



FIBERATLAS

Tutorial Manual

Beta 1 v2

Invitation-only private beta

Publication date: August 30, 2026

Application version: 0.1.0-beta.11

Candidate: B1-R1

Manual authority	Verified build
Signed Windows private-beta candidate	bf3ab655b139

IMPORTANT: The Splicing Laboratory is a Suggested Draft workspace. Only reviewed Apply Splices writes project data.

Local-first OSP mapping, documentation, and splice-planning support

[START HERE](#)

Release record and operating boundaries

Item	Verified record
Release	FiberAtlas Beta 1 v2
Application version	0.1.0-beta.11
Candidate	B1-R1
Source commit	bf3ab655b1391d4c9b9831ba87be3d21cc710bdf
Setup SHA-256	C59FAD3630A3A8412C6DFF4E7085CA17AB07CD8012C0D6D07A86B4E58C4E5518
Portable SHA-256	413D36B176ADF20AC06A471A28EECBEA46D59A1F8EB6B8CBCE2053CD0230CFDC
Audience	Invited private-beta testers using backed-up, disposable, synthetic, or sanitized projects
Status	Signed private-beta candidate; not public, paid, production, construction-ready, or compliance-approved

What this guide covers

- Launching the signed tester candidate and keeping work recoverable.
- Opening a splice closure and identifying feeder, outgoing, and pass-through cables.
- Working visually inside a tray or using Expert Quick Splice.
- Reviewing Suggested Draft work before the explicit Apply Splices checkpoint.
- Inspecting recorded data, exports, print outputs, and fail-closed messages.

NO FIELD CLAIM: A visible route, cable, tray, line, selected fiber, completed row, ready state, or recorded row does not prove optical continuity, capacity, physical fit, installation, testing, engineering approval, compliance, or construction authorization.

FIND YOUR TASK

Contents and ten-minute path

Task	Go to
Make the workspace comfortable	Workspace scale and movement
Open the Splicing Laboratory	Enter a splice case
Identify cables	Cable identity and facing
Connect exact fibers	Visual Workbench
Splice a whole numbered tube	Tube 1:1
Work faster from selectors	Expert Quick Splice
Record reviewed work	Apply Splices
Print or export	Recorded documentation
Resolve a blocked action	Fail-closed states

Ten-minute private-beta walkthrough

1. Open a backed-up synthetic or sanitized project.
2. Select a splice closure and enter the Splicing Laboratory.
3. Confirm the feeder/IN cable, outgoing cable, cable faces, and FIELD TOP.
4. Open Tray 1, select one numbered tube on each side, and connect two exact fibers.
5. Review the Suggested Draft. Do not treat it as recorded yet.
6. Open recorded review and use Apply Splices only if the mapping is intentional.

FIRST-TIME SETUP

Workspace scale and movement

TIP: Press Ctrl+- to tighten the whole application and Ctrl++ to enlarge it. Choose a comfortable browser-scale view before starting a tray.

Action	Control	Result
Reduce interface size	Ctrl+-	More map, cables, and tray context fit on screen
Increase interface size	Ctrl++	Larger controls and labels
Restore common scale	Ctrl+0	Returns the application to its default scale
Move within the visual bench	Drag the dark background	Pans without changing project data
Zoom the visual bench	Mouse wheel inside the visual area	Changes only the local workbench camera
Return to the whole bench	Fit workbench	Restores the full visual context

Cable arrangement is a visual aid. Moving a cable face does not change recorded topology, direction, or project data.

