

GDS-4W™

Mission-Critical Display Information System



Features

- Enterprise-grade and scalable
- Best-in-class graphical rendering quality with sharp and more vibrant resolutions
- Browser-based user interface leveraging HTML5 technology
- Straightforward content manager workflow
- Multi-layered templates, images and video files
- Real-time streaming media feeds streaming and interactivity
- Easily integrate Media RSS, Facebook, Twitter, Google calendars and more

Applications

- Information displays and kiosks
- Interactive wayfinding and maps
- Flight, Gate, and Baggage Information Displays (FIDS, GIDS, BIDS)
- Meeting room events and calendars
- Digital menu boards
- KPI and dashboards

General Description

GDS-4W™ is a mission-critical display information system that integrates with or without a GLOBALCOM.IP system. It leverages HTML5 technology allowing easy administration using any web browser to design and broadcast generated content. With GDS-4W™, facilities can visually engage customers, employees, and visitors across displays and mobile devices throughout a building. Display information system reinforces brand messaging, delivers timely information, and keeps people engaged.

A GDS-4W™ ecosystem is comprised of three components:

1. GDS-4W™ Content Manager Application
2. GDS-4W™ Cloud or On-Premise Server
3. 4WPLAYER Media Players running GDS-4W™ Player Software

The GDS-4W™ Content Manager is the heart of the system, and the centralized application for device and content management. All content is organized, managed and published within the user interface. Users can manage and view all 4WPLAYER media players on the network. Each player can be customized individually and comes plug-and-play ready with preloaded GDS-4W™ Client application. Once content is developed within GDS-4W™ Content Manager application, it is pushed over the network to each 4WPLAYER. The display information content is stored locally within each player and broadcast onto the connected video display(s) via HDMI connection(s).

It allows users to upload any supported media and to build and preview their content. There are factory-provided templates that can be modified including social media, news, data and calendar feeds. The user can schedule programs based on player's location and tags. Administrators can assign view, role, and alert profile to multiple users. The user interface is HTML5 based and viewable on Windows, Mac, linux and mobile devices.

GDS-4W™ Server can be either cloud or on-premise based depending on installation requirements. The cloud-based option allows content to be made available to users on demand via the Internet from the GDS-4W™ cloud server gateway. The other option is on-premise where the application is loaded onto a local server and does not require an internet connection for locations with enhanced LAN security. The local server used can be virtualized.

The platform fully supports emergency or priority message triggers from various types of buttons, sensors, keypads, data or third party software to trigger emergency alerts or other time sensitive information. When triggered, the alert message will interrupt the regular schedule and instantly play the alert message. Once completed, it will seamlessly revert back to regular scheduling.

Additional System Features



GDS-4W™ offers a level of rendering quality that is unmatched. Transitions are smoother, images are sharper and more vibrant. Browser based coding languages can't deliver the same level of sophistication.

It fully leverages the processing engine built into each AtlasIED 4WPLAYER to deliver seamless and complex content with smooth transitions.

It accomplishes the quality standards by leveraging the following design principals:

Native Architecture

GDS-4W™ is specifically developed for mission-critical display information system. The application is loaded directly into the hosted server. Being installed natively is a major performance advantage as it properly leverages the hosted servers features and technology for maximum performance.

Content Preloading

GDS-4W™ pre-loads the 4WPLAYER's with content to ensure the smoothest transitions. While the 4WPLAYER's are currently displaying their content, new media is uploaded in background. The results are seamless, almost imperceptible transitions between any content, including multi-layered templates and tickers. The media will play without any glitches or pixelation.

Supports Wide Capacity of Concurrent Players

GDS-4W™ can support up to 1,500 concurrent players using the cloud-based server implementation. For on-premise server, it can support any number of players (over 1500). The limitation is based on the chosen server hardware and network infrastructure.

IT Friendly

GDS-4W™ Server Application complies with corporate IT standards such as QoS, TCP/IP, H.264, ADFS, SSO.

Multi-Tenant, Multi-User

GDS-4W™ was designed for networks that require complete isolation between multiple tenants. The platform lets administrators assign each tenant their own domain ensuring users can only see their own group/sub-group hierarchy. The system is secure, reliable and features a wide range of user access controls which are essential to any network operator.

Administrators are in complete control of the network.

- Create user accounts that have a predefined expiry date.
- Users can be locked out at any time.
- Fully programmable user rights. Create group specific administrators, managers and user accounts.
- Assign and manage user IP restrictions (up to 10 static IPs can be assigned per user account).
- Control access by group or individual sub-group(s).
- Root level administrators are in total control of what users can see and access on the system.

