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Mapping Services, Systems & Servers

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Why Map IT Services etc.

- Service Management frameworks such as ITIL, ISO20000 say it is best practice
- Modern systems are complex and change is becoming the biggest cause of disruption
- Can't assess and manage risk without a detailed understanding of the live service
- Fundamental to common processes that
 - Reduce cost of delivery
 - Improve response
 - Improve control

Setting Expectations

Why is mapping services and systems difficult?

What do we do today?

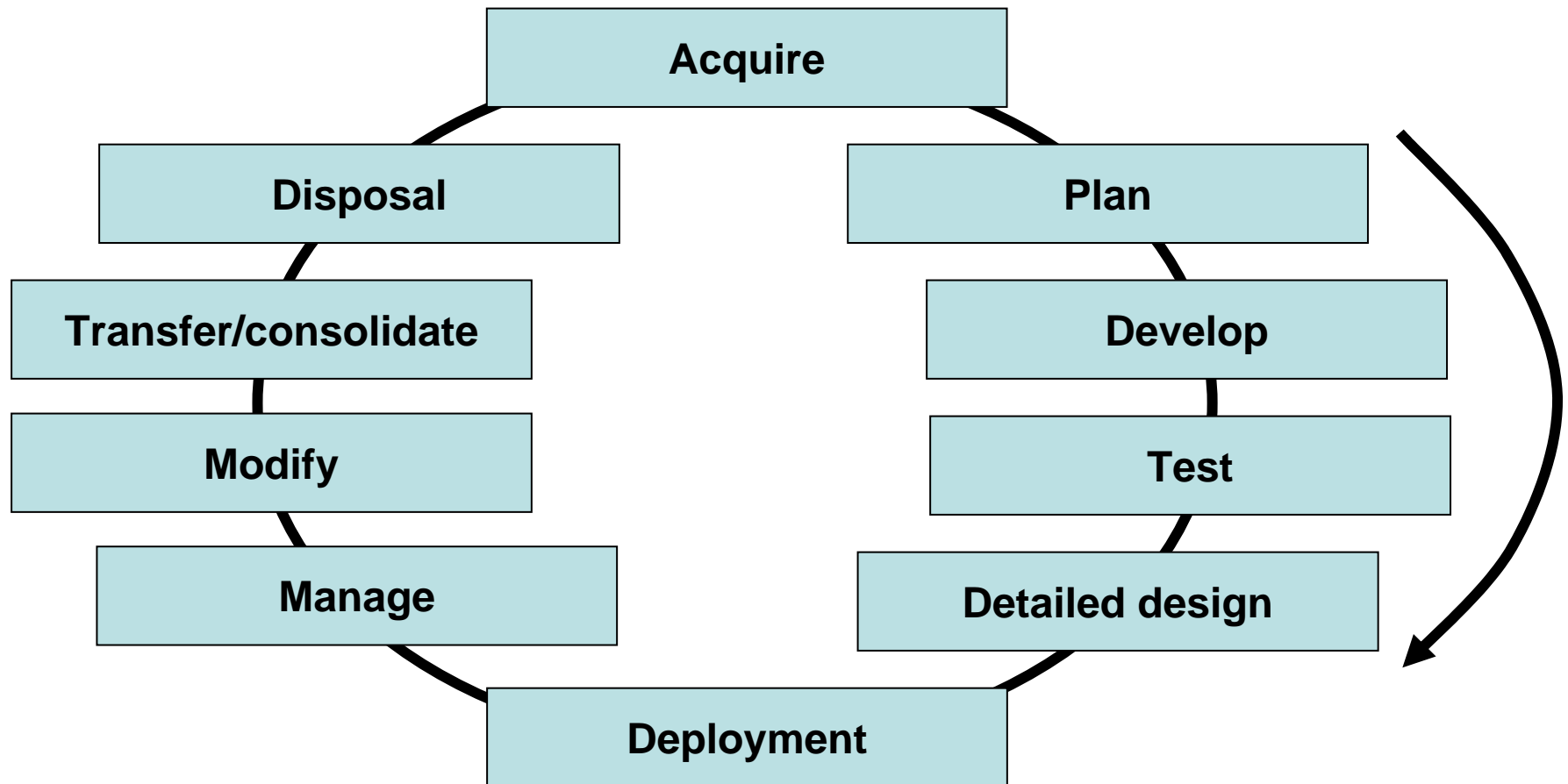
Service catalogue
Power feeds to cabinets
Build documents
Rack diagrams
Maintenance contracts
Server asset list
Departmental billing/charging
Desktop asset list
Equipment room maps
PABX port mapping
Batch processing

LAN/WAN/SAN diagrams
User locations
IP addressing spreadsheet
Chassis/card layouts
Process diagrams
Floor plans
Patching spreadsheets
Building wiring diagrams
Service desk inventory
Project plans
Naming conventions
Power phase summation
Labelling standards
Application architectures