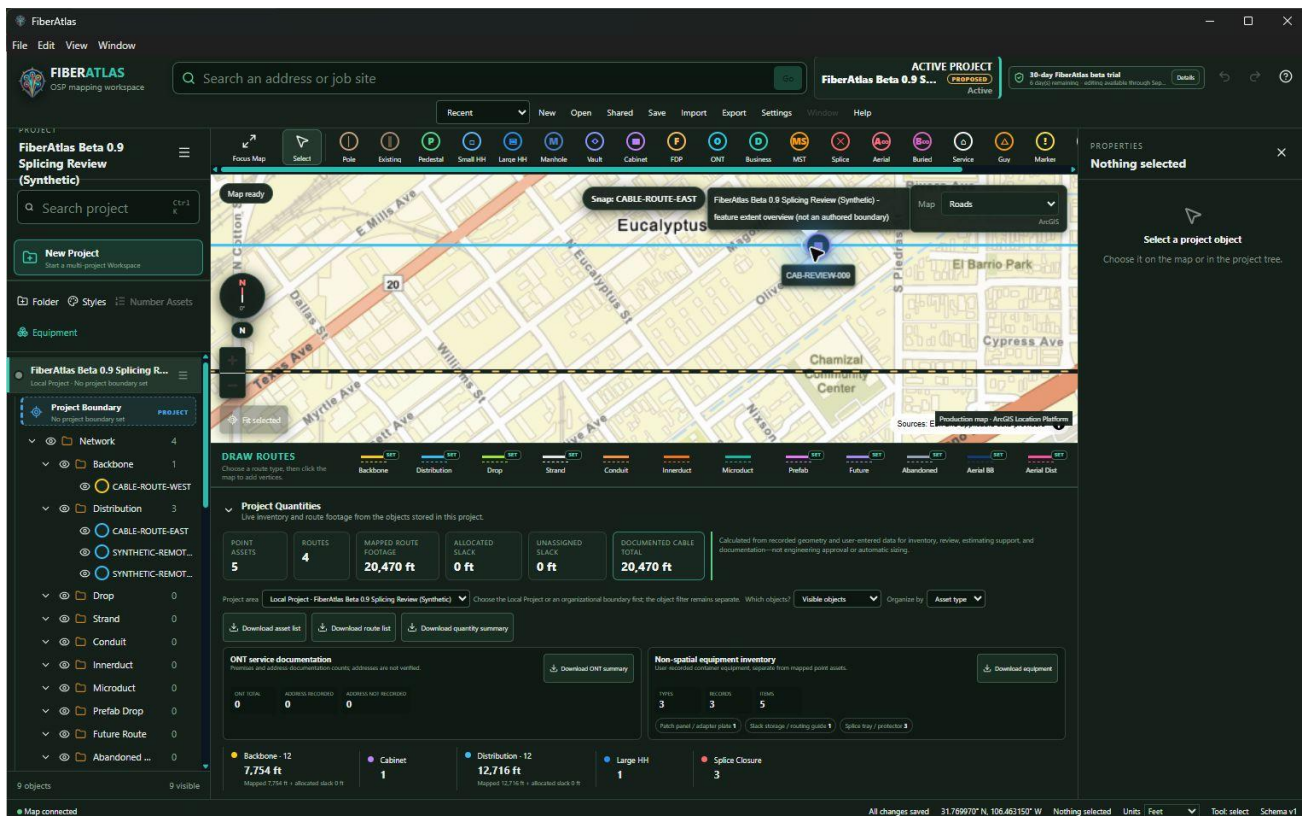


Figure 1. The signed Beta 1 v2 application with a synthetic local project.

SPlicing LABORATORY

Enter a splice case

Goal

Open the dedicated Splicing Laboratory for one recorded splice closure.

Before you begin

Select the correct project and confirm that saved work is current.

Steps

1. Select the splice closure in the project tree or on the map.
2. Read the closure name in Properties.
3. Choose Enter Splicing Laboratory.
4. Confirm the same closure name appears in the Laboratory header.

Expected result

The Laboratory opens for that closure only and clearly labels the local Suggested Draft boundary.

CAUTION: Do not enter a similarly named closure by memory. Read the recorded closure name first.

