Tables or views that could not be compared

Objects with rows that can not be matched automatically are shown in the **Tables or views that could not be compared** group. To match rows in the two data sources, SQL Data Compare requires:

- a *comparison key* for each table or view
- mappings between objects in the data sources

In some cases, SQL Data Compare is unable to map objects and select comparison keys automatically. For example, if there are substantial schema differences between the data sources. This article provides information on manually setting comparison keys.

> ⓘ For more detailed information on setting mappings, see: Mapping data sources.

What is a comparison key?

When comparing data sources, SQL Data Compare looks for a matching primary key or other unique identifier in each data source to use as the *compariso n key.* This enables matching rows to be identified, and their differences to be compared.

For example, the databases *WidgetSales* and *WidgetDeploy* both contain the table [dbo].[WidgetPrices]:

Row Differences

Include			RecordID	WidgetID	WidgetID	Price	Price	DateValidFrom	DateValidFrom
✓			1	1	1	734.6157	167.3397	20/02/1967 04:21:13.490	20/02/1967 04:21:13.490
✓			2	2	2	864.8270	984.5712	14/09/1961 16:18:59.990	14/09/1961 16:18:59.990
✓			3	3	3	929.7010	832.7370	30/07/1987 11:22:45.060	30/07/1987 11:22:45.060
✓			4	4	4	550.6080	910.2792	08/01/1995 11:46:17.670	08/01/1995 11:46:17.670
✓			5	5	5	430.4021	75.9449	02/07/2001 11:34:14.260	02/07/2001 11:34:14.260
✓			6	6	6	178.0344	556.3410	10/11/1955 03:55:05.560	10/11/1955 03:55:05.560
✓			7	7	7	612.1988	268.0287	25/04/1956 08:26:54.040	25/04/1956 08:26:54.040
✓			8	8	8	<NULL>	665.3220	17/12/1989 15:51:04.330	17/12/1989 15:51:04.330
✓			9	9	9	910.8844	539.7343	27/11/1954 00:45:52.830	27/11/1954 00:45:52.830
✓			10	10	10	612.3306	506.0773	15/12/2006 23:43:55.470	15/12/2006 23:43:55.470
✓			11	11	11	177.4279	967.2364	11/04/2003 16:50:01.070	11/04/2003 16:50:01.070
✓			12	12	12	480.3355	138.1921	11/05/1967 17:01:26.840	11/05/1967 17:01:26.840
✓			13	13	13	957.4455	895.0923	20/06/1988 00:52:16.070	20/06/1988 00:52:16.070

All Rows   Identical

Find:

Since rows can be inserted and deleted, we can not be certain that the third row in *WidgetSales* is the same as the third row in *WidgetDeploy*. Simply comparing rows in the order in which they appear in the table can result in a meaningless comparison. Similarly, rows can not be matched based on their *P rice* values - more than one widget can have the same price.

In [dbo].[WidgetPrices], *RecordID* is a primary key. No two widgets will have the same *RecordID*, and the rows are uniquely identified. Two matching *Recor dID* values in *WidgetSales* and *WidgetDeploy* therefore represent the same piece of real world data.

Where there is no matching primary key, or other unique identifier you must set an appropriate comparison key.

For example, if you know that two widgets with the same name are never added to the database on the same day, you can select the two columns *WidgetN ame* and *DateValidFrom* to form the comparison key. The rows in the tables can now be matched.

Setting comparison keys

SQL Data Compare automatically selects a comparison key, if your:

- tables contain a matching primary key, unique index, or unique constraint
- views contain a matching unique, clustered index

If SQL Data Compare is unable to identify a suitable comparison key for a table or view, *Not Set* is shown in the **Comparison Key** box, under **Tables & Views** on the Project Configuration dialog. You set the comparison key by clicking the appropriate **Comparison Key** box. A dialog box is displayed, for example:

Select the columns in the table or view that will comprise the comparison key by using the check boxes.

⚠
- A comparison key cannot include columns whose data type is image, ntext, nvarchar(max), sql_variant, text, varbinary(max), varchar (max), or xml.
- You cannot specify custom comparison keys if you are using a backup as a data source; however, you can select an alternative unique index or unique constraint.

ⓘ For more information on setting up your comparison, see:

- Setting data sources
- Selecting tables and views