Strategy

Proposal
- Business Case
- Framework

Assessment
- Due Diligence

Design
- Identify Stakeholders
- Configuration Planning
- Configuration policy
- Configuration process
- RACI
- Configuration Model
- Interaction with other integrated SM process
- Configuration deliverables/ Artifacts
- Organizational review, Changes
- Metrics formulation (Reporting)

Develop, Implement
- Technology considerations
- Case Study (Modeling and Mapping)
- Technology /Tool Implementation
- Release procedures (SOP's)
- Testing
- Pilot
- Risks and Challenges-Mitigation
- Process control/s
- Training and Transition
- Go-Live

Improve
- Gaps and Continuous Improvement
- Compliance (Adherence and Reporting)

Mature
- Process Maturity Framework
- Audit

Configuration Management System
Strategy & Planning

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Abstract: The Configuration Management System enables the definition and control of the components of services and infrastructure, and the maintenance of accurate configuration information about the historical, planned and current state of services and infrastructure. Federated Configuration Management is at the core of IT Service Management processes, such as Incident, Problem, and Change Management. Conceptual items such as services and applications as well as actual items such as servers, routers and storage devices can be represented as Configuration Items (CIs). Each ticket such as an Incident, RFC, or Problem is associated with one or more CIs. When an issue is reported the technician can search for other issues and changes opened for the same CI. In this paper, key considerations for designing and implementing Configuration Management are summarized. Some important policies, roles, RACI Matrix and leveraging technologies proposed in this paper will be valuable guidelines for IT Service Management practitioners.

Design Configuration Model:

The configuration model provides the configuration item structure for modelling IT services. This includes identification of CI types, relationships, and attributes.

Plan Configuration Item Types:

Configuration Management Types and Subtypes are used to classify configuration items. Configuration Management in SM9 is designed such that all types share a common set of attributes. Each type may be configured to allow an additional set of attributes unique to that type. Inclusion of the types as CI Types should be decided after feasibility analysis as per discovery.

Business Element CI types: Business element CIs includes Business Service, IT Service, and Business Application CIs. These are non-discoverable CI types which must be manually defined.

Business Service: A Business Service is a service that a business provides to another business or that one organization provides to another within a business.
IT Service: An IT service is a service that the IT organization provides to support business services or IT's own operations.
Business Application: A collection of software components that can be managed as an independent unit that supports a particular business function. An application is a logical composition of the functionality required to manipulate the data and provide the functional requirements of underlying business processes. An application has a set of supporting infrastructure entities.

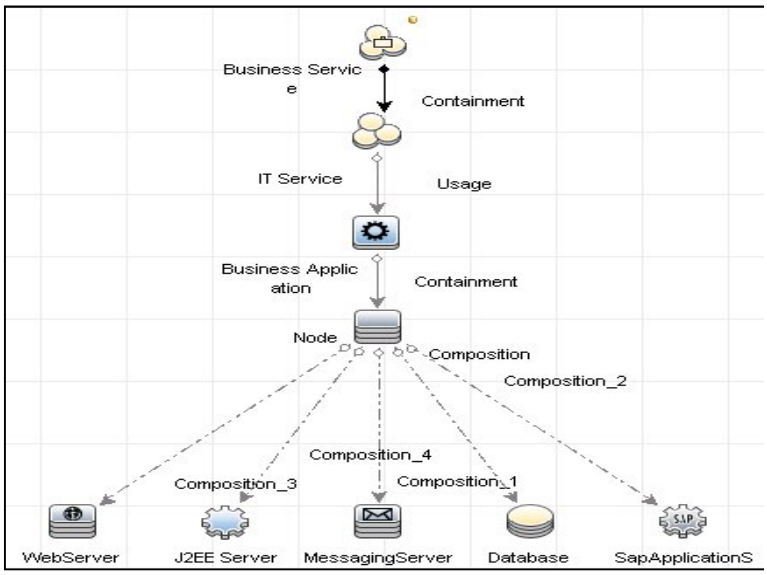
Infrastructure Element CI types: Infrastructure Element CIs are discoverable CI types including servers, network devices, storage devices, and the software that run on these devices.
Computer: This CI type represents a general purpose machine which has an IP address, such as Windows, Unix, Mainframe
Clustering: A Cluster is a system that is made up of two or more Nodes which operate together as an atomic, functional whole to increase the performance, resources, and/or reliability, availability, and serviceability.
Database: A system that manages a collection of records arranged in a predefined structure and format allowing an efficient retrieval and search of data usually by key data items.
Servers (J2EE/WebServers/Application Servers)
Storage: CI types related to data storage.
Network Components: CI types related to networking devices
Telecommunications: CI types related to voice and video communications.
Office Electronics: CI types related to office equipment such as printers and copiers.

