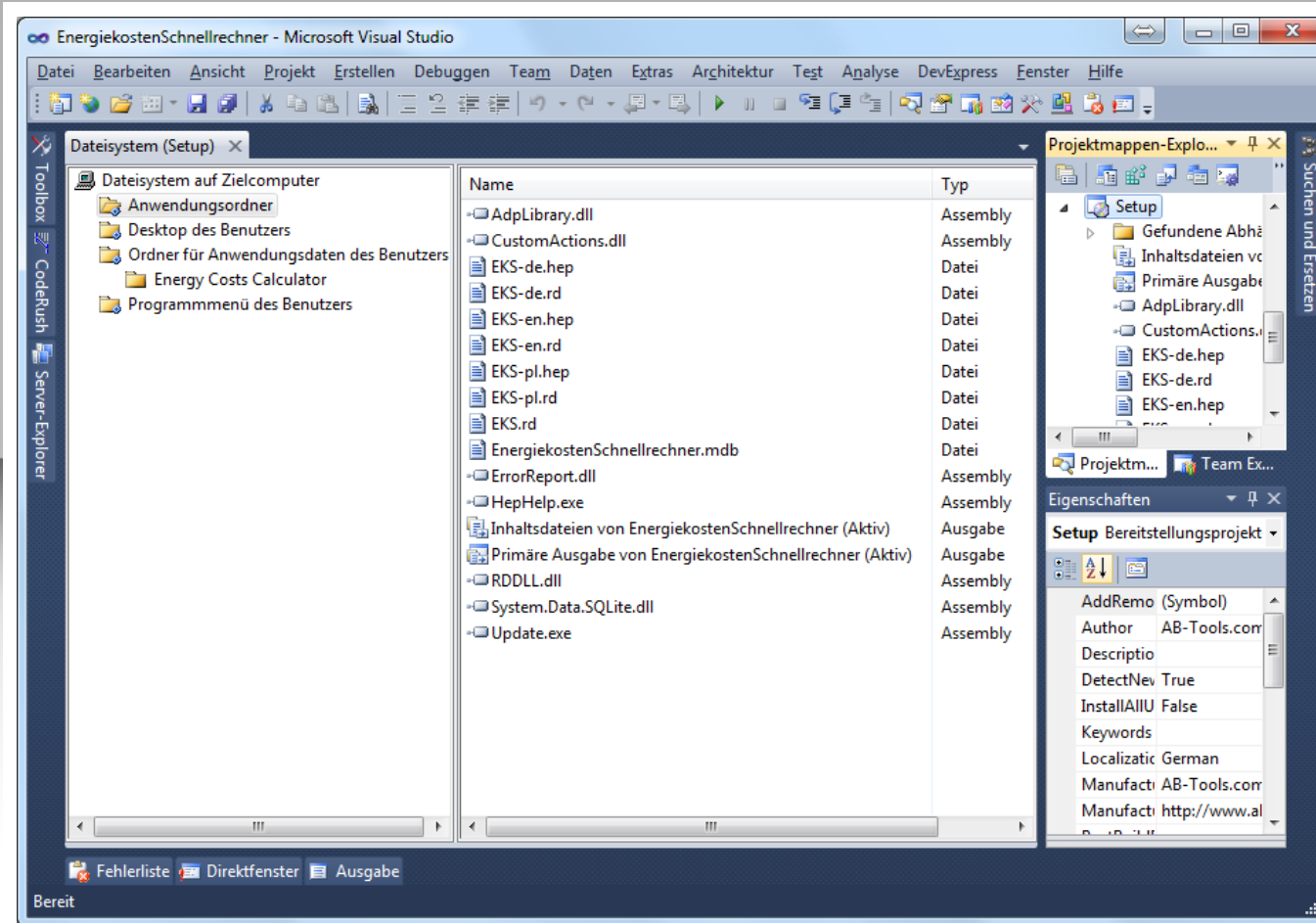
Build an Installer

- For Windows products:
only MSIs are accepted as product installers
- The installer has to be absolute silent
- It has to perform a clean(!) uninstall
- We use the integrated setup system of the Microsoft Visual Studio to build the MSI
- It is extendible with “Custom Actions”
if necessary





