

One of the core features of the SMARTree framework is the concept of 'SMART Tags' . This is where XML SMARTrees are given header metadata in a similar manner to a hashtag, so that users can quickly reference another SMARTree in the user's directory or cloud. SMART Tags are searched and indexed when the user starts the client software, when the user saves a new SMARTree and when the user pulls information from the cloud via GIT for example. The user can create any type of SMART Tag but some tags have special meaning within the the software. These include

- **Material** Smart Tag used to describe a SMARTree as a material used in models for example.
- **Model** Smart Tags used to run embedded solvers within SMARTree.
- **Properties** Smart Tags describe material property descriptions within Material SMARTrees
- **Units** Smart Tags are used to describe SMARTrees that have unit definitions that are in turn used in properties and materials
- **Template** Smart Tags are used for easy access to populate new SMARTrees or append to existing trees
- **Settings** Smart Tags are used to store user customized environment data for the client.

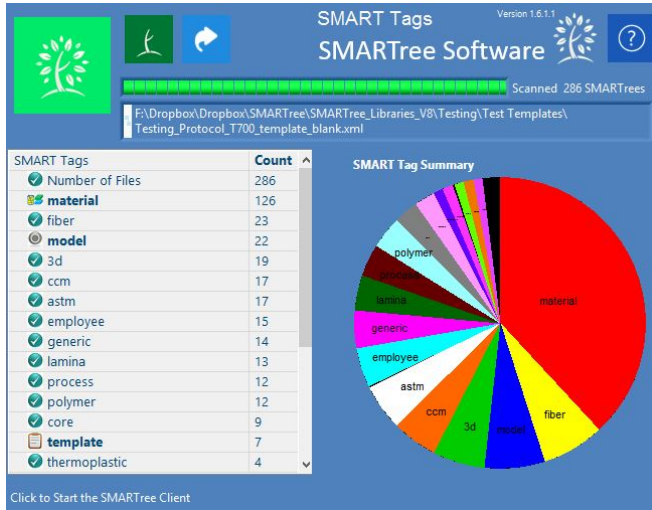
Other examples commonly used include

**Equipment, Devices, Facilities, Personal , SOP, Processes**etc. These SMART Tags can be referenced directly within the current SMARTree in a similar manner as a citation without having to embed the external tree directly and shared within an organization through the cloud via GIT or Sharepoint or any shared folder resource.

### **The SMART Tag Concept showing connectivity between Materials, Properties and Units**

```
<GXML_Root>
  <SMARTree mems='2'>
    <SMARTree_information mems='5'>
      <file_version type='String'>1.010000</file_version>
      <user type='String'>John Smith</user>
      <date type='String'>10/15/2014:2:41 PM</date>
      <key type='String'>null</key>
      <Tags dim='[3]' type='String'>
        <tag>material</tag>
        <tag>thermoplastic</tag>
        <tag>prepreg</tag>
      </Tags>
    </SMARTree_information>
  </SMARTree>
</GXML_Root>
```

### **SMART Tag Description within the XML file**



## The SMART Tag Update Window