Viz Anchor
User's Guide

Product Version 1.0

November 27, 2013

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Last Updated

November 27, 2013

Contents

1 Introduction

Viz Anchor is a Vizrt application targeted at the presenter in the studio, and most often used in live news, sports, weather and election broadcasts. The application runs natively on Apple's iPad and allows users to control playlists with video and graphics directly from the handheld device. With Viz Anchor the presenter can take graphics directly onair without disturbing the flow of the presentation.

Viz Anchor enables your on-air presenter(s) to do what they do best: present content in a compelling way that is not troubled by technical restrictions, and that integrates seamlessly with existing Vizrt workflows. It provides a subset of the functionality of Vizrt's other control applications, such as Viz Content Pilot and Viz Trio, and makes it available on the iPad.

Video clips and graphics scenes can be controlled from anywhere in the studio without the need for a dedicated PC or awkward queries to the control room. The result is a more dynamic presentation with a smooth and organic flow. Through the device's wireless connection, changes in the playlist can easily be pushed to the Viz Anchor.This guarantees that the presenter always has all elements of the latest playlist available.

This section contains information on the following topics:

1.1 Features

Viz Anchor has the following features:

- Playout of graphics added to newsroom stories using the MOS protocol
- Playout of context-enabled playlists and shows
- Playout of Transition Logic graphics (without context)
- Provide a snapshot preview of the scene in the playlist
- Connect to and use any Media Sequencer with a profile and supported playlist type
- Configurable playlist operations
- Support for RGBA (key and fill) versions of the preview thumbnails
- View and send logs directly to Vizrt support for error reporting

See Also

- Known Limitations

1.2 Known Limitations

The following are the known limitations:

- Viz Trio only supports context-enabled shows.
- No support for group representation in playlists or shows.
- Currently no support for Transition Logic using concept and variants.
- Currently no support for events; meaning that Viz Anchor does not receive feedback from the system unless the studio presenter actively requests it.

1.3 Document Structure

Sections 1 introduces Viz Anchor and its basic workflow.

Sections 2and 3describe the system requirements of the components and how to install and configure them.

Section 4 gives all the reference information describing the Viz Anchor user interface. In addition it gives the anchor and control room operator an overview of the tasks that should be performed before going OnAir with Viz Anchor.

Section 5 provides questions and answers to troubleshooting issues.

1.4 Related Documents

1. Viz Artist User's Guide: Contains information on how to create graphics scenes in Viz Artist.
2. Viz Engine Administrator's Guide: Contains information on how to install the Viz Engine software and supported hardware.
3. Viz Content Pilot User's Guide: How to install, configure and use the Viz Content Pilot client and the Newsroom Component, and configure the output channels.
4. Viz Template Wizard User's Guide: How to create templates, concepts and variants, add scripts, assign template variants to categories, and categories to channels for multiple output channel playout.
5. Viz Trio User's Guide: How to install, configure and use the Viz Trio client, and configure the output channels.

1.5 Contact Vizrt

We encourage your suggestions and feedback regarding the product and this documentation. Our support E-mail address is support@vizrt.com. You are also welcome to use the web-based support at www.vizrt.com, or to contact your local Vizrt support person by telephone.

2 Requirements

This section describes the different requirements, such as hardware, software, access rights and general policies for a number of software components that can be integrated with Viz.

IMPORTANT! Always check release notes for information on supported versions.

For more in depth system information, see the respective user and administrator guides.

This section contains information on the following topics:

2.1 General Requirements

There are some general requirements for any Vizrt system to run. These requirements apply when setting up a complete system with integration to other Vizrt and third party software products:

- All machines should be part of the same domain.
- Users of the Vizrt machines should ideally be separated in at least two groups, administrators and designers/operators.
- Most machines running desktop applications must be logged in with sufficient privileges in order to run Vizrt programs, while services by default do not require users to be logged in.
- Vizrt servers must have static IP addresses.

CAUTION! Third party systems that provide Vizrt systems with files must only use Microsoft Windows operating system compatible characters as the file name.

- Vizrt has license restrictions on all Viz Engine and Viz Artist instances. To have an output of Vizrt generated graphics (preview and program channels), either an USB or parallel port dongle on the renderer machine is required.

2.2 Hardware Requirements

Hardware requirements vary depending on the system purchased; however, every system delivered by Vizrt has an accompanying hardware specification sheet that, for a new system, matches the Software Requirements.

For older hardware that are used with newer versions of Vizrt software (e.g. Viz Engine) it is always recommended to check against the current hardware

specifications for the new software version to make sure that the latest software can run on the old hardware specification.

Additional hardware must always be checked to see if it is compatible with existing hardware. For example, the GPI cards supported by Vizrt must fit in the Media Sequencer servers.

For more information on hardware specifications take contact with your local Vizrt representative or send an e-mail to support@vizrt.com.

2.3 Software Requirements

The following sections contain information on the following topics:

- Viz Anchor
- Viz Artist
- Viz Content Pilot
- Viz Engine
- Viz Gateway
- Viz Graphic Hub
- Media Sequencer
- Viz Trio
- Viz Video Hub
- Vizrt Maps

2.3.1 Viz Anchor

Viz Anchor is a Vizrt application targeted at the presenter in the studio. The application runs natively on Apple's iPad and allows users to control playlists with video and graphics directly from the handheld device.

Software	Viz Anchor application, Media Sequencer 1.21, Pilot Data Server 1.1, Preview Server 1.0, Viz Trio 2.10 and Viz Content Pilot 5.5
Operating system	Apple iOS 3.2 and later
Network access	Uses the Bonjour protocol to automatically discover the Media Sequencer and Preview Server if the wireless router/switch allows it.
Hardware	iPad

2.3.2 Viz Artist

Viz Artist is an advanced real-time motion graphics authoring system for the creation of stunning real-time graphics. Built with an elegant and easy to use drag-and-drop user interface and sophisticated 3D animation and modeling tools, Viz Artist enables the digital artist to produce complex and engaging visual

content for broadcast, virtual sets, and visualization in less time and with greater creative freedom.

Table 1: Viz Artist specifications

Software	Viz Engine, Extra Viz Plug-ins, Viz DataPool, Viz World Client *Optional:* Viz Content Pilot with Viz Template Wizard, Media Sequencer, Viz Multiplexer and Thumbnail Generator.
Executable(s)	viz.exe, VizGui.exe, vizSend.exe
Ports and Connections	TCP: 6100 (preview and playout), 14300 (Viz Multiplexer), 50007-50009 (multiplexing).
Local drive access	Read and write access to C:\Program Files\vizrt\viz\
Network access	Mapped drive to VOS still store folder and Viz Engine data root (see Shared Data)
Operating system	Windows XP SP2 and SP3 32-bit.

The Viz Artist design machine should preferably have the same specifications as the Viz Engine playout renderers, especially if the designers need to test performance issues on demanding scenes.

If designers are creating templates for Viz Content Pilot (VCP), it is recommended that VCP is installed on a separate machine for more accurate playout emulation on Viz Engine.

2.3.3 Viz Content Pilot

Viz Content Pilot (VCP) is built on a client-server software model where the VCP client connects to the Viz Content Pilot Database (Oracle database server) for templates and content, and the Media Sequencer for playout.

- VCP requires an Oracle database as the backend server.
- VCP requires a Media Sequencer for communication with Viz Engine and other systems.
  - VCP 5.5 requires Media Sequencer version 1.21 or later.

On the server side, the database serves all clients storing and retrieving content data for the control, delivery and triggering of graphics rendered on the graphics renderer Viz Engine.

This section contains information on the following topics:

- Viz Content Pilot Client
- Viz Content Pilot Database
- Viz Content Pilot Database Administrator
- Viz Content Pilot Newsroom Component
- Viz Content Pilot Thumbnail Generator
- Viz Template Wizard

- Pilot Data Server

Viz Content Pilot Client

The VCP specifications shown below are machine specifications for a typical newsroom system setup, where VCP is the control application receiving the playlist.

Table 2: VCP specifications

Software	Viz Content Pilot, Oracle 10g Runtime Client, Media Sequencer 1.20 or later (1.20 is required for new Live Update functionality and forked execution). *Optional*: Viz World Client, VCP TimeCode Monitor, Viz PreCut. *Optional:* If local preview is chosen, Viz Engine (Extra Viz 2.x Plugins and Viz DataPool) must be installed. *Optional:* Windows Media Player 11 for video clip preview in Viz Object Store.
Executable(s)	VizContentPilot.exe, vizPreviewEngine.exe (local preview)
Local drive access	Access to Oracle client files and folders Read and write access to C:\Program Files\vizrt\
Network access	Mapped drive to Viz Object Store still store folder *Optional:* If local preview using Viz Engine 2 is chosen, a mapped drive to Viz Engine's data root is needed Also see Shared Data
Operating system	Windows 7 Professional 64-bit (recommended), Windows 7 Enterprise 64-bit, Windows 7 Ultimate 64-bit and Windows XP Professional 32-bit.

Vizrt recommends the use of remote preview that has no need for a local Viz Engine or graphics cards on the client machine.

Viz Content Pilot Database

The VCP database is an Oracle database server. Usually two database servers are installed where one is used for manual failover and to hold the Viz Engine 2.x data root. Viz Engine 3.x graphics data is stored on the Viz Graphic Hub).

