

DIGIVOIR SOLUTION SOFTWARE SPECIFICATIONS

** - The features will be released in the future product upgrades or if specifically asked by customers depending on the industry evolution

1	Overview	Basic	Enterprise
	Hosted web solution - Access from anywhere	X	✓
	Distributed architecture - separate management and file servers. Apache Tomcat/Pramati Web server over Win2K/Cent OS	X	✓
	Intuitive web GUI	X	✓
	Comprehensive and extensible device management - so that cost of operations can be reduced	X	✓
	Scalable architecture - can add more servers for load balancing along with MY SQL/MS SQL database supported	X	✓
	LDAP integration for User rights management	X	✓
	SFTP, http, grouping & permission control supported	X	✓
2	Content Management		
	Real time text ticker - which can be changed Remotely	✓	✓
	Manage all the playlists online	X	✓
	Assign campaigns, i.e. schedule a playlist to be played on players or groups of players between specified times in day between two dates. Option for selecting particular weekdays are also available	X	✓
	View all applied campaigns	X	✓
	View the past, current or future schedules through intuitive timeline based GUI	X	✓
	Live tickers based on Player Name, Player Location (city , street , pin code etc) possible	X	✓
	Day based scheduling	✓	✓
	Minute based scheduling	X	✓

3	Content Distribution		
	Distributed architecture - separate management and content servers	X	✓
	Mirrored content server- so that as the number of players increases we can increase distribute the content based on Geography or network topology	X	✓
	Load balancing – Server can check the status of each server and allocate a free server for content download	X	✓
	Peer to peer content download possible	X	✓
	Content download using FTP/HTTP protocols	X	✓
	Content integrity validated after download	X	✓
	Download resumes without resending previous data	X	✓
	Grouping of players	X	✓
4	Remote Client Management		
	Can schedule remote commands from the server	X	✓
	Can execute remote commands from the server	X	✓
	-Player Restart	X	✓
	-Player Shutdown	X	✓
	-Application Restart	X	✓
	-Debug Log Upload	X	✓
	-Playback Log Upload	X	✓
	Can establish ssh tunnel to the remote machine and log on the machine for maintenance.	X	✓
	Can export the X Terminal of player if required (to see what is being displayed on the screen)	X	✓
	E-mail or SMS notification can be sent to concerned users for the following events so that the maintenance if required can be initiated at the earliest	X	✓

	-Player Disconnected	X	✓
	-Schedule download complete	X	✓
	-Download interrupted	X	✓
	-Download success	X	✓
5	User Management		
	The server can manage different users with different levels of permissions. LDAP integration done for User rights management	X	✓

Client Software Specifications

1	Technology Specifications		
	Player renders multiple content on the same screen i.e. it is able to simultaneous render a multiple videos, images and text messages on the same screen.	✓	✓
	The client supports the following resolutions (Intel Celeron 852 GM 1 Ghz/Intel Atom 1.6 Ghz)	✓	✓
	800x600	✓	✓
	1024x768	✓	✓
	1366x768	✓	✓
	Higher resolutions also possible through high-end Processors like Intel Duo core/P IV	✓	✓
2	Playback specifications		
	Player supports play-lists(multiple media sequence)	✓	✓
	Player supports system- time based scheduling of play-lists	✓	✓
	The Player supports direct TV in with a capture card.**And live streaming available through IP streaming	✓	✓
	The player displays websites also in the same layout.	✓	✓
3	Content format support		

	The following multimedia formats are supported by the client		
	MPEG-1	✓	✓
	MPEG-2	✓	✓
	MPEG-4	✓	✓
	AVI	✓	✓
	Jpg	✓	✓
	Gif	✓	✓
	Png	✓	✓
	Tiff	✓	✓
	Mp3	✓	✓
	ac3	✓	✓
	SWF	✓	✓
4	The client is able to playback streaming video, audio and text.		
	The client is able to access the following dynamic web content	✓	✓
	RSS feeds.	✓	✓
	HTML Tickers.	✓	✓
5	Connectivity		
	The client supports the following connectivity options	✓	✓
	Ethernet	✓	✓
	DSL	✓	✓
	Dial-up	✓	✓
	Supports wireless networking (802.11b,g)via standard	✓	✓

	wireless **		
	CDMA	✓	✓
	Wi-MAX**	✓	✓
	Bluetooth**	✓	✓
	Data Card (Reliance / Tata Photon / BSNL Selected model only)	✓	✓
6	Maintenance		
	The client has provision for software update .We should be able to update the following	✓	✓
	The client application	✓	✓
	OS drivers.	✓	✓
	Able to install third party packages remotely.	✓	✓
7	Peripheral Support		
	Support touch screen interface.	✓	✓
	Support for Remote control device. **	✓	✓
	Support Barcode scanner /RFID integration.**	✓	✓
	Support USB based interfaces for playing games.**	✓	✓
	Support Printing of documents**	✓	✓
8	Data Collection		
	The following information is gathered for customer report generation.	X	✓
	Player downtime time report.	X	✓
	Time and duration of each media file.	X	✓
	Number of times each media file was played.	X	✓

