

**HL7 Tooling Work Group**

**HL7 EHR Work Group**

**User Guide for  
Electronic Health Record-System  
Functional Model, Tool**

**November 2014**

# **Chapter Two Installing the EA extension for the EHR-S FM Profile Designer Tool**



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## **1.1 Introduction**

To work with the EHR-S FM FP Designer Tool there are a couple of things that needs to be done. In this chapter the steps to install Enterprise Architect, the EHR-S FM extension and the HL7 MAX extension will be described.

In paragraph 1.2 is described how to get Enterprise Architect for HL7 International members. A license for HL7 members can be obtained at specific conditions. Contact HL7 Headquarters for these conditions. For installing Enterprise Architect there is an URL to the Sparx Systems website with support information.

In paragraph 1.3 the installation of the EHR-S FM extension is described. It is possible that the development of the extension will be continued after phase 2 of the EHR-S FM Profiling Tool development. So in the future an update of the extension can be expected. How to update the extension is described in paragraph 1.5.

The same applies to the MAX extension. How to install the extension is described in paragraph 1.4 and how to update in paragraph 1.6.

We will deliver this package as a one install only version. However, because of the future updates the two parts are described as single files as well.

## **1.2 Enterprise Architect as prerequisite**

### **1.2.1 Getting Enterprise Architect**

Sparx has offered to supply Enterprise Architect licenses to HL7 International members working on HL7 projects. Please go to the HL7 website for further instructions.

Individuals wishing to use Enterprise Architect for HL7 projects can download the software at <http://www.sparxsystems.com.au/products/ea/>

Most functions are available in the Enterprise Architect Professional edition. However, some functions will only work with Enterprise Architect Corporate edition. The HL7 license is the EA Corporate edition.

### **1.2.2 Installing Enterprise Architect**

The user can consult the Sparx website for downloading and installing Enterprise Architect. Please go to: [http://www.sparxsystems.com.au/support/faq/download\\_install.html](http://www.sparxsystems.com.au/support/faq/download_install.html).

For how to install EA please see:

[http://www.sparxsystems.com.au/resources/demos/installingea/TO\\_20060309%20Installing%20EA.htm](http://www.sparxsystems.com.au/resources/demos/installingea/TO_20060309%20Installing%20EA.htm)

### **1.2.3. Introduction in using Enterprise Architect**

Getting started with Enterprise Architect can be viewed on:

<http://www.sparxsystems.com/resources/demos/gettingstarted/getting-started-with-enterprise-architect.html>

Have a look at the basic functions in a nutshell watch:

<http://www.sparxsystems.com.au/resources/demos/eaoverview/index.html>



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If you want to know more about Enterprise Architect, Sparx has more videos available to learn about Enterprise Architect. Below is a list of these videos.

**Note:** the videos are about Enterprise Architect, **NOT** about the EHR-S FM FP Designer Tool. However, getting familiar with EA, helps to work with the EHR-S FM Tool.

- After 'Getting started', take a break, play with the tool, then look at

<http://www.sparxsystems.com/resources/demos/visualmodeling/webinar-20130405-visual-modeling.html>

- Once you have a model, take a look at

<http://www.sparxsystems.com/resources/demos/publish-models/prepare-diagrams-for-publication.html>

- A couple other short videos that might be interesting

[http://www.youtube.com/watch?v=3FSVKjwm6S4&feature=c4-overview&list=UU1lbtSvXDURkqZQf\\_EpyvgQ](http://www.youtube.com/watch?v=3FSVKjwm6S4&feature=c4-overview&list=UU1lbtSvXDURkqZQf_EpyvgQ)

<http://www.youtube.com/watch?v=DGZay5eyeM4>

- When you are ready to interact with other EA users consider joining the Sparx Community site (it's free)

<http://community.sparxsystems...com/>

- If you want to read about it, take a look at

[http://www.sparxsystems.com/enterprise\\_architect\\_user\\_guide/10/modeling\\_basics/uml.html](http://www.sparxsystems.com/enterprise_architect_user_guide/10/modeling_basics/uml.html)

## 1.3 Installing the EHR-S FM extension

The Enterprise Architect extension for the EHR-S FM/ FP is a .msi file which can be obtained by contacting the EHR WG co-chairs. See [http://wiki.hl7.org/index.php?title=EHR\\_Leadership](http://wiki.hl7.org/index.php?title=EHR_Leadership) for contact information.

The extension is a file called: "HL7\_FM\_EA\_Extension vX.jj.mmdd.RENAME\_TO\_msi" or "HL7\_FM\_EA\_Extension vX.jj.mmdd.msi. This is depending on the characteristics of the downloadsite. The reason for this name change to msi is that some websites or e-mail programs do not allow sending a code directly, hence a name change to the extension.

To add this extension to EA you have to execute the following steps:

- Copy or save the EHRSFM\_EA\_Extension.Setup.msi to/on your local hard drive.
- Rename as above if applicable.
- **Make sure EA is not running! Close EA if it is.**
- Open the Windows Explorer and look for the folder in where you copied or saved the EHRSFM\_EA\_Extension.Setup.msi to. See figure 1.

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- Rename the extension to .msi by removing the part 'RENAME\_TO\_'. See figure 1.