Table 3: VCP database specifications

Software	Oracle 10g or 11g (standard editions)
Executable(s)	Check the Oracle documentation.
Ports and Connections	1521 (queries)
Services	Oracle database service, TNS listener service

Table 3: VCP database specifications

Local drive access	A shared folder on the second server (failover) has to be accessible for all machines showing the rendered graphics.
Operating System	Oracle Database for 32-bit Windows is supported on the following operating systems: Windows 2000 with Service Pack 1 or later. All editions, including Terminal Services and Windows 2000 MultiLanguage Edition (MLE), are supported. Windows Server 2003 - all editions Windows XP Professional Windows Vista - Business, Enterprise, and Ultimate editions Windows NT is not supported Windows Multilingual User Interface Pack is supported on Windows Server 2003, Windows XP Professional, and Windows Vista.
Oracle Documentation	Oracle Database Documentation Library: 11g: http://www.oracle.com/pls/db112/homepage 10g: http://www.oracle.com/pls/db102/homepage

Viz Content Pilot Database Administrator

The Viz Content Pilot Database Administrator tool (VCP DBA) is a small application used for installing, upgrading, exporting, importing, and setting various parameters for the Viz Content Pilot Database. It is purely a DBA tool, and should therefore only be used by database administrators.

Table 4: VCP DBA specifications

Software	VCP DBA, Oracle 10g or 11g Administrator Client
Executable(s)	VCPDBA.exe
Services	Oracle database service, TNS listener service
Operating system	Windows Server 2003 32-bit, Windows XP 32-bit and Windows 7 32-bit and 64-bit.

Viz Content Pilot Newsroom Component

The newsroom client machine specification describes a basic setup for journalists and editors. For a more detailed view on available software options, see the Viz

Content Pilot and other administrator guides for descriptions on different types of setup.

Table 5: Newsroom Component specifications

Software	Newsroom client, VCP's Newsroom Component, Viz Object Store, Oracle 10g Instant Client or later, Viz World Client and Microsoft .NET 4 or later. *Optional*: Vizky 1.6 and later (older versions will not work) *Optional:* Oracle 10g Runtime Client or later. *Optional:* If local preview is chosen, Viz Engine (with Extra Viz 2.x Plugins and Viz DataPool) must be installed. *Optional:* Viz EasyCut or Viz PreCut for video clip editing.
Executable(s)	VCPAxFiller.ocx, VCPAxNle.exe (NLE), viz.exe, VizObjectStore.exe
Local drive access	Read access to Oracle client files and folders Read and write access to C:\Program Files\vizrt\
Network access	Mapped drive to VOS still store folder. *Optional:* If local preview using Viz Engine 2 is chosen, a mapped drive to Viz Engine's data root is needed. Also see Shared Data.
Other	Registry settings for preview Registry settings for Media Object Server (MOS) ID
Operating system	Windows 7 Professional 64-bit (recommended), Windows 7 Enterprise 64-bit, Windows 7 Ultimate 64-bit and Windows XP Professional 32-bit.

Vizrt recommends the use of remote preview that has no need for a local Viz Engine on the client machine; hence, local preview is not recommended.

All users of machines installed with Viz Engine must have read and write access to the following folder: C:\Program files\vizrt\.

The Newsroom Component derives its Viz Video Hub parameters from the VCP database.

Viz Content Pilot Thumbnail Generator

VCP's Thumbnail Generator is an optional addition to a VCP setup that generates data element snapshots used as thumbnails in order to visualize graphics and video elements in the VCP client's playlist.

It is recommended to install Thumbnail Generator on the Viz Graphic Hub or Viz Content Pilot Database machine.

It is also recommended to configure Viz Thumbnail Generator to fetch scene snapshots from one of the newsroom Viz Engine preview machines. If installed on a local Viz Engine, see also Viz Engine.

CAUTION! Do not use an on-air Viz Engine to generate thumbnails.

Table 6: Viz Thumbnail Generator specifications

Software	Viz Content Pilot's Thumbnail Generator, Oracle 10g Instant Client *Optional*: Oracle 10g Runtime Client.
Executable(s)	ThumbnailGenerator.exe
Operating system	Windows 7 Professional 64-bit (recommended), Windows 7 Enterprise 64-bit, Windows 7 Ultimate 64-bit, Windows XP Professional 32-bit and Windows 2003 32-bit.

Viz Template Wizard

Viz Template Wizard is a template design and scripting tool used to create templates for graphics and video. It is possible to install Viz Template Wizard on the same machine as Viz Artist; however, it is recommended to install a separate design client for template designers.

Table 7: Viz Template Wizard specifications

Software	Viz Template Wizard, Oracle 10g Instant Client, Media Sequencer *Optional:* Oracle 10g Runtime Client. *Optional:* Windows Media Player 11 for video clip preview in Viz Object Store.
Executable(s)	VizTemplateWizard.exe, scheduler.exe (when running in Console mode)
Operating system	Windows 7 Professional 64-bit (recommended), Windows 7 Enterprise 64-bit, Windows 7 Ultimate 64-bit and Windows XP Professional 32-bit.

Viz Template Wizard connects to Media Sequencer for testing and previewing of template graphics. The Media Sequencer connection defaults to *localhost*. To use a different host set the command line option *-mse <host>* in Viz Template Wizard's target path.

Pilot Data Server

The Pilot Data Server is installed as an application layer on top of the Viz Content Pilot database. The Pilot Data Server may be asked to handle requests from scripts to provide information on data elements, or to provide frame servers the

information needed in order to resolve which scene and data that is to be rendered by the frame server.

Table 8: Pilot Data Server specifications

Software	Pilot Data Server, Oracle 10g Instant Client, Microsoft .NET Framework 4
Executable(s)	Vizrt Pilot Data Server (service)
Ports and Connections	8177
Operating system	Windows 7 Professional 64-bit (recommended), Windows 7 Enterprise 64-bit, Windows 7 Ultimate 64-bit, Windows XP Professional 32-bit and Windows 2008 server

2.3.4 Viz Engine

Viz Engine is an extremely powerful rendering engine and at the core of Vizrt's real-time graphic solutions. 2D and 3D animated scenes designed in Viz Artist are rendered in real-time as high-end animations, and the output can be SD or HD video. Viz Engine systems work with all other Vizrt products to provide users with the total solution for producing on-air graphics content.

To run Viz Engine as a program or preview (optional) machine, the following software and configuration is needed:

Table 9: Viz Engine specifications

Software	Viz Engine 2 or 3, Extra Viz 2 or 3 Plug-ins, Viz DataPool, Vizrt Maps client.
Executable(s)	viz.exe
Ports and Connections	6100 (preview and playout), 14300 (Viz Multiplexer), 50007-50010 (multiplexing).
Local drive access	*Local preview:* Read and write access to folder C:\Program Files\vizrt\
Network access	Mapped drive to VOS still store folder *Local preview:* Mapped drive to Viz Engine data root Also see, Shared Data
Operating system	Windows XP SP2 and SP3 32-bit.

Machines setup for local preview need an OpenGL compatible graphics card and at least 512MB of memory (RAM) in addition to a reasonably new processor. Some graphic features on a preview machine will not be shown exactly as on a Viz Engine renderer. This is limitations in the OpenGL features on the graphics cards, and not related to Vizrt's software.

This section also contains information on the following topics:

- Preview Server

Preview Server

The Preview Server option is used in situations where Viz Engine will be used to provide frames for snapshot/thumbnail generation.

Software	Preview Server, Microsoft .NET Framework 4, Viz Engine 2.8 or Viz 3.2 and later.
Executable(s)	PreviewServer.exe
Ports and Connections	54000 is used when connecting over http using the REST interface.
Network access	Uses the Bonjour protocol to announce available services.
Operating system	Windows XP 32-bit, Windows 7 32/64-bit

2.3.5 Viz Gateway

Viz Gateway is Vizrt's implementation of the MOS Protocol. It enables users of a Newsroom Computer System (NCS) to perform instant updates on playlists in Vizrt's control applications (Viz Trio and VCP).

The Viz Gateway is a framework built to help in newsroom integration tasks. Currently Viz Gateway support NCSs based on the MOS Protocol that is supported by the leading NCS vendors.

Viz Gateway is in principle an extension to the Media Sequencer; hence, any Viz Gateway supported version of the Media Sequencer may be configured to run as a Viz Gateway server using the Viz Gateway configuration tool.

Table 10: Viz Gateway specifications

Software	Viz Gateway 1.0.10 or 2.0 (beta), Oracle 10g Runtime Client
Executable(s)	scheduler.exe (if running in Console mode)
Ports and Connections	10540 - 10541 (MOS lower and upper port), 10640 (DB event port), 10002 (Viz Gateway Controller Client)
Services	vizgwservice.exe
Local drive access	Access to Oracle client files and folders Read and write access to folder C:\Program Files\vizrt\
Operating system	Windows 2003 (recommended), Windows XP and Windows Vista.

2.3.6 Viz Graphic Hub

Viz Graphic Hub is delivered as a pre-installed system with recommended hardware and software. Viz Graphic Hub must be installed as a separate server; hence, it is not recommended to install anything else on the server that will cause the system to lose performance.

Note: The database directory cannot reside on a remote machine.

Table 11: Viz Graphic Hub specifications

Software	Viz Graphic Hub
Executable(s)	VizDbNamingService.exe, VizDbTerminal.exe
Ports and Connections	19392-19396 (in most cases the ports are configurable).
Local drive access	Read and write access to database folders (configurable).
Operating system	Windows XP and Windows Vista.

IMPORTANT! Do not run firewall or antivirus scanning software on the server.

2.3.7 Media Sequencer

The Media Sequencer is middleware software primarily used by control applications to connect to for example render engines, newsroom systems and media asset management systems.

More concrete the Media Sequencer is a framework for defining and executing media elements. The media elements are defined in a tree-based schedule that the sequencer interprets. The schedule is saved as an XML file (named **default.xml**). The XML file, in short, contains the configuration settings and the playlists saved to it by the control application.

