

FOREWORD

Node Atlas began with a wall, a lens... a looking glass.

Autodesk Fusion holds the *whole* of a design,
but it does not reveal all of *structure* beneath it.

The *geometry* is visible.

Some *dependencies* are visible.

Others — real ones, ones the model depends on —
never surface through the interface at all.

The model knows more than it can say.

Node Atlas is what I built to close that gap.

It reads the active Fusion design
and turns it into something you can actually see:

a graph of *relationships*

Parameters driving features

Sketches anchoring geometry

Bodies understood not as shapes

but as the result of a *causal* chain of *decisions*.

It will *trace* what depends on what.

It will show you what changes if a sketch is deleted,
which bodies are affected,
where an *upstream* edit will land *downstream*.

And where Fusion will not expose a relationship,

Node Atlas lets you ***record it by hand***,

so that a dependency the API withholds
can still become part of the readable structure of the design.

That is the practical promise,
and the tool keeps it.

You can stop there.

Most of the time I do.

There is ordinary work to be done:

inspecting, editing, reusing, explaining.

and Node Atlas is, ***before anything else***, a tool for doing it.

But I will say one more thing.

If you only ever use this to draw a prettier picture of your model,
you will have the picture, and nothing else.

A dependency graph can explain the grammar of a design.
But grammar is not **language**.

You can analyze the grammar of a poem,
and miss the poem.

You can map the harmony of a song
and miss the music.

You can map every street in a city
and still miss what makes it home.

But if you follow the graph honestly —

if you ask not only **what** depends on what,
why it was made the way it was,
but **how** the thing was made,
what is **true**

and keep following the chain
past the point of comfort,
somewhere out past the edge of the screen,

you will arrive at the thing this is really about.

I can point toward it.
I cannot hand it over.

“a quality without a name”

That is where the graph stops being a picture.

It shows, *with terrible precision*,
exactly how large the first half is,
and exactly where the second half begins.

You will reach it through your own, or not at all.

It is a **long** way there.
This is the **short** way in.

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