Pulse2011

# How IBM uses its own products to deliver ITIL-aligned Service Management services

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IBM IT Delivery

# Agenda

- **Introduction to IBM IT Delivery**
- Service Management: The Journey
- Key Components of ISM
- Delivery Models
- Shared Instance Architecture
- Conclusions
- Questions

# Introduction to IBM IT Delivery

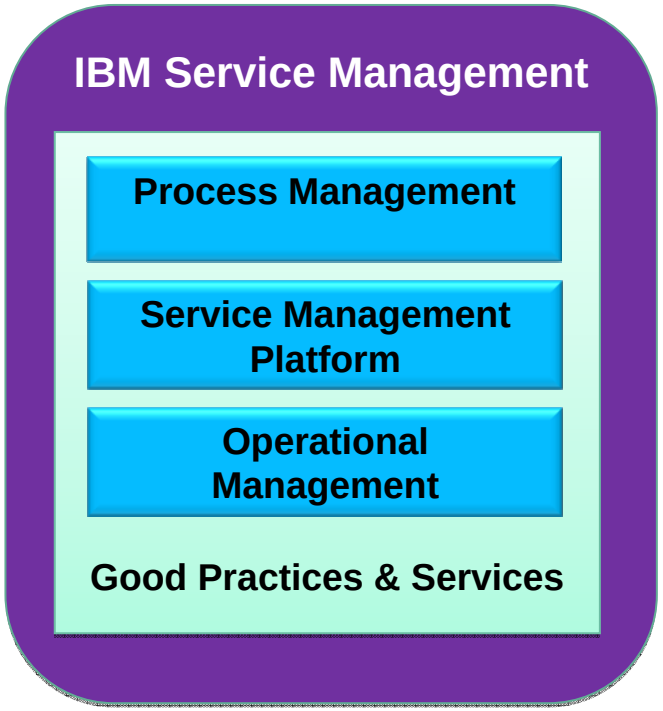
- Our team belongs to the Outsourcing Services arm of IBM providing Service Management services
- The services we offer to our clients include:


- We provide ITIL conformed processes, tools, and skilled people
- We conduct governance and continual service Improvements (CSI) to achieve GOOD Service Management practice

# What is ISM?

- IBM Service Management is a comprehensive and *integrated approach* for Service Management integrating **technology**, **information**, **processes**, and **people** to deliver service excellence and operational efficiency and effectiveness for traditional enterprises, service providers, and mid-size companies

- IBM Service Management includes a portfolio of tools which cover four key areas



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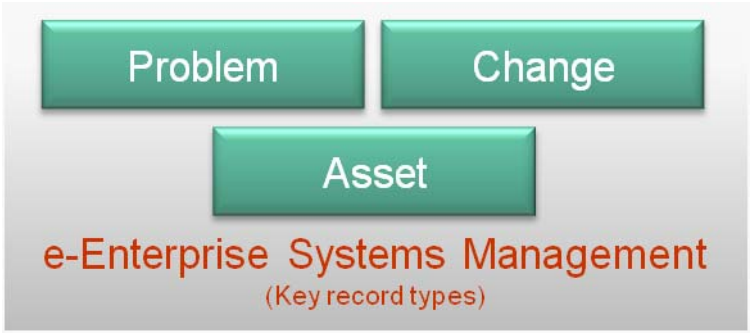
# Journey to ITILv3 improved method of operation

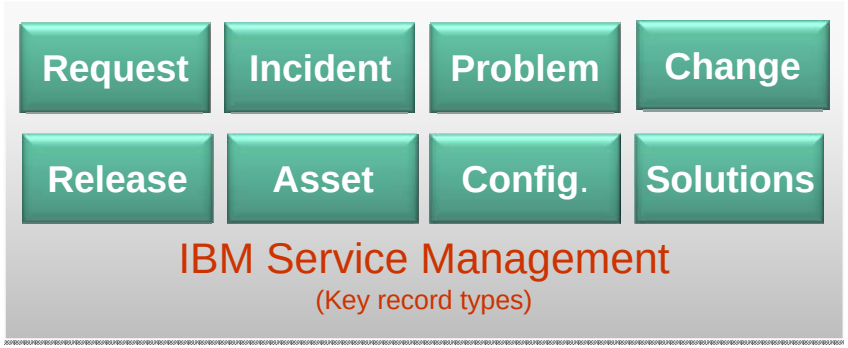
- Transition from legacy processes & tool to new ITILv3 aligned process and tool Involving:
  - –Improvements to processes and Roles & Responsibilities
  - –Up-skilling of users & support staff
  - –Improved reporting
  - –Enhanced tool functionality & automation layer
  - –New integration points

# Service Management: The Old vs The New

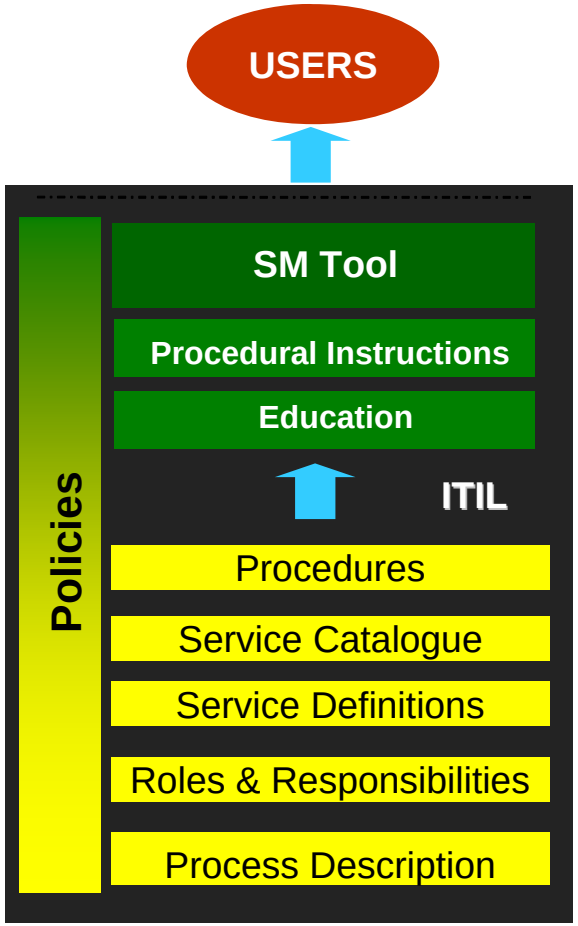
- Delivery teams have limited understanding & visibility of the overall phase
- Processes not aligned to ITILv3
- The tool (eESM) not aligned to ITILv3 and had missing record types

