SpaceClaim plugin for ESPRIT

<u>Overview</u>

SpaceClaim has created a plugin for ESPRIT that allows geometry transfer back and forth between the two products. This is beneficial for SpaceClaim customers looking for a CAM solution and ESPRIT customers looking for a powerful geometry editing and preparation tool.

<u>Cost</u>: Free

<u>Version support</u>

SpaceClaim versions supported: SC 2012 SP 0 and later
ESPRIT versions supported: 2012

<u>Functionality</u>

After installing the SpaceClaim plugin in ESPRIT there will be a new toolbar with an "Export to SpaceClaim" button and an "Import from SpaceClaim" button:

The **Export to SpaceClaim** button can be used to send models to SpaceClaim. This will start a new SpaceClaim session and load the model. However, if SpaceClaim is already running, it will open the model in a new design window. Solids and surfaces in ESPRIT can be exported using this plugin.
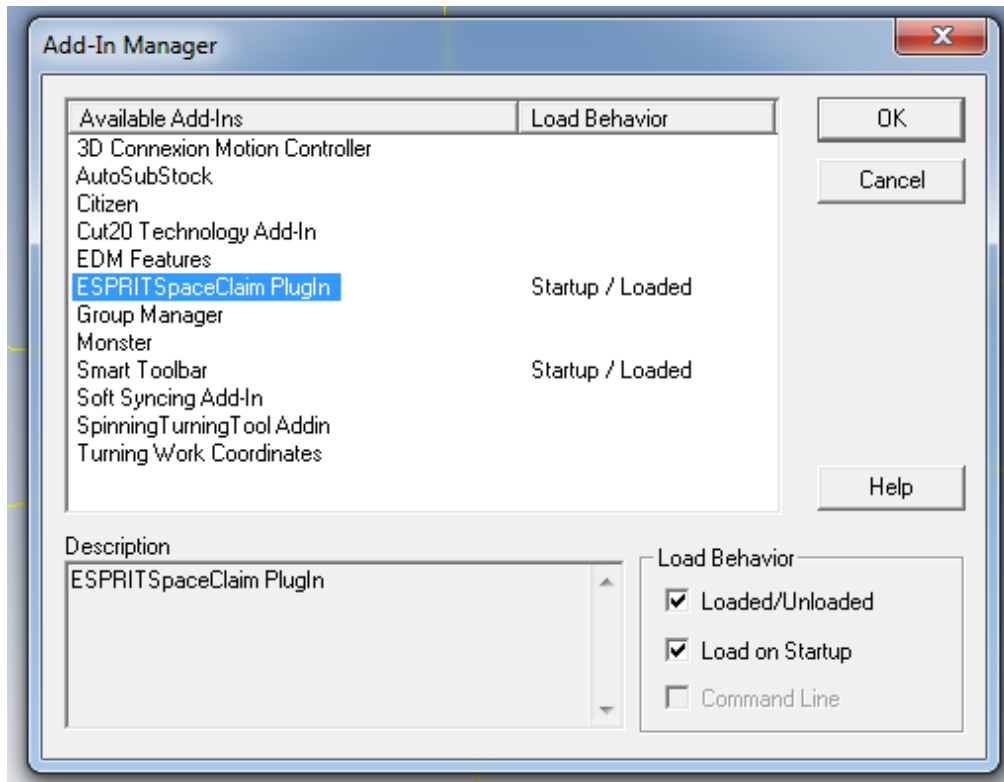
The **Import from SpaceClaim** button can be used in ESPRIT to receive models from SpaceClaim. This will import the active design from the current SpaceClaim session. The model will be imported in the same ESPRIT design window. Remember, SpaceClaim should already be running when using the import functionality. Solids and surfaces in SpaceClaim can be imported into ESPRIT and will retain their colors. Assemblies will be flattened when transferred.

<u>Install procedure</u>

1. Save the following ESPRIT plugin files in SpaceClaim Install directory and turn off Read only property

```
cs
de
es
ESPRIT-SpaceClaim Addin icon files
fr
it
ja
ko
pl
pt-br
zh-Hans
zh-Hant
RegisterOn64bitOS.bat
ESPRITSpaceClaimPlugIn.dll
SpaceClaimPlugInBase.dll
SpaceClaimAddInBridge.dll
ESPRITSpaceClaimPlugIn.dll.config
SpaceClaimAddInBridge.dll.config
RegisterAddinToESPRITon64bitOS.reg
```

2. When installing on **32bit OS**, edit the RegisterOn32bitOS.bat file in the SpaceClaim install directory.

   a. set %ESPRITSpaceClaimPlugInFolder% ={ SpaceClaim install directory}\ESPRITSpaceClaimPlugIn.dll

3. Save and run the batch file. The batch file will first register the plugin to the system using RegAsm.exe, and secondly call RegisterAddinToESPRITon32bitOS.reg to register the ESPRIT software to find and load the SpaceClaim plugin.

