

*RCM*



# Revision and Configuration Management Overview

<http://smsat-www.ilo.dec.com/products/rcm/service/index.htm>

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- **Part of Compaq Customer Services**
  - **Part of Product Service Engineering**
    - **Specialize in System and Network Management knowledge-based tools for Unix, VMS & NT**
      - System Healthcheck
      - Revision and Configuration Management
- **Goal is to differentiate Compaq services in remedial support & Business Critical IT service markets**
- **Assist manufacturing with early life problems**

# Purpose of RCM

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- **Goal:**

- Maximize system uptime by avoiding problems associated with revision incompatibilities or configuration rule violations

- **Strategy**

- Prove solution in Business Critical segment and develop solution for volume use
- Provide tool to support reactive and proactive revision and configuration management of AlphaServer(Digital UNIX, OpenVMS, WindowsNT), VAX(OpenVMS) & Intel(WindowsNT) systems

- **To Customers**

- Unscheduled down-time is minimized
- Improved diagnosis
- Smooth upgrade process
- Problems identified before they impact business operation

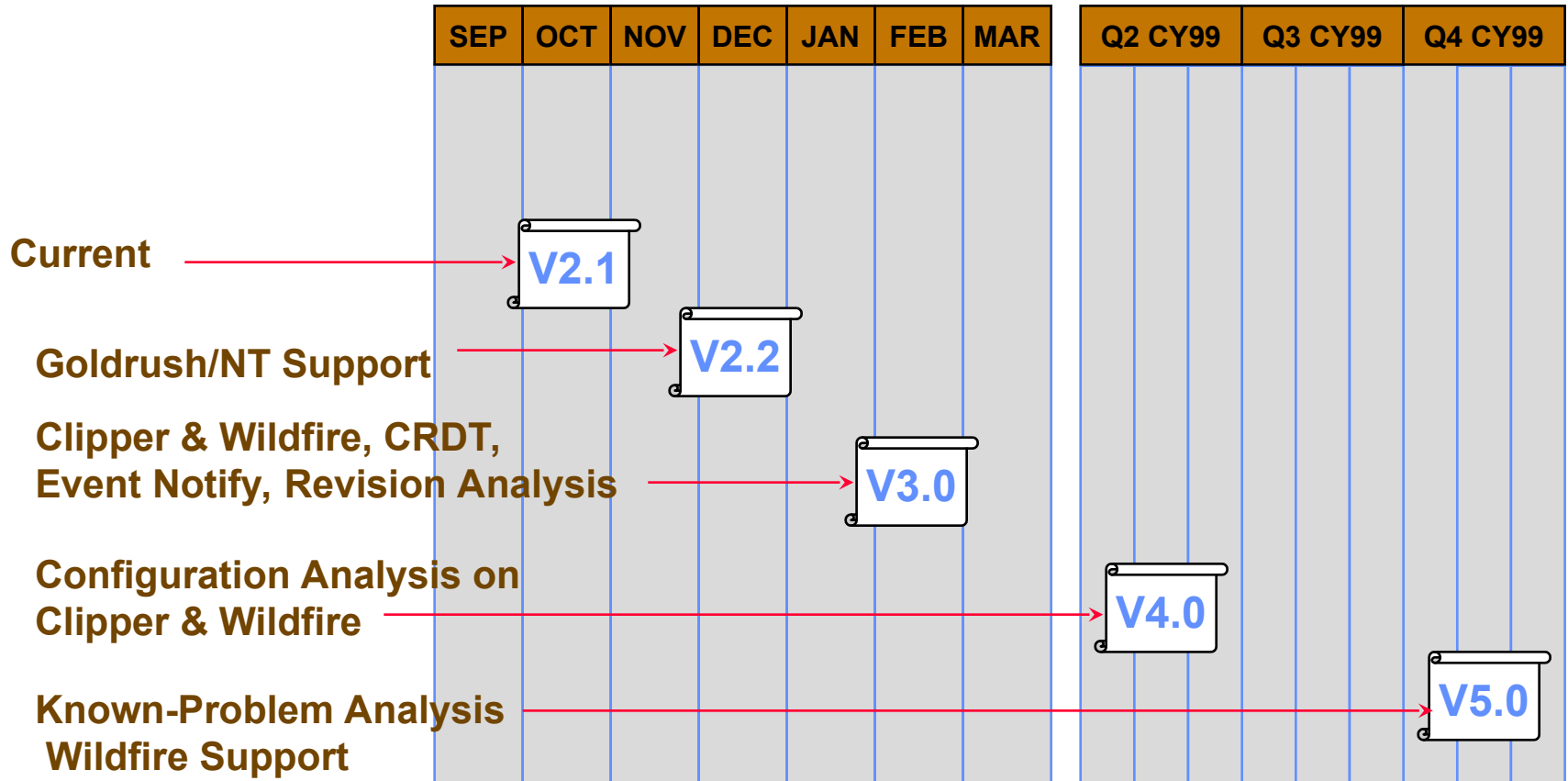
- **To Services**

- Lifecycle revision and configuration management of systems
- All RCM capabilities available through Web
- “Know the customer”
- Verification of service actions
- Change reporting to track system modifications
- Collectors on all systems from manufacturing

- **Purpose and Initiatives:**

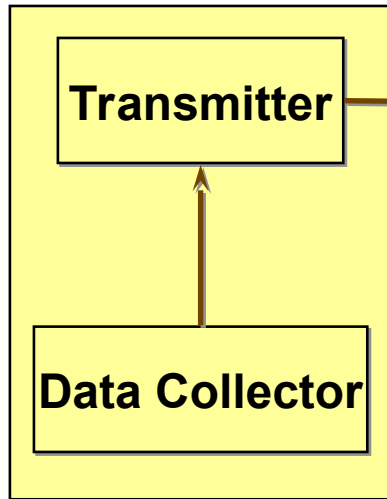
- **Ensure system is fit for its purpose**
- **Understand changes required to bring about stability of system at customer site**
- **Monitor systems in early Life**
- **Analyze collected data**
- **Linked to MPH availability monitoring tool so downtime can be correlated with configuration change in RCM**
- **Aimed at Wildfire systems, will be piloted on Clipper platform**