Build an Installer





Digitally Sign the Installer

- Get “signtool.exe” with the Windows SDK
- Create a small Batch file like this:

```
1 signtool.exe sign /f "mykey.pfx" /p "pfx_password" /t "http://timestamp.verisign.com/scripts/timestamp.dll" "%1"
```

- Just drag & drop your MSI on this Batch file





Published After Validation

The screenshot displays the Intel AppUp application store interface. The top navigation bar includes 'Store', 'Search results', and 'Energy Cost Calculator'. The user's name 'Andreas Breitscho...' is visible in the top right. The main content area features the 'Energy Cost Calculator' app, which has a lightbulb icon, a 5-star rating (4 stars visible), and is rated '3+'. The app is categorized as 'Utilities', released on 9/4/2010, and is free. The developer is 'AB-Tools.com'. The app's description is visible in the 'Description' tab, detailing its functionality as a power and water consumption calculator. To the right, a 'Related Apps' section lists four other applications: 'Advanced Hard...', 'Duplicate Pictur...', 'MyOnApp', and 'Ambiance', each with its own icon, rating, and price.

Intel AppUp™

Andreas Breitscho...

Store Search results Energy Cost Calculator

Store

My Apps

Energy Cost Calculator

★★★★★ (2)

Rated: 3+

Back Get Free

Category: Utilities
Released: 9/4/2010
License: EULA
Developer: AB-Tools.com
Version: 1.1.5.1
Size: 2 MB
Downloads: 521

Description Screenshots Reviews

Do you often wonder which household appliances use so much power? You don't know why your water bill is so high?

This free power and water consumption calculator will allow a quick and easy calculation of the consumption of utilities of a single appliance.

Just after the installation, the program includes an extensive database of household appliances. Of course, you can add your own items to the list.

You will easily find out which appliances are responsible for your high bills.

The program includes many tips, which will help you reduce monthly costs of utilities.

Features of Energy Costs Calculator at a glance:
Do you often wonder which household appliances use so much power? You don't know why your water bill is so high?

This free power and water consumption calculator will allow a quick and easy calculation of the consumption of utilities of a single appliance.

Related Apps

- 1 **Advanced Hard...** ★★★★★ 0,79 € Buy App >
- 2 **Duplicate Pictur...** ★★★★★ 0,99 € Buy App >
- 3 **MyOnApp** ★★★★★ Free Get >
- 4 **Ambiance** ★★★★★ 7,99 € Buy App >

More >



Overview

- Windows Apps
- **MeeGo Apps**
 - Porting to MeeGo
 - Preparations on Developer Machine
 - Preparations on MeeGo Device
 - Preparations in Qt Creator for Debugging
 - Design User Interface
 - Porting Code
 - Build an Installer
 - Published After Validation
- Conclusion





Porting to MeeGo

- Porting the “Energy Costs Calculator”
to

MeeGoTM





Preparations on Developer Machine

SDK Intel AppUp™ SDK 1.0 for MeeGo* - Posted 10th June 2011
AppUp Center framework, allows app to interact with the AppUp Center for digital rights management, crash reporting, payment & more.
[Download](#)

SDK Intel AppUp™ SDK Plug-in Beta for Qt Creator* IDE - Posted 10th June 2011
IDE Plug-in for doing AppUp application development within Qt Creator*.
[Download](#)

SDK Intel AppUp™ encapsulator beta - Posted 20th May 2011
Online tool and automated SDK integration for packaging of HTML 5 and Flash applications for AppUpSM MeeGo* and Windows* stores
[Go to online tool](#)

Test
Everything you need to properly test your application in the Intel AppUp Center, for a target device.