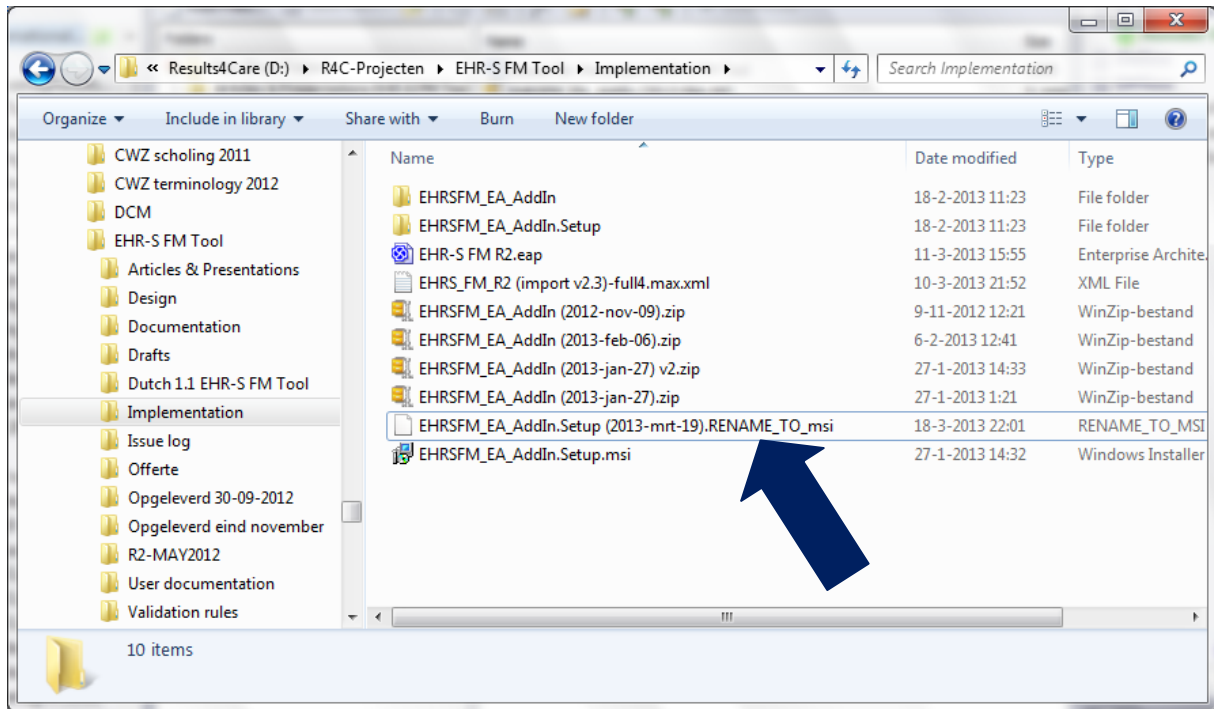


Figure 1. Windows explorer with an example location of the EHR-S FM extension.

- Then select the file, right-click and choose "Install". See figure 2.



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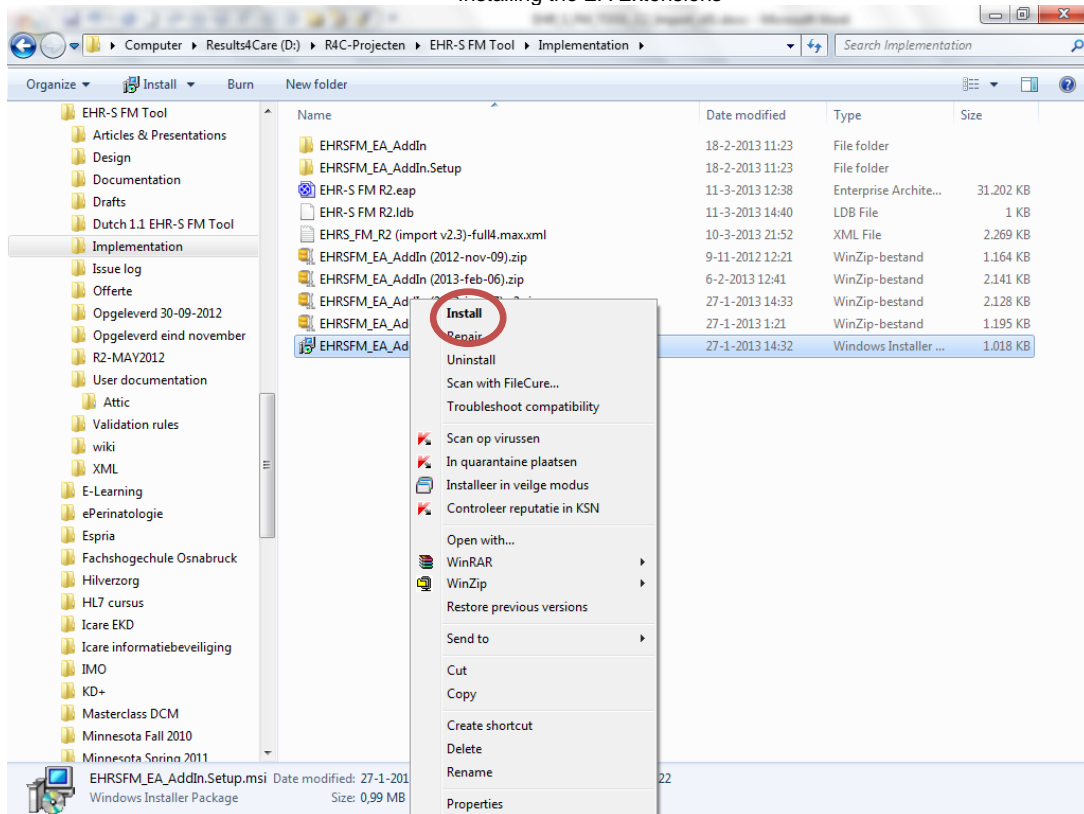


Figure 2. Install the EHR-S FM extension.

- The following screen will pop up. See figure 3. Click on the Next button.