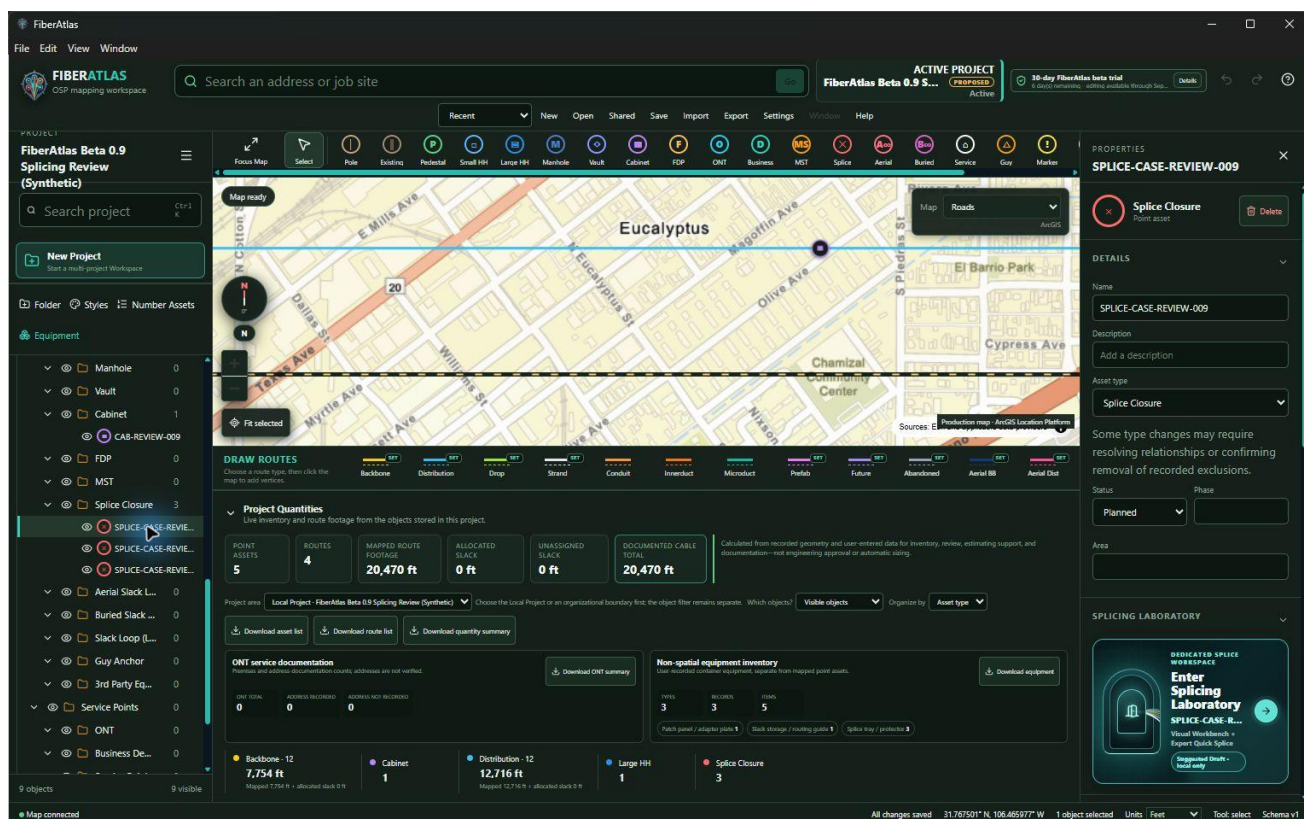


Figure 2. The Splicing Laboratory is presented as a dedicated door for the selected closure.

IDENTIFY BEFORE OPENING THE TRAY

Cable identity and facing

Goal

Stage the feeder, outgoing cables, and pass-through cables while keeping field direction visible.

Before you begin

Label every field cable and confirm the structure before relying on the visual path.

Steps

1. Choose Buried handhole, Aerial case, or Pedestal field view.
2. For each candidate, confirm the cable name, fiber count, route direction, and selected cable face.
3. Choose Use in case for the feeder and each outgoing cable that will be worked.
4. Choose Pass-through for slack-loop cables that remain visible but are not opened.
5. If needed, deliberately select a different feeder/IN cable and accept the rebuild warning.
6. Open the workbench only after both working cable faces are selected.

Expected result

The selected case has one feeder/IN cable and up to eleven outgoing cables, while pass-through cables remain visible.

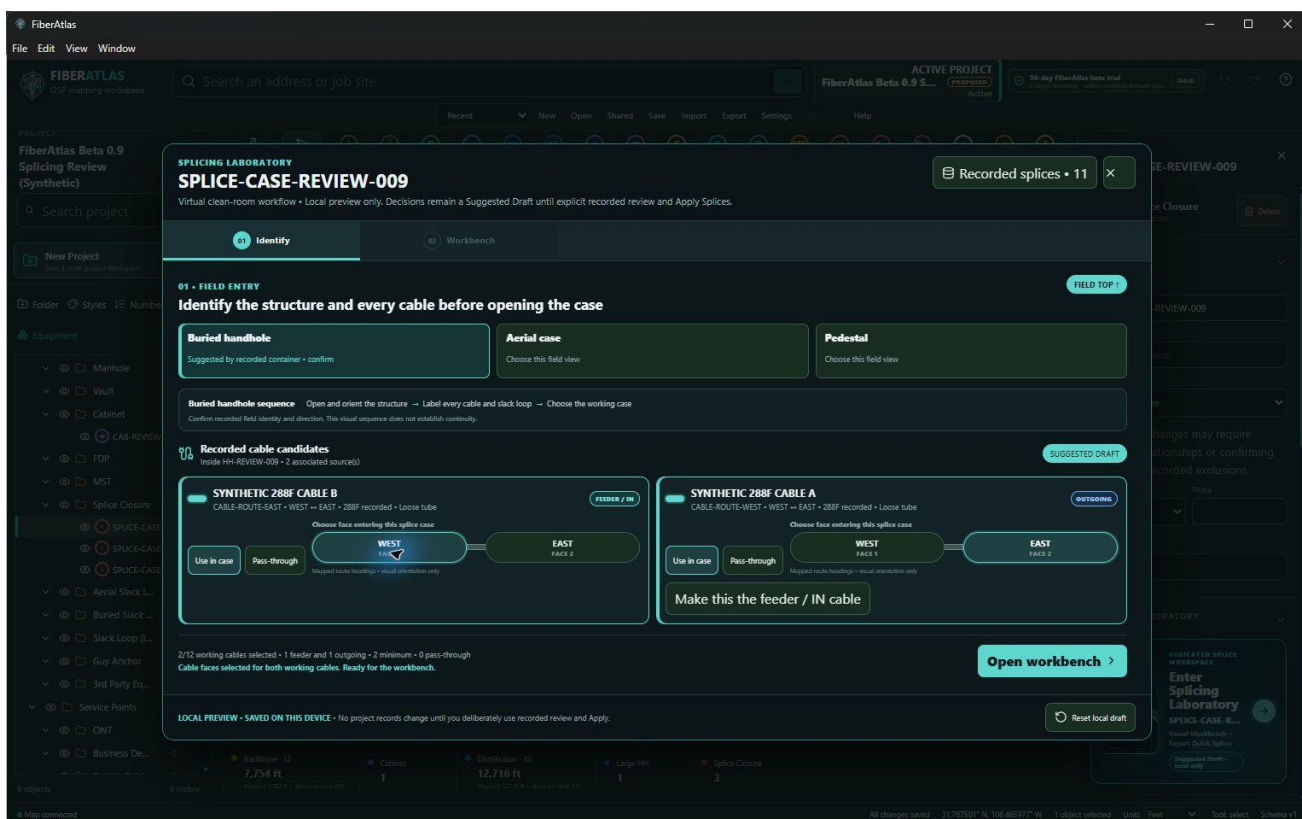


Figure 3. Cable identification keeps the recorded cable names, counts, faces, and directions together.

