

CMDB Visualization Using Visio

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CMDB Visualization Using Visio

Managing change to the services delivered by an IT infrastructure requires understanding at all levels and by many teams. Communicating how systems and services are interlinked is not easy, so we use maps and diagrams to enable comprehension of the likely risks or paths involved.

Examples of typical diagrams covering CMDB/CMS

1. Service Maps
2. Architecture diagrams
3. Data flows between components
4. Change / Incident indication
5. Batch process charts
6. Recovery / Risk indications

There are many different diagrams that help with managing services, so AssetGen SysMap provides an easy way to create the different views of our infrastructure using MS Visio.

Plus we have to consider how we maintain them.

Business Processes

Departmental, Company

Services

End user, infrastructure, supplier

Applications

PC, server, mainframe, SOA

Virtual Infrastructure

PCs, Network, Servers, Storage, DBMS

Hardware Infrastructure

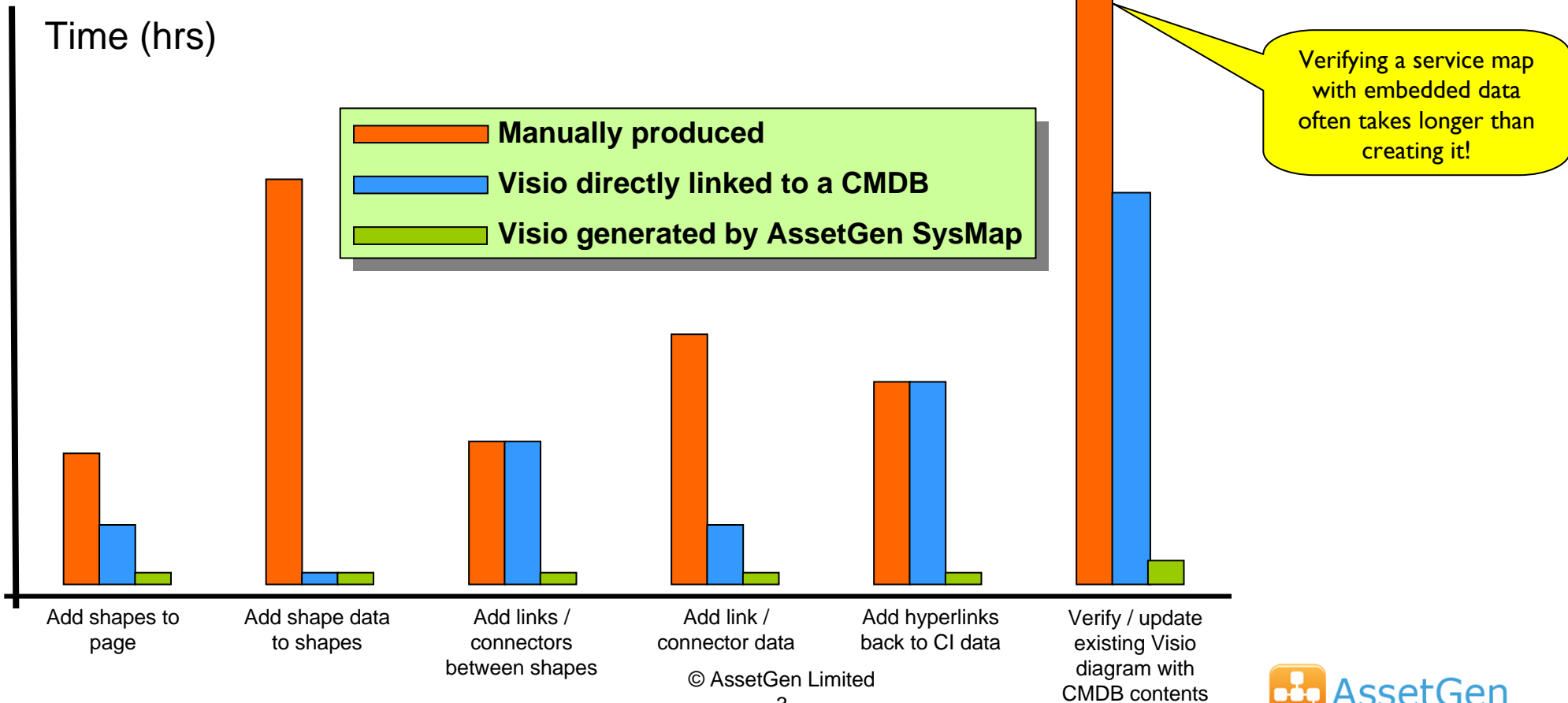
PCs, Network, Servers, UPS, Storage, Other

