

HL7 Model Interchange Format Change Control

Policy and Procedures

HL7 Tooling Work Group

Version 1.2.0

Approved: April 1, 2010

This document describes the policies and procedures associated with maintaining the HL7 Model Interchange Format (MIF).

1 MIF approval status

The MIF consists of a number of schemas each with numerous elements and attributes. Within a packaged release, MIF elements shall have one of the three status types described in this section. The status of each element will be clearly signified by an annotation for the element¹. The status of a given element may change as new releases of the MIF are published.

1.1 Approved

MIF data elements shall not be considered APPROVED until successfully passing HL7 Tooling Work Group, and where appropriate, other HL7 Work Group votes to approve. Such votes will be conducted in accordance with the Work Group's *Decision Making Practices* document.

HL7-endorsed tools are expected to support APPROVED elements in order to satisfy HL7's current and near-term design and implementation requirements.

1.2 Draft

MIF data elements that are approved for inclusion but not yet tested shall be clearly marked as 'DRAFT' within the MIF documentation. DRAFT components may be implemented for testing, and may be subject to change prior to Work Group approval.

DRAFT MIF material shall not be implemented within tools endorsed by the Tooling Work Group and released for use within the HL7 membership as "stable" tools, though DRAFT MIF may be included in Alpha or Beta-release tools with the prior approval of the Tooling Work Group.

All tools shall be capable of successfully parsing, validating, and round-tripping without data-loss DRAFT content even if they do not otherwise expose or manipulate it.

Note: Because the MIF schemas make use of inheritance as part of their definition, it is possible that an inherited element may be considered APPROVED for some usages, but DRAFT for other usages. This will be managed by including comments explaining the differences in usage.

¹ In practice, flags for DRAFT and DEPRECATED will be used and the absence of a flag will signify APPROVED.

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1.3 *Deprecated*

MIF data elements that have previously been approved but for which support has been withdrawn shall be marked as DEPRECATED. Any DEPRECATED element must also have recorded:

- the date of deprecation
- an explanation of the reason for deprecation
- the mechanism intended to replace the function previously handled by this element

DEPRECATED elements may be removed from the MIF schema 2 years after the date of deprecation. Prior to that time, tools must be capable of successfully parsing, validating, and round-tripping without data-loss DEPRECATED content even if they do not otherwise expose or manipulate it.

2 MIF versioning, naming and publishing

The MIF shall be versioned according to the principles documented in the Tooling Work Group's *HL7 Tools Release Practice on GForge* document. Part of that document has been copied over for application to MIF versioning and naming within this section.

2.1 *MIF versioning*

Once promoted as a major release, the only changes made to the main branch of the MIF are those needed to fix bugs. New development occurs in 'branches', with multiple branches possible (e.g. one branch for near-term functionality and another branch for major re-writes). MIF components may be released from these branches as "beta" releases, indicating that the MIF is ready for preliminary or test usage, but has not yet undergone full testing. When a "beta" has undergone full testing, it can then be migrated to the production MIF branch, superseding the previous main branch, and forming the basis for subsequent bug patch releases. This is illustrated in Figure 1.

Note that at any given point in time there may be several fix-packs against previous MIF releases as well as the next release itself. A key part of the branch release process is to ensure that the different types of releases are clearly distinguished, and that users are guided to the appropriate release. For example, most users should be pointed at the most recent release on the main code branch. Only the "beta" tester should be guided to one of the other branches.

