

4D ON AN AWP STRUCTURE

The model, the packages and the schedule share one code.

A 4D model is only as good as the link between its objects and the activities that date them. Built on the AWP structure, that link is a code the whole portfolio already uses, so the 3D model, Primavera P6 and Synchro 4D read the same key.



From the 4D model driven by its Gantt to the plant on site. Illustrative images, no client data.

CWA

Construction Work Area: the area or system of the 3D model.

CWP · EWP

Construction and Engineering Work Packages: contract-aligned WBS nodes.

IWP

Installation Work Package: workplace level, rolled up into P6.

4D object

Model geometry linked to its coded resource, and the resource to its P6 activity.

One code in three tools: the 3D model, Primavera P6 and Synchro 4D. Nothing translated by hand.

THREE ADVANTAGES

What the AWP structure gives a 4D model.

 One code, no parallel scheme

- The AWP hierarchy reuses the portfolio's activity codes, WBS templates and resource names.
- CWA, CWP and IWP are P6 nodes and codes, not a second dictionary kept in a spreadsheet.
- The 3D model, the schedule and the 4D model read the same key. Nothing is translated by hand.

 The link is data, rebuilt on every update

- Model objects link to coded resources, and resources to activities.
- The links are injected into the XER and re-imported: the 4D model follows every schedule update instead of being re-clicked in the UI.
- Mapping tables stay reviewable. Every link can be audited, versioned and corrected as data.

 Adherence you can watch

- Scope: every piece of geometry connects to a valid activity and its 4D object. Nothing built that was never scheduled, nothing scheduled that was never built.
- Flow: the Path of Construction runs CWA to CWP to IWP, with engineering and procurement releases feeding unconstrained installation windows.
- The traceability gate checks the sequence at every cut. The 4D simulation shows it.



A 4D model without a structure is re-linked by hand at every update. On the AWP structure it is rebuilt from the data, and every link stays auditable.

HOW IT LANDS

Standard first, one chain end to end, then every project with a model.

1 Standard design

Path of Construction, coding dictionaries, WBS templates and readiness rules, approved as the corporate standard.

2 Pilot

One chain end to end: engineering, procurement, P6, progress, 4D. Validated by counting, not by a demo.

3 4D per project

The 4D and AWP module runs per project with a 3D model, on the same codes. No new dictionary per contractor.

4 Governance

Recurring gates at every cut: traceability, constraint and revision reviews, and the 4D link rebuilt with each update.

AI behind the toolchain, never on your model



The injector and the mapping checks are built with AI on the structure of the data: the P6 schema and synthetic models. Your model and your schedule never reach an AI.

The link lives in your files



XER in, XER out, mapping tables you can open. P6 and Synchro stay the authoring tools. Nothing is replaced, everything is traceable.

P6 dates it. The package owns it. The model shows it. One code binds the three.

Bring one 3D model and one P6 schedule, and we link one chain end to end.

