

DROP INSTALLATION AGENT

Verify completed drop installation work.
Deliver auditable proof for contractor management.

The Business Challenge

Drop installations are one of the highest-volume, highest-risk stages in fiber network delivery. A mix of internal crews and contractors with manual back-office close-out review means defects are rarely caught at the point of work. Failures emerge only after crews have left, driving costly truck rolls, rework and service activation delays. Without automated validation, operators can't enforce consistent standards, produce reliable as-built records or trigger fair contractor payments. Where historical close-out photos exist, the agent can also analyze these from day one, surfacing previously undetected defects without additional truck rolls.

How the Agent Works

1	Capture Field crew captures close-out photos: conduit, trench depth, NID placement, ONT transition and site restoration.	2	Analyze Visual AI validates each photo: conduit presence, trench depth, fiber dressing, NID security and site restoration.	3	Validate Non-conformances flagged on-site in seconds. Crews fix issues before leaving. No costly return visit.	4	Record Verified evidence and as-built data linked to the work order and asset record in Network Manager.
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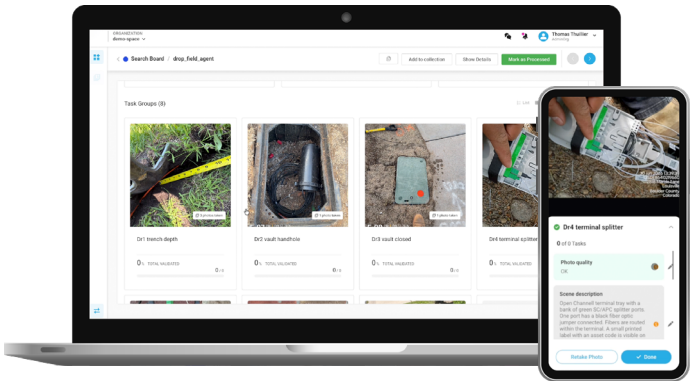
Old Way vs. With Visual Agent Studio

Old Way	VS	With Visual Agent Studio
✗ Existing close-out photos unused and unvalidated		✓ Historical drop photos analyzed from day one
✗ Manual close-out review in the back office		✓ Real-time photo validation at point of installation
✗ Defects found only after crews have left		✓ Non-conformances flagged on-site before crews leave
✗ Incomplete documentation delays contractor payment		✓ Contractor payment based on verified proof of work
✗ No consistent standard across crews and contractors		✓ Every installation checked against the same standard
✗ Undetected defects cause service activation failures		✓ Installation quality validated before activation begins

Proven Customer Outcomes

Expected results from operators deploying the Drop Installation Agent:

Outcome	Result
Installation defect detection	On-site, before crews leave
Documentation quality	Complete and validated at point of work
Contractor payment	Based on verified proof of work
Service activation success	Improved through pre-activation validation
Audit and compliance readiness	Photo-backed evidence on every job



Standard Photo Deliverables (Included)

#	Photo Deliverable	Visual Checks (pass / flag-for-review)	Data Read Off The Photo (OCR)
1	Trench / bury depth	- Right photo type (open trench or slit with measuring device) - Usable photo - Drop cable in the trench - Measuring device positioned to the trench bottom - Depth evidence usable	Tape-measure reading, exactly as shown e.g. 9 in — never estimated visually
2	Open vault / handhole	- Right photo type (open vault with drop) - Usable photo - Drop routed into vault - Slack stored neatly - Closure/terminal condition - Seal and tracer flagged for review	Drop/vault tag e.g. tag 162
3	Closed vault lid	- Right photo type (closed lid at grade) - Usable photo - Lid seated flush - Surface restored around the lid - Locate marks where present	Lid molding / markings
4	Terminal / splitter	- Right photo type (open terminal or splitter) - Usable photo - Drop jumper connected to a port - Workmanship (weathered or stressed hardware flags)	Terminal label — serial and address e.g. V739944471333
5	Light level at the home	- Right meter photo - Usable screen - Reading within the acceptance window (e.g. -28 to -8 dBm — dark fiber like -70 dBm fails) - Correct wavelength	Exact meter values e.g. 1577nm: -20.99 dBm 7.958 uW
6	House transition	- Right photo type (drop at the house wall) - Usable photo - Slack coiled and properly secured (duct tape instead of proper fasteners is caught) - Conduit/riser protecting the cable to grade	Watermark address / job ID
7	Path restoration	- Right photo type (restored drop path) - Usable photo - Surface restored (seams closed) - No cable left on the surface - Site tidy	
8	Aerial drop	- Right photo type (aerial attachment) - Usable photo - Attachment hardware at eave/pole correct - Drip loop present - Span clear	Pole tag — address, ID, ports e.g. 1535 W 16TH ST LD2255CA, 13-24 PORTS: (1-12)