Fixed Infrastructure

(Cabling, Power, Cabinets, Rooms, Buildings)

Why create Visio service maps automatically?

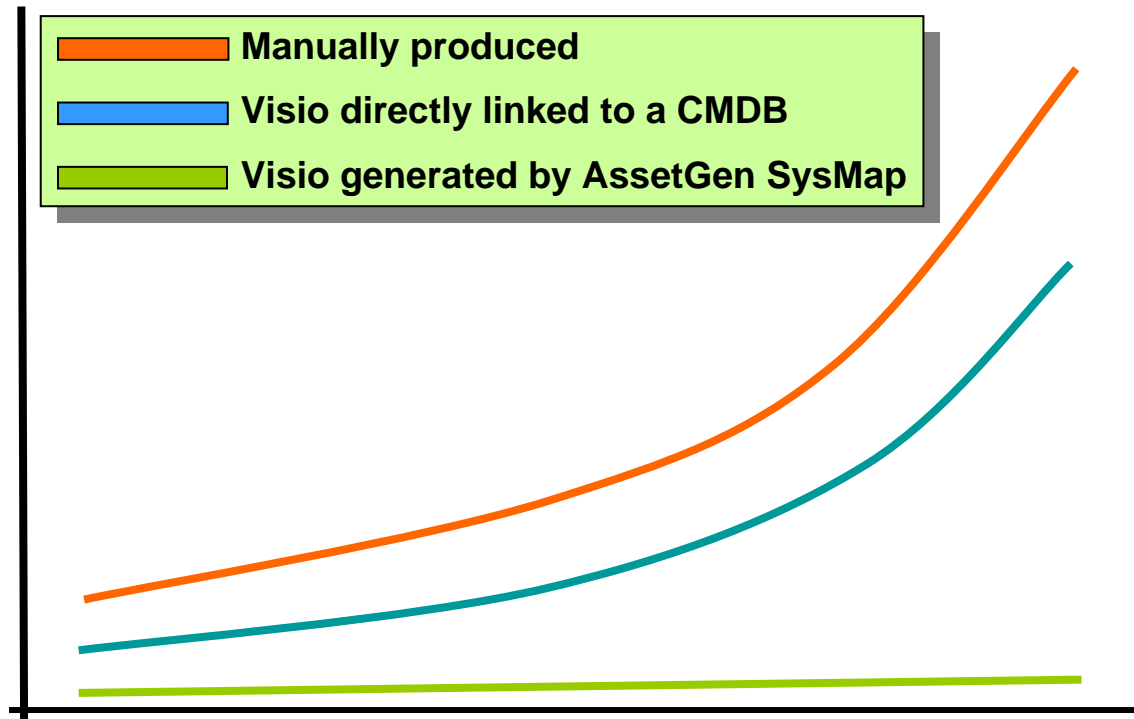
With CMDB data directly linked to Visio, time is saved compared to manual typing, layout and verification. Using AssetGen to create the diagrams takes minutes rather than hours (or days) and doesn't require everyone to be expert Visio users.



The Problem of Complexity

As a service gets more complex, the time taken to manually draw, enter data and verify increases exponentially. Without automated diagram production it becomes costly to create and maintain service views – why not use the data in the CMDB?

Time (hrs)



The difference in time taken when drawing complex services with many server and software CIs is significant.

A complex service is produced in seconds with AssetGen.