Service Element CI types: Service Element CIs include Processes, Plans, Artifacts, and Frameworks etc. These are non-discoverable CI types which must be manually defined.

Configuration Item Attributes

Identify a subset of the attributes that are either "controlled attributes" or "managed state attributes". Both controlled and managed state attributes can only be modified through the Change Management process via an RFC. Managed state attributes have the additional capability of being used for unplanned change detection as the discovery tool can detect the actual state values of these attributes.

Configuration Item Relationships: Determine views of the hierarchical relationships between the primary CI types in the CMS. The diagram to the right provides more detail on the relationship types between the CIs (containment, usage, composition). The Node CI is a CI type in the CMS, of which Computer CIs and Network Device CIs are subtypes.



Topology Mapping Approaches:

The mapping approach should begin with the L0/L1 mapping, then progress to the L2 and L3 mapping as process and tool experience matures. The L2 and L3 mapping is manually intensive if naming standards to not exist for these CI types.

Level	Description
L0	Business Application (no related infrastructure)
L1	Server Host to Business Application
L2	Running software (Web, J2EE, DB) to Server Host to Application
L3	Configuration and code files/DB Schemas to Running Software to Server Host to Application

Dependency Mapping Approaches:

Discoverable: The benefit of using discoverable relationships is that no manual effort is required to create and maintain the relationship. The accuracy of this discovery is dependent on the frequency of the discovery jobs. There is a risk that the relationship could be deleted through aging or never be detected if the TCP connection is infrequent.

Non Discoverable: The benefit of using manually defined relationships includes the ability to provide relationships that are not detected via discovery and to provide more definition regarding the type of relationship. The downside of this approach is the manual effort required to identify and maintain these relationships. There is a risk that the relationship is invalid if it is not being detected via discovery along with the risk that the relationship can become invalid over time. An audit process would need to be in place in order to provide a sufficient level of quality with this type of approach.

Hybrid: The recommended approach in modeling application to application dependencies is to allow for usage of both discoverable relationships and manually defined relationships. From a discoverable relationship perspective, the approach being pursued is to develop enrichment rules which will create new application to application "usage" relationships based on discovered connections.

Configuration Identification

Configuration Item Naming Conventions

The naming conventions need to ensure uniqueness across all CI types and also meet any technical constraints imposed for particular CI types.

Configuration Item Discovery

The Discovery process is the mechanism that enables the collection of information about IT infrastructure resources and their interdependencies.

Populating the CMS

- From Discovery
- From Manual intervention

Configuration Status Accounting and Reporting

Configuration Item Lifecycle

Identify configuration item lifecycle status designators for logical configuration item types and physical configuration item types. technical constraints imposed for particular CI types.

Logical Configuration Items

Status	Description	Start Event
Plan	Logical CI is being planned as part of Service Strategy or Service Design lifecycle phases.	RFC for new CI
Build	Logical CI is in the process of being built and configured and has not completed the Service transition lifecycle phase.	RFC for Build
Live	Logical CI is providing operational services and has completed Service Transition lifecycle phase.	RFC for Service Transition
Pending Decommission	Logical CI is in the process of being decommissioned.	Initiation of RFC for Decommission
Decommissioned	Logical CI has completed the decommissioning process. Final lifecycle status for Logical CIs.	Completion of RFC for Decommission

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Physical Configuration Items

Status	Description	Start Event
Received	Physical CI has been received from vendor and is in a storage area.	Purchase Order iCAP inventory receiving Receiving from other location
Build	Physical CI is in the process of being built and configured and has not completed the Service Transition lifecycle phase.	RFC for Build
Live	Physical CI is providing operational service and has completed Service Transition lifecycle phase.	RFC for Service Transition
Pending Decommission	Physical CI is in the process of being decommissioned.	Initiation of RFC for Decommission
Decommissioned	Physical CI has completed the decommissioning process but has not completed the final asset disposition process.	Completion of all Decommission RFC activities
In Transfer	Physical CI is in transit between locations	
Disposed/Return to Lessor	Physical CI has completed asset disposition process. Final lifecycle status for Physical CIs.	