Notify NOW

Prioritized Visual Notifications

NotifyNOW™ is an exclusive patented software innovation built into GDS-4W™. It provides automated priority visual paging and wayfinding that overrides displayed content and immediately broadcasts the NotifyNOW content. Once the NotifyNOW content is completed, the system seamlessly reverts back to normal broadcast content. Best used for emergency evacuation or important mass notification alerts. NotifyNOW™ also meets ADA-compliance standards.

Cloud-Based Details and Requirements



GDS 4W with **Notify NOW**
GLOBALCOM™ Display System Prioritized Visual Notifications

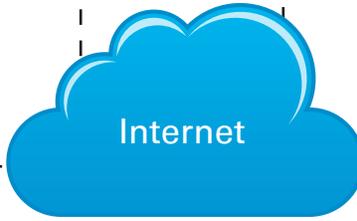
via Cloud Services

GDS-4W™ Content Manager and media assets on cloud hosted server

- One-time deployment fee
- Annual subscription per player



Administration desktop PC with web browser



4WPLAYER2

- Purchase includes player and 1 year license
- After 1 year, annual license



Digital Display



Digital Display



4WPLAYER1

- Purchase includes player and 1 year license
- After 1 year, annual license



Digital Display

AtlasIED provides a cloud-based GDS-4W™ implementation. Under this scenario, AtlasIED hosts the display information content on our servers. Users gain access to the GDS-4W™ Content Manager via any desktop web-browser to upload, schedule and deploy the digital media. GDS-4W™ Content Manager provides all the tools you need to design, edit, and monitor all digital signage players. No software installation required.

A one-time deployment fee is required.

Model	Description
4WCLLOUD	GDS-4W™ Cloud Server Account Set Up

An annual subscription license per 4WPLAYER is also required.

Model	Description
4WCLLOUD-M	GDS-4W™ Cloud Server Annual Subscription - Per Each 4WPLAYER

Note: As an example, a site location with 10 qty 4WPLAYER'S would require 10 qty 4WCLLOUD-M licenses

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On-Premise Details and Requirements

GDS 4W with **Notify NOW**
GLOBALCOM™ Display System Prioritized Visual Notifications

via On-Premise



GDS-4W™ Content Manager and media assets hosted via on-site server

Option A: AtlasIED-built, on-site server

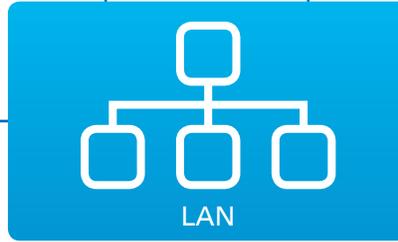
- One-time purchase
- One-time deployment fee
- Annual license fee

Option B: Client-provided, on-site server

- One-time deployment fee
- Annual license fee



Administration desktop PC with web browser



4WPLAYER2

- Purchase includes player and 1 year license
- After 1 year, annual license



4WPLAYER1

- Purchase includes player and 1 year license
- After 1 year, annual license



Digital Display



Digital Display



Digital Display

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On-Premise Server Requirements

AtlasIED provides two choices for on-premise implementation:

Choice A: The 4WSVR packages are turnkey solutions incorporating a factory-loaded server with GDS-4W™ installed.

System	Description
4WSVR1	GDS-4W On-Site Server IED0591RU and Server License for 1-10 players
4WSVR2	GDS-4W On-Site Server IED0591RU and Server License for 11-25 players
4WSVR3	GDS-4W On-Site Server IED0591RU-S1 and Server License for 26-50 players
4WSVR4	GDS-4W On-Site Server IED0591RU-S1 and Server License for 50-100 Players
4WSVR5	GDS-4W On-Site Server IED0591RU-S5 and Server License for more than 101 Players

For any server package chosen, a one-time server configuration fee is required.

System	Description
IED0595	Server Configuration for 591RU & 591RU-S1

The GDS-4W™ Server package chosen is by the number of concurrent players. GDS-4W™ Server will be running both Microsoft IIS and SQL Server (versions 2008, 2012, 2014).

Choice B: The client provides a dedicated on-premise server or virtualized on-premise server and AtlasIED is only providing the software license.

System	Description
4WSVRLIC1	GDS-4W On-Site Server license for 1-10 players
4WSVRLIC2	GDS-4W On-Site Server license for 11-25 players
4WSVRLIC3	GDS-4W On-Site Server license for 26-50 players
4WSVRLIC4	GDS-4W On-Site Server license for more than 51 players

Important Note: The minimum server specifications are listed below:

Spec Description	Recommended Minimum Requirements
Operating System	Windows Server 2012
CPU Cores	4
RAM	32GB
SQL server 2008+ Edition	Standard
Hard Drive	500GB

On-Premise Annual Maintenance: For either on-premise choice, an annual maintenance fee provides system updates.

