



# **Table Of Contents**

Who are Cadonix?

What do we do?

Why browser based cloud?

Cadonix Complete Lifecycle Tools

**Design tools for Engineers** 

Arcadia Schematic Design

Arcadia Harness Layout

Arcadia Component Database

Review and Publish

Arcadia techPublisher

Arcadia reView

**Build and Test** 

Arcadia Formboard

Arcadia Manufacturing

Arcadia Testing Interfaces

Arcadia quoteBuilder

Manage and Analyse

Arcadia platformArchitect

Arcadia harnAlyser

Cadonix partMaster

Cadonix costCompare

**Professional Services** 

Cloud, API, App and Integration Consultancy

Costing Analysis & Component Consolidation Consultancy System and Design Engineering Services

Component Database Transfer and Rationalisation Services

Research and Development

# Who are Cadonix?



Cadonix is a company with a highly dedicated engineering and technology led team based in Oxford, UK.

Unique to us, all of our team have worked in the industries we support, our solutions are designed to work with the industry practices and not dictate workflows. This enables our solutions to be rapidly deployed and adopted.

We take pride in being able to support our customers either directly or through our distributor network. If our customers have any queries or issues, we aim to solve them the same day.

We understand that downtime is unacceptable in a fast-paced world and our systems ensure that customers are supported in a speedy manner.

### What do we do?

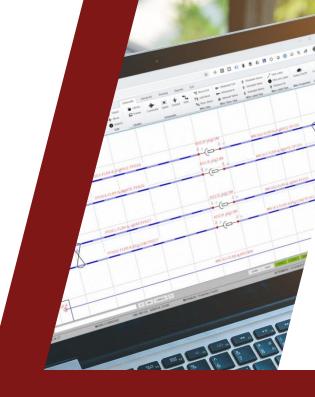
We help companies whose businesses involve the design and manufacture of electrical systems.

We address the needs of the bulk of our customers via the provision of design tools and component services via our cloud suite Arcadia.

For larger enterprise and specialist customers we offer additional Arcadia modules e.g. platformArchitect and other Cadonix products such as costCompare to cater for their more complex needs.

Cadonix also provides consultancy and integration services to allow our customers enhance their businesses and processes using our expertise in both software and electrical engineering competencies.

Whatever the size and scale of customer our industry leading support and parts teams will help ensure your engineers are focused on productive tasks.





**Browser based Design** and Manufacture Suite



Cadonix AWS cloud infrastructure



Full lifecycle toolset for every stage



Enterprise modules for large OEMs and Tier 1s



Industry leading support

# Why browser-based cloud?

From its inception Arcadia was designed to be a browser cloud application as the internet provides unparalleled flexibility in terms of both usage patterns and hardware investment



#### **CLOUD COMPUTING**

All modern future-proof applications are built specifically for the cloud



#### FLEXIBLE LICENCING

The cloud allows for flexible license and user management



#### **COUNTRY FLOATING LICENCES**

Your users are not restricted to a single location or computer



#### COLLABORATE

Enables remote teams to work together – even different companies



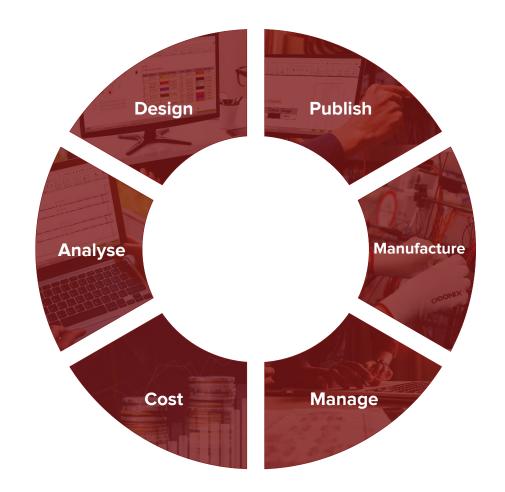
#### INTUITIVE

Browser software is easy to use. Arcadia reduces timescales by 30%



#### **HAPPY USERS**

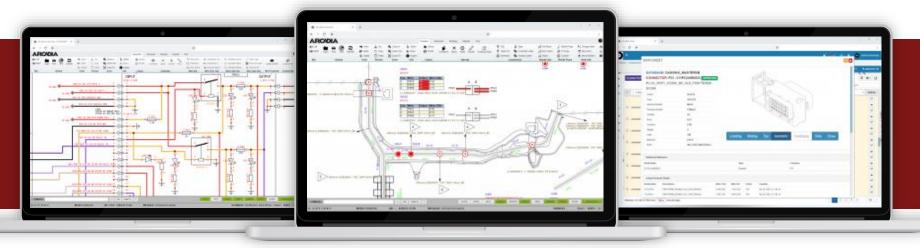
Users are happy because Arcadia reduces operational friction Cadonix Complete Lifecycle Tools



