TIBCO Foresight® EDISIM®

Comparator User's Guide

Version 6.20.0

May 2021

Contents

1 Introduction

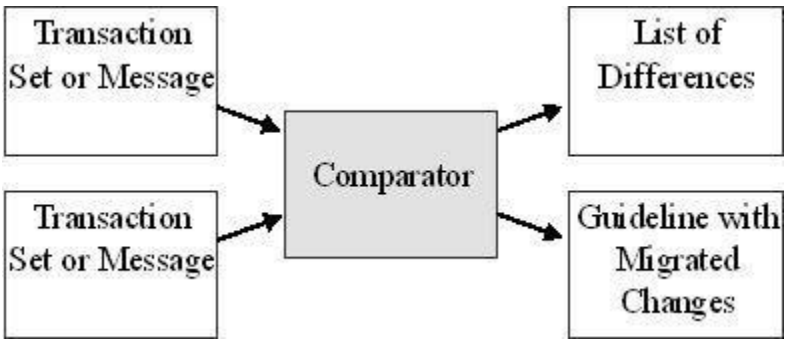
Where Comparator Fits

TIBCO Foresight® EDISIM® Comparator lets you compare transaction sets or messages, and optionally migrate user-created changes between them.

In Comparator, the transaction sets or messages may be:

- **In two different published standards**. For example, what is the difference between transaction set 810 in X12-4010 and X12-5010? This information may be useful if your company is doing a version migration. It also can be useful for trading partners that use different versions than you currently use. Compare the two standard versions and see where the differences lie.
- In two different guidelines or MIGs. For example, can I use Acme's ORDERS with my new partner, Kaver Corp.? Define the guidelines or MIGs in Standards Editor, and then use Comparator to check the two against each other. You might then decide to check Kaver Corp.'s guideline or MIG against those of other trading partners and find the closest match. Compare new specifications to previous specifications and see where the differences lie, so that you can adjust your applications or mapper.
- **In a guideline or MIG and a published standard.** For example, how does our transaction set 875, which is based on UCS-23, differ from the one we will soon be using, UCS-33? Compare your current 875 against the 875 in the published standard UCS-33.

This information will be useful in house, and you can send it to your trading partners when you alert them to the changes that will be coming. If you are the recipient of paper guidelines or MIGs, you can define your partners' guideline or MIG in Standards Editor (or, if they have EDISIM®, they can send you a SEF file to import). You can then run comparisons between the guideline or MIG and the new published standard.


Transaction Set or Message
Transaction Set or Message
Comparator
List of Differences
Guideline with Migrated Changes

Attributes Checked by Comparator

Attributes Checked by Comparator

	Set/ Msg	Loop/ Group	Seg.	Comp.	Elem.	UDT Codes	Dict. Codes
requirement/ status	-	x	x	x	x	-	-
position	-	x	x	x	x	-	-
used	-	-	-	-	-	x	**
max use/repeat	-	x	x	-	-	-	-
table	-	x	x	-	-	-	-
name	x	D94A+	x	x	x	-	-
group number	-	x	-	-	-	-	-
loop ID	-	x	-	-	-	-	-
min length	-	-	-	-	x	-	-
max length	-	-	-	-	x	-	-
user attribute	-	x	x	x	x	-	-
type	-	-	-	-	x	-	-
level notes	x	x	x	x	x	x	x
set note	-	-	x	-	-	-	-
purpose	x	x	x	x	-	-	-
set comment	-	-	x	-	-	-	-
X12 syntax rules	-	-	-	-	-	-	-
EDIFACT dependency notes	-	-	-	-	-	-	-
functional grp.	x	-	-	-	-	-	-
general note	-	-	x	-	-	-	-
comment	-	-	x	x	x	-	-
semantic notes	-	-	x	x	x	-	-
business rules	-	-	x	x	x	-	-
descriptions	-	-	-	-	x	x	x
element repeat	-	-	-	-	-	-	-
code sets	-	-	-	-	-	x	-
code partitions (X12)	-	-	-	-	-	x	x
appl. values	-	-	-	-	x	-	-

** Dictionary codes added by user to base can be seen and migrated.

Currently, Comparator will not report on or migrate changes to:

- syntax rules or dependency notes ("if you use element *x* you must also use element *y*," etc.)
- element repeat counts

Attributes Migrated by Comparator

After a comparison, you can print a report showing the differences, save your comparison settings to a file for re-use later, or migrate differences that are due to user changes.

Attributes Migrated by Comparator

	Set/ Msg	Loop/ Group	Seg.	Comp.	Elem.	UDT Codes	Dict. Codes
requirement/ status	-	x	x	x	x	-	-
position	-	-	-	-	-	-	-
used	-	-	-	-	-	x	**
max use/repeat	-	x	x	-	-	-	-
table	-	-	-	-	-	-	-
name	x	x	x	x	x	-	-
group number	-	-	-	-	-	-	-
loop ID	-	x	-	-	-	-	-
min length	-	-	-	-	x	-	-
max length	-	-	-	-	x	-	-
user attribute	-	x	x	x	x	-	-
type	-	-	-	-	x	-	-
level notes	x	x	x	x	x	x	x
set note	-	-	-	-	-	-	-
purpose	x	x	x	x	-	-	-
set comment	-	-	-	-	-	-	-
X12 syntax rules	-	-	-	-	-	-	-
EDIFACT dependency notes	-	-	-	-	-	-	-
functional grp.	x	-	-	-	-	-	-
general note	-	-	x	-	x	-	-
comment	-	-	x	x	x	-	-
semantic notes	-	-	x	x	x	-	-
business rules	-	-	x	x	x	-	-
element repeat	-	-	-	-	-	-	-
descriptions	-	-	-	-	x	x	x
code sets	-	-	-	-	-	x	-
code explan.	-	-	-	-	-	-	x
code partitions (X12)	-	-	-	-	-	x	-
appl. values	-	-	-	-	x	-	-

** Dictionary codes added by user to base can be seen and migrated.

System Requirements

Please see the TIB_fsp_edisim_<n.n.n>_readme.txt file for EDISIM for applicable system requirements.

Installing Comparator

You install Comparator while installing the other EDISIM components. Please see the Introduction to EDISIM manual for details.

Starting Comparator

You have several ways to start Comparator:

- If using the EDISIM Application Manager, click the Comparator icon: 

- Otherwise, choose **Start | Programs | *<TIBCO_HOME>* | EDISIM | Comparator**.
- Use the Comparator toolbar button from another EDISIM module: 
- (Standalone installation only) From **Windows Explorer**, double-click on **FSCompar.exe** in **EDISIM's Bin** directory.

A quick tour of Comparator

Before starting the quick tour:

- Go into Standards Editor and create two "test" guidelines or MIGs that contain the same transaction set or message. To keep this "quick tour" quick, pick a very short document such as a 997 transaction or a CALINF message. Make one of them a slightly newer version than the other. Add level notes to the older one. Make a few other changes to each of them, including some code changes.
- Now, begin your tour by starting Comparator. You will see the three-part main screen of Comparator.
- If Comparator does not fill the full screen, maximize as described in Adjusting the Screen on page 15.

Choosing what Documents to Compare

Choose **File | New**.

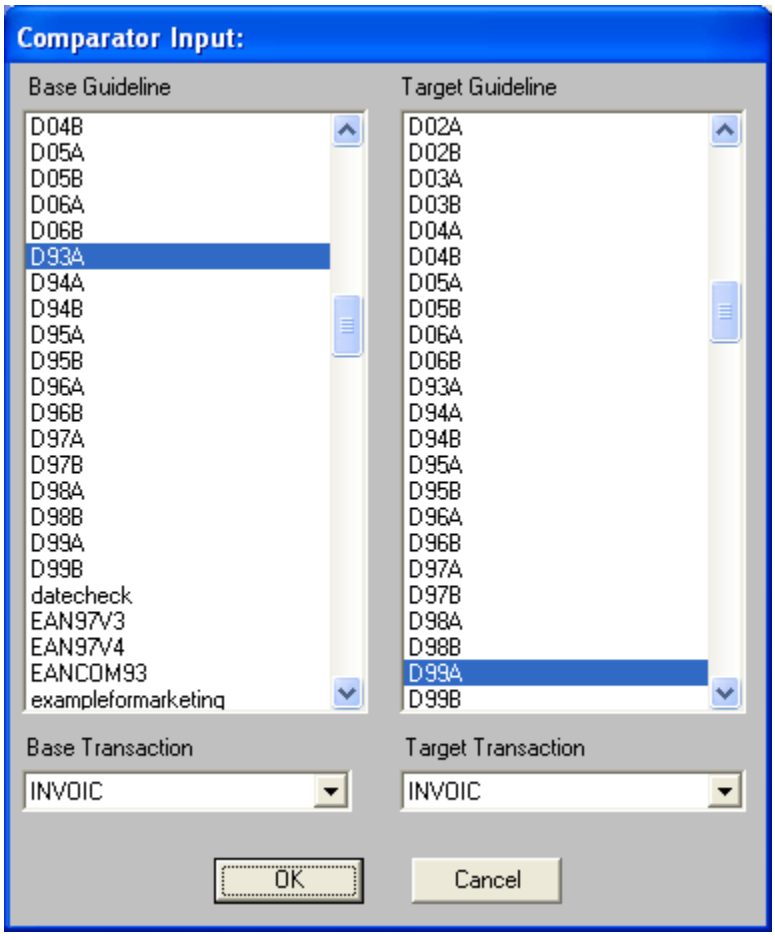
You will see the Comparator Input box, which lets you pick the transaction sets or messages to be compared.

Here are some suggestions about what you can compare for this tutorial:

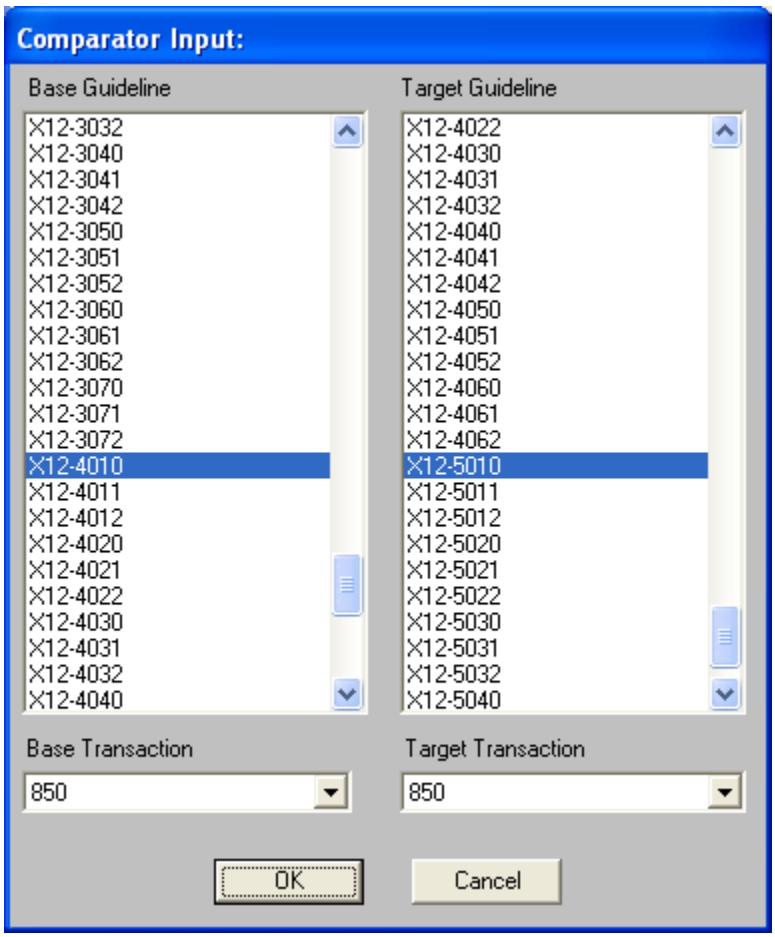
- If you defined two test guidelines or MIGs as suggested above, you could use the older one for the base and the newer one as the target.
- Otherwise, you can compare a guideline or MIG to the published standard on which it is based, or to the next newer published standard.
- If you have no guidelines or MIGs, compare two similar standards such as X12-3040 and X12-3042, or UN-912 and UN-921.

On the left, you will pick the "base" and on the right you will pick the "target." The base document is the "from" document and the target document is the "to" document. Comparator will tell you all the changes that would be needed to get the "from" or base to look like the "to" or target. (See page 22 for more details about base and target.)

Choosing EDIFACT standards



Choosing X12 standards



In this box, you need to choose:

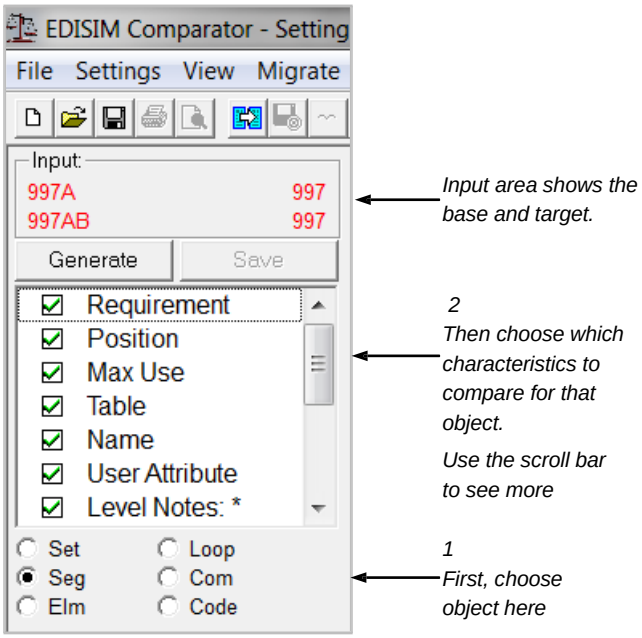
- **The base guideline, MIG, or standard.** Scroll through the "Base Guideline" list on the left until you see the guideline, MIG, or standard that is to serve as the base. Click on it.
- **The base transaction set or message.** Click on the arrow in the Base Transaction area. You will see a list of all transaction sets or messages in the chosen guideline, MIG, or standard. Click on the one to be used in the comparison.
- **The target guideline, MIG, or standard.** Choose a target guideline, MIG, or standard from the Target Guideline list.
- **The target transaction set or message.** Comparator assumes that you will use the same transaction set or message that you chose for the base, but they need not be the same.