AppUp center 2.5 Beta for MeeGo Tablet - Posted 20th May 2011
Full featured application store designed for a tablet user experience. Download to test integration of the SDK, and see how your app will be presented in the store
[Download](#)

AppUp center 2.5 Beta for MeeGo Netbook - Posted 20th May 2011
Full featured application store designed for a netbook user experience. Download to test integration of the SDK, and see how your app will be presented in the store
[Download](#)

- Download MeeGo SDK from MeeGo webpage
- Download AppUp SDK for MeeGo
- Install AppUp center for testing



<http://appdeveloper.intel.com/en-us/meego-sdk-suite>



Preparations on MeeGo Device

- **Install mad-developer component:**

```
zypper install mad-developer
```

- **Install AppUp SDK Debugger:**

```
rpm -i  
    appup-sdk-debugger-1.1.0-36.i386.rpm
```

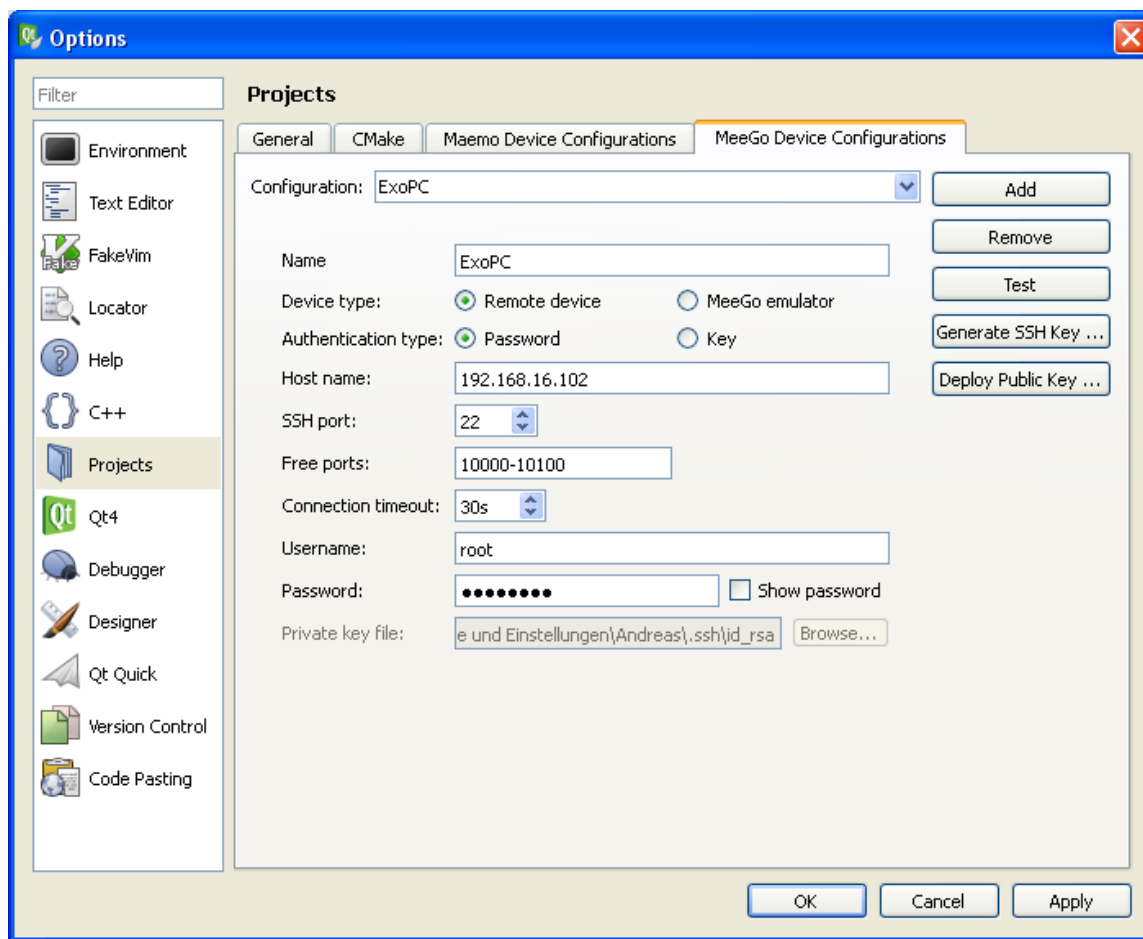
- **Start AppUp SDK Debugger:**

```
/opt/com.intel.appupsdk/tools/  
    debugger/bin/iadp_atds
```