Number of CIs

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Different Views Required From The CMDB

For an environment with 30 services delivered by 100 servers, you may need more than 30 “top down” service maps. Change impact is best served by bottom up maps created as required.

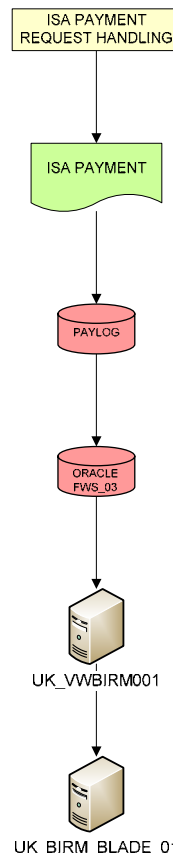
“Top Down”



Starting at a Service or Process, show the supporting CIs.

Typically used by service management

- Validating service CIs
- Identifying risks
- Understanding service architecture
- Availability planning
- Business continuity
- Single points of failure
- Billing and charging
- Transitioning services



Starting at a Server or Application, show the system or service impact

Typically used by technical teams

- Planning a component change
- Submitting change forms
- Incident management
- Incident recovery
- Project planning
- Identifying change ownership
- Predicting fault impact



“Bottom Up”

Creating a Visio Service Map - AssetGen

The screenshot shows the AssetGen SysMap application window. The interface includes a menu bar (Run, Clear, Menu, Print, Help, Exit), a toolbar, and several configuration panels. A table at the bottom displays a list of items with columns for Type, Query Title, Updated, and User.

1. Choose a starting CI for the service map

2. Select the number of levels to display

3. Decide on the search type to display single or multiple services on a diagram

4. Select if you want to draw, compare or update an existing diagram

5. Press RUN to draw

Advanced button for multiple mappings – covered later

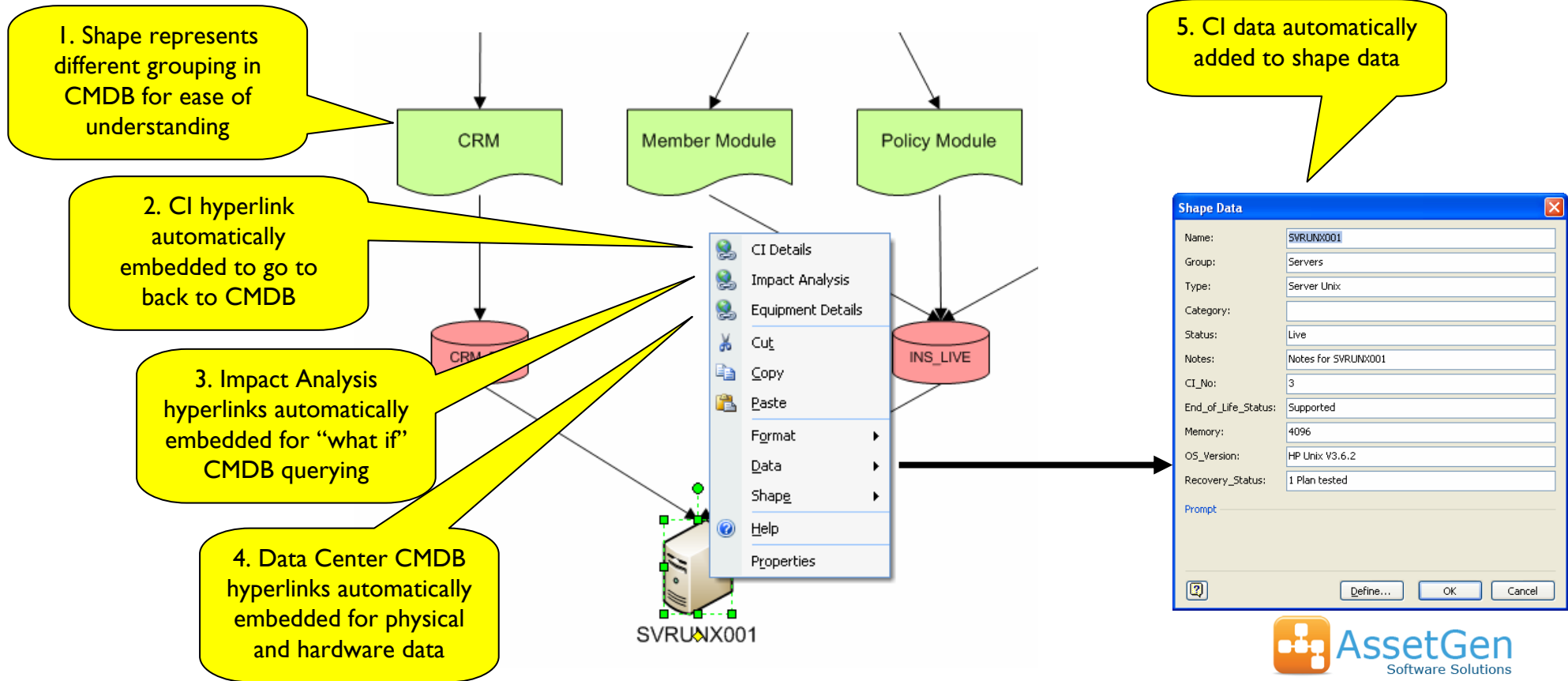
It typically takes a few seconds to draw a service map tailored to your needs;

