



Take Control and Control Change



Safeguarding your intellectual assets



The Big Idea

Tracking your hidden assets just became possible

Looking for a comprehensive solution for managing your software and documentation assets?

From design to long term operation and maintenance, Asset Guardian delivers a set of integrated tools that eliminate communication bottlenecks, flawed software installations and incorrect design modifications. Asset Guardian provides an effective means of managing all software, documentation, changes, faults and design issues from conception through to operation. As the demands of your business increase, Asset Guardian can scale up to meet your growing requirements.

Within an operation that is constantly changing, Asset Guardian can keep your design and operation personnel synchronised with the status of your assets. With features such as email, automatic notification, change logging and a secure approval and authorisation process, Asset Guardian will eliminate the risk of personnel operating with different or incorrect versions of specifications and software.

Tracking information that is critical to the operation and effectiveness of your business is facilitated through a number of key features within Asset Guardian. Your design and support personnel can easily enter data through a number of easy to use standard forms. Data can be quickly retrieved through flexible search and report functions. Personnel raising change requests can be automatically notified of the requests conclusion. An ever evolving knowledge base eliminates the need for data to be entered time and time again.

Things You should know

Up to 90% of UK companies have NO secure backup of process-critical application software - those that do often don't know which is the most up-to-date revision. Floppy disks are NOT a reliable medium for long-term storage, especially in an industrial or process environment.

Original Equipment Manufacturers and Systems Integrators do NOT always routinely retain copies of all the software they supply to you on system hand-over.

Responsibility for software security is rarely assigned to a specific manager or department, so it is often overlooked, until disaster strikes.

Can you afford not to have it?



Introducing the Solution

Uniquely developed to control and protect your assets

Asset Guardian is a unique software management solution designed to control and protect your PLC, DCS and HMI/SCADA software assets. Inadequately managed software can both cause and exacerbate any unplanned outage.

Over the last five years Asset Guardian has been employed by major international process and manufacturing organisations to minimise the risks associated with process-critical software.

Asset Guardian solutions provide a single point of reference to both the most current and all archived information around a software or hardware asset. Our solutions ensure that the following elements are stored and managed in a controlled way:

- Program source code,
- System documentation,
- Fault reports,
- Design changes
- Email communications.

Asset Guardian manages each software asset securely and in compliance with industry standards, including ISO 9001 Tickit and 21 CFR Part 11.

The standard for Quality Assurance in Design, Development, Production, Installation and Servicing (ISO 9001) is particularly relevant. Asset Guardian V4 can be used to keep many Quality Records required by that standard and can be used to demonstrate compliance during audits.

Asset Guardian delivers a total solution for disaster recovery that ensures that system downtime is always minimised.

The Asset Guardian solution is tailored to the needs of the organisation, using a tested consulting approach: The Asset Guardian Lifecycle Model. Each solution is built using our core technology: Asset Guardian V4. Solutions are scalable and interoperable; they can be applied to any number of software assets, users or processes and grown overtime.

Asset Guardian can be hosted within your organisation or with a third party and can be accessed via a secure connection from anywhere, worldwide making it ideal for deployment to all your staff and approved external users.

Things you should know:

Asset Guardian meets the software management needs of organisations operating in high value, high risk production environments. Asset Guardian provides solutions across a range of process and manufacturing industries, with a particular focus upon: Food & Beverage, Pharmaceutical, Power Generation and Oil & Gas.

Asset Guardian controls & manages:

- Business Critical information
- Proprietary Software Installations
- Proprietary Software Licences
- PC / Hardware Build Inventory

Software Control

Securing your process critical software assets

Software Control

Application Software:

Asset Guardian allows the secure storage, revision control and retrieval of asset-related designed for purpose software such as Process Critical DCS, PLC, HMI/SCADA or Database software. Any software that has been specifically designed and created for your applications can be securely booked and controlled. It allows the tracking of installed software and is revision lead.

Proprietary Software

Asset Guardian allows the secure storage, revision control and retrieval of licenced software such as Microsoft Windows®. Proprietary Software is available to purchase from dealers and retailers without need for modification. Asset Guardian allows you to track where your software is installed and at what revision. Asset Guardian also helps avoid licence infringements and avoids the risk of breach of legal contract.