# Planned Release Schedule

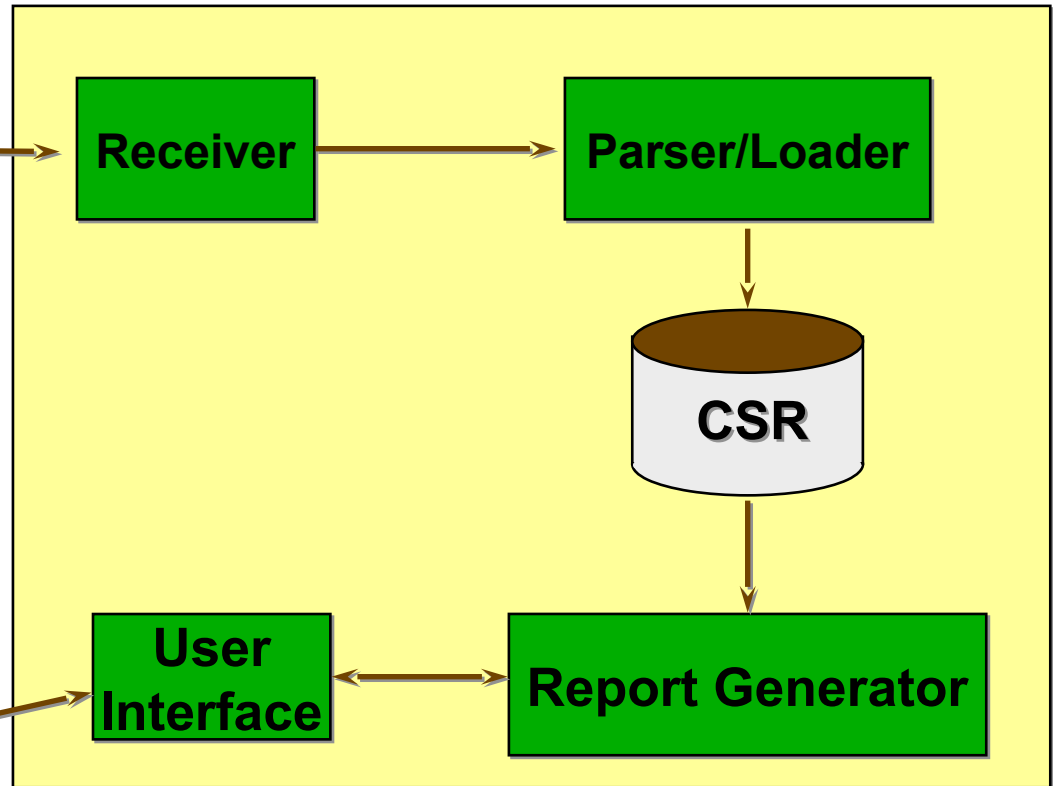


# Overview of RCM -- V2.1

## Customer System



## Compaq - RCM server



Workstation with  
Web Browser

◆ Current Model = RCM processing at Compaq

- **Data collection and transport over email, ftp & DSNlink**
- **Data loader stores all collections in Configuration Snapshot Repository (CSR)**
- **Report generator produces Configuration, Change and Comparison reports**



- **Automated scheduled collections enabling up-to-date configuration, change and comparison reports**
- **Accessible within Compaq Intranet using web browser**
- **Access to data can be restricted to account team through security authorization**
- **Integration DPP, ESMG and Avanto**

## OS

- DIGITAL UNIX V3.2G (or higher)
- OpenVMS V6.2 - V7.1

## Platforms

- Tincup (1200) , Rawhide (4x00)
- Turbolaser (8x00)
- All other AlphaServers (Storage & S/W only)
- VAX/VMS (Storage & S/W only)

## Devices

### Storage (SCSI, HSx, SWXCR)

### FRUs

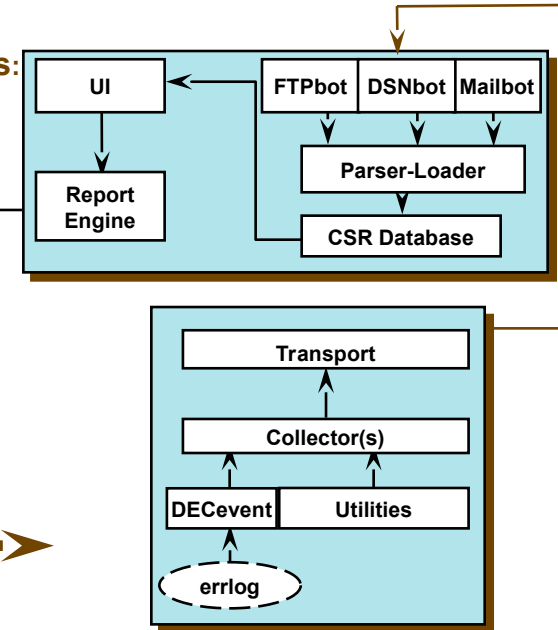
- Processor, Memory, Cache
- System Bus Bridges
- PCI, EISA, XMI Devices
- Power Supply
- Console