The Media Sequencer's scheduler has a high-resolution timer that manages a Virtual Document Object Model (VDOM) that contains the schedule. The scheduler also performs the actual execution of the schedule by interpreting elements describing actions from the VDOM. The communication between end user products and the Media Sequencer mostly goes through a protocol named TreeTalk.

Table 12: Media Sequencer specifications

Software	Media Sequencer, Oracle 10g Runtime Client
Executable(s)	scheduler.exe (if running in Console mode)
Ports and Connections	8580 (REST), 8594 (Media Sequencer TreeTalk)
Services	scheduler.exe
Local drive access	Access to Oracle client files and folders. Read and write access to the following folders: C:\Program Files\vizrt\ C:\Documents and Settings\All Users\Application Data\Vizrt\Media Sequencer Engine

Table 12: Media Sequencer specifications

Network access	Uses the Bonjour protocol to announce available services.
Operating system	Windows 2003 (recommended), Windows XP.

2.3.8 Viz Trio

The Viz trio client is the CG operator's user interface. It has a TCP connection to a Media Sequencer. The client gives the user access to creation, editing and playout of pages with graphics. A Viz Engine for local preview renders the graphics within the Viz Trio client.

Table 13: Viz Trio specifications

Software	Viz Trio client, Extra Viz plug-ins, Microsoft .NET Framework 3.5 SP1 and later (only for Viz Trio version 2.9 and later). Optional: Local Media Sequencer and Oracle 10g Runtime Client for connecting to the Viz Content Pilot Database. *Optional:* Windows Media Player 11 for video clip preview in Viz Object Store.
Executable(s)	trio.exe, viz.exe, trionle.exe (embedded Viz Trio a part of the Viz NLE Plug-in setup)
Operating system	Windows XP SP3 32-bit, Windows 7 32/64-bit

2.3.9 Viz Video Hub

Viz Video Hub is a Media Asset Management (MAM) system that allow users to ingest video clips for use in graphics and as full screen video, supporting both SD and HD output.

Viz Video Hub can be used for finding and adding video to graphics using a range of different control applications for both preview and playout on Viz Engine.

IMPORTANT! Before Viz Video Hub is used the first time, it is important to decide upon the playout format. Ingesting and storing other formats on Viz Video Hub may lead to an undefined behavior if they are different from what is configured on Viz Engine. .

Table 14: Viz Video Hub specifications

Hardware	Viz Video Hub server
Ports and Connections	22, 80, 445, 6555

2.3.10 Vizrt Maps

Vizrt provides a map solution that offers branded maps and geographic animations using Viz Curious Maps and Viz World Client and Server.

Viz Curious Maps

Viz Curious Maps is ideal for designers, program researchers, and producers who need to create high-quality map animations for news, documentary, promotional videos, and online. It is designed to be simple and intuitive to use, so that users with no specific training in computer graphics, or video editing, can create professional maps on demand and at short notice.

Table 15: Viz Curious Maps specifications

Software	Viz Curious Maps 7.2 or later
Executable(s)	WorldMaps.exe
Ports and Connections	80, 8080 (Microsoft Bing and Imagery on Demand) 1947 Sentinel HASP Run-time Environment
Operating system	Windows XP and Windows Vista.

It is possible to run the server and design machine at the same time on the same machine, but it is likely that this will impact the server performance.

Note: Minimum screen resolution is 1280x1024, and it has to be a display size of 96 DPI.

Viz World Client and Server

Viz World Client and Server integrates Viz Curious Maps mapping ability and database into Viz Artist and Viz Engine graphics. By utilizing a set of geographic referencing plug-ins and the maps produced by WoC, the creation of location based graphics using maps, 3D objects, texts, and so on, is seamless.

Table 16: Viz World Client and Server specifications

Software	Viz World Client and Server 10 or later
Executable(s)	ServerAllocator.exe, ServerLauncher.exe, MapConfigClient.exe, AxMapsClient.ocx (embedded editor), MapBuilder.exe
Ports and Connections	101, 102, 103 80, 8080 (Microsoft Bing and Imagery on Demand).
Operating system	Windows XP and Windows Vista.

See Also

- Viz World Client and Server documentation

2.4 Shared Data

Vizrt recommends having mapped drive letters for all your shared data. Mapped drives are commonly used for your Viz Engine 2.x data root, Viz Object Store images, Viz Curious Maps cache.

Note that it is possible to configure most systems to use Universal Naming Convention (UNC) as an alternative to mapped drives.

Example: \\hostname\shared folder\resource

2.5 Ports and Connections

This section contains information on the following topics:

2.5.1 Port Numbers

The table below lists all default server and listening port numbers that are used. It is, if possible, recommended to run the system on a network without a firewall.

Table 17: Listening port numbers

Listener	Port(s)	Descriptions and Comments
ArdFTP Viz MPS	21	Used for video transfers from Viz Video Hub to Viz Engine. Also used by Viz MPS (service: FTP).
Viz Video Hub	22	TCP and UDP for logging in to the Viz Video Hub operating system (service: SSH).
Viz World Server	101-103	Vizrt Maps Client connections to the Vizrt Maps Server.
Viz Video Hub	137 139	Used for SMB file sharing (service: Netbios)
Viz Video Hub, Microsoft Bing and Imagery on Demand	80, 8080	Web interface and client software. SOAP port for communication with Viz Video Hub. For download of Microsoft Bing and Imagery on Demand images. (service: HTTP)
Viz Video Hub	443 445	(service: HTTPS) TCP & UDP used for SMB file sharing (service: Microsoft-DS).
Viz Mobilize	554	Real Time Streaming Protocol (service: TCP).
Oracle 10g database	1521	For clients that connect to the Viz Content Pilot Database.
Sentinel HASP Run-time Environment	1947	The Sentinel HASP Run-time Environment uses port 1947 to communicate with local and remote components. This relates to hardlock dongles used with Viz Curious Maps.

Table 17: Listening port numbers

Viz Video Hub	3080	Low resolution video and index files (service: lighttpd).
Video servers	5250	MVCP and Xlator control port for video servers. Note: this port is only necessary in combination with the video server extension (service: AVCP).
Viz Engine	6100 6700 6800	Ports are used by Media Sequencers that connect to a Viz Engine program and/or preview channel. Viz Engine's default program and preview port is 6100. In a Viz Trio OneBox setup, the default preview port is set to 6800 in order to separate the program and preview channels. In a dual channel setup, the default program ports are 6100 and 6800 for channel 1 and channel 2, respectively. In a dual channel setup, when used for stereo production, the default program ports are 6700 and 6800 for channel 1 (left eye) and channel 2 (right eye), respectively.
Viz Trio	6200 6210	6200 is used for controlling the Viz Trio client over a socket connection. 6210 is used by the Viz NLE plugin to establish a connection to Viz Trio.
Newsroom Component	6220	Used by the Viz NLE Plugin to establish a connection to Viz Content Pilot's Newsroom Component.
Viz NLE Editor	6230	Used by the Viz NLE Plugin to establish a connection to the Viz NLE Editor (on Mac).
Viz NLE Config	6240	Used by the Viz NLE plugin to establish a connection to the Viz NLE Configuration tool (on Mac).
Ticker Service	6300 6301	Ticker handler in Media Sequencer connects to port 6300 for feedback from Ticker Service. Ticker handler in Media Sequencer connecto to port 6301 when controlling the ticker via a socket connection.
Viz Content Pilot	6484	Socket connection used for controlling Viz Content Pilot using macro commands.
Viz Video Hub	6555	Message bus port for communication with Viz Video Hub (service: Messagebus).
Viz Preview License server	7452	For Viz Engine clients (unlicensed/no dongle) connecting to the Viz Preview License server.

Table 17: Listening port numbers

Pilot Data Server	8177	Used when connecting over http using the REST interface.
Media Sequencer	8580 8594	For clients connecting to the Media Sequencer. 8580 is specifically used when connecting over http using the REST interface.
Viz Video Hub	8080	Used for sending keyframes (service: ardok).
Viz Gateway	10001	For DB notification events.
	10002	For Viz Gateway controller clients.
	10540	For MOS object updates.
	10541	For MOS playlist updates.
Viz Content Pilot	10640	Used by Viz Gateway to establish a connection to Viz Content Pilot in order to send and receive updates on MOS messages (e.g. elements and playlists).
Viz Engine	14300	Alternative port used to avoid conflicts with port 6100 (e.g. when using Viz Multiplexer). Port 6100 is normally used by renderers that are on air, hence, it is (e.g. when running Viz Content Pilot version 4 or Viz NLE Plugin towards Viz 2.x) recommended to use another port. Port 14300 is an optional port. The default 6100 may also be used if the renderer is not used on air.
Viz Graphic Hub	19392– 19396	Ports in use when connecting to different Viz Graphic Hub components.
Viz Engine	50007 50008 50009	Ports 50007 – 50009 are all Multiplexing Ports that enables Viz Engine to work on other scenes in sessions that are used for preview purposes. **Isolated port (50007) –** All connections to this port get its own session. **Shared port (50008) –** All connections from one single host shares one session. **Fixed port (50009) –** Same as shared port except that allocated resources are never cleared from memory.
Preview Server	54000	Used when connecting over http using the REST interface.

2.5.2 Multiplexing Ports

For Viz 2 users an external application named Viz Multiplexer is used to allow multiple users connect to Viz for graphics preview. Viz Multiplexer acts as a special proxy between the client software and Viz, and stores the engine's state

for each connected client and restores/updates that state each time a client sends a command to Viz.