CI Type	Status	Start Event
Business Service	Plan	RFC for new Business Service CI - Default Status on CI Creation
	Live	RFC for new Business Service CI - Closure of RFC task for Confirming Live Status
	Decommissioned	RFC for Decommission of Business Service CI
	Deletion	
IT Service	Plan	RFC for new IT Service CI
	Build	RFC for Build of first Business Application CI related to IT Service
	Live	RFC for Service Transition "go-live" of first production Business Application CI related to IT Service.
	Pending Decommission	Initiation of RFC for IT Service Decommission - Initial task - update status value
	Decommissioned	Completion of RFC for Decommission including the decommissioning of all related Business Application CIs
	Deletion	
Business Application	Build	RFC for Build of Business Application CI
	Live	RFC for Service Transition of Business Application CI
	Pending Decommission	Initiation of RFC for Business Application CI Decommission - Initial task - update status value
	Decommissioned	Completion of RFC for Decommission including the decommissioning of all related Dedicated Server CIs
	Deletion	Logical devices (virtual servers) will be automatically deleted by Configuration tool aging 40 days after it is no longer being discovered. Physical devices will have aging disabled and will not be deleted.
	Decommissioned	Pending Decommission -> Decommission: This status change occurs after all decommissioning tasks have been completed in the CI Decommissionig RFC.
	Deletion	This CI type will be automatically deleted by Reconciliation tool aging 40 days after it is no longer being discovered.

Configuration Attributes:

Configuration Baseline: the configuration of a service, product, or infrastructure that has been formally reviewed and agreed on, that thereafter servers as the basis for further activities and that can be changed only through formal change procedures. Configuration Administrators are responsible for establishing configuration baselines to be used for the CI types within their area of responsibility

CI Type	Responsible Party
Business Service	Non-IT groups (IO, HRSSC, FOCUS, etc)
IT Service	IT Demand; Product/Service Mgmt
Business Application	Application Support Team(s)
Computer	Platform Operations
Clustering	Platform Operations
Database	Database Operations
J2EE Servers	Web & App Operations
Other Application Servers	Web & App Operations
Web Servers	Web & App Operations
Storage	Storage Management
Network Components	Network Operations
Telecommunications	Network Operations
Office Electronics	Field Services
Facilities	Facilities Management
Personal Computer	Data feed - no audit
Hand Held Devices	Data feed - no audit
Service Plan	Data feed - no audit
Display Device	Data feed - no audit
Consumables	Field Services
Certificates	Web & App Operations
CI Group	Configuration Management
L&D Course	Data feed - no audit
Aura Engagement	Data feed - no audit
Report	
Software License	Asset Management
CI Relationships	Configuration Management

ATTRIBUTE Label	Description	Attribute Change Comments
CI Name	The name of the CI. This is a required field. CI names must be unique across all CI types.	Business CI's: Name changes should be requested via Config Mgmt RFC and may require change tasks for update to multiple tools (CMDB, Event Mgmt, KnowledgeDocs, etc) Infrastructure CI's: Should not raise Config Mgmt RFC for Infrastructure CI name change. Name changes from discovery should have been the result of a technical RFC that includes name change in attributes.
CI Identifier	System-generated field that specifies the unique ID of the configuration item (CI).	
CI Type	This field identifies the type of CI.	
CI Subtype	This field identifies the subtype of CI. The list of available subtypes depends upon the CI Type the user selected.	
Asset Tag	This is a legacy field intended for customers migrating from previous versions of Federated tool to track the label or tag placed on physical assets, such as for example, a bar code.	
Alias	Any other names the configuration item may be known by, abbreviations or previous names.	
Environment	This field specifies if a CI belongs to a particular environment	
Controlled CI	Controlled configuration items require authorized requests for change (RFCs) in the Change Management process in order to perform change activity on these CIs. The "Controlled" state of configuration items is based on the CI type, lifecycle status, and environment designators.	
Status	CI lifecyles status values as specified by Requirement/Plan/Design. • Plan • Build • Received • In Transfer • Live • Maintenance • Not in Use • Pending Decommission • Decommissioned • Disposed/Return to Lessor • Unknown	Lifecycle status changes should be result of RFCs and should be updated during RFC implementation. This includes the following: Build -> Live: This status change should occur as part of either the "go-live" deployment child RFC associated with Release Management parent RFC or an environment upgrade/cutover RFC (eg, swing server to new hardware, P2V conversion, etc.) Live -> Pending Decommission: This status change should occur as part of a environment cutover RFC and would apply to the old environment. This status change could also occur as a result of an Application decommissioning RFC in the case were an application is no longer used. Pending Decommission -> Decommission: This status change occurs after all decommissioning tasks have occurred.
Data Classification	Data Classification values: DC0 DC1 DC2 DC3 Available for types Services, Applications, Databases	If Data Classification changes, then need to verify that BCQ assessment has been updated and determine whether any changes to security controls are required.