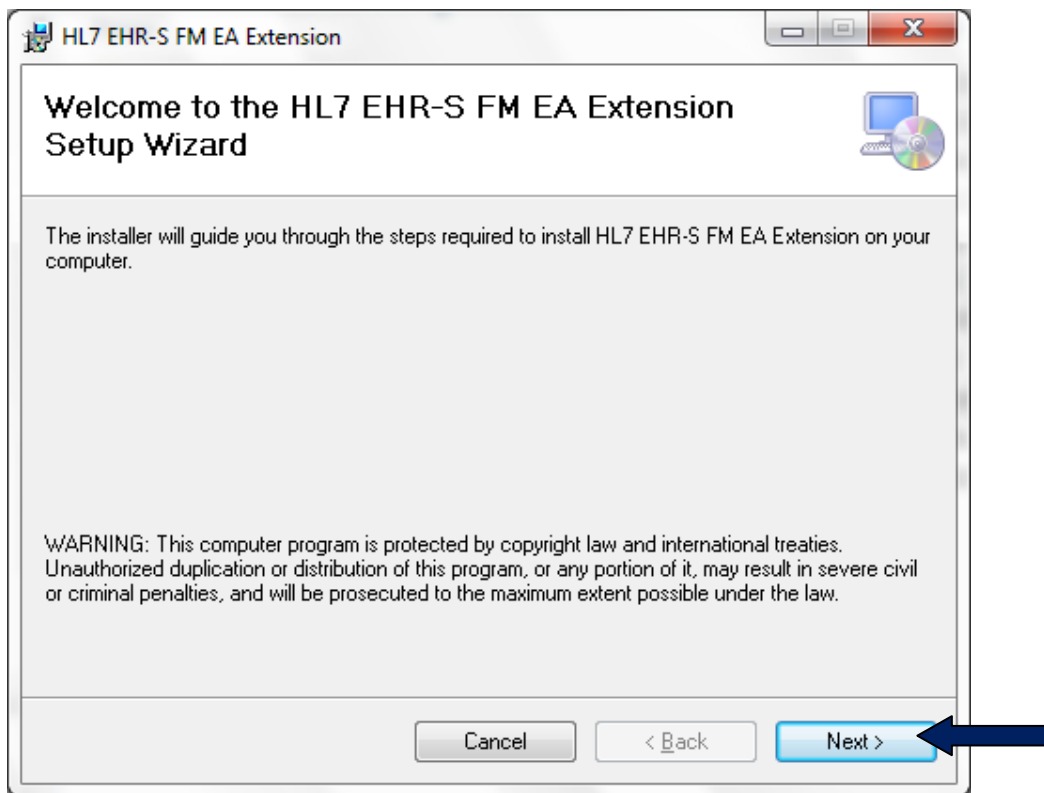


Figure 3. Setup Wizard of the EHR-S FM Extension.

- The Wizard will ask you where you want to install the EHR-S FM extension on your computer. You can choose your folder of choice by clicking on Browse. See figure 4. After that click on the Next button.

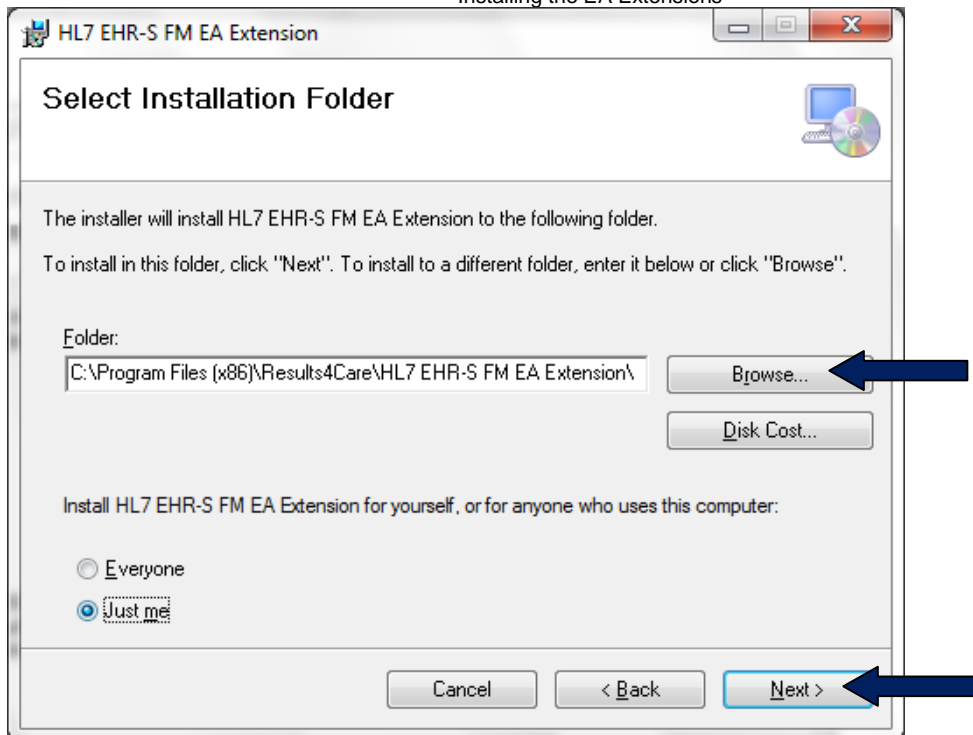


Figure 4. Select Installation folder.

- Confirm the installation in the next Wizard screen by clicking on Next. See figure 5.