- Delivery teams have an understanding & visibility of the related processes and record types
- Processes aligned to ITILv3
- The tool (ISM) aligned to ITILv3 and has all the relevant record types for improved management



# Standard Operating Environment




***Service Definitions*** **List of services and their definitions on offer.**

***Service Catalogue*** **List of services on offer and their applicable costs.**

***Tool (s)*** **Supports the delivery of the process & enforces the Policies.**

***Procedural Instructions*** **These activities are described in configuration with a specific tool used.**

***Procedures*** **Describes activities to be completed as part of the Process - 'what' and 'who'.**

***Policies*** **Governs the Process and its related elements.**

***Roles & Responsibilities*** **'who', what' and 'when'. Defines the responsibilities and accountability for each Process Role.**

***Process*** **A standard supporting business operations & ITIL.**

# Migrating to ISM

- The Project is aimed at migrating all its existing client base who are using the old tool and old processes to the new standard shared operating model
- It will provide a new foundation for expansion and use of the new capability and services
- Newly migrated clients are using the key applications eg. Service Request, Incident, Problem, Change & Configuration
- Clients that have been in BAU on the new tool for a few months have experienced increased ability to extract detailed reports and witnessed improved IT management

# Migrating to ISM: Lessons Learned

- Recognising the importance communicating with the client
- Involving the client in the following activities:
  - → validating the proposed migration data
  - → newly introduced functionality
  - → testing of the automatic notification
  - → reporting modifications
- Use of new ITILv3 terminology during the project eg.

Projected Service Availability (PSA) → Projected Service Outage (PSO)

- Additional face to face education required to key users

# A/P ISM Shared Instance Overview

- Access to ISM is 24x7 either via IBM Intranet or a secured Internet gateway
  - Used by IBM's Customer Service & Delivery Centres
  - Used directly by Customers via the Internet for self-service
- Currently servicing
  - 44 customer accounts across A/NZ & Singapore
  - 3000 tickets & changes per month
  - 2000 users
- Expected to service
  - Over 100 customer accounts across Asia Pacific
  - 1.8 million tickets & changes yearly (150,000 per month)
  - 10,000 users

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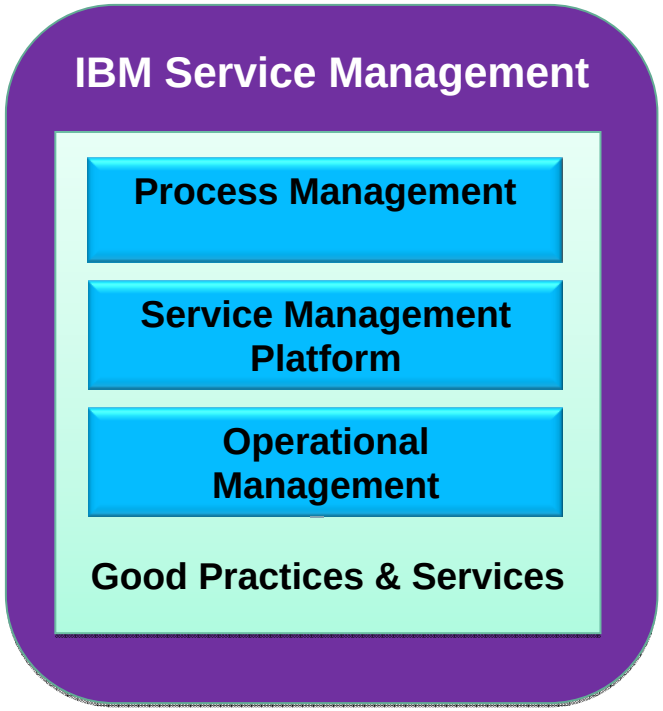
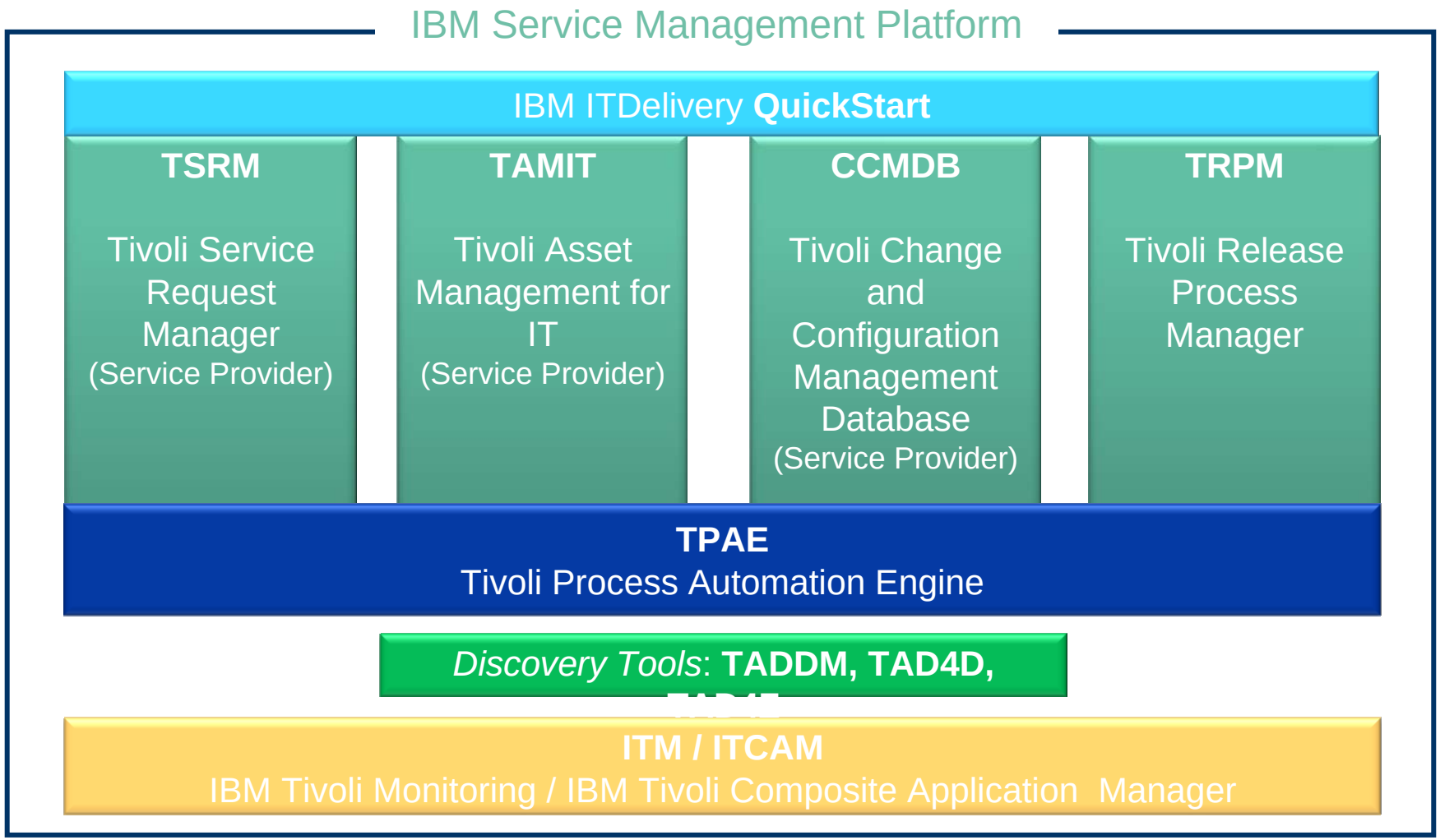
# Key Components of ISM