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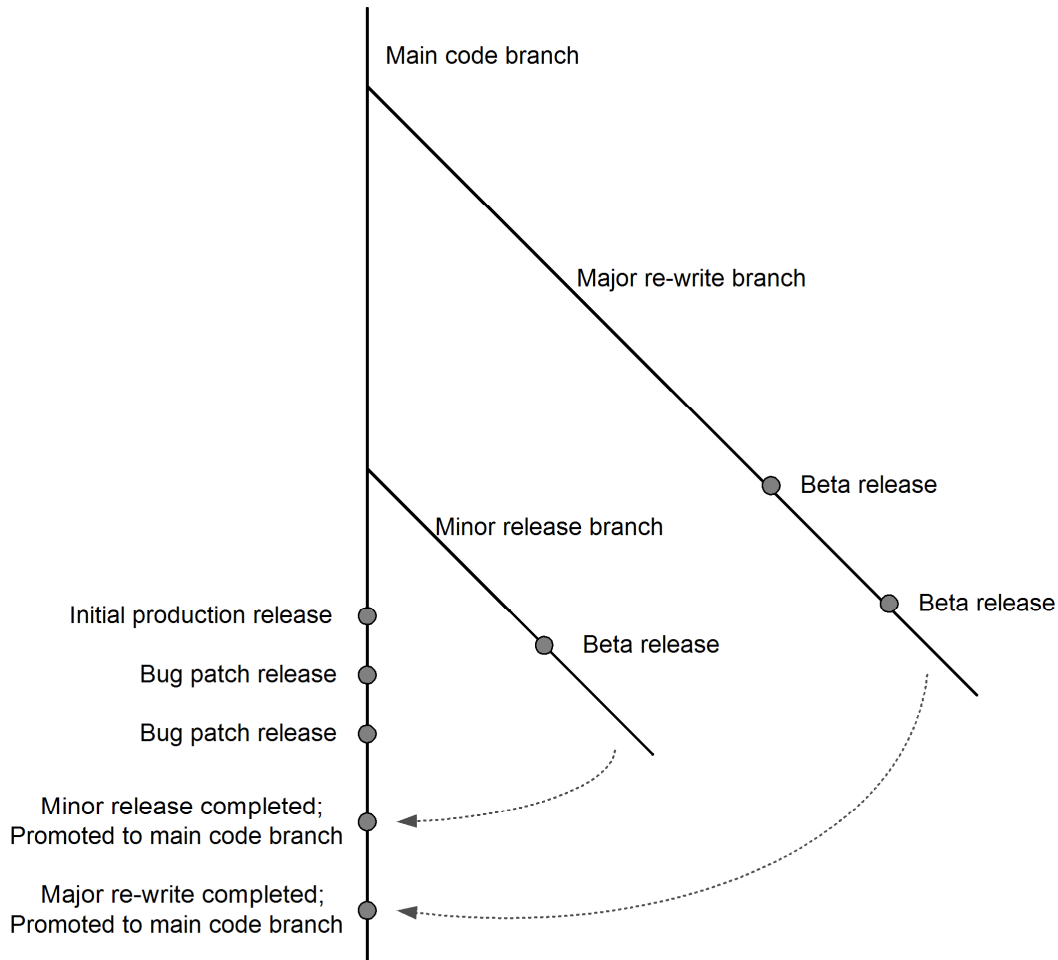


Figure 1: MIF release life cycle - *Branching Approach*

2.2 MIF naming

MIF file naming convention follows the GNU-style names with a project stem prefix and A.B.C.D numbering format. The MIF name format is **hl7_mifschemas-[A].[B].[C].[D]** or **epl_mifschemas-[A].[B].[C].[D]**. The meaning of the letters is as follows:

- Level A represents a massive revision to MIF layout. This level is not expected to change in the future. (Only reason to change this would be a decision to move to a completely different XML syntax.)
- Level B represents a shift in capability or function, such as the inclusion of significant new business areas or changes to how existing areas functions

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- Level C represents minor changes and additions that still impact interoperability
- Level D represents changes to documentation or bug fixes that would not impact any implementations (either because the existing bug would have prevented implementation or because the change is such that it won't break software that would have been written against the old structure.

Changes to levels A will result in a new XML namespace. Changes to levels A, B and C will result in a change to the declared *schemaVersion* attribute. Level D will not appear in MIF instances. It will only ever appear to distinguish published releases on the HL7 GForge site.

