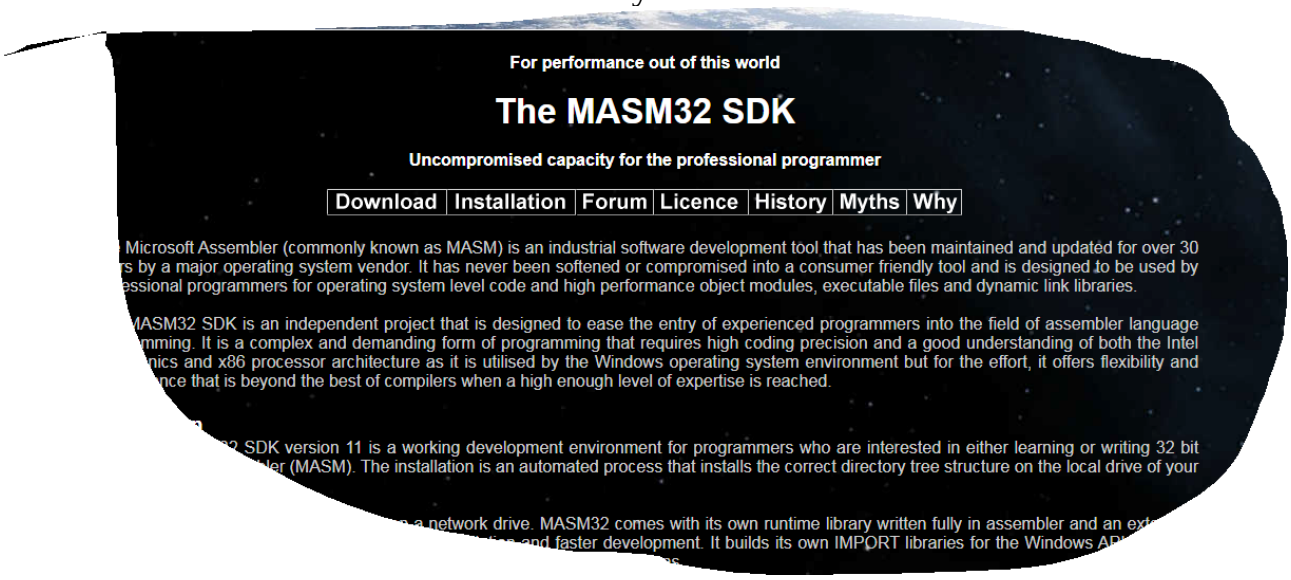
COAL_A_p200165_R1

- **Introduction:**

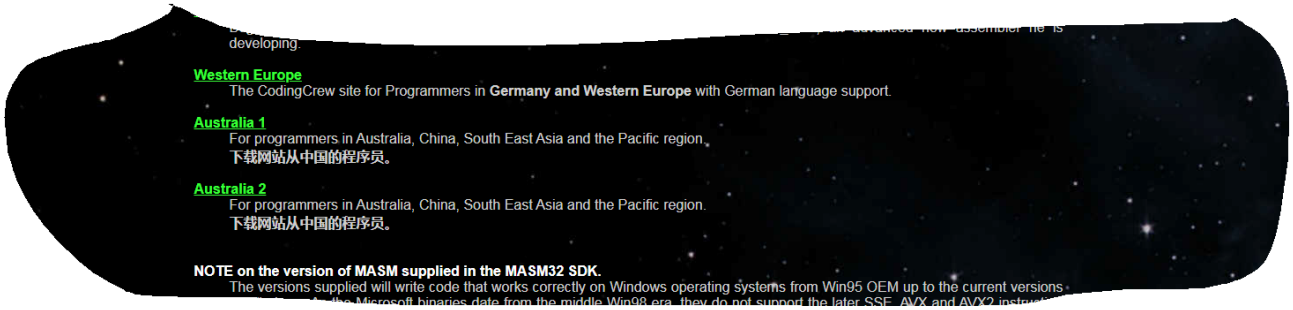
In our first lab we are going to install **masm 32 bit** in our operating system. Masm is basically is our compiler or assembler that will be used to assemble our code. Through masm our code is assembled into **Machine Code** and that code will be executed, and we are going to run **Hello World** program in masm.