FIELD LANGUAGE

Read tube, fiber, and color codes

No.	Code	Color	No.	Code	Color
1	BL	Blue	7	RD	Red
2	OR	Orange	8	BK	Black
3	GR	Green	9	YL	Yellow
4	BR	Brown	10	VT	Violet
5	SL	Slate	11	RS	Rose
6	WH	White	12	AQ	Aqua

Always keep these identifiers together

- Cable name and total fiber count.
- Numbered tube/bundle ordinal and its field color code.
- Fiber number within the selected tube and the absolute fiber number.
- Cable face, feeder/outgoing role, and FIELD TOP direction.
- Tray number and position when the connection is reviewed.

LARGE CABLES: For 432F and 864F cables, use the numeric bundle depth/page indicator as the authority. Color repeats; the bundle number prevents ambiguity.

SEE BEFORE, CURRENT, AND FORWARD

Visual Workbench

The workbench keeps cable faces outside the physical-tray outline and maintains left/in and right/out direction. Tray tabs stay at the top of the case. The active tray opens beneath them without hiding the handhole and cable context.

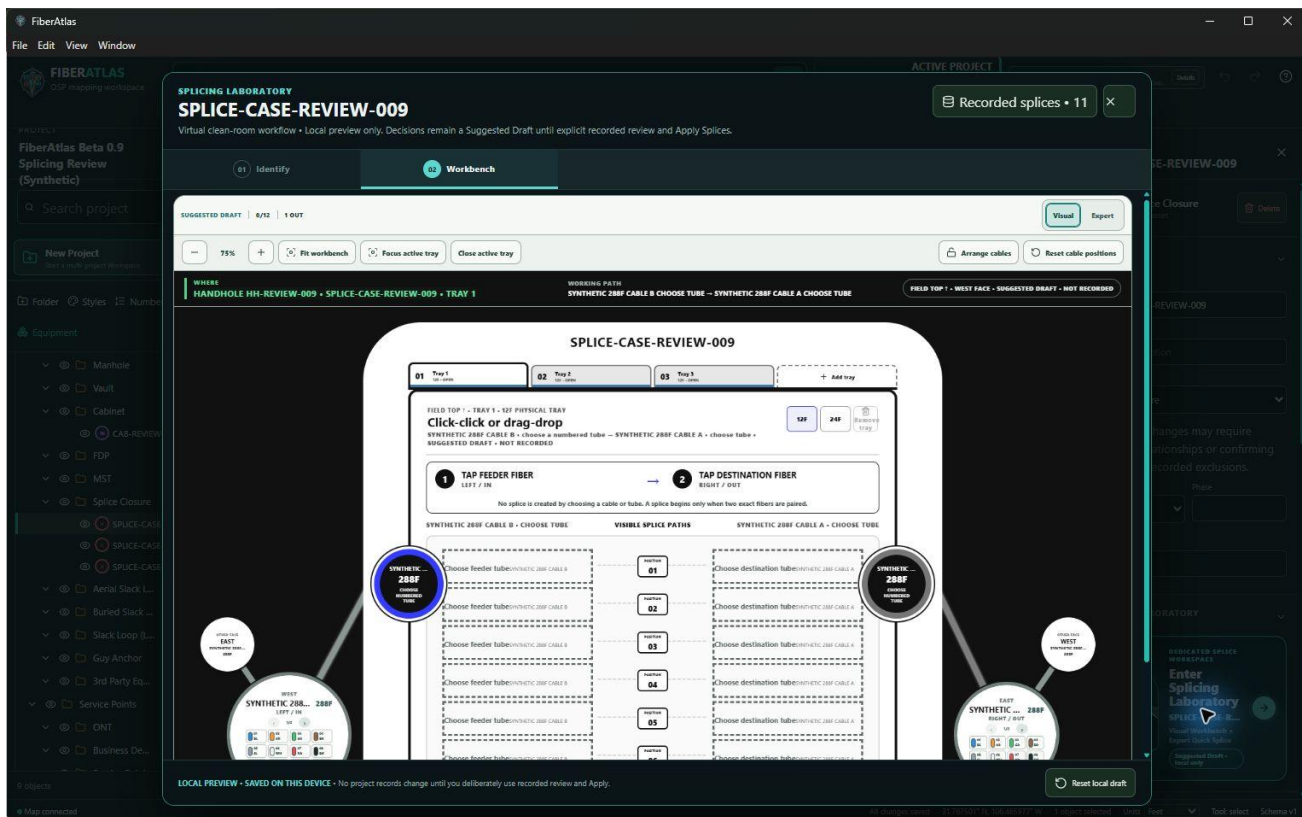


Figure 4. The complete Visual Workbench with cable faces, tray tabs, and the physical-tray outline.

Use the camera deliberately

- Mouse wheel zooms only inside the visual area.
- Drag the dark background to pan; use the regular page scrollbar outside the visual area.
- Fit workbench returns to the full case-and-cable view.
- Focus active tray moves attention to the selected tray without creating a second workspace.
- Arrange cables changes only the local visual layout; Reset cable positions restores the standard view.