When finished with all four choices, click **OK**.

You now return to the main screen and see that the Input box at the top left shows the settings for base and target.

Choosing what Characteristics to Compare for each type of Object

The area on the left lets you select which characteristics will be compared for each type of object.



If you click on the **Set** button, you will see the characteristics that can be compared for the transaction set or message as a whole. If you click on **Seg**, you will see the segment characteristics that can be compared. Notice the scroll bar that appears when needed.

Click on **Code** and clear the **Description** check box (to save time during comparison). A mouse click toggles the check marks on and off.

Choosing Global Options

Just below the object radio buttons, you will see six global options for the comparison. Use a mouse click to select **Migration**, **Drop Unchanged**, **UDT Codes**, and **Dictionary Codes**. Clear the other selections.

The Migration check box lets you migrate differences caused by user changes to the target transaction set or message. When you select the Migrate check box, only migratable selections will be visible in the object options area. This is Comparator's way of showing you what can be migrated.

Performing the Comparison

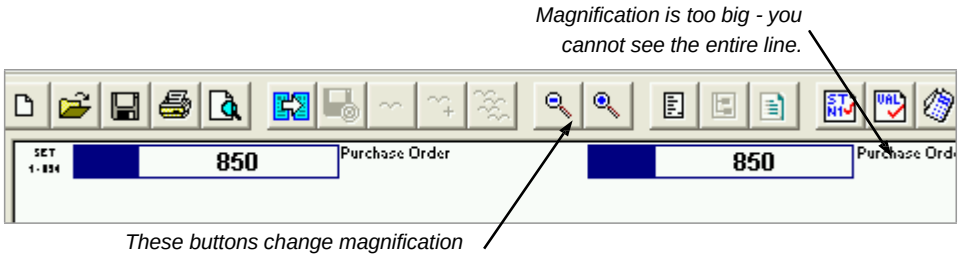
Since we have provided all necessary information, we can go ahead and generate the comparison. Click on the **Generate** button in the upper left.

You will see a report on what is being compared. Typical time for the comparison to complete: 1-5 minutes, depending on the document size, what characteristics you are comparing, and the power of your PC.

When finished, you will see a line with the base and target, and blue boxes.

Viewing the Differences

First, adjust the size of the display so you can see the entire SET line at the upper right:



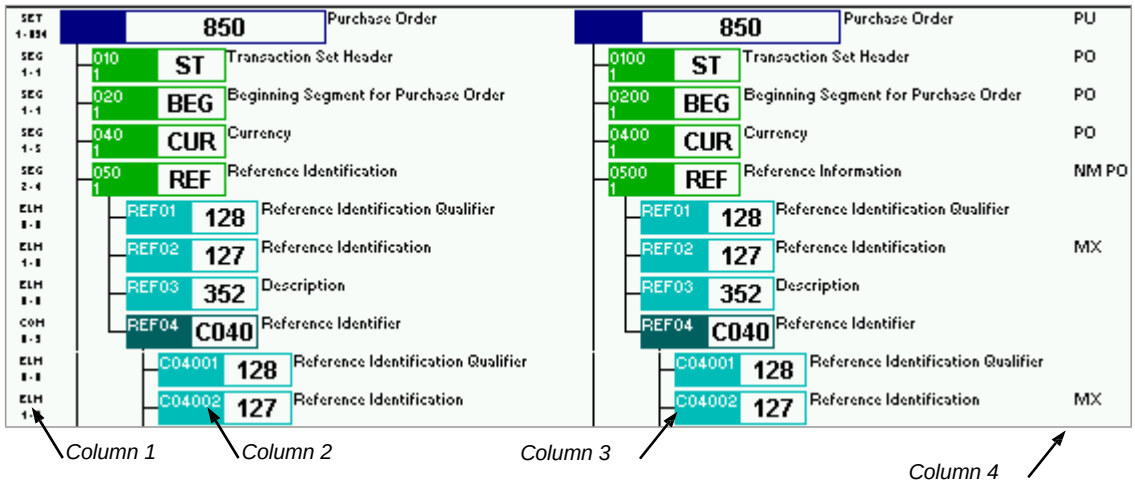
Click on the SET line. Now, repeatedly click on the toolbar button that looks like a magnifying glass with a minus inside, until all of the SET line shows on the screen, like this:

You should see two rectangles, with the transaction set or message names to the right of each.

Double-click on the SET line to expose the list of segments and loops or groups. In Comparator, if you double-click on an object, it exposes the list of its subordinates. If you double-click again, the list of subordinates disappears.

Double-click on a segment to see its elements. Double-click on a loop or group (usually blue), then double-click on one of its segments, and then try to find an element with changed code values.

Your screen might look something like this:



Column 1 This column tells the type of object, and shows whether there are any changes here between the base and the target. For example, segment REF says:

SEG
2-4

This means that the item is a segment, and that there are 2changes to the REF. There are 4 changes to the subordinates of the REF. These changes can be to composites, elements, or codes in the REF.

Column 2 This column shows a graphical picture of the pieces of the base document. Each item's position appears in the colored rectangles.

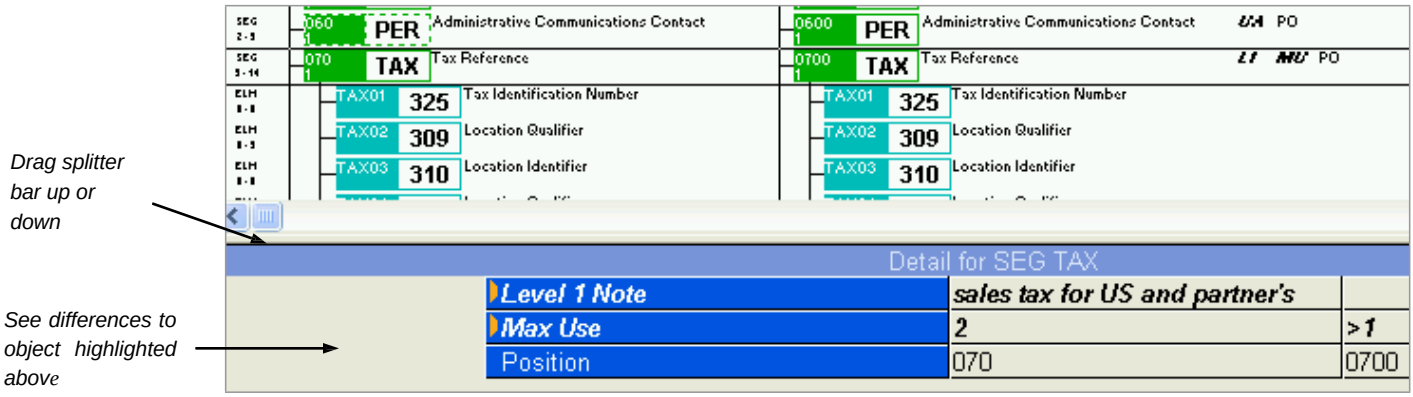
Column 3 This column shows a graphical picture of the target document. Each item's position appears in the colored rectangles.

Column 4 This column shows an abbreviation for the type of change to this object. Example: The ST has **PO** in the last column. **PO** indicates that the position number of the ST differs between the base and the target.

How can I See the Changes?

Highlight an object (other than a code) that has a change - one that has **1** or more for its first number in the first column. Now look at the bottom of the screen. All differences to this object between the base and the target will show there.

If nothing shows at the bottom of the screen, drag up the horizontal splitter bar about 2 inches as described on page 15.



Now highlight an object where you put a note (its right-hand column will show L1, L2, etc.). Look at the note below. Is the entire note showing? If not, double-click on it in the Detail pane at the bottom, so that you can see all of it in a pop-up box. Click **Cancel**.

You can double-click on text items in the Detail pane to see them in the Text Viewer box.

How can I Migrate Changes?

Be sure that the highlighted item has a note or other user change in the base guideline or MIG. The change will be showing at the bottom of the screen in ***bold italic***.

Quick migration: Click on the user change, and then click the **Migrate** button. The change is copied to the target and then it disappears from the bottom of the screen (since there is no longer a difference).

Customized migration: If the note is long and you want to see the rest of it, or if you want to edit the note that gets migrated, do NOT press the Migrate button. Instead, double-click on the note itself. A pop-up Text Viewer box lets you edit the base note. When you press Migrate in the Text Viewer box, the edited note will migrate to the target. You have not changed the note for the base. If you edit a note or other text item before migrating it, the notes will still be flagged as different.

Looking at Codes

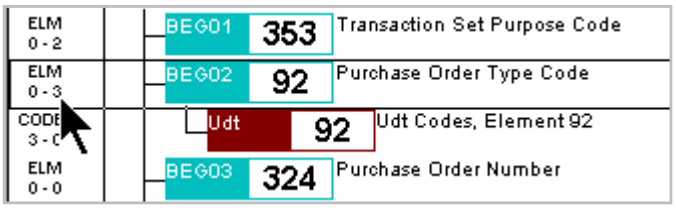
We compared both kinds of codes:

UDT Codes customized lists of codes, or *code sets*, in the transaction set or message. These can exist in guidelines or MIGs, but not in published standards. **Important:** This option causes Comparator to check only those codes that are in a code set in the base.

Dictionary Codes codes as they came from the published standard and appear in the element dictionary. They appear below the transaction and message changes.

To see some UDT codes:

1. Double-click on an **element** that has a change to its subordinates, like this one:



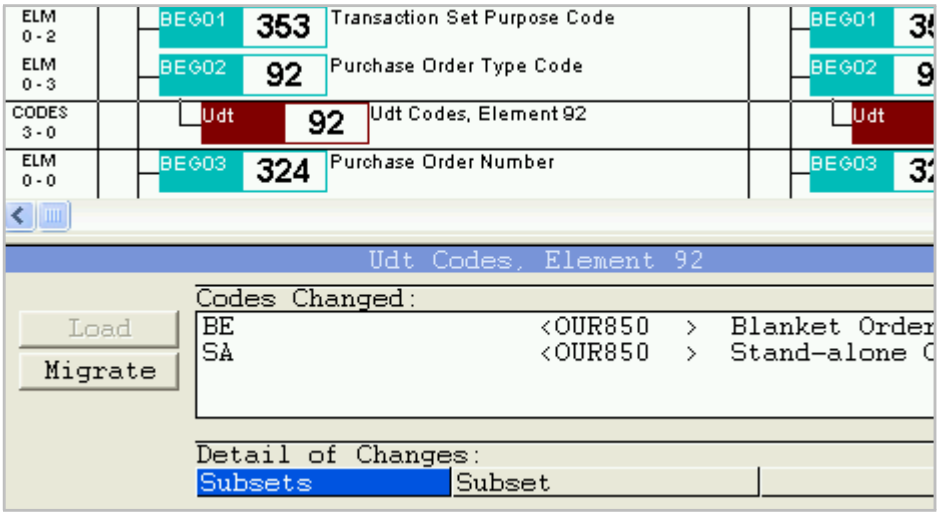
   A line representing its codes will appear.

   The codes themselves do not appear in this area - to keep the display from becoming too long. Instead, you can view them at the bottom of the screen.

2. Highlight the CODES line.

3. Press the **Load** button at the bottom of the screen. The window next to the load button now contains all codes that differ between the base and the target.

4. Pull the splitter bars up or to the left to see the entire codes display, which might look something like this:



Inside the angle brackets, you will see one of these:

- The name of the base (if the code is in a code set only in the base);
- The name of the target (if the code is in a code set only in the target),
- Or the word **modified**.

If you can find one that says <modified>, click on it and the nature of the change will appear in the Detail of Changes area below the codes.

To migrate the entire code set including level notes, click **Migrate**.

After you Finish

If you migrated anything, you will need to save your target. Choose **File | Save Target | OK**.

Choose **File | Exit**. Answer **No** to the question about saving changes to the settings.

2 Basic Skills

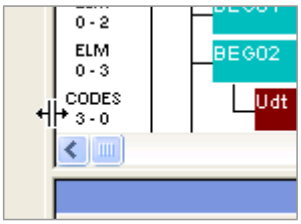
Prerequisites

This section assumes that you have completed A quick tour of Comparator that starts on page 5.

Adjusting the Screen

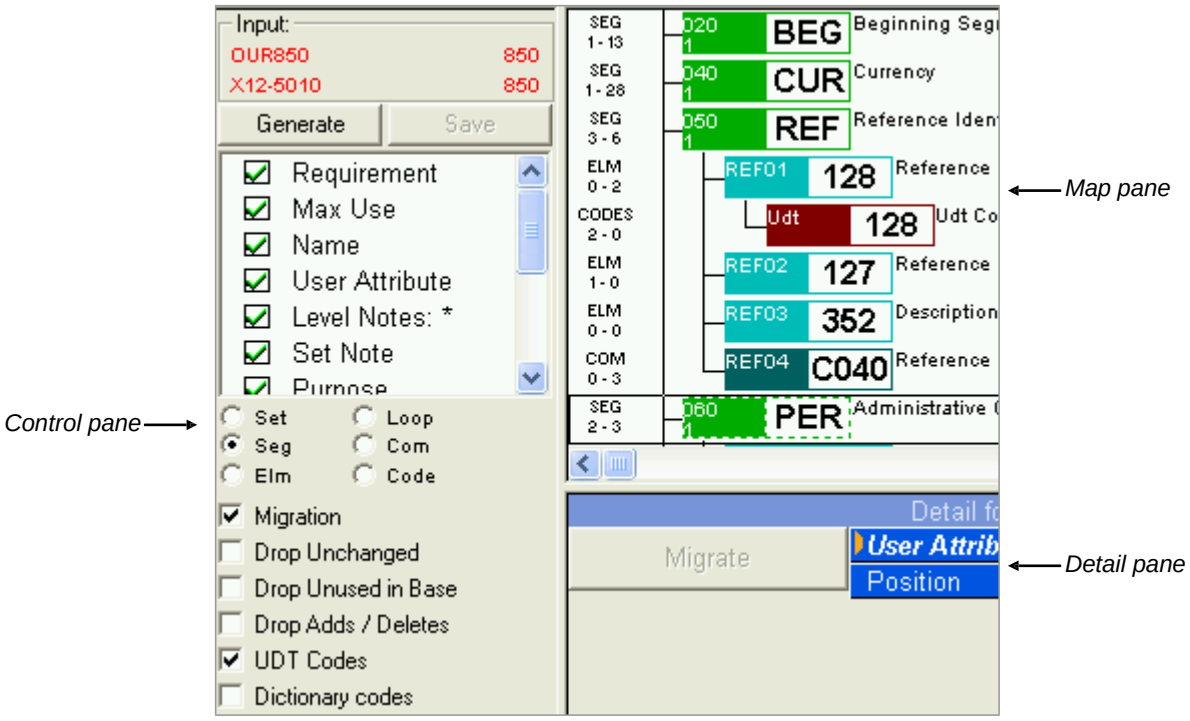
To maximize the screen, click the maximize button in the upper right corner of the Comparator window.