# **Design tools for Engineers**

State-of-the-art cloud-based ECAD software suite developed specifically to enable engineering teams to design & simulate electrical systems and wiring harnesses

Arcadia tools cover the end-to-end process of the design and analysis of electrical systems, the design, layout and manufacture of wire harnesses, their testing and documentation from anywhere - directly in a web

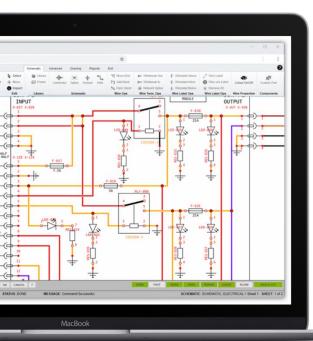


Schematic Design

Harness Layout

**Component Database** 

# AREADIA



# Arcadia Schematic Design

- · Integrated real-time simulation and analysis
- Integrated Symbol Library
- Animated simulation provides a clear understanding of circuits validity at a glance for the Engineer
- · Cross page connectivity
- Building-block library system for rapid design
- · Interfaces to ERP, PLM and MCAD
- Fully integrated with Arcadia Harness for seamless exchange of data
- · Tool Tips provide real-time electrical data

A comprehensive vehicle electrical system design software tool for engineers who need to design, diagram and simulate electrical wiring systems.



#### **Schematic Capture**

Your Arcadia electrical design is not only captured quickly, but inbuilt automated simulation and analysis tools ensure that your design is correct



#### Live Simulation

Arcadia Schematic includes an advanced simulation engine allowing you to accurately simulate your design to see behaviors such as voltage drops and potential fault conditions in real-time



#### **Smart Editor Tools**

Arcadia schematic includes a range of powerful editors allowing you to bulk edit the data in a standard spreadsheet style interface – Arcadia adapts to how you want to work

# **Arcadia Harness Layout**

#### Arcadia Harness ensures your harness is captured both clearly and accurately

- Captures your harness layout with ease via its intuitive graphical interface
- Integrates with your enterprise-wide tools & processes (MCAD,PLM, ERP etc.) using our API
- Integrated parts database
- Automatically selects the correct terminals, seals and accessories based on your design
- Automatically create bill of materials, wire lists and other reports
- Reverse Engineering Capability
- Splice Illustration and Balancing
- Clocking Angle Illustration Tool



# Create harnesses directly from the schematic



Identify a schematic to build your harness from, specify which connectors & splices should be used and added including their part number, cavity table & view.



#### **Ensure Quality**

Design Rule Checks ensure that your harness can be manufactured reliably and all BOM parts are captured and checked.

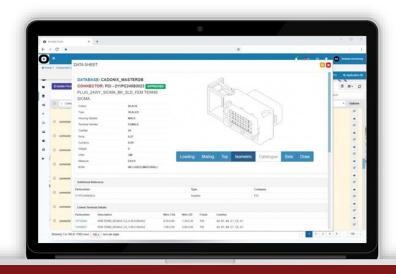


#### Collaborate and Integrate

Arcadia's Cloud based environment enables a connected collaboration of people on projects and teams Fully integrated with Arcadia Schematic Pro Complete validation of all aspects of harness manufacturing documentation.

# Arcadia Component Database

- Ability to import legacy data
- Customizable views to suit individual project requirements
- Multiple part number cross referencing
- Ability to support multiple databases
- · Rapid search facility for all parts
- Comprehensive library of parts available
- Dynamically Generated Datasheets
- Manage Tooling and Applicators



The component database stores all your part information including parametric connector information such as terminals, wire ranges and linked parts



### Advanced component database to store your parts

Arcadia Database allows any image to have a user specified basepoint set, this allows your drawings to neatly arrange and also orientate images and components to their linked harness bundles



### Arcadia component database automation

Arcadia can automatically select coverings such as Conduit, Heat-Shrink-Sleeve and Tube to correctly fit your wire bundles all at the click of a button



#### **In-tool Part Store**

Arcadia includes a part store built-in so that you can select all the parts you need in the database for your next project quickly and easily. If its not in the store, do not worry, you can even order new custom-built parts via the store!



