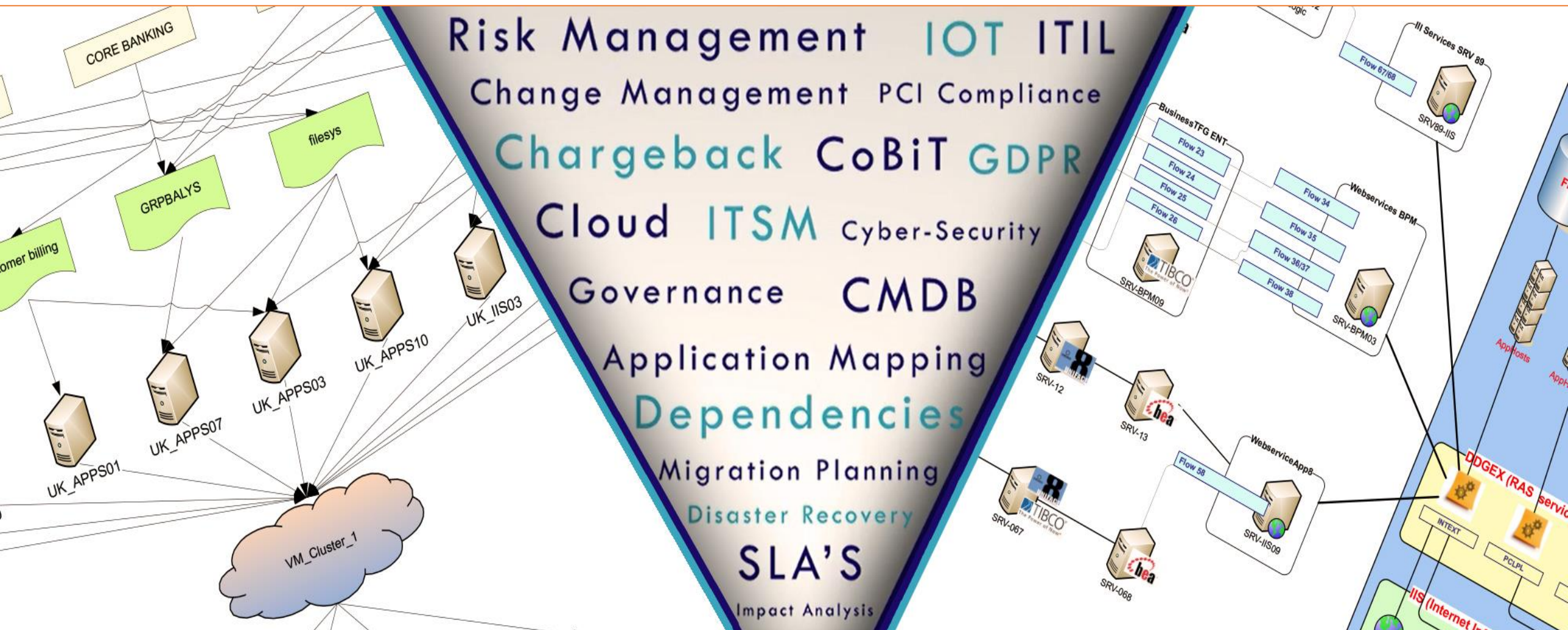


# AssetGen SysMap

Mapping infrastructure, systems, services and processes



Map how devices, systems, applications, services and processes interact.

Improve decision making when faced with equipment or service failures.

Map service, data flow, compliance, risk and other dependencies.

Increase control over planned changes to avoid service disruption.

Visualise risks using CMDB and service management data.

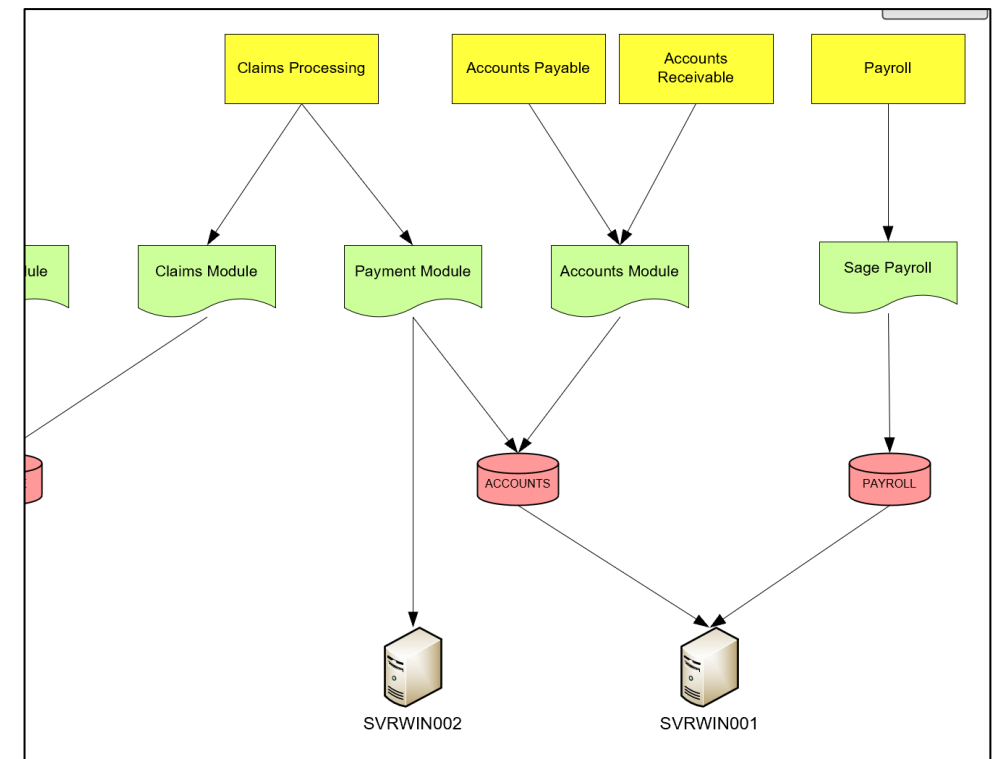
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# AssetGen SysMap Overview

AssetGen SysMap helps communicate the complex structures and groupings within IT and non-IT environments. By mapping the dependencies between systems and components, we simplify understanding so that change impacts and risks are more easily understood. Relating IT systems to business use is a key reason for adoption of AssetGen SysMap, though it is also often used for mapping regulatory compliance, cybersecurity policies and internal processes.

