

## Tech Tip: Objects and Classes

### M-Files Objects

M-Files uses "object types" to define items that are stored in an M-Files vault. Object types can represent almost any type of document, file or information. Common objects types that are already set up in any M-Files vault are documents and document collections. For documents, M-Files stores and manages both the actual file representing the document as well as the metadata or properties that describe and classify the document.

It is also possible to define object types that differ from documents in that they have no related file. Examples of these types of objects are customer, contact or project. Other examples of object types without an associated file include furniture and devices, such computers or phones, that are owned and tracked by the organization.

All of these object types can be managed with M-Files which then provides the ability to sort them in dynamic views, use check-in and check-out to protect against concurrent editing by multiple people, assign access permissions to ensure they are accessible only to authorized personnell, set up custom workflows to automate common business processes, and so on.

### M-Files Classes

Usually an object has a variety of types that have specifci properties or metadata associated with each. For instance, classes of documents might be proposals, agreements or specifications. Classes of contacts might be employees, contractors, vendors, and so on. A customer could also be a class of the contact object, but it's also possible and common that the vault be set up such that Customers are their own unique object type, allowing you to manage customers in special ways that are different than other contacts; in this case a customer object type could have a class for each type of product or service that your company offers. This provides some insight into how M-Files can be easily customized to act as a CRM (Customer Relationship Management) system, and in fact this is the basis for M-Files CRM, but that's for another Tech Tip.

### Creating New Objects and Classes

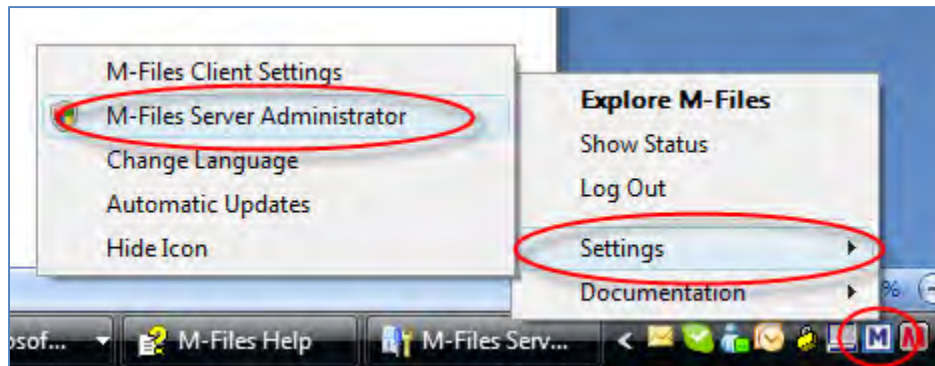
The Objects and Classes desribed above represents the basic structure of the M-Files vault, and it can be quickly and easily customized. This is one of the strengths of M-Files that allows businesses and organizations of all types to quickly adapt and structure M-Files to efficiently address a wide variety of needs and business processes.

Let's take a look at how to quicky create a new object type with multiple classes, each with their own uniqe properties or metadata.

