HOLLYWOOD PROJECT

Alpha 2 Report

The state of Hollywood development as of November 6, 1998

[redacted]

Table of Contents

HOLLYWOOD PROJECT
Alpha 1 Report

Objective of document:
To objectively convey the state of total Hollywood development as of Alpha2 as measured against testable requirements. We desire that Prevue can hang it's hat on our measurement. PDQA will issue a report at the end of each milestone relating:

Objective Measures:
- State of the requirements
- Percentage of requirements met (App., Remote, and System compliance)
- Number and severity of outstanding incidents against each app.

Subjective Measures:
- Gut feels
- Post-mortems - Looks back to things we probably can't change but may guide us in moving forward.

Summary:
Alpha1 notes
The Hollywood Project is on track at the moment. Alpha 1 was met for the most part (although regrettably some difficult Alpha1 features were postponed to Alpha2.) and in some cases development is ahead of where we thought we would be months ago. Despite being on track, we have a tremendously aggressive and challenging time ahead and we must be diligent in communicating warning flags at earliest opportunity.

Alpha2 notes

Conventions used in this document:
If no state is present then the function is not due, not complete or not tested. The development team may consider it complete but until it is verified, there is no way for management to tell **incomplete** from **completed but not released to PDQA**.

✓ Passed test

 Passed with caveats

 C.G. complete, system test awaiting BackOffice completion

S - System has tested capable of feature
A - Application has tested capable of feature
R - Remote software has tested capable of feature

Underscore red Passed everything except … underscored words

Requirement Documents and summary of compliance.

The requirements of the project are currently a set of 14 documents that define the project. These numbers closely match our Alpha1 expectations. All numbers are approximate.

Table 1

State	Document	# of requirements (Approximate)	% verified complete Sys.	% verified complete App.	% verified complete c.g.	Development guess (A1 / A2)
✓	• "Display Functionality"	200			32%	80% /
✓	• "Transmission Subsystem (Teleporter)"	16			62%	80%
✓	• "Transmission Manager"	19			0	50%
✓	• "The Vault"	42			0	60%
✓	• "Media Retrieval and Archival Functionality"	12			0	0%
✓	• "The Backlot"	56			0	40%
✓	• "Hardware Specs"	NA			NA	NA
✓	• "Backhaul Functionality"	14			0	10%
✓	• "Monitoring Functionality"	30			0	50%
	• "Digital Uplink"	3			0	?
✓	• "Bridges"	65			0	40%
✓	• "Auditing and Billing Function"	40			0	0%
✓	• "Promotional Philosophy"	130			0	80%
✓	• "Graphic Ad Requirments for Beta"	5			0	0%
	• Localization					
?	• RetailTrade Zone / Video Insertion					
	Total	527			14%	~70%

These documents can be found at: http://arachnid Click on the pulldown menu Document / Hollywood

Requirements

For Alpha 1 only items in the first 2 requirement documents in Table 1 had testable requirements.

Table 2 "Display Functionality" compliance detail

Compliance	Notes	Requirement
		1 Purpose
		1.1 Provide a broadcast quality Prevue Channel and give the ability to change the look easily.
		2 Functions
		2.1 Video, Audio, Text and Graphics (Tagging)
		2.1.1 Content Requirements
		2.1.1.1 Support Before Order Window per source per program
		2.1.1.2 Support After Order Window per source per program
		2.1.1.3 Provide custom order information including override and default order information.
		2.1.1.4 Ability to display tagging matching the following:
	✓	2.1.1.4.1 Title
		2.1.1.4.2 Rating (MPAA/TV Ratings)
	✓	2.1.1.4.3 Source
		2.1.1.4.4 Source Filter (PPV, SBE, Sports, etc.)
		2.1.1.5 Ability to display a literal tag with:
		2.1.1.5.1 Title
		2.1.1.5.2 Rating (MPAA/TV Ratings)
		2.1.1.5.3 Source
		2.1.1.5.4 Any Text
		2.1.1.6 Ability to display alternate video if no match from above
	✓	2.1.1.7 Ability to display default graphic and audio if no alternate video match
		2.1.1.8 Ability to display a regional tag
		2.1.1.9 Ability to display programming and promotions as:
	✓	2.1.1.9.1 Now Showing, Next Showing when in progress
		2.1.1.9.2 Airing Frequency (Monday, Weekdays, Tonight, etc.)
		2.1.1.9.3 Day, Time, and Channel specific further than one day
		2.1.1.10 Ability to support the following wild cards:
		2.1.1.10.1 Title Match for Sports (NHL*, NFL*, etc.)
		2.1.1.10.2 Title and Source Match
		2.1.1.11 Ability to display and log:
		2.1.1.11.1 National Ads
		2.1.1.11.2 Regional Ads
		2.1.1.11.3 Local Avails
		2.1.1.11.3.1 Graphic Ads
		2.1.1.11.3.2 Text Ads (with font and color control)
		2.1.1.11.3.3 Video Insertion
		2.1.1.11.3.4 Local Interconnect
		2.1.1.11.3.5 Retail Trade Zones (without requiring an additional unit to sit idle)
		2.1.1.12 Support the following Weather Info:
		2.1.1.12.1 City Name
		2.1.1.12.2 Various local conditions
		2.1.1.12.3 3 Day Forecast with:
		2.1.1.12.3.1 High and low temperature
		2.1.1.12.3.2 Icon