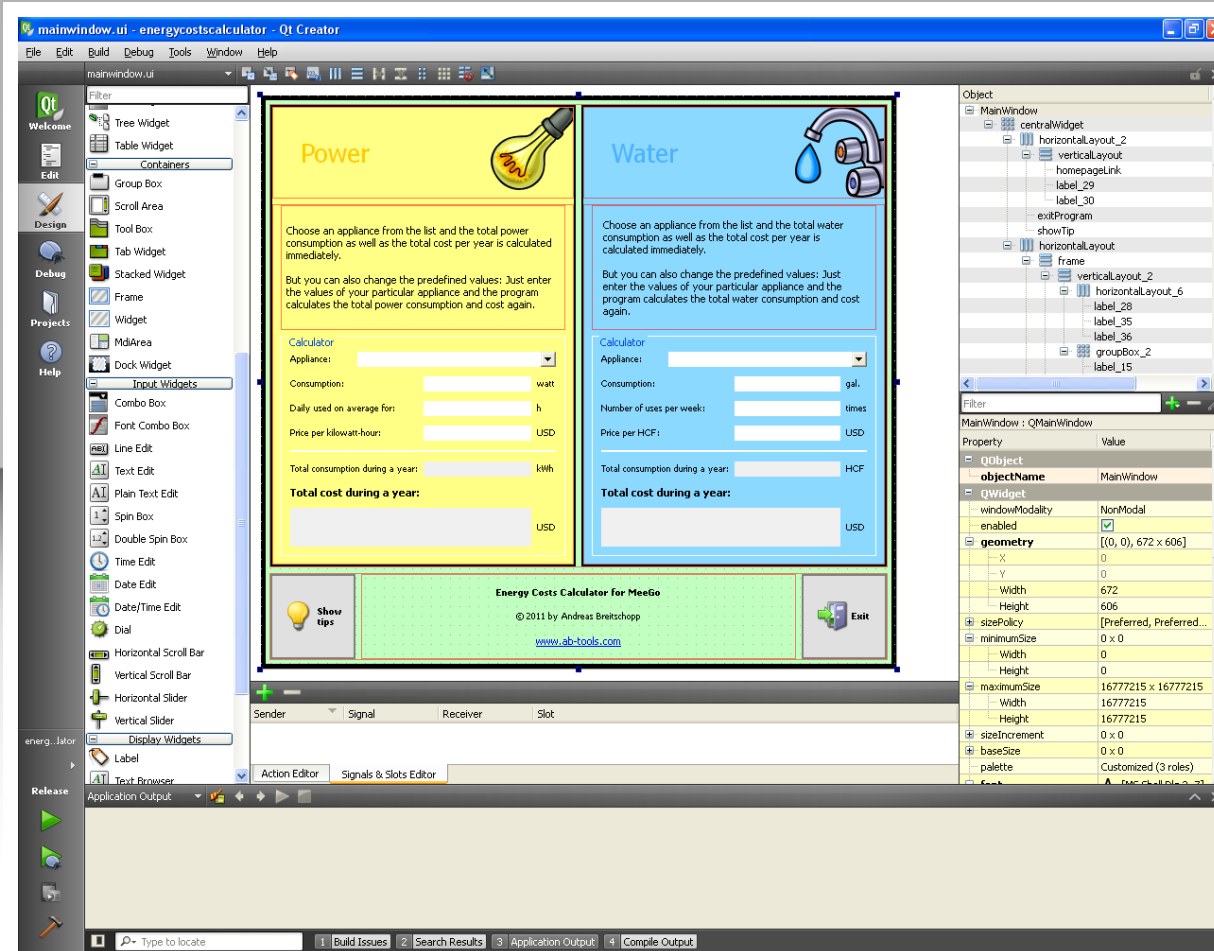


Preparations in Qt Creator for Debugging





Design User Interface





Porting Code

Port your application code:

```
void MainWindow::calculatePowerUsage()
{
    try {
        bool conversionOk;
        double powerConsumption = this->ui->powerConsumption->text().toDouble(&conversionOk);
        double powerUsage = this->ui->powerUsage->text().toDouble(&conversionOk);
        double powerPrice = this->ui->powerPrice->text().toDouble(&conversionOk);
        double powerConsumptionYear = powerConsumption * powerUsage * 365 / 1000;
        double powerPriceYear = powerConsumptionYear * powerPrice;

        QString powerConsumptionYearString;
        powerConsumptionYearString.append(QString("%1").arg(powerConsumptionYear, 0, 'f', 2));
        this->ui->powerConsumptionYear->setText(powerConsumptionYearString);

        QString powerPriceYearString;
        powerPriceYearString.append(QString("%1").arg(powerPriceYear, 0, 'f', 2));
        this->ui->powerPriceYear->setText(powerPriceYearString);
    } catch (...) {
    }
}
```





Add AppUp SDK Code

Again only few lines of code are needed:

```
// [...]  
  
com::intel::adp::Application *app = NULL;  
try{  
    const ADP_APPLICATIONID appID = ADP_DEBUG_APPLICATIONID;  
    //const ADP_APPLICATIONID appID = {{0x19723547, 0x9ADD48DE, 0xA168E27A, 0x0D3E4D30}};  
    app = new Application(appID);  
}  
catch (com::intel::adp::AdpException& e) {  
    QMessageBox::critical(new QWidget(), "Error", e.message());  
    return 1;  
}  
if(app != NULL){  
    delete app;  
    app = NULL;  
}  
  
// [...]
```





Build an Installer

- Creating a desktop entry file
- Adding dependencies to project file:
 - desktop entry file
 - icons files
 - AppUp libraries
- Build RPM installer





Published After Validation