POINT TO THIS, SPLICE TO THIS

Connect exact fibers inside the tray

Goal

Create a Suggested Draft connection between one exact feeder fiber and one exact outgoing fiber.

Before you begin

Confirm the active tray, cable names, tube numbers, color codes, and left/in-right/out direction.

Steps

1. Select one numbered feeder tube. Its twelve color-coded fibers open inside the left side of the tray.
2. Select one numbered outgoing tube. Its twelve color-coded fibers open inside the right side of the tray.
3. Click the feeder fiber, then click the exact destination fiber; or drag the feeder fiber to that destination.
4. Read both cable names, tube numbers, fiber numbers, and the visible path before continuing.
5. Repeat without leaving the tray. The selected cable/tube context remains visible until you deliberately change it.

Expected result

A visible Suggested Draft path appears between the two exact endpoints; no project record has been written.

CAUTION: If the interface reports that a fiber is already in use, open the named case and tray instead of silently replacing the existing connection.

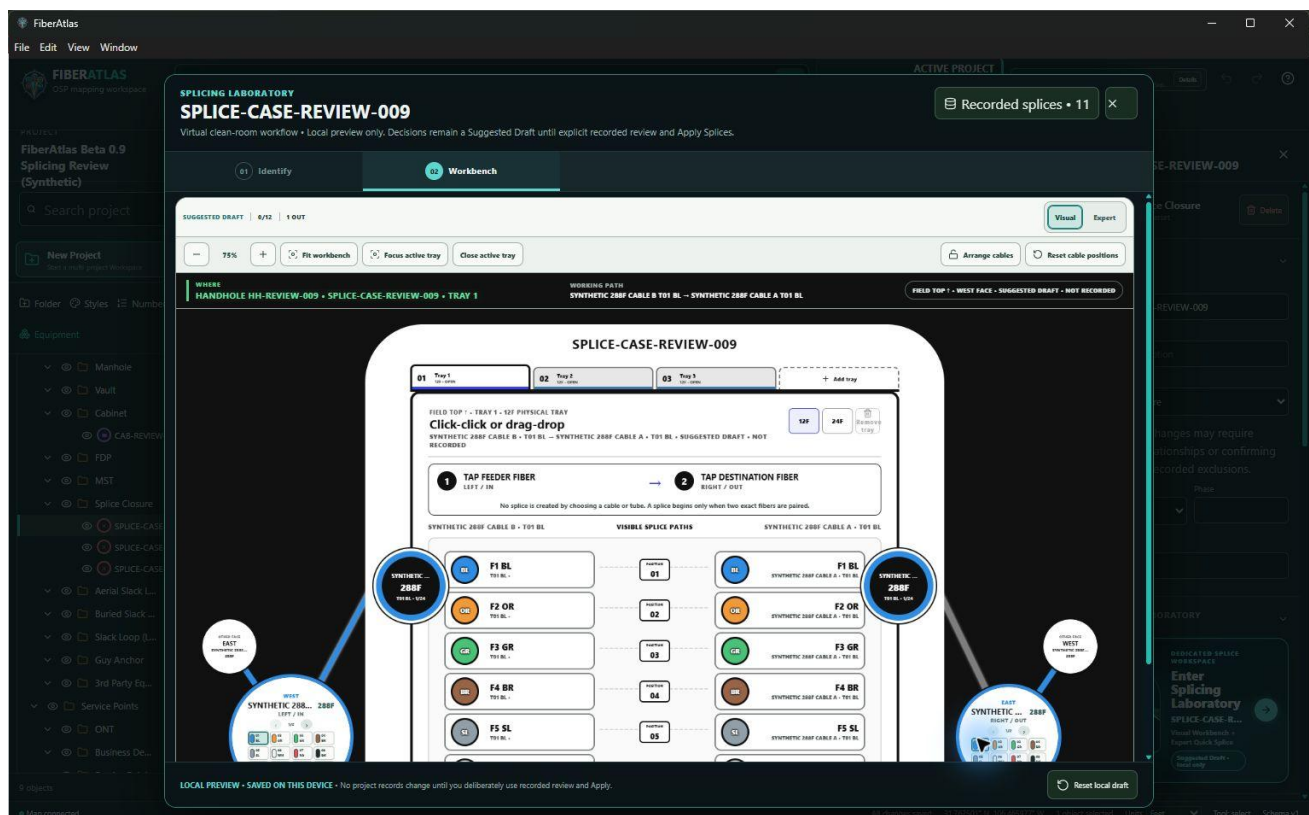


Figure 5. Both numbered blue tubes are open, with every color-coded fiber visible on its side of the tray.

Tube 1:1 and multiple cable legs

Tube 1:1

1. Choose the active tray and the intended feeder/outgoing cable leg.
2. Select one numbered tube on each side.
3. Confirm both tubes have the same fiber count.
4. Choose Tube 1:1.
5. Review all generated rows before marking the tray ready or recording anything.

MISMATCH: A 12-row automatic action stops when source and destination tube counts differ. Resolve the tube choice; do not fill the missing rows by assumption.

