



WEBENCH[®] Altium Connector

Get started with WEBENCH[®] Altium Connector

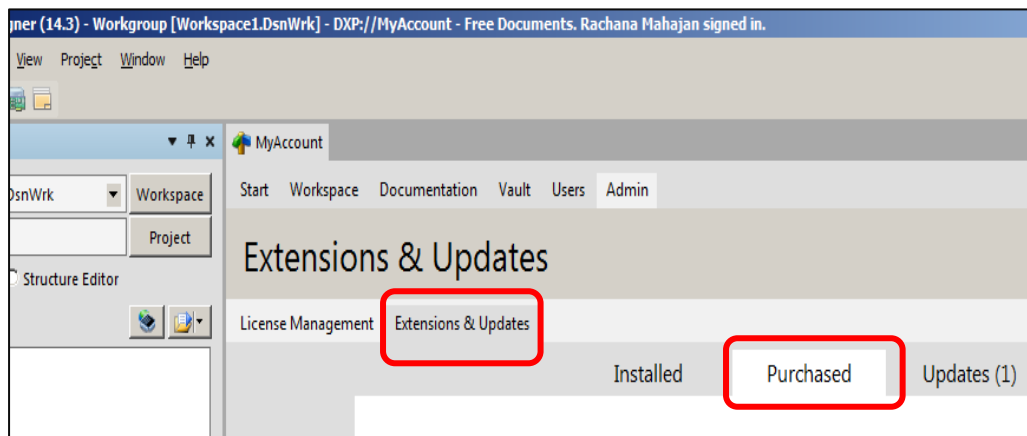
Note: Please install Altium 14 or higher before proceeding by going to

<http://www.altium.com/products/downloads>.

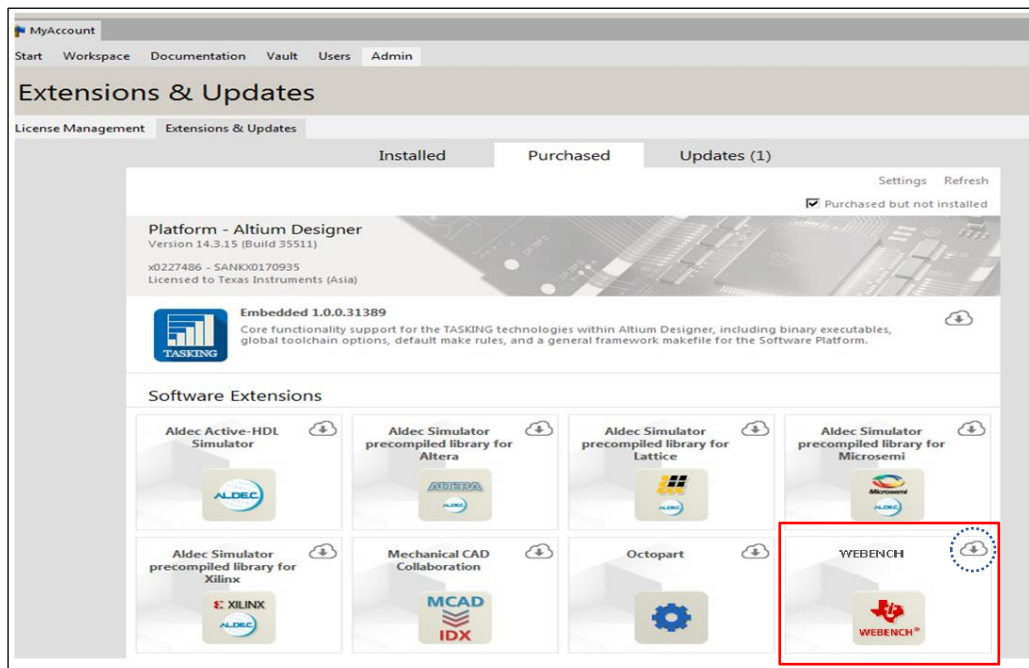
WEBENCH Altium Connector setup installation

Once Altium is installed; you need to install the connector. It is one time installation. To install the connector follow these steps:

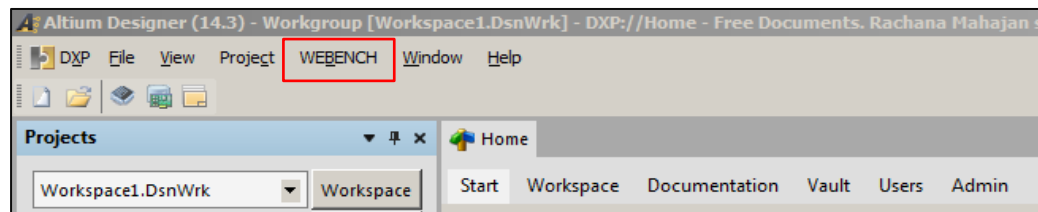
1. Go to the home page in Altium Designer, and check out appropriate license
2. Select **Extensions & Updates** and **Purchased**



3. Look for the WEBENCH extension. Click on the WEBENCH icon to download and install it.



4. Once the WEBENCH connector is installed, restart Altium Designer to complete the installation process. You will see WEBENCH menu added in the Menu bar.