Remove The Risks

Asset Guardian removes the risks. Asset Guardian will store the most up to date software together with all other revisions securely on a file server. Your routine backup procedure guarantees the rest.

Know What You've Got

Asset Guardian makes sure you know what the most up to date revisions are, where these revisions are installed and in a development situation, who is working on what software thus avoiding conflict. Asset Guardian lets you sign out individual sections of a software asset and allows multi user development.



Core Components

Software Control

Change and Fault Logging

Document Control

Correspondence Tracking

Hardware Control

Bypass/Force Override Control

Audit Trail

Users and Security

The software is usually unique to a particular process or plant device. If this software gets lost or is corrupted, you are not able to go to your local retailer and pick up a new copy. You are dependent on having a copy yourself or your developer retaining a copy. If these backups fail, as they often do, where do you go from there?

Change and Fault Logging

From initial design through to lifetime operation

Change And Fault Logging

Asset Guardian allows the entry and tracking of any change requests or fault logs raised against a specific asset. It helps form and complete an audit trail for the asset. It is important that when someone requires a change to an existing or developing asset, the request is thoroughly checked out for safety, functionality and requirements compliance before it is implemented. Changes should not be carried out blindly and without the correct procedures being exercised.

Asset Guardian has a built in change control process which complies with ISO9001:2008 TickIT. By adopting this process, you can be sure that the change will be given all the attention it requires and that the correct personnel in your organisation approve it before it is implemented, test it during its design and sign it off after its implementation.

Although faults do not always result in a change to the software or to documents, they should still be logged. Even if a change is not necessary, a documented log of the fault helps form the audit trail and also records the symptoms and corrective action used to recover the system. This data is then stored for later use and can be used as a knowledge base in the event of the fault recurring. This facility then decreases the diagnosis time which minimises plant downtime and increases plant productivity.

Asset Guardian keeps track of any documents and software that are modified.



Core Components

Software Control
Change and Fault Logging
Document Control
Correspondence Tracking
Hardware Control
Bypass/Force Override Control
Audit Trail
Users and Security

Asset Guardian logs all aspects of a change request and fault such as:

- Asset Number
- Who raised the request/fault log
- Date Raised
- Plant Impact
- Reason for rejection/investigative findings/Recommended Actions to correct
- Who approved the request
- Date approved
- Who the request/fault was assigned to
- A description of the change carried out/corrective action taken
- Who checked the change/correction
- When the change/correction was implemented
- Root cause of the fault
- Any other comments

Documents and Correspondence

Share and control content inside and outside your organisation

Document Control

Asset Guardian allows the entry, secure storage and lifecycle tracking of asset related documents. Asset Guardian allows enterprises or individuals to use a consistent approach to document control. Asset Guardian will control aspects such as Revision Control, Controlled Copies and Distribution, Document Status and Approval. All of this functionality is achieved through a familiar, easy to use interface.

Asset Guardian removes the need for paper logged Design Reviews. By using it to store and control design reviews, the complete design audit trail of the asset is held and maintained in one central database. If the asset is subsequently transferred to another parent asset, the audit trail goes with it. You lose none of the important design information during the transfer.



Correspondence Tracking

Asset Guardian allows the entry and secure storage of any correspondence relating to a specific Asset. Including emails, faxes, letters and telephone journals. From initial design, through commissioning to operation and maintenance—correspondence logged in Asset Guardian helps build up a complete audit trail and history of work carried out on the asset.

Don't lose the email sent from a supplier about a replacement part, simply select the email in Microsoft Outlook and book it into Asset Guardian and it's stored, nothing else to it. Asset Guardian even completes a detailed form automatically from the email. You can send an email from Asset Guardian via Outlook so you don't have to go back and enter the details manually, Asset Guardian takes care of it for you.

Core Components

- Software Control
- Change and Fault Logging
- Document Control
- Correspondence Tracking
- Hardware Control
- Bypass/Force Override Control
- Audit Trail
- Users and Security

Would you like to make sure that everyone on your site is working to the same standards or best practices? What if a standard is updated by its issuing authority, wouldn't it be great if all your personnel automatically knew about the update the next time they were looking through the standard? Asset Guardian allows users to view the latest version of any standard which has been entered against a specific asset simply by double clicking on it. All of the standard's detailed information is present together with a revision history.