## Software

- O/S
- Layered products installed
- Patch sets and sub-sets

### RCM Reports:

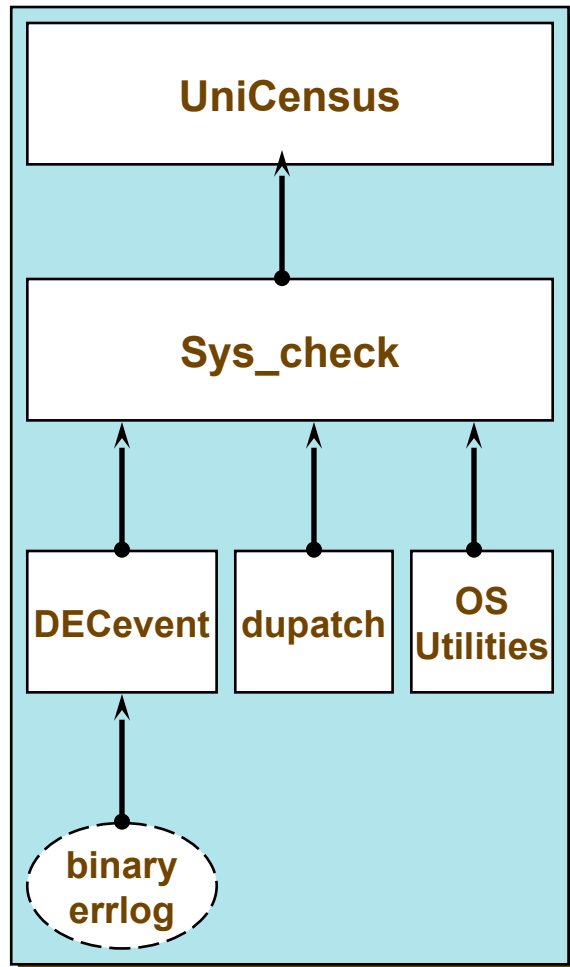
- Configuration
- Comparison
- Change



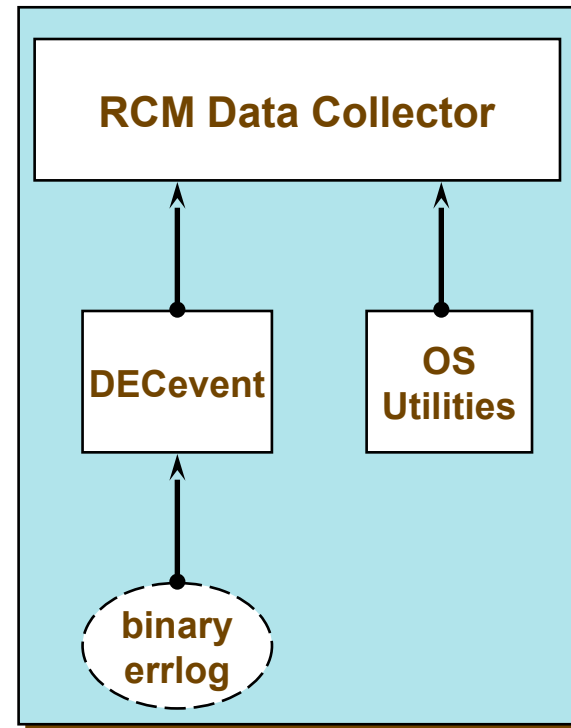
### RCM Data Collection

# How RCM Collection Works

**Customer System - UNIX**



**Customer System - OpenVMS**

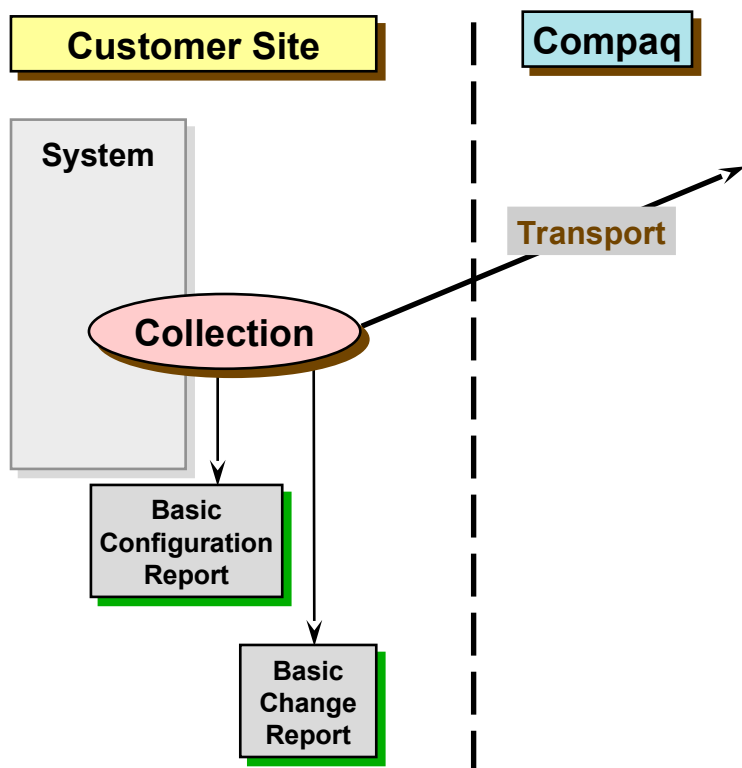


**Note:** On OpenVMS, RCM collects data cluster wide.

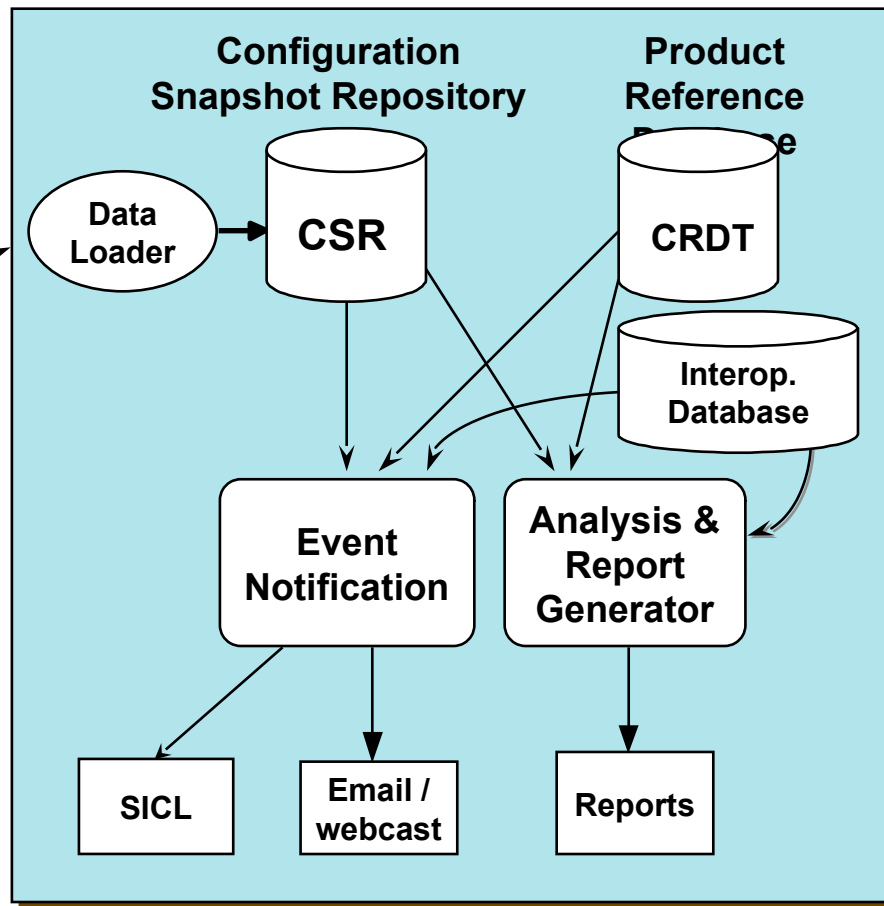
## ■ RCM V2.2

- New collection strategy required for Configuration Tree V5 based systems
- Configuration, change and comparison reports for Goldrush (DS20 )
