



ACE SYSTEMS · WHAKATANE

A product of ACE Systems

NZ\$9.99 EDUCATION COMPANION

PLC Asset Lifecycle Companion

The filling line already knew what was in the rack.
ACE Suite reads the export — Online or on the plant server. This guide tells you what the colours mean.

Guide NZ\$9.99

App does the job · from NZ\$19

The screenshot displays the ACE Suite Online web interface. The main heading is "ACE Suite Online — document a PLC, pay per file." Below this, it states: "Drop a Studio 5000 .LSX or Unity .ZEF and get architecture, hardware BOM, spare I/O, ladder and a functional description you can hand to a client. Same tools as the plant edition — no licence seat." There are two buttons: "Upload a file" and "See it on the ACE demo (free)". A list of benefits is shown: "No more redrawing racks from Module trees in Excel.", "No more counting DI/DO with a highlighter.", "No more guessing Active vs Discontinued from last year's spreadsheet.", and "No more 'the FD will follow' three weeks after handover." A green box highlights: "Your PLC files stay in your browser. Not stored in the cloud. No server copy. Your plant IP does not sit on ACE Systems' site." On the right, a "CONTROLLER EXPORT · QUOTE BEFORE PAY" modal is open, showing a "Drop PLC files" section with instructions to drag .LSX, .ZEF, .XEF, .XBD, .XHW, or .SLC files. It lists two demo files: "ACE_Systems_Demo.LSX" and "ACE_Peer_PLCLSX", both marked as "FREE DEMO". The total cost is "NZ\$0". Buttons for "Open tools" and "Pay to unlock export" are visible.

Active · Active Mature · End of Life · Discontinued

Your PLC files stay in your browser. Not stored in the cloud.

Online · pay per file · On-prem · plant server · ACE Systems, Whakatane

What this guide is — and is not

This is a short field companion for controls engineers and the project managers who quote their work. It is education. It costs NZ\$9.99. It will not inventory your plant.

ACE Suite Online does the job. You drop a Studio 5000 .L5X (or a Unity .ZEF) in the browser. The tools read the export and show architecture, a lifecycle-coloured BOM, spare I/O, ladder, and a functional description you can hand to a client.

The PDF never replaces the file

Reading this will not tell you what is in next week's panel. Date-stamp an export, drop it on ACE Suite Online, and read what the controller already knew. The free ACE demo pair is there so you can see the tools before you pay.

Try it on the ACE demo (free)

ACE_Systems_Demo.L5X is a filling line — infeed, filler, capper, discharge — on a 1756-L83E. ACE_Peer_PLC.L5X is the packer it talks to over produced/consumed tags. Both files are always free, with full tools including export. One real plant file is an on-screen preview until you pay.

Current Online site (test): ace-suite-online-test-as.azurewebsites.net

ACE Suite comes two ways: Online (pay per file, files stay in the browser) and on-prem (licence on the plant network, files stay on their server). Same tools. Different hosting. This companion teaches the lifecycle habit. Neither edition is this NZ\$9.99 guide.

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1. The filling line that already knew

Dairy and food plants still lose hours to a module nobody can name. Drawings are three revisions back. The spreadsheet says Active. The nameplate says 2009. The person who last edited the logic is on nights.

The ACE demo is a small, honest version of that plant: a bottle filling line and a packer. Infeed arrives on Ethernet. The capper sits on ControlNet. The filler talks to the packer so the line does not run when the packer is not ready. None of that was typed into this guide. It is in the two L5X files.

What you see	Where it already lived
Infeed remote rack	Module tree — 1756-ENBT at 192.168.1.20
Capper remote rack	Module tree — 1756-CNB on ControlNet
Bottle in nest / cap present	Tag descriptions on the I/O
Cap feed, chuck, index	Capper MainRoutine rungs
Line permissives + packer ready	Line_Main + produced/consumed
Active vs Discontinued cards	Catalogs in the export, coloured from the lifecycle file

The file already knew this

Architecture, catalogs, firmware, spare channels, who talks to whom, and the If / And / Then of the capper — they are not a documentation project you start after handover. They are already in the export. ACE Suite Online reads them. This guide tells you what to do with the answer.

Screenshots in this companion are from the live ACE Suite Online demo pair — filling line and packer — not an old silo or batch project.

2. Your files stay in the browser

Plant IP is the job. ACE Suite Online is built so the PLC file does not become someone else's copy.

PLC files stay in your browser. Not stored in the cloud.

No server copy of the plant file. Your plant IP does not sit on ACE Systems' servers. After you pay, the tools stay available in this browser for 30 days. Then export locks and the local copies in this browser are cleared. Plant IP is not used to train anything.