The "hl7" prefixed release contains the full set of MIF schema content. The "epl" prefixed release contains the schema structures but with all documentation (excluding notations of deprecation) removed. This reduced version of the schemas is released under the Eclipse Public License and may be distributed in tools made available to non-HL7 members.

The MIF release in current use by a particular version of each of HL7 tools shall be clearly noted. The MIF release in current use by versions of Open Health Tools applications shall also be clearly noted.

2.3 MIF publication

The MIF will be available as packaged releases (including historical releases) on the HL7 GForge site and will be appropriately tagged within the source control system. This site is accessible to all HL7 members.

3 MIF change proposals

MIF change proposals for DRAFT (for testing) or APPROVAL shall be submitted for acceptance via the HL7 GForge and in accordance with Work Group decision-making practice policies.

Defect reports (areas where the MIF is inconsistent or does not reflect existing methodology) may also be posted to the HL7 GForge.

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Each change request should include the following information:

- Type (bug, feature request or support request – determined by tracker used)
- Found in Release (Identifies the most recent MIF schema release e.g. v2.1.0 contains the issue)
- Model Area (Core, Datatype, Dynamic, Interface, Markup, Static, Vocabulary, and Other; See Figure 2 for more details)
- Priority (Very Low, Low, Medium, Medium High, High)
- Additional Approval Required (None, Publishing, MnM, Vocabulary – used if review by other committees is required)
- Description
- The requestor (log-in ID)
- Optionally, the "Fixed In Release" to identify the desired release for the change to be addressed