- WindowsNT support for Goldrush

## RCM Collector

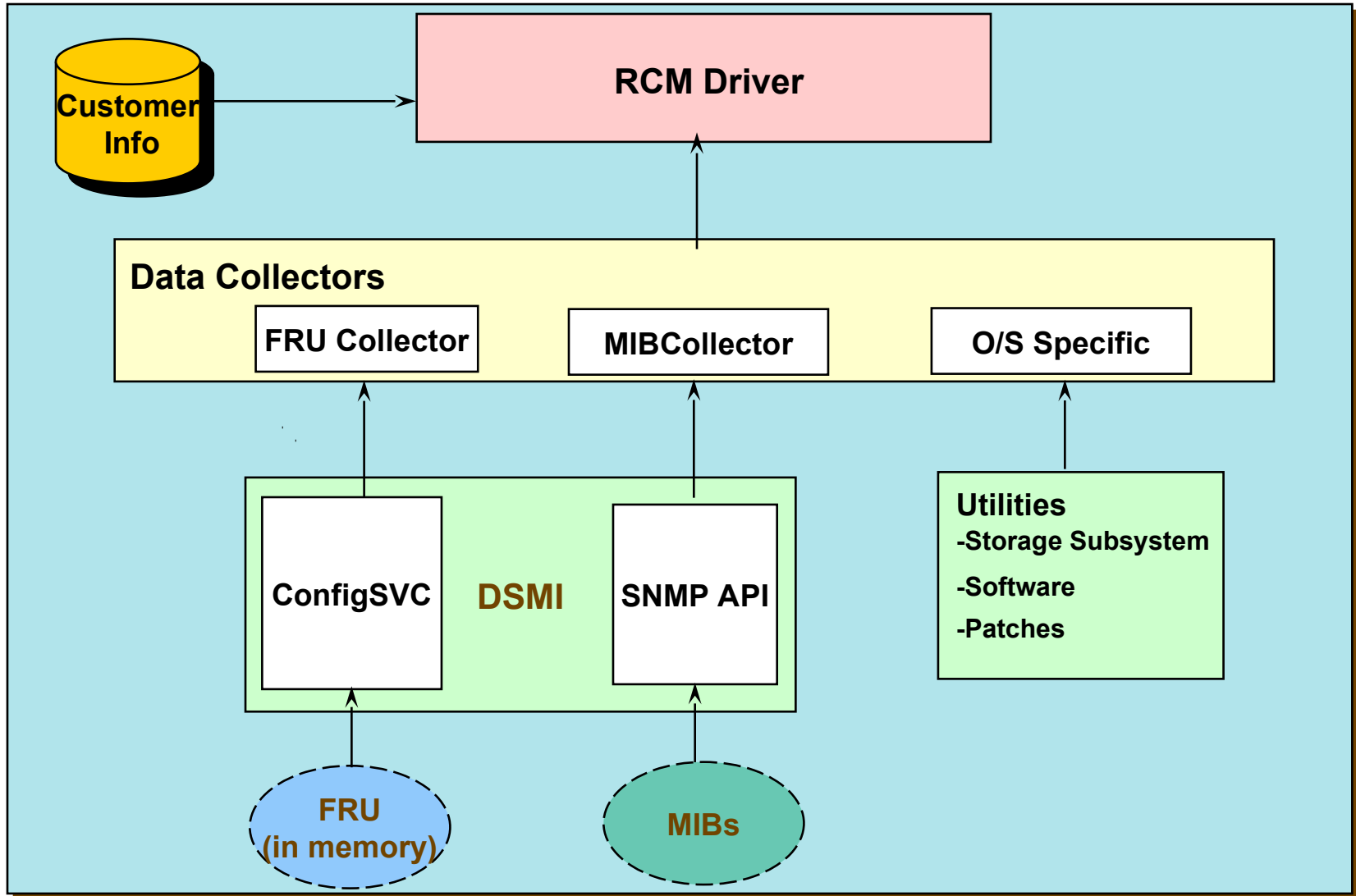


## RCM Back-end



- **Configuration, change, comparison reports for**
  - Clipper; Digital UNIX, OpenVMS, WindowsNT
- **Add product reference database (CRDT)**
  - Coverage includes UNIX patches, hardware revision data, ECO information, storage sub-system reference
  - Hardware configuration and revision data - *Clipper* only
- **Revision Analysis reports**
  - Shows valid revision & appropriate ECO
- **Pro-active event notification**
  - Patch released, hardware upgrade, configuration report ...