Hardware & Bypass Control

System build and bypass tracking

Hardware Control

Asset Guardian minimises the rebuild time on your plant hardware assets. It does this by logging the build of the system i.e. what CPU does it have, how much memory, what's its network address, Asset Guardian stores it all. It also stores any proprietary software and application software which requires to be installed on the system together with revision numbers and where applicable, software serial numbers. Asset Guardian tracks hardware component data such as:

Description, Cost, Type, Warranty Period, Manufacturer, Delivery Time, Model, Part Number and Recommended Spares Holding

Bypass Control

Asset Guardian allows the tracking of any temporary bypasses, forces or overrides applied to software or hardware. It reduces the risk of temporary modifications becoming permanent. During commissioning, testing and operation, personnel are regularly required to temporarily force internal registers within a control system to values to initiate or enable specific events. In real life situations, forcing a register can mean the difference between a plant or process producing or not. In these situations, it is easy to forget that the force has been made until it is too late.



Core Components

Software Control
Change and Fault Logging
Document Control
Correspondence Tracking
Hardware Control
Bypass/Force Override Control
Audit Trail
Users and Security

Asset Guardian logs the forces which are made, who made them and when. This facility makes it much harder for a temporary force to become a permanent feature of a system and allows the system to continue to operate in the way it was designed.

Audit Trail

Auditing completely with no user intervention

Audit Trail

Asset Guardian offers a watertight Audit Trail feature, with highly secure, encrypted password protection that employs electronic signatures and adheres to all requirements of the Food and Drug Administration (FDA) regulations for 21 CFR Part 11.

This highly sophisticated Audit Trail facility is searchable with 100% relational connections. Information can be traced against one or more Items (including documents, software and hardware), Assets, Individuals or Roles, Dates and Actions.

The record of each and every modification and alteration is automatically generated, with no need for user input, complying with the stringent standards of 21 CFR 11.



Core Components

Software Control

Change and Fault Logging

Document Control

Correspondence Tracking

Hardware Control

Bypass/Force Override Control

Audit Trail

Users and Security

Asset Guardian ensures regulatory compliance with a range of industry standards:

- 21 CFR 11 Compliant
- Comprehensive security
- Electronic Signatures
- 100% Relational searches
- Automated audit history
- Automated tracking
- Easily retrievable format

Users and Security

Securing your hidden assets just became possible

Users and Security

One of the most important areas of Asset Guardian is users and security. Each user is assigned specific user security levels via a group security scheme. This allows for maximum levels of security by the simplest possible methods.

Security can be set at the following levels as standard:

- Request Changes, Raise Faults
- Approve Change Requests
- Log in New Revisions, Check Out Documents & Software
- Add New Assets, Edit Existing Assets
- Add New Records
- Delete Records, Remove Revisions
- Edit Existing Records
- Approve Documents for Issue
- View System Passwords
- Administrator of Database
- Approve Activation/De-activation of Forced Software
- View / Administer Audit History



Core Components

- **Software Control**
- **Change and Fault Logging**
- **Document Control**
- **Correspondence Tracking**
- **Hardware Control**
- **Bypass/Force Override Control**
- **Audit Trail**
- **Users and Security**

Asset Guardian ensures the right person will always have access to the right information at the right time through.

- User Level Security
- User Passwords
- Definable Groups
- Asset Level Security
- Group Level Security