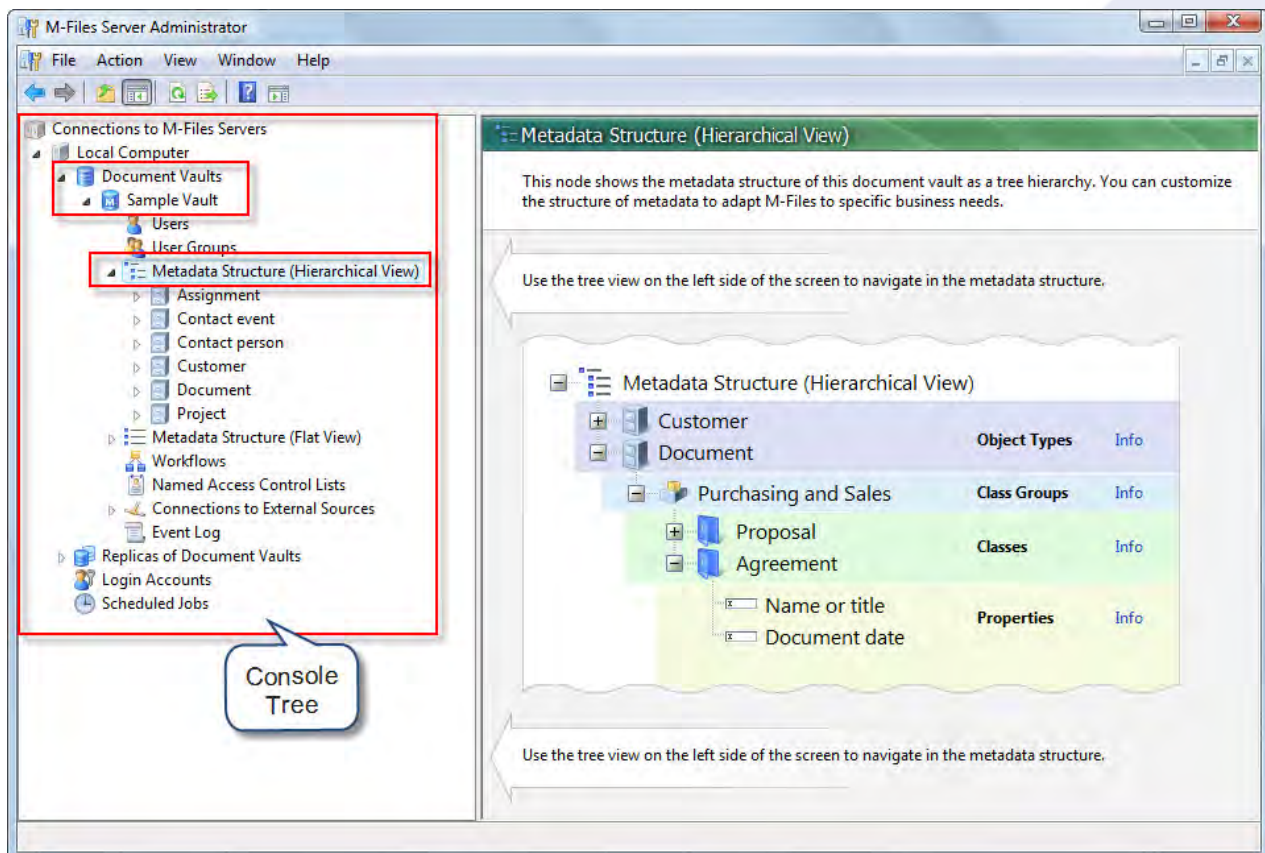
### Creating a New Object Type

Creating a new object type in M-Files is easy; new object types are created using the M-Files Server Administrator application which can be started by rightclicking on the M-Files icon in the Notification Area located at the right side of the taskbar typically along the bottom of the screen. After rightclicking