4. Launch ESPRIT.

5. To verify the plugin installation > Go to Tools>Add-in> Add-in Manager

1. When installing on **64bit OS**, edit the RegisterOn64bitOS.bat file in the SpaceClaim install directory.

   a. set %ESPRITSpaceClaimPlugInFolder%={ SpaceClaim install directory}\ESPRITSpaceClaimPlugIn.dll

2. Save and run the batch file. The batch file will first register the plugin to the system using RegAsm.exe, and secondly call RegisterAddinToESPRITon64bitOS.reg to register the ESPRIT software to find and load the SpaceClaim plugin.

3. Launch ESPRIT.

4. To verify the plugin installation > Go to Tools>Add-in> Add-in Manager

Configuring the Plugin

        Models will be transferred between ESPRIT and SpaceClaim in the SAB format by default. The import and export formats can be controlled using the **SpaceClaimAddInBridge.exe.config** file.

The possible configuration option values are as follows:

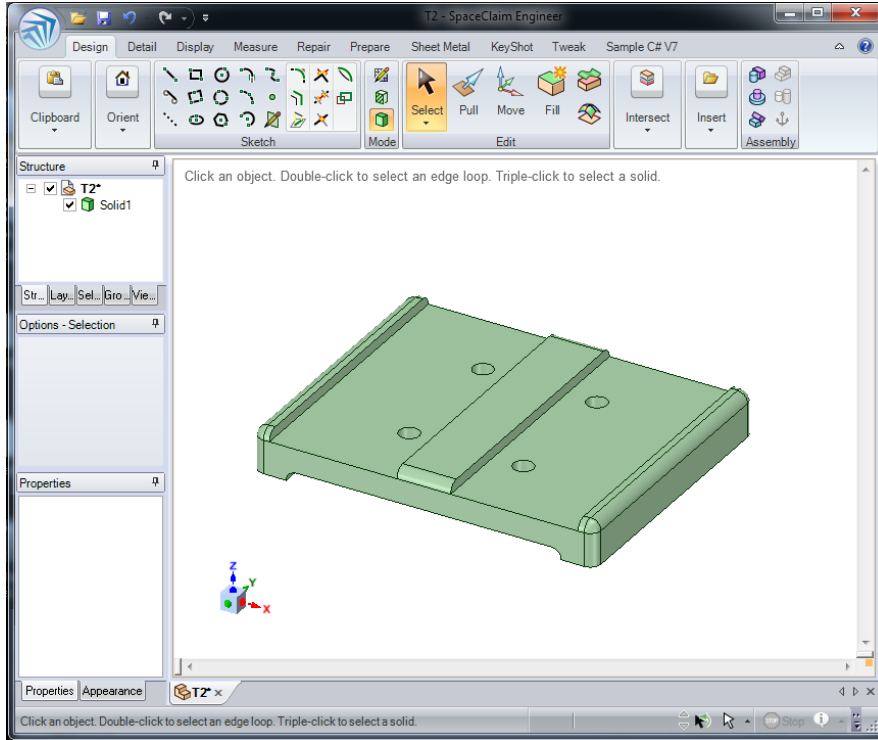| Option Name	Option value	Required SpaceClaim Translator License
FromSpceClaimFormat / ToSpaceClaimFormat	AcisText, AcisBinary	Engineer
	ParasolidText, ParasolidBinary	Data Exchange II
	STEP	Engineer

The default file format for transfer from ESPRIT to SpaceClaim is **STEP**, if ESPRIT cannot find the config file.

Open this file in a text editor, change the value as desired

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
    <configSections>
        <sectionGroup name="userSettings"
type="System.Configuration.UserSettingsGroup, System, Version=4.0.0.0,
Culture=neutral, PublicKeyToken=b77a5c561934e089" >
            <section name="SpaceClaimAddInBridge.Properties.Settings"
type="System.Configuration.ClientSettingsSection, System, Version=4.0.0.0,
Culture=neutral, PublicKeyToken=b77a5c561934e089"
allowExeDefinition="MachineToLocalUser" requirePermission="false" />
        </sectionGroup>
    </configSections>
    <userSettings>
        <SpaceClaimAddInBridge.Properties.Settings>
            <setting name="Setting" serializeAs="String">
                <value />
            </setting>
            <setting name="FromSpaceClaimFormat" serializeAs="String">
                <value>AcisBinary</value>
            </setting>
            <setting name="ToSpaceClaimFormat" serializeAs="String">
                <value>AcisBinary</value>
            </setting>
        </SpaceClaimAddInBridge.Properties.Settings>
    </userSettings>
</configuration>
```

Images

SpaceClaim model before transfer:

Model after import into ESPRIT: