

**NAME**

mdoc update – **mdoc**(5) documentation format support

**SYNOPSIS**

**mdoc update** [OPTIONS]\* ASSEMBLIES

**DESCRIPTION**

**mdoc update** is responsible for the following:

- \* Creating documentation stubs based on *ASSEMBLIES*. The stub-creation process will create new **mdoc**(5) XML files for each type within *ASSEMBLIES*, and provide documentation stubs for each member of those types.
- \* Update documentation stubs based on *ASSEMBLIES*. Existing **mdoc**(5) documentation can be updated to reflect changes within *ASSEMBLIES*, such as added types and members, while preserving existing documentation.

In some limited circumstances, renames will be tracked, minimizing the documentation burden when e.g. a parameter is renamed.

**mdoc update** does not rely on documentation found within source code, though it can import XML Documentation Comments via the **-i** option.

See **mdoc**(1) and **mdoc**(5) for more information.

**OPTIONS****--delete**

Allow **mdoc update** to delete members from documentation files. The only members deleted are members which are no longer present within *ASSEMBLIES* and are not present in any other assembly versions.

If a type is no longer present, the documentation file is *not* deleted, but is instead *renamed* to have a **.remove** extension.

Version detection is done with the *//AssemblyVersion* elements; if there are no *//AssemblyVersion* elements for a given *<Type>* or *<Member/>*, then the *<Type>* will be renamed and/or the *<Member/>* will be removed.

**--exceptions[=SOURCES]**

EXPERIMENTAL. This is not 100% reliable, but is intended to serve as an aid for documentation writers.

Inspect member bodies to determine what exceptions can be generated from the member.

*SOURCES* is an optional comma-separated list of the following sources that should be searched for exceptions:

- added Only generate *<exception/>* elements for members added during the current program execution. This keeps mdoc-update from re-generating *<exception/>* elements for all members (and thus prevents re-insertion for members that had the *<exception/>* elements removed).
- all Find exceptions created in the member itself, references to members in the same assembly, and references to members in dependent assemblies.
- asm Find exceptions created in the member itself and references to members within the same assembly as the member.
- depasm Find exceptions created in the member itself and references to members within dependent

assemblies.

If *SOURCES* isn't provided (the default), then only exceptions created within the member itself will be documented.

**LIMITATIONS:** Exception searching is currently implemented by looking for the exception types that are explicitly created based on the known compile-time types. This has the following limitations:

- \* This will not find exceptions which are implicit to the IL, such as `NullReferenceException` and `IndexOutOfRangeException`.
- \* This will find exceptions which are *not* thrown, e.g.

```
public void CreateAnException ()
{
    Exception e = new Exception ();
}
```

- \* This will not "follow" delegate and interface calls:

```
public void UsesDelegates ()
{
    Func<int, int> a = x => {throw new Exception ();};
    a (4);
}
```

The function *UsesDelegates()* won't have any exceptions documented.

- \* This will find exceptions which "cannot happen", such as `ArgumentNullException` for arguments which are "known" to be non-null:

```
public void A ()
{
    B ("this parameter isn't null");
}

public void B (string s)
{
    if (s == null)
        throw new ArgumentNullException ("s");
}
```

For the above, if **--exceptions=asm** is provided then *A()* will be documented as throwing an `ArgumentNullException`, which cannot happen.

#### **-f=FLAG**

Specify a flag to alter behavior. Valid flags include:

##### **no-assembly-versions**

See the **-fno-assembly-versions** documentation, below.

##### **-fno-assembly-versions**

Do not generate */Type/AssemblyInfo/AssemblyVersion* and */Type/Members/Member/AssemblyInfo* elements.

This is useful to prevent "churn" during updates. Normally, if a type or member hasn't changed but the assembly version has changed, then all types and members will be updated to include a new *//AssemblyVersion* element, thus increasing the amount of changes that need review before

committing (assuming all changes are actually reviewed before commit).

**WARNING:** This *will* interact badly with the **--delete** option, as **--delete** uses the *//AssemblyVersion* elements to track version changes. Thus, if you have a member which is present in an early assembly version and is removed in a subsequent assembly version, such as *System.Text.UTF8Encoding.GetBytes(string)* (which is present in .NET 1.0 but not in .NET 2.0), then the member will be removed when the **--delete -fno-assembly-versions** options are specified, the member was present in an earlier version of the assembly, and the current version of the assembly does not contain the member.

Consequently, this option should *only* be specified if types and members will *never* be removed from an assembly.

**-i, --import=FILE**

Import documentation found within *FILE*.

*FILE* may contain either *csc /doc* XML or *ECMA-335* XML.

**-L, --lib=DIRECTORY**

Add *DIRECTORY* to the assembly search path, so that dependencies of *ASSEMBLIES* can be found without documenting those assemblies.

**-o, --out=DIRECTORY**

Place the generated stubs into *DIRECTORY*.

When updating documentation, *DIRECTORY* is also the source directory.

**-r=ASSEMBLY**

*ASSEMBLY* is a dependency for one of *ASSEMBLIES* which should *not* be documented but is required to process one of *ASSEMBLIES*. Add the directory containing *ASSEMBLY* to the assembly search path.

This option is equivalent to specifying **-L 'dirname ASSEMBLY'**.

**--since=VERSION**

When *updating* documentation for an assembly, if a type or member is encountered which didn't exist in the previous version of the assembly a **<since version="VERSION"/>** element will be inserted.

**--type=TYPE**

Only update documentation for the type *TYPE*.

**-h, -?, --help**

Display a help message and exit.

## SEE ALSO

mdoc(1), mdoc(5), mdoc-assemble(1), mdoc-export-html(1), mdoc-validate(1),

## MAILING LISTS

Visit <http://lists.ximian.com/mailman/listinfo/mono-docs-list> for details.

## WEB SITE

Visit <http://www.mono-project.com> for details