	The following information is gathered for troubleshooting	X	✓
	Player crash reports	X	✓
	Time of crash	X	✓
	Content which caused the crash	X	✓
	FTP downloads errors logs.	X	✓
	Network connection status logs.	X	✓
	Event generation Report	X	✓
9	Display control		
	Able to switch on and switch of the televisions (through RS-232 interface).**	✓	✓
	Able to control the volume of the television.**	✓	✓
	Able to control the brightness and contrast of the television**.	✓	✓
	Able to give the control to the server.	✓	✓
10	Third Party application Integration		
	Supports touch screen interface	✓	✓
	Able to install and play games.**	✓	✓
11	Capture of local video		
	Supports video capture cards.**	✓	✓
	Supports an interface to encode the video and stream it to other devices in the same network.**	✓	✓
12	KIOSK Mode		

	Supports kiosk mode where a touch screen interface provides interactivity for the client.	✓	✓
13	Startup specifications		
	When client starts up the following is done:	✓	✓
	Start the playback of the content.	✓	✓
	Diagnostics of all supported hardware.	✓	✓
	Diagnostics of the TV is possible through RS-232**	✓	✓
	Connect to the server.	✓	✓
	Authenticate from the server.	✓	✓
	Send the initial handshake messages and respond to server.	✓	✓
14	Shutdown specifications		
	The client shutdown normally like a Linux PC with remote commands as well.	✓	✓
	Interface specifications	✓	✓
	The client has the capability to interface with USB based peripherals and touch screen.	✓	✓
	Portability specifications	✓	✓
	The code is easily portable to windows and Linux devices .Also the client hardware can vary depending on amount of graphics capability, connectivity, and form-factor requirements of the customer .The effort involved in porting the client software is minimal in these cases.	✓	✓
	Performance specifications	✓	✓
	The client performance should only be limited by the hardware performance. However there are different versions of hardware available for playback of HD content.	✓	✓

15	Supportability specifications		
	Compatibility:	✓	✓
	The client is compatible with LCD TV's with VGA in.	✓	✓
	Insatiability:	✓	✓
	The installation of the client is "plug and play". The client should be powered on, connected to TV and connected to the internet.	✓	✓
	Maintainability:	✓	✓
	The client sends detailed error logs to the server as and when required.	✓	✓
	Configurability:	✓	✓
	The configuration of the client is done while the client is commissioned for a customer. The authentication information should be entered before it is sent out of the production unit.	✓	✓
	Scalability:	✓	✓
	The network is scalable and the client is acting as a single node of the network.	✓	✓
	Testability:	✓	✓
	A series of automated tests which the client executes after connecting to a test server. After these tests are done, the client will be commissioned from the production unit and will then connect to the main server.	✓	✓
16	Implementation specifications		
	The client code is done so that it could be ported to Linux as well as Windows environment with minimal effort.	✓	✓

17	Operational Environment related specifications		
	The client will run in the customer premise which could be a mall/store or an outdoor location with no human intervention.	✓	✓
18	Usability specifications		
	Accessibility:	✓	✓
	In the signage and kiosk mode, the client is not accessible to the user. In kiosk mode only the touch screen is accessible to the user.	✓	✓
	Aesthetics:	✓	✓
	The client is sleek and sturdy. It can be integrated with the LCD.	✓	✓
	Consistency:	✓	✓
	The client boots up and start playback whenever it is powered on.	✓	✓
19	Security specifications		
	The content delivery to the client can be through secure channels so as to prevent data tampering and content copyright protection. Also the application had been tested through various security standards.	✓	✓
20	Trace specifications		
	The client responds to the server commands to enable debug logging, error logging & operator activity logging requirements.	✓	✓
21	Localization specifications		
	The client has Unicode support and is configurable enough to support the installation of new fonts and text messages	✓	✓

	of new languages.		
22	Target Environment specifications		
	Hardware is Intel Celeron M 1 Ghz/ATOM Thin Client with 1 GB DOM & 1 GB RAM	✓	✓

NB: Digivoir Basic is currently available on windows platform. Linux version can be released on special request by the customer.