Multiple outgoing cables

- A pedestal or splice case can stage twelve working cables total: one feeder plus up to eleven outgoing cables.
- More than two cable legs may be assigned to the same logical tray.
- Each cable leg stays independent; completing one leg must not replace another leg.
- One numbered bundle cannot be assigned to two trays.
- A feeder or outgoing fiber cannot be reused across two active cable legs in the same tray.

TRAY TABS

Manage trays without leaving the case

Control	Use
Tray 1, Tray 2, ...	Open the selected tray beneath the same closure and cable context
Add tray	Create another local tray in the workbench
Remove tray	Remove only an empty, unlocked local tray after confirmation
Done Splicing	Close the active tray and return to the tray overview
All trays	Review tray summaries and cable involvement at a glance
Reopen	Return to a completed local tray when permitted

- When no tray is open, show the mini-card overview rather than a blank page.
- Each tray card should identify the cables involved so a splicer can recover context quickly.
- Ready trays are locked. Breaking a ready tray requires two deliberate confirmations.
- A tray with recorded join or event history cannot be deleted as if it were an empty local tray.

DROPDOWN-DRIVEN PATH

Expert Quick Splice

Goal

Generate a compact Suggested Draft when the operator already knows the intended tube mapping.

Before you begin

Know the exact tray, cable, tube, direction, and scope before using Expert.

Steps

1. Choose Expert.
2. Select the tray and choose One tube or All tubes scope.
3. Select the feeder cable and its numbered tube.
4. Select the outgoing cable and its numbered tube.
5. Choose Splice only when the displayed pair is correct.
6. Return to the tray and review every generated row.

Expected result

The same closure-scoped Suggested Draft is updated. Expert does not bypass validation or Apply Splices.

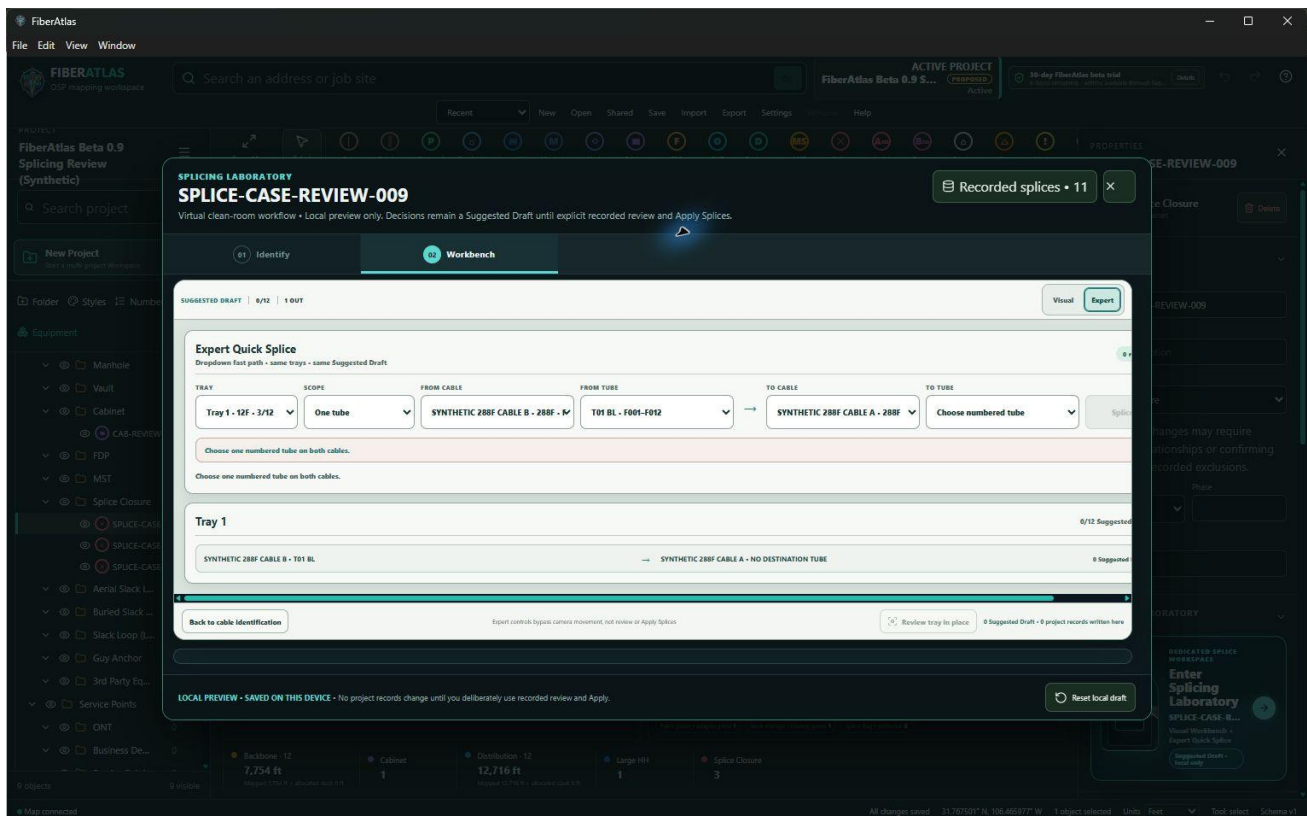


Figure 6. Expert Quick Splice keeps tray, scope, cable, and numbered-tube selectors in one compact row.