To move an inside splitter bar (which separates panes), move the mouse cursor across it until it turns into a double-arrow, then hold down the left mouse button and drag.



After generating a comparison, you will probably want to move the vertical scroll bar all the way to the left so that you have more room to view the results. You will probably want to adjust the horizontal scroll bar too, so that you can see all of the changes in the bottom right pane.

Parts of the Comparator Window



The left side of the Comparator screen is the Control pane. It shows what standards and messages/transaction sets are being compared, what characteristics of each type of object are being compared, and some options.

The top right area is the Map pane. It is initially empty. After a comparison, It shows objects in the transaction sets or messages. When you highlight an object in the Map pane, its changes show in the Detail pane at the bottom. Double-click on an object in the Map pane to expand or collapse its list of subordinates. To display all objects, choose **Settings | Expand All Nodes**.

The bottom right area is the Detail pane. It is initially empty. After a comparison, it shows the highlighted object's changes between the base and the target. If this pane does not appear, drag up the horizontal splitter bar up about two inches.

Which pane is active? The name of the active pane appears on the status bar in the lower right corner of the screen.

For more details about interpreting what is in the Map pane and the Detail pane, please see Seeing the Differences on page 36.

Navigating Menus and Screens

Mouse use

Click Selects an item or area.

Double-click Double-clicking on an object in the Map pane acts as a toggle, expanding or collapsing its list of subordinates. If you double-click in the object options area, all check boxes will clear.

Shift+Double-click
Selects all check boxes in the object options area.

Scroll Bar If you cannot see everything in the current pane, Comparator provides a vertical or horizontal scroll bar.

Keyboard

Alt+key To choose something, hold down *Alt* and press the underlined key.

Esc Cancels the current activity.

Enter Executes the selected choices. When highlighting an item in the Map pane, *Enter* expands or contracts its list of subordinates.

Tab Moves to the next area or button in a box.

Shift+Tab Moves to the previous area or button.

+ The plus key on the numeric keyboard increases the zoom if the Map pane is active.

- The minus key on the numeric keyboard decreases the zoom if the Map pane is active.

Pg Up Moves up one screen if the Map pane is active.

Pg Dn Moves down one screen if the Map pane is active.

Ctrl+**c** Copies highlighted text to the clipboard.

Ctrl+**v** Pastes clipboard text into current location. Useful in the Text Viewer box.

Toolbar

Rest your mouse cursor on a button to see a tooltip.

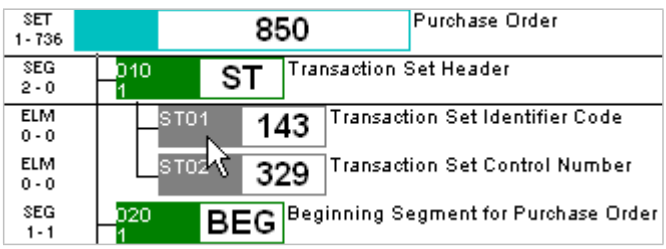
Button	What it Does ...
	**File | New**. Returns default settings and then brings up the Comparator Input box so that you can select a new base and target.
	**File | Open**. Lets you choose a file containing previously saved Comparator settings for base, target, and options.
	**File | Save**. Saves the current settings to a file for future use. If you have not saved the settings, this button acts like File | Save As and asks you to choose a filename.
	**File | Print**. Opens the Print dialog box so that you can print the contents of the Map pane.
	**File | Print Preview**
	**Settings | Input.** Clears the Map and Detail panes and opens the Comparator Input dialog box where you select the base and target. Option settings are unchanged.
	**File | Save Target**
	**Migrate | Current Only.** Migrates user changes to the currently-highlighted object. Available when you have highlighted an item in the Map pane while in graphics view. The Migrate check box must be selected.
	**Migrate | Current and Subordinates.** Migrates user changes to the currently-highlighted object and its subordinates. Available when you have highlighted an item in the Map pane while in graphics view. The Migrate check box must be selected.
	**Migrate | All.** Available when you have clicked on an item in the Map pane while in graphics view. The Migrate check box must be selected.
	**Zoom out.** Reduces the magnification so that more information shows in the Map pane. You must be highlighting something in the Map pane for this to be active. The minus key on the numeric keypad has the same effect.
	**Zoom in.** Enlarges the magnification so that objects appear larger in the Map pane. You must be highlighting something in the Map pane for this to be active. The plus key on the numeric keypad has the same effect.
	**Text view.** Displays, in plain text, a report of differences between the base and target. A second click displays more details in the text report. This button is faded if the report is already in text mode.

Button	What it Does ...
	**Graphical view.** Displays the report in graphics mode. This button is faded if the report is already in graphics mode.
	**Report view.** Displays the report in a table that contains all details of the changes. This button is faded if the report is already in report view.
	**Open EDISIM Analyzer** without closing Comparator.
	**Open EDISIM Validator** without closing Comparator.
	**Open EDISIM Document Builder** without closing Comparator.
	**Open EDISIM Standards Editor** without closing Comparator. Available when Migrate is off.
	**Open EDISIM Standards Reference** without closing Comparator.
	**Open EDISIM Test Data Generator** without closing Comparator.
	**Help**
	**File | Exit**. Closes Comparator, after prompting you about saving the current settings. If you migrated, you will be prompted about saving the target.

Reference Designators

Throughout EDISIM, you will see items referred to by their current position as well as by their ID. For example, the second element in the ST segment is the ST02. It is an element 143. The fourth subelement in composite C001 is C00104.

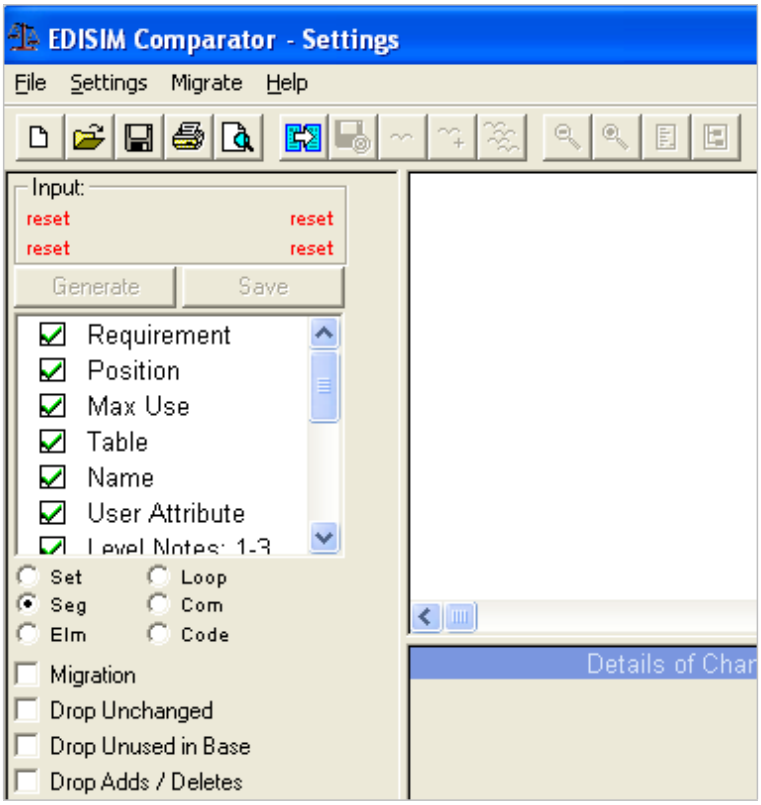
These *reference designators* show the name of the parent item followed by a sequence number. You can see reference designators for elements in the Map pane.



3 Comparing

When you first enter Comparator

The screen shows default settings when you first enter Comparator.



At the top left, the Input area contains the words **reset**. This means that a comparison hasn't been set up yet.

Your first step is to replace these four **resets** with the names of the standards and transaction sets or messages that you want to have compared. You have two ways to do this:

- **Use saved settings:** You can use **File | Open** to open settings that you have saved previously. This is described in Saving and re-using Comparison on page 58.
- **Choose new settings:** You can set up the comparison by specifying the transaction sets or messages and the standards, guidelines, or MIGs that you wish to compare.

If you aren't re-using saved settings, a comparison includes these steps:

Choosing what to Compare

Choosing the Standards, Guidelines, or MIGs

To tell Comparator what to compare, choose either:

File | New	Brings up the Comparator Input box and resets any options to the defaults.
Settings | Input	Brings up the Comparator Input box without resetting options.

Either brings up the Comparator Input box, where you select the base and target standards, guidelines, or MIGs, and a transaction set or message from each.

Base vs. Target

You can think of the base as the older document. The target is the newer document. Another way of looking at it: the base is the "from" document, and the target is the "to" document. Comparator flags changes that would have to be made to get the "from" or base document to look like the "to" or target document.

To determine which is the base and which is the target, think of yourself asking: "What are the differences between <***base***> and <***target***>?" In sentences like these, it will be natural to you to say the name of the base before the target.

If you are migrating:

- The base has the characteristics that you wish to copy to the target.
- The target is the one that you'll be saving after the migration.

If the Base is a Guideline or MIG:

- Comparator checks selected options between the base guideline or MIG and its underlying published standard (X12-40100, D96B, 3070VICS, etc.). This yields a list of **user** changes made to the base.
- It then checks selected options between the base guideline or MIG and the target. This yields a set of differences between the two.
- In the Detail pane, differences due to user changes to the base appear in ***bold italic*** and are preceded with a small colored icon. Changes due to differences between the underlying standard will be in regular font.
- Only differences that are due to **user** changes can be migrated. See the chart on page 3 for a list of migratable attributes.

If the Base is a Published Standard:

- Comparator checks selected options between base and target.
- All changes are displayed but none are migratable.

Using the Input Box

You have four pieces of information to provide in the Input box:

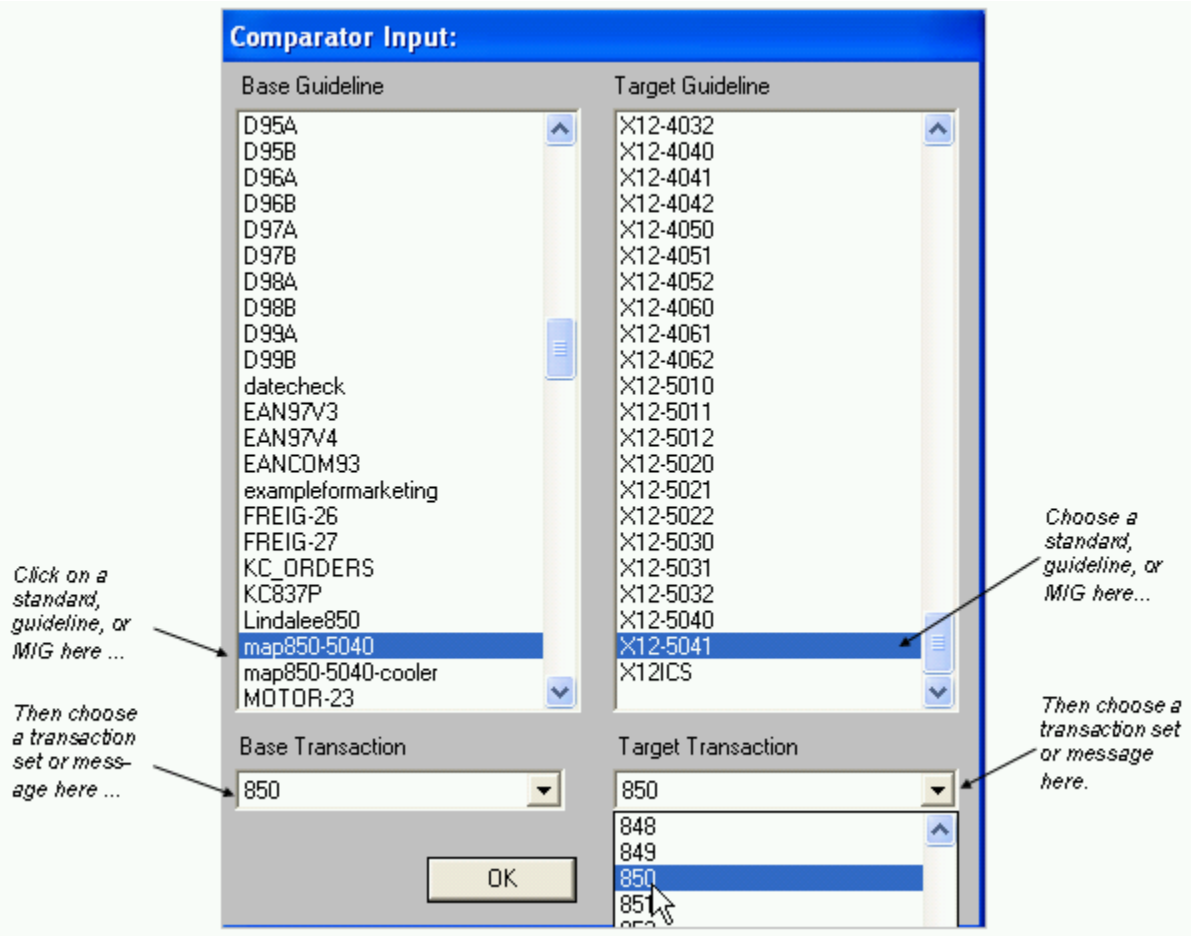
A base standard, guideline, or MIG. Under the Base Guideline heading, a scrollable list shows you all standards, guidelines, and MIGs known to your copy of EDISIM. Choose a standard, guideline, or MIG to use for the base. (To help you find the base quickly, click anywhere in the list and then type its first letter.)