System	Description
4WSVR1LIC-M	GDS-4W On-Site Server yearly maintenance for 1-10 players
4WSVR2LIC-M	GDS-4W On-Site Server yearly maintenance for 11-25 players
4WSVR3LIC-M	GDS-4W On-Site Server yearly maintenance for 26-50 players
4WSVR4LIC-M	GDS-4W On-Site Server yearly maintenance for more than 51 players

AtlasIED Server Selections



Model: IED0591RU is the server within 4WSVR1 and 4WSVR2

System	Description
Operating System	Windows Server 2012R2 Standard Edition
Motherboard	PowerEdge R230 Motherboard, v2
Processor	Intel Xeon E3-1220 v5 3.0GHz, 8M cache, 4C/4T, turbo (80W)
RAM	8GB UDIMM, 2133MT/s, ECC
System Storage	500GB 7.2k RPM SATA 6Gbps 512e Entry 3.5in Cabled Hard Drive
RAID	H330 for SAS/SATA, Cabled Chassis
RAID Controller	PERC H330 Integrated
Network	On-Board LOM 1GBE Dual Port (BCM5720 GbE LOM)
Power Supply	Single, Cabled Power Supply, 250W

Model: IED0591RU-S1 is the server within 4WSVR3 and 4WSVR4

System	Description
Operating System	Windows Server 2012R2 Standard Edition
Motherboard	PowerEdge R230 Motherboard, v2
Processor	Intel Xeon E3-1220 v5 3.0GHz, 8M cache, 4C/4T, turbo (80W)
RAM	8GB UDIMM, 2133MT/s, ECC
System Storage	1TB 7.2K RPM SATA 6Gbps 3.5in Cabled Hard Drive
RAID	H330 for SAS/SATA, Cabled Chassis
RAID Controller	PERC H330 Integrated
Network	On-Board LOM 1GBE Dual Port (BCM5720 GbE LOM)
Power Supply	Single, Cabled Power Supply, 250W

Model: IED0591RU-S5 is the server within 4WSVR5

System	Description
Operating System	Windows Server 2012R2 Standard Edition
Motherboard	PowerEdge R430 / R530 Motherboard MLK
Processor	Intel Xeon E5-2603 v4 1.7GHz, 15M Cache, 6.4GT/s QPI, 6C/6T (85W) Max Mem 1866MHz
RAM	8GB RDIMM, 2400MT/s, Single Rank, x8 Data Width
System Storage	500GB 7.2K RPM SATA 3Gbps 3.5in Hot-plug Hard Drive, 13G
RAID	RAID 5 for H330/H730/H730P (3-8 HDDs or SSDs)
RAID Controller	PERC H330 Integrated
Network	On-Board LOM 1GBE Dual Port (BCM5720 GbE LOM)
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 495W

For any server package chosen, a one-time server configuration fee is required.

Supported Content & Data Feeds

GDS-4W™ Content Manager offers users the ability to upload and manage an extensive range of content including:

Content Type	Format Supported
Video	MP4-4 H264 and H265, QuickTime MOV H264 or Windows Media Video WMV
Image	PNG with transparency, JPG, BMP, and GIF
Template - Ticker	WYSIWYG designer to build sophisticated templates, multi-layer, multi-zones of media, playlists, add data feed with social media and data-grid
HTML	HTML, HTML5, interactivity supported. Plays URL and download and play HTML5 content
Media Streaming	Unicast: HTTP H264 video streams, RTSP
	Multicast: UDP, with H264 codecs @1080P
Flash	SWF (Windows PC only)
XML Feed	Text, images with transparency supported
RSS and Media RSS	Text, images with transparency supported
Hosted Feed	Text, images with transparency supported
Facebook and Twitter	Text, images with transparency supported
Instagram	Text, images with transparency supported
Google Calendar	Shows current and up coming meetings
TV-Tuner (Live TV)	Happauge TV Tuner cards (Windows PC only)

Content properties:

- Preview content through large size thumbnails and streaming.
- Define media validity based date, time and week day periods.
- Content with duration can be specified frame start and end.
- Define to mute audio and hide ticker.
- Assign to content positive and negative tags so content will be played based on player profile or location.
- Edit content keywords so other users can search based on other criteria than media name, type of tag.

