

# Installing the Full System Simulator

A guide for installing the Cell Broadband Engine simulator on a Fedora Core 9  
powered pc.



Frank Blaauw & Spencer Shaw  
25-2-2009

# Installing the Full System Simulator

---

By Spencer Shaw and Frank Blaauw.

This guide is written for development on the Playstation 3 and describes how to install the Cell Broadband Engine FS-Simulaotr on a PC (with FC9). This document was written for the UMCG department Radiology. For this guide the IBM Help guide was used (Section Cell Broadband Engine). This guide can be found on the IBM developer works website.

In no event will the UMCG nor the writers of this document be liable for any damage arising directly or indirectly from any use of the information obtained from this document.

This guide and many other guides can be downloaded from:

<http://code.google.com/p/fedora-cell-project/>

If you encounter any errors on using this document, please read the inform us via the google-code page or google-group.

Copyright ©2009 Frank Blaauw and Spencer Shaw for the UMC-Groningen, All rights reserved.



## Table of Contents

1. Requirements for installation .....	4
1.1 Minimal Requirements. ....	4
2. The installation .....	5
2.1 Installing the Simulator.....	5
2. Tips & Tricks .....	6
2.1 Simulator strange bug.....	6



## 1. Requirements for installation

Everything you might need for this installation is described below.

### 1.1 Minimal Requirements.

- ✓ Pc installed with Fedora Core 9
- ✓ Internet connection



## 2. The installation

If you have read the requirements, you know you need a PC with a working Fedora Core 9 installation. If you don't have this, we'd like to refer to our guide for installing Fedora Core 9 on a i386 PC. For this guide we assume that you have installed FC9.

### 2.1 Installing the Simulator

We start off by installing downloading the full system simulator from the IBM AlphaWorks website.

1<sup>st</sup> Go to the software.ibm page to download the Systemsim.

[https://www14.software.ibm.com/webapp/iwm/web/reg/download.do?source=AW-0LO&S\\_PKG=0LO&S\\_TACT=105AGX59&S\\_CMP=GR&lang=en\\_US&cp=UTF-8](https://www14.software.ibm.com/webapp/iwm/web/reg/download.do?source=AW-0LO&S_PKG=0LO&S_TACT=105AGX59&S_CMP=GR&lang=en_US&cp=UTF-8)

2<sup>nd</sup> For this install we used the version:

```
systemsim-cell-3.1-8.f9.i386.rpm
```

When this guide was written, this simulator was still in beta.

3<sup>rd</sup> Click the download now button to download the simulator files.

*Download now*

4<sup>th</sup> When the file has downloaded, go to the directory it was downloaded to, and execute it

```
cd /home /<user>/Download (probably)
rpm -ivh systemsim-cell-3.1-8.f9.i386.rpm
```

If you get a dependency check error here, you should download the following packages and try again:

```
yum install tk tcl blt
```

5<sup>th</sup> The Simulator has now been installed. To use it, you might need the sysroot\_image package. Download it using YUM.

```
yum install sysroot_image
```

And update it.

```
yum update sysroot_image
```

The Full system simulator is now installed, if you have your ibm-sdk's / Eclipse plug-ins installed you can now use your simulator in Eclipse. Another way to start the simulator is by using the following command:"

```
cd /opt/ibm/systemsim-cell/run/linux
../run_gui
```



## 2. Tips & Tricks

### 2.1 Simulator strange bug.

If your stops at 21%, this is caused by a bug(?) in the simulator. The reason is that it waits for the trigger “Welcome to Fedora Core”, but it get’s “Welcome to Fedora Core Fedora Core 9 (Sulphur)” or something like that, so what you have to do, is simulate the trigger:

```
echo "Welcome to Fedora Core"
```

```
echo "INIT: Entering runlevel: 2"
```

Your simulator should now start and be ready to use.