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## CMDB: Essential to the Service Management strategy

## **Business Proposition:**

This white paper describes how the CMDB is an essential component of the IT Service Management Strategy, and why the FrontRange ITSM CMDB product is the solution of choice.

Organizations in virtually every industry are under relentless pressure to deliver products and services to market faster, better and cheaper. The best IT strategy for meeting this challenge is to increase operational efficiency by aligning IT resource allocation with business service priorities; to enhance process efficiency through process reengineering; and to improve service quality through adoption of ITIL® best practices. If an organization manages its processes well, its business results will be positively impacted.

ITIL's premise is that the cornerstone for delivering on this strategy is the active management of up-to-date information about the configuration items (CI) within the infrastructure including the relationships amongst CIs and the business services. To do so, a consolidated configuration management database (CMDB) is needed.

A CMDB provides a common repository for IT configuration items, their attributes and relationships between each item and to the business services they support. It is a collection of related network, application, server, storage, databases and other IT components that make up a business-oriented IT service. A complete CMDB goes beyond being a repository of physical CI attributes. It also includes CI usage, cost and outage information as well as maintenance records. It contains all the data necessary to provide an end to end service view of the IT infrastructure, offering a single source of record and a logical model of the IT infrastructure as it relates to IT services.



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## **Business Problems:**

- Organizations spend a lot of time discovering and manually keeping track of current status of the location of infrastructure items and how they utilized. Given the continual number of IT changes, manual tracking of this information is resource intensive and nearly impossible.
- Poorly planned and executed changes are causing high rate of service outages; driving service availability lower, and increasing the cost of service level agreement beaches.
- Government regulations such as Sarbanes-Oxley and HIPAA initiatives are challenging IT to implement better
  process controls and to provide complete process logs for automated procedures and audit trail of changes to
  IT components.
- IT is now required by its customers to guarantee service availability levels to business applications and systems. To do so, IT must know what CIs are installed, where they are located and the costs associated to supply the service.
- Without accurate mapping of components to service definitions, root cause analysis, problem diagnosis and resolution are indefinable and problematic.
- IT organizations in the past were working in functional silos, which lead to inefficiencies and lack of communication, collaboration and innovation.



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## **Traditional solutions:**

Traditional IT systems were disparate point solutions designed to serve specific application functions. These systems maintain their application data in proprietary databases, making process integration and consolidated reporting of end to end service view impossible.

Early CMDB adopters generally are using home grown solutions that are built around established IT point solutions such as asset management, network management tools, and help desks solutions. Most of these implementations addressed the data silos issue by importing information into centralized databases periodically. Depending on the implementation, complex reconciliation processes are often needed before aggregating information into one database. As such, real time access to consolidate information is impossible.

As an alternative to consolidating information into a centralized CMDB, some early CMDB adopters opted for the "Federation" alternative, using database views and reporting tools to access configuration data directly from various applications. While this approach solves the real time data access issue, it makes process collaboration across functional units difficult.

Additionally, home grown CMDB solutions do not provide the mapping of IT components to businesses services, thus limiting the overall value of the CMDB. A home-grown CMDB will not have integrated business process automation capabilities which will ensure process control and do not have the capacity to exploit emerging CMDB technologies.

## FrontRange Solutions:

The Frontrange CMDB captures comprehensive CMDB information organically during execution of standard service management workflow, eliminating the need for additional integration and reconciliation processes.



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Being an integral part of FrontRange's fully ITIL-compatible ITSM solution, the CMDB captures CI data, change history, problem records, and service interruption information organically as part of the normal operation workflow in accordance with ITIL best practices. These workflows help to impose proper processes, controls and validation procedures ensuring the accuracy of the information collected in the FrontRange CMDB as well as the audit trail information to support compliance audits.

The FrontRange CMDB goes beyond being a repository of physical CI attributes. It includes CI usage, costing and outage information as well as maintenance records and contains the mapping of IT components to businesses services. The FrontRange CMDB also enables the management of service level agreements and has the capability to analyze service availability metrics using actual service outage information.

The ITSM solution family includes the Configuration Management and Service Level Management modules. These modules provide the Service and Configuration Managers with the ability to define business-oriented IT services, Infrastructure Structures and their associated components and relationships. As information managed through these modules is stored in the same CMDB as they are updated, no additional integration and reconciliation processes are necessary to enable a 360 degree real time access of CMDB information across different IT disciplines.