AssetGen SysMap links physical and virtual infrastructures so that configurations, environments and systems can be easily understood. The flexible database structure has configuration items (CIs) which can be servers, applications, VLANs, VMs, networks, applications, documents, services, end points, etc. depending on the mapping involved. Multiple types of dependencies and relationships can be mapped based on user needs. For example, a server could be mapped to the applications it supports, the data flows to other servers and specific firewall rule sets for inter-zone communication. Each viewpoint highlights change and risk impacts that cross over technology and team boundaries.



Mapping servers to business use

**‘Visualisation quickly shows the systems and processes impacted by a hardware fault or change’**

AssetGen SysMap is available in two versions -

**A) desktop single user** or **B) multi-user server** with web access. SysMap can be used for mapping dependencies for project needs, such as migration planning, risk assessment or CMDB loading. It can also be as a reporting interface onto existing CMDB and service desk systems.

The integration with AssetGen Connect makes it simple to have detailed hardware inventory and service awareness without everyone having to have service desk user accounts.

**Change impact and dependency analysis** ✓

**Disaster recovery planning** ✓

**Systems transformation planning** ✓

**Improved incident and service reporting** ✓

**Data and resilience understanding** ✓

**Audit trails and change history** ✓

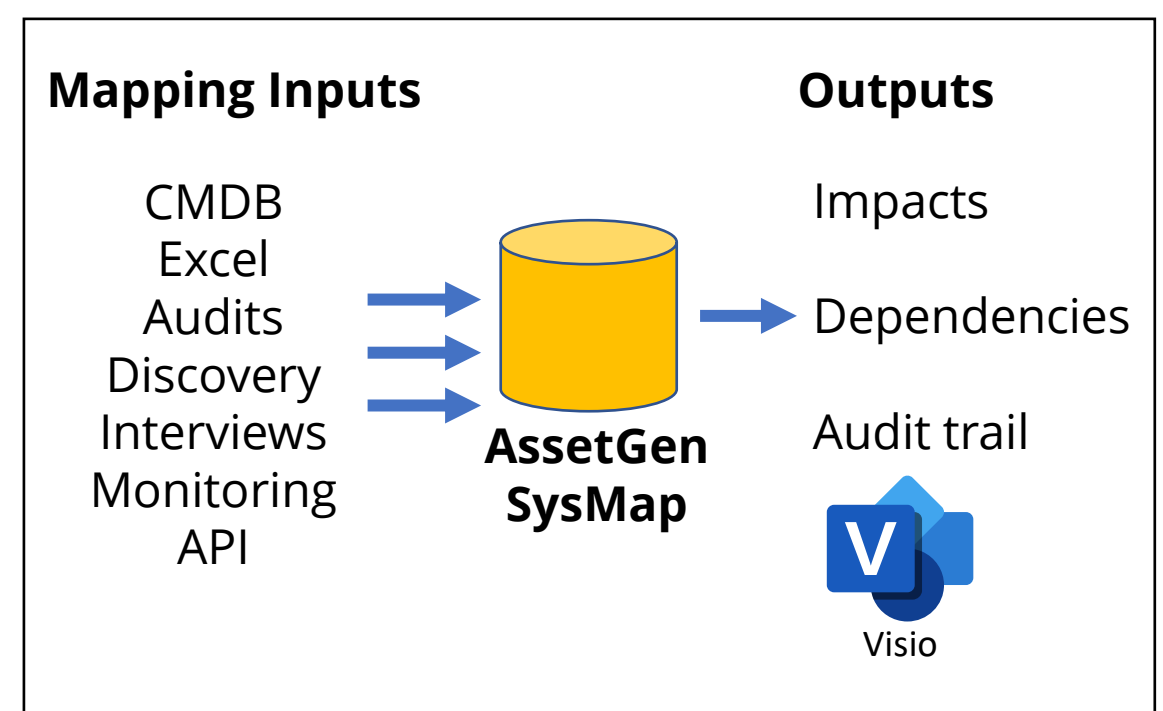


# Mapping Complex Systems

AssetGen SysMap has a flexible database structure so many different methods and levels of detail can be accommodated. Data can be prepared and imported using just 2 spreadsheets, making it easy to populate from manual data collection activities, as well as use existing sources such as discovery toolsets, asset lists or packet traces. Any Visio shapes can be used to represent configuration items and can be selected for each diagram type, so existing standard formats can continue to be used.

Many start with spreadsheets to collect data and normalise for a specific viewpoint – lists of services, applications and servers might be a starting point. With data covering technical configurations, grouping, versions, etc. being added using a spreadsheets becomes impossible to comprehend so many will then draw a diagram to explain.

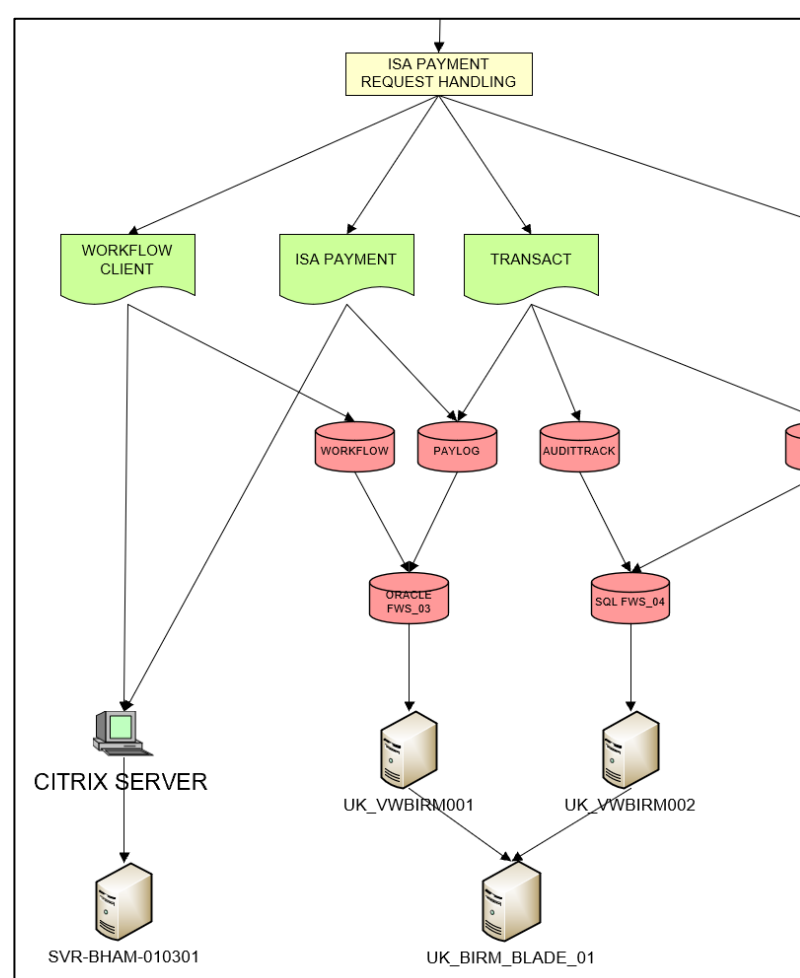
The SysMap database is a better way to collate, construct, manage and report on complex data, this is in addition to automatically creating large numbers of Visio diagrams for different viewpoints.