# RCM Collection on Clipper



# RCM V3.0 - Revision Analysis Example

Part#	Installed FRU Rev	Latest Avail. Rev	Released Revision	ECO Abstract	Link to ECO Description
54-24773-02.B01	B01	D04	D04	Changed mount...	<a href="http://...">http://...</a>
			D01	Fixed bug in ...	<a href="http://...">http://...</a>
			C01	Functional impr ...	<a href="http://...">http://...</a>



- **Configuration analysis**

- Verifies that a system is compliant with configuration rules
- Available on:
  - Compaq AlphaServer GS40, GS80 (Wildfire)
  - Compaq AlphaServer DS20, ES40 (Clipper)
- Configuration analysis to use same rule-set as sales and manufacturing

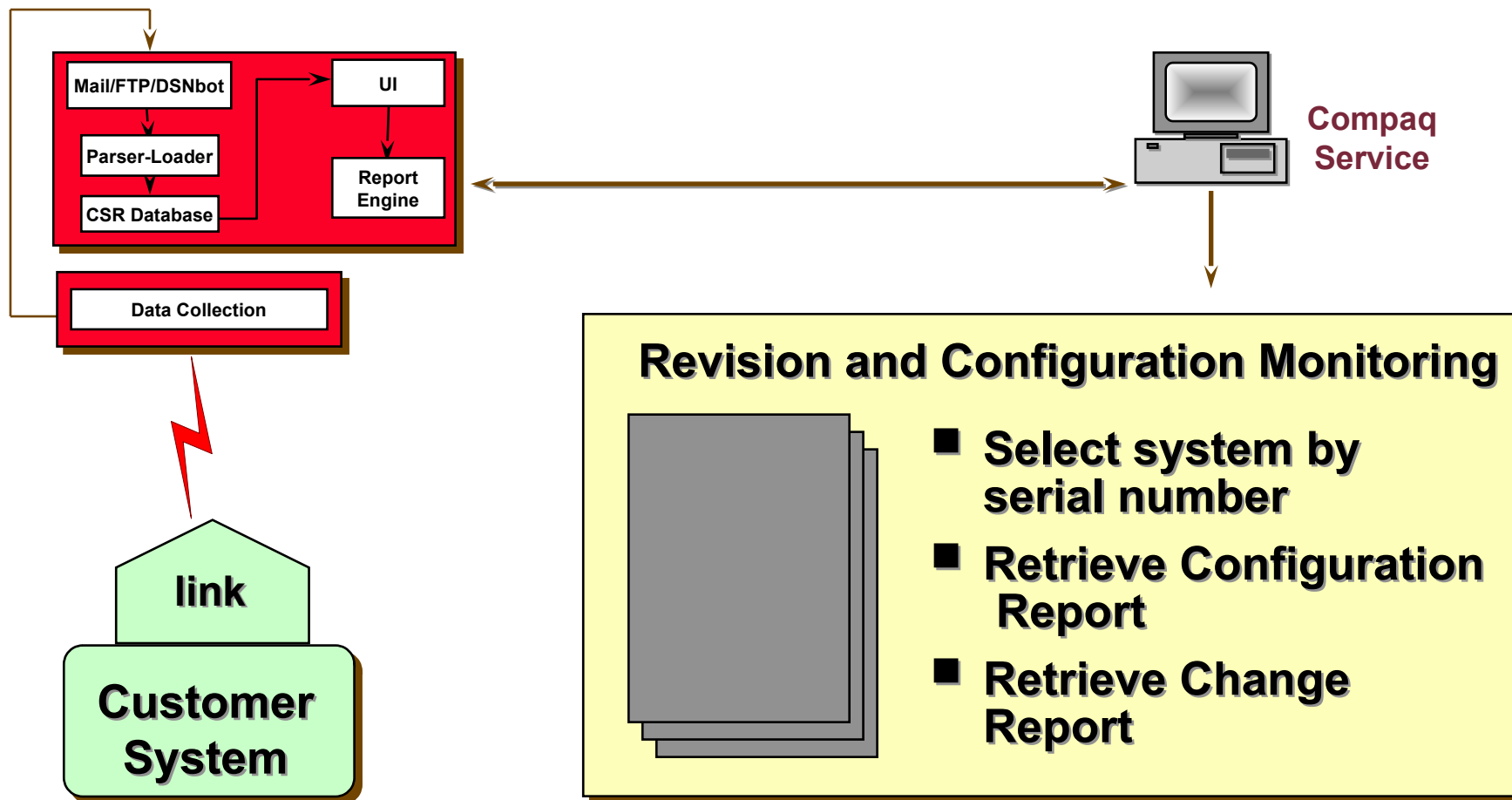
- **Known-problem analysis**

- Evaluate system configurations against knowledge base of 'known-problem' rules
- Report out known problems that may afflict a system
- Recommend appropriate pro-active service actions to avoid the known-problems

