

5.7.1.1 Identifying Changes

Given the robust versioning mechanism of SNOMED CT and the machine processable distribution format, changes made in a new version of a SNOMED CT edition are easy to identify automatically. Extension producers should ensure that they have appropriate mechanisms in place to identify changes in any edition on which their extension is dependent. To identify changes in an edition, the following release artifacts can be used:

- The [delta files](#) generated from the new release
- The [snapshot files](#) from the previous release

Please note: Delta files have been removed from the SNOMED International release package, but a Delta Generation Tool is available for those who need it. The Delta Generation Tool allows users to create their own Delta between two fixed release dates - you can find it here: <https://github.com/IHTSDO/delta-generator-tool/releases>.

These two release artifacts enable changes to be identified, and the nature of those changes understood. The delta release files provide information about all components or reference set members which have changed since the previous release. By comparing this information to the corresponding components or reference set members in the snapshot files from the previous release, stakeholders can understand which of these changes represent additions of new components or reference set members, and which represent new versions of existing components or reference set members. For more information on the different release types please refer to the [release file specification](#).

The table below shows how the values for the *active* attribute in the previous snapshot and current delta can be compared to help to determine the types of change in the release.

		Row in the DELTA view of the CURRENT release		
		active = 0	active = 1	row not present
Row in the SNAPSHOT view of the PREVIOUS release	active = 0	-	Component / member REACTIVATED	NO CHANGE
	active = 1	Component / member INACTIVATED	Component / member CHANGED	NO CHANGE
	row not present	-	Component / member ADDED	-

The types of changes that components and reference set members can undergo are inactivate, reactivate, change or add. For example, if a row (with a given *id*) was not present in the snapshot from the previous release, and then was present (with the same *id*) in the current delta release with an active value of 1, then this means that a new component or reference set member has been added. If a row (with a given *id*) had a value of 1 in the previous snapshot, and now has a value of 1 in the current delta, then this means that the component or reference set member has been changed.



Please note, SNOMED International strongly recommends that extension producers perform regular alignment to the International Edition, without skipping any version. If, for some reason, an extension is not updated to align with a new version of the International Edition, additional maintenance tasks will be required. For example, the extension producer will need to generate a modified 'delta view', which contains all changes made since the last version of the International Edition that was reconciled with the extension. All components and reference set members with an effectiveTime that is more recent than the last reconciled version of the International Edition will need to be considered in this 'delta view'.