




Configuration Management in BT

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Agenda

- Configuration Management
 - ITIL, BS15000
- The BT Environment
 - History
- The BT Solution
 - Process
 - Technical
- Summary
 - Challenges
 - Lessons



What is Configuration Management

- All things to all people!
- Gartner Definitions
 - Server/Client/Network
 - Business Intelligence
 - IT Service
 - Software Development
- IT Service Configuration Management



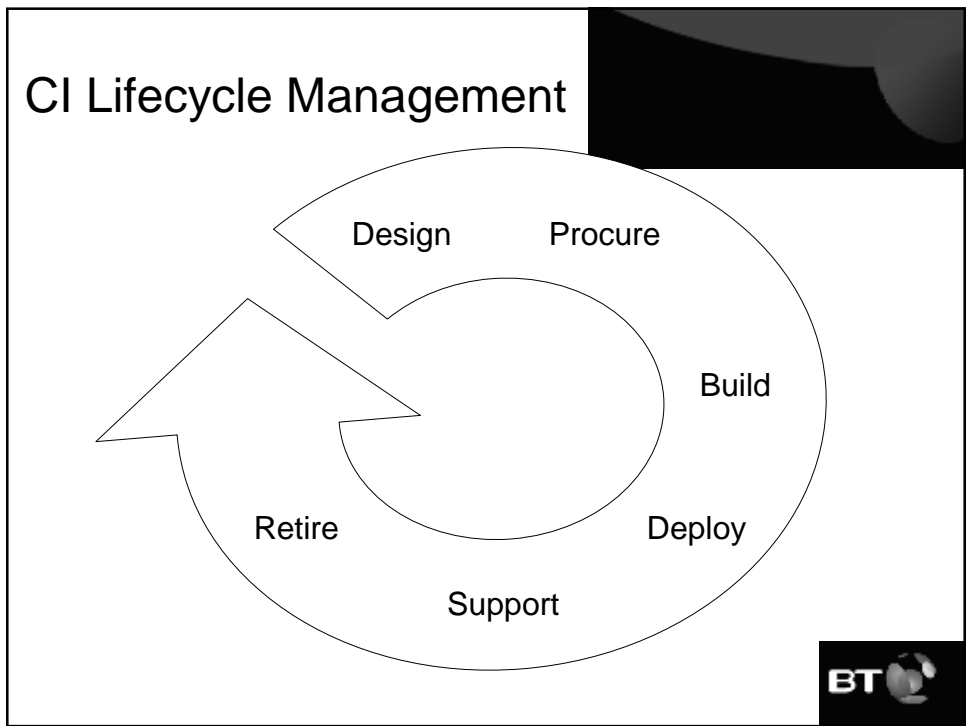
Configuration and Asset Management

The goals of CM are to:

- Account for all IT assets and configurations within the organisation and its services
- Provide accurate information on configurations to support and give a sound basis for all other ITSM processes
- Verify configuration records against the infrastructure and correct exceptions

Asset Management differs from Configuration Management in that CM establishes and records relationships between component parts of the infrastructure as well as details about the components themselves. Asset management often is simple inventory management. Many organisations start with AM and progress to full CM at a later stage.







The BT Environment

Mainframe = 20,000 mips
actively managed & controlled

Open System = Thousands! Chaos!