The Frontrange CMDB has the capability to achieve integration across management tools. Without automation, keeping CMDB information current becomes cumbersome and useful for only the most manual and least time-sensitive of management tasks. Successful deployment of a CMDB strategic must be accomplished in parallel with solid process reengineering. To support this requirement, the ITSM application modules are shipped with automatic workflows to help ensure process and controls. In addition, the ITSM foundation also includes a powerful business process engine and process designer to support custom define processes.

**The Frontrange CMDB is evolutionary.** The FrontRange Foundation was designed from the outset to integrate with third-party applications and legacy data sources through standards-based (Web Service, SOAP, XML, SMTP, SNMP, LDAP, WMI, etc.) connection methods or technology adapters.

FrontRange ITSM and the CMDB are built on a metadata driven architecture; application logic, data model and user interfaces can be customized easily to accomodate requirement and process changes. The metadata driven rachitecutre coupled with the standard based integration capabilities, the FrontRange CMDB is well positioned to interoperate with developing CMDB Federation and reconcillation standards.



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FrontRange Solution's CMDB is part of a modular comprehensive and fully ITIL compatible ITSM solution set that delivers the following capabilities:

- Automatically collects and stores configuration data form IT network, server, systems and client desktops and delivers the information to Service Analysts and Infrastructure & Managers in the context of their normal workflow.
- Provides the tools, automated workflows and management reports for Configuration Managers to define, manage, and audit the relationships between policy compliance of the key infrastructure components to key business services.
- Provides the tools, automated workflows and management reports for Incident, Problem and Change Managers to associate, manage, and audit the relationships between policy compliance of the key infrastructure components to key business services.
- The CMDB enables system users to have full visibility into the other ITIL processes such as Incident, Problem, Change and Release Management. Technicians have visibility to the Problem and Change Boards on the Navigator Bar in order to proactively manage incoming issues or calls. Just by doubleclicking, technicians can drill down and view what CI's may be linked to either Problem or Changes.

### Benefits:

### Improved alignment between IT and Business

The lack of correlation between IT infrastructure costs and supported services minimizes the contribution of IT to the company. Having a CMDB with documented relationships between Infrastructure components to business services and historical information about what and when resources were applied to these components allows IT to relate costs of servicing IT components to the value it delivers to the business. Mapping infrastructure components to service definitions aids in problem diagnosis and resolution. Service-level reporting provides clear evidence of IT value. These information also improves IT's ability to support business priorities by directly mapping infrastructure resources according to the critical business services.

### Improved Operation efficiency and Service Quality

A CMDB coupled with effective Change Management processes will improve service quality by reducing the number of service outages caused by changes through better planning and understanding of the impact of those changes on the rest of the computing environment. Understanding the relationship of critical CIs



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to the priority business services allows IT to strategically monitor the health of key components, and take preemptive actions to resolve situations before service interruption occurs.

#### Improved Security Deployment and Assessment of Risk

When assessing a known vulnerability on a server, CMDB information can be used to assess risk based on both the severity of a patch, as well as the business context of the vulnerability. This capability allows IT organizations to prioritize patches that support the business and ensure that critical systems are secured first.

#### • Enable more Accurate and Streamlined Compliance Management.

To better facilitate Sarbanes-Oxley, HIPAA and other compliance initiatives worldwide, IT organizations can tap into the CMDB information to ensure that the change policies are enforced and asset information are accurate and complete. The CMDB will also provide historical information of changes and CI history required for proper process control and compliance audits.

#### • Pave the path for business service management implementation

Linking relationships between business services and CIs, establishing agreed upon service level agreements with business users for key services and managing these information within a consolidated CMDB are key stepping stones for Business Service Management Implementation.

#### Why FrontRange:

FrontRange Solutions helps customers in over 50 countries automate support tasks, boost service desk productivity, align business requirements with IT priorities and support the business processes that make worldclass companies. Our solutions deliver powerful, "Out of the box" functionality and limitless configuration options necessary to support the unique ways in which companies do business, all with some of the lowest total cost of ownership metrics in the industry.

Building on the unequalled success of our HEAT® product line, FrontRange ITSM solution combines ITIL best practices with the experience gained from over 15 years of improving the way IT organizations worldwide deliver their services. The resulting solution represents a feature-rich set of service management modules with a common platform that allows an enterprise to transform your IT organization from proactive to reactive and reduce the overall costs associated with service delivery.