# Review and Publish

Easily publish engineering data to an interactive export that can be used on or offline, on pc, phone or tablet and without any per-device licensing.

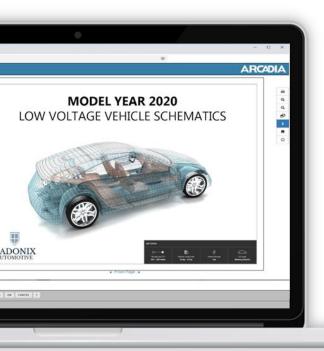
Our technology allows you to share your data easily with service departments, customers and third parties who need access to it Allow your entire organization access to harness design data without consuming design licenses.

#### techPublisher



#### reView





# Arcadia techPublisher

- Automatically produce end-user ready technical publications at the click of a button
- Can be accessed on any device with a compatible web browser
- Interactive click and trace to follow wire breaks & view connector tables
- Can be loaded and viewed on HTML Browser enabled Machines & Vehicles to provide onboard diagnostics diagrams
- Fast and fluid navigation and search
- Can be embedded into existing Web
   Delivered service and parts diagram software

Cadonix techPublisher allows your company to easily publish engineering data to an interactive export that can be easily shared over the internet



### Create service output automatically

Indexes, Connector data tables and schematic sheets are all automatically published to provide an intuitive easy to use resource for your service engineers



### Cadonix technical publication benefits

Photographs & 3D CAD View snapshots can have Hotspots added to aid navigation and clearly illustrate harness routings.

Clearly and Accurately present your service data to technicians and shop floor

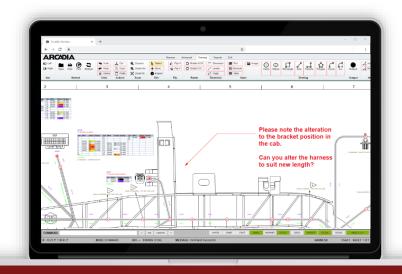


#### **Fully Integrated**

In conjunction with the techPubs publishing module you can create specific service publications for every variant of your product avoiding nonspecific content

### Arcadia reView

- View and mark up Arcadia schematics and harnesses without an Arcadia Design license
- View Arcadia reports including Bill of Materials, Wire Cutting Lists,
   Component databases and manufacturing instructions
- Intelligent 'Click & Trace' functionality across various sheets in a design
- Customers and suppliers can collaborate and review and monitor progress across departments and project Teams
- Seamless exchange of data over the internet



Arcadia reView users can overlay both graphical and textual comments on either completed designs or work in progress without effecting the underlying data.



#### Create mark-up for revision management

Extended Enterprise staff including workshop technicians, field service engineers, procurement, inspection & QA departments, after sales and service as well as facilitating commercial collaboration with Customers



#### **Review drawing markup benefits**

Arcadia reView can be used by anyone that has an interest in the original Arcadia data. This can be a technician working on the factory floor, a field service engineer, goods receivable, procurement engineers or customers working in collaboration with their suppliers

### **Build and Test**

Generate manufacturing documentation not only as a Harness Manufacturer but also for Prototype harness builds or In-House production.

Create a seamless interface between your engineers and the manufacturing technicians avoiding wasted time associated with manual methods







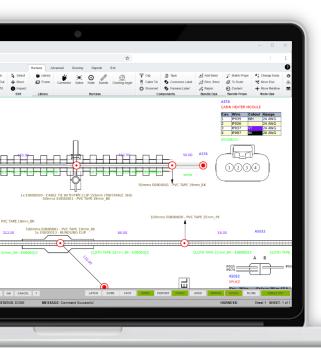


formboard

Manufacturing

Testing

quoteBuilder



# Arcadia Formboard

- Supports Rapid-Tooling systems such as Panduit Quick-Build
- No need to re-draw your layout
- Shows all wire color spot highlight colors and wire IDs
- · Independent profile configurations
- Select table data contents to suit your manufacturing process
- Create Formboard Tooling libraries for quick part re-use

Arcadia Formboard enables manufacturers to automatically Full-Scale and manipulate harness drawings to fit a physical build area.