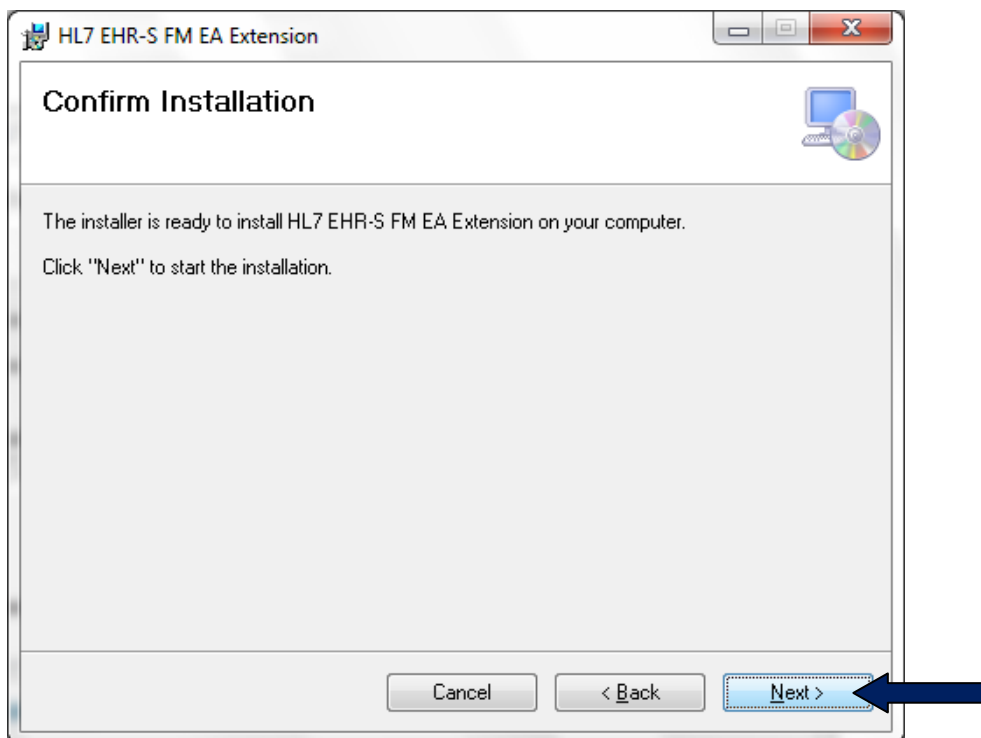


Figure 5. Confirm the installation of the EHR-S FM Extension.





- The installation will run. See figure 6.

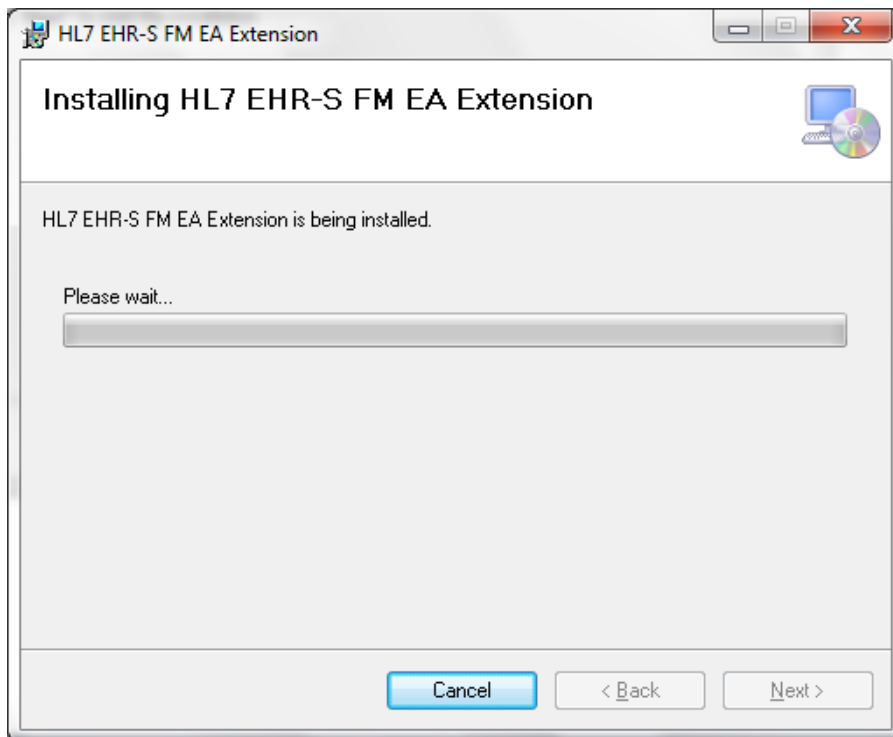


Figure 6. The installation of the EHR-S FM extension.

- When the installation is complete, you will get a next wizard screen saying that the installation is completed. See figure 7. Click on the Close button to exit the wizard.