		2.1.1.13 Support Prevue News Headlines
		2.1.1.14 Ability to turn off different types of programming, ads, or promotions (Promo Typing)
		2.1.1.15 Ability to send or clear a program black out by system (Sporting event black out, Syndex, etc.)
		2.1.2 Display Requirements
		2.1.2.1 Ability to store and play local video.
	✓	2.1.2.2 Ability to show national feed video.
		2.1.2.3 Ability to size, crop and position video anywhere on the screen including:
	✓	2.1.2.3.1 1/2 screen
	✓	2.1.2.3.2 1/4 screen left
	✓	2.1.2.3.3 1/4 screen right
		2.1.2.3.4 2/3 screen (EVD)
	✓	2.1.2.3.5 Source and Destination positioning of the national feed video
	Text doesn't care about background	2.1.2.4 Ability to place text anywhere on the screen including:
		2.1.2.4.1 With no background. This includes Sports 1/3 screen tagging
	✓	2.1.2.4.2 With background. This includes 1/4 screen left tagging and 1/4 screen right tagging.
	✓	2.1.2.4.3 Support different backgrounds (bitmaps, gradient fill, color fill, etc.) system selectable by source.
		2.1.2.5 Support multiple pages for tagging including:
		2.1.2.5.1 For program promotion, second page order information for PPV.
		2.1.2.5.2 For literal, multiple pages of tagging. (No artificial limits).
		2.1.2.5.3 Formatted or unformatted order information system selectable.
		2.1.2.6 Ability to display bitmaps anywhere on the screen including:
		2.1.2.6.1 Merchandising icons (WOW)
		2.1.2.6.2 Stereo symbol
		2.1.2.6.3 Closed Caption symbol
		2.1.2.6.4 Source Icons (Logettes)
	✓	2.1.2.6.5 Different file formats (TGA, PNG)
	✓	2.1.2.7 Ability to insert graphics and video effects real time on the National Feed.
		2.1.2.8 Ability to support scheduled live cut-ins.
	✓	2.1.2.9 Different audio for primary, secondary, and background audio (can be satellite or local external audio).
		2.1.2.10 Ability to support stereo audio.
		2.2 Status Bar
	✓	2.2.1 Provide time of day clock (hh:mm:ss) with configurable display format including military time.
		2.2.2 Configurable time slots (3 half hour slots, vs. 4 half hour slots) synchronized with the Grid.
		2.2.3 2 Status dots to communicate data and control stream flow (Sentimental Blinky).
		2.2.4 Support Data View Titles.
	✓	2.2.5 Ability to define the fonts and colors for this area on the screen separate from the grid or tagging.
		2.3 Grid
		2.3.1 Content Requirements
		Configurable Grid Cell Contents by system
	Not BO configurable	2.3.1.1.1 Source (Text or Logette)