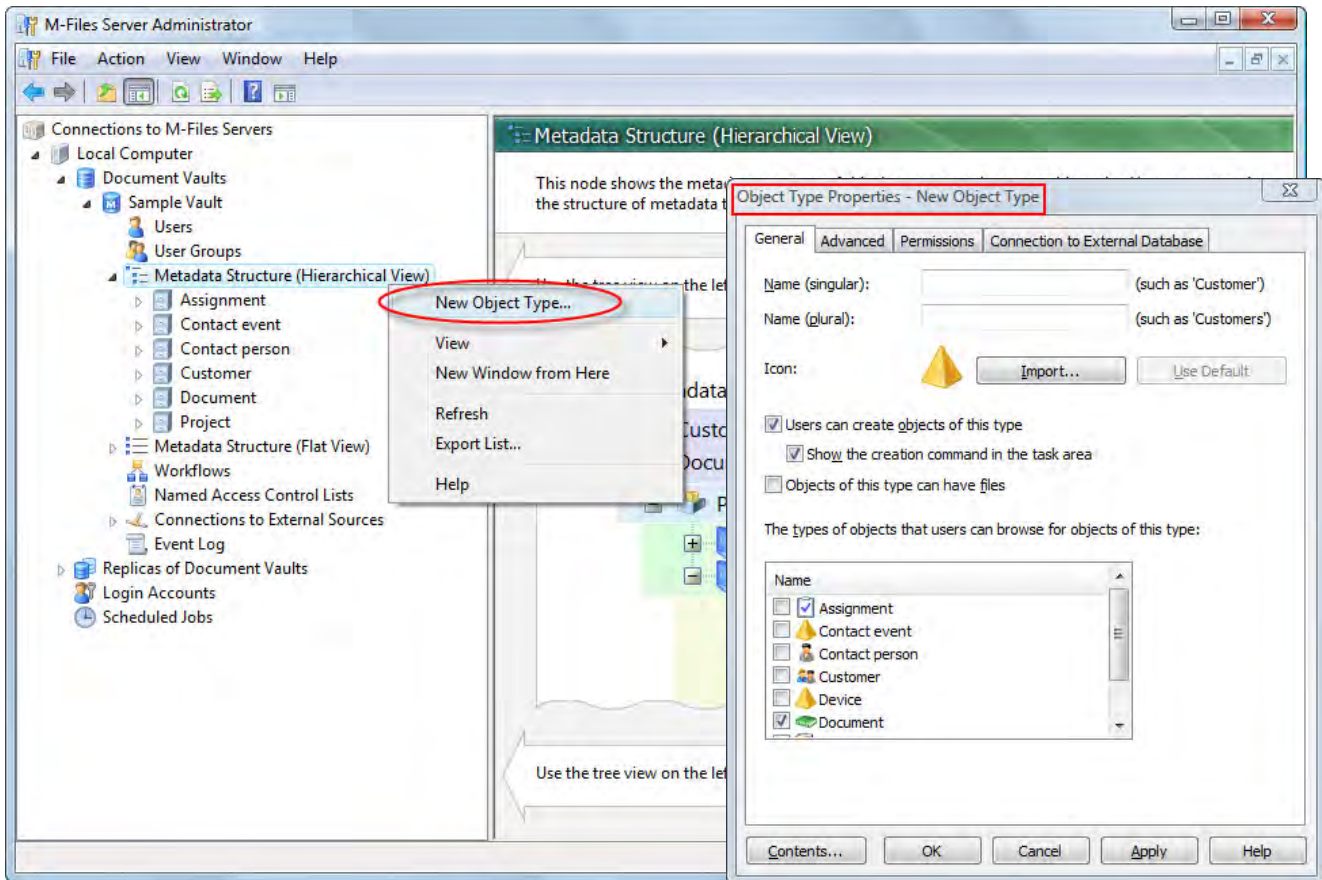
the icon, hover over the Settings menu and then click on the M-Files Server Administrator as shown on the next page.



After launching the Server Administrator expand Document Vaults list in the Console Tree along the left side of the window. Then expand the vault to which you want to add a new object type, in this case the vault is called "Sample Vault." Then expand "Metadata Structure (Hierarchical View)" which enables you to see the vault structure with nested object and class types along with their associated properties as in the figure below. In this case the existing object types are Assignment, Contact event, Contact person, Customer, Document and Project.



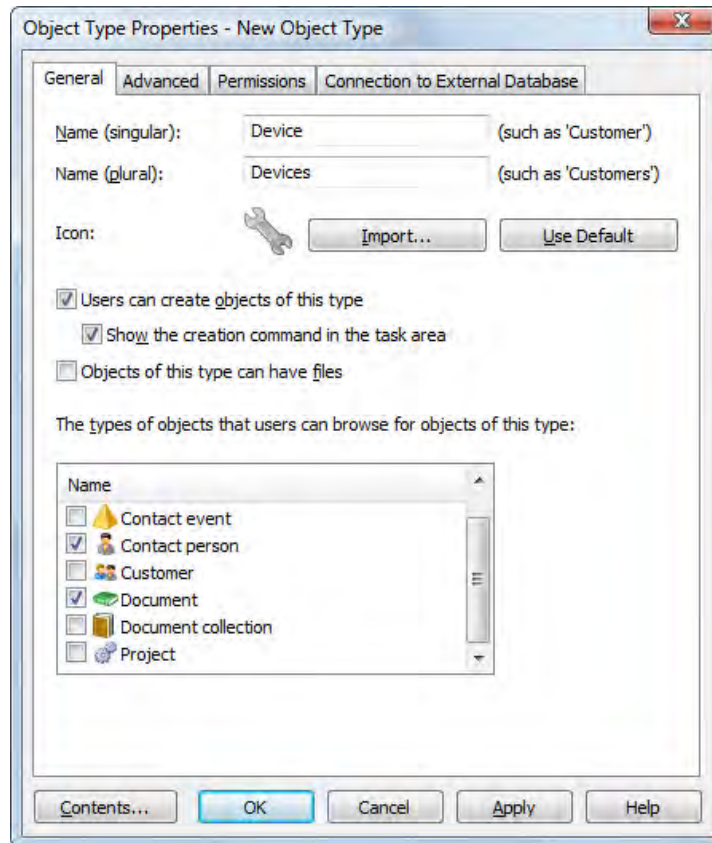
The next step is to rightclick on "Metadata Structure (Hierarchical View)" list and select "New Object Type..." from the pop-up menu which will bring up the "Object Type Properties - New Object Type" dialog box as shown in the next figure.