14 main data centres & 200+ other sites
in the UK

Desktop, software and IT Hardware considered
separately



Config & Asset in BT network

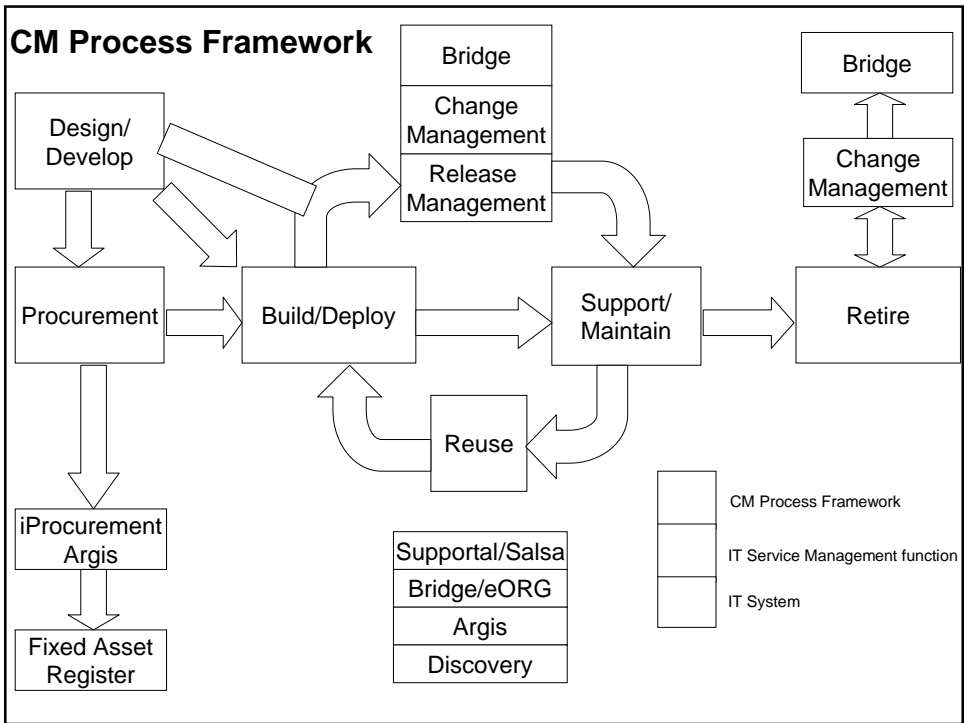
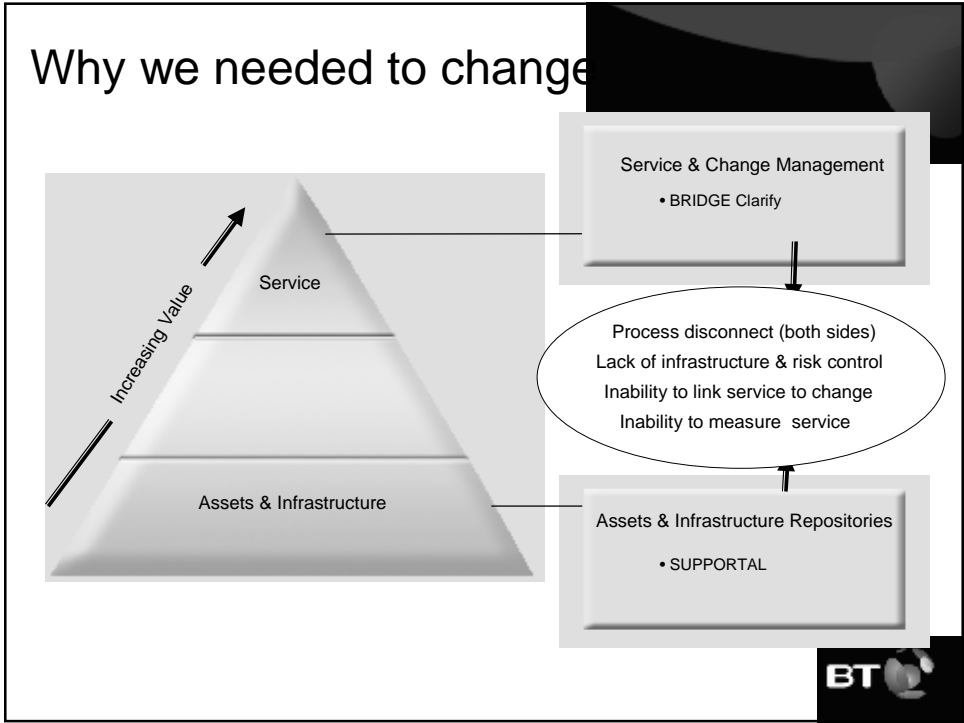
- 3 separate teams (IT Hardware, Desktop, Software) working in close alignment
- Numerous systems now integrated
- Worldwide coverage
- Iterative process of the plan and identify stages