	✓	2.3.1.1.2 Channel Number (support for 6 characters)
	✓	2.3.1.1.3 Parenthetical time
	✓	2.3.1.1.4 Title
	✓	2.3.1.1.5 Rating symbol
	✓	2.3.1.1.6 Release year
	✓	2.3.1.1.7 Actors
	✓	2.3.1.1.8 Movie Description (Synopsis)
		2.3.1.1.9 Stereo, SAP, and ESP symbols
		2.3.1.1.10 Closed Caption symbols
	✓	2.3.1.1.11 Movie duration
	✓	2.3.1.1.12 Program Continuation Arrows
		2.3.1.1.13 Order information including order text, phone number, event text, price
		2.3.1.1.14 Merchandising icon (WOW)
		2.3.1.1.15 All Day Movie Ticket (ADMT) icon or text
		2.3.1.1.16 "Live" or "Tape Delay" on sports programming
		2.3.1.1.17 Configurable ordering of Grid Cell contents and order of drop out
		2.3.1.2 Configurable Cycle Summaries by system
		2.3.1.2.1 Summary by Source, list titles that start in x hours, but still list all times, (how far to look ahead?)
		2.3.1.2.2 Movie Summary
		2.3.1.2.3 Movie Recap
		2.3.1.2.4 Sport Summary
		2.3.1.3 Configurable Summaries by system
		2.3.1.3.1 Genre
		2.3.1.3.2 Frequency
		2.3.1.3.3 When the summary airs
		2.3.1.3.4 Look Ahead
		2.3.1.3.5 Headers and Footers
		2.3.1.4 Configurable Half Hour Breaks (:20 and :50 past the hour) by system
		2.3.1.5 Configurable Grid Banner with rotatable list by system
		2.3.1.6 Date Line under the Status Bar
		2.3.1.7 Message Channels (non-programming information in the Grid)
		2.3.1.8 Genre Sorting (Source Basis?)
		2.3.1.9 Digital Niche Views (Sources marked as Digital Niche)
		2.3.1.9.1 Header/Footer message before/after the view
		2.3.1.9.2 Configurable foreground and background colors
		2.3.1.9.3 Show on every scroll or cycle
		2.3.1.10 Digital Multiplex Views (Sources marked as Digital Multiplex)
		2.3.1.10.1 Display the programs on digital premium sources
		2.3.1.10.2 Include a title line for each timeslot summarized
		2.3.1.10.3 Ability to look ahead 1/2 hour or 1 hour
		2.3.1.10.4 Configurable foreground and background colors
		2.3.1.10.5 Show on every other scroll or cycle
		2.3.1.11 Digital PPV Views (Sources marked as Digital PPV)
		2.3.1.11.1 Display the programs on digital PPV sources
		2.3.1.11.2 Header/Footer message before/after the view
		2.3.1.11.3 Include a title line for each timeslot summarized
		2.3.1.11.4 Ability to specify a pre-promotion window and after order window
		2.3.1.11.5 Configurable foreground and background colors

		2.3.1.11.6 Configurable frequency of appearance
		2.3.2 Display Requirements
		2.3.2.1 Ability to customize the Grid specifically for each customer?
	✓	2.3.2.2 Expandable Grid Cells (Horizontal and Vertical)
	4 slots not tested	2.3.2.3 Configurable time slots (3 half hour slots, vs. 4 half hour slots)
		2.3.2.4 Configurable scroll and paging speeds.
		2.3.2.5 Configurable roll and hold durations for scrolling (pause).
		2.3.2.6 Ability to resize the Grid (if scrolling, implement different roll and hold configurations.) including EVD support.
		2.3.2.7 Ability to change the foreground and background colors by source and program.
	✓	2.3.2.8 Configurable Fonts
	✓	2.3.2.8.1 Font Name
	✓	2.3.2.8.2 Font Size
	✓	2.3.2.8.3 Font Attributes
	✓	2.3.2.8.3.1 Color
	✓	2.3.2.8.3.2 Bold
	✓	2.3.2.8.3.3 Italics
	✓	2.3.2.8.3.4 Underline
	✓	2.3.2.8.3.5 Shadow
	✓	2.3.2.8.3.6 Outline
	✓	2.3.2.8.4 Left or Right Justification or Centering (Horizontal and Vertical)
	✓	2.3.2.9 Configurable backgrounds
	✓	2.3.2.9.1 Transparency
	✓	2.3.2.9.2 Bitmap
	✓	2.3.2.9.3 Gradient Fill (Horizontal, Vertical, Diagonal, Quad fills)
	✓	2.3.2.9.4 Color Fills
	✓	2.3.2.10 Configurable Border Styles
	✓	2.3.2.10.1 3D (Raised or Sunken)
	✓	2.3.2.10.2 Plain
	✓	2.3.2.11 Configurable Border Colors
		2.3.2.12 Ability to display bitmaps including:
		2.3.2.12.1 Merchandising icons (WOW)
		2.3.2.12.2 Stereo, SAP, and ESP symbols
		2.3.2.12.3 Closed Caption symbol
		2.3.2.12.4 Source Icons (Logettes)
		2.3.2.12.5 MSO Logos
		2.3.2.13 Configurable Genre Highlighting (Genre Color Coding)
		2.3.2.14 Configurable Grid Effects
		2.3.2.14.1 Fade
		2.3.2.14.2 Slide
		2.3.2.14.3 Wipe
		2.3.2.14.4 Flip
	✓	2.3.2.14.5 Page
		2.4 System Control