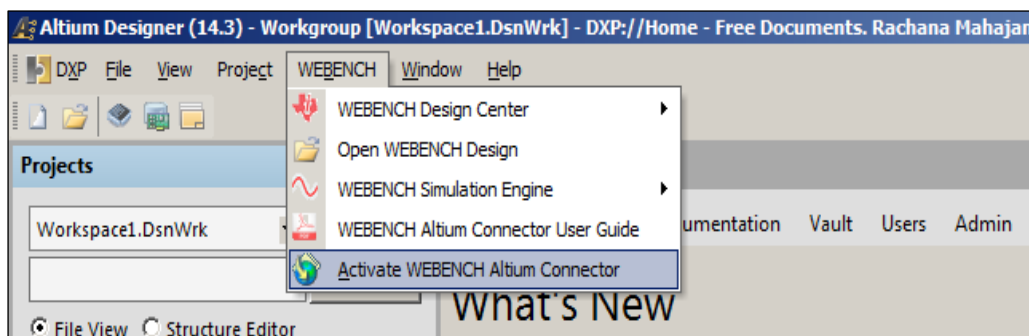
5. Once the WEBENCH connector is installed, you need to activate it in order to run simulations using WBSE.

Select **WEBENCH** and **Activate WEBENCH Altium Connector**

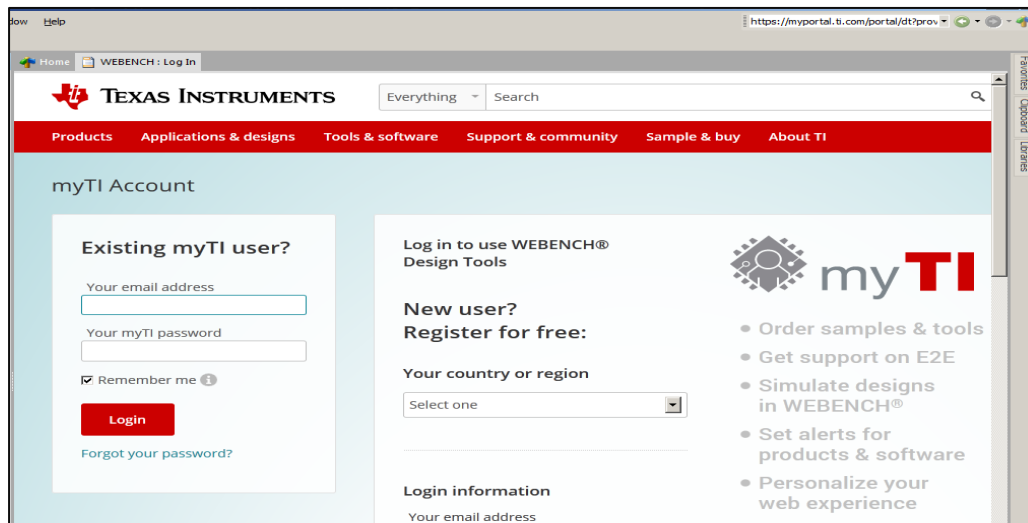
NOTE: You can choose whether you want to use the Altium inbuilt browser or external browser.

*You can go to DXP->Preferences->Simulation->WEBENCH Simulation Engine and select **Open***

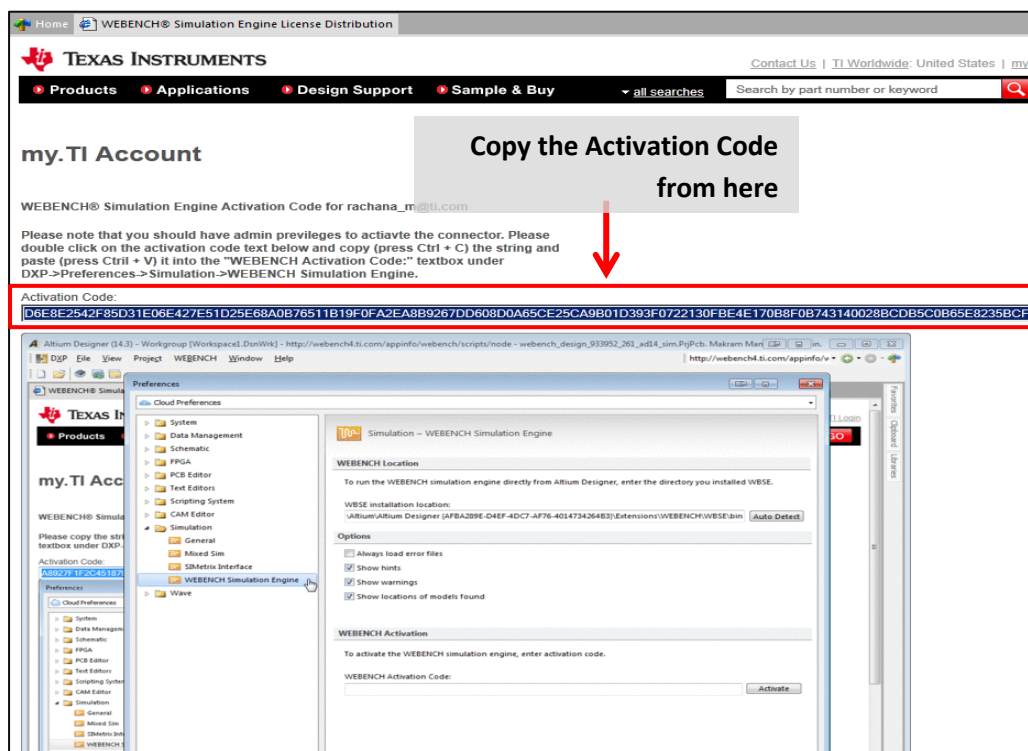
WEBENCH links in external browser.