## IBM Service Management Platform



# Key Components of ISM

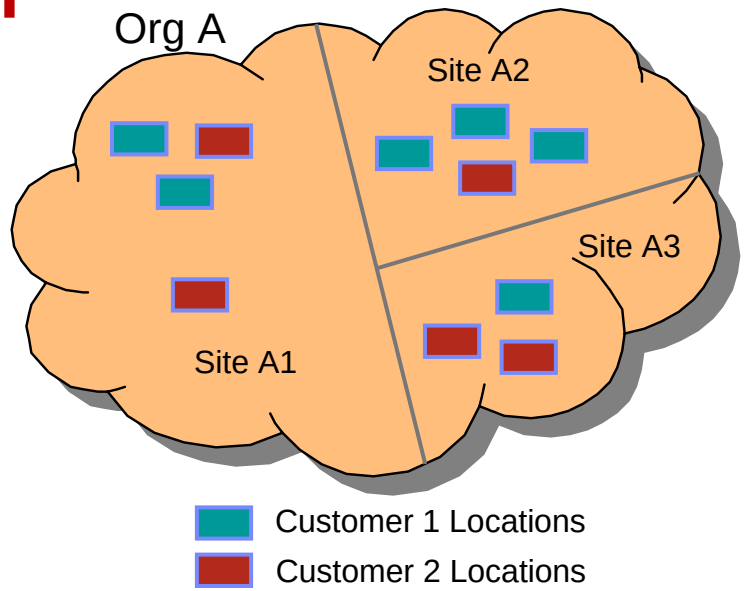


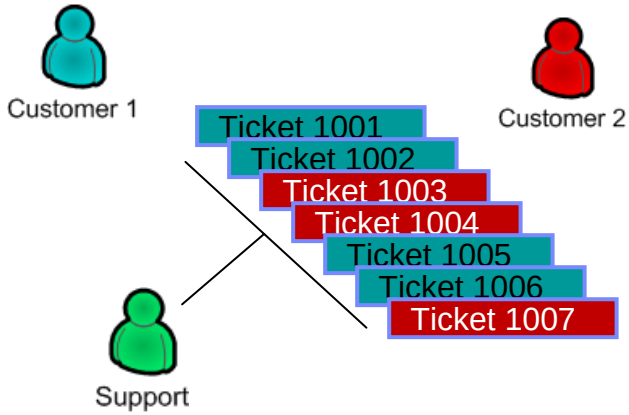
# Key Components: QuickStart Package

- A configuration package encompassing “good practise standards”, aligned to ITIL v3
- What does it contain?
  - Standardized pre-loaded data, eg: classifications
  - Standard Workflows
  - Consistent screen look & feel
  - multi-LDAP integration
  - Standard SLAs and KPIs
  - Pre-built data loaders
  - Standard asset product catalog