The screenshot displays the ACE Suite Online web interface. The main header includes the logo, navigation links (See the tools, Pricing, How it works, Help), and an 'Upload a file' button. The main content area is titled 'ACE Suite Online — document a PLC, pay per file.' and lists benefits such as 'No more redrawing racks from Module trees in Excel' and 'No more counting DI/DO with a highlighter.' A prominent dark green box states: 'Your PLC files stay in your browser. Not stored in the cloud. No server copy. Your plant IP does not sit on ACE Systems' site.' To the right, a 'Drop PLC files' modal is open, showing a list of demo files: 'ACE_Systems_Demo.LSX' and 'ACE_Peer_PLC.LSX', both marked as 'FREE DEMO'. Below the file list, it shows 'This session' with a price of 'NZ\$0' and buttons for 'Open tools' and 'Pay to unlock export'.

ACE Suite Online — document a PLC, pay per file.

Drop a Studio 5000 .LSX or Unity .ZEF and get architecture, hardware BOM, spare I/O, ladder and a functional description you can hand to a client. Same tools as the plant edition — no licence seat.

Upload a file See it on the ACE demo (free)

- No more redrawing racks from Module trees in Excel.
- No more counting DI/DO with a highlighter.
- No more guessing Active vs Discontinued from last year's spreadsheet.
- No more "the FD will follow" three weeks after handover.

Your PLC files stay in your browser. Not stored in the cloud.
No server copy. Your plant IP does not sit on ACE Systems' site.

Drop PLC files
Drag .LSX, .ZEF, .XBD, .XHW or .SLC here. We quote before you pay.

Drop files or click to browse
Up to 40 MB each - quoted instantly

Stays in this browser. Not stored in the cloud.

File Name	Status
ACE_Systems_Demo.LSX	FREE DEMO
ACE_Peer_PLC.LSX	FREE DEMO

This session **NZ\$0**

2 demo files (full tools, free).

Open tools **Pay to unlock export**

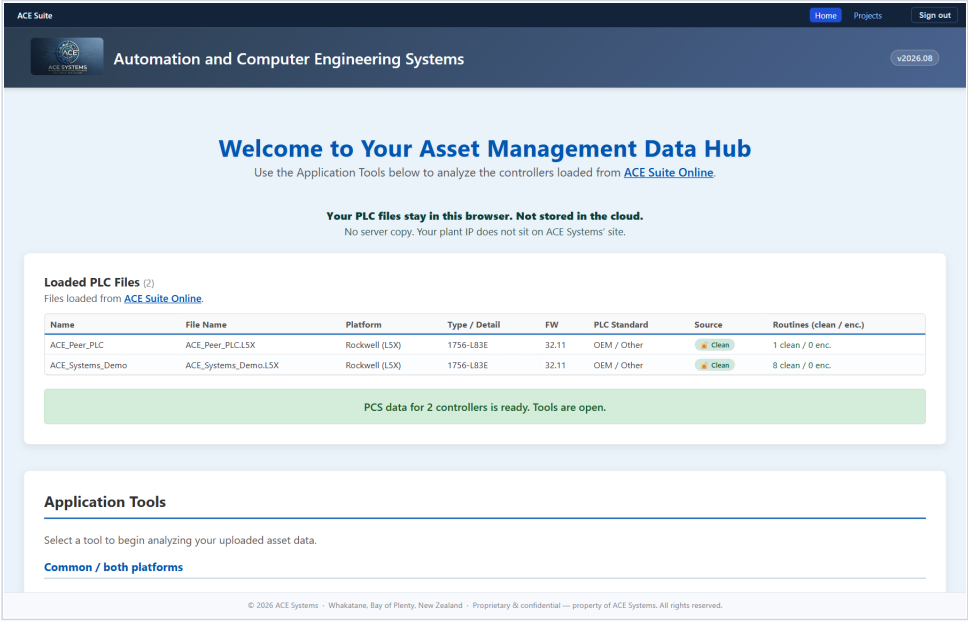
Opens the ACE hub with this session's files.

The documentation is already in the file
From raw file to complete documentation pack: a link inside the ACE demo controllers — architecture, a lifecycle-colored BOM, I/O lists, ladder logic, and a

ACE Suite Online home — privacy lock, drop zone, and the free ACE demo pair at NZ\$0. Captured from the live site.

Open the tools — still in this browser

Click See it on the ACE demo, then Open tools. The hub seeds ACE_Systems_Demo.L5X and ACE_Peer_PLC.L5X from the public samples folder. Your own plant files never leave the browser; they are held in IndexedDB on that machine.



Hub after the demo pair loads. Privacy line is on the hub too. PCS data for two controllers — tools are open.

From here: Asset Map & BOM, Lifecycle colours, I/O utilisation, ladder, Functional Description, messaging, tag search, and the report packager. Same tools as the plant edition — no licence seat.

3. The PLC asset lifecycle

Every controller, I/O card, HMI and managed switch moves through the same stages. Name them and you can ask “where is this asset right now?” instead of discovering the answer on a breakdown.

