

# File System Domain

## Introduction

The File System (FileSys) domain lets you incorporate information from your file system in your reports. This information can come from directories, files, or records within files.

### Aliases

The following names in the File System domain are aliased in the reporting interface:

Name in Domain	Name in Interface	Item Type / Location
Path	FullName	Property / DirectoryObject Class
DirectoryPath	FullName	Property / Directory Class
FilePath Image	FullName Graphic	Property / File Class
Path	Filename	Property / FileRecord Class

# Directory

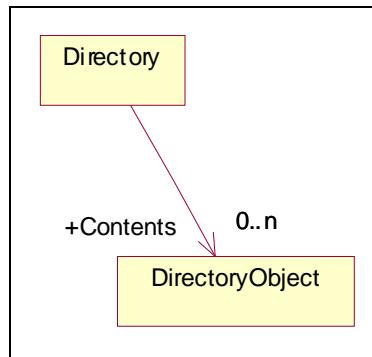
## FileSys Domain

A directory, sometimes called a folder, contains other files or directories.

**Class Hierarchy:** DirectoryObject>Directory

### SubClasses of Directory

This class has no subclasses.



### Properties Specific to Directory

Properties	Inherited From	Description
DirectoryPath		Path of the directory.
DriveLetter	DirectoryObject	Drive letter of the location of the directory.
Extension	DirectoryObject	The segment of a SimpleName following the last period. For example, the Extension of C:\bill\file.txt is txt. If the SimpleName contains no period, then Extension returns a null string.
NameMinusExtension	DirectoryObject	The segment of a SimpleName preceding the last period. For example, the NameMinusExtension of C:\bill\file.test.txt is file.test. If the SimpleName contains no period, then NameMinusExtension returns the SimpleName.
NamePrefix	DirectoryObject	The segment of a SimpleName preceding the first period in the file name. For example, the NameMinusExtension of C:\bill\file.test.txt is file.

<b>Properties</b>	<b>Inherited From</b>	<b>Description</b>
Path	DirectoryObject	The complete path of an object. For example, C:\bill\file.txt.
SimpleName	DirectoryObject	The context-independent portion of an object's name. For example, the SimpleName of C:\bill\file.txt is file.txt.

#### **Relationships Specific to Directory**

<b>Name</b>	<b>Kind</b>	<b>Class</b>	<b>Description</b>
Contents	0..n	DirectoryObject	The DirectoryObjects that reside within the directory (subdirectories are included but not their contents).

# DirectoryObject

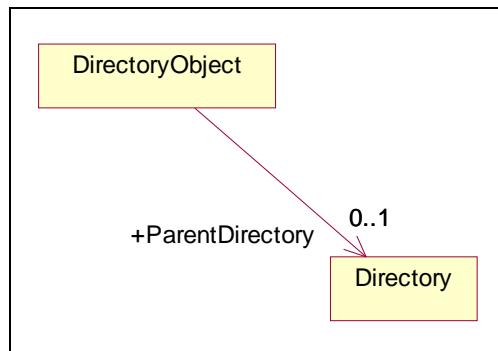
## FileSys Domain

Anything that can be found in a Directory, including files and (sub)directories.

**Class Hierarchy:** DirectoryObject

### SubClasses of DirectoryObject

Directory  
File



### Properties Specific to DirectoryObject

Properties	Inherited From	Description
DriveLetter		Drive letter of the location of the directory.
Extension		The segment of a SimpleName following the last period. For example, the Extension of C:\bill\file.txt is txt. If the SimpleName contains no period, then Extension returns a null string.
NameMinusExtension		The segment of a SimpleName preceding the last period. For example, the NameMinusExtension of C:\bill\file.test.txt is file.test. If the SimpleName contains no period, then NameMinusExtension returns the SimpleName.

Properties	Inherited From	Description
NamePrefix		The segment of a SimpleName preceding the first period in the file name. For example, the NameMinusExtension of C:\bill\file.test.txt is file.
Path		The complete path of an object. For example, C:\bill\file.txt.
SimpleName		The context-independent portion of an object's name. For example, the SimpleName of C:\bill\file.txt is file.txt.

#### Relationships Specific to DirectoryObject

Name	Kind	Class	Description
ParentDirectory	0..1	Directory	Directory containing the object.