A transaction set or message from that base. Under the Base Transaction heading, click the arrow to expose the list of all transaction sets or messages in the base. Choose one to use in the comparison.

A target standard, guideline, or MIG. Under the Target Guideline heading, choose the standard, guideline, or MIG to use for the target.

A transaction set or message from that target. Under the Target Transaction heading, Comparator pre-selects the same transaction set or message. However, you can change this to another transaction set or message, if you'd like.

After choosing all four, the box should show selections in all four areas.



Close the box by choosing **OK**. The input area at the top of the Control pane should now show the base and target.

You can now set the options for this comparison as described under Setting Object Options on page 25 and Setting Global Options on page 32. If you do not want to change any options, you can now perform the comparison as described in Generating the Comparison on page 33.

If you cannot find a guideline, MIG, or standard ...

The input box should show all standards, guidelines, and MIGs known to your version of EDISIM...the same list that you see in Standards Editor, Standards Ref, TDG, and Analyzer. Comparator looks in two places for them:

EDISIM's User Files\Public Guidelines folder for any guidelines and MIGs that you have created with Standards Editor

EDISIM's STATIC folder for any TIBCO Foresight-supplied standards.

If you do not see a standard, guideline, or MIG that you expect, please refer to the list under "Can't Find a Standard, Guideline, or MIG?" in the Standards Editor manual.

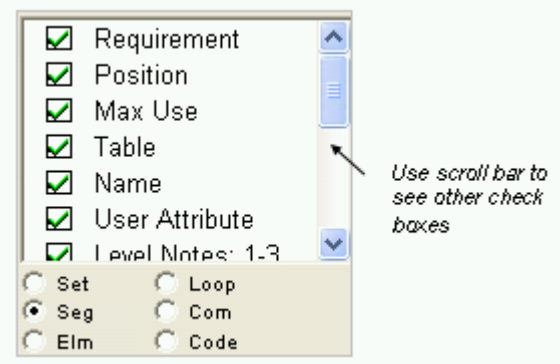
Setting Object Options

Options remain in effect for this comparison only.

The Settings area lets you select whether to compare various attributes. Two benefits of turning off checking of attributes that you do not need to see:

- Fewer things will be marked as changed on the screen, which will let you more quickly find those changes that interest you.
- Performing the comparison will be faster.

The area where you change settings is called the Control pane. It is on the left side and looks like this:



Each type of object contains a different list of attributes. Use these to determine what will be compared and marked as changed if the base and target differ. You can individually toggle them on or off with a mouse click.

To set them:

1. Choose the **Set** or **Msg** radio button and look at the check boxes above it. Use a mouse click to clear any of these items that you do not want to have compared for transaction sets or messages.

2. Then choose the **Seg** radio button, and toggle its check boxes to clear any items that you do not want to have compared for segments. You will need to use the scroll bar to see all of your choices.

3. Continue with **Elm** (for elements), **Loop** (for loops or groups), **Com** (for composites), and **Code**. By default, all items are selected.

Shortcut: To clear all check boxes at once, quickly double-click in the check boxes area. To toggle them all on again, use Shift+double-click.

Any changes that you make will affect the next generation. If you save settings for a particular comparison using **File | Save** or **File | Save As**, all of these choices are saved as well as the identity of the base and the target.

If you change options after generating a comparison, and then want to compare the same base and target using the new options, click the **Generate** button at the top left.

To reset options to the defaults, select **File | New**.

To use the same options with a new base and target, select **Settings | Input**.

Example of setting options: Comparator will detect if an object's position number is different between the base and the target. If you clear the **Position** check box for segment, you are saying (1) you do not want Comparator to flag a segment as changed if position number is the only thing that has changed, and (2) you do not want segment position number differences shown at the bottom of the Detail pane.

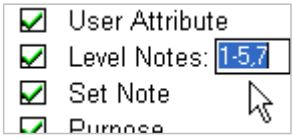
When finished setting all object options for this comparison, you can set the global options as described in Setting Object Options on page 32.

Set or Msg Options

When you choose the **Set** or **Msg** radio button, Comparator displays a list of choices that determine what will be flagged as a change when it compares the transaction sets or messages.

Name
The name of the message or transaction set itself. Examples: Invoice Message, Purchase Order.

Level Notes
Notes on the transaction set or message itself, supplied by a Standards Editor user (guidelines and MIGs only, not published standards). Click on the levels to change them:



Use * for all levels.

Purpose
Purpose of the transaction set or message. Example (for ORDERS): *A message specifying details for goods or services ordered under conditions agreed between the seller and the buyer.*

Functional Group
(X12 only) The functional group for the transaction set. Example: the functional group for an 810 Invoice is **IN**.

Segment Options

When you choose the **Seg** radio button, Comparator displays a list of choices that determine what will be flagged as a change when it compares segments.

Requirement
Segment requirement or status (mandatory, conditional, etc.) according to the X12, EDIFACT, or TRADACOMS published standard. For the user's requirement or status, see User Attribute below.

Position
Segment's position number.

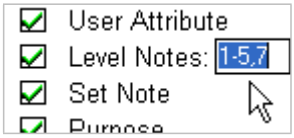
Max Use
The maximum use or repeat: maximum number of times a segment can be used at a certain location.

Table
Table where the segment is located (example: heading or Table 1).

Name
Segment name.

User Attribute
(not in a published standard) The requirement or status agreed upon by you and your trading partner: Used, Not Used, Must be Used, Recommended, Not Recommended. See also Requirement above.

Level Notes
(not in a published standard) User-supplied notes on the segment. Click on the levels to change them:



Use * for all levels.

Set Note
A note on the segment, supplied by X12. These come directly from the underlying X12 standard, and cannot be edited in EDISIM.

Purpose
Segment's purpose.

Set Comment
Transaction set comment on the segment. These come directly from the underlying X12 standard, and cannot be edited in EDISIM.

Note
Transaction set note on the segment. These come from X12 and cannot be edited in EDISIM. See also **Level 1 Note**, **Level 2 Note**, and **Level 3 Note** above.

Comment
Comments referring to this segment as a whole (comments referring specifically to an element or composite in the segment are under the **Elm** or **Com** button). Comments provide information about elements or composites when used in the current segment, but they are not considered part of the standard. These are editable in the Standards Editor segment dictionary.

Semantic Notes
Semantic notes are like comments, but are considered part of the standard. They are editable in the Standards Editor segment dictionary.

Business Rules
Business rules are company-specific conditions or requests that a Standards Editor user adds to that segment. This will include business rule variable names as well as the actual business rules.

Element Options

When you choose the **Elm** radio button, Comparator displays a list of choices that determine what will be flagged as a change when it compares elements.

Requirement
Element requirement or status (Mandatory, Conditional, Optional, etc.) at this location, according to the published X12 or EDIFACT standard.

Position
Element's relative position in the segment or composite (01, 02, etc.)

Name
Element's name. Example: *Quantity*.

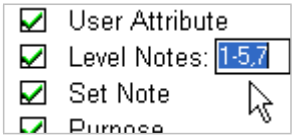
MinL
Minimum length for the data in this element.

MaxL
Maximum length for the data in this element.

User Attribute
(not in a published standard) The requirement or status agreed upon by you and your trading partner: Used, Not Used, Must be Used, Recommended, Not Recommended, and Dependent. See also Requirement above.

Type
Data type: ID, AN, DT, etc. Please see **Data Types** under Help for details.

Level Notes
(not in a published standard) User-supplied notes on the element. Click on the levels to change them:



Use * for all levels.

Comment
Comments referring specifically to this element (comments referring to the segment or composite as a whole are under the **Seg** or **Com** button). Comments provide information about this element when used in the current segment or composite, but comments are not considered part of the standard. These are editable in the Standards Editor segment or composite dictionary.

Semantic Notes
Semantic notes are like comments, but are considered part of the standard. They are editable in the Standards Editor segment or composite dictionary.

Description
Element's description.

Appl Values
Application values are company-specific values that are attached to a non-coded element by a Standards Editor user.

Merge Appl Values
During migration, this selection combines application values from this element in the base with application values from this element in the target.

Business Rules
Business rules are company-specific conditions or requests that a Standards Editor user adds to that element. This includes business rule variables as well as actual business rules.

Loop or Group Options

This radio button displays a list of choices that determine what will be flagged as a change when it compares loops (X12) or groups (EDIFACT).

Requirement
(EDIFACT only) The requirement or status (Mandatory, Optional, etc.) for the group or loop at this location, according to its published X12 or EDIFACT standard. For EDIFACT standards before D94A, and for X12 standards, the loop or group inherits its status from its first segment. For newer EDIFACT standards, the group will have its own separate status.

Position
(EDIFACT only) The position number of the loop or group. For EDIFACT standards D94A or later, the loop has its own position number. For X12 and older EDIFACT standards, this will be the position number of the first segment in the loop or group.

Max Use
Maximum use or repeat: the maximum number of times the loop or group can be repeated at this location.

Table
(EDIFACT only) The table where the loop or group is located. Example: Header or Table 1.

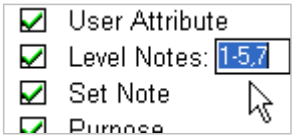
Name
(EDIFACT only) Group name.

Group No.
(EDIFACT only) Group number.

Loop ID
(X12 only) Usually the ID of the loop's first segment: N1 or HL, for example. The loop ID can be changed in Standards Editor.

User Attribute
(MIGs based on EDIFACT standards D94A and later) Setting of the group itself for Used, Not Used, Must be Used, Recommended, and Not Recommended. This reflects the requirement or status agreed upon by you and your trading partner. (X12 and older EDIFACT versions use the requirement or status of the first segment as the loop or group requirement/status.)

Level Notes
(MIGs based on EDIFACT standards D94A and later)
(not in a published standard) User-supplied notes on the group. Click on the levels to change them:



Use * for all levels.

Purpose
(EDIFACT standards D94A and later only.) Purpose of the group itself.

Composite Options

The **Com** radio button displays a list of choices that determine what will be flagged as a change when it compares composites. A composite is a sequence of elements that are used together. They are found in EDIFACT and newer X12 standards.

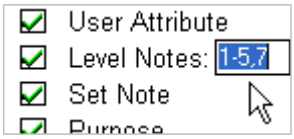
Requirement
Requirement designation or status for the underlying published standard: mandatory, conditional, etc. For information about the local (user-supplied) requirement or status in a guideline or MIG, see **User Attribute** below.

Position
Position numbers of the composites within the segments.

Name
Composite name.

User Attribute
(not in a published standard) Setting for Used, Not Used, Must be Used, Recommended, Not Recommended, or Dependent. This reflects the requirement or status agreed upon by you and your trading partner.

Level Notes
(not in a published standard) User-supplied notes on the composite. Click on the levels to change them:



Use * for all levels.

Purpose
The purpose of the composite.

Comment
Comments that refer to the composite as a whole (comments referring to a specific subelement within a composite are under the **Elm** button). Comments provide information about this composite when used in the current segment, but comments are not considered part of the standard. These are editable in the Standards Editor segment or composite dictionary.

Semantic Notes
Semantic notes are like comments, but are considered part of the standard. They are editable in the Standards Editor segment or composite dictionary.

Business Rules
Business rules are company-specific conditions or requests a Standards Editor user adds to the composite. This includes business rule variables as well as actual business rules.

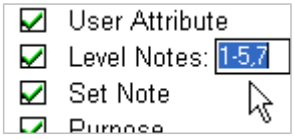
Code Options

The **Code** radio button displays a list of choices that determine what will be flagged as a change when it compares code values.

Used
If you are comparing dictionary codes: Are they present in both standards' dictionaries?

If you are comparing UDT (transaction or message) codes: Are they in a code set and used at the current location?

Level Notes
(not in a published standard) User-supplied notes on the code. Click on the levels to change them:



Use * for all levels.

Description
The text description accompanying the code value.

Subsets
This option says you want to be alerted if the code sets change from the base to the target. For instance, if the base has a code set and the target has a different one, you would like that difference flagged. You must have selected the UDT Codes global option (at the bottom of the Control pane) to have subsets compared.

Partitions
Turning on **Partitions** checks for the possibility that a data element that is partitioned in the base may no longer be partitioned in the target, or vice versa.

Merge Values
During migration, Comparator will combine code values from the base and the target.

Setting Global Options

Before actually generating a comparison, you can choose options that affect the comparison in a global way.

At the bottom of the Control pane, you will see check boxes that let you set global options about what will be included in the comparison. You can toggle these with a mouse click to affect your report in these ways:

Migration
If selected, you can migrate user changes from the base to the target if you choose to do so after generating the comparison.

Drop Unchanged
If selected, items that match are not shown. Dropping unchanged objects makes it easier for you to find the changes.

Drop Unused in Base
If selected, only objects that are used in the base are shown. Do NOT choose this if you are migrating, or you will not be able to migrate the used/not used status.

Drop Adds / Deletes
If selected, objects that appear in only the base or the target are not compared or shown. Objects that have been added or deleted cannot participate in a migration.

UDT Codes
(Guidelines and MIGs only, not published standards.) If selected, codes in the UDT (user-defined transaction, as opposed to the dictionary) are compared? The codes must be in a *code set*, which means a Standards Editor user must have changed the list. In any circumstance, only UDT codes that are in a code set will be compared.

