

Widget Home Screen

NOKIA

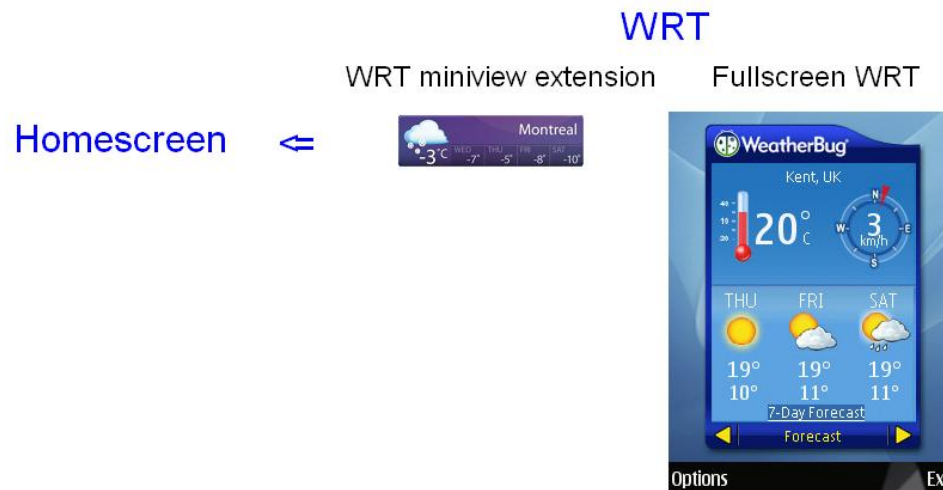
Widget-based Home screen introduction

- N97 first device to have widget-based Home screen
- The end user can personalise Home screen as he likes: add, move and remove widgets from Home screen using drag and drop
- Applications can publish dynamic data Home screen using WRT widget with mini-view or Content Publishing Service with templates



Homescreen Widgets / Mini-view

- (Miniview) widget in Home screen can display a subset of data contained in the full-screen widget
- Data displayed can be dynamically updated
- Convenient way to open a full-screen widget with a single click
- Use Cases: market indicator from a stock market widget, local forecast from a weather widget



How?

- Existing WRT Widget concept is extended with the mini-view support
- All installed, mini-view enabled widgets can be added to Home screen by the end user
- WRT engine uses widget templates to publish the screen shot of selected mini-view to Home screen.
- Default action when widget is selected is to launch full-screen WRT application.
- No direct control of widget in Home screen (only a screen shot)

How to enable Miniview

1. Info.plist

- Enable the widget mini-view by adding key *MiniViewEnabled* in widget's manifest file (info.plist)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Nokia//DTD PLIST 1.0//EN"
"http://www.nokia.com/NOKIA_COM_1/DTDs/plist-1.0.dtd">
<plist version="1.0">
<dict>
    <key>DisplayName</key>
    <string>myminiview</string>
    <key>Identifier</key>
    <string>com.example.miniview.skeleton</string>
    <key>AllowNetworkAccess</key>
    <true/>
    <key>MainHTML</key>
    <string>index.html</string>
    <key>MiniViewEnabled</key>
    <true/>
</dict>
</plist>
```

How to enable Miniview

2. HTML/Javascript/CSS

- Add additional HTML, JavaScript, and CSS to support the Home screen view of the widget:
 - Events are fired from Home screen to widget UI when:
 - The user adds/removes a widget
 - The user opens the widget in full-screen
 - Home screen goes from background to foreground (or vice versa)
 - Add event handlers in the widget to handle these events: loading, showing, resizing
 - Call your *decide* function in event handlers
 - Create content that is specific for displaying the widget in the mini-view

How to enable Miniview

2. HTML/Javascript/CSS

- Add additional HTML, JavaScript, and CSS to support the Home screen view of the widget:
- Implement a *decide* function in your widget that determines whether to display the widget in full-screen or mini-view

```
function setMyLayout()  
{  
    // window.innerHeight for MiniView is actually 91px  
    if (window.innerHeight < 150) {  
        showMiniView();  
    }  
    else {  
        showMainView();  
    }  
}
```

FAQ - general

Q: Can an application set its widget automatically visible in the Home screen? (as opposed to user manually chooses and adds it)?

A: No, this is not possible. The user adds widget in Home screen.

Q: Can a publisher select the position of the Home screen widget slot it will be displayed in?

A: No. Only the end user can move the widgets around the screen. Operator's pre-installed widgets are placed in slots that are defined by the phone manufacturer.

Q: Is animation possible for widgets?

A: Yes, but animation would not be smooth and it would use lots of CPU time, so the battery would not last long.

Q: Can an application publish multiple Home screen widgets?

A: There can be only one mini-view for a WRT widget.

Q: What kind of content can applications publish to Home screen??

A: Publishers can use the predefined templates: wide image, one, two or three text rows, with an image. Of course it is possible to publish any kind of data (image, text) using wide image template.