Stage	What is happening	What should exist
Specify	Selected for a project or replacement	Catalog, spec, alternates considered
Commission	Installed, configured, tested	As-built export, I/O list, notes
Active service	Running in production	Current export, firmware, change log
Watch	Vendor announces EOL or mature status	EOL date, replacement, spares count
End of life	No longer made; support winding down	Spares strategy, replacement quarter
Decommission	Removed from service	Removal date, disposition of spares

Most sites manage commission and active service. Watch and End of life get skipped because nothing is broken yet. That is the gap. A 15-year-old Critical card that just went EOL is a this-quarter conversation. A low-impact card can sit on a watch list.

Vendor words you will actually see

Rockwell publishes Product Lifecycle Status. Schneider publishes End-of-Life bulletins. ACE Suite Online colours catalogs from a lifecycle file — it does not reprint the vendor catalog. The statuses that change a spare or a quote are:

- Active — still manufactured and supported
- End of Life — support winding down; plan the replacement
- Discontinued — no longer made; spares and a path matter now
- Unknown — catalog not in the lifecycle file

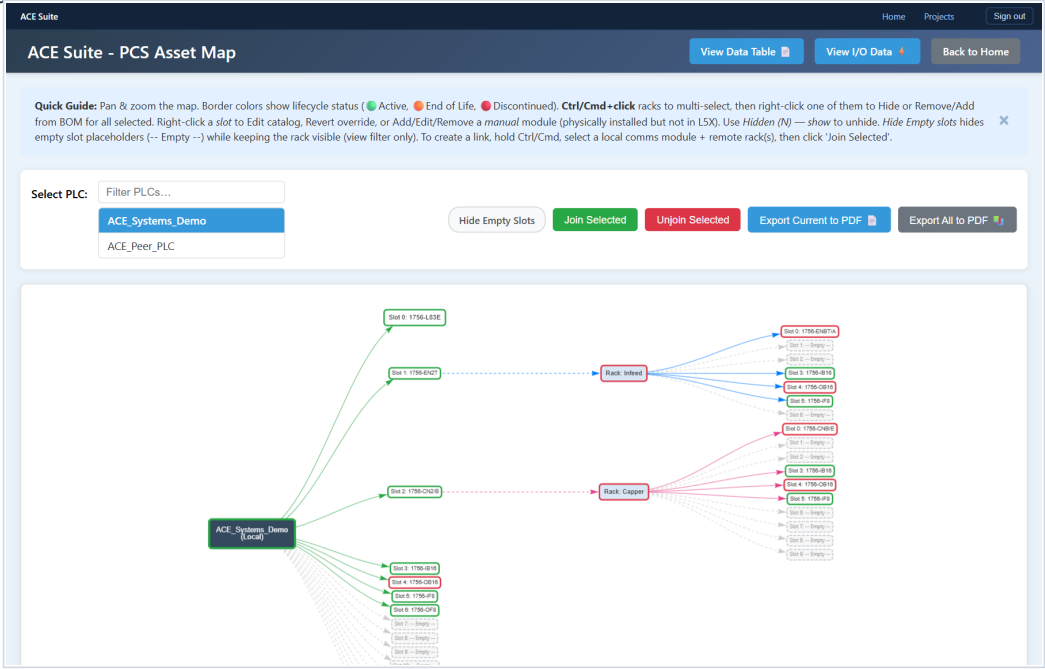
Active Mature is still supported, but it is the warning light before Watch. Treat it as “do not design this into a new panel.”

4. Using lifecycle in plant work

Not every red module is a shutdown. Rank the asset first, then let status drive urgency.

Tier	If it fails	Spares posture
Critical	Stops the line; no honest bypass	Hold on site; verify quarterly
Important	Slowdown, quality risk, or a workaround	Regional spare or fast-ship
Low impact	Redundant, manual, or a side system	Order on failure

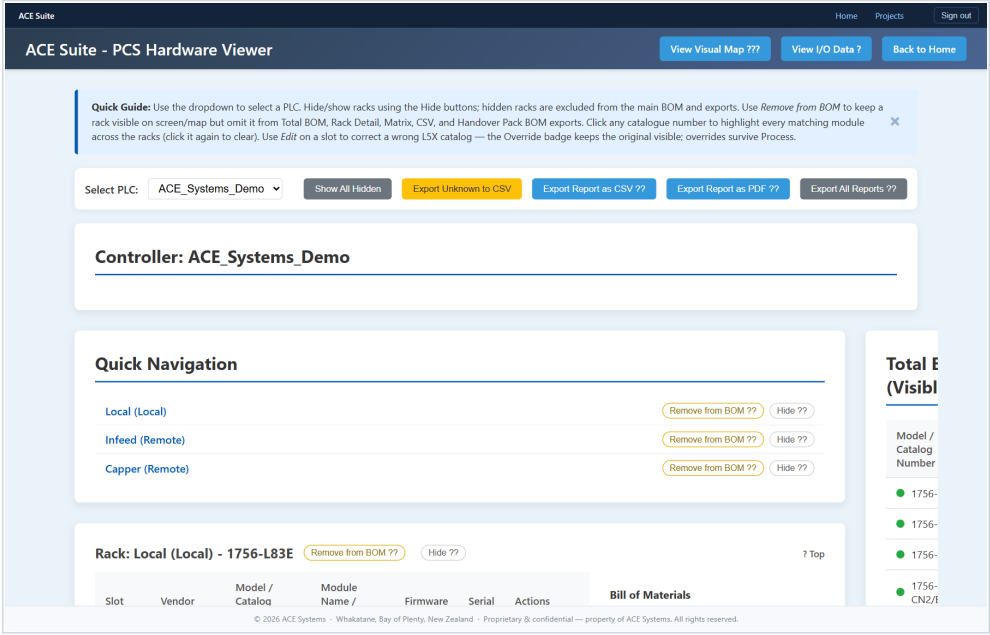
On the ACE demo Asset Map the colours are on the node borders. Green Active. Orange End of Life. Red Discontinued. Grey unknown. Infeed is the Ethernet remote. Capper is the ControlNet remote. You are looking at the filling line — not a redraw of last year’s Excel.