Dictionary Codes
If selected, Comparator compares codes from the **element dictionary**? Normally, these are the codes straight from the published standard (unless someone has used Standards Editor to change the code list for the element dictionary). If someone has changed the codes in the segment dictionary or composite dictionary, Comparator will not report these changes under Dictionary Codes. However, since such code changes carry through to the UDT, these changes will show up under UDT codes.

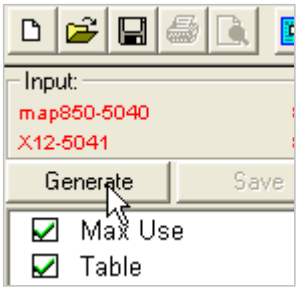
Match On Loop/Group ID
If selected, Comparator matches loops and groups based on their Loop ID. This is generally a better match in HIPAA guidelines. If this option is not selected, Comparator tries to match loops based solely on their segment ID.

Enh. Alternate Matching
If enhanced alternate matching is selected, Comparator matches alternate segments (consecutive segments with the same tag) based on their first code value(s). This results in a match based on the segment's purpose rather than its structure and is especially useful for HIPAA guidelines. If this option is not selected, Comparator matches alternate segments based on their existing order and segment ID.

Generating the Comparison

After choosing the transaction sets or messages, and setting options, you are ready to perform the comparison.

Click Generate at the upper left.



Comparator reports on its progress as it compares each piece of the two transaction sets or messages. It goes through several stages of comparison, as outlined below.

Mapping Objects

Comparator attempts to match up all objects between the base and target. To do this, it checks for the same ID (BEG, PER, 355, etc.) in the same relative position. It likewise matches up loops or groups, and then each segment in them. For loops, it checks the segments in them. If they're similar, it's a match. Comparator does not use position number for matching.

For example, let's say you are comparing these two documents:

Base	Target
ST	ST
BPR	BPS
NTE	NTE
TRN	CUR
CUR	REF
REF	

1. Comparator looks at the first item in the target, the ST, and then looks at the first item in the base. It's a match.

2. It then looks at the BPS in the target and checks the second item in the base. Since they don't match, it scans through the base to try to find a BPS. There is none, so it skips the BPS and the BPR for now.

3. It then looks at the NTE in the target and checks to see if the third item in the base is an NTE. It's a match.

4. It looks at the fourth item in the target, the CUR, and checks the fourth item in the base. It doesn't match.

5. Since it didn't match the CUR, it starts scanning through the remaining segments in the base, finding a match in the next segment in the base.

6. It now starts looking for a match for the fifth item in the target, the REF. Since it knows the fifth item in the base has been matched up, it starts looking at the sixth segment in the base. It's a match.

Comparator then goes back through the unmatched segments in the base and target, attempting to match them up. In this case, there are no further matches, so it marks the BPR and TRN as deleted, and the BPS as added.

Mapping Codes

After aligning items, Comparator processes the code values. For details, see Code Options on page 31.

If you selected **UDT codes** in global options, Comparator checks to see if the codes are in a code set. If they are, it checks them against the same location in the target. If they are not, it skips them.

If you selected **Dictionary codes** in global options, Comparator goes through the codes from the element dictionary, checking codes for elements that appear in the transaction set or message.

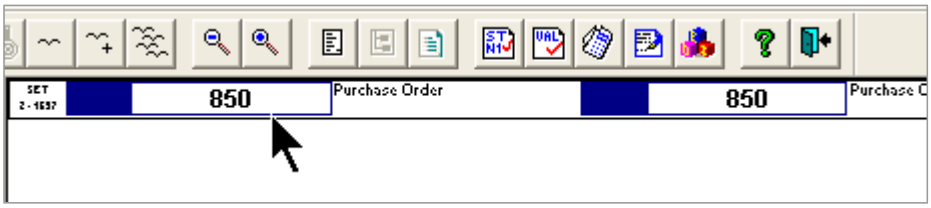
At this point, Comparator does not save details about actual code differences. It just counts the number of code differences between the base and target. (Later, when you click on the Code icon and then press Load, Comparator re-compares codes for that location and shows the differences.)

Comparing Data

Comparator checks each pair of matched objects for differences. If an item is moved or replaced, it will show up as added and deleted.

Comparator doesn't make assumptions about the same loop appearing multiple times in one place: for example, an N1 loop with max repeat count of 3 in the base, and three N1 loops in a row at that place in the target. Comparator doesn't assume that these are all to be matched up.

When finished, you will see that the report area contains a transaction set or message line. It will resemble this:



You are ready to start exploring. Please see Seeing the Differences on page 36 for details on where to go from here.

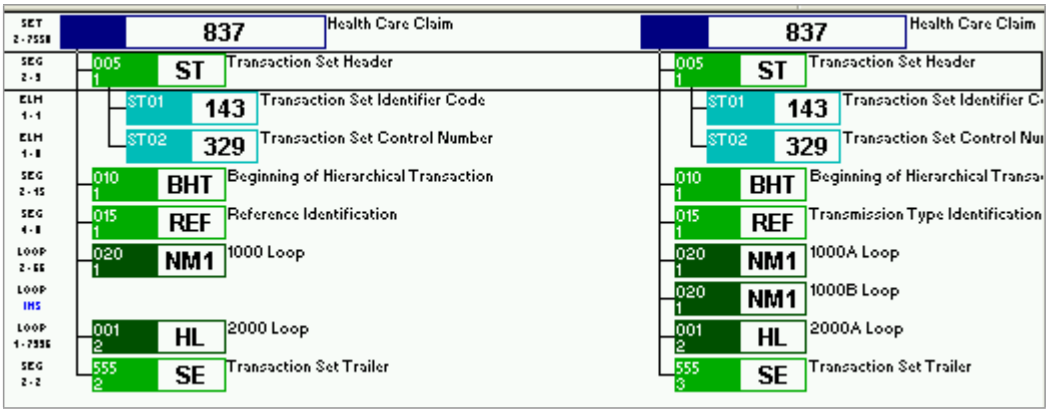
Seeing the Differences

After generating a comparison, you can view the differences in various formats or "views."

Graphics View

After generating a comparison, you are ready to view the differences between the base and target.

When you first generate a comparison, you are in graphics mode, an expandable list of objects like this example (which has been expanded a couple of levels):



Double click on the transaction set or message line at the upper right to expose the double column of segments and loops/ groups in the base and target.

From other views, you can return to graphics view with **View | Graphics View** or the toolbar button.

For information about other views, see:

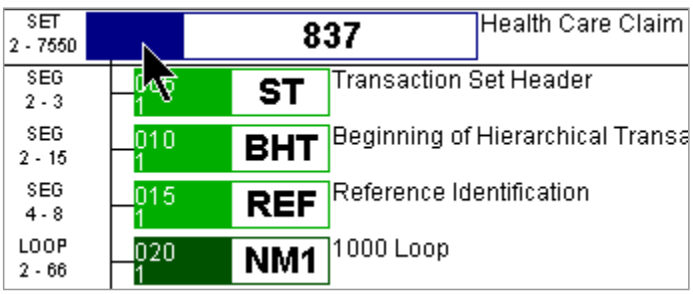
- Two Text Views on page 41
- Report View on page 43

Graphics View - Map Pane

In graphics view, the top right-hand pane is called the Map pane.

You can control how much detail it displays. Right after Comparator generates the comparison, the Map pane shows a single line:

Expand the display by double-clicking on the rectangle.

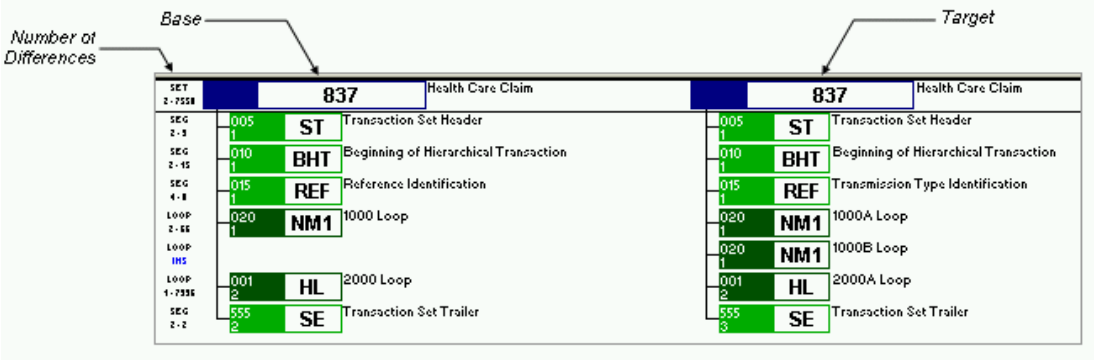


Double-click on any item in the Map pane to show items that are subordinate to it. For example, double-click on a loop to see its segments. Double-click on a segment to see its composites and elements. Double-clicking is a toggle, which can expose or hide the subordinates.

To fully expand the Map pane, choose **Settings | Expand All Nodes**.

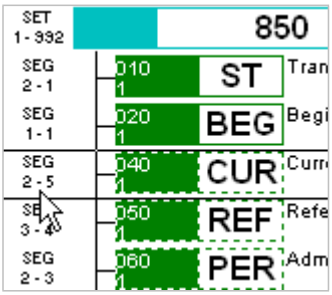
The first three columns are:

- **Current item** (SET, SEG, LOOP, etc.) and the number of differences to this item and to its subordinates.
- **Base** – the base guideline.
- **Target** – the target guideline.



Column 1 – Object and Number of Changes

The first column shows information like this:



Where:

SEG	Abbreviation for the type of object. The color of the boxes is another clue.
2–5	The number of changes to the object, followed by a dash, followed by the number of changes to subordinates of the object. 2-5 means the segment has 2 changes to the segment itself and 3 changes to its subordinates – its composites, elements or codes.

This column might also contain:

INS	You would need to insert this object into the base to make it match the target.
DEL	You'd have to delete it.

If you want to see only objects that are in both the base and the target, choose **Drop Adds/Deletes** in the Control pane before you generate.

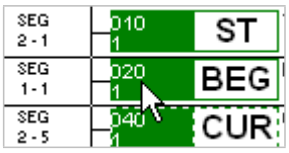
The only changes counted are those for the attributes you selected in the Control pane.

If you don't want to see objects that match exactly (ones that say 0 - 0), choose **Drop Unchanged** in the Control pane before you generate.

Column 2 - Base

The second column shows objects in the base transaction or message. The colored rectangles contain positioning information.

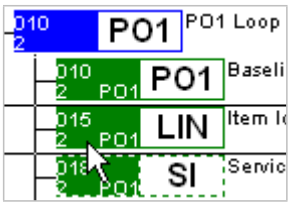
Example segment (not in loop)



Where:

`020` Position number
`1` Table 1

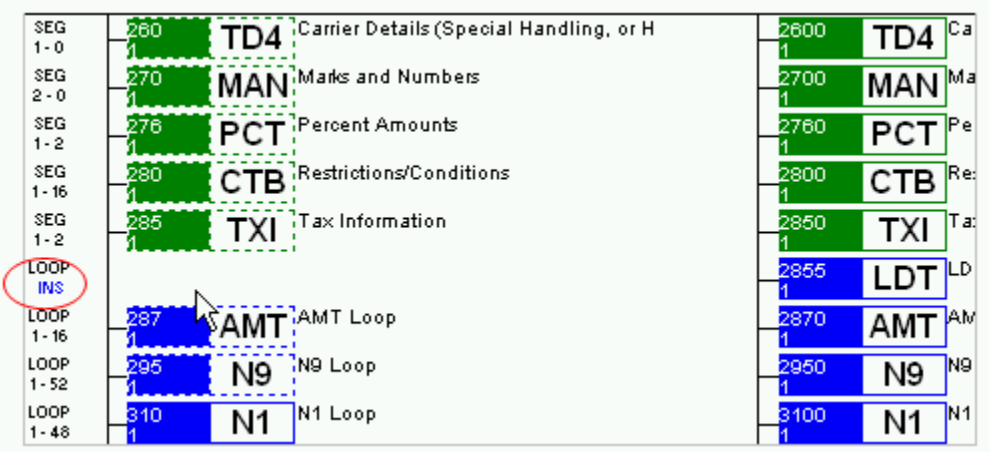
Example segment (in loop)



Where:

`015` Position number
`2` Table 2
PO1 ID of enclosing loop

Where items have been inserted or deleted, Comparator only shows information for the base or the target (but not both). In this example, the LTD segment is not in the base. The blue `INS` in the first column stands for **Inserted**.



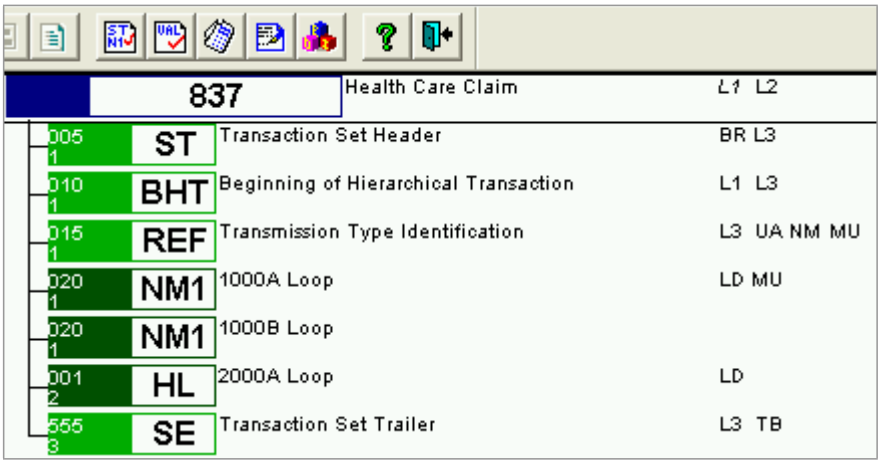
Items with dotted lines around them, like most of the segments and loops in the base column above, are marked unused.

Column 3 - Target

The third column is similar to Column 2, except it represents objects in the target.