For Viz 3 a multiplexer has been integrated into Viz Engine. Internally a session management takes place, with one default session for the GUI and internal/external commands, and additional sessions created on-demand for the multiplexing ports or the preview port.

The 50009 port is traditionally used by Viz Content Pilot 4's Newsroom Component, and is the same as the shared port (50008) except that allocated resources are never cleared from memory. To avoid memory overload, it is recommended to clean up the Viz Engine regularly when using this port.

The 50008 port is a shared port where all connections from one single host shares one session. It is most often used by Viz Trio and the Newsroom Component to display preview frames.

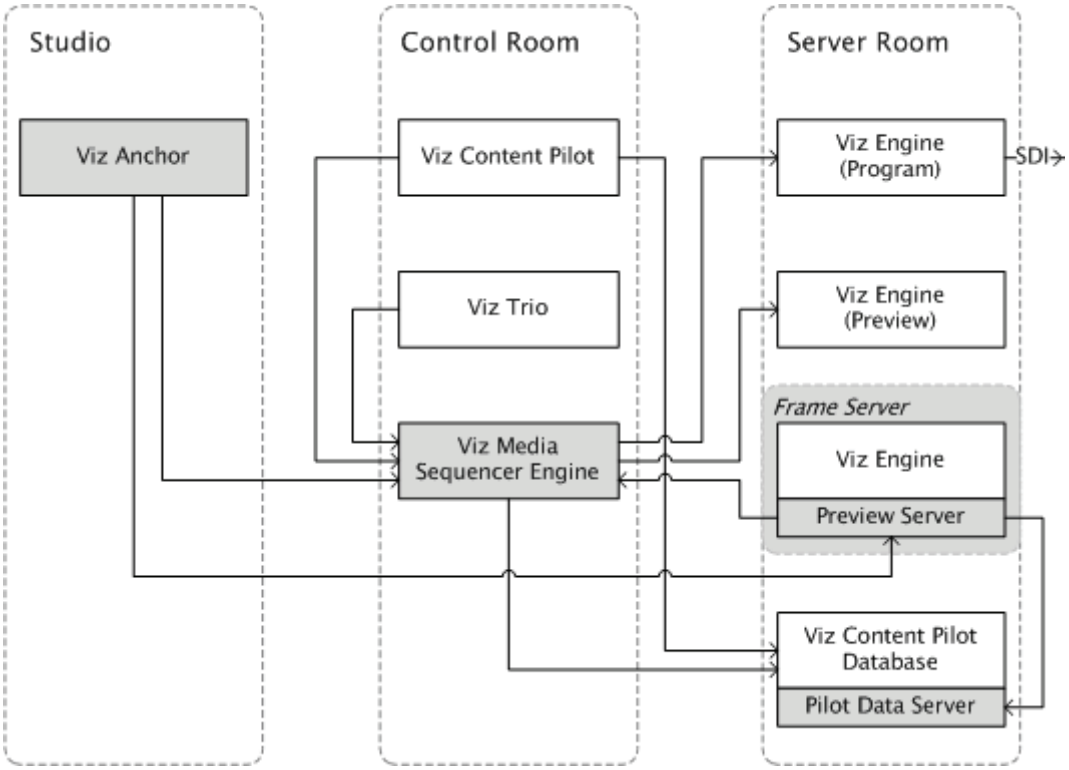
The 50007 port is an isolated port where all connections get their own session. It is used, for example in an NLE setup, to deliver frames to the host NLE-system when rendering or scrubbing video clips with graphics. Using this port will also suppress bounding box commands. Note that 50007 cannot be used by the Newsroom Component.

3 Installation and Configuration

Viz Anchor has been designed to fit into an existing Vizrt production workflow; however, you may find that some of the components are not present in your current system. This section will explain what and how to install, configure and run the different components that are different from your traditional setup.

The pieces of the setup that is covered in this section, that may differ from your setup, are the Viz Anchor application, Preview Server and Pilot Data Server. In addition this section will cover the basic installation of the Media Sequencer.

Figure 1: Viz Anchor system overview



The diagram above describes the different components in a basic Viz Anchor setup. Additionally, it shows which component that is the initiator and in turn the listener.

IMPORTANT! In order to preview data elements from a Viz Content Pilot playlist you have to configure the Pilot Data Server.

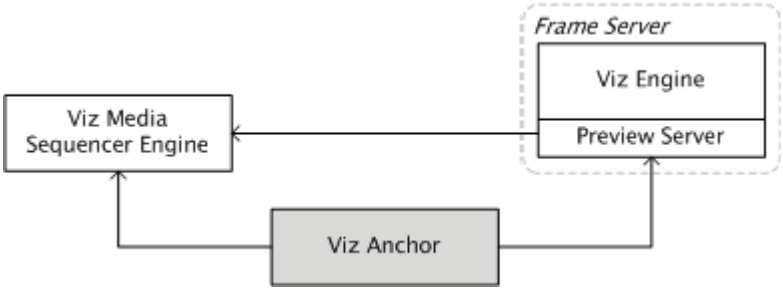
This section contains information on the following topics:

- Viz Anchor
- Media Sequencer
- Preview Server
- Pilot Data Server

See Also

- Requirements
- *Viz Content Pilot User's Guide* for information Viz Content Pilot client and database setup
- *Viz Engine Administrator's Guide* for information on installing the Viz Engine graphics and video render engine.
- *Viz Trio User's Guide* for information on installing the Viz Trio client.
- Vizrt FTP for installers.

3.1 Viz Anchor



This section describes the installation and configuration of the Viz Anchor application in the Viz Anchor setup (see simple diagram above). For a complete system overview, see the Viz Anchor system overview.

Viz Anchor connects to a Media Sequencer, and based on information from the Media Sequencer also to the Preview Server. The Media Sequencer holds the playlist and profile information, while the Preview Server provides the thumbnails that work as a visual cue for the anchor.

To install Viz Anchor

Viz Anchor is available as a free download from the Apple App Store.

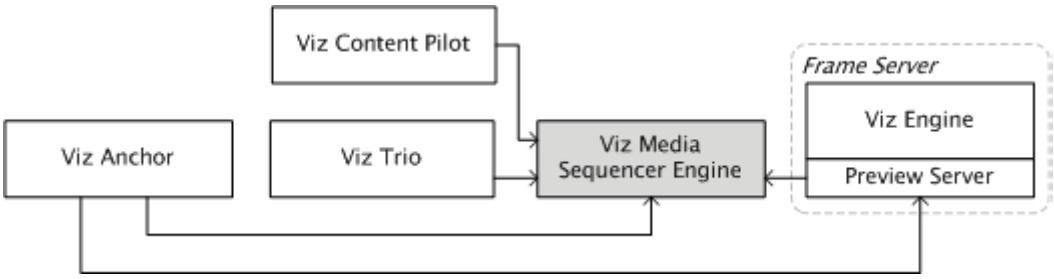
1. Open the App Store application and search for 'Viz Anchor'
2. Install by tapping first the 'Free' icon and then 'Install'.
   - Viz Anchor is automatically placed on a free slot to the right of the main menu.

Note: Viz Anchor is not a standalone application for end users and works only in combination with other Vizrt software components.

See Also

- Configuring Viz Anchor
- Viz Anchor requirements
- Media Sequencer
- Preview Server
- Pilot Data Server

3.2 Media Sequencer



This section describes the installation of the Media Sequencer in the Viz Anchor setup (see simple diagram above). For a complete system overview, see the Viz Anchor system overview.

The Media Sequencer has multiple roles in a Viz Anchor setup. The primary task in this setup is to hold the playlist, profile and preview server configuration. The secondary task is to provide scene information to the Preview Server. The Preview Server will then provide keyframes that are used as thumbnails, or visual cues, in the playlist(s).

This section contains information on the following topics:

- Installation Notes
- To install Media Sequencer

Installation Notes

It is recommended to install the Media Sequencer on a dedicated server; however, it is possible to install it on any machine. A secondary choice may be on the Viz Engine (graphics renderer) or on the Viz Content Pilot or Viz Trio machines (control machine).

The Media Sequencer can run in a service or console mode. When running in service mode, the Media Sequencer will be started automatically when the system boots. When running in console mode you can monitor the Media Sequencer and control it manually; however, it will not automatically start on system boots.

WARNING! If running in console mode, and the console is closed, the Media Sequencer will stop.

To install Media Sequencer

1. Run the installer.
2. Click **Next**.
3. Click **Next**.
   - *Optional*: Select the features to be installed, and the location of the installed files.
4. Click **Install** to start the installation process.
   - *Optional*: Select to put a shortcut on the desktop.

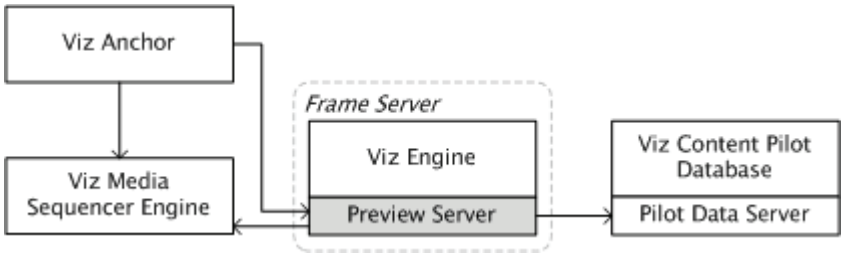
5. Click **Finish**.

Tip: Put a shortcut on your desktop if your are planning to run the Media Sequencer in console mode.