ATTRIBUTE Label	Description	Attribute Change Comments
Security classification	This field specifies if the CI has any security restrictions	If the security classification is changed, then the default assignment group will need to be updated.
SOX classification	This field specifies if the CI has a Sarbanes Oxley (SOX) classification that applies to the CI. The out-of-box data is: • Critical • Non Critical	If the SOX classification is changed, then Risk Management SOX audit scope documentation will need to be updated. This also may change the control requirements for the CI based on required SOX controls (eg, no Developer access to Prod)
Export control classification	This field specifies if the CI has an Export Control classification. The out-of-box data is: • EAR99 (Non Controlled) • 4D994 • 5D991 • 5D002 • 5D992	
IT service continuity plan enabled	This field specifies if the CI has an IT service continuity plan enabled for it.	
Critical CI	This field specifies if the CI is critical for day-to-day operation, such as an E-mail server or RDBMS server. If you open an incident on a critical CI, the incident ticket indicates that this is a critical CI.	
Virtual Server?	Set by Configuration tool if the CI is a virtual server	
Priority	This field specifies the default priority of any related records opened against the CI. The information in this field is used to prepopulate the priority in an incident or interaction. When a user selects the CI in an incident or interaction, it populates the incident or interaction priority based on the CI priority field. The out-of-box data is: • 1 - Critical • 2 - High • 3 - Average • 4 - Low	
Default Impact	This field specifies the default impact of any related record opened against the CI. the information in this field is used to prepopulate the impact in an incident or interaction. When a user selects the CI in an incident or the interaction, it populates the incident or interaction impact based on the CI Default Impact field. The out-of-box data is: • 1 - Enterprise • 2 - Site/Dept • 3 - Multiple Users • 4 - User	
Open Incident	Count of related Incidents	
Open Problems	Count of related Problems	
Open Known Errors	Count of related KnowN Errors	
Open Changes	Count of related Changes	
Maintenance Window	Documents the window for performing maintenance on the CI	

ATTRIBUTE Label	Description	Attribute Change Comments
System Down	This field indicates whether the CI is currently operational or has an open incident related to it causing it to be non-operational. When you close the incident ticket for the CI, this action clears the flag. The CI is no longer marked as down.	
Allow Subscribe	This field determines if the CI is available for subscriptions from the Service Catalog.	
Pending Change	This field indicates whether or not there are any changes pending against this CI. When you close or open a change for the CI, this action sets or clears the flag.	
Externally Hosted?	Set for configuration items that are hosted by external third parties	
Used by Multiple Territories?	This field is set if a configuration item is used by multiple territories	Could require the creation of additional subscription records if this changes from No to Yes
Any non-territory data stored?	This field is set if non-territory data resides within the configuration item	Could result in regulatory changes, Safe Harbor requirements, etc.
RFA	"RFA = Retained for Archive. When checked this indicates that this CI must be retained for archive purposes even if the CI has been decommissioned and/or removed from the Configuration tool."	
RFA Comments	Comments related to archive retention	
Owner	This field identifies the department that owns the CI, for example, the HR department could own the laptops that its employees use.	Ensure that primary owner is updated in any required groups (CI Change Approval Group, CI Notification Groups, etc)
Default Assignment Group	This field identifies the group responsible for supporting the CI while the Owner identifies the department that owns the CI. For example, a PC is owned by the HR department, but IT is the Config admin group responsible for supporting the CI. It is the assignment group responsible for handling interactions or incidents for the CI. This is a required field.	
Demand Group	The Demand group responsible for owning/managing the service	
Support Groups	This field identifies what assignment groups receive tickets when this CI is part of an interaction as well as when escalating to an incident	
Support Remarks	This field is a comment field intended to describe or provide notes for the support groups.	
Service Contract	Identifier of the Service Contract associated with the CI	
Title		
Description	This field is a free-form text field to add additional information about the CI.	
Requirement RTO	The recovery requriement (RTO) of this application/service as defined during the Release and Deployment Management process	Change in value should trigger IT Service Continuity team review and assessment. If current Capability RTO does not meet or exceed Requirement RTO, then either need to deny change in Requirement RTO or initiate project to increase Capabiltiy RTO.
Requirement RTO Range	RTO list values • 1 hour • 2 hours to 3 business days • 4 to 10 business days • 11 to 40 business days • 41 to 80 business days	