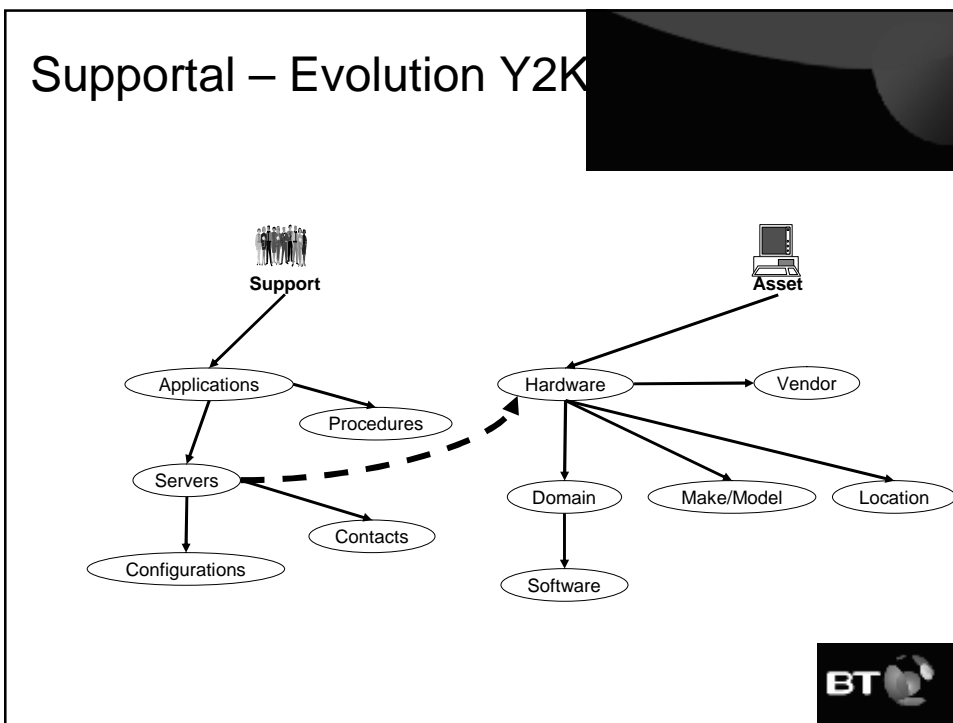
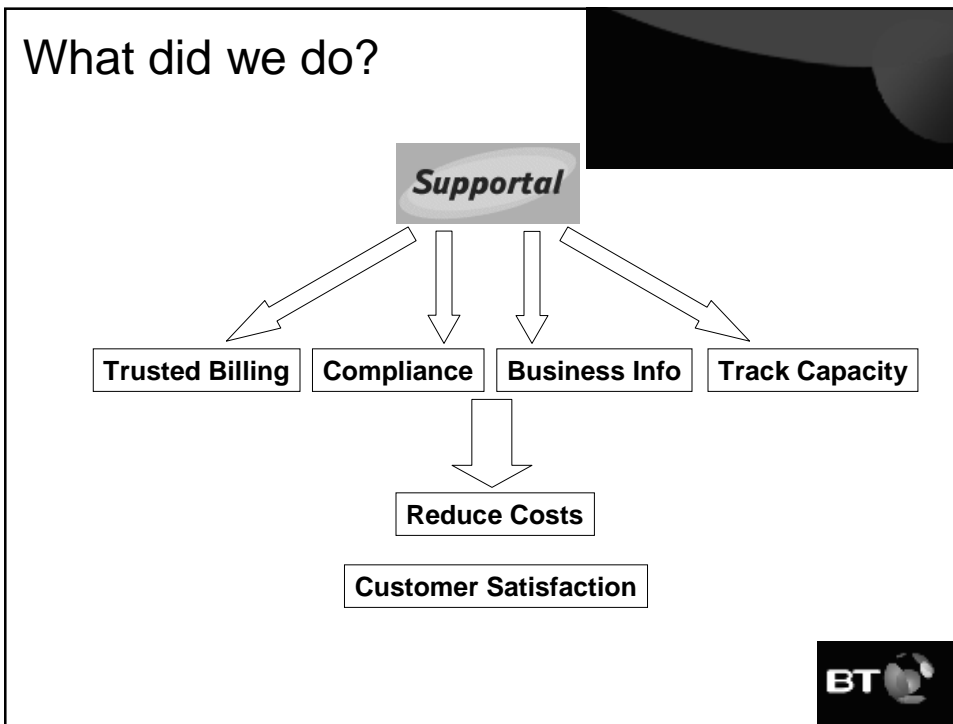


Big Numbers

- 34291 hardware items under control
- 140000+ desktop items identified
- 6000+ software items catalogued
- 4000+ users (500 logins a day)
- 20 full site audits a year
- £7+ million pounds saved in reuse of kit and contract policing in last 3 years