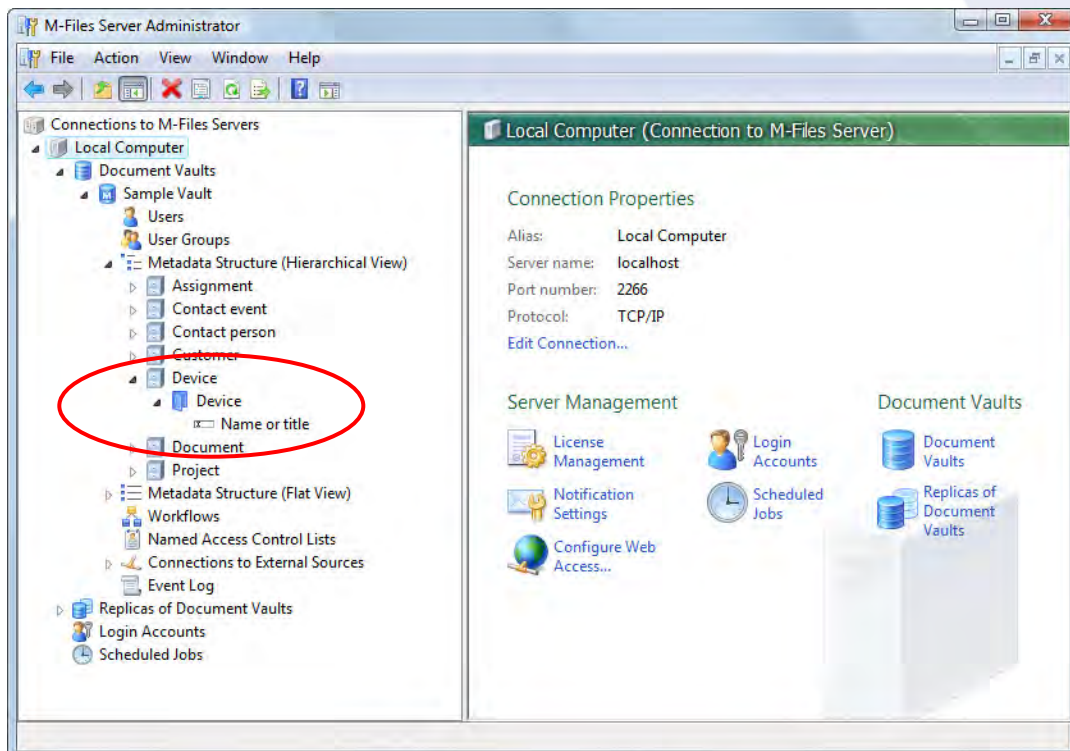
Now you simply enter the type of object you want to add. In this example we will add a "Device" object, which will have two classes, a computer class and a phone class. The various fields in the dialog box are straightforward, so this Tech Tip will leave it to the reader to explore these, except for the last option labeled "The types of objects that users can browse for objects of this type." This relates to the situation where objects have relationships with other objects, which is common; for example, a document is often attached, or related, to a project or customer. The objects related to the current object can be viewed by using the Browse Relationships function in M-Files Client.

With the "The types of objects that users can browse for objects of this type" function, the objects available for use with the selected object type can be specified. For example, if the object type Projects is selected for use with the Customer object type, selecting the customer in M-Files Client and using the Browse Relationships function displays a list of all projects attached to the customer in question.

Next we simply type in Device and Devices as the singular and plural forms of the object name respectively, import a new icon to represent this object type if we want, and select the object types that can be browsed with the Browse Relationship function, in this case Document and Contact person, as shown below:



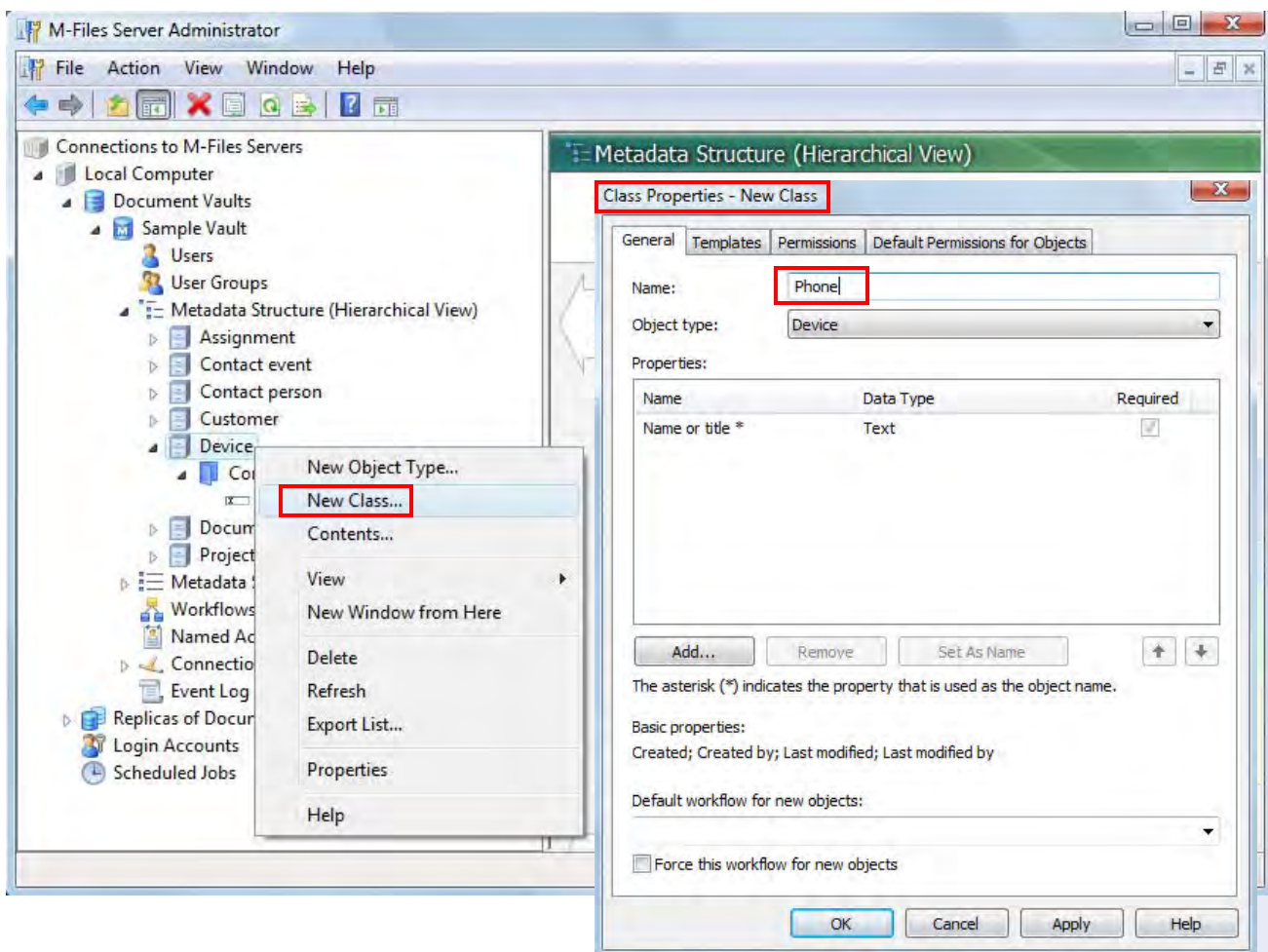
Then select OK and the new object type is created as shown below:



Note that by default the first class is created automatically with the same name as the object type, in this case "Device," and it has one property called "Name or title." You can add additional properties as you like and they can be of all types, dates, descriptions, other objects, such as contact person (which creates a relationship between these two objects, and so on. We won't adding properties in this Tech Tip, but suffice it to say it is easy, give it a try on your own and see.

Next we're going to rename this default Device class to "Computer" and then add another class called "Phone." To rename the current Device class, just click it and you can directly edit the name, or you can rightclick and pick Rename from the pop-up menu.