ATTRIBUTE Label	Description	Attribute Change Comments
Requirement RPO	The recovery requirement (RPO) of this application/service as defined during the Release and Deployment Management process RPO list values • No Loss • 15 Minutes • 1 Day • 3 Days • Other	Change in value should trigger IT Service Continuity team review and assessment. If current Capability RPO does not meet or exceed Requirement RPO, then either need to deny change in Requirement RPO or initiate project to increase Capabiltiy RPO.
Capability RTO	The proven recovery capability (RTO) of this application/service either via Operational events or via planned Recovery/Resilient test. Recovery Capability is for an individual application not for recovery of an application in sequence following a disaster.	
Capability RTO Range	RTO list values • 1 hour • 2 hours to 3 business days • 4 to 10 business days • 11 to 40 business days • 41 to 80 business days	
Capability Criticality	The proven recovery capability (Criticality) of this application/service either via Operational events or via planned Recovery/Resilient test. Recovery Capability is for an individual application not for recovery of an application in sequence following a disaster. Calculation of Criticality RTO Value/Criticality Value 1 hour = Major 2 hours to 3 business days = High 4 to 10 business days = Medium 11 to 40 business days = Low 41 to 80 business days = Other	
Capability RPO	The proven recovery capability (RPO) of this application/service either via Operational events or via planned Recovery/Resilient test. Recovery Capability is for an individual application not for recovery of an application in sequence following a disaster. RPO list values • No Loss • 15 Minutes • 1 Day • 3 Days • Other	
LoS Recovery Order	Indicates the recovery position of this application within the list of applications for your Line of Service.	
Inter LoS Recovery Order	The inter-LoS recovery position (where agreed by the business/BRM)	
Last Tested	Date when last IT Service Continuity test was performed for this CI	
Business Impact Statement	A statement about the impact to the business of this application or service being unavailable.	