		2.4.1 Ability to identify the system by head end and product.
	 Spec needs modifcation	2.4.2 Ability to download data to the remote field unit via satellite (Fake SKy) either globally or by system including the following:
		2.4.2.1 System updates (BIOS updates should maybe be handled by a floppy disk)
		2.4.2.2 System commands (Reboot, Phone Home, Refresh, Clock, Time Zone, etc.)
	✓	2.4.2.3 Software updates
		2.4.2.4 System specific configurations
	✓	2.4.2.5 Schedules, Titles, Channel Lineup, etc.
	✓	2.4.2.6 Video files (MPEG2, AVI, etc.)
	✓	2.4.2.7 Audio files (MPEG2, WAV, etc.)
	✓	2.4.2.8 Graphics (including logos, banners, brushes, weather graphics, etc.)
	 Needs clarification	2.4.3 Ability to automatically and correctly synchronize the remote unit with the atomic clock.
	 80% Not Tested Needs clarification	2.4.4 Ability to handle Daylight Savings Time correctly and automatically
		2.4.5 Specify network on-screen display format for tagging (Qtable and logettes)
		2.4.6 Provide multiple foreign language support
		2.5 Remote Monitoring and Diagnostics
		2.5.1 State of the art remote diagnostics including:
		2.5.1.1 Ability to check a machine's log
		2.5.1.2 Ability to check status of the last file
	✓	2.5.2 Supply error codes with meaningful descriptions
		2.5.3 User interface with the following capabilities:
		2.5.3.1 Ability to review primary and secondary audio, background audio and view external video
		2.5.3.2 Ability to start and stop the scroll
		2.5.3.3 Force Graphic Default
		2.5.3.4 Cycle through graphics
		2.5.3.5 Load graphic on storage device
		2.5.3.6 View diagnostics
		2.5.3.7 Test system functionality via mouse and keyboard
		2.5.4 Ability to identify that data is being received
		2.6 Local Configurations
		2.6.1 Provide the customer with the ability to configure, schedule and deliver local text and graphic ads remotely (Remote Modem Support)
		2.6.2 Provide information partners with the ability to enter local weekend events that will be aired during a Prevue special segment as text over video (Localization Back Office Update)

Table 3 " Transmission Subsystem (Teleporter)" compliance detail

Compliance	Notes	Requirement
		1Transmit Side
	Spec needs modifcation	1.1Send files and commands via satellite, LAN, or WAN.
	Spec needs modifcation. Files unicast / commands multicast	1.2Send files and commands as unicast, multicast, or broadcast.
		1.3Send multiple files simultaneously.
		1.4Send complete files or only selected fragments of a file.
	✓	1.5Interleave commands and files at the packet level.
		1.6Accept transmission requests with priorities or bandwidth allocations.
	only on error	1.7The number of packets received by the receive application (RxPod) will be available for logging and monitoring.
	no Spotlite	1.8The number of missed packets determined by the Receive Application (RxPod) will be available for logging and monitoring.
		1.9The status progress of a file object or command object will be available for monitoring. This will be a low priority process.
		1.10Provide current transmission status and issue alerts in case of problems.
		1.11Log all transmissions and their statuses.
		1.12A compression option will be available to compress non-MPEG2 files(which are already compressed). The Team will investigate existing technology such as the PNG compression scheme.
		2 Receive Side
	✓	2.1Receive and execute single commands or a list of commands. Executing scripted commands (a list of commands with flow control) would be desirable but not required initially.
		2.2Receive files and notify other process(es) on receiving machine of file arrival.
		2.3Track missing fragment information per file and route that information to the receiving machine's backhaul subsystem.
	✓	2.4Restart all command and file reception objects when the machine reboots.