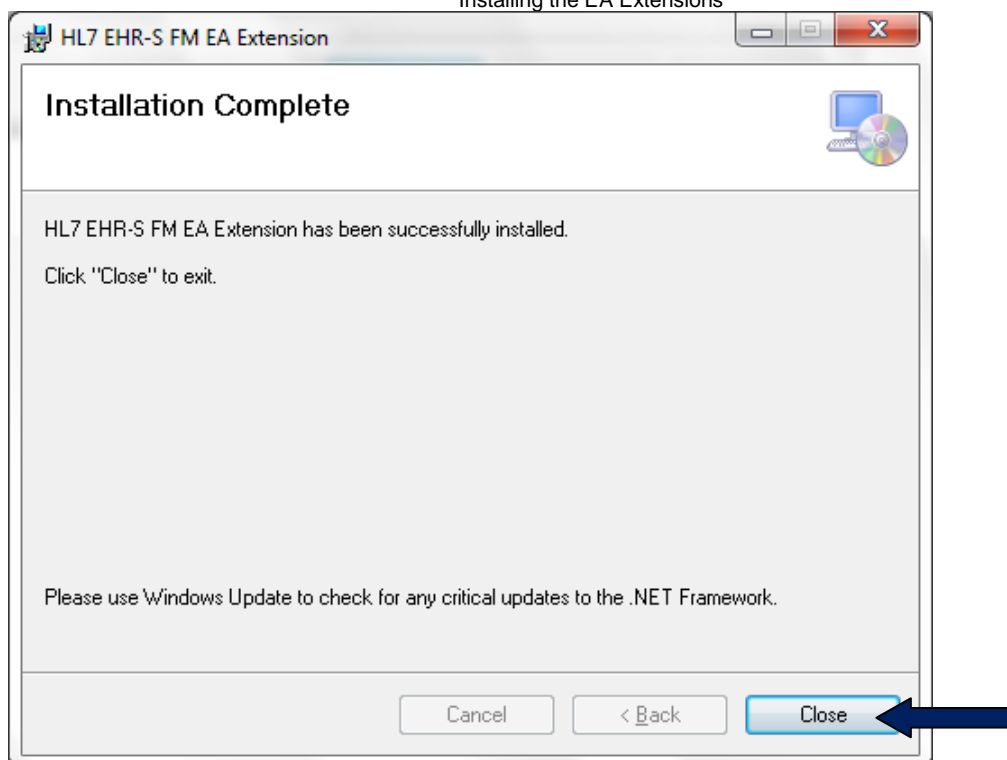


Figure 7. The installation of the extension is complete.

- Start EA and open the EHR-S FM .eap. See paragraph 1.7.

To see more information on the extension after installation, follow the next steps:

- Right click on the model in the Project Browser in EA and select Extensions.
- Select HL7 FM and select About. See figure 8.



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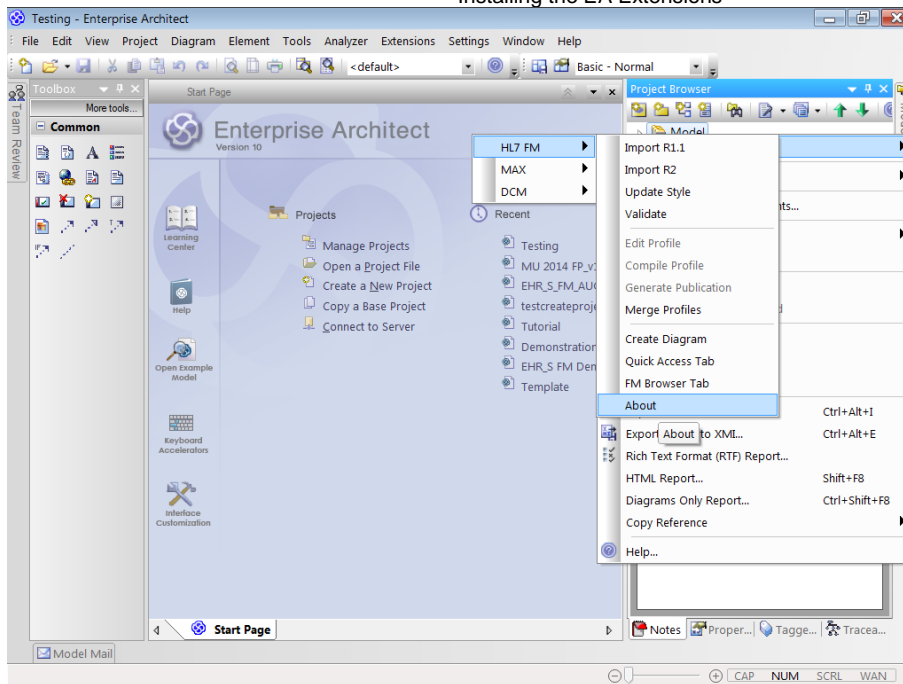


Figure 8. See more information about the EHR-S FM FP Designer tool.

A window with information will open, see figure 9.



Figure 9. Information on the EHR-S FM FP Designer tool.

### 1.4 Installing the HL7 MAX extension

The MAX import/export functionality is included in the EHR-S FM FP extension.

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The full MAX functionalities are available in the separate HL7 MAX extension. This is not needed for the EHR-S FM FP Extension to work. However, you want to use more MAX functionalities in your project please install the MAX extension. This extension can be found at: <https://app.box.com/s/ndhk4hnh2adzcho42sus>

The filename of the MAX extension is "MAX\_EA\_Extension-X.jj.mdd.msi". Also How-to guides can be found. The installation of the MAX extension is done in the same way as the EHR-S FM FP Extension.

## 1.5 Update the EHR-S FM extension

If there is a new version of the EHR-S FM FP extension for Enterprise Architect you need to install this new version to update the extension. A new version of the EHR-S FM extension contains new functionalities in the EHR-S FM FP Designer Tool. Because the tool is in development, a new release of the extension is foreseen.

The newer version of the extension can be installed as described in paragraph 1.3. First you have to uninstall the old version of the extension. To do so, go to the windows explorer and the folder in where you saved the extension. Select the file, right-click and select Uninstall. Uninstall will run automatically after confirmation.

## 2.6 Update the MAX extension

As said in 1.4 the MAX import/export functionality is included in the EHR-S FM FP extension. The full MAX functionalities are available in the separate MAX extension. A new version of the MAX extension can be downloaded from <https://app.box.com/s/ndhk4hnh2adzcho42sus>

Update the MAX extension is done in the same way as an update of the EHR-S FM FP extension.

## 2.7 Open the EHR-S FM .eap file

To browse or work on the EHR-S FM in Enterprise Architect you need the content of the EHR-S FM. This format can be the, so called .eap file, which EA can read or the MAX file of the EHR-S FM. Both files can be obtained by contacting the EHR WG co-chairs. See [http://wiki.hl7.org/index.php?title=EHR\\_Leadership](http://wiki.hl7.org/index.php?title=EHR_Leadership) for contact information.