PCS Asset Map — ACE_Systems_Demo. Local L83E, Infeed (Ethernet), Capper (ControlNet). Border colours are lifecycle status.

The BOM is the same story, in a table

The map is for walking the line. The hardware viewer is for the quote and the spares list: catalog, firmware, slot, count, lifecycle dot. Hide empty slots. Hide or remove a produced/consumed peer if you do not want it on the BOM.



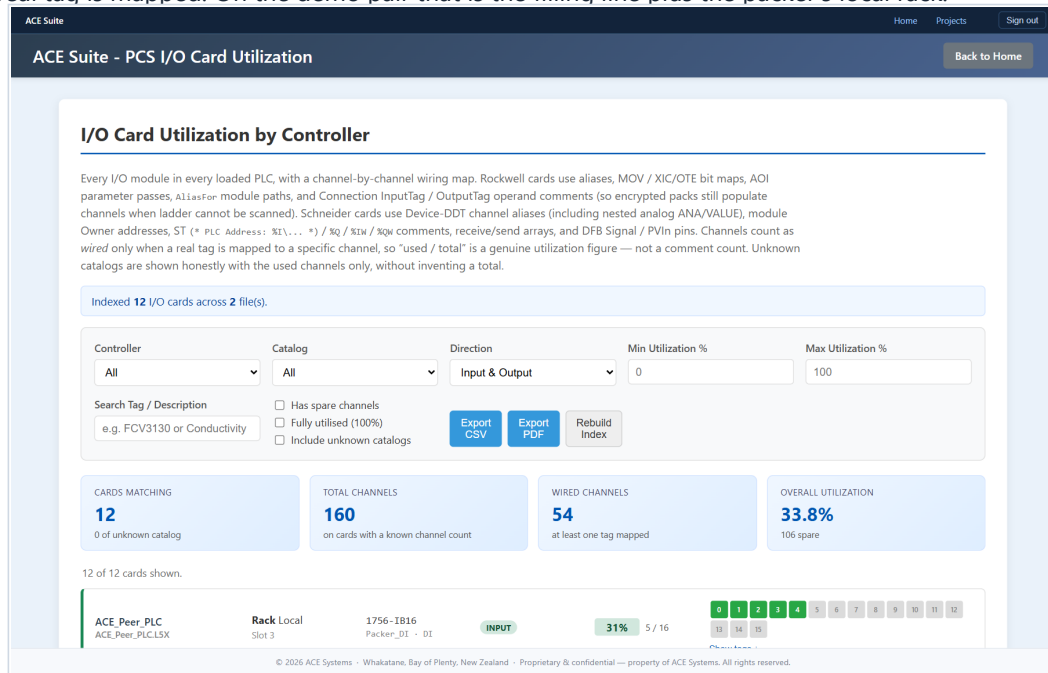
Hardware viewer on the live demo — Local, Infeed (remote), Capper (remote). Lifecycle dots sit on the catalogs from the file.

Do not maintain a second inventory by hand

A perfect spreadsheet nobody opens loses to a rough export you dropped this morning. ACE Suite Online parses the module list. You still own criticality, spares on the shelf, and the replacement path — the tool will not walk the store.

Spare I/O — counted from wiring, not comments

Highlighter-on-the-print I/O counts lie. Comments get copied. Alias tags get forgotten. The I/O tool counts a channel as used when a real tag is mapped. On the demo pair that is the filling line plus the packer's local rack.



I/O card utilisation — ACE_Peer_PLC packer DI shown. Used vs spare from tag wiring. Export CSV or PDF when you need a handover sheet.

That number is what you take to a capacity argument: “we have 106 spare channels across 12 cards” beats “I think the infeed rack still has room.”

5. The file already knew the sequence

Handover still dies on “the FD will follow.” The rungs are already in the L5X. ACE Suite Online turns them into If / And / Then with the tag description beside the address.