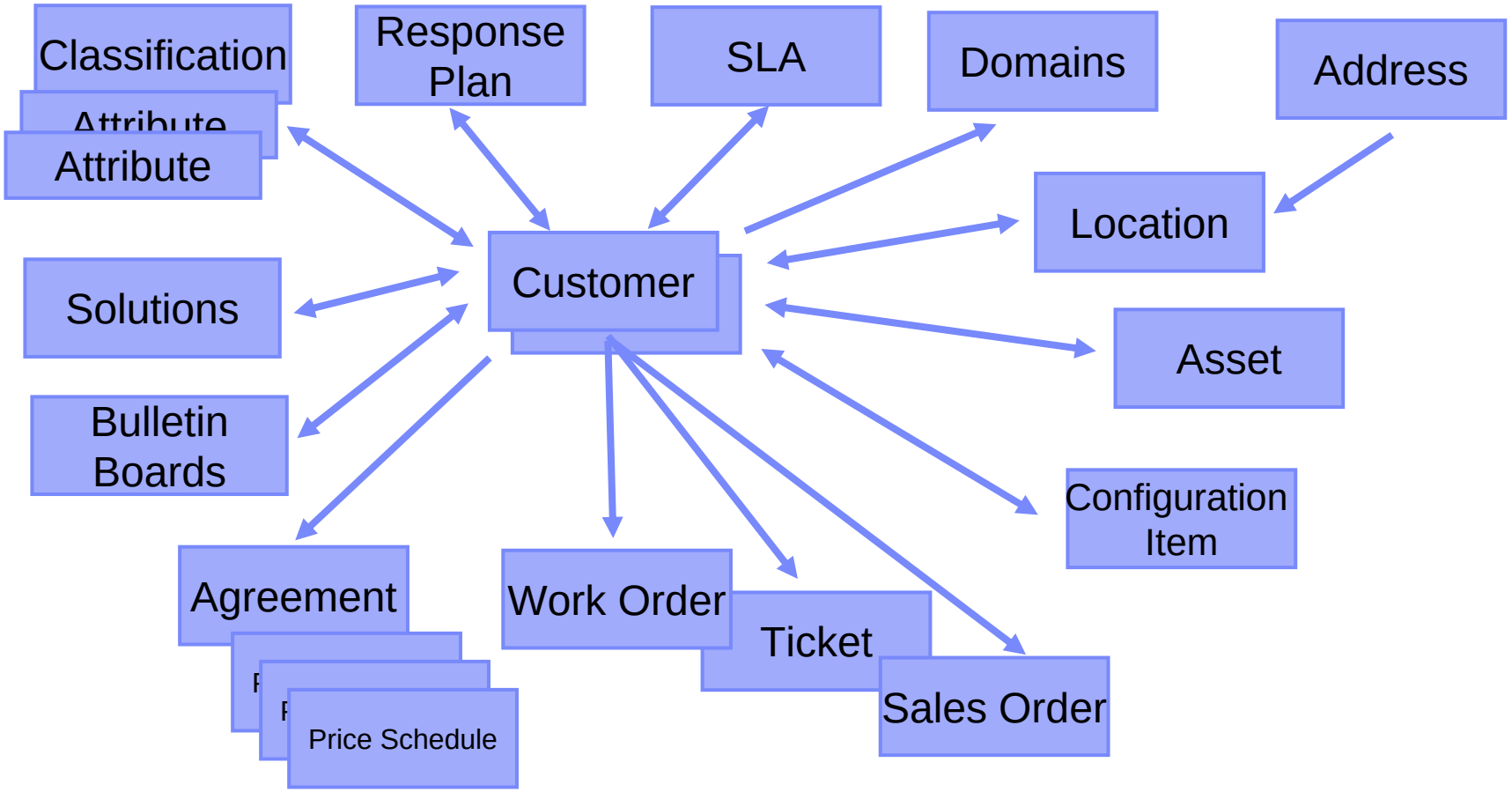
# Data Segregation by Customer

- Leverage the key capability provided by the Service Provider solutions for managing multiple customers on a single instance
  - Customer references added to existing ISM data structures allowing for customer specific SLAs, KPIs, Response Plans…
- Complete security by segregation of customer data
  - Customers view / access only their information
  - Personnel view / access only the data of customer(s) they are granted access to