- with embedded CI data
- with embedded hyperlinks
- with embedded settings
- page size scaled appropriately

Type	Query Title	Updated	User
ards	dcdcd	03/09/2008	Admin
ards	asfafaf	16/07/2008	Admin
ds	dcdc	11/07/2008	Admin
ards	sxsx	26/06/2008	Admin

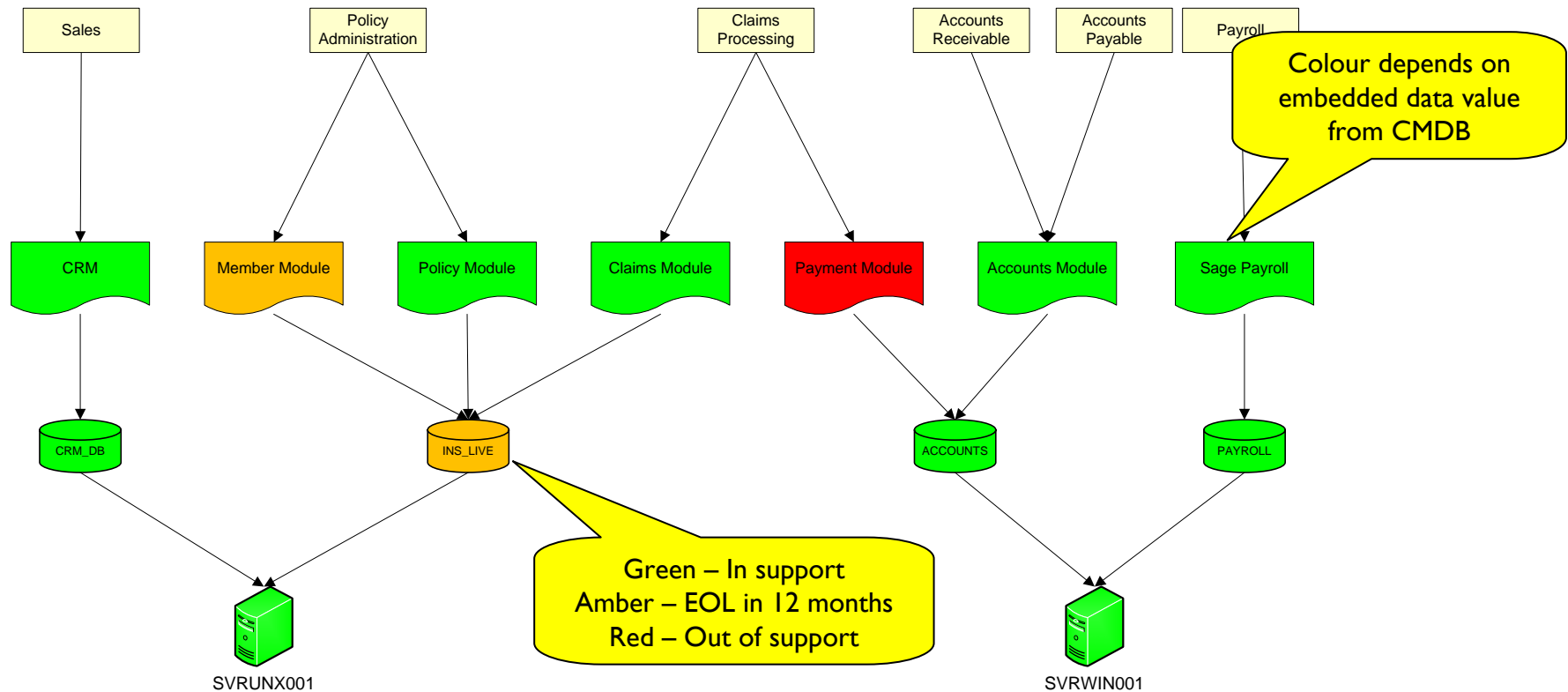
More than a Picture!