Column 4 - Indicators

The fourth column is at the far right and contains abbreviations showing the kinds of changes found. These are called *indicators*:



These abbreviations include:

AV	Application Values
BR	Business Rule or Business Rule Variable
CD	Code Values
CM	Comment
DE	Description
FG	Functional Group Identifier
GP	EDIFACT Group Number

L*n*	Level Notes
LD	Loop Identifier
MD	Mandatory
ML	Minimum Length
MU	Maximum Usage Count
MX	Maximum Length
NM	Name
NT	General Purpose Note
PO	Position Number
PT	Number of Partitions
PU	Purpose and Scope
RP	Repeat Count
RQ	Requirement Designator or Status
SC	Set Comment Attached to Segment
SM	Semantic Note
SN	General Note attached to Set
SS	Code Sets Exist
TB	Table Position
TY	Basic Element Type
UA	User Override of Requirement Designator or Status
US	Used/Not Used

Indicators in bold Italic are user changes to the base, and therefore they can be migrated to the target:

You can print or export this report. Please see Saving and Printing on page 57.

Graphics View - Detail Pane

When you select an item in the top pane, any changes detected for that item will show up in the Detail pane at the bottom.

In this example, the REF segment is selected and has three changes:

The font shows the origin of the difference:

- Differences due to user changes made to the base are in bold Italic and can be migrated.
- Differences due to changes to the published standards are not. To

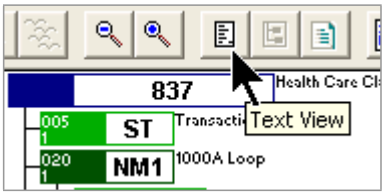
see text items like notes, double click on them in the bottom pane:

A text box will open to display the entire item.

Two Text Views

Text View

To see a text report of your comparison, choose **View | Text Mode View**, or click this toolbar button:



Results will look like this example:

```
  SET   [ 837] Health Care Claim:  Professional
            <delta> Title changed: Health Care Claim:  Professional.

  SEG   [005 ST] Transaction Set Header
*           <delta> Business Rule Semantic changed.

  LOOP [020 NM1] 1000A Loop

  SEG   .[045 PER] Submitter EDI Contact Information
*           <delta> Level 2 notes differ.
*           <delta> Level 3 notes differ.

  ELM   ..[PER03 365] Communication Number Qualifier
*           <delta> Level 2 notes differ.
*           <delta> Level 4 notes differ.
```

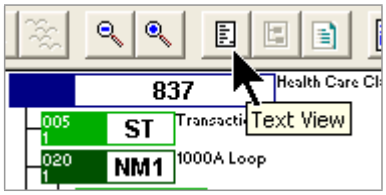
```
  CODES ...[Udt 365] Udt Codes, Element 365
Code Subset/Superset changed.
c value     <usage    > description
- AR        <OUR837P > ARCO System
+ FX        <837AQ120> Facsimile
```

You can print, save, or export this report. Please see:

- Interpreting a text report on page 63
- Saving and Printing on page 57.

Detailed Text View

To see a more detailed text report of your comparison, choose **View | Text Mode View**, or click this toolbar button.



Depending on your view when you started, you may need to click it again to see the additional details, which are in bold in this example:

```
  SET   [ 837 (OUR837P 837 TZAR >> 837AQ120 837 6HZK)] Health Care Claim:
    Professional
          <delta> Title changed: Health Care Claim:   Professional.

  SEG   [005 ST (1/U/1 1/U/1)] Transaction Set Header
*         <delta> Business Rule Semantic changed.

  LOOP [020 NM1 (4/M/1 4/M/1)] 1000A Loop

  SEG   .[045 PER (9/M/2 9/M/2)] Submitter EDI Contact Information
*         <delta> Level 2 notes differ.
*         <delta> Level 3 notes differ.

  ELM   ..[PER03 365 (3/M/1/2/2 3/M/1/2/2)] Communication Number Qualifier
*         <delta> Level 2 notes differ.
*         <delta> Level 4 notes differ.

  CODES ...[Udt 365] Udt Codes, Element 365
Code Subset/Superset changed.
c value     <usage    > description
- AR        <OUR837P > ARCO System
+ FX        <837AQ120> Facsimile
```

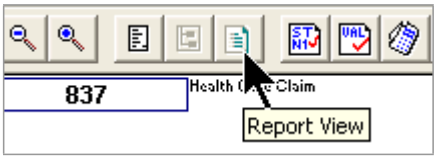
For an explanation of the report, see:

- Interpreting a text report on page 63
- Interpreting Detail Text Report Information on page 65

You can print, save, or export this report. Please see Saving and Printing on page 57.

Report View

To see a table with comparison details, choose **View | Report View**, or click this toolbar button:



Results will look like this example:

Segment PER: Submitter EDI Contact Information

Field	Base	Target
Level 2 Note	Verify how many contact numbers we can accept.	
Level 3 Note*	Examples: PER*IC*JANE DOE*TE*005555555~ PER*IC*ARTHUR JONES*ED*145551212~	Example: PER*IC*JANE DOE*TE*005555555~

Element 365: Communication Number Qualifier (1000A > 1

Field	Base	Target
Level 2 Note	We don't use FX, right? Check with Systems Support.	
Level 4 Note*	We don't use the FX code.	
Code 'AR': ARCO System (Removed)		
Code 'FX': Facsimile (Added)		

You can print or export this report. Please see Saving and Printing on page 57.

Migrating

You can migrate differences caused by user changes to the base. Please see the chart of migratable items in Where Comparator Fits on page 4.

Before you Migrate

For an overview

The target should be a guideline or MIG that you've saved in Standards Editor, not a published standard.

1. As a minimum, go into Standards Editor, do a **File | New**, select the standard, and then select the transaction set or message that you want to use for the target. If you will be migrating multiple consecutive variations of loops, groups, or segments, copy them to match the structure of the base. For example, if you have defined a Bill-to N1 and a separate Ship-to N1, copy the N1 loop to reflect this structure. Save the guideline or MIG. You need not customize it further than this before using it as the target.

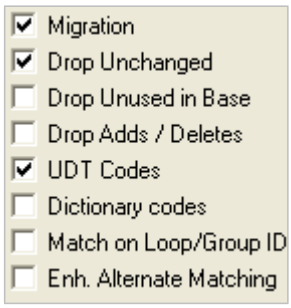
2. In Comparator, use **File | New** and select the base and target. The base should be the guideline or MIG that already has user changes that you want to migrate. The target is the guideline or MIG to which they will be copied.

3. Click each object's radio button and be sure that all attributes that you want to migrate are selected.

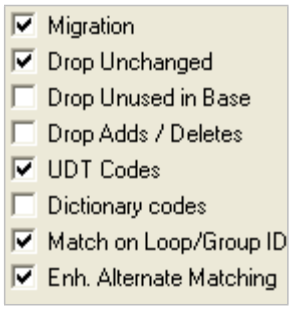
4. Select **Migration** in the global options area settings area.

5. Select the other global options below Migration. When migrating, do NOT select **Drop Unused in Base**.

   Typical non-HIPAA settings might be:



   Typical HIPAA settings might be:



6. If you want to migrate code sets, descriptions, and notes on code values, please read All about Codes on page 49.

7. Click on the **Generate** button at the top left.

When Comparator finishes generating, you are ready to start migrating, as described in Migrating by Dragging (below), Migrating from the Detail Pane on page 46, and Migrating with the Menu on page 48.

Migrating by Dragging

Migrating from Individual Objects

For an overview

You can migrate from the Map pane by dragging an object from the base to the target. All migratable characteristics of that object will be included.

1. Find the object that you wish to migrate. It should have an abbreviation in the last column in an *italic* font, like this *Ln* and *MU*:

2. Hold down the mouse cursor and drag it over the colored box for the object in the base.

3. When a tiny water bottle appears, drag to the corresponding object in the target.

4. Drag the water bottle across the target object's colored box until it turns over and dumps. You can then release the mouse button. The object's differences have now migrated and should no longer be flagged as changes.

   If the object is an element with a code set, *Shift*+drag will migrate the code set also.

Please see All about Codes on page 49 for details about what you get when migrating dictionary codes and UDT codes.

Mass Migrations

For an overview

To migrate all migratable characteristics of an object and all of its subordinates, follow the previously described procedure, but hold down the *Shift* key while dragging. The water bottle will contain a plus sign if subordinates are being migrated.

Codes will be included in this type of migration, if they are subordinate to whatever is being migrated.

To migrate user-created differences in the entire transaction set or message, Shift+drag on the colored rectangle for the transaction set or message itself – it's on the top line in the Map pane.

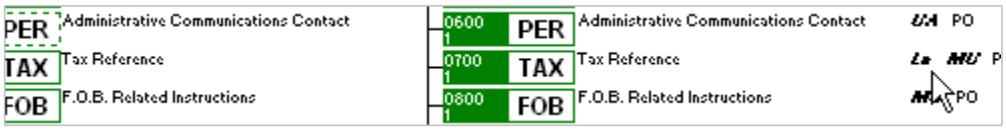
Migrating from the Detail Pane

Easy Migration from the Detail Pane

For an overview

1. Click on an object that has a migratable change (a user change to the base).

   At the end of its line in the Map pane, you can see codes representing the differences for that object.

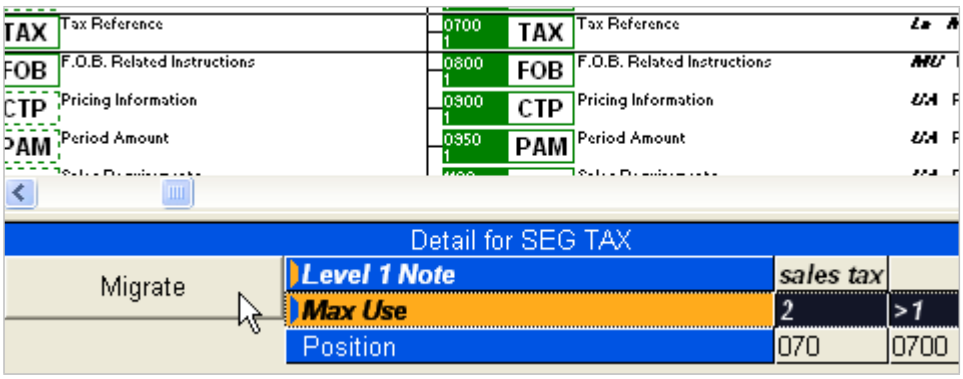


2. In the Detail pane at the bottom, click on the change that you would like to migrate.

   Its color changes.

3. Click on the **Migrate** button at the left side of the Detail pane.

The migration completes and then the change disappears from the Detail pane – since there is no longer a difference.



Migration from the Text Viewer

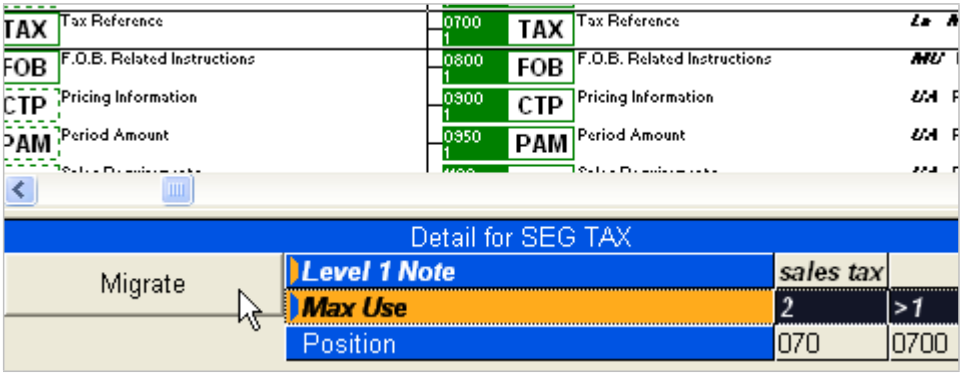
For an overview

At times, you may find that simply clicking the Migrate button does not meet all of your needs. For example:

- You want to see the end of a long text item such as a level 1 note before you decide if you're going to migrate.
- You want to edit the text item as you migrate it.

Comparator lets you do the above in a special text viewing box that you can see by double-clicking on the text item in the Detail pane.

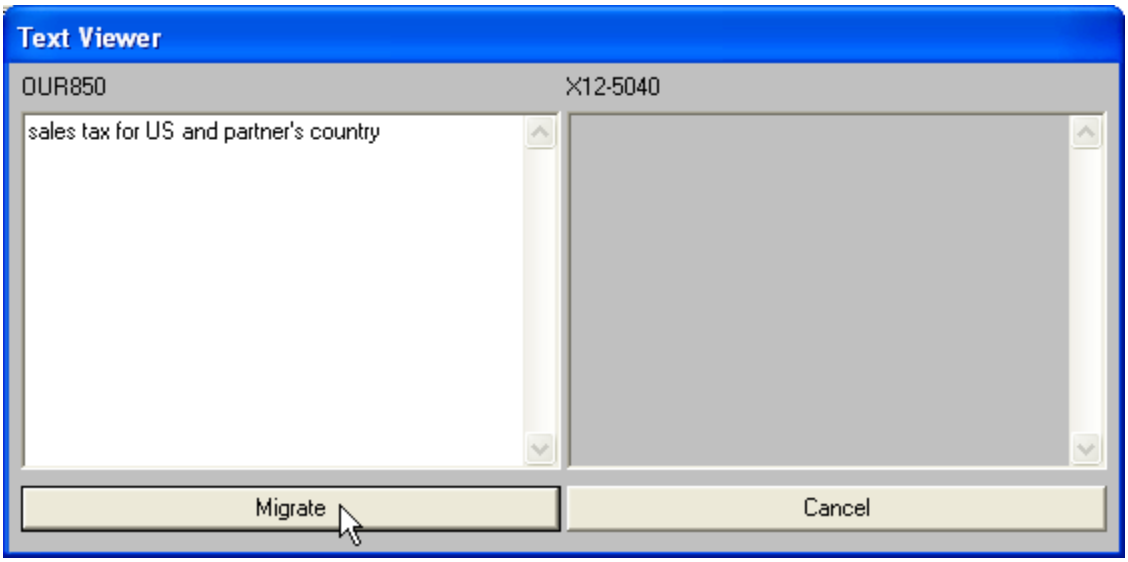
In this example, you can see only the first few words of the Level 1 note in the Detail pane:



To migrate the example above:

1. Double-click on the Level 1 Notes line.

   This opens a text viewer where you can see the entire text of the base and target notes.