# Create formboards automatically from drawings

Arcadia Formboards can be easily resynchronized to customer drawings without the need to re-draw the layout when customers make updates and revision changes

### Arcadia Formboard benefits



Arcadia Formboard output can be used for paperless digital manufacturing using projectors & screens as well as traditional methods

Zone locations can be configured for rapid tooling methodologies such as magnetic board mounts and perforated steel build boards

# Arcadia Manufacturing

The arcadia Manufacturing reports make it easy to generate manufacturing documentation not only as a Harness Manufacturer but also for Prototype harness builds or In-House production.

This creates a seamless interface between your engineers and the manufacturing technicians avoiding wasted time associated with manual methods such as questions and clarifications associated with interpreting a drawing alone.

- · Connector Loading Illustrations with Wire Highlighting
- Manufacturing Ready Adjusted Wire Cutting Lengths
- Splice Configurations are Illustrated in report
- Full BOM Output Ready for Sourcing
- Report Archiving to PLM
- Multicore Preparation Reports



# **Arcadia Testing Interfaces**

Generate test code directly from Arcadia engineering drawings, allowing you to ensure that your harness builds match your CAD 100% without having to built, learn and test against a golden sample build.

Arcadia Testing has output for most popular harness test interfaces in use in the industry such as CAMI Research, CIRRIS, WEETECH & Dynalab.



- Build Harnesses right first time
- See quickly where build issues have occurred
- Profile driven parameters such as acceptable variance in resistance
- Link successful harness tests to your label printers to ensure that a Part

- Number label is only printed after successful test
- Catch build errors early in your batch production
- Ensure increased productivity and reliability

### Create test code output automatically from drawings

Arcadia Testing Interface Code can be instantly generated for any Arcadia drawing, this allows full harness testing even for low volume production

#### Link to connector test headers

There is no limit to the cross-references you can add to a part, easily switch which of these show on your drawings & reports

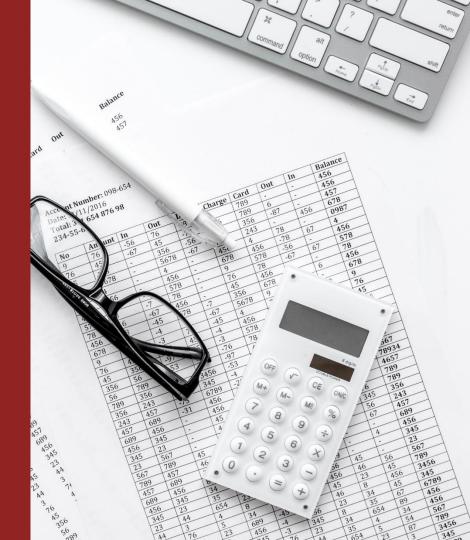
# Arcadia quoteBuilder

Arcadia quoteBuilder is an optional but fully integrated module for use with Arcadia Harness designs. Arcadia quoteBuilder gives you the power to generate Instant accurate quotes for your customers and make sure that no BOM components are missed out during the process.

Labor operations can be assigned for any operation or part type allowing you to accurately capture labor and performance metrics for your organization.

- Review cost reports for historic changes
- Integrated Cost Database
- Generate BOM & Labor reports
- Maintain the specific costing

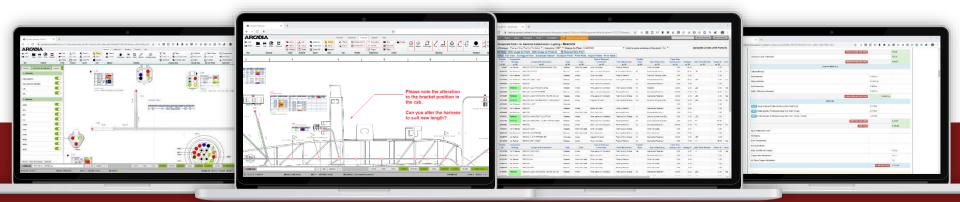
- profile attributes for each supplier/customer
- See the cost impact of engineering changes instantly
- Output reports in PDF, HTML and XLS formats



# Manage and Analyze

Enterprise customers have particular challenges in how they operate. We ensure they are covered with an advance range of tools and services

Cadonix offer a range of Arcadia and supporting browser accessed cloud tools to manage and track your designs, inventory and costs



platformArchitect harnAlyser partMaster costCompare

# Arcadia platformArchitect

Arcadia platformArchitect allows engineers to automatically create derivatives of a 150% master design using advanced processing techniques. Each resulting harness will be packaged with its associated artefacts including schematic, formboard drawing and reports.