Visio gives us many capabilities that extend beyond just a “picture”. AssetGen SysMap generates not just the diagram, but also embeds CI data and hyperlinks back to CMDB.



Using Visio to show status

The data graphics feature of Visio lets us easily see the end of support risk with CIs that make up a service. Really useful for showing risk, recovery, ownership and other status information, but without having to create more diagrams



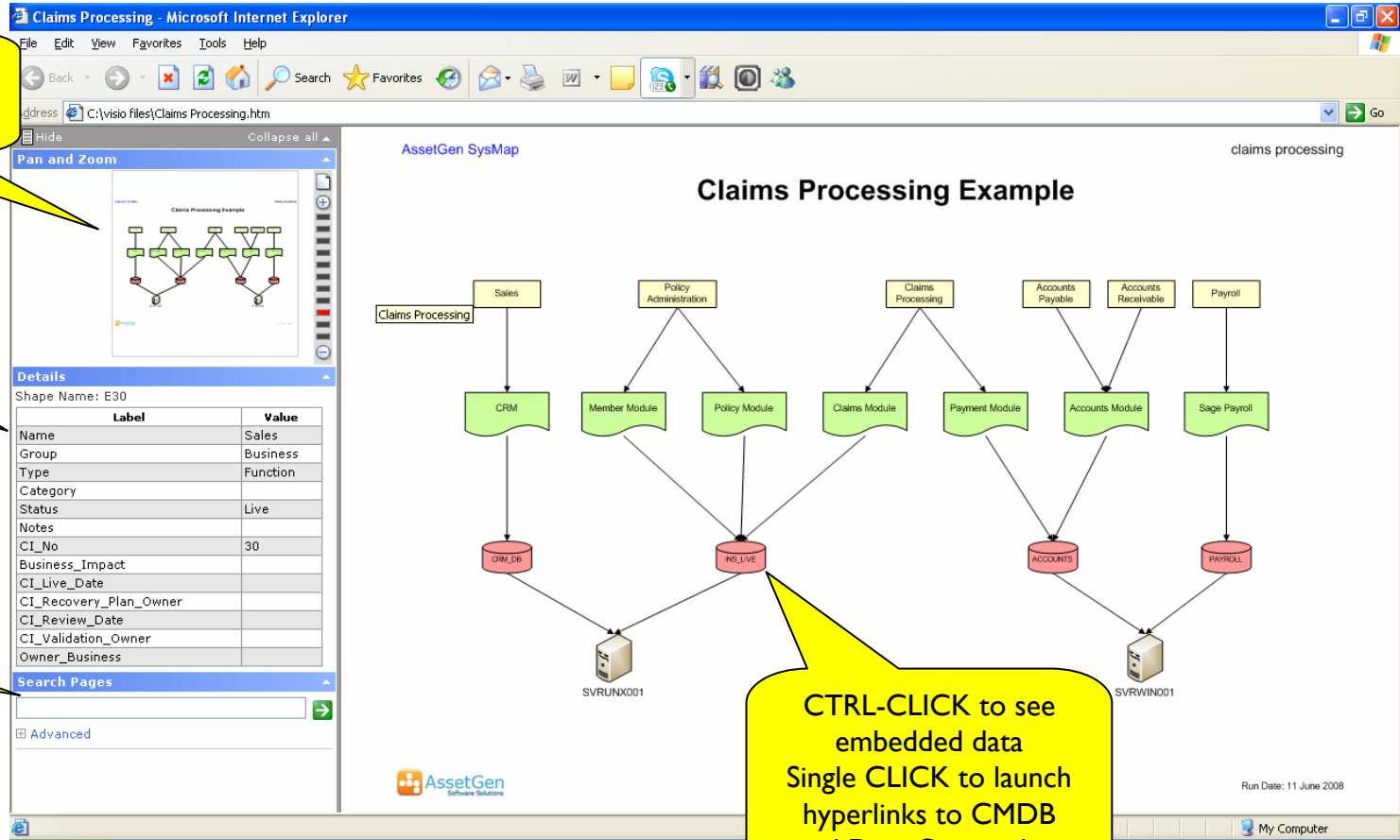
Service Maps on the Intranet

Saving a Visio service map as a web page, preserves hyperlinks and embedded data. An easy way to distribute service knowledge to everyone

Pan and Zoom window for control of detail

Embedded CI data displayed

Search on CI names and embedded data across multiple pages

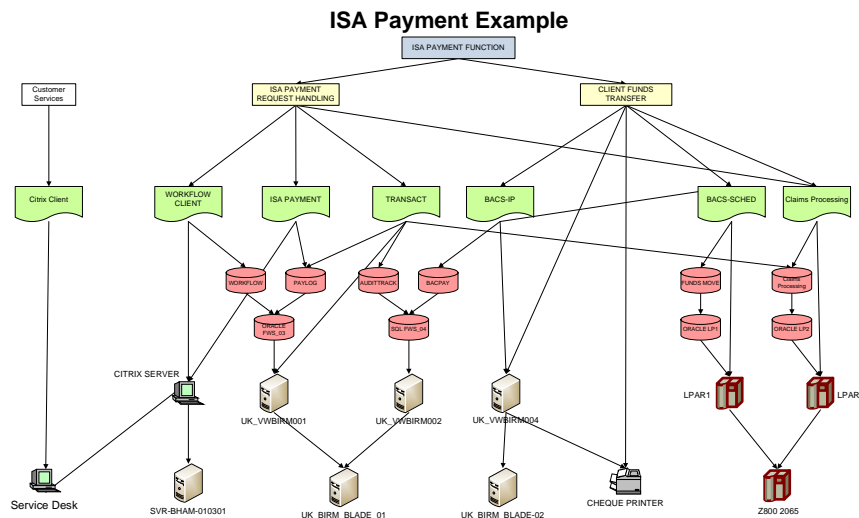


CTRL-CLICK to see embedded data
Single CLICK to launch hyperlinks to CMDB and Data Center data