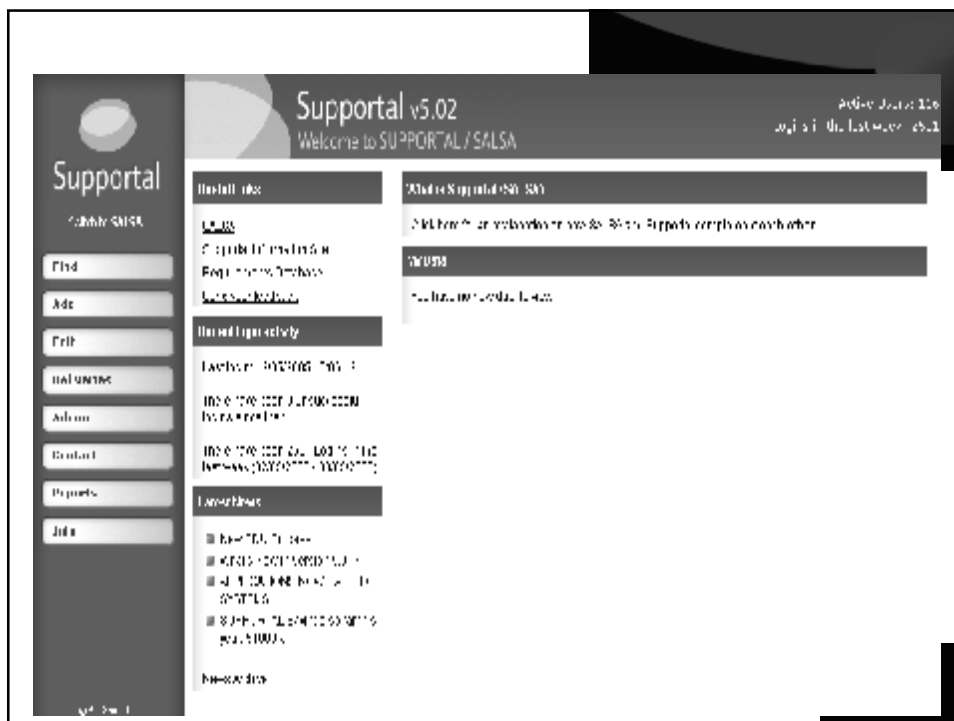




Cradle to Grave Philosophy

- Track every stage of the lifecycle
- Maintain the data integrity
- Data ownership

“What items does BT use to deliver what services to whom at what cost and under what supply contracts, and how do those items interact with each other?”



Certificates

- Visibly separate data to correspond with different job roles & owners
- Provide the necessary structure to improve understanding across a large group of people from all operational disciplines
- Timestamp the data
- Lifecycle View



The screenshot displays a complex web interface. At the top, a window titled "Configuration Certificates (2)" is visible. Below it, a "Bridge WEB Client - Display Full Change" window shows a table with columns: PO Number, Manager, Type, Cost Centre, and Closed. The table contains two rows: "INSTALL" with PO Number "OP010553" and Cost Centre "MRSS NT HW", and "UPGRAD" with PO Number "010512005".

Overlaid on this is a "DISCOVERY VIEW" window for "UCPS: SRYNDENT77". It features a table with columns for "eCensus" and "010512005". The table lists various components and their details:

Component	Details
CS	...
IP	...
HW	...
HW	...
U-U	...
U-U	...
U-U	...

Other elements include a "History" table on the right and a "More Reports" menu with options for "CPU Report", "I/O Report", and "More Reports".

Death Certificate

- Issued on decommissioning



IT System View

SUPPORTAL IT System : SUPPORTAL

Baselines for APP02044

Baseline	Entered By	Start Date	View Changes
1	ARORAA	20/09/2004	View

Use the Add function below to enter a new baseline.