Monitoring and Logging Functionality

Description of Change	Document Version	Update	Submitter
Added new functions based on Operations Functional Requirements overview and meeting.	A	07/15/98	[redacted]
Added ability to determine Product Version to both monitoring and logging.	B	07/24/98	[redacted]
Added Numbering	B	10/27/98	[redacted]

1. Purpose

1.1. Provide the ability to identify status of processes and hardware in the BackOffice and CG, from a remote location.

2. Functions

Overall Guidelines

2.1. *Monitoring*

2.1.1. Report information to the Operations System Monitoring Tool, currently HP OpenView.
2.1.2. Ability to monitor both locally and remotely.
2.1.3. All machines will appear as though they are a network connection. The implication being that all of the current tools used to administer a machine/database can be used. Overall Hollywood design will strive for as much automated correction as feasible.
2.1.4. Monitor the database state, applications, and physical hardware on both the BackOffice and CG.
2.1.5. Define the interface and common format for the subsystems.
2.1.6. Communicate to ensure that each of the subsystems is including useful reporting information. Not just an error, but why?
2.1.7. Establish thresholds and trends.
2.1.8. Three Levels of monitoring:
2.1.9. Level 1 - Is process alive? Preventative Diagnostics
2.1.10. Level 2 - Proactive Correction, Non-intrusive
2.1.11. Level 3 - Intrusive Troubleshooting, Object Exercising.
2.1.12. Work with subsystem teams to identify valid monitoring tasks.
2.1.13. Ability to determine Product Version currently running.

2.2. *Logging*

2.2.1. Common logging object to be shared between BackOffice and CG.
2.2.2. The basic log will be a table in the SQL Server database. This will allow information to be stored and analyzed locally. It will also allow easy extraction of information either locally or remotely by class and verbosity level.
2.2.3. Not all log information needs to be sent to the backoffice. The logs will be analyzed locally and messages based on that analysis sent. If basic log information does need to be sent to the backoffice, it can be extracted by class and/or verbosity level in order to conserve bandwidth.
2.2.4. Processes, which submit log information, must specify log record class and verbosity level. Log information can be filtered at various levels. A process may implement its own verbosity level. A logger object may also filter on class or verbosity level in order to conserve storage space for logs. Note that this means that a process may simply submit everything to its logger without worrying about its own verbosity level by relying on the logger to filter the items properly.
2.2.5. Ability to stamp logs with the current Product Version.

2.3. Transmission

2.3.1. Monitor signal strength from the IRD.
2.3.2. Monitor number of packets received from the receive application (RxPod).
2.3.3. Monitor number of bad packets received from the IDI module and the IRD.
2.3.4. Monitor number of missed packets from the receive application (RxPod).
2.3.5. Monitor status progress from the receive object (File or Command Object). ***This will be a low priority process***.

2.4. Transmission Manager

2.4.1. Monitor status of transmission queues based on configured thresholds. This includes the following:
2.4.2. Queue stopped
2.4.3. Queue paused
2.4.4. Queue reaching maximum capacity (reaching set threshold)

Media Retrieval and Archival Functionality

1. Purpose

1.1. Provide a generic system for storing media files in near-line or off-line storage and make those media files available on-line when needed.

2. Functions

2.1. Retrieve files from near-line or off-line storage (archive) and place into on-line storage (media cache).
2.2. Provide file listings for all files in archive.
2.3. Provide listings of files on individual media so media can be changed out as files are purged.
2.4. FIFO retrieval of media from the archive (no priority needed since media to be used should be known well in advance, relative to retrieval speed).
2.5. Provide ability to purge files from archive, on-line storage, and database.
2.6. Windows NT Connectivity
2.7. Make current media retrieval status available and issue alerts in case of problems.
Make historical retrieval and archive data available for analysis.