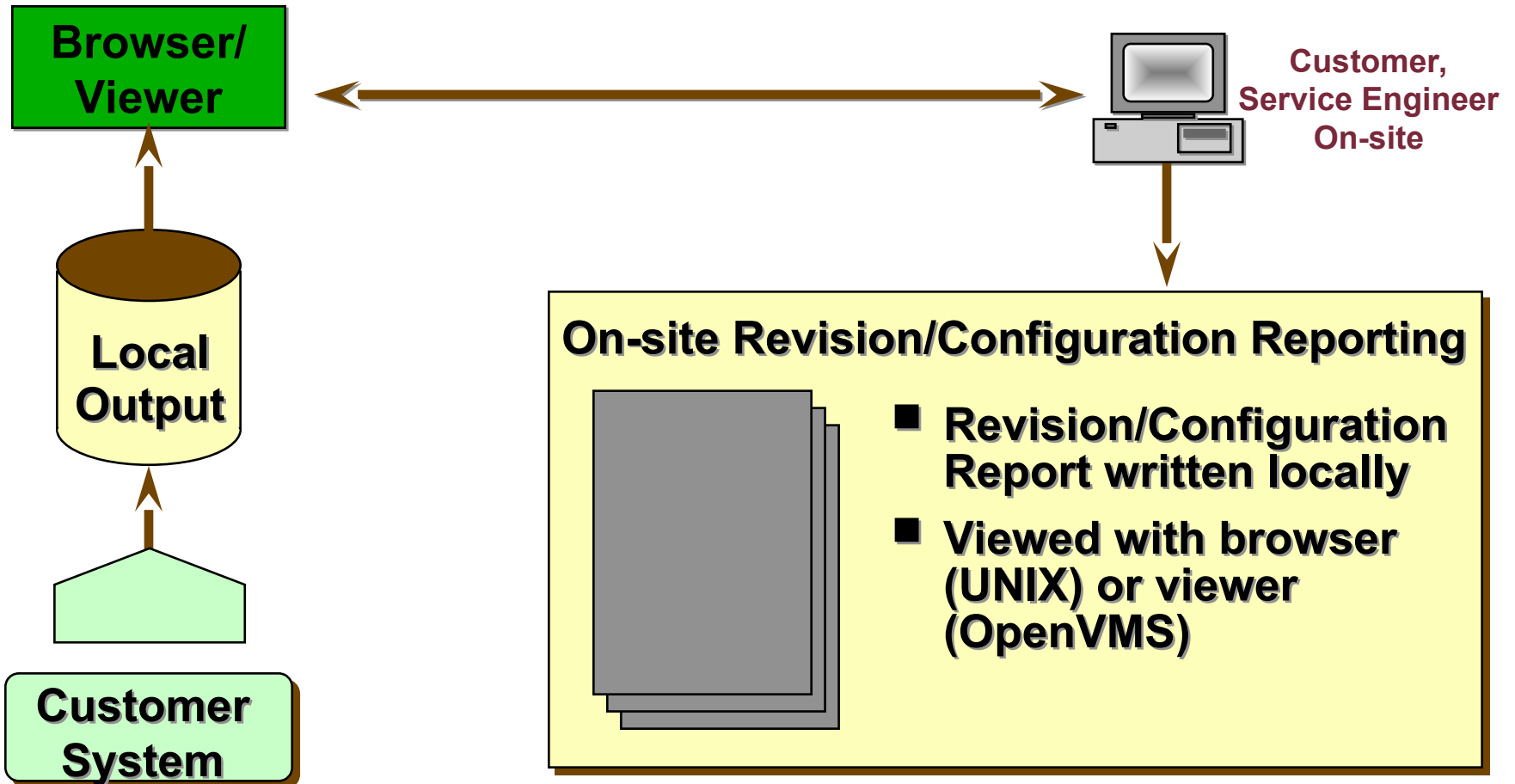
- **What-if analysis**

- “If I add this storage sub-system and upgrade to this version of the operating system, what else will I have to do to ensure the system works first time?”
- On-site delivery of analysis capability
- Will be planned through CIM-XE integration effort