# Data Segregation by Customer - Relationships



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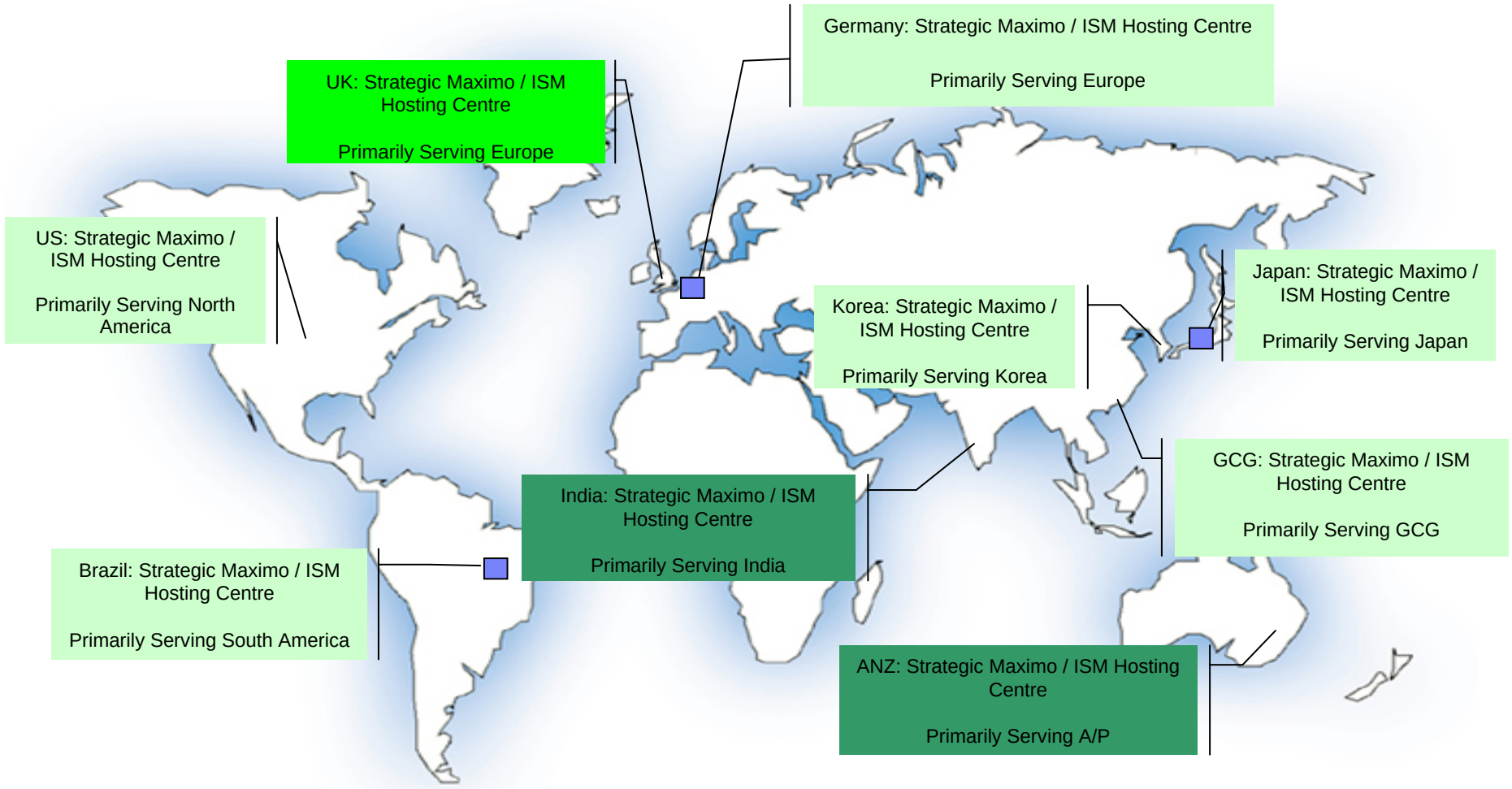
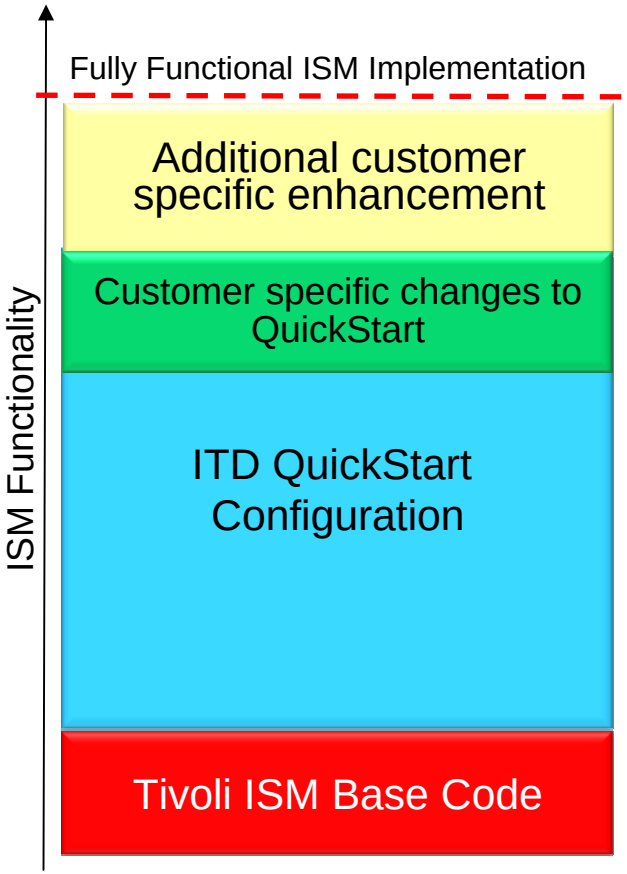
# Shared Delivery Model



# Dedicated Delivery Model




- We recognise that not everyone fits into the box
  - High volume or capacity needs
  - Significantly different processes, procedures and SLAs
  - Information security requirements
- QuickStart assists in getting dedicated sytems up and running quickly - saving cost and time in each deployment