ATTRIBUTE Label	Description	Attribute Change Comments
User Base	This field displays a count of the number of users who use the CI.	Need to verify Capacity Management analysis if user base count changes
Impacted User	User or department subscriptions to the Service	
Managing Territory	Territory that owns/manages the configuration item (US or UK)	
LOS	LoS that owns/manages the configuration item	
Business Unit	Business unit that owns/manages the configuration item	
Department	Department that owns/manages the configuration item	
Corporate Structure	Hierarchy of Territory/LoS/Business Unit/Department	
Contact to Cash	Use the radio button to select the Value Cycle this solution or service most directly supports. Contact to Cash: activities relating to contact/opportunity management; proposals and client/engagement acceptance; engagement delivery and management; time and expense recording and billing. All reporting associated with these activities.	
Contact	Contact element of Contact to Cash value cycle	
Deliver	Deliver element of Contact to Cash value cycle	
Accept	Accept element of Contact to Cash value cycle	
Cash	Cash element of Contact to Cash value cycle	
Research to Reuse	Use the radio button to select the Value Cycle this solution or service most directly supports. Research to Reuse: activities relating to knowledge management, research, collaboration and communication. All reporting associated with these activities.	
Research	Research element of Research to Reuse value cycle	
Augment	Augment element of Research to Reuse value cycle	
Apply	Apply element of Research to Reuse value cycle	
Reuse	Reuse element of Research to Reuse value cycle	
Recruit to Retire	Use the radio button to select the Value Cycle this solution or service most directly supports. Recruit to Retire: activities relating to staff recruitment; training and development; deployment onto jobs; career management. All reporting associated with these activities.	
Recruit	Recruit element of Recruit to Retire value cycle	
Develop	Develop element of Recruit to Retire value cycle	
Deploy	Deploy element of Recruit to Retire value cycle	
Retain	Retain element of Recruit to Retire value cycle	
Retire	Retire element of Recruit to Retire value cycle	
Record to Report	Use the radio button to select the Value Cycle this solution or service most directly supports. Record to Report: activities related to recording, reconciling, and reporting	
Record	Record element of Record to Report value cycle	
Reconcile	Reconcile element of Record to Report value cycle	
Report	Report element ot Record to Report value cycle	
Procure to Pay	Use the radio button to select the Value Cycle this solution or service most directly supports. Procure to Pay: activities relating to ordering goods or services; issuing purchase orders and processing invoices. All reporting associated with these activities.	
Procure	Procure element of Procure to Pay value cycle	

ATTRIBUTE Label	Description	Attribute Change Comments
Receive	Receive element of Procure to Pay value cycle	
Process	Process element of Procure ot Pay value cycle	
Pay	Pay element of Procure to Pay value cycle	
Enabling Service	Use the radio button to select the Value Cycle this solution or service most directly supports. Enabling Service: activities that exist to provide the necessary support infrastructure for the firm's business activities - examples include the ARK database itself or the Identity Management Service.	
Location	Name of location where the CI resides.	Location change should require RFC, this is primarily a result of office moves or decom of equipment. IP address will also be updated with office move.
Site Category	Classification of size of site. Out of box values: A - Critical Site B - Major Site C - Satellite Site D - Home site	
Building	Building name of location where CI resides	
Floor	Floor where CI resides	
Room	Room where CI resides	
Rack	Rack address where the physical CI is installed	Only applies to physical device CIs
Location Comments	Field for tracking additional location related information for the CI.	
Primary Owner	This has been set to respective owner of the CI	
Secondary Owner	This has been set to respective owner of the CI	
Relationship Manager	Assigned Relationship Manager	
Business Tech Leader	Assigned Business Tech Leader	
Primary Prod/Service Mgr	Assigned Primary Prod/Service Mgr	
Secondary Prod/Service Mgr	Assigned Secondary Prod/Service Mgr	
Project Management	Assigned Project Management	
Business Analysis & Testing	Assigned Business Analysis & Testing	
Primary App Support	Assigned Primary App Support	
Secondary App Support	Assigned Secondary App Support	
TCS Primary Ops Service Mgr	Assigned Primary Ops Service Mgr	
TCS Secondary Ops Service Mgr	Assigned Secondary Ops Service Mgr	
TCS App Support LoS Lead	Assigned TCS App Support LoS Lead	
Notification List	List of email addresses for receiving notifications on RFCs for the CI	
Change Approver Group	Change Management approval group for authorizing RFCs for the IT Service. From a US perspective, this group will be populated with IT Demand contacts and is intended to provide the approval for an RFC from a business outage and UAT perspective. This field is only available for IT Service CIs. This field is optional.	