Dynamically update your variant/option matrix and dynamically regenerate drawings.

Manage your wiring complexity with ease!

- Simple to Configure & Manage
- Manage different platforms per profile
- Advanced Dashboard Management
   System
- Generate Unique Reports per Variant

- Advanced Synchronization between Schematic/Harness
- On-the-fly generation one off reports
- Streamline Harness Variants for Production
- Table-Driven Bundle Lengths Allow

  Dynamic Cut Length

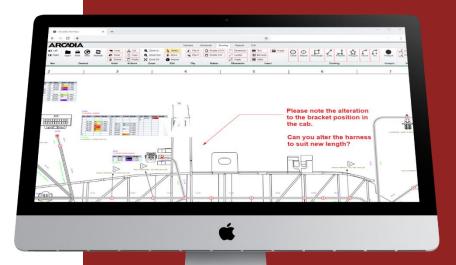


## Arcadia harnAlyser

harnAlyser allows instant comparison, analysis and merge of any 2 similar harness designs.

This can be used to identify changes between revisions, between harness variants and to merge any harnesses that have been modified independently of each other.

- Display change by BOM, Graphical geometry and component metadata
- Show and hide filter options
- Compare different revisions of harness to see the delta impact
- Can Compare any two harnesses even from different projects
- Merge feature lets you Highlight any differences and lets you select into a 3rd new Harness
- · Can show changes as a list and graphically





### Generate revision change reports directly from data

Arcadia harnAlyser can be Create Detailed change logs explaining exactly what changes have been made between harness revisions.



### Identify changes made and highlight on drawings

Quickly see where changes have been made on a harness in an easy-touse interface, save hours searching drawings manually to find changes.

# Cadonix partMaster

Cadonix partMaster is a power viewer, merging for each component family, technical & BOM data from any number of engineering, PLM, purchase and documentation systems. Presented to the user in a simple to use interface, designed to aid end-user in making the right component selection, first time.

- Helps to encourage better engineering and spend decisions
- Allows purchase teams to review price details quickly across different locations
- Complexity reduction for plants, engineering and spare parts
- Engineers can easily search suitable parts for their designs using powerful search and filtering tools
- Powerful output tools allow engineers to build part datasheets for all their selected parts





#### Access From Anywhere

Globally accessible component catalogue stores complete listings of all common use component types for standardization and any associated documentation



### Master of your Global

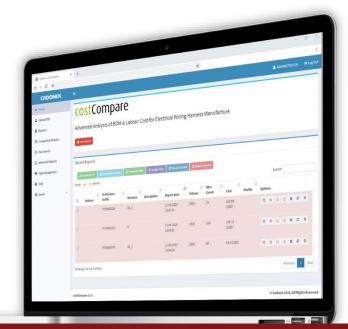
#### Inventory

Cadonix partMaster enables part number reduction by steering engineers and designers towards components with the best quality, cost and performance

# Cadonix costCompare

costCompare allows OEMs and Wire Harness manufacturers to accurately generate reports detailing the total cost to manufacture a wiring harness including the cost of parts and labor, all in a matter of seconds. It also allows detailed comparison of harnesses to identify changes.

Now you can cost every single harness and variant to an exacting degree – in minutes!



- Every Harness Variant has an accurate and detailed report
- costCompare report generation is instant so there is no delay for release
- Supplier has to build to print, there is no scope to edit or amend BOM
- ECAD data is processed by

costCompare to create multiple reports

- Full BOM & Engineering data
  Information
- Fully detailed reports itemizing each element of cost
- Fully integrates with Arcadia



#### **Automatically Generate**

Harness BOM Reports, Harness Cost Estimation, Harness Comparison Reports, Where Used Reports



#### Leave no penny unaccounted for!

Cadonix costCompare ensures that your team can cost 100% of your harnesses. This ensures that there are no gaps in your costing and allows you to analyze the incremental cost differences between revisions.

