Advanced playout and distribution automation from Pebble Beach Systems

Marina delivers powerful, scalable playout automation for systems from one to hundreds of channels, combining architectural flexibility, exceptional system resiliency and extensibility to meet the evolving needs of today’s rapidly changing media environment.

Features

**Scalable Architecture**
Using the latest development tools and methodologies, Marina is a feature-rich automation solution which can economically scale from a single channel to hundreds of services across geographically dispersed locations, and can be architected to fit highly complex and rapidly evolving environments. Its modular applications and standard IT hardware implementation allow architectural flexibility while offering a rich, highly adaptable solution platform.

**Agile Technology**
Marina is designed to manage legacy products and platforms as well as emerging solutions such as channel-in-a-box technologies within video, IT and hybrid infrastructures, and can quickly adapt to new workflows and specific customer requirements using web services and software plug-ins.

**Comprehensive Integration**
Feature-rich connectivity tools closely integrate into a wide variety of workflows offering advanced protocols for digital asset management, traffic, news and scheduling systems, including BXF, MOS and vendor-specific APIs. Whether Business Process Management (BPM), Hierarchical Storage Management (HSM), or the latest integrated channel technology, Marina is designed to integrate across a variety of broadcast ecosystems.

**User Rights Management**
Comprehensive administrators’ toolset for managing and monitoring operator login, activities and audit trails is included.

**Unicode Compliance**
Operation in multiple languages including Chinese, Japanese and Arabic is available, right down to the metadata and database level. Multiple languages can be handled concurrently, and the entire system can be toggled instantly and completely back to English as required.

**Full Audio Track and Multilingual Management**
Multiple audio tracks are managed in association with a single stream of video, dynamically selecting the appropriate audio tracks on a per event basis to deliver, for example, multilingual services, descriptive video or secondary stereo according to target audience requirements.

**Media Aware**
Database-driven media management functionality offers automatic caching and conditional file movement, and allows the system to be contextually aligned with QC workflows and playout services.
Streamlined Operations
Marina's highly flexible and rich user interface can be optimised for individual and group accessibility, exception handling and resource access. This effectively improves service loading and workflow efficiency by simplifying the operator experience. Each operator can control a high density of channels, and desktop layouts can be fixed to streamline operational practices and minimise errors.

Solution Flexibility
An extensive 3rd party product integration portfolio and highly evolved control features create market-leading performance, minimizing cost and operational impact when launching new channels or workflows. The system is designed to deliver flawless control of a wide variety of channel types in any combination, whether live and unpredictable content, regional opt-outs, simulcast, or simple clip-based channels.

Branding Versatility
Media providers continue to differentiate their services with increasingly complex on screen branding, promotions and graphics. Marina can provide added value by automating the creation of complex elements driven by single or cross-channel program schedules, metadata and contextual variables to deliver run time promotions.

Media Status
safeguard the smooth playout of all channel types:

- **Summary Cell** – concise at-a-glance display of device and media status
- **Key Frame Display** – instant confirmation that correct media is cued
- **Media Validation** – visibility of upstream media validation information ensuring all elements are ready to play
- **Conditional Playout** – context-based playout rules. All playlists are linked with the database and immediate changes can be applied if media is embargoed
- **Embedded Media Viewer** – high resolution content can be viewed directly in the UI so that content can be QCed or timecode points allocated for segmentation
- **Join in Progress** – enables the schedule to be rejoined after an overrunning live event

Complex Event Control
Groups of commonly used events, for example for the end of program sequences, can be grouped into a single object, simplifying the playout of multiple levels of secondary and even tertiary events.

Marina delivers a host of tools to
64-bit, multi-core, multi-thread processing power
Marina applies the latest software development technologies, using standard hardware platforms to benefit from ongoing generic advances in IT processing, and delivering robust, resilient and advanced functionality without reliance on bespoke hardware.

Distributed Modular Architecture
Architectural flexibility allows system designs that balance resource and operational requirements. The system’s suite of capabilities is built using modular services blocks, providing customers the freedom to design systems based on their logistics, operations, personnel, technological resources, and future business models.

Device Control
Marina is designed for optimal performance whether working with legacy third party audio and video devices, the newest generation of multi-functional devices or the hybrid combinations of both typically found in modern media facilities.

As third party platforms add features and functionality, their control protocols become vastly more complex and demanding with increased metadata handling and network-based close integration. Marina is committed to keeping pace with these dynamics to continually provide the most elegant and system-oriented solutions.

System Resilience
Marina’s hardware and software have been designed to deliver high reliability, using software mirroring and network teaming to ensure robust on air operations. The system also supports a wide range of features to overcome underlying device failure, including Air Protect, playlist mirroring, N+n redundancy, SQL mirroring and automatic controller failover. Playout automation requires 99.999% availability and Marina is built around auto-recovery, system adaptation, and operational contexts to provide maximum system resiliency, availability and serviceability.

Marina Architecture
Linear Scaling Costs
Clients, channels and devices can be scaled independently of each other, and the necessary processing power added as required.

Lower Power Consumption
Marina delivers highly efficient use of the underlying hardware to optimize the load in every server and ensure compact system design.

For example, a typical 16 channel fully redundant system can be accommodated in 5 servers occupying just 9ru, consuming 3500W, including a mirrored SQL database. A 50 channel control system would fit into 16ru.

Resource Utilisation Tracking
Actual resource usage across the system is tracked so that the system configuration and its underlying resources can be adapted as required. Metrics are provided on how much time devices are actually used for so that the administrator can establish whether the system has sufficient or excessive resources. This helps to control the cost of ownership, reducing unnecessary expense and complexity.

Maintainability and Support
Engineering user interfaces allow for simple system configuration by system administrators. With comprehensive error logging built in to enable the swift diagnosis of malfunctions across the system, technical staff can be alerted by SMS and email of any alarm warnings, and alerts sent into SNMP based systems. Remote login and support is delivered, enabling problems to be investigated remotely, and configuration changes to be effected.

Pebble Beach Systems has checked the information in this datasheet and believes it to be accurate. However the company accepts no responsibility for errors or omissions. Pebble Beach Systems reserves the right to modify its products and specifications without prior notice.

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