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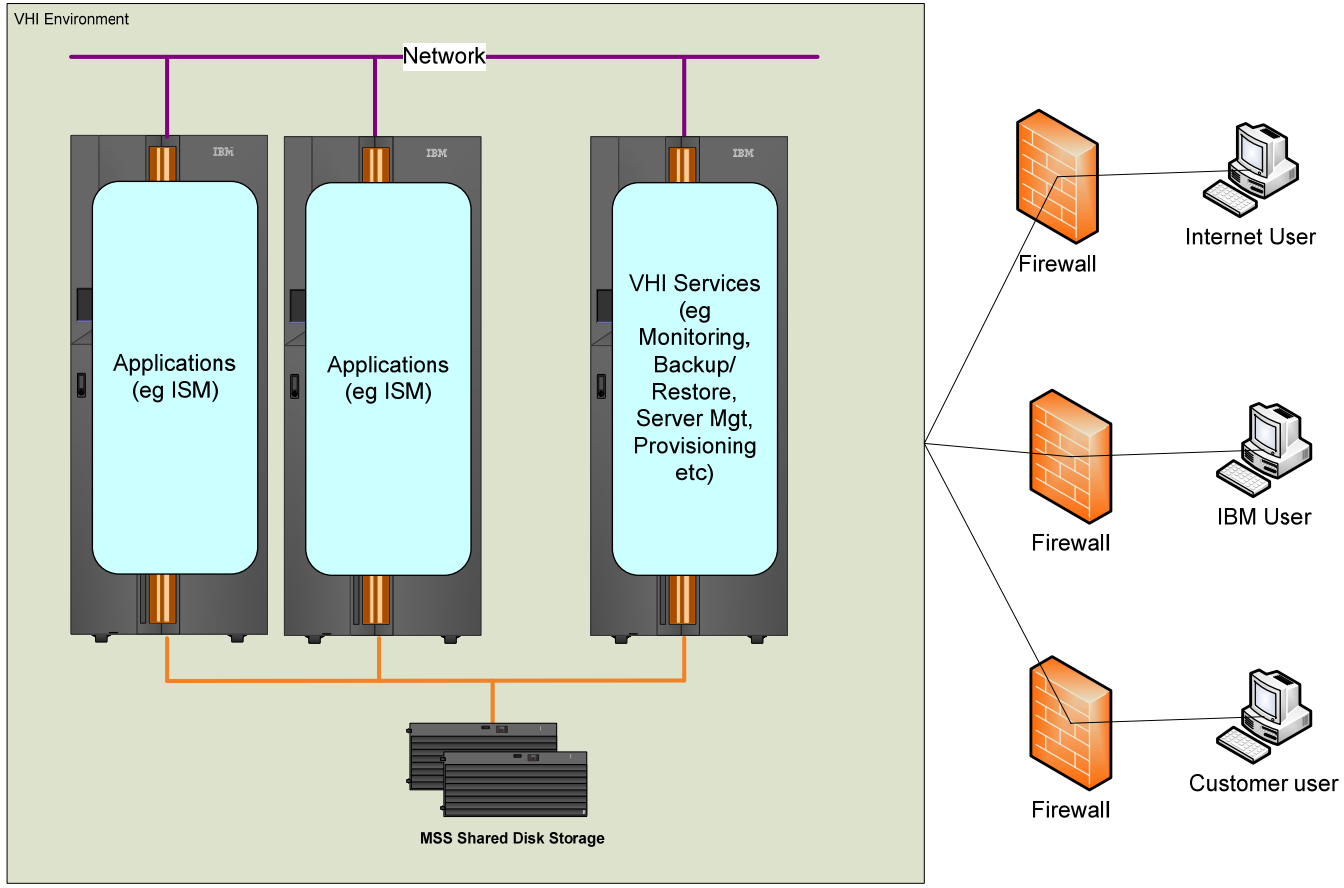
# ISM Architecture in Context

- How is ISM hosted?
  - How the hosting environment contributes to greater efficiency in service delivery
- How does the ISM system design contribute to the quality of service offered?
  - Physical and logical redundancy
  - Scalability and Capacity Management
  - Performance Management
  - Data integration architecture

# Virtualised Hosting Infrastructure (VHI)

Rationale:

- Centralised platform for IBM applications
- Consolidation of existing infrastructure
- Single delivery process for provisioning and support Used to provide standard ISM services (eg reporting) as well as all customer integrations
- Will move to on-demand infrastructure cloud (IaaS)

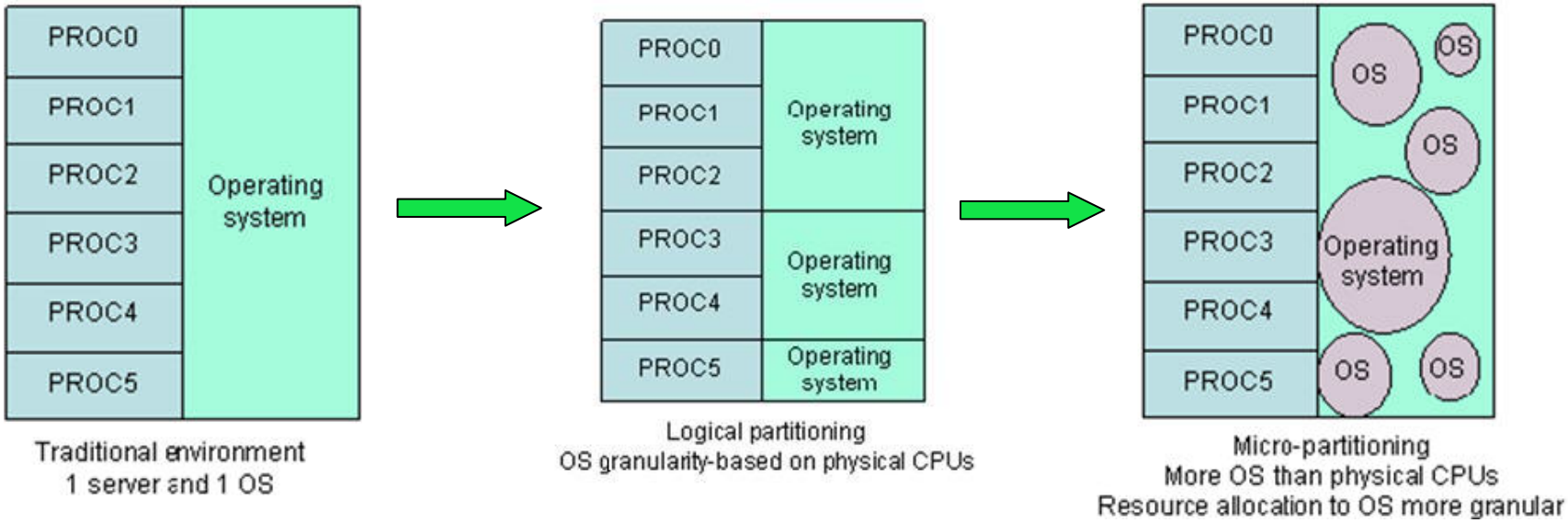



Benefit:

We can focus on Service Delivery rather than supporting the hosting infrastructure