To open the .eap file in EA follows the next steps:

Copy the .eap file to your local hard drive. Then there are two ways to open that .eap file.

1. The easiest way: Open Windows Explorer and look for the folder where you copied the .eap file to. Double click on the file and Enterprise Architect will start. You will see the EHR-S FM under Recent on the Start page of EA. In the Project Browser you see the EHR-S FM. See figure 11.



2. Open Enterprise Architect by going to All programs -> Enterprise Architect -> click on the icon of EA



- You will get the Start Page of EA. See figure 10.
- To get more explanation on the Start Page of EA you can watch the video on YouTube, <http://www.youtube.com/watch?v=PK6rcXTb84Q>. Note: This is not a video from Sparx, but gives a good explanation of the Start Page.

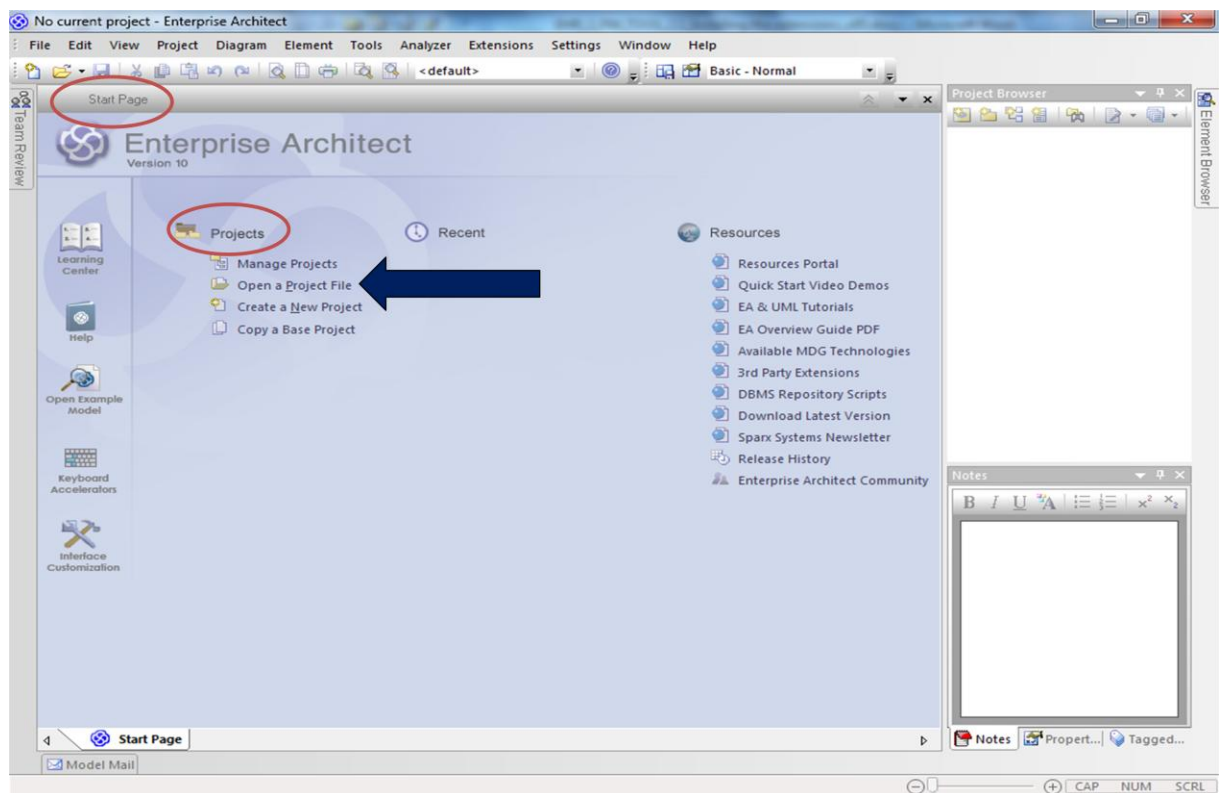


Figure 10. Start page of Enterprise Architect.

- To open the .eap file on your computer go to Projects and choose Open a Project file. Go in EA to the Windows Explorer to the folder where you saved the .eap file. Look for the folder where you copied the .eap file to, click on that file and click on 'open'. You will see the package in the project browser of EA.