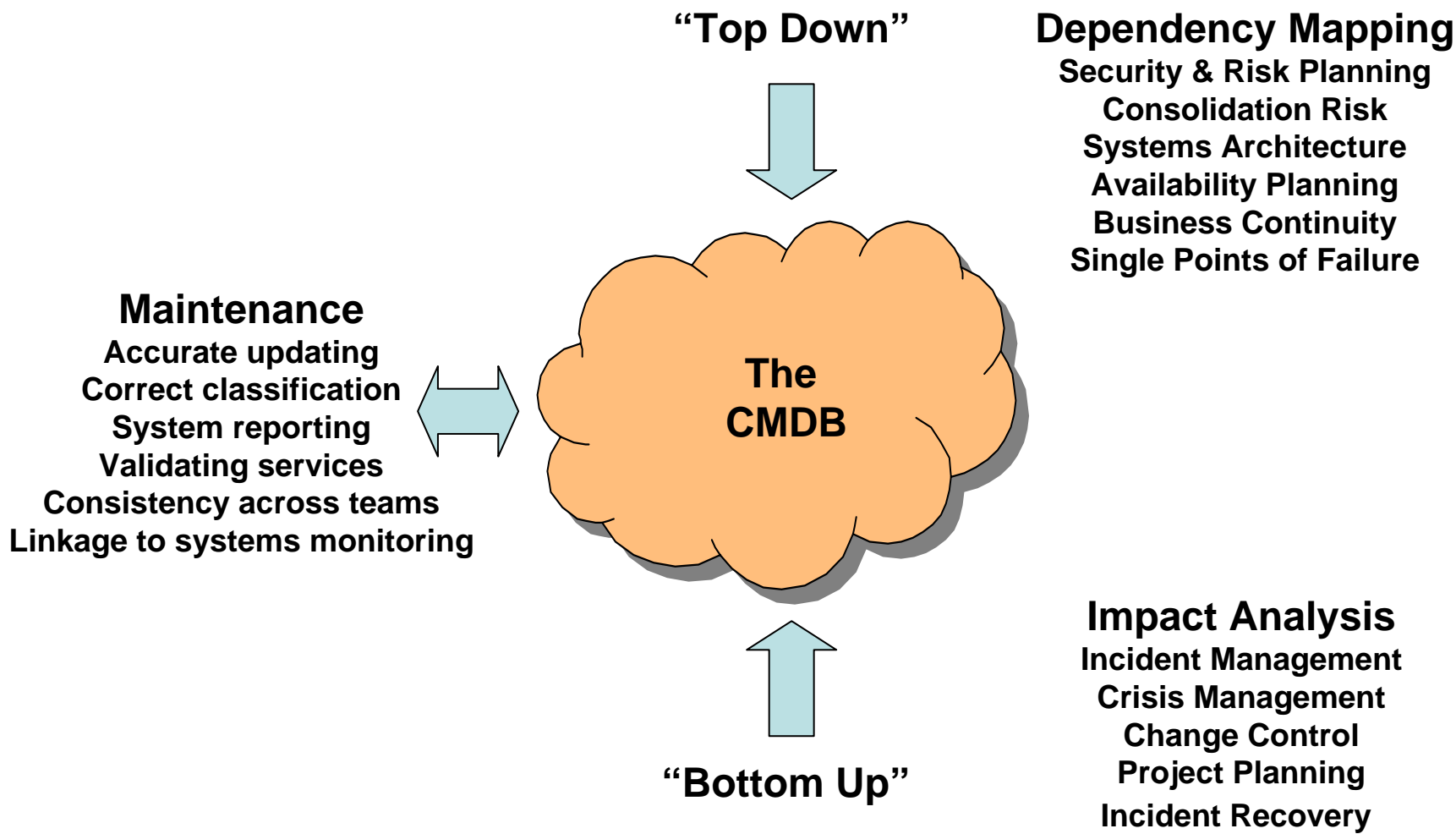
The A-Z of London

- Reference & conventions
- Index(s)
- Key public services
 - Underground, Rail Network
 - Hospitals, Cinemas, Theatres, Car parks
- Overview map
- Congestion charging zone map
- General map
- Detailed map of central London