Proven Technology

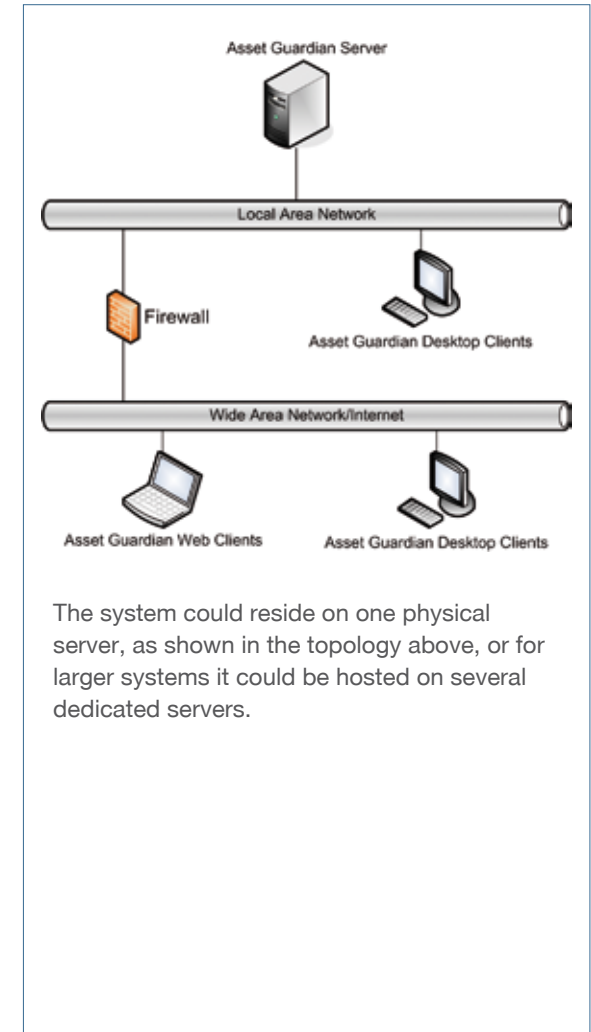
Scalable, flexible, robust, and platform independent

Asset Guardian is built using tried and tested technologies with flexibility and control firmly in mind:

Asset Guardian is built on proven Client/ Server technology and utilises a SQL Database Server.

- It uses thin client architecture ensuring performance is maintained over both local and wide area networks (Internet).
- A feature rich Smart Client is supplied which is platform independent, running on Windows, Mac OS X, Linux or any platform which supports Java.
- Asset Guardian is fully web enabled and can run on any browser. It can run over a secure connection if required.
- The Asset Guardian Server acts as the Web Server and controls the connection to the SQL and File servers.

- Asset Guardian is supplied with PostgreSQL server but can be used with most SQL based servers including Microsoft SQL Server, Oracle and MySQL.
- Any files such as software, image or documents are typically stored on the File server which allows for easy backup. Clients have no direct access to the File Server thus offering an additional level of security.
- Your Asset Guardian, SQL and file server can be hosted in one physical Server box or can be split between numerous Server boxes.
- Asset Guardian system can be hosted locally in your organisation's infrastructure, remotely on your own dedicated system or remotely by using Software As A Service (SAAS) technology.

