MOTOROLA

The Motorola Offline Loader OLL1000 is a specialized carousel server that provides the capability to rapidly load numerous code objects on various set-top box types in a warehouse environment or other staging area independent of the production system. The OLL1000 uses broadcast functions to clear stale code and/or configure mixed set-top types, so that no individual set-top addressing/configuration is required.

The OLL1000 provides the warehouse with more control over code suites. It does so by keeping the loading independent, which has the added benefit of pre-loading set-tops in anticipation of planned code upgrades to support field installations on the day of the code upgrade. It is possible to create the code assignments for the new code a day or two in advance, providing the warehouse with more control over the code suites being pre-loaded.

As shown in the figure below, the OLL1000 system consists of an OLL server, an OM1000/2000, and a population of set-tops. The OLL provides a canned OOB transport stream, necessary configuration messages, code download control messages, and a DCII-compliant code download object carousel to allow a set-top or host to download the desired suite of code objects for a particular warehouse or region.
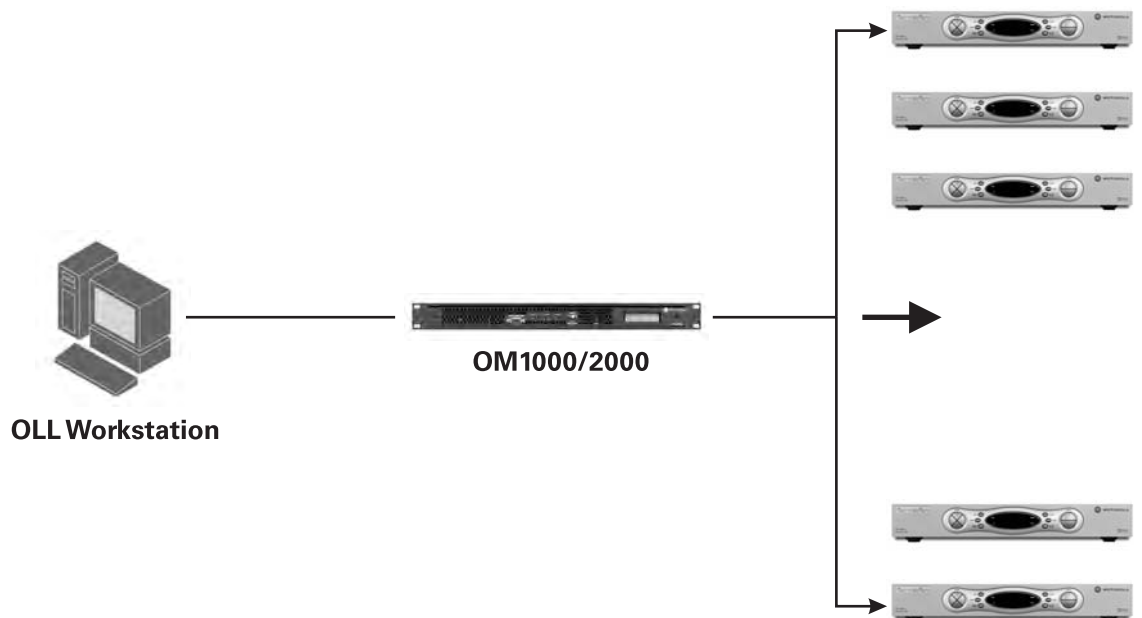
OLL Workstation

OM1000/2000

advanced media technologies®

Benefits

- Supports standalone operation

  - Frees up bandwidth on the production system

  - Greater flexibility without risk of interaction with the production system

  - Enhanced security, isolation, and hardening

- Enables rapid deployment

  - Pre-configured installation CD minimizes required setup

  - Automatically stages content/commands for transmission

  - Reduced home installation time

  - Flexible control via drag and drop of code suite message infrastructure generation

- Simplifies downloading

  - Enhanced tools minimize manual steps and support flexible download configurations

  - Easy configuration and pre-provisioning of set-tops / hosts that use the legacy OOB

- Improves download performance

  - Leverages bandwidth of dedicated OOB

  - Allows downloads at high bitrates

  - Improves acquisition time on legacy set-tops

  - More control over pre-loaded code suite

- Reduces deployment cost and time

Downloading Code Objects

The Motorola OLL1000 provides the following to enable an RF or Ethernet set-top/host to download the suite of code objects for a particular warehouse or region.

- Canned OOB transport stream

- Configuration messages

- Code download control messages

- A DCII-compliant code download object carousel

Concept of Operations

- Canned out-of-band with built-in support for 20 background services

- Pre-configured carousels supporting:

  - Canned OOB (PID 0, 1, PMT, Network, EMM)

  - Download control commands

  - Initialization and cold-initialization commands

  - Up to 20 code/data objects

- Definition of Download Packages via drag and drop of code/data objects into a pre-defined directory structure

  - Highly simplified download control command syntax

  - Highly flexible download configurations with optional configuration file settings

  - Download control messaging support on EMM and background service PIDs

- Execution of package preparation/staging tools via double-click

  - Auto-generation of CDG compatible XML

  - Manual override of auto-generated XML

- Optional cold-initialization of set-tops prior to downloading

  - Useful for clearing previously fielded set-tops

- Optional warm-reset of set-tops when download completes

  - Provides indication to operator without having to monitor serial port output or OSD

- Optional initialization of set-tops after downloading

  - Useful for clearing set-top configurations prior to fielding