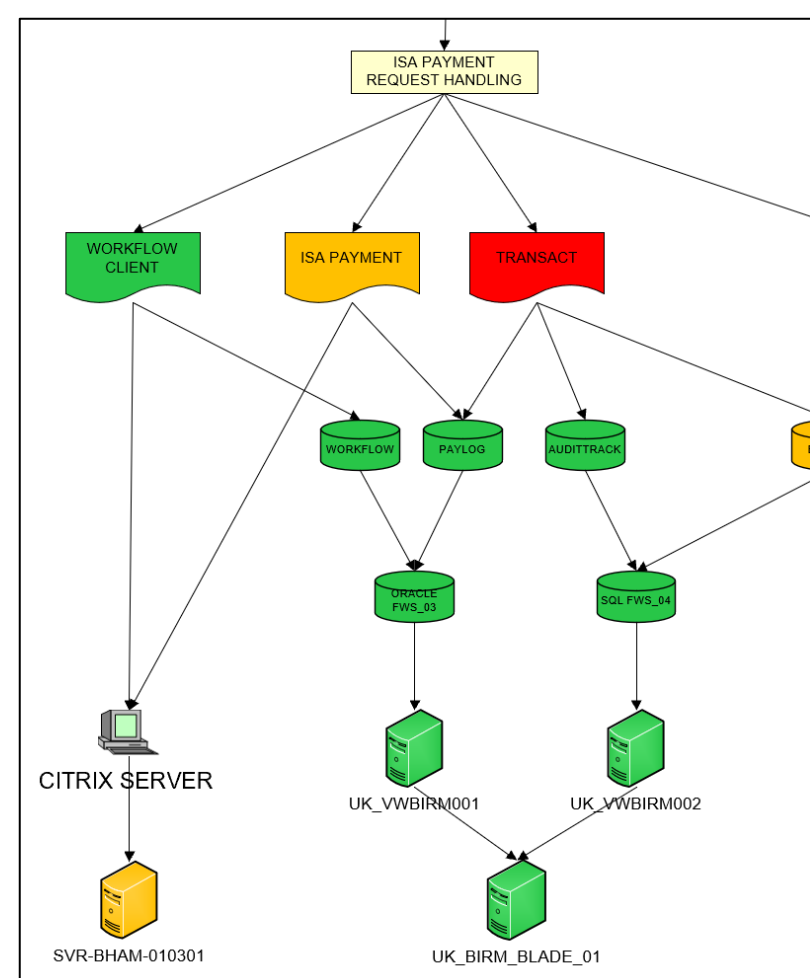
Simplifying complex data

## Create your own dashboards, heat maps and drill downs

SysMap Visio diagrams can have embedded data into shapes so you can create multiple status views and visual displays from one diagram. In the example below an ITIL service map can be colour coded to show supplier risks, technical owners, cyber vulnerabilities, DR recovery, etc. Drill down or hyperlink to SysMap for audit trails or to access more detailed diagrams.



ITIL service hierarchy map



Colour coded by end of life risk status

# SysMap Visio Automation

A picture paints a thousand words – but in modern IT we may need 1000s of pictures to explain the physical locations, network topologies, system configurations and failover scenarios. The AssetGen system is unique in automating the creation and updating of MS Visio diagrams for project, operations and risk management teams. Visio is familiar to existing engineering teams, so AssetGen gives immediate benefit to workload reduction, as well as access to a wide range of Visio stencils for logical and cloud mapping.