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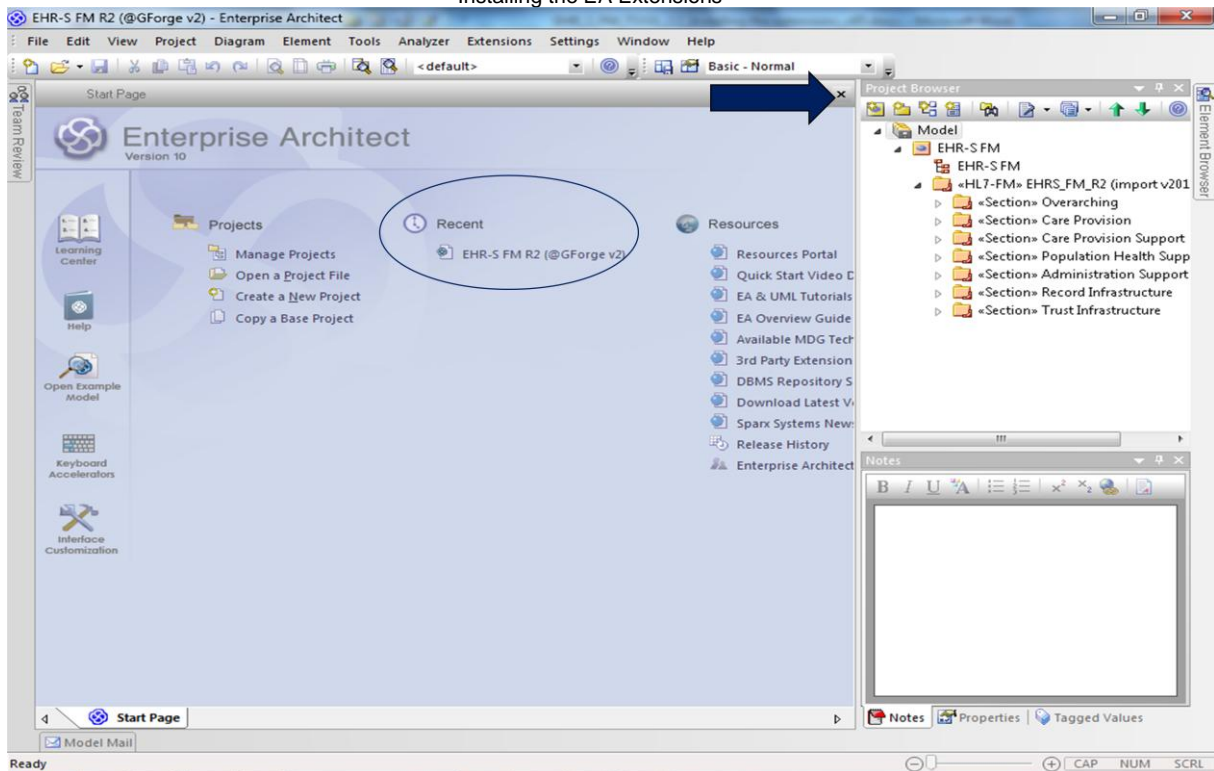


Figure 11. Open project Enterprise Architect.

A third way to get the content of the EHR-S FM in EA is the import of the MAX file in EA. Follow the next steps:

- Open EA and create a new project. See figure 12.
- The windows explorer will open. Select the folder in where you want to create a new project.
- Give a name for the new project and click OK to save it.
- In the EA Project Browser the new project appears as a Model.



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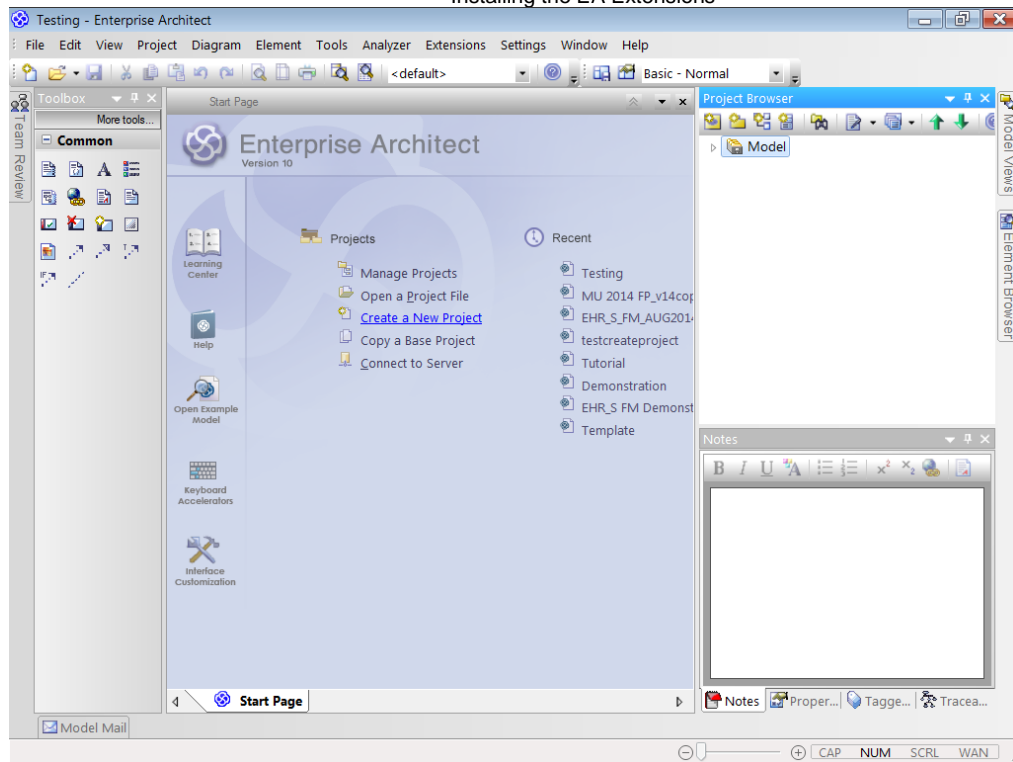


Figure 12. Create a new project in EA.

- In this model you have to create a view. Select Model, right click and select Add View. See figure 13.
- Give the project a name and select Simple. Click OK. The new project as a model has also a view now. See figure 13.