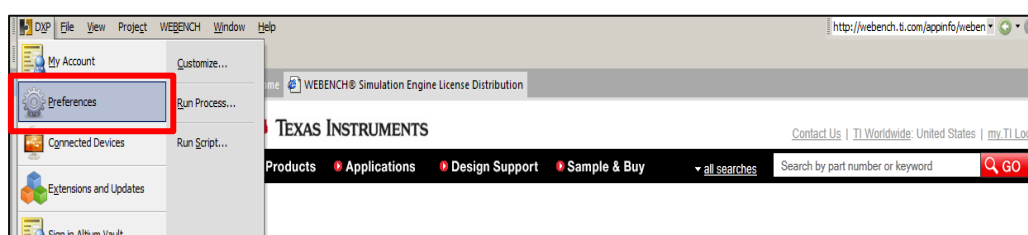
6. The Activate selection takes you to the myTI Account page. Enter your TI credentials and log in. Click **Log In** to get the activation key.



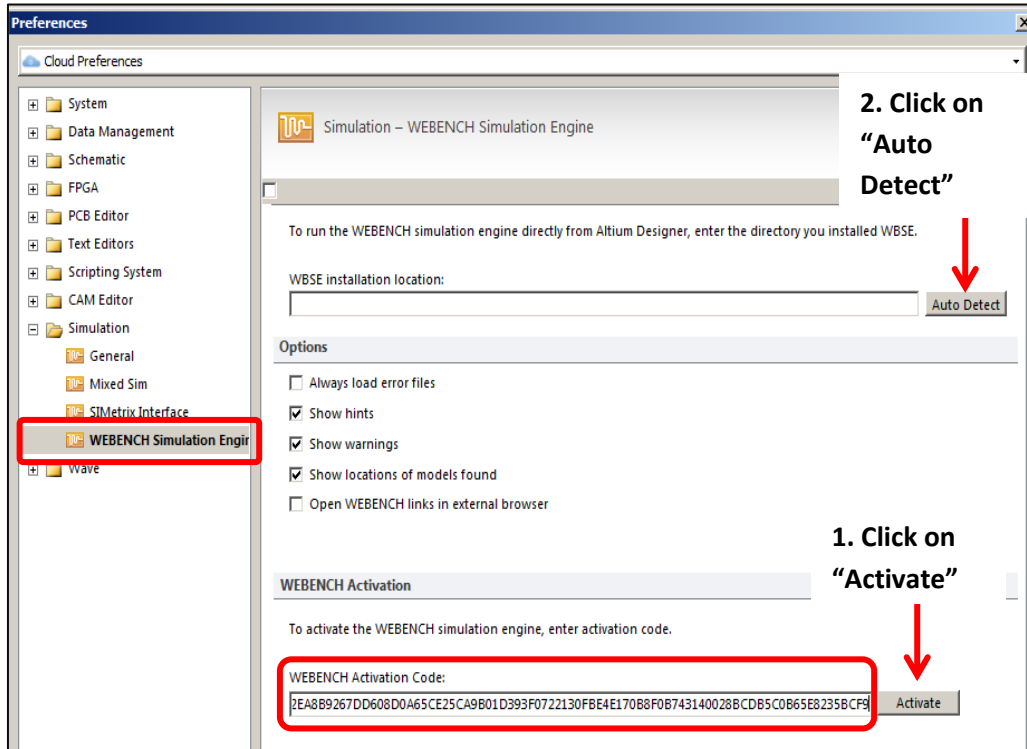
7. Copy the Activation Code provided.



8. Select **Preferences** from the DXP menu.



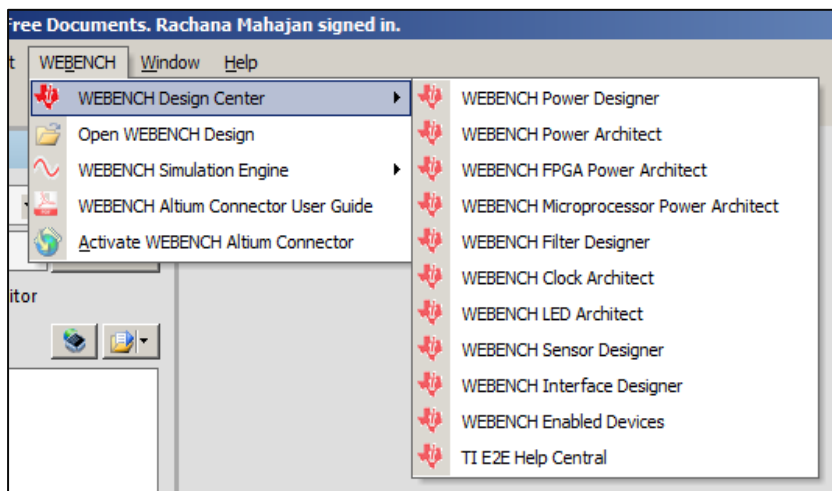
9. Select **WEBENCH Simulation Engine** from the Simulation folder.
Paste the activation code and activate.