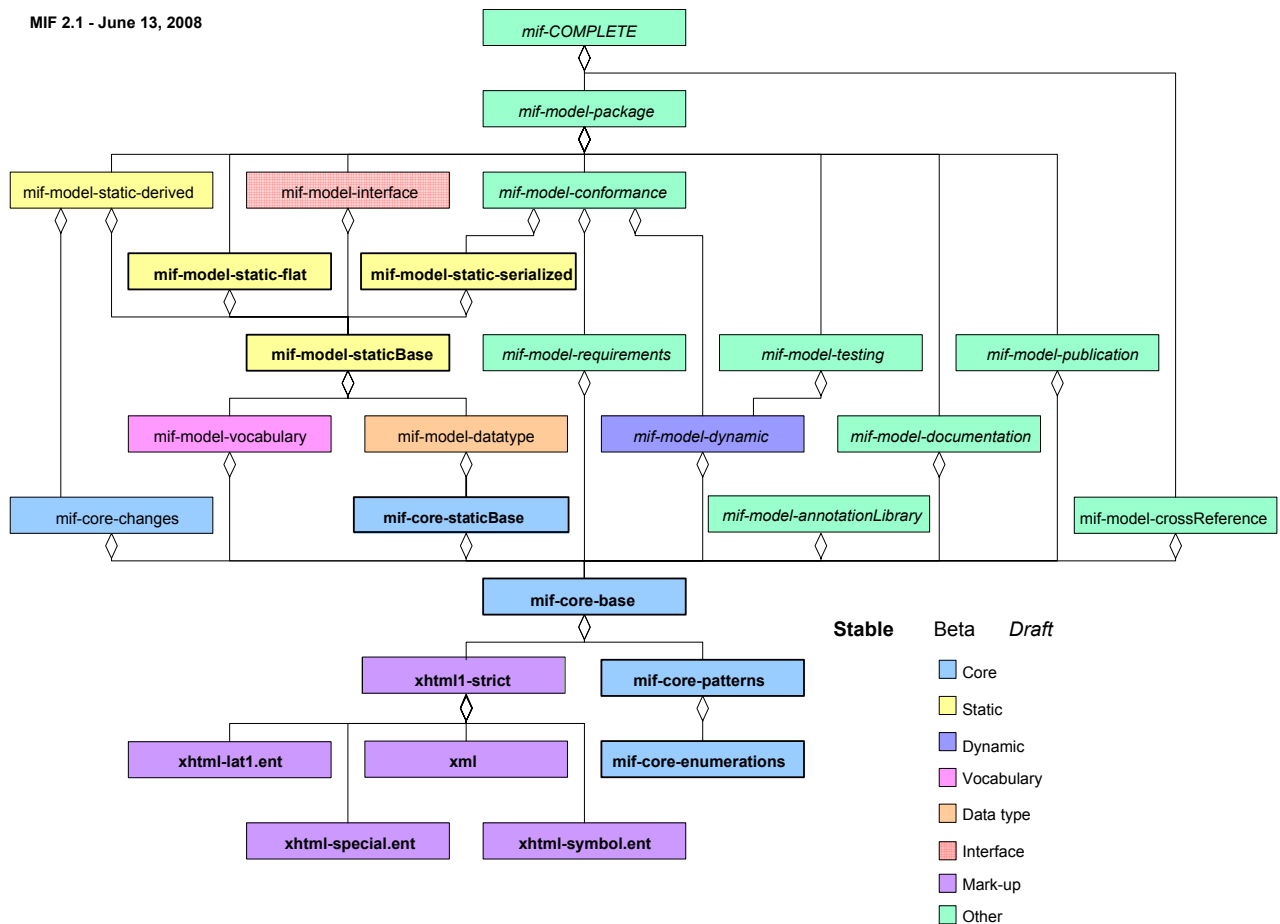


Figure 2: Hierarchy of MIF 2.1 Schemas

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Following resolution, the Tooling Work Group shall add the following information in association with each change request:

- Resolution (None, Accepted, Rejected, Postponed)
- Additional Approval Received (None, Publishing, MnM, Vocabulary)
- Fixed In Release (The MIF release for which the change is planned or has been applied, presuming the change is accepted)
- Status (remains "Open" until change is applied. Only set to "Deleted" if determination made that the submission was in error. E.g. duplicate)²
- Impact assessment (optional - captured as a comment)

In reviewing the MIF change requests, the Tooling Work Group might consult other HL7 Work Groups such as Vocabulary, Publishing and/or Modeling and Methodology (MnM) for their feedback on the proposed change request. This will be tracked using the "Additional Approval Required" and "Additional Approval Received" fields.

Appendix A describes how MIF change request *Status* is documented using the HL7 GForge site.

² Initial *Status* is always "Open"

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A. Managing change requests in the HL7 GForge

Change request status is managed using two separate attributes: State and Resolution. Allowed combinations and interpretations are as follows

Status	Resolution	Interpretation
Open	None	The proposal or defect has not yet had a decision made about it.
Open	Accepted	The proposal or defect has been discussed and approved by a vote of the Tooling TC but not yet implemented in a committed release of the MIF.
Open	Postponed	Decision on resolution of the item has been postponed. Target date or issues to be resolved prior to reconsideration shall be tracked in a comment made at the time of posting.
Closed	Accepted	The change has been made and committed into a published MIF release. The change implementation date and MIF release shall be documented.
Closed	Rejected	The Tooling Work Group has voted to reject the proposed change. Details of the reason for the rejection shall be captured as a comment at the time this status is documented.
Deleted	None	Used when duplicate, "test" or other withdrawn (prior to resolution) proposals are posted.

Note: "Out of Date" is an available resolution in the HL7 GForge drop-down list but will not be used for tracking MIF change requests.

In addition to the HL7 GForge tracking logs, the following actions shall be used to link change proposals to MIF releases:

Source Control

When committing MIF changes associated with a particular proposal or defect, the number associated with the change, and ideally a hyperlink should be included as part of the description of the change

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Change Log

A change log shall be maintained for the MIF which identifies the changes associated with each version of the MIF. Each change associated with a change log item will identify the number of the item.

Inter-version Transform

Each new release of the MIF must be accompanied by bi-directional transform for converting instances valid against the immediately preceding version of the MIF to the new release of the MIF and vice versa. The transform must be published as part of the HL7 V3 Generator tool.