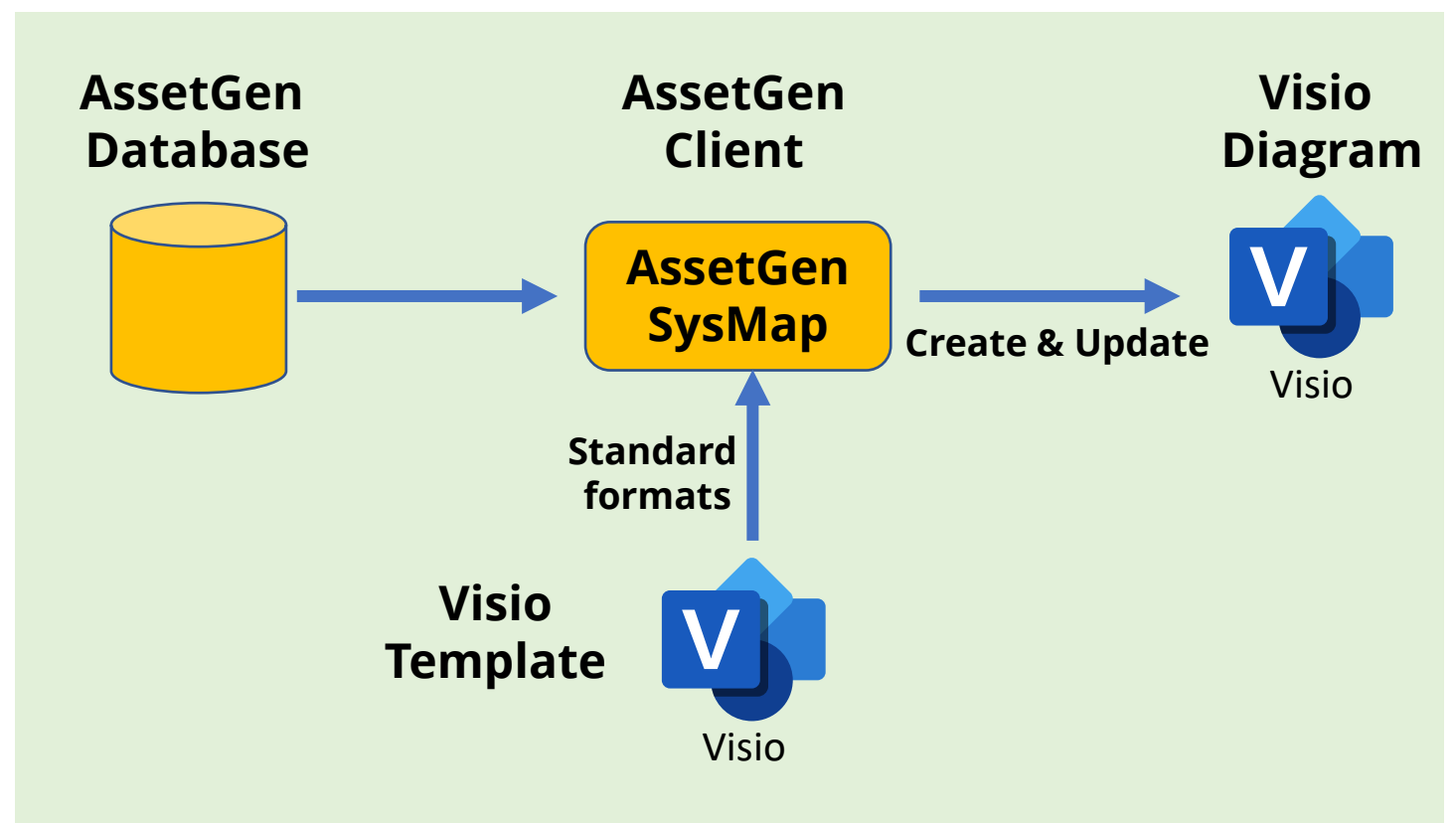
**Creating.** The user chooses the diagram they want, the level of detail and the Visio template to use. AssetGen then extracts the data, matches up the shapes and creates the diagram. Layout is modified by the user for readability.

**Updating.** Updating an existing diagram uses the same process (manually or by automated runs). The diagram is checked and updates applied, preserving the original user layout.

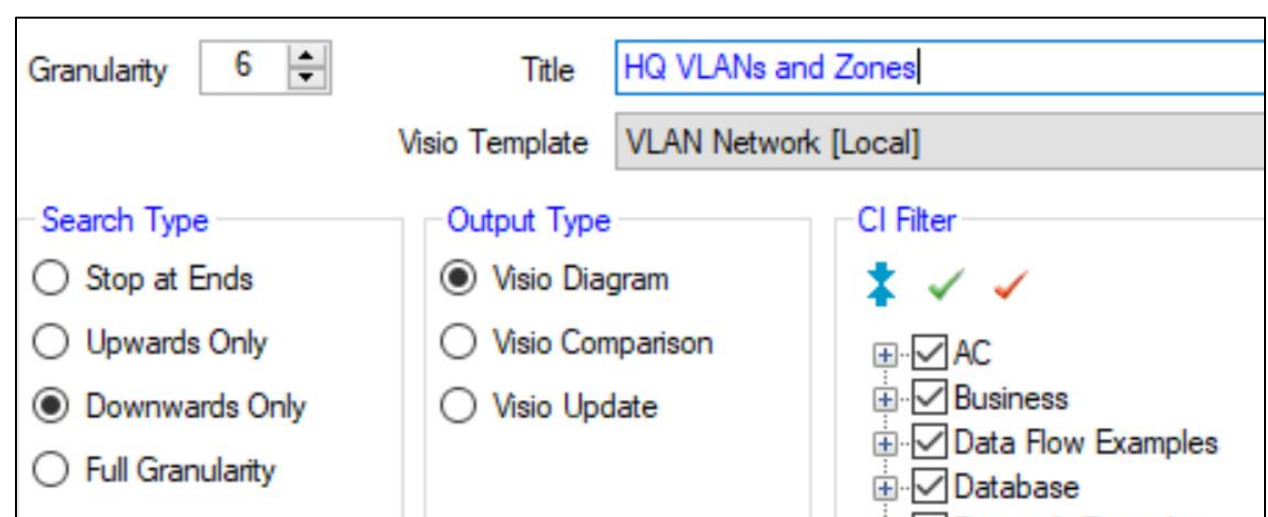
**Comparing.** If there are many 100s or 1000s of diagrams to update it is more efficient to compare data and highlight changes to owners and administrators.

**Filtering.** Complexity can be reduced further by the CI filter removing unnecessary CI types, without loss of mapping data.

**Different perspectives.** It takes seconds to create a Visio diagram with SysMap, which normally takes hours or days to do manually. Sometimes you need all the detail to be seen, other times you just need an overview. SysMap allows choice of both detail and shapes. Being able to select multiple CIs as a start point makes it easy for a diagram to show shared components and risks that are masked by complexity. Perfect for identifying infrastructure that delivers the top 10 services, or the application, services and owners affected with migrating 100 servers to the cloud.



