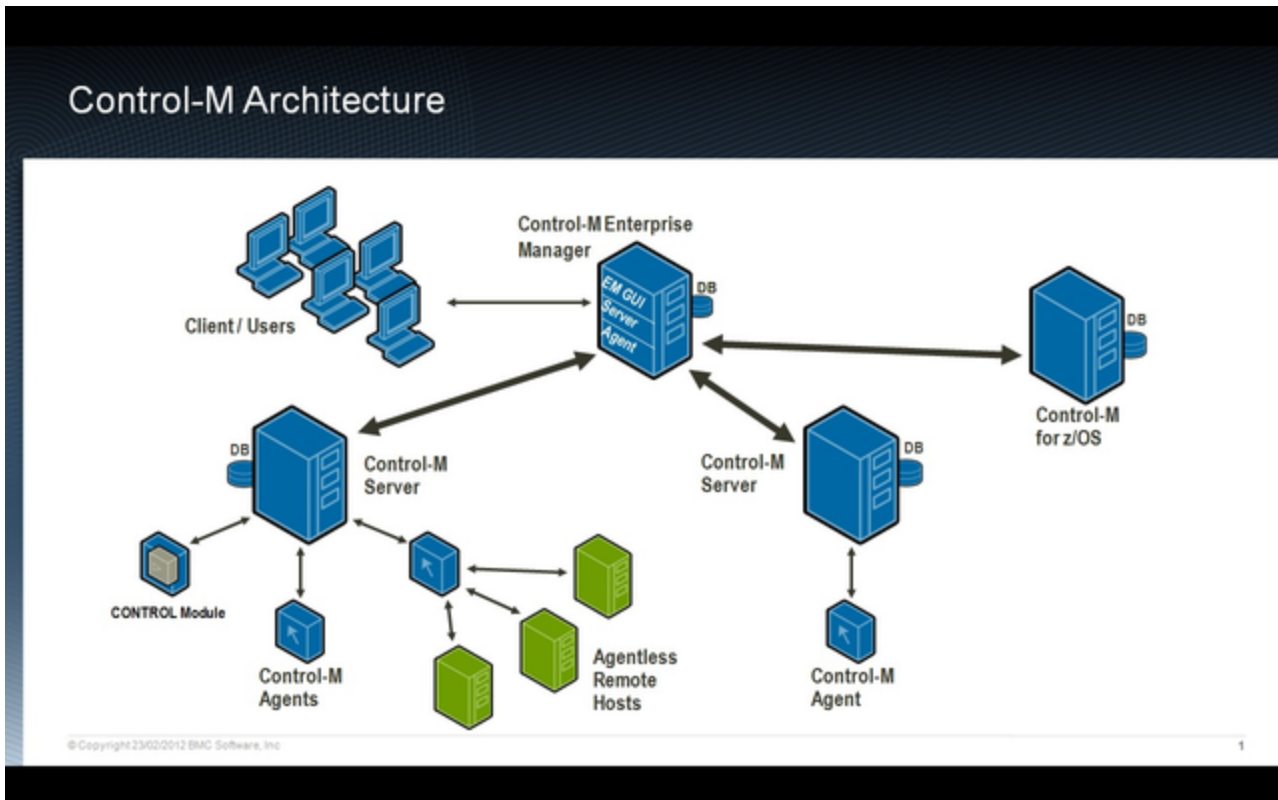# How To - Control-M

- Control-M Workload Automation is a solution to your batch processing production control requirements, which lets you automate the scheduling of your batch flows, and lets you monitor the processing of your batch flows. At the center of infrastructure, data, and applications, it improves SLAs and accelerates application deployment. Control-M simplifies application workflow orchestration. It makes it easy to define, schedule, manage and monitor workflows, ensuring visibility and reliability, and improving SLAs.
- It is a multiplatform tool, allows to schedule jobs on unix based (Solaris, Linux, AIX, HP-UX), windows based and some other powerful platforms such as IBM Z/OS, iSeries machines etc
- It enables to define, schedule change and monitor complex batch services.
- It enables predictive analytics that help to address problems before they effect business.

Architecture

Following are the components of Control-M

- Control-M/Enterprise Manager
- Control-M/Server
- Control-M Agent
- Agentless Remote Hosts
- Control Modules
- Control-M Add-on
- Control-M Client
- Working of Control-M

Control-M Enterprise Manager

- The Control-M/Enterprise Manager is a workload automation tool which provides a single, centralized point of access and control of your batch processing environment.
- It controls the entire organization batches (Jobs) i.e. there will be only one Control-M/Enterprise Manager for whole organization.
- Control-M Enterprise Manager handles multiple Control-M/Servers and it is platform independent. It means it can handle Control-M/Servers running on different platform.
- Control-M Enterprise Manager has a centralized database which keeps all job details running on different Control-M/Servers.

Control-M/Server

- Control-M/Servers are the heart of Control-M processing.
- These are the scheduling engines that schedule jobs, manage job processing flows, and provide notification of job flow status.
- Control-M/Server database—each Control-M/Server has its own database that contains the job processing definitions (organized by scheduling table) for which it is responsible.
- Control-M/Server submits jobs for execution on Control-M/Agent or Remote host computer, monitors the jobs and perform post processing analysis.
- After job completion it sends the status of job back to the Control-M/Enterprise Manager.

Control-M Agent

- As the name implies, a Control-M/Agent is an agent of Control-M/Server.
- A Control-M/Agent runs jobs on behalf of its requesting Control-M/Server, tracks the job processing, and returns status information back to the Control-M/Server.

Remote Hosts

- As an alternative to having a dedicated Control-M/Agent installed, Control-M jobs can be submitted to remote hosts without having Control-M/Agents installed on the remote host computers.
- There are certain advantages of Control-M/Agent and Remote host on which we can decide weather to install agent or configure Remote Host.

Control Modules

- Control Modules are the additional modules which provides advance features in Control-M.
- Following are some of the control modules
    - Advance File Transfer module (AFT)
    - Database Module
    - Self Service
    - Business Process Integration module (BPI)
    - SAP module
    - PeopleSoft, Informatica, Oracle Buisiness Suite and many more.
- Control-M modules are installed on Control-M Agent.

Control-M Add-on

- Control-M also provide some add-ons to enhance the control-M functionality.
- Following are the add-ons available in Control-M:
    - Forecast
    - Batch Impact Manager (BIM)
    - Control-M Workload Change Manager
- Control-M Add-ons are installed on Control-M/Enterprise Manager.

Control-M Client

- Control-M Client is a windows based graphical user interface used to draft and monitor jobs.
- Control-M Client also include Control-M Configuration Manager to manage configuration and Control-M Reporting Facility to generate various reports.
- Control-M Client provide following GUIs
    - Control-M Workload Automation View
    - Control-M Configuration Manager (CCM) View
    - Control-M Reports View

Working of Control-M

- Data Definition File / Job Definition File
- Active Job File
- Control-M Enterprise Manager database keeps the "permanent" copies of the job processing definitions—permanent insofar as they remain unchanged until you modify or delete them

Control-M/Agent v/s Remote Host

- Remote Host Advantages:

- It does not require any installation.
- It does not require upgrade.
- Easy to add and Remove.
- Control-M/Agent Advantages:
  - Control-M/Agent supports Control Modules which provides additional facilities like running file transfer jobs, executing database queries etc.
  - It comes with additional File Watcher feature.
  - We can run jobs using Control-M/Agent utilities.