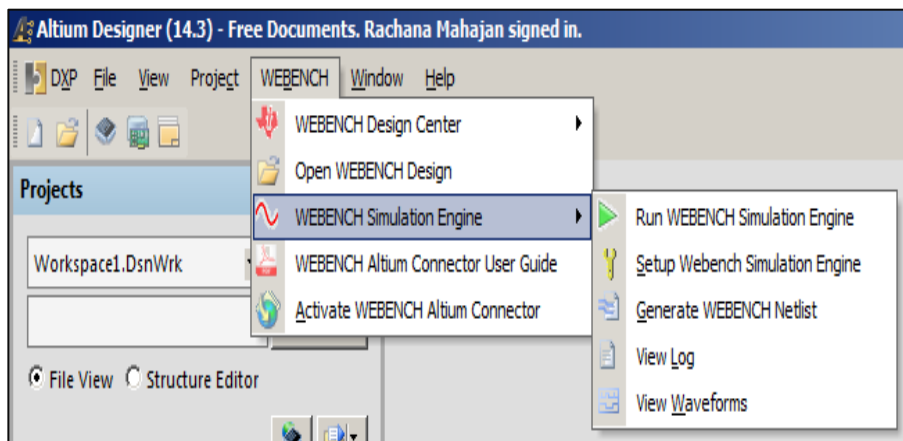
You are ready to use the WEBENCH Simulation Engine.

WEBENCH® menu

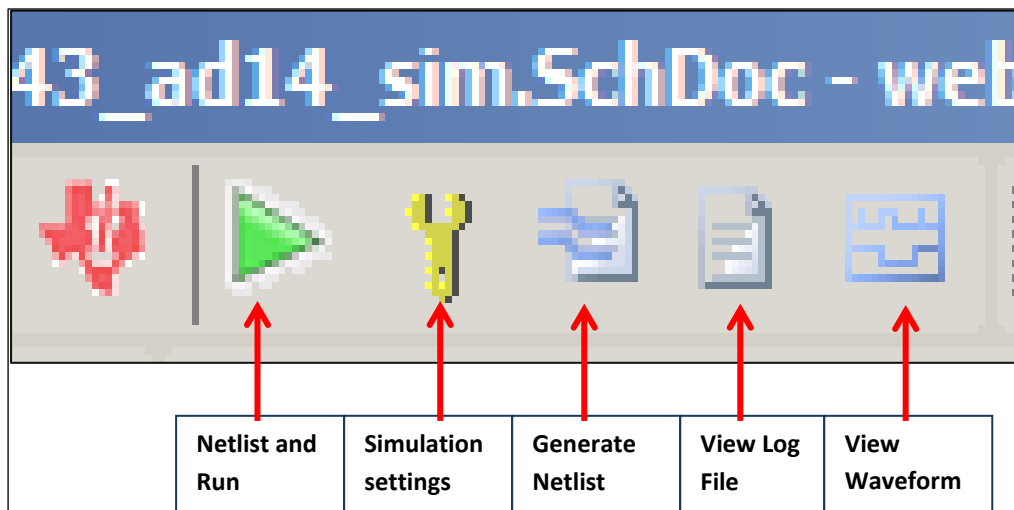
WEBENCH Design Center



WEBENCH Simulation Engine



WEBENCH Simulation Engine toolbar



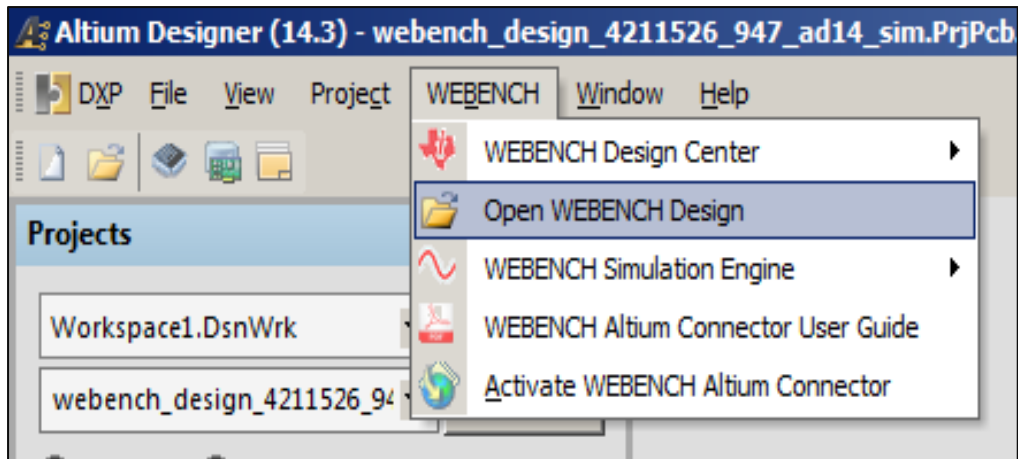
Exporting a design from WEBENCH® Designer

You can export your Power and Filter designs from WEBENCH as shown [here](#).