Total Disks : 0

Host	ConfigVer	ConfigCaseld	AllocVer	AllocCaseld	Build
Total Disks : 0					
Hardware	ConfigVer	ConfigCaseld	AllocVer	AllocCaseld	Build

Out Feeds (Links)

- UCPS (APP01150)
- FACTS (APP03462)
- Prime Integrator (APP03790)
- BRIDGE (APP00092)
- Aperture (APP02547)

BT logo

Software View

Operating System : 1 Item(s)							
Vendor	Software	Version	Instances	Discovery	Discovery Date	Install Date	Last Used
Microsoft	Windows 2000	Server SP 3	1	EDM	09/11/2004		

Databases : 0 Item(s)							
Vendor	Software	Version	Instances	Discovery	Discovery Date	Install Date	Last Used
0							

SOFTWARE COMPARISON							
Discovered: 18 Items							
Vendor	Software	Version	Discovery	Date	Service	Catalog Entry	Contract No
Services: 0 Items (No Service Entries)							

Manage							
Vendor	Software	Version	Instances	Discovery	Discovery Date	Install Date	Last Used
Novadigm	Radia Administrator Workstation	3.1.1	1	ECM	28/05/2004 18:16:00		
Novadigm	Radia Client	3.1.0	1	ECM	28/05/2004 18:16:00		
Novadigm	Radia Application Analyser	3.1.8	1	ECM	28/05/2004 18:16:00		
BT	BTNTTrap	2.2.3.3	1	ECM	28/05/2004 18:16:00		
HEWLETT PACKARD	OpenView Performance Agent	3.65.00	1	ECM	28/05/2004 18:16:00		
Network Associates	McAfee NetShield	4.5.0	1	ECM	28/05/2004 18:16:00		
Adobe	Adobe Download Manager	1.2	1	ECM	28/05/2004 18:16:00		
BT	OpenSSH	371F	1	ECM	28/05/2004 18:16:00		
NetIQ	AppManager	UNKNOWN	1	ECM	28/05/2004 18:16:00		
Microsoft	Windows 2000 Hotfix	KB823559 20030627.14	1	ECM	28/05/2004 18:16:00		



Reporting

Supportal

SEARCH

Find

Add

Edit

Deliveries

Admin

Contact

Reports

- Report Page
- Report Summary
- Report Details

Info

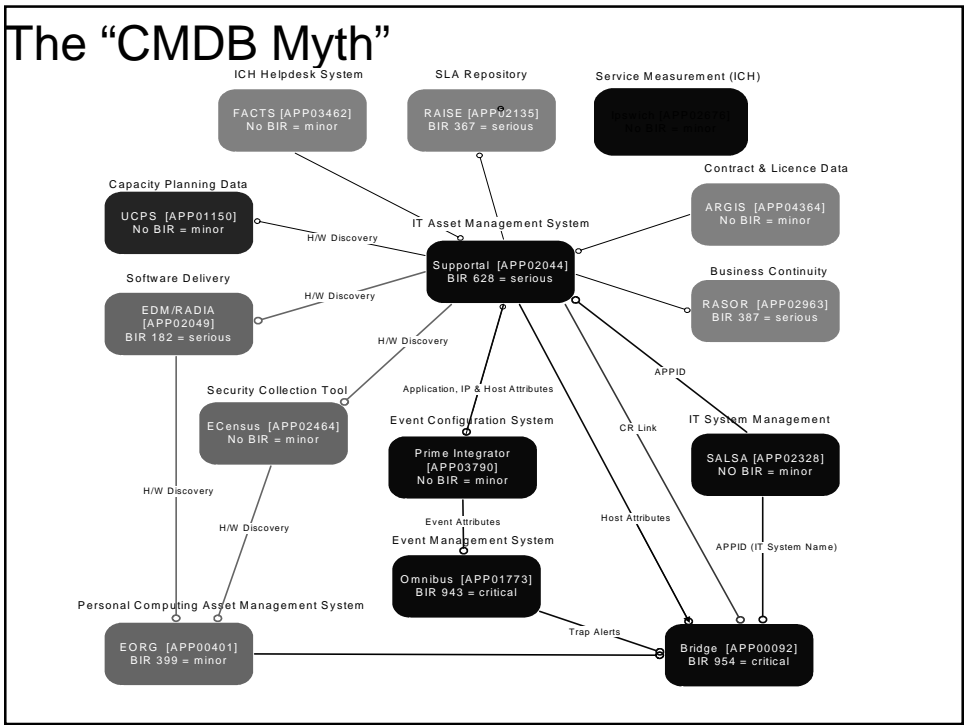
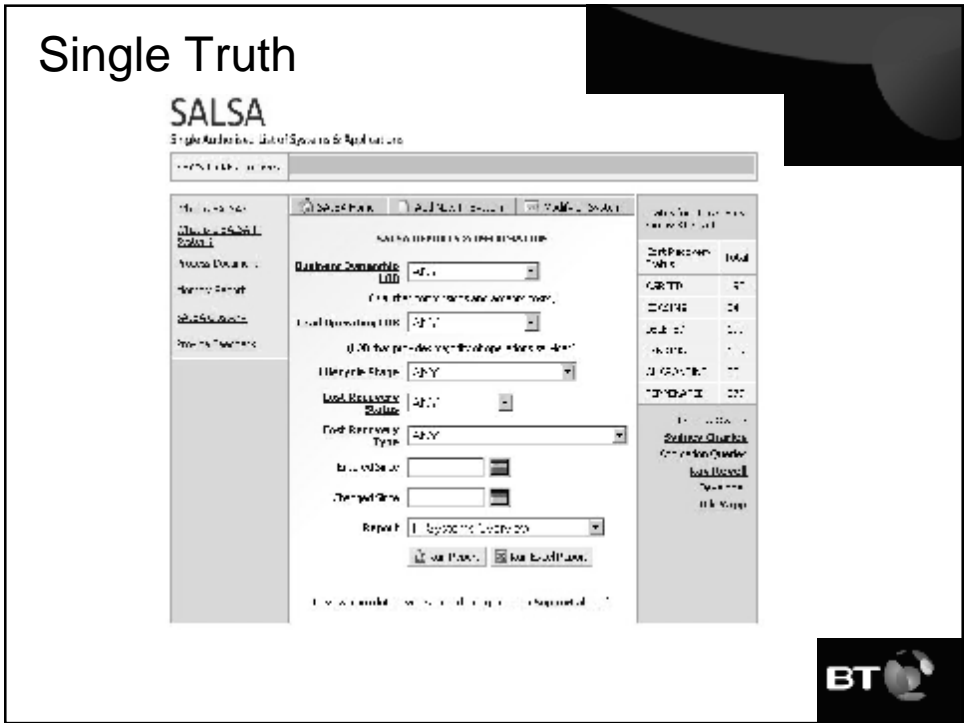
MIS Reporting

