

Alfresco FAQ

Alfresco blog that bridges gaps



What affects Alfresco's "Modified Date"

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When a new node such as a new content (cm:content) or a folder (cm:folder) is created in Alfresco, a mandatory aspect called cm:auditable is added to the node. The name "auditable" may confuse some people into thinking that it has something to do with Alfresco's Auditing subsystem, but it has not.

The aspect contains following properties: cm:created, cm:creator, cm:modified, cm:modifier and cm:accessed.

cm:created

The property cm:created holds the timestamp when a node was first created. Its behavior is predictable as its value will never change throughout the node's lifecycle.

cm:modified

The property cm:modified, on the other hand, has a behavior that's much more complex and unpredictable in nature. The property holds a timestamp of most recent change made to a node. In other words, its value will be advanced when a node is modified. A change can be made by either a person or system, and to its content, metadata, ACL (permissions) or children (in case of a folder).

Property settings to prevent Modified Date from being changed

From Alfresco 3.4.7 and onwards, a property was properly introduced for users to specify whether cm:modified timestamp propagation from child to parent nodes should be respected or not:

Properties	Description
	Default is "true", meaning child operations such as add, delete, move and edit will trigger changes to cm:modified timestamp on the

system.enableTimestampPropagation

parent folder. Even if set to "true", the functionality is only supported for child associations that declare the "propagateTimestamps" element in the dictionary definition.

From Alfresco 4.2.4 and onwards, three more properties were introduced in repository.properties that can further prevent cm:modified from being changed under certain situations. This is yet to be documented by Alfresco in the Official Documentation at the time of this writing (DOCS-883):

Properties	Description
system.auditableData.preserve	The default to preserve all cm:auditable data on a node when the process is not directly driven by a user action
system.auditableData.FileFolderService	Specific control of how the FileFolderService treats cm:auditable data when performing moves. Set to "true" to prevent Auditable data such as cm:modified from being changed when nodes are moved.
system.auditableData.ACLs	Specific control of whether ACL (permissions) changes on a node trigger the cm:auditable aspect. Set to "true" to prevent Auditable data such as cm:modified from being changed when ACLs of nodes are changed.

Deprecated properties

You may have also come across the following properties in the past. These were once effective in some older Alfresco minor versions but are now deprecated. Please do not use them from 4.2.4 and onwards.

Deprecated properties	Description
system.preserve.modificationData	This is DEPRECATED now. This was introduced in MNT-8109 and used by Alfresco in some older minor versions to prevent cm:modified from changing when action move is committed on file/folder.

Behavior of Modified Date under different situations and settings

I've put together two tables showing whether cm:modified timestamp will be changed under different actions and property settings, one for contents and one for folders. The test was done on Alfresco 5.0.1.

Obviously, we are dealing with quite a number of combinations with these property settings. I am not going to table all situations here but just compare Alfresco's default behavior with an extreme situation where all settings are turned on to preserve cm:modified as much as we can. These two situations will be configured in alfresco-global.properties like so:

```
# The default Alfresco settings
```

```
system.enableTimestampPropagation=true  
system.auditableData.preserve=false  
system.auditableData.FileFolderService=false  
system.auditableData.ACLs= false
```

```
# All settings are turned on to preserve cm:modified
```

```
system.enableTimestampPropagation=false  
system.auditableData.preserve=true  
system.auditableData.FileFolderService=true  
system.auditableData.ACLs=true
```

Modified Date's behavior on contents

The following table shows cm:modified's behavior on **contents** when different actions are carried out with default setting and our setting in place:

Behavior of cm:modified on contents	Default Alfresco setting	With all preservation settings turned on
Create	Advanced	Advanced
Upload a new version	Advanced	Advanced
Edit properties (including adding tags)	Advanced	Advanced
Add aspect	Advanced	Advanced

Remove aspect	Advanced	Advanced
Move	Advanced	Preserved
Copy	Preserved	Preserved
Edit offline (check out)	Preserved	Preserved
Cancel edit offline	Preserved	Preserved
Change ACL permissions	Advanced sometimes (when a new ACL is added)	Preserved

Note: File's Modified Date will change when the file itself is moved or when its permission is changed. This can be configured to turn off from Alfresco 4.2.4 and onwards.

Modified Date's behavior on folders

The following table shows cm:modified's behavior on **folders** when different actions are carried out with default setting and our setting in place:

Behavior of cm:modified on folders	Default Alfresco setting	With all preservation settings turned on
Create	Advanced	Advanced
Edit properties (including adding tags)	Advanced	Advanced
Add aspect	Advanced	Advanced
Remove aspect	Advanced	Advanced
Move	Advanced	Preserved
Copy	Preserved	Preserved
Change ACL permissions	Advanced sometimes (when a new ACL is added)	Preserved
Add new children (content or folder)	Advanced	Preserved
Edit children (content or folder) properties	Preserved	Preserved
Upload a new child (content) version	Advanced	Preserved
Move children (content or folder) out	Advanced	Preserved
Move children (content or folder) in	Advanced	Preserved
Copy children (content or folder) out	Preserved	Preserved

Copy children (content or folder) in	Advanced	Preserved
Delete children (content or folder)	Advanced	Preserved
Edit children (content) offline	Preserved	Preserved
Cancel edit children (content) offline	Advanced	Preserved
Change children (content or folder) ACL permissions	Preserved	Preserved

NOTE: Folder's Modified Date will change when a file or sub-folder underneath is deleted, moved or copied into it. This can be configured to turn off from Alfresco 3.4.7 and onwards.

Furthermore, it will also change if the folder's own permissions change or when it is moved. This can be configured to turn off from Alfresco 4.2.4 and onwards.

In summary, as indicated by the tables that from Alfresco 4.2.4 onwards, cm:modified timestamp can be made to be changed only on the following type of actions if all preservation settings are turned on:

1. create,
2. upload a new version and
3. edit properties (including that of aspect changes).