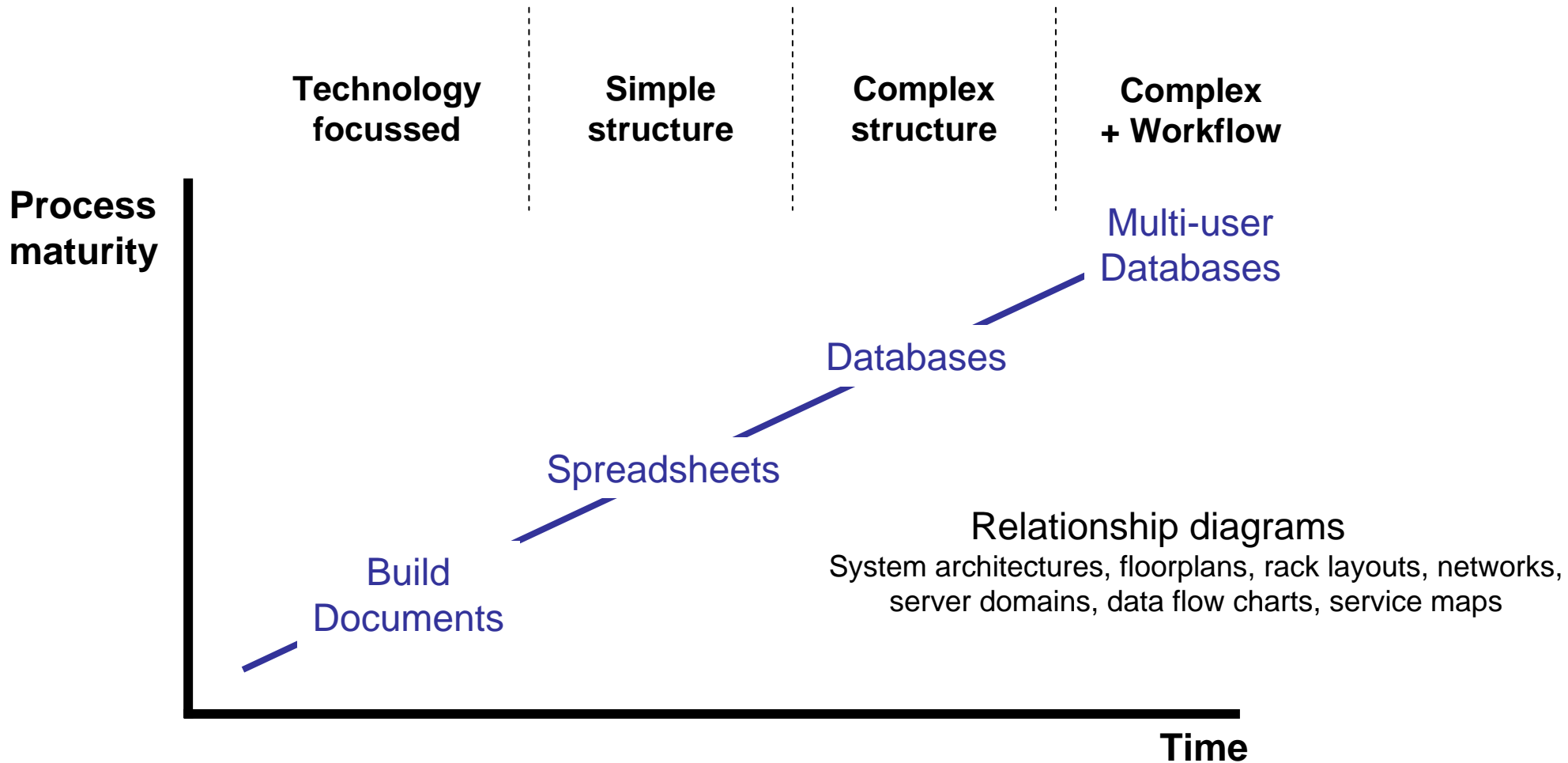
IT System Lifecycle



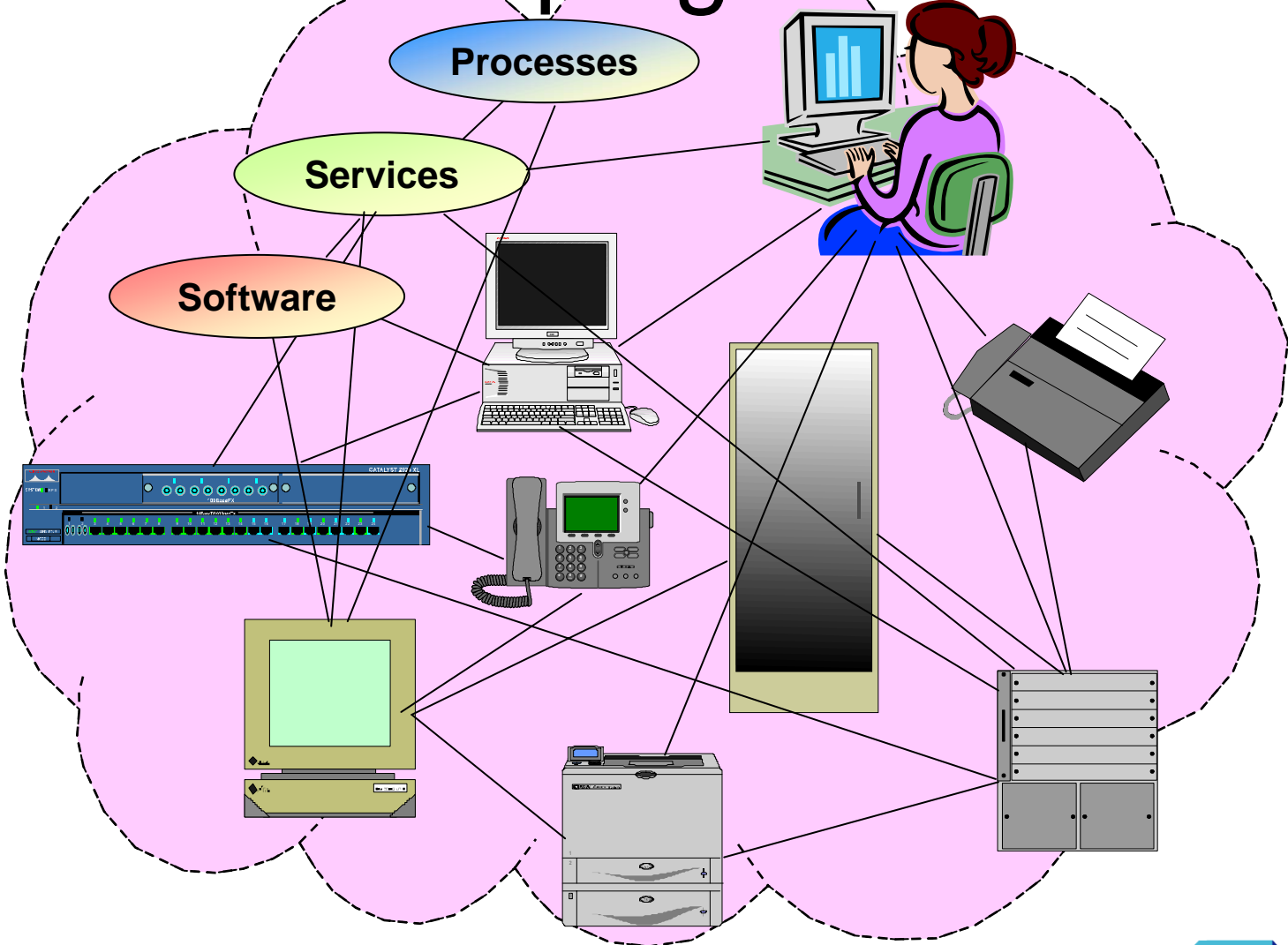
Defining the Need



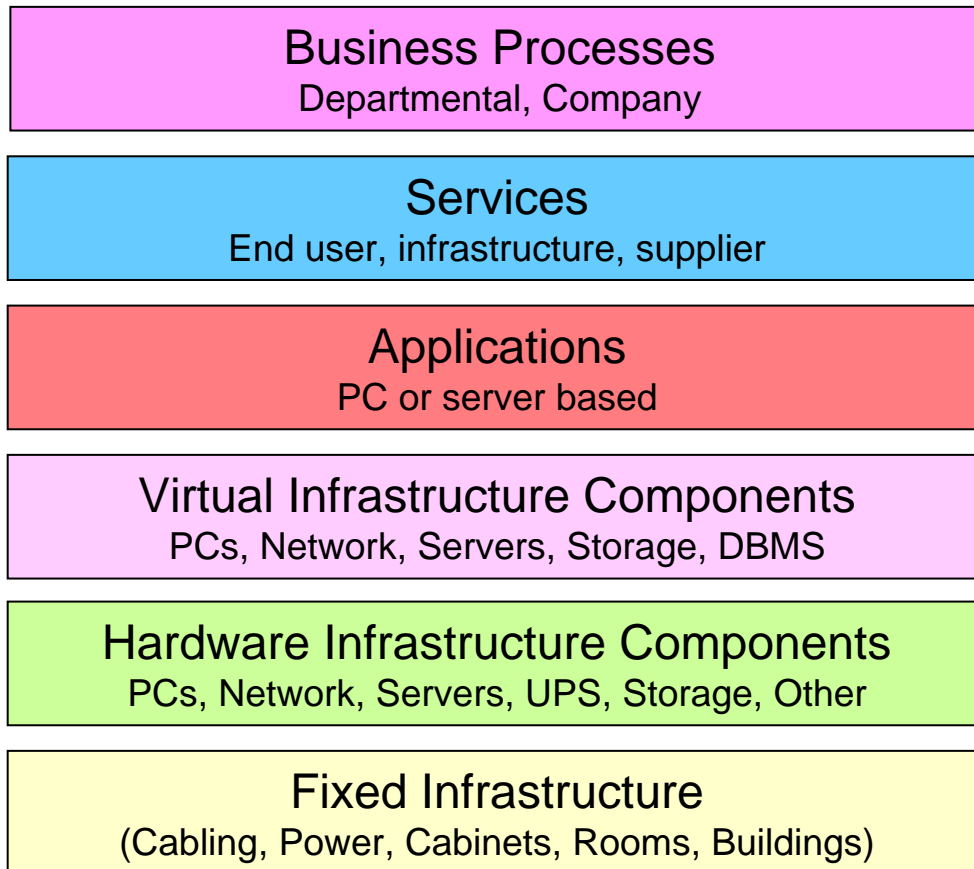
Starting our Journey



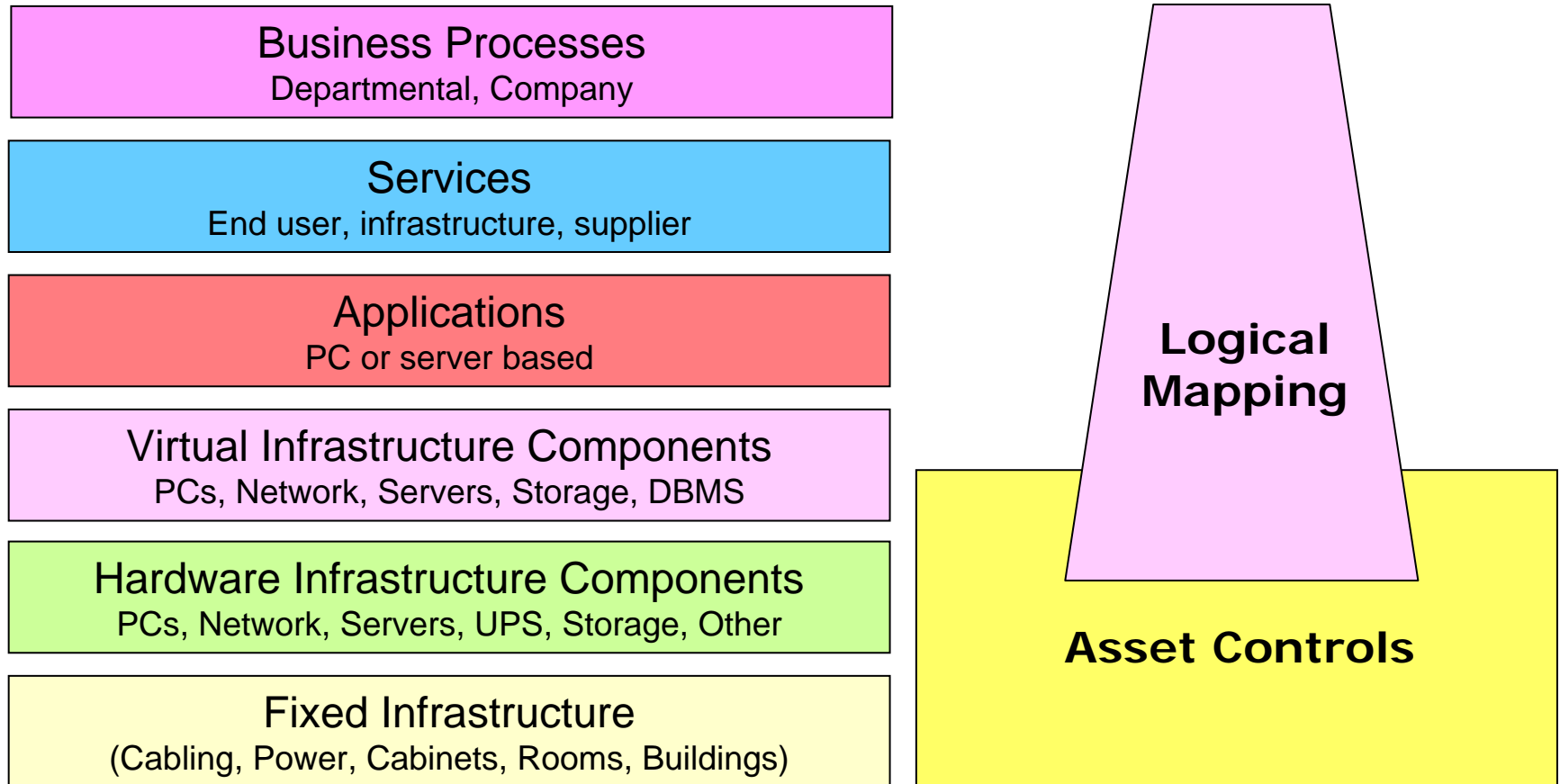
Developing a CMDB



Structuring CI Classes



Breadth & Depth




Mapping Techniques


- List
- Tabs
- Tree
- Hub & Spoke
- Hierarchy
- Complex hierarchy
- Block / Path diagram


Lists


Server Name	Users	Model	IP Address	Application	Location
Roman1	Everyone	GL656	143.5.6.1	Exchange	London
Roman2	Accounts Dept	?	143.5.6.2	Accounts	London
Roman3	Everyone Customers	GL659	143.5.6.3 143.5.6.4 143.5.6.6	Firewall	Rack 4