   If the text appears to be the same on each side of the text viewer box, the difference may be trailing blanks or line feeds at the end of one of them.

2. If you want to edit the note before migrating, make your editing changes on the left (base) side of the text viewer.

   When using this box, you are NOT changing the note for the base. **Comparator will never change the base in any way.**

   You can paste text that you have copied from elsewhere. Click where you wish to insert the text and press *Ctrl* + **v**.

3. When the text is the way you want it in the viewer, press **Migrate**. This overwrites anything that you see in the target area of the text viewer.

   The viewer will close.

If you edited the text before migrating, the line will remain in the Detail pane, since the base and target are still different.

If you did not edit the text before migrating, the difference will disappear from the Detail pane since they are no longer different.

If the text is on a code value:

- **Dictionary code values** can be migrated individually as described above.
- **UDT codes** cannot be manipulated individually, and they cannot be modified before migrating. You can migrate an entire code set "as is" but you cannot pick certain codes from within a code set.

Please see All about Codes on page 49 for specific details about codes.

Migrating with the Menu

For an overview

Click on the line in the Map pane. You can migrate with these selections on the Migrate menu:

Migrate | Current Only
This migrates all migratable items from the line that is currently highlighted in the Map pane. It does not include subordinates of the current item.

Migrate | Current and Subordinates
This migrates all migratable items on the line currently highlighted in the Map pane, and on any of its subordinates, including codes.

Migrate | All
This selection is for those hearty souls who wish to migrate all migratable changes throughout the document.

Saving your Target after Migration

For an overview

Comparator does not automatically save the migrated changes. This is for your own protection.

After you finish migrating, save the target guideline or MIG with one of these:

- **File | Save Target**
- **File | Save Target As**

What if your target is a published standard?
This is not recommended. If you have migrated to a published standard, **File | Save Target** will be faded. You may use **File | Save Target As**, but the resulting guideline or MIG will include every transaction set or message in the published standard. However, all is not lost.

You can do a **File | New** in Standards Editor, select the newly saved guideline or MIG, and then select only the transaction sets or messages that you want. Then save it.

All about Codes

EDISIM provides a lot of flexibility when it comes to customizing codes, and Comparator provides you an assortment of choices about how to include them in a comparison and in a migration. Migrating codes is similar to migrating from other objects in the Map pane, but there are several differences.

Dictionary Codes

Comparing Dictionary Codes

What dictionary codes will be compared?

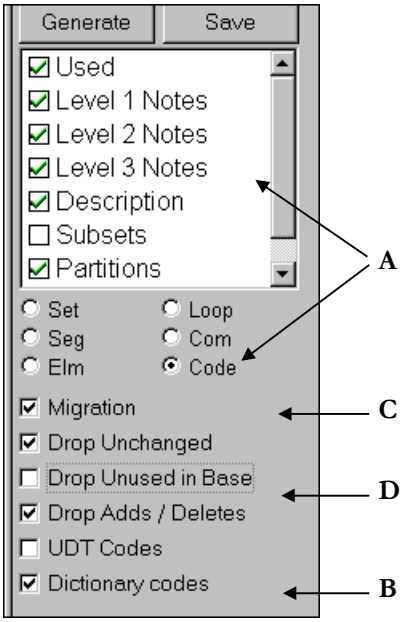
- Codes from the element dictionary are compared. This is an element-dictionary to element-dictionary code comparison.
- If an element does not appear in both transaction sets or messages that you compared, then its codes are not compared.
- Generally, these codes are right from X12 or EDIFACT, although Standards Editor users can change the list of codes in the element dictionary.

How to include dictionary codes in your comparison

1. Choose the base and target.
2. Choose the **Code** radio button and then clear the check boxes for options that you don't want to compare (see A in the picture below).

   If you are migrating: Merge Values, Used, and Subsets have no effect for dictionary codes. See Code Options on page 31 for details about other choices.
3. In the lower check boxes, select **Dictionary Codes** (see B in the picture below.)
4. To save time, consider selecting **Drop Unchanged** if you include Dictionary Codes.
5. If you are migrating, select **Migration** (see C in the picture below).
6. If your only purpose is to migrate, you can specify **Drop Unchanged** and **Drop Adds/Deletes**. These items have no use in migration (see D in the picture below).

   Do NOT select Drop Unused in Base if you want to migrate the unused status of base items.
7. Click **Generate**.



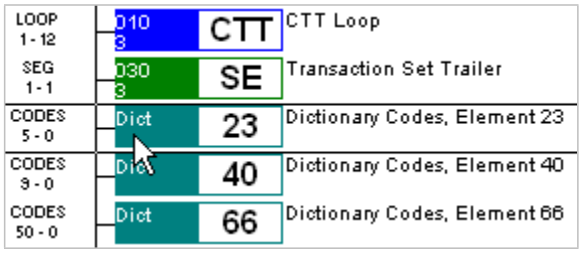
Viewing Changes to Dictionary Codes

After generating the comparison as explained in Dictionary Codes on page 49, you are ready to view code changes between the base and the target.

1. Double-click to expand the transaction set or message line at the top of the Map pane.

2. To see dictionary codes, go to the bottom of the Map pane where you will see boxes representing dictionary codes. Codes normally have a blue rectangle and the word **Codes** in the first column of the Map pane. Only codes for elements that appear in the current transaction set or message will be included in the comparison:

3. Click on a code line in the Map pane. The first column shows how many code changes exist between the base and the target.



4. In the Detail pane at the bottom, click on the **Load** button. This compares the codes for the highlighted element and shows any changes in the **Codes Changed** area.

Example 1

```
163     <997KAVER>     X12.96 Appointment
```

Code **163** is in either the base or the target, but not both.

<997KAVER> is the name of either the base or the target - the one that has code 163. The other does not have code 163.

X12.96 Appointment is the code's description in 997KAVER.

Example 2

```
826     <modified>     X12.19 Tax Information
```

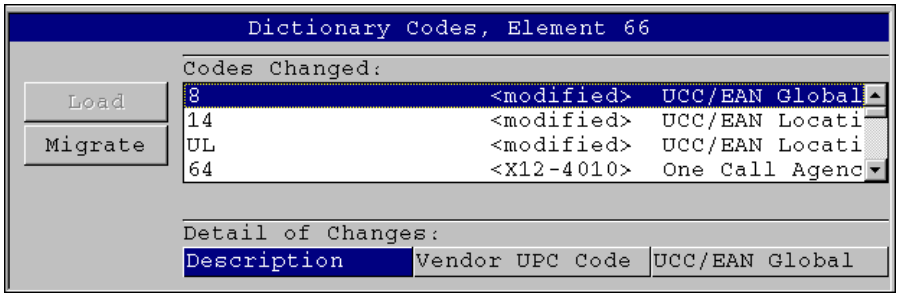
Code **826** is in both the base and the target, but something about it has changed.

<modified> means it has a change to the description, partitions, or level notes. If you click on this line, the change will appear in the Detail of Changes area below it.

X12.19 Tax Info is the code's description in the *target*.

Detail of Changes area

If you click on a code that shows <modified> in the Codes Changed area, the specifics of the change will appear at the very bottom of the pane.



The three columns in the Detail of Changes area include:

Column 1 Property that changed for this code

Column 2 Contents of the note or description in the base

Column 3 Contents of the note or description in the target

Text Viewer Box

If only partial text is showing in column 2 or 3 of the Detail of Changes area, double-click on the partial text. A pop-up Text Viewer box will appear so that you can see all of the text.

Migrating Dictionary Codes

What will migrate?

You can migrate user-created changes to these attributes of codes in the base's element dictionary:

- Code added to base by user, but not in target
- Level notes in base
- Definition changed by user in base
- Explanation changed by user in base

How to migrate

To migrate user-created code changes from the base to the target:

1. In the Map pane, drag the dictionary code box from the base to the target as described in Migrating from Individual Objects on page 45.

   Or, highlight the dictionary code box in the Map pane and then use the choices on the Migrate menu as described in Migrating with the Menu on page 48.

   Or, use the Detail pane for more specific migration:

2. In the Map pane, highlight the code box representing the dictionary codes for a particular element.

3. Click **Load** in the Detail pane.

4. In the Detail pane, click on a code and then click the Migrate button. All user changes to codes for that dictionary element will migrate.

UDT Codes

Comparing UDT Codes

What UDT codes will be compared?

Only UDT codes that are in code sets will be compared. You create a code set in Standards Editor when you change the list of codes in the transaction or message.

To have Comparator check codes for elements that have no code sets, select Dictionary Codes.

How to include UDT codes in your comparison

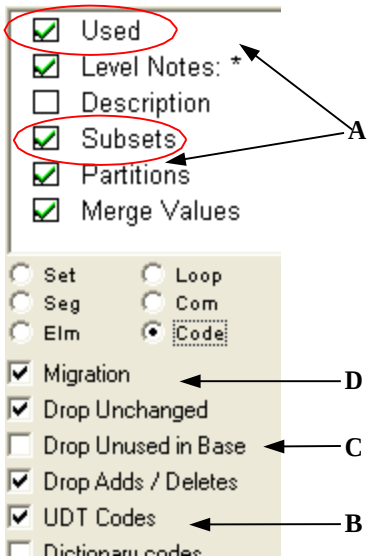
1. Click the **Code** radio button and then clear all options that you do not want to compare. Be sure to leave **Used** and **Subsets** selected (see **A** in the picture below).

2. In the lower check boxes, select **UDT Codes** as shown in **B** in the picture below.

3. If an object is unused in the base, do you want its codes compared? If so, clear **Drop Unused in Base** (see **C** in the picture below).

4. If you are migrating, select the **Migration** check box at the bottom left (see **D** in the following picture).

5. Click **Generate**.



Viewing Changes to UDT Codes

For a UDT code to appear, all of the following must be true:

- It must be in a code set in the base.
- It must differ from the target in some way that is being checked.
- If Drop Unused in Base is selected, it must be attached to an object that is used in the base.

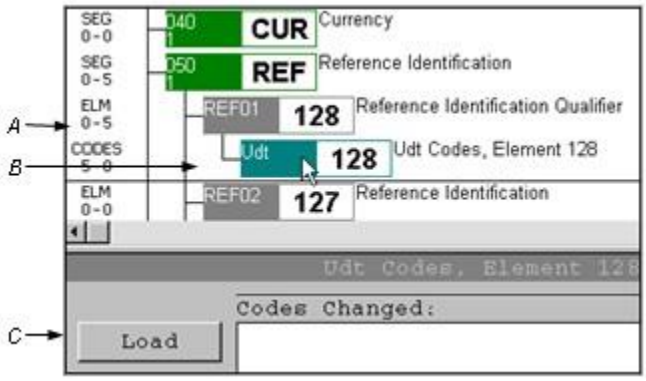
After generating the comparison, you can view UDT code change:

1. Double-click on the transaction set or message line at the top right.

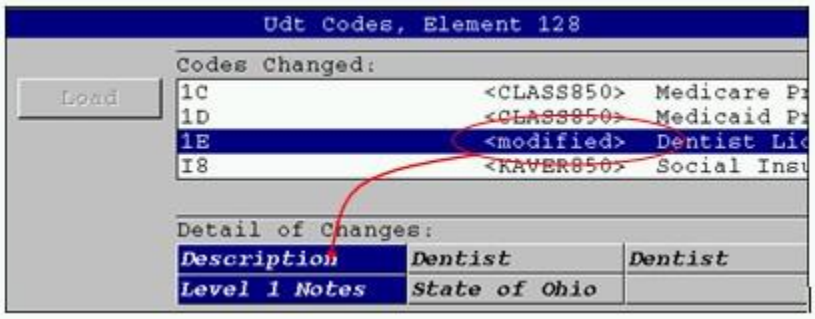
2. Find an element that has a non-zero number after the dash in the first column, as in A in the following picture. Double-click on this element to expose its subordinates.

3. You will then see a box representing the UDT code set for the element. These normally have a blue rectangle containing **UDT** and the word **Codes** in the first column. Click on this line, which is B in the following picture.

4. In the Detail pane at the bottom, click on the Load button (C in the picture below). This compares the codes for the highlighted UDT element and shows any changes in the **Codes Changed** area.



Changed codes then appear in the Detail pane, looking something like this:.



After the code itself (1C, 1D, 1E and I8 in the example above), you will see information in angle braces. This will be either:

- The name of the base if the code is in a code set in the base only.
- The name of the target if the code is in a code set in the target only. You cannot migrate it since it does not exist in the base.
- The word **<modified>** if the code is in a code set in the base and target, but something about the code has changed. Click on the modified code to see details in the **Detail of Changes** area at the very bottom. If this area does not show, drag up the splitter bar between the Map pane and the Detail pane.

If the Detail of Changes area does not show the complete note or description, you can double-click on the partial note or description that does show. This brings up a Text Viewer box.

Migrating UDT Code Sets

What will migrate?

If you migrate codes for a UDT element, Comparator will migrate the entire code set. You cannot selectively migrate codes.

If you chose Merge Values under the Code radio button, Comparator will not overwrite an existing code set in the target. Instead, it will merge the base's code set with that in the target.

Example:

"Merge Values" on or off?	Base's code set	Target's code set before migration	Resulting code set
On	01 02	02 03	01 02 03
Off	01 02	02 03	01 02
doesn't matter	01 02	*None*	01 02
doesn't matter	*None*	*doesn't matter*	*No changes will migrate*

Reused code sets

Code sets can be attached in the UDT or in the composite or segment dictionary.

Those attached to the composite or segment dictionary do **not** migrate to the composite or segment dictionary in the target. Instead, they become UDT code sets, going to each UDT location where the set is inherited from the dictionary.