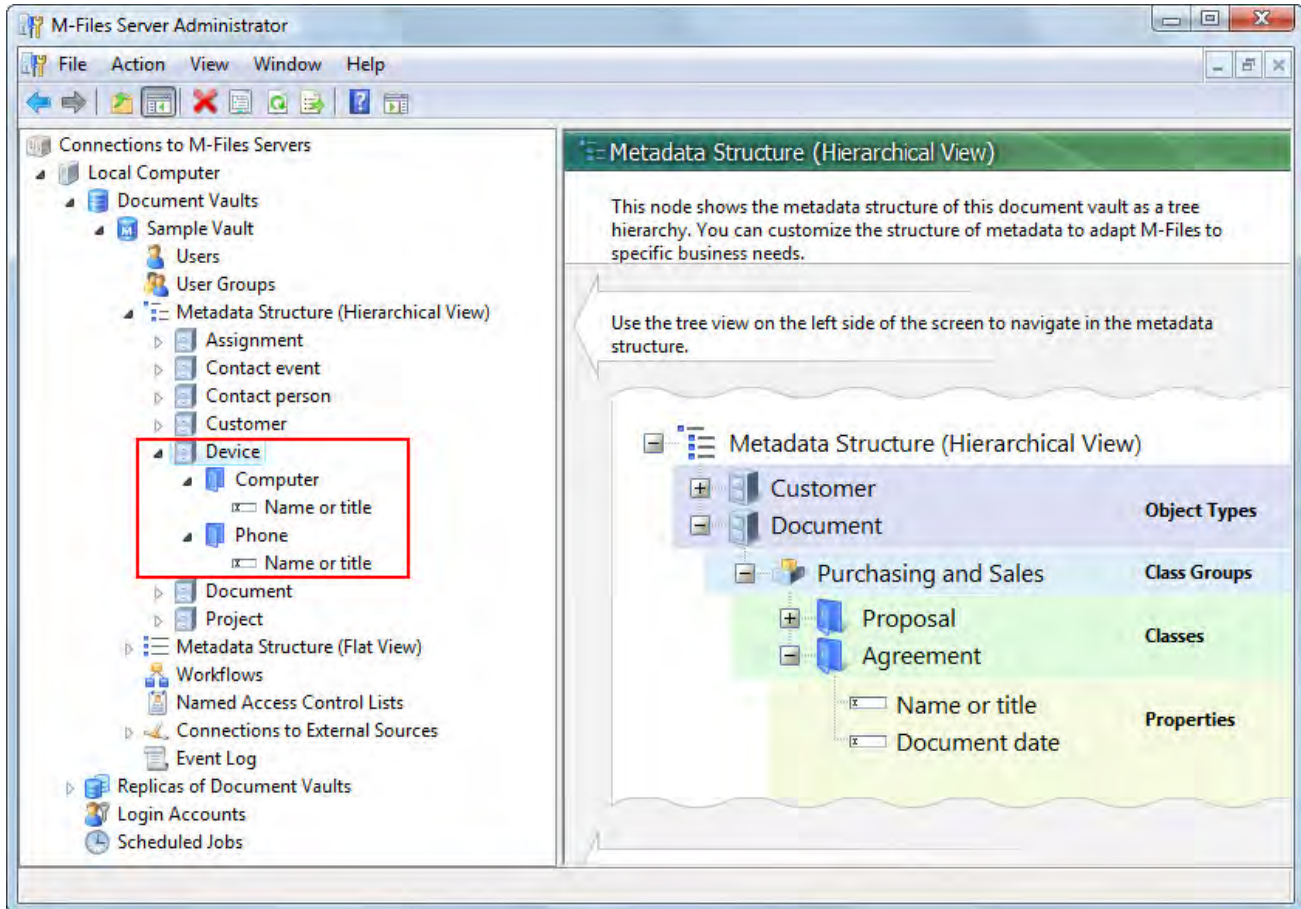
To create a new class, simply rightclick on the Object type "Device" and pick "New Class..." from the pop-up menu as shown below:



This displays the "Class Properties – New Class" dialog box where you enter the name of the new class, in this case "Phone" (the Object type "Device" is already determined because we had rightclicked on the Device to activate this dialog box, but it can be changed here if desired). Note that the "Name or title" property is already assigned by default, and new properties can be added directly in this dialog by clicking the Add button.

Then you simply hit OK and the new Class "Phone" of object type "Device" is created as shown in the image on the next page.

Creating new objects and classes is that easy, and by following these simple steps you can quickly create a custom vault tailored specifically for your business or organization.



If you encounter any technical problems with M-Files, please do not hesitate to contact us at [support@m-files.com](mailto:support@m-files.com). If you have purchased M-Files licenses, please include your M-Files serial number in the message to ensure that you receive priority support.