The Backlot

Purpose

The Backlot system is a data storage mechanism that will pull data from various sources into a composite form. Backlot sources product specific data not attainable from any other viable source. The data passes a quality assurance function, then it is reduced to immediate operational data, and finally passed onto the transmission mechanism. Backlot will manage, automatically and manually, the timely push of data into the field units. Backlot will manage requests for transmission through the transmission system.

Goals established for the Backlot:

- Supports multiple data sources
  - Apollo
  - Manual data entry
  - Paradigm
  - Prism
  - Storyboard
  - Vault
  - HP
  - Localization
  - News/Weather
- Pull data very quickly
- QA process to ensure accurate data from various sources
- QA checks in place for the data that is sourced in Studio. (product configurations)
- Common interface to allow ease of training and use
- Return audit/billing information to Laser

Functions

- Supply ALL data to the field units
- Store all outgoing data into Studio database (configurable storage time window)
- Reduce Studio database into TourBus database to be pushed to the field units
- Manage load, filter, and de-normalization of TourBus on the field unit
- Allow full and partial builds of the TourBus database
- Pull Service, PPV, and CLU information from Prism only
- Pull Source, Schedule, and Program information from Apollo only
- Store and forward Storyboard data, screenplays, mediaplays, etc.
- To facilitate quick data throughput, align data structures to source's api structure as close as possible or as appropriate
- Be able to view the data in composite form
- There will be security levels for the HW sourced data entry
- Utility/tool to view transmitted/captured databases
- Provide ability to QA the data (possibly things such as cross-system data alignment, i.e. Prism/Apollo)
- Manually adjust operational data window (in the prototype, 4 days of data are being sent to field units, in production we will initially be sending 7 days of information).
- Manually adjust data collection, reduction, and data-push cycle frequency for the full and partial TourBus database
- Provide emergency build and data-push capabilities for the TourBus database
- Log and monitor automatic and manual data-push requests of the TourBus database
- Allow manual entry of product specific data and field unit/projector configurations
- All remote hardware - target, IRD, IDI - tracking info(IP, MAC address, Ids, etc.) will be maintained in either the *Global* or Studio database
- Contain Promotional Philosophy and Screenplay Generation detailed as a separate Subsystem
- Facilitates management of job requests through the transmission system interface--Transmission Manager (Control Booth will do this)
- Audit anything that directly effect a customer's or group of customers' data
- Based on flag in Prism, block transmissions to specified field units
- Handle News & Weather feeds
- Handle localization data
- Archive database transmissions
- Ability to make target database schema and code(SQL) changes

Promotional Philosophy x52

1 Purpose

- To provide a scheduled list of desired media and alternate media for presentation at the CG.

2 Functions

- Enable manual placement of media to an appropriate spot within a given date and time.
- Enable the entry of overrides to the promotional pie.
- Automatically fill areas of the pie using predefined content conditions.
- Assist the user with filling a spot using an online version of the rules applied to automated selection.
- Allow for fixed placement of media items (Ad's, Prevue Programming, etc.) as dictated from Columbine or any other system upstream demanding placement.
- Ability to choose most appropriate media to present from the feeds available.
- Provide promotional philosophy at the C.G. Level.
  - Ability to choose something better than the national broadcast from a local source
  - Ability to choose the best option of the national feed
  - Ability to provide a local "fallback" option when standard national and local alternatives are exhausted.
- Ability to request media based not only on content but by its airing time proximity.(PPV in next 2 hours)
- Ability to present internal users with a selected days proposed play list.
- Ability to show internal users the spots which have been automatically placed.
- The GUI interface allows fwd generation and review/correction of screenplays. It will flag errors (ie. Ad spot not filled) that are user defined and include a severity rating. The GUI will allow flagging a section of the screenplay as QA'd.
- Security access levels for the x52 GUI are TBD
- Define archive and reporting mechanism for screenplays
- Add the ability to print the pie chart in the x52 GUI
- Show the hour offset at which each sement begins in the x52 GUI
- Clarify naming of "Channels" vs "Tracks" in documentation
- Ability to create a synchronized pairing lists to fulfill both national channels (A&B National Feeds of matching duration with likely very different content requests).
- The ability to change the format quickly and easily
- Integrate to Paradigm for fixed ads and programming
- Adjust for different parts of the day and week
- Allow for a frequency of promotion for a period of time.
- Incorporate National Ads
- Incorporate Local Ads
- Incorporate special segments
- Incorporate Local Insertion
- Provide time relevant, theme based and source penetration based promotion. Source penetration is defined as the percentage of systems that have a particular source in their CLU.
- Failure modes and recoverablility are TBD
- Allow absolute placement of promotion
- Have no default black time, minimized graphic defaults, minimized fillers
- The plot will take into consideration competitive separation.
- Ability to air multiple graphic ads within 30 and 60 second avails.
- Be able to divide up the hour with different kinds of programming, promotion and ads
- Capability of identifying in advance what programming can be filled in and where additional programming is needed
- No back to back playing of specific content. It is possible to present content for the same title back to back but not the exact same content.