BEFORE RECORDING

Review, remove, reopen, and protect work

State	Meaning	Allowed next action
Suggested Draft	Saved locally for this closure; not project data	Continue, remove deliberately, or open review
Incomplete	One or more endpoints or rows are missing	Return to the exact tray and resolve
Spliced - ready	Local tray is complete and locked	Review; use two confirmations before breaking
Recorded	Written to native project data after Apply Splices	Inspect records; use recorded-change controls
Read-only	Current context cannot be edited safely	Refresh or reopen the correct saved project

Remove a mistaken Suggested Draft splice

1. Open the tray that owns the visible Suggested Draft path.
2. Select the exact splice or row to remove.
3. Choose Remove splice.
4. Confirm that the displayed feeder and destination are the intended pair.
5. Confirm removal. Rebuild the correct pair inside the tray.

PROTECT RECORDED WORK: A recorded splice is not a loose visual line. Use the recorded change/break workflow and its confirmations; never replace it by drawing over it.

REVIEW CHECKPOINT

Apply Splices: the recorded transition

1. Review every tray, cable leg, tube, fiber number, color code, and destination.
2. Resolve incomplete, duplicate, conflicting, in-use, unknown-direction, and capacity-blocked states.
3. Open recorded review from the tray or Laboratory header.
4. Compare the Proposed/Suggested Draft with the current native project records.
5. Choose Apply Splices only when the proposed mapping is intentionally ready to become project data.
6. Reopen the recorded worksheet and confirm the closure, tray, positions, joins, and endpoint counts.

ONLY RECORDED TRANSITION: A visual connection, Expert-generated row, ready tray, screenshot, or local reload does not record the draft. Reviewed Apply Splices is the only guided transition into project data.

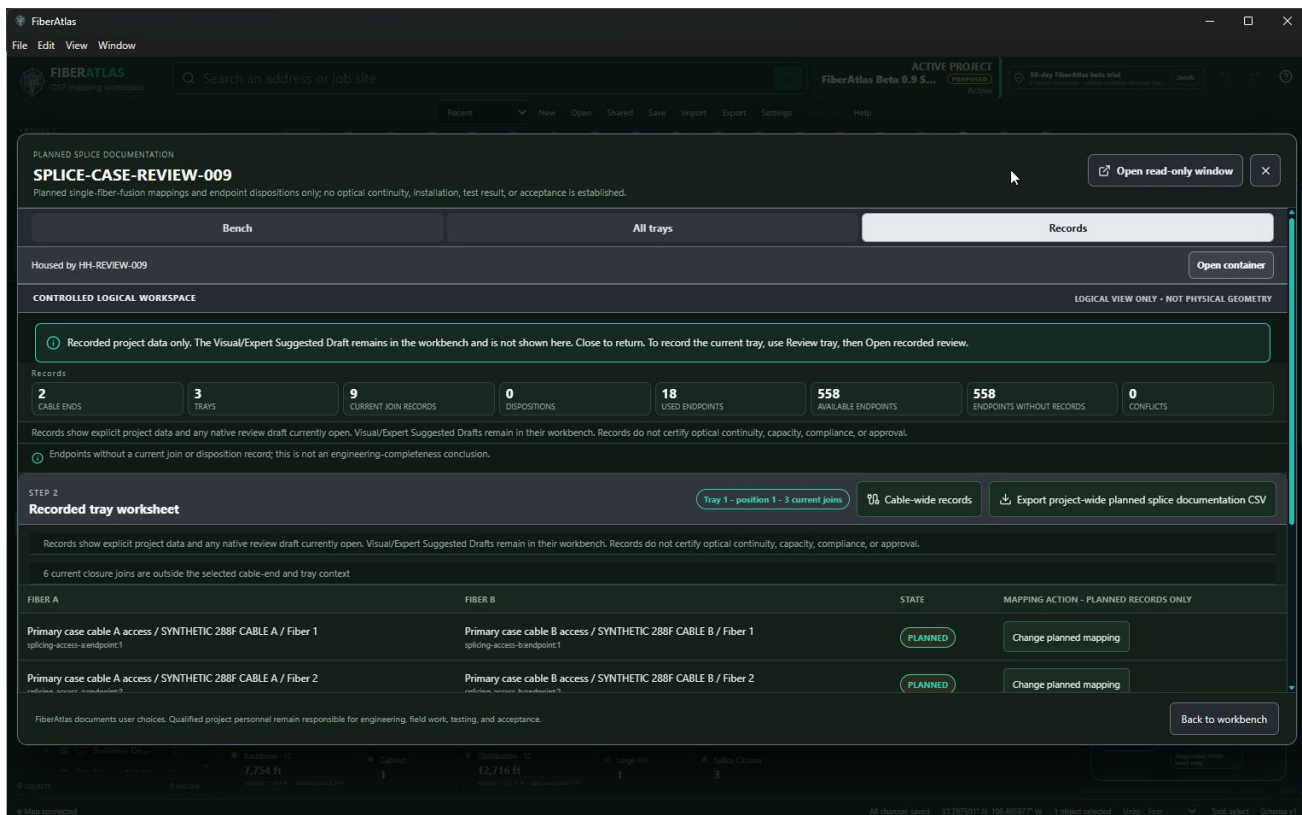


Figure 7. The recorded worksheet is visually separate from the Visual/Expert Suggested Draft.