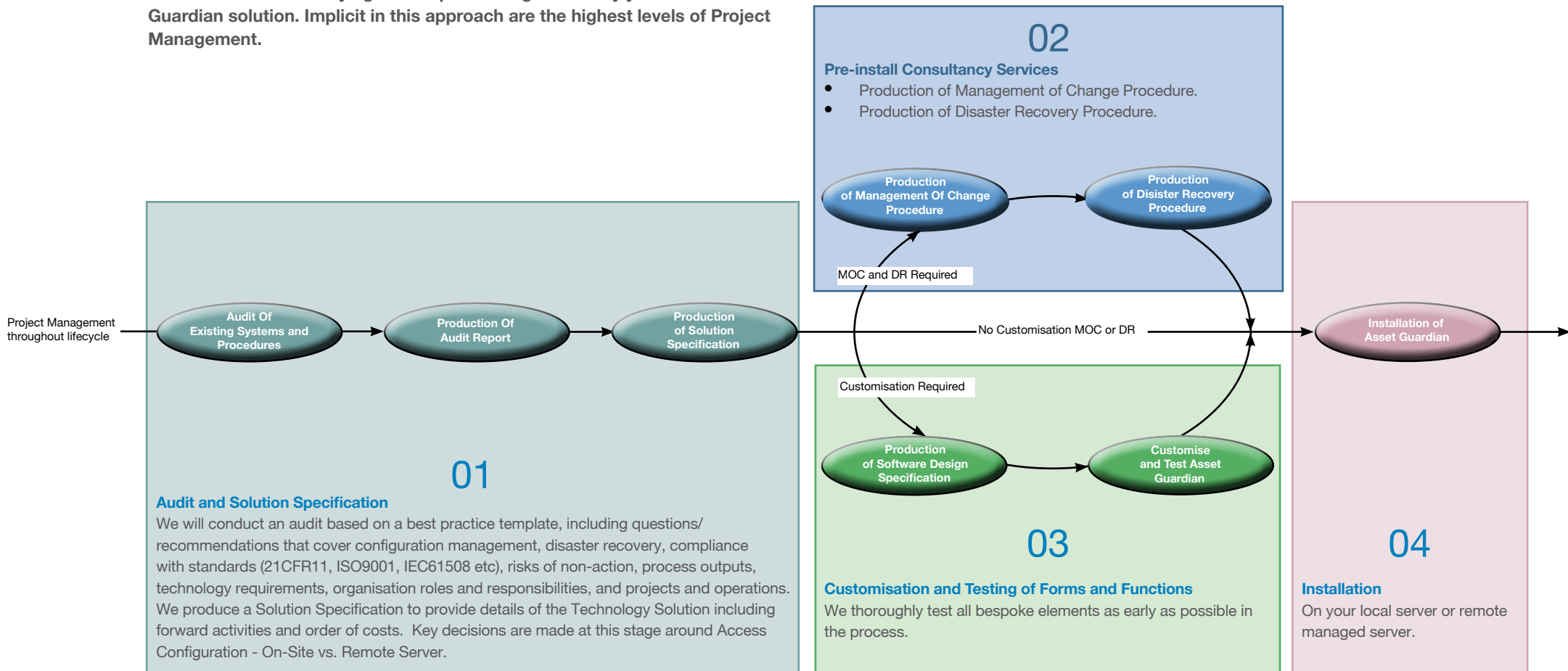


The system could reside on one physical server, as shown in the topology above, or for larger systems it could be hosted on several dedicated servers.

Our Lifecycle Process

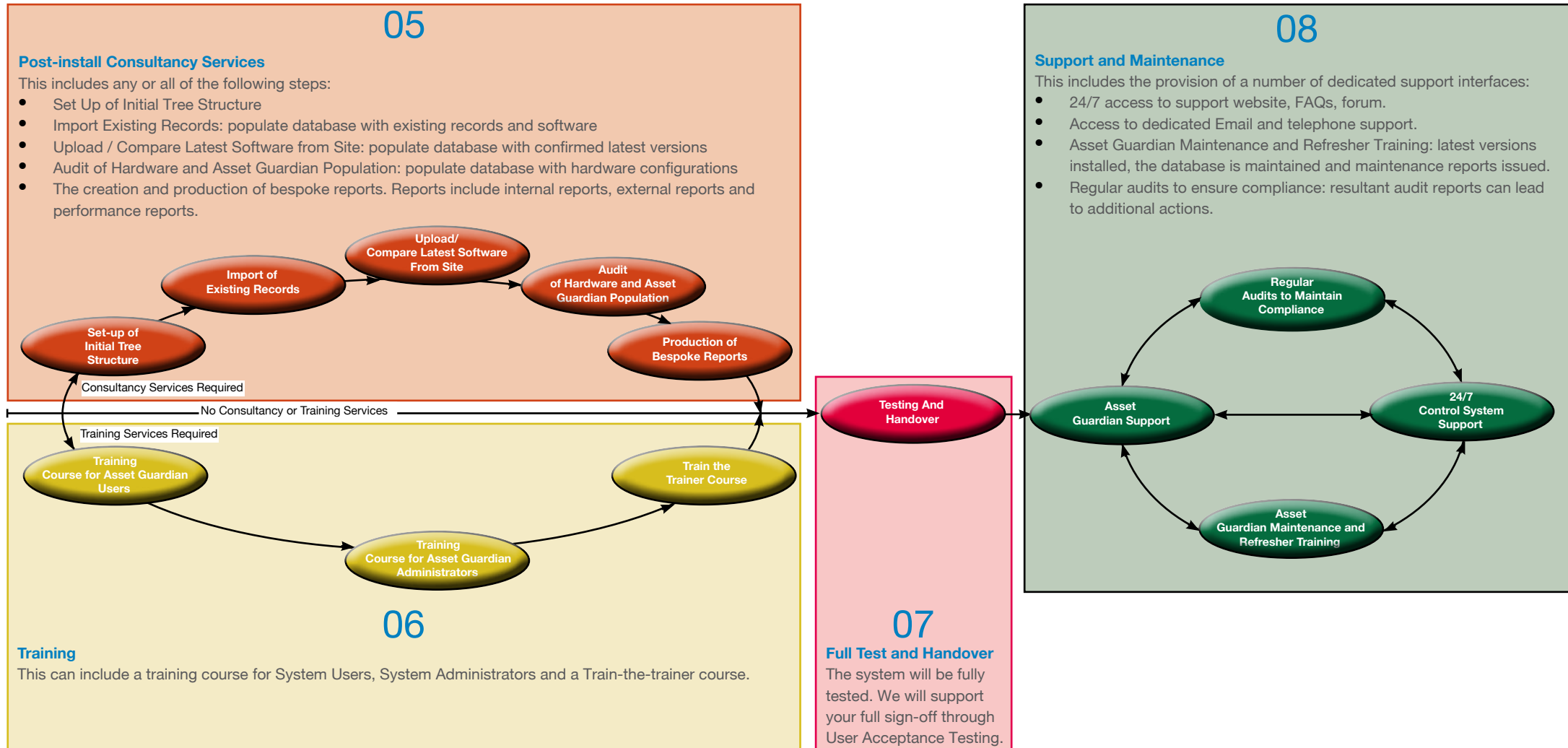
Tried and tested for making the most of your investment....