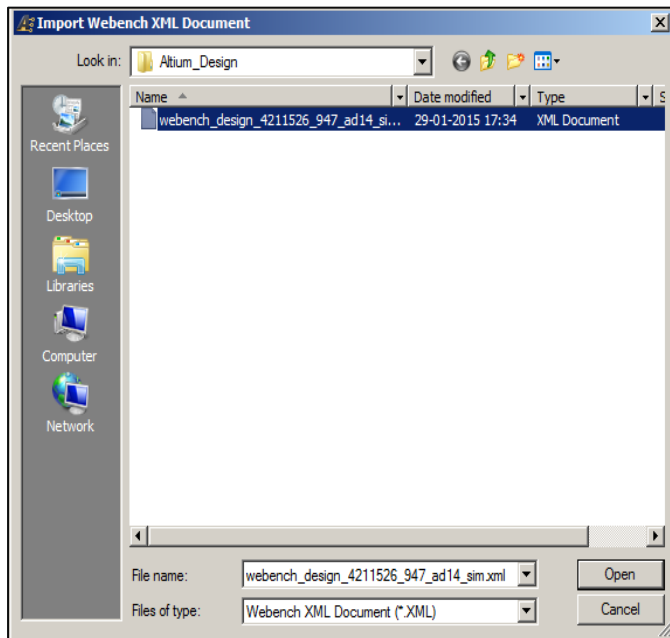
Importing WEBENCH® designs in Altium Designer

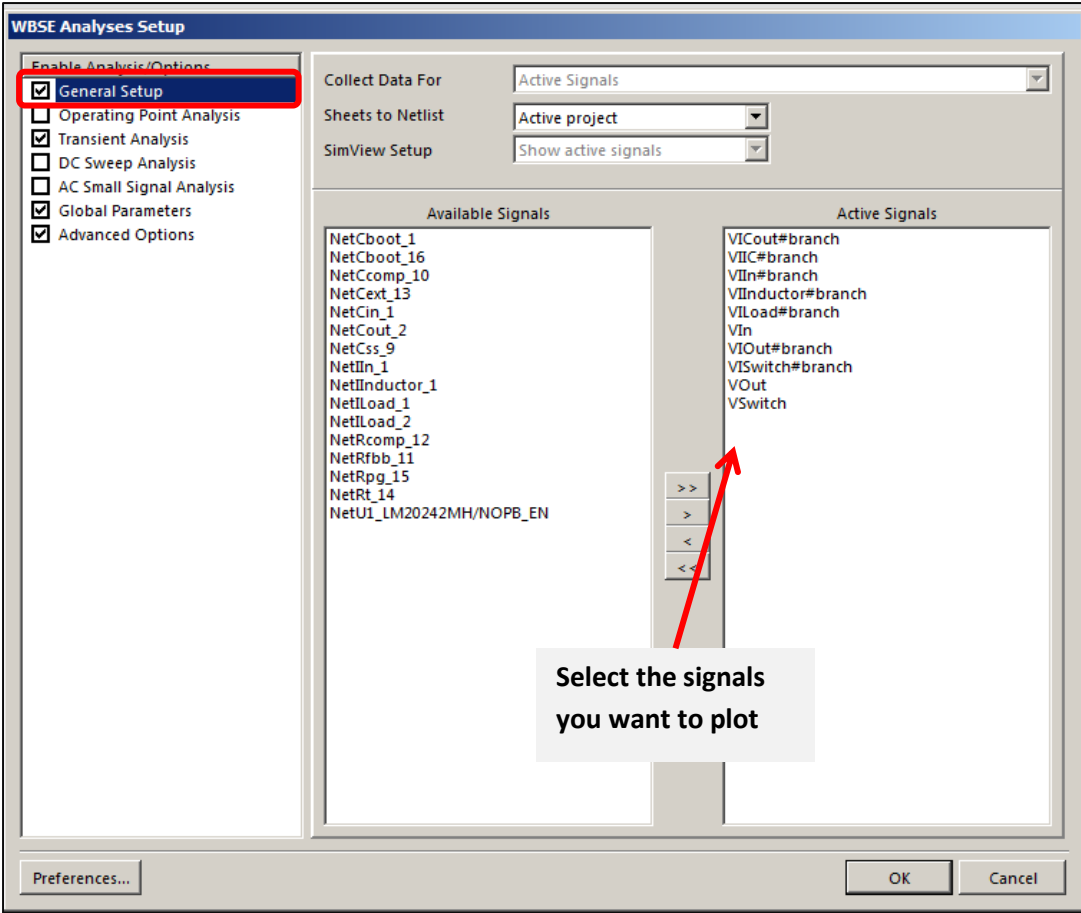
The following procedure explains how to open the design exported in previous steps.

Select **Open WEBENCH Design** from the WEBENCH menu.



Select the downloaded xml file





Transient Analysis

In this section you can change the analysis parameters for transient analysis. Similarly you can tune the parameters for AC, DC and operating point analysis. If you want to make changes to the settings, click on respective analysis name on the left pane and edit the options.