See Also

- Media Sequencer requirements
- Viz Anchor
- Preview Server
- Pilot Data Server
- Viz Content Pilot User's Guide for information Viz Content Pilot client and database setup.
- Viz Engine Administrator's Guide for information on installing the Viz Engine graphics and video render engine.
- Viz Trio User's Guide for information on installing the Viz Trio client.

3.3 Preview Server



This section describes the installation and configuration of the Preview Server in the Viz Anchor setup (see simple diagram above). For a complete system overview, see the Viz Anchor system overview.

The Preview Server is a console application setting up an HTTP REST service on port 54000 on the host it is running. This service accepts requests for graphical snapshots of playout elements from a Viz Engine. Per default, the Viz Engine must run on the same host as the Preview Server, but it is possible to specify another host for the Viz Engine.

This section contains information on the following topics:

- Command Line Arguments
- To install/upgrade the Preview Server
- To configure the Preview Server using command line arguments
- To start the Preview Server

Command Line Arguments

The executable file can be started with the following command line arguments:

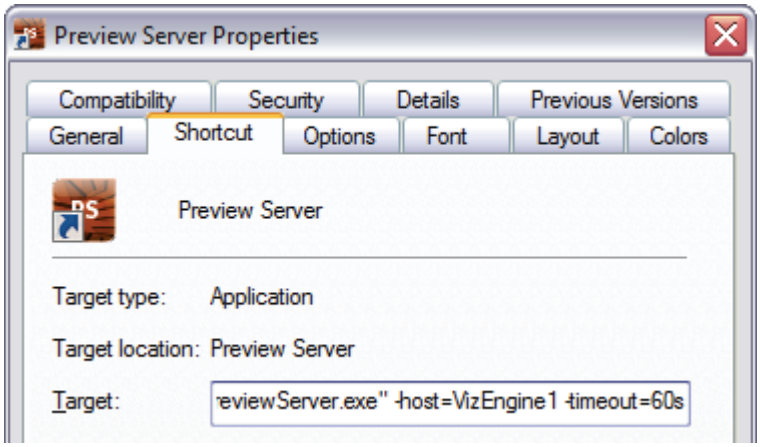
Table 18: Preview Server Command Line Options

Argument	Description
-h= *or* -host=	Specifies the host name of the host running the Viz Engine. Default is localhost.
-p= *or* -port=	Specify the host port of the host running the Viz Engine. Default is 50007, which is the Viz Multiplexer port of the old Viz 2.x, and the built-in multiplexer port of Viz 3.x.
-l= *or* -listen=	Specifies the listener port for the Preview Server. Default is 54000.
-t= *or* -timeout=	Specifies the default time out for a preview request in seconds. Default is 30s.
-v *or* -verbose	Specifies verbose output to the Preview Server log. Enable this if you want to report issues to Vizrt.
-? *or* -help	Displays help on command line arguments when using command prompt.

To install/upgrade the Preview Server

1. Run the installer.
2. Click **Next**.
   - *Optional*: Select the location of the installed files.
3. Click **Next**.
4. Click **Install** to start the installation process.
5. Click **Finish**.

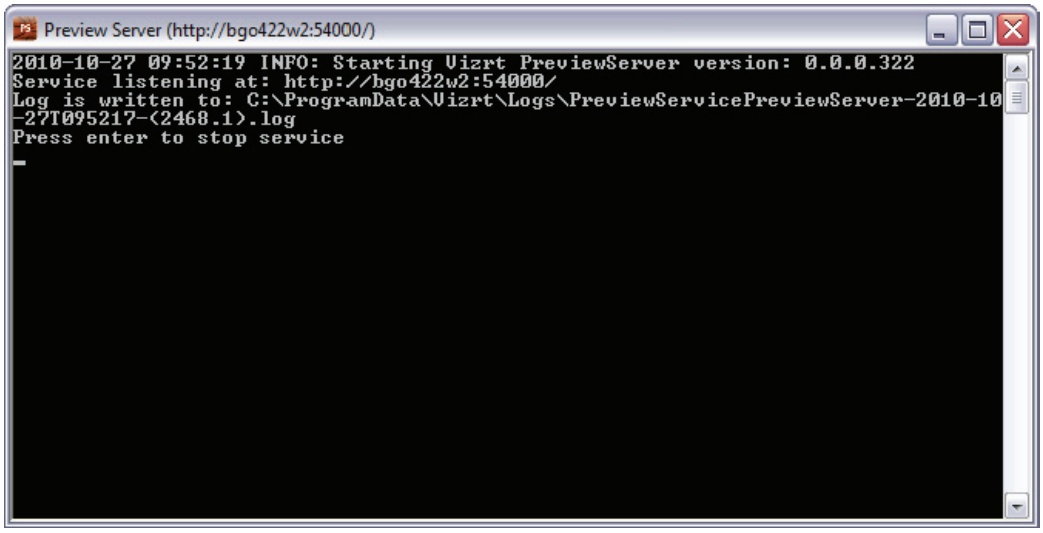
To configure the Preview Server using command line arguments



Note: Configuring the Preview Server is not needed unless you have to specify other than the default by using command line arguments.

1. From the Start menu select and right-click the Preview Server, and from the appearing context menu select Properties.
2. Click the Shortcut tab, and add your Command Line Arguments.

To start the Preview Server



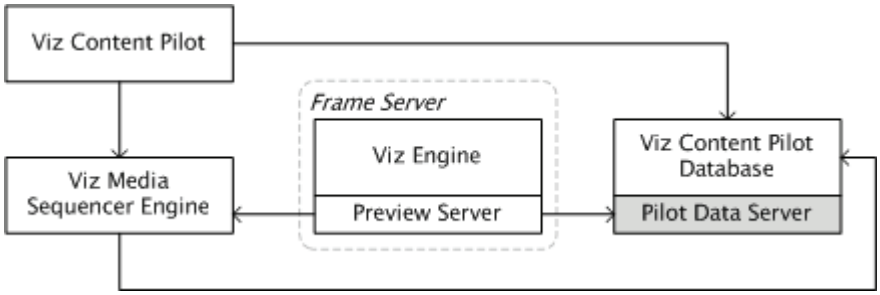
- From the Start menu select Preview Server.
  - The Preview Server is started in a console, and is up and running immediately. Upon start it will try to connect to the specified Viz Engine, or the Viz Engine running on localhost, if not specified.
  - To view the main web page of the server, start a browser and go to http://<hostname>:54000/ (e.g. http://localhost:54000).

See Also

- Preview Server requirements
- Viz Anchor

- Media Sequencer
- Pilot Data Server
- Viz Engine Administrator's Guide for information on installing the Viz Engine graphics and video render engine.

3.4 Pilot Data Server



This section describes the installation and configuration of the Pilot Data Server for a Viz Anchor setup (see simple diagram above). For a complete system overview, see the Viz Anchor system overview.

IMPORTANT! In order to preview data elements from a Viz Content Pilot playlist you have to configure the Pilot Data Server.

The Pilot Data Server provides the frame server (Viz Engine and Preview Server), on request from the Viz Anchor application, the information needed in order to resolve which scene and data that is to be rendered by the frame server. The frame server then provides the thumbnails to the Viz Anchor playlist.

For information on installing the Viz Content Pilot client and the database schema, see the Viz Content Pilot User's Guide.

Installation and configuration tasks should be performed in the following order:

1. To install the Pilot Data Server
2. To configure the Pilot Data Server
3. To configure the Pilot Data Server's database settings

To install the Pilot Data Server

1. Run the installer.
2. Click **Next**.
3. Click **Next**.
   - *Optional*: Select the location of the installed files.
4. Click **Next** to start the installation process.
5. Click **Close**.

To configure the Pilot Data Server

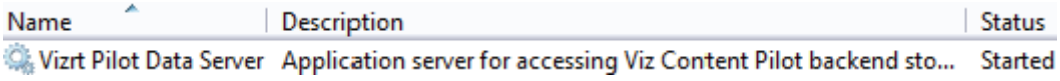
1. Start **Windows Explorer** on the machine Pilot Data Server is installed.

2. Go to the install folder, and open the **PilotAppServerHostService.exe.config** file in a text editing tool (e.g. Notepad).
   - Windows XP: `C:\Program Files\vizrt\Vizrt Pilot Data Server`
   - Windows 7: `C:\Program Files (x86)\vizrt\Vizrt Pilot Data Server`
3. Edit the following parameters (in bold):

```
<PilotDataServer.Properties.Settings>
<setting name="DBConnectString" serializeAs="String">
   <value>hostname/vizrtdb</value>
</setting>

<setting name="DBUserName" serializeAs="String">
   <value>PILOT</value>
</setting>

<setting name="DBPassword" serializeAs="String">
   <value>PILOT</value>
</setting>
</PilotDataServer.Properties.Settings>
```



4. Save the file and **restart** the service **Vizrt Pilot Data Server** from the Windows Services window.

To configure the Pilot Data Server's database settings

1. Start the **Pilot Data Server** in a browser (e.g. http://localhost:8177/)
2. Select **Settings**.
3. Select the **app_server** setting, and add the parameter (i.e. `<hostname>:8177`) for the machine you installed the Pilot Data Server on.
4. Check that the **payload_uri_template** is set to `/dataelements/{id}/payload`
5. Select the **preview_server_uri** setting, and add the parameter (i.e. `http://<hostname>:54000`) for the machine you installed the Preview Server on.
   - This machine, with Viz Engine and Preview Server installed, is typically identified as your *frame server*.
6. Click **Save** to save all changes.
   - If the settings are not available you can add them using the VCP client.
   - From the menu select Options -> Preferences, and in the appearing window select Advanced.

