

Microspeak: Impedance mismatch

 devblogs.microsoft.com/oldnewthing/20180123-00

January 23, 2018



Raymond Chen

In electrical engineering, an impedance mismatch occurs when the input impedance of an electrical load does not match the output impedance of the signal source, resulting in signal reflection or an inefficient power transfer (depending on the type of matching required).

That is not what it means at Microsoft.

In relational databases, an impedance mismatch occurs when a relational database needs to be transformed into an object-oriented model.

That is also not what it means at Microsoft.

At Microsoft, an *impedance mismatch* is a mismatch between what you have and what you want.

In this video, at time code 19:40, there is a slide that says

| No impedance mismatch — JavaScript is the type system of the database engine

This is saying that the type system of the database engine matches the type system of your programming language, so you don't waste time converting between them.

Here's the title of an internal document:

| Impedance Mismatch: Non-Mobile Applications on a Mobile Network

The document discusses the difficulties of taking an application that was originally designed to run on a PC on a fixed network (high availability, running on AC power) and converting it to run on a mobile device (intermittent connectivity, running on battery).

And here's a citation from an internal project proposal:

| We want to minimize the impedance mismatch between X data and Y data, *i.e.*, ensure the two data sets are in the same form.

This citation is handy because it includes a definition.

A related term in Microspeak is friction.

Bonus chatter: You may sometimes hear the word *impedance* pronounced with the accent on the first syllable instead of the second, which makes it sound like *impotence*.

Raymond Chen

Follow