On the demo capper: run the hopper vibrator while the line is running and the hopper is not low; feed a cap when a bottle is in the nest and no cap is present; lower the chuck until torque is done; then index. That is the plant story. It was not written for this PDF.

ACE Suite

Home Projects Sign out

Return to source

Rung 0: * Cap Hopper * Run the hopper vibrator while the line is running and the hopper is not low. Visualize Rung

If:	Line_Running	Filler line running
And	Not HopperLow {Capper:3:I.Data.1}	Cap hopper low
Then:	HopperVibe {Capper:4:O.Data.1}	Hopper vibrator

Rung 1: * Cap Feed * Feed a cap when a bottle is in the nest and no cap is present. Visualize Rung

If:	Line_Running	Filler line running
And	BottleInNest {Local:3:I.Data.4}	Bottle in fill nest
And	Not CapPresent {Capper:3:I.Data.0}	Cap on bottle
Then:	CapFeed_Out {Capper:4:O.Data.0}	Cap feed cylinder

Rung 2: * Cap Chuck * Lower the chuck until torque-done. Visualize Rung

If:	Line_Running	Filler line running
And	CapPresent {Capper:3:I.Data.0}	Cap on bottle
And	Not TorqueDone {Capper:3:I.Data.2}	Chuck torque complete
Then:	Chuck_Down {Local:4:O.Data.2}	Cap chuck down

Rung 3 - NO COMMENT Visualize Rung

If:	TorqueDone {Capper:3:I.Data.2}	Chuck torque complete
Then:	CapperRun {Capper:4:O.Data.2}	Capper index

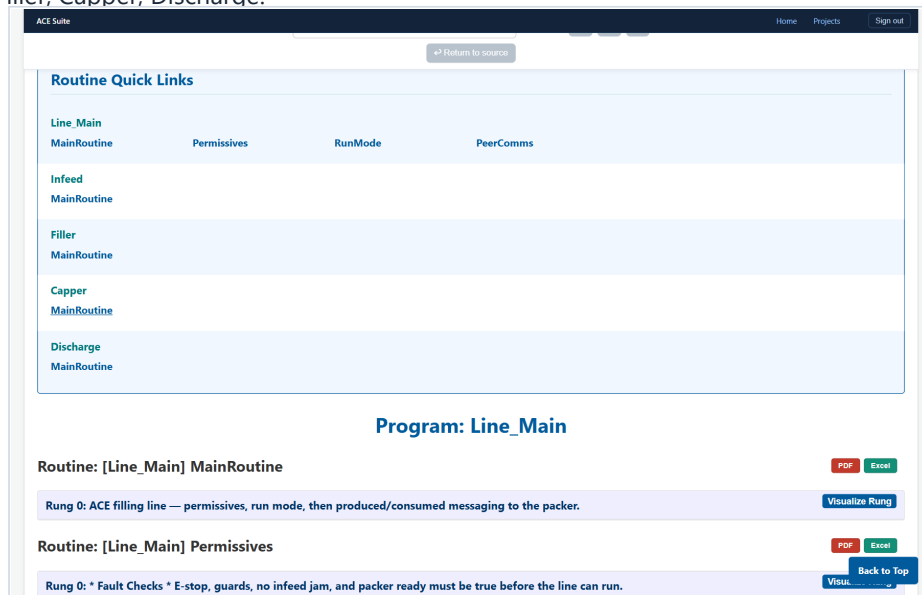
Back to Top

Program: Discharge

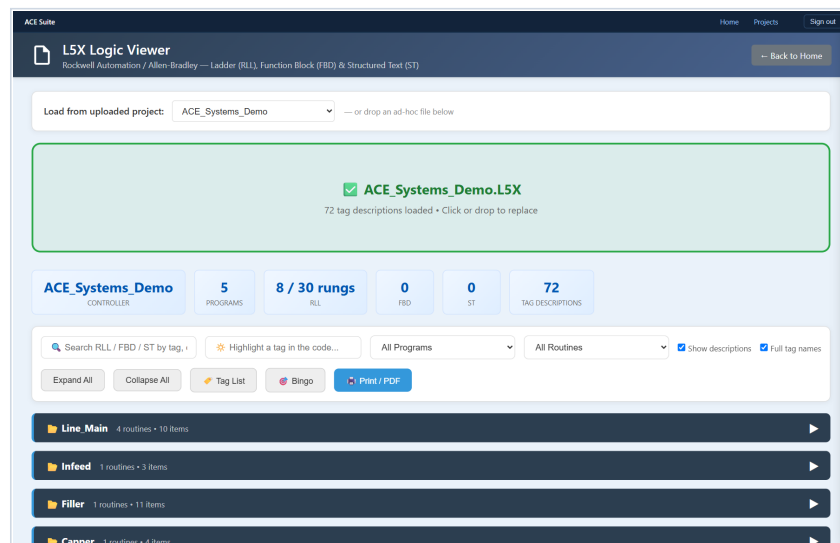
Functional Description — Capper MainRoutine from ACE_Systems_Demo.L5X. Same rungs, readable. Excel or PDF export after you pay (demo is free).