Two sets
of users

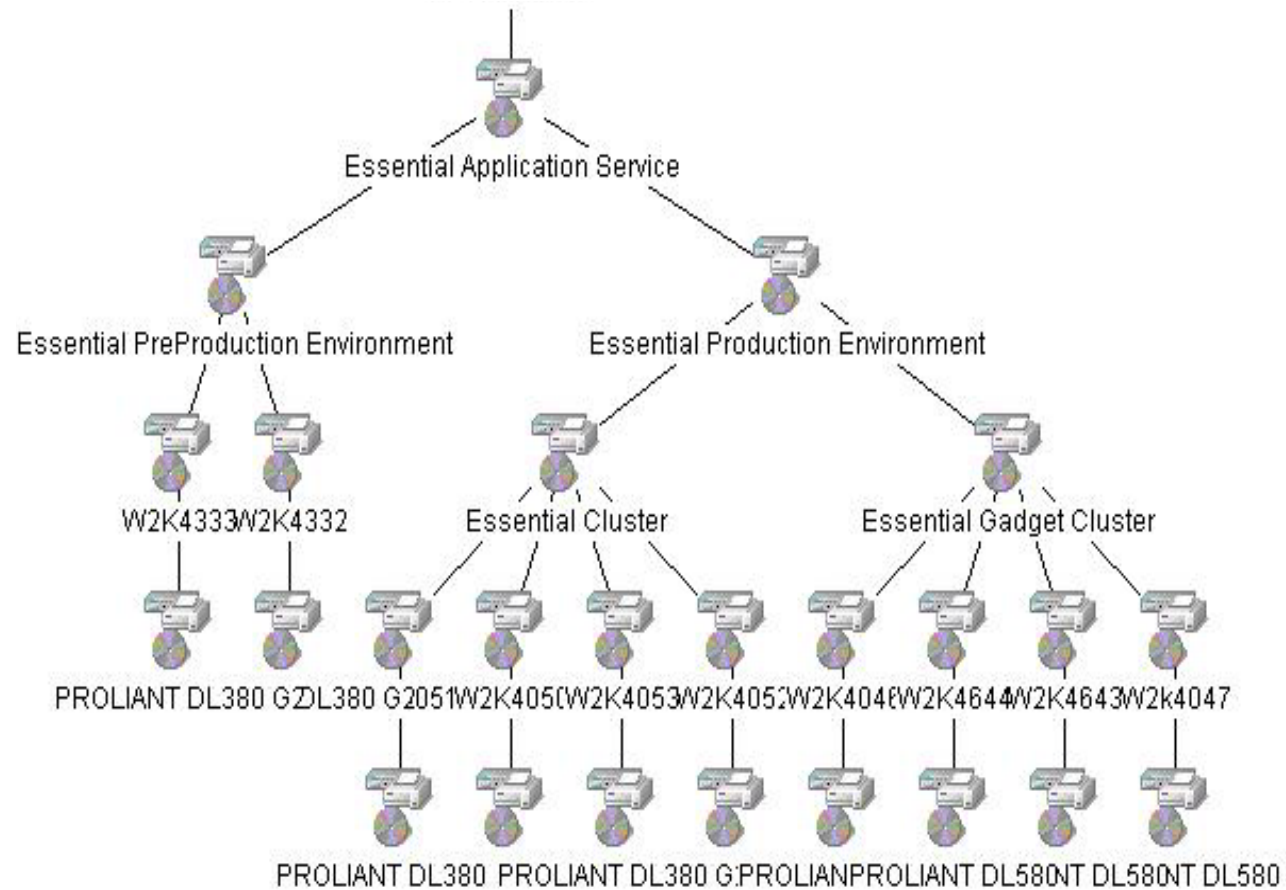

Missing
data


Multiple
entries

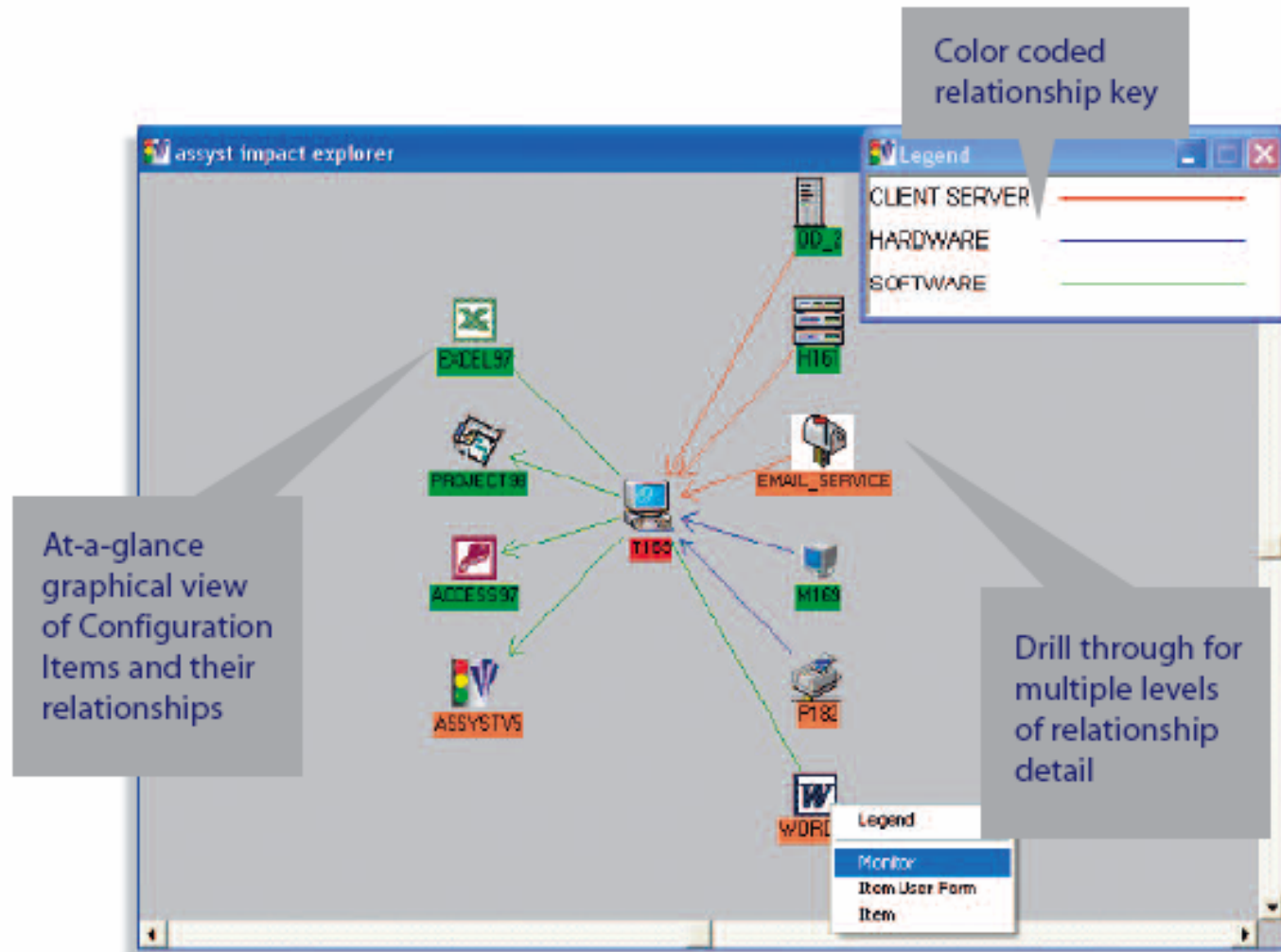

Function or
application


Detail
mismatch

Tree

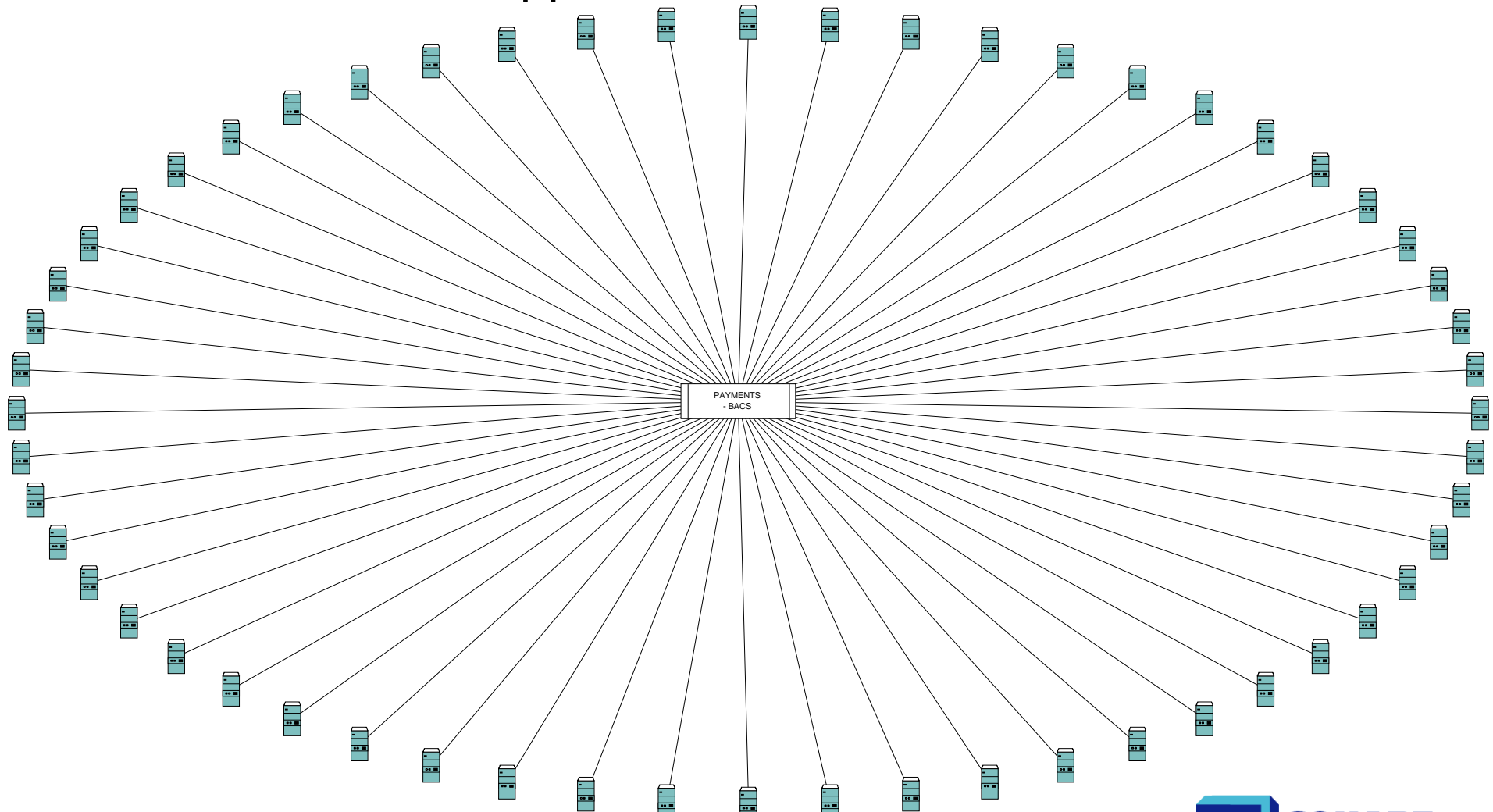


Hub & Spoke Mapping

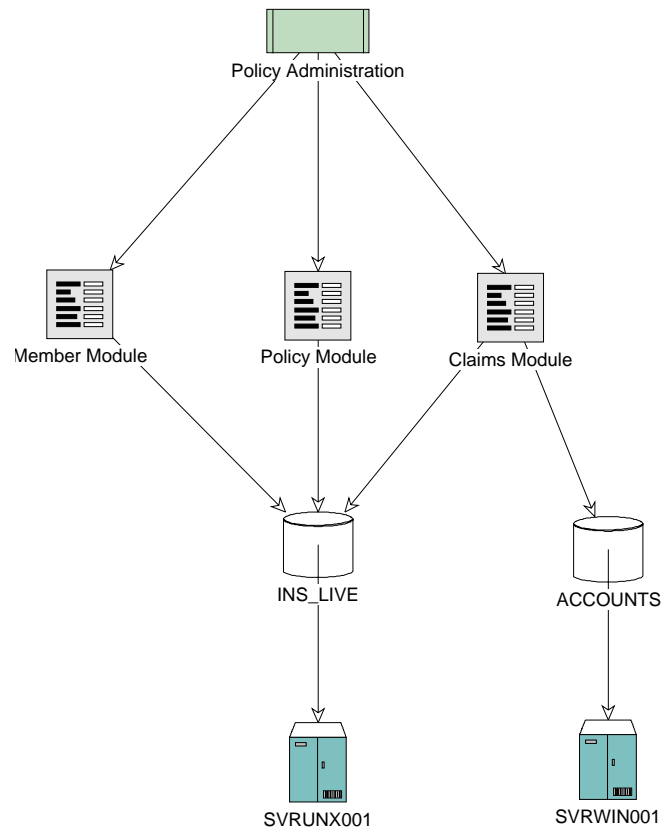


A Little Bit More Complex

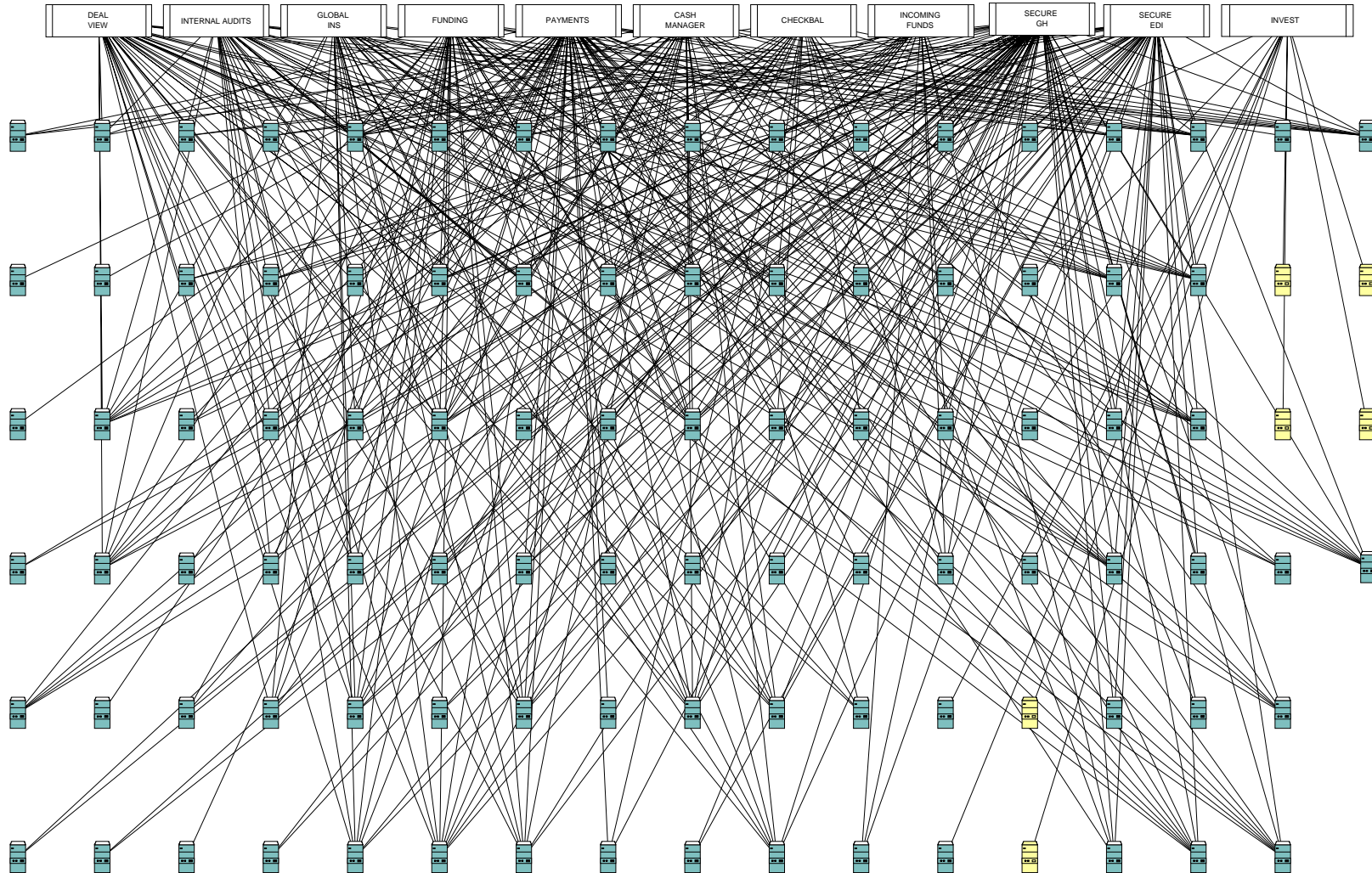
1 Application – 50+ servers



