

Comparing Database Schemas Visually

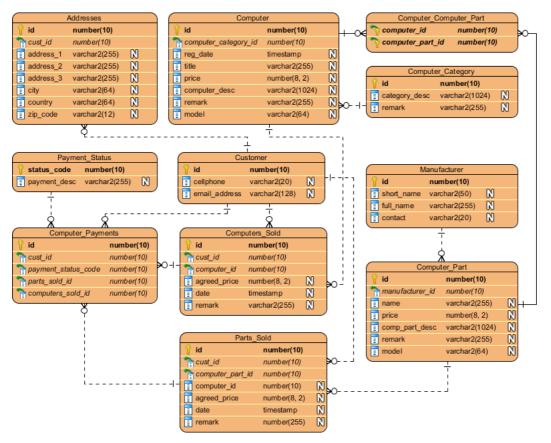
Written Date : September 1, 2009

Finding differences between databases is a tedious job. Visual Paradigm provides a "visual diff" function for database administrator to compare databases by showing their differences visually. This tutorial shows you how to use visual diff to identify changes of databases from release 1.0 to the latest development version.

Overview

- 1. Make a copy of current ERD (version 1.0)
- 2. Modify ERD
- 3. Compare the changes from version 1.0 to latest changes

Here is the database design for the *Computer Sales* project. We are going to modify it, and then compare it with the original copy.

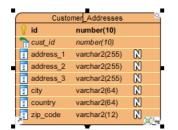


Using Visual Diff

- 1. Download <u>ComputerSales.vpp</u>. You can also find this file at the bottom of this tutorial.
- 2. Open the downloaded .vpp file in Visual Paradigm. To open a project, select **Project > Open** from the application toolbar.
- 3. Let's make a copy of the existing project by selecting **Project > Save > Save as** from the application toolbar.
- 4. Name as **ComputerSales_1_0.vpp** and click **OK**.

Save Project				×
Save In: 📙 Tutorial		~ 🔘 🦻 🖾	۰	
Recent Items Desktop Documents This PC Network VPProjects Workspace				
Project Folder	File Name:	ComputerSales_1_0.vpp	~	Save
+ 👜 🔷 🗸	Save as type:	Visual Paradigm Project (*.vpp)	\sim	Cancel

- 5. Reopen the previous project by selecting **Project > Open > ..\ComputerSales.vpp**.
- 6. Make a few changes to the project. Rename entity Addresses to Customer_Addresses.



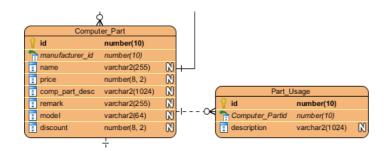
7. Add a new column to entity *Computer_Part* by right clicking on it and selecting **New Column** from the main menu.

			New Column	Alt+Shift+C
Compu id manufacturer_id name price comp_part_desc remark model	ter_Part number(1 number(1 varchar2() number(8 varchar2() varchar2() varchar2()		Open Specification Stereotypes Convert to Array Table Convert to Partial Table Split Table Move/Copy Columns	Enter >
		– Eclit	Sub Diagrams Cut	>

8. Enter *discount : number(8, 2)* as the column definition, press the **Enter** key and then the **Esc** key to confirm editing.

Computer_Part				
💡 id	number(10)			
hanufacturer_id	number(10)			
🔋 name	varchar2(255)	R		
i price	number(8, 2)	R		
comp_part_desc	varchar2(1024)	R		
remark	varchar2(255)	R		
model	varchar2(64)	R		
discount:number(8,2)				

- 9. Create an entity with a **One-to-Many Relationship -> Entity** relationship from *Computer_Part*. Name the entity *Part_Usage*.
- 10. Add the following columns to Part_Usage.
 - +id : number(10)
 - description : varchar2(1024)



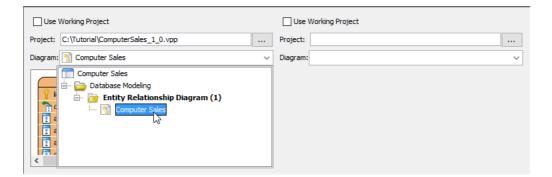
11. Open **Visual Diff** by selecting **Modeling > Visual Diff** from the application toolbar.



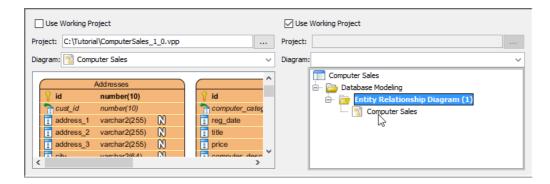
12. In the Visual Diff window, uncheck **Use Working Project** on the left hand side.

Use Working Project	Use Working Project
Project:	Project:
Diagram: V	Diagram: V

13. Click ..., select the **ComputerSales_1_0.vpp** and select *Computer Sales* as the diagram.



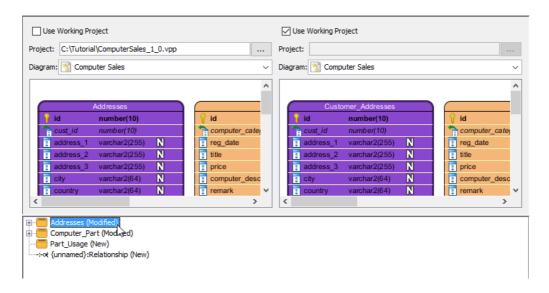
14. Check **Use Working Project** at the right hand side. Select *Computer Sales* as the diagram of right hand side.



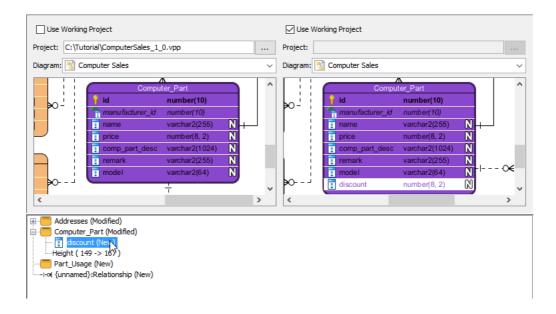
15. The differences of diagrams are listed at the bottom part of the window.

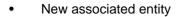
16. Select the differences one by one to see the changes.

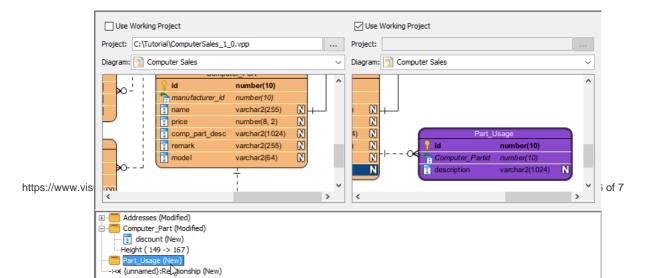
Addresses entity



New column







Resources

1. <u>ComputerSales.vpp</u>

Related Links

- Tutorial Compare Logical and Physical ERD
- FREE database design training Database Design and Management
- What is Entity Relationship Diagram (ERD)?

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Visual Paradigm home page (https://www.visual-paradigm.com/)

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