- **Download the Masm:**

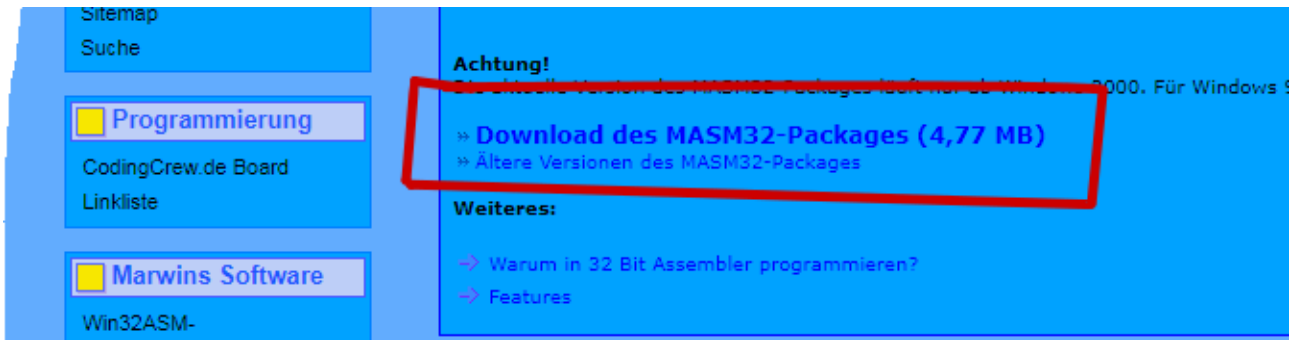
First we have downloaded **Masm 32** in our first lab. To Download the Masm Just search on google **Masm 32 Download** the very first link will be of the masm website and you can download Masm from their.

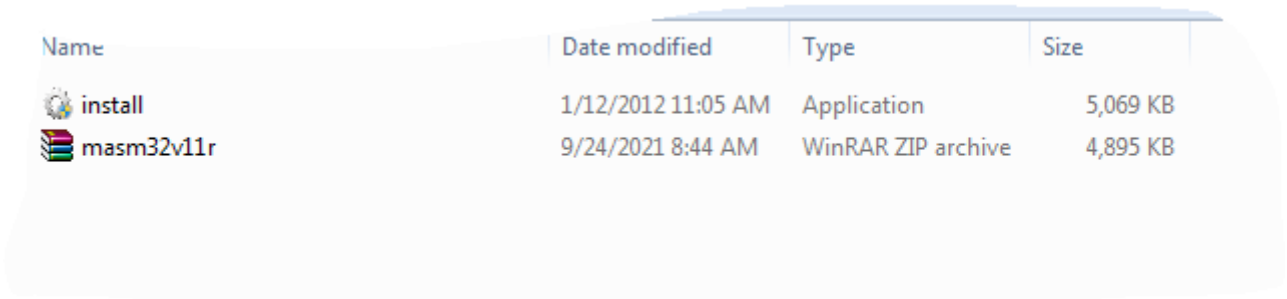


This interface will be seen we have to just click on the **Download** button and that will take us to **Download** Link.

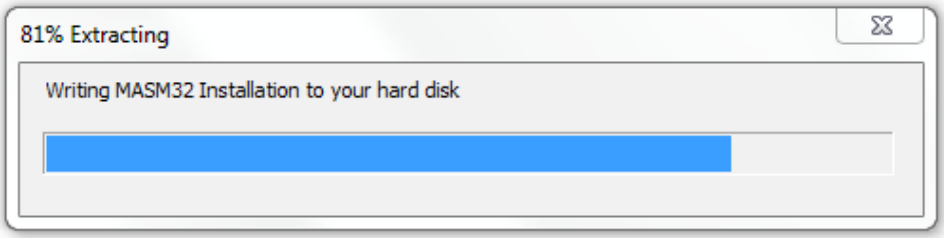


In our case when we are installing in Lab the **Western Europe is worked** or just select any of the server. Then click on Download button the **Masm** will be downloaded in your system.