Line permissives, then the packer

Line_Main on the filling-line PLC is the overview: permissives, run mode, produced/consumed messaging to the packer. Fault checks — e-stop, guards, no infeed jam, packer ready — must be true before the line can run. Programs on the demo: Line_Main, Infeed, Filler, Capper, Discharge.



FD generator — routine list for the filling line, and the first Line_Main rungs. Click a routine; export the pack.



Ladder viewer on ACE_Systems_Demo.L5X — 5 programs, 30 rungs, tag descriptions from the export. Print or PDF.

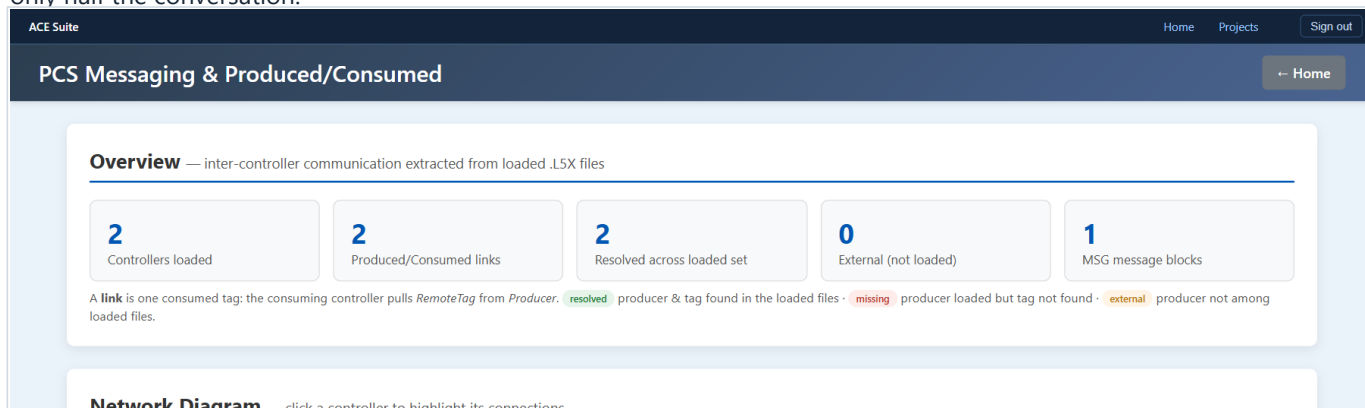
Grafcet, messaging, and an honest limit

The FD tool can switch to a Grafcet view when a step engine is detected — step / actions / transitions, text, diagram, or both. That is the right picture for a sequenced unit (UHT, CIP, a palletiser with a step tag).

This demo has no step engine

ACE_Systems_Demo is interlock-and-rung logic. Grafcet on this pair reports “Step engines: none detected.” We did not paste a fake SFC. If your plant file has a step engine, open Grafcet on that file — not on this companion’s screenshots.

Messaging is the other half of the filling-line story. Two controllers, produced/consumed links, resolved across the loaded set. Select a PLC and see who it talks to, down to the bit, and where that bit is used. Load both demo files or the map is only half the conversation.



PCS Messaging on the live demo pair — 2 controllers, 2 produced/consumed links, 1 MSG block. Load both files or the conversation is only half there.

6. ACE Suite Online — pay per file

The guide is NZ\$9.99 so you know what good looks like. The web app is the work: quote before you pay, then use the ACE tools on that set for 30 days in this browser.

How it works

- Upload one or more controller exports (.L5X, .ZEF, .XEF, .XBD, .XHW, .SLC).
- Quote — NZ\$19 a file, or a 5 / 20 pack if that is cheaper.
- Pay, then use the tools on that set for 30 days in this browser.
- After 30 days, export locks and the local copies in this browser are cleared. We never keep plant files on the server.

Pay by file

Less than an hour of engineering time. GST later, if we are registered.

1 file

NZ\$19

One controller. 30 days in this browser.
Export included.

5 files

NZ\$69

Small plant / messaging set. About
NZ\$13.80 each.

20 files

NZ\$199

Fleet pack. About NZ\$10 each.

Always free: ACE_Systems_Demo.L5X and ACE_Peer_PLC.L5X, full tools including export. One real plant file is an on-screen preview (racks / catalogs). FD, packager, tag search, messaging and ladder unlock after you pay.

This companion is not a licence and not a pack. Current test site: ace-suite-online-test-as.azurewebsites.net

7. ACE Suite on-prem — the plant edition

Same Asset Map, same FD, same lifecycle colours. Different hosting. Online is pay-per-file in the browser. On-prem is the plant application: a licence on their server, files and Data Management on their network.

ACE Suite Online

Pay per file · no licence seat

NZ\$19 · 5 files NZ\$69 · 20 files NZ\$199

Files stay in this browser — not a cloud copy.