IMPORTANT! If you are using a firewall, remember to allow inbound communications on port 8177.

See Also

- Viz Anchor
- Media Sequencer
- Preview Server
- Viz Content Pilot User's Guide for information Viz Content Pilot client and database setup

4 Configuring Viz Anchor

This section describes the Viz Anchor system configuration interface and how to configure Viz Anchor:

- Configuration Interface
- Preparing Viz Anchor

See Also

- Using Viz Anchor

4.1 Configuration Interface

Viz Anchor must be configured in a certain order, and the configuration interface is therefore divided in three parts. Configuring Viz Anchor is done in the following order:

1. Media Sequencer Configuration
   - Preview Server configuration is part of this step.

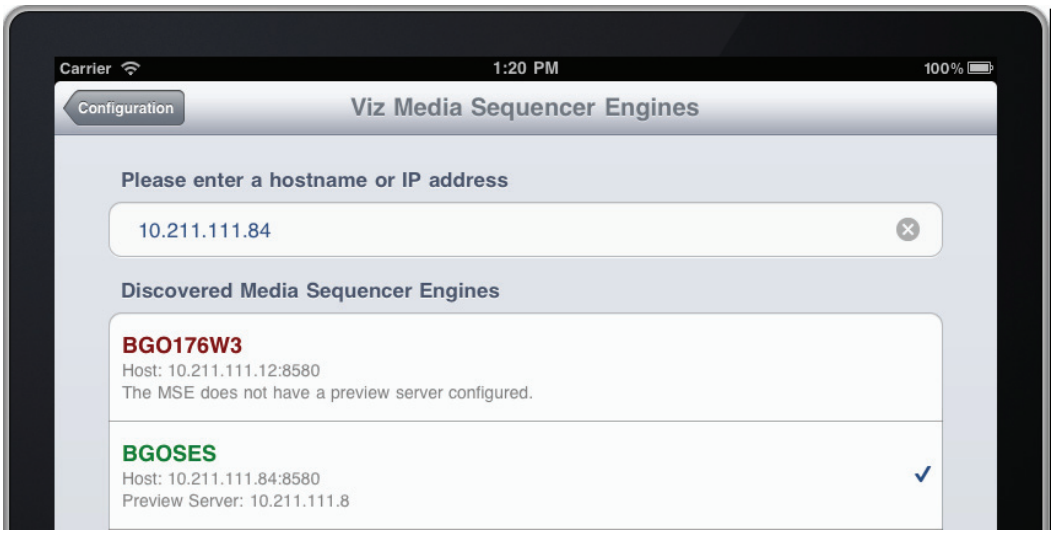
2. Profile Configuration
3. Playlist Configuration

Any issues that may arise can be addressed by reading the Troubleshooting section or by sending an error report with log files to Vizrt. Both these options are available from the Action Menu (upper left).

See Also

- Installation and Configuration of the backend systems

4.1.1 Media Sequencer Configuration



The *Media Sequencer* configuration is done by connecting Viz Anchor to the Media Sequencer over a wireless network. The process of adding a Media Sequencer can either be done manually or through automatic discovery using the Bonjour protocol.

Configuring Viz Anchor is in itself a predefined sequential process, meaning you have to connect to a Media Sequencer before you can set the preview server, select a profile and ultimately select a playlist.

Once you have selected a Media Sequencer and a Preview Server you may continue with the Profile Configuration to select an output profile that will be used for playout.

This section contains information on the following topics and procedures:

- Configuring the Media Sequencer
- Configuring the Preview Server
- Caching of snapshots
- Autodiscovery over a wireless network
- To select a Media Sequencer
- To configure a Preview Server

Configuring the Media Sequencer

Tapping the **Media Sequencer** button enables you to configure one of the discovered Media Sequencers or manually enter its hostname/IP address. Every time you select a Media Sequencer the profile and playlist selection is reset.

Your currently selected Media Sequencer will always be displayed with a checkmark to the right of the entry listing.

All entries display the Media Sequencer's last status message, coloring its hostname/IP address either red (errors and warnings) or green (OK) depending on the status message received. If your Media Sequencer version is not supported, this will be reflected in a separate listing.

Configuring the Preview Server

Tapping the **Preview Server** button enables you to configure one of the discovered Preview Servers or manually enter its hostname or IP address. Each Media Sequencer has its own Preview Server; hence, a Preview Server should ideally be configured only one time.

Once you have configured the Preview Server you do not have to repeat the configuration unless you are using another Media Sequencer that does not have a Preview Server configured or you need to change the Preview Server for the Media Sequencer you are currently using.

All entries display the Preview Server's last status message, coloring its hostname/IP address either red (errors and warnings) or green (OK) depending on the status message received. If your Preview Server version is not supported, this will be reflected in a separate listing.

Note: The Preview Server's hostname/IP address is also displayed with each Media Sequencer entry listing.

Caching of snapshots

A successful configuration will provide Viz Anchor's playlist with snapshots of the scenes. Snapshots are cached on the iPad when a playlist is fetched the first time, and when refreshed. When a playlist is updated the old snapshots are deleted. Change of playlist will not delete cached snapshots.

Autodiscovery over a wireless network

The Media Sequencer and Preview Server both supports the **Bonjour** protocol for automatic discovery over a wireless router and/or switch. If your network does not support or allow this you have to manually enter their hostnames or IP addresses.

To select a Media Sequencer

1. Tap the Media Sequencer button to select a Media Sequencer.
2. Either select a Media Sequencer from the list of automatically discovered Media Sequencers, or
3. Enter the hostname or IP address of the Media Sequencer manually

- Once you have selected a Media Sequencer you may have To configure a Preview Server if you want snapshots of the scenes to appear in the playlist.

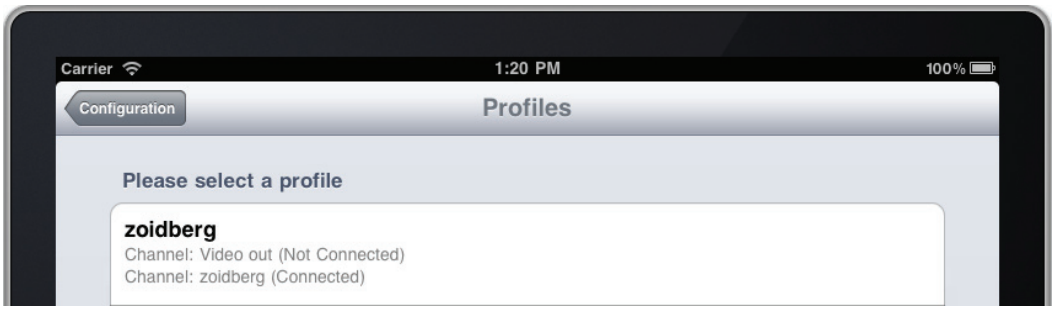
To configure a Preview Server

1. Tap the Media Sequencer button.
2. Select the Media Sequencer you want to configure the Preview Server for
3. Tap the Preview Server to configure it
4. Once you are done, select the Media Sequencer again or tap the Configuration button (upper left) to go back to the top-level configuration view

See Also

- Configuration Interface
- Installation and Configuration of the backend systems
- Using Viz Anchor

4.1.2 Profile Configuration



Once you have performed the Media Sequencer Configuration you may select a profile. Profile configuration enables you to select and set an output profile for the playlist.

The profile defines output channels to be used for playout and displays the channel's status. The status is shown as connected or not connected; hence, it does not show the actual onair status for an output channel's Viz Engine(s).

Once you have selected a profile you may continue with the Playlist Configuration to select a playlist or show.

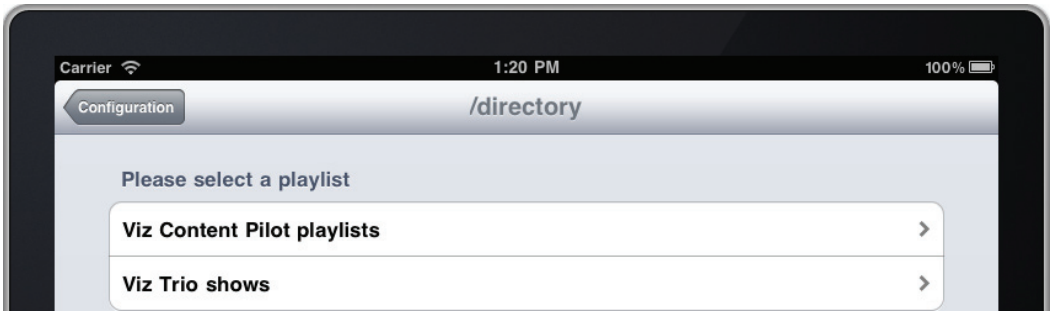
To select a profile

- Tap the **Profile** button to select a profile.
  - Once the profile is selected you may continue with Playlist Configuration.

See Also

- Configuration Interface
- Installation and Configuration of the backend systems
- Using Viz Anchor

4.1.3 Playlist Configuration



Once you have performed the Profile Configuration you may select a playlist. Playlist configuration enables you to open the selected playlist in the Playlist Interface where you can take playlist's elements on air.

Viz Anchor supports Viz Content Pilot and Viz Trio playlists and shows. When browsing for playlists you will notice that the two are separated. This is because Viz Trio supports what is known as a show playlist. A show playlist is different from a Viz Content Pilot playlist in that it is a selection of elements based on a show (sub-set). Also note that templates are not part of a playlist or show in Viz Anchor as it requires the template to be filled with data prior to taking it onair.

When selecting a playlist you may see status messages appearing. A playlist status message will, most importantly, inform you about the playlist's current state and if the graphics are loaded on the program renderer.