ATTRIBUTE Label	Description	Attribute Change Comments
Location	URLs to related knowledge/links for the configuration item	This section will allow the user to provide details of key Knowledge and Configuration items. These may be databases, documents or links. Access may be limited to these items so if you require access please contact the Primary or Secondary owner (see Contacts tab)
Description	Description of the related knowledge/link	
Attachments	File attachments of knowledge related ot the configuration item	
Baseline	This field indicates if the CI has an associated baseline and if the CI is in compliance	
Baseline Version	This field indicates the baseline version that the CI is tracked against. Baseline Versions enable you to have CIs with the same baseline configuration but slight differences. You can have several versions of that baseline, or if you have updates for a new version of a software installed, then you can select a specific version of a baseline for a CI.	
Machine Name	Parent physical server for virtual servers or parent host for running software CIs types	Mapped from Configuration tool
Priimary MAC Address	Represents the entities MAC address. In computer networking, a Media Access Control address (MAC address) is a unique identifier assigned to most network adapters or network interface cards (NICs) by the manufacturer for identification, and used in the Media Access Control protocol sub layer.	Mapped from Configuration tool
OS Name	The operating system name as determined during discovery (e.g. Windows XP, Windows 2003, SunOS)	Mapped from Configuration tool
OS Manufacturer	The name of the vendor of the operating system (e.g. Microsoft, HP, etc).	Mapped from Configuration tool
OS Version	The operating system version.	Mapped from Configuration tool
Bios ID	A manufacturer specified serial number or unique ID of the BIOS.	Mapped from Configuration tool
Bios Manufacturer	Manufacturer of the BIOS	currently not mapped from Configuration tool
Physical Memory (Kb)	The size of volatile memory (RAM, SRAM, DRAM, ZRAM, TRAM).	Mapped from Configuration tool
Additional MAC Addresses	Represents the entities MAC address. In computer networking, a Media Access Control address (MAC address) is a unique identifier assigned to most network adapters or network interface cards (NICs) by the manufacturer for identification, and used in the Media Access Control protocol sub layer.	Mapped from Configuration tool
Domain	This is the domain name of which the node is part of. Typically domains are used to structure entities because of organizational / authorization oriented reasons. The domain name differs from the hostname in the way that the hostname is based on DNS, whereas the DomainName is based on other kind of domains (yp, nis, AD).	Mapped from Configuration tool
Failover Cluster	Cluster name if CI participate in a cluster relationship	Mapped from Configuration tool

ATTRIBUTE Label	Description	Attribute Change Comments
Failover Cluster Type	Cluster name type if the CI participates in a cluster relationship	Mapped from Configuration tool
Network Name	DNS Hostname associated with Primary IP Address for the CI	Mapped from Configuration tool
Primary IP Address	IP Address associated with the CI name	Mapped from Configuration tool
Subnet Mask	The mask of the network this ip is a member in	Mapped from Configuration tool
Default Gateway	This is the IP address of the default router for a given device. Default router is used by device as the next hop of last choice in case no other specific routes are defined for a destination.	Mapped from Configuration tool
Configuration File	Configuration file directory/path for the CI	currently not mapped from Configuration tool
Addl IP Address	Additional IP Addresses associated with the CI	Mapped from Configuration tool
Addl Subnet Mask	The mask of the network that the additional IP addresses are members of	Mapped from Configuration tool
Application Name	Name of the CI	
Administration URL/Port	URL/Port for administrative access to the CI	
Business Import Level		Currently missing values in dropdown list
Disaster/Recovery Coverage	Checkbox	
Disaster/Recovery Tier	Out of box values: Tier 0: No off-site data - Possibly no recovery Tier 1: Data backup with no hot site Tier 2: Data backup with a hot site Tier 3: Electronic vaulting Tier 4: Point-in-tim copies Tier 5: Transaction integrity Tier 6: Zero or near-Zero data loss Tier 7: Highly automated, business integrated solution	
Primary Directory Path	Primary directory path for application	
Data Classification	Data Classification values: DC0 DC1 DC2 DC3 Available for types Services, Applications, Databases	
Product Version	Version identifier of Product	
License Type	Out of box values: Site Limited Bulk Purchase Free	
Service Hours	Text field for entering service hours for application	Redundant with Maintenance Windows on general tab
Source Code Owner	Source Code Owner field is a drop down list. The list of valid values will be stored in FEDERATED TOOL and will be maintained from within Configuration Management. Available for Application type	Current dropdown list has (A,B,C,D)