# ISM Virtualised

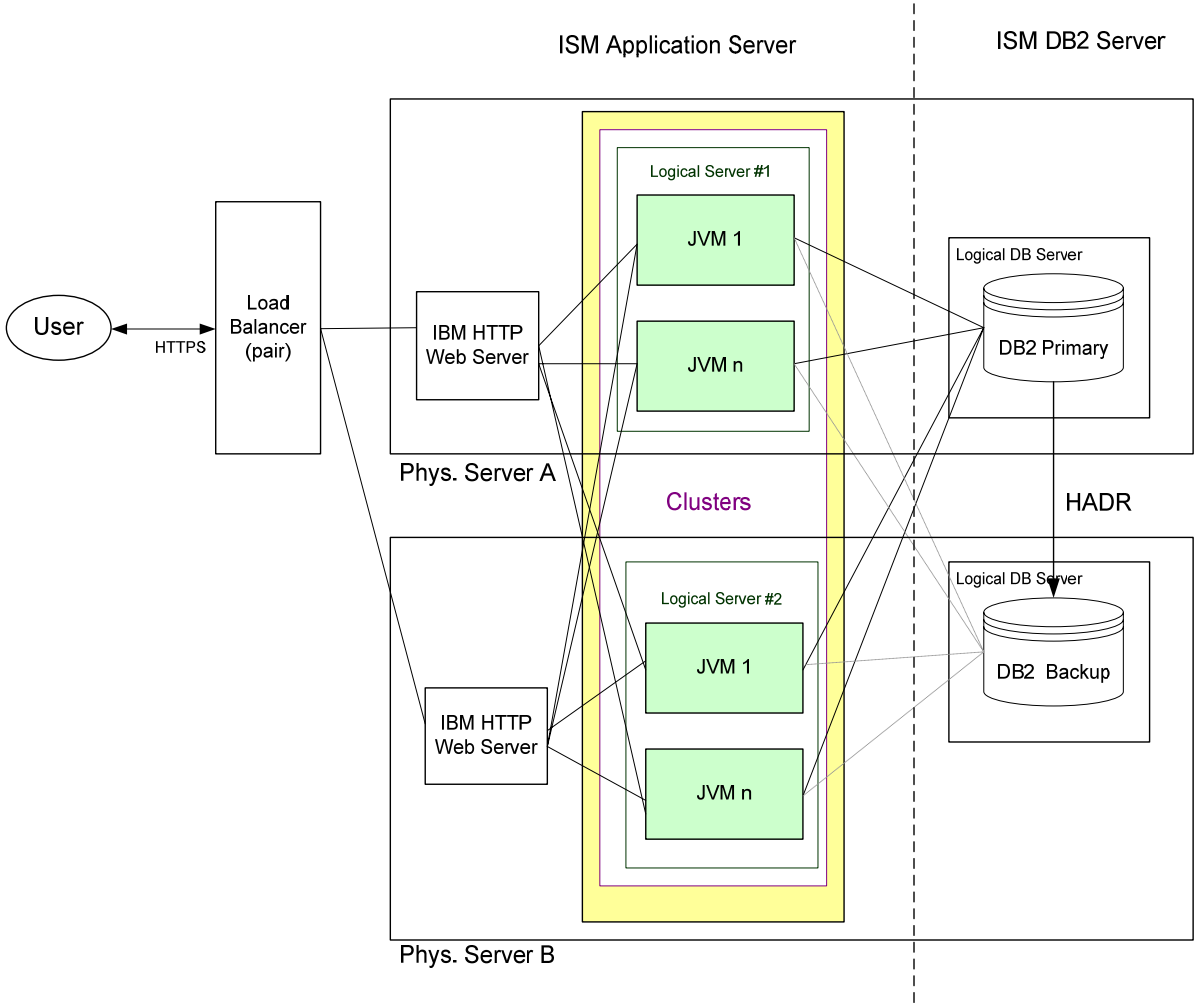
- Infrastructure as a Service (IaaS) to be provided by VHI
- As virtualisation matures, greater flexibility in  LPAR configuration is available:




- Physical servers do not have to be dedicated to a particular application
- The eventual goal is to enable significant reduction in hosting costs through usage-based capacity adjustments

# ISM Physical and Logical Redundancy

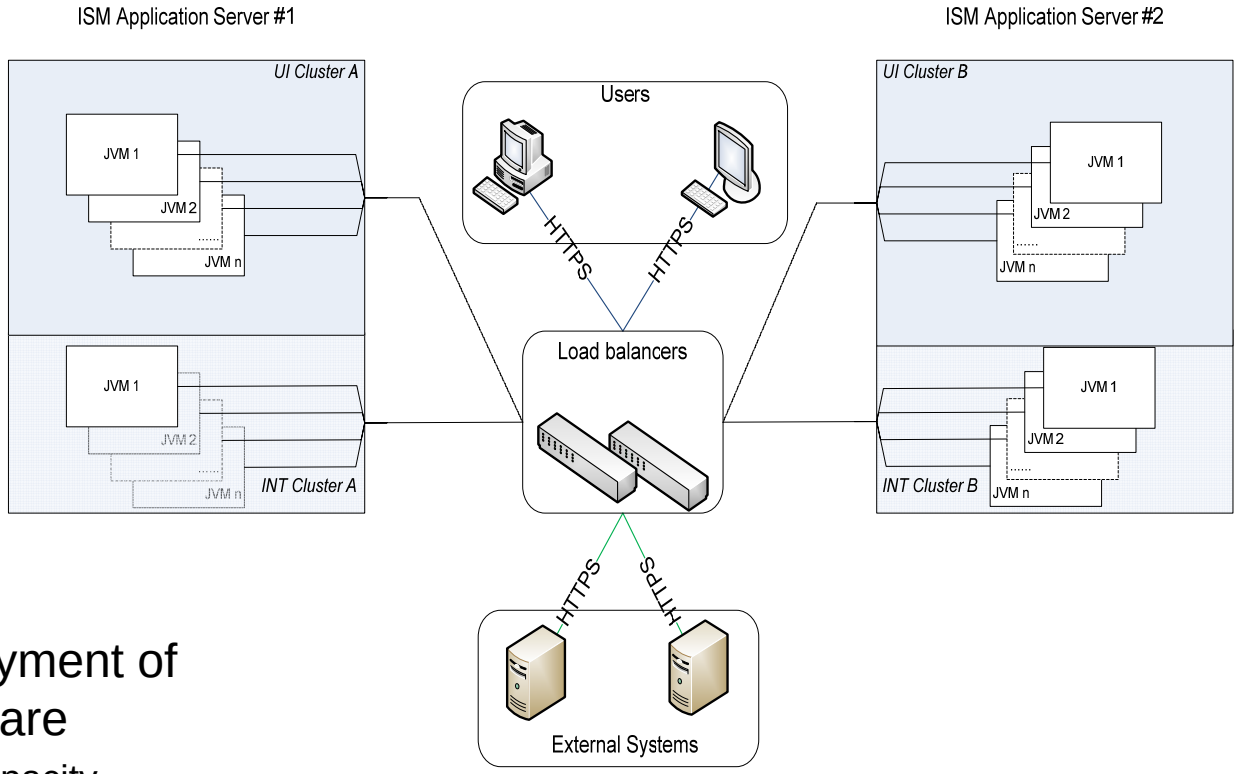
- ISM LPARs spread over two physical servers
- In normal operations, both application servers are used; in case of a server outage, ISM can continue to run with one (requires DB2 fail-over)
- Database redundancy implemented using DB2 High Availability Data Replication software (HADR)