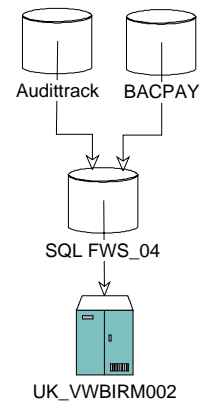
Hierarchy

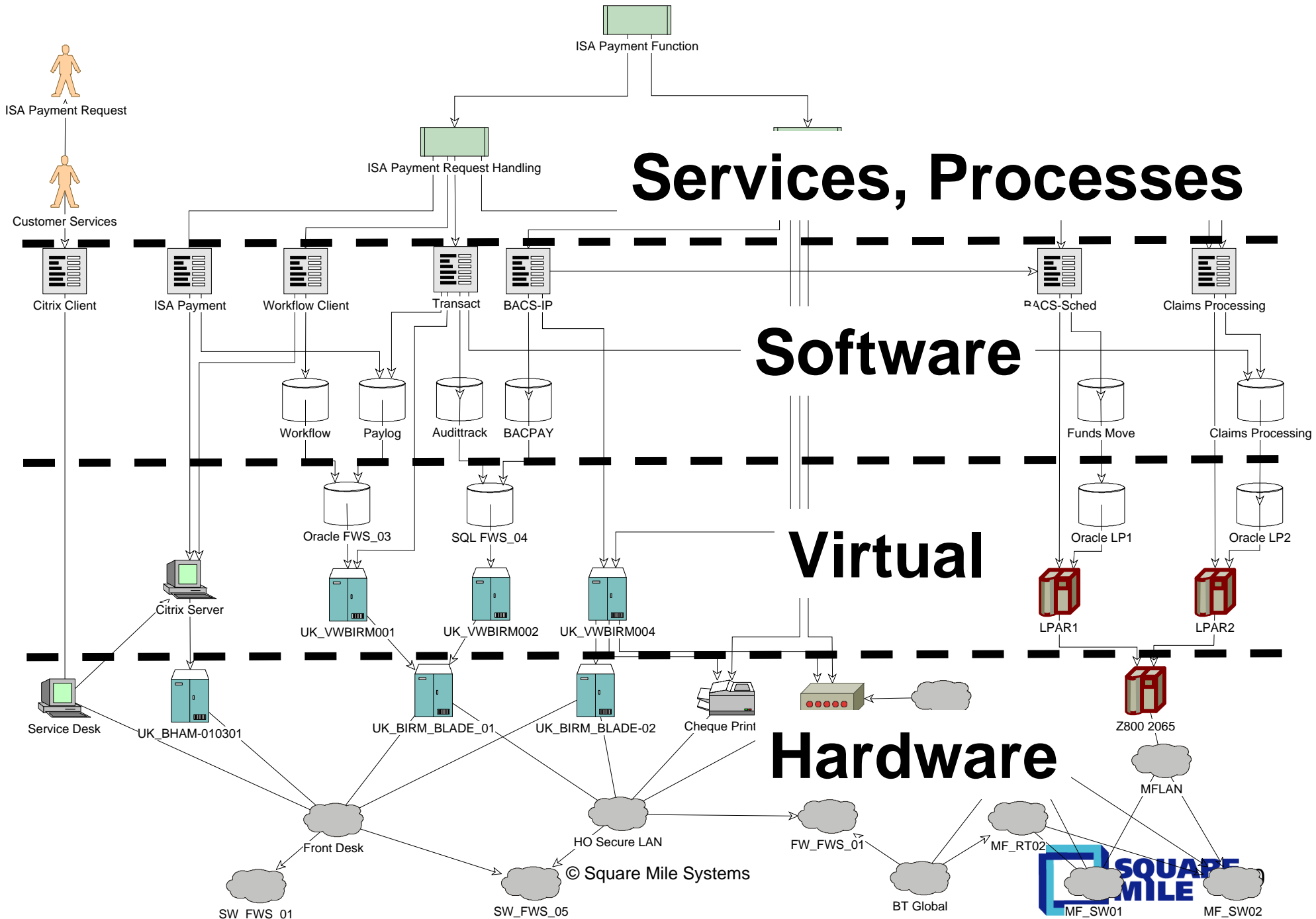


Multiple Applications & Servers



Complex Hierarchy





Services, Processes

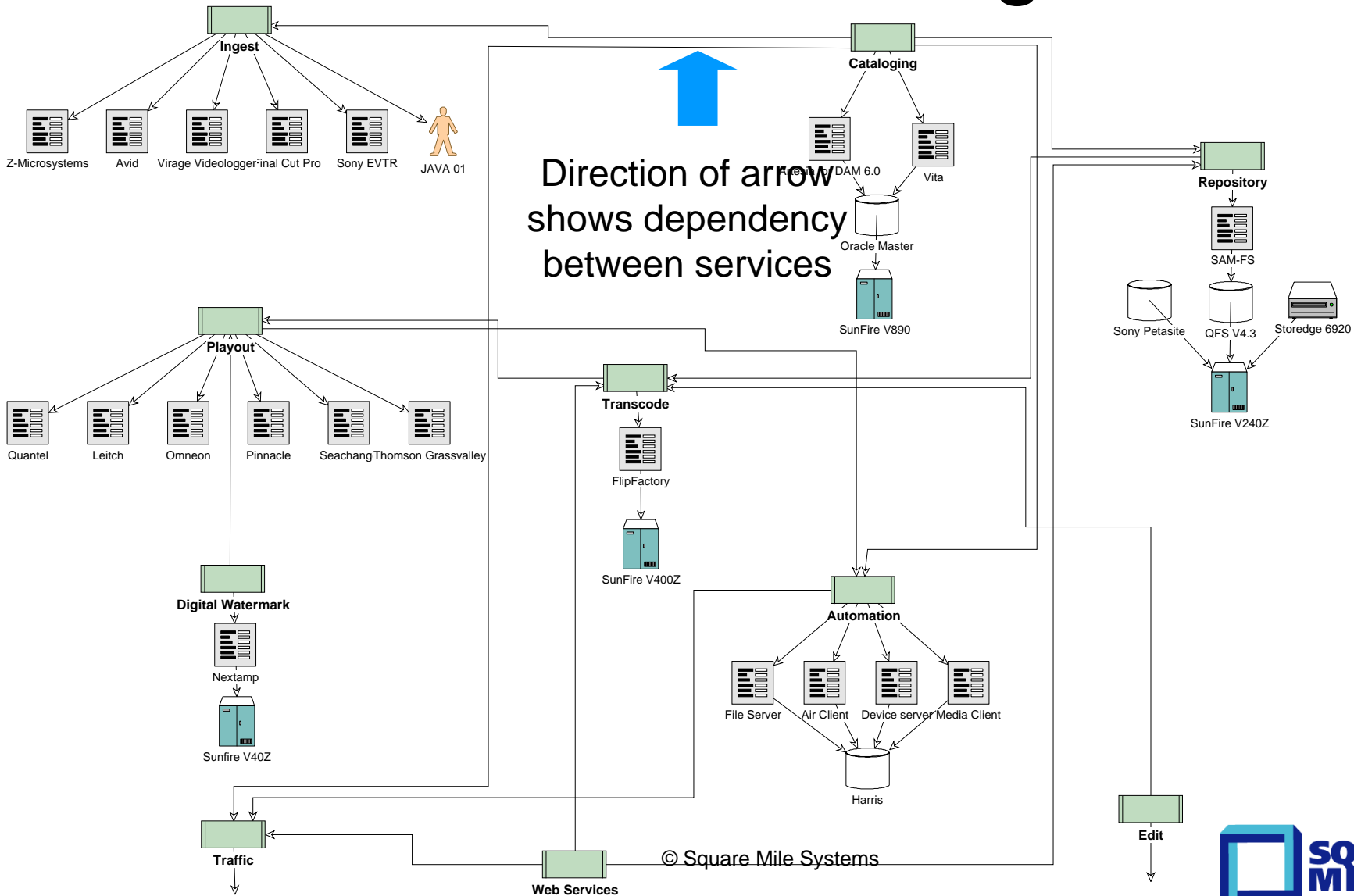
Software

Virtual

Hardware

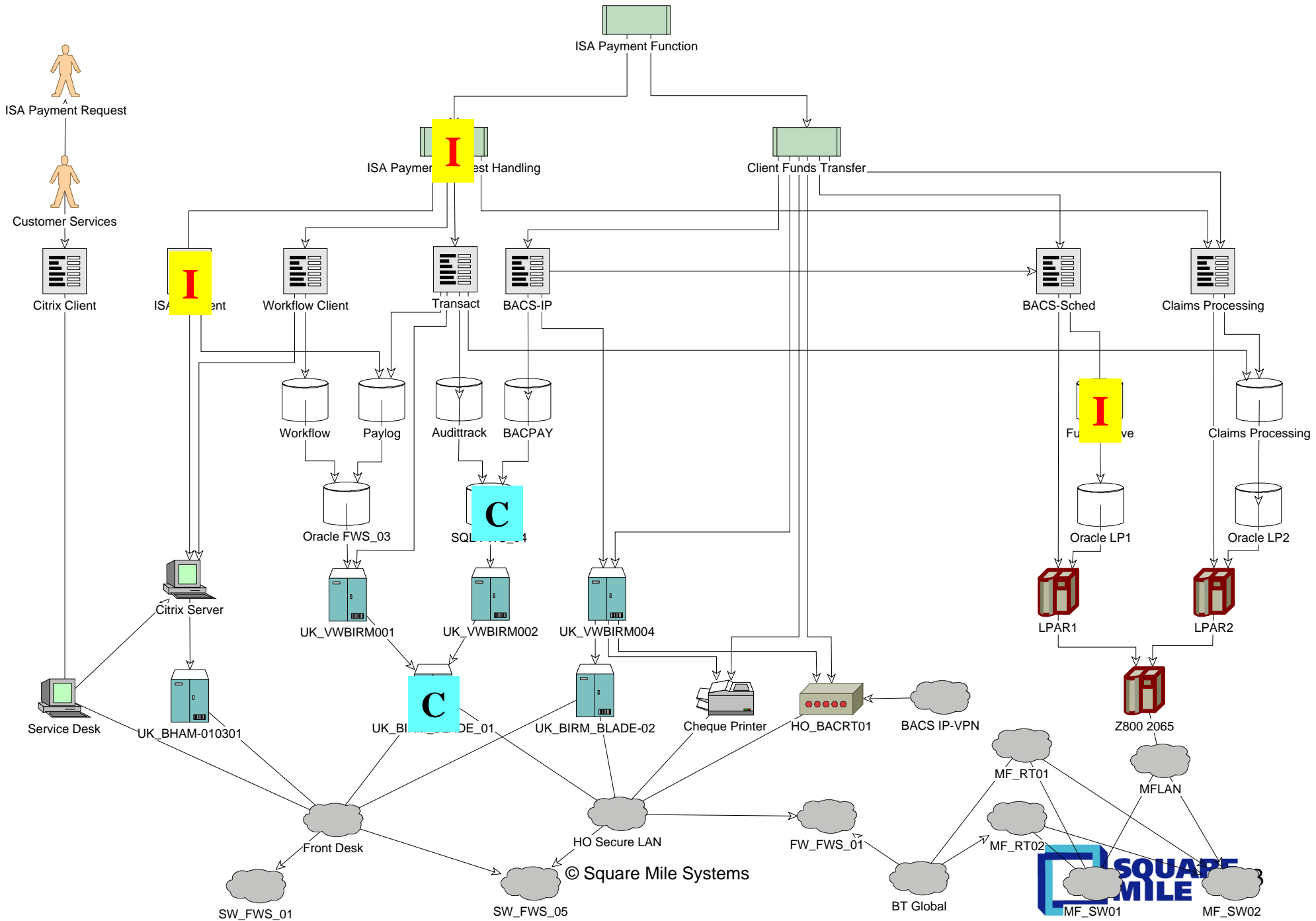


Block / Path Diagram



Multiple Styles of Mapping

- Simple
 - Easy for software to automate
 - Similar styles & templates
 - Difficult to comprehend complexity
- Complex
 - Requires manual layout and design choices
 - Can be structured to suit need and CI volumes
 - Enables comprehension



Choosing the CMDB(s)

- Define the needs
 - top/bottom/maintenance
- Define ownership of data/diagrams
- Look for reduction of duplicate information
 - Within technical systems (monitoring, discovery)
 - Within manual systems (services, risk, etc.)

How – Typical Steps

- Establish common jargon
- Identify appropriate benefits to audience
- Set goals
- Choose style of delivery
- Create a team for change
- Involve 3rd party references / input
 - Conferences, seminars, consultants, peers
- Use Kotter's change model

Achieving Change – Kotter



The End