ATTRIBUTE Label	Description	Attribute Change Comments
Critical Business Windows	Any times in the year when the application/service is critical to the business. This should outline the duration of any window (either Entire Month, 1st Half, 2nd Half, 2nd Half overrun) It should also outline the months that represent critical business windows for this application/service. Available for Application type and Technical Service type	
Additional Information	custom field for additional information for the application CI	
Notification Group		Error with lookup on this field.
Part Number	Manufacturer part number for the CI	
Manufacturer	This is a system-generated field that specifies the manufacturer of the CI if one is associated with the Part Number. This field along with model and serial number uniquely identify the CI.	Mapped from Configuration tool
Model	This is a system-generated field that specifies the manufacturer's model if one is associated with the Part Number. This field along with manufacturer and serial number uniquely identify the item.	Mapped from Configuration tool
Version	This field specifies the manufacturer's version number for the CI.	
Serial Number	This field specifies the manufacturer's serial number for the CI.	Mapped from Configuration tool
Data Privacy		
Data Classification		
Port Number		
Disaster Recovery Tier		
Administration URL/Port		
Product Name		
Product Version		
Listener Access Port	TCP port for the database listener	Mapped from Configuration tool
Notification Group		
Admin ID		
Admin Password		
Remote Access Phone		
Remote Access IP		
Disaster/Recovery Coverage		
Disaster/Recovery Tier		
Grid		
Login Server Name		
Monitored		
Service Name	Name of the Service CI	
Service Type	Subtype of the Service CI	
Service Status	Status of the Service CI	
Data Classification		
Allow Subscription		
Manufacturer		
Type		
Description		
Applications		
Name		currently not mapped from Configuration tool
Version		currently not mapped from Configuration tool

ATTRIBUTE Label	Description	Attribute Change Comments
Type		currently not mapped from Configuration tool
Description		currently not mapped from Configuration tool
Actual State	This tab lists the actual values of CI attributes if the Federated tool system has integration to Configuration tool It shows the latest discovered information from the CONFIGURATION TOOL or its sources.	Mapped from Configuration tool
Pending Attribute Changes	This field lists the attributes that are waiting to be changed through a Change Management record or changes requested through an Unplanned Change (requires an Configuration tool integration). The data in this field can only be modified through Change Management. Each CI has a set of managed attributes that can be changed through Change Management.	
Historic Attribute Changes	This field lists the attributes that are have already been changed through a Change Management record or changes requested through an Unplanned Change (requires an Configuration tool integration).	
Audit Policy	These fields display auditing information and are only enabled for those users who have the capability to audit CIs. The user role is Configuration Auditor. Out of box values: None After Change Weekly Monthly Quarterly Yearly	
Audit Status	Out of box values: Not Audited Audited Minor discrepancy found Critical discrepancy found	
Audit Discrepancy	Audit Discrepancy	
Last Review Date	Last Review Date	
Next Review Date	Next Review Date	
Last Audited By	Configuration Auditor who last audited CI recor	
Last Audit Date		
Next Scheduled Audit		
Primary Contact Name	Name of Primary User of CI	Not utilized by
Support Contacts	Additional support contacts	Not utilized by
Reason	Additional support contacts reason for support	Not utilized by
Last Name	Last name of Primary User of CI (set by lookup of primary contact)	Not utilized by
First Name	First name of Primary User of CI (set by lookup of primary contact)	Not utilized by
Phone No	Phone number of Primary User of CI (set by lookup of primary contact)	Not utilized by
E-Mail	Email address of Primary User of CI (set by lookup of primary contact)	Not utilized by
Description	Additional support contacts description	Not utilized by

ATTRIBUTE Label	Description	Attribute Change Comments
Vendor Name	This tab provides vendor information about the CI for support and maintenance. When the user enters the vendor name, the system provides the additional details.	
Upstream Relationships	This option links to the add a new CI relationship record that enables you to add a new upstream relationship to this CI.	
Downstream Relationshps	This option shows the CIs that have a downstream dependency on this CI. For example, the upstream E-mail service depends on the downstream E-mail server, the network, and your E-mail program.	
Relationship Graph	This tab displays a graphical representation of the upstream and downstream relationships for the CI.	
Outage History	This tab displays information related to the SLA and SLO availability data for the CI.	
Update Objectives		
Max Duration Objectives		
Financial	This tab displays information for the service contracts, parts, labor, and expenses for the CI.	
Scanner Description	This tab provides information about any scanning done on the CI. The information includes the last time this CI was scanned and the date and time of the scan. Scanning can be done to detect viruses or determine the software installed on the CI.	Not utilized by
Scanner Version		Not utilized by
Last Scan		Not utilized by
Date		Not utilized by
Type		Not utilized by
Version		Not utilized by
Scan Result		Not utilized by