To select a playlist

1. Tap the **Playlist** button to select a playlist.
2. Select Viz Content Pilot playlists, or
3. Select Viz Trio shows
4. Tap to select the playlist/show you want to use
   - Once a playlist is selected you will return to the Viz Anchor playlist view.

Note: Unsupported playlists and/or shows are kept in a separate list.

See Also

- Configuration Interface
- Installation and Configuration of the backend systems
- Using Viz Anchor

4.1.4 Action Menu

The action menu in the configuration interface enables you to view Viz Anchor's application logs and report issues to Vizrt support. Reporting problems will automatically log a support case in Vizrt's Customer Relationship Management (CRM) system.

- **Report Problems**: Enables you to browse Viz Anchor's logs, and in error situations that cannot be resolved, report issues back to Vizrt through your

iPad's e-mail client. In order to send support cases to Vizrt through Viz Anchor your iPad's e-mail client must be configured.

- **Help**: Opens the user guide you are currently reading.

See Also

- Reporting Problems
- Configuration Interface
- Installation and Configuration of the backend systems
- Using Viz Anchor

4.2 Preparing Viz Anchor

Preparing Viz Anchor is something that ideally should be done by the control room operator or someone who is familiar with Vizrt's control application(s). Once the operator has prepared the playlist for the anchor it is ready to be used.

This section contains information on the following procedures:

- To create the playlist
- To prepare a playlist for Playout mode

To create the playlist

1. Start your **control application** (e.g. Viz Content Pilot or Viz Trio)
2. Create a **profile**
3. Add a **program channel** to the profile
4. Add an **Viz Engine** to the program channel

Note: Remember to set the Viz Engine in OnAir mode.

---

5. Create a **playlist** or **show playlist** (only context-enabled shows can be used.)

Tip: It is recommended to create separate playlists for use with Viz Anchor

---

6. Add **data elements/pages** to the playlist/show
7. Set the playlist or show playlist to **active**

Note: Viz Trio shows do not have an active or inactive status.

To prepare a playlist for Playout mode

1. Start Viz Anchor
2. Tap the **action** button in the upper right corner
   - This will display a drop-down menu
3. Tap the **Configuration** option
4. Under Media Sequencer Configuration section tap the **Hostname** option/button and select one of the discovered Media Sequencers or manually enter its hostname or IP address
5. Tap the **Profile** option/button and select a profile for playout

6. Tap the **Playlist** option/button and select a playlist or show
7. Tap the **Playlist** button (upper left) to view the playlist

Note: Every time you select a Media Sequencer the profile and playlist selection is reset.

See Also

- Configuration Interface
- Using Viz Anchor

5 Using Viz Anchor

Prior to using Viz Anchor as a presenter Viz Anchor should be configured. Configuring Viz Anchor is something that ideally should be done by the control room operator or someone who is familiar with Vizrt's control application(s). Once the operator has prepared the playlist for use it is ready to be used.

This section contains information on the following topics and procedures:

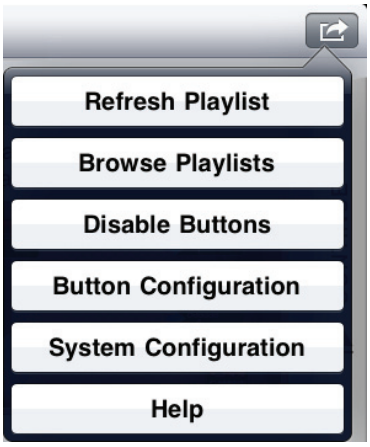
- Playlist Interface
- Playlist Operations

See Also

- Configuring Viz Anchor

5.1 Playlist Interface

The playlist itself is a two column grid that displays each playlist element (with a thumbnail preview of the scene) as a button for taking the element onair. In additon the interface has an action menu for configuring the playlist interface and to access the system configuration. Additionally, the playlist interface may have up to six action buttons for triggering different Playlist Operations.



The action menu options are:

- **Refresh Playlist**: Requests an updated playlist from the Media Sequencer and updated thumbnails from the Preview Server.
- **Browse Playlists**: Opens a panel for selecting playlists or shows stored on the pre-configured Media Sequencer.
- **Disable/Enable Buttons**: Disables all playlist control buttons. This is useful in cases where you would like to prevent commands from being executed on the Media Sequencer and graphics accidentally being taken on or off air. Navigation and preview will still work. This state is indicated in the playlist's top bar.
- **Button Configuration**: The button configuration allows you to assign one of the available actions to one or multiple buttons. This option is not available when the playlist buttons are disabled.
- **System Configuration**: Enables the operator to configure Viz Anchor.
- **Help**: Opens this user's guide.

The default playlist offers a Take command per element in the list; however, you may also expand this by enabling other buttons that may appear on both sides of the playlist. Each side of the playlist has three button placement options (top, middle and bottom).

Tip: Swipe up and down with your fingers to scroll the playlist.

See Also

- Playlist Operations
- Configuring Viz Anchor

5.2 Playlist Operations

This section contains information on the following procedures:

- To playout the playlist
- To refresh the playlist
- To select a playlist
- To disable or enable the playlist buttons

- To assign actions to the playlist buttons

To playout the playlist

1. Start Viz Anchor
2. *Optional*: if the playlist is not selected, see how To select a playlist
3. *Optional*: if the playlist is not updated, see how To refresh the playlist
4. Select an **element**, and tap the **Take** button
   - **Take**: Animates the graphics on air.
5. Tap the **Continue** button
   - **Continue**: Continues the animation on air. Either the graphics will animate out or continue to a new stop/pause point. Both cases depends on the scene's design.
6. *Optional*: Tap the **Continue Reverse** button
   - **Continue Reverse**: Plays back the animation to the previous continue point. Will only work on a director named Default.
7. Repeat steps 3-4.

Note: If audio is enabled you will receive audible feedback for each command.

To refresh the playlist

- When in **Playlist** mode, tap the **action menu** button (upper right), and from the appearing menu select **Refresh Playlist**.
  - This will request an updated playlist from the Media Sequencer and updated thumbnails from the Preview Server.

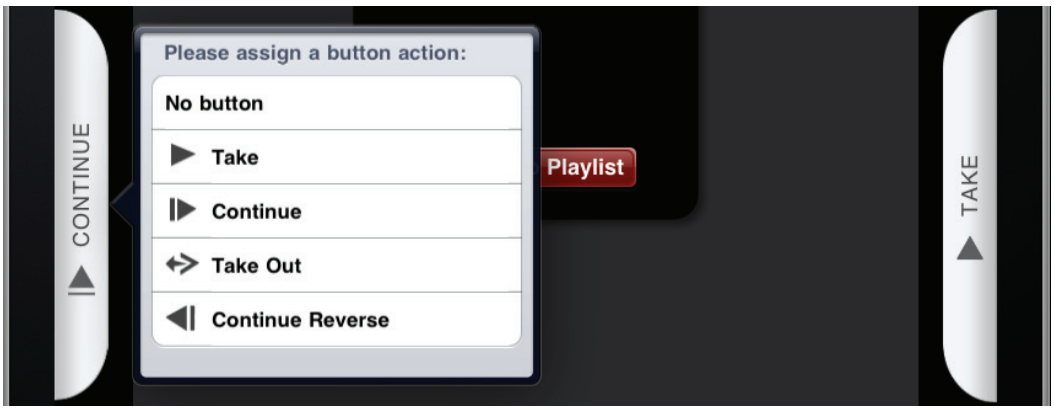
To select a playlist

1. Start Viz Anchor
2. Tap the **action menu** (upper right), and from the appearing menu select **Browse Playlists**
3. Browse for and tap to select a new playlist.
   - This will load the new playlist.

To disable or enable the playlist buttons

- When in **Playlist** mode, tap the **action menu** button (upper right), and from the appearing menu select **Disable or Enable Buttons**.
  - **Disable Buttons** will deactivate the action buttons preventing the presenter from taking graphics on or off air. Navigation and preview will work as normal. This state is indicated in the playlist's top bar (depicted above).
  - **Enable Buttons** will activate the action buttons enabling the presenter to take graphics on or off air.

To assign actions to the playlist buttons



1. Start Viz Anchor
2. Tap the **action menu** button (upper right), and from the appearing menu select **Button Configuration**
3. Tap one of the six buttons on the side and assign one of the available actions from the appearing context menu:
   - **No button**: Disables the command for the selected button.
   - **Take**: Takes the selected graphics on air.
   - **Continue**: Continues the animation of the selected on air graphics to another state.
   - **Take Out**: Takes out the selected graphics resulting in a hard cut (no out animation).
   - **Continue Reverse**: Plays back the animation to the previous continue point. This is helpful in those cases where you want to go back to a previous point in a presentation.
4. Tap **Go back to playlist** to return to Playout mode.

See Also

- Playlist Interface
- Configuring Viz Anchor

6 Troubleshooting

This section aims to provide answers to issues that may arise when using Viz Anchor. In situations where no answer can be found you can, from the Viz Anchor application, report issues directly to Vizrt support using the configuration interface's Action Menu.

This section contains information on the following topics:

6.1 Connection

Question: Why can I not access the Media Sequencer or the playlist?

The following sections might provide an answer:

Network

- Ensure that a wireless network is configured and working. Your network engineer should be able to correct any problems on the network. To configure the network on the iPad, check the Settings app for wireless settings. Viz Anchor does not use 3G or push.
- Ensure that all relevant ports are opened on the firewall (see Ports and Connections).
- The network switch should be configured to allow multicast as that will allow you to automatically find the Media Sequencer via Bonjour. If not, it can be configured manually.