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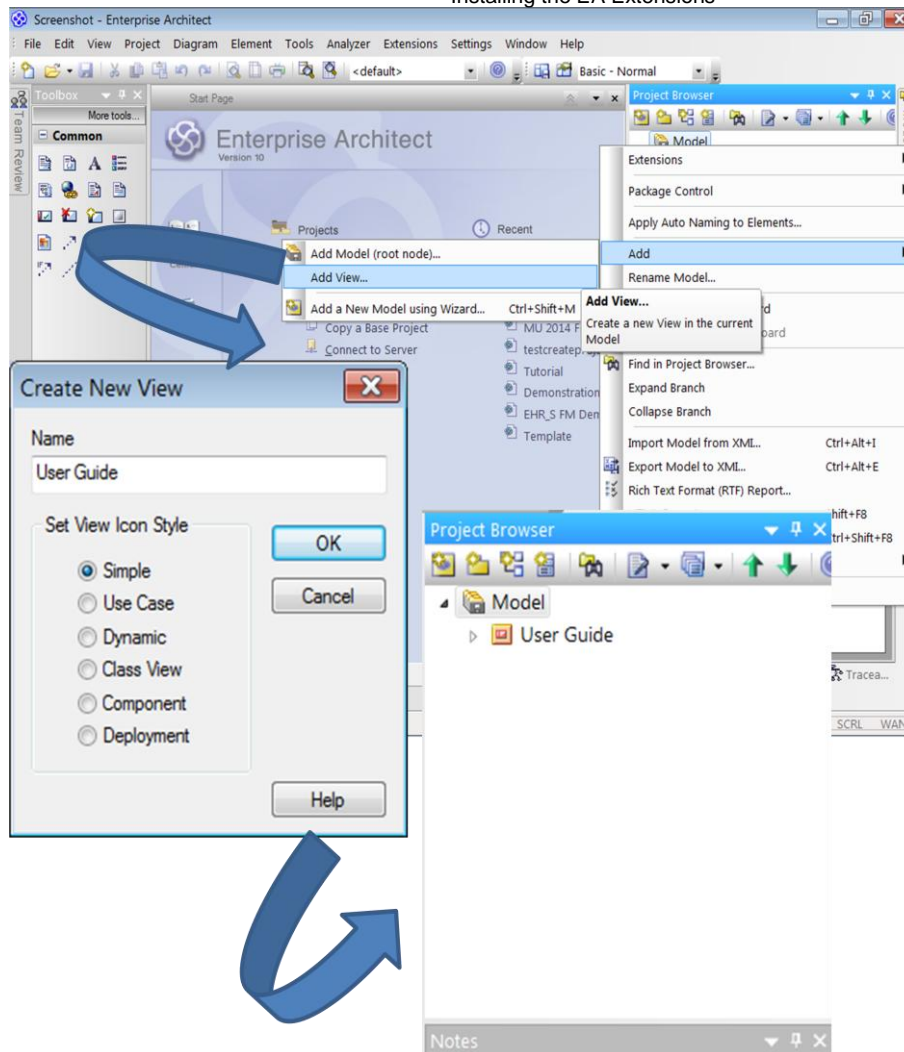


Figure 13. Add a view in a new project.

- Select the view, in this case 'User Guide' and right-click.
- Select Extensions, select HL7 FM and select Quick Access tab. See figure 14.
- Select the option Import MAX file. See figure 14.





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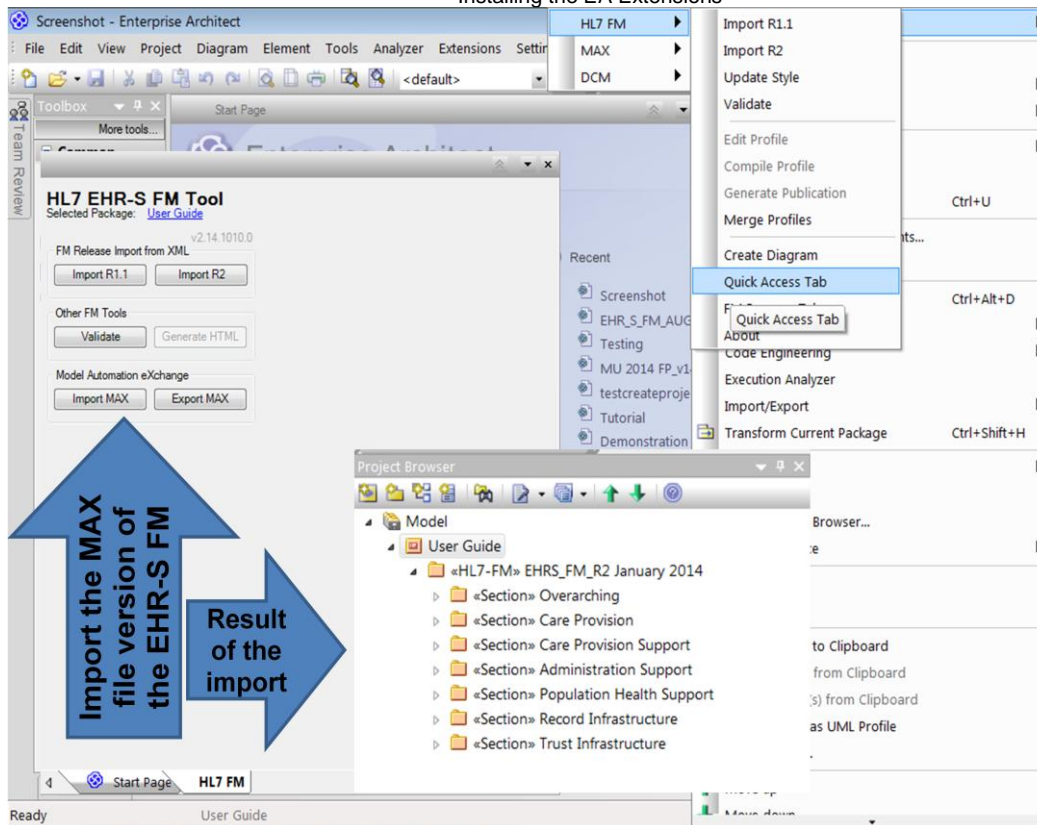


Figure 14. Import the MAX file of the EHR-S FM.

- After clicking the option the windows explorer will open.
- Select the folder in where you saved the MAX file. Select the MAX file.
- The import will run automatically. This will take several minutes.
- In the Project Browser you can see the content of the EHR-S FM. See figure 14.