- Deal with media files that are pieces of a whole and have to air together in a certain order
- Regional ads (National ads with regional tagging)
- Local x52 will be able to make a better choice than the national screenplay generator. Ex:
    - We will want to air local video ID's sent in by the cable affiliate at certain times during the hour.
    - We want to be able to add the local cable affiliate's graphic on the screen at certain times or in certain segments and in the grid and in the tagging.
    - We will want to air local co-branded video defaults that air when nothing better is available.
    - We will want to allow the cable operator to co-brand Prevue Around Town. (We want to be able to charge for this.)
    - We could provide local back-ground audio specific to the head end.
    - We would want to provide the opportunity for an MSO to co-brand individual program promotion spots (i.e. TCI could have their logo on the movie promo spot for Bean).
- Ability to trigger the request for the order information(PPV)
- Support All day movie ticket and whatever replaces it
- An hour is always 60 minutes. The x52 hour will have the capability to offset the beginning of the hour. Ex. The plot wheel starts at :10 seconds after the top of God's hour.
- **Desired Program Promotion**: Need the ability to have ½ screen program promotion spots source constrained to only air within systems that offer the network in their line-up. Allow a secondary ½ screen spot that would air in the systems that do not offer the network in their line-up. Allow a local default video to air in the systems so that a default graphic never shows.
- In addition to our regular ½ screen national advertising, create a pass through opportunity for local cable affiliates during the national break. The local affiliate would have the opportunity to display local information. If they did not choose to participate, the generic deal/retail information would display.

Goals established for placement and airing of National Ads:

- Play at fixed times with and without tags constrained by title and schedule and source.
- The ability to schedule ads and verify that they have played.
- The ability to easily traffic the ads for airing on a national feed or on a local system.
- The ability to easily change the ad placement template and feed that template into the Paradigm system.
- The ability to establish a hierarchy for ads. (Commercial ads take precedence over direct response ads.)
- The ability to notify PAL of problems with ad promotions through the monitoring system.

Syndicated Ads are ads that are constrained by title, episode and/or primary source.
Hollywood will need to support this as well as Regional Ads (which is really Market specific Ads in some cases) and System Specific Tagging ads.

Promo Typing
This gives us the capability of preventing certain ads from airing in certain locations. An example of this would be the EVD ads airing during the sports segment are flagged so that they don't air on Primestar systems that don't have the EVD capability. Promo Typing should really only be used in extreme cases.

Infomercials

These are National Ads that are placed at fixed times normally in the half screen format but in long form (normally 30 minutes). The challenge here is to efficiently traffic these long form ads to play digitally. Currently these ads are placed on laser disc for playback.

2.1.1 Local Ads

Goals established for placement and airing of Local Ads:

- The ability to schedule ads and verify that they have played.
- The ability to easily traffic the ads for airing on a local system.
- The ability to easily change the ad placement and control them on the affiliate level.
- The ability to notify PAL of problems of ad promotions through the backhaul.

Graphic Ads

Goals established for placement and airing of Graphic Ads:

- The ability to play local audio behind graphic ads.
- The ability to air multiple graphic ads in a 15 second pod of stills.
- The ability to show transitions between graphic ads (wipes, dissolves, slides, etc.)
- The ability to download graphics and audio remotely.
- The ability to air graphic ads back to back without a second of black.