WBSE Analyses Setup

Enable Analysis/Options

- General Setup
- Operating Point Analysis
- Transient Analysis**
- DC Sweep Analysis
- AC Small Signal Analysis
- Global Parameters
- Advanced Options

Transient Analysis Setup

Parameter	Value	is Default Value
Transient Start Time	0.000	<input type="checkbox"/>
Transient Stop Time	3.000m	<input type="checkbox"/>
Time Step Size for Fixed Time Step Controlling Methods	1.000n	<input type="checkbox"/>
Transient Max Step Time	AUTO	<input checked="" type="checkbox"/>
Use Initial Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use Initial Conditions for Devices/Nodes	ALL	<input checked="" type="checkbox"/>
Threshold to resolve transitions	10.00n	<input checked="" type="checkbox"/>
Iteration limit before reducing time step	AUTO	<input checked="" type="checkbox"/>
Maximum iteration allowed during transient run	AUTO	<input checked="" type="checkbox"/>
Local Truncation Error Ratio	20	<input checked="" type="checkbox"/>
Relative Local Truncation Ratio	20	<input checked="" type="checkbox"/>
Absolute current error tolerance	1.000p	<input type="checkbox"/>
Absolute voltage error tolerance	1.000u	<input type="checkbox"/>
Relative error tolerance	10.00m	<input checked="" type="checkbox"/>
Absolute error tolerance for enforcing KCL	1.000p	<input type="checkbox"/>
Minimum allowed branch conductance	1.000p	<input checked="" type="checkbox"/>
Minimum capacitance value allowed	1.000e-15	<input checked="" type="checkbox"/>
Enable TI proprietary optimal time-stepping algorithm	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Additional Parameters

.TRAN

OK Cancel

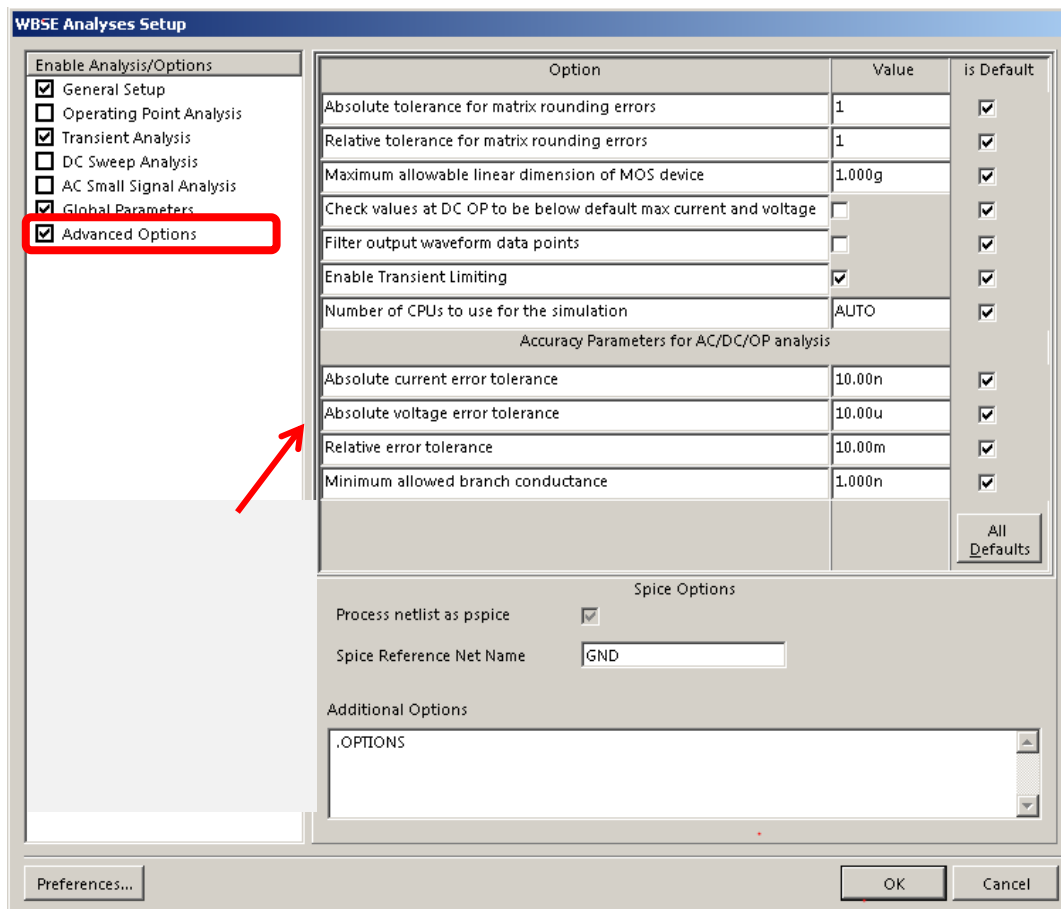
Preferences... All Defaults

Set the necessary analysis parameters

For WEBENCH exported designs, optimal parameters are set by default.

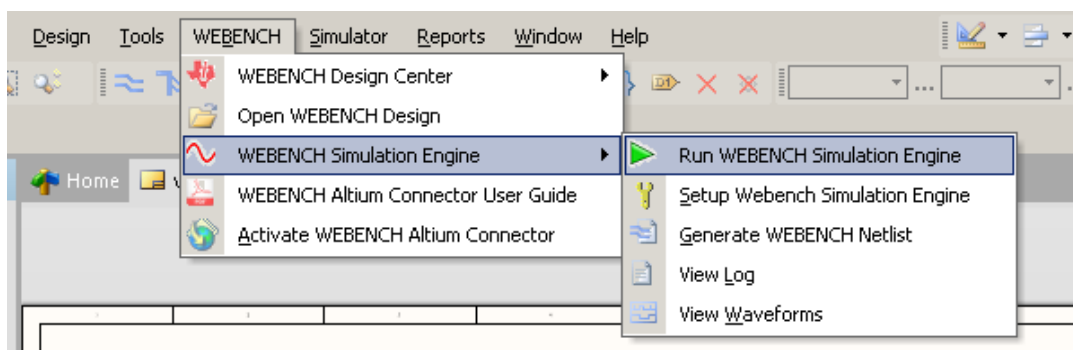
Advanced Options

If you want to specify some simulation parameter, it can be defined in the Global Parameter options.