The Asset Guardian Customer Lifecycle Model (AGCLM) is the 8-step approach we apply to every project we undertake. It is a tried and tested methodology which looks to understand your existing processes, assets and risks before identifying and implementing effectively your Asset Guardian solution. Implicit in this approach are the highest levels of Project Management.



Our Lifecycle Process

....by producing optimum results



Ease of Use

Meeting the needs of users

Who uses Asset Guardian?

Asset Guardian solutions are designed specifically to support a range of broad industry roles with a minimum level of IT knowledge:

Design Personnel

Store software and hardware design records such as loop diagrams, schematic diagrams or logic diagrams and track their revision history individually or collectively. Issue to clients in a format that suits.

Support Personnel

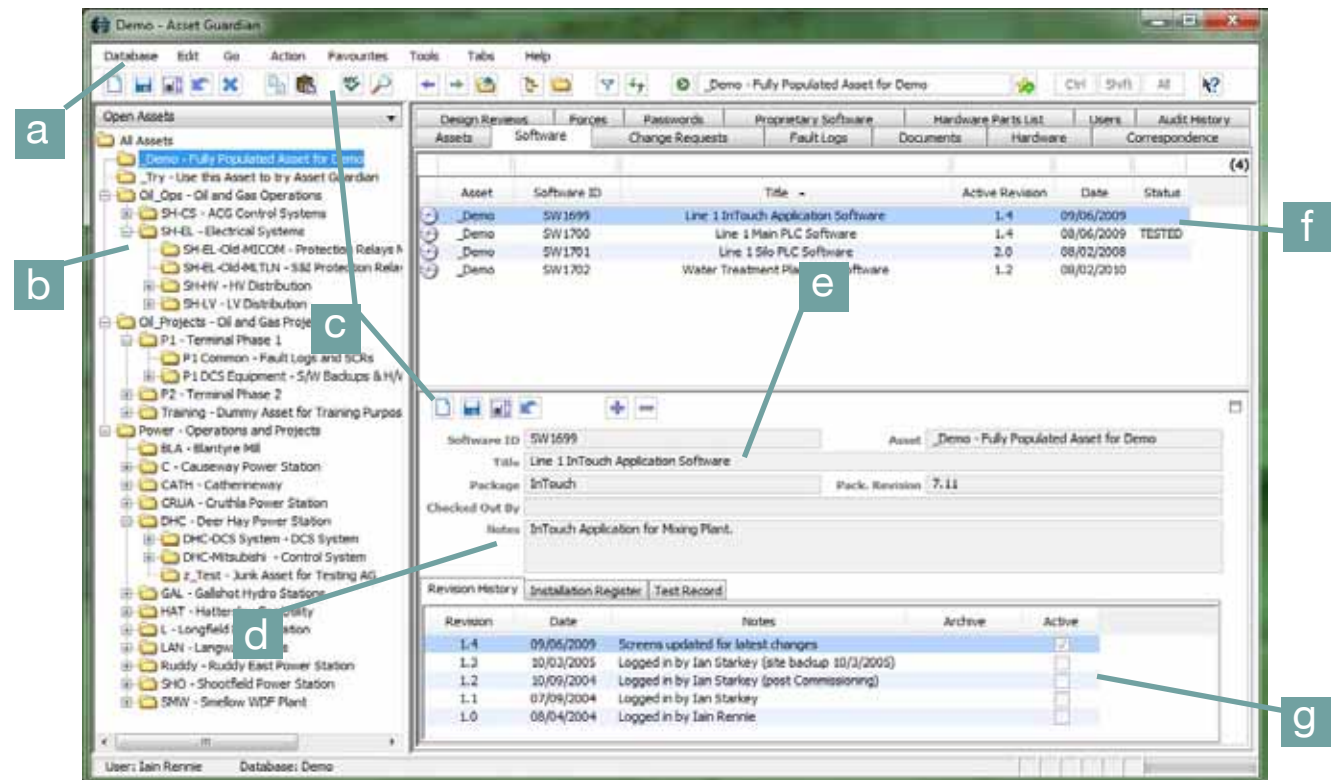
Access the most current and up-to-date software and documentation. Work with the same data (specification or drawing) as Design Personnel.