Media Sequencer

- Ensure that the Media Sequencer is running, and if necessary restart it.
- Please check that the Media Sequencer is responding to the REST port. You can test this from the iPad (or a regular computer). Open a web browser and go to http://<MSE-host>:8580/ and check that you can connect and browse its directories.
- If you have a connection, check that you can browse through the Media Sequencer's directories to find the playlist you want.

6.2 Playout

Question: Why does the Media Sequencer not play out elements?

The following sections might provide an answer:

Auditive feedback

- Please take note of the sound that Viz Anchor plays – there is one sound for when it successfully sends a command and a another when it fails.

Continue

- Continue will not have an effect unless the scene is already at a stop point. The result of tapping Continue when you are not at a continue point is nothing.

Continue reverse

- Continue Reverse will currently only affect the Default director and has no effect if there is no Default director; hence, if you plan to use Continue Reverse the scene needs to be designed with this in mind.
- Continue Reverse will in most cases not work for Transition Logic.

Initialized

- Sometimes it might take some time for an element to load on the Viz Engine and be played out. To reduce this time – please ensure that a playlist is initialised in the control room.
- We also recommend that the operators activate the playlist used by the Viz Anchor on a profile. This will give you the loaded status on the system configuration page.
- Please pay attention to the loaded status on the system configuration page, this might give valuable indication to load times when you are in the playlist.

Profile

- Please check that the profile used still exists and has not been deleted. Browsing for profiles in the system configuration should reveal the status.
- Please check the profile configuration (in Viz Content Pilot and/or Viz Trio) that the channels and render engines are configured correctly.
- Please check that the wanted profile's channels exist and that the outputs are connected. The connection status of the profile's channels are shown when browsing for a profile in the system configuration and on the system configuration page.

Usage

- Viz Anchor will only play a selected element, so please ensure that an element is selected before trying to perform an operation.

Viz Engine

- Please check that the Viz Engine is in onair mode. Status shown for the Media Sequencer only displays connection status connected and not connected.
- Please check the Viz Engine console that the Viz Engine is receiving commands from the Media Sequencer when you perform operations on the elements in the playlist. To show the console, click the Show Commands button.

Media Sequencer

- Please check that the Media Sequencer is running.
- Please check that the Media Sequencer is responding on the REST port. You can test this from the iPad (or a normal computer) by opening up a web browser and going to http://<MSE-host>:8580/. Check that you can connect and browse its directories.
- Please check the Media Sequencer logs that it is receiving commands and passing them on.

6.3 Preview

Question: Why do I not get a preview?

The following sections might provide an answer:

- HTTP Resource
- Key
- Pilot Data Server
- Preview point
- Preview Server
- Viz Engine
- Media Sequencer

HTTP Resource

- Some http resources (e.g. payload data) may not be found on the Media Sequencer or the Pilot Data Server. This will be reported in the playlist for individual elements. In some cases this might be due to deleted elements. If not, please contact Vizrt support.
- Viz Graphic Hub might not have the scene - if this is the case Viz Anchor should display this information in the playlist.

Key

- Viz Anchor displays preview with both fill and key (RGBA), so to get preview your scene should have a useful key. In Preview Server version 1.0 and Viz Anchor version 1.0 we will add a full key if there is no key, but there is no guarantee that this behaviour will continue.
- Viz Anchor uses a small grid as background to allow you to see the key.

Pilot Data Server

- The Pilot Data Server is only relevant for Viz Content Pilot (VCP) and in particular newsroom playlists over the MOS protocol, and not for normal Viz Trio shows.
- Please check that the Pilot Data Server is configured and correctly configured on the VCP database.
- Please check that the Pilot Data Server configuration files are correct too (see Pilot Data Server).
- Please check that the Pilot Data Server is running. Normally such problems will be reported both in the Preview Server logs and in the Viz Anchor playlist for the elements.
- Please check that the Pilot Data Server is not configured towards the wrong VCP database - check the configuration XML file (see Pilot Data Server)

Preview point

- We recommend a `pilot1` tag on the scene's director for non Transition Logic scenes, but the preview server will fall back to the default preview point (i.e. where the scene was saved) if there is no pilot1 point. For Transition Logic scenes the `pilot1` tag is used for preview.
- Failure to use a preview point will frequently give black or wrong preview. Adding a `pilot1` tag where you want preview should solve this.

Preview Server

- Please check that the configured Preview Server is a host that exists. The system configuration page will let you know if the hostname cannot be resolved on your network.
- Please check that the Preview Server is running. If the Preview Server is not running, the system configuration page should display that Viz Anchor is not able to connect to the Preview Server. You can also use a web browser to see if you are able to connect to http://<Preview Server-host>:54000/ which is the Preview Server's REST service.
- Is the Preview Server connected to the Viz Engine? You can check the connection status at the Preview Server REST port at http://<Preview Server-host>:54000/. It should state whether it is connected or not.
- Is the Preview Server busy fetching a bigger scene? The Preview Server will block until it gets a preview and will not respond to other queries while it is fetching.
- If the console on the Preview Server is printing many errors and seems stuck, a restart might help.
- The Preview Server might be configured towards a different Viz Graphic Hub than the playout engine.

Viz Engine

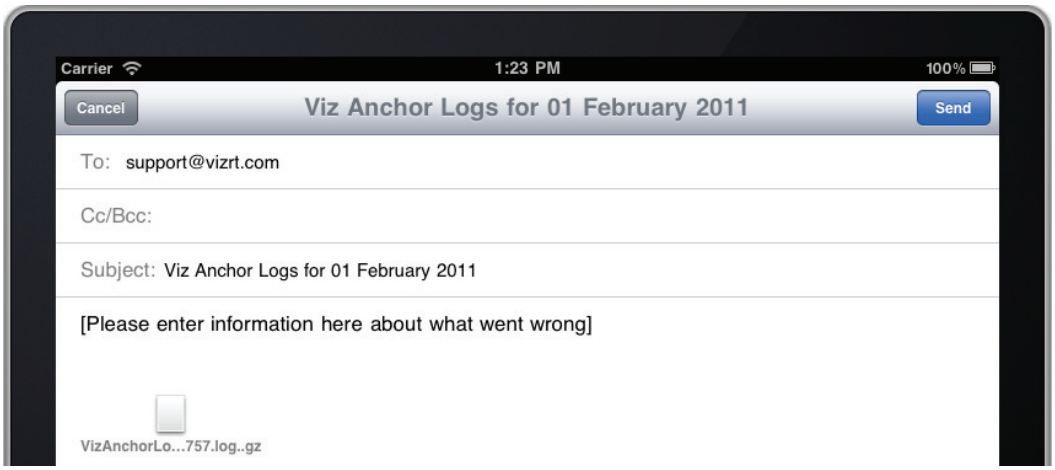
- Please check that the Viz Engine connected to the Preview Server is running and is in onair mode.
- Please check the Viz Engine console to see if the Preview Server is sending commands. You can open the console of the Viz Engine by clicking the Show Commands button.

- Please check if the Viz Engine is busy loading scenes from a (slow) Viz Graphic Hub. This can be seen by opening the console with the Show Commands button and then see if the Viz Engine prints sporadic load-messages.
- Please check that the Viz Engine is correctly connected to Viz Graphic Hub.

Media Sequencer

- Is the Preview Server configured on the Media Sequencer? If not, this should be signalled in the system configuration on the Preview Server button.

6.4 Reporting Problems



Viz Anchor is able to report problems directly to Vizrt's Customer Relationship Management system as an e-mail to case.

When reading log messages you will always have the option of sending this to Vizrt support. You can send all logs of the day, or a specific log message. Note that if Viz Anchor itself crashes, the log message/entry will be colored in red.

This section contains information on the following topic and procedure:

- Content of the Report
- To report a problem

Content of the Report

The report should contain information about the following topics;

Problem description (as detailed as possible), logs, software and hardware, setup, graphics and network.

- **Problem description**: Include a good description of what the problem is and how to reproduce it. Please use simple English.

- **Logs**: Add relevant logs. This is essential for tracking down things and ruling out problems. See how To report a problem.

- **Software and Hardware**: The log file contains information about your iPad, Viz Anchor application, Media Sequencer, Preview Server and (if used) Pilot Data Server. This point should also note information about other systems that are used: newsroom systems, render engines (and hardware, if it is a standard PC or has SDI), and control applications (e.g. Viz Content Pilot or Viz Trio).

- **Setup**: Describe differences in the installation, if any, from the recommended setup.

- **Graphics**: Note information about scenes that work and do not work, and add information about what has been tested (for example if key is ok or not). If there are specific issues regarding graphics it is recommended to report this afterwards by attaching an archive of your scenes to the support case.

- **Network**: Add a description of how the network, bandwidth, routers, and switches are configured.

To report a problem

1. Configure your iPad's e-mail application
2. Start Viz Anchor
3. Select **System Configuration** from the action menu (upper right)
4. Select **Report Problems** from the action menu (upper right)

Either:
- Tap **Mail today's logs to Vizrt**

Or:
- Select a specific log entry and tap **Mail log to Vizrt**

5. Fill in the Content of the Report
6. Tap **Send**

7 Appendix

This appendix mentions software used by Viz Anchor and its terms of use. The following software has been used:

- Audio
- AQGridView
- Google Data XML
- TBXML

7.1 Audio

Viz Anchor's sound used for auditive feedback in fail situations is licensed under a Creative Commons Sampling Plus 1.0 License.

7.2 AQGridView

Created by Jim Dovey on 10/2/2010.

7.3 Google Data XML

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7.4 TBXML

Version 1.4

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