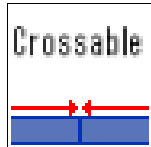
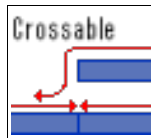
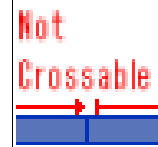


Setting Solitary Connections in a Clipping File

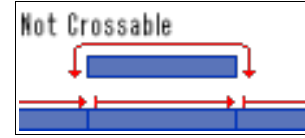
How it Works



Connections are what allow objects to cross from one tile to another. A tile can not be crossed if there is a stop on one side or the other. A stop sets a sort of wall placed on the edge of the tile. It can not be crossed in either direction.



The interesting thing is that no check is made to determine if the tile you are connected to is linked directly back on the other side. This can be exploited to allow a solitary (one-way) connection between one tile and another. For this to work, the tile you will connect to must be connected to something else; if a stop is on either side of the walkway you are connecting to, you will not be able to cross the wall it forms.

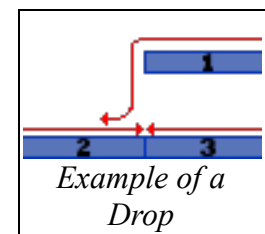


to, you will not be able to cross the wall it forms.

The examples below illustrate the three most common types of connections, and in each case a drop of some sort is implied. However, it should be noted that really solitary connections can be applied to a variety of odd situations, such as a ramp that leads up to 'trap door' of sorts, a series of rooms that all rest on the same positions, and even situations like elevators.

The Drop

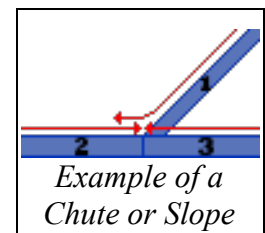
The drop is the simplest and most common solitary connection. In this example, an overhang is placed over a pathway below. Firstly, and of the most dire importance, it is absolutely necessary that the edge of the platform and the path below be positioned right over each other and the edges use the same x and z coordinates. The edge of the upper platform must line up perfectly with the path below to ensure objects pass properly from one tile to the next. Always be sure your edges match!



The next step is quite simple. Set the connection for the edge of the platform (1) to be connected to the floor below (2). Congratulations - your very first solitary connection!

The Chute

This is very similar to the drop but requires a little more work. In the drop, the platform above was not connected to the walkway below. Only the connection of the platform needed to be set. The chute by contrast connects directly to the floor. It could be a direct vertical drop, a ramp or slope, or just a little transitory section to make the platform above match the floor below.



The only thing that complicates matters is that the automatic connection programs, namely the GoldenEye Setup Editor and Zoinkity's clipping tools, both connect tiles with matching faces. Thankfully, it isn't complicated to determine which tiles they will connect first, or in the worst case to connect all the tiles properly after the program finishes.

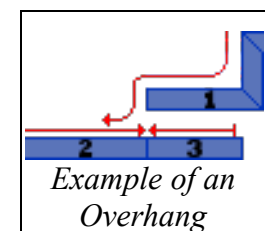
Both programs progress through the files from the first room to the last room, and from the first tile in the room to the last. If both of the tiles on the floor precede the one meeting them, then you need only set the one meeting them. Likewise for the other two situations.

However, assuming you do not know the order of the tiles or do not trust the connection utility, simply set all three tiles are such:

1. Tile 2 to Tile 3
2. Tile 3 to Tile 2
3. Tile 1 to Tile 2

The Ledge

Ledges are particularly challenging because they seemingly defy the rule that you can not



cross a stop. Unfortunately, there is no simple way to make them, and they require a certain degree of trial-and-error. As previously stated, it is not possible to cross a tile if there is a stop on either side of the edge. The trick here is to create a sort of overhang that acts as a chute or drop, moving you past the area blocked off by the wall made by the stop.

The illustration to the right is not to scale. The difference between the overhang tile (1) and the floor beneath (3) is only one unit. They are not set to the same elevation to avoid the horrors of congruent tiles, which would make connecting everything a real headache. At only one unit's difference, the elevation of the floor will be virtually unnoticeable except at extremely small scales.

The overhang itself should be the minimum possible distance to overcome the stop on tile 3, and for good reason. For all intents and purposes tile 1 is duplicating tile 3, which means you can have a situation where an object on tile 1 can be in the same location as something on tile 3 but can't interact with it. For instance, an ammo box on tile 3 can't be collected from tile 1, and an object on tile 1 can't keep a player on tile 3 from moving through it.

However, the only way to determine the minimum possible distance needed requires a good deal of trial and error. Unfortunately, the effect of stops differs on the scale of the stage. Also, if the overhang meets at a corner you will require more distance to overcome the overhang. Expect this to be somewhat time-consuming.

The basic technique is simple enough however. When you create the lower floor, partition a bit of space anywhere the floor meets the wall. That will act as tile 3 from the illustration, touching the wall normally and have stops set. Do the floor for the upper section normally as well. Reach a wall down to the floor from the ledge, but set its lower y values one unit above the floor. From here, stretch out a section the same size and shape as tile 3 but one unit higher, which will act as tile 1. From there, you treat it as a normal drop, merely setting a connection to tile 2.

The end result should be that an object can travel from tile 1 to 2 and tile 3 to tile 2, but you'll only be able to walk from tile 2 to 3. Effectively, you can only run off the ledge, not back onto it.

-Zoinkity (nefariousdogooder@yahoo.com)