AFTER APPLY

Recorded documentation, export, and print

Output	Source	Use
Recorded tray worksheet	Native recorded joins/endpoints	Review one tray and position context
Cable-wide records	Native recorded cable usage	Trace where cable fibers are already used
Planned splice CSV	Recorded/native worksheet data	Portable review and QA outside the visual draft
Project export	Saved project data	Controlled backup or transfer
Splice-case print	Recorded tray hierarchy	Field-facing documentation after separate print review

PRINT NOTE: The planned splice-case print format is 8.5 x 11 inches, landscape, booklet style. Folding, binding, booklet imposition, cover content, and pagination remain a separate print-package decision.

PROVENANCE: Do not export or print an uncommitted visual preview as if it were the recorded worksheet. Printed pages must identify whether data is Suggested Draft or recorded.

STOP AND RESOLVE

Fail-closed states

Message/state	What it protects	Response
Unlabeled / unknown direction	Cable identity and facing	Label and confirm the recorded cable before continuing
Incomplete row	Two-endpoint mapping	Return to the tray and select the missing exact endpoint
Unstaged Tube 1:1	Automatic mapping scope	Stage matching numbered tubes first
Unequal tube counts	Row-by-row validity	Choose equal-count tubes or use deliberate individual work
Fiber already in use	Existing splice ownership	Open the named case/tray and inspect the existing record
Duplicate sleeve/bundle/fiber	Unique active ownership	Remove the conflicting draft or select a different endpoint
Conflicting destination	One intentional destination	Resolve the conflict before review
Ineligible South/backfeed	Recorded source eligibility	Use only the explicit cut/available side or correct the recorded state
Read-only / stale	Saved project consistency	Close and reopen the correct current project context
Offline / unavailable	Durable access	Restore access before depending on map or hosted resources

These blocks are safety behavior, not application indecision. Do not work around them by guessing or by treating a visible line as proof.

WHAT TO TRY

Private-beta test missions

1. Complete the ten-minute synthetic walkthrough and verify no project records change before Apply Splices.
2. Build one pedestal case with one feeder and at least three outgoing cables in one tray.
3. Create multiple trays, close them, inspect the tray overview, and reopen each tray.
4. Use Visual for one tube and Expert for another, then compare the same Suggested Draft in review.
5. Attempt a duplicate fiber, duplicate bundle, mismatched Tube 1:1, and thirteenth working cable; confirm each action stops clearly.
6. Use Ctrl+- and the visual camera controls at desktop and narrow widths.
7. Apply a reviewed synthetic draft, then verify the recorded worksheet, cable-use view, and CSV.

Useful feedback record

- Project type and synthetic/sanitized status.
- Closure and tray name.
- Cable names, tube numbers, fiber numbers, and field color codes.
- Visual or Expert mode and the exact action taken.
- Expected result, actual result, and a screenshot.
- Whether the state was Suggested Draft, ready, recorded, read-only, or blocked.

PRIVACY: Never include passwords, provider credentials, billing details, or unrelated customer information in feedback.

KEEP BESIDE THE TESTER

Quick reference

Need	Do this
More room	Ctrl+;-; then Fit workbench
Larger text	Ctrl++
See whole case	Mouse wheel out inside the visual area or Fit workbench
Open exact fibers	Select a numbered tube on each cable face
Connect one pair	Click-click or drag-drop inside the tray
Connect a matching tube	Select both numbered tubes, then Tube 1:1
Add another tray	Use the Add tray tab
Check another tray	Select its tray tab; keep the same closure context
Correct a draft mistake	Open owning tray, Remove splice, confirm, rebuild
Work from selectors	Switch to Expert
Record reviewed work	Open review and deliberately Apply Splices
Verify recorded work	Open Recorded splices and inspect the worksheet

BL OR GR BR SL WH RD BK YL VT RS AQ

Known limits and responsible use

- This is an invitation-only private beta, not a public, paid, production, or construction release.
- Use backed-up, disposable, synthetic, or sanitized projects during testing.
- The Visual/Expert draft is local to the device and closure until reviewed Apply Splices.
- The map may depend on network access even though project work is local-first.
- Unknown or unsupported states remain visible; FiberAtlas does not invent continuity or direction.
- Qualified project personnel remain responsible for engineering, field work, testing, acceptance, compliance, and approvals.

TESTER PROMISE: Make splicing less stressful by keeping identity, direction, numbers, colors, trays, and recorded state visible. Stop when the evidence is unclear.

Manual source basis

Built against signed candidate bf3ab655 and the controlled Beta 1 v2 release, twelve-cable pedestal, cable-direction, visual-bench, tray-management, and recorded cable-use contracts. All application figures in this edition were freshly captured from the signed packaged build using synthetic data.