## File

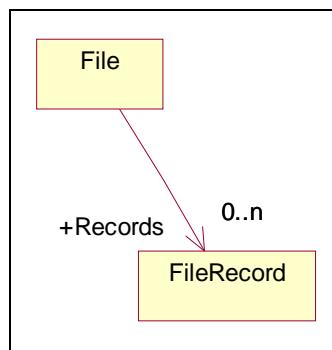
### FileSys Domain

A subclass of DirectoryObject that does not contain other files or directories. Files can be ASCII or binary. They can contain text, bitmaps, program source, object code, executable code, or any other form of information that can be stored in a file. Note that the Graphic and Text attributes may not be defined for certain types of files.

**Class Hierarchy:** DirectoryObject>File

#### SubClasses of File

This class has no subclasses.



#### Properties Specific to File

Properties	Inherited From	Description
DriveLetter	DirectoryObject	Drive letter of the location of the directory.
Extension	DirectoryObject	The segment of a SimpleName following the last period. For example, the Extension of C:\bill\file.txt is txt. If the SimpleName contains no period, then Extension returns a null string.
FilePath		Path of the file.
IsGraphic		True if the file is a supported graphic image format.
NameMinusExtension	DirectoryObject	The segment of a SimpleName preceding the last period. For example, the NameMinusExtension of C:\bill\file.test.txt is file.test. If the SimpleName contains no period, then NameMinusExtension returns the SimpleName.

Properties	Inherited From	Description
NamePrefix	DirectoryObject	The segment of a SimpleName preceding the first period in the file name. For example, the NameMinusExtension of C:\bill\file.test.txt is file.
Path	DirectoryObject	The complete path of an object. For example, C:\bill\file.txt.
SimpleName	DirectoryObject	The context-independent portion of an object's name. For example, the SimpleName of C:\bill\file.txt is file.txt.
Text		The complete contents of an ASCII text file. Undefined for other file types.

### Relationships Specific to File

Name	Kind	Class	Description
Records	0..n	FileRecord	The records contained in a text file. By default, newlines are used to distinguish separate records within a file. It is possible to override this default by including a RECORD_DELIMITER directive in the file.

## **FileRecord**

### **FileSys Domain**

ASCII text files can be further decomposed into file records. File records are especially useful for parsing flat database files.

Records must contain key fields that uniquely identify each record. By default the first field is the key.

You can add directives at the beginning of the file to change the defaults. The directives are:

- #RECORD\_DELIMITER, which specifies a character other than a newline to delimit records within the file.
- #FIELD\_DELIMITER, which specifies a character other than a space to delimit fields within records.
- #QUOTE\_DELIMITER, which specifies a character other than a double quote to delimit a single field that may include the field delimiter character.
- #KEY\_FIELDS, which specifies a list of field numbers, separated by spaces, used to uniquely identify each record.

For example, with the following directives added, fields are separated by a slash and the second field (containing the last name) is used as the key instead of the first field:

```
#FIELD_DELIMITER /
#KEY_FIELDS 2
Kofi/Annan/Ghana/1997/2002
Boutros/Boutros-Ghali/Egypt/1992/1996
Javier/Perez de Cuellar/Peru/1982/1991
Kurt/Waldheim/Austria/1972/1981
```

You can use the following special characters in these directives:

- \n, for newline
- \t, for horizontal tab
- \b, for backspace
- \r, for carriage return
- \f, for formfeed
- \\", for backslash

#### **Class Hierarchy: FileRecord**

#### **SubClasses of FileRecord**

This class has no subclasses.

**Properties Specific to FileRecord**

<b>Properties</b>	<b>Inherited From</b>	<b>Description</b>
Field01 ▪ ▪ ▪ Field30		Text of the specified field, numbered from left to right. The extent of each field is determined by the field delimiter character, which defaults to a space. You can change the default by including a FIELD_DELIMITER directive in your file. Double quotes ("") can be used to designate a single field that includes field delimiters. You can change the quote character by including a QUOTE_DELIMITER directive in your file.
Filename		The full path of the file that contains this record.
Position		The nth position of the record relative to the file that contains it.
Text		The complete ASCII contents of the Record. Undefined for other file types.
UniqueKey		The field or combination of fields used to uniquely identify the record. The default is to use the first field as the unique key. You can change the default by including a KEY_FIELDS directive in your file. If you have used the KEY_FIELDS directive to specify a multiple-field key, you enter a key by supplying each field, in order, separated by the field delimiter.

**Relationships Specific to FileRecord**

This class has no relationships.