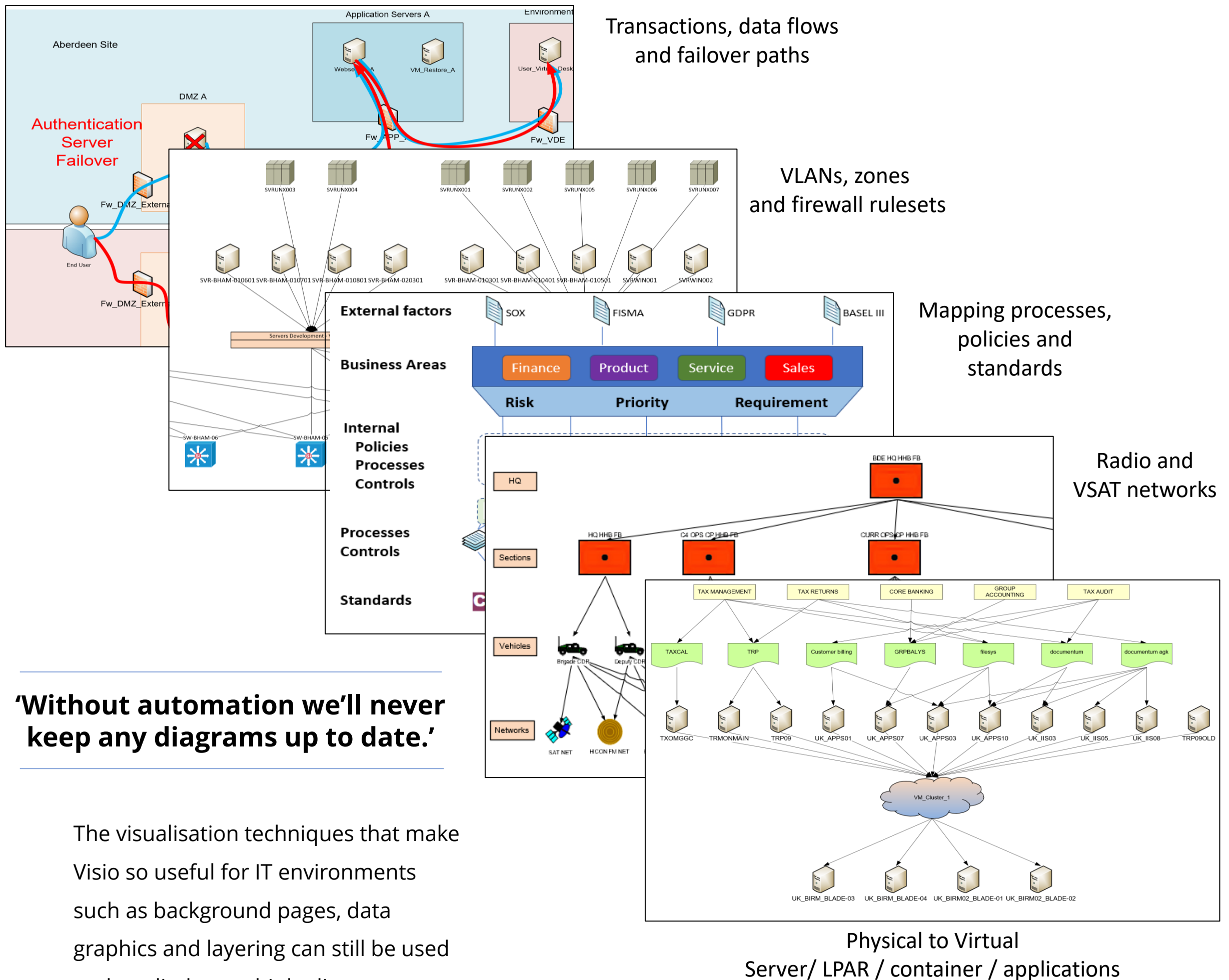
SysMap automated diagramming process



Visio output controls

# Visio Diagrams Of Dependencies

From one source of data, AssetGen provides one off, project and operational Visio diagrams which are consistent in content and symbols for any size of environment. Users do not need to be Visio experts to create a diagram, as AssetGen does most of the work for them. With our flexible approach to automated diagramming, many types of diagrams commonly used in enterprise infrastructure are supported.



**‘Without automation we’ll never keep any diagrams up to date.’**

The visualisation techniques that make Visio so useful for IT environments such as background pages, data graphics and layering can still be used and applied to multiple diagram types.

ITIL service and system maps

Network and system architectures

Data and transaction flows

Cloud interfaces and settings



Hardware to virtual mapping – servers, ports

End points, firewall rules and settings

Client access and interworking

Resilience, failover and recovery





# Change Impact & Dependency Analysis

Change is constant, but disruptive if not managed and controlled. Unintended changes such as faults, cyber attacks and configuration errors which cause disruption need quick decisions to be made to restore service and isolate potential causes. Planned changes shouldn't cause disruption, but risk mitigation and testing adds delays, costs and assumes everyone has the same understanding. Time is critical!

AssetGen SysMap provide options to react to situations, as well as support complex planning and analysis needs such as a data centre migration involving 2000 servers. What does it do? who is impacted? why is it involved? is there a DR fallback? Simple questions that often cross hardware, software and business team boundaries, so the answers are often difficult and time consuming to get. With the business impacts of technical changes often assumed, it is no wonder many IT projects subsequently overrun deadlines and budgets.

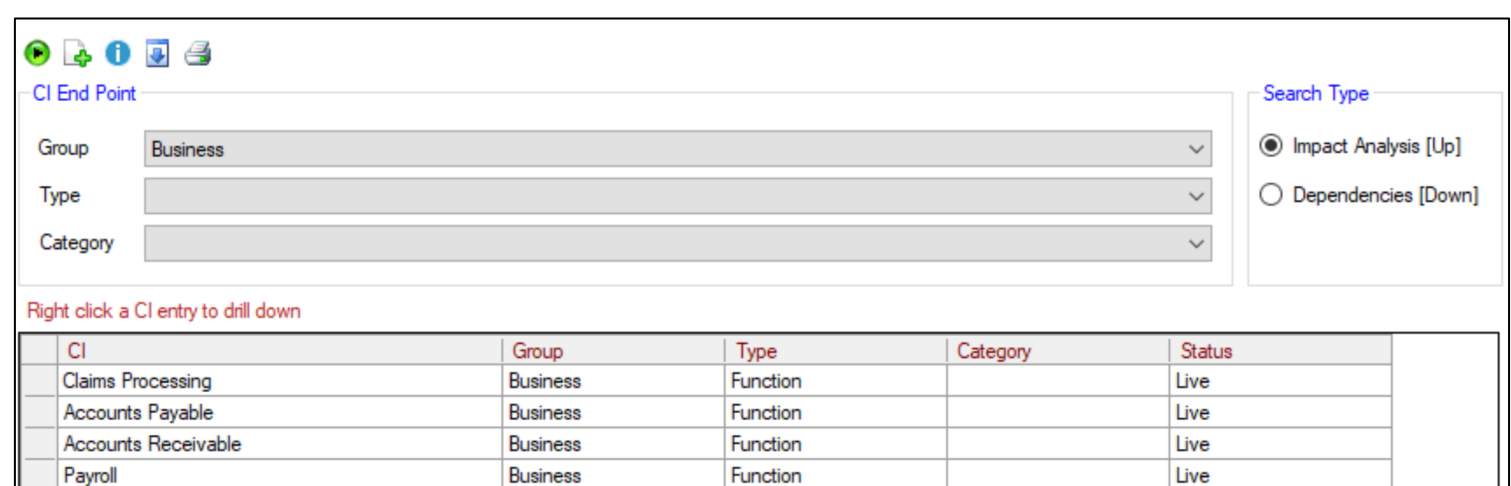


Understand the risk before making the change!