What happens to code sets attached to multiple places in the base? Consider a code set consisting of values **AA** and **BB** attached as follows. The code set is actually reused throughout Standards Editor, and is not simply a duplicate set of values in each place:

Code Set **AA,BB**

Attached at N103 at 070

Attached at N103 at 180

If you request migration of either one of these locations, the other does not automatically migrate with it. This is true even if the target also shares a code set at 070 and 180.

How to migrate

To migrate user-created element dictionary code changes:

1. In the Map pane, highlight the blue rectangle for the UDT codes.
2. Hold down the left mouse button and slowly drag the mouse cursor over the blue rectangle for the base. The mouse cursor will turn into a small water bottle. Continue holding the mouse button down.
3. Drag the water bottle to the corresponding blue rectangle in the target and wait until the water bottle turns over. Release the mouse.

Or:

1. Highlight the UDT code box in the Map pane and then use the choices on the Migrate menu as described in Migrating with the Menu on page 48.

Or:

1. In the Map pane, highlight the line containing the blue rectangle for the codes.
2. Click **Load** in the Detail pane.
3. Click **Migrate** in the Detail pane if you want to migrate all codes.

Saving and Printing

View	Saving and Exporting	Printing
Graphical (View | Graphic View)	**Saving** Not available **Exporting** File | Export Results Saves a CSV file with location and change information for the items showing in the map pane Unexposed items do not export	File | Print Prints the graphical display that you see in the map pane Unexposed items do not print Shows number of codes changed but not the actual codes To create a PDF (if you have Adobe Acrobat): 1. **Settings | Expand All Nodes** 2. **File | Print | Adobe PDF**
Text (View | Text Mode View)	**Saving** File | Save Text Report Saves the compact text report that you see on the screen **Exporting** File | Export Results Saves the same CSV file as detailed text view and report view and includes location and change information for all items flagged as changed	File | Print Prints the compact text report that you see on the screen
Text – detailed (View | Detailed Text Mode View)	**Saving** File | Save Text Report Saves the detailed text report that you see on the screen **Exporting** File | Export Results Saves the same CSV file as the text mode and report views	File | Print Prints the detailed text report that you see on the screen
Report (View | Report View)	**Saving** Not available **Exporting** File | Export Results Saves the same CSV file as the two text views	File | Print Prints the detailed chart that you see on the screen To create a PDF (if you have Adobe Acrobat): .**File | Print | Adobe PDF**

Tips:

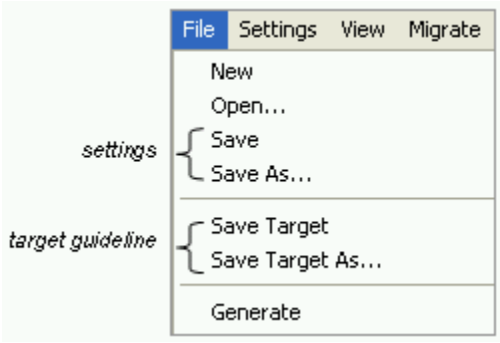
- To make the report more concise, generate with **Drop Unchanged** selected.
- Before printing in Graphic view, consider using **File | Print Preview** to verify what you will be getting.
- If **File | Print** is faded, click in the Map pane and then check the File menu again.

Saving and re-using Comparison Settings

Saving Settings

You can save the current settings for future use. This will save time and assure consistency. Choose:

- **File | Save**
- **File | Save As** (to choose a different name),
- or click on the toolbar's diskette button.



Default file type is **.dlt**, which is what Comparator will be looking for when you open a saved comparison.

When exiting Comparator, you may be asked "Save Changes to *xxx*?" where *xxx* is either the name of the previously saved settings **.dlt** file, or the word "Settings." If you choose Yes, Comparator saves the comparison to the name that was shown in the prompt.

Using Saved Settings

You can retrieve previously saved settings with **File | Open**. The base, target, and any saved options are retrieved. You can use **Settings | Input** to change the base and target.

Starting another Comparison

After completing a comparison, you can start another one:

1. Change options and regenerate.
2. Choose **File | New** if you want to reset options to the defaults and then go to the Input box to pick a base and target, or ...
3. Choose **File | Open** to re-use a saved DLT file, or ...
4. Choose **Settings | Input** to retain current options, but go to the Input box to pick a new base and target.
5. When finished, choose **Generate**.

Is your Comparison Taking too Long?

The following factors slow down generation speed:

Codes
Many codes in the base and target, and the inclusion of dictionary codes.

Text
Large amounts of text that have to be processed, especially code descriptions.

The easiest way to save a lot of time during a comparison is to omit checking of dictionary codes, or at least code descriptions. Please see Code Options on page 31.

Changing the Base or Target

When viewing the differences between a base and a target, you may notice something that needs to be changed. For example, you may need to change the code list for a certain element or you may need to mark an element as unused.

After closing the guideline or MIG in Comparator, you can change it from within Standards Editor. Any changes that you make and save from within Standards Editor will automatically be reflected in all other parts of EDISIM, including Comparator.

You could then regenerate in Comparator to include the changes in a comparison or migration.

Comparator Menus

File Menu

File | New
Clears current settings, then opens the Comparator Input box so that you can choose a new base and target. If you have unsaved changes to the current settings or target, Comparator asks if you'd like to save them.

File | Open
Brings up a Windows file open box so that you can choose a previously saved .DLT file. This file may contain settings for base and target, and will have settings for options. The .DLT files were created with **File | Save** or **File | Save As**.

File | Save
Saves the current settings: what documents to compare, and which options to use. If no filename is showing in the title of the Comparator window, you will be asked to select a filename. If a filename is included in the title, Comparator saves the current settings to that filename.

File | Save As
Similar to File | Save except you will always be asked to select a filename.

File | Save Target
Saves the target after a migration. If the target is a published standard, you will be asked to enter a new name. This selection will be faded if you did not migrate.

File | Save Target As
Similar to File | Save Target, but you will always be asked to enter a new name for the target.

File | Generate
Available after you have supplied Comparator with a base and target. Actually performs the comparison. It is the same as clicking the Generate button in the Control pane.

File | Print
Available after you have generated. The Map pane must be active (if not, click in it). You will go to a typical Windows Print box.

File | Print Preview
Available after you have generated. The Map pane must be active (if not, click in it). Displays your print job on the screen so that you can see what you will be printing.

File | Save Text Report
Active if you are in Text Mode. Lets you save the contents of the Map pane to a text file.

File | Export Results
Lets you save the differences to a comma-delimited (csv) file.

File | Exit
Exits Comparator. If you have unsaved settings, Comparator asks you if you'd like to save them. Likewise, if you have unsaved changes to the target, Comparator offers to save the target.

recently-opened settings files
The last settings files used by Comparator are listed at the bottom of the menu. You can click on one as a quick way to open it. This is equivalent to choosing **File | Open** and then choosing the settings file.

Settings Menu

The Settings Menu lets you choose what documents to compare, and what options to use during the comparison.

Settings | Input
This takes you to the Comparator Input box, where you choose the base and target. Your options remain unchanged.

Settings | Expand all Nodes
(available in Graphics View) Exposes all subordinates at all levels in the Map pane.

View Menu

View | Text Mode View
Changes the display in the Map pane to plain text. From this view, you can print the text report (**File | Print**) or save it to a file (**File | Save Text Report**). You cannot migrate from this view. The first time you switch to text view for a given comparison, there will be a delay while Comparator prepares the text information. After that, you can switch back and forth between views without any delays.

View | Detailed Text Mode View
Like text mode view, but the report contains some additional information (see Interpreting Detail Text Report Information on page 65).

View | Graphic View
Changes the text display in the Map pane to graphics. This does not involve a delay or regeneration of the comparison. From graphics view, you can print the contents of the Map pane (**File | Print**) as a graphic.

View | Report View
Changes the text display in the Map pane to a detailed table. This does not involve a delay or regeneration of the comparison.

Zoom In
Zoom Out
Changes the magnification of the map pane when in graphics view.

Migrate Menu

This menu is an alternative to drag-and-drop migrating or using the Migrate button in the Detail pane. You must be in Graphic View to migrate.

Migrate | Current Only
This migrates all user-created differences for the current object only. Subordinates are not migrated.

Migrate | Current and Subordinates
This migrates all migratable differences for the current object, and for all of its subordinates.

Migrate | All
This migrates all migratable differences for the entire transaction set or message.

4 Appendix A - Interpreting Text Reports

Interpreting a text report

Report Contents	Explanation
SET [997] Functional Acknowledgment <delta> Title changed: Functional Acknowledgment. <delta> Level 1 notes differ.	Two changes to the transaction set itself.
SEG [010 ST] Transaction Set Header	No changes to the ST segment itself. It's just here because its first element's codes changed.
ELM .[ST01 143] Transaction Set Identifier Code	No changes to this element itself, but its codes changed. Notice the dot before [ST01 143]. This indicates one level of subordination.
CODES ..[Udt 143] Udt Codes, Element 143 c value <usage > description 997 <modified> X12.20 Functional Acknowledgment <modified> Description changed. 126 <modified> X12.76 Vehicle Application Advice <modified> Usage Changed.	Code 997 (X12.20 Functional Acknowledgment) had a change to its description. Code 126 (X12.76 Vehicle Application Advice) had a change to its usage.

Report Contents	Explanation
LOOP [030 AK2] AK2 Loop SEG .[030 AK2] Transaction Set Response Header <delta> User Attribute changed to Used; was Must Be Used. <delta> Level 1 notes differ. ELM ..[AK201 143] Transaction Set Identifier Code CODES ...[Udt 143] Udt Codes, Element 143 c value <usage > description 000 <modified> Unknown <modified> Level 1 notes differ.	Notice the dots showing increasing levels of subordination. Code value 000 (Unknown) has a Level 1 notes change.
SEG .[060 AK5] Transaction Set Response Trailer ELM ..[AK501 717] Transaction Set Acknowledgment Code CODES ...[Udt 717] Udt Codes, Element 717 Code Subset/Superset changed. c value <usage > description A <modified> Accepted <modified> Usage Changed. E <modified> Accepted But Errors Were Noted <modified> Usage Changed. SEG [070 AK9] Functional Group Response Trailer ELM .[AK901 715] Functional Group Acknowledge Code CODES ..[Udt 715] Udt Codes, Element 715 Code Subset/Superset changed. c value <usage > description A <modified> Accepted <modified> Usage Changed. E <modified> Accepted, But Errors Were Noted. <modified> Usage Changed.	Various code changes in the AK5 and AK9.
CODES [Dict 718] Dictionary Codes, Element 718 c value <usage > description + 23 <997KAVNU> Transaction Set Control Number Not Unique within	This is a change to dictionary codes for element 718. Code value "23" has been added to the target's dictionary.
CODES [Dict 720] Dictionary Codes, Element 720 c value <usage > description 3 <modified> Mandatory segment is missing <modified> Description changed. - 8 <997KAVER> Segment Has Data Element Errors + 9 <997KAVNU> Other unexpected condition	The description for code value "3" ("Mandatory segment is missing") has changed.

Interpreting Detail Text Report Information

Information added to text report		
	Additional Information	**Example**
SET	Base guideline name Set number Unique internal ID Same information for target	**(OUR837P 837 TZAR >> 837AQ120 837 6HZK)**
LOOP	Base ordinal number Base requirement or usage: U=Used X=Not Used M=Must Be Used R=Recommended N=Not Recommended D=Dependent Base maximum repeat Same information for target	**(4/M/1 4/M/1)**
SEG	Base ordinal number Base requirement or usage Base maximum repeat Same information for target	**(9/M/2 9/M/2)**
COM	Base position in segment Base requirement or usage Base maximum repeat Same information for target	**(1/U/1 1/U/1)**
ELM	Base position in segment or composite Base requirement or usage Base maximum repeat Base minimum length Base maximum length Same information for target	**(3/M/1/2/2 3/M/1/2/2)**

5 Index

TIBCO Documentation and Support Services

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, mainly in HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit https://docs.tibco.com.

Product-Specific Documentation

Documentation for TIBCO® Foresight® EDISIM® is available on the TIBCO Foresight® EDISIM® Documentation page.

The following documents for this product can be found on the TIBCO Documentation site:

- *TIBCO Foresight® EDISIM® Release Notes*
- *TIBCO Foresight® EDISIM® Data Types*
- *TIBCO Foresight® EDISIM® Documentation and Demo Data Index*
- *TIBCO Foresight® EDISIM® Supported File Formats*
- *TIBCO Foresight® EDISIM® Installation Guide*
- *TIBCO Foresight® EDISIM® Introduction to EDISIM®*
- *TIBCO Foresight® EDISIM® DocStarter: Creating a Guideline from EDI Data*
- *TIBCO Foresight® EDISIM® Guideline Merge*
- *TIBCO Foresight® EDISIM® Document Builder User's Guide*
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- *TIBCO Foresight® EDISIM® Library User's Guide*
- *TIBCO Foresight® EDISIM® Validation Profile Files (APF)*
- *TIBCO Foresight® EDISIM® Using XML*
- *TIBCO Foresight® EDISIM® Comparator User's Guide*
- *TIBCO Foresight® EDISIM® Analyzer User's Guide*
- *TIBCO Foresight® EDISIM® Standards and Guidelines Reference Manual*
- *TIBCO Foresight® EDISIM® Test Data Generator User's Guide*
- *TIBCO Foresight® EDISIM® Self-Paced Tutorial: Introduction to EDISIM® (X12 Standards)*

- *TIBCO Foresight® EDISIM® Self-Paced Tutorial: Introduction to EDISIM® EDIFACT D99A Orders*
- *TIBCO Foresight® EDISIM® Standards Editor User's Guide*
- *TIBCO Foresight® EDISIM® Business Rules*

How to Contact TIBCO Support

You can contact TIBCO Support in the following ways:

- For an overview of TIBCO Support, visit http://www.tibco.com/services/support.
- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the TIBCO Support portal at https://support.tibco.com.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to https://support.tibco.com. If you do not have a user name, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to https://community.tibco.com

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