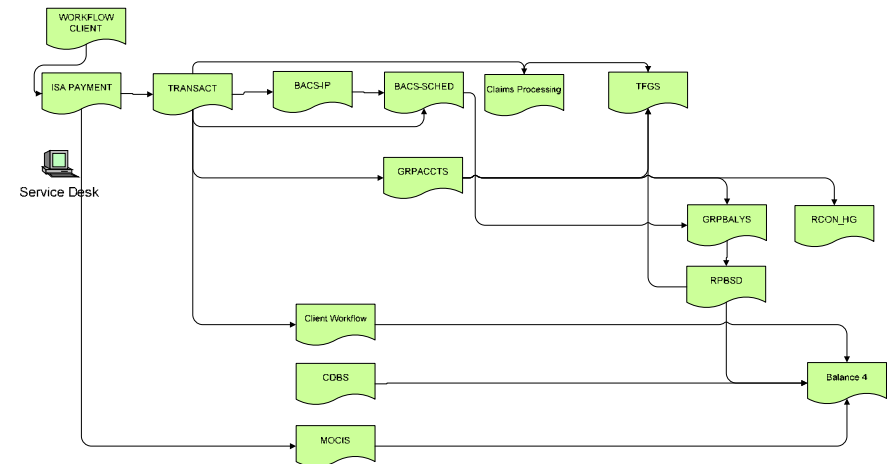
Multiple Perspectives, Common Data

Using the advanced filtering, multiple mappings can be maintained in AssetGen SysMap and then displayed separately. Ideal for reducing the number of disparate sets covering operational systems. Produce Visio diagrams of either as required

Service View

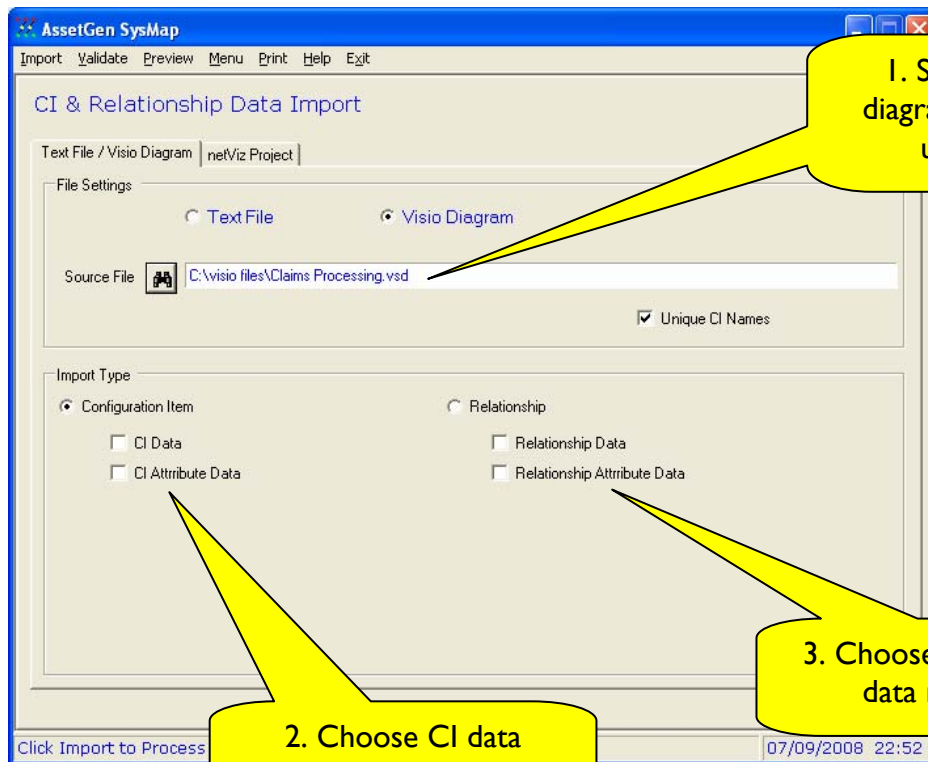


Data Flow View



Use Visio for Data Capture

If you draw a service map in Visio, it can be used to update AssetGen SysMap directly. We check for duplication, enabling common components to be re-used in multiple service maps. Other options include .txt, .csv and netViz.