The screenshot displays the Intel AppUp Beta application store interface. The top navigation bar includes the Intel AppUp Beta logo, the user name 'Andreas Breitschopp', and a 'Help' dropdown menu. The main content area shows the search results for 'Energy Costs Calculator for MeeGo'. The app's details include a lightbulb icon, a rating of 3+ stars, and a 'Get Free' button. The description section is expanded, showing the app's purpose and features. To the right, a 'Related Apps' section lists other applications like 'Finance Tips', 'Fatwallet Desk', 'Car Loan Calc fo...', 'Stock News', and 'Credit Card Cutt...'. The interface is designed with a dark blue and purple color scheme.

Intel AppUpSM Beta

Andreas Breitschopp

Help

Store

Store > Search Results > Energy Costs Calculator for MeeGo

My Apps

Energy Costs Cal...

Rated: 3+

★★★★★

Get Free >

Category: Finance
Released: 2011-04-26
License: EULA
Developer: AB-Tools.com
Version: 1.0.0
Size: 0.09 Mb
Downloads: 10

Description Screenshots Reviews

Do you often wonder which household appliances use so much power? You don't know why your water bill is so high?

This free power and water consumption calculator will allow a quick and easy calculation of the consumption of appliances.

Just after the installation, the program includes an extensive database of household appliances.

You will easily find out which appliances are responsible for your high bills.

The program includes many tips, which will help you reduce monthly costs of utilities.

Features of Energy Costs Calculator at a glance:

- Free power and water consumption calculator

Related Apps

Finance Tips ★★★★★ **FREE** Get App

Fatwallet Desk ★★★★★ **FREE** Get App

Car Loan Calc fo... ★★★★★ **FREE** Get App

Stock News ★★★★★ **FREE** Get App

Credit Card Cutt... ★★★★★ **FREE** Get App

More



Overview

- Windows Apps
- MeeGo Apps
- **Conclusion**





Conclusion



If you already have Windows apps ready
it is very easy to get them into AppUp.



Depending on the complexity of your apps
and their programming language
you can easily port them to MeeGo.



Thank You for Your Attention!



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