# **Professional Services**

Cadonix is not only the worlds leading enterprise cloud Harness Design CAD suite, we are also providers of professional and engineering services.

If you have a requirement in any of the areas below or related, please do not hesitate to contact us on info@cadonix.com and we can work together on the best solution for your needs

Cadonix' team aims to help you and your business in a cloud connected world



Cloud, API Integration



Costing Consultancy



System & Design



Component Management

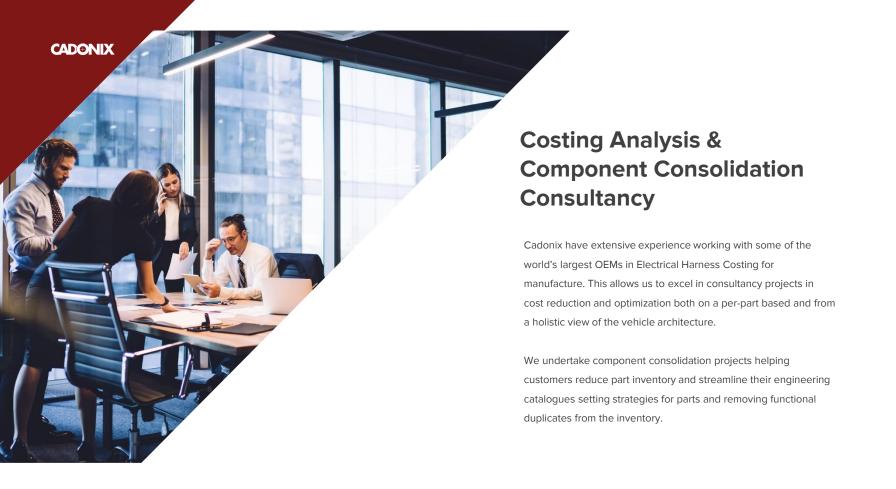
# Cloud, API, App and Integration Consultancy

With over a decade of cloud and web development experience Cadonix engineers can help you with any part of the software development life-cycle to ensure that your existing infrastructure and systems can work seamlessly with Cadonix and capable 3<sup>rd</sup> party products.

If you have customers on Arcadia and want to deliver your branded services into their installation, for example you may wish to provide one click services, our App team is ready to understand your requirements.

To keep your engineers processed you can use our API add all your interactions and checkpoints into Arcadia itself.



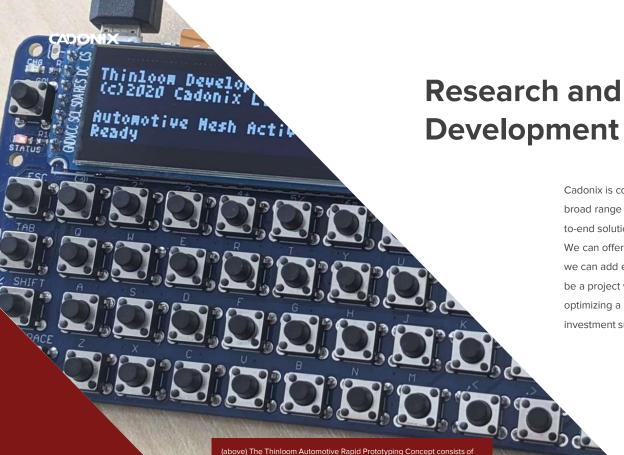




Component
Database Transfer
and
Rationalization
Services

We understand that a pain point with any longstanding engineering company is the necessity to transfer and rationalize your engineering data and libraries onto new platforms and systems. If you want to know how we can help you in this, please contact us and we can discuss the strategies available.





Cadonix is committed to industry leading quality R&D on a broad range of technical subjects and disciplines, favoring end to-end solutions for our customers.

We can offer R&D on a consultancy basis on projects where we can add exponential value to your endeavors. This could be a project with an instant return such as analyzing and optimizing a manufacturing process, through to a longer-term investment such as a proof-of-concept product design.

> **DISCUSS YOUR R&D PROJECT REQUIREMENTS WITH US TODAY!**

to allow engineers to build mule vehicles and test functionality regardless of their respective locations and without wires!

# **Thank You**