## Single CI Impact Analysis

A single CI impact or dependency analysis is carried out in a few seconds.

1. Select the CI
2. Hit run for the impacted CIs.



CI End Point

Group: Business

Type:

Category:

Search Type

☒ Impact Analysis [Up]

☐ Dependencies [Down]

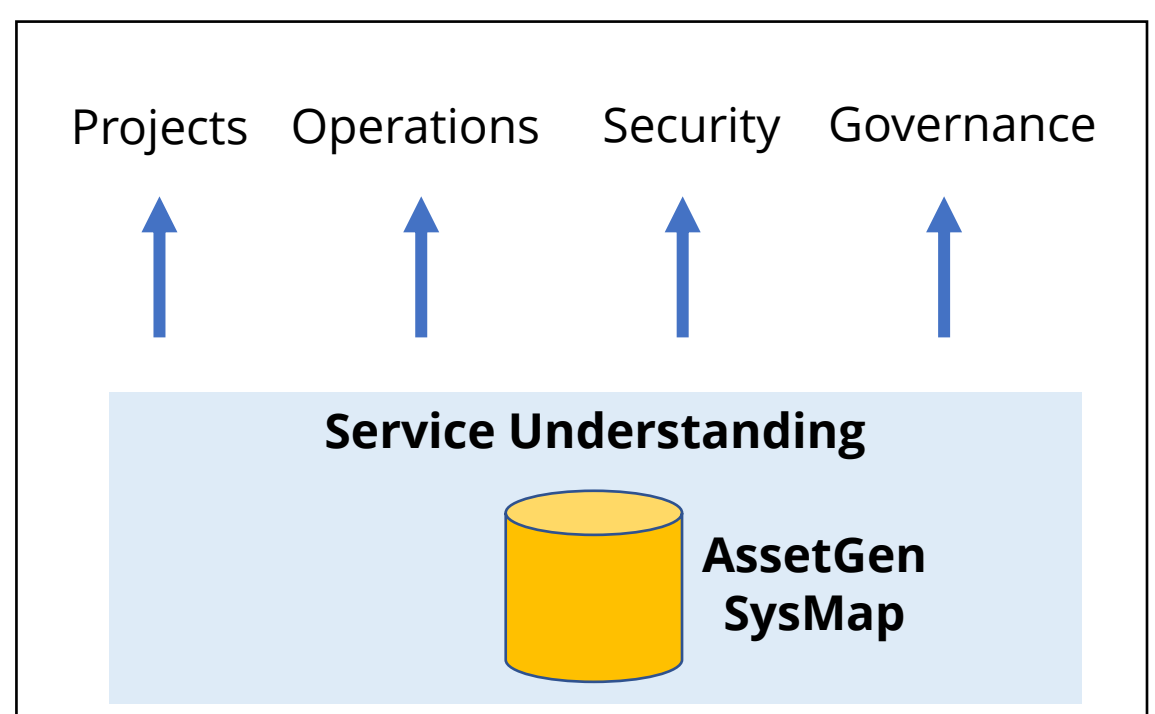
Right click a CI entry to drill down

CI	Group	Type	Category	Status
Claims Processing	Business	Function		Live
Accounts Payable	Business	Function		Live
Accounts Receivable	Business	Function		Live
Payroll	Business	Function		Live

Single CI impact/dependency form

## Spread Service and Risk Awareness

Access impact analysis easily by a web browser, API, SysMap client, Visio diagrams or AssetGen Connect (see the integrations section). Embed the CI impact web hyperlinks in monitoring toolsets, web portals, Excel, etc. for convenience. Simple, quick and needs minimal training.



Consistent risk and impacts awareness

# Multi-CI Change Impact Analysis

Moving, upgrading, releasing multiple components makes risk understanding more difficult. SysMap provides both Visio diagram and change reporting to make multi-CI impact analysis easier to manage. For speed and project support we extend the single CI approach with additional filtering, importing and output in Excel formats.