One handover, a consultant, a USB of L5X.

ace-suite-online-test-as.azurewebsites.net

ACE Suite on-prem

Plant application · their network

Licence on the plant server. Ask ACE Systems.

Files and Data Management stay on site.

Weekly PLC work, many controllers, CMMS.

Contact ACE Systems, Whakatane.

Who buys Online

- One handover pack this week.
- A consultant quoting a single line.
- A friend with a USB of L5X files.
- No plant server. No licence seat.

Who buys on-prem

- The site documents PLCs every week.
- They want it on the plant network.
- CMMS / export is a standing workflow.
- Many controllers — not a one-off USB.

Do not mix them up

Online is not a licence seat. On-prem files do not go to Azure. If the work is one USB this week, buy the file. If the site will drop exports every week and load a CMMS, talk to ACE Systems about the plant edition.

The plant hub adds Data Management

The Online hub is the tool tiles — Asset Map, FD, ladder — after a file is already in this browser. The plant edition keeps the full hub on their server: PLC uploads, lifecycle CSV, Process and Save, Pattern Validator, and the same tool tiles against that site store.

Automation and Computer Engineering Systems v2026.08 Offline Online

Welcome to Your Asset Management Data Hub

This application serves as a central hub for managing and analyzing your industrial control system assets. Begin by uploading the necessary data files below, then use the Application Tools to visualize rack layouts, generate bills of materials, and assess the lifecycle status of your equipment.

Data Management

ClarOTy Asset Report Upload

Upload the full asset report CSV from Claroty. This data is required for some tools.

1. Upload Asset Report (.csv)

⚠ No Asset data loaded. Please upload the Asset Report.

Drag & Drop .csv file here or click to browse

No file chosen

PLC Files Upload

Upload Rockwell (.LSX, .SLC), Schneider hardware (.XHW), Schneider programs (.XBD) and/or Schneider Unity Control Expert (.ZEF, .XEF) files together — they're sorted automatically by type and fed to the right tools (Unity projects open in the Unity Code Reader; XHW feeds the Asset Map / BOM / I/O tools).

2. Upload PLC Files (.LSX, .SLC, .XBD, .XHW, .ZEF, .XEF)

⚠ No PCS data loaded. Please upload .LSX, .slc, .xhw or .zef/.xef project file(s).

Drag & Drop file(s) here or click to browse (up to 10 files)

More than 10 PLC files? Choose the folder — we process **one file at a time** (groups of 5 in the progress bar), save each to the server, then free memory so large site loads finish reliably.

Choose PLC folder...

No files chosen

Lifecycle Data Upload

Upload the lifecycle CSV file. Used for color-coding assets in other tools. On the Server edition this updates the **shared** master copy for everyone (requires Engineer or Administrator). Editing AppRoot\Lifecycle.csv on disk does *not* refresh an existing database — use this upload (or Pattern Suite → Restore).

3. Upload Lifecycle Data (.csv)

⚠ No Lifecycle data loaded. Please upload the Lifecycle Data file.

Drag & Drop .csv file here or click to browse

No file chosen

Apply Lifecycle to Server

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ACE Suite on-prem hub (plant application). Data Management sits on their server: PLC files, lifecycle loader, folder load, Process. Online hub is the tool tiles; this edition keeps plant IP on site.

Plant IP stays on the customer's site

On-prem, the export lives on their plant server / network — not on ACE Systems' Azure host. Online still keeps files in the browser only. Two products. Two places the file stays. Ask ACE Systems, Whakatane, for the plant licence — this guide does not price that seat.

ACE Systems, Whakatane. A product of ACE Systems.

8. Keep the export honest

Lifecycle colours are only as good as the project you dropped. A few habits keep the L5X trustworthy.

- Date-stamp every export. Site_Area_2026-09-18.L5X is obvious once three people have exported the same controller.
- Treat the newest export as authoritative until a nameplate proves otherwise. Historical exports are history — keep them, do not quote from them.
- Keep a short change log beside the file: what changed, who, why. Often the only record of why a rung exists.
- Store the export with the I/O list, network drawing and a panel photo — not on a laptop that left the site.
- Re-export after any live edit, however small. The five-minute online change is how documentation dies.

Physical audit still matters

ACE Suite tells you what the project file believes is installed. After a breakdown replacement done at 02:00, spot-check the nameplate. If the card in the rack is not the catalog in the export, the colour on the map is the previous card's colour.

What to track — once the file has spoken

Start with controllers, comms modules, and any I/O type that stops the line. For each: catalog, slot, firmware, lifecycle status and the date it changed, criticality, spares on hand, replacement path, last verified. Resist the last terminal block. A bloated list nobody maintains dies in the first month.

9. A quarterly review that survives being busy

The old way: open a spreadsheet, filter Critical, check vendor pages, walk the spares cage, write a paragraph for the budget owner. Two to four hours if the inventory already exists. The failure mode is not difficulty — it is no owner and no date.