Commissioning Personnel

As software and hardware is commissioned, relevant documentation and the 'as-built software' are kept up-to-date.

Document Controllers

Control document creation and amendment and advise all previous copy holders when a document has changed.



a. Familiar drop down menus

b. Familiar windows explorer style navigation

c. Easy to use and conveniently placed toolbars

d. Easy to fill in forms for data entry

e. Automatically populated fields and intelligent drop downs

f. Scrollable lists and tabs to speed data recovery

g. Sub forms and lists to maximise available data and minimise desktop clutter

About Elite

The people behind the solution

Asset Guardian was developed by Elite Control Systems Limited to manage complex software and hardware development projects. Asset Guardian provides a simple, convenient and cost-effective tool for minimising the risk to your operations from system failure.

Elite Control Systems

Elite Control Systems, founded in 1992, has proved itself one of the most innovative companies in the system integration business. A substantial company with overseas operations and a wealth of expertise and experience, Elite remains true to its ideals: meticulous planning, an innovative attitude to business, the highest standards of service, and quality engineering — this is the Elite approach.

These ideals underlie its 'Promoting Performance Through Partnership' approach. Working in close partnership with clients, Elite's engineering staff fully appreciate the need for rapid, demonstrable returns on clients' investments.

Elite has achieved accreditation to the ISO9001:2008 TickIT certification for design, management and maintenance of application software.

Elite's design teams bring a wealth of experience in process control, automation and information systems. They place particular emphasis on Programmable Logic Controllers (PLCs), Supervisory Control and Data Acquisition Systems (SCADA) and Distributed Control Systems (DCS) software.

Elite was a pioneer in the use of automated simulation and testing to conduct continuous pre-testing of its work, to ensure that each "building block" and the system as a whole meets agreed functional specifications before it goes on site. This ensures that processing interruptions are kept to an absolute minimum.

Did you know?

Elite Control Systems engineers are frequently called upon to assist clients in recovering from plant outages caused by system failure. These can result in anything from a few hours downtime on a single system to complete plant shutdown.

Elite Control Systems Limited

Elite House
Starlaw Business Park
Livingston
West Lothian
Scotland
EH54 8SF
United Kingdom
Phone: +44(0)1506 597900
Fax: +44(0)1506 597919
E-Mail: sales@assetguardian.com, info@elitecontrols.co.uk
www.assetguardian.com, www.elitecontrols.com

Elite Companies:

www.assetguardian.com
www.elitecontrols.com
www.elitesafety.co.uk
www.elitesupport.co.uk

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