MIS Reporting

Generated by Vendor Software on 11 May 2005

Vendor	Software	Version	Instances	Discovery	Discovery Date	Install Date	Last Used
Novadigm	Radia Administrator Workstation	3.1.1	1	ECM	28/05/2004 18:16:00		
Novadigm	Radia Client	3.1.0	1	ECM	28/05/2004 18:16:00		
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Identify/Control

Initially – servers only, and only in the data centres (controlled environments)

Re-scoped over the years in 4 phases to cover servers, network kit (routers, switches & hubs), disk arrays, silos, software, PDUs

Changing business requirements – software to patch level

Personal Assets (Desktop) – held in a linked system



Audit & Verification

- Ownership of data - people with a vested interest
- Spot Audits/email audits
- Discovery tools vs manual entry



Challenges

- Scale and complexity of BT estate
- Cultural barriers
- Fundamental misunderstanding of CM
- The “CMDB myth”



Recent Challenges

- Europe and the rest of the world
 - Culture
 - Language
 - Access
 - Technology
- Suppliers/Partners
 - HP Support
 - SUN Support
- Sarbanes Oxley



CM Business Case

Taking our CM capabilities beyond the current level will:

- **Facilitate adherence to legal obligations** - Software licensing for instance is a current hot topic with related Internal Audit recommendations
- **Contribute to Contingency Planning** – facilitate the restoration of IT Service in the event of a disaster
- **Improve security by controlling the versions of Configuration Items in use** – make it harder to maliciously or erroneously change a CI
- **Enable the organisation to reduce the use of unauthorised software** – this has both legal and financial implications
- **Facilitate the implementation of ITIL/BS15000 standards of IT Service Management**



What have we learned?

- Have an end point in view but start small and controlled
- Think process and people, NOT tools
- Don't get anal about ITIL – work out what works in your culture and environment
- Education and awareness



Where are we going now

- Service Mapping
 - What does it mean?
 - Business Process Mapping
 - Business Service Management
- Further integration
 - Web services, SOA
 - Emergent market
- Discovery policy
 - Agentless data collectors
- More education and awareness
 - Functional silos
 - Culture Change



Questions?

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