# ISM Capacity and Performance Management

- IBM monitoring suite (ITM, ITCAM) deployed in VHI to monitor servers, databases, operating systems and applications
- Automatic monitoring of ISM system components enables rapid response by support teams
- ITM and ITCAM are configured to provide optimal ISM application service reliability
- Alert trends discovered via collection of monitoring data (events, alerts) can be used to identify patterns that in turn provide input for capacity and performance planning

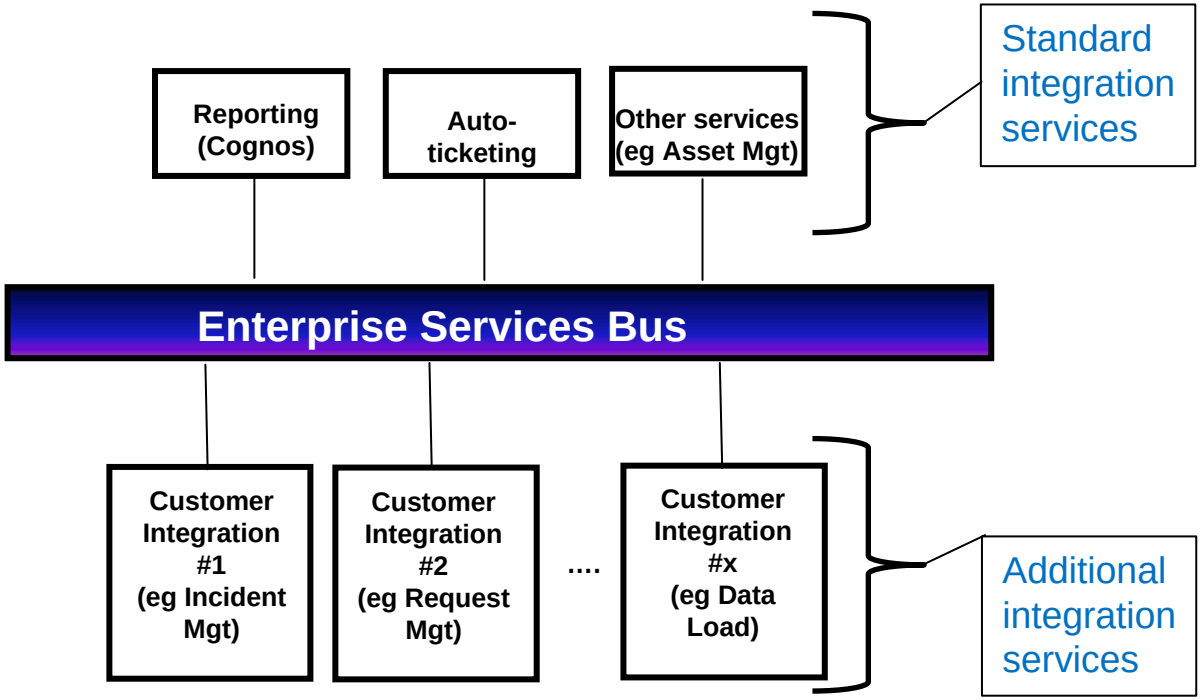
# ISM Scalability




- VHI provides vertical scalability through deployment of high-end P-series hardware
  - Large CPU and memory capacity
- ISM architecture is horizontally scalable
  - Increase number of JVMs in cluster
  - Increase physical servers making up ISM application
- A/P ISM Shared Instance initially sized for 150,000 tickets per month

# ISM Integration Architecture

- External integration architecture
  - Reduces ISM system overhead
  - Scalable
  - Robust queuing and message handling
  - Additional protocols
  - Additional message exchange mechanisms
  - Greater data security
  - Standard message format
  - Greater standardisation




- Provides standard ISM services (eg reporting) as well as all customer integrations

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# Conclusions

- Continual service improvement to ensure sustainable good practice is adopted
- Recommendations for process and policy improvements
- Driving requirements back into IBMs development cycle for ongoing improvements to products and good-practice configurations (QuickStart)
- Standard replicable model to expedite delivery
- Ability to react to increasing demand due to the flexibility of the architecture
- Leveraging depth and breadth of IBM product range in providing ISM managed service

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