Text Ads *Need more specification*

No functionality specified yet.

Video Insertion

- Ability to air regular Prevue programming, a local video promotion or default graphic when insertion fails.
- Affiliate runs local ads during insertion time provided. They can run graphic ads, text ads, and local video –(We could traffic it and allow them to load from CD-ROM. Madeleine says this cannot be pursued until marketability is established.) We don't really know what video they insert on local insertion. We queue the tape deck and air what they feed in. Local configuration identifies when insertion happens. If there is an error we need to handle it with default. There is a question of requiring a Time Base Corrector (TBC) that will clean up distortion in the tape feed.

Retail Trade Zone

[redacted] talked with [redacted] and confirmed that we can remove from Promotional Philosophy Requirements. RTZ information will be removed from this document.

Retail Trade Zone (RTZ) is a feature that allows a group of head ends to be linked to one video insertion device. It is made up of one master device with several slave devices. The slave devices receive their video from the master device that is hooked up to the video insertion equipment. Each of the slave devices has it's own satellite feed. (I checked with [redacted].)

Requirements same as D1, need to list.

Miscellaneous

- Need to be able to place All Day Movie Ticket (ADMT) and WOW Merchandising icons on selected movies. These allow the cable affiliate to conduction promotions. In both, a local system conducts a promotion tied to an ordering a PPV movie. We put the icon on the screen in the scroll, tagging and summaries. The cable affiliate does the education of the customer on video insertion or bill stuffer, radio or whatever. In the case of WOW, the icon means that if a customer orders a PPV movie, he will get free or discount merchandise. In the case of ADMT, he will get the movie all day at one price.
- We could keep the background audio local and save the audio channel for global.
- We need a tool to be able to look at the entire month and come back with a list of where there is missing programming so we know we need to produce more.

2.1.2Absolute Rate Control

- **Update… Hollywood Prevue Channel (Vista Product) will not need to have the intelligence of Absolute Rate Control (ARC) at a system level or national level.**

Absolute Rate Control provides the ability to choose how many times a program is promoted during an hour. The absolute is the guaranteed frequency of the promotion. There has to be some check to make sure you are not requesting something that is not possible. There are only so many spots available each hour. If you put in ARC on more than one title or type and you run out of spots, how do you know it?

We want to promote at the top and bottom of the hour what is getting ready to start especially PPV.

Goals established for Absolute Rate Control:

- Specify Rate of promotion as a function of time and available slots
- Notify when absolute rates cannot be satisfied
- Ability to place by title, source, type, etc.
- Ability to produce affidavits
- Rate is variable over time
- Day-partible or week-partible

2.1.3Special Segments

Genre specific ads should be considered during these special segments. For example, we can't have non-family promotion locally or nationally during the Family Segment. Competitive separation also has to be considered during these segments. For example, we wouldn't want to have a Ford Truck ad and a Chevy Truck ad airing back to back during the Sports Segment.

Weather,News,Sports

- Back office will schedule a meeting (specifically [redacted], [redacted] and [redacted]) to gather current information on News, Weather and Sports. These elements will be standard video with text and or video content which is localized.

3 Data Flow Diagram

- TBI

4 Processes

- Online searches for Plot based items
- Load of Columbine Ad's
- Load of Columbine Prevue Programming elements
- Search for spots which have no valid content
- Generation of screen play

5 Interfaces

- Vault
- Columbine
- Studio Live
- NCS-backward feed necessary?
- Media Retrieval System
- Media Transmission

6

7

8 Deliverables

Listed in implementation order

- Screen Play
- GUI for management of the scheduling template
- Ability to present to users the spots without content
- Set of data associated to the screen play item selected at the Local CG item

9

10 Tasks

Listed in order of priority:

- TBI

11

12 Assumptions

- All Prevue Programming is generated and fixed placed by Columbine.
- All Ad placement is generated and fixed placed by Columbine.
- All Absolute Rate Controlled Items will be fixed placed by Columbine.
- Paradigm must be in place by August for our Alpha rollout and development testing. We will not consider MAST at all.
- The Plot will be defined by [redacted] and maintained by [redacted].