



Senior Design Project in Electrical & Computer Engineering



Readiness Management Database Data Quality Analysis

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What is RMS?

The Coast Guard is currently able to monitor its state of personnel and resource readiness through online access to the central Readiness Management System (RMS) database. The RMS consolidates several specialized databases, such as aviation, training, engineering, and medical information, into a centralized location. This allows individual service members and units to view personal and operational readiness information. Users may access readiness reports on deployability, personnel qualifications and weapons readiness, in the CGCentral online environment.

Project Background

The RMS should provide a convenient and reliable source of readiness information to help make managerial decisions. However, some of the data in the database is flawed. For example, medical and CASREP information are sometimes inaccurately reported. To help correct these data inconsistencies, this project team will advise HQ on methods of data quality measurement and management improvement. The team will also analyze data quality and tracking issues associated with the RMS. Data quality improvement will increase the credibility and reliability of the RMS, increasing users' trust of the system to provide accurate and timely evaluations of readiness to help accomplish their mission.

CGCentral Interface



Project Plan

- Analyze and report on data quality management practices of private industry, including the evaluation and regulation of data quality
- Formulate a database that allows RMS staff to track user reported data quality issues.
- Identify and implement more efficient and easier help desk organization
- Identify and implement a simpler and more automated workflow system for tracking and processing report requests from users

Project Deliverables

- Identify key drivers of data quality and recommend an approach for quantitatively measuring data quality in general, such as problems with the process, policy or technology
- Outline and implement a Data Quality Tracking Database, with documentation to provide centralized records of data quality issues
- Outline and implement a Report Request Tracking System, with documentation to provide an organized and efficient method of keeping track of all report requests

Sample RMS Report

RMS PUBLISHED REPORTS No Official Use Only

PacArea Weapons Requirements

	Pistol			M16			M16			Shotgun			Shotgun		
	Required	People	Percent												
CGC BARRACUDA (0870)	7	0		7	0		7	0		7	0		7	0	
CGC DORADO (0870)	8	0		8	0		8	0		8	0		8	0	
CGC HAWKSHILL (0870)	12	0		12	0		12	0		12	0		12	0	
CGC BLACKTIP (0870)	6	0		6	0		6	0		6	0		6	0	
USCGC BLACKTIP (0870)	10	0		10	0		10	0		10	0		10	0	
CGC NARRAH (0870)	10	0		10	0		10	0		10	0		10	0	