**Change request submission**



**Server migration planning**



**Identifying DR resource profiles**



**Billing for CI service usage**



**Updating risk profiles with changes**



**Regulations impacting processes**



**Release management planning**



**Environment comparison**



**PII data types and locations**



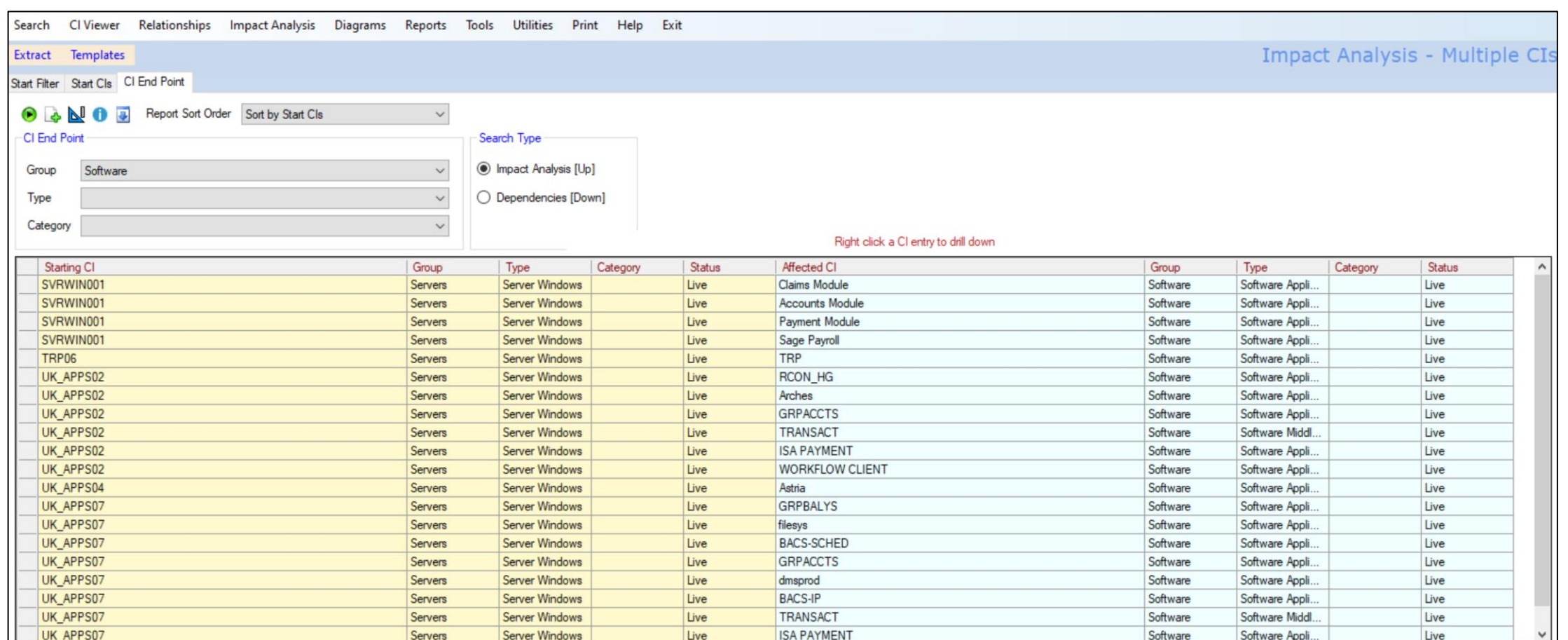
**External data flows and transactions**



**Data centre migration planning**



**Cluster and VM service impacts**

Starting CI	Group	Type	Category	Status	Affected CI	Group	Type	Category	Status
SVRWIN001	Servers	Server Windows		Live	Claims Module	Software	Software Appli...		Live
SVRWIN001	Servers	Server Windows		Live	Accounts Module	Software	Software Appli...		Live
SVRWIN001	Servers	Server Windows		Live	Payment Module	Software	Software Appli...		Live
SVRWIN001	Servers	Server Windows		Live	Sage Payroll	Software	Software Appli...		Live
TRP06	Servers	Server Windows		Live	TRP	Software	Software Appli...		Live
UK_APPS02	Servers	Server Windows		Live	RCON_HG	Software	Software Appli...		Live
UK_APPS02	Servers	Server Windows		Live	Arches	Software	Software Appli...		Live
UK_APPS02	Servers	Server Windows		Live	GRPACCTS	Software	Software Appli...		Live
UK_APPS02	Servers	Server Windows		Live	TRANSACT	Software	Software Middl...		Live
UK_APPS02	Servers	Server Windows		Live	ISA PAYMENT	Software	Software Appli...		Live
UK_APPS02	Servers	Server Windows		Live	WORKFLOW CLIENT	Software	Software Appli...		Live
UK_APPS04	Servers	Server Windows		Live	Astria	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	GRPBALYS	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	filesys	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	BACS-SCHED	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	GRPACCTS	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	dnspod	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	BACS-IP	Software	Software Appli...		Live
UK_APPS07	Servers	Server Windows		Live	TRANSACT	Software	Software Middl...		Live
UK_APPS07	Servers	Server Windows		Live	ISA PAYMENT	Software	Software Appli...		Live

Multi-CI impact/dependency analysis

## Multi-CI Impact Analysis

A multi-CI impact or dependency analysis takes only a few seconds.

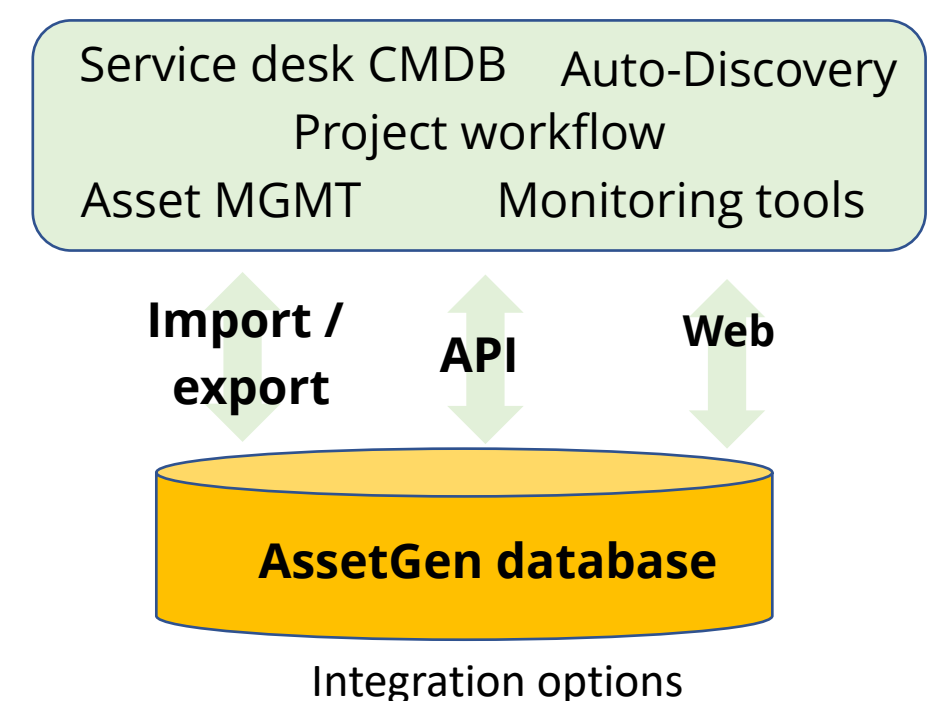
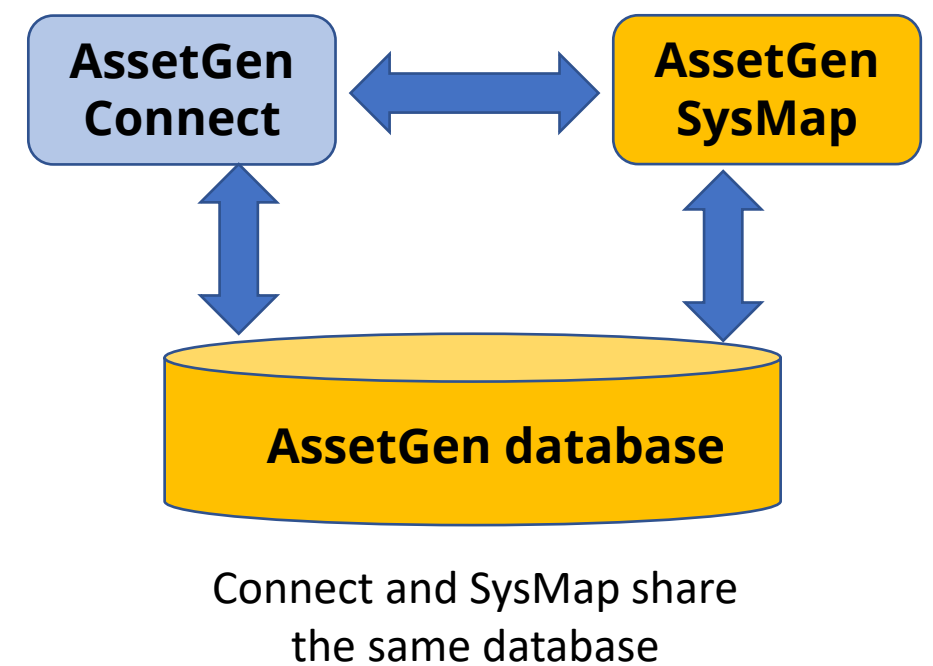
1. Select the starting CIs Individual selection, filtering, import file, filter template
2. Hit run for the impacted CIs. Filter by CI target groups and types
3. Sort or export into Excel to organize outputs Interactive sorting or use Excel /BI capabilities