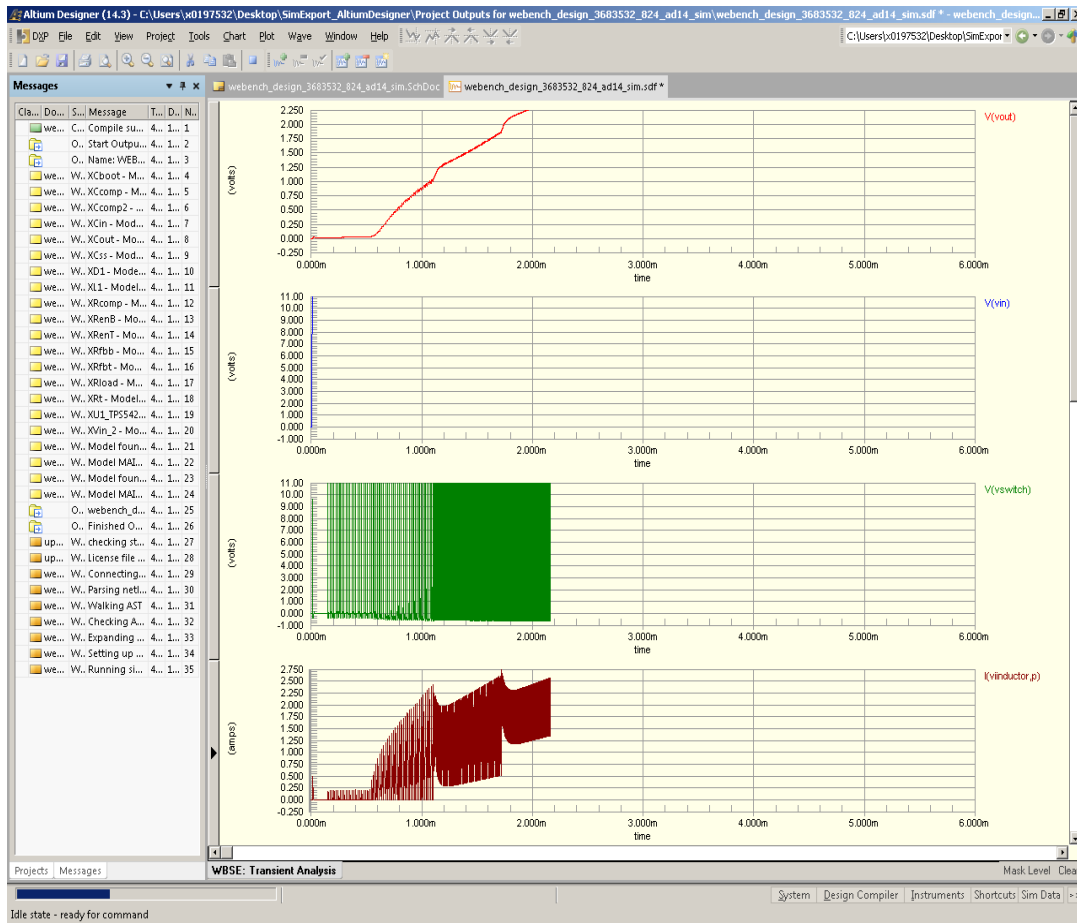


Running WEBENCH® Simulation Engine

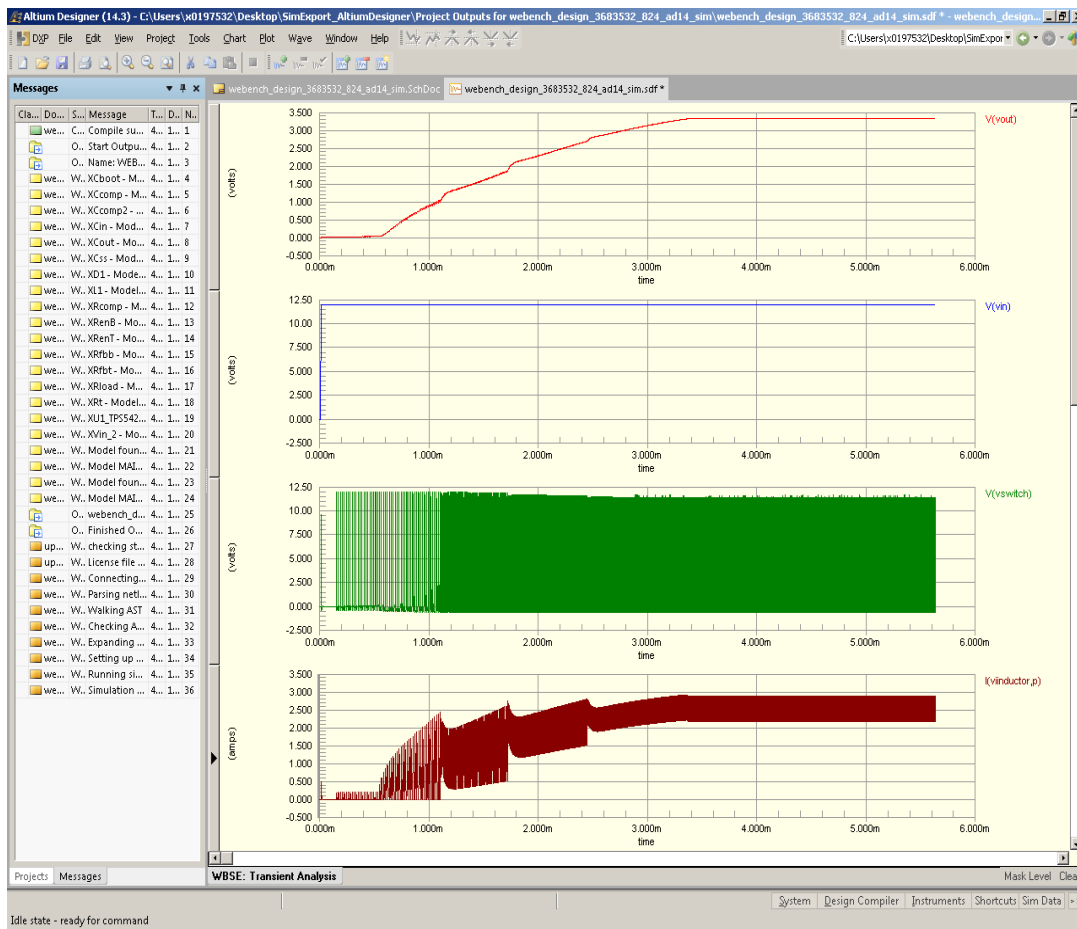
To simulate a design in WEBENCH® Simulation Engine, select **WEBENCH Simulation Engine** from the **WEBENCH** menu, or you can click **Run** icon from the toolbar. If you have not activated, the WEBENCH Altium Connector it will ask you activate.



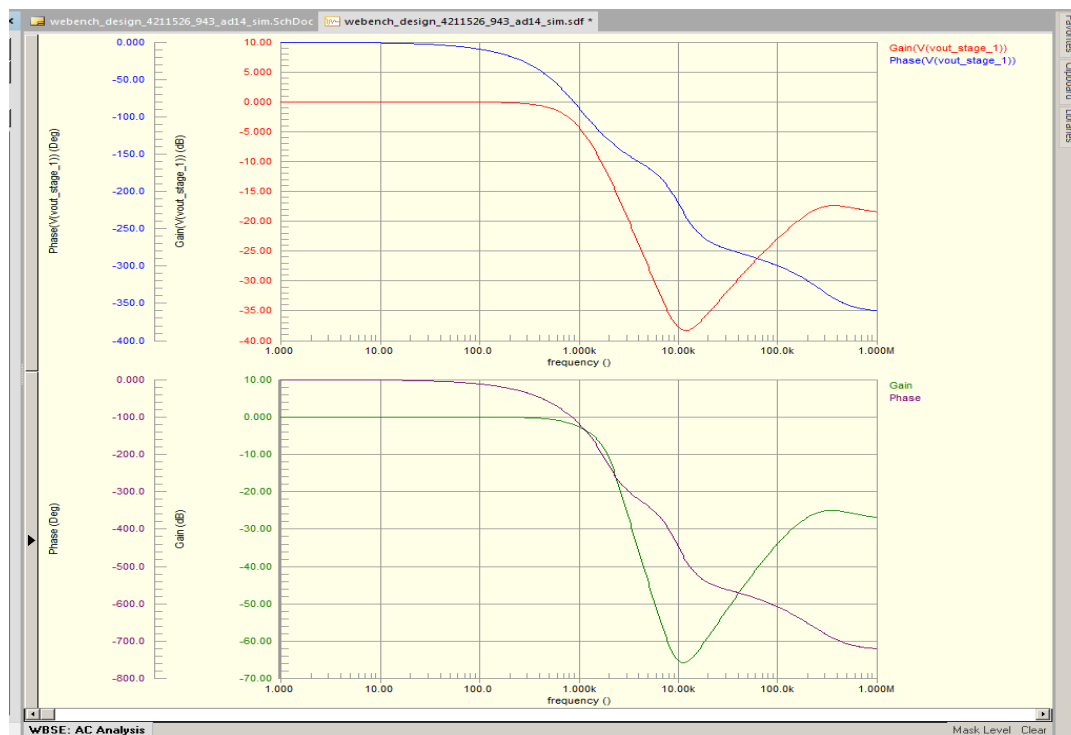
You can see streaming waveforms as the simulation progresses.



Here are the complete simulation results



Simulation results for a sample filter circuit (AC analysis)



Getting Help

- The User Guide can also be accessed from the WEBENCH® menu in Altium Designer. Select **WEBENCH Altium Connector User Guide** from the WEBENCH menu.
- For help on simulating a PSpice model in WBSE, refer to: http://e2e.ti.com/support/development_tools/webench_design_center/
- For help on Altium related issues, refer to Altium help manuals.

Feedback

Please submit feedback to the [WEBENCH E2E Community](#).

[See our disclaimer](#)

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