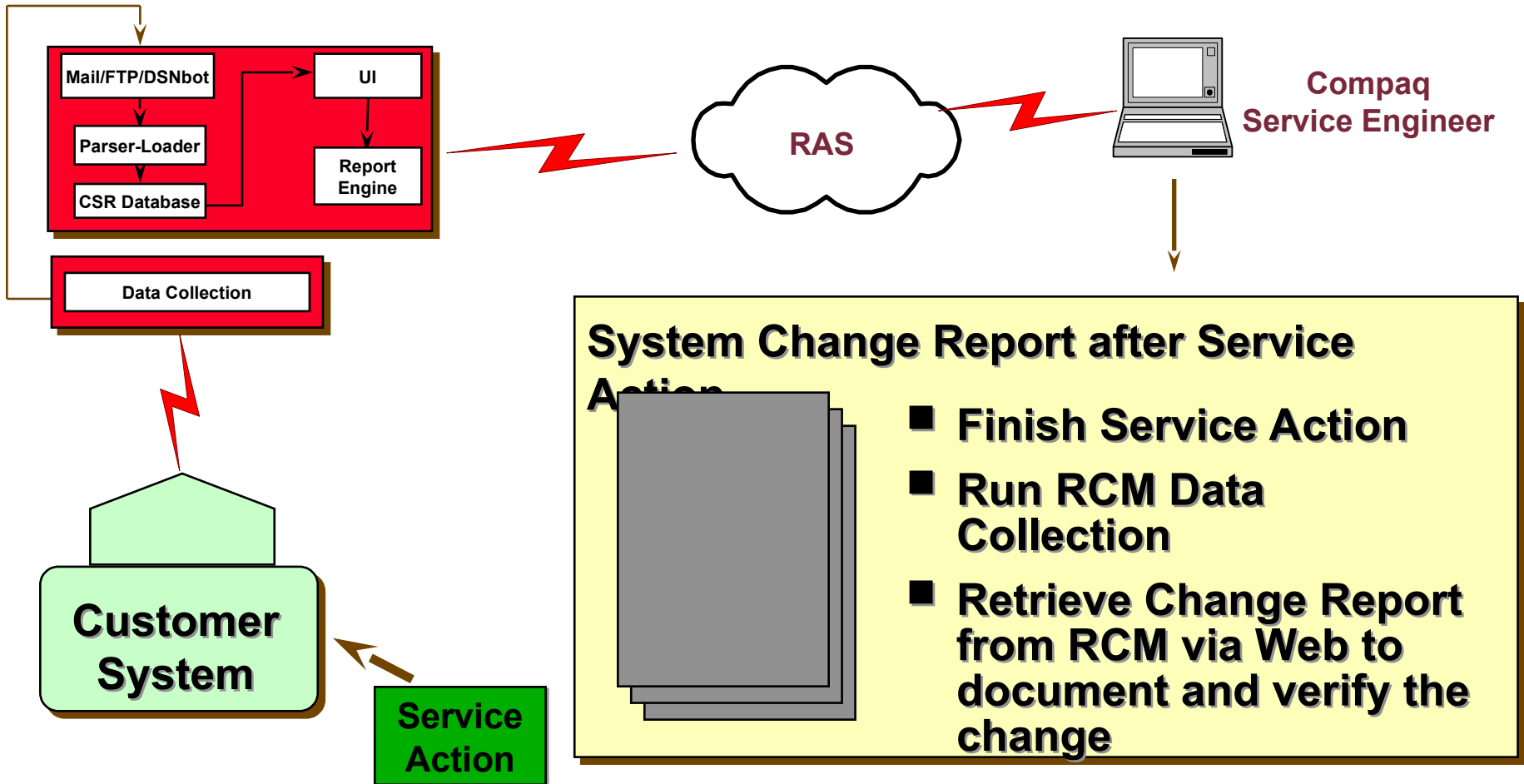
# RCM Deployment Scenario #1



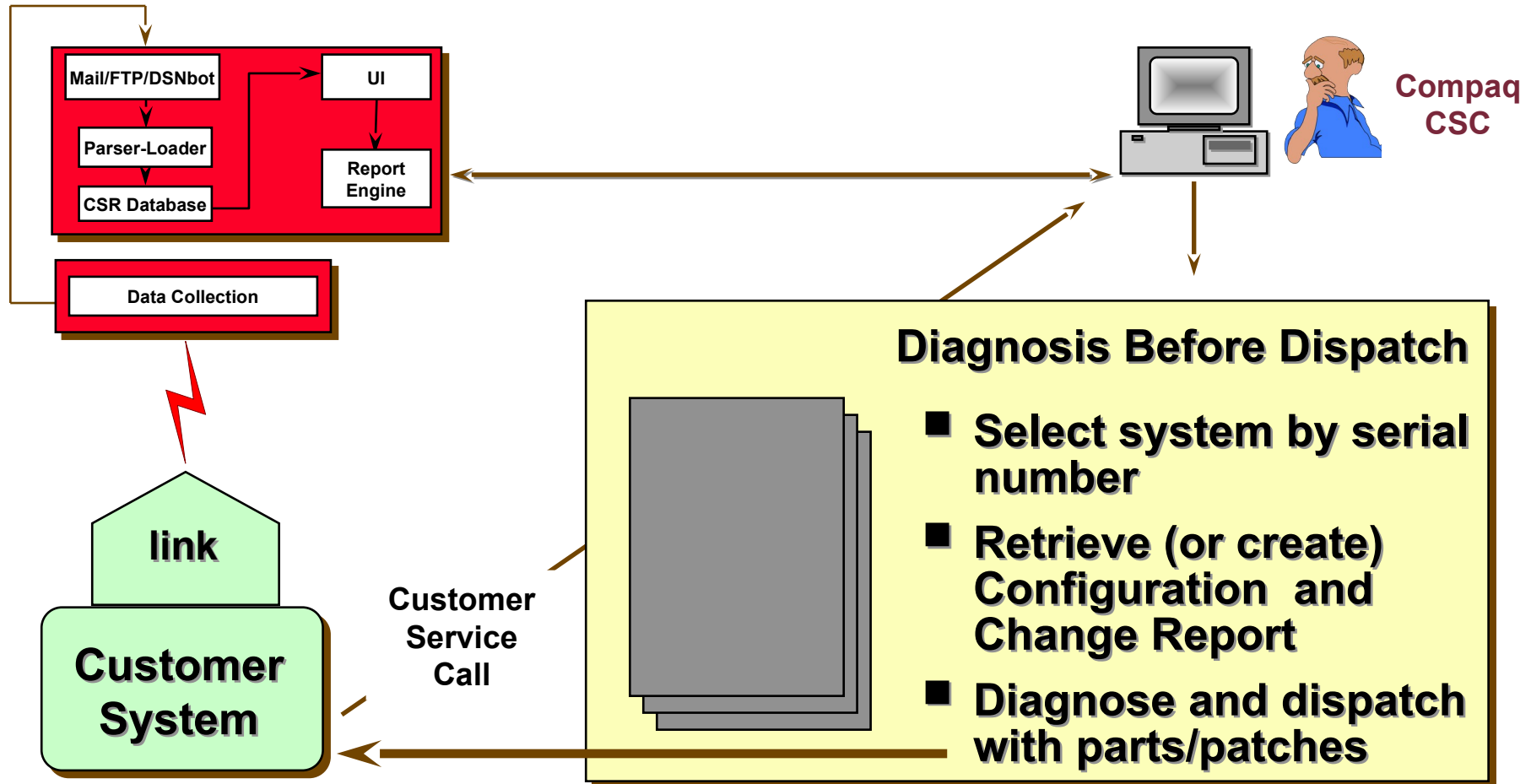
# RCM Deployment Scenario #2



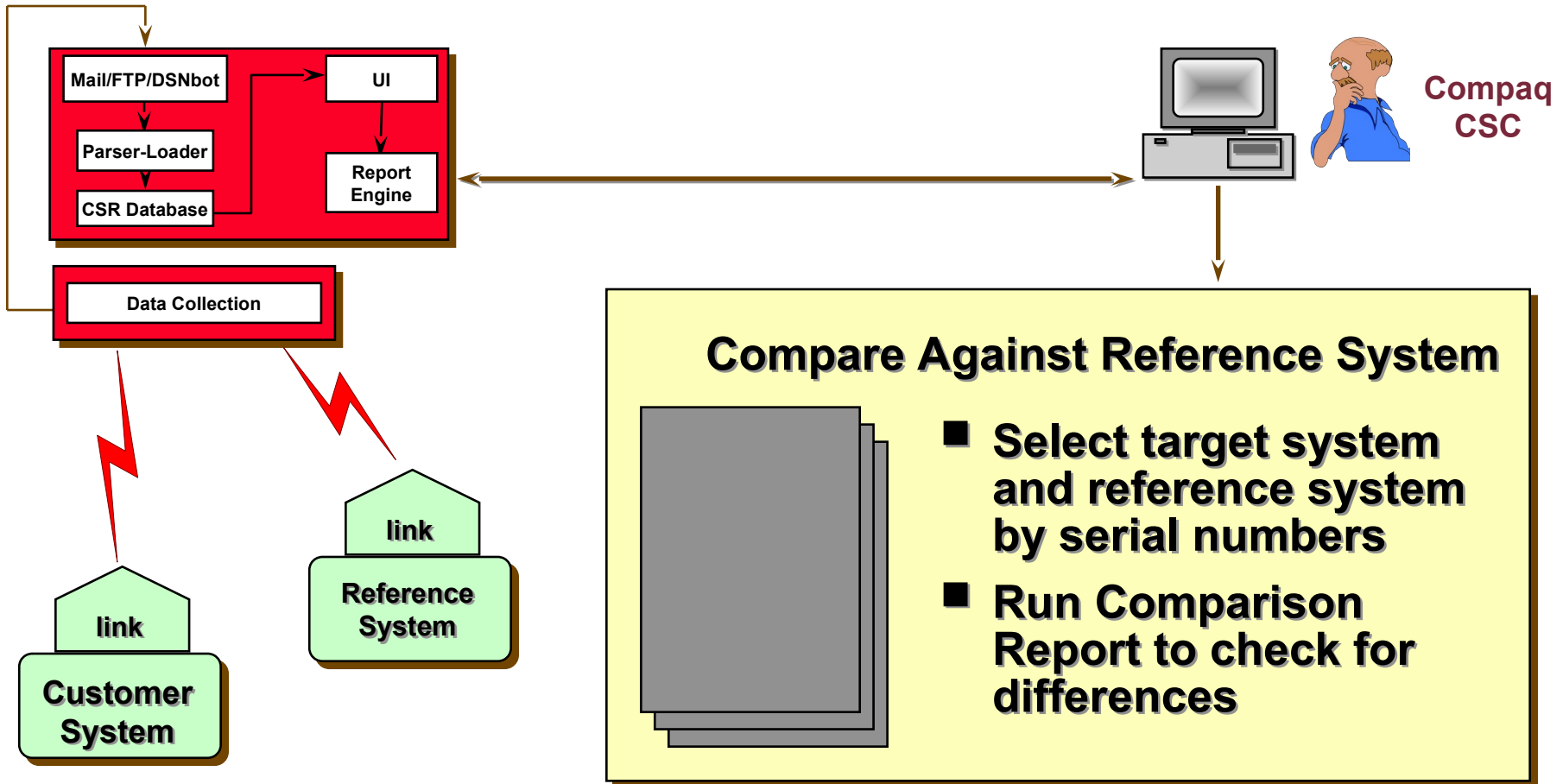
# RCM Deployment Scenario #3



# RCM Deployment Scenario #4

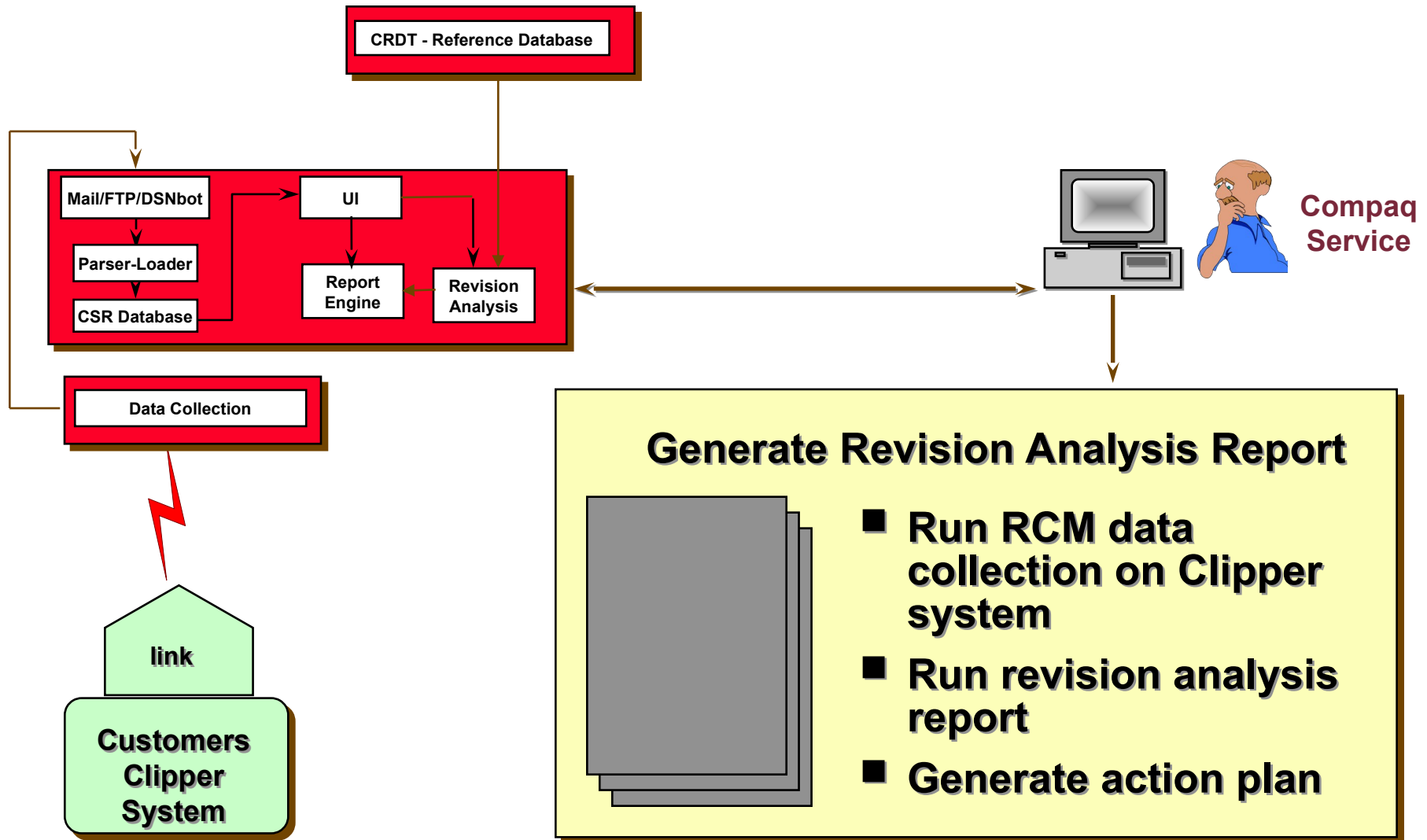


# RCM Deployment Scenario #5





# RCM Deployment Scenario #6



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- For more information, please visit our website at:

<http://smsat-www.ilo.dec.com/products/rcm/service/index.htm>