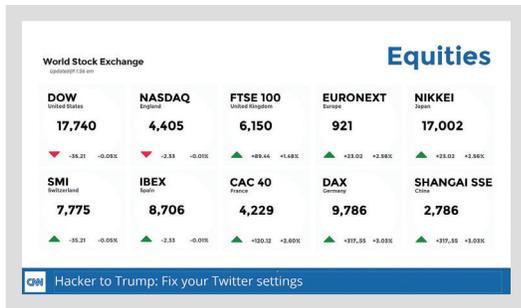
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Overview of GDS-4W™ Content Manager and Template Gallery



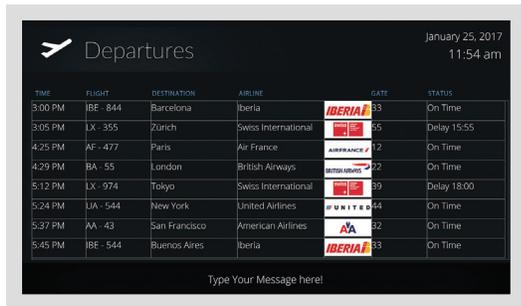
GDS-4W™ Content Manager incorporates a template designer for easy content creation. It lets you create multi-layered templates with media and playlist zones, text fields, geometric shapes, current date and time, data feeds, social media and a customizable background layer (solid color or image of your choice).

It is 100% WYSIWYG. The platform allows real-time viewing of the actual content and data feeds while designing templates and tickers. No more guessing what the template will look like when published on onto the display screens.



The templates include XML, RSS and Media RSS data feeds including: KPIs, ERP and Microsoft SharePoint data; Social media feeds from Facebook and Twitter; Appointment and room reservation data from Google Calendar.

Our data feed support supports all popular social media APIs. Anyone can create professional templates without any coding.



It can interface with Flight, Gate, and Baggage Information Database Systems for high-quality airline arrival and departure screens, gate information, and baggage claim displays. It supports multiple resolution sizes for large displays located in the terminal areas or smaller displays within the local gates.

The Template Designer can also create lobby messaging displays, hospital donor walls, train and bus station schedule boards, hotel traveler information displays and much more. You can assign transition effects and select display options for any data in individual fields or tables.



The Template and Ticker Designers feature a simplified, mobile and tablet friendly UI, that lets users edit content from anywhere.

Templates can also span multiple displays so you can create professional video walls and restaurant menu boards. Display point-of-sale pricing and item descriptions that are always current. Data is updated on your displays in real time.

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Architect and Engineer Specifications

The Software Suite Specified is a mission-critical application that controls a Display Information Platform. The Display Information System shall be capable of functioning stand alone, as a Visual Messaging Application, or as a part of a Unified Communications application capable of Interfacing with a GLOBALCOM® IP Public Address and Emergency Notification System. The technology shall provide for convenient administration using any web browser to design and broadcast generated content to visual display screens. The intended function of the software suite and its associated hardware is to allow facilities to visually engage customers, employees, and visitors across displays and mobile devices throughout a facility. The application shall be a browser based application that uses HTML5.

The Visual Signage Platform shall function as a Content Manager Application which can be cloud based off premises, or hosted on a local server for complete local, or remote command and control of messaging. The Content Manager Application is responsible for the organization, management and scheduling of media in a template based environment which permits the maximum possible flexibility to customize visual messaging for a facility. The included Template Designer shall provide a framework by which emergency or priority message triggers from various external 3rd party software or data, buttons, sensors, key pads or schedules can interrupt schedules of regularly scheduled media. The Visual Messaging Platform shall feature NotifyNow™ to permit higher priority NotifyNow™ content to immediately override normal display media and once completed shall seamlessly revert to normal priority content.

The Template Designer shall also provide for multilayered templates under the designers control with multi playlist zones to include text, shapes, media content XML, RSS and Media RSS feeds including KPI's, ERP and social media from Facebook, Twitter and appointment and room reservation data from Google Calendar. The included templates shall include Lobby Messaging Boards, Traveler Information Displays, and Train and Bus station schedule boards

The Software Suite shall at a minimum be able to interface with Flight Information Data (FIDS), Gate and Baggage Information Database Systems (BIDS, GIDS) for high quality airport information messaging and wayfinding.

In operation, the application shall be loaded directly into the hosted server to properly leverage the hosted servers features and technology for maximum performance and function to pre-load the 4WPLAYER's with content to ensure the smoothest transitions. 4WPLAYER's are capable of multitasking by displaying current content concurrent with new media uploaded in background. The results shall be seamless, transitions between any content, including multi-layered templates and tickers. The media shall be displayed without any unwanted visual artifacts including pixilation or unwanted visual artifacts. The Software Suite shall accommodate networks that require complete isolation between multiple tenants. The platform allows administrators to assign each tenant their own domain ensuring users can only affect and view their own group/sub-group hierarchy. The system shall be secure, and feature a wide range of user access controls which provides oversight essential to the network operator.

The cloud-based server implementation shall support up to 1,500 concurrent players. For on premise server deployments, up to 250 players can be controlled. The Software Suite Specified is an Enterprise-Grade Application and shall comply with corporate IT standards to include ADFS and SSO. The Content Manager shall be the GDS-4W™ from AtlasIED.