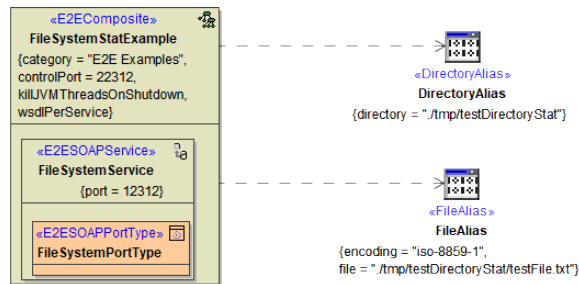# File System Components

Builder 7 The usage of file system access is represented by two aliases: a **directory alias** (having stereotype <<DirectoryAlias>>) and a **file alias** (having stereotype <<FileAlias>>). They are connected to the service composite by a dependency.

Figure: File System Component Diagram

The alias **FileAlias** represents a certain file, the alias **DirectoryAlias** represents a certain directory on the file system. On both you can use relative paths - they will be relative to the service directory on the E2E Bridge, then.

The directory alias can define a base directory and a default file encoding:

- The default file **encoding** can be overridden per adapter call using a dynamic **encoding** parameter, e.g. on File System Adapter calls reading lines, or with the Flat File Adapter.
- Regarding the base **directory**, the file name parameter will be treated as a path relative to this directory on the File System Adapter call. Jumping out of the base directory by `../../aDirectory` tricks is impossible. The base directory can be changed in the service settings on the E2E Bridge, however.

See also Directory Alias and Dynamic File Access for an example of using the directory alias with dynamic file access.

Using a file resource, neither file encoding nor file path can be overridden.

Tagged Values

<<DirectoryAlias>>

Tagged Value	Description	Allowed Values	
directory	Specify a path to a directory. This directory will be treated as a base directory. It will be either used directly (for a File System Adapter operating directly on directories), or as a base directory for a path segment given by a dynamic file **name** parameter. It is not possible to jump out of the base directory by `../../aDirectory` tricks. The base directory can only be changed in the service settings on the Bridge.	Example:	`./tmp/testDirectory`
fileEncoding	Specify the default encoding be used with the directory. This default encoding can be overwritten on adapter calls, using a dynamic **encoding** parameter, e.g. on File System Adapter calls reading lines, or with the Flat File Adapter.	Refer to Charset Definitions for possible values.	
		default	`iso-8859-1`

<<FileAlias>>

Tagged Value	Description	Allowed Values	
file	Specify name and path of the file you want to access.	Example:	`./tmp/testDirectory/testFile.txt`

encoding	Specify the encoding of the file.	Refer to Charset Definitions for possible values.	
		def ault	iso-8859-1
resource	Instead of a **file**, you can select a resource from the list of imported resources. The File System Adapter will then use the resource instead of **fi le**. The resource can be replaced changing the resource path in the **File System Adapter** settings of the xUML service. If **resource** is specified neither **file** nor **encoding** can be overridden dynamically. See Importing File Resources for more information on importing resources and xUML Service Settings for more information on changing the settings of a service.		

File System Components of Builder Version 6

Deprecated since Builder 7

The use of file system access is represented by the two aliases **DirectoryAlias** and **FileAlias**. Both have the stereotype <<FileSystemAlias>>. They are connected to the service composite by a dependency.

Figure: File System Component Diagram
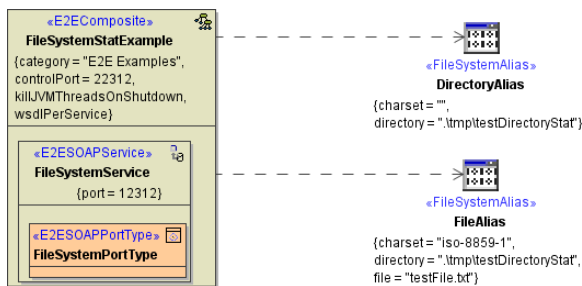
The alias **FileAlias** represents a certain file. It has three tagged values:

- **fileName:** The file name of the file you want to access.
- **directory:** The path to the file.
- **charset:** The charset definition of the file.

The alias **DirectoryAlias** represents a certain directory on the file system. Hence, only the tagged value **d irectory** has to be defined.

Tagged Values of the <<FileSystemAlias>>

In general, a <<FileSystemAlias>> can have four tagged values:

Tagged Value	Description	Allowed Values	
fileName	Specify the name of the file you want to access. Leave this tagged value empty, if you want to access a directory.	Ex am ple:	myFile. txt
directory	Specify the path to the file or directory.	Ex am ple:	.\tmp\tes tDirecto ry
charset	Specify the charset of the file. Refer to Charset Definitions for possible values. If the alias refers to a directory, specifying **charset** is superfluous.	def ault	iso-8859-1

resource	Instead of a **fileName**, you can select a resource from the list of imported resources. The File System Adapter will then use the resource instead of **directory/fileName**. The resource can be replaced changing the resource path in the **File System Adapter** settings of the xUML service. See Importing File Resources for more information on importing resources and xUML Service Settings for more information on changing the settings of a service.	