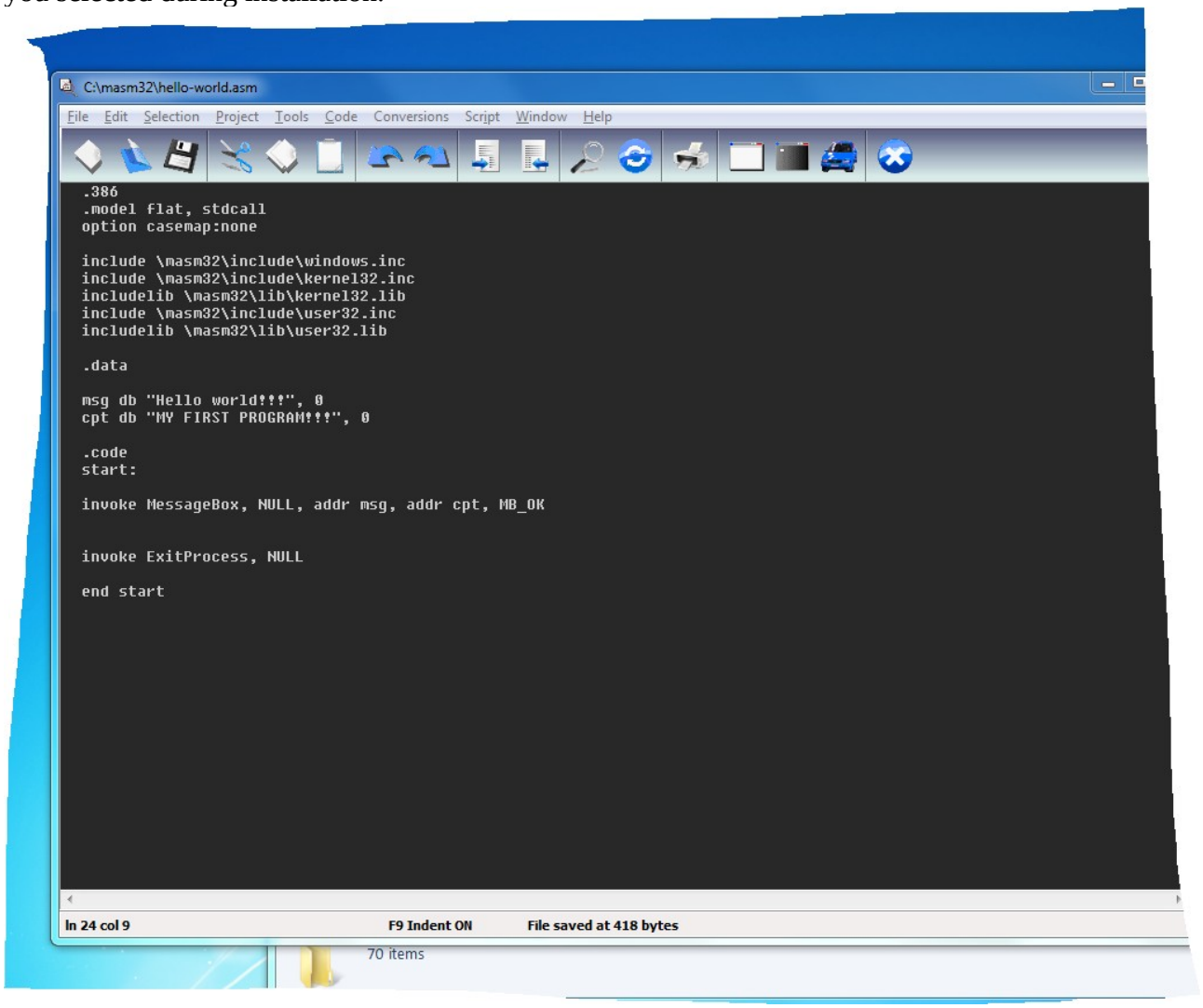
We have Extract the **masm32v11r** and just double click on the extracted file and select the directory where you want to install **masm**. Once that it will ask for a lot of confirmations just **Ok …** and masm will be installed in your system.



This file will be opened after successful installation of **Masm.**

```
Welcome to the MASM32 SDK, fast track high performance software development.
------------------------------------------------------------------------------

The MASM32 SDK has now been installed but there are a number of things to do
to finally set it up so that you can maximise your output with this SDK.

Configure this editor so that it suits your progamming style. The "Edit"
menu has a settings option so you can configure the editor to your own
preferences.

If possible, download the old WIN32.HLP file from the internet then set
it up as the F1 help file so you can access Windows API functions, messages
and equates directly from the editor with the F1 key.

If you are not already familiar with the MASM32 SDK it is recommended that
you start with the default editor to learn how the SDK is put together and
what makes it work. Once you are familiar with it you can safely customise
how you set up and use the MASM32 SDK.

You should set the file associations in either Explorer or Winfile for ASM
files to the default editor so that you can open assembler files by double
clicking on the file in either Explorer or Winfile.

The default editor is set up ready to run with scripts and help files
available on the menus but there is additional information that you need
for developing software in assembler in Windows. This cannot be included
for both size and copyright reasons.

1. The INTEL Pentium 4 or later manuals which can be downloaded from INTEL.

2. The Microsoft PLATFORMSDK or its successor that can either be downloaded
   from Microsoft or purchased for the price of the shipping.

It will also be to your benefit to download the resource editor RESEDIT
written by Ketil Olsen as it is a viable and very useful tool to have availabl
for creating resource dialogs. You will need to become familiar with how
it works and the format that it saves RC files with but it is a modern and
very up to date tool that can produce professional results when used properly.

The MASM32 SDK has a large body of example code that deals with a wide range
of common code types and it also has extensive documentation on the HELP
menu to help to get you up to pace quickly in writing assembler. In
particular check out the "High Level Macro Help" help file on the help menu
as it is designed to introduce programmers to the MACRO capacity of MASM.

Note that the complete library and macro system for the MASM32 SDK is
available for you to read and build, there is no secret code in the MASM32
SDK.

Steve Hutchesson for the MASM32 SDK, 1998-2011
```

Now we have runned our Hello world program in masm. The shortcut of masm is added to **desktop** and past this code and save the file in the **masm32** folder. This folder will be in the directory which you selected during installation.



This is the code that will produce **Hello world.** We have copied this code and select on

- **project**
- **build-all**

Then **.com** file will be generated by masm that will be our output file. Just type your file name in command prompt and you will see the output.