The multi-CI analysis is ideal for major project teams where project and technical risks have to be refreshed during the project planning and rollout. Complex projects often highlight gaps in existing dependency data, but need to maintain their own focused information set. Multi-CI analysis saves time and also complements CMDB reporting.

# AssetGen Integrations

**1. AssetGen Connect** maps the physical infrastructure that underpins the logical and virtual infrastructure. Connect provide a detailed inventory of hardware, connectivity and location for use by infrastructure planning and operations teams. When used with SysMap it enables change impact analysis using based on multiple racks, devices and connections. Making it simpler to plan moving racks, upgrading network switches, shutdown power, etc. and submit change requests with service impacts.

**2. Management Toolset Integration.** The mapping data in SysMap can be populated and updated from existing service desks, extending CMDB data analysis and diagramming. Three options are available – API, csv/xml import/export and web hyperlinks. SysMap hyperlinks can be imported into web based monitoring tools for quick impact analysis when faults are detected. The options for data exchange and updating are dependent on data quality and resources.



# AssetGen Licencing and Platforms

AssetGen SysMap is available in 2 versions with **A) single use desktop** and **B) multi-user** with web access. Licences are based on the database size and purchased as a perpetual licence with annual software support. Database sizes start at 300 CIs, increasing to 1000, 3000, 5000, 10000 and unlimited. Licences can be easily upgraded with scope and platform changes. Discounts are available for multi-server implementations.

30-day temporary licences are available for our desktop evaluation version. Integrators and service providers who require temporary rather than perpetual licences for one or multiple projects can contact our customer support team who will advise on licence costs and options.

The AssetGen SysMap system requires standard Microsoft Windows platforms for desktop and server versions. The desktop version requires Windows 10 and above. The multi-user server version requires Windows Server 2019 with SQL server, IIS for the web and API interfaces. We recommend Visio Professional 2013/7/19/ Microsoft365 plan2 for working with AssetGen. For more information on supported platforms, please contact Square Mile Systems customer support.



# Implementation Services

We provide various services to help AssetGen SysMap deliver the benefits and efficiencies that it is capable of. As many infrastructure teams are time limited, it makes sense to involve our specialists to support an implementation. Our product knowledge and experience will deliver end results faster and skills gaps can be overcome. Services are always customised to requirements, with our customer support team able to provide options, costs and timescales.

## 1. Prototyping and proof concept

A short, focused project where we configure and load sample customer data onto an evaluation system. It lets you see how data is processed, produces sample outputs and helps refine requirements for product licences and implementation.

## 2. Training and Skills Transfer

On premise and remote administrator training are available for both AssetGen SysMap (3 days) and Visio Automation (2 days). Training is often combined with other services to minimise impact on staff workload.



## 3. Implementation and project tasks

Implementation tasks can be allocated to Square Mile to complement existing resources.

- Delivery of 2 services known to be complex, used by our specialists to define a mapping approach.
- Consolidation, normalisation and bulk loading of existing records
- Data capture and audits where data is found to have gaps or inconsistencies.
- Development of supporting Visio standards, templates and diagram formats.

## 4. Post implementation

- On going administration support and data checking.
- Mentoring of key individuals.
- Update training for new staff and changes in scope.



# About Square Mile Systems

Square Mile Systems is based in the United Kingdom, developing the AssetGen system at our HQ in Poulton, Gloucestershire. The first production version of AssetGen was released in 2006 with customers across all sectors and continents then purchasing the system. While mainly focused on complex enterprise level ICT systems documentation, AssetGen is also used for marine, industrial, military and transportation environments that have adopted IT and IoT technologies.

Square Mile Systems works with various industry trade associations in the UK and North America developing best practices and standards for documenting and visualising complex ICT infrastructure.

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**‘ We use AssetGen constantly and trust it more than our CMDB and spreadsheets.  
(and neither produces Visio service maps, rack and network diagrams!) ’**

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For more information, please visit our websites which have more product information, webinars and contact forms.

Alternatively, call us at our HQ and we will be glad to help. **Tel: +44 (0)8700 340770**



[www.assetgen.com](http://www.assetgen.com)



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