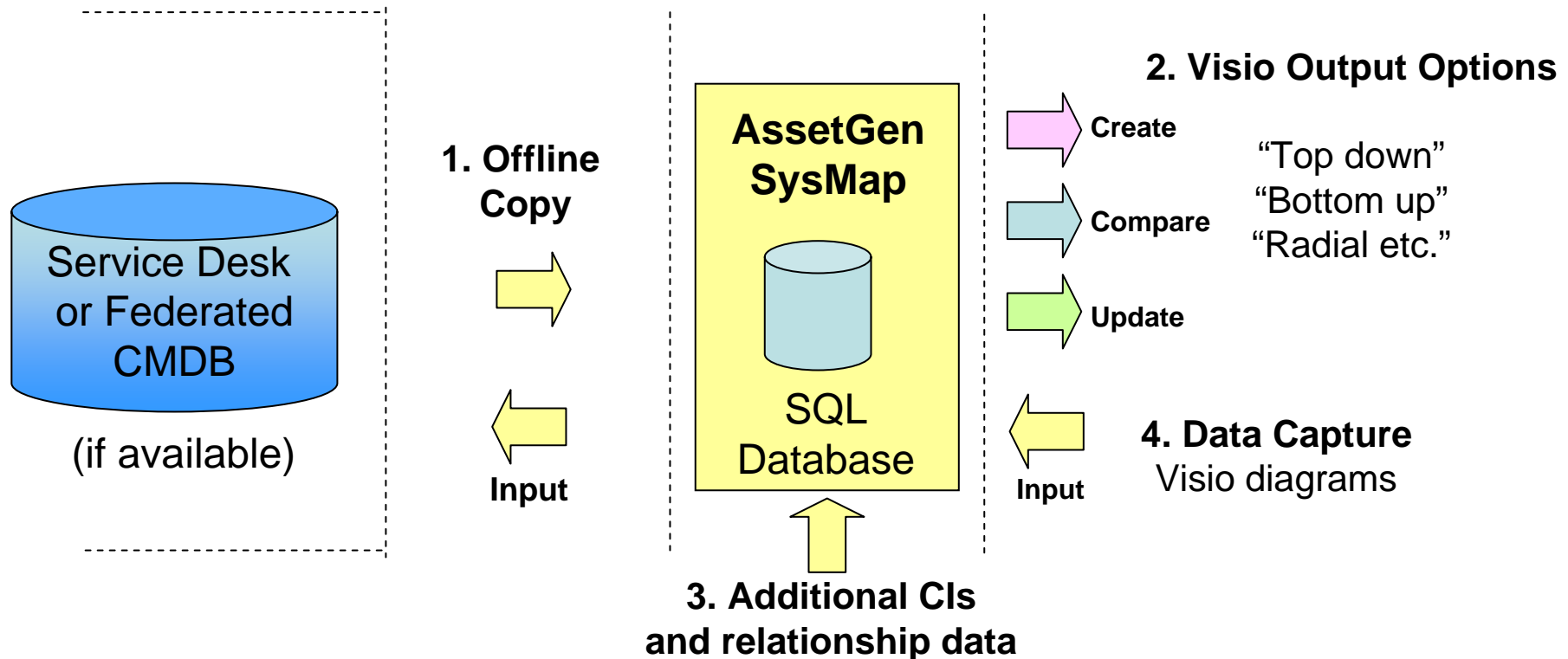
1. Select the Visio diagram to import or update from

2. Choose CI data required

3. Choose relationship data required

Makes it easy to document services one at a time, using AssetGen SysMap to show overlaps, common components and gaps in understanding

AssetGen SysMap Overview



1. An offline copy is taken of the existing CMDB – avoiding CMDB performance issues
2. AssetGen SysMap then produces Visio diagrams under user control
3. Additional CI data or relationships can be added to aid service understanding
4. Visio diagrams can be used for data capture into AssetGen SysMap

CMDB Visualization Summary

We make it possible to automate the production of complex service maps, from the same data that is used for categorising changes and incidents. The services become easier to understand and effort in communicating with different teams is reduced. Visio can also be used as data capture tool when creating or updating service catalogues.

To finish with, Visio combined with AssetGen SysMap gives

- a. A quick, automated way to produce diagrams from existing CMDB data
- b. A fast way to validate the accuracy of CMDB data and relationships
- c. Service maps which are easily communicated using standard MS office toolsets
- d. Consistency of symbols, content and embedded data across maps
- e. A method of data capture that avoids manual transcription from and into CMDBs.
- f. Great flexibility in the outputs generated
- g. Savings in staff time in producing and maintaining service maps

Contact us or our resellers for more information on the AssetGen range

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