The ACE Suite version of the same review (Online or on-prem):

- Export the Critical controllers this week. Date-stamp the files.
- Drop them on ACE Suite Online, or Process them on the plant hub if that is the edition they run.
- On the Asset Map, look at red and orange first — Discontinued and End of Life.
- Confirm spares against the cage, not the record. The tool does not count the drawer.
- For anything newly EOL or Discontinued on a Critical tier: replacement path, rough budget, target quarter.
- Close with one paragraph to whoever owns the maintenance budget.

Make it someone's job, briefly

Put the review on a calendar. Event-triggered still matters: after any breakdown replacement, update the record before the details are forgotten. That is the step sites skip, and the one that makes records drift fastest.

Sites that get caught by obsolescence are not the ones with old hardware. Nearly every dairy site has old hardware. They are the ones where nobody could say, on the day it mattered, what was installed, what its status was, or what the replacement path looked like.

10. Quoting and the CMMS, without re-keying

For the project manager

A tender asks: what is actually out there, and what will it take to touch it? Answering that often costs the senior engineer a day in old projects. When the register comes from the current exports — same format, every controller — the quote starts from catalogs and I/O counts, not institutional memory.

- Faster tender turnaround. No day reconstructing the panel before a number can exist.
- More accurate quotes. Price the module count in the export, not a drawing from the last integrator.
- Fewer missed assets. A rack added outside the original set still appears — it is in the file.

For SAP, Maximo and friends

Mechanical assets get entered carefully. PLC racks often do not. Populating a CMMS by typing catalogs is the same transcription problem with a different logo. Use the export-driven BOM as the source to load or reconcile the controls side — accurate part numbers, a complete list, a periodic check against the maintenance system.

Good documentation is a commercial asset

A site with a current register turns “we need two weeks to scope this” into “here is the quote,” without trading accuracy for speed. The guide taught the habit. The file still has to be dropped.

Two ways to get the tools

ACE Suite Online — document a PLC, pay per file. Files stay in the browser. Not a licence seat.

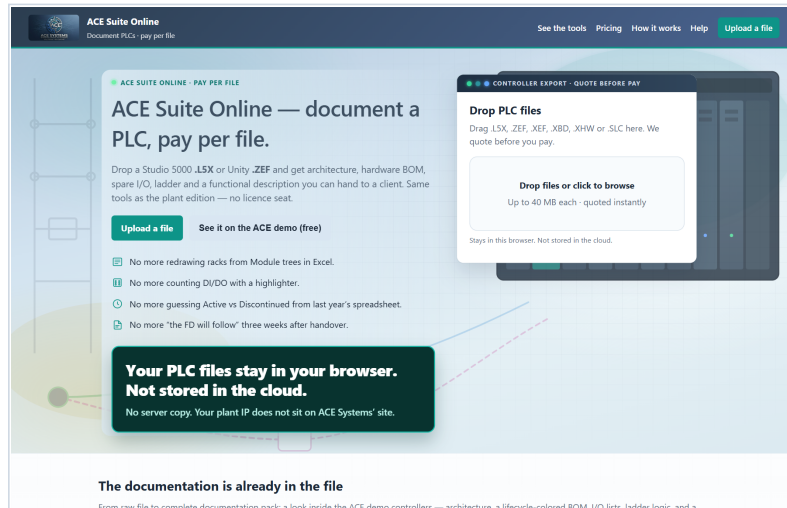
<https://ace-suite-online-test-as.azurewebsites.net>

NZ\$19 a file · packs NZ\$69 / NZ\$199 · GST later if we are registered

ACE Suite on-prem — the plant application. Licence on their server. Files stay on their network.

Contact ACE Systems, Whakatane. This guide does not price that seat.

This guide · NZ\$9.99 · education only · not an ACE Suite licence



ACE Suite Online home. Privacy lock on the left. Drop zone on the right. See it on the ACE demo is free. Plant edition is the on-prem hub — ask ACE Systems.

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Closing notes

None of this requires a dedicated hire. It requires an inventory that is actually complete, a criticality ranking that is honest, and a review that happens on a calendar. ACE Suite removes the afternoon of transcription so the review can stay on the calendar.

Schneider Unity / Control Expert (.ZEF, .XEF, .XBD, .XHW) and SLC exports are supported on Online (same pay-per-file path) and on the plant edition. The story in these pages is the Rockwell filling-line demo because that is the pair you can open for free today.

Disclaimer

This guide is a general field reference. It does not replace vendor documentation, site-specific engineering judgement, or applicable safety and regulatory requirements. Lifecycle colours depend on the lifecycle file loaded with the tools and on the catalogs in your export. They are not a substitute for the vendor's current product lifecycle page. NZ\$9.99 is the price of this guide, not an ACE Suite Online pack and not an on-prem licence.

A product of ACE Systems, Whakatane, New Zealand.

ace-suite-online-test-as.azurewebsites.net · on-prem: [contact ACE Systems](#)